



Te Kāhui
Whaihanga
New Zealand
Institute of
Architects



Building Code Clause(s) B1

PRODUCER STATEMENT – PS1 – DESIGN

ISSUED BY: CSEng.nz Ltd.
(Design Firm)

TO: Moddex New Zealand
(Owner/Developer)

TO BE SUPPLIED TO: Applicable Territorial Authority
(Building Consent Authority)

IN RESPECT OF: Moddex Barrier System: Conectabal - Occupancy Class A/B/E & C3
(Description of Building Work)

AT: Various Locations across New Zealand
(Address)

Town/City: **LOT** **DP** **SO**
(Address)

We have been engaged by the owner/developer referred to above to provide:
Engineering design.

.....
(Extent of Engagement)

services in respect of the requirements of Clause(s) B1 of the Building Code for:

All or Part only (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:

Compliance Documents issued by the Ministry of Business, Innovation & Employment B1/VM1 or
(verification method/acceptable solution)

Alternative solution as per the attached schedule.....

The proposed building work covered by this producer statement is described on the drawings titled:

See schedule attached* and numbered ;
together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:

- (i) Site verification of the following design assumptions See schedule attached*
(ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. I also recommend the following level of construction monitoring/observation:


CM1 CM2 CM3 CM4 CM5 (Engineering Categories) or as per agreement with owner/developer (Architectural)

I, Gerard Callebaut am: CPEng 1010705 # Reg Arch #
(Name of Design Professional)

I am a member of: Engineering New Zealand NZIA and hold the following qualifications: B. Sc. Civil Engineering

The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.

The Design Firm is a member of ACENZ:

SIGNED BY: Gerard Callebaut (Signature) 
(Name of Design Professional)

ON BEHALF OF CSEng.nz Ltd. Date: 13/08/2020
(Design Firm)

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000.*

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.
THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACENZ, ENGINEERING NEW ZEALAND AND NZIA

SCHEDULE

*From page 1:

On behalf of the design firm and subject to site verification of the following design assumptions:

1. The substrate, to which the barrier is fixed, as designed by others, is able to resist the applied loads.
2. The installation of the barrier is in accordance with the limits and specifications as set out on the drawing.

DRAWINGS

Drawing Number	Sheet	Revision	Date	Description
160430-100-S002_1	1	3	27/05/2019	Conectabal: Barrier Details and Specification
160430-100-S002_2	2	4	06/07/2020	Conectabal: Barrier Details and Specification
200623-100-S003_1	1	0	12/08/2020	Conectabal: Barrier Details and Specification
200623-100-S003_2	2	0	12/08/2020	Conectabal: Barrier Details and Specification

DOCUMENTS

Document Number	Revision	Date	Description
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ALTERNATIVE SOLUTIONS

NZ Building Code Compliance Clause	Document Number	Date	Description
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GENERAL

1. THESE SPECIFICATIONS SHALL TAKE PRECEDENCE UNLESS OTHERWISE ADVISED BY THE DESIGN ENGINEER
2. COMPLY WITH CONTRACTORS HSE PLAN.
COMPLY WITH HEALTH & SAFETY IN EMPLOYMENT ACT & REGULATIONS.
MAINTAIN SAFE SITE AND WORK PRACTICES AT ALL TIMES.
3. ALL WORK AND MATERIALS SHALL COMPLY WITH THE BUILDING ACT & REGULATIONS.
4. THE BUILDING DESIGNER IS RESPONSIBLE FOR ENSURING THE NECESSARY SUPPORTING STRUCTURE IS PROVIDED FOR THE BARRIER SYSTEM.
5. THE SUPPORTING STRUCTURE SHALL BE DESIGNED FOR THE MINIMUM DESIGN LOADS SPECIFIED IN THE BASIS OF DESIGN.
6. THE SUPPORTING STRUCTURE SHALL BE DESIGNED TO ACCOMMODATE THE SPECIFIED BARRIER ANCHORS.
7. OBTAIN BUILDING CONSENT AS REQUIRED. CALL FOR ALL SCHEDULED INSPECTIONS AND FINAL INSPECTION FOR CODE OF COMPLIANCE ON COMPLETION.
8. CHECK ALL DIMENSIONS AND LEVELS ON SITE BEFORE STARTING CONSTRUCTION WORK.
REFER ARCHITECTURAL DIMENSIONING FOR LAYOUT AND LEVELS.
REFER ENGINEERING DIMENSIONING FOR DETAILS.
9. ALL COMPONENTS OF THE MODDEX BARRIER SYSTEM INCLUDING FIXINGS AND ANCHORS SHALL BE SUPPLIED BY MODDEX NZ.

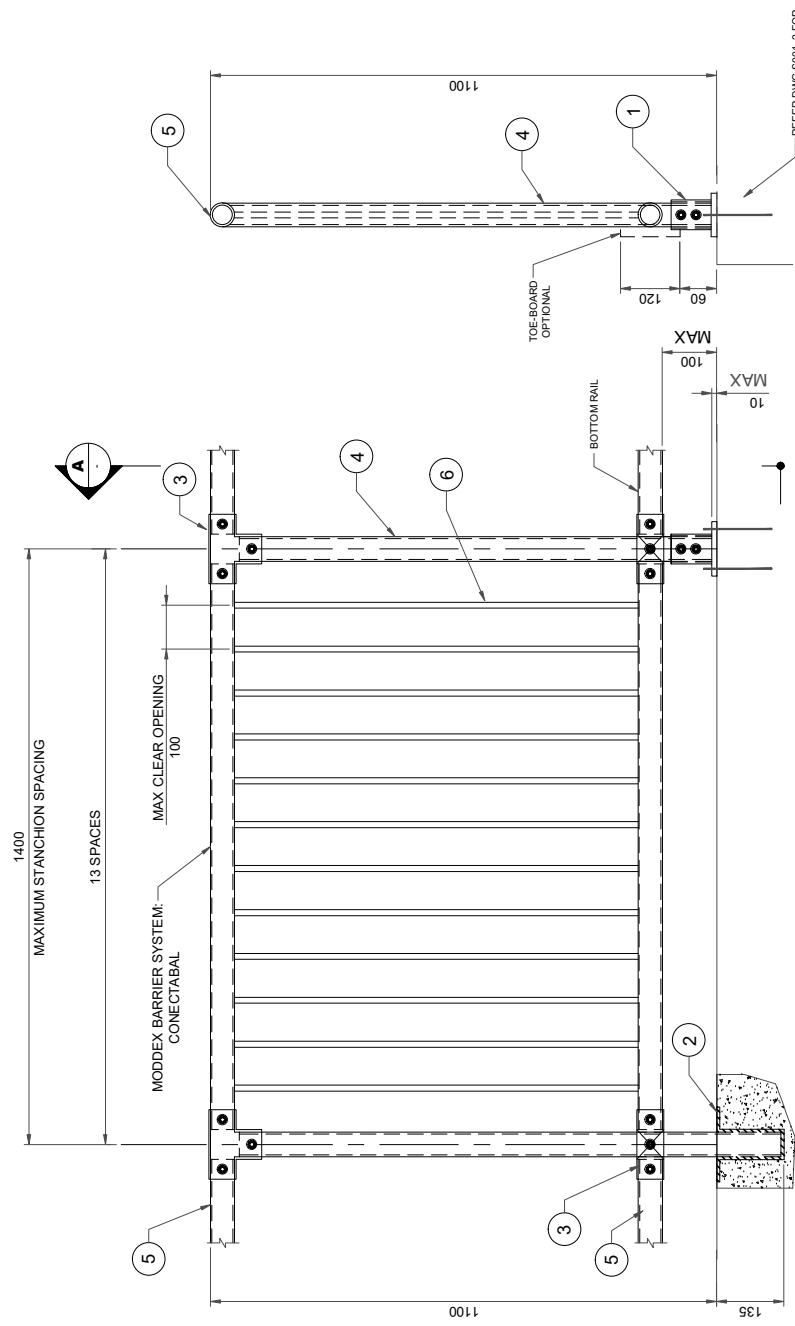
BASIS OF DESIGN

1. DESIGN LIFE 50 YEARS MINIMUM
2. BUILDING OCCUPANCY A, B/E, & C3
3. LOADINGS AS/NZS 1170.1:2002 - TABLE 3.3
AS 1857:2013 - CL6.1
4. LIVE LOADINGS LINE 0.75 kN/m
CONCENTRATED 0.6 kN
INFILL 1kPa(0.5kN).

STRUCTURE

ITEM NO.	MATERIAL	GRADE
1	CAST BASE FLANGE	MALLEABLE CAST IRON
2	CAST BASE SOCKET	MALLEABLE CAST IRON
3	CAST CONNECTOR	MALLEABLE CAST IRON
4	48.3 OD x 4.0 GALVANIZED CHS	250
5	48.3 OD x 3.2 GALVANIZED CHS	250
6	12 DIA. ROUND BAR	300

1. ALL PIPE TO CONFORM TO /AS 1074
2. GALVANIZING TO /AS/NZS 4680: 2006
3. REFER TO MODDEX BARRIER SYSTEM : TUFFRAIL FOR FURTHER PRODUCT SPECIFICATION DETAILS.



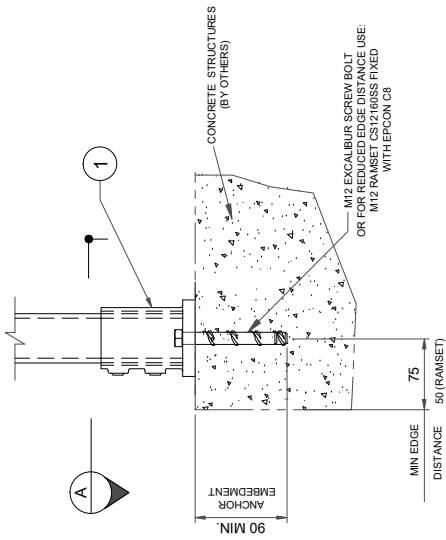
TYPICAL HORIZONTAL BARRIER ELEVATION
1:10

SECTION A
1:10

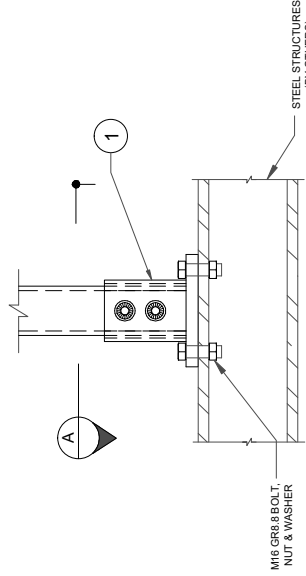
BARRIER CONFIGURATION OPTIONS

1. TOP RAIL & BOTTOM RAIL.
2. TOP RAIL, BOTTOM RAIL & TOE-BOARD.

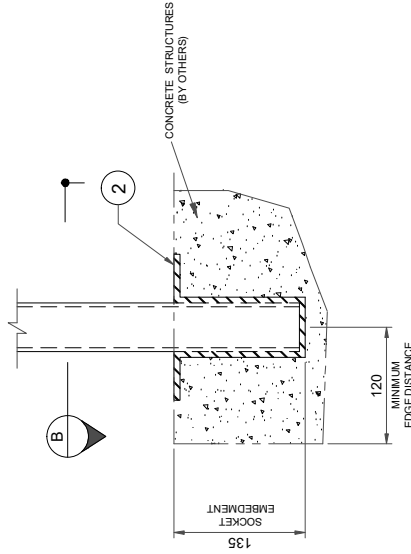
Client		Consultant		Project		Sheet Title		Drawn: SDTS		Scale: 1:10	
moddex		CSEng.nz CIVIL & STRUCTURAL ENGINEERING		MODDEX BARRIER SYSTEM: CONECTABAL		BARRIER DETAILS AND SPECIFICATION		File name:		Series	
info@cseng.nz		160430		100		Sheet Number		Rev		3	
STANCHION BASE SOCKET		30.09.2018		GC		STANCHION SPACING MATERIAL		1		31.05.2018	
BARRIER HEIGHT		17.04.2018		GC		APPROVED FOR CONSTRUCTION		0		17.04.2018	
Rev	Date	Appd	Reason								



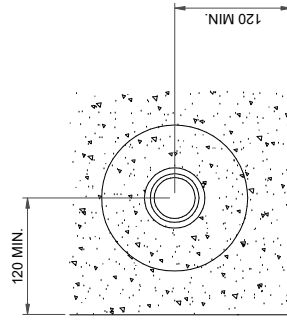
TYP. BASEPLATE TO CONCRETE FIXING
1.5 (TOP MOUNT)



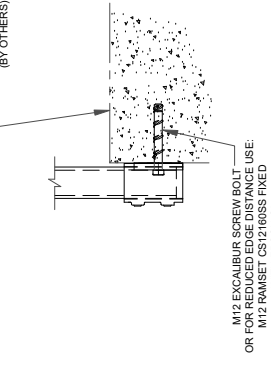
TYP. BASEPLATE TO STEEL FIXING
1.5 (TOP MOUNT)



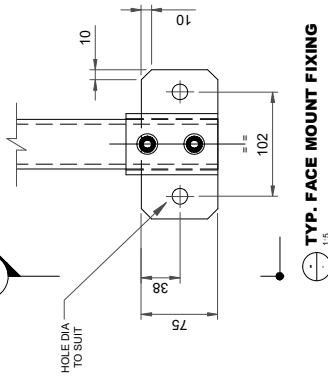
TYP. CAST-IN SOCKET TO CONCRETE EMBEDMENT
1.5



SECTION B
1.5



SECTION C
1.5 FACE MOUNT



TYP. FACE MOUNT FIXING
1.5

ANCHORS:

CONCRETE

1. CONCRETE STRUCTURES SUPPORTING BARRIERS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 30 MPa.
2. ANCHORS SHALL BE M12 EXCALIBUR SCREWBOLT UNLESS NOTED OTHERWISE.
3. ALTERNATIVE ANCHOR OPTION FOR REDUCED EDGE DISTANCE: AND EXTERIOR ZONES C & D
RAMISET CS/12168GH FIXED WITH EPICON C8
RAMISET CS12168SS FIXED WITH EPICON C8

ANCHOR MATERIAL COATING

- INTERIOR ZINC GALVANIZED (AS 1214)
- EXTERIOR ZONE B ZINC GALVANIZED (AS 1214)
- INTERIOR RAMISET CS12168SS FIXED WITH EPICON C8
- EXTERIOR ALL ZONES RAMISET CS12168SS FIXED WITH EPICON C8

Rev	Date	Appd	Reason
4	06.07.2020	GC	TOP MOUNT
3	20.08.2019	GC	FACE MOUNT
2	27.05.2019	GC	STANCHION BASE SOCKET
1	30.09.2018	GC	LOG O CHANGE
0	17.4.2018	GC	APPROVED FOR CONSTRUCTION

Client		Consultant	
moddex		CS Eng-nz CONSTRUCTION ENGINEERING	
Project		info@cseng.nz	
Sheet Title		BARRIER DETAILS AND SPECIFICATION	
Drawn: SDTS		Scale: AS SHOWN	
File name:	Job Number	Series	Sheet Number
	160430	100	S002_2
Rev	4	Sheet Number	S002_2

GENERAL

1. THESE SPECIFICATIONS SHALL TAKE PRECEDENCE UNLESS OTHERWISE ADVISED BY THE DESIGN ENGINEER
2. COMPLY WITH CONTRACTORS HSE PLAN.
3. COMPLY WITH HEALTH & SAFETY IN EMPLOYMENT ACT & REGULATIONS.
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50. COMPLY WITH HEALTH & SAFETY IN EMPLOYMENT ACT & REGULATIONS.

BASIS OF DESIGN

1. DESIGN LIFE 50 YEARS MINIMUM
2. BUILDING OCCUPANCY A, BE, & C3
3. LOADINGS AS/NZS 1170.1 : 2002 - TABLE 3.3 AS 1687 : 2013 - Cl.6.1
4. LIVE LOADINGS LINE CONCENTRATED 0.75 kN/m 0.6 kN 1kPa/0.5kN

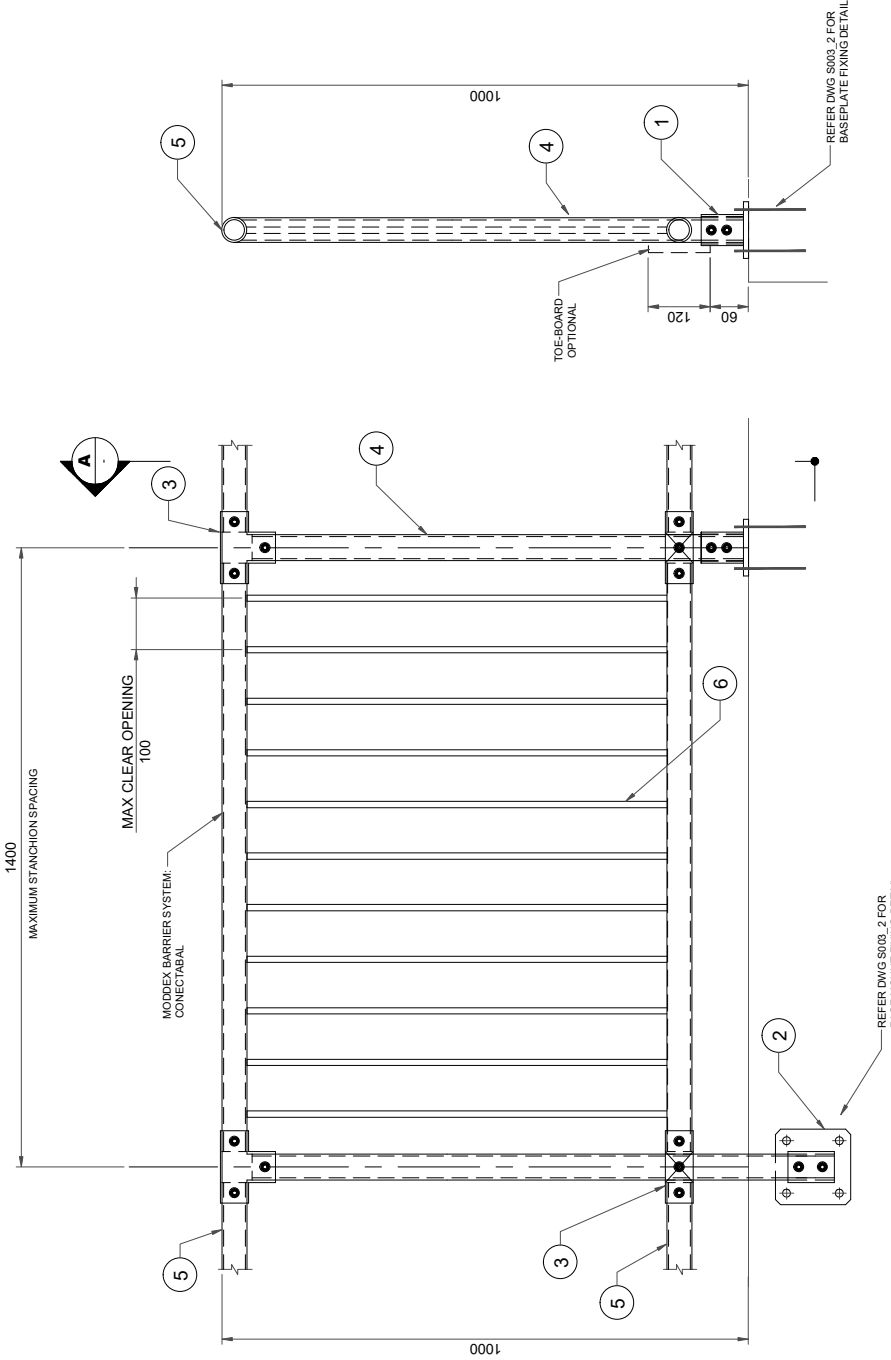
STRUCTURE

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1. ALL PIPE TO CONFORM TO : AS 1074
2. GALVANIZING TO : AS/NZS 4680 : 2006
3. REFER TO MODDEX HANDRAIL SYSTEM : CONECTABAL FOR FURTHER PRODUCT SPECIFICATION DETAILS.

HANDRAIL CONFIGURATION OPTIONS

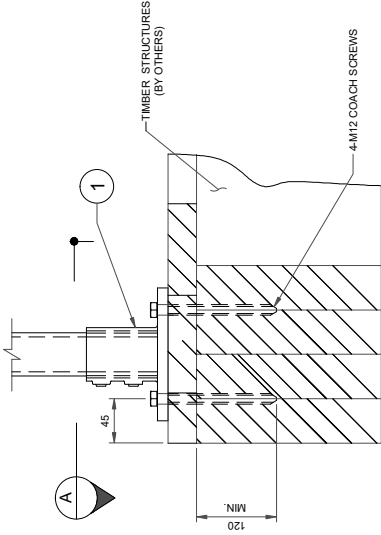
1. TOP RAIL & BOTTOM RAIL
2. TOP RAIL, BOTTOM RAIL & TOE BOARD



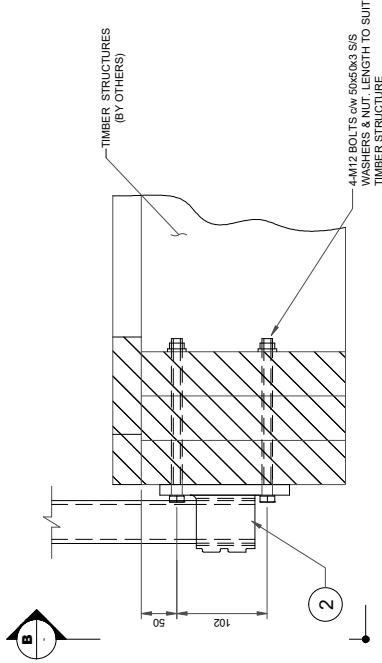
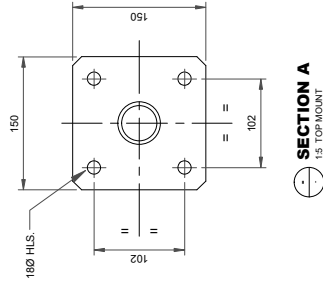
TYPICAL HORIZONTAL BARRIER ELEVATION
1:10

SECTION A
1:10

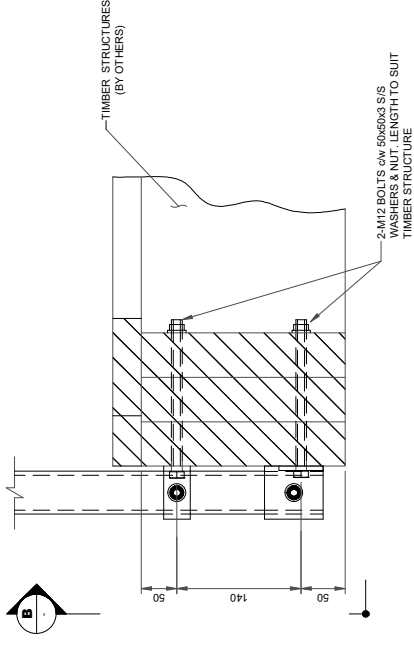
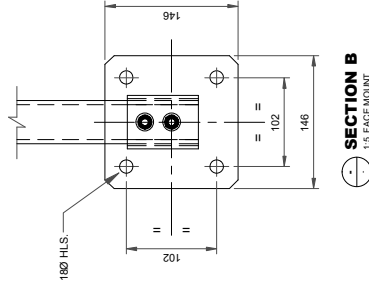
Rev		Date	Appd	Reason
0	12.09.2020	GC		APPROVED FOR CONSTRUCTION
Rescon				
Client				
moddex		Consultant		
CSEng.nz CIVIL STRUCTURAL ENGINEERS		Project		
info@cseeng.nz		MODDEX BARRIER SYSTEM: CONECTABAL		
Sheet Title		BARRIER DETAILS AND SPECIFICATION		
Drawn: SDTS		Scale: 1:10		
File name:				
Job Number	Series	Sheet Number	Rev	
200623	100	S003_1	0	



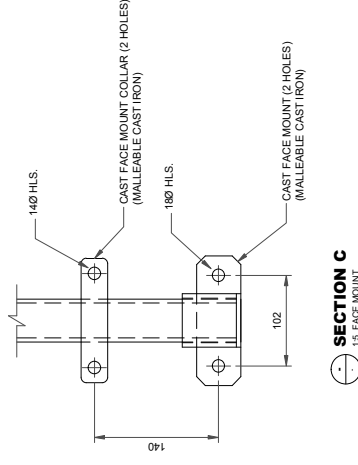
TYP. TOP MOUNT FIXING
1:5



TYP. FACE MOUNT FIXING
1:5



ALT. FACE MOUNT FIXING
1:5





ANCHORS:

TIMBER:

- TIMBER STRUCTURES SUPPORTING BARRIERS SHALL BE DESIGNED IN ACCORDANCE WITH THE NEW ZEALAND BUILDING CODE AND NZS 3604 (TIMBER FRAMED BUILDINGS)

ANCHOR MATERIAL COATING (NZS 3604 - TBL 4.1)

- EXTERIOR, EXPOSED - TYPE 304 STAINLESS STEEL

Rev		Date	Appd	Reason	Client				 info@cseng.nz		Project MODDEX BARRIER SYSTEM: CONECTABAL		Sheet Title BARRIER DETAILS AND SPECIFICATION		Drawn: SDTS Scale: AS SHOWN		File name: Job Number: 200623 Series: 100 Sheet Number: S003_2 Rev: 0	
0	12.08.2020	GC		APPROVED FOR CONSTRUCTION														