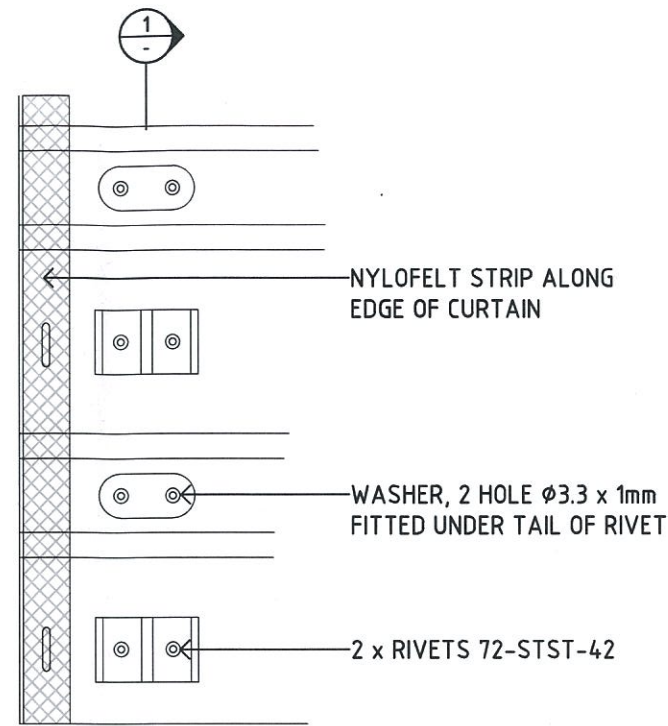
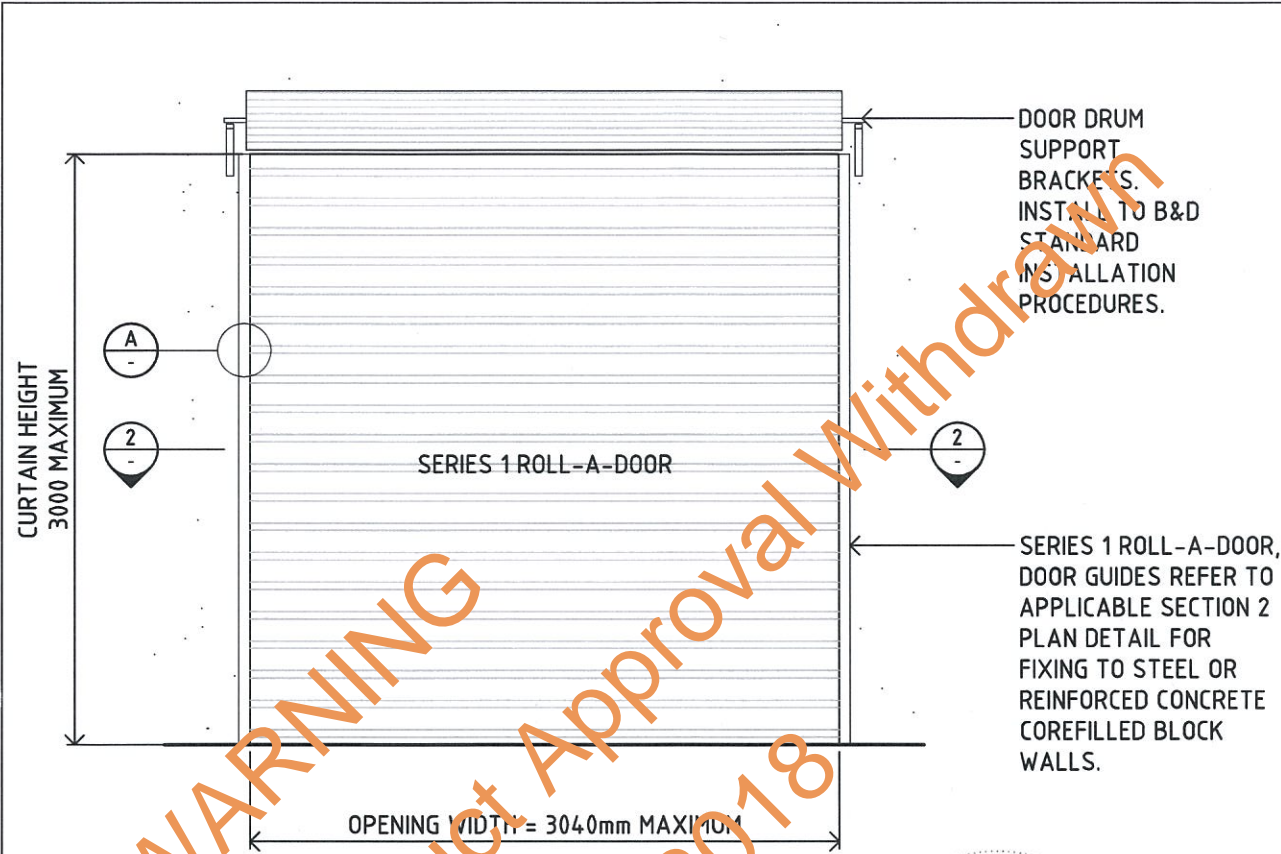
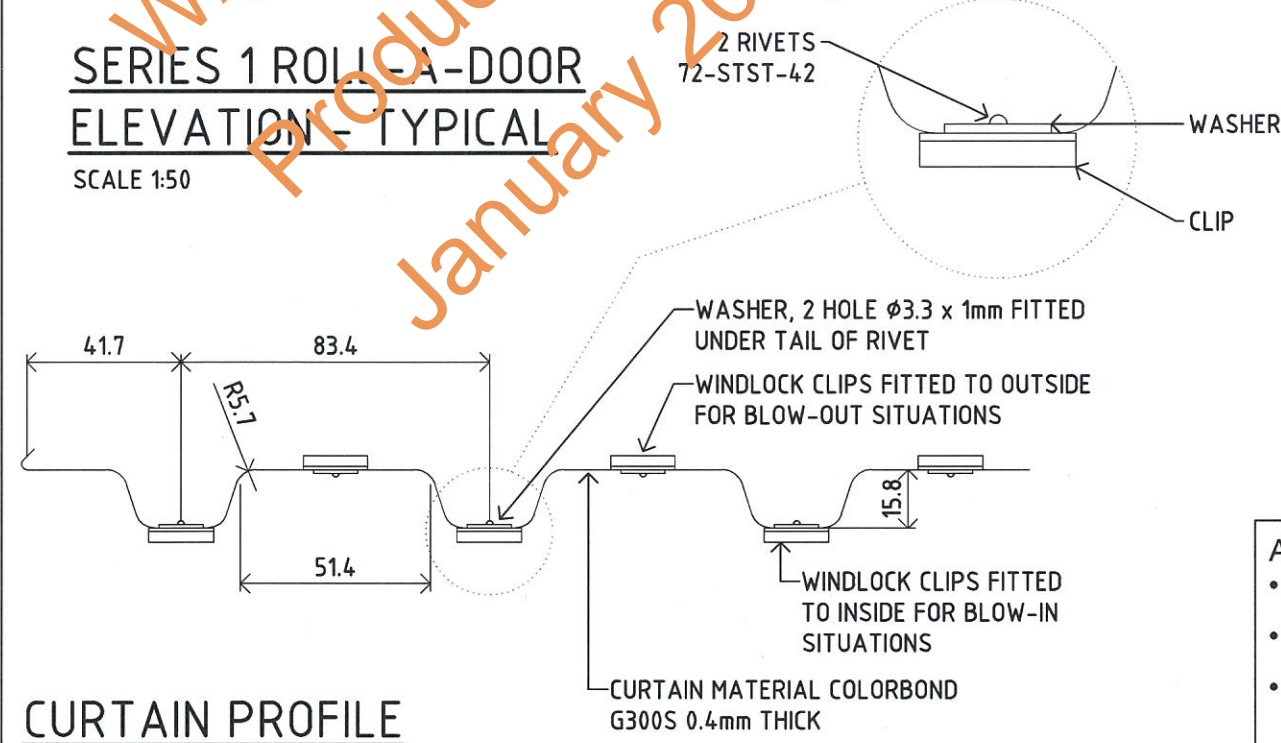


IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1), THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENTS P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



DETAIL
SCALE = 1:2
CURTAIN MATERIAL AND WINDCLIPS - PART ELEVATION

SERIES 1 ROLL-A-DOOR ELEVATION - TYPICAL
SCALE 1:50



CURTAIN PROFILE SECTION
SCALE = 1:2

Product Name
B&D SERIES 1 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

- REGION C
- TERRAIN CATEGORY 2.5
- DOOR HEIGHT 3.0M MAX.
- BUILDING IMPORTANCE = LEVEL 2
- REGION WINDSPEED VR = 69.3m/s
- DOORS ARE RATED UP TO AN ULTIMATE DESIGN WIND PRESSURE = 3.26kPa FOR A MAXIMUM ALLOWABLE OPENING WIDTH OF 3040mm
- 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.
- (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)

Limitations

- STEEL ABUTMENT POSTS TO BE 2.4mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O. (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
- 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 ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.
- THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADING DOES NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATING OF 3.26 kPa.
- DOORS MAY BE POSITIONED AT ANY LOCATION ALONG THE BUILDING ENVELOPE INCLUDING ALL LOCAL PRESSURE ZONES (ie. CORNERS OF BUILDINGS), PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.

Additional Notes Covering Basis of DTC

- ALL DOOR COMPONENTS TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR MANUFACTURING.
- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR INSTALLATION GUIDELINES.
- THE SERIES 1 ROLL-A-DOORS INCLUDE THE FOLLOWING B&D PRODUCT/MODEL NAMES:
a) SQUARELINE™ DELUXE ROLL-A-DOOR® (MODEL R1D)
b) FIRMADOOR (MODEL R1F)
c) ROLLMASTA (MODEL R1R)
d) ROLL-A-DOOR™ MINI WAREHOUSE MODEL (MODEL R1M)
e) ROLL-A-DOOR™ MINI WAREHOUSE (R1ME)

Accepted for Inclusion
DTCM ref: m/420/1 DRAWING No. S01

Notes covering basis of DTC (Relevant test reports etc)

- REPORT No. TS894 REVISION A DATED 6th JUNE 2013 (CYCLONE TESTING STATION, SCHOOL OF ENGINEERING AND PHYSICAL SCIENCES, JAMES COOK UNIVERSITY).
- PRINCIPLES OF MECHANICS.
- REFER TO "ADDITIONAL NOTES COVERING BASIS OF DTC".

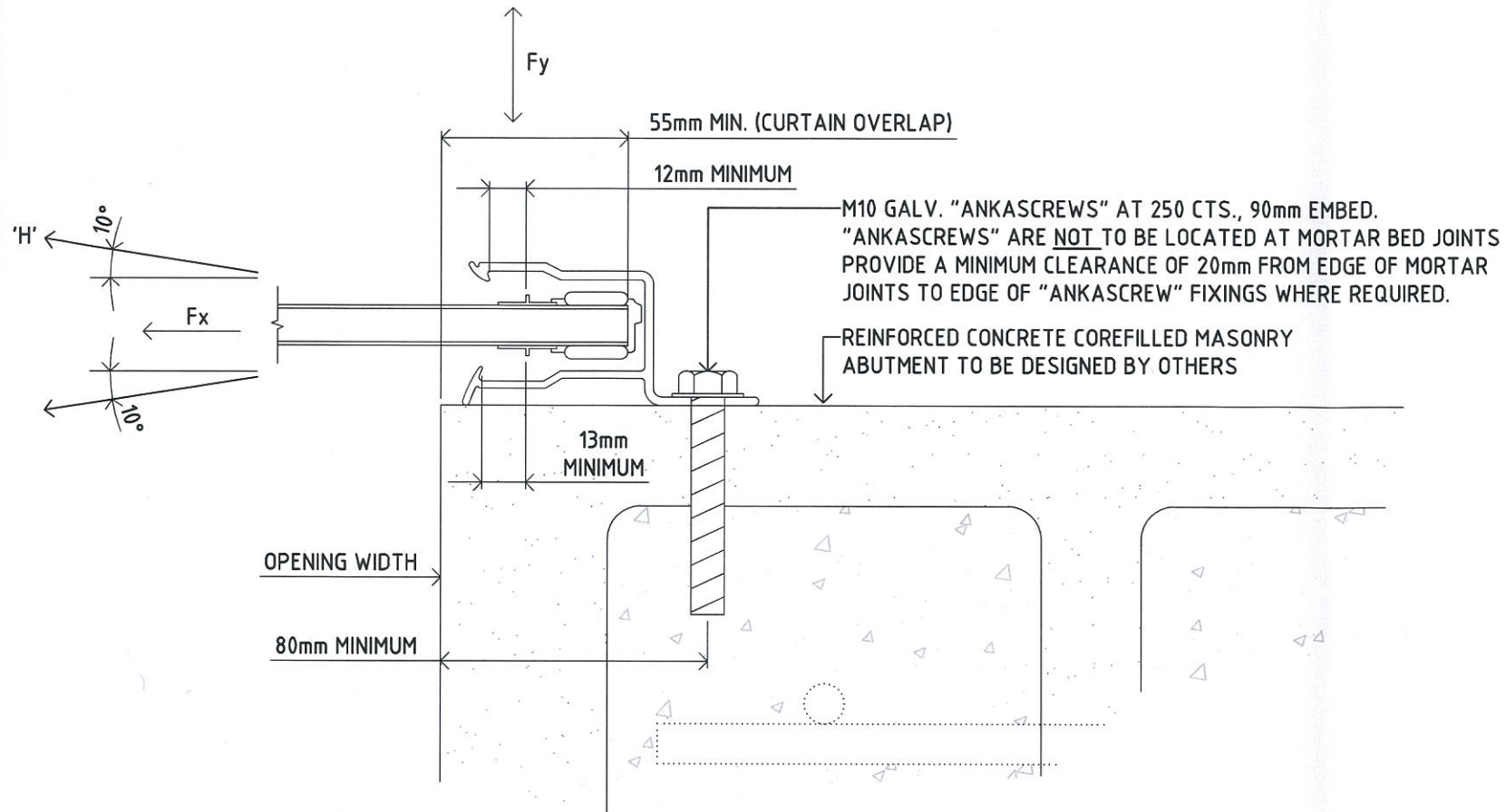
****Design Engineers Certification**
Name: JAMES ELLIS
Registration Number: 47429ES
Date: 22/8/2014
Signature: [Signature]

****Certifying Engineers Certification**
HEINER STRUCTURAL
Name: ENGINEERING CONSULTANTS
NT Registration Number: 52229ES
Date: 04/09/2014
Signature: [Signature]

Chairman's Signature: [Signature]
Chairman's Name: Peter Russell
Date of Approval: 6/11/14 **Expiry Date:** 6/11/19

**registered as a structural engineer in Australia **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 PLAN
SCALE = 1:2

GUIDE SUPPORTED BY REINFORCED CONCRETE COREFILLED MASONRY UNITS FOR A MAXIMUM OPENING WIDTH OF 3040mm IN REGION C TC2.5 AND UP TO A MAXIMUM DESIGN WIND PRESSURE OF 3.26 kPa.

NOTE:

- FIXINGS INTO REINFORCED CONCRETE COREFILLED BLOCK WALL ABUTMENTS HAVE BEEN DESIGNED USING THE RAMSET-SPECIFIERS RESOURCE BOOK.

Additional Notes Covering Basis of DTC

- ALL DOOR COMPONENTS TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR MANUFACTURING.
- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR INSTALLATION GUIDELINES.
- THE SERIES 1 ROLL-A-DOORS INCLUDE THE FOLLOWING B&D PRODUCT/MODEL NAMES:
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 - FIRMADOOR (MODEL R1F)
 - ROLLMASTA (MODEL R1R)
 - ROLL-A-DOOR™ MINI WAREHOUSE MODEL (MODEL R1M)
 - ROLL-A-DOOR™ MINI WAREHOUSE (R1ME)

Product Name
B&D SERIES 1 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**
- REGION C
 - TERRAIN CATEGORY 2.5
 - DOOR HEIGHT 3.0M MAX.
 - BUILDING IMPORTANCE = LEVEL 2
 - REGION WINDSPEED VR = 69.3m/s
 - DOORS ARE RATED UP TO AN ULTIMATE DESIGN WIND PRESSURE = 3.26kPa FOR A MAXIMUM ALLOWABLE OPENING WIDTH OF 3040mm
 - 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.
 - (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)

- Limitations**
- STEEL ABUTMENT POSTS TO BE 2.4mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O. (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
 - 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 ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.
 - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADING DOES NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATING OF 3.26 kPa.
 - DOORS MAY BE POSITIONED AT ANY LOCATION ALONG THE BUILDING ENVELOPE INCLUDING ALL LOCAL PRESSURE ZONES (ie. CORNERS OF BUILDINGS), PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.

Accepted for Inclusion
DTCM ref: *m/420/2* DRAWING No. S02

Notes covering basis of DTC (Relevant test reports etc)

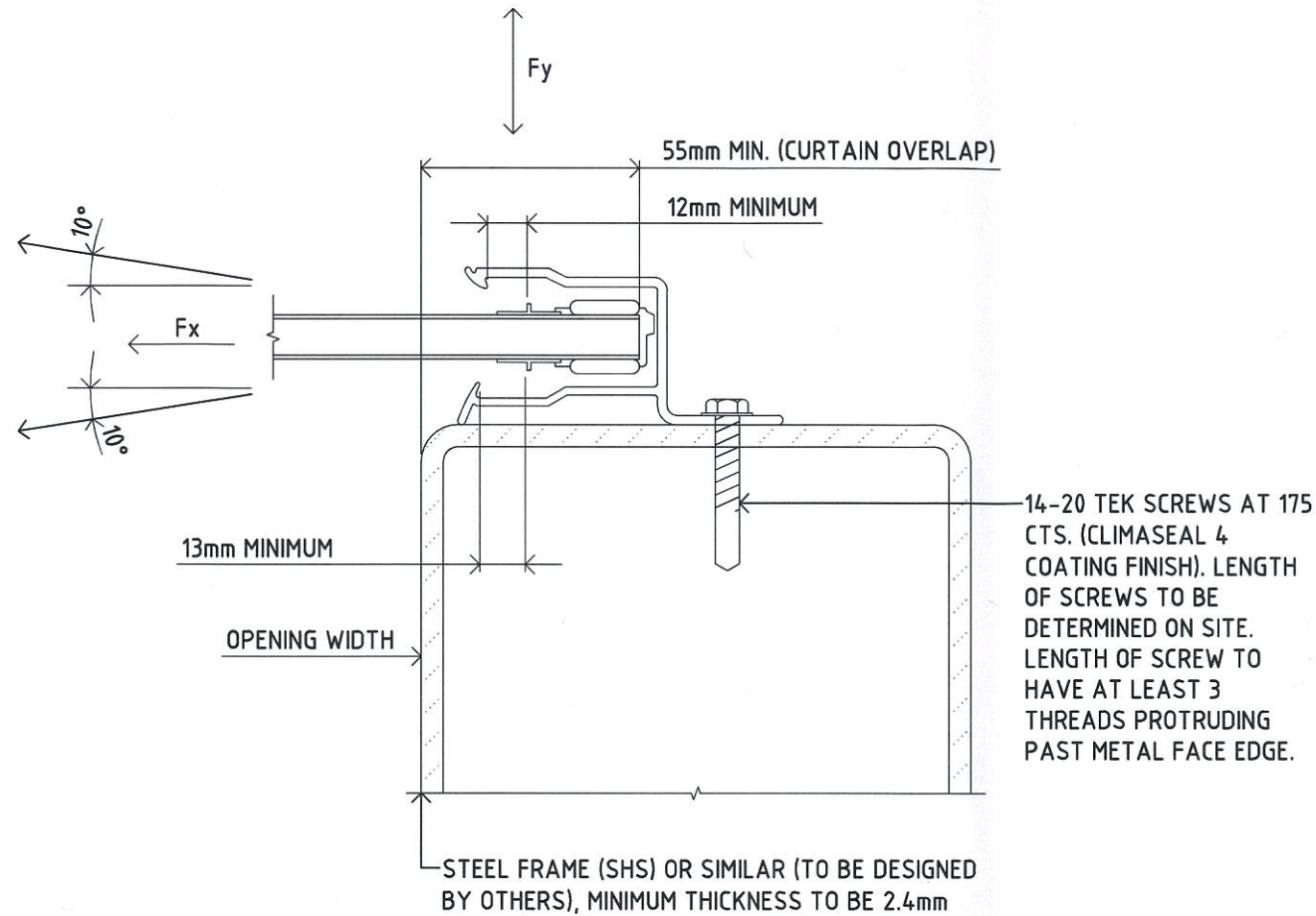
- REPORT No. TS894 REVISION A DATED 6th JUNE 2013 (CYCLONE TESTING STATION, SCHOOL OF ENGINEERING AND PHYSICAL SCIENCES, JAMES COOK UNIVERSITY).
- PRINCIPLES OF MECHANICS.
- REFER TO "ADDITIONAL NOTES COVERING BASIS OF DTC".

****Design Engineers Certification**
Name: JAMES ELLIS
Registration Number: 47429ES
Date: 22/8/2014
Signature: *[Signature]*
**registered as a structural engineer in Australia

****Certifying Engineers Certification**
HEINER STRUCTURAL
Name: ENGINEERING CONSULTANTS
NT Registration Number: 52229ES
Date: 04/09/2014
Signature: *[Signature]*
**registered as a structural engineer in Northern Territory

Chairman's Signature: *[Signature]*
Chairman's Name: *Peter Russell*
Date of Approval: *6/11/14* **Expiry Date:** *6/11/19*

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 PLAN
SCALE = 1:2 S01

GUIDE SUPPORTED BY MILD STEEL MULLION FRAME FOR A MAXIMUM OPENING WIDTH OF 3040mm IN REGION C TC2.5 AND UP TO A MAXIMUM DESIGN WIND PRESSURE OF 3.26 kPa.

NOTE:

- FIXINGS INTO STRUCTURAL STEEL ABUTMENTS HAVE BEEN DESIGNED USING TECHNICAL DATA PROVIDED BY BUILDEX FASTENERS.

Additional Notes Covering Basis of DTC

- ALL DOOR COMPONENTS TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR MANUFACTURING.
- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR INSTALLATION GUIDELINES.
- THE SERIES 1 ROLL-A-DOORS INCLUDE THE FOLLOWING B&D PRODUCT/MODEL NAMES:
 - SQUARELINE™ DELUXE ROLL-A-DOOR® (MODEL R1D)
 - FIRMADOOR (MODEL R1F)
 - ROLLMASTA (MODEL R1R)
 - ROLL-A-DOOR™ MINI WAREHOUSE MODEL (MODEL R1M)
 - ROLL-A-DOOR™ MINI WAREHOUSE (R1ME)

Product Name
B&D SERIES 1 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**
- REGION C
 - TERRAIN CATEGORY 2.5
 - DOOR HEIGHT 3.0M MAX.
 - BUILDING IMPORTANCE = LEVEL 2
 - REGION WINDSPEED VR = 69.3m/s
 - DOORS ARE RATED UP TO AN ULTIMATE DESIGN WIND PRESSURE = 3.26kPa FOR A MAXIMUM ALLOWABLE OPENING WIDTH OF 3040mm
 - 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.
 - (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)

- Limitations**
- STEEL ABUTMENT POSTS TO BE 2.4mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O. (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
 - 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 ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.
 - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADING DOES NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATING OF 3.26 kPa.
 - DOORS MAY BE POSITIONED AT ANY LOCATION ALONG THE BUILDING ENVELOPE INCLUDING ALL LOCAL PRESSURE ZONES (ie. CORNERS OF BUILDINGS), PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.

Accepted for Inclusion

DTCM ref: *m/420/3* DRAWING No. S03

Notes covering basis of DTC (Relevant test reports etc)

- REPORT No. TS894 REVISION A DATED 6th JUNE 2013 (CYCLONE TESTING STATION, SCHOOL OF ENGINEERING AND PHYSICAL SCIENCES, JAMES COOK UNIVERSITY).
- PRINCIPLES OF MECHANICS.
- REFER TO "ADDITIONAL NOTES COVERING BASIS OF DTC".

****Design Engineers Certification**

Name: JAMES ELLIS
Registration Number: 47429ES
Date: 22/8/2014
Signature: *[Signature]*

**registered as a structural engineer in Australia

****Certifying Engineers Certification**

Name: HEINER STRUCTURAL ENGINEERING CONSULTANTS
NT Registration Number: 52229ES
Date: 04/09/2014
Signature: *[Signature]*

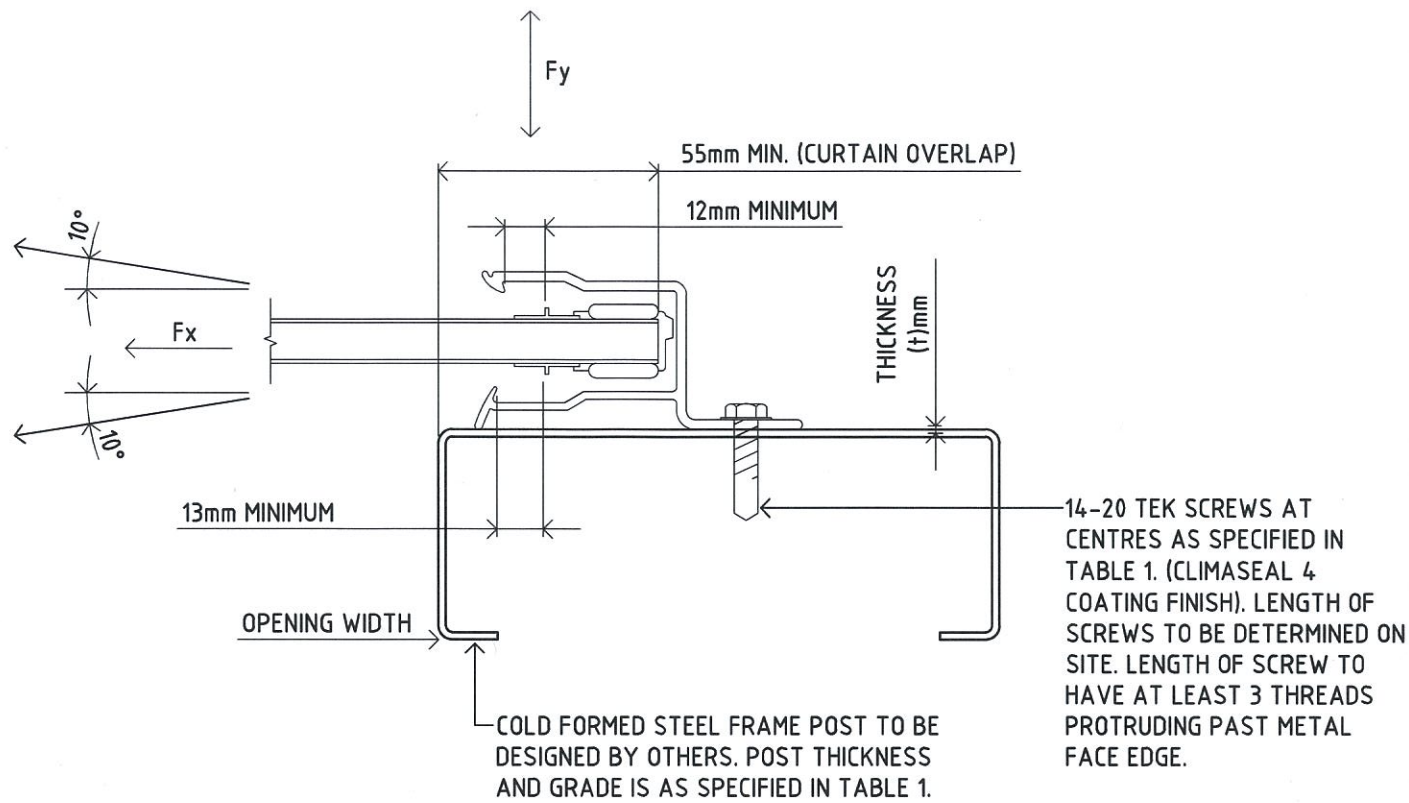
**registered as a structural engineer in Northern Territory

Chairman's Signature: *[Signature]*

Chairman's Name: *Peter Russell*

Date of Approval: *6/11/14* **Expiry Date:** *6/11/19*

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 MULLIONS

SECTION 2 PLAN
SCALE = 1:2 S01

GUIDE SUPPORTED BY COLD FORMED STEEL MULLION FRAME FOR A MAXIMUM OPENING WIDTH OF 3040mm IN REGION C TC2.5 AND UP TO A MAXIMUM DESIGN WIND PRESSURE OF 3.26 kPa.

NOTE:

- FIXINGS INTO COLD FORMED STEEL ABUTMENTS HAVE BEEN DESIGNED USING TECHNICAL DATA PROVIDED BY BUILDDEX FASTENERS.

TABLE 1

FASTENING SPECIFICATIONS INTO COLD FORMED STEEL ABUTMENT SUPPORTS COMPLYING WITH AS 1397-1993

THICKNESS (t)mm	GRADE	YIELD STRENGTH	TENSILE STRENGTH	SPACING (mm)
1mm	G550	550 MPa	550 MPa	125mm
1.2mm	G500	500 MPa	520 MPa	150mm
1.5mm	G450	450 MPa	480 MPa	175mm
1.9mm	G450	450 MPa	480 MPa	175mm

Additional Notes Covering Basis of DTC

- ALL DOOR COMPONENTS TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR MANUFACTURING.
- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR INSTALLATION GUIDELINES.
- THE SERIES 1 ROLL-A-DOORS INCLUDE THE FOLLOWING B&D PRODUCT/MODEL NAMES:
 - SQUARELINE™ DELUXE ROLL-A-DOOR® (MODEL R1D)
 - FIRMADOOR (MODEL R1F)
 - ROLLMASTA (MODEL R1R)
 - ROLL-A-DOOR™ MINI WAREHOUSE MODEL (MODEL R1M)
 - ROLL-A-DOOR™ MINI WAREHOUSE (R1ME)

Product Name
B&D SERIES 1 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**
- REGION C
 - TERRAIN CATEGORY 2.5
 - DOOR HEIGHT 3.0M MAX.
 - BUILDING IMPORTANCE = LEVEL 2
 - REGION WINDSPEED VR = 69.3m/s
 - DOORS ARE RATED UP TO AN ULTIMATE DESIGN WIND PRESSURE = 3.26kPa FOR A MAXIMUM ALLOWABLE OPENING WIDTH OF 3040mm
 - 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
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 - AS/NZS 4600: 2005 COLD FORMED STRUCTURES
 - AS/NZS 1664.1:1997 ALUMINUM STRUCTURES PART1:LIMIT STATE DESIGN
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 - (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)

- Limitations**
- STEEL ABUTMENT POSTS TO BE 2.4mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O. (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
 - 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.
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 - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADING DOES NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATING OF 3.26 kPa.
 - DOORS MAY BE POSITIONED AT ANY LOCATION ALONG THE BUILDING ENVELOPE INCLUDING ALL LOCAL PRESSURE ZONES (ie. CORNERS OF BUILDINGS), PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.

Accepted for Inclusion

DTCM ref: *M/420/4* DRAWING No. S04

Chairman's Signature: *P. Russell*

Chairman's Name: *Peter Russell*

Date of Approval: *6/11/14* **Expiry Date:** *6/11/19*

Notes covering basis of DTC (Relevant test reports etc)

- REPORT No. TS894 REVISION A DATED 6th JUNE 2013 (CYCLONE TESTING STATION, SCHOOL OF ENGINEERING AND PHYSICAL SCIENCES, JAMES COOK UNIVERSITY).
- PRINCIPLES OF MECHANICS.
- REFER TO "ADDITIONAL NOTES COVERING BASIS OF DTC".

****Design Engineers Certification**

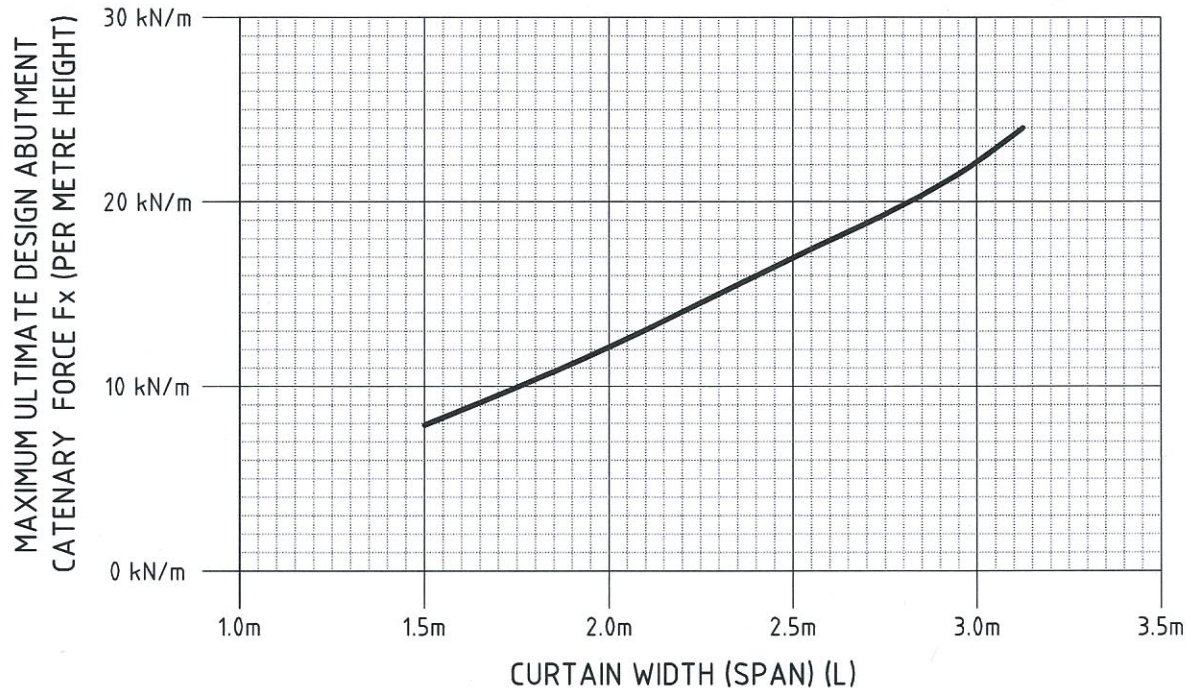
Name: JAMES ELLIS
Registration Number: 47429ES
Date: 22/8/2014
Signature: *[Signature]*

**registered as a structural engineer in Australia

****Certifying Engineers Certification**

Name: HEINER STRUCTURAL ENGINEERING CONSULTANTS
NT Registration Number: 52229ES
Date: 04/09/2014
Signature: *[Signature]*

**registered as a structural engineer in Northern Territory



NOTE: CURTAIN WIDTH = OPENING WIDTH + CURTAIN OVERLAPS

MAXIMUM ULTIMATE DESIGN ABUTMENT CATENARY FORCE F_x (PER METRE HEIGHT) FOR VARIOUS SPANS IN REGION C, TC2.5 AND UP TO A MAXIMUM DESIGN WIND PRESSURE OF 3.26 kPa

NOTE 1: $F_y = \frac{WL}{2}$
 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)

Additional Notes Covering Basis of DTC

- ALL DOOR COMPONENTS TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR MANUFACTURING.
- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D SERIES 1 ROLL-A-DOOR INSTALLATION GUIDELINES.
- THE SERIES 1 ROLL-A-DOORS INCLUDE THE FOLLOWING B&D PRODUCT/MODEL NAMES:
 - SQUARELINE™ DELUXE ROLL-A-DOOR® (MODEL R1D)
 - FIRMADOOR (MODEL R1F)
 - ROLLMASTA (MODEL R1R)
 - ROLL-A-DOOR™ MINI WAREHOUSE MODEL (MODEL R1M)
 - ROLL-A-DOOR™ MINI WAREHOUSE (R1ME)

Product Name
 B&D SERIES 1 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**
- REGION C
 - TERRAIN CATEGORY 2.5
 - DOOR HEIGHT 3.0M MAX.
 - BUILDING IMPORTANCE = LEVEL 2
 - REGION WINDSPEED VR = 69.3m/s
 - DOORS ARE RATED UP TO AN ULTIMATE DESIGN WIND PRESSURE = 3.26kPa FOR A MAXIMUM ALLOWABLE OPENING WIDTH OF 3040mm
 - 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.
 - (REFER ALSO TO NOTES COVERING BASIS OF DRAWINGS & LIMITATIONS)

- Limitations**
- STEEL ABUTMENT POSTS TO BE 2.4mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O. (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
 - CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF BLOCK WALL UNIT (f'_{uc}) = 15 MPa (MIN.).
 - CORE FILLING OF BLOCKWALL (f'_{c}) = 15 MPa (MIN.).
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 - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADING DOES NOT EXCEED THE ULTIMATE DESIGN WIND PRESSURE RATING OF 3.26 kPa.
 - DOORS MAY BE POSITIONED AT ANY LOCATION ALONG THE BUILDING ENVELOPE INCLUDING ALL LOCAL PRESSURE ZONES (ie. CORNERS OF BUILDINGS), PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURE DOES NOT EXCEED 3.26 kPa.

Accepted for Inclusion

DTCM ref: *m/420/5* DRAWING No. S05

Notes covering basis of DTC (Relevant test reports etc)

- REPORT No. TS894 REVISION A DATED 6th JUNE 2013 (CYCLONE TESTING STATION, SCHOOL OF ENGINEERING AND PHYSICAL SCIENCES, JAMES COOK UNIVERSITY).
- PRINCIPLES OF MECHANICS.
- REFER TO "ADDITIONAL NOTES COVERING BASIS OF DTC".

****Design Engineers Certification**

Name: JAMES ELLIS
 Registration Number: 47429ES
 Date: 22/8/2014
 Signature: *[Signature]*

**registered as a structural engineer in Australia

****Certifying Engineers Certification**

HEINER STRUCTURAL
 Name: ENGINEERING CONSULTANTS
 NT Registration Number: 52229ES
 Date: 04/09/2014
 Signature: *[Signature]*

**registered as a structural engineer in Northern Territory

Chairman's Signature: *[Signature]*

Chairman's Name: *Peter Russell*

Date of Approval: *6/11/14* **Expiry Date:** *6/11/19*