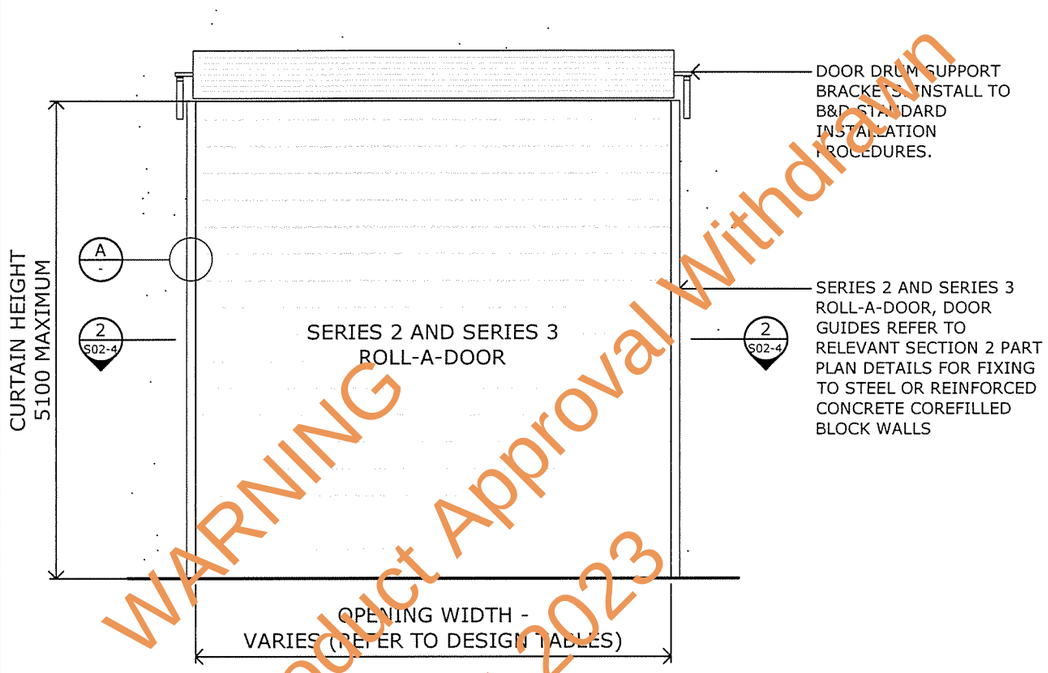
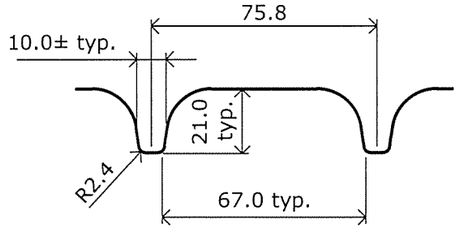
IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



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

SCALE 1:50

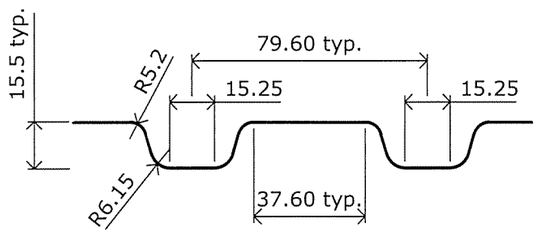
CURTAIN WIDTH (L)= OPENING WIDTH + CURTAIN OVERLAPS
(REFER TO DRAWINGS S02, S03 AND S04 FOR DETAILS)



CURTAIN PROFILE

SECTION 3 -
SCALE = 1:2

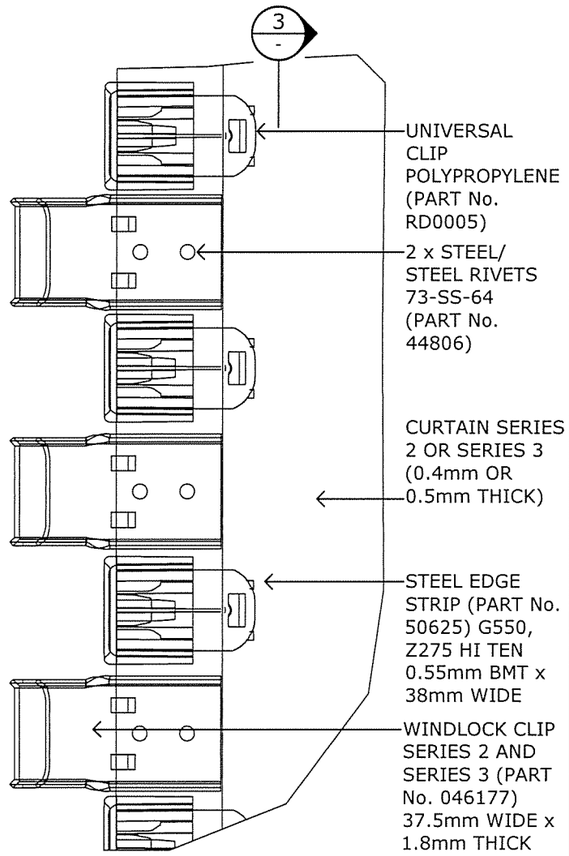
SERIES 2 PROFILE (REFER ALSO TO TABLE B)



CURTAIN PROFILE

SECTION 3 -
SCALE = 1:2

SERIES 3 PROFILE (REFER ALSO TO TABLE B)



DETAIL A -
SCALE = 1:2

CURTAIN MATERIAL AND WIND-LOCK CLIPS - PART ELEVATION

AS VIEWED FROM BACK FACE

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M|334|01 DRAWING No. S01 - REV 2

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:

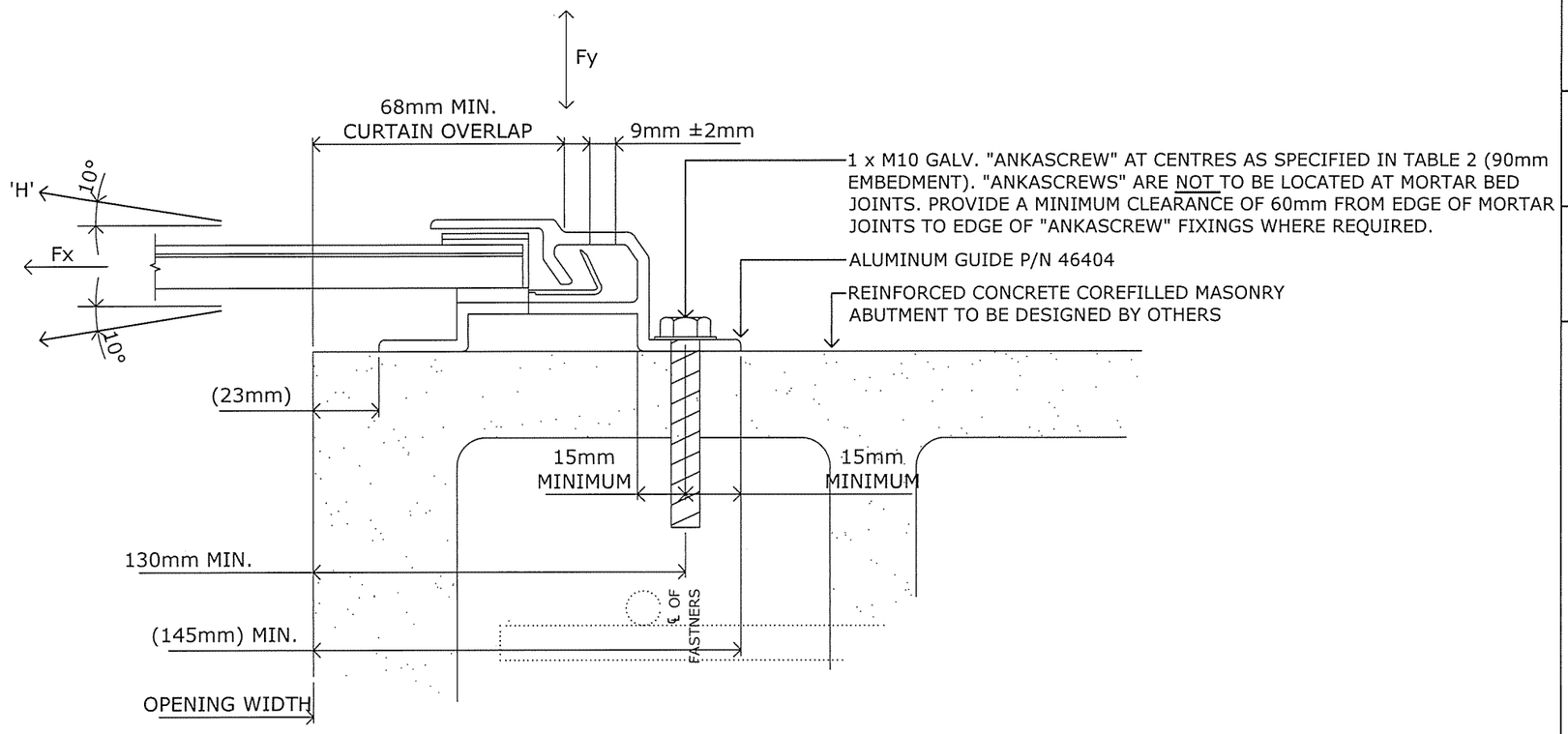
registered as a structural engineer in **Australia

**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:

registered as a structural engineer in **Northern Territory

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



FIXING TO BLOCKWORK

SECTION 2/S01 PART PLAN
SCALE = 1:2

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

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 IN TABLE 2.

NOTE:
- THE ABOVE FASTENING DETAIL HAS BEEN BASED ON THE RELEVANT MAXIMUM DESIGN SPAN LIMITS GIVEN IN TABLE 2.
- FASTENINGS ONTO REINFORCED CONCRETE COREFILLED BLOCK WALL ABUTMENTS HAVE BEEN DESIGNED USING THE RAMSET-SPECIFIERS RESOURCE BOOK.

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M/334/02 DRAWING No. S02 - REV 2

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)
- REPORT NO. TS1067 REVISION A & 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.
- 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.

**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:

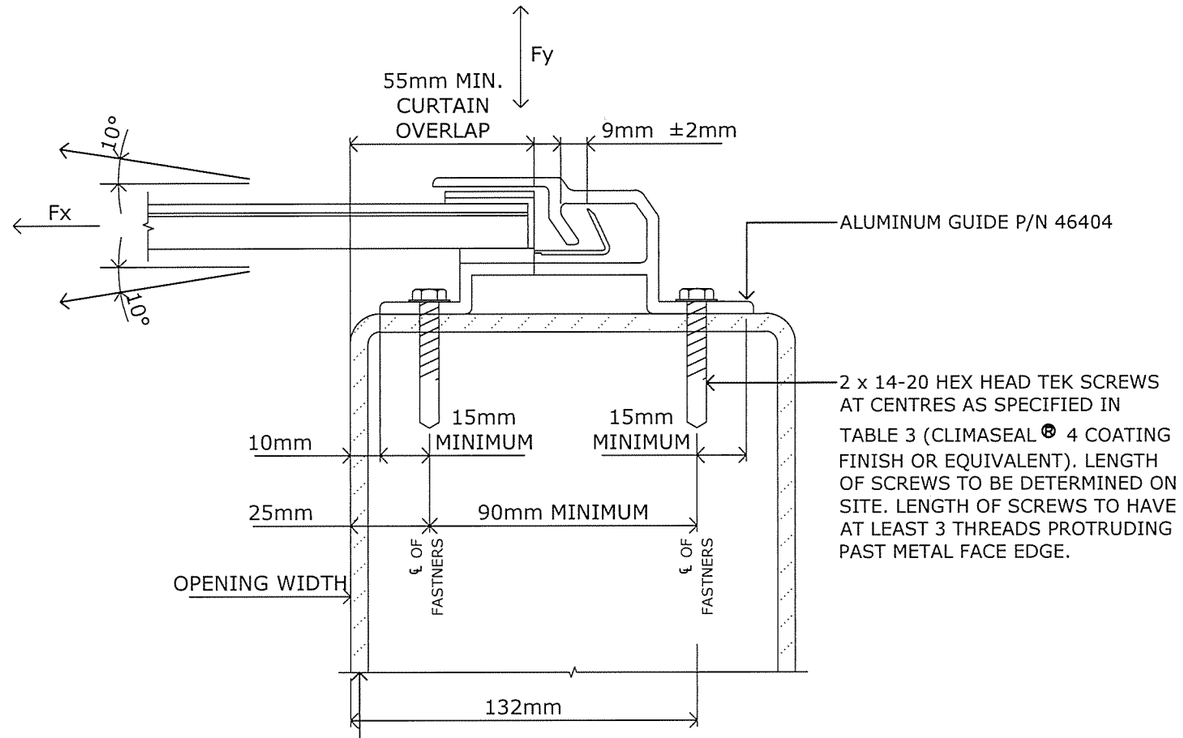
registered as a structural engineer in **Australia

**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:

registered as a structural engineer in **Northern Territory

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



FIXING TO MILD STEEL MULLION

SECTION 2/S01 PART PLAN

SCALE = 1:2

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

NOTE:

- THE ABOVE FASTENING DETAIL HAS BEEN BASED ON THE RELEVANT MAXIMUM DESIGN SPAN LIMITS GIVEN IN TABLE 3.
- FASTENINGS ONTO STRUCTURAL STEEL ABUTMENTS HAVE BEEN DESIGNED USING 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.

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: m/334/03 DRAWING No. S03 - REV 2

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

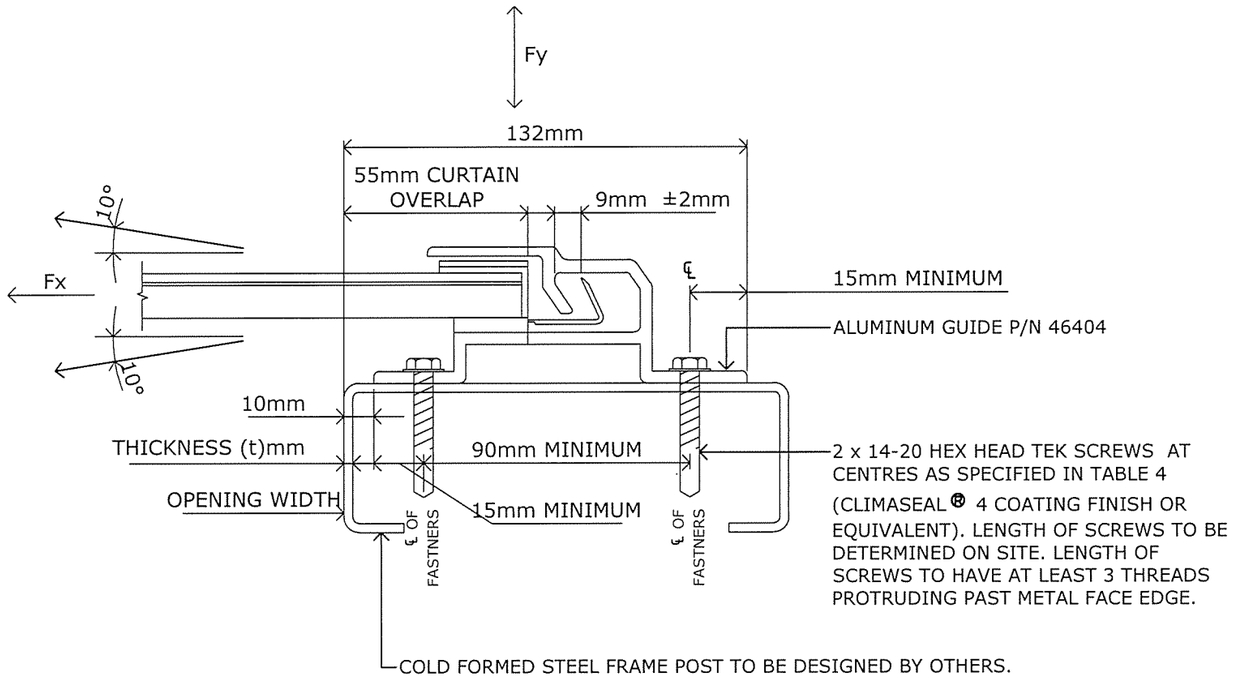
**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:
**registered as a structural engineer in Australia

**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:
**registered as a structural engineer in Northern Territory

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



FIXING TO COLD FORMED MULLION

SECTION 2/S01 PART PLAN
SCALE = 1:2

GUIDE SUPPORTED BY COLD FORMED STEEL MULLION FRAME (REFER TO TABLE 4 FOR FASTENING DETAILS).

NOTE:

- THE ABOVE FASTENING DETAIL HAS BEEN BASED ON THE RELEVANT MAXIMUM DESIGN SPAN LIMITS GIVEN IN TABLE 4.
- 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.

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: m/334/04 DRAWING No. S04 - REV 2

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:
**registered as a structural engineer in Australia

**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:
**registered as a structural engineer in Northern Territory

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

TABLE 1A
MAXIMUM ALLOWABLE SPANS (L) FOR SERIES 2 PROFILE 0.5mm BMT

REGION	TERRAIN CATEGORY	UP TO 5.1m HIGH	
		CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
C	2	5.5m	-
	2.5	5.5m	-

NOTE:
- SPAN (L) = CURTAIN WIDTH
- CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS (REFER TO DRAWING DRAWINGS S02,S03 & S04 FOR DETAILS).
- THE BUILDING DESIGN ENGINEER IS TO VERIFY THAT THE MAXIMUM ALLOWABLE SPANS GIVEN IN TABLE 1A ARE WITHIN THE MAXIMUM ULTIMATE DESIGN WIND CAPACITY LIMITS GIVEN IN FIGURE A1 WHEN DETERMINING THE SITE SPECIFIC DESIGN WIND PRESSURES.

TABLE 1B
MAXIMUM ALLOWABLE SPANS (L) FOR SERIES 2 PROFILE 0.4mm BMT

REGION	TERRAIN CATEGORY	UP TO 5.1m HIGH	
		CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
C	2	4.9m	-
	2.5	5.25m	-

NOTE:
- SPAN (L) = CURTAIN WIDTH
- CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS (REFER TO DRAWING DRAWINGS S02,S03 & S04 FOR DETAILS).
- THE BUILDING DESIGN ENGINEER IS TO VERIFY THAT THE MAXIMUM ALLOWABLE SPANS GIVEN IN TABLE 1B ARE WITHIN THE MAXIMUM ULTIMATE DESIGN WIND CAPACITY LIMITS GIVEN IN FIGURE B1 WHEN DETERMINING THE SITE SPECIFIC DESIGN WIND PRESSURES.

TABLE 2
FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO BLOCKWORK ABUTMENTS

SPAN (L)	CLIPS AT EVERY FLAT
3000-3499mm	1 x M10 GAL ANKASCREW AT 250 CTS.
3500-3999mm	1 x M10 GAL ANKASCREW AT 250 CTS.
4000-4499mm	1 x M10 GAL ANKASCREW AT 225 CTS.
4500-4999mm	1 x M10 GAL ANKASCREW AT 200 CTS.
5000-5500mm	1 x M10 GAL ANKASCREW AT 200 CTS.

NOTE:
- SPAN (L) = CURTAIN WIDTH
- CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS (REFER TO DRAWING DRAWING S02 FOR DETAILS).
- FOR SPANS LESS THAN 3m USE 1.M10 GALV. ANKASCREWS AT 250 CTS.

TABLE 1C
MAXIMUM ALLOWABLE SPANS (L) FOR SERIES 3 PROFILE 0.5mm BMT

REGION	TERRAIN CATEGORY	UP TO 5.1m HIGH	
		CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
C	2	5.3m	-
	2.5	5.5m	-

NOTE:
- SPAN (L) = CURTAIN WIDTH
- CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS (REFER TO DRAWING DRAWINGS S02,S03 & S04 FOR DETAILS).
- THE BUILDING DESIGN ENGINEER IS TO VERIFY THAT THE MAXIMUM ALLOWABLE SPANS GIVEN IN TABLE 1C ARE WITHIN THE MAXIMUM ULTIMATE DESIGN WIND CAPACITY LIMITS GIVEN IN FIGURE C1 WHEN DETERMINING THE SITE SPECIFIC DESIGN WIND PRESSURES.

TABLE 1D
MAXIMUM ALLOWABLE SPANS (L) FOR SERIES 3 PROFILE 0.4mm BMT

REGION	TERRAIN CATEGORY	UP TO 5.1m HIGH	
		CLIPS AT EVERY FLAT	CLIPS AT EVERY SECOND FLAT
C	2	4.8m	-
	2.5	5.15m	-

NOTE:
- SPAN (L) = CURTAIN WIDTH
- CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS (REFER TO DRAWING DRAWINGS S02,S03 & S04 FOR DETAILS).
- THE BUILDING DESIGN ENGINEER IS TO VERIFY THAT THE MAXIMUM ALLOWABLE SPANS GIVEN IN TABLE 1D ARE WITHIN THE MAXIMUM ULTIMATE DESIGN WIND CAPACITY LIMITS GIVEN IN FIGURE D1 WHEN DETERMINING THE SITE SPECIFIC DESIGN WIND PRESSURES.

TABLE 3
FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO STRUCTURAL STEEL ABUTMENTS (G250 STEEL)

SPAN (L)	CLIPS AT EVERY FLAT
3000-3499mm	2 x 14-20 TEK SCREWS AT 300 CTS.
3500-3999mm	2 x 14-20 TEK SCREWS AT 300 CTS.
4000-4499mm	2 x 14-20 TEK SCREWS AT 275 CTS.
4500-4999mm	2 x 14-20 TEK SCREWS AT 250 CTS.
5000-5500mm	2 x 14-20 TEK SCREWS AT 250 CTS.

NOTE:
- SPAN (L) = CURTAIN WIDTH
- CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS (REFER TO DRAWING S03 FOR DETAILS).
- FOR SPANS LESS THAN 3m USE 2 x 14-20 TEK SCREWS AT 300 CTS.

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M/334/05 DRAWING No. S05 - REV 2

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:

registered as a structural engineer in **Australia

**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:

registered as a structural engineer in **Northern Territory

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

TABLE 4

FASTENING SPECIFICATIONS OF ALUMINUM GUIDE ONTO COLD FORMED STRUCTURAL STEEL ABUTMENTS COMPLYING WITH AS 1397-1993

THICKNESS AND GRADE	SPAN (L)	CLIPS AT EVERY FLAT
1mm (G550)	3000-3499mm	2 x 14-20 TEK SCREWS AT 150 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 150 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 125 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 125 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 125 CTS.
1.2mm (G500)	3000-3499mm	2 x 14-20 TEK SCREWS AT 175 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 175 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 150 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 150 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 150 CTS.
1.5mm (G450)	3000-3499mm	2 x 14-20 TEK SCREWS AT 200 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 200 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 175 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 175 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 175 CTS.
1.9mm (G450)	3000-3499mm	2 x 14-20 TEK SCREWS AT 250 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 250 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 225 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 225 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 225 CTS.
2.4mm (G450)	3000-3499mm	2 x 14-20 TEK SCREWS AT 275 CTS.
	3500-3999mm	2 x 14-20 TEK SCREWS AT 275 CTS.
	4000-4499mm	2 x 14-20 TEK SCREWS AT 250 CTS.
	4500-4999mm	2 x 14-20 TEK SCREWS AT 250 CTS.
	5000-5500mm	2 x 14-20 TEK SCREWS AT 250 CTS.

NOTE:
- SPAN (L) = CURTAIN WIDTH
- CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS (REFER TO DRAWING DRAWING S04 FOR DETAILS).
- FOR SPANS LESS THAN 3m USE FASTENING SPECIFICATIONS AS FOR SPANS 3000-3499mm.

TABLE A

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

THICKNESS (t)mm	GRADE	YIELD 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

TABLE B

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 SQUARLINE WIDELINE	COLORBOND ZALG300S2	S3	0.5mm

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD
34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M/334/06 DRAWING No. S06 - REV 2

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:

registered as a structural engineer in **Australia

**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:

registered as a structural engineer in **Northern Territory

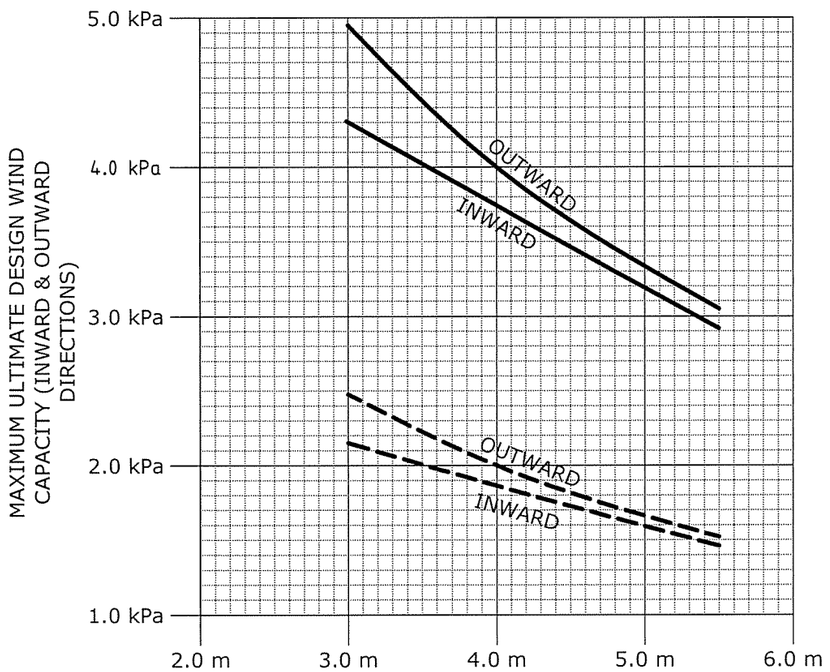
Chairman's **Signature:**

Chairman's **Name:** Paul Nowland

Date of **Approval:** 25-05-2018 Expiry **Date:** 25-05-2023

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

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

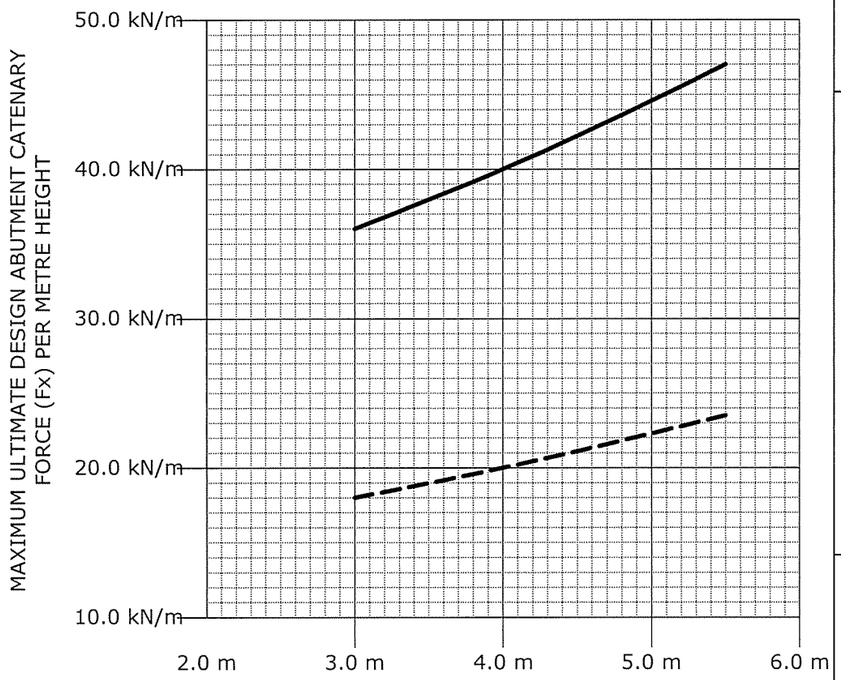


——— CLIPS AT EVERY FLAT

– – – – – 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 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 PRESSURE CAPACITY FOR A GIVEN SPAN (REFER ALSO TO FIGURE A). CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS

NOTE: $Fy = \frac{WL}{2}$

WHERE Fy = MAXIMUM OUT OF PLANE ULTIMATE DESIGN ABUTMENT FORCE (PER METRE HEIGHT)
W = ULTIMATE DESIGN WIND PRESSURE (kPa)
L = CURTAIN WIDTH (SPAN) (m)

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M/334/07 DRAWING No. S07 - REV 2

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:

registered as a structural engineer in **Australia

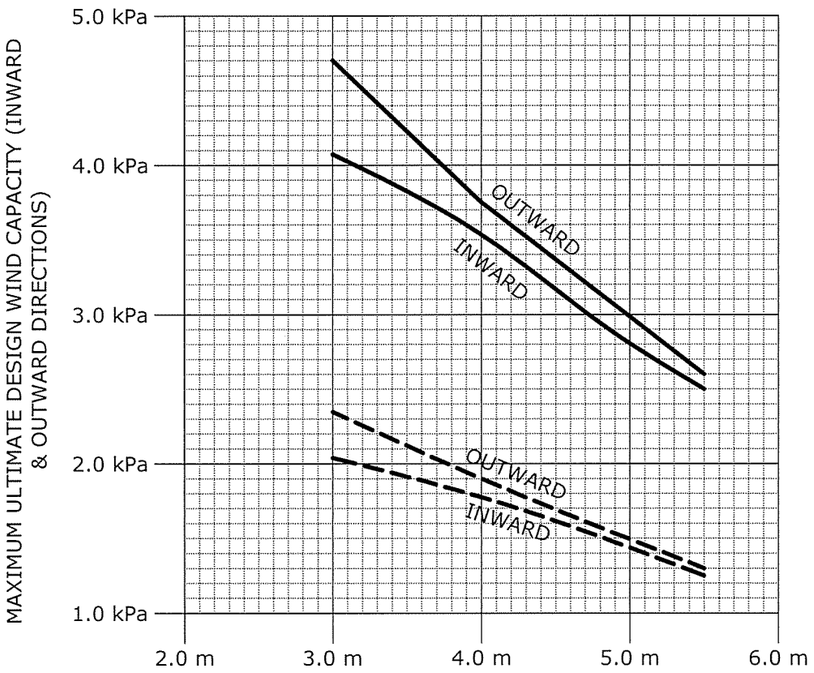
**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:

registered as a structural engineer in **Northern Territory

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

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

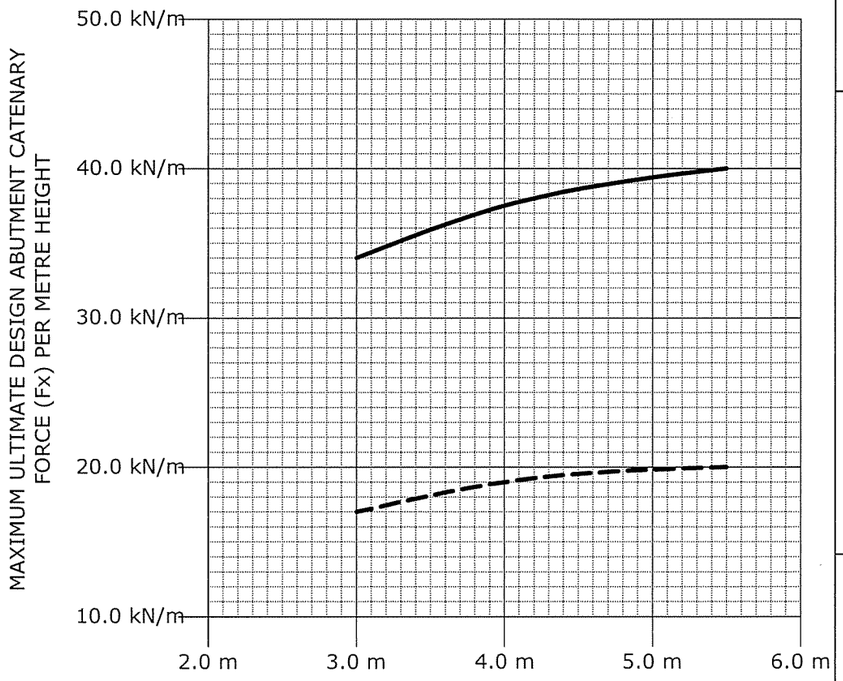


——— CLIPS AT EVERY FLAT

– – – – – CLIPS AT EVERY SECOND FLAT

NOTE: EXTRAPOLATION IS NOT PERMITTED
CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS

FIGURE (B2)
ULTIMATE DESIGN CATENARY FORCE FOR A GIVEN SPAN WHEN USING A CURTAIN THICKNESS OF 0.4mm 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: $Fy = \frac{WL}{2}$
WHERE Fy = MAXIMUM OUT OF PLANE ULTIMATE DESIGN ABUTMENT FORCE (PER METRE HEIGHT)
W = ULTIMATE DESIGN WIND PRESSURE (kPa)
L = CURTAIN WIDTH (SPAN) (m)

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD
34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M/334/08 DRAWING No. S08 - REV 2

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

**Design Engineers Certification

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:

registered as a structural engineer in **Australia

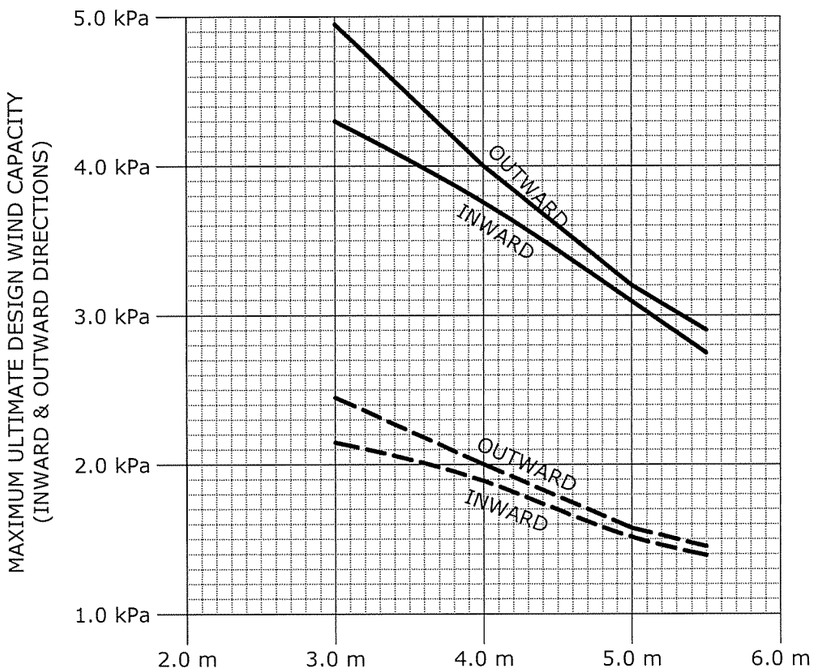
**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:

registered as a structural engineer in **Northern Territory

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

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

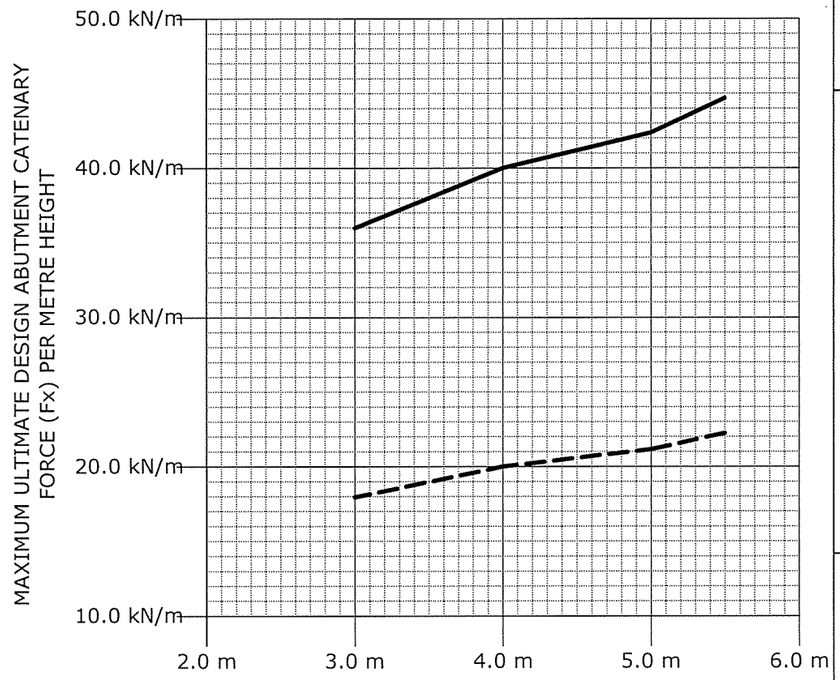


——— CLIPS AT EVERY FLAT

– – – – – CLIPS AT EVERY SECOND FLAT

NOTE: EXTRAPOLATION IS NOT PERMITTED
CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS

FIGURE (C2)
MAXIMUM ULTIMATE DESIGN ABUTMENT CATENARY FORCE FOR A GIVEN SPAN USING A CURTAIN THICKNESS OF 0.5mm WITH A SERIES 3 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: $Fy = \frac{WL}{2}$

WHERE Fy = MAXIMUM OUT OF PLANE ULTIMATE DESIGN ABUTMENT FORCE (PER METRE HEIGHT)

W = ULTIMATE DESIGN WIND PRESSURE (kPa)
L = CURTAIN WIDTH (SPAN) (m)

Product Name

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product Description

WINDLOCKED ROLLER DOOR

Manufacturer's Name

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- FOR THE ABOVE DESIGN CRITERIA PROVIDE CLIPS AT EVERY FLAT AS SHOWN ON PART ELEVATION (DETAIL A).
- 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.
- AS/NZS 1170.2:2011 STRUCTURAL DESIGN ACTIONS PART 2:WIND ACTIONS.
- AS/NZS 4505:2012 GARAGE DOORS & OTHER LARGE ACCESS DOORS.
- AS/NZS 1170.0:2002 STRUCTURAL DESIGN ACTIONS - PART 0:GENERAL PRINCIPLES.
- AS 4100:1998 STEEL STRUCTURES
- AS 3700-2001 MASONRY STRUCTURES
- AS/NZS 4600: 2005 COLD FORMED STRUCTURES
- AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
- AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.
- AS 3600:2009 CONCRETE STRUCTURES

Limitations

- STEEL ABUTMENT POSTS TO BE 3.0mm (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.).
- 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,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M/334/09 DRAWING No. S09 - REV 2

Chairman's Signature:

Chairman's Name: Paul Nowland

Date of Approval: 25-05-2018 Expiry Date: 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & 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.
- 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.

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Name: JAMES ELLIS
Registration Number: 47429ES
Date: 16/08/2017
Signature:

registered as a structural engineer in **Australia

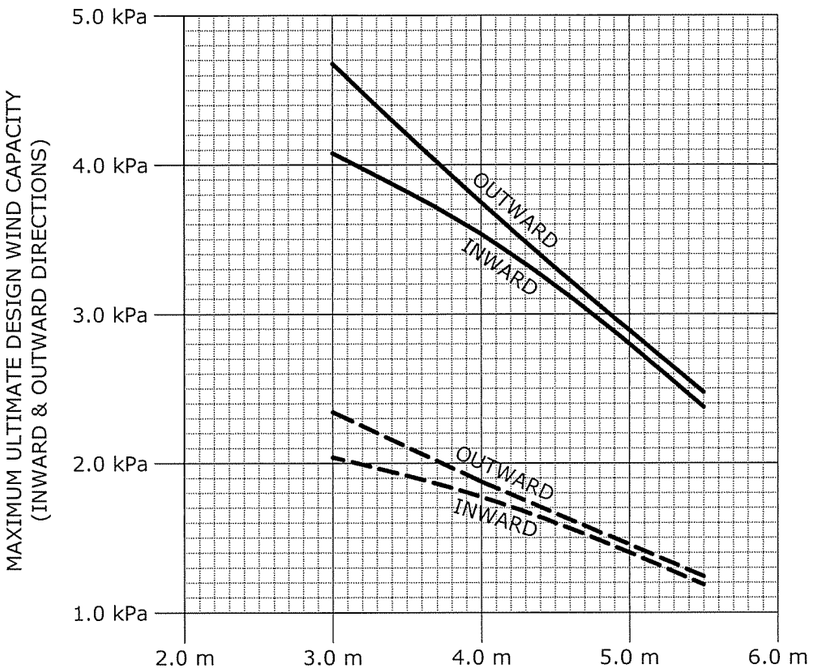
**Certifying Engineers Certification

Name: ASSET SERVICES Pty Ltd
NT Registration Number: 152941ES
Date: 26/09/2017
Signature:

registered as a structural engineer in **Northern Territory

IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1). THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

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

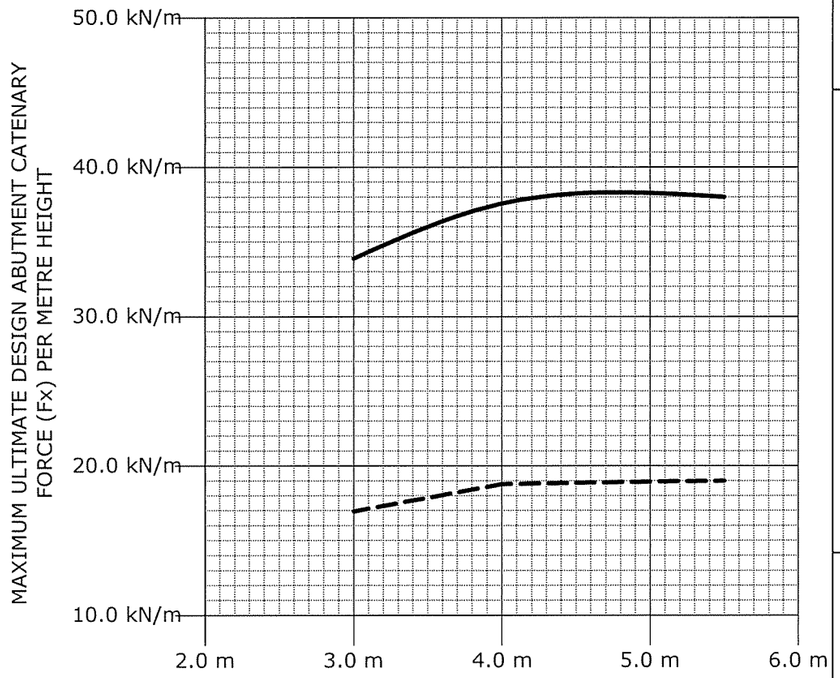


——— CLIPS AT EVERY FLAT

– – – – – CLIPS AT EVERY SECOND FLAT

NOTE: EXTRAPOLATION IS NOT PERMITTED
CURTAIN WIDTH (L) = OPENING WIDTH + CURTAIN OVERLAPS

FIGURE (D2)
MAXIMUM ULTIMATE DESIGN ABUTMENT CATENARY FORCE FOR A GIVEN SPAN USING A CURTAIN THICKNESS OF 0.4mm WITH A SERIES 3 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: $Fy = \frac{WL}{2}$

WHERE Fy = MAXIMUM OUT OF PLANE ULTIMATE DESIGN ABUTMENT FORCE (PER METRE HEIGHT)

W = ULTIMATE DESIGN WIND PRESSURE (kPa)
L = CURTAIN WIDTH (SPAN) (m)

Product **Name**

B&D SERIES 2 AND SERIES 3 ROLL-A-DOOR

Product **Description**

WINDLOCKED ROLLER DOOR

Manufacturer's **Name**

B&D AUSTRALIA PTY LTD

34-36 MARIGOLD STREET, REVESBY NSW 2212 PH: 136 263

Design Criteria

- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)
- REGION C
- TERRAIN CATEGORY 2
- DOOR HEIGHT 5.1m MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
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- AS 3600:2009 CONCRETE STRUCTURES

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- PROVIDE CLIPS AT EVERY FLAT OR EVERY SECOND FLAT AS REQUIRED (REFER TO FIGURES A1, B1, C1 OR D1 AND TABLES 1A,1B,1C OR 1D AS APPROPRIATE).

Accepted for Inclusion

DTCM ref: M/334/10 DRAWING No. S10 - REV 2

Chairman's **Signature:**

Chairman's **Name:** Paul Nowland

Date of **Approval:** 25-05-2018 Expiry **Date:** 25-05-2023

Notes covering basis of DTC (Relevant test reports etc)

- REPORT NO. TS1067 REVISION A & ADDENDUM TO REPORT NO.TS1067 REVISION A (CYCLONE TESTING STATION, SCHOOL OF ENGINEERING AND PHYSICAL SCIENCES, JAMES COOK UNIVERSITY).
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