



AIRPORT DOORS

Quality Door Solutions

**TECHNICAL DESIGN CATALOGUE
DOORS**



Residential • Commercial • Industrial
www.airportdoors.com.au

Introduction

Your Airport Doors Technical Design Catalogue begins at the product selection stage and provides a straightforward guide to the important task of selecting the appropriate product for your application.

The Product Selection Guide including a Product Range Summary, Method of Operation and Product Selection Charts etc. is a quick reference guide designed to provide an overview of the types of doors on offer. In addition, this section also helps to narrow down the selection by being able to compare door features and applications at a glance.

Having identified a range of appropriate products, one can then find detailed information and technical specifications under the product category in order to get a better

understanding of the product's features, capabilities, limitations and clearance requirements.

The catalogue is designed to be user friendly while providing architects and builders with the necessary technical information to ensure doors are appropriately selected and specified.

At the time of publication, the AS/NZS 4505:2012 had recently been released. Airport Doors will be reviewing its product range to ensure compliance with the provisions of the latest applicable Australian Standards.

For further information contact your nearest branch.



Catalogue Registration **No. 201510**

CATALOGUE REGISTRATION

To ensure you have the latest and most up-to-date information, simply register your details and catalogue on our website. By registering online, we can keep you informed of new products, product improvements, specification updates and more. Remember to update your contact details as they change, so that you can continue to receive up-to-date information.

DISCLAIMER

All products contained in this catalogue are available from the time of print. Some products may not be available from all branches. Consult your nearest branch for product availability before specifying.

Airport Doors endeavours with all reasonable effort to ensure that the information contained in this catalogue is correct and up-to-date at the time of print. In line with Airport Doors' research and development program, Airport Doors reserves the right to change specifications at any time without notice.

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The catalogue contains general information only, and it is the responsibility of the user to verify the accuracy of the information. Consult Technical Sales for detailed information about your individual application.

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Company Profile

Airport Doors

Airport Doors is Australia's superior manufacturer of Residential, Commercial and Industrial doors. With an extensive product range, a wealth of expertise and the ability to custom-make, Airport Doors offers clients almost countless quality door solutions, as well as dedicated and professional service right through from the initial project design stage to project completion and also for many years to come.

Trading since 1958, Airport Doors is a privately owned Australian company with extensive industry experience. Renowned for our wide range of door products, we are also widely recognised for our unparalleled excellence in the design and manufacture of Special Application Doors - doors specifically designed and manufactured to suit unique applications. Some of our more prominent Special Application Doors include the Canopy Door and 30.5m wide Vertical Lift Door at Southern Cross Station, Melbourne and the 16m high 4-leaf Fold-Up Door at Patrick Brisbane Autostrad Terminal.

Attracted to the diversity and quality of our products, our large client base consists of architects, builders, door agents and end-users. Airport Doors' continual research and development program, along with ongoing quality control practices, cements our position at the forefront of door technology, and ensures you are provided with the best and latest trends, styles, materials and products.

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Major Projects

Airport Doors

PAST MAJOR PROJECTS

Owing to our vast product range and expertise, at Airport Doors we not only cater for small and medium sized projects, we also specially design and supply doors for major projects, including some of Australia's most prominent landmarks.

Hangar 8 – Essendon, Victoria

The large counterweight Fold-Up Door at Hangar 8 (Essendon Airport), specifically designed, manufactured and installed by Airport Doors, is a massive 6.78m high by 23.6m wide and is electrically operated with a three-phase 2HP Motor and logic control upgrade with PE Beams. The door is clad with Colorbond Spandek and Webglas GC corrugated sheet in Opal. This Hangar door is a great example of Airport Doors' engineering capabilities and demonstrates the Fold-Up Door's inherent capacity to easily handle large design wind loads and dead loads. The door's simple balancing system means efficient, low cost operation and reliability.

In addition to the large Hangar door, Airport Doors also supplied and installed a Rib-line Steel Sectional Door.



Major Projects (Continued)

Airport Doors

Hardened & Network Army (HNA) – Edinburgh, South Australia

The Hardened & Network Army (HNA) project in Edinburgh, South Australia, was the largest and most challenging project to date. Airport Doors manufactured and installed 116 Fold-Up doors, approximately 100 Steel Roller Shutters, 20 Aluminium Roller Shutters, 9 Fire Shutters and 17 Aluminium Roller Grilles.

Due to the sheer size of the project, efficiencies in processes and techniques were introduced to assist with the coordination and installation of doors. For example, telescopic forklift equipment was used instead of standard forklifts as it provided flexibility in getting around the massive site (approx. 1 square km).

Airport Doors worked closely with the design team and was involved with the Hardened & Networked Army project from the early design stage through to completion. This project demonstrates Airport Doors' ability to successfully roll-out large scale projects with care and dedication.



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Major Projects (Continued)

Airport Doors

Patrick Brisbane Autostrad Terminal – Berth 10 Fisherman Islands, Queensland

Patrick's Autostrad Terminal is a high tech container terminal utilising the world's first free ranging robotic straddle carriers. In conjunction with the design architect and builder, Airport Doors specially designed and manufactured four steel 4-leaf Fold-Up Doors. One of the major design requirements was the opening height. The counterweight balanced doors (a variation of the standard Fold-Up Door) measuring 16m high by 7.2m wide had to be large enough to house the massive robotic straddle carriers. These 4-leaf Fold-Up Doors are the highest doors of their kind and weigh 4 tonne each.

The highly complex drive system has an intelligent programmable logic controller (PLC) that assists the operator with door travel and locking control functions. To allow uncomplicated access for maintenance, the motors were designed and fitted at ground level.

The heavy duty 16m high steel tracks, weighing 1.6 tonne each, are bolted to the structure and allow smooth operation and travel. The doors are clad with Lysaght® steel sheeting and Suntuf® polycarbonate sheeting and when open, the doors provide high quality daylight and natural ventilation to the workshop.



Major Projects (Continued)

Airport Doors

Southern Cross Station – Melbourne, Victoria

The impressive Vertical Lift Door and Canopy Door at Southern Cross Station highlights the vastness and quality of Airport Doors' capabilities. Designed and manufactured by Airport Doors, in consultation with Grimshaw Jackson Joint Venture and Winward Structures, the job was awarded to Airport Doors due to our proven track record and ability to custom design and manufacture to meet specific design requirements.

The remarkable Vertical Lift Door located at the corner of Bourke Street and Collins Street, is 3m high by a massive 30.5m wide. Emblazoned with the station's name, this door is one of the widest single span glazed counterweight doors ever made in Australia. The equally stunning glazed Canopy Door, located on the south side of the station (on Collins Street), doubles as a canopy when open. The Canopy Door is 5.7m high by 16m wide and operates using hydraulic cylinders and cam levers. Both doors open up to provide major pedestrian entry and exit points to the station.



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Major Projects (Continued)

Airport Doors

Helimed One Facility – Traralgon, Victoria

The Fold-Up Door at Helimed One Facility provides quick and easy opening and closing of the helicopter hangar, whilst also providing a clear span in a single movement. The 6m high by 19.5m wide door is clad vertically with Colorbond® Trimdek, and was specifically designed and manufactured for the application.

The Fold-Up Door is motorised for convenience using a three-phase geared motor and motor starter with push-buttons. It can also be easily disengaged and used manually in case of power outage. In addition to 'dead man' wired push-buttons, an infrared safety beam, flashing light and audible buzzer ensure safe operation.



Major Projects (Continued)

Airport Doors

Federation Square – Melbourne, Victoria

Located in the heart of Melbourne, Federation Square is a major landmark and tourist destination. This project involved meeting specific design requirements to produce doors that merge seamlessly with the building's striking architecture.

The project included 4 Fold-Up Doors; 5 Automatic Sliding Doors, fabricated as single-panes of sail-shaped glass, cantilevered and clamped below pavement level to specially designed and electrically driven carriages and tracks; and a unique operable Atrium Acoustic Wall with pedestrian access, specially engineered for this application. The 5-tonne sliding and stacking wall at the entrance to BMW Edge consists of six separate panels that are raised by ball screws, converting each section into a pivoted panel during the stacking operation. The electromechanical lift system employs position monitoring for safety. The wall also functions as an acoustic barrier for concerts and conferences and reaches 7m in height and spans a total of 11m.



Major Projects (Continued)

Airport Doors

Project (Builder)	Location	Doors
AUSTRALIA WIDE		
Coles Distribution Centres (Lend Lease [previously Bovis Lend Lease])	Australia Wide	24-48 motorised counterweight Vertical Lift (Loading Bay) Doors per site. Incorporated a glass viewing window and Lysaght-Spandek cladding, lined with flat sheet on the inside.
VIC		
ELF Stage 1 Puckapunyal Works - Department of Defence School of Armour (Kane Constructions)	Puckapunyal	14x Series 130 Steel Roller Shutters
Southbank One (Brookfield Multiplex)	Southbank	2x Glide-Up and 4x Sectional Doors
RACV Torquay Resort (Kane Constructions)	Torquay	1x Sliding Door, 1x Fold-Up Door and 3x Vertical Lift Doors
The Air Wing (SJ Higgins)	Essendon	Fold-Up Doors & Roller Shutters
Sadliers Transport (Access Constructions)	Spotswood	15x Series 75 Steel Roller Shutters
NSW		
Holesworthy Barracks (CC Pines)	Holesworthy	Roller Shutters
Sydney TAFE - Ultimo (AW Edwards)	Ultimo	13 Fold-Up Doors, 9 Steel Roller Shutters, 5 Aluminium Roller Shutters
DHL (Prime Constructions)	Erskine Park	27 Steel Roller Shutters
QLD		
University of Queensland - The Advanced Engineering Building (Watpac)	St Lucia	8 Vertical Lift Doors
Oakey Army Aviation Centre (GHD)	Oakey	Multiple Fold-Up Doors
RAAF Base Amberley (various builders)	Ipswich	Fold-Up Doors, Roller Shutters & Gates
Brisbane Convention and Exhibition Centre South Bank (Leighton Contractors)	Brisbane	Insulated Fold-Up Doors, Special Application Doors etc.
SA		
Glenside Campus Health Facility (Hansen Yuncken)	Glenside	23 Aluminium Panorama Roller Shutters
Adelaide Oval Redevelopment (Baulderstone [previously Baulderstone Hornibrook])	Adelaide	136 doors including, Steel Roller Shutters, Aluminium Roller Shutters, Fire Shutters
Port Lincoln Airport Terminal (Mossop Construction & Interiors)	Port Lincoln	Glide-Up Doors, Roller Shutters, Roller Grilles
WA		
BHP Billiton Building (Brookfield Multiplex)	Perth City Square	7x Fully Glazed Motorised Fold-Up Doors
Fortescue Metals (National Buildplan Group)	Christmas Creek Mine, Newman	11 oversized Steel Roller Shutters.
Campbell Barracks - Helicopter underwater escape training facility (Thomas & Coffee)	Swanbourne	Aluminium Roller Shutters, Roller Doors & Fold-Up Doors
Southern Seawater Desalination Plant (AJ Lucas)	Binningup	Steel Roller Shutters

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Product Selection Guide



- Roller Doors
- Roller Shutters
- Roller Grilles
- Sectional Doors
- Counterweight Doors
- Sliding Doors and Gates
- Special Application Doors
- Door Operators and Accessories

Product Range Summary

Product Selection Guide



ROLLER DOORS

The Roller Door's economical, durable and convenient features make it one of the most popular garage doors on the Australian market. Airport Doors' Roller Doors are available in a wide range of colours, are custom manufactured to suit each individual door opening, and have a unique rigid profile that adds extra strength and security.



ROLLER SHUTTERS (STEEL, ALUMINIUM, TIMBER)

Roller Shutters consist of a flexible curtain made up of individual interlocking slats and are primarily used for commercial and industrial applications. Individual interlocking slats provide strength and enable economical slat replacement should part of the curtain become damaged.

Roller Shutters are available in steel, aluminium and timber and are ideal for applications such as factories, warehouses, shopping centres, counters and cool-rooms. Fire Shutters are ideal for isolating and limiting potential fire spread, whilst also providing a fire rating in openings with fire-resistant walls.



ROLLER GRILLES (STEEL, ALUMINIUM)

Roller Grilles consist of a flexible 'brick type' pattern grille made up of horizontal tubes and vertical links. Roller Grilles are designed to provide security with maximum ventilation and visual access and are primarily used for commercial and industrial applications such as shopping centres and car parks.



SECTIONAL DOORS

The exciting wide range of Sectional Door (a.k.a. Panel Door) designs means that you have an even greater chance of finding the right door to meet your needs and budget. Sectional Doors are widely used for residential garage doors and can also be used for commercial and light industrial applications. Available in a wide range of colours and materials (including steel, aluminium and timber), most Sectional Doors can also be enhanced with optional feature windows to allow natural light into your garage or warehouse. Sectional Doors are suitable for applications with a usage up to 50 operations per day.

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Product Range Summary

(Continued)

Product Selection Guide



COUNTERWEIGHT DOORS

Counterweight Doors are a specialised product, custom designed and manufactured in a variety of styles. Counterweights have been used in engineering since ancient times as a means of storing the potential energy of a system, and providing the force for operation and movement. They are a simple, reliable and perpetual solution for raising heavy loads and maintaining systems in equilibrium. In counterweight doors, the door is balanced by a counterweight system and encompasses a strong steel frame, which can be clad in a variety of materials. There are generally few moving parts, resulting in a system that is long lasting, cost effective and easy to maintain. Counterweight Doors can be used in a wide range of applications including garages, car parks, showrooms, restaurants, fire and ambulance stations, transport depots, loading docks, aircraft hangars etc.



SLIDING DOORS & GATES

Sliding Doors and Gates can provide full opening height and are excellent for wide openings. They are commonly used in residential, commercial and industrial applications, such as car parks, fence lines, factories, warehouses and showrooms. Sliding Doors and Gates can be clad in a wide range of cladding materials and can be designed as a single-leaf or multi-leaf door.



SPECIAL APPLICATION DOORS

In addition to the standard product range, Airport Doors also design and manufacture Special Application Doors. Special Application Doors include the Hydraulic Ramp Cover, Auto Pit Shutter, and unique one-off door designs that are entirely custom-designed, engineered and manufactured in consultation with the client and architect.

DOOR OPERATORS AND ACCESSORIES

This section gives a brief overview of the various door operators & accessories available. Door operators and accessories can provide additional convenience, flexibility, safety and security for your application.

Product Range Selection Chart

Product Selection Guide

PRODUCT RANGE	APPLICATIONS																	
Roller Doors					●	●	●	●	●	●	●	●	●	●	●	●	●	
Roller Shutters	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
Roller Grilles		●		●			●			●		●			●	●		
Sectional Doors		●	●		●	●	●	●	●	●			●		●	●		
Counterweight Doors	●	●	●	●	●	●	●	●	●	●			●	●	●	●		
Sliding Doors	●	●	●			●	●	●	●			●	●		●	●		
Special Application Doors	●	●	●	●	●	●	●		●	●		●	●	●	●	●		
	Aircraft Hangers	Car Park Entries	Cool-Rooms & Insulated Drier Rooms	Counters, Kiosks & Bars	Emergency Services (e.g. CFA)	Factories & Warehouses (external)	Factories & Warehouses (internal)	Garages & Carports	Laneways (freestanding)	Restaurants	Self Storage	Shopfronts	Shopping Complexes	Showrooms	Supermarket Entrances	Transport & Loading Docks/Bays	Vehicles (e.g. trucks)	Workshops

PRODUCT RANGE	OPTIONAL FEATURES								
Roller Doors						●			
Roller Shutters		●		●	●	●	●	●	
Roller Grilles				●		●		●	●
Sectional Doors	●		●		●	●	●	●	●
Counterweight Doors	●		●	●	●	●	●	●	●
Sliding Doors	●		●	●	●	●	●	●	●
Special Application Doors	●		●	●	●	●	●	●	●
	Cladding Options	Fire Rated	Glass	High Usage	Insulation Sound/Thermal	Motorisation	Personal Entry & Exit Door	Ventilation	Vision

SELECTION CHART KEY

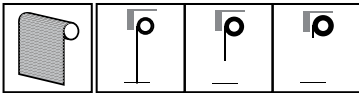
● Suitable, conditions may apply

*Special Application Doors can be custom designed and made to suit unique applications.

Method of Operation

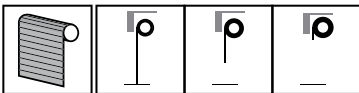
Product Selection Guide

ROLLER DOORS



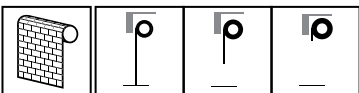
Roller Doors consist of a continuous corrugated steel curtain, which guided by vertical steel door guides, winds onto an overhead drum. Roller Doors are typically installed behind-fix.

ROLLER SHUTTERS



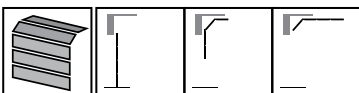
Roller Shutters consist of a steel, aluminium or timber curtain made up of interlocking slats. The curtain winds onto an overhead drum and is guided by vertical door guides. As standard, Roller Shutters are installed on the inside face of an opening and overlap the nibs and lintel (known as 'behind-fix'). Some aluminium and timber Roller Shutters can also be installed in-between the opening (known as 'between-fix').

ROLLER GRILLES



Roller Grilles consist of a flexible grille curtain which winds onto an overhead drum and is guided by vertical door guides. As standard, Roller Grilles are installed on the inside face of an opening and overlap the nibs and lintel (known as 'behind-fix'). Aluminium Roller Grilles can also be installed in-between the opening (known as 'between-fix').

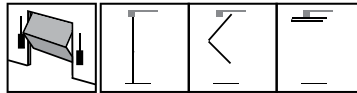
SECTIONAL DOORS



Sectional Doors are typically made up of four or more horizontal hinged panels. Assisted by a torsion spring balance system, the door operates within vertical and horizontal tracks, allowing the door to rest horizontally overhead when in the open position.

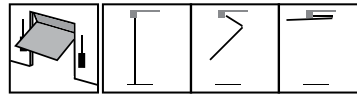
NOTE: Alternative tracking variations, (e.g. high lift, angled lift etc.) can be accommodated depending on the door weight and application.

COUNTERWEIGHT DOORS - FOLD-UP DOORS



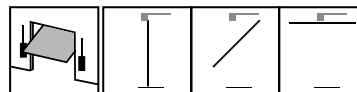
Fold-Up Doors operate within the opening and consist of two hinged counter balanced panels. As the door opens, the bottom panel swings in and the panels fold together. The top panel pivots via steel link arms and both panels are guided by rollers which run in vertical tracks. In the open position, the door rests folded horizontally under the lintel and projects both internally and externally of the building. The panels are suspended by means of a multiple pulley system.

COUNTERWEIGHT DOORS - OFFSET FOLD-UP DOORS



Offset Fold-Up Doors operate within the opening and consist of two hinged counter balanced panels. As the door opens, the bottom panel swings out and both panels fold up together. The top panel pivots while the bottom panel is guided by rollers which run in vertical tracks. In the open position, the door rests folded horizontally under the lintel and projects both internally and externally of the building. The panels are suspended by means of a single pulley system. The door operates within the opening.

COUNTERWEIGHT DOORS - GLIDE-UP DOORS

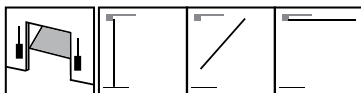


Glide-Up doors consist of a single panel balanced by counterweights. As the Glide-Up Door opens, the bottom of the door swings outward and the top of the door swings inward. In the open position, the door projects both internally and externally of the opening and rests horizontally under the lintel. The door operates within the opening. Door movement is controlled by guide rollers in vertical tracks and connecting link arms.

Method of Operation (Continued)

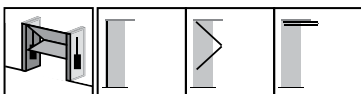
Product Selection Guide

COUNTERWEIGHT DOORS - FULLY INTERNAL GLIDE-UP DOORS



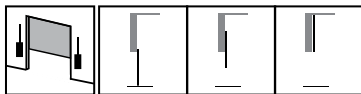
Fully Internal Glide-Up Doors consist of a single panel balanced by counterweights. As its name suggests, the Fully Internal Glide-Up Door does not project past the exterior building line or lintel. As the door opens, the top of the door travels backwards along horizontal tracks, and the bottom of the door travels up vertical tracks until the door rests horizontally overhead. To achieve maximum opening height the door operates behind the opening as standard.

COUNTERWEIGHT DOORS - V-FOLD DOORS

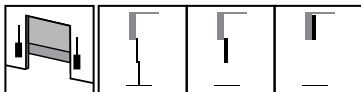


V-Fold Doors consists of two counter balanced panels and operate within the opening as standard, or can be installed free-standing or behind-fix. As the door opens, the panels fold inwards together and travel upwards. The door does not protrude past the exterior building line or lintel.

COUNTERWEIGHT DOORS - VERTICAL LIFT DOORS



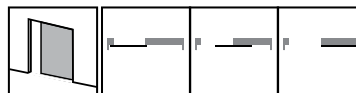
» Single-Leaf Vertical Lift



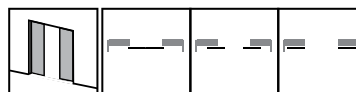
» Multi-Leaf Vertical Lift

Vertical Lift Doors consist of either single- or multiple-leaf/s and is balanced by counterweights. Vertical Lift Doors are typically installed 'behind-fix'. The door travel is controlled by means of counterweights and steel vertical tracks allowing the door to travel up or down. Vertical Lift Doors provide full opening clearance when in the open position.

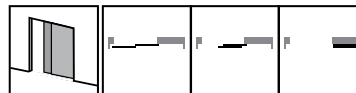
SLIDING DOORS



» Single Leaf Sliding Door



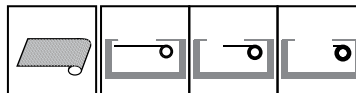
» Multi Leaf Bi-parting Sliding Door



» Multi Leaf One Way Sliding Door

Sliding Doors & Gates operate behind the opening (as standard) on either a top hung track (Top Track Sliding) or a floor track (Floor Track Sliding). Top Track Sliding Doors operate by way of ball bearing loaded rollers guided within an overhead steel track. Floor Track Sliding doors operate by way of ball bearing loaded wheels guided along a steel floor track. A multi-leaf sliding door can be designed with a bi-parting or one-way system according to design parameters.

SPECIAL APPLICATION DOORS – AUTO PIT SHUTTER



The Auto Pit Shutter is recessed into the ground and travels horizontally in curtain guides. The shutter housing is designed so that it can be lifted out for major maintenance.

Cladding Options

Product Selection Guide

Airport Doors' Counterweight Doors, Sliding Doors, selected Sectional Doors, and Special Application Doors can be clad with a wide variety of cladding material to match or complement the building, façade or interior.

Below is a brief overview of the typical door cladding options available. It is important to note that although we endeavour at all times to meet the clients door cladding design requirements, Airport Doors adheres to in-house product specifications and relevant Australian Standards, thus some cladding materials may not be suitable for the application.

Wherever possible, it is recommended to use standard or common cladding profiles and sizes (for cost effectiveness or should replacement be required in the future). In consultation with our Technical Sales and Engineers, other cladding types (not listed), may also be specified.

ACRYLIC

Acrylic is a strong, lightweight and impact resistant plastic sheet commonly referred to as the brand Perspex®. It is available in clear (as standard), tint, selected colour, frost or non reflective. Acrylic is an excellent substitute for glass as it has excellent clarity and does not yellow over time.



ALUMINIUM

Aluminium cladding is available in a variety of finishes, including natural anodised, colour anodised, powder coat or mill finish. Typical aluminium door cladding materials consist of...

- **Flat Sheet** - Typical aluminium flat sheet thicknesses range between 1.6mm to 3mm.



- **Ribbed Sheet**
- **Corrugated Sheet**
- **Perforated Metal** - is typically available in 1.6mm to 3mm thick in round perforations (as standard) of various sizes to provide the required ventilation. Other patterns or custom design imaging may also be available.
- **Expanded Metal** - available in a range of patterns and designs and is commonly used to provide ventilation and vision
- **Grate Bar Grille** - provides ventilation and vision
- **Louvre** - provides ventilation, directional view and privacy, whilst reducing exposure to rain.
- **Tread-plate**
- **Composite Aluminium Sheet** - e.g. Alucobond®
- **Airport Door's Aluminium Sectional panels**



GLASS

Glass provides natural light and excellent visual access, making it an ideal cladding material for showrooms, restaurants, cafes and display areas.

A selected range of commercial aluminium alloy glazing extrusions are used to glaze the door. Refer to Technical Sales for specific glazing extrusion details. Doors are glazed in accordance with AS1288.

6.38mm laminated safety glass is recommended for most applications. Heavier grades (including double glazing) or ornamental glass should not be specified before consulting the manufacturer due to additional weight, deflection or door design



Cladding Options (Continued)

Product Selection Guide

considerations.

Depending on the type of door, glass will be typically glazed with either elastomeric sealant or a glazing wedge/channel. Fully glazed doors may be fitted with a steel kick plate as a structural member (in accordance with AS4100) to avoid deflection in the closed position. Glass is available in Clear, Tint, Obscure, Translucent, Reflective, Patterned, and Low Emissivity (Low E).



Typical types of glass door cladding include...

- **Grade 'A' Laminated Safety Glass** – typically 6.38mm
- **Heat Strengthened**
- **Toughened**
- **Toughened Laminated Safety Glass**
- **Double Glazed**

Due to the variety in glazing options, consult Technical Sales as to your specific requirement.

INSULATION

Acoustic or thermal insulation can be provided when specified. Thermal insulation is typically a bonded polystyrene panel (e.g. cool-room panels or insulated building panels).

Acoustical insulation is typically a composite of several acoustical materials such as Dense Acoustic Paneling, Acoustic Insulation Batts, Mass loaded vinyl etc. Restrictions may apply due to weight of insulation materials. Consult Technical Sales for further information.

POLYCARBONATE

Is a lightweight plastic sheet featuring flexibility and impact resistance (approximately 30 times more resistant than glass). Available in clear (as standard), tint or selected colour. **NOTE:** UV exposure typically yellows

polycarbonate sheet over time, therefore UV stabilised polycarbonate sheet should be specified where this is a concern.

Polycarbonate door cladding materials are available in the following forms...

- **Flat Sheet** – Typical polycarbonate thicknesses range from 4mm to 6mm thick, however other thickness may be available.
- **Multi-cell Sheeting** - (e.g. Danpalon)
- **Ribbed**
- **Corrugated**

STEEL

Steel cladding is available in a variety of finishes, including galvanised, Zinalume®, powder coat, pre-painted steel (such as Colorbond®) and specialised finishes e.g. hot dip galvanised etc.

Steel door cladding comes in a large range of profiles such as ...

- **Flat Sheet** - typical thicknesses range between 1.6mm to 3mm.
- **Ribbed Sheet** - such as K-Panel® or Trimdek® is often used to match façade or wall cladding.
- **Corrugated Sheet** - such as Custom Orb®, Mini Orb®.
- **Perforated Metal** - is typically available in 1.6mm to 3mm thick round perforations (as standard), of various sizes to provide the required ventilation. Other patterns or custom design imaging may also be available.
- **Expanded Metal** - available in a range of patterns and designs and is commonly used to provide ventilation and vision



Cladding Options (Continued)

Product Selection Guide

- **Woven Wire Mesh** - commonly used to provide ventilation and vision
- **Grate Bar Grille** - provides ventilation and vision
- **Bar Grille** - steel bar grille cladding is often used to provide visibility and ventilation in applications such as car parks. Bar grille cladding is constructed using DuraGal® 20mm square rolled hollow section as standard, welded to the door frame over the entire area at approximately 120mm centre spacing as standard or as specified.

Bar grille cladding is applied vertically for counterweight and sliding doors and horizontally for sectional doors as standard. DuraGal® bar grille is etch primed and finished to selected paint system or powder coated.

- **Louvre** - provides ventilation, directional view and privacy, whilst reducing exposure to rain.
- **Airport Door's Steel Sectional panels**

TIMBER

Doors can be clad in a wide variety of timber boards, profiles and thicknesses, Timber weight is highly variable, therefore restrictions may apply due to design considerations.

Timber boards are supplied untreated as standard ready for the client to treat the door as desired. Where specified a part-seal primer can be applied in preparation for painting by the client.

Typical timbers available are...

- Western Red Cedar
- KD Hardwood



- Other types of timber, such as Ironbark or Spotted Gum etc., are available upon specification and availability.

Timber Profiles

- **Shiplap**
- **Tongue & Groove**
- **V-Joint**
- **Channel 1, Channel 2**
- **Eased Edge**
- **Weatherboard**
- **Ply Wood: Exterior Grade or Marine Grade Hoop Pine** - available in a range of thicknesses from 9mm. NOTE: Stock ply is available in 1200mm by 2400mm size sheets, however it can be scarf joined to form a large continuous sheet. Ply wood is typically supplied untreated, however we can provide it primed upon specification. Timber beading can also be applied to ply wood to create a design or pattern. Plywood is often used as a substrate for other door cladding materials.
- **Timber Battens** - (e.g. Concept Click Batten Screening)
- **Timber Composite**
- **Louvre**

OTHER MATERIALS

Specialised materials, such as those listed below, may also be applied as a door cladding option depending on design considerations. Please consult Technical Sales or Engineering for further information on availability and application of materials.

- Stainless Steel
- Zinc & Copper Sheeting
- Cement Sheeting – e.g. Exotec®
- Turf (for Hydraulic Ramp Covers)



Alucobond® is a registered trade mark of 3A Composites GmbH.

Amplimesh™ is a registered trade mark of Aluminium Extrusions and Distribution Pty Limited.

Colorbond®, Custom Orb®, Trimdek®, Zinalume® are registered trade marks of BlueScope Steel Limited.

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Technical Specs & Clearance Details Key

Product Selection Guide

KEY	DESCRIPTION
B	Dimension between bottom of lintel and top of drum support bracket
C	Width of counterweight cover (in most cases equals P or G minus 25mm)
CL	Ceiling level
D	Depth of counterweight cover
E	External projection
EL	Electrically operated door
FL	Floor level
G	Sideroom on motor, chain or hand operation side
GHr	Pulley headroom (Floor Track Sliding Door/Gate)
GL	Manual glazed door
Hr	Total headroom
I	Internal projection
L	Dimension between side of opening and centre of drum support bracket (geared side)
M	Internal projection of motor
P	Sideroom on plain side
R	Dimension between side of opening and centre of drum support bracket (plain side)
S	Manual sheeted door
SHr	Soffit headroom (Top Track Sliding Door/Gate)
T	Total door thickness plus working clearance
X	Swing of door above lintel

NOTE: All drawings are drawn 'Inside Looking Out'.

Notes

Product Selection Guide

Service and Preventative Maintenance Agreements

To maintain the life of your door and door operator, Airport Doors recommend you service your door regularly. The frequency of servicing is dependent on the particular type of door, its size, weight, usage and application. As part of our commitment to providing ongoing after sales service to our clients, our knowledgeable service representatives are well equipped to service and/or repair your door and operator when required, or as a preventative maintenance agreement.

At Airport Doors we also provide thorough service and repairs to almost every brand and type of door and door operator. For further information or to discuss preventative maintenance service agreements, contact your local Airport Doors office today.

Roller Doors



Summary

Roller Doors



SERIES A

Series A Roller Doors provide economical security for residential purposes such as single garages, carports and lane ways, and are also suitable for light commercial purposes such as countertops and mini storage warehouses.



SERIES B

Series B Roller Doors are primarily used for double garages, carports and lane ways, as well as light commercial purposes such as mini storage warehouses and workshops.



SERIES C

Series C Roller Doors are primarily used for light industrial purposes such as factories and warehouses, and operate manually with a chain or can be motorised with an industrial motor.

Selection Chart

Roller Doors

PRODUCT RANGE	APPLICATIONS																	
Series A				✓	✓	●	✓	✓	✓		✓	✓	✓			✓		
Series B				●	✓	●	✓	✓	✓		✓	✓	✓			✓		
Series C					✓	●	✓	✓	●		●	●	✓			✓		
	Aircraft Hangers	Car Parks	Cool-Rooms & Insulated Drier Rooms	Counters, Kiosks & Bars	Emergency Services (e.g. CFA)	Factories & Warehouses (external)	Factories & Warehouses (internal)	Garages & Carports	Laneways (freestanding)	Restaurants	Self Storage	Shopfronts	Shopping Complexes	Showrooms	Supermarket Entrances	Transport & Loading Docks/Bays	Vehicles (e.g. trucks)	Workshops

PRODUCT RANGE	OPTIONAL FEATURES										
Series A						✓	✓				
Series B						✓					
Series C						✓					
	Cladding Options	Fire Rated	Glass	High Usage	Insulation Sound/Thermal	Motorisation	Mullions	Personal Entry & Exit Door	Ventilation (5-25% Airflow)	Ventilation (26% + Airflow)	Vision

SELECTION CHART KEY

- ✓ Suitable
- Suitable, conditions may apply

Series A

Roller Doors



Airport Doors' Roller Doors have a unique rigid profile that provides extra strength and durability. Series A Roller Doors provide economical security, and are ideal for residential purposes such as single garages, carports and lane ways, as well as light commercial purposes such as countertops and mini storage warehouses.

FEATURES

- Economical
- Smooth operation
- Low Maintenance
- Extra rigid curtain profile

DOOR DIMENSIONS

- Maximum Height: 3000mm
- Maximum Width: 3740mm

NOTE: Door overlaps opening width 30mm on each side.

RECOMMENDED SPECIFICATIONS

Series A steel Roller Door with standard centre lift-lock as manufactured by Airport Doors. Balanced by torsion springs, the Roller Door operates by means of a flexible corrugated curtain, which guided by vertical steel door guides, winds onto an overhead drum.

Series A

Roller Doors

CURTAIN

The Roller Door curtain is manufactured from a continuous, roll-formed, deep profile steel sheet, lock seamed together. The 0.425mm thick steel sheet is fitted with a nylon felt strip which runs down both sides of the curtain to provide smooth operation.

FINISH

Roller Doors are available in a wide range of pre-painted steel (e.g. Colorbond) colours. See the Airport Doors website or contact Airport Doors for current colour availability.

BOTTOM RAIL

The Roller Door bottom rail reinforces the roller door curtain and is manufactured from a durable extruded aluminium section fitted with a PVC bottom weather seal. The weather seal aids in minimising leaves and rain from entering under the door.

ADDITIONAL DOOR SEAL (OPTIONAL)

An additional brush seal can be provided to seal the working clearance gap at the lintel. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

DOOR GUIDES

The vertical door guides consist of a specially roll-formed, galvanised steel channel section with a depth of 30mm.

DRUM & SPRING ASSEMBLY

The drum consists of specially designed drum wheels which are manufactured from high grade glass-filled nylon for durability and hard wearing. Specially designed helical coil torsion springs (with 20,000 lifecycle) are attached to the drum wheel and anchored to the drum axle. The door curtain fully wraps around the drum wheel, enclosing the drum springs.

DRUM SUPPORT BRACKETS

Series A drum support brackets comprise a superior heavy-duty triangular design manufactured from 2mm thick pressed steel.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Roller Door and its fixing

requirements. Consult Technical Sales for further details.

LOCKING

A centre lift-lock, keyed on the external face and free latched on the internal face, is fitted to the door at waist height. In a counter top application the locking facility can (when specified) be fitted to the bottom of the curtain. Alternatively, Series A Roller Doors can be supplied with a pair of shoot bolt locks (internally or externally as specified) fitted to the bottom rail (padlocks not included).

NOTE: Shoot bolt locks are not recommended for doors that are motorised. Special locks such as warehouse locks may also be available upon specification.

MULLIONS (OPTIONAL)

Optional removable or fixed centre mullions can be used for wide openings, creating multiple door installations. Removable centre mullions are 125mm in width and are manufactured from mill finish aluminium. Removable centre mullions are not recommended for large Roller Door widths or in environments subject to high wind loading. Fixed centre mullions are manufactured from galvanised steel jambs of 150mm width by 50mm depth.

OPERATION

Roller Doors consist of a continuous corrugated steel curtain that winds onto an overhead drum and is guided by vertical steel door guides. Roller Doors are typically installed behind-fix.

HAND OPERATION

Series A Roller Doors are designed for effortless hand operation.

MOTORISATION

For convenience and ease of operation Series A Roller Doors can be motorised using a 24DC/240v operator with remote control hand transmitters and optional wall button. Standard Roller Door Operators come standard with an emergency manual release mechanism in case of power outage.

For further information see Door Operators & Accessories.

OPTIONS

- Additional door seals
- Reverse colour
- Tapered bottom
- Mullions
- Reverse roll

Series B

Roller Doors



Airport Doors' Roller Doors have a unique rigid profile enabling added strength and durability. Series B Roller Doors are primarily used for large openings such as garages, carports and lane ways as well as light commercial purposes such as mini storage warehouses and workshops.

FEATURES

- Economical
- Smooth operation
- Low maintenance
- Extra rigid curtain profile

DOOR DIMENSIONS

- Maximum Height: 3300mm
- Maximum Width: 5100mm

NOTE: Door overlaps opening width 50mm on each side.

RECOMMENDED SPECIFICATIONS

Series B steel Roller Door with standard centre lift-lock as manufactured by Airport Doors. Balanced by torsion springs, the Roller Door operates by means of a flexible corrugated curtain, which guided by vertical steel door guides, winds onto an overhead drum.

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Series B

Roller Doors

CURTAIN

The Roller Door curtain is manufactured from a continuous, roll-formed, deep profile steel sheet, lock seamed together. The 0.425mm thick steel sheet is fitted with a nylon felt strip which runs down both sides of the curtain to provide smooth operation.

FINISH

Roller Doors are available in a wide range of pre-painted steel (e.g. Colorbond) colours. See the Airport Doors website or contact Airport Doors for current colour availability.

BOTTOM RAIL

The Roller Door bottom rail reinforces the roller door curtain and is manufactured from a durable extruded aluminium section fitted with a PVC bottom weather seal. The weather seal aids in minimising leaves and rain from entering under the door.

ADDITIONAL DOOR SEAL (OPTIONAL)

An additional brush seal can be provided to seal the working clearance gap at the lintel. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

DOOR GUIDES

The door guides consist of a specially roll-formed, galvanised steel channel section with a depth of 50mm.

DRUM & SPRING ASSEMBLY

The drum consists of specially designed drum wheels which are manufactured from high grade glass-filled nylon for durability and hard wearing. Specially designed helical coil torsion springs (with 20,000 lifecycle) are attached to the drum wheel and anchored to the drum axle. The door curtain fully wraps around the drum wheel, enclosing the drum springs.



DRUM SUPPORT BRACKETS

Series B drum support brackets are manufactured from heavy-duty galvanised steel angle. They are designed to be fixed to a solid wall with masonry anchors or welded to heavy-duty steel work.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Roller Door and its fixing requirements. Consult Technical Sales for further details.

LOCKING

A centre lift-lock, keyed on the external face and free latched on the internal face, is fitted to the door at waist height. In a counter top application the locking facility can (when specified) be fitted to the bottom of the curtain. Alternatively, Series B Roller Doors can be supplied with a pair of shoot bolt locks (internally or externally as specified) fitted to the bottom rail as standard or at waist height when specified (padlocks not included). NOTE: Shoot bolt locks are not recommended for doors that are motorised. Special locks such as warehouse locks may also be available upon specification.

OPERATION

Roller Doors consist of a continuous corrugated steel curtain that winds onto an overhead drum and is guided by vertical steel door guides. Roller Doors are typically installed behind-fix.

HAND OPERATION

Series B Roller Doors can be hand operated, however for added convenience motorisation is recommended.

MOTORISATION

For convenience and ease of operation Series B Roller Doors can be motorised using a 24DC/240v operator with remote control hand transmitters and optional wall button. Standard Roller Door Operators come standard with an emergency manual release mechanism in case of power outage.

For further information see Door Operators & Accessories.

OPTIONS

- Additional door seals
- Tapered bottom
- Reverse roll
- Reverse colour

Series C

Roller Doors



Airport Doors' Roller Doors have a unique rigid profile which provides additional strength and durability. Series C Roller Doors comprise manual chain operation and are primarily used for commercial and light industrial purposes such as factories and warehouses.

FEATURES

- Economical
- Smooth operation
- Low maintenance
- Extra rigid curtain profile

DOOR DIMENSIONS

- Maximum Height: 4200mm*
- Maximum Width: 5100mm*

*Total size must not exceed 17m².

NOTE: Door overlaps opening width 50mm on each side.

RECOMMENDED SPECIFICATIONS

Series C steel Roller Door with chain operation as manufactured by Airport Doors. Balanced by torsion springs, the Roller Door operates by means of a flexible corrugated curtain, which guided by vertical steel door guides, winds onto an overhead drum.

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Series C

Roller Doors

CURTAIN

The Roller Door curtain is manufactured from a continuous, roll-formed, deep profile steel sheet, lock seamed together. The 0.425mm thick steel sheet is fitted with a nylon felt strip which runs down both sides of the curtain to provide smooth operation.

FINISH

Roller Doors are available in a wide range of pre-painted steel (e.g. Colorbond) colours. See the Airport Doors website or contact Airport Doors for current colour availability.

BOTTOM RAIL

The Roller Door bottom rail reinforces the roller door curtain and is manufactured from a durable extruded aluminium section fitted with a PVC bottom weather seal. The weather seal aids in minimising leaves and rain from entering under the door.

ADDITIONAL DOOR SEAL (OPTIONAL)

An additional brush seal can be provided to seal the working clearance gap at the lintel. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

DOOR GUIDES

The door guides consist of a specially roll-formed, galvanised steel channel section with a depth of 50mm.

DRUM & SPRING ASSEMBLY

The drum consists of specially designed drum wheels which are manufactured from high grade glass-filled nylon for durability and hard wearing. Specially designed helical coil torsion springs (with 20,000 lifecycle) are attached to the drum wheel and anchored to the drum axle. The door curtain fully wraps around the drum wheel, enclosing the drum springs.

DRUM SUPPORT BRACKETS

Series C drum support brackets are manufactured from galvanised steel angle. They are designed to be fixed to a solid wall with masonry anchors or welded to heavy-duty steel work.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Roller Door and its fixing requirements. Consult Technical Sales for further details.

LOCKING

Standard Series C locking facility consists of a steel chain lock, or when specified an additional shoot bolt lock can be fixed to the bottom rail on the opposite side to the chain (padlocks not included). NOTE: Chain locks and shoot bolt locks are not typically fitted on doors that are motorised.

OPERATION

Roller Doors consist of a continuous corrugated steel curtain that winds onto an overhead drum and is guided by vertical steel door guides. Roller Doors are typically installed behind-fix.

CHAIN OPERATION

Chain operation works by means of a gearing assembly and chain attached internally to the left or right side of the drum. Direct chain drive with chain wheel attached to the drum is used for doors up to 3300 high or doors over 14m². For ease of operation, larger doors are fitted with planetary reduction gearing. NOTE: Planetary reduction gearing can also be used as an alternative to direct chain drive for smaller doors when specified.

MOTORISATION

For convenience and ease of operation Series C Roller Doors can be motorised via a (industrial) geared electric motor with standard reversing starter push-button station (control box) and emergency hand chain operation in case of a power outage. The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on availability of power, door usage and door access requirements. Motorisation is available in three-phase (415v) or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories (e.g. remote control, key switches etc.) and photo electric beams for added safety are available upon specification. For further information see Door Operators & Accessories.

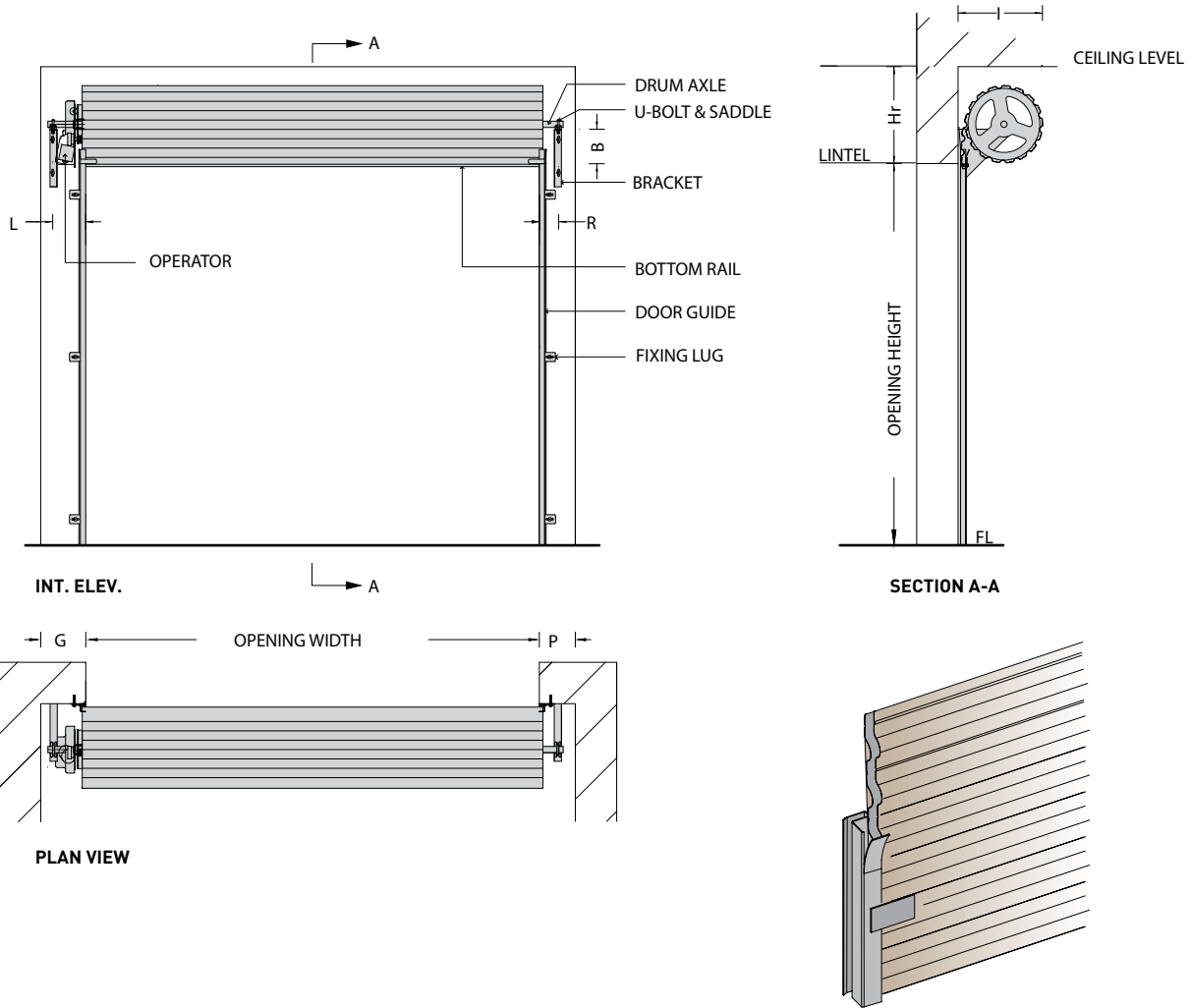
OPTIONS

- Additional door seals
- Tapered bottom
- Reverse roll
- Reverse colour



Series A

Technical Specs: Roller Doors



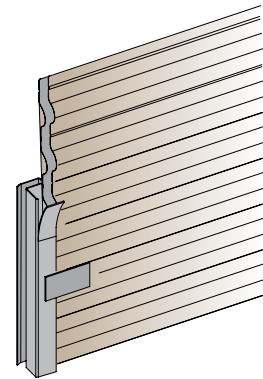
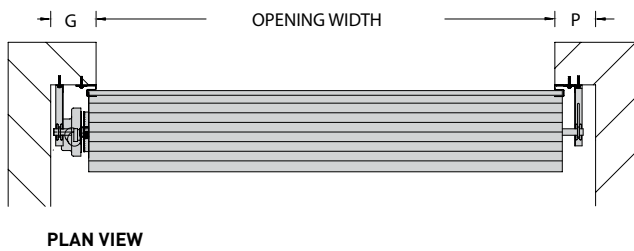
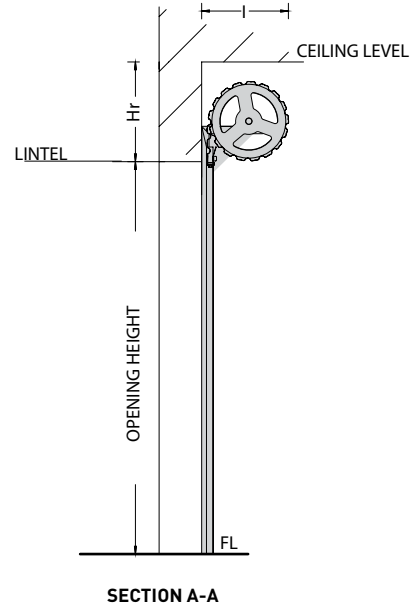
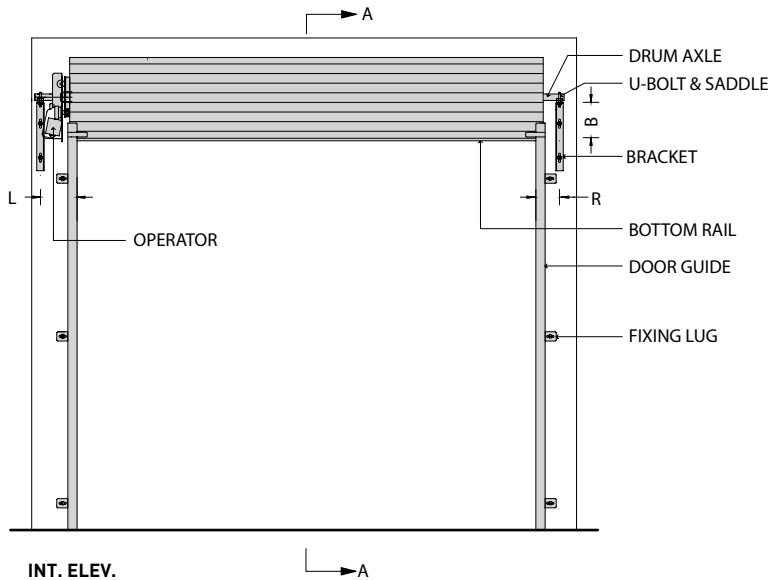
CLEARANCE DETAILS								
HEIGHT UP TO	Hr	B	I	OPERATION	DRIVEN END		PLAIN END	
					G	L	P	R
1850	490	250	470	HAND OPERATION	P	R	100	80
2600	500	255	480		MOTORISATION	200	170	100
3000	550	280	530					

Notes:

- Where Roller Doors are to be fitted in a cavity bulkhead situation, due allowances should be made to dimension "I" (600mm clearance is required for fixing and lifting purposes).
- WEIGHT - approximately 10Kg/m²
- **B** dimension applies when Hr dimension is as per specification.
- **Hr** dimension is recommended so that the door in the fully open position, does not protrude into the opening.

Series B

Technical Specs: Roller Doors



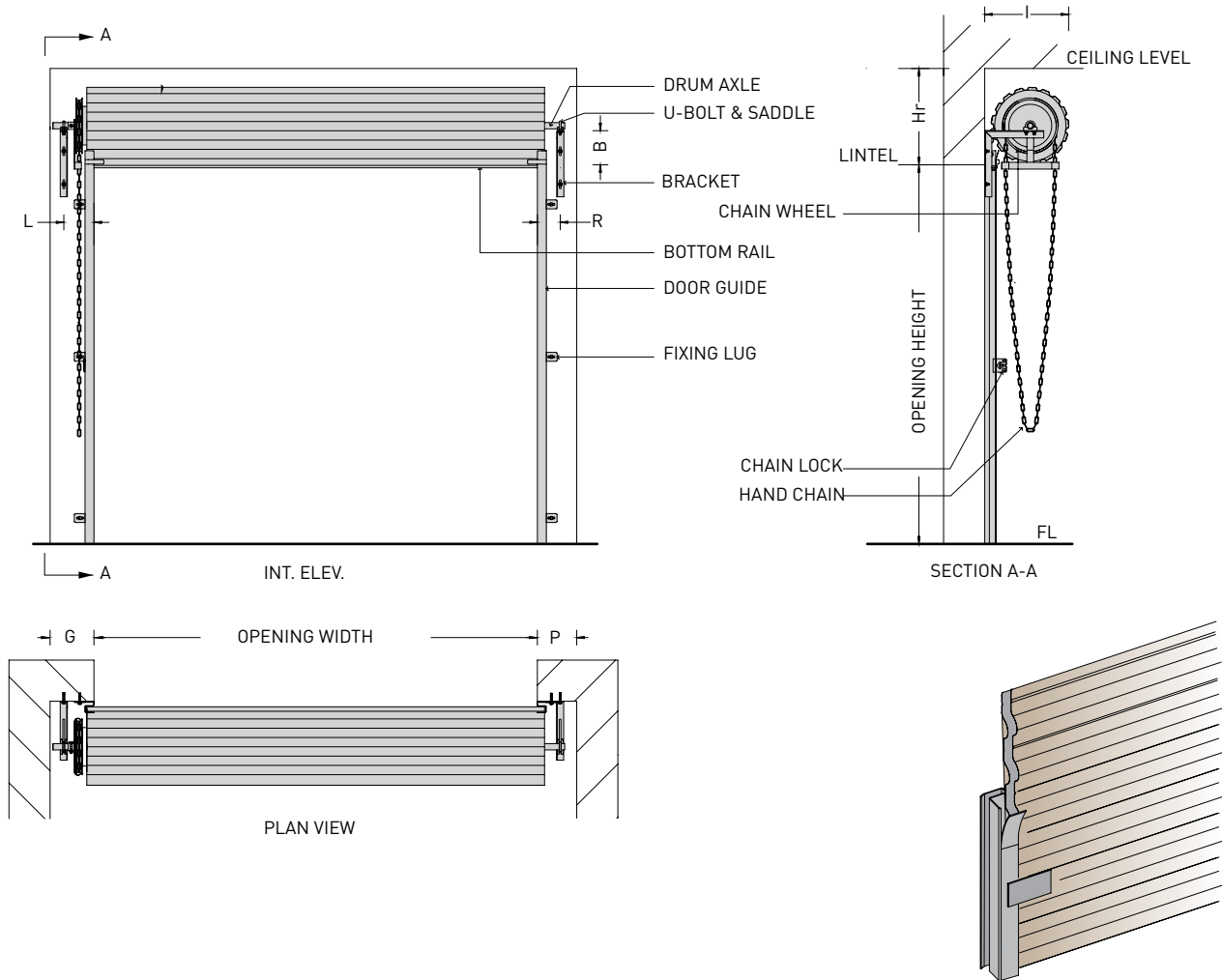
CLEARANCE DETAILS								
HEIGHT UP TO	Hr	B	I	OPERATION	DRIVEN END		PLAIN END	
					G	L	P	R
1850	490	250	470	HAND OPERATION	P	R	150	100
2600	500	255	480					
3000	550	280	530	MOTORISATION	220	200	150	100

Notes:

- Where Roller Doors are to be fitted in a cavity bulkhead situation, due allowances should be made to dimension "I" (600mm clearance is required for fixing and lifting purposes).
- WEIGHT - approximately 10Kg/m²
- B dimension applies when Hr dimension is as per specification.
- Hr dimension is recommended so that the door in the fully open position, does not protrude into the opening.

Series C

Technical Specs: Roller Doors



CLEARANCE DETAILS								
HEIGHT UP TO	Hr	B	I	OPERATION	DRIVEN END		PLAIN END	
					G	L	P	R
2600	500	255	480					
3300	550	280	530	CHAIN OPERATION	230	175	150	100
4300	590	300	570	MOTORISATION	500	145	150	100

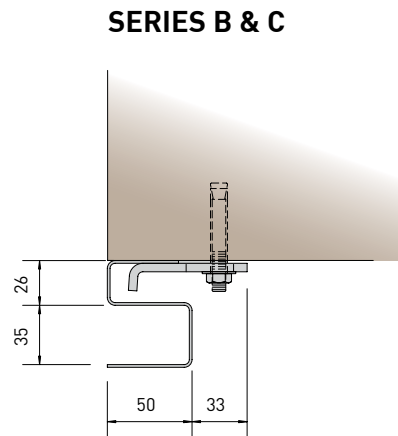
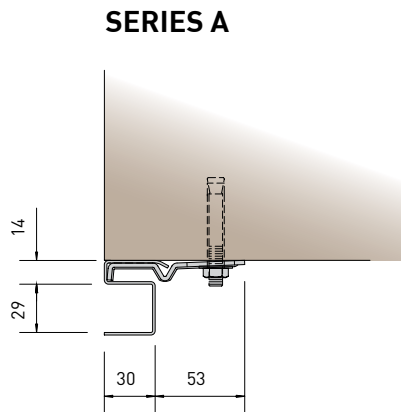
Notes:

- Where Roller Doors are to be fitted in a cavity bulkhead situation, due allowances should be made to dimension "I" (700mm clearance is required for fixing and lifting purposes).
- WEIGHT - approximately 10Kg/m²
- Chain operation is normally fitted on L/H side (R/H side is available when specified)
- B dimension applies when Hr dimension is as per specification.
- Hr dimension is recommended so that the door in the fully open position, does not protrude into the opening.

Door Guides

Technical Specs: Roller Doors

SERIES A, SERIES B & SERIES C STANDARD DOOR GUIDES



Roller Shutters



Summary

Roller Shutters

Steel



SERIES 75

Series 75 steel Roller Shutters of 75mm profile, provide high strength security for commercial and industrial applications such as factories, loading docks, workshops and warehouses. The small profile and tighter interlocking curl, enables smooth and quiet operation, making the Series 75 Roller Shutter also suitable for car park entries. As well as standard chain or motor operation small Series 75 Roller Shutters can simply be hand operated (size restriction applies).



SERIES 100

Series 100 steel Roller Shutters have a strong 100mm profile and are ideal for commercial and industrial applications such as factories, loading docks, workshops and warehouses. As well as standard chain or motor operation, small Series 100 Roller Shutters can also be hand operated (size restriction applies).



SERIES 130

Series 130 steel Roller Shutters of 130mm profile, provide high strength security and are used for commercial and industrial applications such as factories, loading docks, workshops and warehouses. The unique larger profile of the Series 130 provides added curtain strength and an aesthetically pleasing appearance. Series 130's are available in standard chain or motor operation.



2 HOUR FIRE SHUTTER

The 2-Hour Fire Shutter of 75mm steel profile has a certified integrity of 2 hours fire resistance and is ideal for applications where isolating and limiting potential fire spread (in openings with fire-resistant walls) is required. It is commonly used as part of an integrated fire prevention system (or practice) in buildings holding flammable materials, shopping centres, supermarket entries, warehouses and office buildings.



4 HOUR FIRE SHUTTER

The 4-Hour Fire Shutter of 75mm profile is ideal for applications where a 4-hour fire resistance integrity is required for isolating and limiting potential fire spread (in openings with fire-resistant walls). Fire Shutters are commonly used as part of an integrated fire prevention system (or practice) in buildings holding flammable materials, shopping centres, supermarket entries, warehouses and office buildings.

Summary (Continued)

Roller Shutters

Aluminium



SERIES 25

Series 25 aluminium Roller Shutters (of 25mm profile) are designed to provide security for small openings, especially where headroom is limited. Applications include counters, kiosks, bars, cabinets and trucks.



SERIES 63

Series 63 aluminium Roller Shutters (of 63mm profile) provide security for applications such as shop fronts, shopping centres, storage areas and counters. Series 63 slats can be slotted or perforated to provide visual access or ventilation where this is required.



CLEARLITE

The Airport Doors' Clearlite Roller Shutter boasts a strong transparent polycarbonate and aluminium curtain, making it ideal for internal applications such as shop fronts in shopping centres, counters, cafe's and showrooms, particularly where visual access is important.



PANORAMA

The aluminium Panorama Roller Shutter provides security for internal or external openings with provision for vision and ventilation. Panoramas are commonly used in shopping centres, arcades, large entrances, shop fronts and buildings near the sea.



SUPA SLAT

The Supa Slat Roller Shutter's strong and robust design makes it ideal for external applications and large internal openings such as shopping centres, arcades, large entrances, shop fronts and buildings near the sea. Insulated slats are recommended for temperature controlled applications (e.g. cool rooms) requiring reduced heating or cooling transfer.

Timber



TIMBER ROLLER SHUTTER

The beauty and warmth of timber makes the Timber Roller Shutter a perfect solution for internal applications such as counters, bars, clubrooms, churches and showrooms. Timber roller shutters are quiet to operate and can be polished or stained to complement the surrounding décor.

Selection Chart

Roller Shutters

ROLLER SHUTTERS		APPLICATIONS																	
Steel	Series 75	●	✓		●	✓	✓	✓	●	✓	●	✓	✓	●		●	✓		✓
	Series 100	●	●			✓	✓	✓		✓			✓	●			✓		✓
	Series 130	●	●			✓	✓	✓		●			✓	●			✓		✓
	2 Hour Fire Shutter				●		✓	✓			✓	✓	✓	✓		●			✓
	4 Hour Fire Shutter				●		✓	✓			✓	✓	✓	✓		●			✓
Aluminium	Series 25				✓	✓					✓				●			✓	●
	Series 63				✓	✓			●	●	✓	✓	✓	✓	✓	✓		✓	●
	Clearlite				✓						✓		✓	✓	✓				●
	Panorama		●		●	●	●	✓		●	✓	✓	✓	✓		✓	✓		●
	Supa Slat		●	✓	●		●	✓			✓		✓	✓		✓	✓		●
	Timber Roller Shutter				✓	✓					✓				✓				
			Aircraft Hangers	Car Parks	Cool-Rooms & Insulated Drier Rooms	Reception, Counters, Kiosks & Bars	Emergency Services (e.g. CFA)	Factories & Warehouses (external)	Factories & Warehouses (internal)	Garages & Carports	Laneways (freestanding)	Restaurants	Self Storage	Shopfronts	Shopping Complexes	Showrooms	Supermarket Entrances	Transport & Loading Docks/Bays	Vehicles (e.g. trucks)

ROLLER SHUTTERS		OPTIONAL FEATURES										
Steel	Series 75				●		✓	✓	✓	✓	✓	
	Series 100				●		✓	✓	✓	✓	✓	
	Series 130						✓	✓	✓	✓	✓	
	2 Hour Fire Shutter		✓				✓					
	4 Hour Fire Shutter		✓				✓					
Aluminium	Series 25						✓	✓				
	Series 63						✓	✓		✓	✓	
	Clearlite						✓	✓			✓	
	Panorama						✓	✓		✓	✓	
	Supa Slat					✓	✓	✓		✓	✓	
	Timber Roller Shutter						✓	✓				
			Cladding Options	Fire Rated	Glass	High Usage	Insulation Sound/Thermal	Motorsation	Mullions	Personal Entry & Exit Door	Ventilation (5-20% Airflow)	Ventilation (26% + Airflow)

SELECTION CHART KEY

- ✓ Suitable
- Suitable, conditions may apply

Series 75

Steel Roller Shutters



Series 75 Roller Shutters consist of individual interlocking steel slats, providing high strength security for commercial and industrial applications such as factories, loading docks, workshops and warehouses.

FEATURES

- Interlocking steel slats
- Optional vision/ventilation

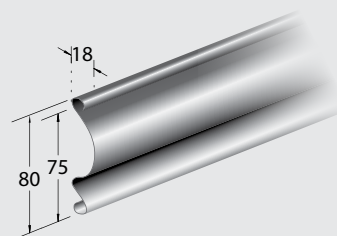
DOOR DIMENSIONS

- Maximum Door Height: 6500mm
- Maximum Door Width: 10000mm

NOTE: Maximum door dimensions may vary depending on wind loading and the door's design features and application. Maximum size may be reduced if the door is slotted or perforated (see Ventilation). In special applications, Series 75 Roller Shutters may be designed to suit larger sizes, consult manufacturer for further information.

RECOMMENDED SPECIFICATIONS

Series 75 steel Roller Shutter with 75mm high slats in 0.6mm, 0.8mm, 1.0mm or 1.2mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking steel slats winding onto an overhead drum and guided in steel door guides.



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Series 75

Steel Roller Shutters

CURTAIN

The Series 75 curtain is manufactured from individual, roll-formed, interlocking steel slats with a 75mm profile. The interlocking slats are roll-formed from galvanised steel sections of 0.6mm, 0.8mm or 1.0 mm thickness as standard, or 1.2mm thick for special applications. The thickness of steel is determined by the application and is dependent on the door width and wind loading. Alternating slats are fitted with nylon end clips to stop lateral movement of the curtain and to ensure smooth operation. When specified, deflection of the curtain can be reduced by installing the door higher than normal.

WIND LOCKS

When specified, wind lock clips are fitted to the ends of the slats to provide extra protection against excessive winds. As a guide wind locks are recommended for shutters over 6000mm wide; however in certain locations and applications e.g. high wind or cyclonic areas, wind locks may be required for shutters less than 6000mm wide. Refer to wind-loading chart (available from manufacturer) for further information. Wind lock clips are fabricated from cast iron to suit specially designed wind lock door guides and are fixed to every second or fourth slat as required for the application.

FINISH

The curtain is roll-formed from galvanised material as standard and can be powder coated (up to 9000mm wide) when specified. The drum and drum support brackets are prime-coated.

VENTILATION (OPTIONAL)

The Roller Shutter slats can be slotted or perforated to provide ventilation. The terms 'fully-slotted' or 'fully-perforated' refers to shutters in which all slats within the opening are slotted or perforated. 'Part-slotted' or 'part-perforated' refers to shutters that have a combination of slotted/perforated and non-slotted/perforated slats. Note, slotted or perforated shutters should be specified in powder coat finish (galvanised is not recommended).

Slotted Slats – Slots are 103mm wide by 19mm high at approximately 150mm intervals. When fully slotted, airflow of approximately 10% is achieved. Slotted shutters may reduce door strength and therefore may decrease the maximum door size available. Fully-slotted shutters should not exceed 3500mm high by 8000mm wide.

Perforated Slats – Perforated slats of 1.0mm thickness consist

of 2.0mm nom. diameter perforations at staggered pitch. Fully-perforated shutters provide approximately 20% airflow. Fully-perforated Series 75 Roller Shutters should not exceed 3500mm high by 6000mm wide. Size restrictions may also apply to part-perforated Roller Shutters.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Doors can be built into the Roller Shutter. Restrictions apply. PA Entry and Exit Doors are available for small to medium width Roller Shutters over 3000mm in height and that are not exposed to high wind loads. PA Entry and Exit Doors are fitted with a standard Lockwood 201 night latch. Other locks can be fitted if specified

Standard PA Entry Doors open inward and are 1000mm high by 600mm wide and are fitted approximately 210mm above floor level.

Standard PA Exit Doors open outward and are approximately 2040mm high by 1000mm wide and are fitted approximately 50mm above floor level.

NOTE: PA Entry and Exit Doors do not roll up with the shutter, and thus must be manually opened before operating the door. If the shutter has a PA Entry or Exit door and is motorised, a cut-out switch must be fitted to prevent accidental damage to the door. PA Entry and Exit Doors do not comply as fire exits.

BOTTOM RAIL

The bottom rail is manufactured from specially extruded, heavy duty, aluminium section, which interlocks with the bottom slat. Roller Shutters over 6500mm in width use a steel box section bottom rail. The bottom rail reinforces the Roller Shutter curtain and is fitted with a PVC bottom weather seal.

DOOR GUIDES

The door guides are manufactured from 2.5mm thick roll-formed galvanised steel with a depth of 78mm. Door guides are fixed to the walls using steel fixing lugs or can be welded directly to steel work. See installation drawing for further details.

WIND LOCK DOOR GUIDES

Wind lock door guides (where wind locks are specified) are manufactured from 3.0mm thick roll-formed galvanised steel with a depth of 100mm. See installation drawing for further details.



Series 75

Steel Roller Shutters

DRUM & SPRING ASSEMBLY

The drum consists of a seamless or spiral welded, cylindrical tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Series 75 Roller Shutter drum support brackets are manufactured from mild steel plate with a minimum thickness of 8mm.

FIXING REQUIREMENTS

The building construction (typically steel or concrete) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Hand-operated Series 75 Roller Shutters are fitted with two shoot-bolts, fitted internally or externally to each end of the bottom rail.

Chain operated steel Roller Shutters are fitted with a steel chain lock designed to accommodate a padlock. As an optional extra, chain operated shutters can also be fitted with two shoot-bolts, fitted internally to each end of the bottom rail. (Padlocks not included).

Electric operated (motorised) doors are secured by the motor and its controls.

NOTE: If optional shoot-bolts are fitted to a motorised shutter, a cut out switch for each shoot-bolt must be fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Centre door mullions of either a sliding or fixed type (as specified), are manufactured from mild steel plate with a standard width of 300mm. A sliding mullion is manually operated by disengaging top and bottom latches and sliding to one side of the doorway on an overhead sliding track fixed to the underside of the lintel. A fixed type mullion is not removable and is fixed to the floor and lintel.

OPERATION

Roller Shutters operate by means of a flexible interlocking steel

curtain, winding onto an overhead drum and guided in steel door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). Series 75 Roller Shutters are available in hand operation, chain operation or electric operation.

HAND OPERATION

Series 75 Roller Shutters can be hand-operated up to 2200mm height and 2400mm width. As doors can become quite heavy, hand operation is not recommended over this size.

CHAIN OPERATION

Gearing is fitted to one end of the Roller Shutter and matched to suit the door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism. **NOTE:** Chain operation is not recommended for Series 75 Roller Shutters over 20m².

MOTORISATION (ELECTRIC OPERATION)

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box) and an emergency hand chain operation in case of a power outage. The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, wind loading, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification.

For further information see Door Operators & Accessories.

OPTIONS

- Tapered bottom



Series 100

Steel Roller Shutters



Series 100 steel Roller Shutters provide high strength security and are ideal for commercial and industrial applications such as factories, loading docks, workshops and warehouses.

FEATURES

- Interlocking steel slats
- Optional vision/ventilation

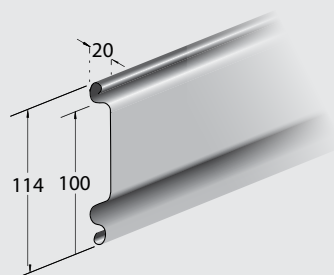
DOOR DIMENSIONS

- Maximum Height: 6500mm
- Maximum Width: 10000mm

NOTE: Maximum door dimensions may vary depending on wind loading and the door's design features and application. Maximum size may be reduced if the door is slotted or perforated (see Ventilation). In special applications, Series 100 Roller Shutters may be designed to suit larger sizes, consult manufacturer for further information.

RECOMMENDED SPECIFICATIONS

Series 100 steel Roller Shutter with 100mm high slats in 0.6mm, 0.8mm or 1.0mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking steel slats winding onto an overhead drum and guided in steel door guides.



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Series 100

Steel Roller Shutters

CURTAIN

The Series 100 curtain is manufactured from individual, roll-formed, interlocking steel slats with a 100mm profile. The interlocking slats are roll-formed from galvanised steel sections of 0.6mm, 0.8mm or 1.0 mm thickness. The thickness of steel is determined by the application and is dependent on the door width and wind loading. Alternating slats are fitted with nylon end clips to stop lateral movement of the curtain and to ensure smooth operation. When specified, deflection of the curtain can be reduced by installing the door higher than normal.

WIND LOCKS

When specified, wind lock clips are fitted to the ends of the slats to provide extra protection against excessive winds. As a guide wind locks are recommended for shutters over 6000mm wide; however in certain locations and applications e.g. high wind or cyclonic areas, wind locks may be required for shutters less than 6000mm wide. Refer to wind-loading chart (available from manufacturer) for further information. Wind lock clips are fabricated from cast iron to suit specially designed wind lock door guides and are fixed to every second or fourth slat as required for the application.

FINISH

The curtain is roll-formed from galvanised material as standard and can be powder coated (up to 9000mm wide) when specified. The drum and drum support brackets are prime-coated.

VENTILATION (OPTIONAL)

The Roller Shutter slats can be slotted or perforated to provide ventilation. The terms 'fully-slotted' or 'fully-perforated' refers to shutters in which all slats within the opening are slotted or perforated. 'Part-slotted' or 'part-perforated' refers to shutters that have a combination of slotted/perforated and non-slotted/perforated slats. Note, slotted and perforated shutters should be specified in powder coat finish (galvanised is not recommended).
 Slotted slats – Slats are 100mm wide by 45mm high at approximately 150mm intervals. When fully slotted, airflow of approximately 16% is achieved. Slotted shutters may reduce door strength and therefore may decrease the maximum door size available. Fully-slotted shutters should not exceed 3500mm high by 8000mm wide.
 Perforated Slats – Perforated slats of 1.0mm thickness consist of 1.7mm nom. diameter perforations at staggered pitch. Fully-perforated shutters provide approximately 23% airflow. Fully-perforated Series 100 Roller Shutters should not exceed

3500mm high by 6000mm wide. Size restrictions may also apply to part-perforated Roller Shutters.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Doors can be built into the Roller Shutter. Restrictions apply. PA Entry and Exit Doors are available for small to medium width Roller Shutters over 3000mm in height and that are not exposed to high wind loads. PA Entry and Exit Doors are fitted with a standard Lockwood 201 night latch. Other locks can be fitted if specified

Standard PA Entry Doors open inward and are 1000mm high by 600mm wide and are fitted approximately 210mm above floor level.

Standard PA Exit Doors open outward and are approximately 2040mm high by 1000mm wide and are fitted approximately 50mm above floor level.

NOTE: PA Entry and Exit Doors do not roll up with the shutter, and thus must be manually opened before operating the door. If the shutter has a PA Entry or Exit door and is motorised, a cut-out switch must be fitted to prevent accidental damage to the door. PA Entry and Exit Doors do not comply as fire exits.

BOTTOM RAIL

The bottom rail is manufactured from specially extruded, heavy duty, aluminium section, which interlocks with the bottom slat. Roller Shutters over 6500mm in width use a steel box section bottom rail. The bottom rail reinforces the Roller Shutter curtain and is fitted with a PVC bottom weather seal.

DOOR GUIDES

The door guides are manufactured from 2.5mm thick roll-formed galvanised steel with a depth of 78mm. Door guides are fixed to the walls using steel fixing lugs or can be welded directly to steel work. See installation drawing for further details.

WIND LOCK DOOR GUIDES

Wind lock door guides (where wind locks are specified) are manufactured from 3.0mm thick roll-formed galvanised steel with a depth of 100mm. See installation drawing for further details.

DRUM & SPRING ASSEMBLY

The drum consists of a seamless or spiral welded, cylindrical tube



Series 100

Steel Roller Shutters

revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Series 100 Roller Shutter drum support brackets are manufactured from mild steel plate with a minimum thickness of 8mm.

FIXING REQUIREMENTS

The building construction (typically steel or concrete) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Chain operated steel Roller Shutters are fitted with a steel chain lock designed to accommodate a padlock. As an optional extra, chain operated shutters can also be fitted with two shoot-bolts, fitted internally to each end of the bottom rail. (Padlocks not included).

Electric operated doors are secured by the motor and its controls.

NOTE: If optional shoot-bolts are fitted to a motorised shutter, a cut out switch for each shoot-bolt must be fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Centre door mullions of either a sliding or fixed type (as specified), are manufactured from mild steel plate with a standard width of 300mm. A sliding mullion is manually operated by disengaging top and bottom latches and sliding to one side of the doorway on an overhead sliding track fixed to the underside of the lintel. A fixed type mullion is not removable and is fixed to the floor and lintel.

OPERATION

Roller Shutters operate by means of a flexible interlocking steel curtain, winding onto an overhead drum and guided in steel door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). Series 100 Roller Shutters are available in chain operation or electric operation.

CHAIN OPERATION

Gearing is fitted to one end of the Roller Shutter and matched to suit the door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism. **NOTE:** Chain operation is not recommended for Series 100 Roller Shutters over 20m².

MOTORISATION (ELECTRIC OPERATION)

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box) and an emergency hand chain operation in case of a power outage. The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, wind loading, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification.

For further information see Door Operators & Accessories.

OPTIONS

- Tapered bottom

Series 130

Steel Roller Shutters



Series 130 steel Roller Shutters provide high strength security and are used for commercial and industrial applications such as factories, loading docks, workshops and warehouses.

FEATURES

- Interlocking steel slats
- Optional vision/ventilation

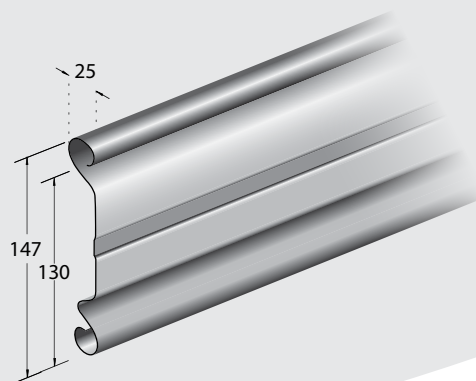
DOOR DIMENSIONS

- Maximum Height: 6000mm
- Maximum Width: 9500mm

NOTE: Maximum door dimensions may vary depending on wind loading and the door's design features and application. Maximum size may be reduced if the door is slotted or perforated (see Ventilation). Consult manufacturer for further information. In special applications, Series 130 Roller Shutters may be designed to suit larger sizes, consult manufacturer for further information.

RECOMMENDED SPECIFICATIONS

Series 130 steel Roller Shutter with 130mm high slats in 0.6mm, 0.8mm or 1.0mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking steel slats winding onto an overhead drum and guided in steel door guides.



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Series 130

Steel Roller Shutters

CURTAIN

The Series 130 curtain is manufactured from individual, roll-formed, interlocking steel slats with a 130mm profile. The interlocking slats are roll-formed from galvanised steel sections of 0.6mm, 0.8mm or 1.0mm thickness. The thickness of steel is determined by the application and is dependent on the door width and wind loading. Alternating slats are fitted with nylon end clips to stop lateral movement of the curtain and to ensure smooth operation. When specified, deflection of the curtain can be reduced by installing the door higher than normal.

WIND LOCKS

When specified, wind lock clips are fitted to the ends of the slats to provide extra protection against excessive winds. As a guide wind locks are recommended for shutters over 6000mm wide; however in certain locations and applications e.g. high wind or cyclonic areas, wind locks may be required for shutters less than 6000mm wide. Refer to wind-loading chart (available from manufacturer) for further information. Wind lock clips are fabricated from cast iron to suit specially designed wind lock door guides and are fixed to every second or fourth slat as required for the application.

FINISH

The curtain is roll-formed from galvanised material as standard and can be powder coated (up to 9000mm wide) when specified. The drum and drum support brackets are prime-coated.

VENTILATION (OPTIONAL)

The Roller Shutter slats can be slotted or perforated to provide ventilation. The terms 'fully-slotted' or 'fully-perforated' refers to shutters in which all slats within the opening are slotted or perforated. 'Part-slotted' or 'part-perforated' refers to shutters that have a combination of slotted/perforated and non-slotted/perforated slats. Please note, slotted and perforated shutters should be specified in powder coat finish (galvanised is not recommended).

Slotted Slats – Slots are 126mm wide by 30mm high at 150mm intervals. When fully slotted, airflow of approximately 10% is achieved. Slotted shutters may reduce door strength and therefore may decrease the maximum door size available. Fully-slotted shutters should not exceed 3500mm high by 8000mm wide.

Perforated Slats – Perforated slats of 1.0mm thickness consist of 3.2mm nom. diameter perforations at staggered pitch. Fully-perforated slats provide approximately 14% airflow. Fully-perforated Series 130 Roller Shutters should not exceed 3500mm high by 6000mm wide. Size restrictions may also apply to part-perforated Roller Shutters.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Doors can be built into the Roller Shutter. Restrictions apply. PA Entry and Exit Doors are available for small to medium width Roller Shutters over 3000mm in height and that are not exposed to high wind loads. PA Entry and Exit Doors are fitted with a standard Lockwood 201 night latch. Other locks can be fitted if specified

Standard PA Entry Doors open inward and are 1000mm high by 600mm wide and are fitted approximately 210mm above floor level.

Standard PA Exit Doors open outward and are approximately 2040mm high by 1000mm wide and are fitted approximately 50mm above floor level.

NOTE: PA Entry and Exit Doors do not roll up with the shutter, and thus must be manually opened before operating the door. If the shutter has a PA Entry or Exit door and is motorised, a cut-out switch must be fitted to prevent accidental damage to the door. PA Entry and Exit Doors do not comply as fire exits.

BOTTOM RAIL

The bottom rail is manufactured from specially extruded, heavy duty, aluminium section, which interlocks with the bottom slat. Roller Shutters over 6500mm in width use a steel box section bottom rail. The bottom rail reinforces the Roller Shutter curtain and is fitted with a PVC bottom weather seal.

DOOR GUIDES

The door guides are manufactured from 2.5mm thick roll-formed galvanised steel with a depth of 78mm. Door guides are fixed to the walls using steel fixing lugs or can be welded directly to steel work. See installation drawing for further details.

WIND LOCK TRACKS

Wind lock door guides (where wind locks are specified) are manufactured from 3.0mm thick roll-formed galvanised steel with a depth of 100mm. See installation drawing for further details.



Series 130

Steel Roller Shutters

DRUM & SPRING ASSEMBLY

The drum consists of a seamless or spiral welded, cylindrical tube revolving on a central steel axle and encasing helical torsion springs matched to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Series 130 Roller Shutter drum support brackets are manufactured from mild steel plate with a minimum thickness of 8mm.

FIXING REQUIREMENTS

The building construction (typically steel or concrete) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Chain operated steel Roller Shutters are fitted with a steel chain lock designed to accommodate a padlock. As an optional extra, chain operated shutters can also be fitted with two shoot-bolts, fitted internally to each end of the bottom rail. (Padlocks not included).

Electric operated doors are secured by the motor and its controls.

NOTE: If optional shoot-bolts are fitted to a motorised shutter, a cut out switch for each shoot-bolt must be fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Centre door mullions of either a sliding or fixed type (as specified), are manufactured from mild steel plate with a standard width of 300mm. A sliding mullion is manually operated by disengaging top and bottom latches and sliding to one side of the doorway on an overhead sliding track fixed to the underside of the lintel. A fixed type mullion is not removable and is fixed to the floor and lintel.

OPERATION

Roller Shutters operate by means of a flexible interlocking steel curtain, winding onto an overhead drum and guided in steel door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). Series 130 Roller

Shutters are available in chain operation or electric operation.

CHAIN OPERATION

Gearing is fitted to one end of the Roller Shutter and matched to suit the door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism.

NOTE: Chain operation is not recommended for Series 130 Roller Shutters over 20m².

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box) and an emergency hand chain operation in case of a power outage. The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, wind loading, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification.

For further information see Door Operators & Accessories.

OPTIONS

- Tapered bottom



2 & 4 Hour Fire Shutter

Steel Roller Shutters



2 or 4 Hour Fire Resistant Roller Shutters are designed for openings with fire-resistant walls where isolating or resisting the passage of fire is required. They are commonly used as part of an integrated fire prevention system in applications such as shopping centres, hospitals, aged care facilities, hazardous goods storage, warehouses, factories and office buildings.

FEATURES

- Certified integrity 2 or 4 hour fire rated
- Controlled descent mechanism
- Interlocking steel slats

DOOR DIMENSIONS - UNDRENCHED DOORSETS (NON INSULATED)

- Maximum Height: 5000mm*
- Maximum Width:
5000mm* (4 hour) / 8000mm* (2 hour)

*Total size must not exceed 20m².

DOOR DIMENSIONS - OVERSIZE (DRENCHED DOORSETS)

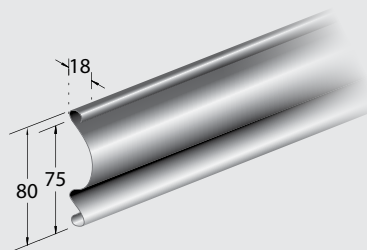
- Maximum Height: 5000mm*
- Maximum Width: 8000mm*

*Total size must not exceed 27.5m²

NOTE: 2 or 4 Hour Fire Resistant Roller Shutter doorsets requiring insulation or greater than 20m² must be incorporated with drenchers to each face of the curtain. Drenchers strictly by client. See Insulation (Drencher System) requirement details on next page.

RECOMMENDED SPECIFICATIONS

2 or 4 Hour Fire Resistant Roller Shutter (include required FRL [fire resistance level] e.g. -/120/-) with 75mm high slats in 1.0mm thick steel as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking steel slats winding onto an overhead drum and guided in steel door guides.



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2 & 4 Hour Fire Shutter

Steel Roller Shutters

The Fire Shutter is certified in accordance with Australian Standard 1530.4-2005 and Australian Standard 1905.2-2005.

CERTIFIED TESTING

The Fire Roller Shutter was tested by the CSIRO (Certificate of Test No. 364) in accordance with Australian Standard 1530, Methods for fire tests on building materials, components and structures, Part 4 – 1990, Fire-resistance tests of elements of building construction. The Fire Shutter was tested with the drum and the descent limiting gear exposed to the fire.

FORMAL OPINION ASSESMENT

2 & 4 Hour Fire Resistant Roller Shutters are manufactured based on and in accordance with the test results, the performance requirements of AS 1530.4-2005, and the conditions set out in Assessment Number FCO-2859 (CSIRO 2011) to meet the required fire-resistance levels if tested in accordance with AS 1530.4-2005.

CURTAIN

The Fire Resistant Roller Shutter curtain is manufactured from 75mm high by 1.0mm thick roll-formed, interlocking steel slats. Alternating slats are fitted with cast end clips to prevent lateral movement of the curtain and ensure smooth operation.

INSULATION (DRENCHER SYSTEM)

Where insulation is required (e.g. FRL -/120/30 or -/240/30) or where door is over 20m², the fire resistant roller shutter must be incorporated with a drencher system that provides a minimum of 0.2L/s per square metre uniformly to both sides of the door curtain. Drencher system is strictly the responsibility of the client (builder).

FINISH

The curtain is roll-formed from galvanised material as standard or can be powder coated when specified. The drum and drum support brackets are prime-coated.

BOTTOM RAIL

The bottom rail is manufactured from two 50 x 50 x 5mm steel angles fitted back to back to the bottom slat.

DOOR GUIDES

The door guides, designed to suit curtain depth and working clearance, are manufactured from 2.5mm or 3mm thick roll-formed galvanised steel with a depth of 78mm or 100mm (depending on door width). The door guides are fixed to the walls using steel fixing lugs at approximately 500mm centres.

DRUM & SPRING ASSEMBLY

The drum consists of a seamless welded, cylindrical tube revolving around a central steel axle and encasing helical torsion springs engineered to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width. The springs have provision for automatic release with a split axle mechanism to allow the door to automatically close (when activated) and to provide assistance in opening the door before resetting.

DRUM SUPPORT BRACKETS

Fire Shutter drum support brackets are manufactured from mild steel plate, with a minimum thickness of 8mm. The brackets are fitted with flange type ball bearings to suit the shaft diameter and door weight and are fixed to a structural fire-resistant (non-combustible) wall.

BULKHEAD / HOOD

A bulkhead or hood is required over the roller drum and must be incorporated with the door to achieve compliance. Bulkhead to be provided by client (builder), alternatively pressed metal hood to be provided by client (builder) unless otherwise specified.

FIXING REQUIREMENTS

The door opening (walls and threshold) must be of a non-combustible material to comply with the relevant Australian Standards (refer to AS1905.2-2005). In addition, the opening construction must also be structurally sound and have adequate strength to support the Roller Shutter and its fixing



2 & 4 Hour Fire Shutter

Steel Roller Shutters

requirements in standard and in fire conditions. Consult manufacturer for further details.

CLOSING DESCENT MECHANISM

The door closing descent mechanism is as standard actuated by a **Fusible Link only** which is designed to break when the nominal temperature reaches above 71°C. The fusible link is fitted on the roller drum side no further than 250mm from the roller drum and exposed to general airflow. It is connected to a spring loaded automatic release arm. When the fusible link is broken, the release arm is activated to release door spring tension (and disengage the motor where fitted) enabling the door to free-fall under controlled descent. Where the opening is greater than 4m wide, the shutter will have at least two fusible links (connected via a cable) located at each end of the opening. Optional **Fusible Link with 24vDC Holding Magnet** can be used on motorised and manual chain operated fire shutters that are connected to the building's Fire Indicator Panel (FIP). It is highly recommended that the FIP has battery back-up in case of power outage that is not caused by fire signal. Where required, a smoke detector or fire alarm can be interfaced from the FIP to the Fire Shutter (strictly responsibility of the client). The door closing descent mechanism is actuated by the Holding Magnet when the FIP receives a signal of fire in either the door vicinity or other area (depending on FIP setup), the FIP then terminates the continuous 24vDC power to the holding magnet, releasing the clutch and the door spring tension enabling the door to free-fall under controlled descent. The fusible link acts as a back-up in case of magnet release failure and will actuate descent as described above. NOTE: All wiring and 24vDC power supply from FIP to the holding magnet is the responsibility of the client (builder).

Optional **Fusible Link with ETL** can be used on motorised and manual chain operated fire shutters that are connected to the building's FIP. Where required, a smoke detector or fire alarm can be interfaced from the FIP to the Fire Shutter (strictly responsibility of the client). The door closing descent mechanism is actuated when the FIP upon receiving a fire signal sends an electrical pulse to the ETL (situated at the door) which melts the link releasing the clutch and the door spring tension enabling the door to free-fall under controlled descent. Should the FIP fail to send an electrical pulse to the ETL, the ETL is also activated by temperature. The fusible link acts as a back-up in case of ETL failure and will actuate descent as described above. NOTE: All wiring from FIP to the ETL is the responsibility of the client (builder).

The drum automatic release is fitted with a specially designed automatic controlled descent governor to match the door size and weight. The governor is designed to provide an average speed of descent between 250mm to 300mm per second. **NOTE:** The area around the door opening must be kept clear at all times.

OPERATION

Roller Shutters operate by means of a flexible interlocking steel curtain, revolving on a drum and guided in steel door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). 2 and 4 Hour Fire Shutters are available in hold-open operation, hand operation, manual chain operation or electric operation.

HOLD OPEN

The curtain remains open at all times except when the closing descent mechanism is actuated by the sensing device.

HAND OPERATION

Fire Shutters can be hand-operated up to 2200mm height and 2000mm width.

CHAIN OPERATION

Gearing is fitted to one end of the Roller Shutter and matched to suit door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism. **NOTE:** Chain operation is not recommended for Fire Shutters over 16m². Chain locks are not fitted to Fire Shutters.

MOTORISATION (ELECTRIC OPERATION)

Motorisation is via a geared electric motor with controlled descent and incorporates a standard reversing starter push-button station (control box) and an emergency hand chain operation in case of a power outage. The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.



2 & 4 Hour Fire Shutter

Steel Roller Shutters

LABELING/COMPLIANCE CERTIFICATES

Fire resistant roller shutters are clearly labeled with a metal tag mechanically affixed to the bottom rail. On completion and testing of the fire resistant roller shutter, Airport Doors will provide a certificate of compliance when requested.

MAINTENANCE & RESETTING

As indicated in AS1905.2, fire-resistant roller shutters require regular inspection and need to be re-certified as operable. The frequency of these inspections would appropriately be considered in consultation with the regulatory authority.

Where fire-resistant roller shutters are being used other than 'Hold-Open' (e.g. operated daily) it is very important that doors are not only inspected but also serviced on a regular basis.

NOTE: Where a fire has not occurred but the shutter's descent mechanism has been actuated, resetting of the fire shutter to make it operable again is required. In the case where a fire has actuated the descent mechanism, the heat absorbed and the inertia of the curtain make future manual opening of the curtain unlikely.



Series 25

Aluminium Roller Shutters



The Series 25 aluminium Roller Shutter is designed to provide security for small openings such as counters, kiosks, bars, cabinets and trucks and is ideal for applications where headroom is limited.

FEATURES

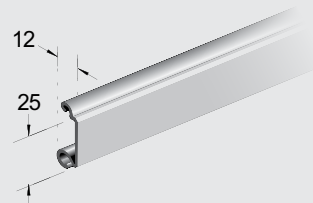
- Light and easy to operate
- Interlocking aluminium slats
- Minimal headroom required

DOOR DIMENSIONS

- Maximum Height: 2100mm*
 - Maximum Width: 2100mm*
- *Total size must not exceed 4m².

RECOMMENDED SPECIFICATIONS

Series 25 aluminium Roller Shutter with 25mm high slats in 1.4mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking aluminium slats winding onto an overhead drum and guided in aluminium door guides.



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Series 25

Aluminium Roller Shutters

CURTAIN

The Series 25 curtain is manufactured from 25mm high by 1.4mm thick specially extruded interlocking aluminium slats. Alternating slats are fitted with nylon end clips to prevent lateral movement of the curtain and to ensure smooth operation.

FINISH

Aluminium slats are available in natural anodised as standard and can be colour anodised or powder coated when specified.

BOTTOM RAIL

The bottom rail is manufactured from specially extruded aluminium section and is fitted with a PVC bottom weather-seal.

DOOR GUIDES

Series 25 standard door guides are manufactured from 1.5mm thick "h" profile extruded aluminium channel. A felt cushioning seal is inserted into the door guide to facilitate smooth operation. Where the opening is uneven or not plumb, door guides are used in conjunction with 'take-up' channels (limitations may apply).

DRUM & SPRING ASSEMBLY

The drum is manufactured from either mild steel tube or galvanised spiral duct tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The drum is attached to nylon drum wheels, which provide bearing support to the shaft, and completely conceal the springs. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Series 25 Roller Shutter drum support brackets are manufactured from mild steel plate with a minimum thickness of 3mm and are fixed to the wall using masonry anchors or hex head screws, or as specified for steel work. The drum support brackets are prime-coated.

FIXING REQUIREMENTS

The building construction (typically timber or steel) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Hand operated Series 25 Roller Shutters will be fitted as standard with a low profile lock which is identically keyed on both sides. The lock will be fitted to the bottom rail as standard and allow full opening height.

Alternatively, master key locking is also available upon specification. Master key is available as key operated from outside and 'dead' latch on inside. Where required 'free' (hand) latch can be provided on the inside upon specification. Alternatively it can be provided keyed on outside and reverse key on the inside.

NOTE: Master key locks protrude out from the bottom rail, therefore the full opening height cannot be provided (the bottom rail will sit under the lintel in the fully open position).

A shoot-bolt system is also available as an alternative locking option. Padlocks not included.

NOTE: Where door is motorised a manual lock, as discussed above, is not fitted.

OPERATION

Roller Shutters operate by means of a flexible interlocking aluminium curtain, winding onto an overhead drum and guided in aluminium door guides. Series 25 Roller Shutters can be installed 'behind-fix' or 'between-fix' and are available as hand operated or motorised.

HAND OPERATION

Series 25 Roller Shutters are designed for effortless hand operation.

MOTORISATION (OPTIONAL)

Standard motorisation is via a 24v DC motor with a wall push-button that opens and closes the door. The operator plugs into a standard GPO and consists of an emergency manual release mechanism in case of power outage.

Alternatively Series 25 aluminium roller shutters can be motorised using a tubular motor fitted inside the drum. Tubular motors are available in single-phase 240v or 24DC/240v. A manual override mechanism is available to enable manual operation in case of power outage.

Operator selection is dependent on the door size, door weight and the door's application.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories (e.g. remote control, key switches etc.) and photo electric beams for added safety are available upon specification. For further information see Door Operators & Accessories.

NOTE: Where between-fix is required, tubular motor is used as standard.

OPTIONS

- Between-fix installation

Series 63

Aluminium Roller Shutters



Consisting of individual interlocking aluminium slats the Series 63 Roller Shutter is designed to provide security for applications such as shopfronts, shopping centres, storage areas and counters, and can be provided with visual access or ventilation.

FEATURES

- Interlocking aluminium slats
- Light and easy to operate
- Optional vision/ventilation

DOOR DIMENSIONS

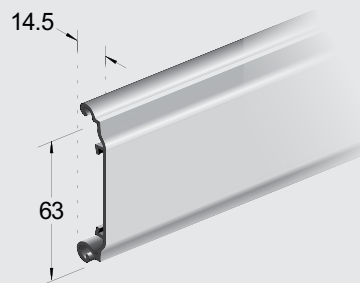
- Maximum Height: 3000mm*
- Maximum Width: 3500mm*

*Total size must not exceed 9m².

NOTE: Size restrictions may occur for external applications. Consult manufacturer for further information.

RECOMMENDED SPECIFICATIONS

Series 63 aluminium Roller Shutter with 63mm high slats in 1.2mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking aluminium slats winding onto an overhead drum and guided in aluminium door guides.



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Series 63

Aluminium Roller Shutters

CURTAIN

The Series 63 curtain is manufactured from 63mm high by 1.2mm thick specially extruded interlocking aluminium slats. Alternating slats are fitted with nylon end clips to prevent lateral movement of the curtain and to ensure smooth operation.

FINISH

Aluminium slats are available in natural anodised as standard, and can be colour anodised or powder coated when specified.

VENTILATION (OPTIONAL)

Ventilation can be provided, when specified, by slotting the individual interlocking slats. Slots are 89mm wide by 28mm high at 54mm intervals. The slotting may be applied to any number of slats as specified. Fully slotted slats achieve airflow of approximately 24%. Size restrictions may apply where shutter is fully slotted or installed in external applications. Consult manufacturer for further information.

VISION PANELS (OPTIONAL)

Clear acrylic can be fitted to the back of slotted aluminium slats to prevent wind and dust from coming through whilst still providing visual access. Alternatively, translucent acrylic panels may also be available.

BOTTOM RAIL

The bottom rail is manufactured from 1.4mm specially extruded aluminium section (measuring 90mm in height), and is fitted with a PVC bottom weather-seal.

DOOR GUIDES

Series 63 standard door guides are manufactured from 2mm thick, 50mm x 30mm extruded aluminium. Where the opening is uneven or not plumb, door guides are used in conjunction with 'take-up' channels (limitations may apply).

DRUM & SPRING ASSEMBLY

The drum is manufactured from galvanised spiral duct tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The drum is attached to nylon drum wheels, which provide bearing support to the shaft, and completely conceal the springs. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Series 63 Roller Shutter drum support brackets are manufactured from either mild steel plate with a thickness of

3mm, or mild steel angle brackets both matched to suit door size and weight. The drum support brackets are prime-coated and are fixed to the wall using masonry anchors or hex head screws, or as specified for steel work.

FIXING REQUIREMENTS

The building construction (typically timber, steel or solid brick) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Hand operated Series 63 Roller Shutters will be fitted as standard with a low profile lock which is identically keyed on both sides. The lock will be fitted to the bottom rail as standard and allow full opening height. When specified the lock can be fitted at waist height.

Alternatively, master key locking is also available upon specification. Master key is available as key operated from outside and 'dead' latch on inside. Where required 'free' (hand) latch can be provided on the inside upon specification. Master key can also be provided keyed on the outside and reverse key on the inside when specified.

NOTE: Master key locks protrude out from the bottom rail, therefore the full opening height cannot be provided (the bottom rail will sit under the lintel in the fully open position).

A shoot-bolt system is also available as an alternative locking option. Padlocks not included.

NOTE: Where door is motorised a manual lock, as discussed above, is not fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Series 63 standard centre mullions, of either removable or fixed type, are manufactured from extruded aluminium of 125mm width.

Removable mullions are designed to give full opening width. A removable centre mullion consists of a lift-out mullion that locks into the bottom plate with locking pins and fits into the mullion head under the lintel. A fixed type mullion is fixed to the floor and lintel.

Corner mullions are used when two shutters meet in a corner. The mullion is manufactured from aluminium sheets fabricated to suit the angle and size as required. The width of the angular corner mullions can be minimised if the drums are vertically staged when installed.



Series 63

Aluminium Roller Shutters

OPERATION

Roller Shutters operate by means of a flexible interlocking aluminium curtain, winding onto an overhead drum and guided in aluminium door guides. Series 63 Roller Shutters can be installed 'behind-fix' or 'between-fix' and are available as hand operated or motorised.

HAND OPERATION

Hand operation of Series 63 Roller Shutters is suitable up to 2400 high by 2500 wide.

MOTORISATION

Standard motorisation is via a 24v DC motor with a wall push-button that opens and closes the door. The operator plugs into a standard GPO and consists of an emergency manual release mechanism in case of power outage.

Alternatively Series 63 aluminium roller shutters can be motorised using a tubular motor fitted inside the drum. Tubular motors are available in single-phase 240v or 24DC/240v. A manual override mechanism is available to enable manual operation in case of power outage.

Operator selection is dependent on the door size, door weight and the door's application.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of

the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories (e.g. remote control, key switches etc.) and photo electric beams for added safety, are available upon specification. For further information see Door Operators & Accessories.

NOTE: Where between-fix is required, tubular motor is used as standard.

OPTIONS

- Tapered bottom
- Mullions: removable or fixed
- Vision/Ventilation
- Between-fix installation



Clearlite

Aluminium Roller Shutters



The Airport Doors Clearlite Roller Shutter is one of the strongest transparent polycarbonate shutters on the Australian market and is designed to provide security for internal applications such as shop fronts in shopping centres, counters, cafe's and showrooms.

FEATURES

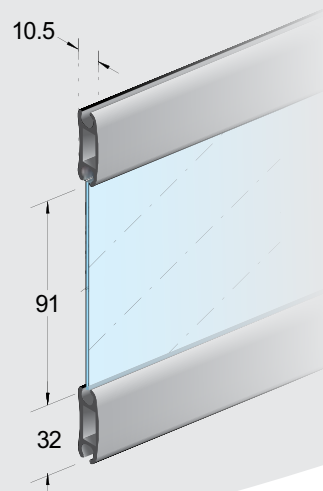
- Interlocking slats
- Light and easy to operate
- Vision Roller Shutter

DOOR DIMENSIONS

- Maximum Height: 3000mm*
 - Maximum Width: 3000mm*
- *Total size must not exceed 8m².

RECOMMENDED SPECIFICATIONS

Clearlite Roller Shutter with clear polycarbonate infill fitted into 35mm high extruded aluminium mid-rail as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain winding onto an overhead drum and guided in aluminium door guides.



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Clearlite

Aluminium Roller Shutters

CURTAIN

The Clearlite curtain is manufactured from clear polycarbonate infill fitted into extruded aluminium mid-rail with a 35mm face-height. Each mid-rail is fitted with specially moulded nylon end clips to prevent lateral movement and ensure smooth operation.

FINISH

Aluminium mid-rails are available in natural anodised as standard and can be colour anodised or powder coated when specified.

VENTILATION (OPTIONAL)

Ventilation can be provided when specified by slotting a number of clear polycarbonate slats to create a part-slotted curtain. Fully-slotted Clearlite Shutters are not available.

BOTTOM RAIL

The bottom rail is manufactured from 1.8mm specially extruded aluminium section (measuring 85mm in height), and is fitted with a PVC bottom weather-seal.

DOOR GUIDES

Clearlite standard door guides are manufactured from 2mm thick, 50mm by 30mm extruded aluminium. Where the opening is uneven or not plumb, door guides are used in conjunction with 'take-up' channels (limitations may apply).

DRUM & SPRING ASSEMBLY

The drum is manufactured from galvanised spiral duct tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The drum is attached to nylon drum wheels, which provide bearing support to the shaft, and completely conceal the springs. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Clearlite Roller Shutter drum support brackets are manufactured from either mild steel plate with a thickness of 3mm, or mild steel angle brackets both matched to suit door size and weight. The drum support brackets are prime-coated and are fixed to the wall using masonry anchors or hex head screws, or as specified for steel work.

FIXING REQUIREMENTS

The building construction (typically timber, steel or solid brick) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Hand operated Clearlite Roller Shutters will be fitted as standard with a low profile lock which is identically keyed on both sides. The lock will be fitted to the bottom rail as standard and allow full opening height. When specified the lock can be fitted at waist height.

Alternatively, master key locking is also available upon specification. Master key is available as key operated from outside and 'dead' latch on inside. Where required 'free' (hand) latch can be provided on the inside upon specification. Master key can also be provided keyed on the outside and reverse key on the inside when specified.

NOTE: Master key locks protrude out from the bottom rail, therefore the full opening height cannot be provided (the bottom rail will sit under the lintel in the fully open position).

A shoot-bolt system is also available as an alternative locking option. Padlocks not included.

NOTE: Where door is motorised a manual lock, as discussed above, is not fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Clearlite standard centre mullions, of either removable or fixed type, are manufactured from extruded aluminium of 125mm width.

Removable mullions are designed to give full opening width. A removable centre mullion consists of a lift-out mullion that locks into the bottom plate with locking pins and fits into the mullion head under the lintel. A fixed type mullion is fixed to the floor and lintel.

Corner mullions are used when two shutters meet in a corner. The mullion is manufactured from aluminium sheets fabricated to suit the angle and size as required. The width of the angular corner mullions can be minimised if the drums are vertically staged when installed.

OPERATION

Roller Shutters operate by means of a flexible interlocking curtain, winding onto an overhead drum and guided in aluminium door guides. Clearlite Roller Shutters can be installed 'behind-fix' or 'between-fix' and are available as hand operated or motorised.

HAND OPERATION

Hand operation of Clearlite Roller Shutters is suitable up to 2400 high by 2500 wide.

MOTORISATION

Standard motorisation is via a 24v DC motor with a wall push-button that opens and closes the door. The operator plugs into a standard GPO and consists of an emergency manual release mechanism in case of power outage.

Alternatively Clearlite aluminium roller shutters can be motorised using a tubular motor fitted inside the drum. Tubular motors are available in single-phase 240v or 24DC/240v. A manual override mechanism is available to enable manual operation in case of power outage.

Operator selection is dependent on the door size, door weight and the door's application.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories (e.g. remote control, key switches etc.) and photo electric beams for added safety, are available upon specification. For further information see Door Operators & Accessories.

NOTE: Where between-fix is required, tubular motor is used as standard.

OPTIONS

- Tapered bottom
- Mullions: removable or fixed
- Between-fix installation

Panorama

Aluminium Roller Shutters



The Panorama Shutter provides security for internal and external openings with provision for vision and ventilation. Panoramas are commonly used in shopping centres, arcades, large entrances, shop fronts and buildings near the sea.

FEATURES

- Interlocking aluminium slats
- Optional vision/ventilation

DOOR DIMENSIONS

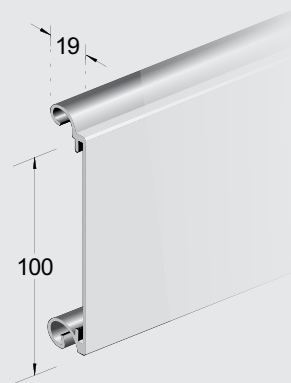
- Maximum Height: 3600mm*
- Maximum Width: 7500mm*

*Total size must not exceed 25m².

NOTE: Size restrictions may occur for external applications. Consult manufacturer for further information.

RECOMMENDED SPECIFICATIONS

Panorama aluminium Roller Shutter with 100mm high by 19mm deep slats in 1.4mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking aluminium slats winding onto an overhead drum and guided in aluminium door guides.



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Panorama

Aluminium Roller Shutters

CURTAIN

The Panorama curtain is manufactured from 100mm high by 19mm deep by 1.4mm thick specially extruded interlocking aluminium slats. Alternating slats are fitted with nylon end clips to prevent lateral movement of the curtain and to ensure smooth operation.

FINISH

Aluminium slats are available in natural anodised as standard and can be colour anodised or powder coated when specified.

VENTILATION (OPTIONAL)

When specified, the Roller Shutter slats can be slotted or perforated to provide ventilation.

Slotted Slats - Slots are 160mm wide by 58mm high at 100mm intervals. The slotting may be applied to any number of slats as specified. Fully slotted slats achieve airflow of approximately 27%.

Perforated Slats - Standard perforations are of 6.5mm diameter at a pitch of 13mm. Fully perforated Panorama shutters provide approximately 30% airflow. Alternatively non-standard perforations of 7.8mm diameter at a pitch of 14mm can be provided to allow approximately 21% airflow when fully perforated.

Fully slotted or fully perforated shutters are not suitable for external applications. Size restrictions may apply to internal Panorama Shutters that are fully slotted or fully perforated.

VISION PANELS (OPTIONAL)

Clear acrylic can be fitted to the back of slotted aluminium slats to prevent wind and dust from coming through whilst still providing light and vision.

BOTTOM RAIL

The bottom rail is manufactured from heavy gauge extruded aluminium and is fitted with a PVC bottom weather-seal. The bottom rail is attached to the bottom slat for adequate strengthening of the curtain. **NOTE:** For special applications, steel bottom rails may be used (as an alternative) to provide adequate strength and support.

DOOR GUIDES

The door guides are manufactured from 3mm thick specially extruded 116mm by 35mm aluminium sections.

DRUM & SPRING ASSEMBLY

The drum consists of a seamless or spiral welded, cylindrical tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Panorama Roller Shutter drum support brackets are manufactured from mild steel plate with a minimum thickness of 8mm.

FIXING REQUIREMENTS

The building construction (typically steel or concrete) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Chain operated Panorama Roller Shutters are fitted with a steel chain lock designed to accommodate a padlock. As an optional extra, chain operated shutters can also be fitted with two shoot-bolts, fitted internally to each end of the bottom rail. Padlocks not included.

Electric operated (motorised) doors are secured by the motor and its controls.

NOTE: If optional shoot-bolts are fitted to a motorised shutter, a cut out switch for each shoot-bolt must be fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Removable and sliding type mullions are manufactured from steel or aluminium of approximately 300mm width. A removable mullion which allows the mullion to be removed by hand is suitable up to 2.4m high. A sliding mullion is manually operated by disengaging top and bottom latches and sliding to one side of the doorway on an overhead sliding track fixed to the underside of the lintel. A fixed type mullion (typically made of steel) is not removable and is fixed to the floor and lintel.

OPERATION

Panorama Roller Shutters operate by means of a flexible interlocking aluminium curtain, winding onto an overhead drum and guided in aluminium door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). Panorama Roller Shutters are available in chain operation or electric operation.

CHAIN OPERATION

Gearing is fitted to one end of the Roller Shutter and matched to suit the door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism.

NOTE: Chain operation is not recommended for Panorama Roller Shutters over 20m².

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box) and emergency hand chain operation (in case of a power outage). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, wind loading, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification.

For further information see Door Operators & Accessories.

OPTIONS

- Tapered bottom
- Ventilation/Vision
- Mullions

Supa Slat Insulated/Non-Insulated

Aluminium Roller Shutters



With its strong and robust design, the aluminium Supa Slat roller shutter is ideal for external applications and large internal openings such as wall dividers, shopping centres, arcades, large entrances, shop fronts and buildings near the sea. Insulated slats are recommended for temperature controlled applications (such as cool rooms), where reduced heating or cooling transfer is required.

FEATURES

- Interlocking aluminium slats
- Strong design
- Insulation or Non-insulation option

DOOR DIMENSIONS

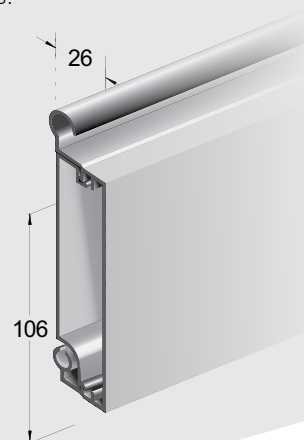
- Maximum Height: 4200mm*
- Maximum Width: 9000mm*

*Total door size shall not exceed 30m².

NOTE: Size restrictions may occur for external applications, consult manufacturer for details.

RECOMMENDED SPECIFICATIONS

Supa Slat Insulated or Supa Slat Non-Insulated aluminium roller shutter with 105mm high slats in 1.6mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible curtain made of interlocking aluminium slats winding onto an overhead drum and guided in aluminium door guides.



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Supa Slat Insulated/ Supa Slat Non-Insulated

Aluminium Roller Shutters

CURTAIN

The Supa Slat flat-finish curtain is manufactured from 105mm high by 30mm deep by 1.6mm thick specially extruded interlocking aluminium slats. The curtain of the Insulated version also comprises polystyrene infill with an aluminium or PVC backing plate to provide thermal insulation.

Alternating slats are fitted with nylon end clips to prevent lateral movement of the curtain and to ensure smooth operation.

FINISH

Aluminium slats are available in natural anodised as standard and can be colour anodised or powder coated when specified.

BOTTOM RAIL

The bottom rail is manufactured from extruded aluminium (of 165mm in height) and is fitted with a PVC bottom weather-seal. The bottom rail is attached to the bottom slat for adequate strengthening of the curtain.

DOOR GUIDES

The door guides are manufactured from 4mm thick specially extruded 133mm by 48mm aluminium sections. A felt cushioning seal is inserted into the door guide to facilitate smooth operation.

DRUM & SPRING ASSEMBLY

The drum consists of a seamless or spiral welded, cylindrical tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Supa Slat Roller Shutter drum support brackets are manufactured from mild steel plate with a minimum thickness of 8mm.

FIXING REQUIREMENTS

The building construction (typically steel or concrete) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Chain operated Supa Slat Roller Shutters are fitted with a steel chain lock designed to accommodate a padlock. As an optional extra, chain operated shutters can also be fitted with two shoot-bolts. Shoot-bolts are fitted internally to each end of the bottom rail. Padlocks not included.

Electric operated (motorised) doors are secured by the motor and its controls.

NOTE: If optional shoot-bolts are fitted to a motorised shutter, a cut out switch for each shoot-bolt must be fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Removable and sliding type mullions are manufactured from steel or aluminium of approximately 300mm width. A removable mullion, which allows the mullion to be removed by hand, is suitable up to 2.4m high. A sliding mullion is manually operated by disengaging top and bottom latches and sliding to one side of the doorway on an overhead sliding track fixed to the underside of the lintel. A fixed type mullion (typically made of steel) is not removable and is fixed to the floor and lintel.

OPERATION

Supa Slat Roller Shutters operate by means of a flexible interlocking aluminium curtain, winding onto an overhead drum and guided in aluminium door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). Supa Slat Roller Shutters are available in chain operation or electric operation.

CHAIN OPERATION

Gearing is fitted to one end of the Roller Shutter and matched to suit the door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism.

NOTE: Chain operation is not recommended for Supa Slat Roller Shutters over 20m².

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box) and emergency hand chain operation (in case of a power outage). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, wind loading, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification.

For further information see Door Operators & Accessories.

OPTIONS

- Insulated/Non Insulated
- Tapered bottom
- Mullions

Timber Roller Shutter

Timber Roller Shutters



The natural beauty and warmth of timber makes the Timber Roller Shutter a perfect solution for internal applications such as counters, bars, clubrooms, churches and showrooms. Its elegant curtain design enables quiet operation and can be polished or stained to complement the surrounding décor.

FEATURES

- Appealing timber design
- Quiet operation
- Natural finish

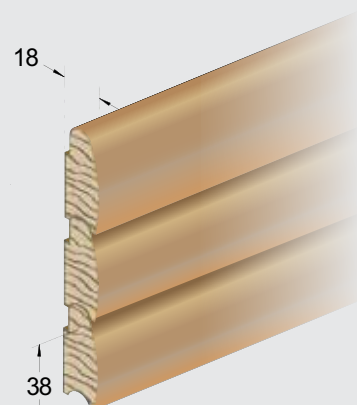
DOOR DIMENSIONS

- Maximum Height: 2300mm*
- Maximum Width: 3000mm*

*Total size must not exceed 5.2m².

RECOMMENDED SPECIFICATIONS

Timber Roller Shutter with 45mm high slats in 17mm thick material as manufactured by Airport Doors. The Roller Shutter operates by means of a flexible timber slatted curtain winding onto an overhead drum and guided in timber or aluminium door guides.



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Timber Roller Shutter

Timber Roller Shutters

CURTAIN

The Timber Roller Shutter curtain is manufactured from specially moulded 45 mm high by 17mm thick Mountain Ash timber slats. The slats are morticed internally and lined with spring steel straps and copper straps cushioned by cotton webbing. The copper straps and cotton webbing are countersunk screwed from the back to link the slats together.

FINISH

Mountain Ash timber slats are sanded smooth and supplied untreated. Polish or stain can be applied to the slats at a later date by client.

NOTE: Polyurethane or other lacquer finishes are not suitable for timber shutters.

BOTTOM RAIL

The bottom rail is manufactured from 90mm high by 17mm wide timber moulding.

DOOR GUIDES

Timber Roller Shutter standard door guides are manufactured from 2mm thick, 50mm x 30mm extruded aluminium. Where the opening is uneven or not plumb, door guides are used in conjunction with 'take-up' channels (limitations may apply).

In some cases door guides can be manufactured from specially moulded timber of 65mm by 55mm.

NOTE: Where aluminium mullions are required, door guides will be aluminium.

DRUM & SPRING ASSEMBLY

The drum is manufactured from galvanised spiral duct tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The drum is attached to nylon drum wheels, which provide bearing support to the shaft, and completely conceal the springs. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Timber Roller Shutter drum support brackets are manufactured from either mild steel plate with a thickness of 3mm, or mild steel angle brackets both matched to suit door size and weight. The drum support brackets are prime-coated and are fixed to the wall using masonry anchors or hex head screws, or as specified for steel work.

FIXING REQUIREMENTS

The building construction (typically timber, steel or core-filled brick) must be structurally sound and have adequate strength to support the Roller Shutter and its fixing requirements. Consult manufacturer for further details.

LOCKING

Standard locking is by means of two 100mm long chrome or brass plated barrel bolts fitted externally to each side of the bottom rail.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Timber Roller Shutter centre door mullions, of either removable or fixed type, are manufactured from aluminium extrusion with a standard width of 125mm. Where aluminium mullions are required, aluminium door guides will be used instead of the standard timber door guides. Fixed centre door mullions can alternatively be fabricated from timber when specified, however restrictions may apply. Consult the manufacturer for further information.

Fixed and removable corner mullions are manufactured in aluminium. Specifications may differ from application to application.

OPERATION

The Timber Roller Shutter operates by means of a flexible interlocking timber curtain, winding onto an overhead drum and guided in timber door guides. Timber Roller Shutters can be installed 'behind-fix' or 'between-fix' and are available as hand operated or motorised.

HAND OPERATION

Timber Roller Shutters are designed for hand-operation up to 2000 high by 2000 wide.

MOTORISATION

Standard motorisation is via a 24v DC motor with a wall push-button that opens and closes the door. The operator plugs into a standard GPO and consists of an emergency manual release mechanism in case of power outage.

Alternatively Timber Roller Shutters can be motorised using a tubular motor fitted inside the drum. Tubular motors are available in single-phase 240v or 24DC/240v. A manual override mechanism is available to enable manual operation in case of power outage.

Operator selection is dependent on the door size, door weight and the door's application.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories (e.g. remote control, key switches etc.) and photo electric beams for added safety, are available upon specification. For further information see Door Operators & Accessories.

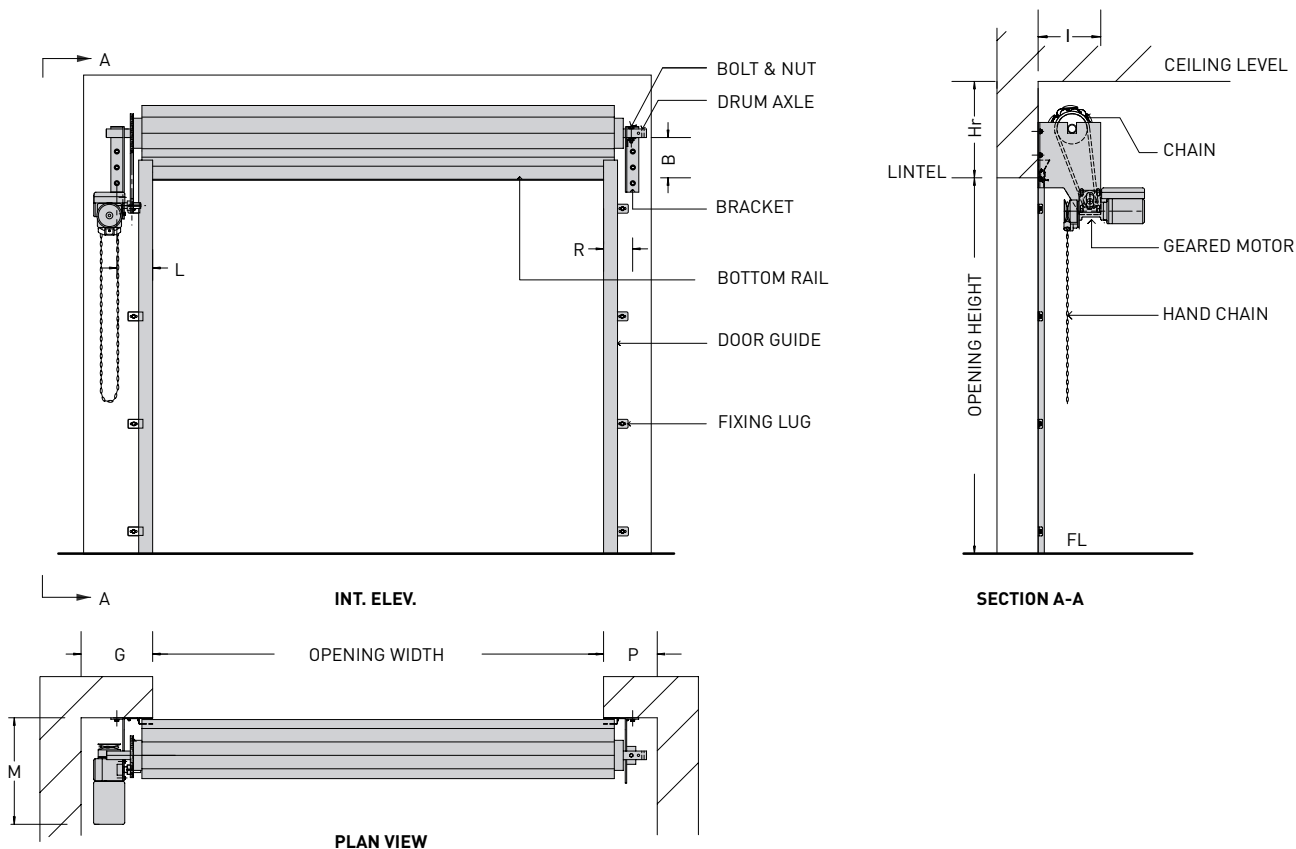
NOTE: Where between-fix is required, tubular motor is used as standard.

OPTIONS

- Mullions: removable or fixed
- Between-fix installation

Series 75

Technical Specs: Steel Roller Shutters



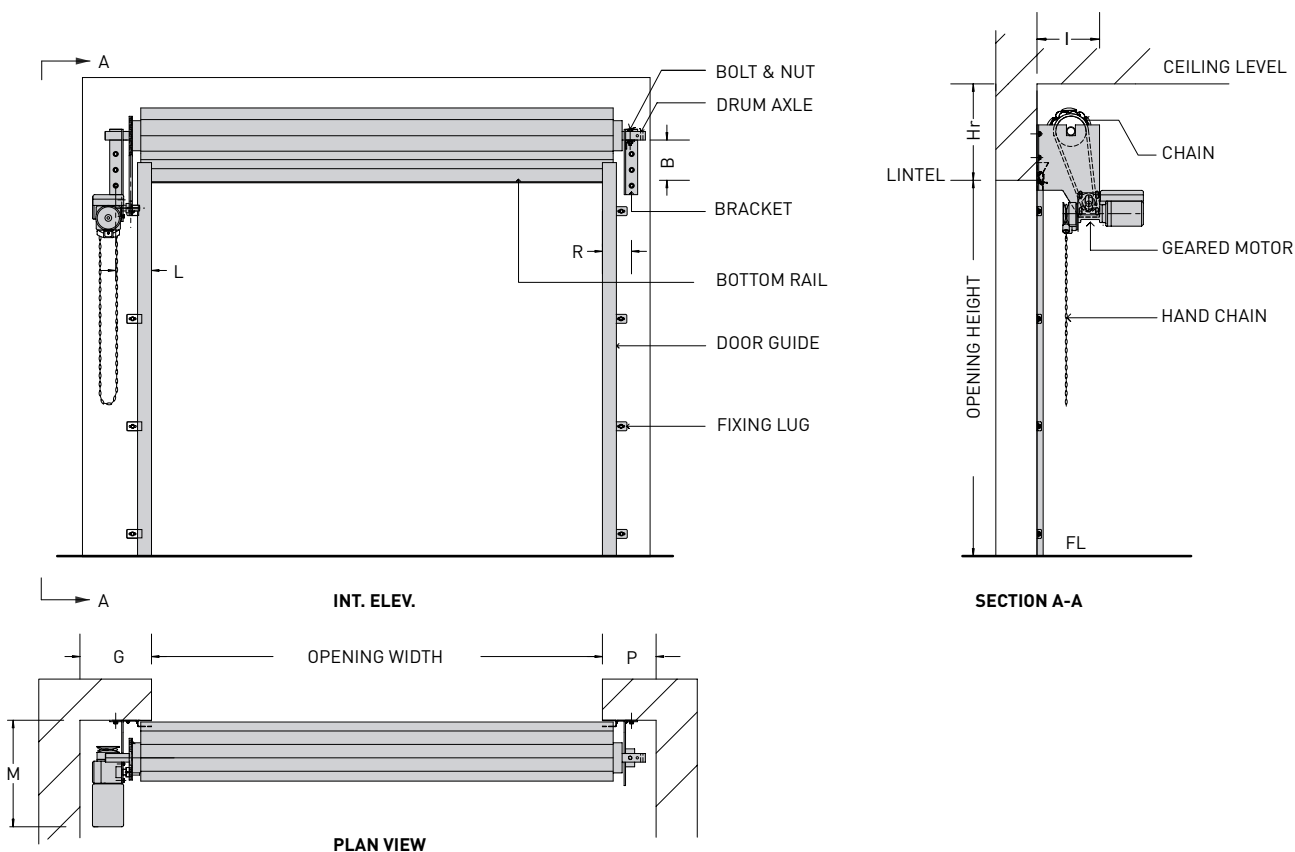
CLEARANCE DETAILS													
HEIGHT UP TO	WIDTH UP TO 8m				WIDTH UP TO 10m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M	Hr	B	I	M		G	L**	P	R**
2400	530	325	410	595	550	335	410	595	HAND OPERATION	P	R	250	170
4300	600	385	430	595	610	390	430	595	CHAIN OPERATION	300	190	250	170
6500	690	450	550	675	800	375	680	675	MOTORISATION (STD)	500	190	250	170
									MOTORISATION (INBOARD*)	250	180	250	170

Notes:

- For hand operated doors, sideroom on one side only (P) can (where required) be reduced to 120 min.
- Standard chain operated or motorised doors have the drive unit fitted outboard.
- *Inboard motorisation is available when sufficient clearance is not available for standard motorisation. If fitted inboard, the drive unit fits partly within opening under drum/curtain. Add 150 to dimension M for inboard motorised doors.
- Door-stops on door guides are fitted on hand-operated or chain-operated shutters.
- **Where shutter has windlocks allow extra 10mm for 'R' and extra 40mm for 'L'.

Series 100

Technical Specs: Steel Roller Shutters



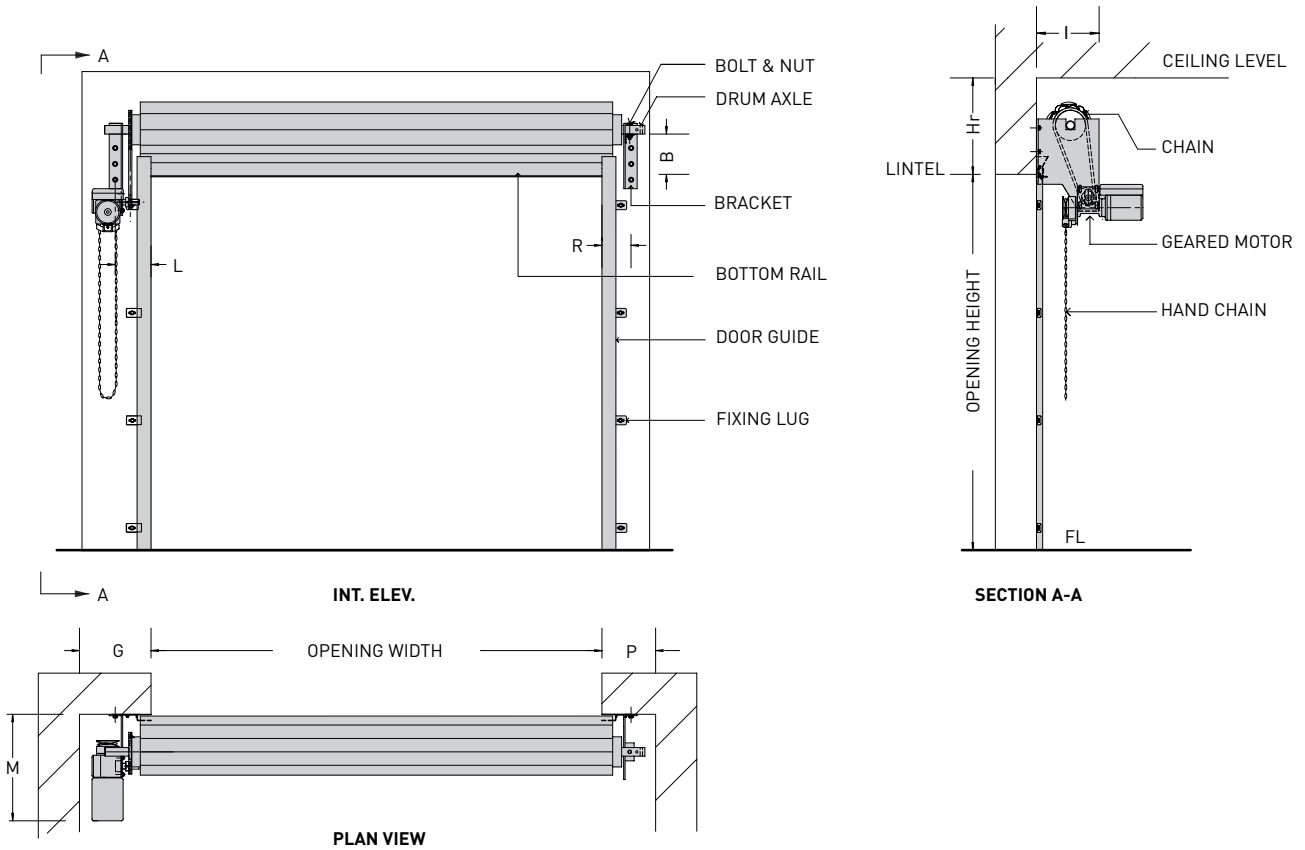
CLEARANCE DETAILS													
HEIGHT UP TO	WIDTH UP TO 8m				WIDTH UP TO 10m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M	Hr	B	I	M		G	L**	P	R**
2400	530	325	410	595	550	335	410	595	CHAIN OPERATION	300	190	250	170
4300	600	385	430	595	610	390	430	595	MOTORISATION (STD)	500	190	250	170
6500	690	450	550	675	800	375	680	675	MOTORISATION (INBOARD*)	250	180	250	170

Notes:

- Standard chain operated or motorised doors have the drive unit fitted outboard.
- *Inboard motorisation is available when sufficient clearance is not available for standard motorisation. If fitted inboard, the drive unit fits partly within opening under drum/curtain. Add 150 to dimension M for inboard motorised doors.
- Door-stops on door guides are fitted on chain-operated shutters.
- **Where shutter has windlocks allow extra 10mm for 'R' and extra 40mm for 'L'.

Series 130

Technical Specs: Steel Roller Shutters



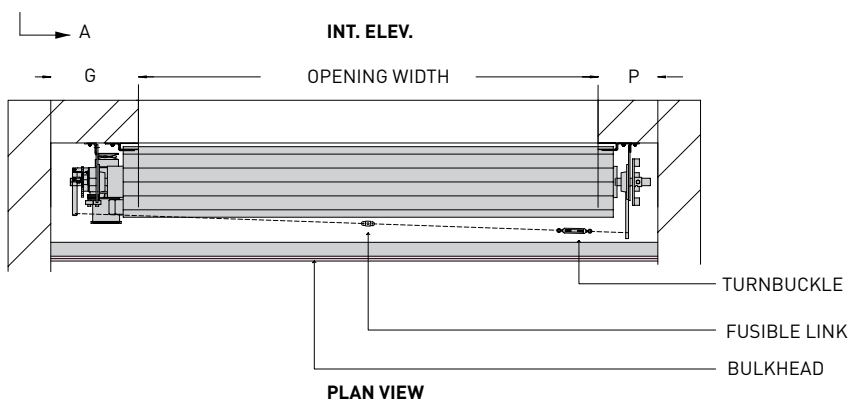
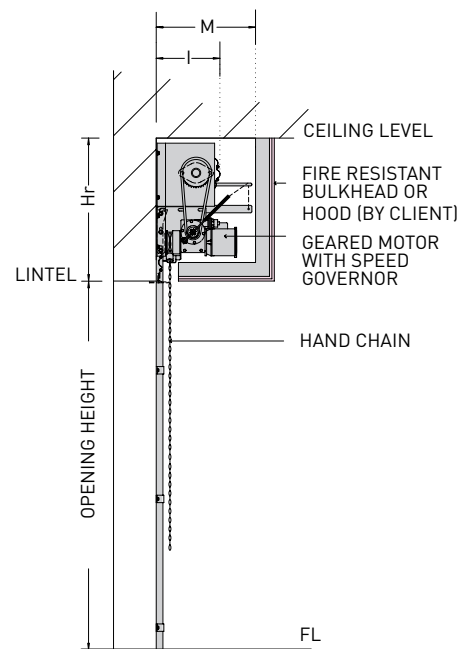
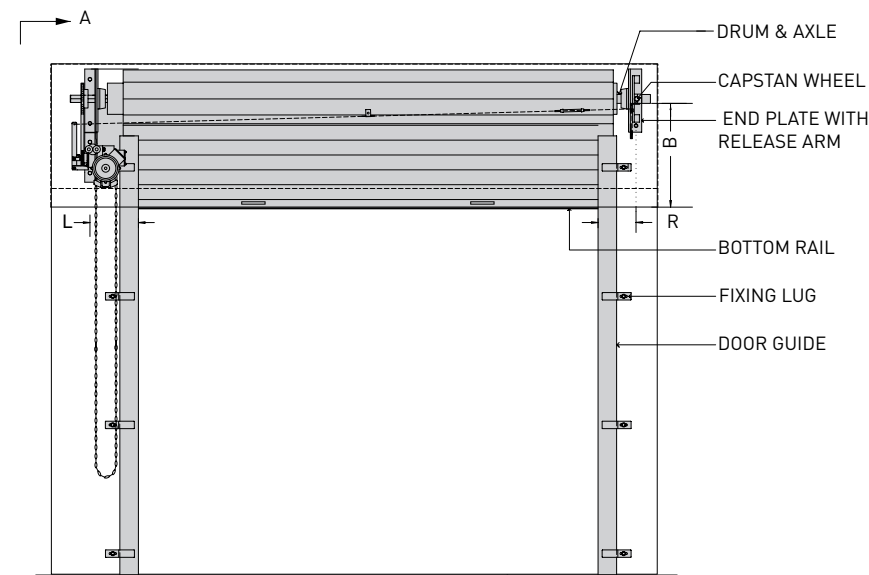
CLEARANCE DETAILS													
HEIGHT UP TO	WIDTH UP TO 8m				WIDTH UP TO 9.5m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M	Hr	B	I	M		G	L**	P	R**
	2400	530	325	410	595	550	335	410		595	CHAIN OPERATION	300	190
4300	600	385	430	595	610	390	430	595	MOTORISATION (STD)	500	190	250	170
6000	690	450	550	675	800	375	680	675	MOTORISATION (INBOARD*)	250	180	250	170

Notes:

- Standard chain operated or motorised doors have the drive unit fitted outboard.
- *Inboard motorisation is available when sufficient clearance is not available for standard motorisation. If fitted inboard, the drive unit fits partly within opening under drum/curtain. Add 150 to dimension M for inboard motorised doors.
- Door-stops on door guides are fitted on chain-operated shutters.
- **Where shutter has windlocks allow extra 10mm for 'R' and extra 40mm for 'L'.

2 & 4 Hour Fire Shutter

Technical Specs: Steel Roller Shutters



SECTION A-A

INT. ELEV.

PLAN VIEW

NOTE:

Also see 2 & 4 Hour Fire Shutter Bulkhead/Hood

CLEARANCE DETAILS - 2 HOUR (FRL -/120/- or -/120/30)

HEIGHT UP TO	WIDTH UP TO 8m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M		G	L	P	R
2400	770	550	410	535	HAND OPERATION	P	R	300	220
4300	810	570	430	535	CHAIN OPERATION	500	265	300	220
5000	830	590	500	535	MOTORISATION	500	265	300	220

CLEARANCE DETAILS - 4 HOUR (FRL -/240/- or -/240/30)

HEIGHT UP TO	WIDTH UP TO 8m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M		G	L	P	R
2400	800	580	410	535	HAND OPERATION	P	R	300	220
4300	900	660	430	535	CHAIN OPERATION	500	265	300	220
5000	920	685	500	535	MOTORISATION	500	265	300	220

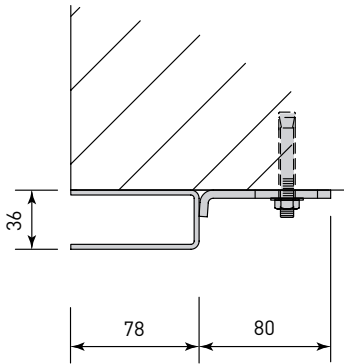
Notes:

- Standard chain operated or motorised doors have the drive unit fitted outboard.
- Door-stops on door guides are fitted on hand-operated or chain-operated shutters.
- Total door size must not exceed 20m² if undrenched or 27.5m² when incorporated with a sufficient drencher system.
- The Fire Resistant Roller Shutter is part of a fire rated wall system, therefore the opening construction (wall and threshold) must be fire resistant in accordance with AS1530.4-2005 and must be installed in accordance with the conditions set out in AS1905.2-2005, AS1530.4-2005 and Letter of Opinion Assesment #FCO-2859 (CSIRO 2011).

Door Guides

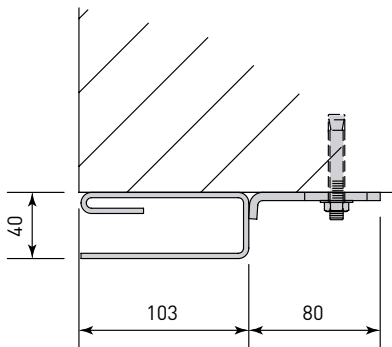
Technical Specs: Steel Roller Shutters

SERIES 75, 100, & 130 STANDARD DOOR GUIDE

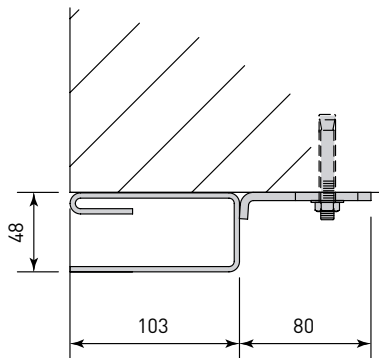


WINDLOCK DOOR GUIDES

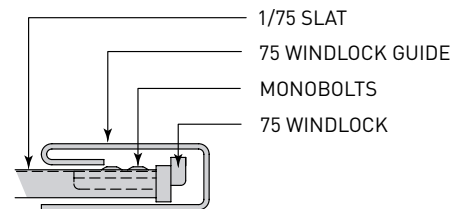
SERIES 75



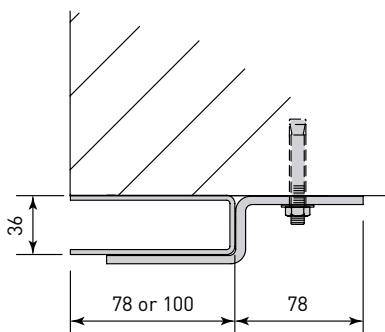
SERIES 100/130



DETAIL : WINDLOCK



2 & 4 HOUR FIRE SHUTTER STANDARD DOOR GUIDE



2 & 4 Hour Fire Shutter -

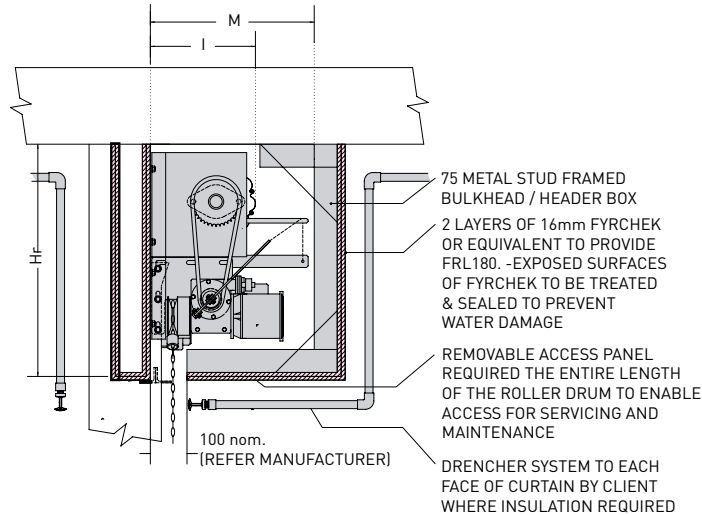
Bulkhead/Hood

Technical Specs: Steel Roller Shutters

Bulkhead or Hood is required over the roller drum and must be incorporated with the door to achieve compliance. Bulkhead is strictly by client (builder)

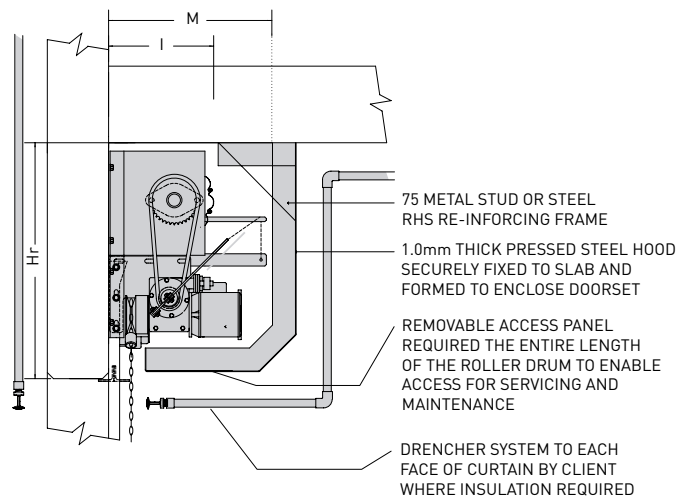
TYPICAL BULKHEAD

- Design is indicative only.
- Bulkhead provided by client (builder)
- Fusible link must be exposed to general airflow



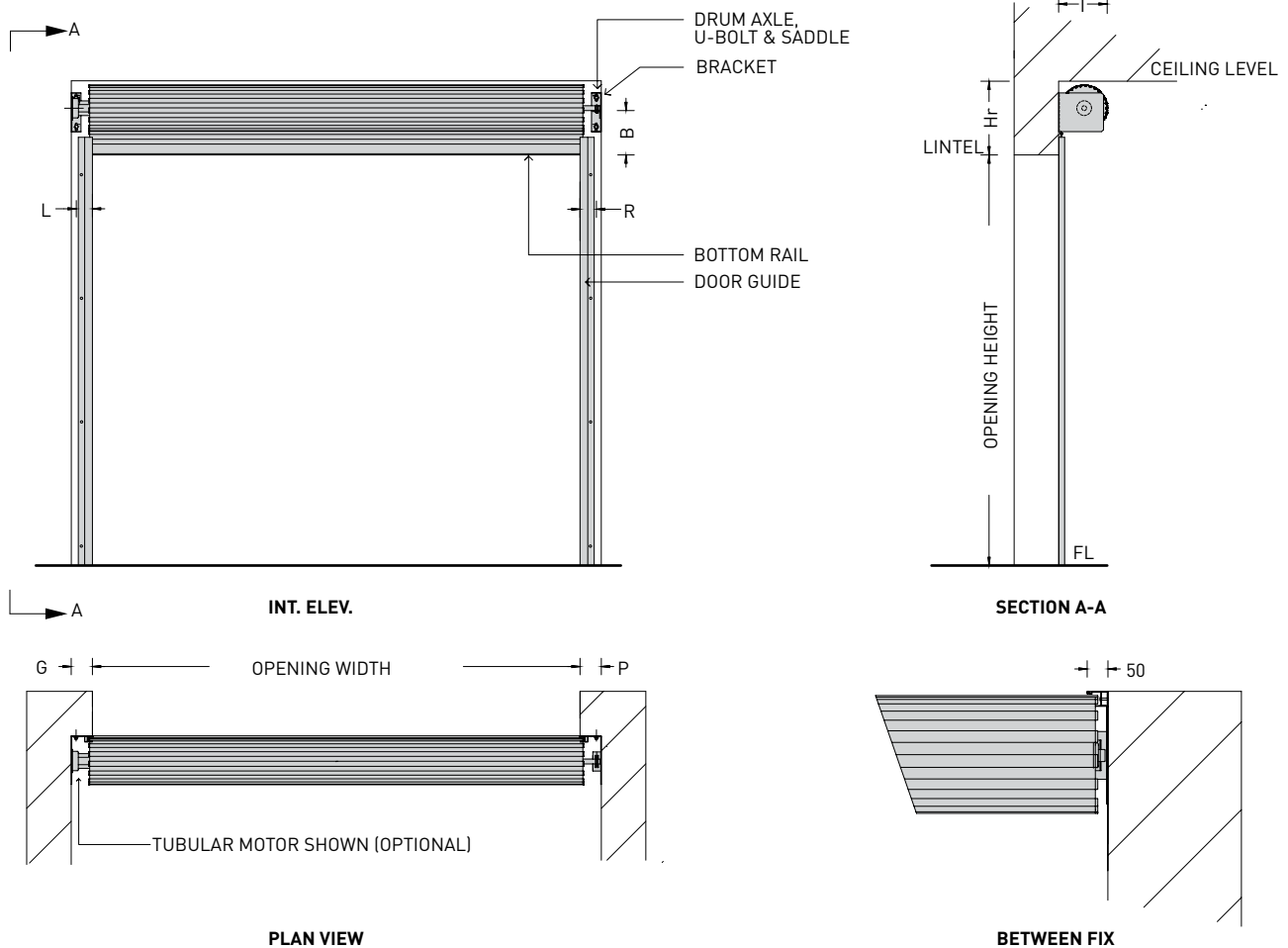
ALTERNATIVE PRESSED METAL HOOD

- Design is indicative only.
- Hood made from min. 1.0mm pressed steel and formed to enclose doorset as shown.
- Gap between steel hood and shutter must allow for deflection of curtain. Consult with manufacturer.
- Hood provided by client unless otherwise specified.
- Fusible link must be exposed to general airflow.



Series 25

Technical Specs: Aluminium Roller Shutters



CLEARANCE DETAILS (Behind Fix)

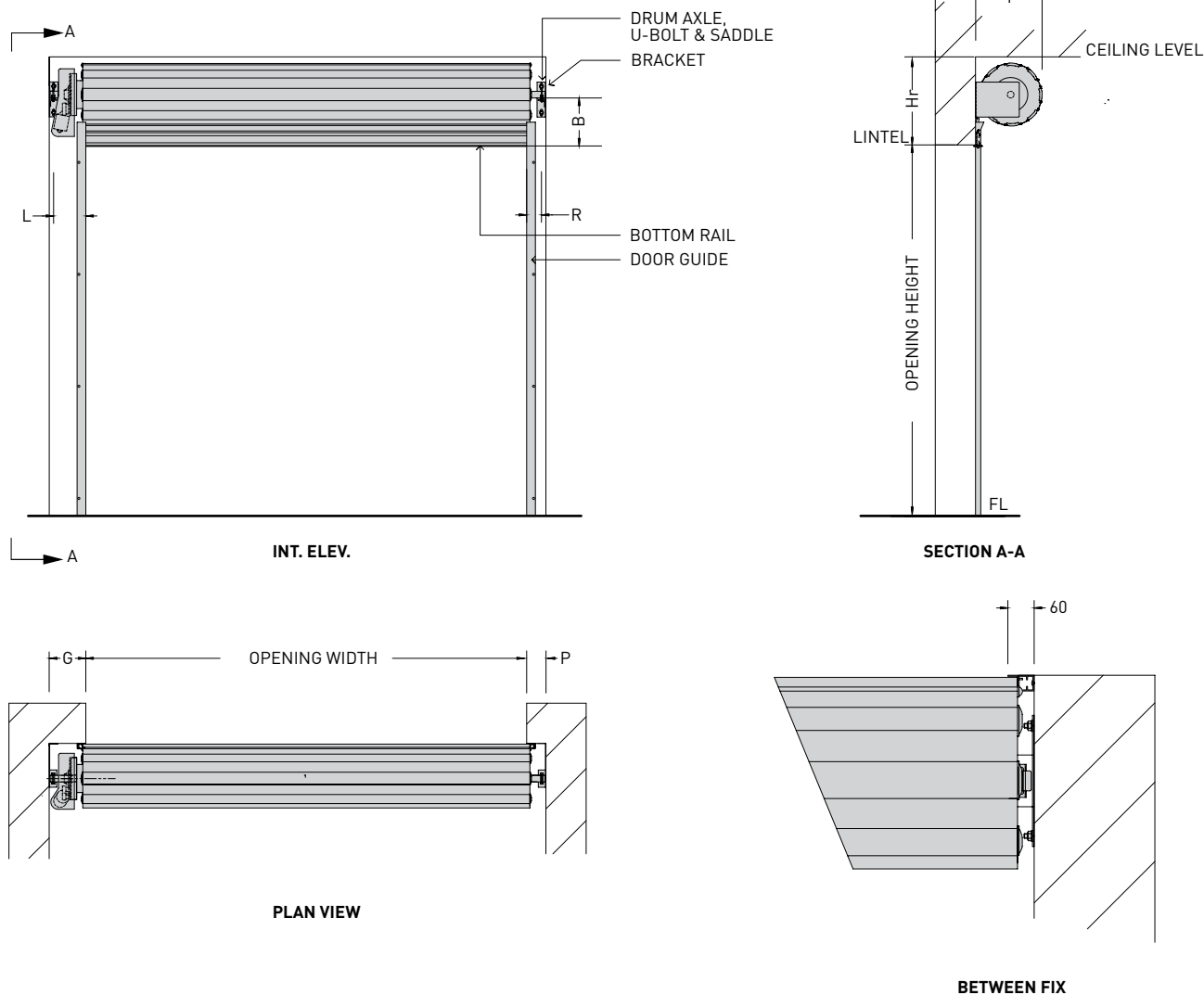
HEIGHT UP TO	WIDTH UP TO 2.1m			OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I		G*	L	P*	R
1100	420	280	280	HAND OPERATION	P	R	100	70
1500	440	300	300	MOTORISATION (STD)	250	190	100	70
2100	500	320	340	MOTORISATION (TUBULAR)	100	80	100	70

Notes:

- *For 'between-fix' installation, G & P = 0.
- Total door size must not exceed 4m².

Series 63

Technical Specs: Aluminium Roller Shutters



CLEARANCE DETAILS (Behind Fix)

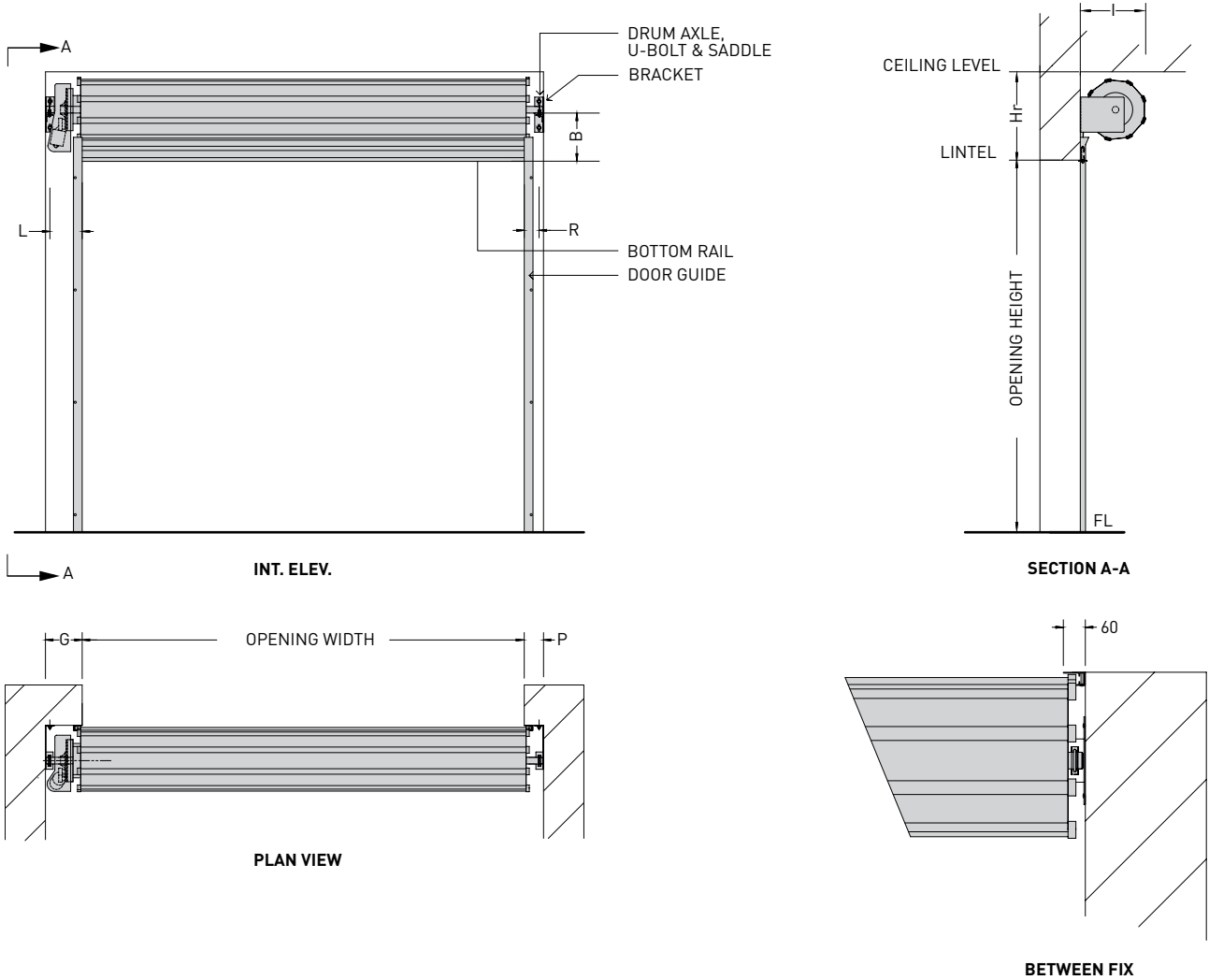
HEIGHT UP TO	WIDTH UP TO 3m			WIDTH UP TO 3.5m			OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	Hr	B	I		G*	L	P*	R
1100	450	300	260	450	300	260	HAND OPERATION	P	R	100	70
1700	480	320	290	480	320	290	MOTORISATION (STD)	250	190	100	70
2500	540	340	350	540	340	350	MOTORISATION (TUBULAR)	100	80	100	70
3000	560	350	370	600	390	400					

Notes:

- *For 'between-fix' installation, G & P = 0.
- Total door size must not exceed 9m².

Clearlite

Technical Specs: Aluminium Roller Shutters



CLEARANCE DETAILS (Behind Fix)

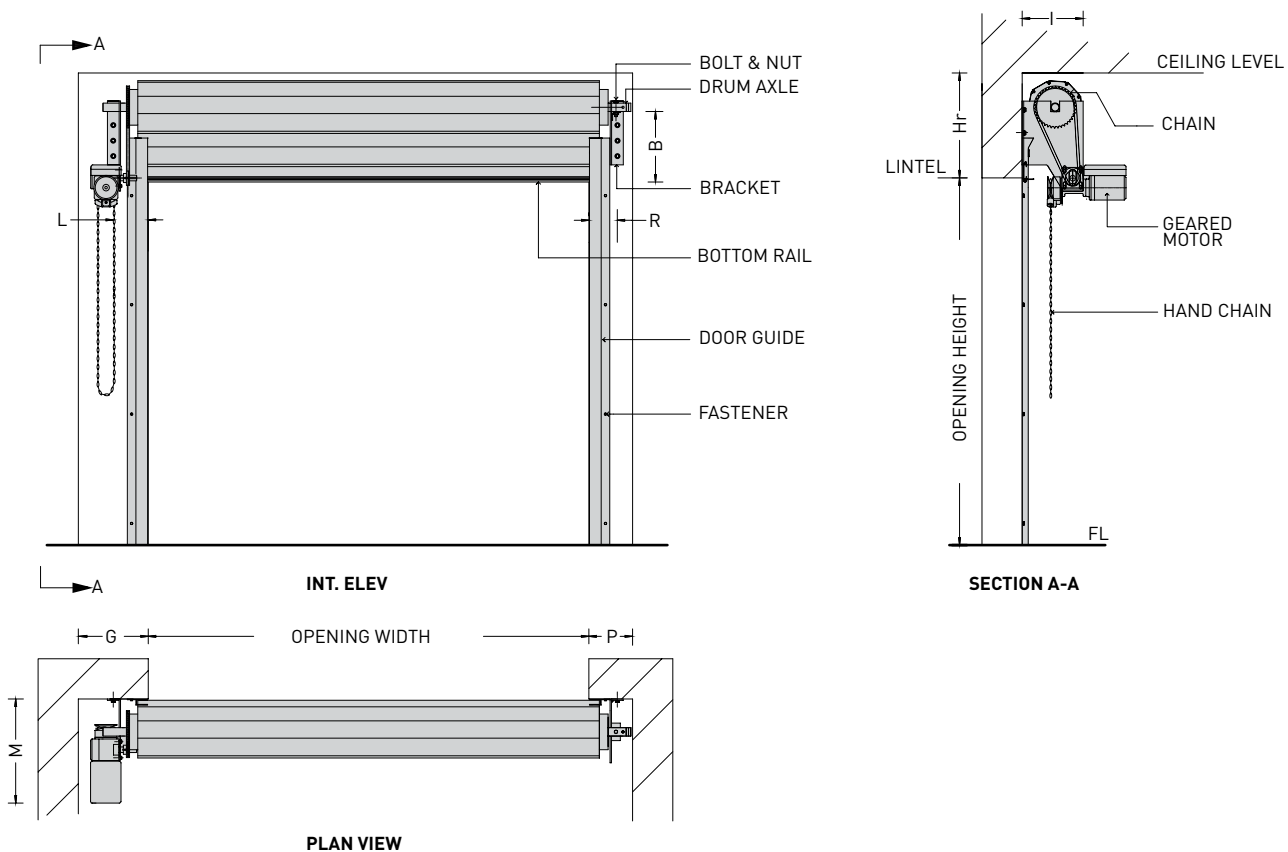
HEIGHT UP TO	WIDTH UP TO 3m			OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I		G*	L	P*	R
1100	480	330	330	HAND OPERATION	P	R	100	70
2500	530	350	360	MOTORISATION (STD)	250	190	100	70
3000	550	360	420	MOTORISATION (TUBULAR)	100	80	100	70

Notes:

- *For 'between-fix' installation, G & P = 0.
- Total door size must not exceed 8m².

Panorama

Technical Specs: Aluminium Roller Shutters



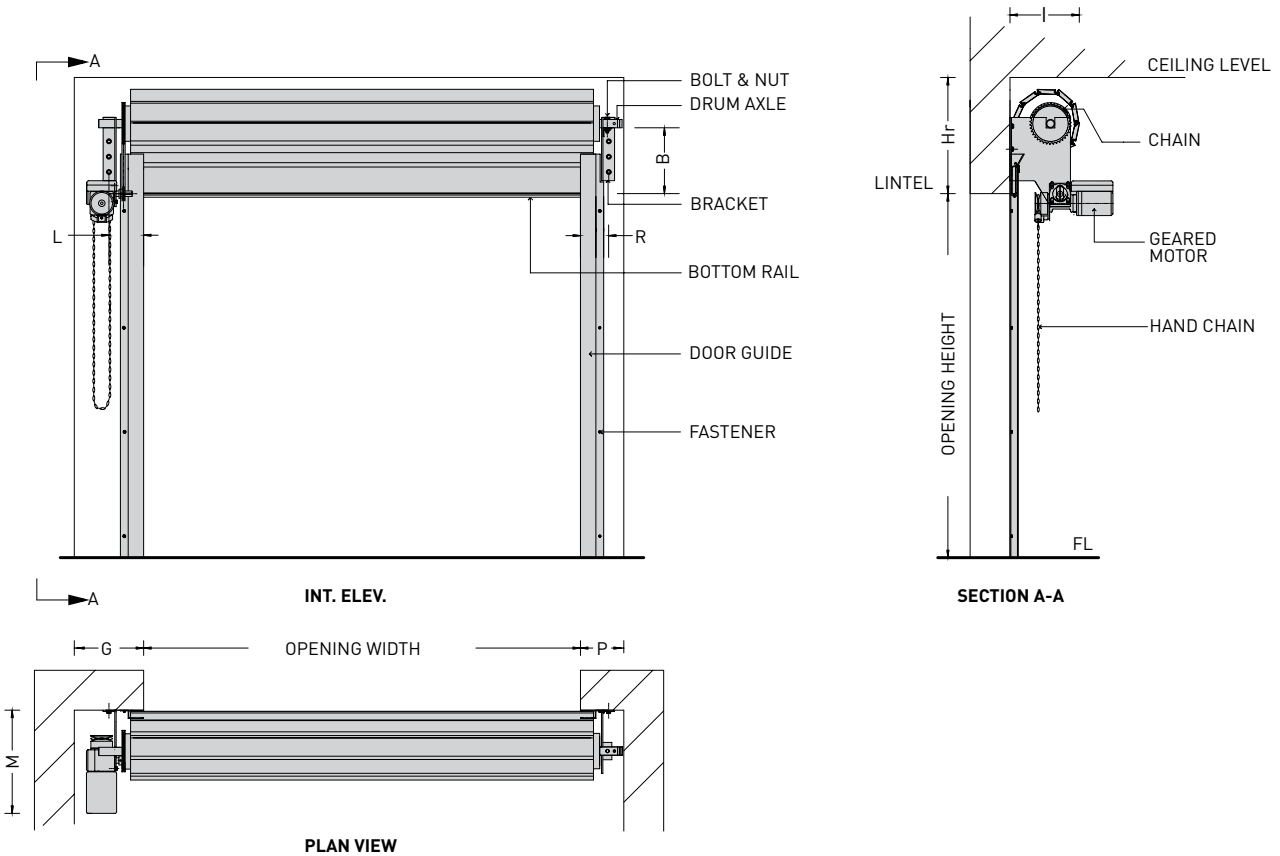
CLEARANCE DETAILS									
HEIGHT UP TO	WIDTH UP TO 7.5m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M		G	L	P	R
2100	600	380	430	595	HAND OPERATION	300	190	250	170
3000	640	400	480	595	MOTORISATION (STD)	500	190	250	170
3600	675	430	530	595	MOTORISATION (INBOARD*)	250	180	250	170

Notes:

- Standard chain operated or motorised doors have the drive unit fitted outboard.
- *Inboard motorisation is available when sufficient clearance is not available for standard motorisation. If fitted inboard, the drive unit fits partly within opening under drum/curtain. Add 150 to dimension M for inboard motorised doors.
- Door-stops on door guides are fitted on chain-operated shutters.
- Total door size must not exceed 25m².

Supa Slat Insulated/Non-Insulated

Technical Specs: Aluminium Roller Shutters



CLEARANCE DETAILS									
HEIGHT UP TO	WIDTH UP TO 9m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M		G	L	P	R
2100	670	400	490	595	HAND OPERATION	300	190	250	170
3000	720	450	530	595	MOTORISATION (STD)	500	190	250	170
3600	750	480	560	595	MOTORISATION (INBOARD*)	250	180	250	170
4200	770	485	580	595					

Notes:

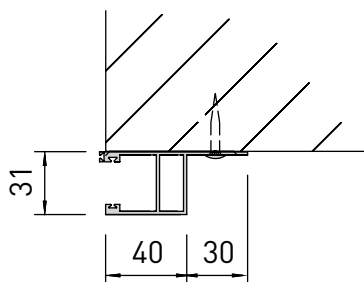
- Standard chain operated or motorised doors have the drive unit fitted outboard.
- *Inboard motorisation is available when sufficient clearance is not available for standard motorisation. If fitted inboard, the drive unit fits partly within opening under drum/curtain. Add 150 to dimension M for inboard motorised doors.
- Door-stops on door guides are fitted on chain-operated shutters.
- Total door size must not exceed 30m².

Door Guides

Technical Specs: Aluminium Roller Shutters

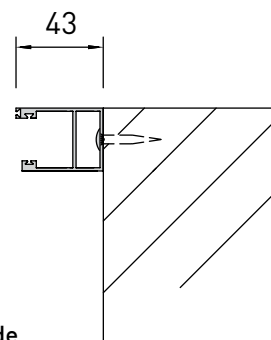
SERIES 25 STANDARD DOOR GUIDES

BEHIND WALL FIXING



Aluminium Guide

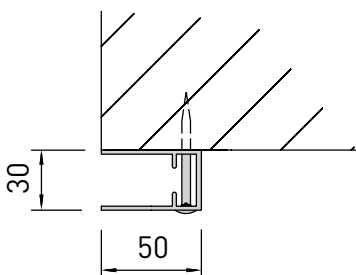
BETWEEN WALL FIXING



Aluminium Guide

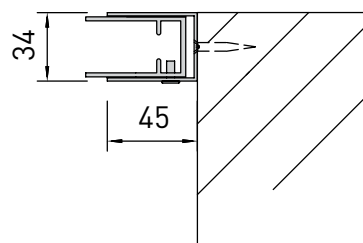
SERIES 63 & CLEARLITE STANDARD DOOR GUIDES

BEHIND WALL FIXING



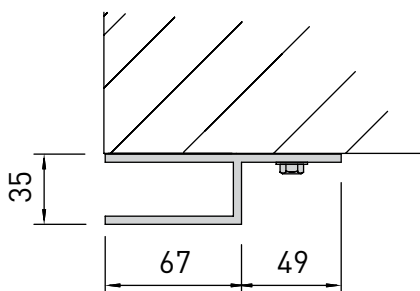
Aluminium Guide

BETWEEN WALL FIXING

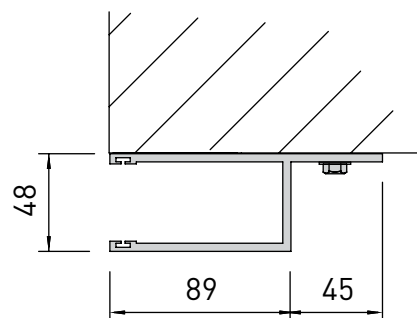


Aluminium Guide With Take Up Channel

PANORAMA STANDARD DOOR GUIDE

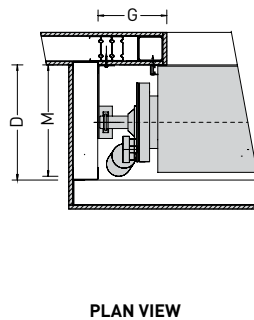
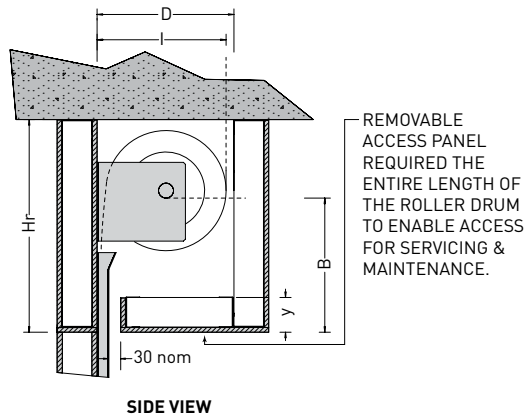


SUPA SLAT INSULATED & NON INSULATED STANDARD DOOR GUIDE



Bulkhead

Technical Specs: Aluminium & Timber Roller Shutters, & Aluminium Security Roller Grille



Notes:

- Bulkhead to be supplied and installed by CLIENT after installation of roller shutter.
- Design is indicative only.
- Adequate structural support to hold door weight and for fixing of drum support brackets and door guides to be provided by client.
- Clearances below are based on Motorised doors. For Chain and Hand operated doors refer to product Technical Specs for dimensions of 'G' & 'P'
- Sufficient access must be made available for future maintenance or servicing. If insufficient access is provided, Airport Doors will not be held accountable for any costs associated with the inability to maintain or service the door.

SERIES 25

BULKHEAD CLEARANCE DETAILS						
HEIGHT UP TO	Hr	B	I	D	M	G
1100	500 + y	280	280	500	290	250
1500	500 + y	300	300	500	305	250
2100	500 + y	320	340	500	320	250

SERIES 63

BULKHEAD CLEARANCE DETAILS						
HEIGHT UP TO	Hr	B	I	D	M	G
1100	500 + y	295	260	500	290	250
1700	500 + y	310	290	500	305	250
2500	500 + y	340	350	500	335	250
3000	500 + y	350	370	500	350	250

CLEARLITE & ALUMINIUM SECURITY ROLLER GRILLE

BULKHEAD CLEARANCE DETAILS						
HEIGHT UP TO	Hr	B	I	D	M	G
1100	500 + y	330	330	500	310	250
1700	540 + y	340	350	500	335	250
2500	580 + y	360	390	500	355	250
3000	580 + y	360	390	500	355	250

PANORAMA

BULKHEAD CLEARANCE DETAILS						
HEIGHT UP TO	Hr	B	I	D	M ^o	G
2100	800 + y	610	430	700	600	500
3000	840 + y	635	480	700	600	500
3600	875 + y	660	530	700	600	500

M^o - Depth at Motor location. Refer Technical Specifications.

SUPA SLAT

BULKHEAD CLEARANCE DETAILS						
HEIGHT UP TO	Hr	B	I	D	M ^o	G
2100	870 + y	610	490	700	600	500
3000	920 + y	635	530	700	600	500
3600	950 + y	660	560	700	600	500
4200	970 + y	665	580	700	600	500

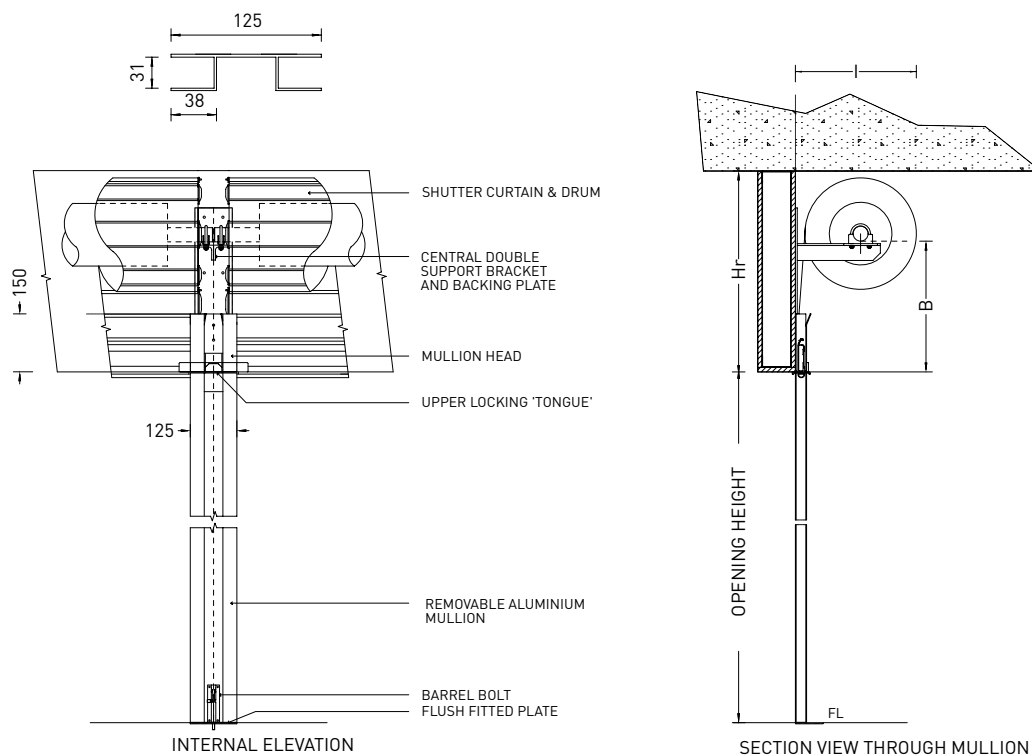
TIMBER ROLLER SHUTTER

BULKHEAD CLEARANCE DETAILS						
HEIGHT UP TO	Hr	B	I	D	M	G
1100	510 + y	340	270	500	295	250
1700	530 + y	355	310	500	315	250
2300	560 + y	370	360	500	325	250

M^o - Depth at Motor location. Refer Technical Specifications.

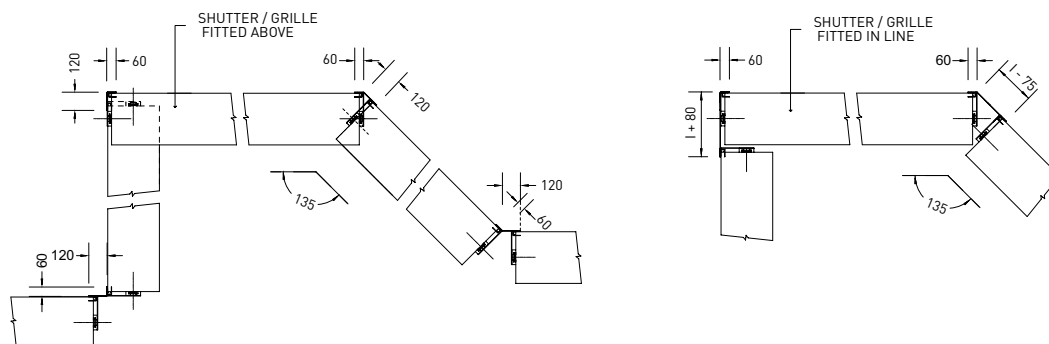
Mullion

Technical Specs: Aluminium / Timber Roller Shutters, & Aluminium Security Roller Grille



TYPICAL CENTRAL REMOVABLE MULLION INSTALLATION

- Shown above is the removable aluminium Mullion available for the Series 63, Clearlite, Timber Roller Shutter and Aluminium Security Roller Grille.
- The building construction must have adequate structural support (400mm x 400mm at Mullion Head location) to support the Mullion Head and the two shutters. Overhead structure cannot sag or twist.
- Mullions have barrel bolts that latch into flush fitted floor plate.

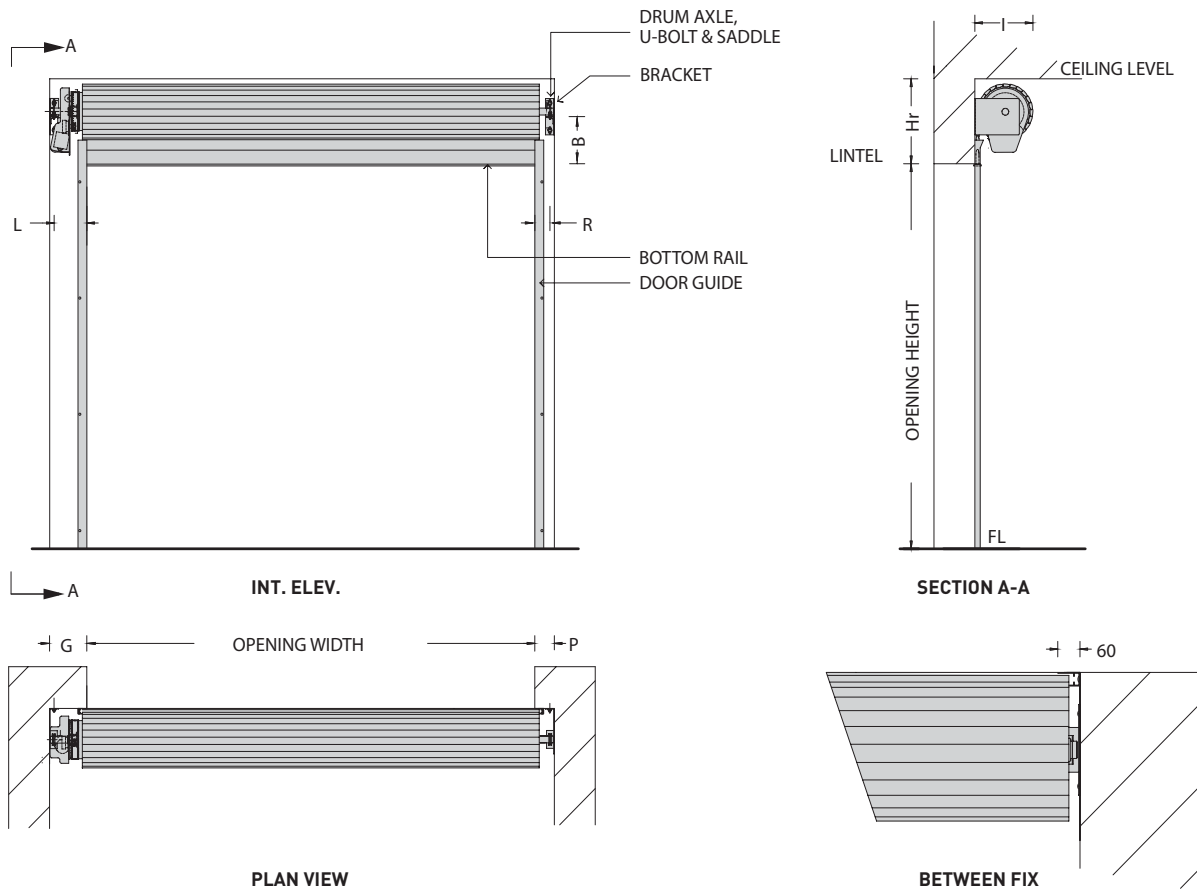


TYPICAL 90 & 135 DEGREE REMOVABLE MULLION INSTALLATIONS

- Shown above are corner removable aluminium Mullion configurations available for the Series 63, Clearlite and Aluminium Security Roller Grille.
- Where one Shutter / Grille fits above the other, the total minimum head room required is dimension 'I' plus 'Hr'.
- Other minimum dimensions of Mullions are as shown.
- The building construction must have adequate structural support (400mm x 400mm at Mullion Head location) to support the Mullion Head and the two shutters. Overhead structure cannot sag or twist.
- Removable Mullions have barrel bolts that latch into counter tops or floors as applicable.

Timber Roller Shutter

Technical Specs: Timber Roller Shutters



CLEARANCE DETAILS

HEIGHT UP TO	WIDTH UP TO 3m			OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I		G	L	P	R
1100	510	340	270	HAND OPERATION	P	R	100	70
1700	530	355	310	MOTORISATION (STD)	250	190	100	70
2300	560	370	360	MOTORISATION (TUBULAR)	100	80	100	70

Notes:

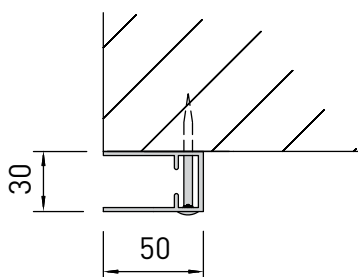
- *For 'between-fix' installation, G & P = 0.
- Total door size must not exceed 5.2m².

Door Guides

Technical Specs: Timber Roller Shutter

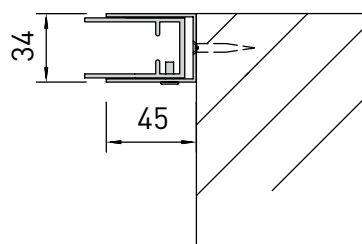
TIMBER ROLLER SHUTTER STANDARD DOOR GUIDES

BEHIND WALL FIXING



Aluminium Guide

BETWEEN WALL FIXING

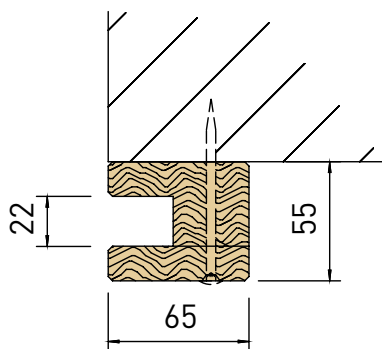


Aluminium Guide With Take Up Channel

NOTE: Where aluminium mullions are required for Timber Roller Shutters, door guides will be aluminium, as per above.

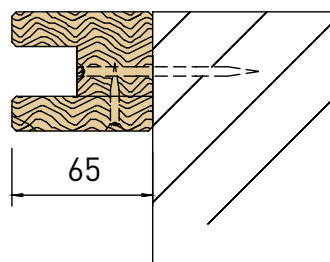
NON STANDARD DOOR GUIDES

BEHIND WALL FIXING



Timber Guide

BETWEEN WALL FIXING



Timber Guide With Take Up Channel

NOTE: Timber door guides are not recommended for large timber shutters.

Notes

Service and Preventative Maintenance Agreements

To maintain the life of your door and door operator, Airport Doors recommend you service your door regularly. The frequency of servicing is dependent on the particular type of door, its size, weight, usage and application. As part of our commitment to providing ongoing after sales service to our clients, our knowledgeable service representatives are well equipped to service and/or repair your door and operator when required, or as a preventative maintenance agreement.

At Airport Doors we also provide thorough service and repairs to almost every brand and type of door and door operator. For further information or to discuss preventative maintenance service agreements, contact your local Airport Doors office today.

Roller Grilles



Summary

Roller Grilles

Steel



STEEL ROLLER GRILLE

Steel Roller Grilles are designed to provide security for external applications requiring maximum vision and ventilation. Typical applications include small car park entrances, security entrance dividers and markets.

Aluminium



ALUMINIUM SECURITY ROLLER GRILLE

Aluminium Security Roller Grilles are designed to provide security (with maximum vision and ventilation) for internal applications such as shop fronts in shopping centres, entrances, passage ways, bars, counters and partition areas.

Selection Chart

Roller Grilles

ROLLER GRILLES	APPLICATIONS																	
Steel Security Roller Grille	✓						✓							✓			✓	
Aluminium Security Roller Grille			✓				✓			●		✓	✓		●		✓	
	Aircraft Hangers	Car Parks	Cool-Rooms & Insulated Drier Rooms	Reception, Counters, Kiosks & Bars	Emergency Services (e.g. CFA)	Factories & Warehouses (external)	Factories & Warehouses (internal)	Garages & Carports	Laneways (freestanding)	Restaurants	Self Storage	Shopfronts	Shopping Complexes	Showrooms	Supermarket Entrances	Transport & Loading Docks/Bays	Vehicles (e.g. trucks)	Workshops

ROLLER GRILLES	OPTIONAL FEATURES										
Steel Security Roller Grille				●		✓	✓			✓	✓
Aluminium Security Roller Grille						✓	✓			✓	✓
	Cladding Options	Fire Rated	Glass	High Usage	Insulation Sound/Thermal	Motorisation	Mullions	Personal Entry & Exit Door	Ventilation (5-25% Airflow)	Ventilation (26% + Airflow)	Vision

SELECTION CHART KEY

- ✓ Suitable
- Suitable, conditions may apply

Steel Roller Grille

Roller Grilles



Steel Roller Grilles are designed to provide security for external applications where maximum vision and ventilation are important requirements. Typical applications include small car park entrances, security entrance dividers and markets.

FEATURES

- Vision
- Ventilation
- Heavy duty

DOOR DIMENSIONS

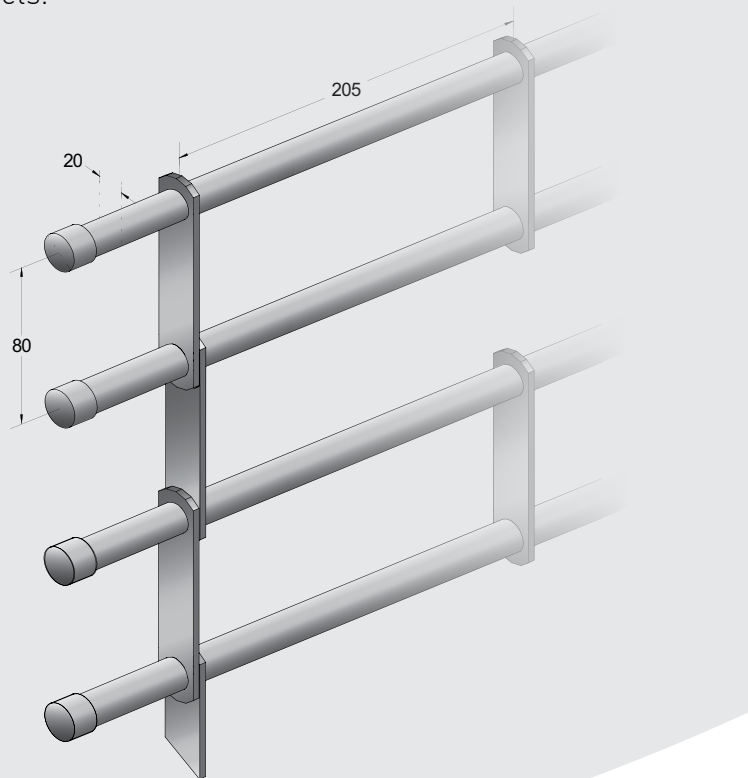
- Maximum Height: 4200mm*
- Maximum Width: 8000mm*

*Total size must not exceed 21m².

NOTE: In special applications, Steel Roller Grilles may be designed to suit larger sizes, consult manufacturer for further information.

RECOMMENDED SPECIFICATIONS

Steel Roller Grille with 20mm diameter aluminium tubes (containing 16mm diameter inner steel tube) and vertical steel links as manufactured by Airport Doors. The Roller Grille operates by means of a flexible grille curtain winding onto an overhead drum and guided in vertical door guides.



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Steel Roller Grille

Roller Grilles

CURTAIN

The Steel Roller Grille curtain is manufactured from horizontal tubes spaced vertically at 80mm centres and connected by zinc coated 3mm thick vertical steel links spaced at 205mm centres, to form a brick-like pattern. The horizontal tubes consist of an inner galvanised steel tube of 16mm diameter and an outer aluminium sleeve of 20mm diameter. The ends of the tubes are fitted with nylon end caps to provide smooth operation within the door guide.

FINISH

The steel roller grille is available in anodised or powder coated finish with zinc coated vertical links. The door guides are galvanised steel and all other components (drum and support brackets, etc.) are prime coated.

BOTTOM RAIL

The bottom rail is manufactured from 2.2mm thick by 123mm high specially extruded heavy duty aluminium section. Roller Grilles over 6500mm in width use a steel box section bottom rail. The bottom rail reinforces the Roller Grille curtain and can be fitted with a PVC bottom weather seal when specified.

DOOR GUIDES

The door guides are manufactured from 2.5mm thick roll-formed galvanised steel with a depth of 76mm.

DRUM & SPRING ASSEMBLY

The drum consists of a seamless or spiral welded, cylindrical tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Steel Roller Grille drum support brackets are manufactured from mild steel plate with a minimum thickness of 8mm.

FIXING REQUIREMENTS

The building construction (typically steel or concrete) must be structurally sound and have adequate strength to support the Roller Grille and its fixing requirements. Consult manufacturer for further details.

LOCKING

Chain operated Steel Roller Grilles are fitted with a steel chain lock designed to accommodate a padlock. As an optional extra, chain operated roller grilles can also be fitted with two shoot-bolts. Shoot-bolts are fitted internally to each end of the bottom rail. Padlocks not included.

Electric operated (motorised) doors are to be secured by the motor and its controls.

NOTE: If optional shoot-bolts are fitted to a motorised roller grille, a cut out switch for each shoot-bolt must be fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Centre door mullions of either a sliding or fixed type (as specified), are manufactured from mild steel plate with a standard width of 300mm. A sliding mullion is manually operated by disengaging top and bottom latches and sliding to one side of the doorway on an overhead sliding track fixed to the underside of the lintel. A fixed type mullion is not removable and is fixed to the floor and lintel.

OPERATION

Steel Roller Grilles operate by means of a flexible curtain, winding onto an overhead drum and guided in vertical door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). Steel Roller Grilles are available in chain operation or motorised.

CHAIN OPERATION

Gearing is fitted to one end of the Roller Grille and matched to suit the door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism.

NOTE: Chain operation is not recommended for Steel Roller Grilles over 20m².

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box) and emergency hand chain operation (in case of a power outage). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification.

For further information see Door Operators & Accessories.

IMPORTANT

Steel Roller Grilles are not recommended in applications which are subject to corrosive environments such as, but not limited to coastal areas.

OPTIONS

- Tapered Bottom
- Mullions: sliding or fixed
- Reverse roll



Aluminium Security Roller Grille

Roller Grilles



The Aluminium Security Roller Grille provides security and maximum vision and ventilation for internal applications such as shop fronts in shopping centres. It is also suited for entrances, passage ways, bars, counters and partition areas.

FEATURES

- Light and easy to operate
- Vision
- Ventilation
- Security

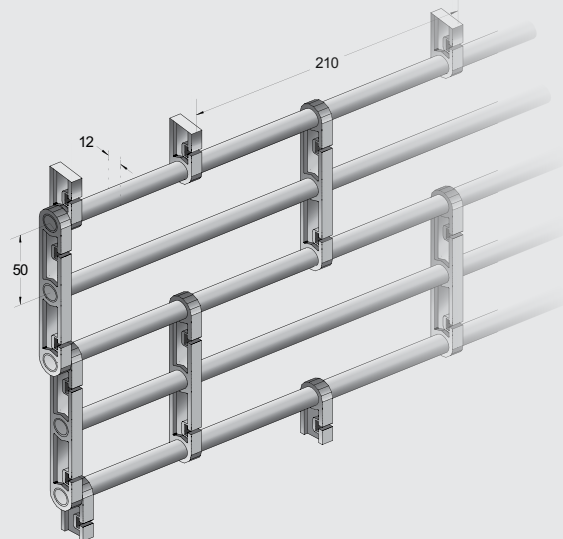
DOOR DIMENSIONS

- Maximum Height: 3000mm*
- Maximum Width: 3400mm*

*Total size must not exceed 10m².

RECOMMENDED SPECIFICATIONS

Aluminium Security Roller Grille comprising 12mm diameter horizontal aluminium tubes combined with vertical polyethylene links as manufactured by Airport Doors. The Roller Grille operates by means of a flexible grille curtain winding onto an overhead drum and guided in aluminium door guides.



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Aluminium Security Roller Grille

Roller Grilles

CURTAIN

The Aluminium Security Roller Grille curtain is manufactured from horizontal 12mm diameter aluminium tubes spaced vertically at 50mm centres and connected with vertical links (made of injection moulded high-density polyethylene) spaced at 210mm centres to form a brick-like pattern.

FINISH

All aluminium sections are natural anodised as standard and can be colour anodised or powder coated when specified. Polyethylene links are available in selected colours only (typically grey, black or white). Consult manufacturer for current colour availability.

BOTTOM RAIL

The bottom rail is manufactured from 2.2mm thick by 123mm high specially extruded aluminium section and is fitted with a PVC bottom weather-seal.

DOOR GUIDES

Aluminium Security Roller Grille standard door guides are manufactured from 2mm thick, 50mm by 30mm extruded aluminium. Where the opening is uneven or not plumb, door guides are used in conjunction with 'take-up' channels (limitations may apply).

DRUM & SPRING ASSEMBLY

The drum is manufactured from galvanised spiral duct tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The drum is attached to nylon drum wheels, which provide bearing support to the shaft, and completely conceal the springs. The drum is designed to provide minimal deflection over the door width.

DRUM SUPPORT BRACKETS

Aluminium Security Roller Grille drum support brackets are manufactured from either mild steel plate with a thickness of 3mm, or mild steel angle brackets both matched to suit door size and weight. The drum support brackets are prime-coated and are fixed to the wall using masonry anchors or hex head screws, or as specified for steel work.

FIXING REQUIREMENTS

The building construction (typically timber, steel or core-filled brick) must be structurally sound and have adequate strength to support the Roller Grille and its fixing requirements. Consult manufacturer for further details.

LOCKING

Hand operated Aluminium Security Roller Grilles will be fitted as standard with a low profile lock which is identically keyed on both sides. The lock will be fitted to the bottom rail as standard and allow full opening height. When specified the lock can be fitted at waist height.

Alternatively, master key locking is also available upon specification. Master key is available as key operated from outside and 'dead' latch on inside. Where required 'free' (hand) latch can be provided on the inside upon specification. Master key can also be provided keyed on the outside and reverse key on the inside when specified.

NOTE: Master key locks protrude 14mm-25mm out from the bottom rail, therefore the full opening height cannot be provided (the bottom rail will sit under the lintel in the fully open position).

A shoot-bolt system is also available as an alternative locking option. Padlocks not included.

NOTE: Where door is motorised a manual lock, as discussed above, is not fitted.

MULLIONS (OPTIONAL)

Centre door mullions can be used for wide openings to create multiple door installations. Aluminium Security Roller Grille standard centre mullions, of either removable or fixed type, are manufactured from extruded aluminium of 125mm width.

Removable mullions are designed to give full opening width. A removable centre mullion consists of a lift-out mullion that locks into the bottom plate with locking pins and fits into the mullion head under the lintel. A fixed type mullion is fixed to the floor and lintel.

Corner mullions are used when two roller grilles meet in a corner. The mullion is manufactured from aluminium sheets fabricated to suit the angle and size as required. The width of the angular corner mullions can be minimised if the drums are vertically staged when installed.

OPERATION

Aluminium Security Roller Grilles operate by means of a flexible grille curtain, winding onto an overhead drum and guided in aluminium door guides. Aluminium Security Roller Grilles can be installed 'behind-fix' or 'between-fix' and are available as hand operated or motorised.

HAND OPERATION

Hand operation of Aluminium Security Roller Grilles is suitable up to 3000 high by 3000 wide.

MOTORISATION

Standard motorisation is via a 24v DC motor with a wall push-button that opens and closes the door. The operator plugs into a standard GPO and consists of an emergency manual release mechanism in case of power outage.

Alternatively the Aluminium Security Roller Grille can be motorised using a tubular motor fitted inside the drum. Tubular motors are available in single-phase 240v or 24DC/240v. A manual override mechanism is available to enable manual operation in case of power outage.

Operator selection is dependent on the door size, door weight and the door's application.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client.

Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories (e.g. remote control, key switches etc.) and photo electric beams for added safety, are available upon specification. For further information see Door Operators & Accessories.

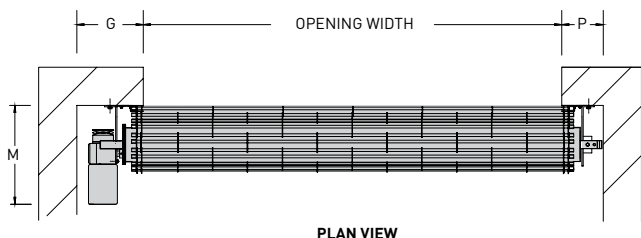
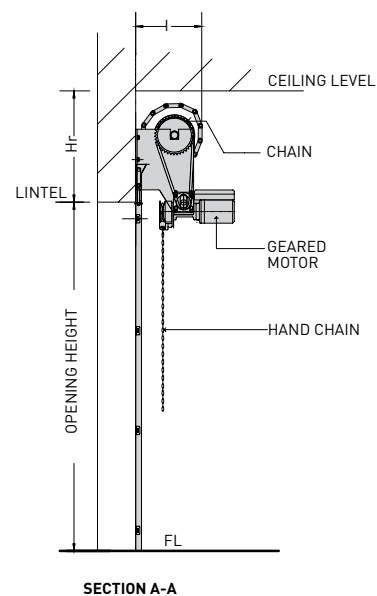
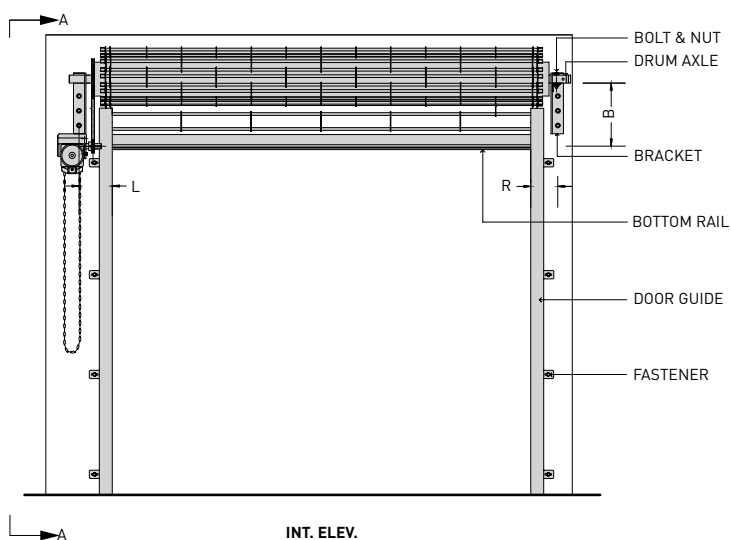
NOTE: Where between-fix is required, tubular motor is used as standard.

OPTIONS

- Tapered bottom
- Mullions: removable or fixed
- Between-fix installation
- Reverse roll

Steel Roller Grille

Technical Specs: Roller Grilles



CLEARANCE DETAILS

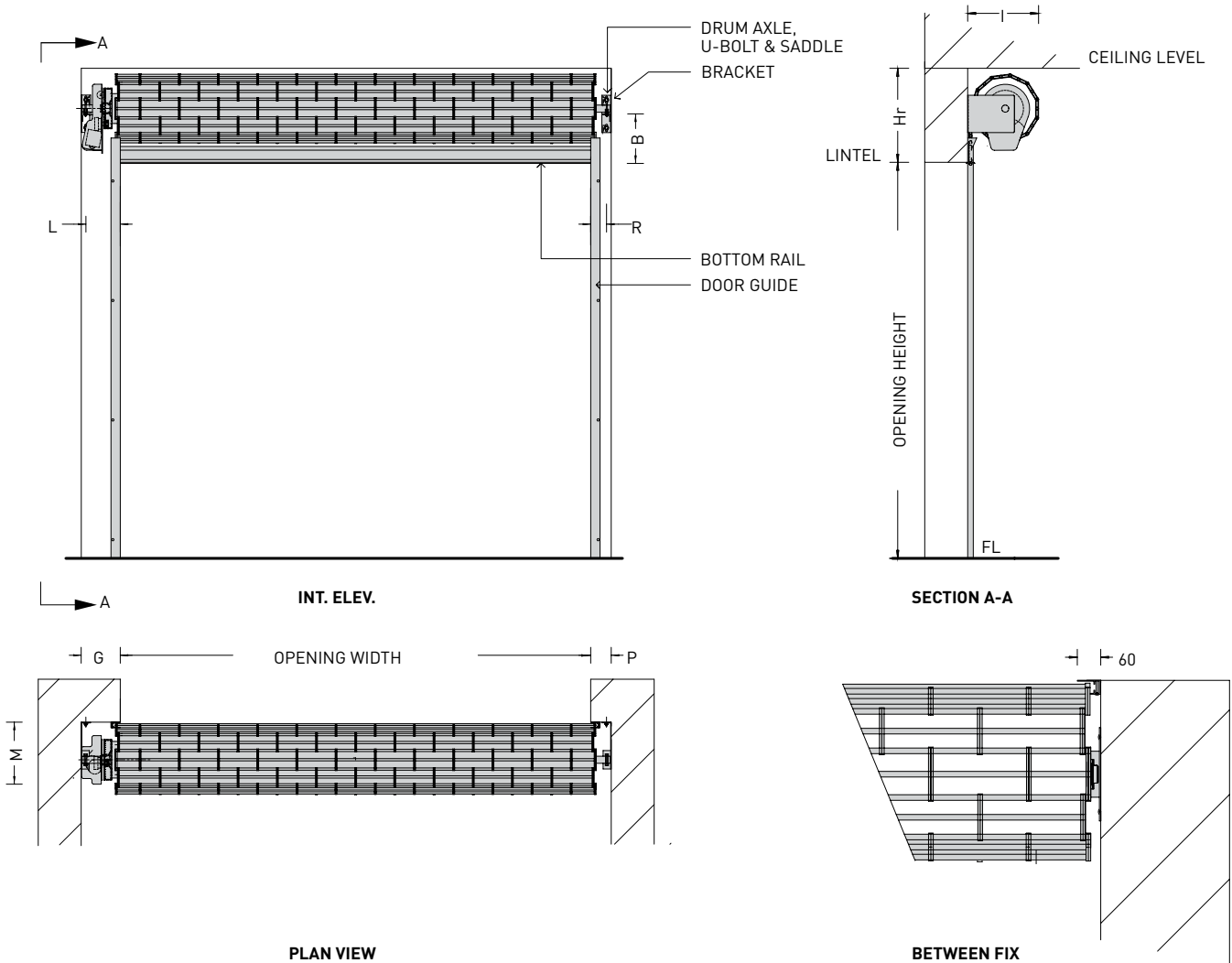
HEIGHT UP TO	WIDTH UP TO 8m				OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I	M		G	L	P	R
2400	680	415	480	595	CHAIN OPERATION	300	200	250	170
3000	700	435	500	595	MOTORISATION (STD)	500	200	250	170
4200	750	475	525	595	MOTORISATION (INBOARD*)	250	180	250	170

Notes:

- Standard chain operated or motorised doors have the drive unit fitted outboard.
- *Inboard motorisation is available when sufficient clearance is not available for standard motorisation. If fitted inboard, the drive unit fits partly within opening under drum/curtain. Add 150 to dimension M for inboard motorised doors.
- Door-stops on door guides are fitted on chain-operated shutters.
- Total door size must not exceed 21m².

Aluminium Security Roller Grille

Technical Specs: Roller Grilles



CLEARANCE DETAILS								
HEIGHT UP TO	WIDTH UP TO 3.4m			OPERATION	DRIVEN END		PLAIN END	
	Hr	B	I		G	L	P	R
1100	490	315	300	HAND OPERATION	P	R	100	70
1700	540	340	350	MOTORISATION (STD)	250	190	100	70
2500	580	360	390	MOTORISATION (TUBULAR)	100	80	100	70
3000	580	360	390					

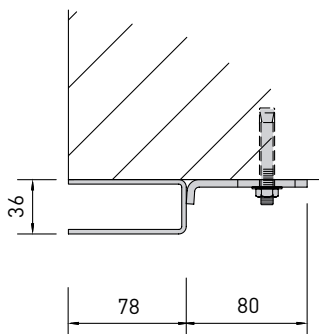
Notes:

- *For 'between-fix' installation, G & P = 0.
- Total door size must not exceed 10m².

Door Guides

Technical Specs: Roller Grilles

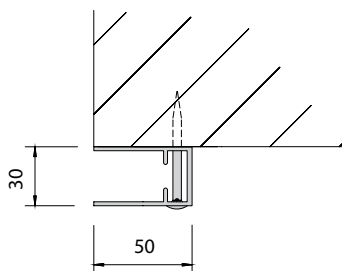
STEEL ROLLER GRILLE STANDARD DOOR GUIDE



STEEL GUIDE

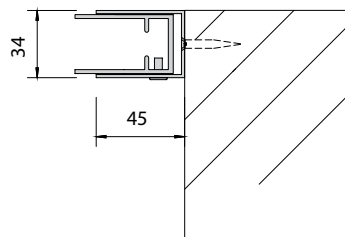
ALUMINIUM SECURITY ROLLER GRILLE STANDARD DOOR GUIDES

BEHIND WALL FIXING



ALUMINIUM GUIDE

BETWEEN WALL FIXING



ALUMINIUM GUIDE WITH TAKE UP CHANNEL

Notes

Service and Preventative Maintenance Agreements

To maintain the life of your door and door operator, Airport Doors recommend you service your door regularly. The frequency of servicing is dependent on the particular type of door, its size, weight, usage and application. As part of our commitment to providing ongoing after sales service to our clients, our knowledgeable service representatives are well equipped to service and/or repair your door and operator when required, or as a preventative maintenance agreement.

At Airport Doors we also provide thorough service and repairs to almost every brand and type of door and door operator. For further information or to discuss preventative maintenance service agreements, contact your local Airport Doors office today.

Sectional Doors



Summary

Sectional Doors

Steel



PINNACLE SERIES

The Pinnacle Series sectional door range is primarily used for garage door and light commercial applications. Providing security, strength and reliable operation, these doors are available in a variety of classic and modern panel designs and can be fitted with optional feature windows.



YARRA

The Yarra's minimalist and strong design consists of a flat (non-textured) face making this panel ideal for the contemporary home or apartment.



RIB-LINE

Steel Rib-Line sectional doors encompass a strong panel design and are suitable for most commercial and light industrial applications. Optional features including acrylic vision panels and perforated panels can be provided upon specification.



SAXTON

Saxton sectional doors are a custom designed door ideal for most commercial and light industrial applications. Encompassing a steel frame, the Saxton can be clad with a variety of materials. NOTE: Cladding limitations may apply due to weight restrictions.

Aluminium



HORIZON-LINE

The Horizon-Line sectional door has a strong, sleek and smooth-finish aluminium slat design, making it ideal for contemporary homes and commercial applications. These doors are well suited to coastal areas and can also be enhanced with optional custom windows.

Summary (Continued)

Sectional Doors

Aluminium



HORIZON-SHINE

The aluminium Horizon-Shine sectional door combines the sleek Horizon-Line panel with one or more contemporary elongated window/s fitted into the top panel.



REFLECTION

The aluminium Reflection sectional door features a strong aluminium extruded frame with a rounded edge profile. The Reflection can be clad with acrylic or glass (size restrictions apply).



AUSTIN

The timeless design of the Austin aluminium sectional door makes it ideal for both residential and commercial applications. The aluminium extruded frame not only combines strength and simplicity but also provides for a wide variety of cladding options and thicknesses.

Timber



TIMBER SECTIONAL DOORS

Timber Sectional Doors are available in a wide variety of sophisticated panel designs and finishes. Typically manufactured from Western Red Cedar, these doors are not only a striking feature, but also provide a cozy and welcoming touch to your façade.

Selection Chart

Sectional Doors

PRODUCT RANGE		APPLICATIONS																		
Steel	Pinnacle Series		●					●	●	✓					✓					●
	Yarra		●					●	●	✓					✓					●
	Rib-line		●	●				✓	●	✓								●		✓
	Saxton		●	●				✓	●	●					✓		●			✓
Aluminium	Horizon-line		●	●				●	●	✓					✓					
	Horizon-shine		●	●				●	●	✓					✓					
	Reflection		●					●	●	✓					✓					
	Austin		●	●				●	●	✓					✓					●
	Timber Sectional Doors		●							✓					✓					
		Aircraft Hangers	Car Parks	Cool-Rooms & Insulated Drier Rooms	Counters, Kiosks & Bars	Emergency Services (e.g. CFA)	Factories & Warehouses (external)	Factories & Warehouses (internal)	Garages & Carports	Laneways (freestanding)	Restaurants	Self Storage	Shopfronts	Shopping Complexes	Showrooms	Supermarket Entrances	Transport & Loading Docks/Bays	Vehicles (e.g. trucks)	Workshops	

PRODUCT RANGE		OPTIONAL FEATURES										
Steel	Pinnacle Series						●	✓				✓
	Yarra							✓				✓
	Rib-line						●	✓			✓	✓
	Saxton	✓					●	✓			✓	✓
Aluminium	Horizon-line			●			●	✓				✓
	Horizon-shine			●				✓				✓
	Reflection	●		●				✓				✓
	Austin	✓		●				✓			✓	✓
	Timber Sectional Doors	●		●				✓			●	✓
		Cladding Options	Fire Rated	Glass	High Usage	Insulation Sound/Thermal	Motorisation	Mullions	Personal Entry & Exit Door	Ventilation (5-25% Airflow)	Ventilation (26% + Airflow)	Vision

SELECTION CHART KEY

- ✓ Suitable
- Suitable, conditions may apply

Pinnacle Series

Steel Sectional Doors



Pinnacle Series steel sectional doors provide security, strength and reliable operation for garage door or light commercial applications. This superior product comprises a wide range of classic and contemporary panel designs available in a wide range of colours and custom-made to suit the door opening size.

FEATURES

- Wide range of appealing designs
- Strong profile
- Easy to operate
- Optional acrylic windows

DOOR DIMENSIONS

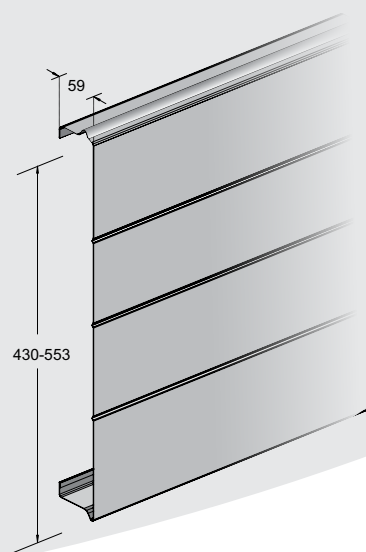
- Maximum Height: 3500mm*
 - Maximum Width: 6200mm*
- *Total size must not exceed 16.5m².

NOTE: Some panel designs are not available in maximum sizes. Refer to Residential & Commercial Steel Sectional Doors brochure for specific information.

RECOMMENDED SPECIFICATIONS

The Pinnacle Series steel sectional door in selected panel design and selected texture. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.



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Pinnacle Series

Steel Sectional Doors

PANEL DETAILS

Pinnacle Series panels are custom manufactured from 0.6mm thick roll-formed or pressed steel (depending on chosen panel design) and are available in Woodgrain texture or the unique Coppertone texture. Panels are custom manufactured to suit the opening height; this ensures equal panel heights for a consistent appearance. Steel vertical stiles are riveted to the back of the panels to give additional strength and provide a fixing point for hinges and roller hinge brackets.

WINDOWS (OPTIONAL)

Clear acrylic windows can be provided to add that special touch to your garage door and facade, as well as functioning as a practical means of providing light into your garage. Windows are available in a variety of stylish designs. See brochure for window options.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. A combination of steel struts, RHS or pin trusses may be used to brace the door.

FINISH

Pinnacle Series sectional doors are available in a wide range of pre-painted steel (e.g. Colorbond®) or powder coat colours. See the Airport Doors website or contact Sales for current colour availability.

BOTTOM RAIL

The strong aluminium extruded bottom rail fitted with a durable PVC weather seal, is fitted to the bottom panel to provide added strength and to minimise slightly uneven ground. The standard bottom rail comprises a 5mm face, however where required, an extended bottom-rail of 45mm face may be used.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate

nylon track rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft directly above the door behind the lintel. NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.



Pinnacle Series

Steel Sectional Doors

LOCKING

Manually operated doors can be fitted with a standard "T" handle lock incorporating a two point locking system. Alternative manual locking system can be fitted upon specification.

Motorised sectional doors are self-locking, thus are not fitted with a manual lock as standard.

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (24DC/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 24DC/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks) direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Acrylic windows
- Additional door seals
- Tapered bottom



Yarra

Steel Sectional Doors



The Yarra's minimalist and strong design consists of a flat (non-textured) face, making this panel ideal for the contemporary home or apartment.

FEATURES

- Sleek and strong design
- Smooth face
- Optional acrylic windows

DOOR DIMENSIONS

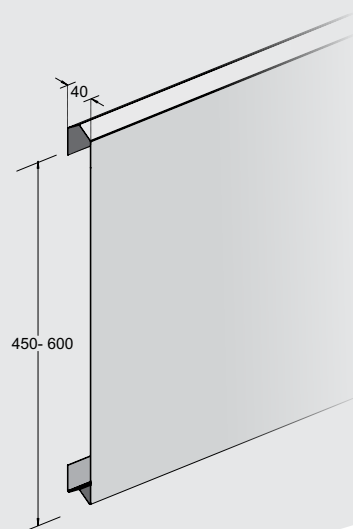
- Maximum Height: 3500mm*
 - Maximum Width: 5200mm*
- *Total size must not exceed 13m².

NOTE: Panel height restrictions apply, consult Technical Sales.

RECOMMENDED SPECIFICATIONS

The Yarra steel sectional door in selected colour. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc



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Yarra

Steel Sectional Doors

PANEL DETAILS

Yarra panels are custom manufactured from 0.75mm thick Zinalume® folded steel and are available in flat (non-textured) finish. Panels are custom manufactured to suit the opening height. Panels are custom manufactured to suit the opening height; this ensures equal panel heights for a consistent appearance. Steel vertical stiles are riveted to the back of the panels to give additional strength and provide a fixing point for hinges and roller hinge brackets.

WINDOWS (OPTIONAL)

Clear acrylic windows can be provided to add that special touch to your garage door and facade, as well as functioning as a practical means of providing light into your garage. Windows are available in a variety of stylish designs. See brochure for window options.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. A combination of steel struts, RHS or pin trusses may be used to brace the door.

FINISH

Yarra sectional doors are available in Zinalume® or a wide range of powder coat colours.

WEATHER SEAL

The bottom panel will be fitted with a flat rubber weather seal to reduce interior exposure of rain and leaves.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate nylon track rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft directly above the door behind the lintel. NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.

LOCKING

Manually operated doors can be fitted with a standard "T" handle lock incorporating a two point locking system. Alternative manual locking system can be fitted upon specification. Motorised sectional doors are self-locking, thus are not fitted with a manual lock as standard.

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (240V/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 240V/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm

Yarra

Steel Sectional Doors

connects the carriage to the top of the door enabling the door to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks) direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or

isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Acrylic windows
- Additional door seals
- Tapered bottom



Rib-Line

Steel Sectional Doors



Rib-line steel sectional doors encompass a robust design and can be provided with optional ventilation or acrylic vision panels. The Rib-line is suitable for most commercial and light industrial applications (such as workshops, small to medium car parks and laneways, etc.), and are also ideal for residential applications where extra strength is required for large garage door openings.

FEATURES

- Robust design
- Easy to operate
- Optional vision/ventilation panels
- Optional insulation

DOOR DIMENSIONS

- Maximum Height: 4200mm*
- Maximum Width: 7400mm*

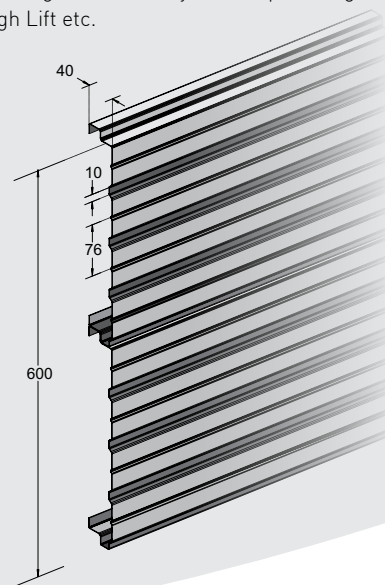
*Standard Residential applications- Door must not exceed 19m²

*Commercial/Industrial applications - Door must not exceed 24m²

RECOMMENDED SPECIFICATIONS

The Rib-Line steel Sectional Door in selected colour as manufactured by Airport Doors. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.



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Rib-Line

Steel Sectional Doors

PANEL DETAILS

The Rib-Line panel is manufactured from 0.55mm thick galvanised steel and is 40mm deep. Standard panels comprise of two 300mm high sections stitch riveted together to form a 600mm high panel.

End and intermediate vertical stiles are manufactured from 1.6mm galvanised steel channel and are riveted to the back of the panels to give additional strength and provide a fixing point for hinges and roller hinge brackets.

VENTILATION (OPTIONAL)

The Rib-Line Sectional Door can be perforated to provide ventilation up to 10% airflow (when 'fully-perforated').

VISION PANELS (OPTIONAL)

Where required, acrylic window panels manufactured from a steel frame with aluminium extrusion or angle can be combined with the Rib-Line panels to allow natural light into the garage or building.

INSULATION (OPTIONAL)

Polystyrene thermal insulation can be fitted inside the panel with a backing plate when specified. Consult Technical Sales for more information.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. Steel struts or pin trusses may be used to brace the door as required.

FINISH

Rib-Line panels are available in galvanised or can be powder coated in a wide range of powder coat colours.

WEATHER SEAL

The bottom panel will be fitted with a flat rubber weather seal to reduce interior exposure of rain and leaves.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate nylon track rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft (torsion bar) directly above the door behind the lintel. NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

CROSS SHAFT (TORSION BAR)

The cross shaft is manufactured using steel tube as standard, or solid steel bar (in large or heavy door applications). The shaft operates via bearings and is supported by end and centre anchor plates.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large,



Rib-Line

Steel Sectional Doors

heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.

LOCKING

Manually operated doors can be either fitted with spring loaded shoot bolts on the inside (padlocks not included), or a "T" handle lock incorporating a two point locking system. NOTE: Motorised sectional doors are self-locking and are not fitted with a manual lock as standard.

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (24DC/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 24DC/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door

to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks) direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Ventilation
- Vision panels
- Additional door seals
- Tapered bottom



Saxton

Steel Sectional Doors



Saxton sectional doors are a custom designed door ideal for most commercial and light industrial applications such as workshops, warehouses and small car parks. Encompassing a steel frame the Saxton can be clad with a variety of materials. NOTE: Cladding restrictions may apply.

FEATURES

- Robust design
- Easy to operate
- Various cladding options
- Optional insulation

DOOR DIMENSIONS

- Maximum Height: 5000mm*
- Maximum Width: 8000mm*

*Total size must not exceed 30m².

RECOMMENDED SPECIFICATIONS

The Saxton steel Sectional Door with rolled hollow steel tube framed panels with selected cladding, as manufactured by Airport Doors. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.

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Saxton

Steel Sectional Doors

PANEL DETAILS

The Saxton door frame is fabricated from Dual Grade C350LO/ C450LO DuraGal® RHS rectangular hollow steel sections, trussed as required and designed in accordance with AS4100 (Steel Structures) and designed as per manufacturer's specifications to withstand wind loading. The panels are manufactured up to 600mm in height and can be clad with a variety of cladding materials (restrictions may apply due to size or weight limitations).

All exposed steel work is prepared and shop primed before the application of any specified coatings. The steel frame, tracks and fittings can be finished prime painted or powder coated. **(NOTE: Large doors may not be available in powder coat finish).** Other steelwork finishes or specified paint systems can also be supplied when specified.

CLADDING

Various cladding options such as bar grille, steel flat sheet, aluminium flat sheet, mesh (steel or aluminium), woven wire or perforated sheet metal can be applied to the panel enabling a variety of panel designs. **NOTE: Cladding restrictions may apply due to size or weight limitations.**

Optional aluminium extrusion (St Lucia or St Kilda) can be fitted to the framework (upon specification) in order to provide a tidy frame for fitting the selected cladding. Aluminium extrusions can be natural anodised or powder coated.

INSULATION (OPTIONAL)

Sound or thermal insulation can be provided when specified (limitations may apply). Consult Technical Sales for further information.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. Thus where required (typically in large or heavy doors), pin trusses will be fitted to the door.

BOTTOM RAIL

The bottom rail reinforces the bottom panel and is manufactured from a durable extruded aluminium section fitted with a PVC bottom weather seal. The weather seal minimises the gap in slightly uneven ground surfaces and reduces interior exposure of rain and leaves. The standard bottom rail has a 5mm face.

NOTE: Bar Grille Saxton sectional doors are (as standard)

not fitted with a bottom-rail and PVC weather seal. Unless otherwise specified, Bar Grille Saxton sectional doors will be fitted with rubber stops on the bottom of the bottom panel.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate nylon track rollers. **NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage.** Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft (torsion bar) directly above the door behind the lintel. **NOTE: For low headroom track applications (where suitable), the cross shaft & springs may be required to be mounted at the end of the horizontal tracks. Low headroom is not typically recommended for this type of door due to the door weight.**

CROSS SHAFT (TORSION BAR)

The cross shaft is manufactured using steel tube as standard, or solid steel bar (in large or heavy door applications). The shaft operates via bearings and is supported by end and centre anchor plates.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from



Saxton

Steel Sectional Doors

galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 180 - 200kg are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.

LOCKING

Manually operated doors can be either fitted with spring loaded shoot bolts on the inside (padlocks not included), or a "T" handle lock incorporating a two point locking system. NOTE: Motorised sectional doors are self-locking and are not fitted with a manual lock as standard.

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised. Motorisation is highly recommended.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (240V/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 240V/240v automated operator

unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring vertical access control, or doors installed with high lift or vertical lift tracks) direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Cladding options
- Additional door seals
- Tapered bottom



Horizon-Line

Aluminium Sectional Doors



For a quality, smooth-finish panel boasting a strong, sleek and modern design, the Horizon-Line aluminium sectional door is the perfect solution. It's stunning design makes it ideal for contemporary homes and commercial applications.

FEATURES

- Easy to operate
- Strong construction
- Appealing design
- Optional widows

DOOR DIMENSIONS

- Height: 3500mm*
- Width: 6500mm*

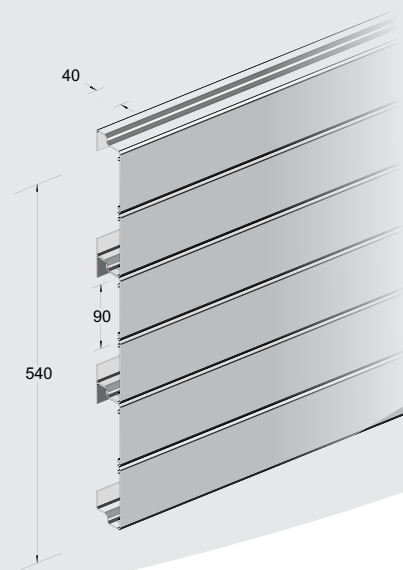
*Total size must not exceed 17.5m².

NOTE: Widths up to 7000mm may be available on special order.

RECOMMENDED SPECIFICATIONS

Horizon-Line aluminium Sectional Door with 90mm high slats in 1.5mm thick aluminium as manufactured by Airport Doors. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.



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Horizon-Line

Aluminium Sectional Doors

PANEL DETAILS

The Horizon-Line's strong profile consists of stylish 90mm high horizontal slats manufactured from 1.5mm extruded aluminium with a depth of 40mm. Aluminium vertical stiles are riveted to the back of the panels to give additional strength and provide a fixing point for hinges and roller hinge brackets.

WINDOWS (OPTIONAL)

Glass or acrylic windows can be custom designed into your Horizon-Line door to create a unique look and to also allow natural light through. Size and placement of windows are designed to manufacturer's specifications.

INSULATION (OPTIONAL)

Polystyrene thermal insulation can be fitted inside the panel with a backing plate when specified. Consult Technical Sales for more information.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. Steel struts or pin trusses may be used to brace the door as required.

FINISH

Horizon-Line panels are available in natural anodised or a wide range of powder coat colours.

WEATHER SEAL

The bottom panel will be fitted with a flat rubber weather seal to reduce interior exposure of rain and leaves.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate nylon track rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft (torsion bar) directly above the door behind the lintel. NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.

LOCKING

Manually operated doors can be either fitted with spring loaded shoot bolts on the inside (padlocks not included), or a "T" handle lock incorporating a two point locking system. NOTE: Motorised sectional doors are self-locking and are not fitted with a manual lock as standard.



Horizon-Line

Aluminium Sectional Doors

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (24DC/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 24DC/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks)

direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Custom windows
- Additional door seals
- Tapered bottom



Horizon-Shine

Aluminium Sectional Doors



The Horizon-Shine sectional door encompasses the contemporary Horizon-Line panel with the addition of one or more striking elongated windows fitted to the top part of the door. The stylish window not only looks great, but it also allows natural light to shine through into the garage.

FEATURES

- Easy to operate
- Strong construction
- Appealing design
- Elongated window/s

DOOR DIMENSIONS

- Height: 3500mm*
- Width: 6500mm*

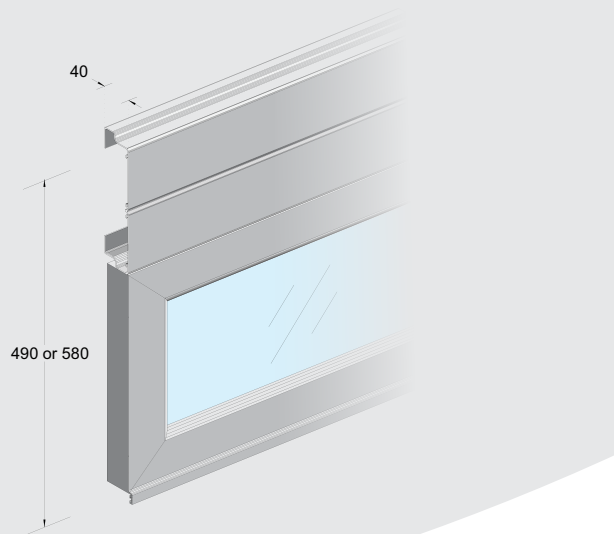
*Total size must not exceed 17.5m².

NOTE: Widths up to 7000mm may be available on special order.

RECOMMENDED SPECIFICATIONS

Horizon-Shine aluminium Sectional Door with 90mm high slats in 1.5mm thick aluminium combined with horizontal window/s at top of the door as manufactured by Airport Doors. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.



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Horizon-Shine

Aluminium Sectional Doors

PANEL DETAILS

The Horizon-Shine's strong profile consists of stylish 90mm high horizontal slats manufactured from 1.5mm extruded aluminium with a depth of 40mm. Aluminium vertical stiles are riveted to the back of the panels to give additional strength and provide a fixing point for hinges and roller hinge brackets.

WINDOW/S

One or more horizontal windows will be designed to suit the application and fitted into the top panel as standard. The window is approximately 180mm in height and consists of 6.38mm laminated safety glass in White Translucent (as standard).

The maximum one-piece glass span is 2600mm. Doors larger than 2600mm wide will consist of a maximum one-piece glass span of 1500mm, thus the window will consist of vertical dividers where required. The glass is fitted into the Reflection aluminium extrusion with Santoprene (PVC/Rubber compound) glazing channel.

INSULATION (OPTIONAL)

Sound or thermal insulation can be provided when specified. Consult Technical Sales for more information.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. Steel struts or pin trusses may be used to brace the door as required.

FINISH

Horizon-Shine panels are available in natural anodised or a wide range of powder coat colours.

WEATHER SEAL

The bottom panel will be fitted with a flat rubber weather seal to reduce interior exposure of rain and leaves.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm

(2") profile. Standard tracks are designed to accommodate nylon track rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft (torsion bar) directly above the door behind the lintel. NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.



Horizon-Shine

Aluminium Sectional Doors

LOCKING

Manually operated doors can be either fitted with spring loaded shoot bolts on the inside (padlocks not included), or a "T" handle lock incorporating a two point locking system. NOTE: Motorised sectional doors are self-locking and are not fitted with a manual lock as standard.

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (24DC/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 24DC/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks) direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Insulation
- Additional door seals
- Tapered bottom



Reflection

Aluminium Sectional Doors



The Reflection aluminium sectional door features a chic round edge aluminium extrusion that can be clad with either glass or acrylic. Featuring a strong, sleek and modern design, the Reflection is ideal for residential and commercial applications.

FEATURES

- Easy to operate
- Strong construction
- Appealing design

DOOR DIMENSIONS

Glass Cladding

- Maximum Height: 2600mm*
- Maximum Width: 4900mm*

*Total door size must not exceed 10.5m².

Acrylic Cladding

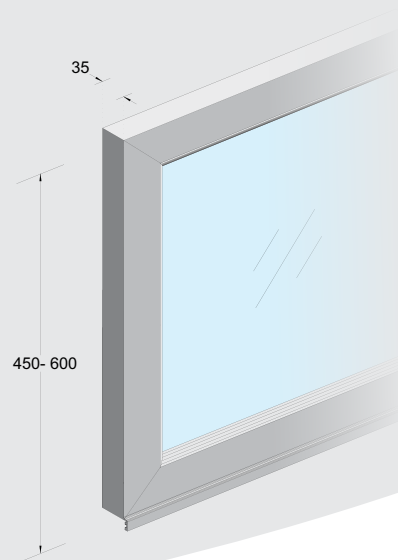
- Maximum Height: 3500mm**
- Maximum Width: 6500mm**

**Total door size must not exceed 16.5m².

RECOMMENDED SPECIFICATIONS

Reflection aluminium Sectional Door with 65mm high by 35mm deep frame and selected cladding as manufactured by Airport Doors. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.



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Reflection

Aluminium Sectional Doors

PANEL DETAILS

The Reflection panel consists of a contemporary 65mm high by 35mm deep extruded aluminium frame and can be clad with 4.5mm acrylic or 6.38mm laminated safety glass. Cladding is fitted into a Santoprene (PVC/Rubber compound) glazing channel to suit. Each door is custom designed to suit the application. Panel height is designed to suit door-opening height and cladding type.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. The door is braced as required using RHS and/or an 'open-web' truss to the bottom panel.

FINISH

The aluminium extruded frame is available in natural anodised, colour anodised or a wide range of powder coat colours.

BOTTOM RAIL

The bottom rail reinforces the bottom panel and is manufactured from a durable extruded aluminium section fitted with a PVC bottom weather seal. The weather seal minimises the gap in slightly uneven ground surfaces and reduces interior exposure of rain and leaves. The standard bottom rail has a 5mm face.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate nylon track rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft (torsion bar) directly above the door behind the lintel.

NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.

LOCKING

Manually operated doors can be either fitted with spring loaded shoot bolts on the inside (padlocks not included), or a "T" handle lock incorporating a two point locking system. NOTE: Motorised sectional doors are self-locking and are not fitted with a manual lock as standard.



Reflection

Aluminium Sectional Doors

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (24DC/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 24DC/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks)

direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Cladding infills (6.38mm glass or 4.5mm acrylic)
- Additional door seals
- Tapered bottom



Austin

Aluminium Sectional Doors



The Austin aluminium sectional door has an elegant and timeless design ideal for contemporary style homes and commercial applications such as showrooms, workshops or small car parks. The Austin can be clad using a variety of cladding materials to truly enhance and complement the visual appearance of the façade.

FEATURES

- Easy to operate
- Optional vision/ventilation panels
- Appealing designs
- Cladding options

DOOR DIMENSIONS

Glass Cladding

- Maximum Height: 2600mm*
- Maximum Width: 4900mm*

*Total door size must not exceed 10.5m².

Other Cladding Types

- Maximum Height: 3500mm**
- Maximum Width: 7400mm**

**Total door weight must not exceed 280kg for residential use.

Special requirements may be possible for commercial or industrial applications up to 350kg (consult Technical Sales for details).

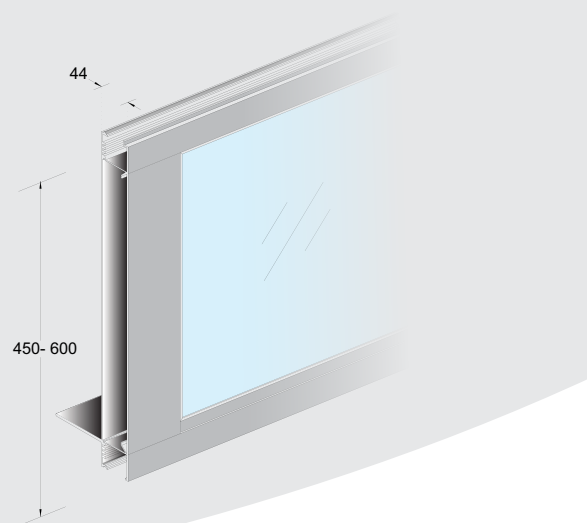
NOTE: The above dimensions are a guide only and restrictions may apply; door size is largely dependent on cladding type, weight and application.

RECOMMENDED SPECIFICATIONS

The Austin Sectional Door with aluminium extruded frame and selected cladding as manufactured by Airport Doors. The sectional door operates by means of horizontal hinged

panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.



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Austin

Aluminium Sectional Doors

PANEL DETAILS

The Austin sectional door encompasses a strong and sleek aluminium "box-type" frame machined to match the profiles of the mating members and bolted together using full length bolts to provide a weather tight interlocking joint. The panels are manufactured up to 600mm in height and consist of vertical dividers where required by design, or as per manufacturer's specifications. The Austin's smart design allows for a diverse range of cladding materials in a variety of thicknesses (restrictions may apply due to size or weight limitations).

CLADDING MATERIALS

Various cladding options including glass, acrylic, aluminium sheet, perforated aluminium, plywood etc can be provided up to 7mm thick. Cladding restrictions may apply depending on door size, weight or application. Consult Technical Sales for further details. The Austin has the added advantage of possible on-site cladding replacement, should it be required.

BRACING

Bracing is designed to suit door width and weight as per manufacturer's specifications. The door is braced as required using RHS and/or an 'open-web' truss to the bottom panel.

FINISH

The aluminium extruded frame is available in natural anodised, colour anodised or a wide range of powder coat colours.

BOTTOM RAIL

The bottom rail reinforces the bottom panel and is manufactured from a durable extruded aluminium section fitted with a PVC bottom weather seal. The weather seal minimises the gap in slightly uneven ground surfaces and reduces interior exposure of rain and leaves. The standard bottom rail has a 5mm face.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate nylon track

rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft directly above the door behind the lintel. NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.

LOCKING

Manually operated doors can be either fitted with spring loaded shoot bolts on the inside (padlocks not included), or a "T" handle lock incorporating a two point locking system. NOTE: Motorised



Austin

Aluminium Sectional Doors

sectional doors are self-locking and are not fitted with a manual lock as standard.

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (24DC/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 24DC/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door to open and close. Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks) direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

OPTIONS

- Cladding options (up to 7mm thick)
- Additional door seals



Timber Sectional Doors

Timber Sectional Doors



Timber Sectional Doors are available in a wide variety of sophisticated panel designs and finishes and provide a warm, cozy and welcoming impression. Typically manufactured from Western Red Cedar, these quality doors can truly enhance and complement the façade.

FEATURES

- Western Red Cedar timber
- Easy to operate
- Appealing designs
- Optional windows

MAXIMUM DOOR SIZE

- Maximum Height: 3320mm
- Maximum Width: 6000mm

NOTE: Maximum dimensions are a guide only.

RECOMMENDED SPECIFICATIONS

Timber Sectional Door in selected panel design and finish. The sectional door operates by means of horizontal hinged panels that travel vertically to the top of the door-opening and then horizontally under the ceiling.

NOTE: When specifying a sectional overhead door, it is important to also specify the door's intended or expected usage (i.e. number of operations per day or number of vehicles in car park). Sectional Doors are suitable for applications with a usage up to 50 operations per day. In applications requiring higher usage, counterweight doors or sliding doors are highly recommended. When specifying, please also nominate the tracking installation system required e.g. Standard Headroom, High Lift etc.

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Timber Sectional Doors

Timber Sectional Doors

PANEL DETAILS

As standard panels are manufactured from Western Red Cedar 'Standard Grade'. Alternative timbers, may be available upon specification. NOTE: Due to weight and availability of alternative timbers, size or design restrictions may apply.

Timber panel thicknesses vary depending on the chosen design. The 'Hamilton' profile has horizontal slats and unless otherwise specified are V-joined together as standard. The selected timber profile is glued and nailed to an aluminium frame to form panels of up to 600mm in height.

BRACING

Where required by design to match the door size and weight, Steel Struts are used to brace the door.

FINISH

Timber Sectional Doors can be supplied with a fully sealed Sikkens finish. Fully sealed Sikkens finish is a colour sealer coat available in Dark Oak (as standard), Walnut or Mahogany. Other finish colours may be available. Alternatively, timber sectional doors may also be supplied; oiled (using CD50 oil); part sealed Sikkens (allowing customer to apply a suitable colour topcoat), primed (ready for customer to paint the door); or raw (allowing the end user to treat the door as desired).

The timbers used in Timber Sectional Doors are of a high quality; however due to the nature of timber itself, consistency of colours and patterns cannot be guaranteed.

TIMBER PRESERVATION

Like most exterior timbers, Western Red Cedar requires some tender loving care to keep it looking its best. To ensure long lasting timber protection, it is recommended that the end user inspects the door regularly and re-applies the appropriate finish at the first sign of timber ageing. Sikkens Superior Sealed timber finishes require re-application approximately every 2-5 years. As a guide, North or West facing doors should be recoated every 2 years, while South or East facing should be recoated every 4-5 years. Oiled doors should be re-coated more regularly (approx every 1-3 years).

WINDOWS (OPTIONAL)

Clear acrylic, glass or leadlight window designs can be provided to enhance the appearance of the door and façade and allow natural light to filter into the garage.

BOTTOM RAIL

A strong aluminium extruded bottom rail with a durable PVC weather seal is fitted to the bottom of the door in order to provide additional reinforcement and to minimise leaves and rain from entering under the door.

ADDITIONAL DOOR SEALS (OPTIONAL)

Additional door seals can be provided to seal the working clearance gap around the door. Seals for fire risk areas are designed to prevent embers from entering the garage and are manufactured from a flame retardant material. Door seals also help to reduce dust and dirt from entering the garage.

DOOR TRACKS

Standard vertical and horizontal tracks are manufactured from specially roll-formed heavy-duty galvanised steel of 50mm (2") profile. Standard tracks are designed to accommodate nylon track rollers. NOTE: 75mm (3") tracks with steel track rollers are used for large or heavy doors, or where required for frequent usage. Horizontal tracks are reinforced with 40mm by 40mm steel angle and are supported 200mm-300mm from each end. Where tracks exceed 3000mm, additional centre supports will also be provided.

SPRINGS

Torsion springs are typically made from 5.6mm to 9mm thick oil tempered spring wire and are designed to suit the door size and weight and tensioned to correctly balance the door. The springs (as standard) are mounted along a steel cross shaft directly above the door behind the lintel. NOTE: For low headroom track applications, the cross shaft & springs may be required to be mounted at the end of the horizontal tracks.

HARDWARE

Cable drums are attached to each end of the steel cross shaft. Galvanised steel wire cables run from the cable drums to the bottom steel anchor brackets at the bottom ends of the door. As the cable drums turn, by means of the torsion springs and cross shaft, the cables wind on or off the grooves of the cable drums to lift the door up or down.

Sectional door support brackets are manufactured from galvanised steel. Horizontal track support brackets are attached to adjacent walls (where wall distance is 600mm or less) or supported from the ceiling.



Timber Sectional Doors

Timber Sectional Doors

Sectional door hinges are manufactured from galvanised steel for strength and durability. Doors that exceed 5500mm in width are fitted with double hinge roller brackets and rollers with extended shafts.

Standard track rollers consist of steel ball bearings complete with a nylon outer casing for quieter operation. For large, heavy, or frequent operation doors (e.g. 20+ operations per day), steel track rollers with steel ball bearings are used for added strength.

FIXING REQUIREMENTS

The building construction (typically solid brick, concrete or steel) must be structurally sound and have adequate strength to support the Sectional Door and its fixing requirements. Overhead fixing points for the horizontal tracks and central motor rack are also required. Consult Technical Sales for location and further details.

LOCKING

Manually operated timber sectional doors can be either fitted with; spring loaded shoot bolts on the inside (padlocks not included), or a "T" handle lock incorporating a two point locking system. NOTE: Motorised sectional doors are self-locking and are not fitted with a manual lock as standard.

OPERATION

Sectional Doors operate from behind the opening and are typically made up of four or more horizontal hinged panels. The panels are fitted with track rollers on each side to enable the door to travel smoothly within specially designed sectional door tracks. In the open position the door rests horizontally overhead as standard. Alternative track installation (e.g. high lift or vertical lift) may be available depending on the door size, weight and application (limitations may apply). Sectional doors can be operated by hand or motorised.

MOTORISATION

Sectional overhead doors are typically motorised by a centrally mounted overhead 'trolley' type operator, either of single-phase (24DC/240v or 240v) or three-phase (415v) power depending on size, weight and application of door. Residential applications are supplied as standard with 24DC/240v automated operator unless otherwise specified. The operator head is mounted under the ceiling to a central steel drive rack consisting of a chain or belt drive and a travelling carriage. A coupling arm connects the carriage to the top of the door enabling the door to open and close.

Standard operators are fitted with a pull cord to enable emergency manual operation in case of power outage. Residential sectional operators come complete with hand transmitters for remote control access. Unless otherwise specified, commercial sectional operators come with a standard push-button station only. Specific access control requirements should be specified by the client.

Alternative direct drive motorisation, with either single- or three-phase power is also available. In some circumstances (e.g. heavy or large doors, doors requiring commercial access control, or doors installed with high lift or vertical lift tracks) direct drive motorisation is the only suitable option. Direct drive operators are fitted to the side of the door and directly drive the steel cross shaft. The operator includes a pull cord or a hauling chain (depending on the operator) to enable emergency manual operation in case of power outage.

The provision of adequate mains power supply and GPO or isolator (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as access control accessories, safety and security accessories including; slack rope tension monitor, automatic lock mechanism and safety reversing sensors etc., are available upon specification. For further information see Door Operators & Accessories.

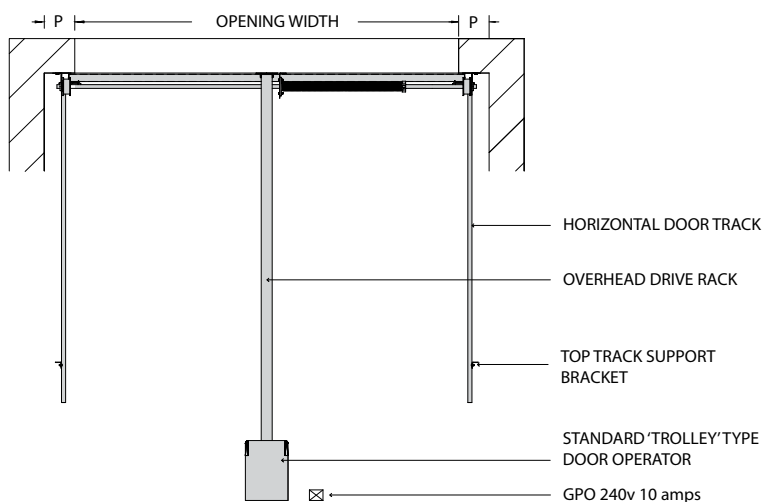
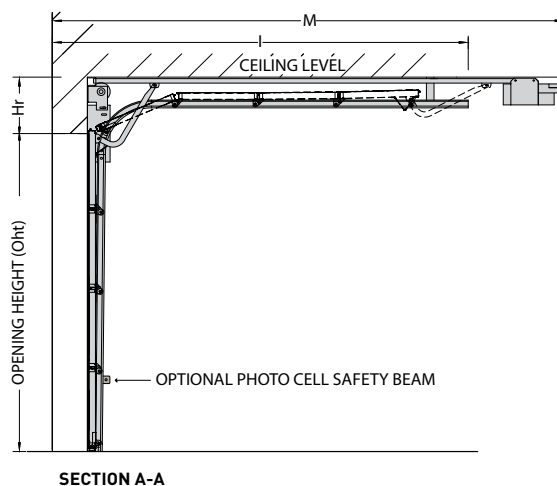
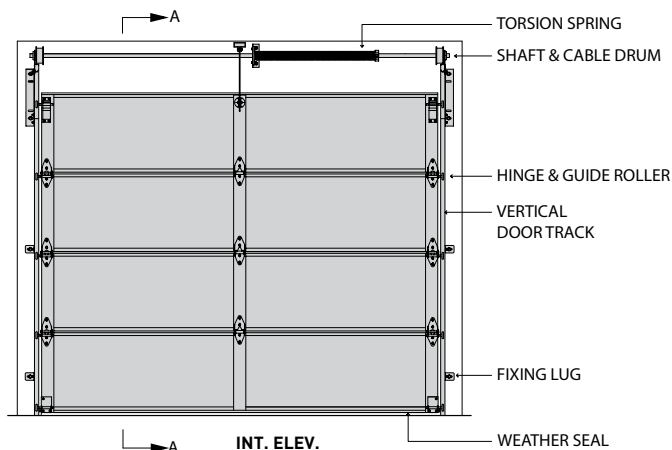
OPTIONS

- Windows
- Additional door seals
- Tapered bottom



Standard Headroom

Technical Specs: Sectional Doors



PLAN VIEW

NOTE:

- SHOWN IS MINIMUM STANDARD HEADROOM INSTALLATION.
- THE DOOR OPERATOR AND DRIVE RACK FIT DIRECTLY UNDER THE CEILING IN THE MIDDLE OF THE OPENING.
- WHERE THERE IS MORE HEADROOM THAN NEEDED, STEEL DROPPERS ARE USED TO SUSPEND THE OPERATOR IN POSITION.
- OVERHEAD SUPPORTING STRUCTURE IS REQUIRED AT OPERATOR LOCATION.
- NOTE: ALTERNATIVE DIRECT DRIVE OPERATORS ARE ALSO AVAILABLE. THESE TURN THE SHAFT DIRECTLY USING A THROUGH SHAFT GEARBOX AND MOTOR.

CLEARANCE DETAILS (STANDARD HEADROOM)

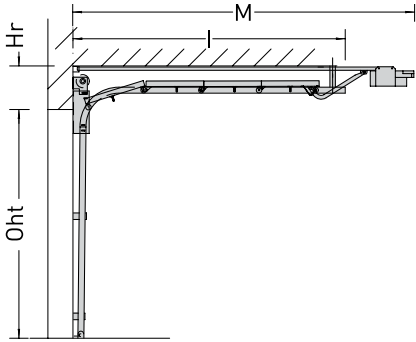
Oht*	Hr	I	M	OPERATION	P
Sectional Door - up to 175kg					
3600	350	Oht + 400	N/A	Hand Operation	120
3600	380	Oht + 400	Oht + 1000	Motorisation: 'Trolley' type operator	120
Sectional Door - 176-250kg					
3600	430	Oht + 400	Oht + 1000	Motorisation: 'Trolley' type operator	200
Heavy Duty Sectional Door - 251-350kg (not recommended for residential use)					
4200	450	Oht + 400	Oht + 1000	Motorisation: 'Trolley' type operator	200

Notes:

- * Oht = Opening Height

Track Installation Options

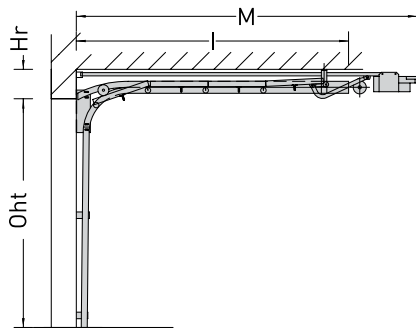
Technical Specs: Sectional Doors



Sectional Door - Standard Headroom

Standard headroom installation is the most common and recommended type of sectional door installation. This installation is standard with all sectional doors unless otherwise specified.

Please see Standard Headroom Technical Specification drawing and clearance information.



Sectional Door - Low Headroom (Non-Standard)

Low headroom installation is used in circumstances where standard installation is not achievable. **NOTE:** Door size, weight and application restrictions apply. Low headroom installation is not suitable for large or heavy doors, or applications with multiple car parks (such as commercial car parks).

CLEARANCE DETAILS

Oht*	Hr	I	M	OPERATION	P	G
Low Headroom - up to 175kg						
3600	240	Oht + 600	Oht + 1000	Hand Operation	150	N/A
3600	270	Oht + 600	Oht + 1000	Motorisation: 'Trolley' type operator	150	N/A
3600	320	Oht + 600	Oht + 1000	Motorisation: 'Trolley' type operator	200	N/A

Notes:

*Oht = Opening Height

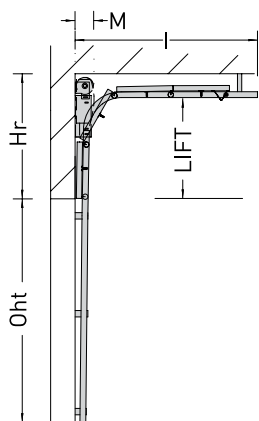
Note:

Non standard track installations are subject to size, weight and application (e.g. frequency of use) restrictions. Unless otherwise specified, installation type will be standard headroom installation. Please stipulate track installation type required when specifying. Consult Technical Sales for further information.

Track Installation Options

Continued

Technical Specs: Sectional Doors



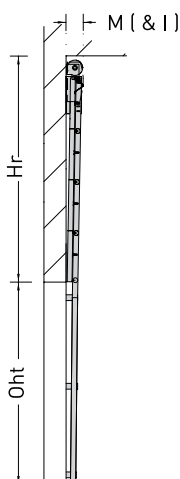
Sectional Door - High Lift Installation (Non-Standard)

High Lift installation is ideal for applications where there is a large distance between the ceiling and the bottom of the lintel and where maximum internal height clearance is required (when door is open). Motorisation of high lift sectional doors is by direct drive.

CLEARANCE DETAILS						
DIMENSIONS					SIDEROOM	
Oht*	Hr	I	M	OPERATION	P	G
High Lift						
3600	Lift+310	Oht+600-Lift	400	Motorisation: Direct Drive	200	380

Notes:

- *Opening Height
- Lift= Clear vertical distance between bottom of lintel & horizontal track



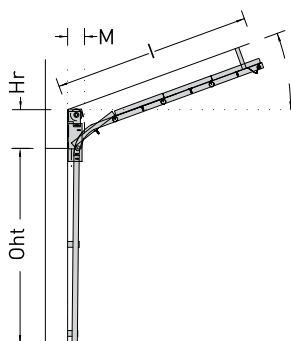
Sectional Door - Vertical Lift Installation (Non-Standard)

Vertical Lift installation for sectional doors is available as an option; however the Vertical Lift Counterweight Door is a much more superior option, as there are less moving components. Vertical Lift Sectional Door motorisation is by direct drive.

CLEARANCE DETAILS						
DIMENSIONS					SIDEROOM	
Oht*	Hr	I	M	OPERATION	P	G
Vertical Lift						
3600	Oht+310	450	400	Motorisation: Direct Drive	200	380

Notes:

- *Opening Height



Sectional Door - Angle Lift Installation (Non-Standard)

Angle Lift (or follow the roof) installation can be provided up to a maximum angle of 20 degrees and maximum of 10 operations per day. NOTE: Door size, weight and application restrictions apply. Angle Lift installation is not suitable for large or heavy doors, or applications with multiple car parks (such as commercial car parks). Motorisation of Angle Lift installation can be by either 'trolley' type or direct drive, depending on application.

CLEARANCE DETAILS						
DIMENSIONS					SIDEROOM	
Oht*	Hr	I	M	OPERATION	P	G
Angle Lift						
3600	Min 350	Oht+600-350	400	Motorisation: Direct Drive	200	380

Notes:

- *Opening Height

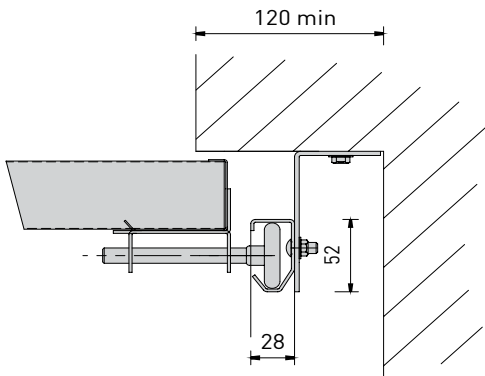
NOTE: Non standard track installations are subject to size, weight and application (e.g. frequency of use) restrictions. Unless otherwise specified, installation type will be standard headroom installation. Please stipulate track installation type required when specifying. Consult Technical Sales for further information.

Door Tracks & Direct Drive

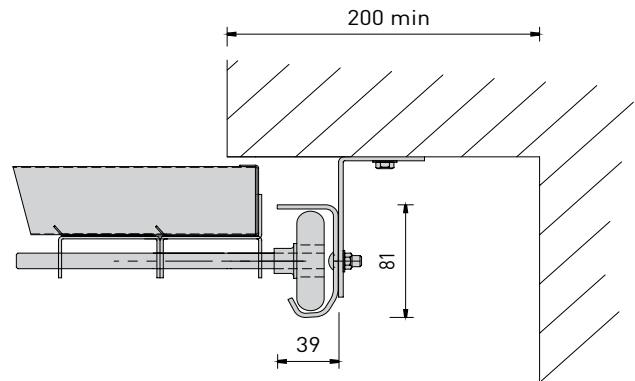
Technical Specs: Sectional Doors

SECTIONAL DOORS STANDARD DOOR TRACKS

STANDARD 2" TRACK



HEAVY DUTY 3" TRACK

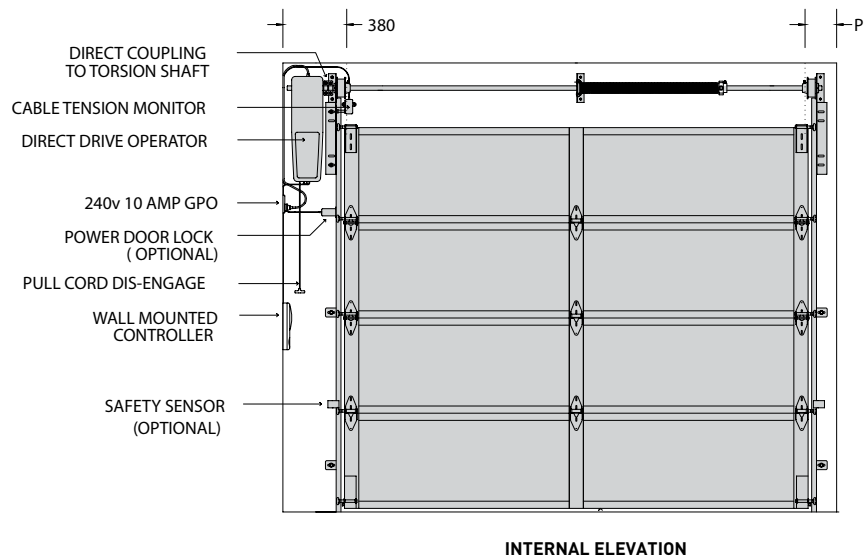


DIRECT DRIVE ('JACK SHAFT') OPERATOR

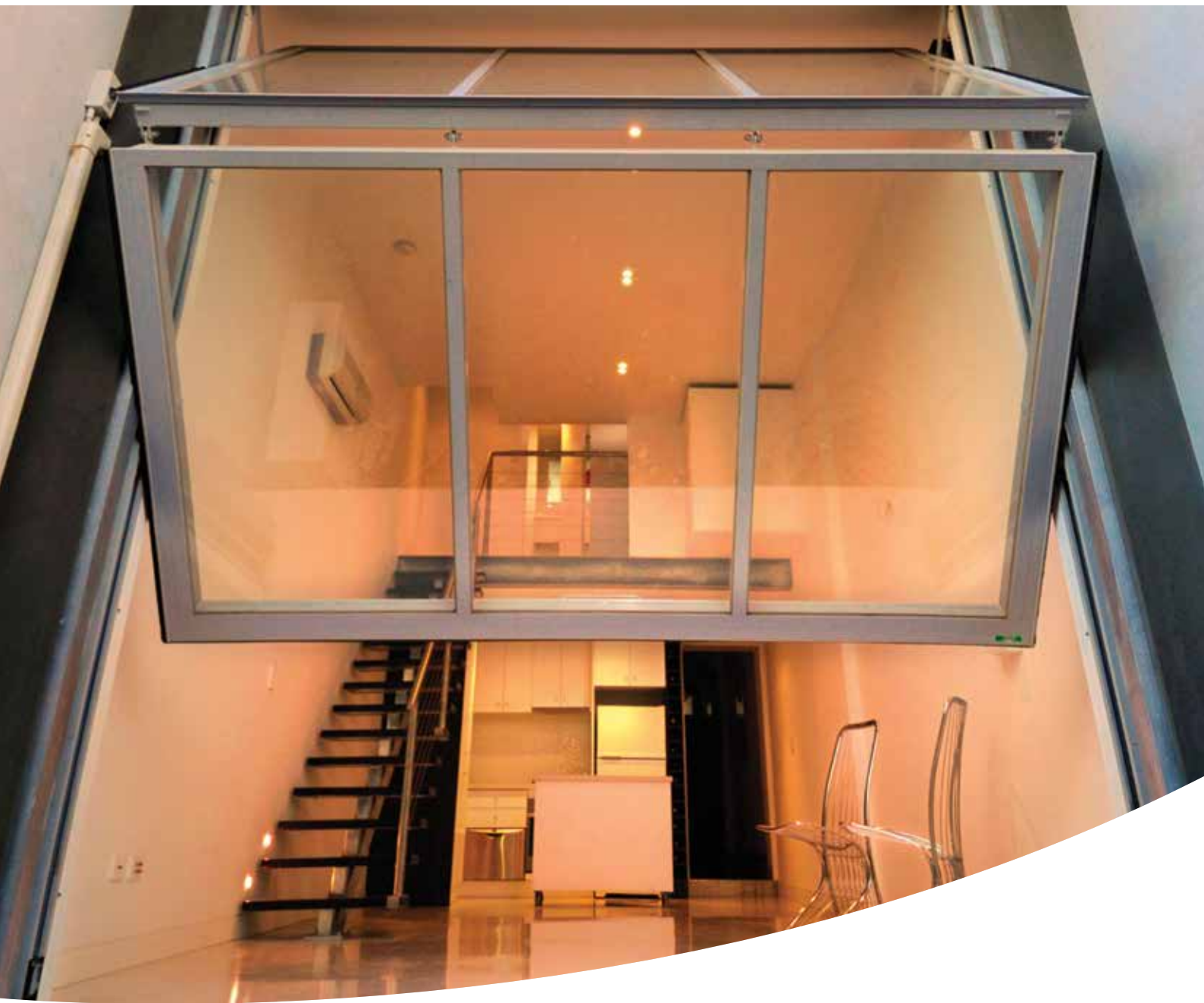
- DIRECT DRIVE IS AN ALTERNATIVE METHOD OF MOTORISATION MAINLY USED WITH HIGH, ANGLED OR VERTICAL LIFT INSTALLATIONS, AND HEAVY OR LARGE DOORS.
- THE OPERATOR DIRECTLY DRIVES THE TORSION SHAFT.
- ELECTRICAL OR MECHANICAL MEANS OF MONITORING THE CABLE TENSION IS REQUIRED FOR SAFETY AND SEPERATE LOCKING OF THE DOOR IS ADVISED.
- AS A VARIETY OF OPERATORS ARE USED, THIS DIAGRAM IS INDICATIVE ONLY.
- THE OPERATOR IS SELECTED TO SUIT THE APPLICATION AS WELL AS DOOR SIZE, WEIGHT AND INSTALLATION.
- TYPICALLY 415v 3 PHASE OPERATORS ARE USED WITH COMMERCIAL CARPARK DOORS FOR INSTANCE
- SAFETY SENSORS (EG. PE BEAMS, SAFETY EDGE SENSORS ETC.) ARE RECOMMENDED.

NOTE:

Direct Drive Operators are not suitable for Low Headroom installations



Counterweight Doors



Summary

Counterweight Doors



FOLD-UP DOORS

The Fold-Up Door is an especially useful and reliable two-panel counterweighted door. As a high-use, low maintenance door, with a design capacity to the highest cyclonic wind speeds, it is a perfect solution for the very largest of openings and can incorporate all types of cladding, including acoustic insulation, thermal insulation, or double glazed window panels. Unlike other doors, the Fold-Up Door is specifically designed so that its performance is not impaired by increased weight (or size). The Fold-Up Door can sufficiently balance excessive door and cladding mass, thus enabling ease of use, both manually and electrically. Fold-Up Doors are widely used in commercial and industrial applications such as fire and ambulance stations, workshops, transport depots, aircraft hangars, showrooms etc. They are also ideal for large glazed or uniquely clad residential garage doors.



OFFSET FOLD-UP DOORS

Offset Fold-Up Doors are a variation of the Fold-Up and are used in applications where the bottom of the door is required to swing out or there is insufficient backroom. The door consists of a small upper panel and a large lower panel hinged together. Offset Fold-Up Doors can be clad in variety of cladding materials and are suited to applications such as counters, restaurants, bars, cafes etc.



GLIDE-UP DOORS

Encompassing strength and durability, Glide-Up Doors are commonly used for residential and commercial applications such as garages, car park entries, workshops, showrooms, room dividers etc. The Glide-Up Door is a single panel, "half-in, half-out" counterweight door that can be clad in a variety of cladding materials including timber, steel or aluminium sheet, glass etc.

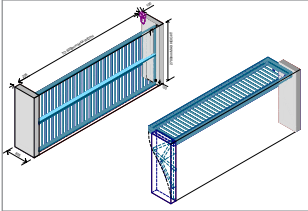


FULLY INTERNAL GLIDE-UP DOORS

Fully Internal Glide-Up Doors are ideal in cases where external projection (past the exterior of a building) of the door is prohibited, and where full opening height is required. They are commonly used for residential and commercial applications such as garages, car park entries, workshops, showrooms, etc., and can be clad in a wide range of cladding materials.

Summary

Counterweight Doors



V-FOLD DOORS

V-Fold Doors are a high quality, fast opening door, specifically designed for high use commercial car park applications. The door does not protrude externally, and is designed to fit within the opening as a freestanding unit or behind fix. The door features safety sensors as standard, and side piers which can also be mounted entirely isolated from the building, reducing vibration and noise.



VERTICAL LIFT DOORS

Vertical Lift counterweight doors are typically used for applications such as car parks, workshops, warehouses, reception areas etc. They are also widely used as thermal or acoustic barriers in loading docks, drier rooms and cool rooms. Vertical Lift Doors can be designed as a single or multiple leaf door and operate by travelling up or down on vertical steel tracks. Vertical Lift Doors can be glazed or clad in a wide range of cladding materials.

Selection Chart

Counterweight Doors

PRODUCT RANGE	APPLICATIONS																	
Fold-Up Door	✓	✓	●	✓	✓	✓	✓	✓	●		✓		✓	✓	●	✓		✓
Offset Fold-Up Door		●	●	✓	✓	✓	✓	●		✓		●	✓					✓
Glide-Up Door		✓	●	✓	●	✓	✓	✓		✓		●	✓					●
Fully Internal Glide-Up Door		✓	●	●	●	✓	✓	✓		●		●	●					●
V-Fold Door		✓							✓									
Vertical Lift Door	✓	✓	✓	✓	●	✓	✓	●	✓	✓		●	●		✓			●

Aircraft Hangers
 Car Parks
 Cool-Rooms & Insulated Drier Rooms
 Counters, Kiosks & Bars
 Emergency Services (e.g. CFA)
 Factories & Warehouses (external)
 Factories & Warehouses (internal)
 Garages & Carports
 Laneways (freestanding)
 Restaurants
 Self Storage
 Shopfronts
 Shopping Complexes
 Showrooms
 Supermarket Entrances
 Transport & Loading Docks/Bays
 Vehicles (e.g. trucks)
 Workshops

PRODUCT RANGE	OPTIONAL FEATURES										
Fold-Up Door	✓		✓	✓	●	✓		✓	✓	✓	✓
Offset Fold-Up Door	✓		✓	●	●	✓		✓	✓	✓	✓
Glide-Up Door	✓		✓	✓	●	✓		✓	✓	✓	✓
Fully Internal Glide-Up Door	✓		✓	✓	●	✓		✓	✓	✓	✓
V-Fold Door	●				●	✓			✓	✓	✓
Vertical Lift Door	✓		✓	✓	✓	✓		✓	✓	✓	✓

Cladding Options
 Fire Rated
 Glass
 High Usage
 Insulation Sound/Thermal
 Motorisation
 Mullions
 Personat Entry & Exit Door
 Ventilation (5-25% Airflow)
 Ventilation (26% + Airflow)
 Vision

SELECTION CHART KEY

- ✓ Suitable
- Suitable, conditions may apply

Fold-Up Door

Counterweight Doors



Fold-Up Doors are typically glazed and are widely used in commercial and industrial applications such as fire and ambulance stations, workshops, transport depots, aircraft hangars, showrooms, etc. Fold-Up Doors are also ideal for large or uniquely clad garage doors on architecturally designed homes. Fold-Up Doors are a two-panel counterweighted door specifically designed so that its performance is not impaired by increased weight (or size), thus making it ideal for even the largest of openings and also a wide variety of cladding types.

FEATURES

- Counterweight balance
- Wide range of cladding options
- Ideal for large openings
- Ease of operation
- Minimal maintenance
- Long lasting
- High usage

DOOR DIMENSIONS

- Maximum Height: 7000mm
- Maximum Width: 24000mm

NOTE: Maximum dimensions are a guide only and may vary due to wind loading and cladding. Larger sizes of up to 10m high or 30m wide may be available. Consult Technical Sales for further information.

RECOMMENDED SPECIFICATIONS

Fold-Up Door, consisting of two steel framed hinged panels, with selected cladding, and inclusive of all hardware, as manufactured by Airport Doors. Balanced by a counterweight system, the panels rotate, folding up under the lintel. The open door projects inwards and outwards of the opening.

NOTE: Fold-Up Doors are custom-made to suit the door opening and specific application. Client's design and specification requirements must be clearly stipulated.

Fold-Up Door

Counterweight Doors

DOOR OPENING

The door operates within the opening; therefore all sides must be plumb and true. **IMPORTANT:** Allowance for the thickness of the folded door and working clearance must be made when designing the opening to give the required drive through clearance. Refer to Technical Specifications for clearance information.

FIXING REQUIREMENTS

It is the responsibility of the architect/builder to provide structurally adequate columns/walls to carry all design loads. See also Technical Specifications.

DOOR FRAME AND HARDWARE

The door frame is constructed using Dual Grade C350L0/ C450L0 DuraGal® RHS rectangular hollow steel sections, braced and trussed as required and designed in accordance with AS4100 (Steel Structures) and to comply with the provisions of AS/NZS 4505:2012 (Garage doors and other large access doors) and AS1170 Part 1-2 (Wind Loads). Unless otherwise specified, the minimum design wind load is Region A5, Category 3. The counterweight system is subject to the SAA Crane Code. A minimum Safety Factor of 5 applies to the wire rope sizing and a minimum ratio of 22:1 applies to the pulleys. Sealed ball bearings or bushings are used at the load points.

All exposed steel work is prepared and shop primed before the application of any specified coatings. The steel frame, tracks and fittings can be finished prime painted or powder coated. (NOTE: Large doors may not be available in powder coat finish). Other steelwork finishes or specified paint systems can also be supplied when specified.

CLADDING

The Fold-Up Door can be designed to accommodate and match various cladding materials including glass (single or double glazed), steel or aluminium sheet, timber, mesh, acoustic insulation, thermal insulation etc. NOTE: Some restrictions may apply. See also Cladding Options and Technical Specifications.

DOOR SEALS

Fold-Up Doors are designed to fit within the opening as standard, therefore a typical working clearance of 15mm on each side and at the top of the door is required, as well as a

typical working clearance of 25mm at the bottom of the door. As standard, brush seals are fitted at the top and to each side of the door, and a PVC bulb seal is fitted to the bottom of the door. NOTE: Standard seals reduce draughts and exposure to weather, however they are not watertight. Alternative sealing such as seals combined with thresholds may be available when specified.

COUNTERWEIGHT COVERS

Steel counterweights are enclosed and protected using heavy gauge pressed steel covers to approximately two-thirds of the door height as standard. Counterweight covers are finished as per the frame specification. They are custom-made and designed to suit the site dimensions.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Entry Doors (opening inwards) can be built into the bottom panel of a Fold-Up Door. Restrictions apply. **NOTE:** PA Doors have a stepover threshold and do not comply as fire exits. PA Doors must be kept shut when operating the main door. Optional 'door closer' and/or 'door monitoring switch' are available and highly recommended.

LOCKING

Manually operated Fold-Up Doors are fitted with pad bolts on the inside as standard. Padlocks not included. When specified, key lockable bolts, or similar, are available as an alternative. NOTE: Electric operated (motorised) doors are secured by the motor and its controls.

HOLD OPEN LATCH (OPTIONAL)

Manually operated counterweight doors can be fitted with a spring loaded Hold Open Latch, to ensure they stay open in windy areas.

OPERATION

Fold-Up Doors consist of two hinged panels, which fold together as the door is being opened. Using a counterweight system, the bottom panel swings in and the door (in the open position) rests folded horizontally under the lintel, projecting internally and externally of the building. See also Method of Operation.



Fold-Up Door

Counterweight Doors

HAND OPERATION

A practical feature of the Fold-Up Door is its capacity to be manually operated at weights of up to 1000kg. It is recommended, however, that doors which are either; high, large, subject to high wind loads, or are in frequent use, are motorised for convenience and ease of operation. In the advent of power outage, all doors are capable of hand operation.

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on availability of power, door usage and door access requirements. Motorisation is available in three-phase (415v) as standard, single-phase (240v) or 24DC/240v. Residential applications are supplied as standard with 24DC/240v automated operator. Motorised doors incorporate a manual release mechanism for manual operation (in case of a power outage).

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification. NOTE: For safety, Photoelectric Beams (PE Beams) are highly recommended on all counterweight doors. Where doors are automated by a radio control, PE Beams are a requirement. A Through-Beam must be used on all government installations (e.g. ambulance, police, CFA stations).

See also Door Operators & Accessories. For further Fold-Up Door information, download the Fold-Up Door Technical Data Sheet PDF.

OPTIONS

- High usage
- Fast opening (up to 300mm per second)



Offset Fold-Up Door

Counterweight Doors



Offset Fold-Up Doors are a counterweight door consisting of a small upper panel and a large lower panel. Offset Fold-Up Doors can be clad in a variety of cladding materials. They are suited to commercial applications such as counters, restaurants, bars, cafes etc. Offset Fold-Up Doors are a hybrid door which folds in the opposite direction to the standard Fold-Up Door. Where there is insufficient backroom for a standard Fold-Up Door, or where the bottom of the door is required to swing out, the Offset Fold-Up Door is ideal.

FEATURES

- Counterweight balance
- Wide range of cladding options
- Minimal maintenance
- Long lasting

DOOR DIMENSIONS

- Maximum Height: 3600mm
- Maximum Width: 6000mm

NOTE: Due to its design, the Offset Fold-Up Door is not recommended for high wind areas. Maximum dimensions are a guide only and may vary due to wind loading and cladding. Consult Technical Sales for further information.

RECOMMENDED SPECIFICATIONS

Offset Fold-Up Door, consisting of two steel framed hinged panels, with selected cladding, and inclusive of all hardware, as manufactured by Airport Doors. Balanced by a counterweight system, the panels rotate, folding up under the lintel. The open door projects inwards and outwards of the opening.

NOTE: Offset Fold-Up Doors are custom-made to suit the door opening and specific application. The client's design and specification requirements must be clearly stipulated.

Offset Fold-up Door

Counterweight Doors

DOOR OPENING

The door operates within the opening; therefore all sides must be plumb and true. **IMPORTANT:** Allowance for the thickness of the folded door and working clearance must be made when designing the opening to give the required drive through clearance. Refer to Technical Specifications for clearance information.

FIXING REQUIREMENTS

It is the responsibility of the architect/builder to provide structurally adequate columns/walls to carry all design loads. See also Technical Specifications.

DOOR FRAME AND HARDWARE

The door frame is constructed using Dual Grade C350LO/ C450LO DuraGal® RHS rectangular hollow steel sections, braced and trussed as required and designed in accordance with AS4100 (Steel Structures) and to comply with the provisions of AS/NZS 4505:2012 (Garage doors and other large access doors) and AS1170 Part 1-2 (Wind Loads). Unless otherwise specified, the minimum design wind load is Region A5, Category 3. The counterweight system is subject to the SAA Crane Code. A minimum Safety Factor of 5 applies to the wire rope sizing and a minimum ratio of 22:1 applies to the pulleys. Sealed ball bearings or bushings are used at the load points.

All exposed steel work is prepared and shop primed before the application of any specified coatings. The steel frame, tracks and fittings can be finished prime painted or powder coated. (NOTE: Large doors may not be available in powder coat finish). Other steelwork finishes or specified paint systems can also be supplied when specified.

The top panel of the Offset Fold-Up Door is approximately 35% of the door height.

CLADDING

The Offset Fold-Up Door can be designed to accommodate and match various cladding materials including glass, steel or aluminium sheet, timber, mesh, etc. NOTE: Depending on the weight, size or application of materials, restrictions may apply. See also Cladding Options and Technical Specifications.

DOOR SEALS

Offset Fold-Up Doors are designed to fit within the opening as standard, therefore a typical working clearance of 15mm on each side and at the top of the door is required, as well as a typical working clearance of 25mm at the bottom of the door. As standard, brush seals are fitted at the top and to each side of the door and a PVC bulb seal is fitted to the bottom of the door. **NOTE:** Standard seals reduce draughts and exposure to weather, however they are not watertight. Alternative sealing such as seals combined with thresholds may be available when specified.

COUNTERWEIGHT COVERS

Steel counterweights are enclosed and protected using heavy gauge pressed steel covers to approximately two-thirds of the door height as standard. Counterweight covers are finished as per the frame specification and are custom-made and designed to suit the site dimensions.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Exit Doors (opening outwards) can be built into the bottom panel of an Offset Fold-Up Door. Restrictions apply. **NOTE:** PA Doors have a stepover threshold and do not comply as fire exits. PA Doors must be kept shut when operating the main door. Optional 'door closer' and/or 'door monitoring switch' are available and highly recommended.

LOCKING

Motorised doors are self-locking and are not fitted with additional locks. Manually operated Offset Fold-Up Doors are fitted with pad bolts on the inside as standard. Padlocks not included.

OPERATION

Offset Fold-Up Doors consist of two hinged panels which fold together as the door is being opened. Using a counterweight system, the bottom panel swings out and the door (in the open position) rests horizontally under the lintel. They require less backroom than Fold-Up Doors due to the opposite folding direction of the panels combined with the top panel being approximately 35% of the door height. See also Method of Operation.

HAND OPERATION

Airport Doors recommends that Offset Fold-Up Doors are motorised in all cases. This is due to the effort required to open the door.

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on availability of power, door usage and door access requirements. Motorisation is available in three-phase (415v) as standard, single-phase (240v) or 24DC/240v. Residential applications are supplied as standard with 24DC/240v automated operator. Motorised doors incorporate a manual release mechanism for manual operation (in case of a power outage).

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification. **NOTE:** For safety, Photoelectric Beams (PE Beams) are highly recommended on all counterweight doors. Where doors are automated by a radio control, PE Beams are a requirement. A Through-Beam must be used on all government installations (e.g. ambulance, police, CFA stations).

For further information see Door Operators & Accessories.

Glide-Up Door

Counterweight Doors



Glide-Up Doors are a single panel, “half-in, half-out” counterweight door that can be clad in a variety of materials including timber, steel or aluminium sheet, glass etc. Encompassing strength and durability, Glide-Up Doors are commonly used for residential and commercial applications, such as garages, car park entries, workshops, showrooms, room dividers etc.

FEATURES

- Counterweight balance
- Wide range of cladding options
- Ease of operation
- Minimal maintenance
- Long lasting

DOOR DIMENSIONS

- Maximum Height: 3000mm
- Maximum Width: 10000mm

(If larger door sizes are required, please consult Technical Sales)

NOTE: Maximum dimensions are a guide only and may vary due to wind loading and cladding type. Consult Technical Sales for further information.

RECOMMENDED SPECIFICATIONS

Glide-Up Door, consisting of a single steel framed panel with selected cladding, and inclusive of all hardware, as manufactured by Airport Doors. Balanced by means of counterweights, the open door protrudes “half in and half out” of the opening.

NOTE: Glide-Up Doors are custom-made to suit the door opening and specific application. The client’s design and specification requirements must be clearly stipulated.

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Glide-Up Door

Counterweight Doors

DOOR OPENING

The door fits below the lintel and operates within the opening; therefore all sides must be plumb and true. **IMPORTANT:** Allowance for the thickness of the door and working clearance must be made when designing the opening to give the required drive through clearance. Refer to Technical Specifications for clearance information.

FIXING REQUIREMENTS

It is the responsibility of the architect/builder to provide structurally adequate columns/walls to carry all design loads. Refer to Technical Specifications for clearance information.

DOOR FRAME AND HARDWARE

The door frame is constructed using Dual Grade C350LO/ C450LO DuraGal® RHS rectangular hollow steel sections, braced and trussed as required and designed in accordance with AS4100 (Steel Structures) and to comply with the provisions of AS/NZS 4505:2012 (Garage doors and other large access doors) and AS1170 Part 1-2 (Wind Loads). Unless otherwise specified, the minimum design wind load is Region A5, Category 3. The counterweight system is subject to the SAA Crane Code. A minimum Safety Factor of 5 applies to the wire rope sizing and a minimum ratio of 22:1 applies to the pulleys. Sealed ball bearings or bushings are used at the load points.

All exposed steel work is prepared and shop primed before the application of any specified coatings. The steel frame, tracks and fittings can be finished prime painted or powder coated. (NOTE: Large doors may not be available in powder coat finish). Other steelwork finishes or specified paint systems can also be supplied when specified.

CLADDING

The Glide-Up Door can be designed to accommodate and match various cladding materials including glass, steel or aluminium sheet, timber, mesh, etc. NOTE: Depending on the weight, size or application of materials, restrictions may apply. See also Cladding Options and Technical Specifications.

DOOR SEALS

Glide-Up Doors are designed to fit within the opening as standard, therefore a typical working clearance of 15mm on

each side and at the top of the door is required, as well as a typical working clearance of 25mm at the bottom of the door. As standard, brush seals are fitted at the top and to each side of the door and a PVC bulb seal is fitted to the bottom of the door. **NOTE:** Standard seals reduce draughts and exposure to weather, however they are not watertight. Alternative sealing such as seals combined with thresholds may be available when specified.

COUNTERWEIGHT COVERS

Steel counterweights are enclosed and protected using heavy gauge pressed steel covers to approximately two-thirds of the door height as standard. Counterweight covers are finished as per the frame specification and are custom-made and designed to suit the site dimensions.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Exit Doors (opening outwards) can be built into the Glide-Up Door. Restrictions apply. **NOTE:** PA Doors have a stepover threshold and do not comply as fire exits. PA Doors must be kept shut when operating the main door. Optional 'door closer' and/or 'door monitoring switch' are available and highly recommended.

LOCKING

Manually operated Glide-Up Doors are fitted with pad bolts on the inside as standard. Padlocks not included. When specified, key lockable bolts, or similar, are available as an alternative. NOTE: Motorised doors are self-locking and are not fitted with additional locks.

HOLD OPEN LATCH (OPTIONAL)

Manually operated counterweight doors can be fitted with a spring loaded Hold Open Latch to ensure they stay open in windy areas.

OPERATION

Glide-Up Doors consist of a single panel, which swings outwards and upwards. Using a counterweight system, the door (in the open position) rests horizontally under the lintel, projecting internally and externally of the building. See also Method of Operation.



Glide-Up Door

Counterweight Doors

HAND OPERATION

The Glide-Up Door can be manually operated up to 600kg total door weight. It is recommended, however, that doors are motorised, especially where they are; high, large, subject to high wind loads, or, are in frequent use.

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on availability of power, door usage and door access requirements. Motorisation is available in three-phase (415v) as standard, single-phase (240v) or 24DC/240v. Residential applications are supplied as standard with 24DC/240v automated operator. Motorised doors incorporate a manual release mechanism for manual operation (in case of a power outage).

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification. NOTE: For safety, Photoelectric Beams (PE Beams) are highly recommended on all counterweight doors. Where doors are automated by a radio control, PE Beams are a requirement. A Through-Beam must be used on all government installations (e.g. ambulance, police, CFA stations).

For further information see Door Operators & Accessories.

OPTIONS

Flush mount installation

(NOTE: This requires a specifically designed opening, refer to downloadable Technical Datasheet). Alternatively consult Technical Sales regarding the NEW Façade Door.



Fully Internal Glide-Up Door

Counterweight Doors



Fully Internal Glide-Up Doors are ideal in cases where external projection (past the exterior of a building) of the door is prohibited, and where full opening height is required. They are commonly used for residential and commercial applications such as garages, car park entries, workshops, showrooms, etc., and can be clad in a wide range of cladding materials.

FEATURES

- Counterweight balance
- Wide range of cladding options
- No external projection
- Full opening clearance (sufficient sideroom and headroom required)
- Long lasting

DOOR DIMENSIONS

- Maximum Height: 4000mm
- Maximum Width: 10000mm

NOTE: Maximum door dimensions are a guide only and may vary due to wind loading and cladding. Consult Technical Sales for further information.

RECOMMENDED SPECIFICATIONS

Fully Internal Glide-Up Door, consisting of a single steel framed panel, selected cladding, and inclusive of all hardware, as manufactured by Airport Doors. Balanced by means of counterweights, the door operates fully inside of the opening.

NOTE: Fully Internal Glide-Up Doors are custom-made to suit the door opening and specific application. The client's design and specification requirements must be clearly stipulated.

Fully Internal Glide-Up Door

Counterweight Doors

DOOR OPENING

The door operates behind the opening as standard, however it can be fitted within the opening (i.e. flush mount) in which case all sides must be plumb and true.

FIXING REQUIREMENTS

It is the responsibility of the architect/builder to provide structurally adequate columns/walls to carry all design loads. Refer to Technical Specifications for clearance information.

DOOR FRAME AND HARDWARE

The door frame is constructed using Dual Grade C350LO/ C450LO DuraGal® RHS rectangular hollow steel sections, braced and trussed as required and designed in accordance with AS4100 (Steel Structures) and to comply with the provisions of AS/NZS 4505:2012 (Garage doors and other large access doors) and AS1170 Part 1-2 (Wind Loads). Unless otherwise specified, the minimum design wind load is Region A5, Category 3. The counterweight system is subject to the SAA Crane Code. A minimum Safety Factor of 5 applies to the wire rope sizing and a minimum ratio of 22:1 applies to the pulleys. Sealed ball bearings or bushings are used at the load points.

All exposed steel work is prepared and shop primed before the application of any specified coatings. The steel frame, tracks and fittings can be finished prime painted or powder coated. **(NOTE: Large doors may not be available in powder coat finish).** Other steelwork finishes or specified paint systems can also be supplied when specified.

CLADDING

The Fully Internal Glide-Up Door can be designed to accommodate and match various cladding materials including glass, steel or aluminium sheet, timber, mesh, etc. **NOTE:** Depending on the weight, size or application of materials, restrictions may apply. See also Cladding Options and Technical Specifications.

DOOR SEALS

Fully Internal Glide-Up Doors either overlap the opening (as standard) or fit within the opening. In either case, a working clearance of 25mm is required at the bottom of the door, and where the door is fitted within the opening, additional working clearance of 15mm on each side and at the top of the door is required for smooth operation. As standard, brush seals are fitted at the top and to each side of the door and a PVC bulb seal is fitted to the bottom of the door. **NOTE:** Standard seals reduce draughts and exposure to weather, however they are not watertight. Alternative sealing such as seals combined with thresholds may be available when specified.

COUNTERWEIGHT COVERS

Steel counterweights are enclosed and protected using heavy gauge pressed steel covers to approximately two-thirds of the door height as standard. Counterweight covers are finished as per the frame specification and are custom-made and designed to suit the site dimensions.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Exit Doors (opening outwards) can be built into the Fully Internal Glide-

Up Door. Restrictions apply. **NOTE:** PA Doors have a stepover threshold and do not comply as fire exits. PA Doors must be kept shut when operating the main door. Optional 'door closer' and/or 'door monitoring switch' are available and highly recommended.

LOCKING

Manually operated Fully Internal Glide-Up Doors are fitted with pad bolts on the inside as standard. Padlocks not included. When specified, key lockable bolts, or similar, are available as an alternative. **NOTE:** Motorised doors are self-locking and are not fitted with additional locks.

OPERATION

The Fully Internal Glide-Up Door is a single panel door which operates via a counterweight system. As the door opens, the top of the panel travels along horizontal tracks, and the bottom travels up vertical tracks until the door rests horizontally overhead (remaining internal at all times). To achieve maximum opening height the door operates behind the opening as standard. See also Method of Operation.

HAND OPERATION

The Fully Internal Glide-Up Door can be manually operated up to 300kg total door weight. It is recommended, however, that doors are motorised, especially where they are; high, large, subject to high wind loads, or, are in frequent use.

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on availability of power, door usage and door access requirements. Motorisation is available in three-phase (415v) as standard, single-phase (240v) or 24DC/240v. Residential applications are supplied as standard with 24DC/240v automated operator. Motorised doors incorporate a manual release mechanism for manual operation (in case of a power outage).

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification. **NOTE:** For safety, Photoelectric Beams (PE Beams) are highly recommended on all counterweight doors. Where doors are automated by a radio control, PE Beams are a requirement. A Through-Beam must be used on all government installations (e.g. ambulance, police, CFA stations).

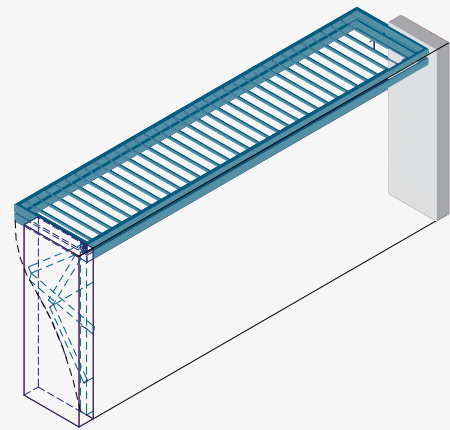
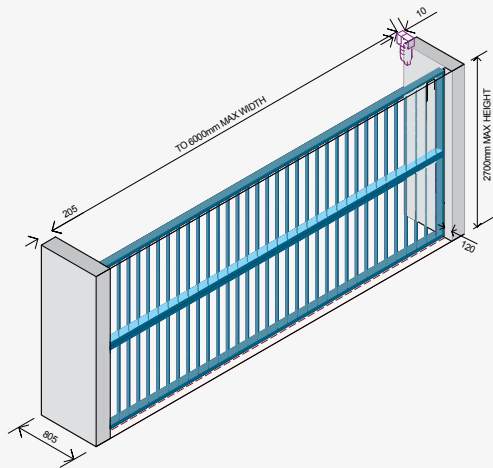
For further information see Door Operators & Accessories

ALTERNATIVE

- For a flush mount door consult Technical Sales regarding the Fully Internal Glide-Up Door Flush Mount version or the NEW Façade Door.

V-Fold Door

Counterweight Doors



The V-Fold Door is a high quality, fast opening door that is perfect for high-use car park applications. V-Folds are specifically designed to meet the requirements of car park entries and exits, and can be supplied as a bar grille or incorporating perforations, woven, expanded mesh or any of the architectural screens that are popular.

FEATURES

- Bar grille design
- Vision/ventilation
- Steel construction (as standard) or aluminium alternative
- No external projection
- Suitable for installation as a fully isolated, free standing barrier
- Noise & vibration reduction
- High usage (up to 20 cycles per hour)
- Safety sensors as standard
- High quality, long lasting components
- Fast opening (300mm per second) & controlled closing speed
- Low maintenance

DOOR DIMENSIONS

- Maximum Height: 2700mm
- Maximum Width: 6000mm

RECOMMENDED SPECIFICATIONS

V-Fold door, consisting of two hinged panels that fold upwards together, complete with side piers and inclusive of all hardware, as manufactured by Airport Doors. Balanced by counterweights and motorised, the door opens into a folded position under the ceiling fully within the building.

NOTE: V-Fold Doors are custom-made to suit the door opening and specific application. Client's design and specification requirements must be clearly stipulated.

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V-Fold Door

Counterweight Doors

DOOR OPENING

The door is specifically designed to be fitted from wall to wall and from floor to ceiling, operating within the opening. It is important to note that the 'drive through height' is from floor to ceiling minus the thickness of the folded door. Total opening width is the dimension from wall to wall minus allowance of 205mm each side (410mm total) for the door track system. Fascia's and side jambs are not required. The floor must be level over the entire door width and all other surfaces should be plumb and true. The doorset can also be used as a fully isolated, free standing barrier. NOTE: The door can be fitted down sloping driveways with modification to base plates. Refer to Technical Specifications for clearance information.

FIXING REQUIREMENTS

It is the responsibility of the architect/builder to provide a structurally adequate and level concrete floor, specifically under each door side pier, that will carry the design loads. Where the door fits wall to wall, the door piers are also fastened to the side walls for additional stability. See also Technical Specifications.

DOOR FRAME AND HARDWARE

The door frame is constructed using Dual Grade C350LO/C450LO DuraGal® RHS rectangular hollow steel sections or aluminium alloy box sections, braced and trussed as required and designed in accordance with AS4100 (Steel Structures) or Specification for Aluminium Structures 2000 and to comply with the provisions of AS/NZS 4505:2012 (Garage doors and other large access doors) and AS1170 Part 1-2 (Wind Loads). Unless otherwise specified, the minimum design wind load is Region A5, Category 3.

All exposed steel work or aluminium is prepared and shop primed before the application of any specified coatings. The frame, tracks and fittings can be finished prime painted or powder coated. [NOTE: Large doors may not be available in powder coat finish]. Other steelwork or aluminium finishes or specified paint systems can also be supplied when specified.

The frame comprises two similar sized panels that are hinged together. The two meeting transoms are spaced by 25mm to avoid a pinch point at the hinge line. The cladding is fitted within the panels. The doorset includes specially fabricated steel side piers that guide and drive the twin panels. The piers also encase the counterweights and drive system which is fitted into the left hand pier as standard. Long life suspension system (leaf chain) & high quality sealed ball bearings is used throughout the transmission.

DOOR TRACK SYSTEM

The door has a patent pending drive mechanism that is contained within the left hand side pier. The door drive axle is guided vertically within a slot built into the pier. Each pier is self-standing and has a base plate area of 205mm wide by 805mm deep. It stands to within 10mm of the full opening height. The pier is designed to be anchored to a level floor pad.

Additionally, using isolation pads, the piers can be mounted entirely isolated from the building, reducing vibration and noise. Each pier is fully encased using pressed metal, removable panel sections and is finished as per the door frame.

In cases where the driveway slopes down inside, the piers

require leveled pad areas to each side, or, where this is not possible, additional mounting 'feet' can be supplied to anchor the base of the pier to the sloping floor.

CLADDING

The standard door is a security bar grille with vertical 20 SHS spaced 100mm apart. V-Fold Doors can alternatively (when specified) be clad using light weight materials. Any light weight cladding that allows ventilation, sufficient air flow and visibility is suitable.

NOTE: Cladding weight restrictions apply and glass is not suitable given the doors application.

DOOR SEALS (OPTIONAL)

Typically Bar Grille V-Fold doors do not require door seals. Where doors are solid clad, door seals can be fitted if specified.

LOCKING

V- Fold Doors are self-locking and secure (via the motor).

OPERATION

V-Folds comprise two similar sized panels that are hinged together horizontally and fold together as they travel upwards, coming to rest in the open position under the ceiling. The door operates within the opening as standard, or can be installed free-standing or behind-fix. The door does not protrude past the exterior building line. All V-Folds are motorised and designed for high usage (e.g. up to 20 cycles per hour). The motor is conveniently located to the rear of the left hand pier and is easily accessible. See also Method of Operation.

MOTORISATION

The standard V-Fold is motorised using a three-phase, high quality, high cycle rated motor with variable speed control. The motor is fitted with a manual disengage for maintenance work and a hauling chain for manual operation. Mains power required is 415v 50Hz 10 amps minimum.

Each door is fitted with a rubber safety sensing edge fitted to the inside bottom edge of the door and PE Beam fitted to the side piers on the inside. Additional external photo cells can be fitted as an optional extra.

Depending when the sensors are triggered, they either stop the door from operating or auto reverse.

Standard access control is via push-buttons mounted on the controller, which is typically located along the internal wall. The controller has full logic control with timed self-closing and adjustable opening & closing travel times. NOTE: Speed of operation is 300mm/sec.

The provision of adequate mains power supply and isolator to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing. Optional extras, such as access control accessories are available upon specification.

For further information see Door Operators & Accessories.

OPTIONS

- 5yr extended warranty on mechanical parts when purchased with a service agreement. Patent Pending 2012216581

Vertical Lift Door

Counterweight Doors



Vertical Lift counterweight Doors are typically used for residential, commercial and industrial applications such as, car parks, workshops, warehouses, reception areas etc. They are also widely used as thermal or acoustic barriers in loading docks, drier rooms and cool rooms. Vertical Lift Doors can be designed as a single or multiple panel door and operate by travelling up or down on vertical steel tracks. Vertical Lift Doors can be glazed or clad in a wide range of cladding materials.

FEATURES

- Counterweight balance
- Wide range of cladding options
- Ideal for acoustic and temperature control
- Ease of operation
- Minimal maintenance
- Long lasting
- Minimal side room and back room requirements

DOOR DIMENSIONS

- Maximum Height: 4000mm
- Maximum Width: 10000mm

NOTE: Maximum door dimensions are a guide only and may vary due to wind loading and cladding. Due to variations in design for this type of door, Technical Sales should be consulted on all types of applications. Larger sizes of up to 10000mm high or 20000mm wide may be available.

RECOMMENDED SPECIFICATION

Vertical Lift Door, comprising single or multiple steel framed panels, selected cladding, and inclusive of all hardware, as manufactured by Airport Doors. Balanced by means of a counterweight system, the door travels directly up above the lintel to provide full opening height.

NOTE: Vertical Lift Doors require sufficient headroom and are custom-made to suit the door opening and specific application. The client's design and specification requirements must be clearly stipulated.

Vertical Lift Door

Counterweight Doors

DOOR OPENING

Vertical Lift Doors are ideal for applications where there is ample headroom and little sideroom or backroom. The door operates behind fix as standard, or where required and specified, it can be installed externally of the opening.

FIXING REQUIREMENTS

It is the responsibility of the architect/builder to provide structurally adequate columns/walls to carry all design loads. Refer to Technical Specifications for clearance information.

DOOR FRAME AND HARDWARE

The door frame is constructed using Dual Grade C350L0/C450L0 DuraGal® RHS rectangular hollow steel sections, braced and trussed as required and designed in accordance with AS4100 (Steel Structures) and to comply with the provisions of AS/NZS 4505:2012 (Garage doors and other large access doors) and AS1170 Part 1-2 (Wind Loads). Unless otherwise specified, the minimum design wind load is Region A5, Category 3. The counterweight system is subject to the SAA Crane Code. A minimum Safety Factor of 5 applies to the wire rope sizing and a minimum ratio of 22:1 applies to the pulleys. Sealed ball bearings or bushings are used at the load points.

All exposed steel work is prepared and shop primed before the application of any specified coatings. The steel frame, tracks and fittings can be finished prime painted or powder coated. (NOTE: Large doors may not be available in powder coat finish). Other steelwork finishes or specified paint systems can also be supplied when specified.

CLADDING

The Vertical Lift Door can be designed to accommodate and match various cladding materials including glass (single or double glazed), steel or aluminium sheet, timber, mesh, acoustic insulation, thermal insulation etc. NOTE: Depending on the weight, size, or application of materials, restrictions may apply. See also Cladding Options and Technical Specifications.

DOOR SEALS

Vertical Lift Doors are designed to overlap the opening. Standard door seals consist of brush seals to the top and sides of the door, and a PVC bulb seal fitted to the bottom of door. NOTE: Standard seals reduce draughts and exposure to weather, however they are not watertight. Seals with increased thermal or acoustic insulation performance are available when specified.

COUNTERWEIGHT COVERS

Steel counterweights are enclosed and protected using heavy gauge pressed steel covers to approximately two-thirds of the door height as standard. Counterweight covers are finished as per the frame specification and are custom-made and designed to suit the site dimensions.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Entry Doors (opening inwards) can be built into the Vertical Lift Door. Restrictions apply. **NOTE:** PA Doors have a stepover threshold

and do not comply as fire exits. PA Doors must be kept shut when operating the main door. Optional 'door closer' and/or 'door monitoring switch' are available and highly recommended.

LOCKING

Manually operated Vertical Lift Doors are fitted with pad bolts on the inside as standard. Padlocks not included. When specified, key lockable bolts, or similar, are available as an alternative. **NOTE:** Motorised doors are self-locking and are not fitted with additional locks.

OPERATION

Balanced by counterweights, the Vertical Lift Door has guide rollers on each side that travel up vertical tracks allowing the door to lift up to provide full opening clearance. See also Method of Operation.

HAND OPERATION

The Vertical Lift Door can be manually operated up to 600kg total door weight. It is highly recommended, however, that doors which are either; high, large, subject to high wind loads, or are in frequent use, are motorised for convenience and ease of operation.

MOTORISATION

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on availability of power, door usage and door access requirements. Motorisation is available in three-phase (415v) as standard, single-phase (240v) or 24DC/240v. Residential applications are supplied as standard with 24DC/240v automated operator. Motorised doors incorporate a manual release mechanism for manual operation (in case of a power outage).

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification. **NOTE:** For safety, Photoelectric Beams (PE Beams) are highly recommended on all counterweight doors. Where doors are automated by a radio control, PE Beams are a requirement. A Through-Beam must be used on all government installations (e.g. ambulance, police, CFA stations).

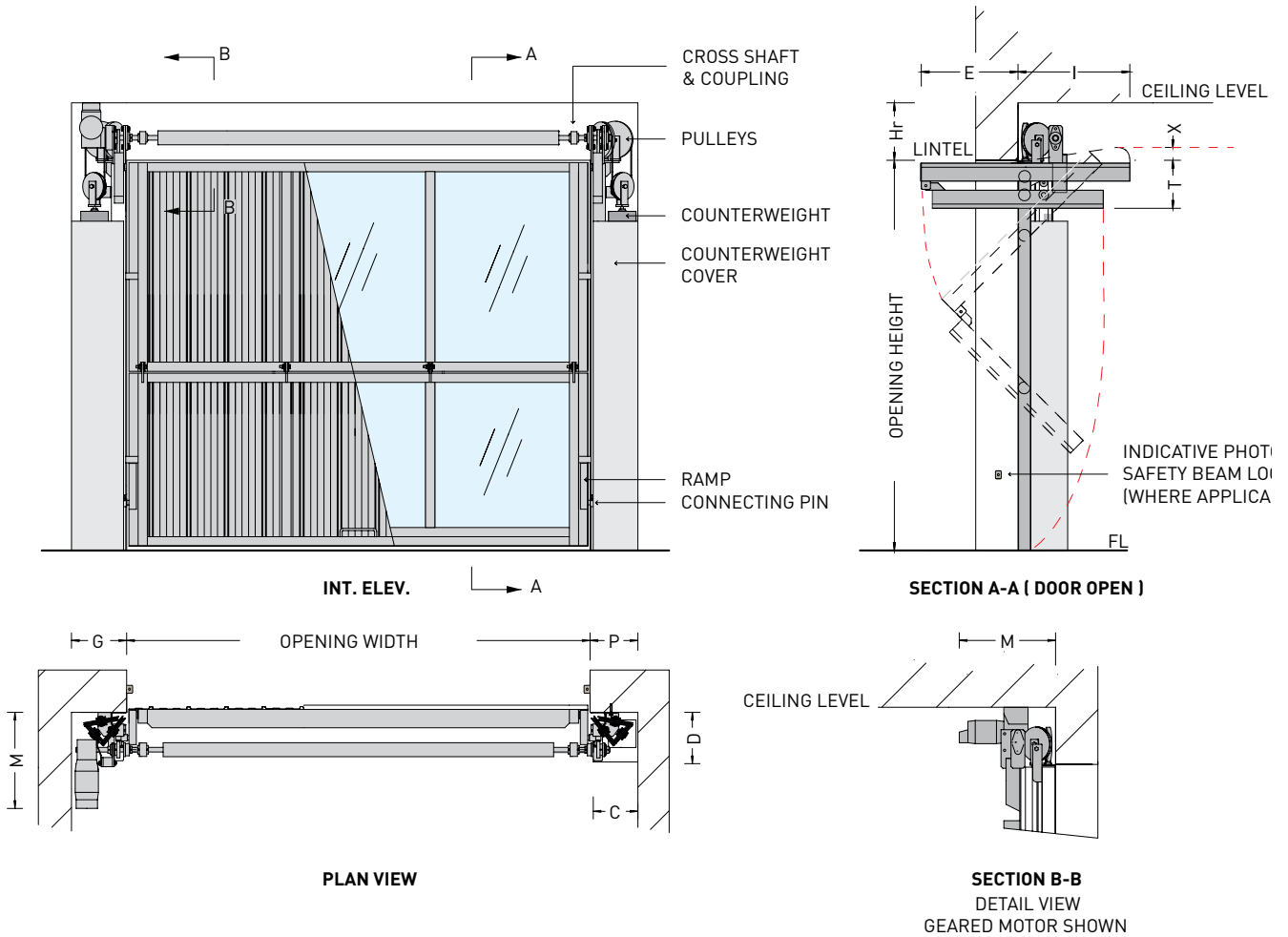
For further information see Door Operators & Accessories.

OPTIONS

- High usage
- Fast opening (up to 300mm per second)

Fold-Up Door

Technical Specs: Counterweight Doors



Note:

See Fold-Up Door Clearance Details overleaf

Fold-Up Door

Technical Specs: Counterweight Doors

CLEARANCE DETAILS (Based on W/Load- Reg A Cat 3 (Melb.) Ws - 0.5kPa, Vs- 38m/s, Wu- 0.8kPa, Vu- 50M/s.)

CLEARANCE DETAILS																								
HEIGHT UP TO	X	E	I	TYPE	WIDTH UP TO 4m				5m				6m				7m				8m			
					G	Hr	D	T	G	Hr	D	T	G	Hr	D	T	G	Hr	D	T	G	Hr	D	T
3m	150	630	965	S	160	350	290	280	160	350	325	280	210	350	270	300	210	350	270	300	230	250	325	345
				Gl	210	350	270	260	210	350	270	260	210	350	270	280	230	250	325	280	230	250	325	325
				EL	280	300	270		280	300	270		280	300	270		300	350	270		300	350	270	
4m	170	960	1215	S	160	350	290	280	160	350	325	280	210	350	270	300	210	350	270	300	230	250	325	345
				Gl	160	350	325	260	210	350	270	260	210	350	270	280	230	250	325	280	230	250	325	325
				EL	280	300	270		280	300	270		280	300	270		280	300	270		300	350	270	
5m	220	1150	1450	S	160	350	290	280	160	350	325	350	160	350	325	350	210	350	270	350	280	350	270	365
				Gl	160	350	325	260	210	350	270	330	210	350	270	330	210	350	270	330	280	280	325	345
				EL	280	300	270		280	300	270		280	300	270		280	300	270		300	350	270	
6m	240	1450	1800	S	160	350	290	350	160	350	325	350	160	350	325	450	260	350	270	450	210	350	270	400
				Gl	160	350	325	330	210	350	270	330	210	350	270	430	260	250	325	430	230	250	325	380
				EL	280	300	270		280	300	270		280	300	270		280	300	270		300	350	270	
7m	250	1750	2100	S	160	350	290	450	160	350	325	450	260	350	325	450	210	350	270	450	210	350	270	450
				Gl	160	350	325	430	210	350	270	430	260	350	270	430	230	250	325	430	230	250	325	430
				EL	300	400	270		300	400	270		350	400	270		350	400	270		350	420	270	

CLEARANCE DETAILS (Continued)																								
HEIGHT UP TO	X	E	I	TYPE	Width up to 9m				10m				12m				14m				16m			
					G	Hr	D	T	G	Hr	D	T	G	Hr	D	T	G	Hr	D	T	G	Hr	D	T
3m	150	630	965	S	260	350	325	345	300	350	325	365	300	350	350	430	300	350	350	490	300	350	350	530
				Gl	280	350	345	325	280	350	345	345	300	420	350	410	300	420	350	470	300	420	350	510
				EL	350	400	345		350	400	345		400	420	350		400	420	350		400	450	350	
4m	170	960	1215	S	300	250	325	365	230	250	325	405	280	350	350	450	350	350	400	610	350	350	400	700
				Gl	300	350	345	345	350	400	345	385	300	420	350	430	350	350	400	590	380	580	520	680
				EL	350	350	345		350	400	345		350	420	350		400	420	400		400	580	520	
5m	220	1150	1450	S	280	350	270	385	280	350	345	425	350	350	400	580	350	350	400	650	380	580	520	700
				Gl	280	250	325	365	280	350	345	405	380	580	520	560	380	580	520	630	450	580	520	680
				EL	350	350	270		350	400	345		380	580	520		380	580	520		450	580	520	
6m	240	1450	1800	S	210	350	270	400	300	420	340	410	350	350	400	550	350	350	400	610	350	350	400	700
				Gl	230	250	325	380	300	420	340	390	380	580	520	530	380	580	520	590	380	580	520	680
				EL	350	350	270		350	420	340		380	580	520		380	580	520		380	580	520	
7m	250	1750	2100	S	230	250	325	430	300	420	340	430	350	350	400	580	350	350	400	610	350	350	400	700
				Gl	300	420	340	410	300	420	340	410	380	580	520	560	380	580	520	590	450	580	520	680
				EL	350	420	340		350	420	340		380	580	520		380	580	520		450	580	520	

NOTES: P = G for all Manual doors.

M varies with motor location, type and size. See Industrial Operators.

I (Internal Projection) increases with truss height, ie, span, therefore it should be verified.

For doors larger than this chart range refer to Manufacturer.

Fold-Up Door

Technical Specs: Counterweight Doors

CLEARANCE DETAILS (Based on W/Load- Reg A Cat 3 (Melb.) Ws - 0.5kPa, Vs- 38m/s, Wu- 0.8kPa, Vu- 50M/s.)

CLEARANCE DETAILS (Continued)																					
HEIGHT UP TO	X	E	I	TYPE	WIDTH UP TO 18m				20m				22m				24m				
					G	Hr	D	T	G	Hr	D	T	G	Hr	D	T	G	Hr	D	T	
3m	150	630	965	S	300	350	350	620													
				GL	300	420	350	600													
				EL	450	580	350														
4m	170	960	1215	S	350	350	400	750	380	580	520	840									
				GL	450	580	520	730	450	580	520	820									
				EL	450	580	520		450	580	520										
5m	220	1150	1450	S	380	580	520	780	380	580	520	840	380	580	520	940	380	580	520	1000	
				GL	450	580	520	760	450	580	520	820	550	600	650	920	550	600	650	980	
				EL	450	580	520		450	580	520		550	600	650		550	600	650		
6m	240	1450	1800	S	380	580	520	750	380	580	520	840	380	580	520	890	380	580	520	940	
				GL	450	580	520	730	450	580	520	820	550	600	650	870	550	600	650	920	
				EL	450	580	520		450	580	520		550	600	650		550	600	650		
7m	250	1750	2100	S	380	580	520	780	380	580	520	840	380	580	520	940	380	580	520	1000	
				GL	450	580	520	760	450	580	520	820	550	600	650	920	550	600	650	980	
				EL	450	580	520		450	580	520		550	600	650		550	600	650		

For larger door sizes consult Technical Sales.

KEY

C = 'G' or 'P' - 20mm (in most cases). (Counterweight Cover Width)

E = Opening Height - 'I'. (Nominal External Projection)

I: Nominal Internal Projection dimension. This dimension increases with door width (due to truss height), therefore this dimension is a guide only and should be confirmed.

M: Dimension varies with motor location, type and size.

P = 'G' for all Manual Doors.

S: Manual Sheeted Door

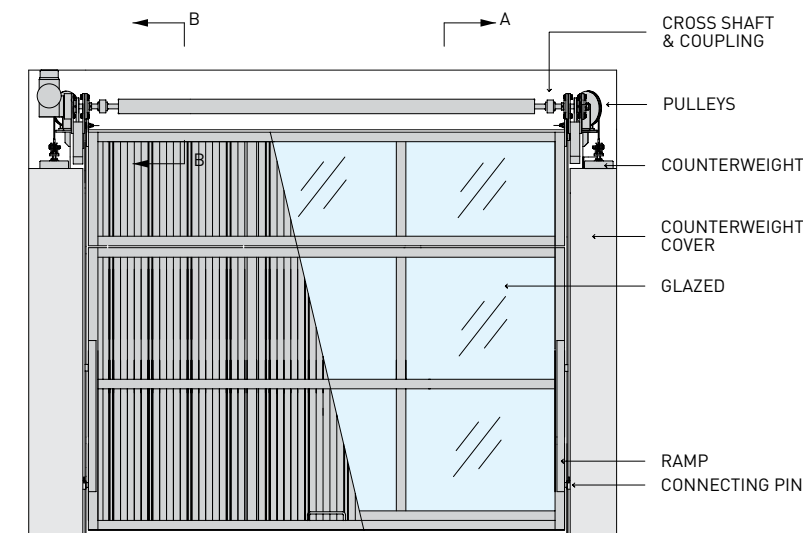
GL: Manual Glazed Door

EL: Electrically Operated Door

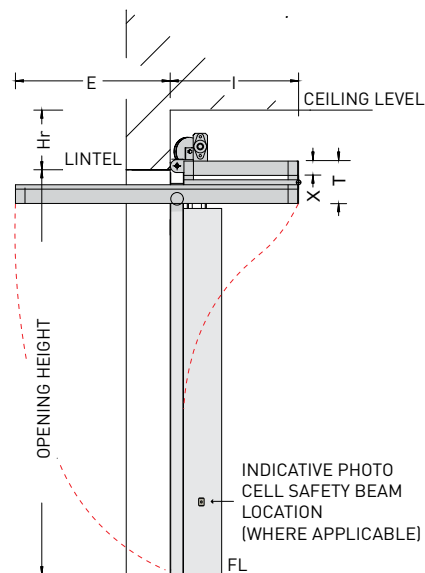
For full KEY reference, see 'Technical Specs and Clearance Details KEY' in the Product Selection Guide section.

Offset Fold-Up Door

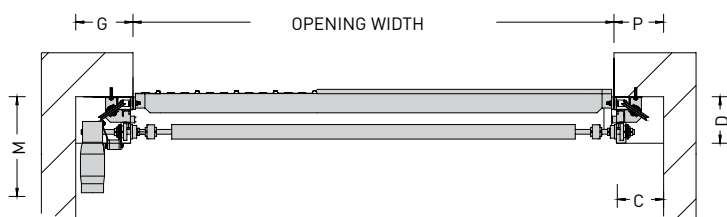
Technical Specs: Counterweight Doors



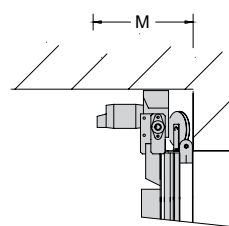
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SECTION A-A (DOOR OPEN)



PLAN VIEW



SECTION B-B
DETAIL VIEW
GEARED MOTOR SHOWN

CLEARANCE DETAILS

HEIGHT UP TO	TYPE	Width up to 4m						6m					
		G	P	Hr	T	D	X	G	P	Hr	T	D	X
2.5 m	S	P	150	150	210	250	75	P	200	200	250	280	125
	GL	P	200	200	210	280	75	P	250	250	250	280	125
	EL	280	280	350		280	75	300	300	350		280	125
3.6 m	S	P	150	150	210	250	75	P	200	200	250	280	125
	GL	P	200	200	210	280	75	P	250	250	250	280	125
	EL	280	280	350		280	75	300	300	350		280	125

KEY

C = 'G' or 'P' - 20mm (in most cases).
(Counterweight Cover Width)

E = Opening Height - 'I'.
(External Projection)

I = (Opening Height / 3.5) + 70.
(Internal Projection)

M: Dimension varies with motor location, type and size.

S: Manual Sheeted Door

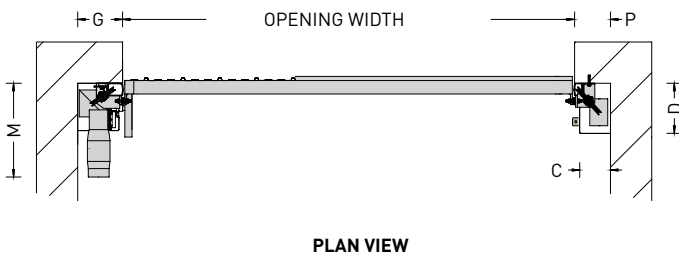
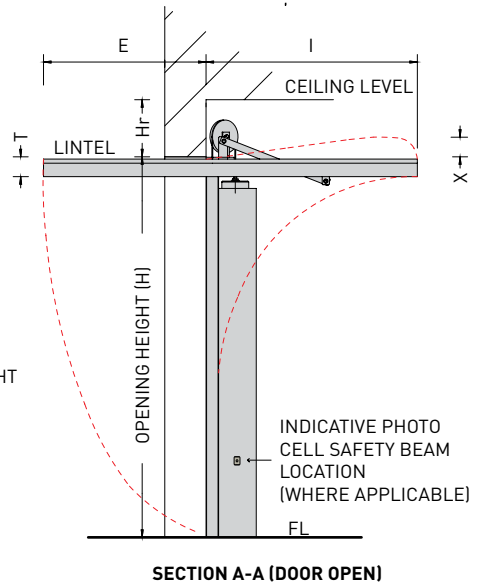
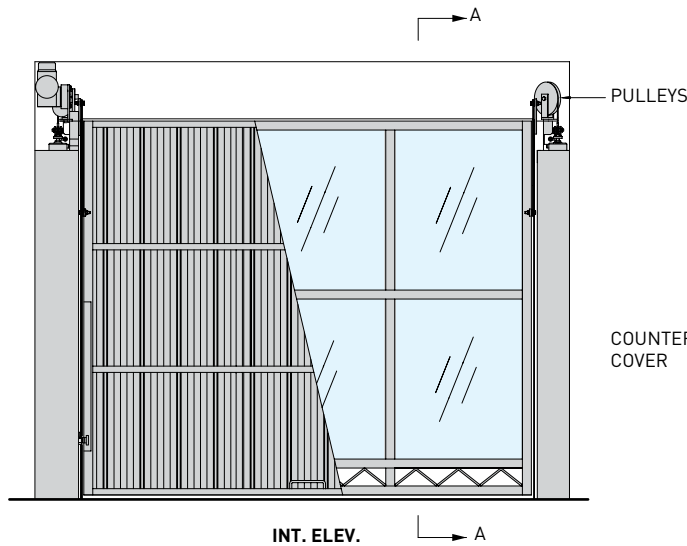
GL: Manual Glazed Door

EL: Electrically Operated Door

For full KEY reference, see 'Technical Specs and Clearance Details KEY' in the Product Selection Guide section.

Glide-Up Door

Technical Specs: Counterweight Doors



CLEARANCE DETAILS

HEIGHT UP TO	TYPE	Width up to 3m						5m						7m						10m					
		G	P	Hr	T	D	X	G	P	Hr	T	D	X	G	P	Hr	T	D	X	G	P	Hr	T	D	X
2.5m	S	P	150	150	120	250	140	P	150	200	150	280	140	P	200	200	200	280	140	P	250	300	250	280	140
	GL	P	200	200	120	280	140	P	200	200	150	280	140	P	250	250	200	280	140	P	300	300	280	350	140
	EL	260*	200	300		280	140	260*	260	300		280	140	350	350	300		280	140	350	350	300		280	140
3m	S	P	150	150	120	250	150	P	150	200	150	280	150	P	200	200	200	280	150	P	250	300	300	280	150
	GL	P	200	200	150	280	150	P	200	200	200	280	150	P	250	250	200	280	150	P	300	300	300	350	150
	EL	260*	200	300		280	150	260*	260	300		280	150	350	350	300		280	150	350	350	300		280	150

KEY

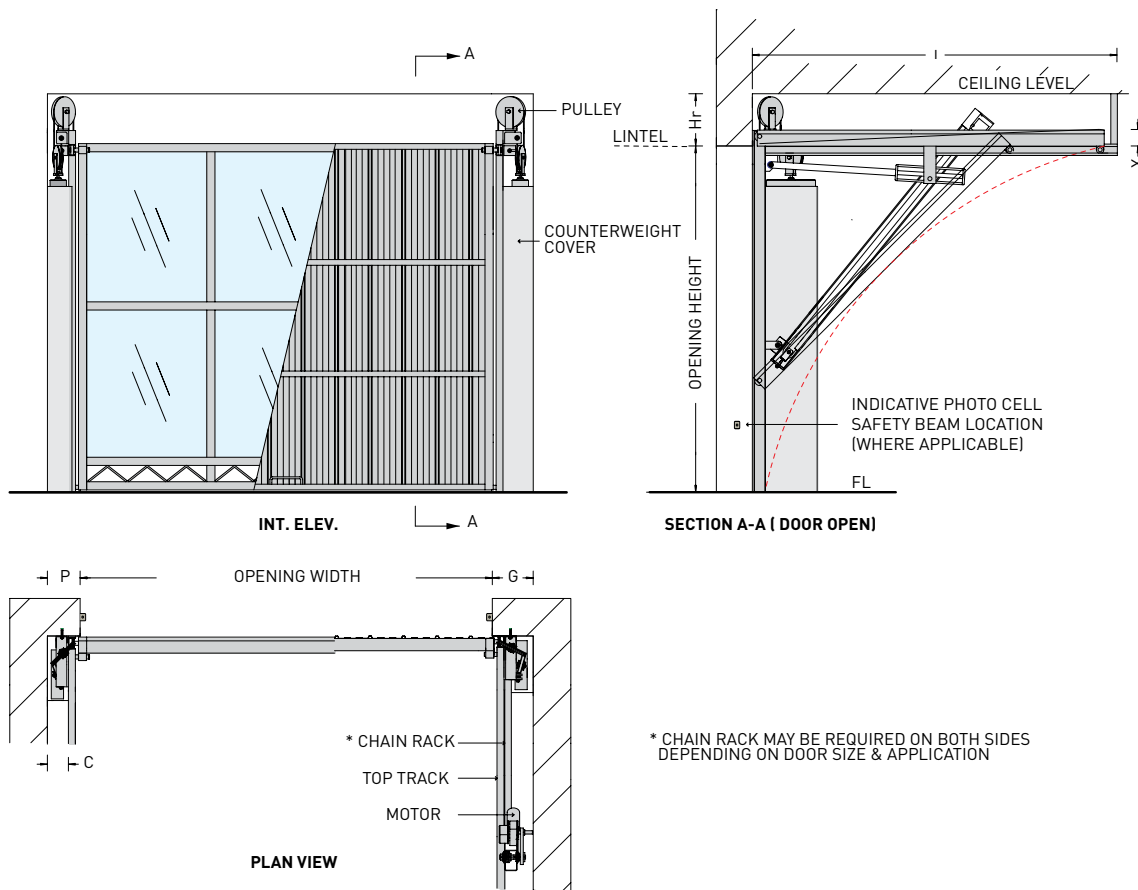
- C = 'G' or 'P' - 20mm (in most cases). [Counterweight Cover Width]
- E = (Opening Height / 2) - 135mm. [External Projection]
- I = (Opening Height / 2) + 13mm. [Internal Projection]

- S: Manual Sheeted Door
- GL: Manual Glazed Door
- EL: Electrically Operated Door

For full KEY reference, see 'Technical Specs and Clearance Details KEY' in the Product Selection Guide section.

Fully Internal Glide-Up Door

Technical Specs: Counterweight Doors



CLEARANCE DETAILS																					
HEIGHT UP TO	TYPE	WIDTH UP To 3m					5m					7m					10m				
		G	P	Hr	D	X	G	P	Hr	D	X	G	P	Hr	D	X	G	P	Hr	D	X
2.5m	S	P	200	270	300	150	P	200	350	300	150	P	250	400	350	150	P	300	550	350	150
	GL	P	200	320	300	150	P	250	350	350	150	P	300	450	350	150	P	300	580	350	150
	EL	250	200	320	300	150	250	250	350	350	150	300	300	450	350	150	300	300	580	400	150
4m	S	P	200	270	300	150	P	200	350	300	150	P	250	400	350	150	P	300	550	350	150
	GL	P	200	320	300	150	P	250	350	350	150	P	300	450	350	150	P	400	580	400	150
	EL	250	200	320	300	150	250	250	350	350	150	300	300	450	350	150	400	400	580	400	150

KEY

C = 'G' or 'P' - 20mm (in most cases). (Counterweight Cover Width)

I = Opening Height +100mm (Internal Projection)

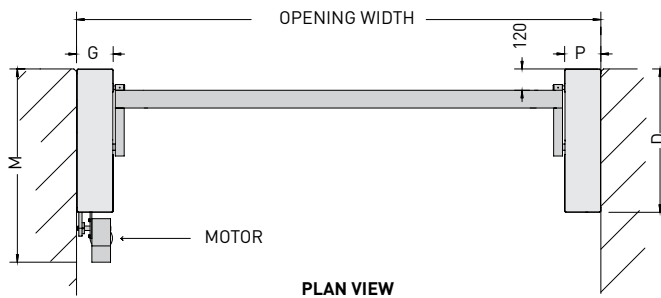
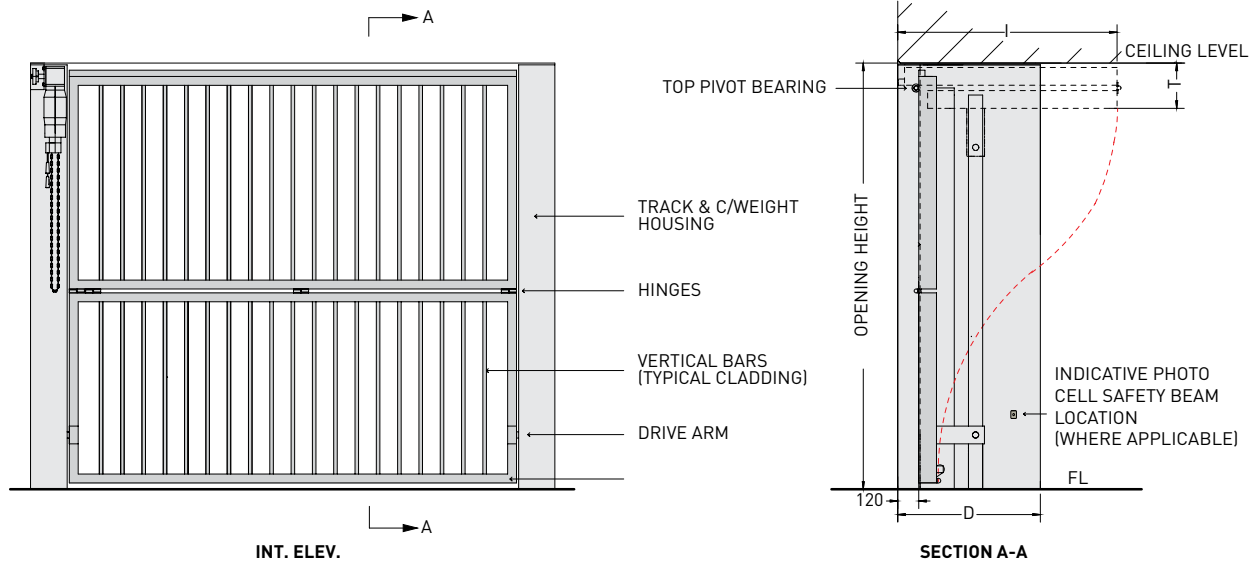
- S: Manual Sheeted Door
- GL: Manual Glazed Door
- EL: Electrically Operated Door

For full KEY reference, see 'Technical Specs and Clearance Details KEY' in the Product Selection Guide section.

- For the flush mount version download Fully Internal Glide-Up Door Flush Mount Technical Data Sheet or see NEW Facade Door.

V-Fold Door

Technical Specs: Counterweight Doors



CLEARANCE DETAILS								
HEIGHT UP TO	TYPE	WIDTH UP TO 6m						
		G	P	Hr*	T	D	I	M
2.4 m	EL	205	205	0	255	805	1235	1090
2.7 m	EL	205	205	0	255	805	1385	1090

Notes:

- V-Folds are designed to fully fit within the opening as standard, however they can also be fitted to the inside of an opening where there is at least 205 side room.
- * Where door is fitted behind the lintel, minimum headroom is equal to 'T'.

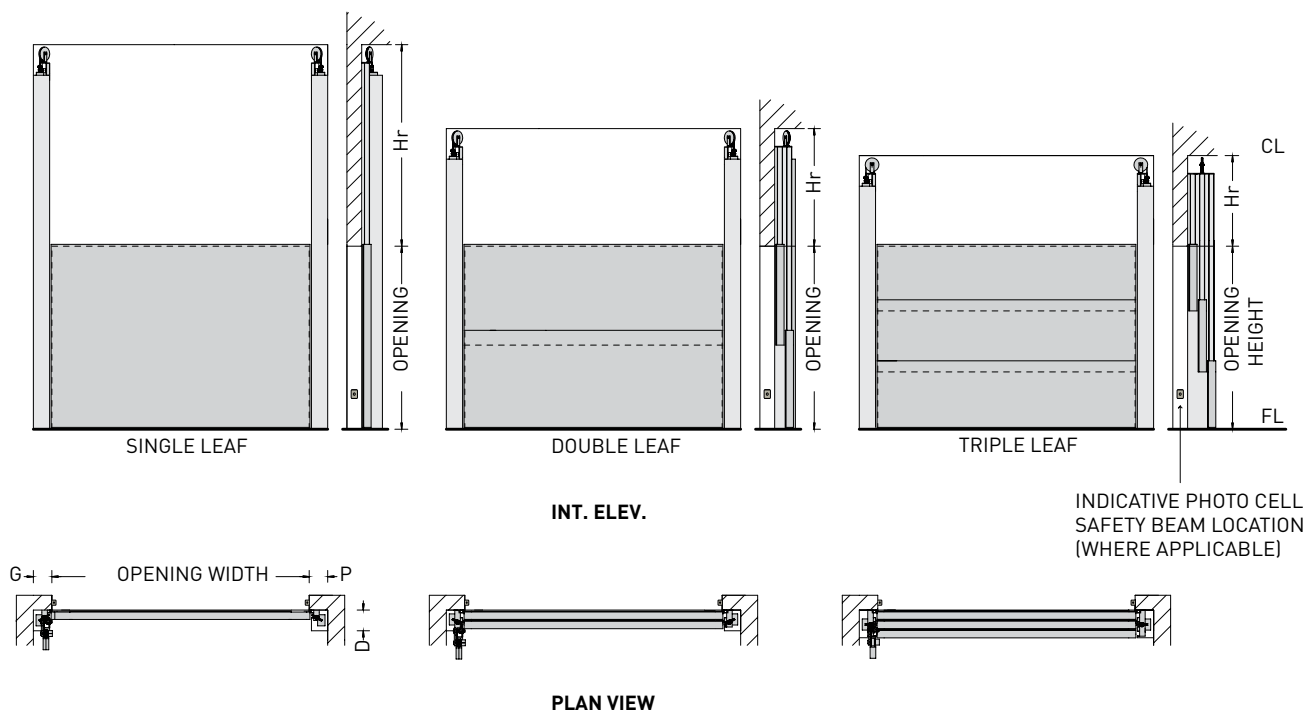
KEY

EL: Electrically Operated Door (All V-Fold Doors are motorised)

For full KEY reference, see 'Technical Specs and Clearance Details KEY' in the Product Selection Guide section.

Vertical Lift Door

Technical Specs: Counterweight Doors



CLEARANCE DETAILS																	
HEIGHT UP TO	TYPE	WIDTH UP TO 3m				5m				7m				10m			
		G	P	Hr	D	G	P	Hr	D	G	P	Hr	D	G	P	Hr	D
2.5 m	S	P	200	A	260	P	250	A	260	P	250	A	350	P	300	A	450
	GL	P	250	A	280	P	250	A	280	P	300	A	350	P	300	A	450
	EL	250	250	A	280	250	250	A	280	300	300	A	350	300	300	A	450
4 m	S	P	200	A	260	P	250	A	280	P	300	A	350	P	300	A	450
	GL	P	250	A	280	P	250	A	280	P	300	A	350	P	400	A	450
	EL	250	250	A	280	250	250	A	280	300	300	A	350	400	400	A	450

For larger door sizes consult Technical Sales.

KEY

A = Opening Height + 250. (Single-leaf Door Headroom)

A = (Opening Height / 2) + 350. (Double-leaf Door Headroom)

A = (Opening Height / 3) + 400. (Triple-leaf Door Headroom)

C = 'G' or 'P' - 20mm (in most cases). (Counterweight Cover Width)

S: Manual Sheeted Door

GL: Manual Glazed Door

EL: Electrically Operated Door

For full KEY reference, see 'Technical Specs and Clearance Details KEY' in the Product Selection Guide section.

Notes

Service and Preventative Maintenance Agreements

To maintain the life of your door and door operator, Airport Doors recommend you service your door regularly. The frequency of servicing is dependent on the particular type of door, its size, weight, usage and application. As part of our commitment to providing ongoing after sales service to our clients, our knowledgeable service representatives are well equipped to service and/or repair your door and operator when required, or as a preventative maintenance agreement.

At Airport Doors we also provide thorough service and repairs to almost every brand and type of door and door operator. For further information or to discuss preventative maintenance service agreements, contact your local Airport Doors office today.

Sliding Doors & Gates



Summary

Sliding Doors & Gates



TOP TRACK & FLOOR TRACK SLIDING

Top Track and Floor Track Sliding Doors and Gates can be clad in a variety of materials including bar grille, flat sheet, mesh, timber slats and glass. Top Track and Floor Track Sliding Doors and Gates are commonly used in applications such as car parks, fence lines, factories, warehouses and showrooms, and can be designed as either a single-leaf or multi-leaf door as required.

Selection Chart

Sliding Doors & Gates

SLIDING DOORS & GATES	APPLICATIONS																	
Top Track Sliding		✓	✓			✓	✓	✓	✓	✓			●	✓		✓		✓
Floor Track Sliding	✓	✓	●			✓	✓	✓	✓				●	✓		✓		✓
	Aircraft Hangers	Car Parks	Cool-Rooms & Insulated Drier Rooms	Counters, Kiosks & Bars	Emergency Services (e.g. CFA)	Factories & Warehouses (external)	Factories & Warehouses (internal)	Garages & Carports	Laneways (freestanding)	Restaurants	Self Storage	Shopfronts	Shopping Complexes	Showrooms	Supermarket Entrances	Transport & Loading Docks/Bays	Vehicles (e.g. trucks)	Workshops

SLIDING DOORS & GATES	OPTIONAL FEATURES										
Top Track Sliding	✓		✓	✓	●	✓		✓	✓	✓	✓
Floor Track Sliding	✓		✓	✓	●	✓		✓	✓	✓	✓
	Cladding Options	Fire Rated	Glass	High Usage	Insulation Sound/Thermal	Motorisation	Mullions	Personal Entry & Exit Door	Ventilation (5-25% Airflow)	Ventilation (26% + Airflow)	Vision

SELECTION CHART KEY

- ✓ Suitable
- Suitable, conditions may apply

Top Track & Floor Track Sliding

Sliding Doors & Gates



Airport Doors' Sliding Doors and Gates are superb for wide openings and are typically used in residential, commercial and industrial applications, such as car parks, fence lines, factories, warehouses, and showrooms. Sliding Doors and Gates can be clad in a wide range of cladding materials and are available in two styles; Top Track Sliding or Floor Track Sliding (suitable for larger & heavier doors). Sliding Doors and Gates can be designed as a single-leaf or multi-leaf door as required.

FEATURES

- Wide range of cladding options
- Suitable for large openings
- Minimal maintenance
- Long Lasting

TOP TRACK SLIDING - DOOR DIMENSIONS

- Maximum Height: 4000mm*
- Maximum Width: 10000mm*

*Total door weight must not exceed 650kg.

For large openings, multi-leaf sliding doors are recommended to reduce the size and weight of each leaf. For best operating results, the width of each leaf should not exceed two thirds of the door height.

FLOOR TRACK SLIDING - DOOR DIMENSIONS

- Maximum Height: 6000mm*
- Maximum Width: 10000mm*

*Total door weight must not exceed 2000kg.

NOTE: In special applications Floor Track Sliding Doors/Gates may be available in larger sizes up to a maximum of 15m high and maximum of 30m wide. Consult Technical Sales for further information.

RECOMMENDED SPECIFICATIONS

Single- or multi-leaf Sliding Door (or Gate) consisting of steel frame, selected cladding and selected track type (Top Track or Floor Track) as manufactured by Airport Doors.

Sliding Doors and Gates are custom-made to suit the door opening and specific application. The client's design and specification requirements must be clearly stipulated.

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Top Track & Floor Track Sliding

Sliding Doors & Gates

DOOR OPENING & FIXING REQUIREMENTS

The door operates behind or in front of the opening. It is the responsibility of the architect/builder to provide structurally adequate beams, columns, walls and floor to carry all design loads. Specifically the top track sliding door/gate requires an adequate beam or lintel to carry the door load. The floor track sliding door/gate requires a level floor over the extent of the opening and door travel. Refer to Technical Specifications for clearance information.

NOTE: For heavy vehicular traffic, and industrial applications both guides and floor tracks should be cast into the floor.

DOOR FRAME AND HARDWARE

The door frame is constructed using Dual Grade C350LO/ C450LO Duragal RHS rectangular hollow steel sections, braced and trussed as required and designed in accordance with AS4100 (Steel Structures) and to comply with the provisions of AS/NZS 4505:2012 (Garage doors and other large access doors) and AS1170 Part 1-2 (Wind Loads). Unless otherwise specified, the minimum design wind load is Region A5, Category 3.

All exposed steel work is prepared and shop primed before the application of any specified coatings. The steel frame, tracks and fittings can be finished prime painted or powder coated. (NOTE: Large doors may not be available in powder coat finish). Other steelwork finishes or specified paint systems can also be supplied when specified. Standard hardware is available for door panels from 120kg to 650kg.

TOP TRACK SLIDING HARDWARE

Top Track Sliding Doors/Gates are fitted with ball bearing loaded sliding carriages (trolleys). The carriage rollers roll smoothly within a galvanised steel roll-formed track, fixed above the door head. The bottom of the door is guided by means of either a 'Standard Above Ground Floor Guide' or alternatively by a 'Cast in Channel & Guide Pin'. NOTE: The standard Airport Doors Top Track Sliding Door is not recommended for doors over 650kg.

FLOOR TRACK SLIDING HARDWARE

Floor Track Sliding Doors/Gates are fitted with two machined, sealed ball bearing loaded wheels, profiled to suit either 1) an above ground track or; 2) an in-ground track.

1. The 'Above Ground "U" Formed Floor Track' is used for light duty applications such as residential and light commercial. It is a raised, press metal galvanised steel guide, laid and masonry anchored to a level floor. The top of the gate shall be guided by adjustable rollers fitted to the wall.
2. The 'Cast In Floor Track' is typically used for heavy vehicular traffic and industrial applications. It is a level continuous slot formed between two angles recessed into concrete.

CLADDING

Sliding Doors and Gates can be designed to accommodate and match various cladding materials including bar grille, glass (single or double glazed), steel or aluminium sheet, timber, mesh etc. NOTE: Depending on the weight, size, or application of materials, restrictions may apply. See also Cladding Options and Technical Specifications.

PERSONAL ACCESS (PA) DOORS (OPTIONAL)

Where there is no other entrance into the building, PA Entry Doors (opening inwards) can be built into the Sliding Door or Gate. Restrictions apply. NOTE: PA Doors have a stepover threshold and do not comply as fire exits. PA Doors must be kept shut when operating the main door. Optional 'door closer' and/or 'door monitoring switch' are available and highly recommended.

LOCKING

Manually operated Sliding Doors/Gates are fitted with a hasp and staple or a long-shoot pad bolt with provision for padlocking. Padlocks not included. The lock is fixed internally and fitted to one side of the door unless otherwise specified. When specified, key lockable bolts, or similar, are available as an alternative.

NOTE: Motorised doors are self-locking and are not fitted with additional locks.

OPERATION

Sliding Doors operate from behind the opening (as standard) on either a top hung track (Top Track Sliding) or a floor track (Floor Track Sliding). Single leaf sliding doors slide to one side of the opening, while multi-leaf sliding doors can be either bi-parting or single side sliding (using multiple tacks). Airport Doors' sliding doors/gates can be hand operated (up to 650kg) or motorised for ease of use and convenience. See also Method of Operation.

MOTORISATION

Standard motorisation is typically via a sliding gate operator which uses a toothed rack and spur gear drive. The operator comes complete with logic control and optional access control accessories.

Operator selection is dependent on availability of power, door usage, door weight and door access requirements. Motorisation is available in three-phase (415v), single-phase (240v) or 24DC/240v. Single-phase is suitable for doors up to 650kg door weight. Residential applications are typically supplied with 24DC/240v automated operator. Motorised doors incorporate a manual release mechanism for manual operation (in case of a power outage).

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

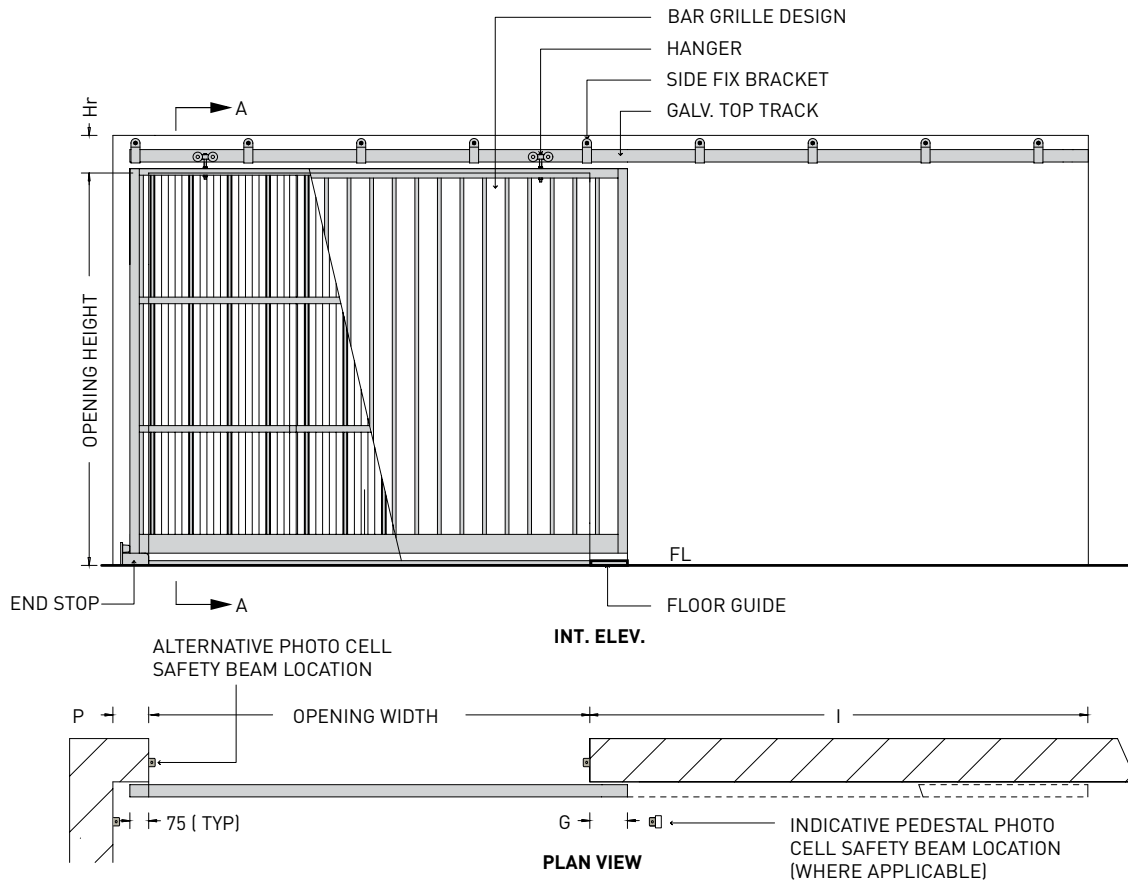
Optional extras, such as battery back-up and access control accessories are available upon specification.

NOTE: For safety, Photoelectric Beams (PE Beams) are highly recommended. Where doors are automated by a radio control, PE Beams are a requirement. A Through-Beam must be used on all government installations.

For further information see Door Operators & Accessories.

Top Track Sliding Door/Gate

Technical Specs: Sliding Doors and Gates



CLEARANCE DETAILS																	
HEIGHT UP TO	HEIGHT	WIDTH UP TO 3m				5m				7m				10m			
		G	P	Hr	SHr	G	P	Hr	SHr	G	P	Hr	SHr	G	P	Hr	SHr
2.5 m	S	200	100	185	110	200	100	185	110	300	100	185	110	300	100	220	180
	GL	200	100	185	110	200	100	185	110	300	100	185	110	300	100	220	180
	EL	320	100	185	110	320	100	185	110	320	100	185	110	400	100	220	180
4 m	S	200	100	185	110	200	100	185	110	300	100	200	110	300	100	220	180
	GL	200	100	185	110	200	100	185	110	300	100	200	110	300	100	220	180
	EL	320	100	185	110	320	100	185	110	400	100	200	110	400	100	220	180

For larger door sizes and multiple door panel designs, consult Technical Sales.

KEY

I = Opening Width + P + G. (Single-leaf Sliding Door internal projection along wall)

I = Leaf Width + P + G. (Multi-leaf Sliding Door internal projection along wall)

SHr: Soffit fixed track headroom (applications where max. drive through height is required)

S: Manual Sheeted Door

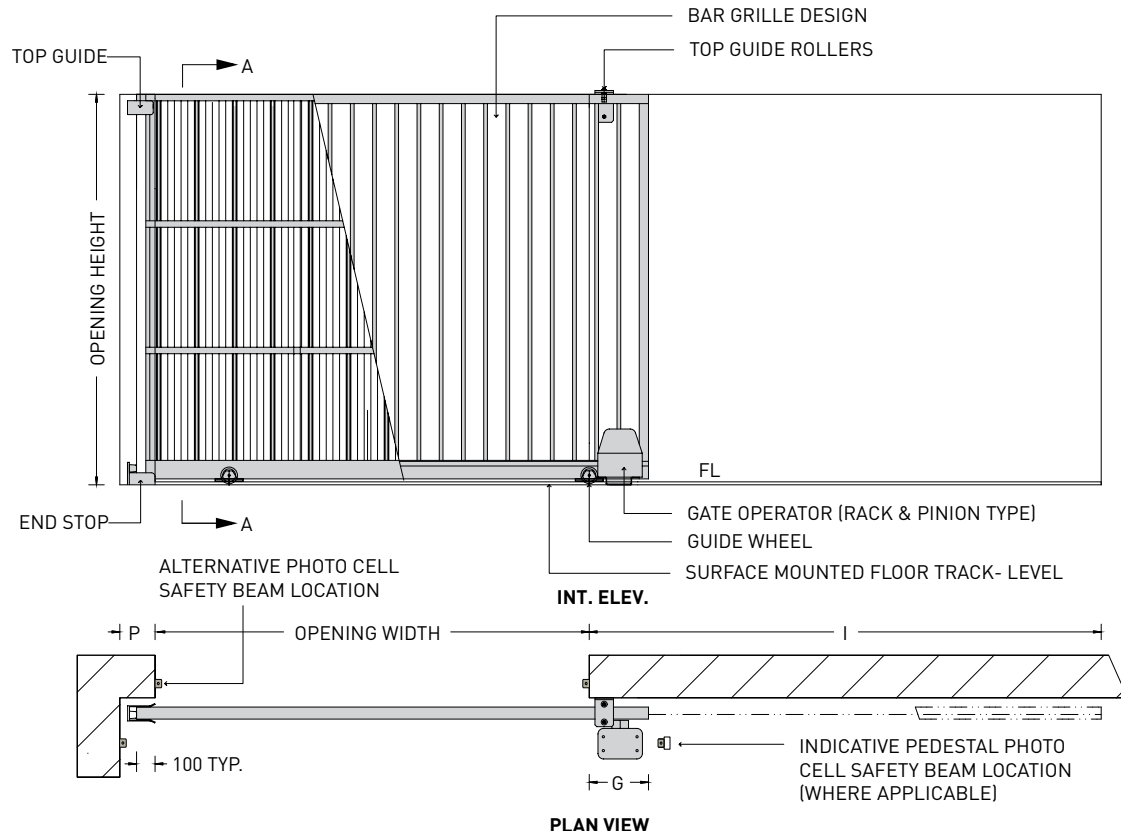
GL: Manual Glazed Door

EL: Electrically Operated Door

For full KEY reference, see 'Technical Specs and Clearance Details KEY' in the Product Selection Guide section.

Floor Track Sliding Door/Gate

Technical Specs: Sliding Doors and Gates



CLEARANCE DETAILS																	
HEIGHT UP TO	TYPE	WIDTH UP TO 3m				5m				7m				10m			
		G	P	Hr	GHR	G	P	Hr	GHR	G	P	Hr	GHR	G	P	Hr	GHR
2.5 m	S	200	100	120	25	200	100	120	25	300	100	120	25	300	100	220	200
	GL	200	100	120	25	200	100	120	25	300	100	120	25	300	100	220	200
	EL	320	100	120	25	320	100	120	25	320	100	120	25	400	100	220	200
4 m	S	200	100	120	N/A	200	100	120	N/A	300	100	120	N/A	300	100	220	N/A
	GL	200	100	120	N/A	200	100	120	N/A	300	100	120	N/A	300	100	220	N/A
	EL	320	100	120	N/A	320	100	120	N/A	400	100	120	N/A	400	100	220	N/A
6 m	S	200	100	120	N/A	200	100	120	N/A	300	100	120	N/A	300	100	220	N/A
	GL	200	100	120	N/A	200	100	120	N/A	300	100	120	N/A	300	100	220	N/A
	EL	320	100	120	N/A	320	100	120	N/A	400	100	120	N/A	400	100	220	N/A

For larger door sizes and multiple door panel designs, consult Technical Sales.

KEY

GHR: Gate headroom (applications where door is counterlevered/supported off posts or brick wall fencing)

I = Opening Width + P + G. (Single-leaf Sliding Door internal projection along wall)

I = Leaf Width + P + G. (Multi-leaf Sliding Door internal projection along wall)

S: Manual Sheeted Door

GL: Manual Glazed Door

EL: Electrically Operated Door

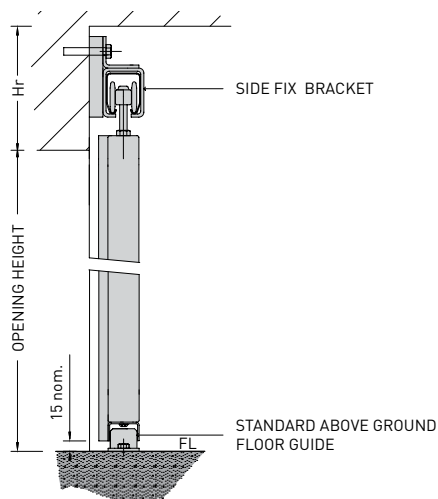
For full KEY reference, see "Technical Specs and Clearance Details KEY" in the Product Selection Guide section.

Track Details

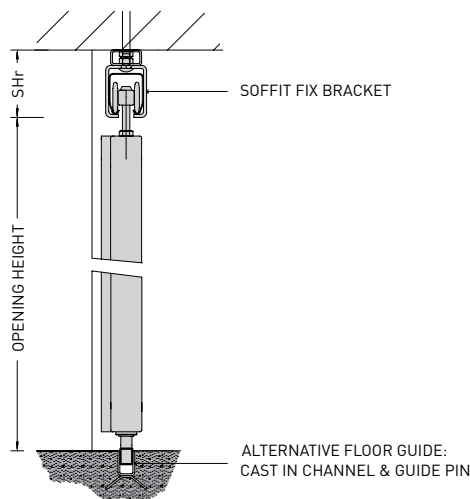
Technical Specs: Sliding Doors and Gates

TOP TRACK SLIDING

SIDE FIX (SECTION A-A)

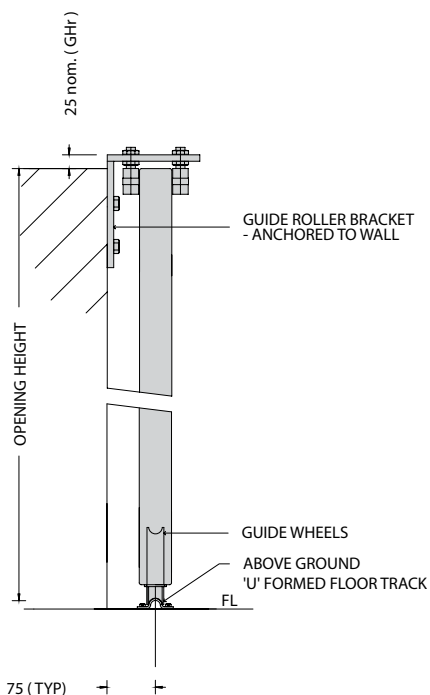


SOFFIT FIX

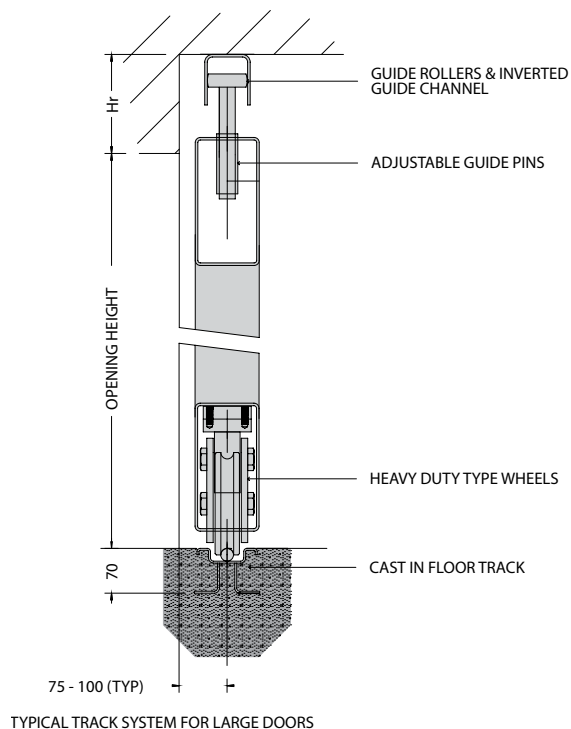


FLOOR TRACK SLIDING

ABOVE GROUND "U" FORMED FLOOR TRACK (SECTION A-A)



CAST IN FLOOR TRACK



TYPICAL TRACK SYSTEM FOR LARGE DOORS

Notes

Service and Preventative Maintenance Agreements

To maintain the life of your door and door operator, Airport Doors recommend you service your door regularly. The frequency of servicing is dependent on the particular type of door, its size, weight, usage and application. As part of our commitment to providing ongoing after sales service to our clients, our knowledgeable service representatives are well equipped to service and/or repair your door and operator when required, or as a preventative maintenance agreement.

At Airport Doors we also provide thorough service and repairs to almost every brand and type of door and door operator. For further information or to discuss preventative maintenance service agreements, contact your local Airport Doors office today.

Special Application Doors



Photo: Adrian Boddy Photography and Fiala Architects

Summary

Special Application Doors



In addition to the standard product range, Airport Doors also design and manufacture Special Application Doors. Special Application Doors include the **Hydraulic Ramp Cover**, **Auto Pit Shutter**, and unique one-off **custom design doors** that are entirely custom-designed, engineered and manufactured in consultation with the client and architect. High Speed fabric rolling doors are also available as a special application door and are ideal for applications such as distribution centres and warehouses.



ONE-OFF CUSTOM DESIGN

Airport Doors has custom-designed and manufactured some of the largest and heaviest doors in Australia. With a wide range of industry experience and engineering expertise, Airport Doors works closely with clients, architects and engineers to design and manufacture completely unique doors for specific and unusual applications.



Examples of some of our more prominent one-off Special Application Doors include;

- 4-Leaf Fold-Up Door at Patrick Brisbane Autostrad Terminal, Fisherman Islands, Queensland
- Vertical Lift Door and Canopy Door at Southern Cross Station Melbourne, Victoria
- Atrium Acoustic Wall with pedestrian access at Federation Square, Melbourne, Victoria



For further details on these doors see Major Projects.

Hydraulic Ramp Cover

Special Application Doors



The Hydraulic Ramp Cover has been designed to maintain normal drive way parking and vehicular access to the rear of a property, as well as access to underground car parking via the ramp.

With property square meter costs at a premium, basement car parking has become a desirable option, and thus so has the Hydraulic Ramp Cover. The Ramp Cover removes the need for a typical ground-level garage from the drive way and yard area, freeing up space. With turf laid on top of the Cover, the drive way can appear as a lawned garden.

FEATURES

- A fully engineered and designed solution to suit the specific site dimensions and requirements
- Various substrate flooring available
- Cover design live/dead load 3kPa or 2 parked cars
- Heavy duty reliable hydraulic components
- Anti-vibration mounting pads fitted under cylinder bases and machined urethane bushes fitted to clevis head pins
- Incorporated safety edge sensors and infrared beam sensors

RECOMMENDED SPECIFICATIONS

Hydraulic Ramp Cover hinged at rear or front and specially designed as per Airport Doors' specifications.

NOTE: Consultation with Technical Sales is highly recommended given the nature of this product and its design requirements.

Hydraulic Ramp Cover

Special Application Doors

DIMENSIONS

Dimensions are indicative only. Covers are made to measure. The typical Cover is sized to suit a minimum 3100mm wide by 11600mm long ramp. Based on a width of 3100mm, the Cover is 3020mm wide and drive through clearance between cylinders is 2600mm. The length is based on the requirement for transitional slopes to top and bottom of ramp. Modelling of ramp is recommended to avoid low to the ground vehicles from hitting the floor.

Where space permits, the cylinders can be placed in alcoves built into the ramp walls so that full ramp width is utilised.

CONSTRUCTION

The Cover is fabricated from high grade structural steel sections, fully welded and profiled to meet the slope at the top edge. The standard flooring is 5mm steel thread plate with a raised MS angle perimeter. The Cover is fully pre-fabricated and bolts to the opening beam above the basement entry. Therefore during the concrete formwork of the basement, a 250 PFC (parallel flange channel) is supplied ready to be cast into the lintel beam. The ramp requires load bearing concrete pads to take the cylinders. The size and location of these will be indicated on preliminary shop drawings.

The ramp also requires preparation for the casting of 40mm PVC conduits which will take the hydraulic hoses and control wiring from the cylinders to the power pack. These need to be laid prior to concreting and cannot have tight bends which would prevent the hoses from passing. Conduits for low voltage wiring for the Safety Beams are also required. The safety beam conduits can be either built-in at the time of construction or surface laid afterwards.

FINISH

All steelwork is shop primed as standard. Due to size and weight of structure, it cannot be hot dip galvanised. Steelwork can be shop finished using a specified paint system as per structural steelwork finishes. The standard Ramp Cover comes with a shop primed tread plate flooring ready for painting by client. This can be sealed and overlaid with pebble screed or other flexible coverings.

If the Cover is to be tiled or laid with cellular turf, 18mm cement sheet flooring is used instead of plate. **NOTE:** The maximum overlay cladding weight (e.g. tiles, turf, pebble screed etc.) cannot exceed 85kg m/sq.

OPERATION

The Ramp Cover is available in two versions; rear-end hinged (as shown in Technical Specifications) and front-end hinged. It is opened by two multi-staged hydraulic cylinders, which raise and lower the Cover as required.

ELECTRICAL/MECHANICAL

The hydraulic power pack incorporates a three-phase (415v) 7.5kW motor and pump. Mains power of 20 amps three-phase plus neutral is required to the controller location.

NOTE: The pump generates low frequency vibration which is amplified when housed in a basement (due to hard surfaces).

We highly recommend that the power pack be housed separately. Where space permits, an alcove built into the ramp wall can house the power unit and controller. This area can be sound proofed. Alternatively a culvert sump drain can be sunk in the garden or within the ramp itself to take the unit. This will isolate the noise. The cylinders also vibrate as they transition through their stages, however this vibration is dampened at their mountings and connections.

Access control can be by line of sight wall mounted push-button station (recommended), or via key card. For safe operation, line of sight operation (e.g. via a press and hold switch) is preferred at all times. Dual activation of drive way gates and Hydraulic Ramp Cover can be achieved if required. Access via radio control handsets may also be available as an option, however additional safety sensors are recommended.

Travel time is variable; however as slower operation time is recommended, an opening time of 30-40 seconds is to be expected.

The provision of adequate mains power supply and isolator to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

An optional three-phase UPS (Uninterruptible Power Supply) unit is recommended in case of power outage. This will activate automatically upon mains power outage and allow for several operations using battery back up. The unit keeps batteries charged at all times.

SAFETY

Each installation is assessed for safe operation. Infrared safety beams are used to detect any obstruction in the operational area. Up to four safety PE Beams may be used. PE Beams are fitted to detect large stationary objects on top of the cover. The cover will not operate when a PE signal is broken. In addition, sensor strips are fitted at the pinch points, the leading edge, and if accessible, along the sides of the Cover. It is the responsibility of the person operating the ramp cover to ensure safe operation at all times.

For further information contact Technical Sales.

Auto Pit Shutter

Special Application Doors

Airport Doors' strong, durable heavy duty steel slatted Auto Pit Shutter is ideal for sealing auto service pits or other pit openings. Designed to meet requirements for single pits up to 14 metres long, the curtain will withstand pedestrian traffic. Additionally, Airport Doors also manufacture a light duty aluminium slatted Auto Pit Shutter which is ideal for smaller pits.

FEATURES

STEEL HEAVY DUTY MODEL

- Strong steel slatted curtain capable of withstanding incidental pedestrian traffic
- 'Drop in' modular design of steel pit shutter housing (for ease of maintenance)
- Low, infrequent maintenance required
- Suitable for single pits up to 14 metres long
- Quality, easily accessed three-phase motor with variable speed controller and push-button access control
- Curtain slats are individually replaceable
- The curtain tracks do not require any lubrication or special lining
- Curtain is bearing roller loaded and is driven directly in and out of housing

ALUMINIUM LIGHT DUTY MODEL

- Curtain is bearing roller loaded and is driven directly in and out of housing
- Light aluminium curtain suitable for smaller pits
- 'Drop in' modular design of aluminium pit shutter housing (for ease of maintenance)
- Low, infrequent maintenance required
- Suitable for single pits up to 8.5 metres long
- Quality, easily accessed three-phase motor with variable speed controller and push-button access control
- Curtain slats are individually replaceable
- The curtain guides require additional reticulated drive chain & rail.

HEAVY DUTY STEEL AUTO PIT SHUTTER - PIT DIMENSIONS*

- Maximum Pit Length: 14000mm
- Maximum Pit Width: 1100mm

LIGHT DUTY ALUMINIUM AUTO PIT SHUTTER - PIT DIMENSIONS*

- Maximum Pit Length: 8500mm
- Maximum Pit Width: 1100mm

*Refer to Technical Specifications for main design dimensions of pit and shutter recess. Design of pit as drawn is indicative only.

RECOMMENDED SPECIFICATIONS

Auto Pit Shutter: fully retractable, motor operated shutter curtain made from steel (Heavy Duty Model) or aluminium (Light Duty Model) slats guided along slots formed into the sides of the pit. The complete shutter and housing, as manufactured by Airport Doors is supplied ready to fit in a pre-prepared recess at one end of the pit.

NOTE: The pit and recess is to be made by client to Airport Doors' recommended sizes.

Auto Pit Shutter

Special Application Doors

FIXING REQUIREMENTS

It is the responsibility of the architect/builder to provide a structurally adequate pit, designed to comply with the product. See also Technical Specifications.

CONSTRUCTION

The Auto Pit Shutter is constructed and supplied as a complete (drop-in) housing ready for installation into the specially made pit. For pit recess recommended sizes, refer to Technical Specifications. At one end of the Pit, an extension is formed to house the 'drop-in' shutter housing. The Auto Pit Shutter comes complete with a 5mm tread plate cover for the shutter housing.

The Steel Auto Pit Shutter is made from 1mm thick 100mm profile steel interlocking slat, with special end rollers. The Aluminium Auto Pit Shutter is made from 1.2mm thick 63mm profile aluminium interlocking slat, with nylon end clips.

For both types of Auto Pit Shutters the pit must be constructed with the horizontal curtain guides incorporated. The curtain guides can be formed using mild steel angle sections anchored or cast into the pit sides to the required dimensions.

The pit design is indicative only. The Shutter design can be varied to suit individual requirements.

FINISH

The Auto Pit Shutter curtain is powder coated 'Safety' Yellow as standard. All other steel work is powder coat finish.

OPERATION & MAINTENANCE

The Steel Auto Pit Shutter curtain is driven in or out of the shutter housing by a geared electric motor drive. The curtain travels horizontally in curtain guides.

The Aluminium Auto Pit Shutter is driven in or out of the shutter housing by a continuous sprocket chain drive incorporating an electric motor.

As the pit shutter is recessed into the ground, it may not be accessible for major maintenance. The shutter housing is therefore designed to be lifted out for major maintenance.

MOTORISATION

Motorisation is via a geared electric motor and incorporates a 'Press and Hold' Open and Close push-button station and red Emergency Stop button. Additional access control and accessory options are available to suit your requirements.

Motorisation is available in three-phase (415v) as standard. Curtain travel is controlled by mechanical limit switches.

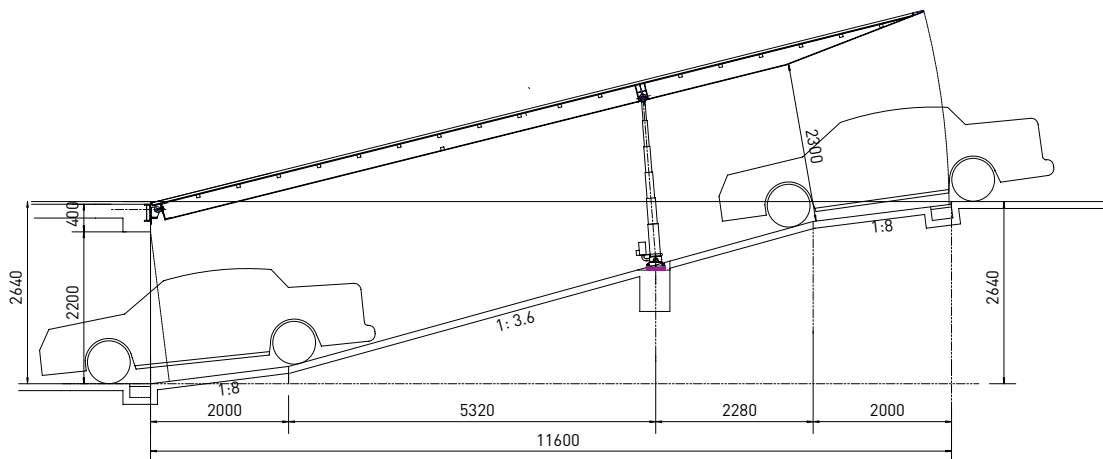
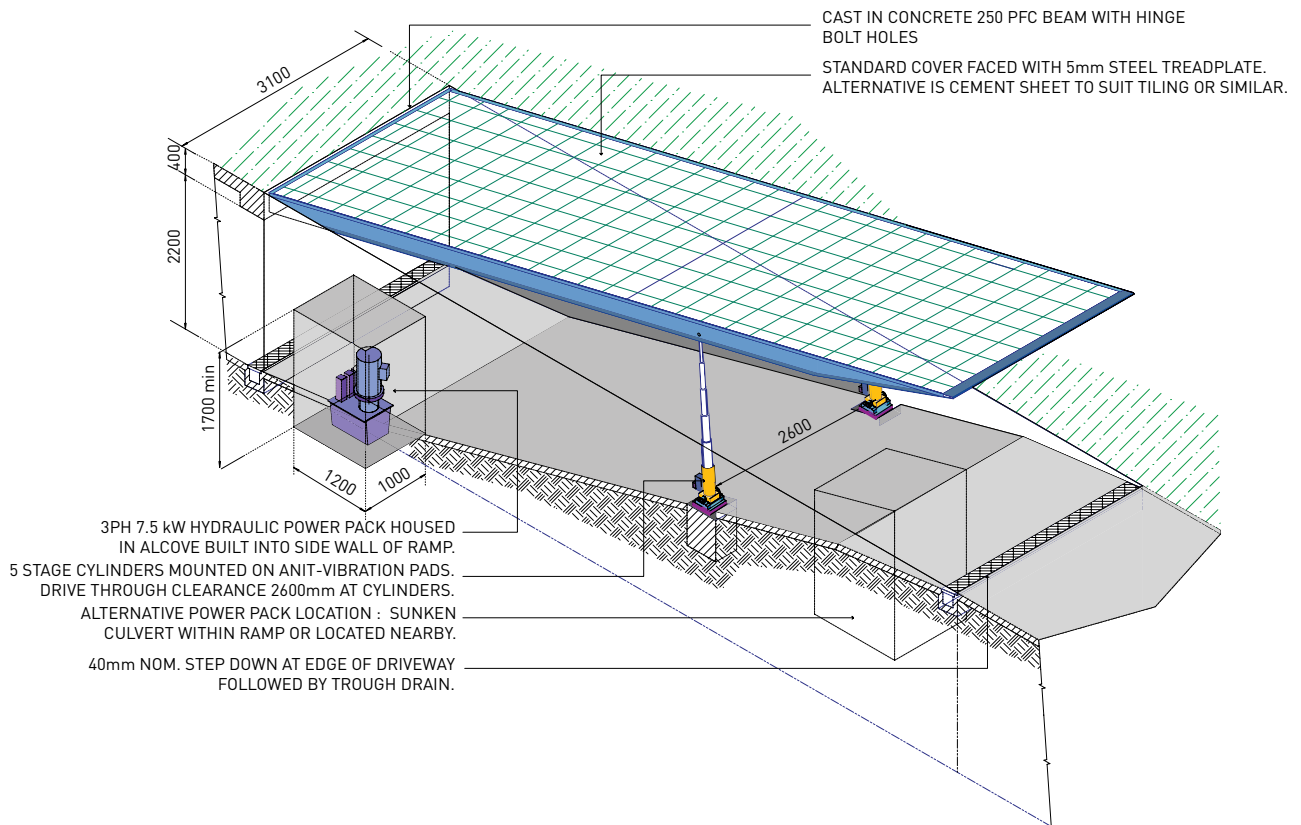
The provision of adequate mains power supply and isolator to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

SAFETY

It is the responsibility of the person operating the Auto Pit Shutter to ensure safe operation at all times.

Hydraulic Ramp Cover

Technical Specs: Special Application Doors



SECTION VIEW : TYPICAL RAMP DESIGN WITH TRANSITION SLOPES

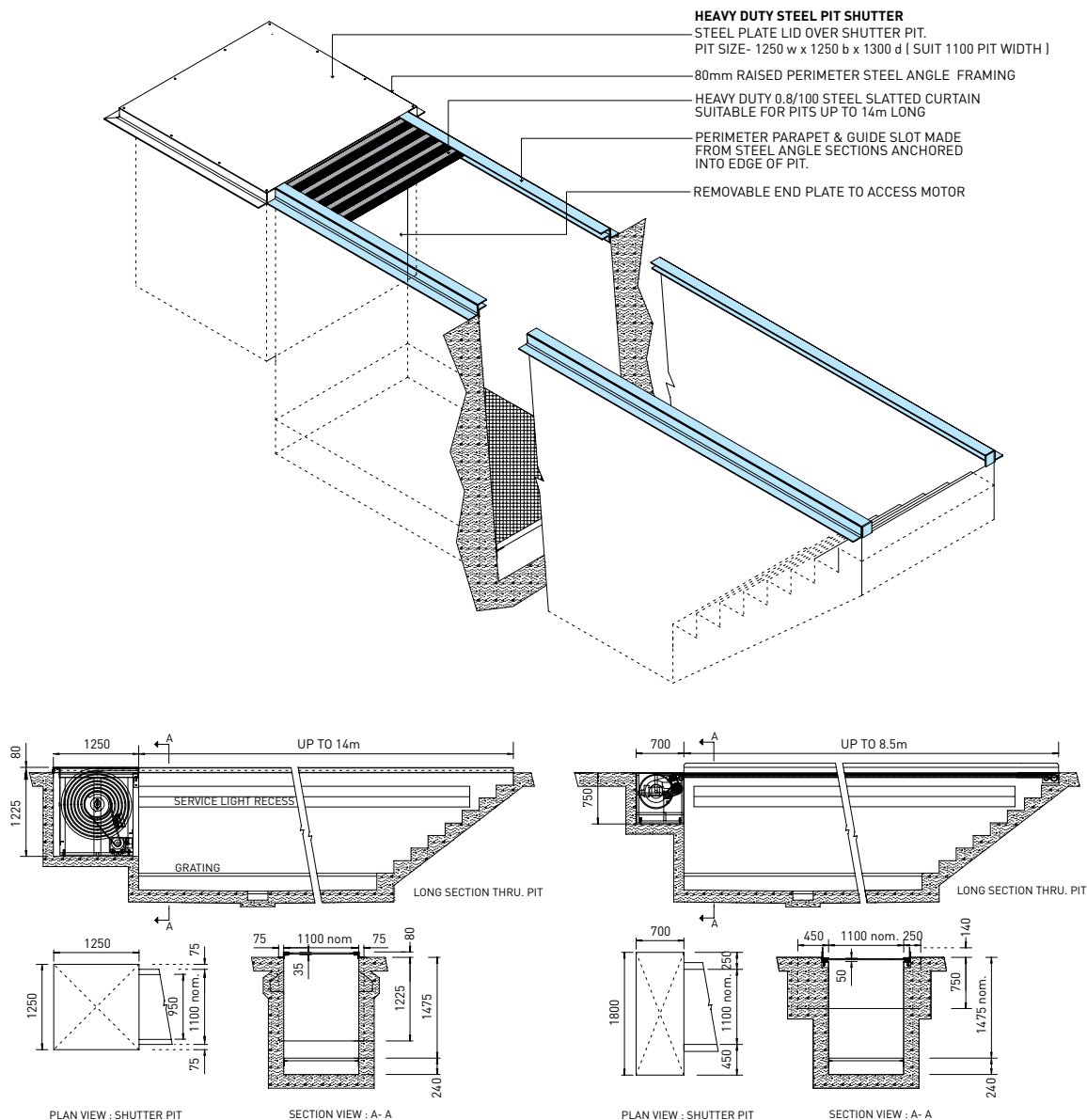
HYDRAULIC RAMP COVER CAN HAVE A POSITIVE SLOPE TOWARDS OUTSIDE FOR DRAINAGE

REAR HINGE MODEL SHOWN - ALTERNATIVE FRONT HINGE ALSO AVAILABLE

NOTE: THE HYDRAULIC RAMP COVER IS IDEAL FOR UNDERGROUND CARPARK ACCESS AND DRIVEWAY PARKING

Auto Pit Shutters

Technical Specs: Special Application Doors



HEAVY DUTY STEEL PIT SHUTTER :

- SUITABLE FOR PITS UP TO 14m LONG.
- FEATURES STRONG, DURABLE STEEL SLATTED CURTAIN WHICH WILL WITHSTAND HEAVY LOADS & FREQUENT USE.
- SHUTTER IS DRIVEN DIRECTLY OUT OF PIT SHUTTER HOUSING.
- ENTIRE PIT SHUTTER HOUSING LIFTS OUT FOR MAINTENANCE.
- MOTOR DRIVE IS ACCESSIBLE FROM WITHIN PIT.
- REQUIRES GUIDE SLOTS 35mm HIGH x 65mm DEEP nom FULL LENGTH. THESE CAN BE FORMED USING STEEL ANGLE SECTIONS ANCHORED OR CAST INTO THE PIT SIDES.

LIGHT DUTY ALUMINIUM PIT SHUTTER :

- SUITABLE FOR PITS UP TO 8.5m LONG.
- FEATURES ALUMINIUM SLATTED CURTAIN DESIGNED FOR LIGHT, INFREQUENT USE.
- NOT DESIGNED TO CARRY ANY ADDITIONAL LOADING
- CHAIN DRIVEN RETICULATION SYSTEM WITH MOTOR DRIVE
- REQUIRES GUIDE SLOTS 50mm HIGH x 65mm DEEP nom FULL LENGTH. THESE CAN BE FORMED USING STEEL ANGLE SECTIONS ANCHORED OR CAST INTO THE PIT SIDES.

Notes

Service and Preventative Maintenance Agreements

To maintain the life of your door and door operator, Airport Doors recommend you service your door regularly. The frequency of servicing is dependent on the particular type of door, its size, weight, usage and application. As part of our commitment to providing ongoing after sales service to our clients, our knowledgeable service representatives are well equipped to service and/or repair your door and operator when required, or as a preventative maintenance agreement.

At Airport Doors we also provide thorough service and repairs to almost every brand and type of door and door operator. For further information or to discuss preventative maintenance service agreements, contact your local Airport Doors office today.

Door Operators & Accessories



Door Operators & Accessories



Door Operators and Accessories play an integral role in providing convenience, ease of use and functionality of your door. It is important when specifying a door that you also consider the requirements for motorisation (whether required now or in the future).

There are a wide variety of door & gate operators on the market, thus it is difficult to list each individually. Below is a brief overview of the most important features, functions and capabilities to help you select the operator and/or accessories to suit your application.

OPERATOR VOLTAGE TYPES

Door and Gate operators are available in either Single-Phase (240v - 50Hz) or Three-Phase (415v- 50Hz) mains supply. Some single-phase operators use a 24DC motor (typically used for residential applications or some commercial applications).

DOOR OPERATOR BRANDS

- Airport Doors
- ATA
- BFT
- Fadini
- GfA Elektromaten
- Grifco - Chamberlain
- Marantec
- Merlin

Door Operators & Accessories

OPERATOR OPTIONS

- Anti-fallback Clutch
- Auto Close Card – to auto reverse door direction
- Battery Back Up (UPS – uninterrupted power supply)
- Break Motor
- Continuous Use – (High Duty Cycle)
- Current Sensing Safety (overload monitoring and protection)
- Emergency Release (manual operation by hand or chain drive)
- Flameproof Motor, Electronics and Housing
- Heavy Duty
- IP Rating Options up to IP65 (Dust Ignition Proof)
- Receiver Card – for radio frequency control and interfacing with other compatible controllers
- Slack Rope Tension Monitor (Sectional Door Operators)
- Variable Speed (Soft Start, Soft Stop)

OPERATOR ACCESSORIES

- Antenna Extension – to increase reception
- Audible Alarm
- Electric Ground Lock – for gate operators
- Electric Post Lock – for gate operators
- Emergency Key Release – recommended in applications that do not have any other access point into the garage or building
- Emergency Stop Button (mushroom head)
- Flush Mounted Push-Buttons/Key Switches
- Pedestal Mounting for card readers, key switches and safety beams
- Safety Reversing Sensors (see below)
- Solenoid Locks
- Stop Plate - for electric ground lock – for gate operators
- Traffic Bollards
- Warning or Traffic Lights

ACCESS CONTROL OPTIONS

- Auto Close Function (timer up to 7 days)
- Card Reader
- FIP (Fire Indicator Panel) Signal
- Induction Loop Detector (in ground)
- Keypad
- Key Switch
- Magnetic Strip (surface mounted)
- Oncoming Traffic Control with Automatic Closing Timer
- PLC (Programmable Logic Controller) – typically used in Emergency Services applications e.g. Fire & Ambulance Stations
- Push-Button Station with 'Up', 'Down' and 'Stop' function
- Radio Control via hand transmitters (handsets)

SAFETY REVERSING SENSORS

- Closing Edge Safety Device – radio frequency sensor
- Photoelectric Beam (PE Beam)
 - o Reflector type
 - o Through Beam (also known as One Way Photocell) – radio or infrared
- Reverse Sensing Strip – pressure or optical sensor

Appendices



Glossary of Technical Terms

TERM	DEFINITION
24DC Motor	A 24 volt direct current motor used for door automation. Mains supply is 240v.
Access Control Device	A device linked into the door or gate operator to enable the appropriate door activation. Various options are available.
Automated Operator	A motorised operator (opener) that controls the opening and closing of a door via the use of radio frequency handsets or alternative means.
Backroom (backspace)	The horizontal clearance distance backwards from the inside face of the lintel (or opening) to the nearest obstruction. Sufficient backroom is required to allow for the physical door components in the open, close or operational positions.
Behind-fix	A type of installation where the door is fitted to the inside face of an opening and overlaps the nibs and lintel.
Between fix	A type of installation where the door is fitted within the opening.
Bi-Fold	The term bi-fold or bi-folding door should not be used when specifying an Airport Doors Fold-Up Door.
Bottom Rail	An extruded or solid horizontal length attached to the bottom of the door to provide strength and reinforcement of the door.
Bulkhead	In architecture, a bulkhead is referred to as an enclosed boxed area or downstand from a ceiling (typically used in retail applications). Where a bulkhead is used to enclose a door's roller drum it is important that allowances are made for fitting and servicing the door.
Bushfire Zone Fire Rating	The NCC specifies the level of fire rating applicable for Buildings and building components (including doors) within Bushfire zones.
Cable Drums	Grooved drums fitted onto each end of the steel cross shaft. Lifting cables wind around the grooves of the cable drum to enable the door to open or close without cable lapping or chafing.
Chain Operation	Operation of a door by mechanical hauling chain. See also Emergency Hand Chain.
Cladding	Building material fitted to the door frame for the purpose of appearance, style and function.
Counterweight balance	A means of balancing the door by using steel counterweights that are held in constant suspension by pulleys and steel wire ropes.
D.L.I. Gate	Outdated term. See Personal Exit Door
Dead Man Switch	In electrical terms, a switch that must be held in or latched for current to flow. Once released, current stops. 'Dead Man' switches are used for line of sight closing of doors as a safety precaution.
Door Curtain	The main part or body of a rolling door.
Door Guide	A channel section which guides the door's edge as the door opens and closes.
Door Track	A channel section which guides the door's track rollers (which are fitted to the edge of a door) so that the door operates smoothly.
Drive Through Height	Also referred to as 'drive through clearance', 'walk through height', 'max' headroom', 'head clearance', 'max clearance', 'clear opening height'. This height is the actual resultant height under the door when in the open position. It is measured at mid span and at the lowest point. It is the opening height minus 'T' (total door thickness plus working clearance when door is in open position) and estimated deflection. Furthermore, the floor may slope up or down. Therefore the minimum required drive through height should always be specified by the door user.
Drum	Typically a cylindrical pipe over which the (rolling door) curtain rolls.
Drum Axle	In rolling doors, the fixed central hollow pipe or solid steel shaft that the drum rotates around.
Drum Support Brackets	Brackets fixed to the wall above the door way that support the (rolling) door's drum
Ear Lug	Welded at each side of the counterweight door are ear or pivot lugs that the link arms connect to. Their position is defined and important to the door operation. Also referred to as a 'Door Lug'.
Electrically operated	A method of operation whereby an electrically driven door operator is used to open and close the door.
Emergency Hand Chain	Enables emergency chain operation of motorised doors if there is a power outage. NOTE: It may not be possible to open very large doors using a chain.
Emergency Key Release	A release mechanism (by key) which disengages the door operator from the outside to allow manual operation. Recommended in applications that do not have any other access point into the garage or building.
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Emergency Release Mechanism	A feature of a door operator that allows manual operation by hand or chain.
External Projection	The maximum distance that the door protrudes out from the fixing face in the open position.
Fascia	A horizontal panel or board fitted into the top of the opening. Required in applications where there is insufficient headroom.
Fire Rated Roller Shutter	A doorset which is classified and certified to withstand a fire as defined in Australian Standards AS1905.2 – 2005.
Fittings	This term covers all the ancillary parts that are 'fitted' to the door stiles inclusive of all hardware.
Fixing Face	The internal vertical face or wall surface that the tracks are fitted against. This locates the face of the door in relation to the walls
Flashing	A strip of impervious material (typically Colorbond sheet metal) used to trim and/or seal the edges of door or fascia cladding.
Fold-Up Door	A proprietary counterweight door system as defined and described elsewhere in this Catalogue. NOTE: Other loose terms in the industry for this type of product may include Bi-fold Counterweight Door, Renlita Door, Series 3000 or Foldaway Sectional Door.
Frequency of use	Measured on cycles per hour. Doors are rated; 'Intermittent', 'Moderate' or 'High'. A standard doorset is rated 'Intermittent'. A door specifically designed for 'High' usage can be designed to operate up to 20 cycles per hour.
Fusible link	A thermo-electric fuse that breaks apart when electrically charged. It is used to trigger the descent of a fire shutter.
Glazing	The act of setting with glass.
Hand operation	Operation of a door by pushing or pulling by hand.
Head Plate	A flat steel plate welded on top of the track that carries the pulleys. Sometimes also called 'Header' or 'Heading Plate'.
Headroom	The unobstructed vertical distance above the lintel.
Helical torsion springs	A cylindrical coil of tempered spring wire used for counterbalancing by torsion.
High usage	See Frequency of use.
Inside Looking Out	Unless otherwise stated, drawings are (as standard) drawn from the inside of an opening looking out.
Interface	The act of sending or receiving ancillary signals to or from the door controller. Interfacing is used for Access Control, Fire Service Signals and Security Monitoring.
Internal Projection	The maximum distance that the door protrudes in from the fixing face in the open position.
Isolating Switch	A switch which isolates the mains power supply and is a mandatory safety requirement.
Jamb	A vertical section (typically of steel RHS) that forms the side of a door opening to create sideroom, packing or adequate fixing points.
Key Release	[See Emergency Key Release]
kPa	A SI unit of pressure = Kilopascals. 1 kPa = 1 kN per square metre. (1 kN = 1000 Newton's or 101.972 kg)
Leaf (Door Leaf)	A term used to refer to the body or panel of a counterweight or sliding door/gate
Lift-Up	In counterweighted doors, this term often refers to a Glide-Up door which is described elsewhere in this Catalogue
Link Arm	In counterweight doors, the link arms control the articulation of the door. They are typically steel flat sections pivoted at the top of each door track (at the post lug) and connected to the door at the ear lug. Also referred to as a 'Pivot Arm'.
Lintel	A horizontal structural member which supports the load over a door opening.
Loop Detector	In Automation, a large loop of wire is embedded in the ground. When a large metal object, i.e. a car, passes over it, a slight current is induced in the wire which signals the door access control. It is used as a means of automated exit control.
LSD	LSD is Limit State Design which is the applicable design method for all steel structures in Accordance with AS 4100 2000. ULS and SLS are respectively the Ultimate Limit State and Serviceability Limit State design Wind Loads applicable.
Manual operation	Operation of a door either by hand or chain (without electrical operation).
Master Keying	The coordination of cylinder locks to be opened or locked by one "master" key. The hardware supplier is responsible for the lock cylinder and our locking device needs to be coordinated with the hardware supplier. The lock cylinder may be furnished by this supplier and changed on site.
TERM	DEFINITION
Mullion	An aluminium, steel or timber vertical section with door guides on each side to enable operation of doors.

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Opening height	The measured vertical distance from the ground (floor) to the bottom of the lintel. NOTE: The opening height is not necessarily the final drive through clearance height. The door may rest under the lintel (as is the case with some counterweight doors).
Opening Width	The measured horizontal distance between the door nibs, columns or jambs forming the opening.
Pad-bolt	A sliding bolt (with provision for a padlock) to fasten a door. See also Shoot-bolt.
Personal Access (PA) Doors	A small door built within the main door. Only recommended where there is no other access into the garage or building. NOTE: Personal Entry Doors open inward and Personal Exit Doors open outward.
Personal Entry Door	See Personal Access Doors
Personal Exit Door	See Personal Access Doors
Planetary Gearing	A gear train used to increase the speed and provide mechanical advantage used in chain operated Roller Doors.
PLC (Programmable Logic Controller)	A sophisticated programmable door controller allowing multiple input and output functions, parameter control and diagnostic analysis. Typically used in CFA, Emergency Service or High Rise applications.
Post Lug	Welded at the top of each track (in counterweight doors) is a steel flat section that the link arm bolts to and pivots from. Its position is defined and important to the door operation. Also referred to as a 'Top Pivot' or 'Guide Lug'.
Posts	Posts are typically RHS or SHS sections concreted into the ground to form a door opening. Sizes vary based on load and height.
Pulley	In counterweighted doors and low headroom, rear torsion sectional doors, a pulley is a machined steel, cast steel or plastic sheave grooved to take a steel wire rope. It is typically ball bearing loaded, fitted in a yoke or saddle and comes in a range of diameters.
Pulley Headroom	In counterweighted doors, the pulley sheaves sit on top of the head plate which is welded level at the top of each track. Therefore the pulleys are higher than the door and require corresponding head room. As the counterweights hang next to the tracks, the 'footprint' of the track and counterweight assembly (in plan view) correspond then to the area where this head room is required.
Pulley Layout	In counterweight doors, the spatial layout, in plan view, of the pulleys, track and counterweight. It corresponds to the footprint of the complete track/counterweight assembly which is enclosed by the counterweight cover or surround.
Push Button Station	A push button station typically includes UP, DOWN (or OPEN, CLOSE) and STOP function control. It can also include a keyed isolating switch as an option.
Push Pull Rod	A steel rod to assist with manual opening or closing of doors.
Receiver or Receiver Card	In automation, the electronic circuit card that receives the radio signal from the hand transmitter or access control signal.
Remote Control/Automation	The term 'remote control' has come specifically to mean radio frequency control of doors, however it simply means access control of a door remotely or at a distance.
Reverse Colour	An optional feature (provided only with Roller Doors) that allows the colour to be put on the reverse side of the corrugated curtain face.
Reverse Roll	An optional feature for selected rolling doors installed on the outside of an opening.
Safety Reversing Sensors	Are a door control accessory to sense an obstruction and safely reverse the door. Types of Safety Reversing Sensors include optical, pressure sensitive, or electro magnetic (e.g. infra-red, radio frequency, proximity switch) activation.
Shaft or Cross Shaft	In rolling doors, the central solid steel drum axle. In Sectional doors, the hollow pipe or solid steel bar that has the counterbalancing springs and cable drums fitted to. In counterweighted doors, the hollow pipe or solid steel bar that couples one side of the door drive system to the other.
Shoot-Bolt (or Throw Bolt)	A throw bolt without provision for padlocking. See also Pad-bolt.
Sideroom	On the internal wall adjacent to the door opening, the measured horizontal distance to the nearest obstruction from the edge of the door opening.
Single-phase	240v - 50Hz mains power supply.
Slat	An extruded or roll formed length of steel or aluminium shaped to interlock and form the curtain of a Roller Shutter. Slats come in various profiles and sizes and can also be made from morticed timber.
TERM	DEFINITION
SLS	See LSD.

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Solenoid Brake	In Automation where a brake motor is used, the brake is activated by a solenoid.
Stepped-out or Stepped-in Lintel	Counterweight doors usually fit under the lintel, however the lintel may not be in line with the fixing face. It may protrude outwards or protrude inwards from the plane of the fixing face. In design we assume that these internal surfaces are flush or in the same plane. Therefore the location of the lintel must be defined.
Tapered Bottom	An angled door bottom custom-made to suit a sloped ground.
Terminal Contact	The connection point for ancillary equipment/accessories to interface with the door controller.
Three-phase	415v- 50Hz mains power supply.
Tilt-Up Door (spring balanced)	A one-piece tilting spring balanced door.
Torsion Bar	In sectional doors, this term is used for the counterbalancing cross shaft that is fitted with the torsion springs and cable drums etc. It can also apply to the steel tool bars used to tension door springs.
Torsion Spring	In rolling doors, the torsion spring is a helical coil of tempered spring wire that is wound up to provide torsion. It is fitted within a drum. In sectional doors, the torsion spring is fitted around the cross shaft and wound up to provide torsion.
Travel Rise	This term refers to the maximum height that the top leading edge of the door travels to before it settles into a horizontal, open position. Height clearance is therefore required in this zone right across the opening. The depth of the zone is defined by the Internal projection distance. Also referred to as 'Travel Arc', 'Travel Headroom', 'Arc of Travel' or 'Door Rise'.
ULS	See LSD.
UPS	Uninterruptible Power Supply to operate a door whilst there is a power outage. It is an electrical unit containing an inverter and storage batteries to provide limited run time power back up.
Ventilation	An optional door feature typically using perforations or slots to provide airflow into a building. Other forms of ventilation including bar grille, mesh, louvre may also be available.
Visual access	An optional door feature allowing visibility through a door.
Weather-seal	A horizontal strip made of PVC or other material attached to the bottom of the door (typically in a bottom rail). It is used to minimise the gap between the bottom of the door and slightly uneven ground, and to reduce rain and leaves entering under the door.
Wicket Gate	Outdated term. See Personal Entry Door
Wind load (wind pressure)	In general, doors are designed to AS NZS 1170.1 and .2 2011 Structural Design Actions- Wind Actions. This standard specifies the design loading or force, measured in kPa that the doorset must withstand. Unless specified otherwise, the minimum design load is ULS; 0.8 kPa, SLS; 0.51 kPa.
Wind Speed	Measured in metres/second, design wind speeds for various regions are specified in AS NZS 1170. 1-2 2011. It is the basic unit used in the formula to determine the design wind pressure or wind load. NOTE: Wind speed is not equivalent to wind load.
Windlock door guides	Used in Cyclonic or high wind load prone regions, roller shutters are fitted with windlock guides which include an inner edge strip that the windlock latches against when the curtain is subject to large deformation under high wind load.
Windlock or Windlock Clip	A specially made steel end clip riveted at the end of a roller shutter slat that locks within the windlock guide when the curtain is subject to large deformation under high wind load.
Zone of Travel	The physical space that the door leaf/s swing/s through as the door opens or closes. When projected down onto the ground under the door, it forms a zone that must be left unobstructed for safe door operation.