

THERMAL BREAK

HEAVY DUTY INSULATED ROLLER SHUTTERS



- MAX SIZE OF APPROX 90m²
- INSULATION VALUE - 0.69w/M²K
- ACOUSTIC VALUE OF 18DBA
- GALVANISED STEEL CONSTRUCTION
- RANGE OF CONTROL OPTIONS
- EASE OF REPAIR
- RANGE OF SECURITY OPTIONS



GUARDIAN THERMAL BREAK Heavy duty Insulated Roller Shutters has been specifically designed to meet the ever increasing need for thermal and acoustic insulation. It has a uniquely dimensioned twin skinned lath section and boasts a thermal value of 0.69w/M²k along with an acoustic insulation value of 18DBA. A range of control, security, safety and aesthetic options means the Thermal Break is suitable for many applications.

IMAGE INFORMATION - SHOWN HERE IS OUR THERMAL BREAK DIRECT DRIVE THE TB-DD, IT IS SHOWN WITH 3 ROWS OF WINDOWS 200MM x 37MM WITH 300 MM CENTRES ALSO SHOWN WITH SAFETY PHOTOCELLS AND OPTO SAFETY EDGE.

SPECIFICATION

SHUTTER CURTAIN

Manufactured from interlocked aluminium sections with twin ribbed faces for rigidity, complete with hardened security bars. Specially coated using SP80 abrasion resistant paint system producing a hard wearing door panel coating. The curtain, when assembled, is held in position with purposely designed injection moulded end fittings, manufactured from hard wearing nylon-6. The bottom of the shutter is terminated with a purpose designed extrusion.

BOTTOM RAIL

Formed from cold rolled steel section complete with rubber weather buffer to provide a water tight barrier when the door is closed.

ROLLER BARREL ASSEMBLY

Constructed from mild steel tube with helicoil counter balance springs, mounted on 25mm steel shaft, with mild steel bearing blocks at each end and incorporating high speed bearings. Tube and shaft sizes vary according to overall door dimensions and weight.

ELECTRIC MOTOR

Shaft mounted Guthrie Douglas Safedrive motors as standard, Complete with integral safety break and manual hand chain for emergency operation.

ROLLER HEAD BRACKETS

Fabricated from steel plate 406 mm laser cut plate as standard, bespoke designs for larger shutters

COIL CASING

Constructed from steel sheet thickness dependant on shutter width (Optional Upgrade)

GUIDE ASSEMBLY

Guide assembly is of sufficient depth to withstand normal wind loadings. The exact size varies depending on the size of the opening. Guides are formed from cold rolled channel sections secured to the opening by continuous steel angles, or from specially designed pressed steel section to give additional protection from high winds.

LOCKING

Via the geared electric motor – additional locking systems available, Ground locks, Side locks, (with electric interlocks)

FINISH

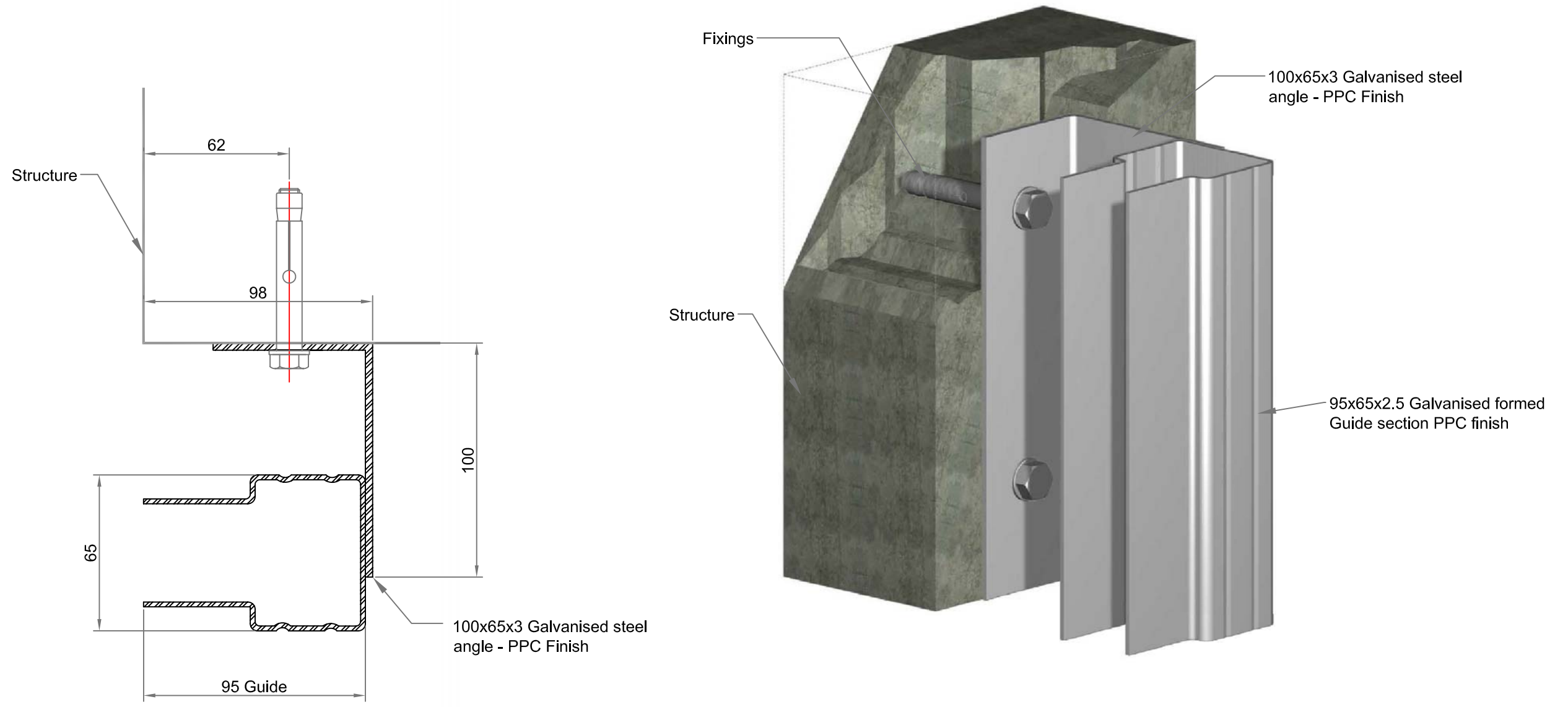
All parts not galvanised are painted with one coat primer
CURTAIN - Constructed from a 50mm flat / 75mm curved steel scroll laths interlocked with steel end locks and galvanised double formed bottom rail.

OPTIONAL EXTRAS

Powder coated finish to any BS or RAL number
Ground locking units and interlock
Burglar alarm connection
Timer activation
Remote operation
Sentinal security gate

OPTIONAL PERSPEX VISION PANELS
200mm x 37mm

Fixing To:-	
Steel	M8/M10 Set Screws
Brick	M8/M10 Rawlbolts/Sleeve Anchors
Blockwork	M8/M10 Rawlbolts/Sleeve Anchors
Timber	M8/M10 Coach Screws
Concrete	M8/M10 Rawlbolts



TYPICAL DETAIL
Cross Section through Guide

GUARDIAN

DOOR SOLUTIONS FOR ALL REQUIREMENTS

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Leigh on Sea, SS9 5PR
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www.guardiandoors.com

UNLESS OTHERWISE INDICATED
ALL DIMENSIONS IN MILLIMETERS
AND ALL TOLERANCES ±1.0

DRAWN	CHK'D	APP'D	DATE	SCALE
CH			29/11/12	1:2@A3

TITLE
TYPICAL DETAIL INSULATED GUIDE

Drwg No: INS Guide Detail
Guardian maintains a policy of progressive design and we reserve the right to modify specifications without prior notice or alteration to this drawing

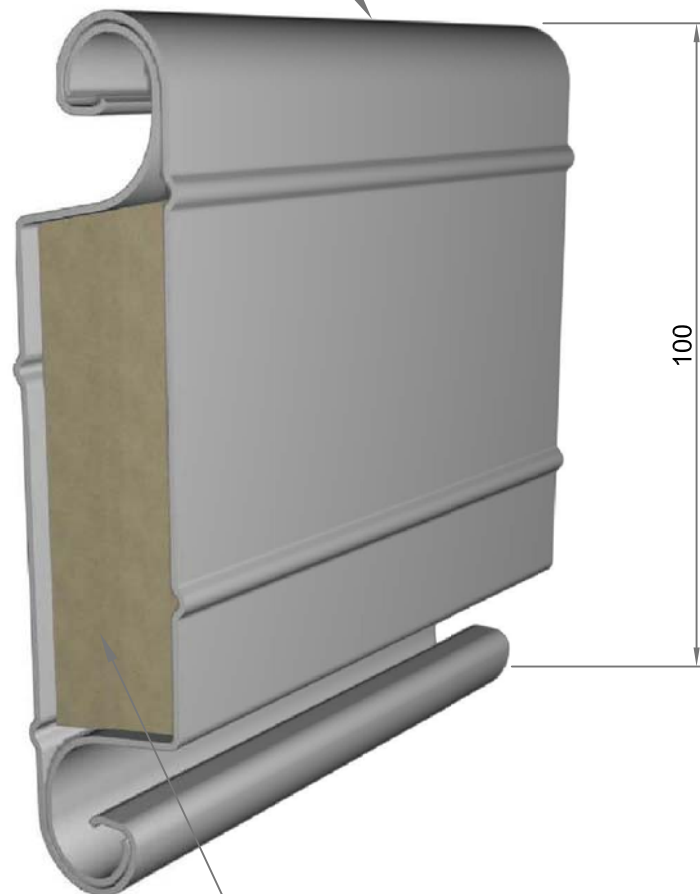
ISSUE	DATE	APP'D
1	26/07	PN

1 2 3 4 5 6 7 8

A

A

100x0.7 ThI Galvanise
Twin skin lath
Galvanise PPC Finish



Ceramic fibre infill (Insulated Fire Roller Shutters)
Ecotec Polyurethane infill (Standard Insulated Roller Shutters)

TYPICAL DETAIL
Section Through Insulated Lath
Used on Standard and
Fire Rated Insulated Roller Shutters

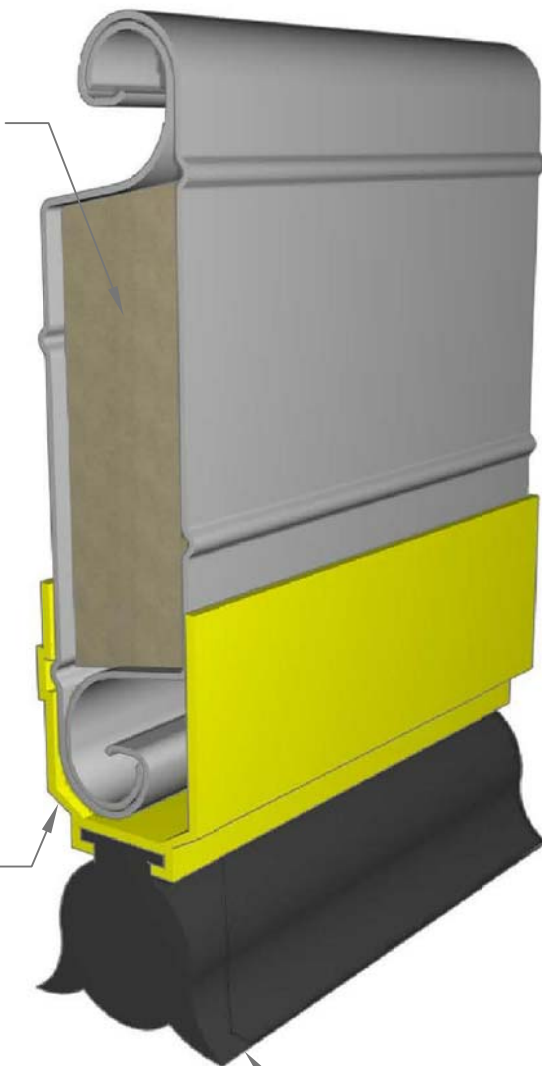
Ceramic Fibre infill



Heavy duty bottom bar
section

TYPICAL DETAIL
Section Through Bottom Bar
Fire Rated Insulated Roller Shutters

Ecotec Polyurethane infill



Yellow plastic carrier
(Also available in aluminium)

Rubber Bottom Bar

TYPICAL DETAIL
Section Through Bottom Bar
Standard Insulated Roller Shutters

B

B

C

C

D

D

E

E

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DRAWN

CHK'D

APP'D

DATE

SCALE

Drwg No: INS Lath Details

ISSUE

DATE

APP'D

CH

29/11/12

A3

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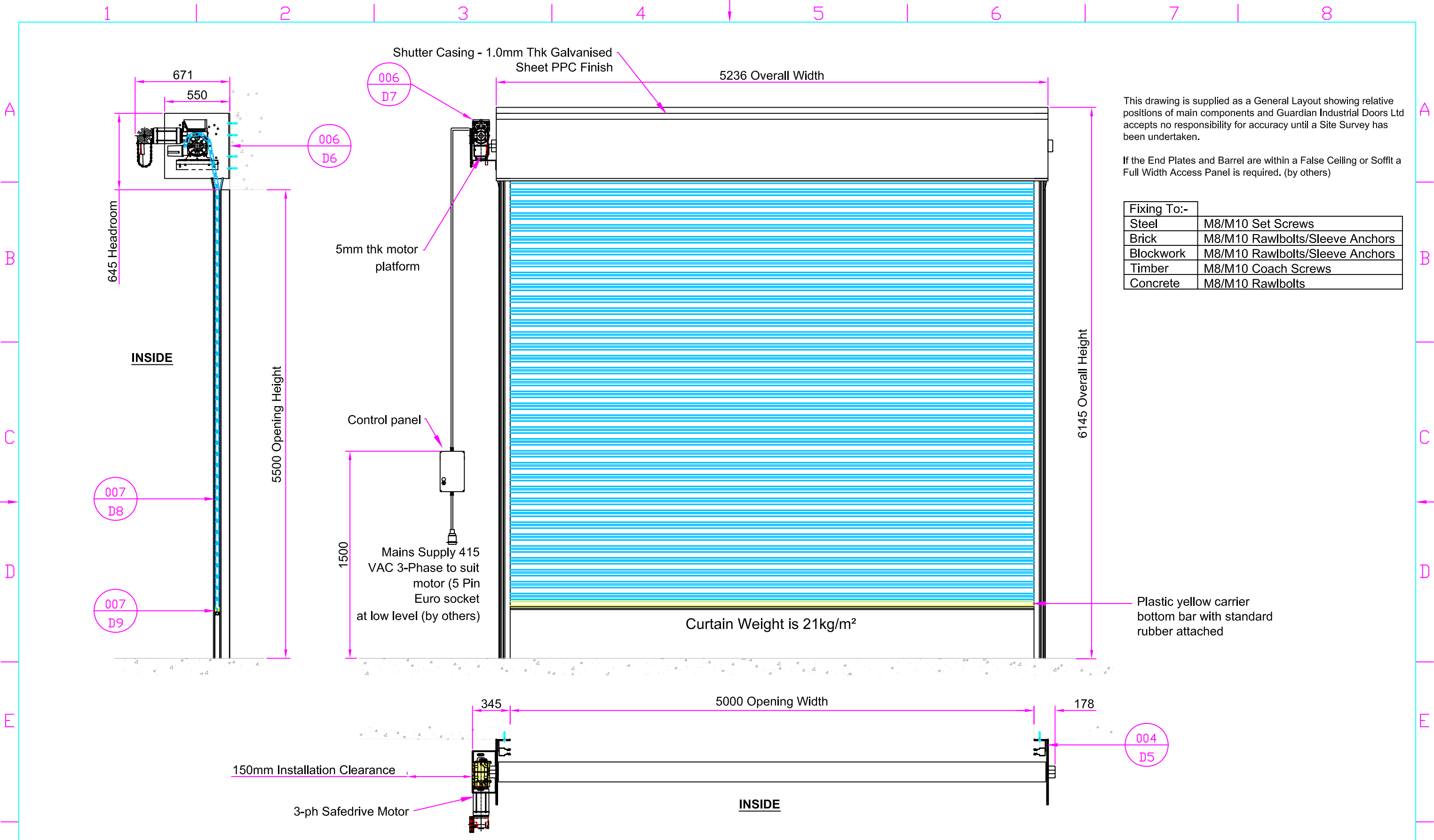
TITLE

TYPICAL INSULATED LATH AND
BOTTOM BAR DETAILS

1 2 3 4 5 6 7 8

F

F



This drawing is supplied as a General Layout showing relative positions of main components and Guardian Industrial Doors Ltd accepts no responsibility for accuracy until a Site Survey has been undertaken.

If the End Plates and Barrel are within a False Ceiling or Soffit a Full Width Access Panel is required. (by others)

Fixing To:-	
Steel	M8/M10 Set Screws
Brick	M8/M10 Rawlbolts/Sleeve Anchors
Blockwork	M8/M10 Rawlbolts/Sleeve Anchors
Timber	M8/M10 Coach Screws
Concrete	M8/M10 Rawlbolts

Plastic yellow carrier bottom bar with standard rubber attached

Curtain Weight is 21kg/m²

Mains Supply 415 VAC 3-Phase to suit motor (5 Pin Euro socket at low level (by others))

Control panel

5mm thk motor platform

Shutter Casing - 1.0mm Thk Galvanised Sheet PPC Finish

INSIDE

INSIDE

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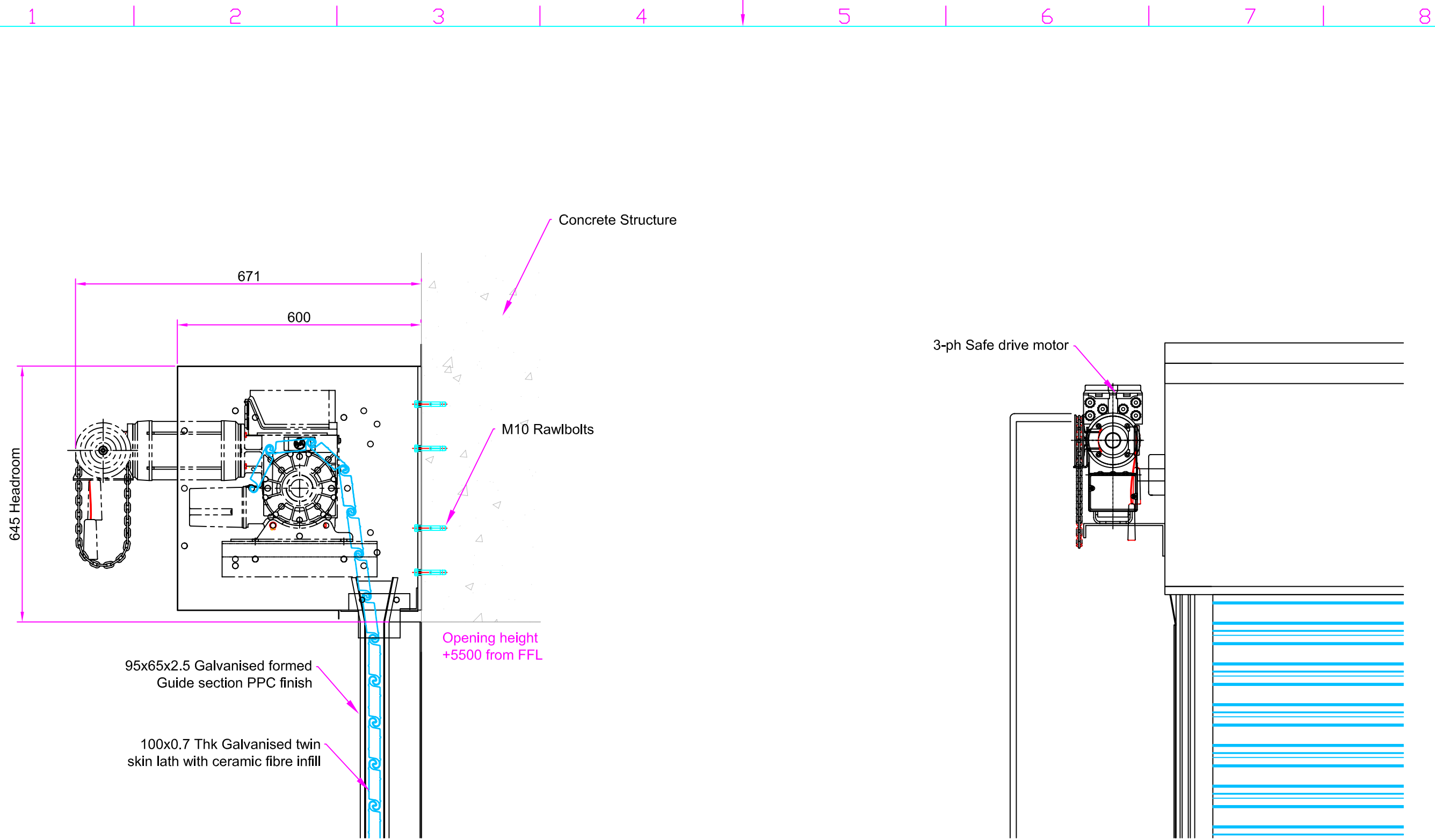
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DRAWN	CHK'D	APP'D	DATE	SCALE
CH			26/07/12	1:30@A3

TITLE
**Industrial Thermal Break Shutter
General Layout 6115x5154**

Drwg No: IND TBS DWG 005
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DETAIL 06 - Section through drive end (1:10)

DETAIL 07 - Front Elevation drive end (1:10)

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CH			26/07/12	1:10@A3

TITLE
**Industrial Thermal Break Shutter
Detail 06 & 07**

Drwg No: IND TBS DWG 006

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0800 783 6602

ROLLER SHUTTERS - SECTIONAL OVERHEAD DOORS - INSULATED DOORS - FOLDING DOORS
 STEEL DOORS - FIRE RATED DOORS - SECURITY DOORS - SLIDING GATES - HIGH SPEED DOORS

Construction Products Regulation

Declaration of conformity and performance

1. Identification code – THERMAL BREAK INDUSTRIAL
2. Serial Number - _____
3. Year of manufacture _____
4. Intended use - Internal or external access door.
5. Manufacturer - Guardian Industrial Doors LTD - 45 Progress rd, Leigh – On – Sea, Essex, SS9 5PR
6. Authorised representative : N/A
7. Relevant harmonised standards: BS EN 13241-1:2003+A1:2011, PDQ labs Warrington APT 1104 performed initial type tests under EN13241-1 2003, EN12424:2000, EN12444:2001, EN12604:2000, and issued test reports, 158735/1, 158735/2, 158735/3 157386
8. European Technical assessment: Not applicable.
9. Declared performance

	Guardian Industrial Doors LTD 45 Progress Road Leigh –On –Sea Essex SS9 5PR	
Characteristic	Declared Performance	Harmonised Standard
Resistance to wind load	Class 5	BSEN 13241-1:2003 + A1 :2011 (In accordance with the machinery directive MD/98/37/EC.)
Dangerous substances	None	
Safe opening	Pass	
Mechanical resistance and stability	Pass	
Operating forces	Pass	
Thermal resistance	NPD	
Air Permeability	NPD	
Durability of Water tightness, Air permeability and thermal resistance against degradation.	NPD	

Specific technical documentation: Operation and maintenance manual.

10. The performance of the product in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is the sole responsibility of the manufacturer identified in point 5.

Signed on behalf of the manufacturer by:

R. Everitt.

General Manager



Guardian Industrial Doors Ltd
 Managing Director: RW Everitt Company Secretary: E Everitt
 Registered Office: 45 Progress Road, Leigh on Sea, Essex SS9 5PR
 Fax No 01702 260117
 Registered in England No 1447746

L20 DOORS / SHUTTERS / HATCHES

610 ROLLER SHUTTER

Product reference: GUARDIAN THERMAL BREAK RANGE – INDUSTRIAL MODEL

Arrangement: Vertical roller shutter

Accreditation: BS EN 1324

Insulated Steel Roller Shutters.

A vertical operated heavy duty insulated roller shutter.

Dimensions:

Opening height up to 8000mm, opening width up to 8000mm..

Contact Guardian Doors Technical Department for advice on larger doors.

Weight: 45 kg/m² of door opening.

Steel Curtain – (Aluminum curtain available on request)

0.7mm galvanised steel, each section 100mm deep. The lath is made up from two individual lath sections held together over their length by the interlocking profile quirk section. The lath is built up together with endlocks to form the complete curtain. Infill is inserted into each lath section to provide a 0.7 W/m²/K U-value. The bottom of the curtain is fitted with an extrusion complete with an interlocking rubber strip.

Roller Assembly

Constructed from mild steel tube of sufficient gauge to prevent deflection, mounted on bright steel shafts running in ball races, reduction drive gearing where applicable is by machine cut steel gears or chain drive to suit the size of the opening.

Endplates

Roller barrel assembly supported by mild steel endplates with mounting angles for connection to structure.

Side Guides

Cold rolled galvanised steel to form a channel section. Guides are fitted with a steel mounting angle in order to secure the guides to the opening structure. Plastic carrier with double brushes strips are provided on both faces of the guide this ensures a snug fit around the roller curtain to reduce heat loss.

Brush Strip

Aluminum extrusion with nylon brush for installation to structural soffit of the opening.

Electric Motor Operation 415v 50Hz 3 phase SafeDrive - motor with emergency hand chain override. Can be handed to suit site conditions.

Control panel – With lcd status display, one touch impulse opening, hold to close. Also features maintenance alert system, fault recording, operation counter,

Finish

All parts not galvanised are painted one coat protective primer (ex works), ready for site painting by others. Consult with Guardian Industrial Doors Ltd technical literature for details. Guardian Doors can also provide a design and specification advisory service and it is recommended that they are consulted early in the design process.

Manufacturer: GUARDIAN INDUSTRIAL DOORS 45 Progress Road Leigh On Sea Essex, SS9 5PR Tel: 01702 512424. Fax: 01702 510015. Email: mail@guardiandoors.com Web: www.guardiandoors.com

OPTIONS

Cosmetic

Vision panels -Single or multiple clear polycarbonate 197 x 43mm vision panel incorporated into the lath sections.

Hood cover

Formed from galvanised steel to enclose the rear of the shutter coil. Also available with powder coat finish.

Motor cover

Formed from galvanised steel to encase the electric motor unit. Also available with powder coat finish.

Controls and operation

Key switch control unit – flush mounted

Key switch control unit – surface mounted

External weatherproof push button

Key lockable push button control

Group control unit for up to 6 shutters simultaneously (**will require additional safety pressure edge.**)

Radio controlled (**will require additional safety pressure edge.**)

Safety Systems

Safety bottom edge if safety bottom edge strikes an object the shutter stops and returns to the open position

Safety photo cell beam if safety beam is broken the shutter stops and returns to the open position

Security