

STRUCTURAL STEEL REINFORCING BATTEN
 (1 PER PANEL) EXCEPT THE TOP PANEL ONLY WHICH
 SHALL HAVE 2 REINFORCING BATTENS, REFER TO DETAIL
 B. PROVIDE TRACKLOCK SUPPORT BRACKETS ALONG
 BOTH ABUTMENT SUPPORTS (REFER TO DETAIL A).

Product Name
B&D STORM SHIELD HIGH WIND SECTIONAL DOOR

Product Description
REINFORCED SECTIONAL DOOR WITH TRACKLOCK SYSTEM

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
 - DOOR HEIGHT 3.415m MAX.
 - BUILDING IMPORTANCE LEVEL 2
 - REGION WINDSPEED VR = 69.3m/s
 - DOORS ARE RATED UP TO AN ULTIMATE DESIGN WIND PRESSURE OF:
 - INWARD = 2.92 kPa
 - OUTWARD = 3.37 kPa (FOR DOOR SPANS < 4m)
 - OUTWARD = 3.04 kPa (FOR DOOR SPANS > 4m)
 - FOR A MAXIMUM DOOR WIDTH OF 5.5m.
 - 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.
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 - AS 3700-2018 MASONRY STRUCTURES
 - AS/NZS 4600: 2018 COLD FORMED STRUCTURES
 - AS/NZS 1170.1:2002 STRUCTURAL DESIGN ACTIONS - PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS.

- Limitations
- STRUCTURAL STEEL ABUTMENT POSTS TO BE 3mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O. (REFER TO SECTION 1 ON DRAWING S03).
 - 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 STRUCTURAL 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 SPECIFIED IN THE DESIGN CRITERIA.
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B&D STORM SHIELD HIGH WIND SECTIONAL DOOR - ELEVATION
MAXIMUM DOOR WIDTH = 5.5m
 NOTE: DOOR WIDTH (SPAN) (L) = OPENING WIDTH + CURTAIN OVERLAPS
 DOOR HEIGHT = OPENING HEIGHT + TOP PANEL OVERLAP
 1:25

- ALL DOOR COMPONENTS TO BE IN ACCORDANCE WITH STANDARD B&D STORM SHIELD HIGH WIND SECTIONAL DOOR MANUFACTURING.
- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D STORM SHIELD HIGH WIND SECTIONAL DOOR INSTALLATION GUIDELINES.
- ALL TEK SCREW FASTENER MECHANICAL PROPERTIES ARE TO BE OF A MINIMUM CAPACITY AS GIVEN IN THE BUILDDEX FASTENERS TECHNICAL SPECIFICATION SECTION OF THE PRODUCT CATALOGUE.
- MECHANICAL ANKASCREW FASTENER CAPACITIES HAVE BEEN DERIVED FROM THE RAMSET SPECIFIERS RESOURCE BOOK

Notes covering basis of DTC (Relevant test reports etc)

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- IN HOUSE TESTING CONDUCTED ON THE 3rd AUGUST 2015 AND DOCUMENTED ON THE 2nd DECEMBER 2015 (Report No. 2015-10-28)
- PRINCIPLES OF MECHANICS.

Checking Engineer
 Name: JAMES ELLIS
 Registration Number: 47429ES
 Date: 08/03/2023
 Signature:

Certifying Engineer
 Name: ASSET SERVICES PTY LTD
 NT Registration Number: 152941ES
 Date: 08/03/2023
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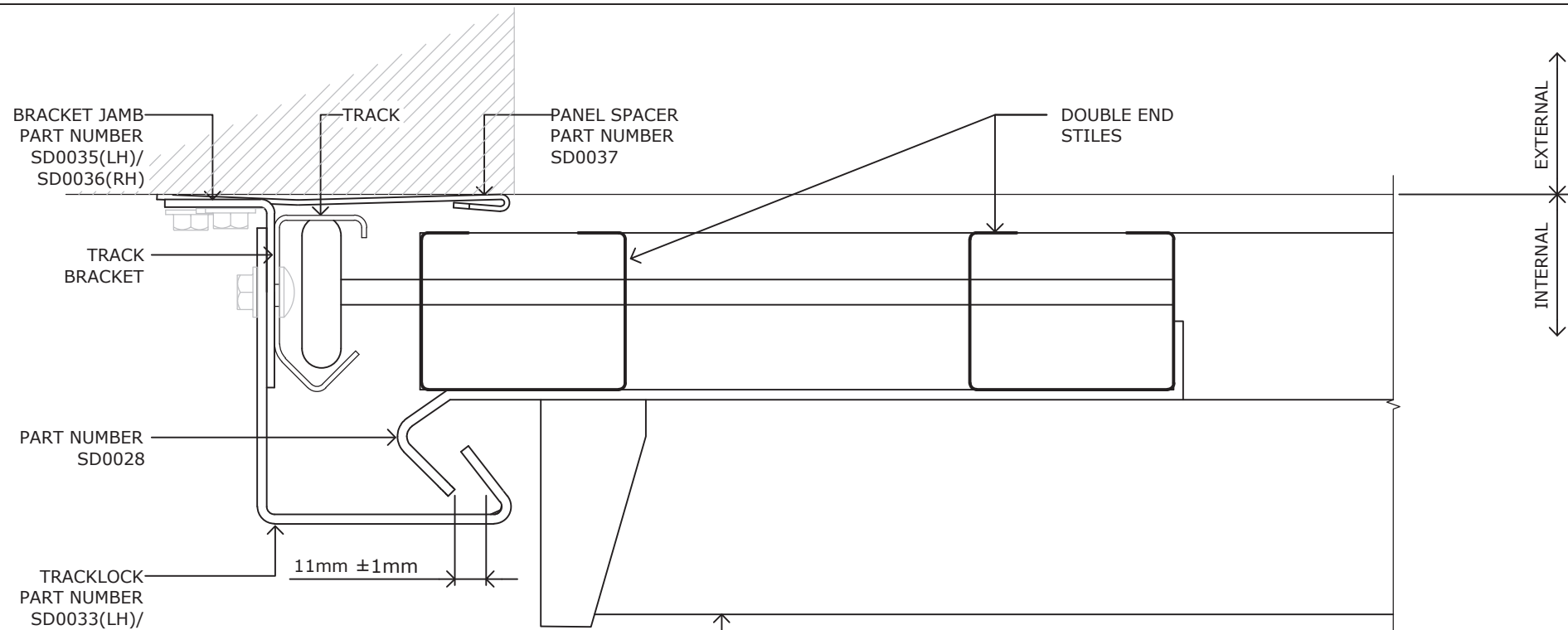
DTCM drawing number: M/439/01-03 DRAWING No. S01 - Rev 2

Chairperson's Signature:

Chairperson's Name: Paul Nowland

Date of Approval: 28/04/2023 Expiry Date: 27/04/2028

NORTHERN TERRITORY DEEMED TO COMPLY MANUAL - National Construction Code Volume 2 (Section 3.0.4 Structural resistance of materials in high wind areas)
 This product has been determined to satisfy NCC Performance Requirement P2.1.1 for structural stability and resistance



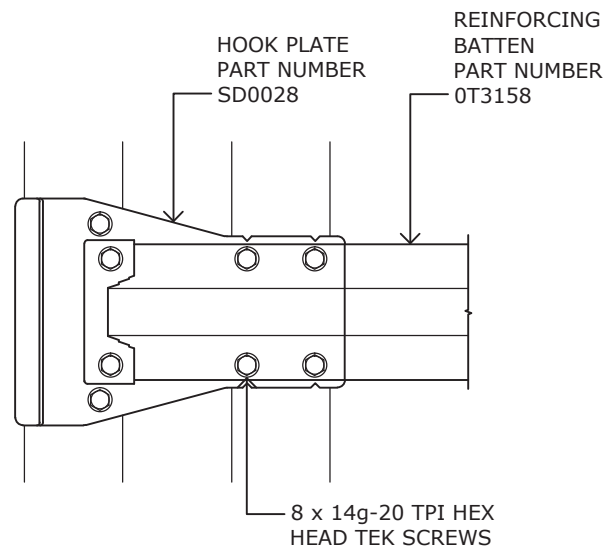
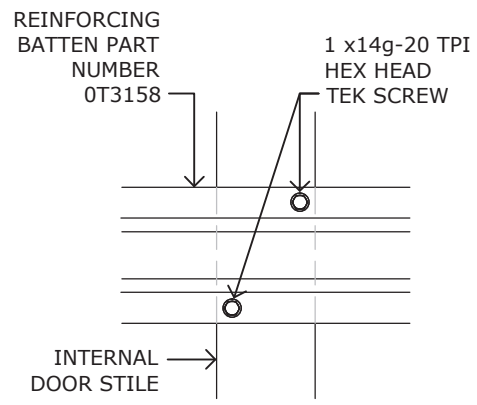
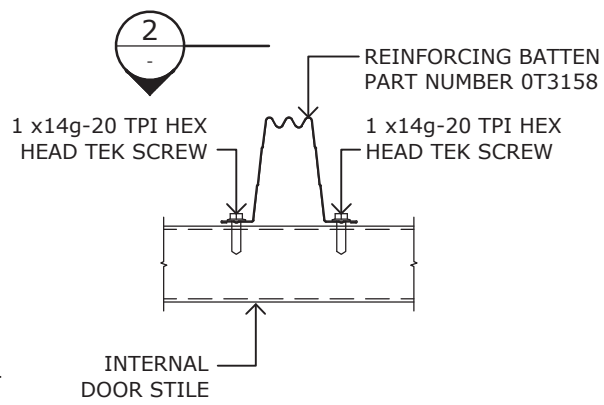
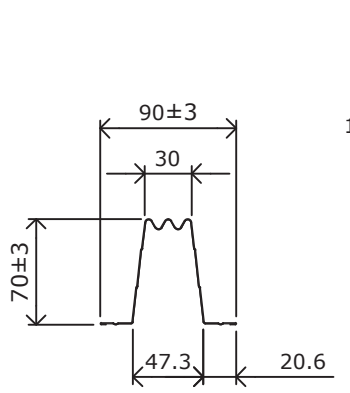
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DETAIL A
 1:2
 TRACKLOCK SUPPORT BRACKET - PART PLAN (CROSS SECTION)
 S.01



DETAIL B
 1:5
 TYPICAL STRUCTURAL STEEL REINFORCING BATTEN - (CROSS SECTION PROFILE) PART NUMBER OT3158
 MATERIAL: 0.55mm G550 GALVABOND
 S01

DETAIL C
 1:2
 TYPICAL AT ALL INTERSECTIONS OF REINFORCING BATTENS AND INTERNAL DOOR STILES
 PART ELEVATION
 S01

SECTION 2
 1:2
 PART PLAN
 -

DETAIL D
 1:5
 TYPICAL AT EACH ENDS OF REINFORCING BATTENS
 PART PLAN
 S01

- Limitations**
- STRUCTURAL STEEL ABUTMENT POSTS TO BE 3mm (MIN.) IN THICKNESS WITH A MINIMUM STRESS GRADE OF G250 U.N.O. (REFER TO SECTION 1 ON DRAWING S03).
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DTCM drawing number: M/439/02 DRAWING No. S02 - Rev 2

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- DOOR INSTALLATION TO BE IN ACCORDANCE WITH STANDARD B&D STORM SHIELD HIGH WIND SECTIONAL DOOR INSTALLATION GUIDELINES.
- ALL TEK SCREW FASTENER MECHANICAL PROPERTIES ARE TO BE OF A MINIMUM CAPACITY AS GIVEN IN THE BUILDDEX FASTENERS TECHNICAL SPECIFICATION SECTION OF THE PRODUCT CATALOGUE.
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Notes covering basis of DTC (Relevant test reports etc)

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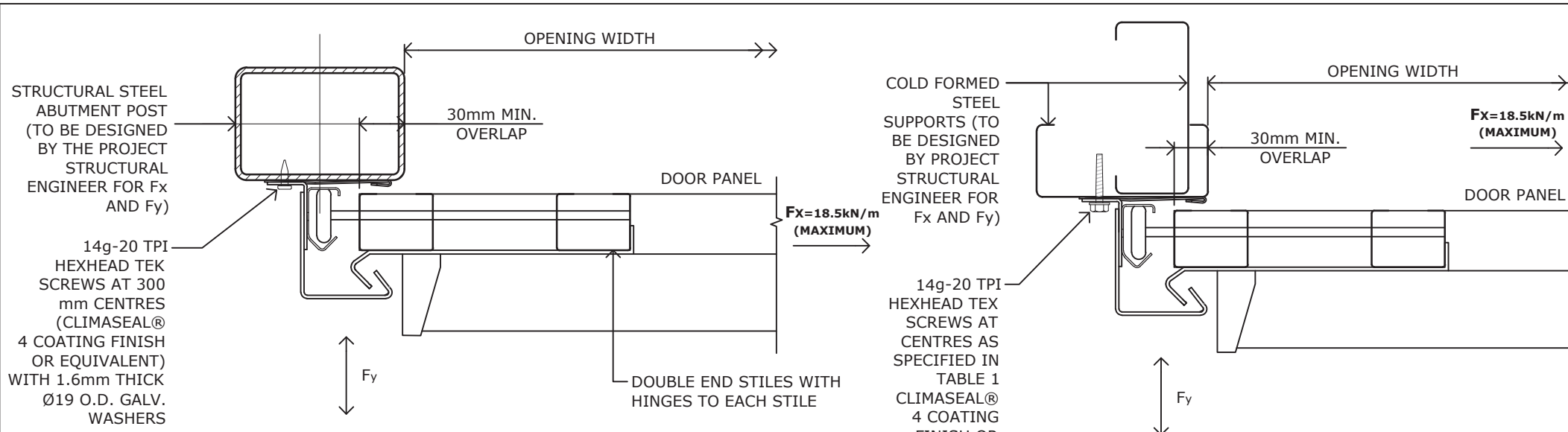
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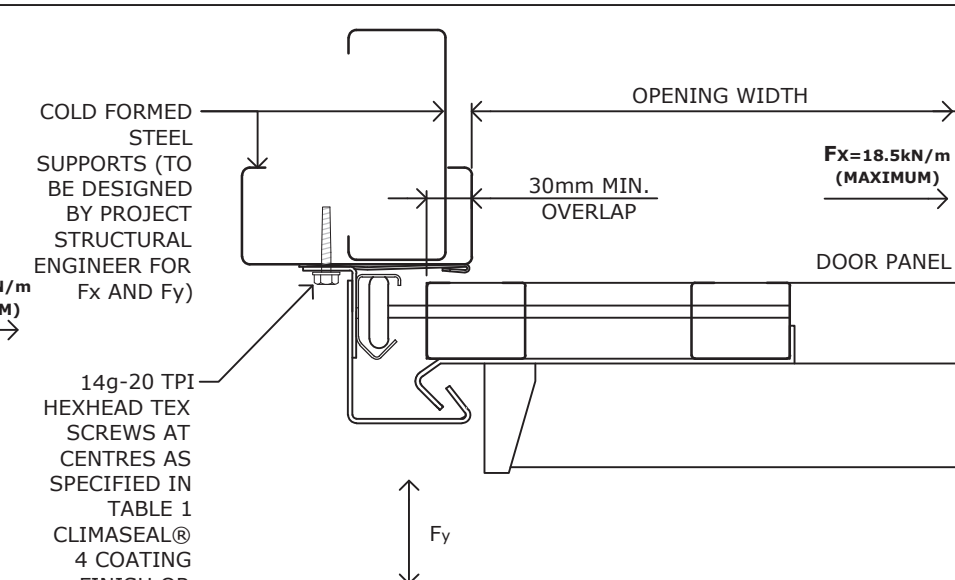
This product has been determined to satisfy NCC Performance Requirement P2.1.1 for structural stability and resistance



SECTION 1
S01

1:5
PLAN OF TRACK FIXING TO STEEL ABUTMENT SUPPORT POST.
NOTE: THE MAXIMUM ULTIMATE DESIGN ABUTMENT CATENARY FORCE $F_x = 18.5kN$ PER METRE HEIGHT OF DOOR FOR ALL SPANS (DOOR WIDTHS) UP TO 5.5m.

NOTE:
 $F_y = \frac{W}{L}$
WHERE F_y = MAXIMUM OUT OF PLANE ULTIMATE DESIGN ABUTMENT FORCE PER METRE
 W = ULTIMATE DESIGN WIND PRESSURE (kPa)
 L = DOOR WIDTH (SPAN) (m)



SECTION 1
S01

1:5
PLAN OF TRACK FIXING TO COLD FORMED STEEL ABUTMENT SUPPORTS.
NOTE: THE MAXIMUM ULTIMATE DESIGN ABUTMENT CATENARY FORCE $F_x = 18.5kN$ PER METRE HEIGHT OF DOOR FOR ALL SPANS (DOOR WIDTHS) UP TO 5.5m.

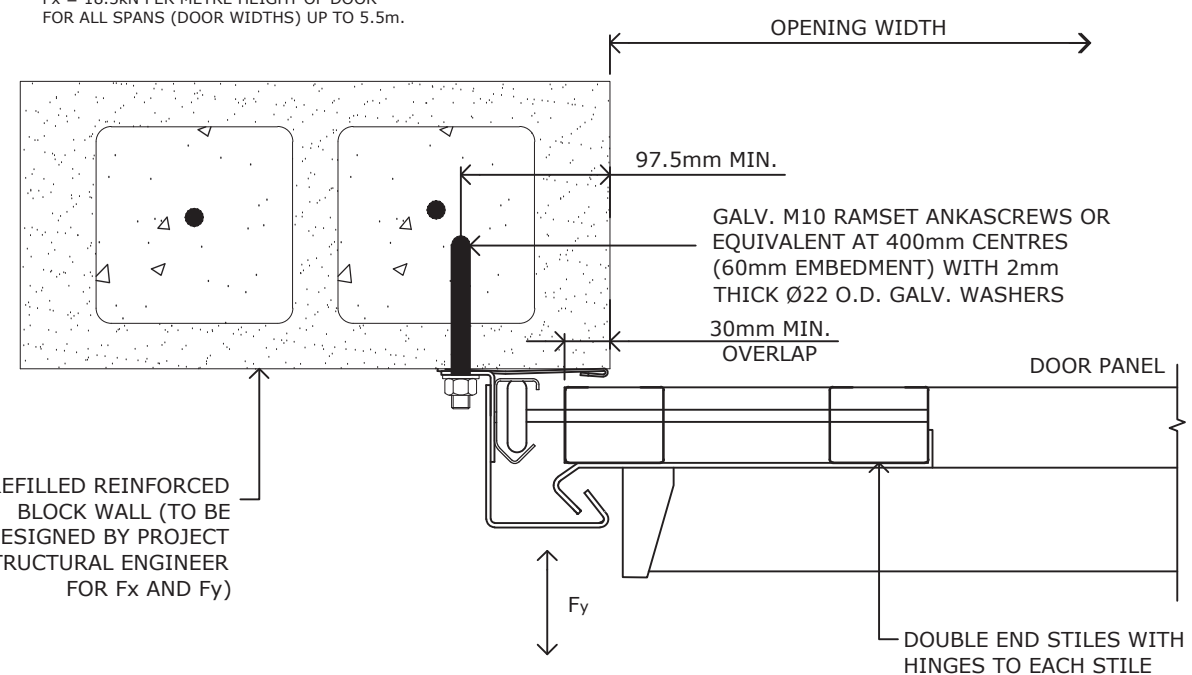
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 L = DOOR WIDTH (SPAN) (m)

TABLE 1

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

MATERIAL 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	200mm
1.9mm	G450	450 MPa	480 MPa	250mm

NOTE: ALL TEK SCREWS TO BE OF A CLIMASEAL® 4 COATING FINISH OR EQUIVALENT



SECTION 1
S01

1:10
PLAN OF TRACK FIXING TO REINFORCED COREFILLED BLOCKWORK ABUTMENT SUPPORTS.

NOTE:
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 L = DOOR WIDTH (SPAN) (m)

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