

GLIDEROL® Series A Roller Doors

Application:

GLIDEROL Series A Roller Doors are designed for commercial and residential use. Available in both manual and automatic models, these doors are suitable for openings up to **6 m wide x 3 m high** in a single panel. For wider openings or if desired, a series of smaller width doors can be fitted, linked by removable centre mullions.

In Commercial application, the Gliderol door is excellent as shop-front doors. Its colorbond finish gives a softer appearance and is less "industrial" looking. With a choice of standard colours and the flexibility of "colour-play", these doors will fit into any shop-front decor. Its operation is quiet and smooth, and requires so little effort that the lady shop staff will definitely appreciate. Locking is ergonomically located at waist level.

In Residential application, the door makes an ideal garage door. With built-in radio receiver, it is the most convenient and cost-effective remote-control garage door available. The control box features push-button controls for operation within the garage. It also has a remarkably bright light panel which activates automatically whenever the door is operated. This is a useful garage light which switches itself off after 3 to 4 minutes. Manually operated garage doors are also available, if desired.



TECHNICAL DATA

(A) DRUM ASSEMBLY

(1) Drumwheels

The drumwheels are moulded from glass reinforced Nylon-6 engineering plastics. Essential property of this material is that it is light, hard and strong enough to serve its purpose and yet capable of taking the pressured effects of pneumatic rivetting as it is not brittle and does not expand when tested in temperature of up to 60°C. Also, moulding process ensures size and shape consistency.

(2) Springs

Suitably graded, oil-tempered, custom-designed steel torsion springs. Number and size of springs used are charted according to door size and designed to counter-balance increasing or reducing curtain weight with corresponding amount of torsion.

(3) Torque-tube Design

The springs are secured to the axle on one end and the drumwheels on the other. The top sheet of the curtain is then fully wrapped and secured around the drumwheels to form a "laterally corrugated cylinder". This cylinder, with spring torsion applied, behaves like a torque-tube capable of operating the door effortlessly. Amount of torsion can be fine-tuned by adjusting axle position even after installation.

(B) DOOR CURTAIN

(1) Material

0.5 mm thick Lysaght's Colorbond steel, profile-rollformed into 600 mm wide panels. Lysaght's Colorbond steel is a patented steel coating system consisting of Zinalume (45% alum / 55% zinc alloy continuous hot-dipped galvanising) and finished with oven-baked silicone modified polyester coating.

(2) Joining of Panels

Curtain panels of required lengths are joined to the required height by means of a point-pressure lock-seaming process to form a continuous curtain sheet. These joints are permanent and cannot be unlocked without damage. They are also rigid and do not have a "hinging" action.

(3) Strength of Curtain

As with steel roofing sheets, remarkable strength is achieved through effective design of corrugations. The "I" value (moment of inertia) of the curtain exceeds 30,000 mm⁴ on both surfaces.

(4) Wind-loading Capacity

A 3-metre wide door is calculated to be able to withstand wind speeds of up to 42 m/sec with acceptable deflection. Where higher wind-loading capability is required, the curtain's capacity can be greatly enhanced with the incorporation of wind-lock clips and guides.

(5) Edge Treatment

Self-lubricating seamless braided nylon Polyglide running the whole height of curtain prevents metal-to-metal contact with the guides and effectively eases sliding friction. For doors exceeding 3750 mm width, a tension strip is added to both edges to prevent stretching of curtain corrugations.

(C) BRACKETS

Wall brackets are fabricated from 50 x 50 x 4 thk mild steel angles with slots designed to receive the appropriate axle clamps. Both ends of the axle are mounted on purpose-made steel or cast-iron saddles and clamped into position by steel 'U' bolts.

(D) DOOR GUIDES

Proprietary extruded aluminium profiled guide sections which are strong and neat in appearance. Guide-type selection according to application.

(E) BOTTOM-RAIL

Full length of specially extruded aluminium section lock-seamed onto the bottom of the door curtain. Bottom-rail also features two slots to retain a seamless PVC finned weatherseal for keeping out weather and dirt.

(F) LOCKS

Proprietary waist-high lock with lock bars locking into door guides. Lock has finger-grip recesses for lifting or closing door. Locksets are secured from inside and do not have fasteners visible from the outside. Dual-mode operation permits option of lock operation from inside without the use of key. Doors exceeding 3.5 m width are fitted with two locksets, one on each side of the door.

Alternatively, doors can be fitted with a padbolt lockable slide-bolt installed at the ends of the bottom-rail.

(G) DOOR OPERATION**(1) Manual Operation**

Superb counter-balancing enables the door to be push-pull hand operated with minimal effort. For doors exceeding 2.3 m height, a hook handle will be provided to assist operation beyond arm's reach.

(2) Electric Operation**(a) Drive Unit**

Patented GLIDERMATIC motor operator specially developed for Roller Doors with most components in Nylon-6 engineering plastics. The drive power is provided by twin 24V D.C motors with synchronised gear reduction. The whole unit is compact enough to fit neatly inside the door roll and drives the door directly. Easy conversion to manual mode by simply lifting the engagement pin provided.

(b) Control Box

Compact-sized control box with electronic PCB and built-in transformer. It is linked to the drive unit via a pre-wired link cord with snap-on connector. An automatic over-load device ensures durability of motors. For garage doors, control box also contains a built-in radio receiver for remote-control operation. It also has a light panel which lights up whenever the door is activated, and switches off automatically after 3-4 minutes.

(c) Safety Device

Built-in electronic device sensitive to any point of bottom-rail. When a closing door is obstructed, it will automatically stop. For garage doors where remote control is used, the door will stop and immediately reverse when obstructed.

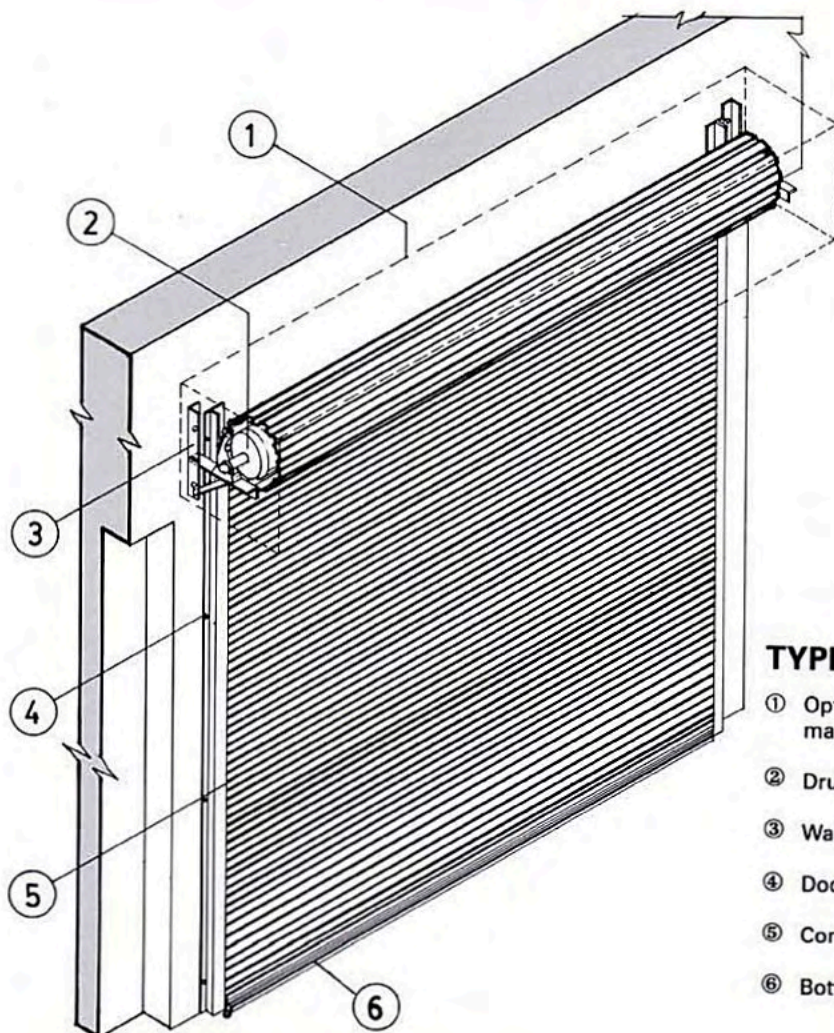
- (d) **Speed of travel** — Average 170 mm/sec.
- (e) **Power Supply Requirement**
A 230V 1 Ph 13 amp power socket is required for each motor. Automatic back-up power pack is available as an option.
- (f) **Mode of Operation**
Standard operation is by push-button controls provided on the control box. Being electronically controlled, the Glidermatic is adaptable to a wide range of operation modes and configurations. It is compatible with the latest security systems and can be controlled by wired or wireless remote controls, card-key access systems and programmable control systems sensor-activated by light, movement, temperature, etc. Conversions to manual mode can be conveniently effected at **ground level** by means of a lever actuator.
- (H) **MAINTENANCE**
The doors are virtually maintenance-free because of efficient design and extensive use of non-ferrous components. The guides are always clean and dry because no grease or lubricants are needed.

SPECIFICATION

The GLIDEROL Series A door is architecturally specified as a manually operated Roller Door constructed of Colorbond Zinalume steel curtain material permanently lock-seamed to form a continuous curtain with the edges treated with self-lubricating seamless braided nylon Polyglide to prevent metal-to-metal contact. The drum assembly shall consist of suitably graded oil-tempered torsion springs secured to drumwheels moulded from engineering plastics. The curtain top shall be fully secured and wrapped around the drum assembly to form a cylindrical torque tube. The bottom-rail shall be an extruded aluminium section lock-seamed onto the bottom of the curtain with the base of the rail containing two slots to retain a seamless finned PVC weatherseal. Locks shall be a dual mode waist-high lock with finger-grip recesses.

Electrically operated doors shall be as above described but containing a proprietary motor operator installed within the door roll. The control box shall feature push-button controls and a built-in auto-stop safety device. The system shall be convertible to manual operation and have remote control and power back-up capabilities. The operation configuration shall be selected and approved by the Superintending Officer before installation.

Note:- Radio remote control or other special operating requirements should be specifically stated. A manufacturer's warranty certificate with the desired warranty period should be obtained.



TYPICAL INSTALLATION

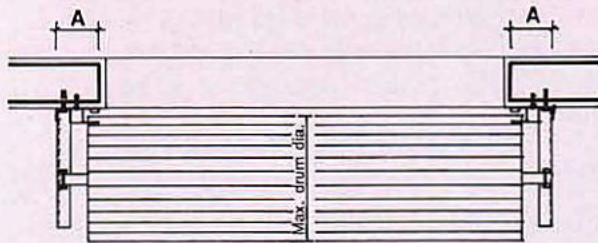
- ① Optional Box Housing — available in matching colorbond finish
- ② Drum Assembly
- ③ Wall Brackets
- ④ Door Guides
- ⑤ Continuous sheet curtain
- ⑥ Bottom rail with weatherseal



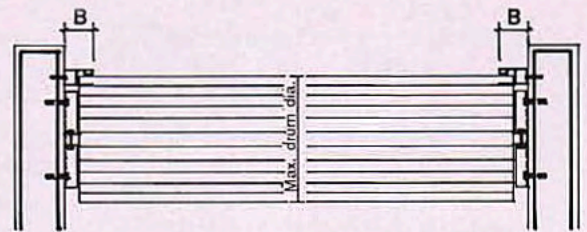
Remote-controlled Garage Doors

TYPICAL FIXING DETAILS

MANUAL MODEL

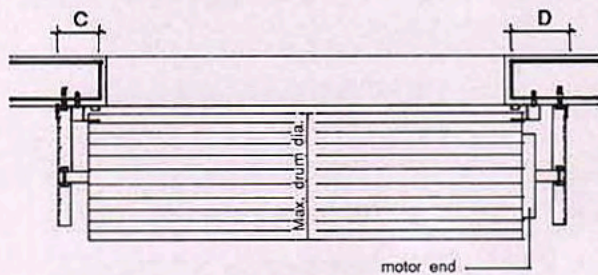


FIXING BEHIND WALLS

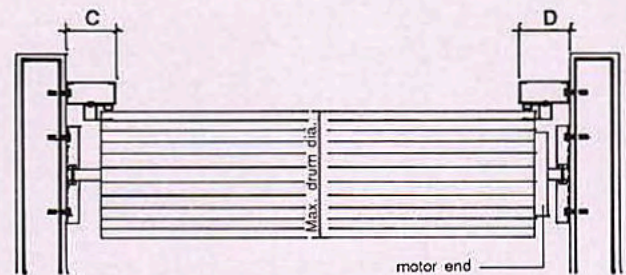


FIXING BETWEEN WALLS

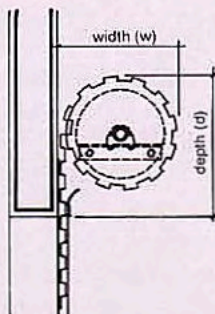
AUTOMATIC MODEL



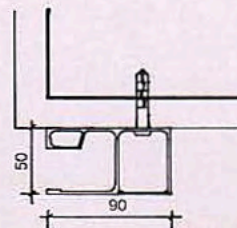
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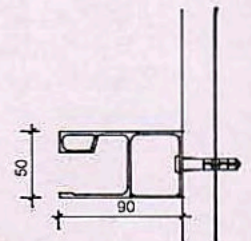
FIXING BETWEEN WALLS



SECTION (HEADROOM)



(FIXING BEHIND WALLS)



(FIXING BETWEEN WALLS)

GUIDE DETAILS
TYPE RDA

MINIMUM SIDE ROOM AND HEADROOM REQUIREMENT (in millimetre)

DOOR HT. (up to)	MAX. DRUM DIA.	A	B	C	D	HEADROOM	
						w	d
1120	400	100	90	100	150	420	440
1700	420	100	90	100	150	440	460
2280	440	100	90	100	150	460	480
2860	460	100	90	100	150	480	500
3000	480	100	90	100	150	500	530

We reserve the right to improve or alter details without notice.