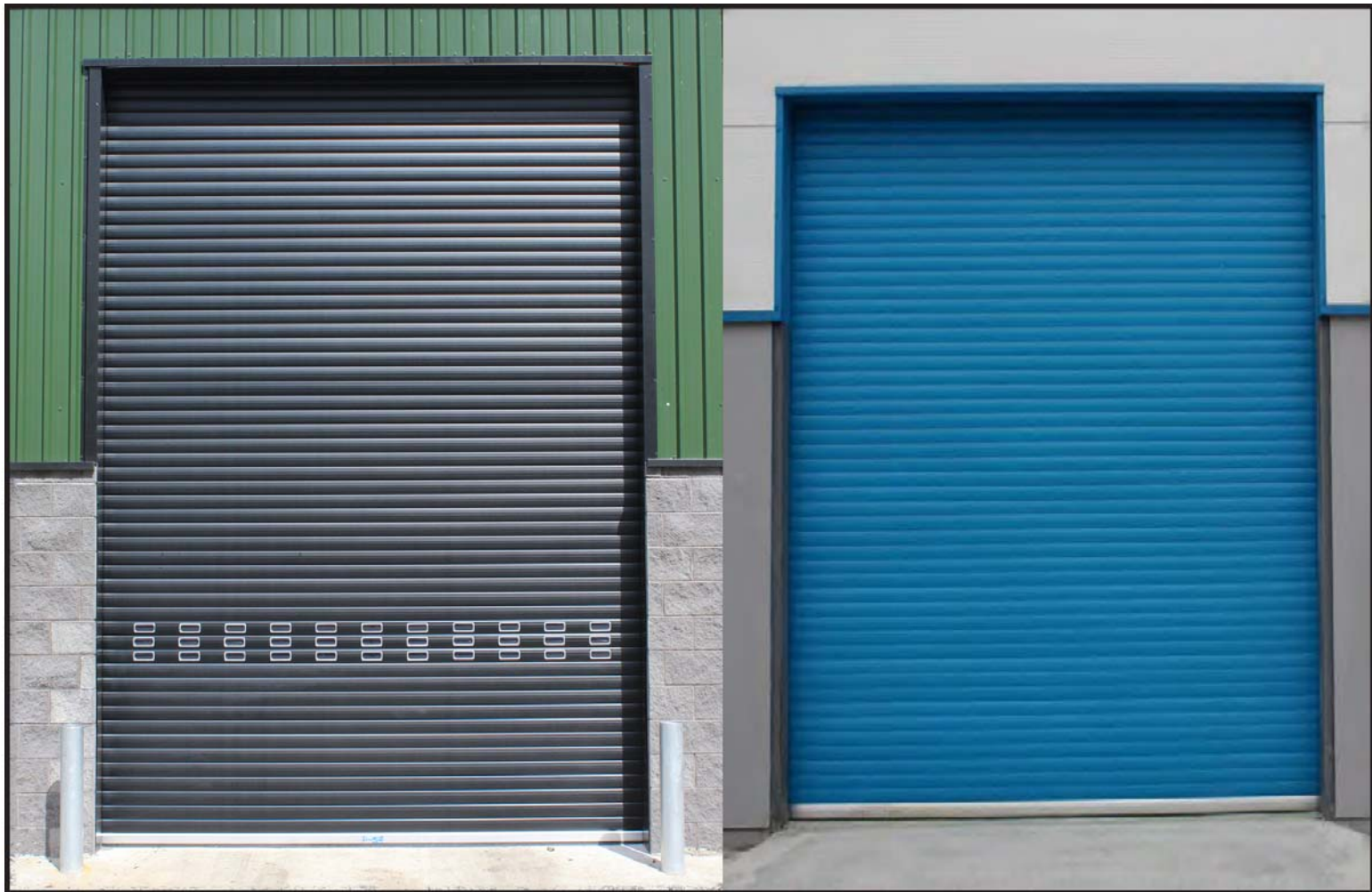


Ellickson - Industrial Insulated Roller Shutter Door



Custom Made Quality Solutions.

03 – EC Declaration



DECLARATION OF CONFORMITY

Ellickson Doors Ltd declares under its own responsibility that the Insulated Roller Doors:

Make: Ellickson Doors Ltd.
Model: EDL. Insulated Roller Shutter Door.
Year: October 2018.

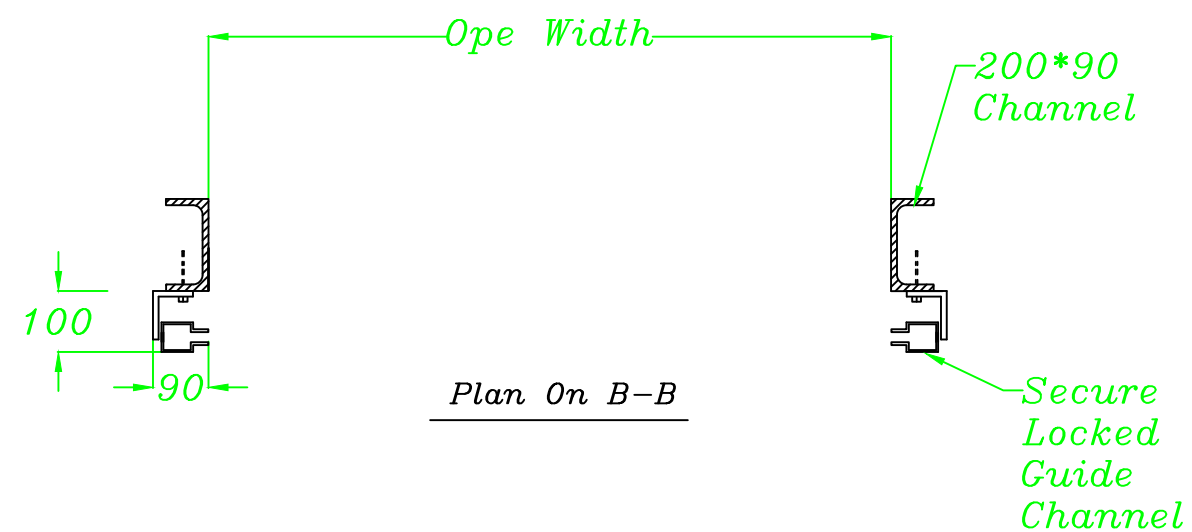
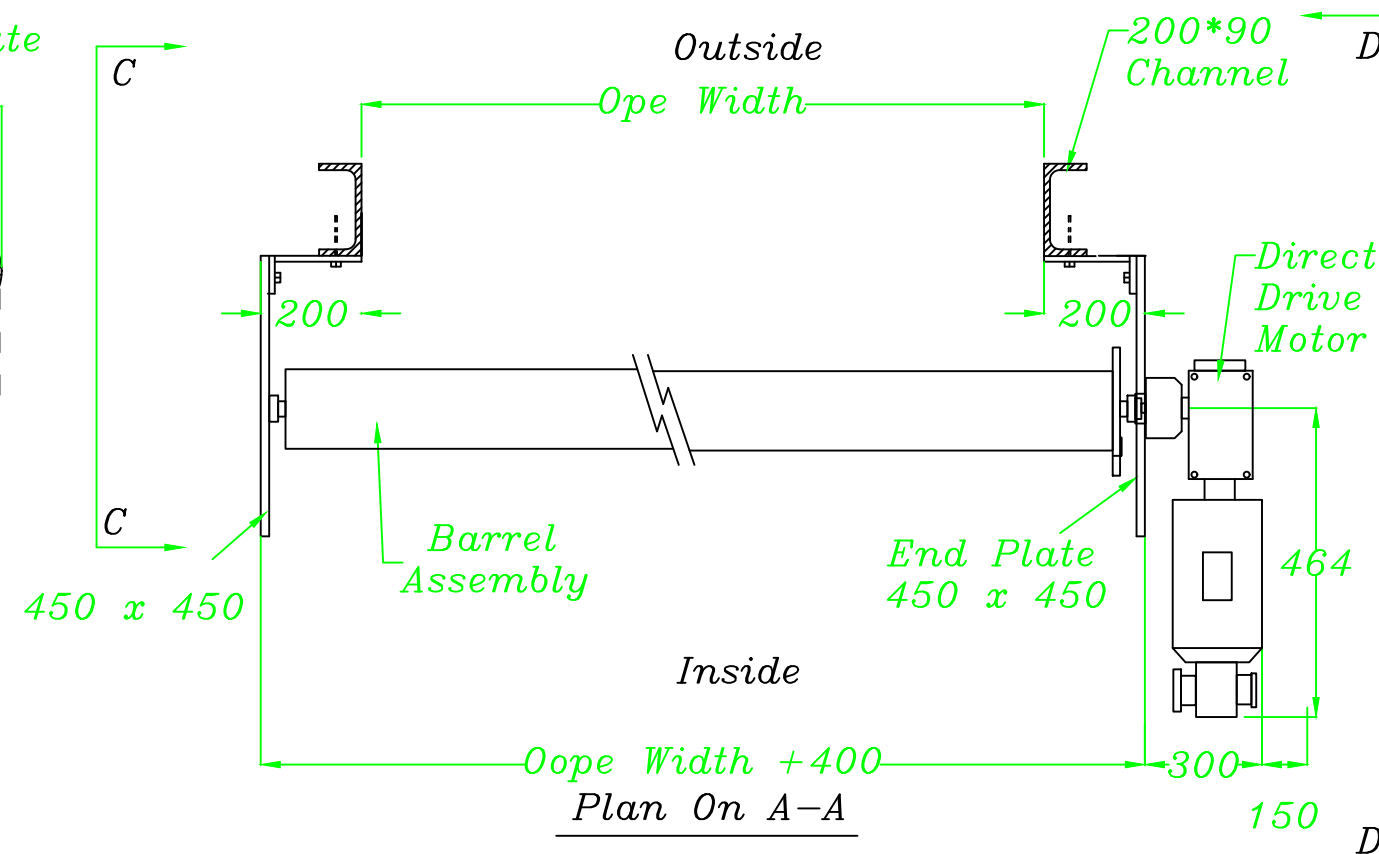
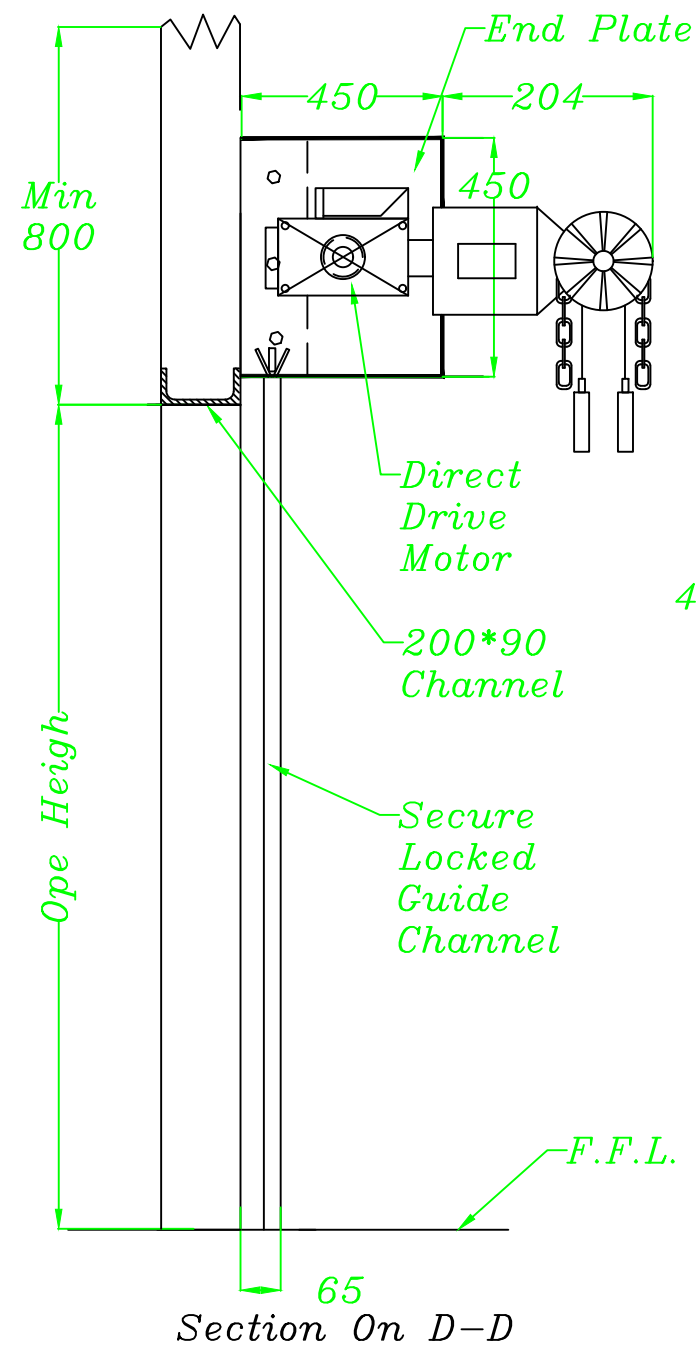
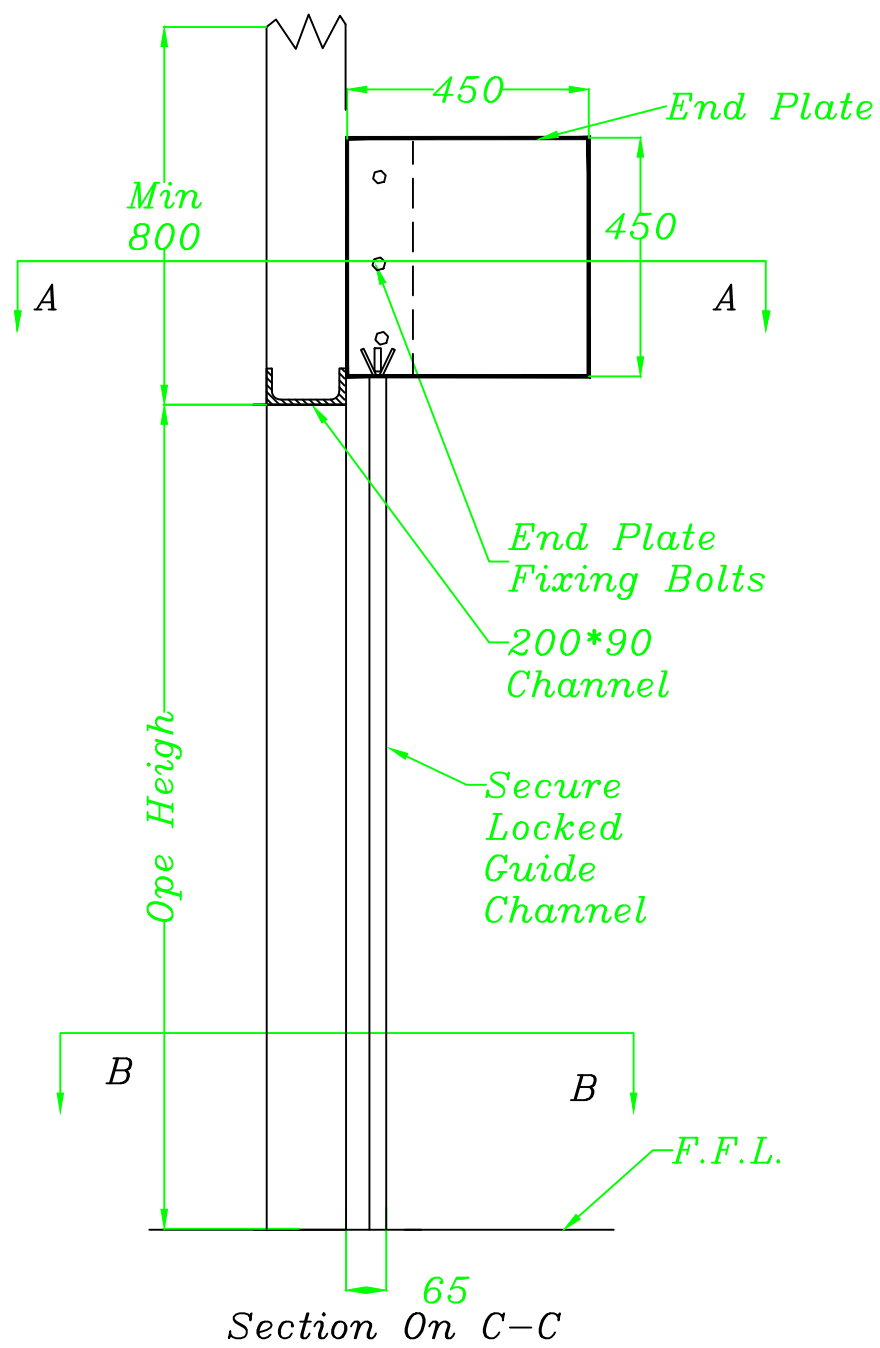
Is compliant with the essential requirements of the following directives:

- 89 / 106 / EC** Construction Products Directive.
- 98 / 37 / EC** Machinery Directive.
- 89 / 336 / EC** Electromagnetic Compatibility Directive.
- 73 / 23 / EC** Low Voltage Directive.


And have been calculated and designed pursuant to the following European harmonised standards:

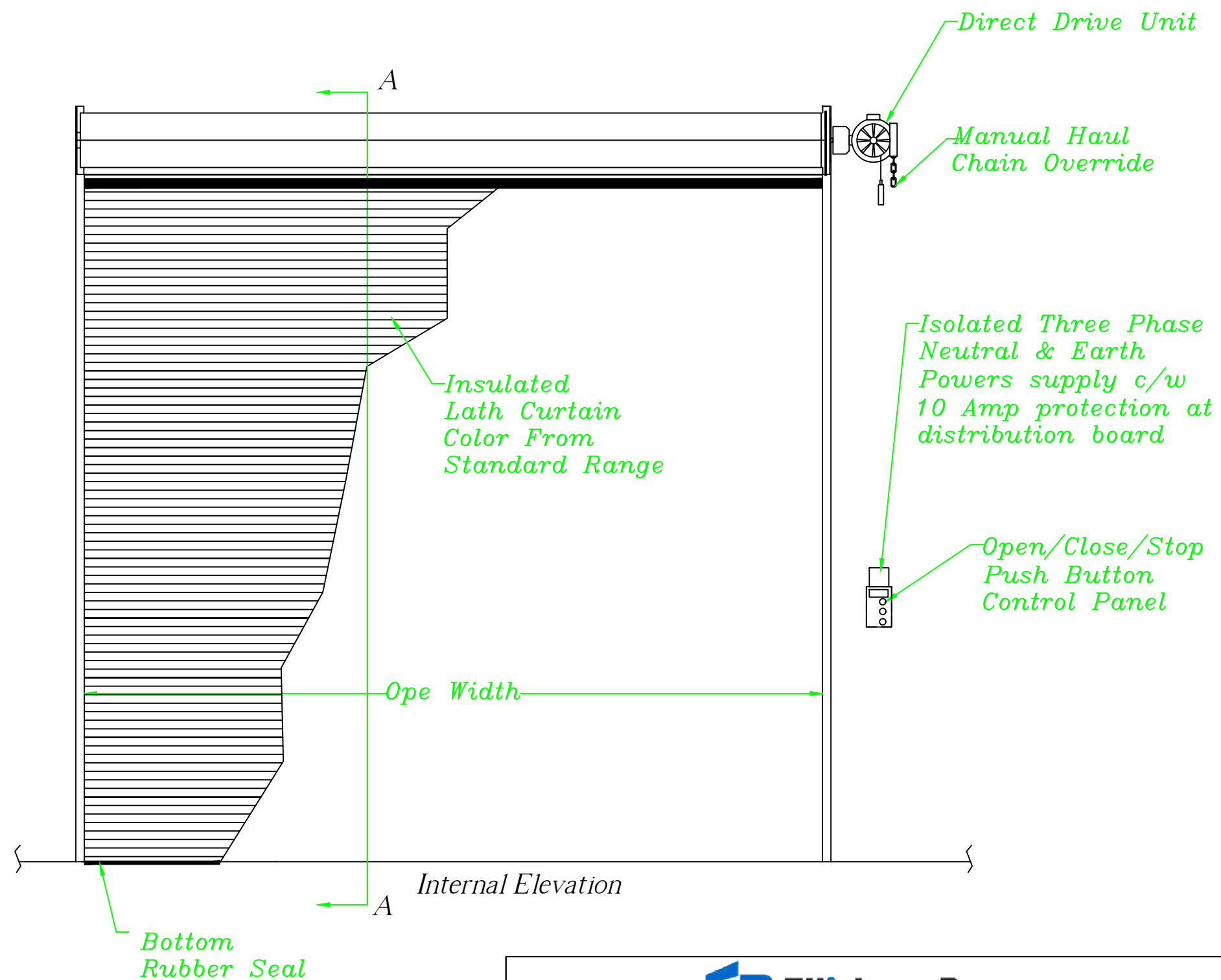
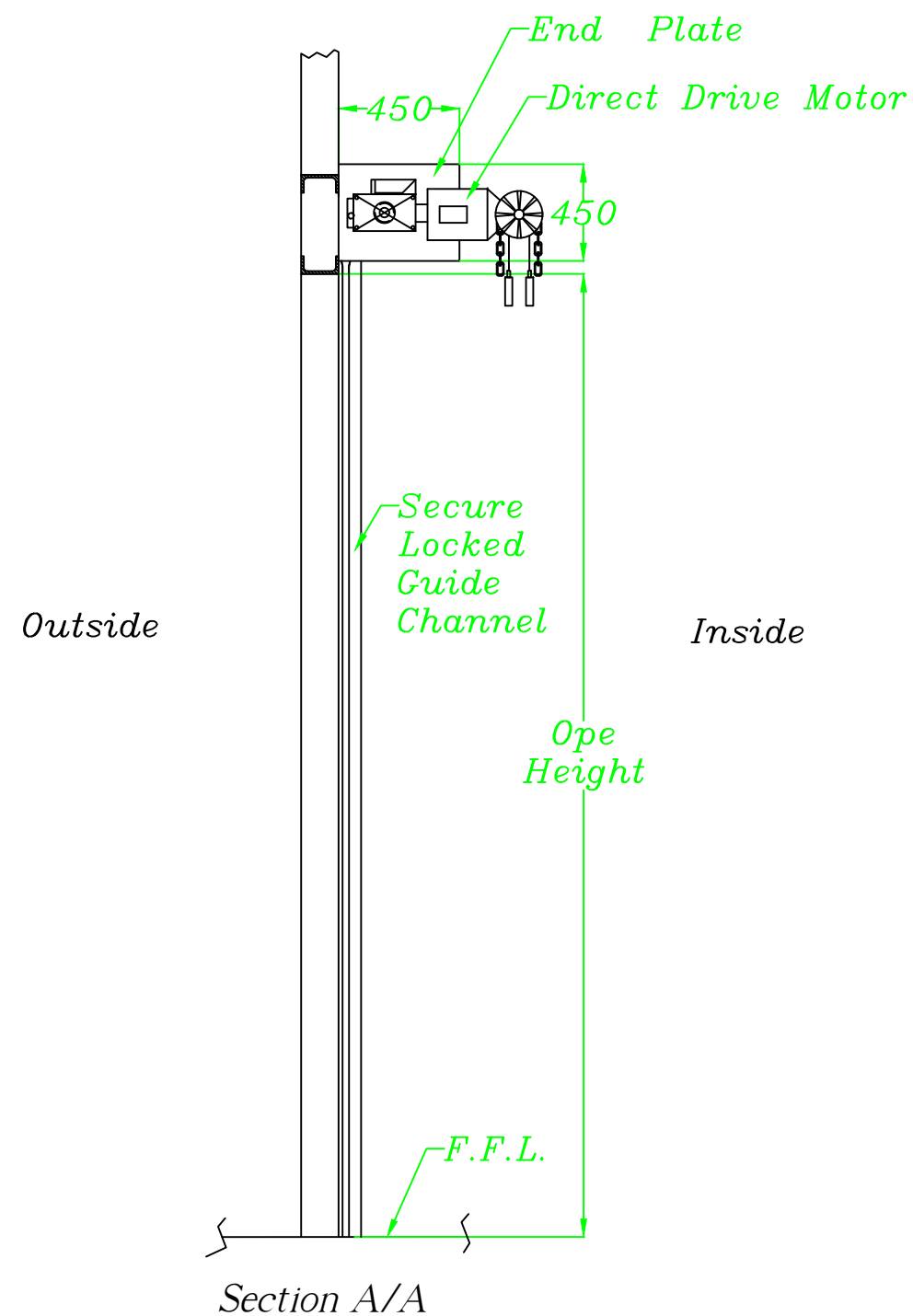
- EN 12424:2000** Resistance to wind loading Class 5.
- EN 12425:2000** Resistance to water penetration Class 3.
- EN 12426:2000** Air permeability Class 3.
- EN 12453:2000** Safety in use of power operated doors.
- EN 12604:2000** Mechanical aspects.
- EN 12605:2000** Mechanical aspects: Testing process.
- EN 1954-1:1996** Safety of machines: Safety parts and electrical controls.
- EN 13241-1:2003** Thermal Insulation U= 1.6 W/ M2k.

.
.




Door Ref: -
 1 No Insulated Roller Shutter Door
 Ope Size ****mm W x ****mm H
 PVC finish from standard range of colours
 Guide track and parts galvanised finish
 Haul chain override in the event of mains power failure.
 Electric operation by 3 phase direct drive motor unit.
 Isolated Power supply 3 Phase Neutral + Earth
 C/W 10 Amp Protection at distribution panel
 Activation By Open/Close/Stop Push Button Control Panel

 <p>Unit 16A, Six Cross Roads Business Park, Waterford TEL: 051-370962 MOB: 087 2859866, 087 2306843</p>			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETRES DO NOT SCALE DRAWING		DRAWING TITLE <i>Ellickson Insulated Roller Shutter Door</i>	
DRAWN BY <i>A O Brien</i>	DATE <i>14-1-22</i>	STORAGE REFERENCE	JOB REFERENCE
CHECKED BY		DRAWING NO. <i>IRSD-PJH-01b</i>	



Door Ref: -
 1 No Insulated Roller Shutter Door
 Ope Size ****mm W x ****mm H
 PVC finish from standard range of colours
 Guide track and parts galvanised finish
 Haul chain override in the event of mains power failure.
 Electric operation by 3 phase direct drive motor unit.
 Isolated Power supply 3 Phase Neutral + Earth
 C/W 10 Amp Protection at distribution panel
 Activation By Open/Close/Stop Push Button Control Panel

 <p>Unit 16A, Six Cross Roads Business Park, Waterford TEL: 051-370962 MOB: 087 2859866, 087 2306843</p>			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETRES DO NOT SCALE DRAWING		DRAWING TITLE Ellickson Insulated Roller Shutter Door	
DRAWN BY	DATE	STORAGE REFERENCE	JOB REFERENCE
A O'Brien	14-1-22		
CHECKED BY		DRAWING NO.	
		IRSD-PJH-02b	



Ellickson Doors
SUPPLY • INSTALL • SERVICE

Unit 16A, Six Cross Roads Business Park, Waterford, Ireland.

(T) + 353 (51) 370962 (M) + 353 (87) 2859866 www.ellicksondoors.com info@ellicksondoors.com

95mm Industrial Insulated Roller Doors





All doors individually matched to customer specific requirements for colour and size.



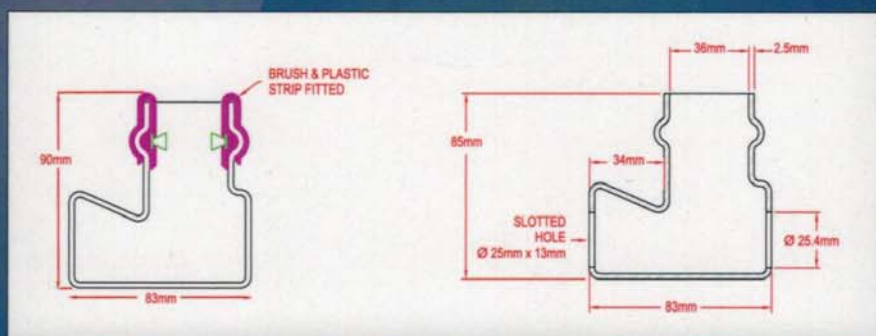


All doors individually matched to customer specific requirements for colour and size.



Magroll 90mm Guide

- 83 x 90mm roll formed guide rail. Manufactured from 2.5mm galvanised steel.
- Unique pre-punched guide rail offers easy fitting.
- Slotted holes allow for adjustment during installation and guide will be cut in 500mm increments from 2500mm - 8000mm.
- Guides can be cut to specific lengths without holes as per customer request.
- Snap-on PVC brush carrier with fixed mohair on both sides reduces heat loss and ensures quiet operation.
- The Magroll 90mm guide system can be used with or without wind locks.



Top Hanger

- Unique top hanger (Barrel Lath) suitable for 127mm or 139mm barrel or greater (5" or 5.5" inches).
- Recessed hanger design conceals 10mm nut and bolt fixing.
- Hanger profile protects lath during operation.
- Supplied at 360mm with an 11mm pre-drilled hole.



Bottom Rail

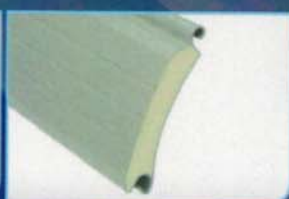
- Aluminum extruded bottom rail with weather seal.
- Special air cushion rubber strip ensures solid seal from door to door.
- Solid design provides increased level of security.



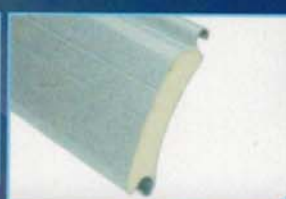
Bottom Rail
with Safe Edge



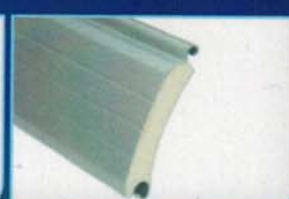
White
RAL 9003



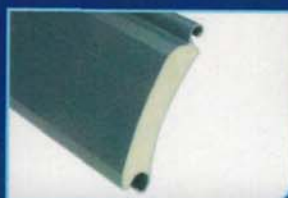
Goosewing Grey
RAL 7038



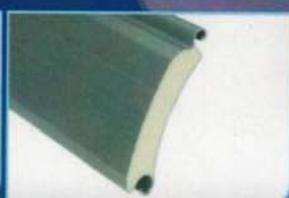
Galvanised



Silver
RAL 9006



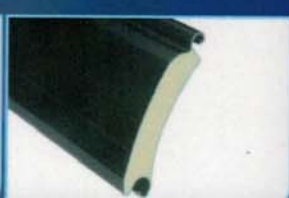
Dark Grey
Nearest RAL 7011



Merlin Grey
BS18 B25



Anthracite
RAL 7016



Black
RAL 9005



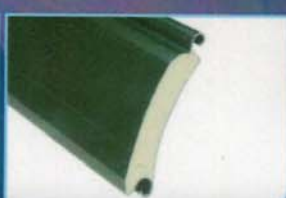
Red



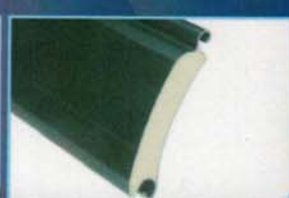
Moorland Green
BS12 B21



Olive Green
RAL 6003



Dark Green
Nearest RAL 6009



Juniper Green
BS12 B29



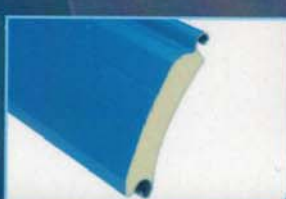
Chili Red
RAL 3000



Golden Oak



Van Dyke Brown
RAL 8014



Solent Blue
BS18 E53



Sargasso
Nearest RAL 5003

- Laminated coating provides superior anti-scratch resistance compared to painted surfaces.
- Wide variety of colours available for immediate manufacture.
- Textured finish for added durability.

Multiple Industrial Installation



- Designed for both industrial and domestic use.
- Very strong yet light at just 11.3kg per sq mtr.
- Laminated anti-scratch coating for extended lifespan.
- Also suitable for large domestic applications.



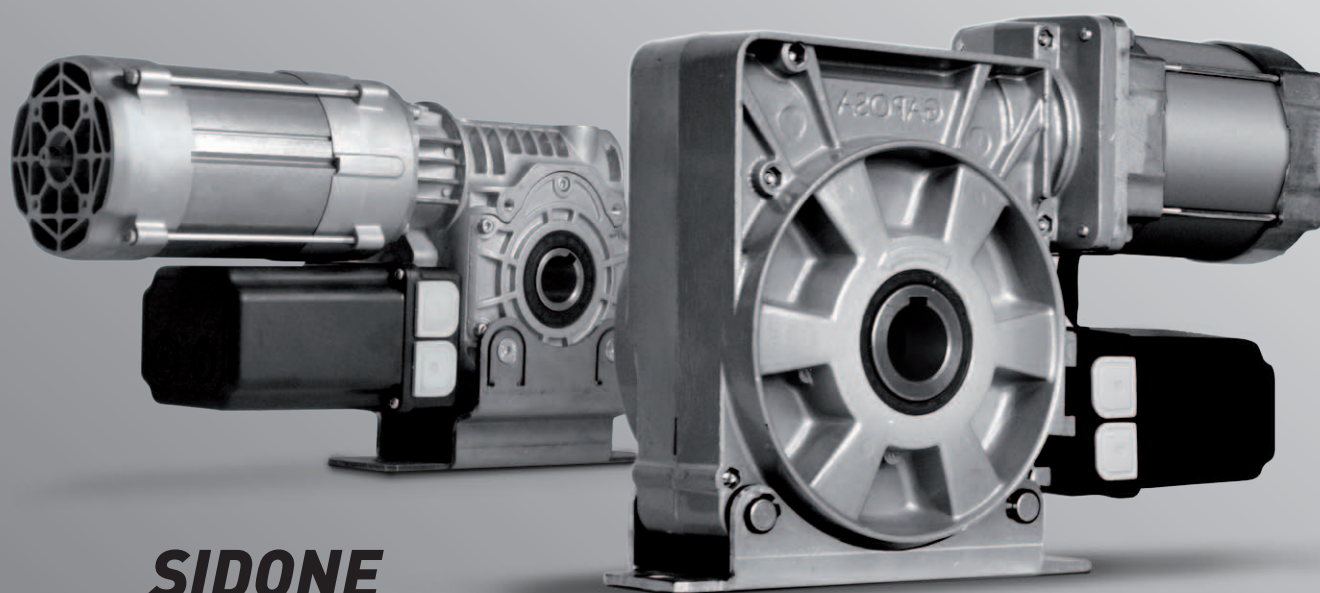
Insulated Industrial Roller Door

Magroll™ 95mm Industrial Insulated Doors are the first one piece industrial lath to be produced in Ireland and the UK. Every aspect of this product has been carefully designed from the choice of material to the unique shape of the profile. Below are some of the advantages of choosing our superior product.

- Use of PVC laminate coated steel ensures long lifespan and superior anti-scratch/wear properties.
- With a one piece lath the PU insulation is bonded to the outer skins ensuring a very strong lath.
- The design of our lath ensures that the profile rolls into a much smaller roll than other two piece laths, which is good news for applications where space is limited.
- We have available an extruded bottom slat with rubber extruded profile to seal the door to floor.
- A unique extruded aluminium profile for attaching the top lath to the barrel is of great benefit, it allows a bolt to be welded to tube and the extruded profile conceals the head of bolt to avoid damaging the laths when rolling around the tube.
- 90mm side guides are also produced by ourselves which have holes pre-punched for fitting and two PVC brush carriers are pushed onto the profile to ensure a very quiet operation.



Official distributor



SIDONE

Drives for rolling doors



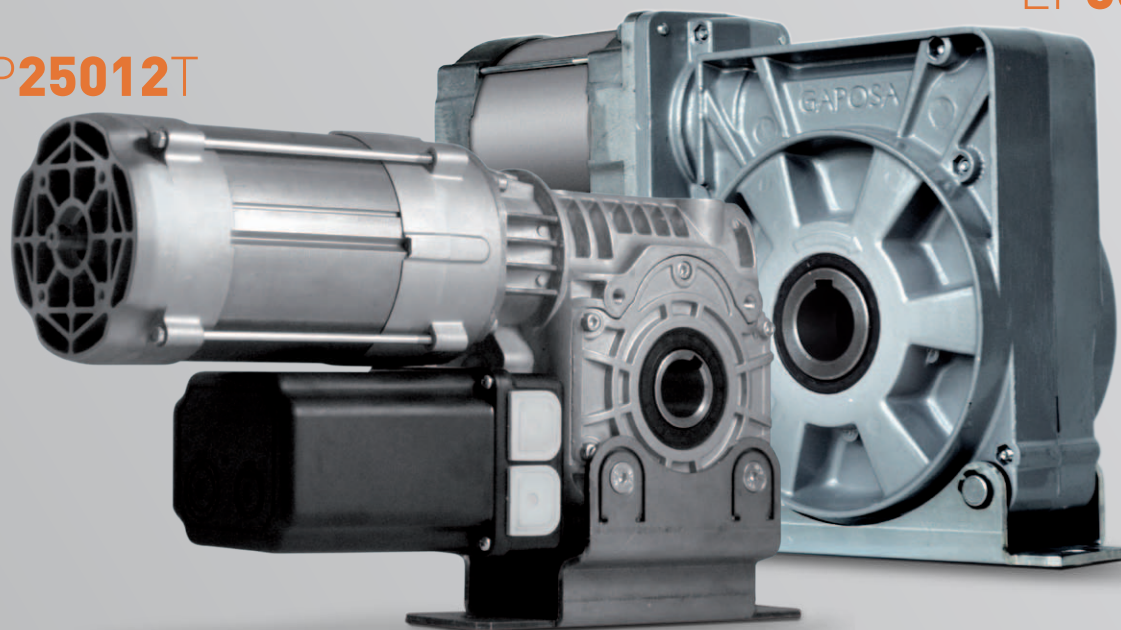
SAFETY BRAKES

safety device for rolling shutters without springs

Side motors with integrated safety brake for garage doors, commercial and industrial shutters

LP40011T
LP55011T
LP65011T

LP25012T



LP25012T

Torque (Nm)	250
Output Speed (Min ⁻¹)	12
Hollow shaft (mm)	30
Holding torque (Nm)	900
Power (kW)	1.1
Power Supply (Vac)	400
Frequency (Hz)	50
Amperage (A)	3.0
Working temperature	-5°C/40°C
Max Cycles Per Hour	20
Limit Switch range	18
Protection Rate (IP)	54
Weight (kg)	18

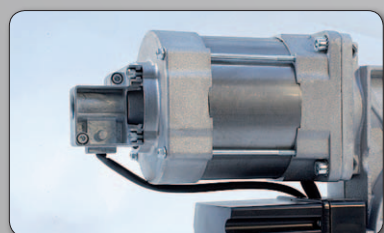
LP40011T

LP55011T

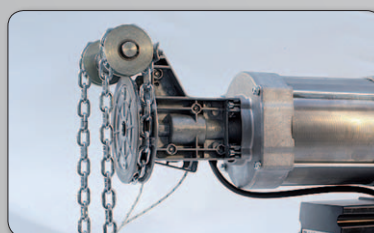
LP65011T

Torque (Nm)	400	550	650
Output speed (min ⁻¹)	11	11	11
Power supply (Vac)	400	400	400
Frequency (Hz)	50	50	50
Power (kW)	1	1.2	1.8
Absorption (A)	3	3.8	4.5
Duty rating (ED)	S3-60%	S3-50%	S3-50%
Limit switch max turns*	12	12	12
Working temperature	-5°C/40°C	-5°C/40°C	-5°C/40°C
Noise (dB)	<70	<70	<70
Protection rate (IP)	54	54	54
Weight (kg)	28	30	32

Override options



¹ Hand crank



² Hand chain
override

Control unit for three/single-phase motors

QC300 QC301



- 3phase control unit (QC300) / 1phase (QC301)
- More room while wiring
- Quick connections for power and limits cable
- Integrated buttons in the front cover for UP, STOP and DOWN control
- Inter-locked contactors for the best reliability
- Selectable safety input= optoelectric safety edge/nc contacts for safety beams
- Auto-check
- Selectable DOWN operating mode= dead man/momentary
- Automatic closing (selectable timing)
- Colors/sequences of led for visual display of the main functions/troubleshooting
- Parallel connection facility for grouping more QC300 in one push button
- IP rating: 54

Power supply 400 Vac (3Ph) - 50/60 Hz (**QC300**) | 230 Vac (1Ph) - 50 Hz (**QC301**)

Power supply external accessories 24VDC / max 70mA

Motor power max 2 kW

Protection fuse 315 mA

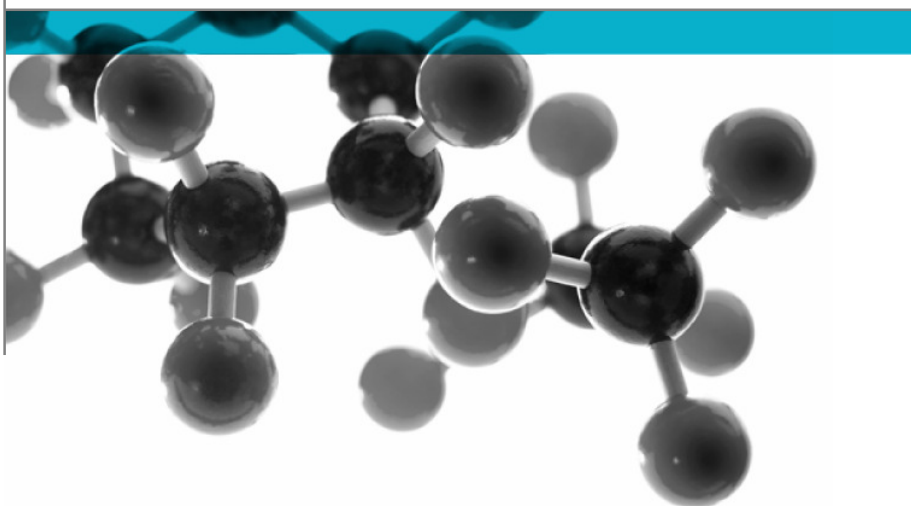
Protection rate IP54

Working temperature -10°C / +60°C

Dimensions 133 x 208 x 80 mm



EN13241-1:2003



TESTS OF INDUSTRIAL, COMMERCIAL and GARAGE DOORS and GATES

A Report To: D4 Products Ltd / Ellickson Doors Ltd

Document Reference: WIL 326588

Date: 06/02/2012

Copy: 01

Issue No.: 01

Page 1

Testing
Advising
Assuring

TEST CONCLUSIONS

Samples of:

Manufacturer D4 Products Ltd / Ellickson Doors Ltd

Product Insulated roller shutter laths

Model Magroll 95 mm insulated laths

have been tested in accordance with: BS6375-1:2009

By Exova Warrington APT, a UKAS accredited Testing Laboratory (No. 0621) and EC Notified Body number (No. 1104)

At Key Industrial Park, Fernside Rd., Willenhall. West Midlands. WV13 3YA.

Results and comments as detailed below:

Standard & Clause No.	Description	Compliance
EN 13241-1:2003 clause 4.4.1	Watertightness	NT
EN 13241-1:2003 clause 4.2.9	Release of dangerous substances	NT
EN 13241-1:2003 clause 4.4.3	Resistance to wind load – Class +5/-5	Yes
EN 12424:2000 clause 4.		
EN 12444:2001 clause 7.1.2		
EN 13241-1:2003 clause 4.4.5	Thermal resistance	NT
EN 13241-1:2003 clause 4.4.6	Air permeability	NT
EN 13241-1:2003 clause 4.2.2	Manual operation	NT
EN 12604:2000 clause 4.4.1		
EN 12605:2000 clause 5.1.5		
EN 12453:2000 clause 5.3.5		
EN 13241-1:2003 clause 4.2.8	Safe opening of vertical moving doors.	NT
EN 12604:2000 clause 4.3.4	Anti drop devices	
EN 12604:2000 clause 5.3.2	Out of balance forces	
EN 13241-1:2003 clause 4.3.3	Operating forces	NT
EN 12453:2000 clause 5.1		
EN 12445:2000 clause 5.2		
EN 13241-1:2003 clause 4.4.7	Durability	

No inferences can be made regarding performance against other requirements of this standard

Tests marked "N/A" are not applicable to the sample under test.

Tests marked "N/T" were not applied to the sample under test

AUTHORISATION

Tests performed by: Chris Bryan, Test Engineer

Report issued by: Chris Bryan, Test Engineer



Signed

Date 18th April 2013

For and on behalf of Exova Warrington APT

Report authorised by: Mark West, Assistant Operations Manager



Signed

Date 18th April 2013

For and on behalf of Exova Warrington APT

Report issued: 18 April 2013



NOTE.

Tests marked "Not UKAS Accredited" are not covered by the Laboratory UKAS accreditation schedule.

Tests marked NT were not tested

Tests marked NA are not applicable to the product on test.

The laboratory has tested the product supplied by the client as sampled in accordance with their own requirements

Exova Warringtonapt is an EC Notified Body Number 1104

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Document No.: WIL 326588
Author: C. Bryan
Client: D4 Products Ltd /
Ellickson Doors Ltd

Page No.: 3 of 12
Issue Date: 2/6/2012
Issue No.: 01



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PERFORMANCE CRITERIA & TEST RESULTS.....	10
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TEST DETAILS

CLIENT DETAILS

Company name D4 Products Ltd
 Ellickson Doors Ltd

Contact Bryan Northey

ORDER DETAILS

Order number Verbal Bryan
Dated 15/02/2013

SAMPLE DETAILS

Product Insulated roller shutter laths
Model Magroll 95mm Insulated lath D4
Manufacturer Products Ltd / Ellickson Doors Ltd
Markings None
Material Steel
Markings None
Date of Manufacture Unknown
Other information None

TEST DETAILS

Test specification BS EN 13241-1:2003 Industrial, commercial and garage doors and gate – product standard -
 Part 1: products without fire resistance or smoke characteristics
Test to clauses 4.4.3
Test methods EN 12489 Resistance to water penetration – test methods
 EN 12444 Resistance to wind load – testing and calculation
 EN 12427 Air Permeability – test methods
 EN 12605 Mechanical aspects – test methods
 EN 12604 Mechanical aspects – requirements
 EN 12445 Safety in use of power operated doors – test methods

Sample received 22/02/2013
Test started 25/02/2013
Test completed 25/02/2013

Special Test
requirements
Other reports to be
used in conjunction
with this report

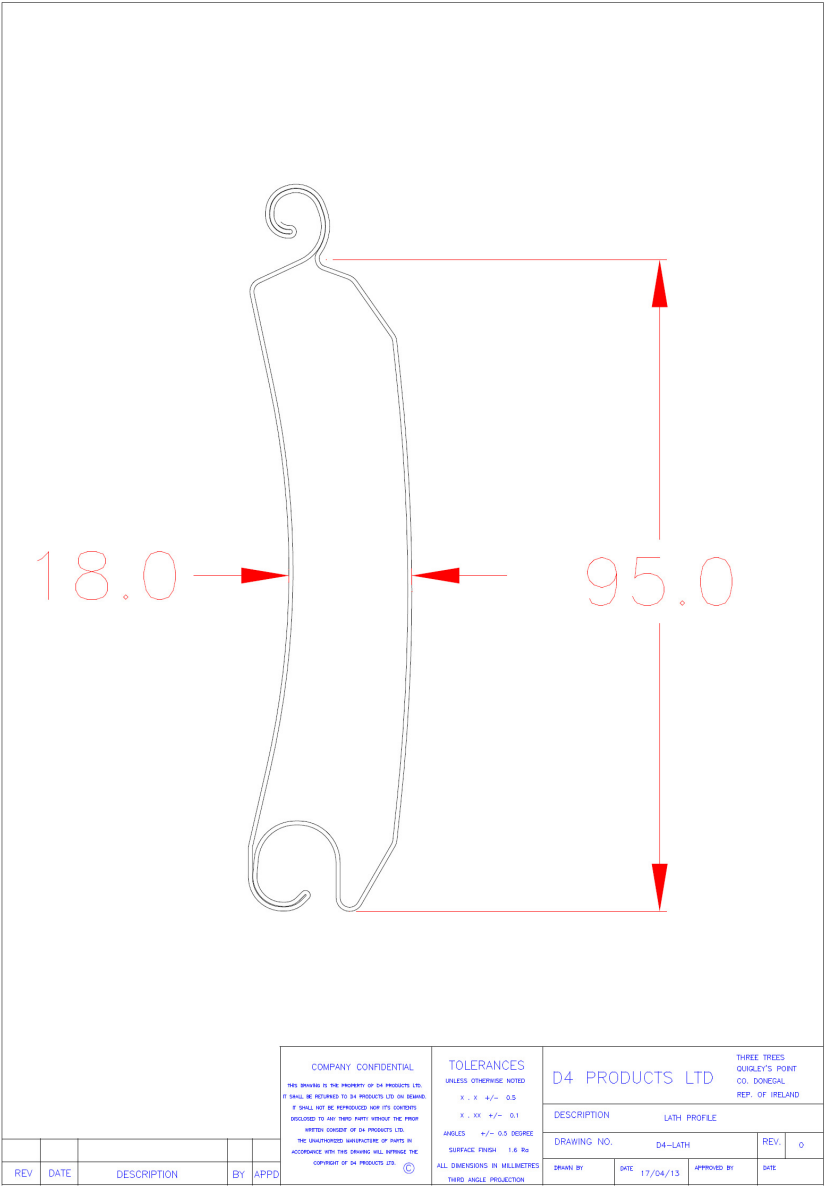
INITIAL OBSERVATIONS

The external face
of the sample



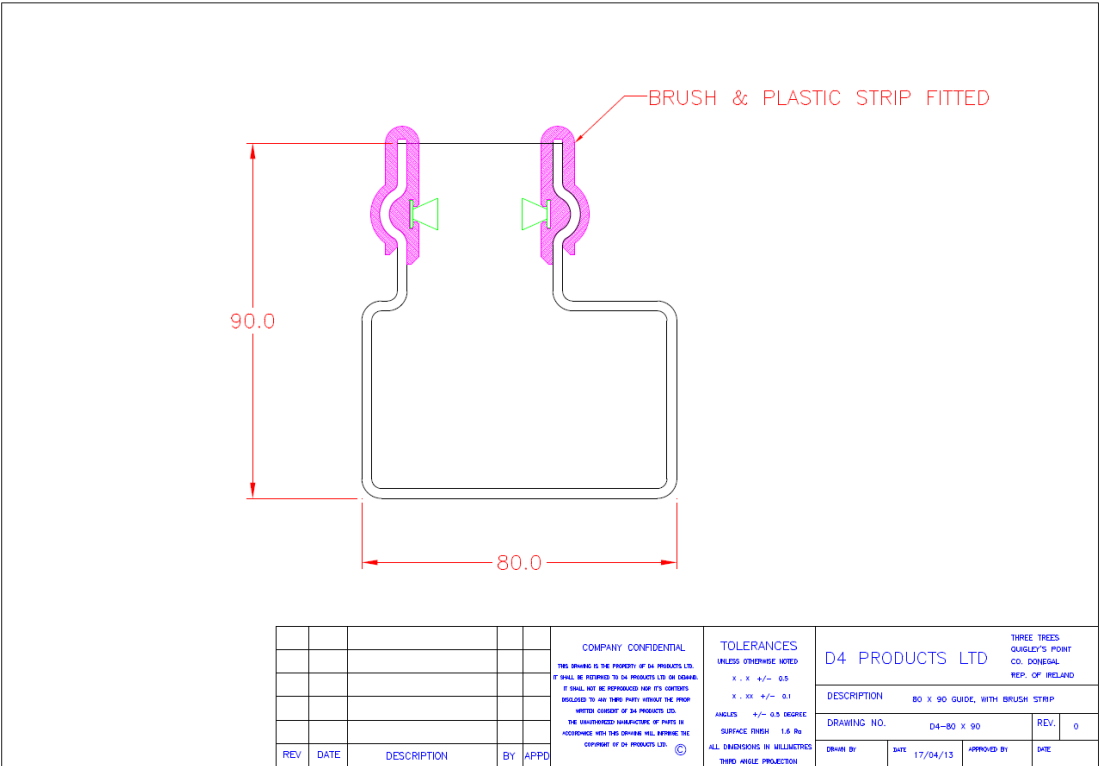
TEST SPECIMEN

Figure 1- Door details



Do not scale. All dimensions are in mm

Figure 2 – Frame Details



Do not scale. All dimensions are in mm

Item**Description****Door Details**

Model : Magroll 95mm insulated lath
Size : 7525 x 1070 mm
Construction and material : Steel
Date of manufacture : February 2013
Storage details : Factory

Frame Details

Model : Magroll Guide
Size : 80 x 90 mm
Construction and material : Steel
Date of manufacture : February 2013
Storage details : Factory

PERFORMANCE CRITERIA & TEST RESULTS

Wind Load test BS EN13241-1 Clause 4.4.3

Required Class

5

Atmospheric Conditions

Air Temp	19 °C
----------	-------

Test Sample

Overall Size of Door Sample	7525 x 1070 mm
Overall Size of Frame Sample	80 x 90 mm

Test 1 Outer face

Pressure (Pa)	Position of centre (mm)	Deflection (mm)	Movement out of guide	
			Left hand guide (mm)	Right hand guide (mm)
0	1040	0	0	0
375.0	800	240	14	18
562.5	775	265	20	26
875.0	745	295	24	27
1250.0	706	334	30	30
1300.0	701	339	36	33
2150.0	Rig could not go any higher at this point			

Test 2 Inner face

Pressure (Pa)	Position of centre (mm)	Deflection (mm)	Movement out of guide	
			Left hand guide (mm)	Right hand guide (mm)
0	1085	0	0	0
375.0	800	285	18	30
562.5	765	320	22	35
875.0	730	355	25	39
1250.0	700	385	31	47
1300.0	694	391	32	47

Wind Load Class Achieved

Inwards	5
Outwards	5

There were no breakages of any components of the door set
 There were no permanent deformation which could influence safety
 The was not sufficient deflection to cause the door to disengage from the frame

CONCLUSIONS

**Evaluation
against
objective**

The roller shutter supplied achieved a class 5 wind rating in both directions

**Observations &
comments**

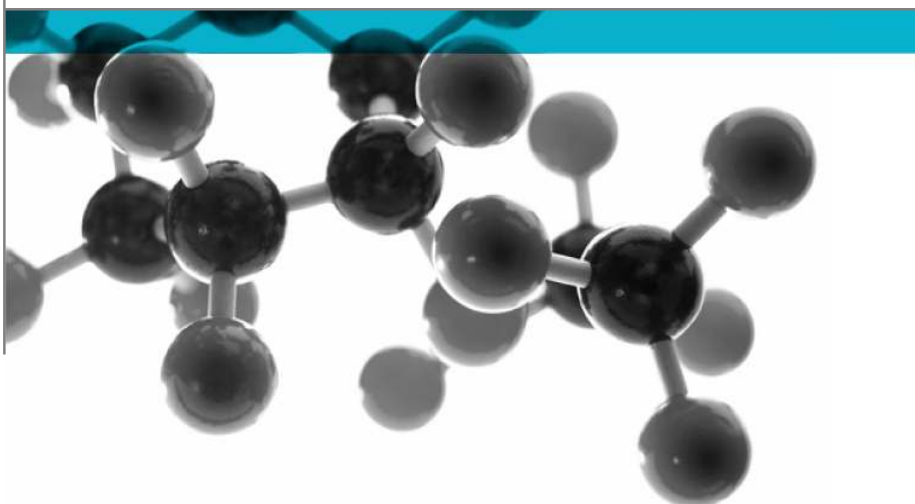
REVISION HISTORY

Issue No :	Re - Issue Date :
Revised By:	Approved By:
Reason for Revision:	

Issue No :	Re - Issue Date :
Revised By:	Approved By:
Reason for Revision:	

END OF REPORT

BS EN ISO 10077-1:2006



Thermal Performance of Windows, Doors & Shutters – Calculation of Thermal Resistance

A Report To: D4 Products Ltd /
Ellickson Doors Ltd

Document Reference: WIL 327206

Date: 16/05/2013

Copy: 1

Issue No.: 1

Page 1

Testing
Advising
Assuring

TEST CONCLUSIONS

Drawings of:

Manufacturer D4 Products Limited / Ellickson Doors Ltd
Product Insulated Roller Shutter Lath Magroll
Model 95mm Insulated Lath

Have been submitted for U-values calculation in accordance with BS EN ISO 10077-1:2006.
By Mark West, a BFRC certified simulator (No. 055) of Exova Warringtonfire Willenhall, a UKAS accredited Testing Laboratory (No. 0621) and EC Notified Body number (No. 1104)

At Key Industrial Park, Fernside Rd, Willenhall, West Midlands, WV13 3YA.
Results and comments as detailed below:

Description	U-value W/(m ² .K)
Lath section including joint	3.3
Lath section core only	1.1

NOTE: Results gained using a polyurethane core with thermal conductivity 0.0241, as advised by the manufacturer. This value was not verified and as such this report should be used for indicative purposes only.

No inferences can be made regarding performance against other requirements of this standard

AUTHORISATION

Simulation performed by: Mark West, Assistant Operations Manager

Report issued by: Mark West, Assistant Operations Manager

Signed 

Date 16/05/2013

For and on behalf of Exova Warringtonfire

Report authorised by: Ian Keeling, Operations Manager

Signed 

Date 16/05/2013

For and on behalf of Exova Warringtonfire

Report issued: 16 May 2013



0621

NOTE.

Tests marked "Not UKAS Accredited" are not covered by the Laboratory UKAS accreditation schedule.

Tests marked NT were not tested

Tests marked NA are not applicable to the product on test.

Exova Warringtonfire is an EC Notified Body Number 1104

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LIMITATIONS.....	7
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ANNEX D: THERM MODELS.....	11
REVISION HISTORY.....	12

TEST DETAILS

CLIENT DETAILS

Company name D4 Products Ltd /
Ellickson Doors Ltd

Contact Bryan Northey

ORDER DETAILS

Order number VERBAL
Dated

PRODUCT DETAILS

Product Insulated Roller Shutter Lath (lath only & core simulated)
Model Magroll 95mm Insulated Lath
Manufacturer D4 Products Ltd / Ellickson Doors Ltd
Material Steel/PVC facing & polyurethane core

TEST DETAILS

Test specification BS EN ISO 10077-1:2006
Full test Yes
Test to clauses N/a
Calculation methods BS EN ISO 10077-1:2006 Thermal performance of windows, doors & shutters –
Calculation of thermal transmittance – Part 1: General
BS EN ISO 10077-2:2012 Thermal performance of windows, doors & shutters –
Calculation of thermal transmittance – Part 2: Numerical method for frames

Simulation software & spreadsheet versions used Thermal transmittance models obtained by computer simulation using Therm
Finite Element Simulator V5.2.14 provided by LBNL. Software validated in
accordance with Annex D of BS EN ISO 10077-2.

TEST PROCEDURE

Introduction

This test report should be read in conjunction with the Standard BS EN ISO 10077-1:2006 Thermal performance of windows, doors and shutters – Calculation of thermal transmittance – Part 1: General, BS EN ISO 10077-2:2012 Thermal performance of windows, doors and shutters – Calculation of thermal resistance – Part 2: Numerical method for frames.

Drawings in DXF format were submitted for calculation of thermal transmittance in accordance with BS EN ISO 10077-1.

Instruction To Test

The calculations were conducted on the 7th March 2013 on behalf of D4 Products Ltd.

Calculation method

As per Clause 6 of BS EN ISO 10077-1 Input Data the thermal transmittance of the two halves of a lath and the junction between the two was carried out by simulation in accordance with Annex C of BS EN ISO 10077-2 using THERM finite element analysis software version 5.2.14 provided by LBNL.

Values used for the design thermal conductivity of materials in this calculation were taken from Annex A of BS EN ISO 10077-2, and are listed in Annex A of this report.

NOTE: Results gained using a polyurethane core with thermal conductivity 0.0241, as advised by the manufacturer. This value was not verified and as such this report should be used for indicative purposes only.

As such the result contained in this report is partly derived from tabulated values and should be considered indicative and not definitive.

CONCLUSIONS

Evaluation against objective	The sectional drawings of the window as provided by the client were subjected to thermal performance calculations in accordance with BS EN ISO 10077-1.
-------------------------------------	---

Observations & comments

LIMITATIONS

Limitations	The results relate only to the behaviour of the specimens of the element of construction under the particular conditions of the calculation. They are not intended to be the sole criteria for assessing the potential performance of the element in use, nor do they reflect the actual behaviour in use.
--------------------	--

Uncertainty of Measurement	The uncertainties of measurements calculated for a confidence level of 95% throughout these tests are within the limits of these tolerances.
-----------------------------------	--

The user and the simulation software have been validated in accordance with Annex D of BS EN ISO 10077-2:2012, giving the following accuracies:

- Thermal transmittance $\pm 5\%$
 - Linear thermal transmittance $\pm 5\%$
-

ANNEX A: SOURCE DATA

Materials used

Design thermal conductivity of materials used in the simulation
(taken from Annex A BS EN ISO 10077-2:2003 Table A.1 unless otherwise stated)

Material	Conductivity (W/ m.K)	Source
Galvanised Steel facing	50	BS EN ISO 10077-2 Table A.1
PVC facing	0.17	BS EN ISO 10077-2 Table A.1
Polyurethane core Voracor CS1364	0.0241	Unverified manufacturer supplied data (see following page for details)



Dow Chemical Company Limited
Station Road
Birch Vale
High Peak
Derbyshire
SK22 1 BR

Tuesday 9th April 2013

Bryan Northey
D4 Products Limited
Three Trees
Quigley's Point
Co, Donegal,
Ireland

RE: Testing of laboratory prepared foam sample of Voracor CS 1364

Dear Bryan,

A moulded sample of Voracor CS 1364 was prepared in our laboratory facility in Ahlen, Germany. Moulded at an expected core density of 70kg/m³. The sample was then tested for thermal conductivity after conditioning for 24 hours at 22oC.

Thermal Conductivity @ 10°C mean: 0.0241 W/mK

Moulded Core Density: 70.4 Kg/m3

Yours sincerely,

Mark Riley

Technical Sales
Nordic, UK and Ireland

Dow Formulated Systems



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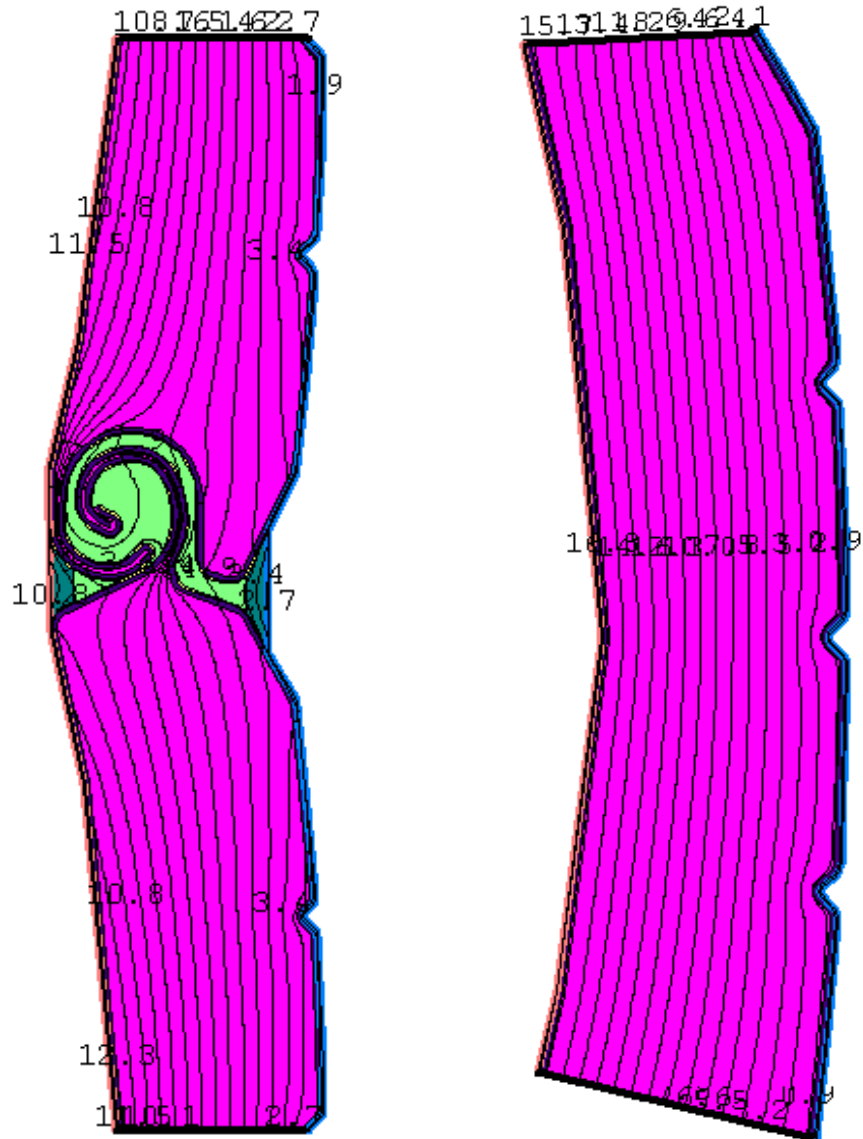
mriley@dow.com

Technical drawing of a decorative vertical element, likely a door handle or pull. The drawing shows the profile of the element with various dimensions and features:

- Overall Height:** 107
- Overall Width:** 62
- Top Section:** A curved top with a radius of $R130$.
- Mounting Plate:** A rectangular plate with a width of 65 and a height of 81.
- Decorative Elements:** A central decorative element with a width of 30 and a height of 95.
- Dimensions:**
 - Top section width: 18.74
 - Mounting plate width: 18.63
 - Decorative element width: 18.63
 - Bottom section width: 18.72
- Angles:** A 30° angle is indicated at the bottom right corner.

ANNEX B: THERM MODELS

Lath & lath core simulation model



REVISION HISTORY

Issue No :	Re - Issue Date :
Revised By:	Approved By:
Reason for Revision:	

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END OF REPORT