



Building Code Clause(s) B1, D1

PRODUCER STATEMENT – PS1 – DESIGN

(Guidance on use of Producer Statements (formerly page 2) is available at www.ipenz.nz)

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 Handrail System : Assistraill - Occupancy Class B/E
(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, D1 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/MM1, D1/AS1 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: IPENZ 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 22/09/2021
(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, IPENZ 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.
3. Barrier maintenance is in accordance with the Moddex barrier specifications and requirements. Life to first maintenance is considered to be 13 years minimum – 26 years maximum.

DRAWINGS

Drawing Number	Sheet	Revision	Date	Description
191002-100-S001_1	1	2	22/09/2021	Assistrail: Handrail Details and Specification
191002-100-S001_2	2	1	22/11/2019	Assistrail: Handrail 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 HANDRAIL 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 HANDRAIL SYSTEM INCLUDING FIXINGS AND ANCHORS SHALL BE SUPPLIED BY MODDEX NZ.

BASIS OF DESIGN

1. DESIGN LIFE 50 YEARS MINIMUM
2. BUILDING OCCUPANCY B.E
3. LOADINGS AS/NZS 1170.1 : 2002 - TABLE 3.3
AS 1657:2013 - CL6.1
4. LIVE LOADINGS
LINE 0.25 kN/m
CONCENTRATED 0.6 kN
INFILL N/A

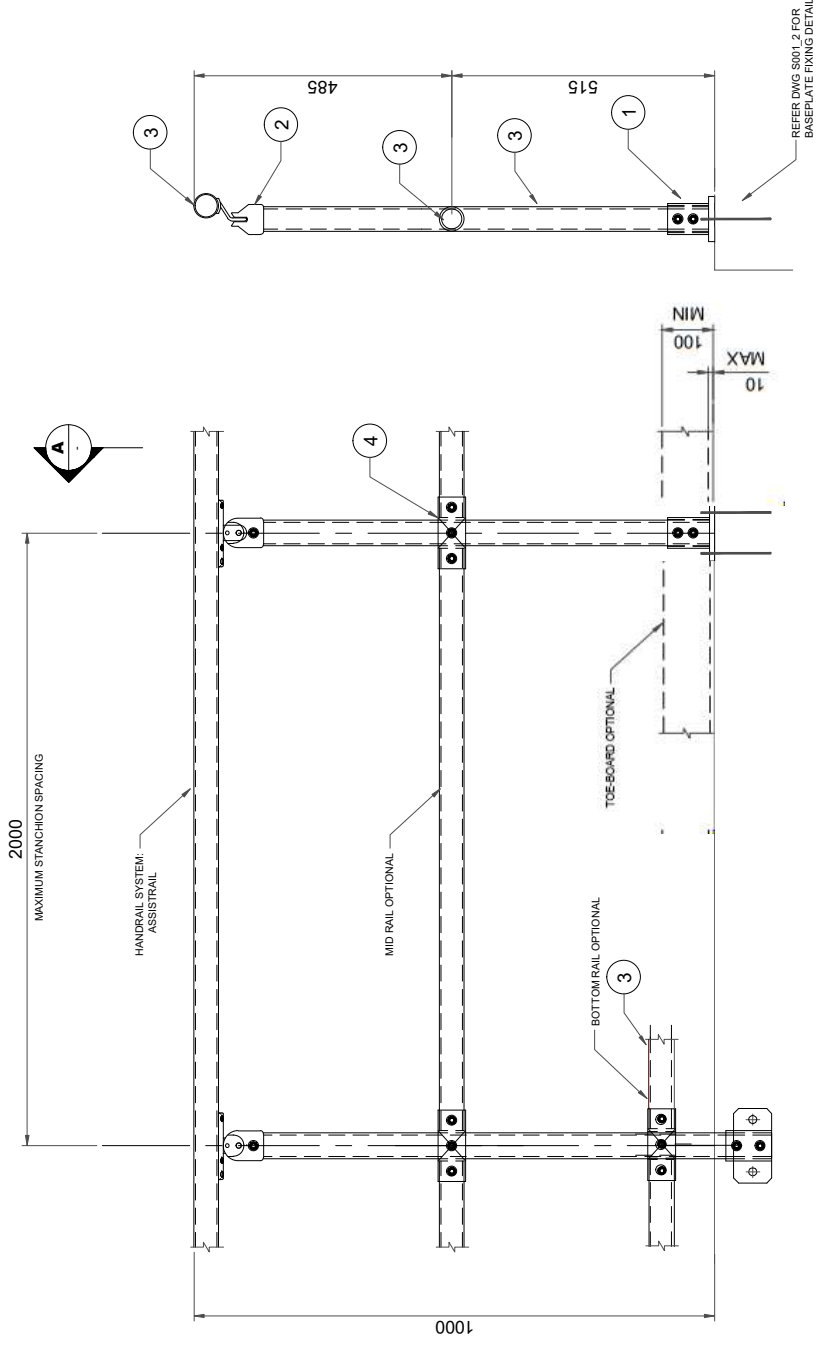
STRUCTURE

ITEM NO.	MATERIAL	GRADE
1	CAST BASE FLANGE	MALLEABLE CAST IRON
2	CAST HANDRAIL CONNECTOR	MALLEABLE CAST IRON
3	48.3 OD X 3.2 GALVANIZED CHS	250
4	CAST CONNECTOR	MALLEABLE CAST IRON

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

HANDRAIL CONFIGURATION OPTIONS

1. TOP RAIL & MID RAIL
2. TOP RAIL, MID RAIL & BOTTOM RAIL
3. TOP RAIL, MID RAIL & TOE-BOARD.
4. TOP RAIL, MID RAIL, BOTTOM RAIL & TOE-BOARD.



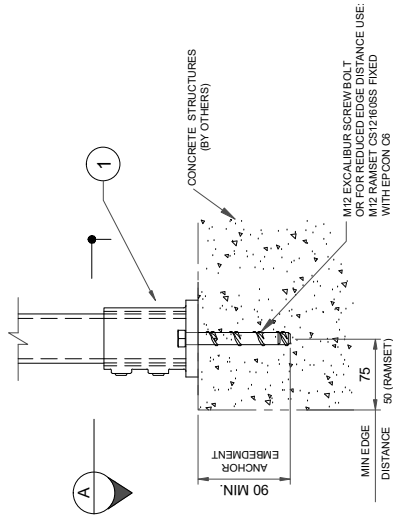
TYPICAL HORIZONTAL HANDRAIL ELEVATION

1:10

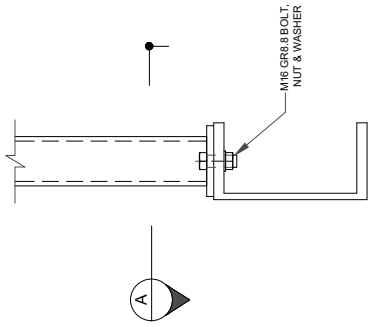
SECTION A

1:10

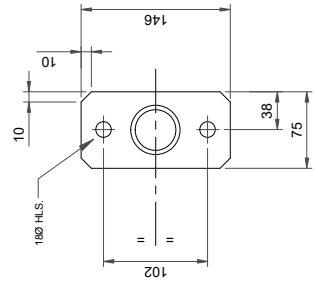
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<p>File name:</p>			
<p>Job Number 191002</p>	<p>Series 100</p>		
<p>Sheet Number S001_1</p>	<p>Rev 2</p>		
<p>Sheet Title HANDRAIL DETAILS AND SPECIFICATION</p>			
<p>ASSISTRAIL HANDRAIL</p>			
<p>Project</p>			
<p>Client</p>			
<p>Consultant CS Eng-nz CIVIL & STRUCTURAL ENGINEERS info@cseng.nz</p>			
<p>moddex</p>			
<p>Rev Date Appd Reason</p>			
2	22.09.2021	GC	APPROVED FOR CONSTRUCTION
1	08.07.2020	GC	APPROVED FOR CONSTRUCTION
0	28.11.2019	GC	APPROVED FOR CONSTRUCTION



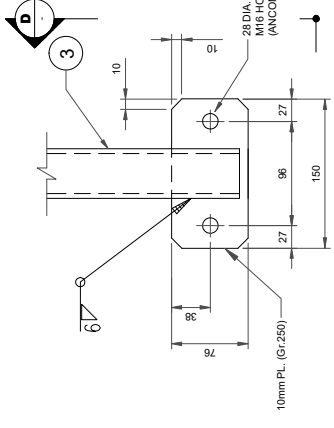
TYP. BASEPLATE TO CONCRETE FIXING
1.5 TOP MOUNT



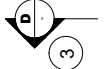
TYP. OPEN SECTION FIXING
1.5 TOP MOUNT



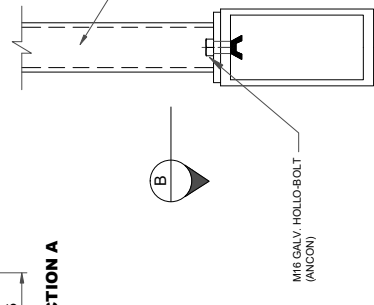
SECTION A
1.5



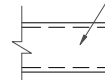
TYP. HOLLOW SECTION FIXING
1.5 FACE MOUNT



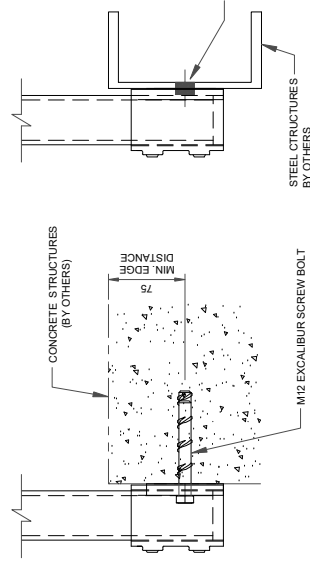
SECTION D
1.5 FACE MOUNT



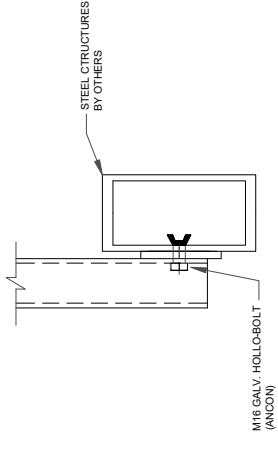
TYP. HOLLOW SECTION FIXING
1.5 TOP MOUNT



SECTION B
1.5 TOP MOUNT



SECTION C
1.5 FACE MOUNT



SECTION D
1.5 FACE MOUNT



SECTION D
1.5 FACE MOUNT

ANCHORS:

- CONCRETE**
1. ANCHORS SHALL BE M12 EXCALIBUR SCREWBOLT UNLESS NOTED OTHERWISE.
 2. ALTERNATIVE ANCHOR OPTION REDUCED EDGE DISTANCE: EXTERIOR ALL ZONES RAMSET CS12/16SSS FIXED WITH EPICON 06.
 3. CONCRETE STRUCTURES SUPPORTING HANDRAIL SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 30 MPa.

STEEL

1. ANCHORS SHALL BE M16 BOLTS, NUTS AND WASHERS (PROPERTY CLASS GRADE 8.8)

ANCHOR MATERIAL COATING

1. INTERIOR ZINC GALVANIZED (AS 1214)
2. EXTERIOR ZONE B ZINC GALVANIZED (AS 1214)

Client		moddex		Consultant		CS Eng.nz CIVIL & STRUCTURAL ENGINEERS		Project		ASSTRAIL HANDRAIL		Sheet Title		HANDRAIL DETAILS AND SPECIFICATION		Drawn: SDTS		Scale: AS SHOWN	
Rev	Date	Appd	Reason									File name:	Job Number	Series	Sheet Number	Rev			
1	21.09.2021	GC	APPROVED FOR CONSTRUCTION									191002	100	S001_2	1				
0	28.11.2019	GC	APPROVED FOR CONSTRUCTION																