

## SERIES 2 AND SERIES 3 ROLL-A-DOOR ELEVATION - TYPICAL

SCALE 1:50. CURTAIN WIDTH (L) = OPENING WIDTH +  
CURTAIN OVERLAPS (REFER TO DRAWINGS S02, S03 & S04 FOR DETAILS)

TABLE A

CURTAIN MODEL & PRODUCT NAME	CURTAIN MATERIAL TYPE AND GRADE	CURTAIN PROFILE	CURTAIN MATERIAL THICKNESS
R2L - SERIES 2 TRADITIONAL LOW PROFILE	COLORBOND ZALG300S2	S2	0.4mm
R2F - SERIES 2 FIRMADOOR LIGHT INDUSTRIAL	COLORBOND ZALG300S2	S2	0.4mm
R2I - SERIES 2 TRADITIONAL INDUSTRIAL	COLORBOND ZALG300S2	S2	0.5mm
R2W - SERIES 2 TRADITIONAL WIDELINE	COLORBOND ZALG300S2	S2	0.5mm
R3F - SERIES 3 MAXI	COLORBOND ZALG300S2	S3	0.4mm
R3I - SERIES 3 SQUARELINE INDUSTRIAL	COLORBOND ZALG300S2	S3	0.5mm
R3W - SERIES 3 SQUARELINE WIDELINE	COLORBOND ZALG300S2	S3	0.5mm

DOOR DRUM SUPPORT BRACKETS. INSTALL TO B&D STANDARD INSTALLATION PROCEDURES.

SERIES 2 AND SERIES 3 ROLL-A-DOOR, DOOR GUIDES REFER TO SECTION 4 ON DRAWINGS S02, S03 & S04 PART PLAN SECTION DETAILS

CURTAIN SERIES 2 OR SERIES 3 (0.4mm OR 0.5mm THICK). FOR CURTAIN DETAILS REFER TO TABLE A AND SECTION 3

STEEL EDGE STRIP (PART No. 50625) G550, Z275 HI TEN 0.55mm BMT x 38mm WIDE

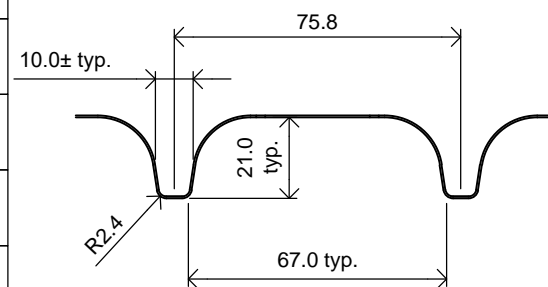
2 x STEEL/STEEL RIVETS 73-SS-64 (PART No. 44806)

WINDLOCK CLIP SERIES 2 AND SERIES 3 (PART No. 046177) 37.5mm WIDE x 1.8mm THICK SGC340 Z275 OR EQUIVALENT

UNIVERSAL CLIP POLYPROPYLENE (PART No. RD0005)

## CURTAIN MATERIAL AND WIND-LOCK CLIPS - PART ELEVATION

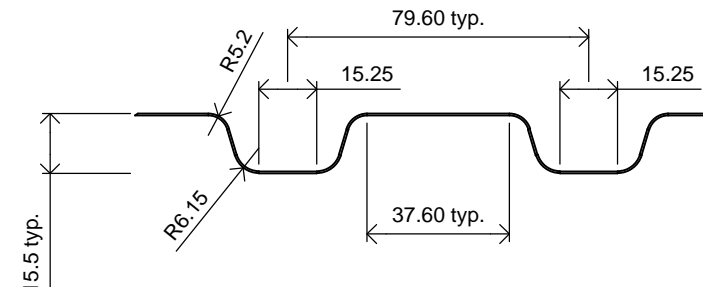
AS VIEWED FROM BACK FACE  
SCALE 1:2



### SECTION 3

SCALE = 1:2

SERIES 2 PROFILE (REFER ALSO TO TABLE A)



### SECTION 3

SCALE = 1:2

SERIES 3 PROFILE (REFER ALSO TO TABLE A)

### NOTES :

#### DESIGN CRITERIA

- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- SERIES 2 AND SERIES 3 DOORS ARE RATED UP TO AN ULTIMATE DESIGN WIND PRESSURE RATING AS GIVEN IN FIGURES A1, B1, C1 OR D1 AS APPROPRIATE FOR THE RELEVANT SPAN CONSIDERED.
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART PLAN OF CURTAIN MATERIAL AND WIND-LOCK CLIPS.
- CURTAIN HEIGHT = OPENING HEIGHT.
- OPENING WIDTH = CURTAIN WIDTH - CURTAIN OVERLAPS (REFER TO SECTION 4 ON DRAWINGS S02, S03 AND S04).
- CLIPS AT EVERY SECOND FLAT ARE TO BE ADOPTED ONLY FOR USE IN WIND REGIONS A & B BASED ON A MAXIMUM ALLOWABLE SPAN AND INTERNAL PRESSURE COEFFICIENTS AS NOMINATED ON DRAWING S05.

#### LIMITATIONS

- (STEEL ABUTMENT POSTS TO BE 3mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O.
- CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF BLOCK WALL UNIT ( $f_{uc}$ ) = 15 MPa (MIN.)
- CORE FILLING OF BLOCKWALL ( $f_c$ ) = 15 MPa (MIN.)
- CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF SOLID CLAY MASONRY UNIT ( $f_{uc}$ ) = 20 MPa (MIN.)
- MINIMUM MORTAR CLASSIFICATION = M3.
- THE STRUCTURE TO WHICH THE DOOR IS ATTACHED SHALL BE ASSESSED AND CERTIFIED INDEPENDENTLY AS REQUIRED BY A SUITABLY QUALIFIED ENGINEER.
- ALTERNATIVE DESIGN PARAMETERS TO WHAT ARE SPECIFIED ON THESE DRAWINGS ALONG WITH ALTERNATIVE SITE SPECIFIC LOCAL PRESSURE FACTORS MAY BE ADOPTED PROVIDED THE CALCULATED SITE SPECIFIC ULTIMATE DESIGN WIND PRESSURES DO NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATINGS GIVEN IN FIGURES A1, B1, C1 OR D1 AS APPROPRIATE.
- THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADINGS DO NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATINGS GIVEN IN FIGURES A1, B1, C1 OR D1 AS APPROPRIATE.
- DOORS MAY BE POSITIONED AT ANY LOCATION ALONG THE BUILDING ENVELOPE INCLUDING ALL LOCAL PRESSURE ZONES (ie. CORNERS OF BUILDINGS), PROVIDED THE CALCULATED SITE SPECIFIC ULTIMATE DESIGN WIND PRESSURES DO NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATINGS GIVEN IN FIGURES A1, B1, C1 OR D1 AS APPROPRIATE.
- PROVIDE CLIPS AT EVERY FLAT OR EVERY SECOND FLAT AS REQUIRED (REFER TO FIGURES A1, B1, C1 OR D1 AND TABLES 1a OR 1b AS APPROPRIATE).

#### NOTES COVERING BASIS OF DRAWINGS

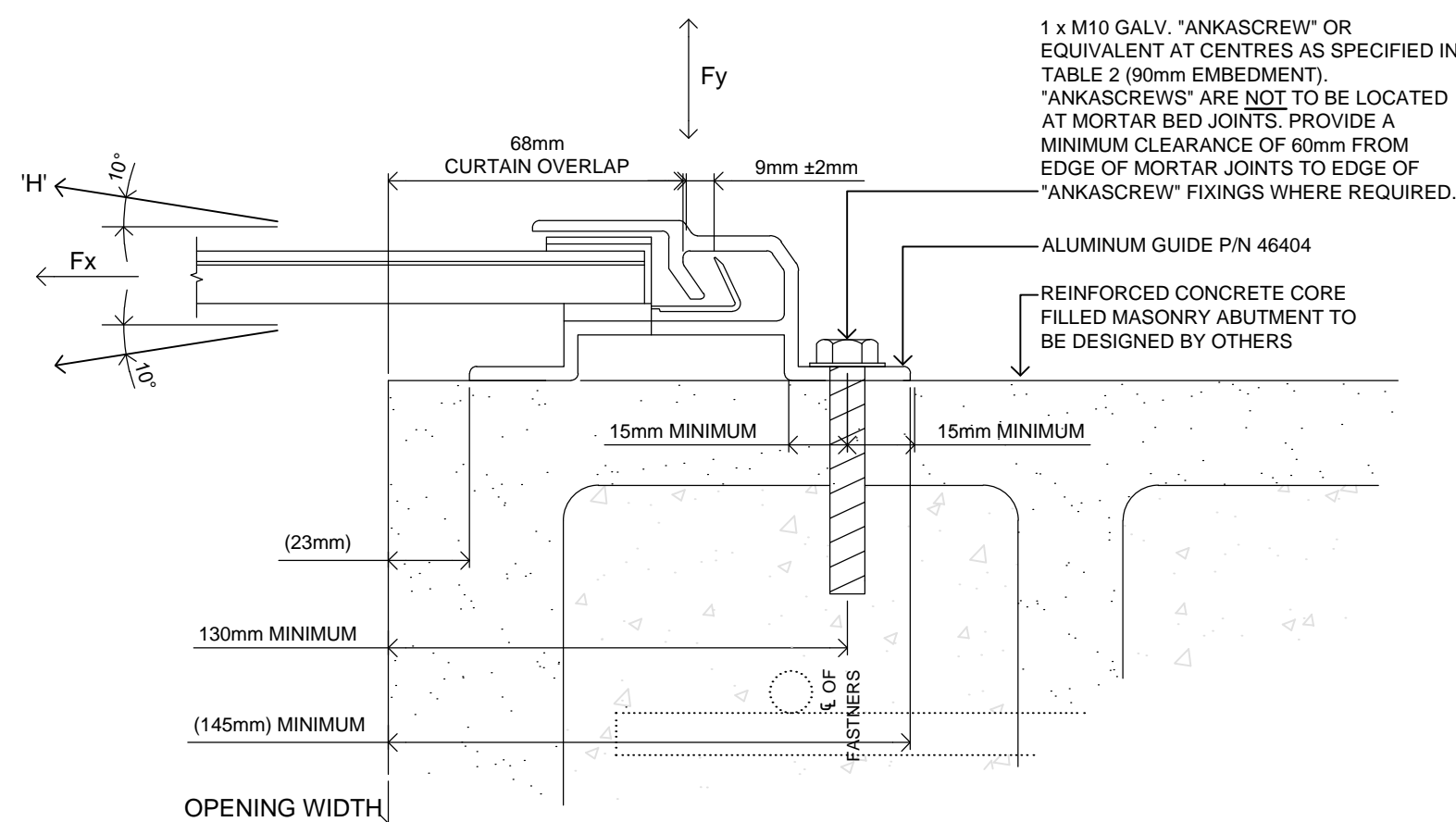
- TEST REPORT NO.'s TS1067 REVISION A AND ADDENDUM TO REPORT NO.TS1067 REVISION A (CYCLONE TESTING STATION, SCHOOL OF ENGINEERING AND PHYSICAL SCIENCES, JAMES COOK UNIVERSITY).
- IN-HOUSE TESTING CONDUCTED ON THE 19th JULY, 2017.
- PRINCIPLES OF MECHANICS.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS - PART 2: WIND ACTIONS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0: GENERAL PRINCIPLES.
- AS/NZS 4505:2012 GARAGE DOORS AND OTHER LARGE ACCESS DOORS.
- AS 4100:1998 STEEL STRUCTURES.
- AS 3700:2001 MASONRY STRUCTURES.
- AS 3600:2009 CONCRETE STRUCTURES.
- AS/NZS 4600:2005 COLD FORMED STEEL STRUCTURES.
- AS/NZS 1664.1:1997 ALUMINIUM STRUCTURES PART 1 - LIMIT STATE DESIGN.
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 1720.1:2010 TIMBER STRUCTURES, PART 1 - DESIGN METHODS.
- ALL DOOR COMPONENTS TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR MANUFACTURING.
- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR INSTALLATION GUIDELINES.

ISSUE	DATE	AMENDMENTS
M	14.08.17	SERIES 2 PROFILE AMENDED AND
		SERIES 3 PROFILE ADDED

CLIENT	B&D AUSTRALIA PTY LTD
PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

DRAWING	SERIES 2 AND SERIES 3 ROLL-A-DOOR, ELEVATION PART PLAN, SECTION AND NOTES
SCALE	
DESIGNED	J.E.
DRAWN	AAB
CHECKED & APPROVED	
DATE	August 2017

DRAWING No.	S01 M
PROJECT No.	2289



**SECTION 4 PART PLAN**  
SCALE = 1:2

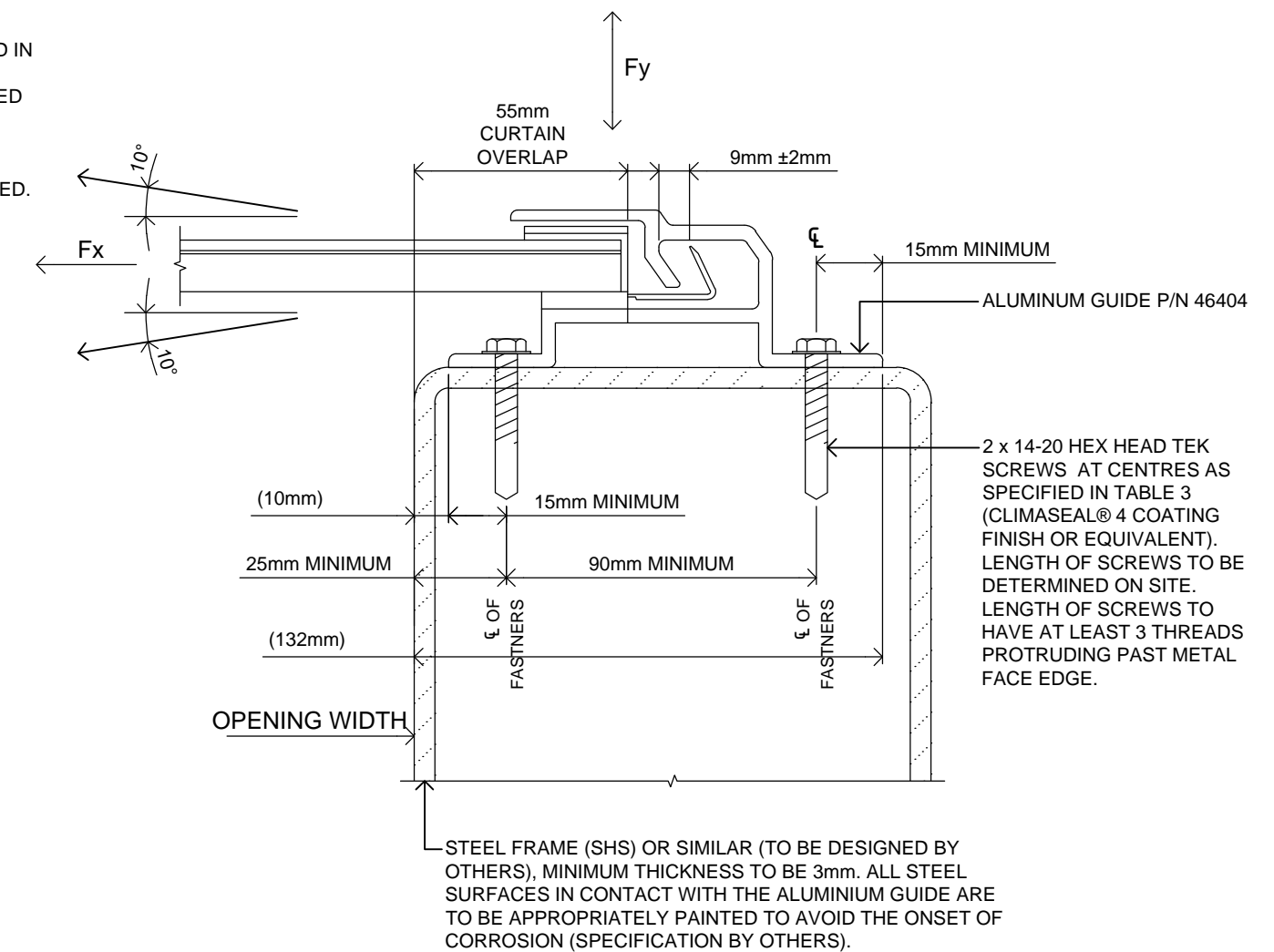
GUIDE SUPPORTED BY REINFORCED CONCRETE CORE FILLED MASONRY ABUTMENTS (REFER TO TABLE 2 FOR FASTENING DETAILS). SIMILAR FOR GUIDES SUPPORTED BY REINFORCED CONCRETE WALL PANELS.

SIMILAR FOR GUIDES SUPPORTED BY SOLID CLAY MASONRY EXCEPT REFER TO TABLE 5 FOR FASTENING DETAILS.

THE ALUMINUM GUIDE CAN ALSO BE SECURED USING 2 x M10 GALV. "ANKASCREWS". FOR THE FASTENING OF THE GUIDE USING 2 x M10 "ANKASCREWS" THROUGH BOTH LEGS OF THE GUIDE PROVIDE A 40mm MINIMUM EDGE DISTANCE OF THE GUIDE FROM THE EDGE OF THE ABUTMENT IN LIEU OF 23mm AS ILLUSTRATED ABOVE. PROVIDE FASTENINGS AT CENTRES AS SPECIFIED USING EITHER TABLE 2 OR TABLE 5 WHERE APPROPRIATE.

**NOTE:**

- THE ABOVE FASTENING DETAIL HAS BEEN BASED ON THE RELEVANT MAXIMUM DESIGN SPAN LIMITS AS GIVEN IN TABLE 2.
- FASTENINGS INTO REINFORCED CONCRETE CORE FILLED BLOCK WALL ABUTMENTS HAVE BEEN DESIGNED USING THE RAMSET-SPECIFIERS RESOURCE BOOK.
- THE FOLLOWING CODES OF PRACTICE WERE ALSO CONSIDERED IN THE DESIGN OF THE ABOVE FASTENING DETAIL:
  - AS/NZS 1664.1:1997 ALUMINIUM STRUCTURES PART 1: LIMIT STATE DESIGN.
  - AS 3700-2001 MASONRY STRUCTURES.



**SECTION 4 PART PLAN**  
SCALE = 1:2

GUIDE SUPPORTED BY STEEL FRAME (REFER TO TABLE 3 FOR FASTENING DETAILS).

**NOTE:**

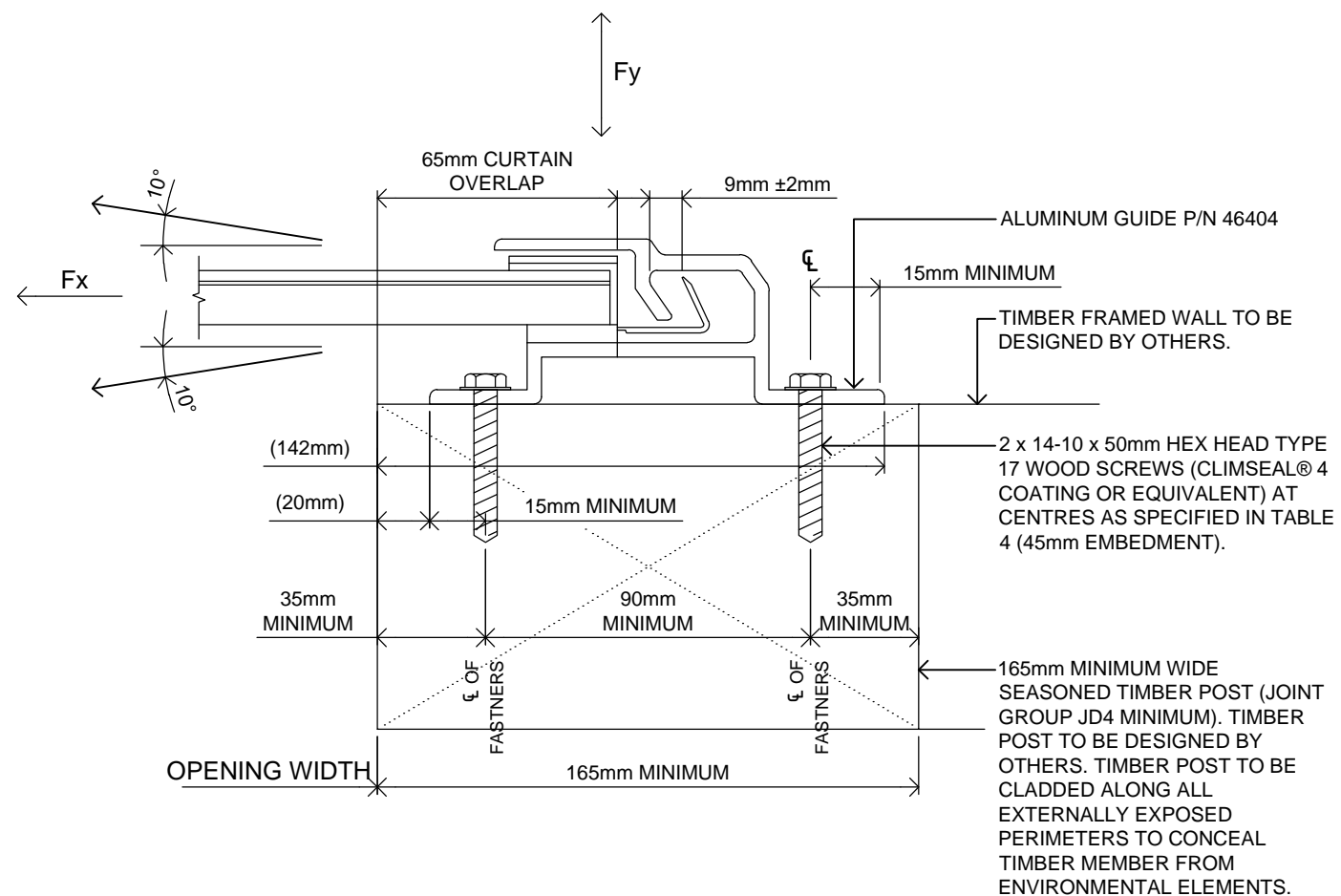
- THE ABOVE FASTENING DETAIL HAS BEEN BASED ON THE RELEVANT MAXIMUM DESIGN SPAN LIMITS AS GIVEN IN TABLE 3.
- FASTENINGS INTO STRUCTURAL STEEL ABUTMENTS HAVE BEEN DESIGNED USING THE TECHNICAL DATA PROVIDED BY BUILDEX FASTERNERS.
- STAINLESS STEEL TEK SCREWS IN LIEU OF CLIMASEAL® 4 COATED TEK SCREWS ARE TO BE USED IN HIGHLY CORROSIVE ENVIRONMENTS.
- THE FOLLOWING CODES OF PRACTICE WERE ALSO CONSIDERED IN THE DESIGN OF THE ABOVE FASTENING DETAIL:
  - AS 4100:1998 STEEL STRUCTURES.
  - AS/NZS 4600:2005 COLD FORMED STEEL STRUCTURES
  - AS/NZS 1664.1:1997 ALUMINIUM STRUCTURES PART 1: LIMIT STATE DESIGN.

ISSUE	DATE	AMENDMENTS
M	14.08.17	SERIES 2 PROFILE AMENDED AND
		SERIES 3 PROFILE ADDED

CLIENT	B&D AUSTRALIA PTY LTD
PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

DRAWING	SERIES 2 AND SERIES 3 ROLL-A-DOOR SUPPORT SECTION DETAILS
James Ellis & Associates	Consulting Structural Engineers
SCALE	DESIGNED J.E.
DRAWN AAB	CHECKED & APPROVED [Signature]
DATE	August 2017

DRAWING No.	S02 M
PROJECT No.	2289



## SECTION 4 PART PLAN

SCALE = 1:2


GUIDE SUPPORTED BY TIMBER FRAME (REFER TO TABLE 4 FOR FASTENING DETAILS).

### NOTE:

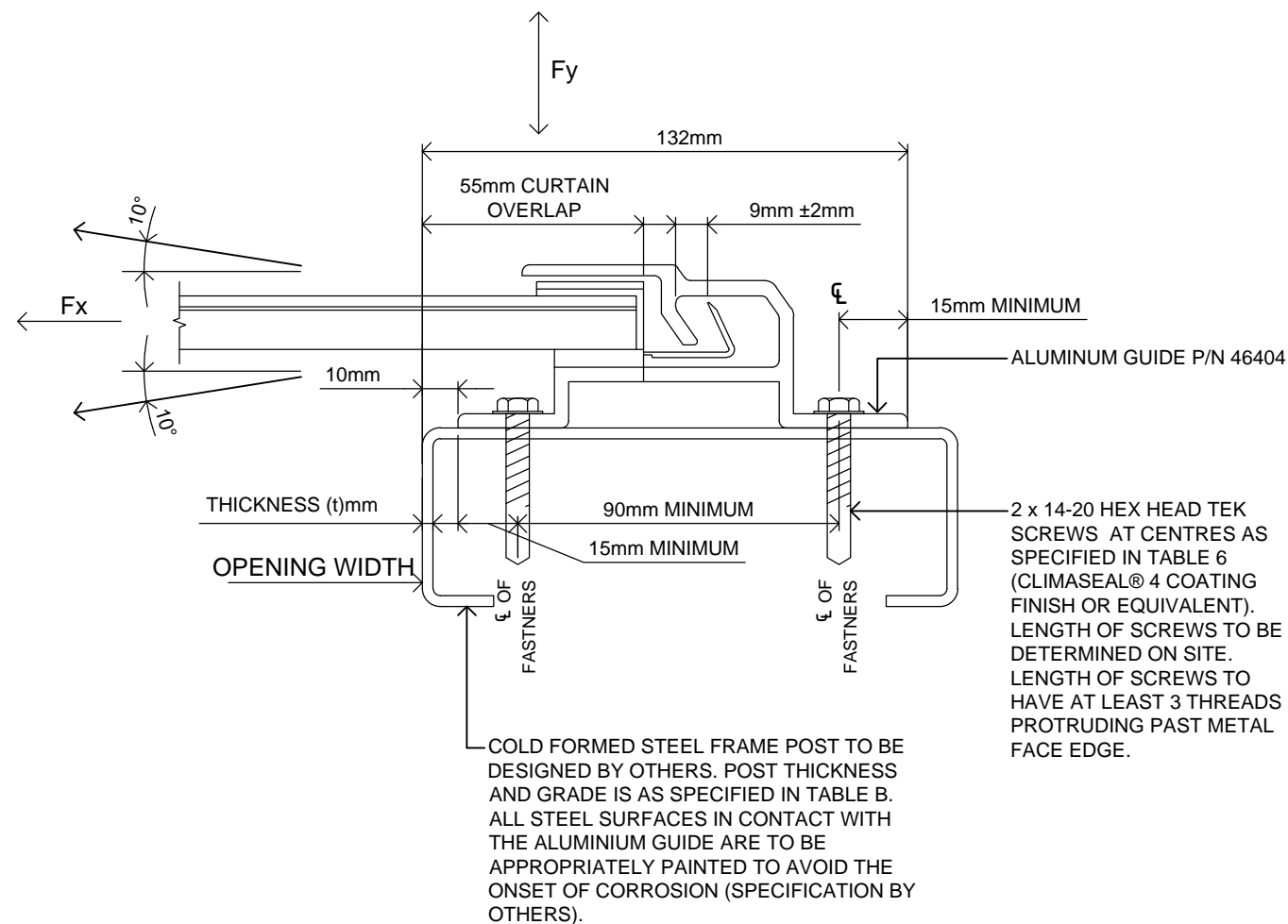
- THE ABOVE FASTENING DETAIL HAS BEEN BASED ON THE RELEVANT MAXIMUM DESIGN SPAN LIMITS AS GIVEN IN TABLE 4.
- FASTENINGS INTO TIMBER FRAMED ABUTMENTS HAVE BEEN DESIGNED USING THE TECHNICAL DATA PROVIDED BY BUILDEX FASTENERS.
- STAINLESS STEEL TEK SCREWS IN LIEU OF CLIMASEAL® 4 COATED TEK SCREWS ARE TO BE USED IN HIGHLY CORROSIVE ENVIRONMENTS.
- THE FOLLOWING CODES OF PRACTICE WERE ALSO CONSIDERED IN THE DESIGN OF THE ABOVE FASTENING DETAIL:
  - AS 1720.1-2010 TIMBER STRUCTURES PART 1:DESIGN METHODS.
  - AS/NZS 1664.1:1997 ALUMINIUM STRUCTURES PART 1:LIMIT STATE DESIGN.

ISSUE	DATE	AMENDMENTS
M	14.08.17	SERIES 2 PROFILE AMENDED AND
		SERIES 3 PROFILE ADDED

CLIENT	B&D AUSTRALIA PTY LTD
PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

DRAWING	SERIES 2 AND SERIES 3 ROLL-A-DOOR SUPPORT SECTION DETAILS	SCALE	
		DESIGNED	J.E.
		DRAWN	AAB
		CHECKED & APPROVED	
		DATE	August 2017

DRAWING No.	S03 M
PROJECT No.	2289



## SECTION 4 PART PLAN

SCALE = 1:2

GUIDE SUPPORTED BY COLD FORMED STEEL FRAME (REFER TO TABLE 6 FOR FASTENING DETAILS).

### NOTE:

- THE ABOVE FASTENING DETAIL HAS BEEN BASED ON THE RELEVANT MAXIMUM DESIGN SPAN LIMITS GIVEN IN TABLE 6.
- FASTENINGS ONTO COLD FORMED STEEL ABUTMENTS HAVE BEEN DESIGNED USING THE TECHNICAL DATA PROVIDED BY BUILDEX FASTENERS.
- STAINLESS STEEL TEK SCREWS IN LIEU OF CLIMASEAL® 4 COATED TEK SCREWS ARE TO BE USED IN HIGHLY CORROSIVE ENVIRONMENTS.
- THE FOLLOWING CODES OF PRACTICE WERE ALSO CONSIDERED IN THE DESIGN OF THE ABOVE FASTENING DETAIL:
  - AS/NZS 4600:2005 COLD FORMED STEEL STRUCTURES
  - AS/NZS 1664.1:1997 ALUMINIUM STRUCTURES PART 1: LIMIT STATE DESIGN.

TABLE 6

FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO COLD FORMED STEEL ABUTMENTS COMPLYING WITH AS 1397-1993			
THICKNESS AND GRADE	SPAN	CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
1mm (G550)	3000-3499mm	2 x 14-20 TEK SCREWS AT 150 CTS.	2 x 14-20 TEK SCREWS AT 300 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 150 CTS.	2 x 14-20 TEK SCREWS AT 300 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 125 CTS.	2 x 14-20 TEK SCREWS AT 250 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 125 CTS.	2 x 14-20 TEK SCREWS AT 250 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 125 CTS.	2 x 14-20 TEK SCREWS AT 250 CTS.
1.2mm (G500)	3000-3499mm	2 x 14-20 TEK SCREWS AT 175 CTS.	2 x 14-20 TEK SCREWS AT 350 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 175 CTS.	2 x 14-20 TEK SCREWS AT 350 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 150 CTS.	2 x 14-20 TEK SCREWS AT 300 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 150 CTS.	2 x 14-20 TEK SCREWS AT 300 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 150 CTS.	2 x 14-20 TEK SCREWS AT 300 CTS.
1.5mm (G450)	3000-3499mm	2 x 14-20 TEK SCREWS AT 200 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 200 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 175 CTS.	2 x 14-20 TEK SCREWS AT 350 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 175 CTS.	2 x 14-20 TEK SCREWS AT 350 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 175 CTS.	2 x 14-20 TEK SCREWS AT 350 CTS.
1.9mm (G450)	3000-3499mm	2 x 14-20 TEK SCREWS AT 250 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 250 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 225 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 225 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 225 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
2.4mm (G450)	3000-3499mm	2 x 14-20 TEK SCREWS AT 275 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 275 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 250 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 250 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 250 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.

NOTE: FOR SPANS LESS THAN 3m USE FASTENING SPECIFICATIONS AS FOR SPANS 3000-3499mm

TABLE B

MINIMUM STRENGTHS OF COLD FORMED STEEL COMPLYING WITH AS 1397-1993

THICKNESS (t)mm	GRADE	YEILD STRENGTH	TENSILE STRENGTH
1mm	G550	550 MPa	550 MPa
1.2mm	G500	500 MPa	520 MPa
1.5mm	G450	450 MPa	480 MPa
1.9mm	G450	450 MPa	480 MPa
2.4mm	G450	450 MPa	480 MPa

ISSUE	DATE	AMENDMENTS
M	14.08.17	SERIES 2 PROFILE AMENDED AND
		SERIES 3 PROFILE ADDED

CLIENT	B&D AUSTRALIA PTY LTD
PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

DRAWING	SERIES 2 AND SERIES 3 ROLL-A-DOOR SUPPORT SECTION DETAIL AND TABLE	SCALE	
		DESIGNED	J.E.
		DRAWN	AAB
		CHECKED & APPROVED	
		DATE	August 2017

DRAWING No.	S04 M
PROJECT No.	2289

TABLE 1a  
QUICK REFERENCE GUIDE ON MAXIMUM  
ALLOWABLE SPANS FOR BUILDERS AND  
BUILDING CERTIFIERS

CURTAIN THICKNESS = 0.5mm					
REGION	TERRAIN CATEGORY	SERIES 2		SERIES 3	
		CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT	CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
A	2	5.5m	5.5m	5.5m	5.5m
	2.5	5.5m	5.5m	5.5m	5.5m
	3	5.5m	5.5m	5.5m	5.5m
B	2	5.5m	4.3m	5.5m	4.3m
	2.5	5.5m	4.8m	5.5m	4.6m
	3	5.5m	5.4m	5.5m	5.1m
C	2	5.5m	N/A	5.3m	N/A
	2.5	5.5m	N/A	5.5m	N/A
D	2	N/A	N/A	N/A	N/A
	2.5	3.0m	N/A	3.0m	N/A

NOTE: THE BUILDING DESIGN ENGINEER IS TO VERIFY THAT THE MAXIMUM ALLOWABLE SPANS GIVEN IN TABLE 1a FOR ANY GIVEN WIND REGION AND TERRAIN CATEGORY ARE WITHIN THE MAXIMUM ULTIMATE DESIGN WIND CAPACITY LIMITS GIVEN IN FIGURES A1,B1,C1 AND D1 AS APPROPRIATE WHEN DETERMINING THE SITE SPECIFIC DESIGN WIND PRESSURES.

TABLE 1b  
QUICK REFERENCE GUIDE ON MAXIMUM  
ALLOWABLE SPANS FOR BUILDERS AND  
BUILDING CERTIFIERS

CURTAIN THICKNESS = 0.4mm					
REGION	TERRAIN CATEGORY	SERIES 2		SERIES 3	
		CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT	CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
A	2	5.5m	5.5m	5.5m	5.5m
	2.5	5.5m	5.5m	5.5m	5.5m
	3	5.5m	5.5m	5.5m	5.5m
B	2	5.5m	4.0m	5.5m	4.0m
	2.5	5.5m	4.4m	5.5m	4.4m
	3	5.5m	4.9m	5.5m	4.8m
C	2	4.9m	N/A	4.8m	N/A
	2.5	5.25m	N/A	5.15m	N/A
D	2	N/A	N/A	N/A	N/A
	2.5	N/A	N/A	N/A	N/A

NOTE: THE BUILDING DESIGN ENGINEER IS TO VERIFY THAT THE MAXIMUM ALLOWABLE SPANS GIVEN IN TABLE 1b FOR ANY GIVEN WIND REGION AND TERRAIN CATEGORY ARE WITHIN THE MAXIMUM ULTIMATE DESIGN WIND CAPACITY LIMITS GIVEN IN FIGURES A1,B1,C1 AND D1 AS APPROPRIATE WHEN DETERMINING THE SITE SPECIFIC DESIGN WIND PRESSURES.

TABLE 2

FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO BLOCKWALL ABUTMENTS		
SPAN	CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
3000-3499mm	1 x M10 GAL ANKASCREW AT 250 CTS.	1 x M10 GAL ANKASCREW AT 400 CTS.
3500-3999mm	1 x M10 GAL ANKASCREW AT 250 CTS.	1 x M10 GAL ANKASCREW AT 400 CTS.
4000-4499mm	1 x M10 GAL ANKASCREW AT 225 CTS.	1 x M10 GAL ANKASCREW AT 400 CTS.
4500-4999mm	1 x M10 GAL ANKASCREW AT 200 CTS.	1 x M10 GAL ANKASCREW AT 400 CTS.
5000-5500mm	1 x M10 GAL ANKASCREW AT 200 CTS.	1 x M10 GAL ANKASCREW AT 400 CTS.

NOTE: FOR SPANS LESS THAN 3m USE FASTENING SPECIFICATIONS AS FOR SPANS 3000-3499mm

TABLE 4

FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO TIMBER FRAMED ABUTMENTS		
SPAN	CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
3000-3499mm	2 x 14-10 TYPE 17 WOOD SCREWS AT 125 CTS.	2 x 14-10 TYPE 17 WOOD SCREWS AT 250 CTS.
3500-3999mm	2 x 14-10 TYPE 17 WOOD SCREWS AT 125 CTS.	2 x 14-10 TYPE 17 WOOD SCREWS AT 250 CTS.
4000-4499mm	2 x 14-10 TYPE 17 WOOD SCREWS AT 100 CTS.	2 x 14-10 TYPE 17 WOOD SCREWS AT 200 CTS.
4500-4999mm	2 x 14-10 TYPE 17 WOOD SCREWS AT 100 CTS.	2 x 14-10 TYPE 17 WOOD SCREWS AT 200 CTS.
5000-5500mm	2 x 14-10 TYPE 17 WOOD SCREWS AT 100 CTS.	2 x 14-10 TYPE 17 WOOD SCREWS AT 200 CTS.

NOTE: FOR SPANS LESS THAN 3m USE FASTENING SPECIFICATIONS AS FOR SPANS 3000-3499mm

NOTE:

- FOR WIND REGIONS A & B, INTERNAL PRESSURE COEFFICIENTS (Cpi) OF -0.3 & +0.2 WERE NOMINALLY ADOPTED.
- FOR WIND REGIONS C & D, INTERNAL PRESSURE COEFFICIENTS (Cpi) OF -0.3 & +0.6 WERE NOMINALLY ADOPTED.
- MAXIMUM ALLOWABLE SPANS = CURTAIN WIDTH.
- SPAN = CURTAIN WIDTH.
- CURTAIN WIDTH = OPENING WIDTH + CURTAIN OVERLAPS (REFER DRAWINGS S02, S03 & S04).
- FASTENING SPECIFICATIONS WERE BASED ON THE MAXIMUM ULTIMATE DESIGN WIND PRESSURE RATINGS DERIVED FOR EACH GIVEN SPAN AS NOMINATED IN FIGURES A1,B1,C1 AND D1.

TABLE 3

FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO 3.0mm (MINIMUM) THICK G250 STEEL ABUTMENTS		
SPAN	CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
3000-3499mm	2 x 14-20 TEK SCREWS AT 300 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
3500-3999mm	2 x 14-20 TEK SCREWS AT 300 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
4000-4499mm	2 x 14-20 TEK SCREWS AT 275 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
4500-4999mm	2 x 14-20 TEK SCREWS AT 250 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.
5000-5500mm	2 x 14-20 TEK SCREWS AT 250 CTS.	2 x 14-20 TEK SCREWS AT 400 CTS.

NOTE: FOR SPANS LESS THAN 3m USE FASTENING SPECIFICATIONS AS FOR SPANS 3000-3499mm

TABLE 5

FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO SOLID CLAY MASONRY ABUTMENTS		
SPAN	CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
3000-3499mm	REFER TO COMMENT IN NOTES BELOW	1 x M10 GAL ANKASCREWS AT EVERY SECOND BRICK COURSE (MAX. 170 CTS.)
3500-3999mm	REFER TO COMMENT IN NOTES BELOW	1 x M10 GAL ANKASCREWS AT EVERY SECOND BRICK COURSE (MAX. 170 CTS.)
4000-4499mm	REFER TO COMMENT IN NOTES BELOW	REFER TO COMMENT IN NOTES BELOW
4500-4999mm	REFER TO COMMENT IN NOTES BELOW	REFER TO COMMENT IN NOTES BELOW
5000-5500mm	REFER TO COMMENT IN NOTES BELOW	REFER TO COMMENT IN NOTES BELOW

NOTE:

- FOR CASES WHERE FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO SOLID CLAY MASONRY ABUTMENTS HAVE NOT BEEN NOMINATED IN TABLE 5, THE CURTAIN GUIDES ARE TO BE FIXED TO A STEEL MULLION (IN ACCORDANCE WITH THESE DRAWINGS). THE STEEL MULLION IS TO BE SUBSEQUENTLY SECURED TO THE CLAY MASONRY ABUTMENTS IN ACCORDANCE WITH THE PROJECT ENGINEER'S DESIGN INSTRUCTIONS.
- NOTE: FOR SPANS LESS THAN 3m USE FASTENING SPECIFICATIONS AS FOR SPANS 3000-3499mm.

ISSUE	DATE	AMENDMENTS
M	14.08.17	SERIES 2 PROFILE AMENDED AND
		SERIES 3 PROFILE ADDED

CLIENT

B&D AUSTRALIA PTY LTD

PROJECT

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR  
FOR USE IN ALL WIND REGIONS

DRAWING

SERIES 2 AND SERIES 3  
ROLL-A-DOOR TABLES

James Ellis & Associates

Consulting Structural Engineers

SCALE

DESIGNED J.E.

DRAWN AAB

CHECKED&  
APPROVED

DATE

August 2017

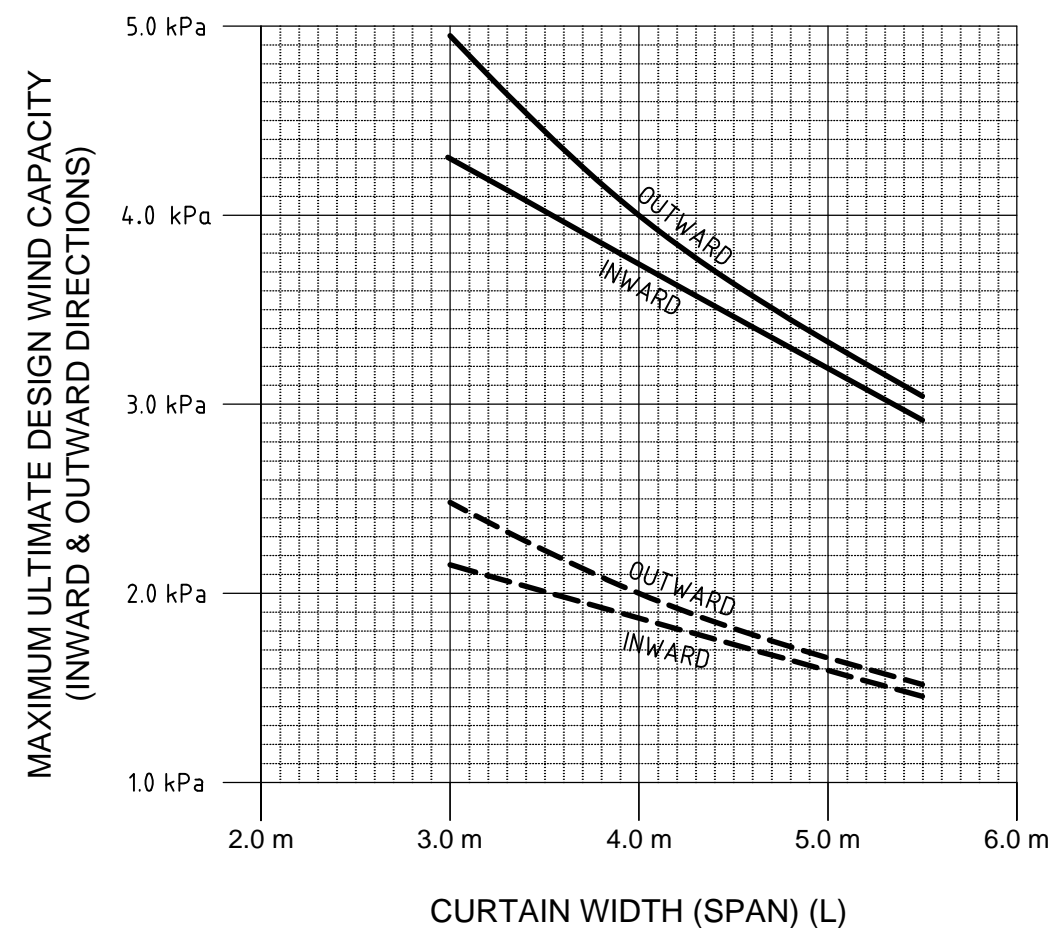
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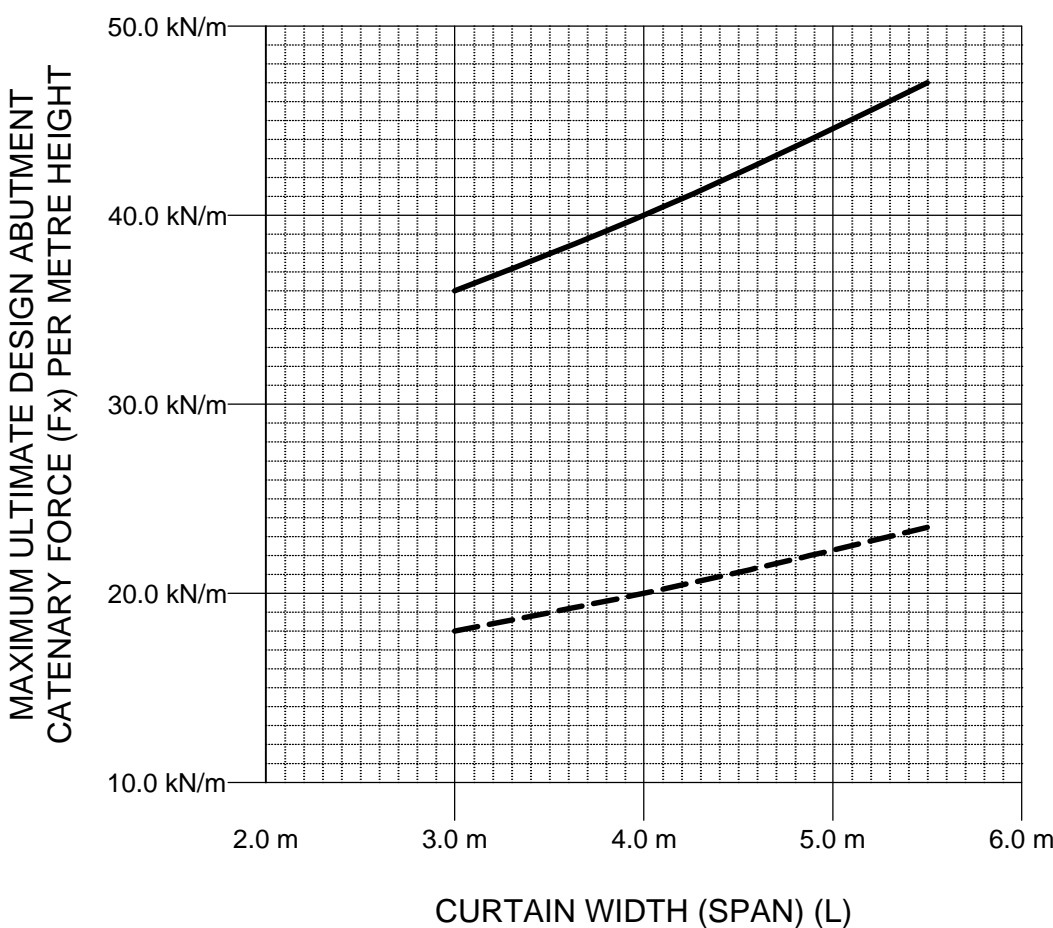
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**FIGURE (A1)**  
**ULTIMATE DESIGN WIND**  
**CAPACITY FOR A GIVEN SPAN**  
**USING A CURTAIN THICKNESS OF**  
**0.5mm WITH A SERIES 2 PROFILE**



————— CLIPS AT EVERY FLAT  
 - - - - - CLIPS AT EVERY SECOND FLAT  
 NOTE:       EXTRAPOLATION IS NOT PERMITTED  
               CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS

**FIGURE (A2)**  
**ULTIMATE DESIGN CATENARY FORCE**  
**FOR A GIVEN SPAN WHEN USING A**  
**CURTAIN THICKNESS OF 0.5mm WITH**  
**A SERIES 2 PROFILE**



————— CLIPS AT EVERY FLAT  
 - - - - - CLIPS AT EVERY SECOND FLAT  
 NOTE:       DESIGN ABUTMENT FORCES HAVE BEEN DERIVED USING THE  
               MAXIMUM ULTIMATE DESIGN WIND CAPACITY FOR THAT GIVEN  
               SPAN. CURTAIN WIDTH (L)= OPENING WIDTH + CURTAIN OVERLAPS  
  
 NOTE:        $F_y = \frac{WL}{2}$   
  
 WHERE    $F_y$  = MAXIMUM OUT OF PLANE ULTIMATE DESIGN  
               ABUTMENT FORCE (PER METRE HEIGHT)  
  
 W = ULTIMATE DESIGN WIND PRESSURE (kPa)  
 L = CURTAIN WIDTH (SPAN) (m)

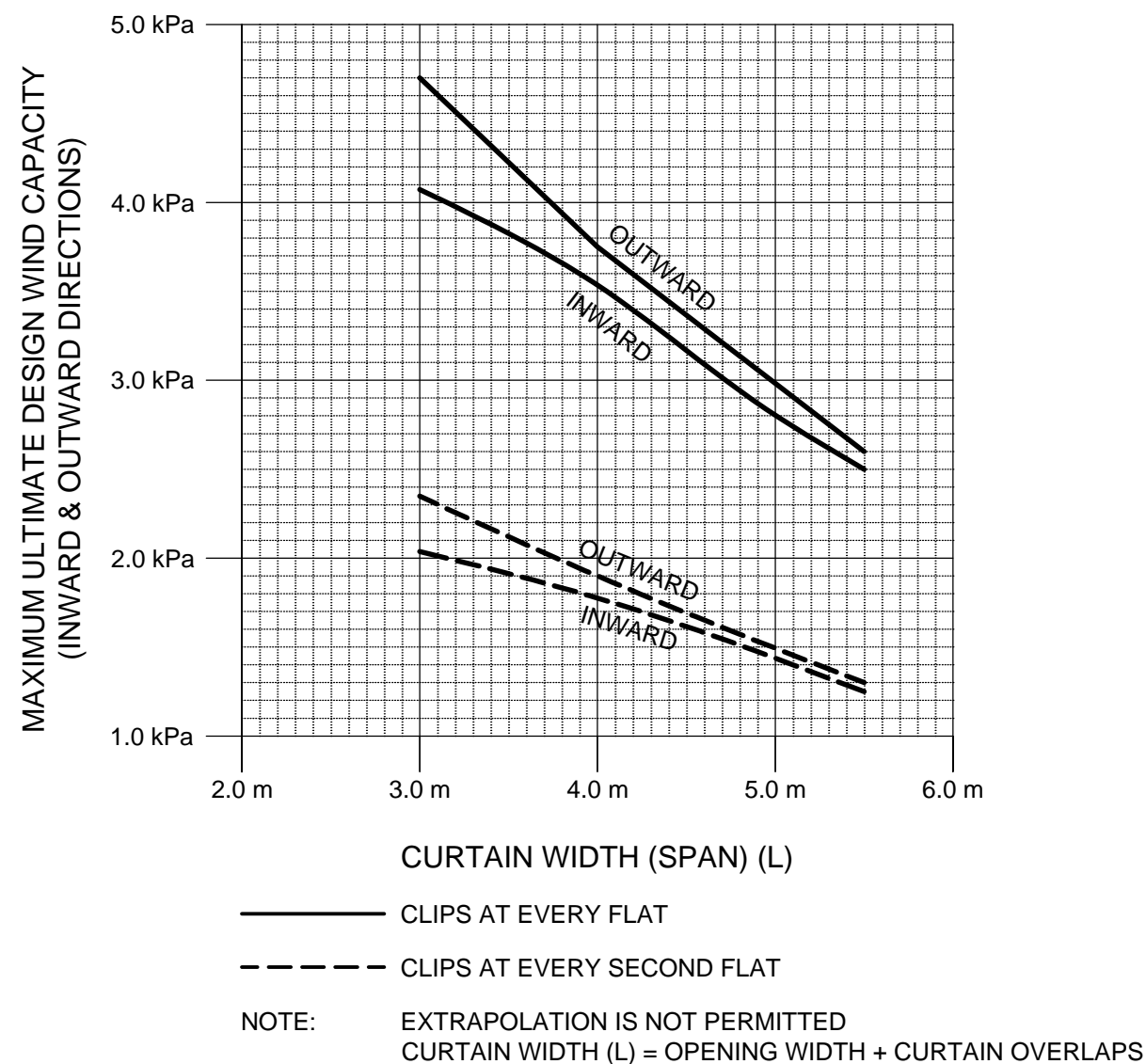
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		SERIES 3 PROFILE ADDED

CLIENT	B&D AUSTRALIA PTY LTD
PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

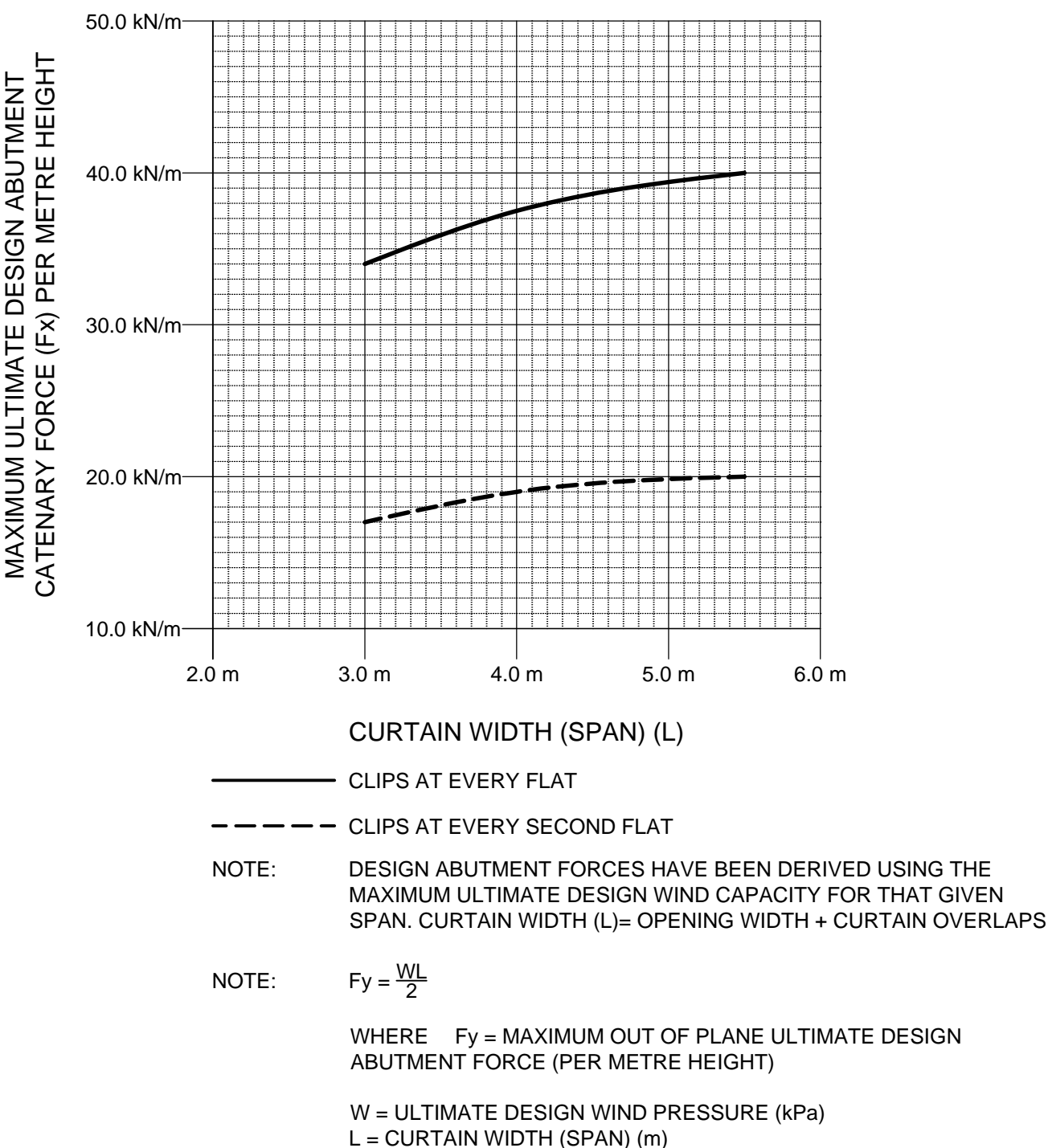
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SCALE	
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**FIGURE (B1)**  
**ULTIMATE DESIGN WIND**  
**CAPACITY FOR A GIVEN SPAN**  
**USING A CURTAIN THICKNESS OF**  
**0.4mm WITH A SERIES 2 PROFILE**



**FIGURE (B2)**  
**ULTIMATE DESIGN CATENARY**  
**FORCE FOR A GIVEN SPAN WHEN**  
**USING A CURTAIN THICKNESS OF**  
**0.4mm WITH A SERIES 2 PROFILE**



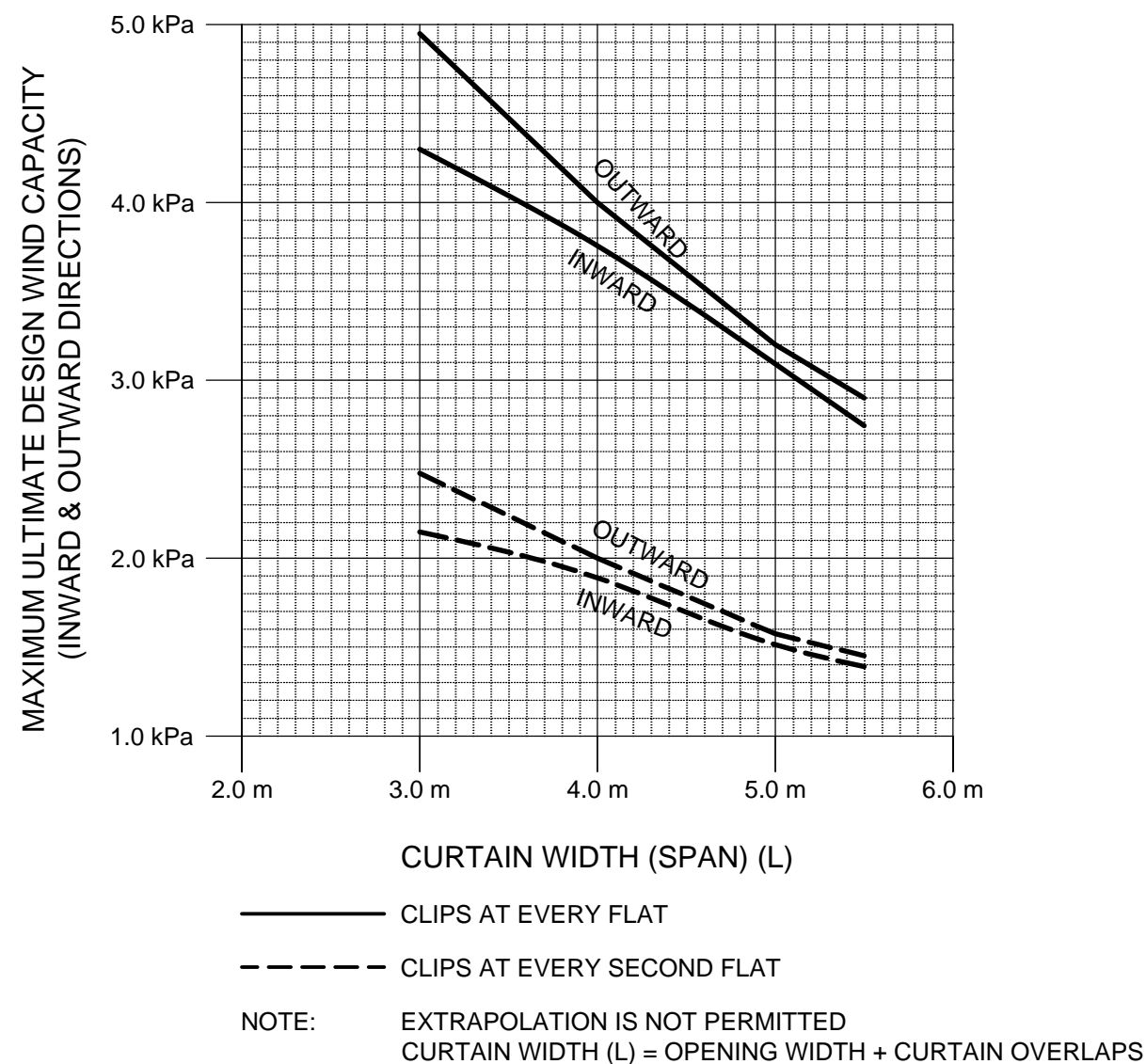
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PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

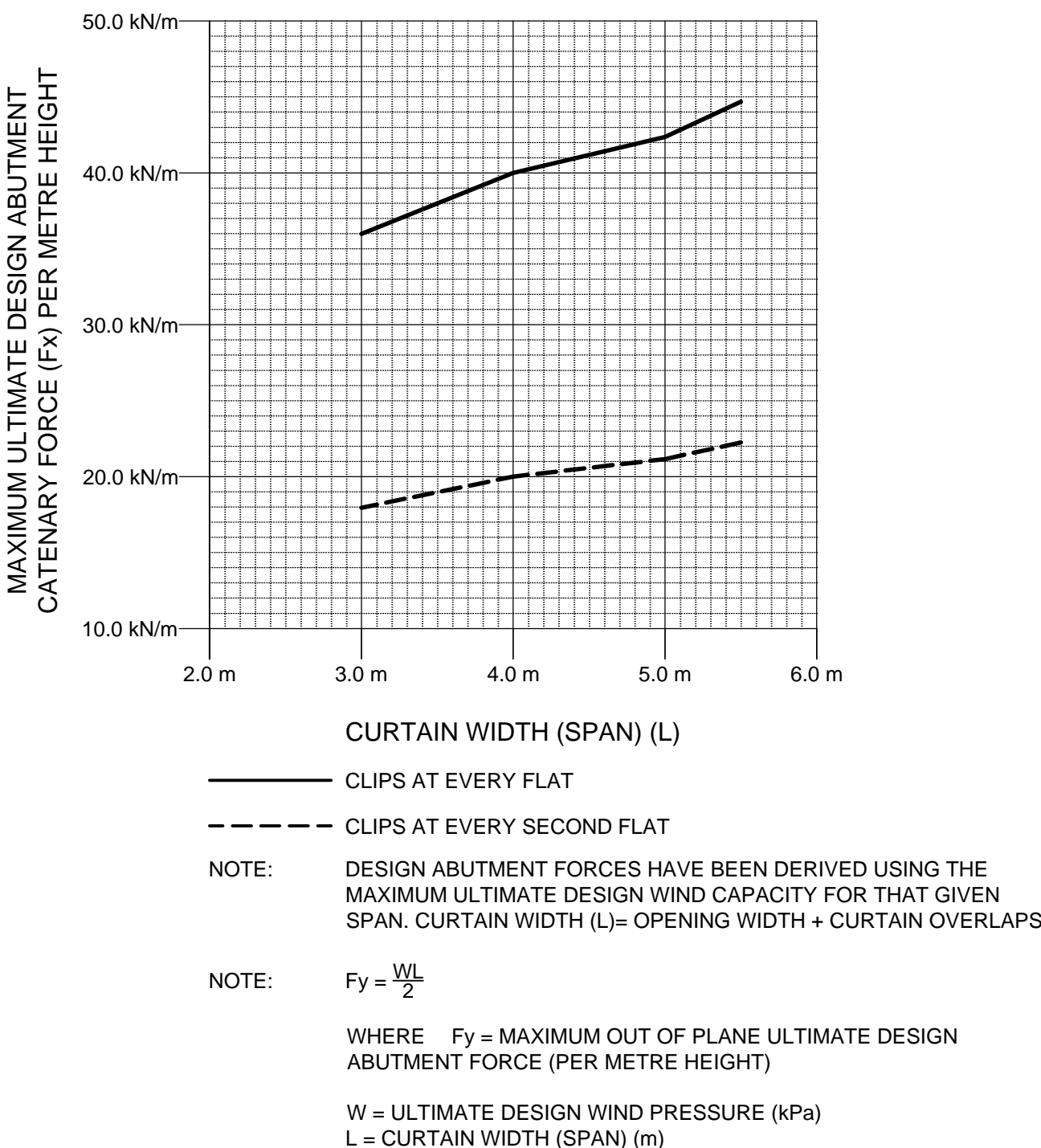
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**FIGURE (C1)**  
**MAXIMUM ULTIMATE DESIGN WIND**  
**CAPACITY FOR A GIVEN SPAN**  
**USING A CURTAIN THICKNESS OF**  
**0.5mm WITH A SERIES 3 PROFILE**



**FIGURE (C2)**  
**MAXIMUM ULTIMATE DESIGN ABUTMENT**  
**CATENARY FORCE FOR A GIVEN SPAN**  
**USING A CURTAIN THICKNESS OF 0.5mm**  
**WITH A SERIES 3 PROFILE**



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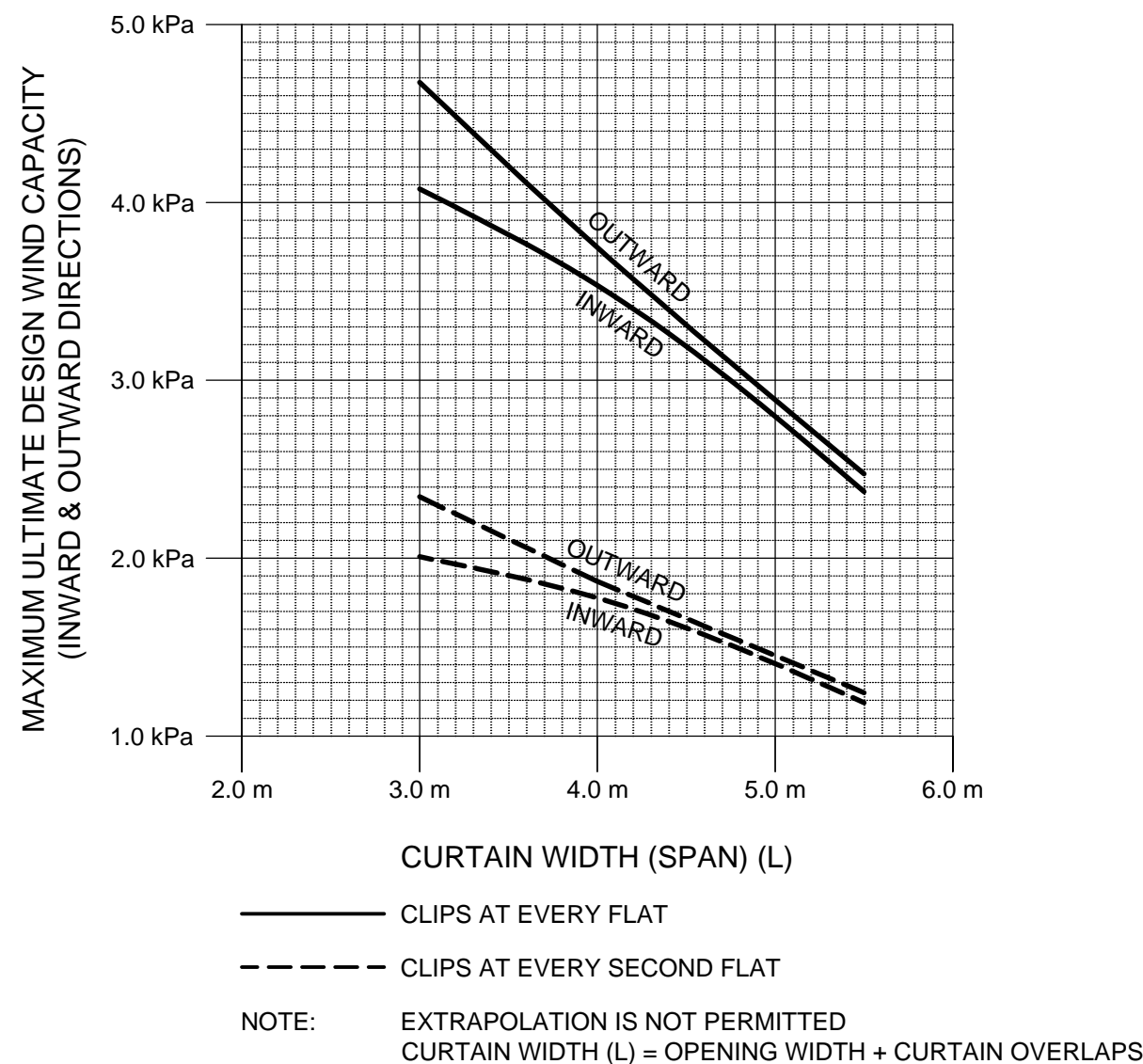
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PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

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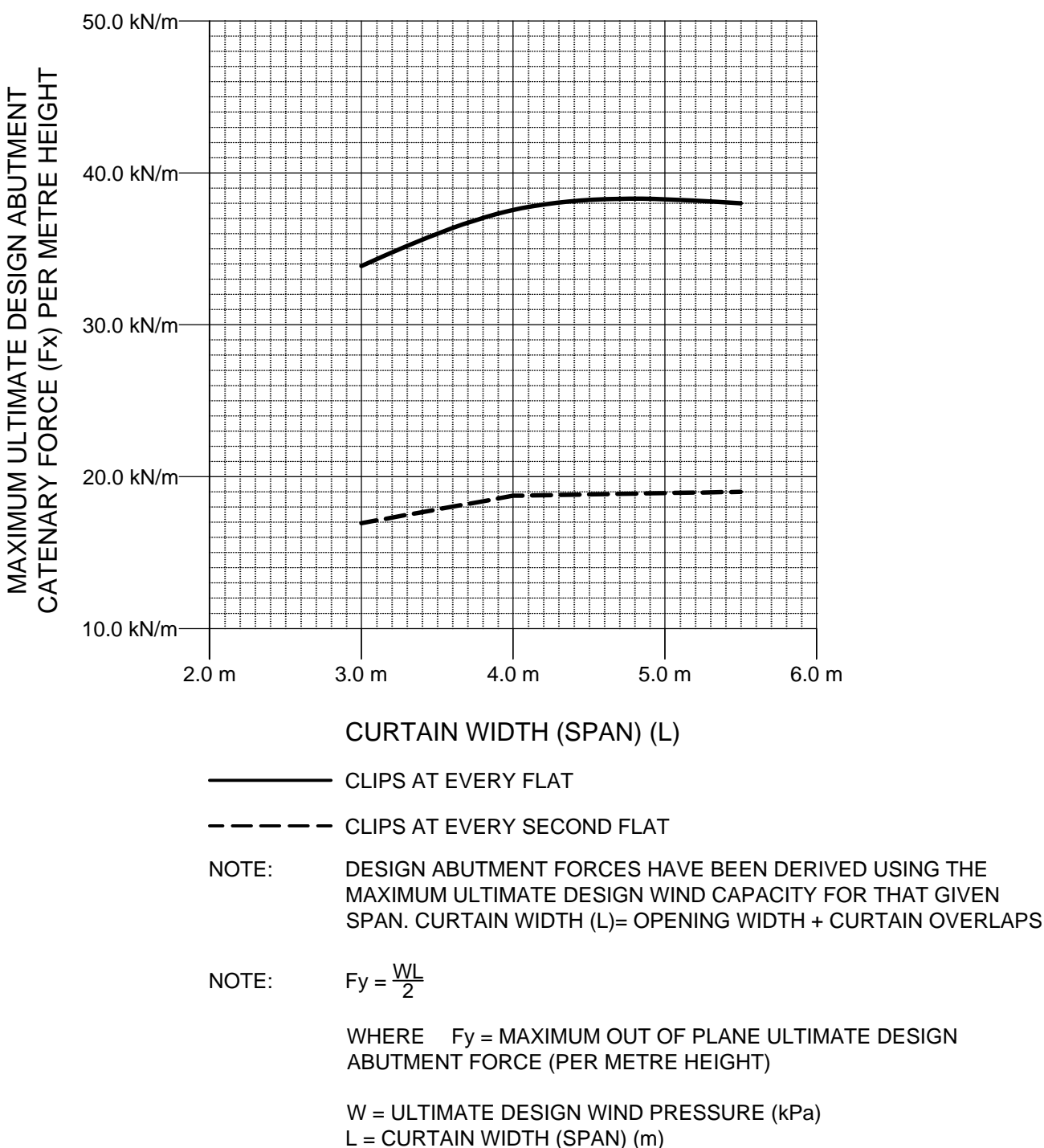
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**FIGURE (D1)**  
**MAXIMUM ULTIMATE DESIGN WIND**  
**CAPACITY FOR A GIVEN SPAN**  
**USING A CURTAIN THICKNESS OF**  
**0.4mm WITH A SERIES 3 PROFILE**



**FIGURE (D2)**  
**MAXIMUM ULTIMATE DESIGN ABUTMENT**  
**CATENARY FORCE FOR A GIVEN SPAN**  
**USING A CURTAIN THICKNESS OF 0.4mm**  
**WITH A SERIES 3 PROFILE**



ISSUE	DATE	AMENDMENTS
M	14.08.17	SERIES 2 PROFILE AMENDED AND SERIES 3 PROFILE ADDED

CLIENT	B&D AUSTRALIA PTY LTD
PROJECT	B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR FOR USE IN ALL WIND REGIONS

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