



# LPCB Approved Security Doors and Shutters

Steel Hinged Doors LPS1175 Security Rating 1, 2, 3, 4 & 5

Roller Shutters LPS1175 Security Rating 1,2, 3 & 4



**ascot**  
DOORS

made to measure

# Centurion Hinged Doors & Shutters

# LPS1175

Welcome to Ascot Doors Limited, manufacturer and installer of individually made-to-measure high performance steel hinged and roller shutter doors.

## Made to measure

Ascot offer the complete service from design, manufacture and installation to on-going service and repair.

Unrivalled aesthetics and performance have become the hallmark of Ascot Doors in all applications from personnel access, fire and high security, to energy efficiency and sound reduction, internally and externally.

Based in Bolton, UK, Ascot makes purpose-made doors in it's own factories using the latest computer controlled production equipment. Together with modern welding techniques and in-house powder

coating technology the highest quality standards are applied, not only in products, but in peoples daily work processes.

Installation teams undergo rigorous training to ensure that your doors are made and fitted in accordance with LPS1175 where appropriate, and in all cases, in the most effective and safest manner possible.

Recognised internationally for high levels of quality and safety, Ascot make doors for UK, Irish and overseas customers.



armouries & gun clubs  
factories & warehouses  
education establishments  
banks & building societies  
pharmaceutical & research  
local authorities & hospitals  
public buildings & museums  
telecommunications & utilities  
defence buildings & police stations

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Certificate No. 131/b  
Certificate No. 131/d



Quality Systems Certificate  
No. 131 Assessed to  
ISO 9001:2000



# High security performance doors

Where security is priority. Ascot's doors are approved by the Loss Prevention Certification Board to LPS1175, the Home Office and Secure by Design and combine strength with elegance and durability with cost effectiveness.

In buildings, where safety and security can't be met by standard doors, Ascot high security steel doorsets are designed to resist attempts at forced entry. Doorsets are individually made to specification to fit any door opening and are constructed to Security Ratings 1-5 to resist a series of attacks from one minute to 10 minutes duration by attack by one person using

powered tools. Ascot steel hinged doors don't shrink, warp or twist, they are immune to insect attack and will not support bacteria, mould or fungi. Ascot steel doors are hard wearing and designed to cope with high traffic levels for internal and external use. All grades of security door can be supplied fire rated for up to 240 minutes to BS EN 1634.

## LPS1175 Security Rating 5 - tool category D+

SR5 rated doors are tested to withstand a determined attempt at forced entry using 18 volt cordless tools, powered disc cutters, a reciprocating saw as well as tools in categories A to C.

## LPS1175 Security Rating 4 - tool category D

Under this rating doors are tested to withstand an experienced attempt at forced entry using tools which include 12 volt cordless powered hand tools, disc grinders, circular saws, power drills, jig saws, a sledge hammer, a felling axe, hole saws, plate shears, bolt cutters, steel wedges and hooligan bar.

## LPS1175 Security Rating 3 - tool category C

Under this rating doors are tested to withstand a deliberated attempt at forced entry using bodily physical force and a wide selection of tools including axe, cold chisels, brick bolsters, crow bar, lump hammer and cordless drill.

## LPS1175 Security Rating 2 - tool category B

Hinged doors and shutters certified to these security standards have resisted a series of professional attacks, each lasting up to 2 minutes using a variety of hand-tools such as hammers, levers, screwdriver, steel tube and shears.

## LPS1175 Security Rating 1 - tool category A

Hinged doors and shutters certified to these security standards have resisted a series of professional attacks, each lasting up to 1 minute using a variety of hand-tools such as levers, screwdrivers, spanners and punches.



Steel hinged doors  
Roller shutters



Security Rating			
level of risk	security ref no.	hinged doors	roller shutters
Enhanced	SR5	✓	
Very high	SR4	✓	✓
High	SR3	✓	✓
Medium	SR2	✓	✓
Moderate	SR1	✓	✓

# High security Steel Hinged Door specifications

## Security specification

Ascot Doors employ a leaf and frame design and reinforcing techniques to provide high levels of security. Doors are fitted with door furniture to meet the most demanding specifications. A resilient polyester powder coat base primer reduces maintenance and improves the life of the finished coat; a factory applied polyester top coat or paint to most BS or RAL colours are available as options. Features include a unique double leaf anti-penetration full height astragal, single doors have a market 'first' leading edge design to prevent jemmying.

## Door and frame construction

Centurion high security doors are available as single or double doorsets for internal and external use. Doors and frames are constructed from Zintec steel to BS EN 10152 which provides excellent corrosion resistance and improved paint adhesion than galvanised steel. Panels are reinforced with anti-jemmy channels.

## Door and frame construction SR3, 4 & 5

Panels are reinforced horizontally and vertically with 3.0 mm Zintec steel channels. Standard honeycomb infill is expanded and bonded within the door under pressure. The folded twin tray construction is welded resulting in a leaf thickness of 50 mm. Each door leaf is supported on continuous stainless steel high load hinges with integral security dog-bolts. Frames are made from 2 mm Zintec steel press braked to give standard or special profiles. Jointed & welded corners as standard.

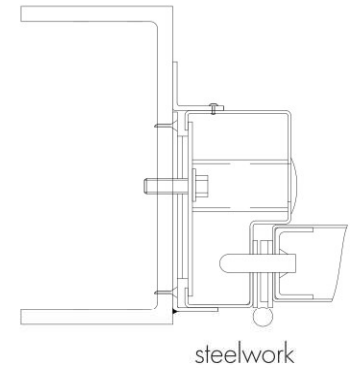
## Door and Frame Construction SR1 & 2

Appropriate reinforcements for the specified ironmongery are assembled within the leaf. The twin tray construction, complete with paper honeycomb infill, is bonded under pressure and welded to form a 45 mm thick panel. Each door leaf is supported on stainless steel dog bolt hinges to EN1935 Grade 14. Frames are made from 1.6 mm Zintec steel press braked to form standard or special profiles, but jointed and bolted as standard.

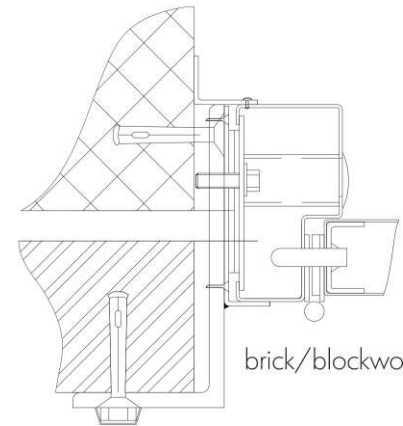
## Fixing arrangements



SR3 to SR5 typical fixing



steelwork



brick/blockwork

Installation configurations SR1 to SR5			substrate				
Rating	door ref no.	LPCB ref no	SR1 timber, brickwork blockwork	SR2 timber (hardwood) brick/blockwork, steelwork	SR3 brickwork blockwork Steelwork	SR4 reinforced brick/ blockwork, steelwork reinforced concrete	SR5 reinforced concrete steelwork
SR5	A365S	tbc					✓
	A365D	tbc					✓
SR4	A355S	131d/01				✓	✓
SR4	A364S	131d/02				✓	✓
	A364D	131d/03			✓	✓	✓
SR3	A363S	131d/04			✓	✓	✓
	A363D	131d/05			✓	✓	✓
SR2	A362S	tbc		✓	✓	✓	✓
	A362D	tbc		✓	✓	✓	✓
SR1	A361S	tbc	✓	✓	✓	✓	✓
	A361D	tbc	✓	✓	✓	✓	✓

# Steel Hinged Door sizes

## Openings

Ascot high security hinged doors are certified according to the sizes in the tables below, single leaf doors are 700 x 1800 minimum and 1350 x 2900 maximum. Double leaf doors are 1400 x 1800 minimum and 2610 x 2900 maximum. The requirement for taller doorsets can be accommodated with overpanels.



overpanel

LPS1175 SR3, SR4, SR5						
structural openings mm						
product name	doorset configuration	min height	min width	max height	max width	security rating
Centurion A365S	single leaf outward opening	1800	700	2900	1350	5
Centurion A365D	single leaf outward opening	1800	1400	2900	1350	5
Centurion A355S	single leaf outward opening	1800	700	2500	1350	4
Centurion A364S	single leaf outward opening	1800	700	2900	1350	4
Centurion A364D	double leaf outward opening	1800	1400	2900	2610	4
Centurion A363S	single leaf outward opening	1800	700	2900	1350	3
Centurion A363D	double leaf outward opening	1800	1400	2900	2610	3

LPS1175 SR1, SR2						
structural openings mm						
product name	doorset configuration	min height	min width	max height	max width	security rating
Centurion A362S	single leaf, outward opening single point locking	1800	700	2500	1350	2
Centurion A362D	double leaf, outward opening single point locking to active leaf	1800	1400	2500	2610	2
Centurion A362S	single leaf, outward opening three point locking	1800	700	2900	1350	2
Centurion A362D	double leaf, outward opening three point locking to active leaf	1800	1400	2900	2610	2
Centurion A361S	single leaf, outward opening single point locking	1800	700	2500	1350	1
Centurion A361D	double leaf, outward opening single point locking to active leaf	1800	1400	2500	2610	1
Centurion A361S	single leaf, outward opening three point locking	1800	700	2900	1350	1
Centurion A361D	double leaf, outward opening three point locking to active leaf	1800	1400	2900	2610	1

Max height for single point locking 2,500 mm

# Hinged Door Selection

## selection guide

### 1. number of bolts

#### 3-point bolting

secure a single door or the active leaf of a double door set at the top, bottom and centre.

#### 2-point bolting

secure the passive (first to close) leaf of a double doorset at the top and bottom only.

Single point Abryll

### 2. entry method

#### deadlocking with access control

12v solenoid, energise to unlock (fail secure) and handle entry.

#### no entry

exit door only.

#### deadlocking with key and handle entry

### 3. exit method

#### deadlocking with access control

handle, pad or bar release on the inside

#### no exit

entry door only

#### deadlocking with key

handle, pad or bar release on the inside

#### deadlocking with turnknob

handle release on inside

#### bolting with panic bar

release on inside

#### bolting with emergency breakdome

release on the inside



## Ironmongery

### Security

A range of high security surface mounted panic and escape hardware by Mico-Tindall is factory fitted. Mortice lock are available for SR1 and SR2 complete with cylinder guards to protect external cylinders.

The units can be operated by pad, lever or bar and be supplied as single action escape units or have the ability to be internally locked by key or thumbturn. Access externally is by cylinder, in a high security housing and lever.



pad



bar



Abryll MD3  
with visual indicator and  
heavy duty lever



3 point panic  
locking system

# Locking options

## Locks and access control

A choice of certified locking cylinders from Assa, Abloy, Kaba, Locken, Union and others in various shapes e.g. Euro profile, Scandinavian Oval, Rim and Round threaded. Doors are fitted with Assa Scandinavian cylinders as standard.

Additional locking and access control methods are available. For controlled access, doors can be fitted with electrically operated hardware controlled by either keypad, card swipe, card reader or fob.

### Access control options

- lock cylinder
- RFID swipe card
- magnetic card reader
- RFID fob
- thumb print recognition
- electronic keypad
- solenoid locks
- timed limited locks

more styles available, please ask the technical team



Internal Scandinavian oval cylinder



External Scandinavian oval cylinder



Euro single cylinder



ABLOY round cylinder



ASSA round cylinder

## External access



ELK lock with lever



USCH4 lock cylinder housing (Up to SR4)



USCH5 lock cylinder (Up to SR5)

For a full list please refer to [www.ascotdoors.co.uk](http://www.ascotdoors.co.uk)

# Ironmongery



22 mm safety lever



Mico tower bolt

## Visions

We offer security rated visions approved to LPS1175 which can also be fire rated for up to 60 minutes. Our range is continually expanding, so please contact the technical team for up to date information.

## Louvres

Steel louvres can also be installed in Ascot LPS 1175 doorsets. Please contact the technical team for details.

## Hardware options



heavy duty door closer  
(with hold open if required)



heavy duty stay



High security vision window

## Handing

A simple rule to determine the handing of a door-set; - stand in front of the closed door or the side where you can see the hinge knuckles. If they are to the right, it is a right hand door - if they are to the left, it is a left hand door. High security door handing styles are available in single and double door sets and open outwards.

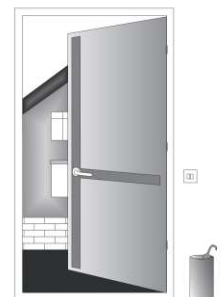
## Door and frame finishes

The extensive range of Ascot steel doors and frames are coated in polyester powder coat primer to RAL 7004 (grey) ready for on-site painting or can be factory finished with polyester powder in any available BS or RAL reference.

For doors in high salinity or high pollution areas, such as within 5 km of the coast, abattoirs, swimming pools, water treatment works or heavy industrial areas, we recommend a marine grade finish is applied. In addition, the substrate of the doors can be changed to Aluzinc to BS EN 10327 (AZ150G) to give vastly improved door life.



right hand  
outward opening



left hand  
outward opening





# High Security Roller Shutters

Where higher levels of security is a main concern, the LPS1175 approved Centurion Shutter resists attempts at forced entry from SR1 right up to SR4 to combat the most determined perpetrator.



## Construction

Highly versatile and cost effective. Ascot Centurion High Security Shutters are individually designed and manufactured to suit the specific opening using stylish laths, which are much more attractive than conventional sections. A wide variety of curtains and guide sections are available which are dependant on the level of security rating required.

## Curtains

Shutter curtains are constructed from either traditional steel laths, extruded aluminium or aluminium insulated lath dependant on the security rating required. All curtains are securely held using an end lock to suit the curtain configuration which prevents lateral movement. Traditional steel lath is available in perforated finish (SR1 only). The aluminium lath is available in punch and/or punched and glazed (SR1 only). All Ascot shutter curtains are finished off with either a heavy duty roll formed 'T' section (SR1 & SR2 only) or mill finished extruded aluminium bottom rail.

## Guides

Vertical guides are formed from rolled steel or extruded aluminium dependent on size, wind loading and security rating and are supplied with suitable angles for fixing to the structure.

## Endplates

Mild steel endplates of appropriate thickness relative to door size are supplied with angles for fixing to the structure. Either 5 mm thick (min) for tube motor operation or 8 mm (min) thick primmed steel laser cut endplates for direct drive operation are provided to accept the barrel and curtain assembly. They are complete with either galvanised steel tube motor brackets and safety brake or high quality two bolt flange bearings.

## Barrel

The barrel assembly is constructed from seamless steel tube of adequate diameter to resist deflection and is supported in bearings or cups attached to mild steel endplates.

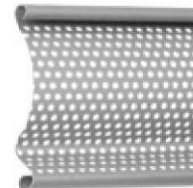
factories  
retail shops  
loading bays  
warehouses  
industrial units



Solid Steel Lath  
(SR1 & SR2)



Aluminium Single  
Skin Solid Lath  
(SR1 only)



Steel Perforated Lath  
(SR1 only)



Aluminium Punched  
Glazed Single Skin Lath  
(SR1 only)



Aluminium Double  
Skin Lath  
(SR4 only)



Aluminium Double  
Skin Lath  
(SR3 only)



Steel Guide &  
Angle Section



Aluminium Guide  
& Angle Section



Steel Bottom Rail



Aluminium Bottom Rail

# Construction & Shutter sizes

The Ascot Centurion shutter is constructed to meet the demands of the Loss Prevention Certification Board. The following table illustrates the construction configuration in conformance to the specified Security Rating for the opening.

aluminium laths



## Construction

LPS1175 roller shutter door sets

product name	configuration	guide type	curtain construction
Centurion SR4	face fixed	steel reinforced	double skin laths with reinforced bars
Centurion SR3	reveal & face fixed internally	aluminium	double skin aluminium laths with reinforced bars
Centurion SR2	reveal & face fixed internally	steel	18 gauge steel laths
Centurion SR1	reveal & face fixed internally	steel	solid 20 gauge steel laths perforated 20 gauge steel laths solid single skin aluminium laths punched aluminium laths punched and glazed aluminium laths

## Fixing arrangements

### Installation configurations

door	product ref	security rating	LPCB ref no.	substrate			
				brickwork	blockwork	concrete	structural steel
Centurion	A305SS	SR1	131e/01	✓	✓	✓	✓
Centurion	A305PS	SR1	131e/02	✓	✓	✓	✓
Centurion	A305SA	SR1	131e/03	✓	✓	✓	✓
Centurion	A305PA	SR1	131e/04	✓	✓	✓	✓
Centurion	A305PG	SR1	131e/05	✓	✓	✓	✓
Centurion	A310SS	SR2	131e/06	✓	✓	✓	✓
Centurion	A315	SR3	131e/07	✓	✓	✓	✓
Centurion	A320	SR4	131b	✓	✓	✓	✓

## Openings

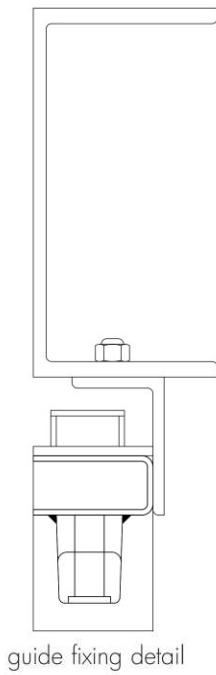
Roller shutters are manufactured to suit the specific opening. Maximum and minimum design sizes in the table below are approved by the LPCB to LPS1175.

### Sizes

product name	structural openings mm			
	min height	min width	max height	max width
Centurion SR4	2,000	2,500	7,000	9,000
Centurion SR3	1,000	2,000	7,000	7,000
Centurion SR2	1,000	1,000	7,000	7,000
Centurion SR1	1,000	1,000	7,000	7,000

## Shutter operation

The method of opening security shutters depends on the size and weight of the curtain and customer preference. Single phase (230 V) and three phase (415 V) electrically driven doors are operated with an internal keyswitch.

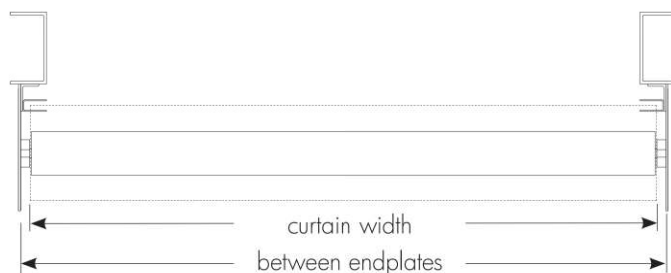


Operation		opening type			
Door	LPCB ref no.	push up	tube motor 230 V	direct drive 415 V	electric counter sprung barrel 415 V
Centurion SR4	131b		✓	✓	✓
Centurion SR3	131e/07		✓	✓	
Centurion SR2	131e/06	✓	✓	✓	
Centurion SR1	131e/01-05	✓	✓	✓	

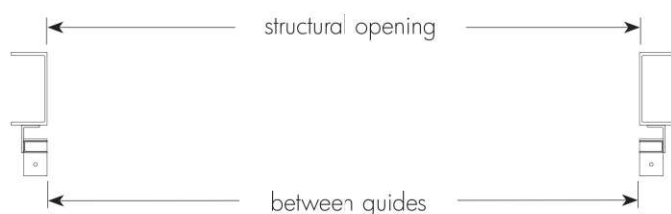
## Manual Push Up

The roller assembly is constructed from a 9' gauge galvanised steel tube. High quality helically wound counter balance springs, mounted inside the tube allows operators to push-up and pull-down the curtain smoothly and effortlessly. The tube assembly is hung from endplates via galvanised cups.

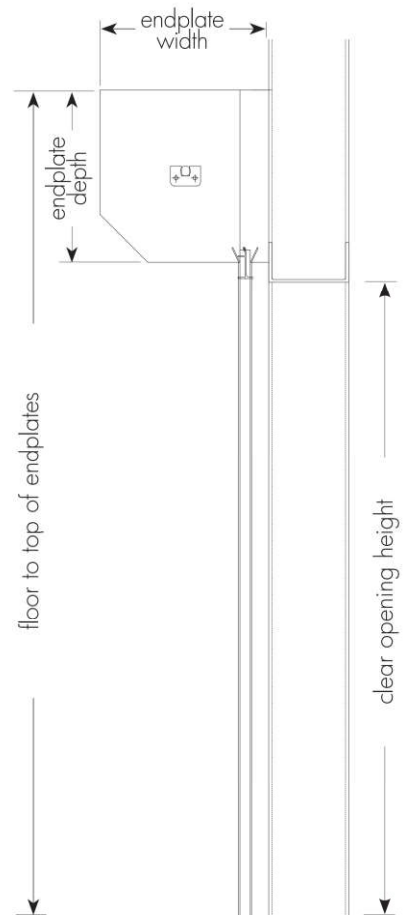
Push up operation is suitable for smaller openings where frequency of operation is limited and is typically used on smaller openings such as doorways, windows, serveries or bars. Openings exceeding 2500 mm x 2500 mm should be electrically operated.



plan at guide level



plan at barrel level



section

# Operation

## Electric Tube Motor

The roller assembly is constructed from high quality steel tubes, the outside diameter and wall thickness suits the door size. Contained within the barrel is a 240 volt tubular motor set in high grade castings and sleeves. The motor is totally concealed within the barrel and comes with a manual over-ride (at high level) to allow operation in the event of power failure. The full barrel assembly is hung from endplates via galvanised steel fixing brackets and safety brake.

Any shutter installed over a door-way is fitted with a safety brake to prevent the shutter from falling under its own weight in the event of motor or gearing failure. The motor is mounted within the roller mechanism, which reduces the amount of space required to accommodate the head assembly.

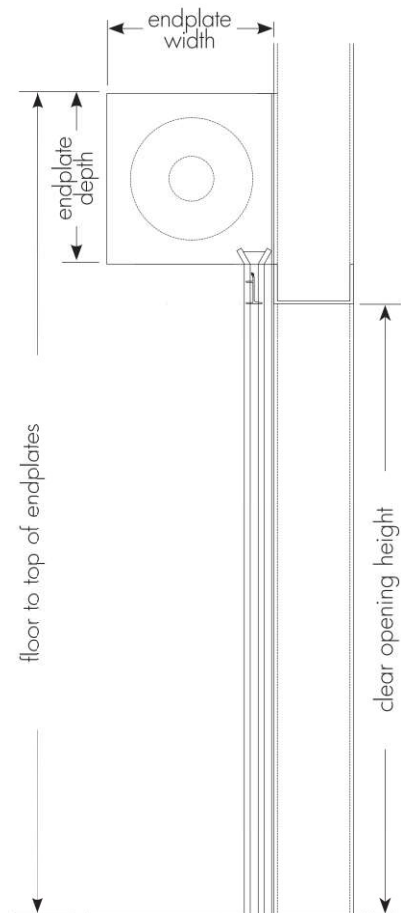
Single-phase tube motors are typically used on shop-front, office or domestic, low use applications. Safety brakes (anti fall-back device) are fitted where necessary to comply with European regulations. Emergency hand operation is provided as standard via a manual eyelet for crank handle operation in event of power or mechanical failure. Electric tube motors are available with a wide range of electrical control options.



plan at guide level



plan at barrel level



section

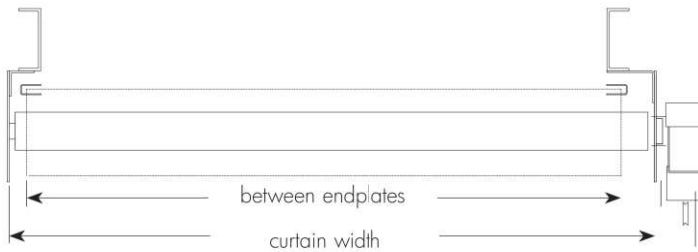
# Operation

## Electric Direct Drive (safe-drive)

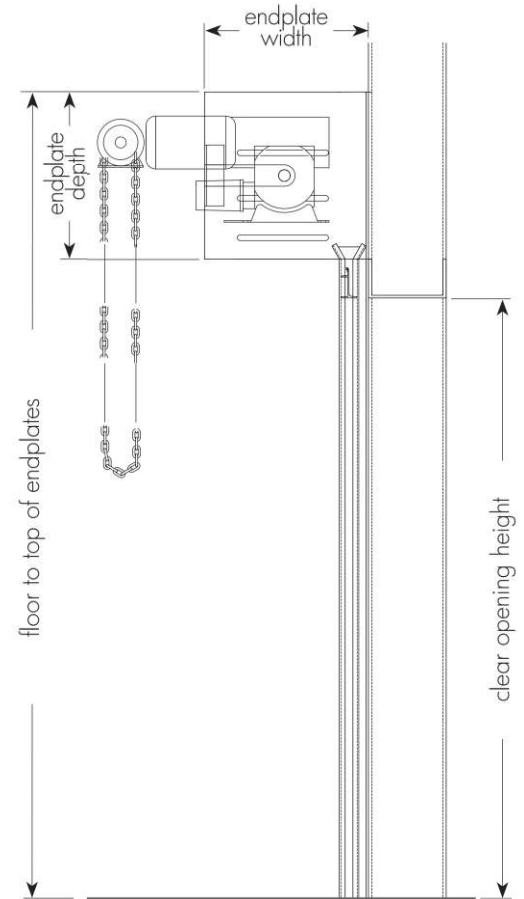
The roller assembly is constructed from mild steel tube, the outside diameter and wall thickness is dependant on the door size and is mounted on an 8 mm (min) thick mild steel spools and solid keywayed shafts, eliminating the need for counter balance springs or gear trains.

EDD's are fitted with an integral safety brake (anti fall-back device) to comply with European safety regulations. Emergency hand chain, operable from floor level is provided as standard in the event of electrical or mechanical failure.

The Ascot EDD operation is available with an extensive range of plug-in, pre-wired, low voltage control options, varying from a simple push-button or keyswitch.



plan at guide level



section

# Roller Shutter Options

## Locking

All shutters are furnished with two high security bullet locks. The lock housings are bolted directly to the guide section. For shutters over 5000 mm wide, (SR4) a ground lock is fitted to the bottom rail for added protection against levering and jacking.

## Finish

Centurion shutters are finished in standard galvanised steel or mill finished aluminium. Polyester power coat finish in a range of RAL or BS references are available as an option.

## Bullet lock interlocks

On electrically operated shutters, bullet locks can be provided with a control panel to prevent operation whilst in the locked position, warning signs can be provided.

## Hood coil casing & fascia's

The roller assembly can be encased in a galvanised steel pressed coil casing to provide protection to the barrel and curtain, it also finishes off the shutter for better looks.

## Silver Lance Anti Ram Post

Where the risk of ram raids is high, the Ascot Silver Lance post provides a second line of defence to buildings from the threat of a forced entry using a vehicle. Manufactured from 90 tonne grade high tensile (stainless?) steel, Ascot Anti Ram posts are positioned 750 mm apart behind the shutter and are easily removed during working hours.

## Keyswitch

Hi security tamper proof keyswitch to operate tube motor shutter.



bullet lock



hoods & fascia's (option)



direct drive control panel



keyswitch



silver lance Anti Ram Post



RAL & BS shades