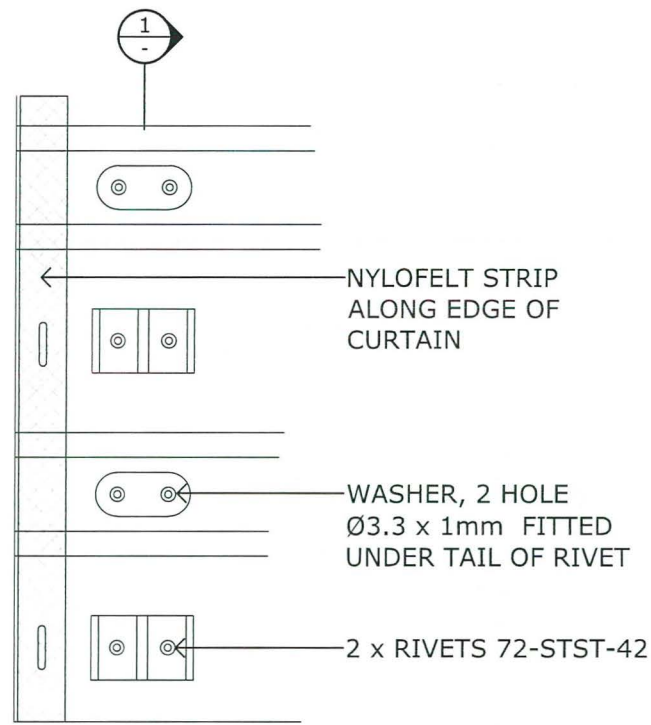
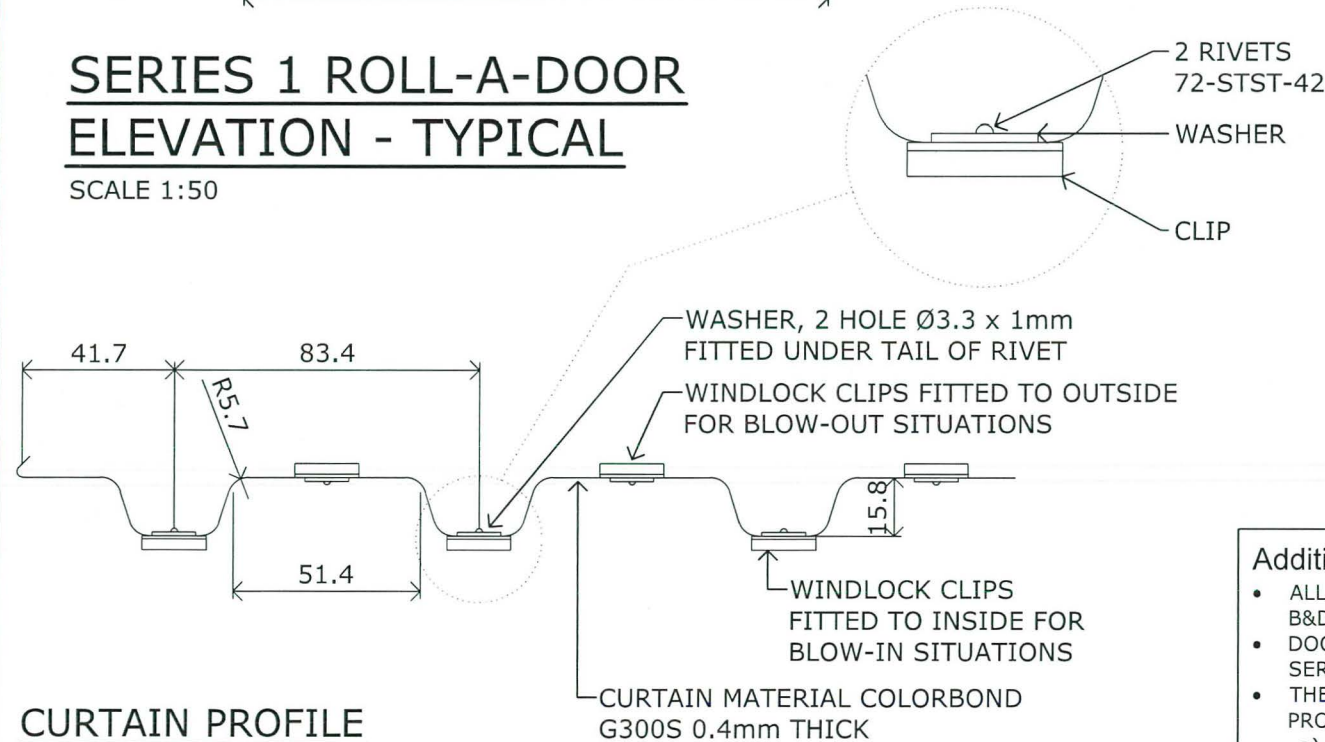


**SERIES 1 ROLL-A-DOOR  
ELEVATION - TYPICAL**  
SCALE 1:50



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



**CURTAIN PROFILE  
SECTION 1**  
SCALE = 1:2

**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. DESIGNERS SHALL TAKE INTO ACCOUNT HIGH LOCAL PRESSURE AREAS WHEN VERIFYING THE DOOR ULTIMATE DESIGN WIND PRESSURE.
  - 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 3700-2018 MASONRY STRUCTURES
  - AS/NZS 4600: 2018 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 UNLESS NOTED OTHERWISE AS SPECIFIED IN TABLE 1 (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 SHALL BE ADOPTED IF NEEDED PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURES DO NOT EXCEED 3.26 kPa.
  - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADINGS DO 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 PRESSURES DO NOT EXCEED 3.26 kPa.

**Accepted for Inclusion**

DTCM ref: *M/438/01* DRAWING No. S01 - Rev 1

Chairman's Signature: *[Signature]*

Chairman's Name: **Paul Nowland**

Date of Approval: **5/02/2020** Expiry Date: **5/02/2025**

- 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".

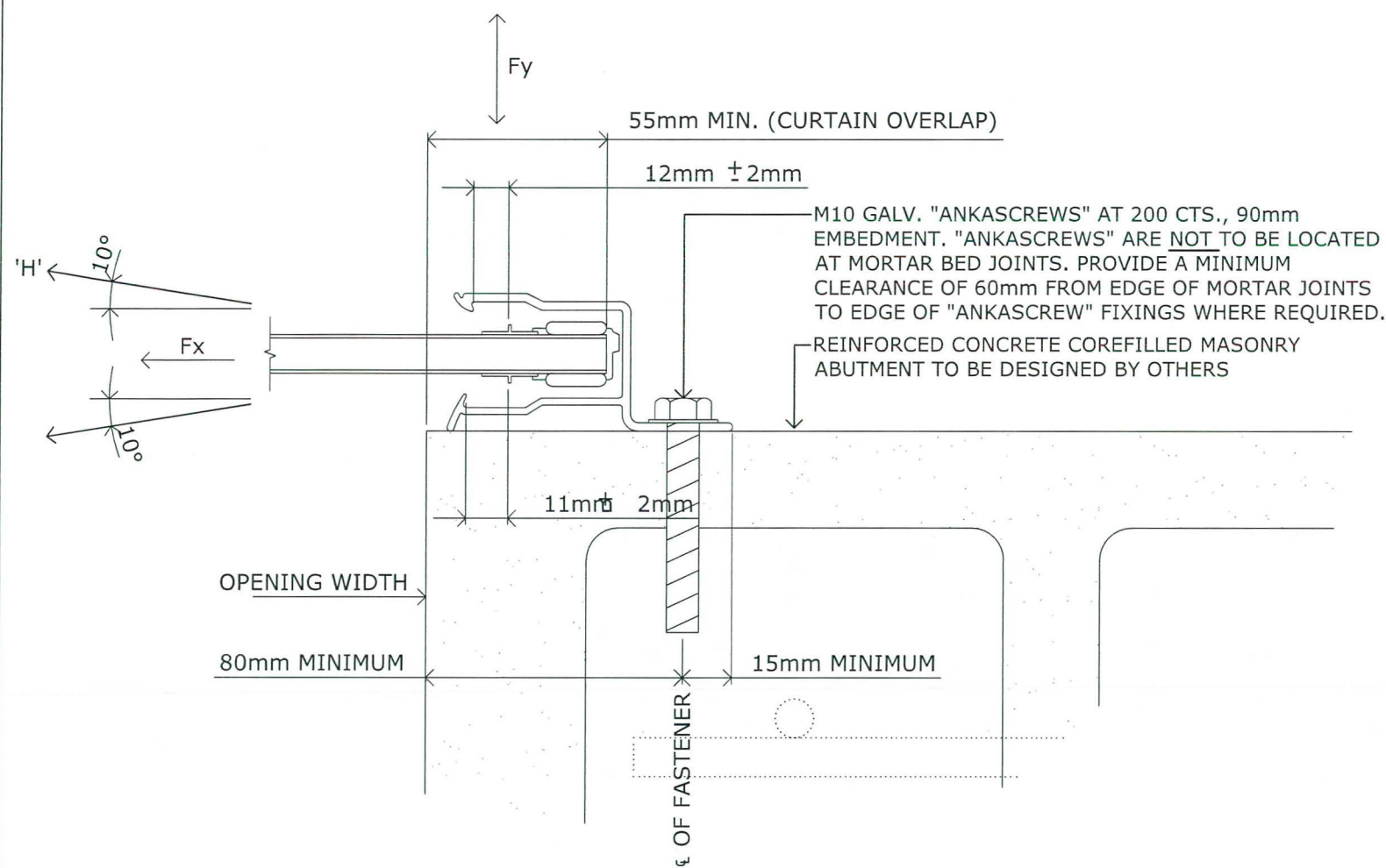
**\*\*Design Engineers Certification**

Name: JAMES ELLIS  
Registration Number: 47429ES  
Date: 02/12/2019  
Signature: *[Signature]*  
\*\*registered as a structural engineer in Australia

**\*\*Certifying Engineers Certification**

Name: ASSET SERVICES PTY LTD  
NT Registration Number: 152941ES  
Date: 03/12/2019  
Signature: *[Signature]*  
\*\*registered as a structural engineer in Northern Territory





**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:
  - 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)

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: 02/12/2019  
Signature: *[Signature]*

\*\*registered as a structural engineer in Australia

**\*\*Certifying Engineers Certification**

Name: ASSET SERVICES PTY LTD  
NT Registration Number: 152941ES  
Date: 03/12/2019  
Signature: *[Signature]*

\*\*registered as a structural engineer in Northern Territory

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. DESIGNERS SHALL TAKE INTO ACCOUNT HIGH LOCAL PRESSURE AREAS WHEN VERIFYING THE DOOR ULTIMATE DESIGN WIND PRESSURE.
  - 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 3700-2018 MASONRY STRUCTURES
  - AS/NZS 4600: 2018 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 UNLESS NOTED OTHERWISE AS SPECIFIED IN TABLE 1 (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
  - CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF BLOCK WALL UNIT (f<sub>uc</sub>) = 15 MPa (MIN.).
  - CORE FILLING OF BLOCKWALL (f<sub>c</sub>) = 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 SHALL BE ADOPTED IF NEEDED PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURES DO NOT EXCEED 3.26 kPa.
  - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADINGS DO 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 PRESSURES DO NOT EXCEED 3.26 kPa.

**Accepted for Inclusion**

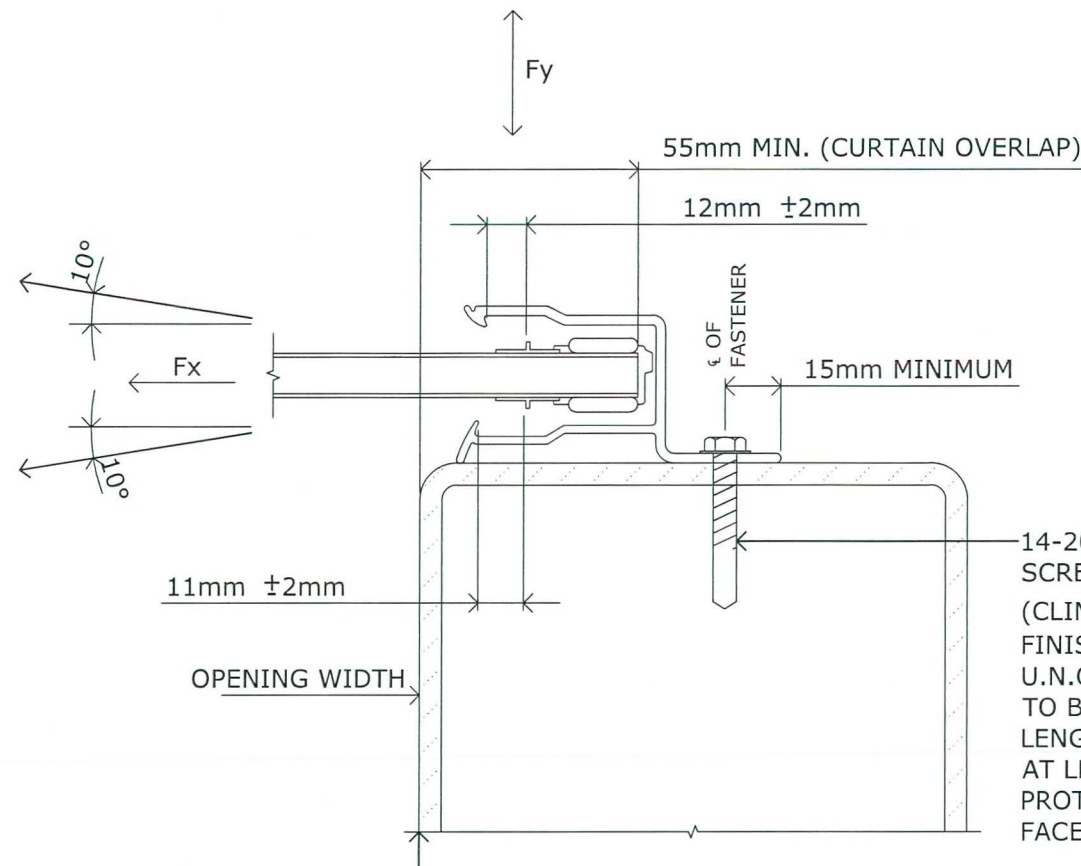
DTCM ref: *M/438/02* DRAWING No. S02 - Rev 2

Chairman's Signature: *[Signature]*

Chairman's Name: **Paul Nowland**

Date of Approval: **5/02/2020** Expiry Date: **5/02/2025**





14-20 HEX HEAD TEK SCREWS AT 150 CTS. (CLIMASEAL®4 COATING FINISH OR EQUIVALENT U.N.O.). LENGTH OF SCREWS TO BE DETERMINED ON SITE. LENGTH OF SCREWS TO HAVE AT LEAST 3 THREADS PROTRUDING PAST METAL FACE EDGE.

STEEL FRAME (SHS) OR SIMILAR (TO BE DESIGNED BY OTHERS), MINIMUM THICKNESS TO BE 2.4mm. ALL STEEL SURFACES IN CONTACT WITH THE ALUMINUM GUIDE ARE TO BE APPROPRIATELY PAINTED TO AVOID THE ONSET OF CORROSION (SPECIFICATION BY OTHERS).

**FIXING TO MILD STEEL MULLION**

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

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 BUILDDEX FASTENERS.
- STAINLESS STEEL TEK SCREWS IN LIEU OF CLIMASEAL®4 COATED TEK SCREWS ARE TO BE USED IN HIGHLY CORROSIVE ENVIRONMENTS.

- 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)

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. DESIGNERS SHALL TAKE INTO ACCOUNT HIGH LOCAL PRESSURE AREAS WHEN VERIFYING THE DOOR ULTIMATE DESIGN WIND PRESSURE.
  - 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 3700-2018 MASONRY STRUCTURES
  - AS/NZS 4600: 2018 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 UNLESS NOTED OTHERWISE AS SPECIFIED IN TABLE 1 (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 SHALL BE ADOPTED IF NEEDED PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURES DO NOT EXCEED 3.26 kPa.
  - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADINGS DO 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 PRESSURES DO NOT EXCEED 3.26 kPa.

**Accepted for Inclusion**

DTCM ref: **M/438/03** DRAWING No. S03 - Rev 2

Chairman's Signature:

Chairman's Name: **Paul Nowland**

Date of Approval: **5/02/2020** Expiry Date: **5/02/2025**

- 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: 02/12/2019  
Signature:

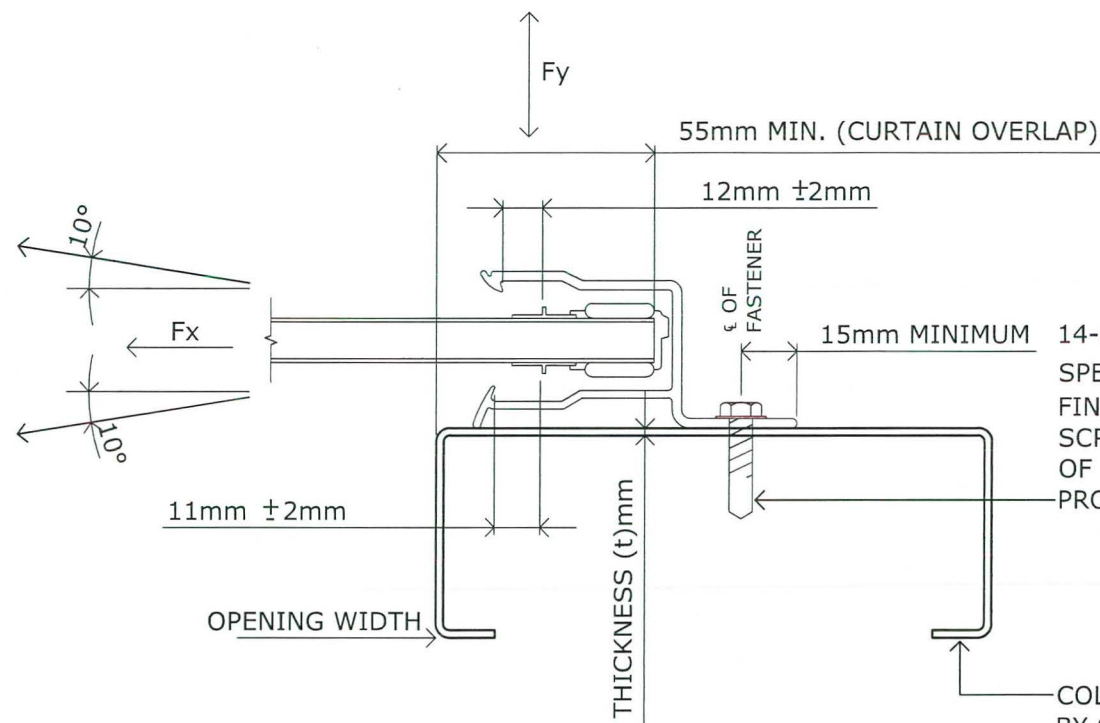
\*\*registered as a structural engineer in Australia

**\*\*Certifying Engineers Certification**

Name: ASSET SERVICES PTY LTD  
NT Registration Number: 152941ES  
Date: 03/12/2019  
Signature:

\*\*registered as a structural engineer in Northern Territory





14-20 HEX HEAD TEK SCREWS AT CENTRES AS SPECIFIED IN TABLE 1. (CLIMASEAL®4 COATING FINISH OR EQUIVALENT U.N.O.). LENGTH OF SCREWS TO BE DETERMINED ON SITE. LENGTH OF SCREWS TO HAVE AT LEAST 3 THREADS PROTRUDING PAST METAL FACE EDGE.

COLD FORMED STEEL FRAME POST TO BE DESIGNED BY OTHERS. POST THICKNESS AND GRADE IS AS SPECIFIED IN TABLE 1. ALL STEEL SURFACES IN CONTACT WITH THE ALUMINUM GUIDE ARE TO BE APPROPRIATELY PAINTED TO AVOID THE ONSET OF CORROSION (SPECIFICATION BY OTHERS).

**FIXING TO COLD FORMED MULLIONS**

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

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 BUILDEX FASTENERS.
  - STAINLESS STEEL TEK SCREWS IN LIEU OF CLIMASEAL®4 COATED TEK SCREWS ARE TO BE USED IN HIGHLY CORROSIVE ENVIRONMENTS.

**TABLE 1**  
FASTENING SPECIFICATIONS INTO COLD FORMED STEEL ABUTMENT SUPPORTS COMPLYING WITH AS 1397-2011

THICKNESS (t)mm	GRADE	YIELD STRENGTH	TENSILE STRENGTH	SPACING (mm)
1mm	G550	550 MPa	550 MPa	100mm
1.2mm	G500	500 MPa	520 MPa	125mm
1.5mm	G450	450 MPa	480 MPa	150mm
1.9mm	G450	450 MPa	480 MPa	150mm

**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. DESIGNERS SHALL TAKE INTO ACCOUNT HIGH LOCAL PRESSURE AREAS WHEN VERIFYING THE DOOR ULTIMATE DESIGN WIND PRESSURE.
  - 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 3700-2018 MASONRY STRUCTURES
  - AS/NZS 4600: 2018 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 UNLESS NOTED OTHERWISE AS SPECIFIED IN TABLE 1 (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
  - CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF BLOCK WALL UNIT (F<sub>uc</sub>) = 15 MPa (MIN.).
  - CORE FILLING OF BLOCKWALL (F<sub>c</sub>) = 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 SHALL BE ADOPTED IF NEEDED PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURES DO NOT EXCEED 3.26 kPa.
  - THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADINGS DO 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 PRESSURES DO NOT EXCEED 3.26 kPa.

**Accepted for Inclusion**

DTCM ref: *M/438/04* DRAWING No. S04 - Rev 2

Chairman's Signature: *[Signature]*

Chairman's Name: **Paul Nowland**

Date of Approval: **5/02/2020** Expiry Date: **5/02/2025**

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: 02/12/2019  
Signature: *[Signature]*

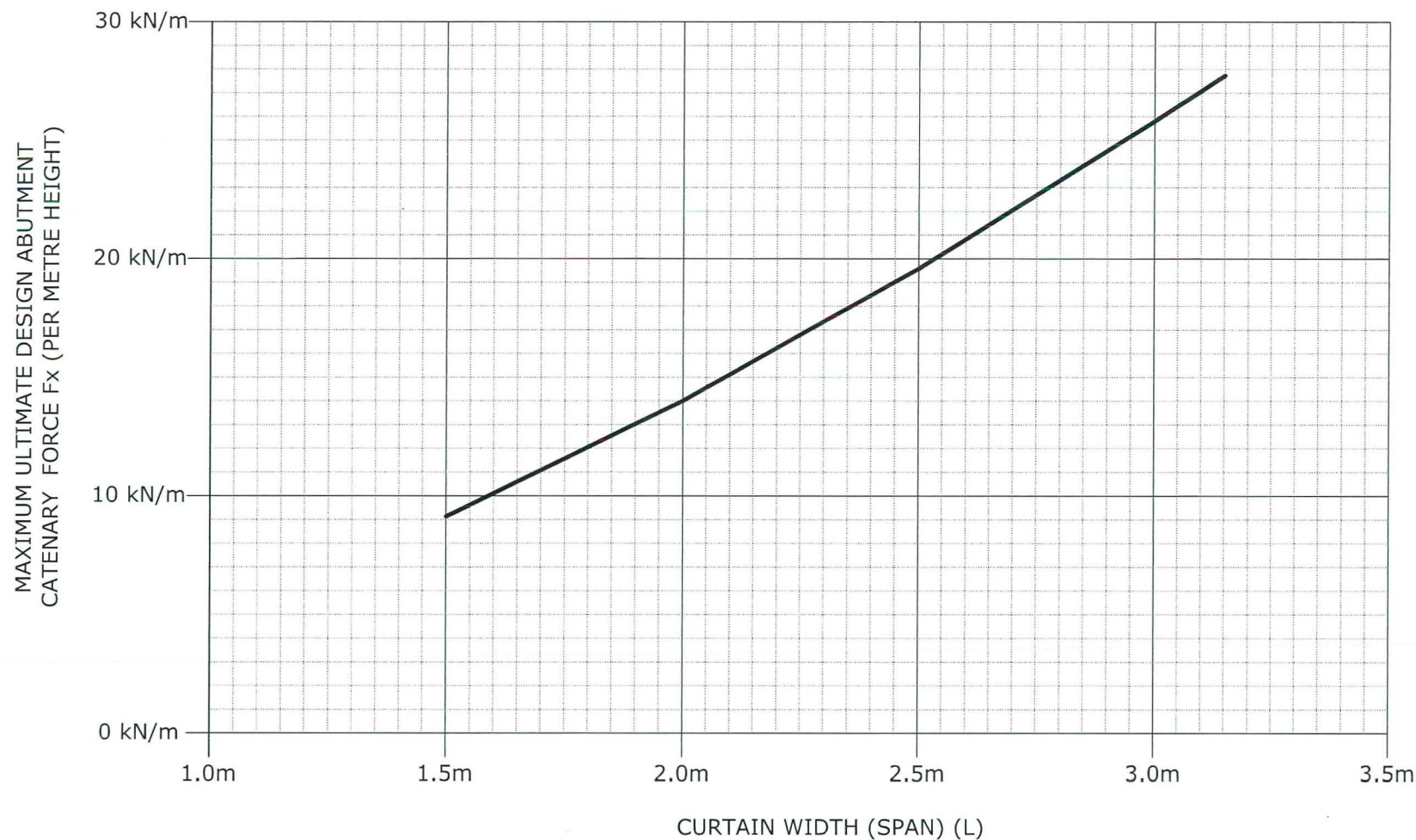
\*\*registered as a structural engineer in Australia

**\*\*Certifying Engineers Certification**

Name: ASSET SERVICES PTY LTD  
NT Registration Number: 152941ES  
Date: 03/12/2019  
Signature: *[Signature]*

\*\*registered as a structural engineer in Northern Territory





NOTE: CURTAIN WIDTH = OPENING WIDTH + CURTAIN OVERLAPS

**MAXIMUM ULTIMATE DESIGN ABUTMENT CATENARY FORCE F<sub>x</sub> (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<sub>y</sub> = 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:
  - 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)

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  
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Signature:

\*\*registered as a structural engineer in Australia

\*\*Certifying Engineers Certification

Name: ASSET SERVICES PTY LTD  
NT Registration Number: 152941ES  
Date: 03/12/2019  
Signature:

\*\*registered as a structural engineer in Northern Territory

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. DESIGNERS SHALL TAKE INTO ACCOUNT HIGH LOCAL PRESSURE AREAS WHEN VERIFYING THE DOOR ULTIMATE DESIGN WIND PRESSURE.
- 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 3700-2018 MASONRY STRUCTURES
- AS/NZS 4600: 2018 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 UNLESS NOTED OTHERWISE AS SPECIFIED IN TABLE 1 (REFER SECTIONS 2 ON DRAWINGS S03 AND S04).
- CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF BLOCK WALL UNIT (f<sub>uc</sub>) = 15 MPa (MIN.).
- CORE FILLING OF BLOCKWALL (f<sub>c</sub>) = 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 SHALL BE ADOPTED IF NEEDED PROVIDED THE CALCULATED ULTIMATE DESIGN WIND PRESSURES DO NOT EXCEED 3.26 kPa.
- THE BUILDING DESIGN ENGINEER IS TO ENSURE THAT THE SITE SPECIFIC DESIGN WIND LOADINGS DO 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 PRESSURES DO NOT EXCEED 3.26 kPa.

**Accepted for Inclusion**

DTCM ref: *M/438/05* DRAWING No. S05 - Rev 2

Chairman's Signature:

Chairman's Name: **Paul Nowland**

Date of Approval: **5/02/2020** Expiry Date: **5/02/2025**