Producer Statement PS1

Pool Fencing and Fall Restraint Barriers

Engineering Specifications and Installation Details for Compliance with NZBC B1, F4, F9



Property Enhancement & Protection

Barrier specification selection guide

Clause F4 'Safety from Falling' of the New Zealand Building Code requires building areas to be constructed to reduce the likelihood of accidental falls. Specifically, barriers are required where people could fall one metre or more.

Barriers need to be designed and constructed so that they are capable of providing the strength and stiffness necessary for the proposed location and occupancy type of the property which they serve. Evidence of the suitability of the barrier system for its proposed use, needs to be provided when making a building consent application. This

producer statement provides the assurance that Fentec product specifications and installation details have been pre-approved by Chartered Professional Engineers and comply with all NZBC B1, F4, F9 requirements.

It is important that your selected barrier design is appropriate to the specific installation location and intended use. Use this guide to determine your specific barrier design and installation details.

Generic producer statement

This is a generic Producer Statement, issued to Terranota Ltd, which provides the assurance that the proprietary products detailed in this document have been structurally engineered to comply with the New Zealand Building Code and the building code clauses as detailed, and for the application(s) as described in this document.

The fencing components detailed in this Producer Statement are proprietary products, engineered to comply with the requirements of the stated building code clause. Of equal importance is the detail of the fixing method to ensure the correct installation of the proprietary components. To this end, most common installation applications have been illustrated with appropriate details to ensure a safe and compliant fence/balustrade.

The structure (or ground conditions) to which the proprietary components are installed is the responsibility of the installer or end user, and it is recommended that an

independent engineer is engaged to confirm the compliance of the structure (or ground condition) with the New Zealand Building Code. Where relevant, and when critical to the compliance of the proprietary components, this producer statement details specific requirements of the structure (or ground conditions) as a minimum standard.

It is the installer or end user's responsibility to ensure the proprietary components are installed accurately to the detail provided. If your particular structure design or application is not covered in the details provided, then this generic producer statement cannot be applied to your installation. In this instance, please contact Fentec to discuss a custom-engineered solution that will meet your requirements.

How to use this document

This producer statements includes details for a variety of designs and applications, to ensure you get the right panel and fixing details for your application, please follow the instructions below:

- 1. Check the Design Loading that applies to your application, (see **Table A**). There are different Design Loadings and Minimum Barrier Heights, that apply to various occupancy types and scenarios. Following this is a table showing the corrosion zones in NZ and what fixing types you must use in these zones'.
- 2. Using **Table B**, you will be able to see what panel styles are able to be used with the loading identified in Step 1, this will also give you the maximum post centre you can install this panel at and will direct you to the panel drawing page.
- 3. On the applicable panel drawing, take note of how the panel is installed and what posts you can use, then follow the colours and drawing numbers to see the approved post fixing details, for the loading and panel style for your application.
- 4. In these pages you will find the fixing drawings that we have designed for most common applications, if the application that you are needing isn't shown here, please let us know and we can find a custom solution for you.

Barrier loading selection

Where a barrier serves multiple occupancies, default to the highest loading requirement from all location scenarios. For more information, please refer to www.building.govt.nz

Table A: Barrier Loading Selection						
Occupancy Type	Building Code Clause			Minimum Overall Barrier Height		
A - Domestic	F9	Pool fence only	0.33kN	1.2m		
A - Domestic	F4	All areas serving one dwelling but excluding balconies, decks & terraces, e.g., walkways, stairs & landings, & retaining walls not adjacent to a deck or terrace	0.35kN/m	1.0m 0.9m for stairs only		
A - Domestic	F4	External balcony, decks, terraces, retaining walls & walkways in a multidwelling application, including open public spaces	0.75kN/m	1.0m single dwelling 1.1m multi dwelling		
B & E - Offices & work areas including storage	F4	Access walkways, stairs & landings	0.35kN/m	1.1m		
B & E - Offices & work areas including storage	F4	Areas including balconies, decks & terraces not susceptible to overcrowding	0.75kN/m	1.1m		
C - Areas without obstacles for moving people & where people might congregate	F4	Areas including walkways, stairs & landings, balconeis, decks & terraces not susceptible to overcrowding, including parks and reserves	0.75kN/m	1.1m		

Fixing types

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. To determine the corrosion zone for your installation location, please check maps in Figure 4.2 in NZS3604:201 (or online search 'BRANZ Maps'). Use the table below to determine the appropriate fixing types required for your particular location.

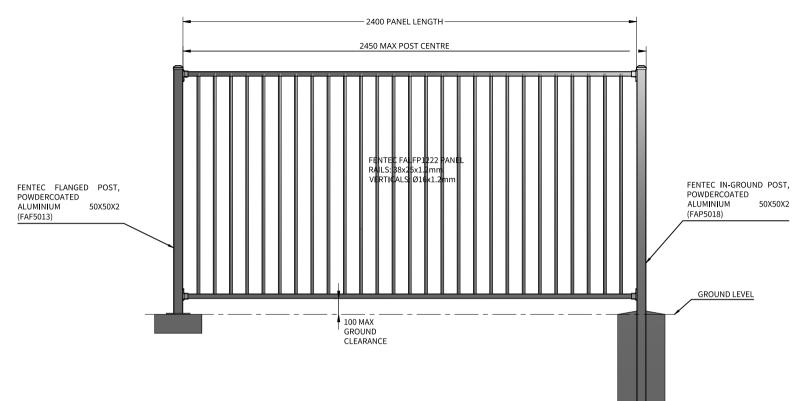
Table B: Fixing Types					
Zone	Risk Level & Location	Fixing Type			
Zone B	Low risk	Hot dip galvinised			
Zone C	Medium risk	Hot dip galvinised			
Zone D	High risk, all offshore locations within 500m of coastline, including harbours, locations within 100m of tidal estuaries & sheltered inlets	316 stainless steel			
Zone E	Very high risk, locations described in Zone D, beachfronts & seaside locations	316 stainless steel			

Barrier panel selection

Table C: Barrier Panel Selection Maximum Post Centre								
Product		Height	Code	F9 Pool Fencing	F4 – 0.35kN/m	F4 – 0.75kN/m	Page	
Lodge		1200mm	FALLFP1222	2450mm	N/A	N/A	4	
Delta		950mm	FADFP9522	N/A	1175mm	1175mm	5	
2 0.103		1200mm	FADFP1222	2300mm*	1175mm	1175mm	5	
Delta		950mm	FADBR9511	N/A	1175mm	1175mm	5	
Raking		1200mm	FADBR1211	N/A	1175mm	1175mm	5	
Alto		1200mm	FAAFP1222	2300mm*	1175mm	1175mm	6	
		1500mm	FAAFP1522	2300mm*	1175mm	1175mm	6	
Alto		1200mm	FAARP1224	N/A	1175mm	1175mm	6	
Raking		1500mm	FAARP1524	N/A	1175mm	1175mm	6	
	1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	1200mm	FAMFP1222	2300mm*	1175mm	1175mm	7	
Mansion		1500mm	FAMFP1522	2300mm*	1175mm	1175mm	7	
		1800mm	FAMFP1822	N/A	1175mm	1175mm	8	
Mansion		1200mm	FAMRP1224	N/A	1175mm	1175mm	7	
Raking		1500mm	FAMRP1524	N/A	1175mm	1175mm	7	
	4	1800mm	FAMRP1824	N/A	1175mm	1175mm	8	
Axis		1200mm	FAXFP1222	2275mm*	1075mm	1075mm	9	
*See Page 11 for typical pool fence installation and requirements								

For pool fencing: In case of extreme wind events, the fences will need to be inspected to ensure F9 – "restricting access to residential pools" compliance. Damaged fence components must be replaced before the fence can be safely utilized. Studio89 and Fentec assumes no liability from extreme wind events.

FENTEC LODGE FENCE FOR F9 (POOL FENCE) APPLICATIONS



Panel Type

LODGE 1200 High - FALFP1222

Loadings	F9 (Pool Fence)	F4 - 0.35kN/m (Fall Restraint)	F4 - 0.75kN/m (Fall Restraint)		
Max Post Centres	2450mm	N/A	N/A		
In-Ground Post Options	50x50mm FAP5018	N/A	N/A		
Flanged Post Options	50x50mm FAF5013	N/A	N/A		
Applicable Fixing Details	FPA503301 FPA503302 FPA503303	N/A	N/A		

General Notes

- 1. All dimensions are in millimetres.
- 2. Drawings are not necessarily to scale
- 3. Check www.fentec.co.nz to ensure you have the most recent edition of this publication.

Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zone	Risk Level & Location	Fixing Type			
Zone B	Low risk	Hot-dip Galvanised			
Zone C	Medium risk	Hot-dip Galvanised			
Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel			
Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel			

Existing Support Structure

- 1. Supporting structures as not covered by these drawings unless specific requirements are detailed.
- Supporting structures are by others and must comply with the New Zealand Building Code.
- 3. If unsure of existing structure compliance, seek professional advice.



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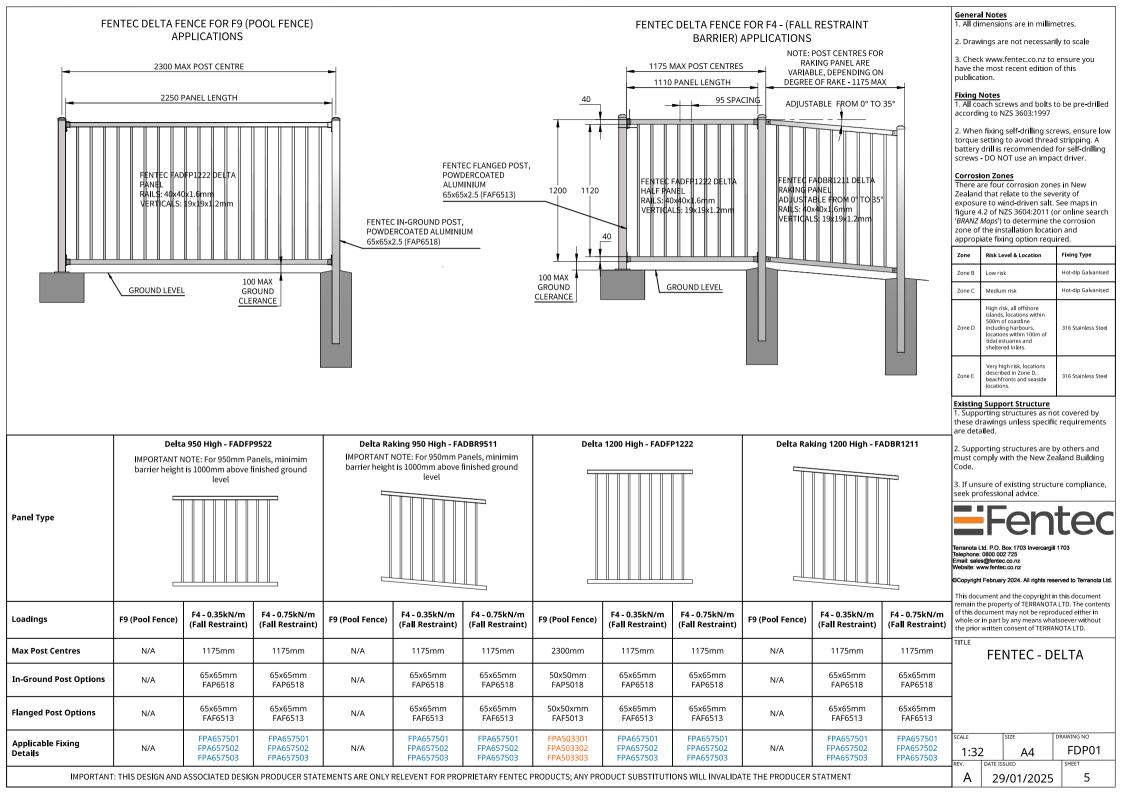
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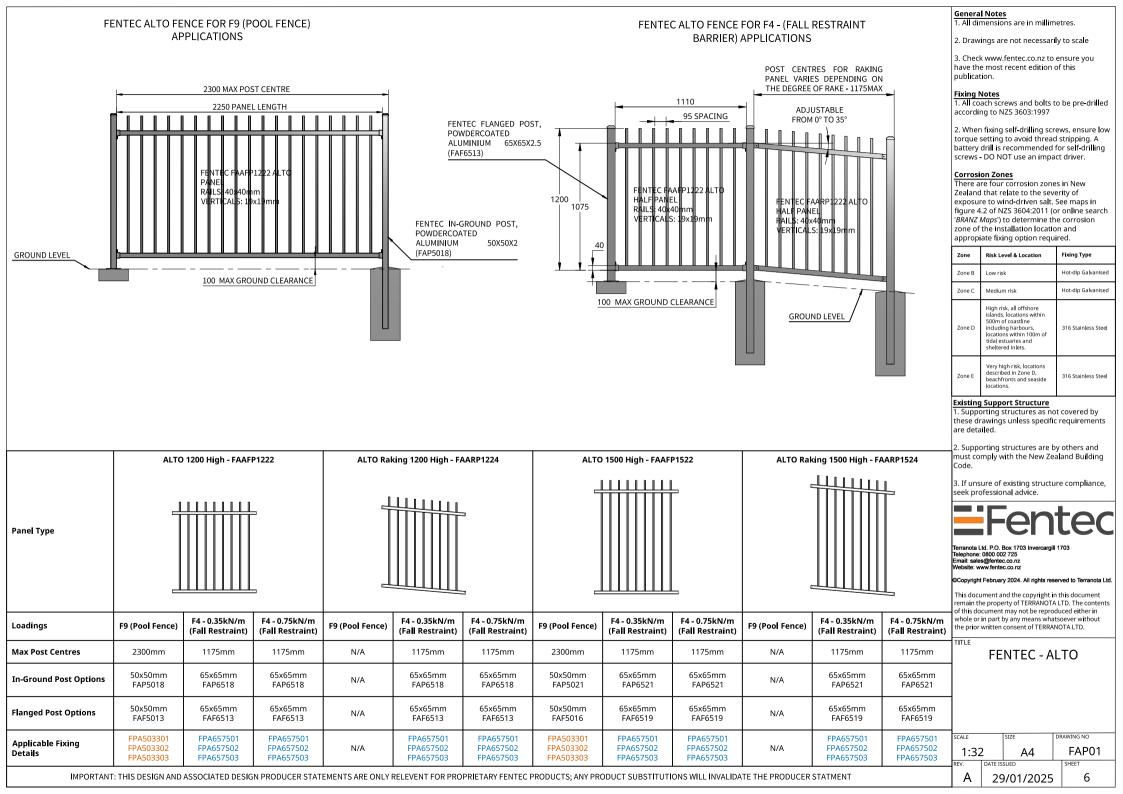
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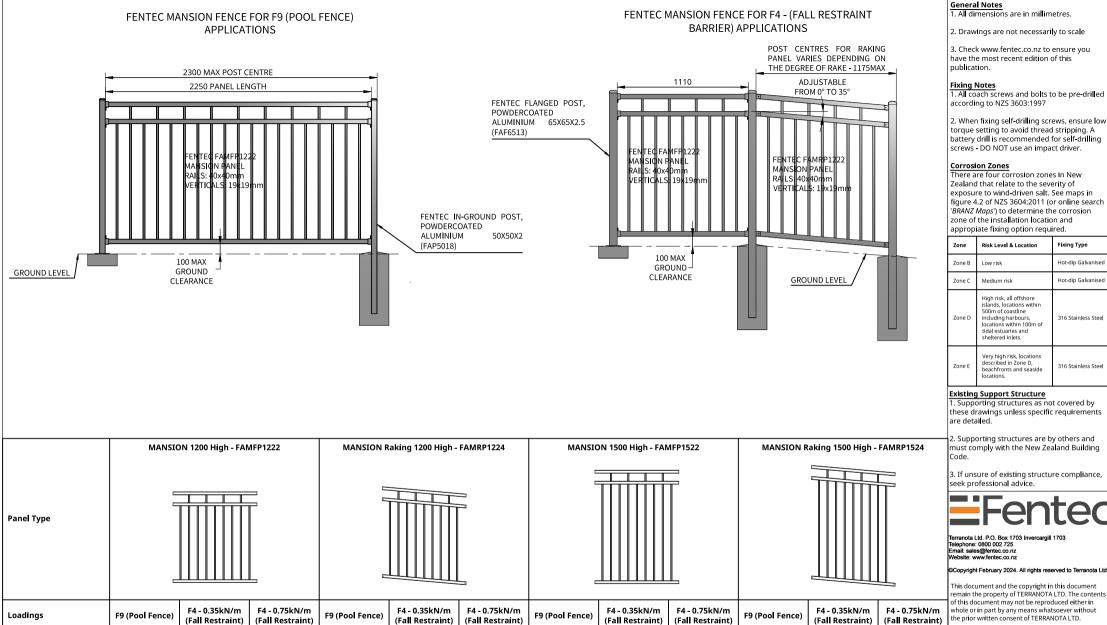
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FENTEC - LODGE

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IMPORTANT: THIS DESIGN AND ASSOCIATED DESIGN PRODUCER STATEMENTS ARE ONLY RELEVENT FOR PROPRIETARY FENTEC PRODUCTS; ANY PRODUCT SUBSTITUTIONS WILL INVALIDATE THE PRODUCER STATMENT

1175mm

65x65mm

FAP6518

65x65mm

FAF6513

FPA657501

FPA657502

FPA657503

1175mm

65x65mm

FAP6518

65x65mm

FAF6513

FPA657501

FPA657502

FPA657503

2300mm

50x50mm

FAP5021

50x50mm

FAF5016

FPA503301

FPA503302

FPA503303

1175mm

65x65mm

FAP6521

65x65mm

FAF6519

FPA657501

FPA657502

FPA657503

1175mm

65x65mm

FAP6521

65x65mm

FAF6519

FPA657501

FPA657502

FPA657503

N/A

N/A

N/A

1175mm

65x65mm

FAP6521

65x65mm

FAF6519

FPA657501

FPA657502

FPA657503

Max Post Centres

In-Ground Post Options

Flanged Post Options

Applicable Fixing

Details

2300mm

50x50mm

FAP5018

50x50mm

FAF5013

FPA503301

FPA503302

FPA503303

1175mm

65x65mm

FAP6518

65x65mm

FAF6513

FPA657501

FPA657502

FPA657503

1175mm

65x65mm

FAP6518

65x65mm

FAF6513

FPA657501

FPA657502

FPA657503

N/A

N/A

N/A

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling

figure 4.2 of NZS 3604:2011 (or online search

Zone	Risk Level & Location	Fixing Type
Zone B	Low risk	Hot-dip Galvanised
Zone C	Medium risk	Hot-dip Galvanised
Zone C	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel
Zone E	Very high risk, locations described in Zone D,	316 Stainless Steel

these drawings unless specific requirements

2. Supporting structures are by others and



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Α

1175mm

65x65mm

FAP6521

65x65mm

FAF6519

FPA657501

FPA657502

FPA657503

FENTEC - MANSION

CALE FMP01 1:32 **A4**

29/01/2025

7

FENTEC MANSION FENCE FOR F4 - (FALL RESTRAINT BARRIER) APPLICATIONS POST CENTRES FOR RAKING PANEL VARIES DEPENDING ON THE DEGREE OF RAKE - 1175MAX 1110 ADJUSTABLE FROM 0° TO 35° FENTEC FLANGED POST, FENTEC FAMRP18 MANSION PANEL POWDERCOATED ALUMINIUM 65X65X2.5 RAILS: 40x40mm (FAF6519) FENTEC IN-GROUND POST, POWDERCOATED ALUMINIUM 65X65X2.5 (FAP6525) 100 MAX GROUND CLEARANCE **GROUND LEVEL**

Panel Type	MANSION 1800 High - FAMFP1822			MANSION Raking 1800 High - FAMRP1824			
Loadings	F9 (Pool Fence)	F4 - 0.35kN/m (Fall Restraint)	F4 - 0.75kN/m (Fall Restraint)	F9 (Pool Fence)	F4 - 0.35kN/m (Fall Restraint)	F4 - 0.75kN/m (Fall Restraint)	
Max Post Centres	N/A	1175mm	1175mm	N/A	1175mm	1175mm	
In-Ground Post Options	N/A	65x65mm FAP6525	65x65mm FAP6525	N/A	65x65mm FAP6525	65x65mm FAP6525	
Flanged Post Options	N/A	65x65mm FAF6519	65x65mm FAF6519	N/A	65x65mm FAF6519	65x65mm FAF6519	
Applicable Fixing Details	N/A	FPA657501 FPA657502 FPA657503	FPA657501 FPA657502 FPA657503	N/A	FPA657501 FPA657502 FPA657503	FPA657501 FPA657502 FPA657503	

General Notes

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Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zone	Risk Level & Location	Fixing Type			
Zone B	Low risk	Hot-dip Galvanised			
Zone C	Medium risk	Hot-dip Galvanised			
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Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel			

Existing Support Structure

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TLE

FENTEC - MANSION

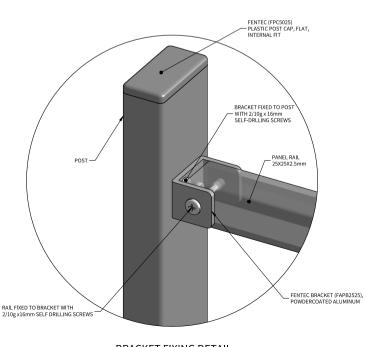
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2275 MAX POST CENTRE 2250 PANEL LENGTH FENTEC STEEL FLANGED POST, 50X25X2 (FSF5213) POST, 50X25X2 (FSF5213) FENTEC FAKFF1222 ANS PANEL PANEL PANEL RAMS: 50X25X2 5mm VERTICALS: 5025X.2 7mm VERTICALS: 502

AXIS 1200 High - FAXFP1222 **Panel Type** F4 - 0.35kN/m F4 - 0.75kN/m Loadings F9 (Pool Fence) (Fall Restraint) (Fall Restraint) **Max Post Centres** 2275mm 1075mm 1075mm 50x25mm 50x25mm 50x25mm **In-Ground Post Options** (FAP5218) (FSP5218) (FSP5218) 50x25mm 50x25mm 50x25mm Flanged Post Options (FAF5213) (FSF5213) (FSF5213) FPA527501 FPA527501 FPA527501 **Applicable Fixing** FPA527502 Details FAP527503 FAP527503 FAP527503

FENTEC AXIS FENCE FOR F9 (POOL FENCE)

APPLICATIONS



FENTEC AXIS FENCE FOR F4 - (FALL RESTRAINT

BARRIER) APPLICATIONS

BRACKET FIXING DETAIL

1:2

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Fixing Notes

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	Zone	Risk Level & Location	Fixing Type
=	Zone B	Low risk	Hot-dip Galvanised
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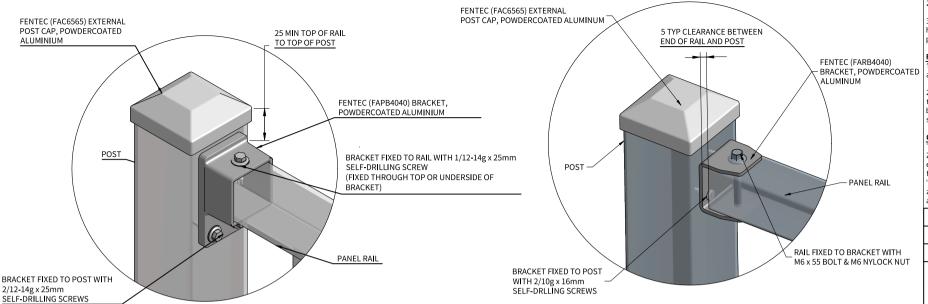
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TITLE

FENTEC - AXIS

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1:32		A4	FXP01		
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Α	29	0/01/2025		9	



STANDARD PANEL BRACKET FIXING DETAIL SCALE: 1:3.5 1:3

DIRECTIONAL PANEL BRACKET FIXING DETAIL SCALE: 1:3.5 1:3

WHEN FIXING SCREWS USE LOW TORQUE SETTING ON DRILL FENTEC (FAC6565) EXTERNAL POST CAP. TO ENSURE THREAD IS NOT STRIPPED. USE EXTRA CAUTION POWDERCOATED ALUMINIUM WHEN FIXING INTO ALUMINIUM. DO NOT USE AN IMPACT DRIVER AS THIS WILL VOID FENTEC WARRANTY 5 TYP CLEARANCE BETWEEN END OF RAIL AND POST BRACKET FIXED TO POST WITH 2/10g x 16mm SELF-DRILLING SCREWS FENTEC (FARB4040) BRACKET, POWDERCOATED ALUMINIUM BRACKET FIXED TO RAIL WITH 2/10g x 16mm SELF-DRILLING SCREWS PANEL RAIL **POST**

> RAKING PANEL BRACKET FIXING DETAIL SCALE: 1:3.5 1:3

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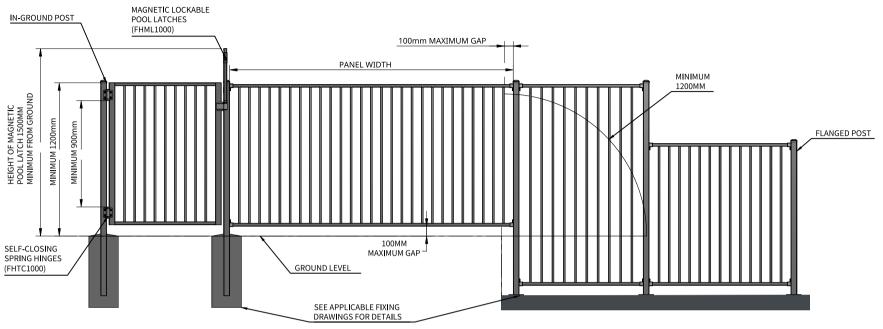
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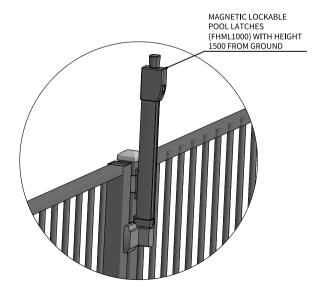
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FENTEC RAIL BRACKET FIXING **DETAILS**

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FENTEC FENCE FOR F9 (POOL FENCE) APPLICATIONS





MAGNETIC LOCKABLE LATCHES (FHML1000) 1:10

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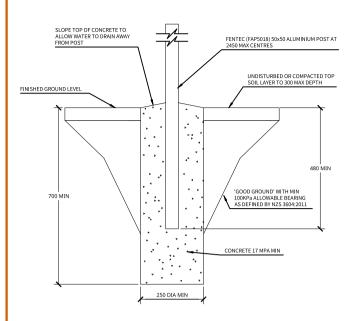
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TLE

FENTEC TYPICAL POOL FENCE INSTALL

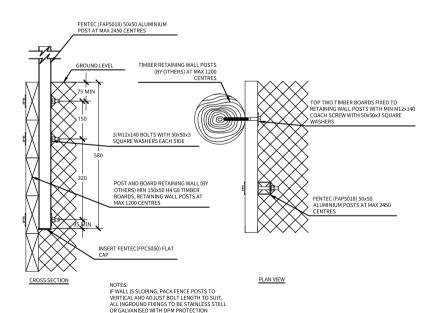
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Α	29	0/01/2025		11	



DRAWING NO: ICA503324

APPLICATION: CONCRETE IN-GROUND

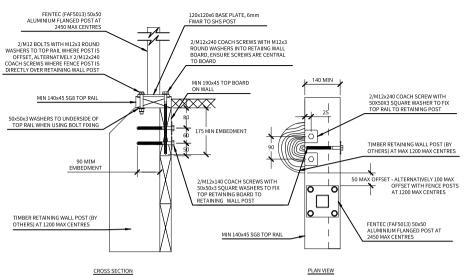
LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES



DRAWING NO: SRA503324-A

APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL (POST ON INSIDE OF RETAINING WALL)

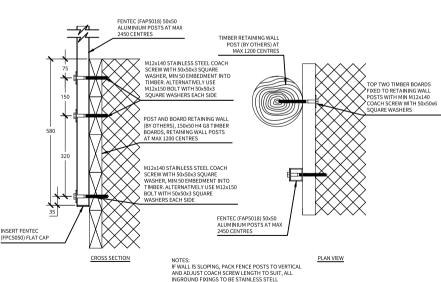
LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES



DRAWING NO: TRA503324

APPLICATION: TOP-FIX TO TIMBER RETAINING WALL

LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES



DRAWING NO: SRA503324-B

APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL (POST ON OUTSIDE OF RETAINING WALL)

LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES General Notes

- 1. All dimensions are in millimetres.
- 2. Drawings are not necessarily to scale
- . Check www.fentec.co.nz to ensure you have the most recent edition of this publication

Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

	Zone	Risk Level & Location	Fixing Type		
	Zone B	Low risk	Hot-dip Galvanised		
	Zone C	Medium risk	Hot-dip Galvanised		
	Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel		
	Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel		

Existing Support Structure

- 1. Supporting structures as not covered by these drawings unless specific requirements are detailed.
- 2. Supporting structures are by others and must comply with the New Zealand Building
- If unsure of existing structure compliance, seek professional advice.



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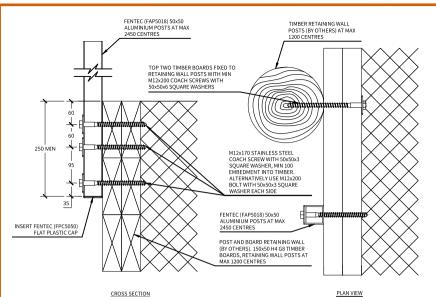
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TITLE FENTEC CONCRETE IN-GROUND & TIMBER RETAINING WALL FIXING DESIGNS FOR:

- LODGE
- DELTA
- ALTO - MANSION

FOR 0.33kN POINT LOADING (REFER TO BARRIER SPECIFICATION GUIDE FOR

RELEVANT OCUPANCY TYPES) SCALE FPA503301 29/01/2025 12

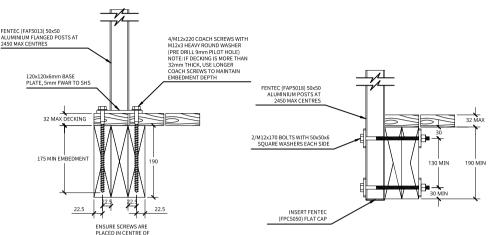


IE WALL IS SLOPING PACK FENCE POSTS TO VERTICAL AND ADJUST COACH SCREW LENGTH TO SUIT, ALL INGROUND FIXINGS

DRAWING NO: SRB503324-B APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL - DOUBLE BOARD (POST ON OUTSIDE OF RETAINING WALL) LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES

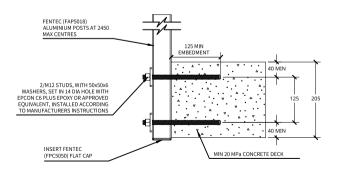
FENTEC (FAF5013) 50x50 ALUMINIUM FLANGED POST AT 2450 MAX CENTRES 4/M12x100 RAMSET ANKA SCREW OR APPROVED EQUIVALENT WITH M12x3 ROUND WASHER 120x120x6mm BASE PLATE, 5mm FWAR TO SHS POST 120 MIN MIN 20 MPa CONCRETE DECK 40 MIN EDGE DISTANCE

> DRAWING NO: TDA503324 APPLICATION: TOP-FIX TO CONCRETE DECK LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES



DRAWING NO: TTA503324 APPLICATION: TOP-FIX TO TIMBER DECK LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES

DRAWING NO: STA503324 APPLICATION: SIDE-FIX TO TIMBER DECK LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES



DRAWING NO: SDA503324-A APPLICATION: SIDE-FIX TO CONCRETE DECK (205mm THICKNESS) LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES

General Notes

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Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zor	ie	Risk Level & Location	Fixing Type		
Zor	ne B	Low risk	Hot-dip Galvanised		
Zor	Zone C Medium risk High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and shetered inlets.		Hot-dip Galvanised		
Zor			316 Stainless Steel		
Zor	ne E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel		

Existing Support Structure

- 1. Supporting structures as not covered by these drawings unless specific requirements are detailed.
- 2. Supporting structures are by others and must comply with the New Zealand Building
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TITLE: FENTEC CONCRETE TIMBER RETAINING WALL (DOUBLE BOARD), TIMBER DECK & CONCRETE DECK FIXING DESIGNS FOR: - LODGE

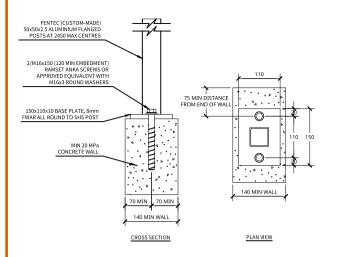
- DELTA
- ALTO
- MANSION

FOR 0.33kN POINT LOADING (REFER TO BARRIER SPECIFICATION GUIDE FOR RELEVANT OCCUPANCY TYPES) SCALE

FPA503302 1:10 **A4**

29/01/2025

13



FENTEC (CUSTOM MADE)

50x50x2.5 ALUMINIUM FLANGED

2/M12 STUDS, WITH M12x3 HEAVY ROUND WASHERS, SET IN 14 DIA HOLE

APPROVED EQUIVALENT, INSTALLED ACCORDING TO MANUFACTURERS

MASONRY BLOCK WALL SOLID FILLED

WITH EPCON C6 PLUS EPOXY OR

INSTRUCTION

70 MIN EDGE

DISTANCE

POSTS AT 2450 MAX CENTRES

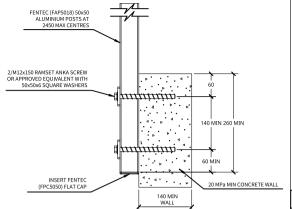
DRAWING NO: TWA503324-A
APPLICATION: TOP-FIX TO CONCRETE WALL
LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES
LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES

FENTEC (FAF5013) 50x50 ALLIMINIUM ELANGED POST AT 2450 MAX CENTRES 4/M12x100 RAMSET ANKA SCREWS OR APPROVED EQUIVALENT WITH M12x3 MIN 40 EDGE DISTANCE ROUND WASHERS FROM CENTRE OF FIXING TO END OF CONCRETE WALL 120x120x6mm BASE PLATE 5mm FWAR TO SHS POST MIN 20 MPa CONCRETE WALL 40 MIN EDGE DISTANCE DISTANCE 170 MIN WALL

DRAWING NO: TWA503324-B
APPLICATION: TOP-FIX TO CONCRETE WALL
LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES
LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES

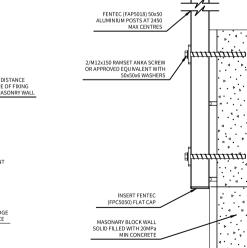
FENTEC (FAF5013) 50x50 ALUMINIUM FLANGED POSTS AT 2450 MAX CENTRES 4/M12 STUDS WITH M12x3 HEAVY ROUND WASHERS, SET IN 14 DIA HOLE WITH MIN 50 EDGE DISTANCE EPCON C6 PLUS EPOXY OR APPROVED EQUIVALENT, INSTALLED ACCORDING TO MANUFACTURERS INSTRUCTIONS FROM CENTRE OF FIXING TO END OF MASONRY WALL 120v120v6mm BASE PLATE 5mm FWAR TO SHS POST 160 MIN MASONRY BLOCK MBEDMENT WALL SOLID FILLED WITH 20 MPa MIN CONCRETE 50 MIN EDGE 50 MIN EDGE DISTANCE 190 MIN WALL

DRAWING NO: TMA503324-B
APPLICATION: TOP-FIX TO MASONARY WALL (20 SERIES)
LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES
LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES



DRAWING NO: SWA503324 APPLICATION: SIDE-FIX TO CONCRETE WALL

LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES



DRAWING NO: SMA503324

APPLICATION: SIDE-FIX TO MASONARY WALL (15 SERIES)
LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES
LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES

140 MIN WALI

270 MIN 415 MIN

General Notes

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Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zone	Risk Level & Location	Fixing Type		
Zone B	Low risk	Hot-dip Galvanised		
Zone C	Medium risk	Hot-dip Galvanised		
Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel		
Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel		

Existing Support Structure

- 1. Supporting structures as not covered by these drawings unless specific requirements are detailed.
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TITLE

FENTEC CONCRETE WALL & MASONARY WALL FIXING DESIGNS FOR:

- LODGE
- DELTA
- ALTO
- MANSION

FOR 0.33kN POINT LOADING (REFER TO BARRIER SPECIFICATION GUIDE FOR RELEVANT OCCUPANCY TYPES)

APPLICATION: TOP-FIX TO MASONARY WALL (15 SERIES) LOADING: 1200H: 0.33kN POINT LOAD AT MAX 2450 POST CENTRES LOADING: 1500H: 0.33kN POINT LOAD AT MAX 2300 POST CENTRES

8mm FWAR TO SHS POST

120 MIM

EMBEDMENT

70 MIN EDGE

DISTANCE

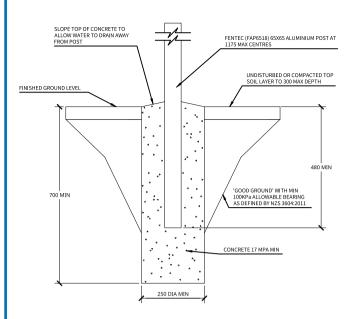
140 MIN WALL

DRAWING NO: TMA503324-A

90 MIN DISTANCE

(

140 MIN WALL

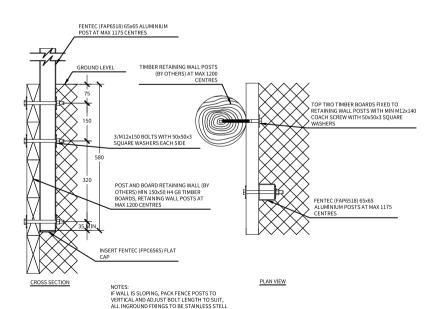


DRAWING NO: ICA657512

APPLICATION: CONCRETE IN-GROUND

LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES

HEIGHTS: 1200, 1500, 1800



120x120x10 BASE PLATE, 8mm FWAR TO SHS POST FENTEC (FAF6513) 65x65 ALUMINIUM FLANGED POST AT 2/M12x240 COACH SCREWS WITH M12x3 2/M12 BOLTS WITH M12x3 ROUND WASHERS TO TOP RAIL WHERE POST IS ROLIND WASHERS INTO RETAIING WALL BOARD, ENSURE SCREWS ARE CENTRAL TO BOARD OFFSET, ALTERNATIVELY 2/M12x240 COACH SCREWS WHERE FENCE POST IS DIRECTLY OVER RETAINING WALL POST 140 MIN MIN 190x45 TOP BOARD 2/M12x240 COACH SCREW WITH MIN 140x45 SG8 TOP RAIL 50X50X3 SQUARE WASHER TO FIX TOP RAIL TO RETAINING POST 50x50x3 WASHERS TO UNDERSIDE OF TOP RAIL WHEN USING BOLT FIXING 190 MIN EMBEDMENT TIMBER RETAINING WALL POST (BY OTHERS) AT MAX 1200 MAX CENTRES 0 EMBEDMENT 100 MAX OFFSET 2/M12x140 COACH SCREWS WITH 50x50x3 SQUARE WASHERS TO FIX TOP RETAINING BOARD TO RETAINING WALL POST TIMBER RETAINING WALL POST (BY FENTEC (FAF6513) 65x65 ALUMINIUM FLANGED POST AT OTHERS) AT 1200 MAX CENTRES MIN 140x45 SG8 TOP RAIL 1175 MAX CENTRES

DRAWING NO: TRA657512

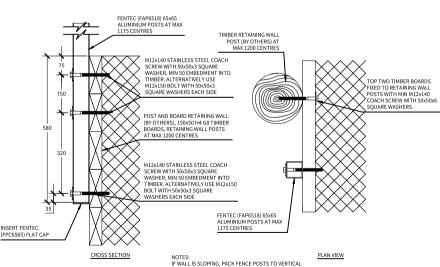
CROSS SECTION

APPLICATION: TOP-FIX TO TIMBER RETAINING WALL

PLAN VIEW

LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES

HEIGHTS: 1200, 1500, 1800



DRAWING NO: SRA657512-A

APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL (POST ON INSIDE OF RETAINING WALL)

OR GAI VANISED WITH DPM PROTECTION

LOADING: 0.35kN/m AT MAX 1175 POST CENTRES

LOADING: 0.75kN/m AT MAX 1175 POST CENTRES

HEIGHTS: 1200, 1500, 1800

DRAWING NO: SRA657512-B APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL (POST ON OUTSIDE OF RETAINING WALL) LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800

AND ADJUST COACH SCREW LENGTH TO SUIT, ALL

INGROUND FIXINGS TO BE STAINLESS STELL

General Notes

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Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zone	Risk Level & Location	Fixing Type
Zone B	Low risk	Hot-dip Galvanised
Zone C	Medium risk	Hot-dip Galvanised
Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel
Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel

Existing Support Structure

I. Supporting structures as not covered by these drawings unless specific requirements are detailed.

- 2. Supporting structures are by others and must comply with the New Zealand Building Code.
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TITLE

FENTEC CONCRETE IN-GROUND & TIMBER RETAINING WALL FIXING DESIGNS FOR:

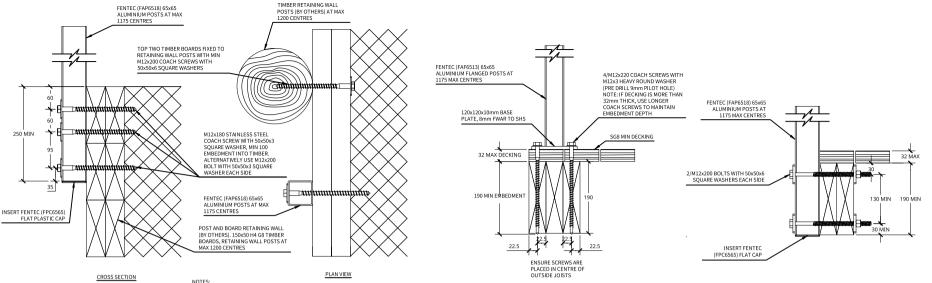
- DELTA
- ALTO
- MANSION

FOR 0.35kN/m & 0.75kN/m HORIZONTAL LOADING (REFER TO BARRIER SPECIFICATION GUIDE FOR RELEVANT OCUPANCY TYPES)

15

SCALE FPA657501 1:15 Α4

29/01/2025

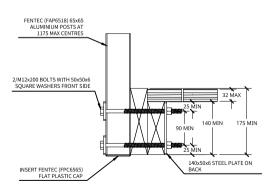


DRAWING NO: SRB657512-B APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL - DOUBLE BOARD (POST ON OUTSIDE OF RETAINING WALL) LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800

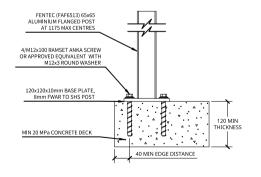
IF WALL IS SLOPING. PACK FENCE POSTS TO VERTICAL AND ADJUST COACH SCREW LENGTH TO SHIT ALL INGPOLIND FIXINGS

> DRAWING NO: TTA657512 APPLICATION: TOP-FIX TO TIMBER DECK LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800

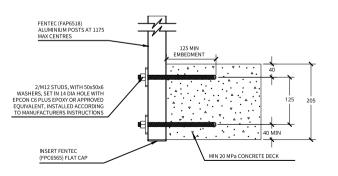
DRAWING NO: STA657512-A APPLICATION: SIDE-FIX TO TIMBER DECK LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800



DRAWING NO: STA657512-B APPLICATION: SIDE-FIX TO TIMBER DECK LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800



DRAWING NO: TDA657512 APPLICATION: TOP-FIX TO CONCRETE DECK LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800



DRAWING NO: SDA657512-A APPLICATION: SIDE-FIX TO CONCRETE DECK (205 min THICKNESS) LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800

General Notes

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Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

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Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zone Risk Level & Location		Fixing Type		
Zone B	Low risk	Hot-dip Galvanised		
Zone C	Medium risk	Hot-dip Galvanised		
Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel		
Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel		

Existing Support Structure

1. Supporting structures as not covered by these drawings unless specific requirements are detailed.

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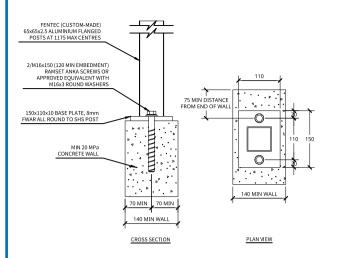
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TITLE: FENTEC CONCRETE TIMBER RETAINING WALL (DOUBLE BOARD), TIMBER DECK & CONCRETE DECK FIXING DESIGNS FOR:

- DELTA
- ALTO
- MANSION

FOR 0.35kN/m & 0.75kN/m HORIZONTAL LOADING (REFER TO BARRIER SPECIFICATION GUIDE FOR RELEVANT

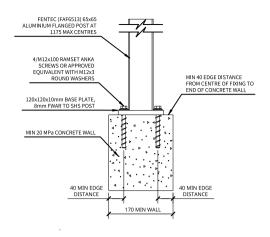
	OCCUPAN					
	1:10 REV. DATE IS A 29		SIZE	DF	DRAWING NO	
			A4	FPA657502		
			SUED		SHEET	
			9/01/2025		16	



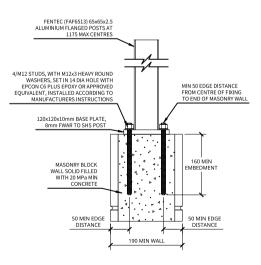
DRAWING NO: TWA657512-A
APPLICATION: TOP-FIX TO CONCRETE WALL
LOADING: 0.35kN/m AT MAX 1175 POST CENTRES
LOADING: 0.75kN/m AT MAX 1175 POST CENTRES
HEIGHTS: 1200, 1500, 1800

FENTEC (CUSTOM MADE) 65x65x2.5 ALUMINIUM FLANGED POSTS AT 1175 MAX CENTRES 2/M12 STUDS WITH M12v3 HEAVY ROUND WASHERS, SET IN 14 DIA HOLE WITH EPCON C6 PLUS EPOXY OR 8mm FWAR TO SHS POST APPROVED EQUIVALENT, INSTALLED ACCORDING TO MANUFACTURERS INSTRUCTION 90 MIN DISTANCE 120 MIM 0 EMBEDMENT MASONRY BLOCK WALL SOLID FILLED **(C)** 70 MIN EDGE 70 MIN EDGE DISTANCE DISTANCE 140 MIN WALL 140 MIN WALL

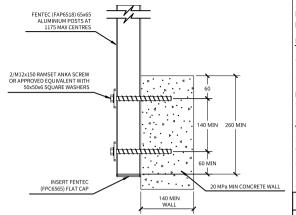
DRAWING NO: TMA657512-A
APPLICATION: TOP-FIX TO MASONARY WALL (15 SERIES)
LOADING: 0.35kN/m AT MAX 1175 POST CENTRES
LOADING: 0.75kN/m AT MAX 1175 POST CENTRES
HEIGHTS: 1200, 1500, 1800



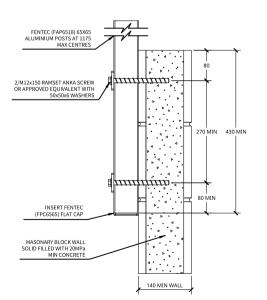
DRAWING NO: TWA657512-B APPLICATION: TOP-FIX TO CONCRETE WALL LOADING: 0.35kN/m AT MAX 1175 POST CENTRES LOADING: 0.75kN/m AT MAX 1175 POST CENTRES HEIGHTS: 1200, 1500, 1800



DRAWING NO: TMA657512-B
APPLICATION: TOP-FIX TO MASONARY WALL (20 SERIES)
LOADING: 0.35kN/m AT MAX 1175 POST CENTRES
LOADING: 0.75kN/m AT MAX 1175 POST CENTRES
HEIGHTS: 1200. 1500. 1800



DRAWING NO: SWA657512
APPLICATION: SIDE-FIX TO CONCRETE WALL
LOADING: 0.35kN/m AT MAX 1175 POST CENTRES
LOADING: 0.75kN/m AT MAX 1175 POST CENTRES
HEIGHTS: 1200, 1500, 1800



DRAWING NO: SMA657512
APPLICATION: SIDE-FIX TO MASONARY WALL (15 SERIES)
LOADING: 0.35kN/m AT MAX 1175 POST CENTRES
LOADING: 0.75kN/m AT MAX 1175 POST CENTRES
HEIGHTS: 1200, 1500, 1800

General Notes

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Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zone	Risk Level & Location	Fixing Type		
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Zone C	Medium risk	Hot-dip Galvanised		
Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel		
Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel		

Existing Support Structure

- 1. Supporting structures as not covered by these drawings unless specific requirements are detailed.
- Supporting structures are by others and must comply with the New Zealand Building Code.
- 3. If unsure of existing structure compliance, seek professional advice.



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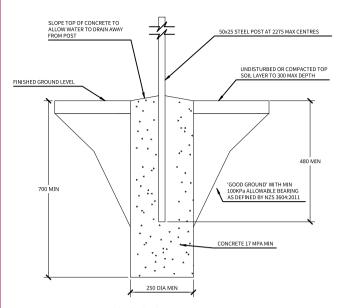
TITLE FENTEC CONCRETE WALL & MASONARY WALL FIXING DESIGNS FOR:

- DELTA
- ALTO
- MANSION

FOR 0.35kN/m & 0.75kN/m HORIZONTAL LOADING

(REFER TO BARRIER SPECIFICATION GUIDE FOR RELEVANT

	OCCUPANCI TIPES)				
	SCALE		SIZE	DF	AWING NO
	1:10		A4	FPA65750	
			SUED		SHEET
	Α	29	/01/2025		17



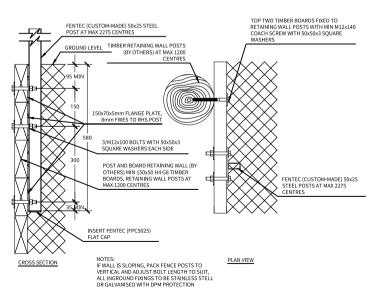
DRAWING NO: ICA527511

APPLICATION: CONCRETE IN-GROUND

LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES

LOADING: 0.35kN/m AT MAX 1075 POST CENTRES LOADING: 0.75kN/m AT MAX 1075 POST CENTRES

HEIGHT: 1200 ONLY



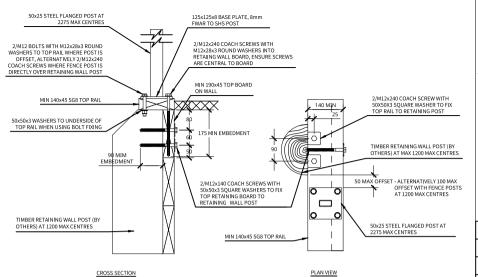
DRAWING NO: SRA527511-A

APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL (POST ON INSIDE OF RETAINING WALL)

LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES

LOADING: 0.35kN/m AT MAX 1075 POST CENTRES

LOADING: 0.75kN/m AT MAX 1075 POST CENTRES HEIGHT: 1200 ONLY



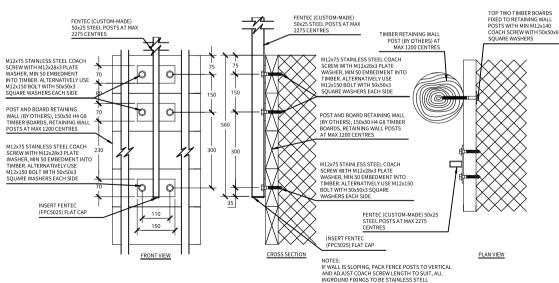
DRAWING NO: TRA527511

APPLICATION: TOP-FIX TO TIMBER RETAINING WALL

LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES

LOADING: 0.35kN/m AT MAX 1075 POST CENTRES LOADING: 0.75kN/m AT MAX 1075 POST CENTRES

HEIGHT: 1200 ONLY



DRAWING NO: SRA527511-B

APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL (POST ON OUTSIDE OF RETAINING WALL)

LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES

LOADING: 0.35kN/m AT MAX 1075 POST CENTRES

LOADING: 0.75kN/m AT MAX 1075 POST CENTRES HEIGHT: 1200 ONLY

General Notes

1. All dimensions are in millimetres.

- 2. Drawings are not necessarily to scale
- . Check www.fentec.co.nz to ensure you have the most recent edition of this publication

Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

	Zone	Risk Level & Location	Fixing Type	
	Zone B	Low risk	Hot-dip Galvanised	
	Zone C	Medium risk	Hot-dip Galvanised	
	Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel	
	Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel	

Existing Support Structure

1. Supporting structures as not covered by these drawings unless specific requirements are detailed.

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FENTEC AXIS BARRIER FIXING DESIGNS FOR:

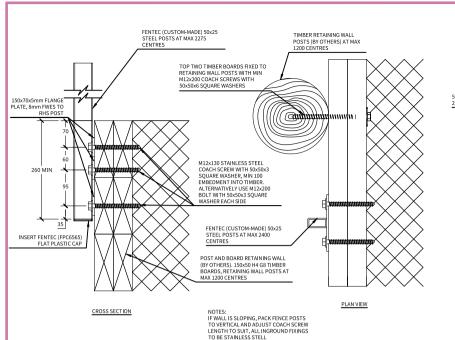
- CONCRETE IN-GROUND
- TIMBER RETAINING WALL

FOR 0.33kN POINT LOAD, 0.35kN/m & 0.75kN/m HORIZONTAL LOADING

(REFER TO BARRIER SPECIFICATION GUIDE FOR RELEVANT OCUPANCY TYPES) SCALE

FPA527501 1:15 29/01/2025

18



DRAWING NO: SRB527511-B

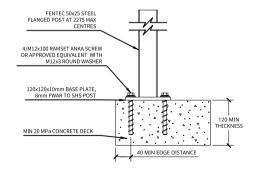
APPLICATION: SIDE-FIX TO TIMBER RETAINING WALL - DOUBLE BOARD (POST ON

OUTSIDE OF RETAINING WALL)

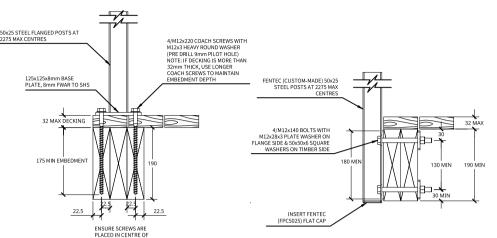
LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES
LOADING: 0.35kN/m AT MAX 1075 POST CENTRES

LOADING: 0.75kN/m AT MAX 1075 POST CENTRES

HEIGHT: 1200 ONLY



DRAWING NO: TDA527511
APPELCATION: TOP-FIX TO CONCRETE DECK
LOADING: 0.35kN/m AT MAX 1075 POST CENTRES
LOADING: 0.75kN/m AT MAX 1075 POST CENTRES
LOADING: 0.75kN/m AT MAX 1075 POST CENTRES
HEIGHT: 1200 ONLY

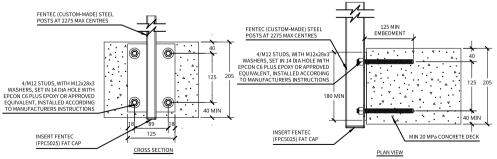


DRAWING NO: TTA527511

APPLICATION: TOP-FIX TO TIMBER DECK
LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES
LOADING: 0.35kN/m AT MAX 1075 POST CENTRES
LOADING: 0.75kN/m AT MAX 1075 POST CENTRES

HEIGHT: 1200 ONLY

DRAWING NO: STA527511
APPLICATION: SIDE-FIX TO TIMBER DECK
LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES
LOADING: 0.35kN/m AT MAX 1075 POST CENTRES
LOADING: 0.75kN/m AT MAX 1075 POST CENTRES
HEIGHT: 1200 ONLY



DRAWING NO: SDA527511-A
APPLICATION: SIDE-FIX TO CONCRETE DECK (180 min THICKNESS)
LOADING: 0.35kN POINT LOAD AT MAX 2275 POST CENTRES
LOADING: 0.35kN/m AT MAX 1075 POST CENTRES
LOADING: 0.75kN/m AT MAX 1075 POST CENTRES

General Notes

1. All dimensions are in millimetres.

- 2. Drawings are not necessarily to scale
- 3. Check www.fentec.co.nz to ensure you have the most recent edition of this publication.

Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and appropiate fixing option required.

Zone	Risk Level & Location	Fixing Type	
Zone B	Low risk	Hot-dip Galvanised	
Zone C	Medium risk	Hot-dip Galvanised	
Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel	
Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel	

Existing Support Structure

 Supporting structures as not covered by these drawings unless specific requirements are detailed.

- 2. Supporting structures are by others and must comply with the New Zealand Building
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TITLE:

FENTEC AXIS BARRIER FIXING DESIGNS FOR:
- TIMBER RETAINING WALL (DOUBLE BOARD)

- TIMBER DECK

- CONCRETE DECK

FOR 0.33kN POINT LOAD, 0.35kN/m & 0.75kN/m HORIZONTAL LOADING (REFER TO BARRIER SPECIFICATION GUIDE FOR

SCALE SIZE DRAWING NO

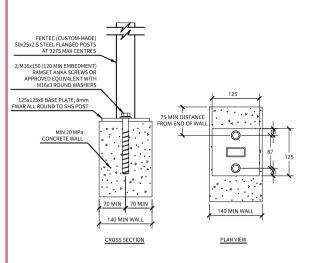
1:10 A4 FPA527502

DATE ISSUED SHEE

19

A 29/01/2025

| A |



DRAWING NO: TWA527511-A APPLICATION: TOP-FIX TO CONCRETE WALL LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES LOADING: 0.35kN/m AT MAX 1075 POST CENTRES LOADING: 0.75kN/m AT MAX 1075 POST CENTRES HEIGHT: 1200 ONLY

FENTEC 50x25 STEEL FLANGED POST AT 2275 MAX CENTRES 4/M12x100 RAMSET ANKA EOUIVALENT WITH M12x3 ROUND WASHERS MIN 40 EDGE DISTANCE FROM CENTRE OF FIXING TO 8mm FWAR TO RHS POST END OF CONCRETE WALL MIN 20 MPa CONCRETE WALL 41 MIN EDGE 41 MIN EDGE DISTANCE DISTANCE 170 MIN WALI

> DRAWING NO: TWA527511-B APPLICATION: TOP-FIX TO CONCRETE WALL LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES LOADING: 0.35kN/m AT MAX 1075 POST CENTRES LOADING: 0.75kN/m AT MAX 1075 POST CENTRES HEIGHT: 1200 ONLY

FENTEC (CUSTOM-MADE) 50x25 STEEL POSTS AT 2275 MAX FENTEC (CUSTOM-MADE) 50x25 STEEL POSTS AT 2275 MAX CENTRES 4/M12x100 RAMSET ANKA SCREW OR APPROVED EQUIVALENT WITH M12x28x3 PLATE WASHERS 4/M12x100 RAMSET ANKA SCREW OR APPROVED EQUIVALENT WITH M12x28x3 PLATE WASHERS viuuu 20 MPa MIN CONCRETE WALL 250 MIN 40 MIN MIN 08 INSERT FENTEC (EPC5025) FLAT CAP uuuuu 60 MIN -60 MIN INSERT FENTEC (EPC5025) FLAT CAP 140 MIN WALL 20 MPa MIN CONCRETE WAL CROSS SECTION FRONT VIEW

DRAWING NO: SWA527511

APPLICATION: SIDE-FIX TO CONCRETE WALL

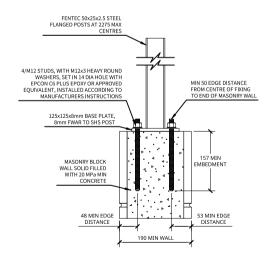
LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES LOADING: 0.35kN/m AT MAX 1075 POST CENTRES

LOADING: 0.75kN/m AT MAX 1075 POST CENTRES

HEIGHT: 1200 ONLY

50x25x2.5 STEEL FLANGED 2/M12 STUDS WITH M12v3 HEAVY ROUND WASHERS, SET IN 14 DIA HOLE 125x125x8mm BASE PLATE, WITH EPCON C6 PLUS EPOXY OR 8mm FWAR TO SHS POST APPROVED EQUIVALENT, INSTALLED ACCORDING TO MANUFACTURERS INSTRUCTION 90 MIN DISTANCE FROM END OF WALL 122 MIM MASONRY BLOCK WALL SOLID FILLED 0 70 MIN EDGE 70 MIN EDGE DISTANCE DISTANCE 140 MIN WALL 140 MIN WALL

> DRAWING NO: TMA527511-A APPLICATION: TOP-FIX TO MASONARY WALL (15 SERIES) LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES LOADING: 0.35kN/m AT MAX 1075 POST CENTRES LOADING: 0.75kN/m AT MAX 1075 POST CENTRES HEIGHT: 1200 ONLY



DRAWING NO: TMA527511-B APPLICATION: TOP-FIX TO MASONARY WALL (20 SERIES) LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES LOADING: 0.35kN/m AT MAX 1075 POST CENTRES LOADING: 0.75kN/m AT MAX 1075 POST CENTRES HEIGHT: 1200 ONLY

FENTEC (CLISTOM-MADE) 50x25 STEEL POSTS AT 2275 MAX CENTRES uliuuu 4/M12x100 RAMSET ANKA SCREW OR APPROVED EQUIVALENT WITH M12x28x3 WASHERS 150x70x5mm FLANGE PLATE. 8mm FWES TO RHS POS ainma INSERT FENTEC (FPC5025) FLAT CAP MASONARY BLOCK WALL SOLID FILLED WITH 20MPa 140 MIN WALI

> DRAWING NO: SMA527511 APPLICATION: SIDE-FIX TO MASONARY WALL (15 SERIES) LOADING: 0.33kN POINT LOAD AT MAX 2275 POST CENTRES LOADING: 0.35kN/m AT MAX 1075 POST CENTRES LOADING: 0.75kN/m AT MAX 1075 POST CENTRES HEIGHT: 1200 ONLY

General Notes

1. All dimensions are in millimetres.

- 2. Drawings are not necessarily to scale
- 3. Check www.fentec.co.nz to ensure you have the most recent edition of this publication.

Fixing Notes

1. All coach screws and bolts to be pre-drilled according to NZS 3603:1997

2. When fixing self-drilling screws, ensure low torque setting to avoid thread stripping. A battery drill is recommended for self-drilling screws - DO NOT use an impact driver.

Corrosion Zones

There are four corrosion zones in New Zealand that relate to the severity of exposure to wind-driven salt. See maps in figure 4.2 of NZS 3604:2011 (or online search 'BRANZ Maps') to determine the corrosion zone of the installation location and

	appropi	rea.	
	Zone	Risk Level & Location	Fixing Type
L	Zone B	Low risk	Hot-dip Galvanised
	Zone C	Medium risk	Hot-dip Galvanised
	Zone D	High risk, all offshore islands, locations within 500m of coastline including harbours, locations within 100m of tidal estuaries and sheltered inlets.	316 Stainless Steel
	Zone E	Very high risk, locations described in Zone D, beachfronts and seaside locations.	316 Stainless Steel

Existing Support Structure

. Supporting structures as not covered by these drawings unless specific requirements are detailed.

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TITLE

FENTEC AXIS BARRIER FIXING DESIGNS

- CONCRETE WALL
- MASONARY WALL

FOR 0.33kN POINT LOAD, 0.35kN/m & 0.75kN/m HORIZONTAL LOADING

(REFER TO BARRIER SPECIFICATION GUIDE FOR RELEVANT OCCUPANCY TYPES) DRAWING NO SCALE FPA527503 1:10 A4 20 Α 29/01/2025





PRODUCER STATEMENT – PS1 DESIGN

BUILDING CODE CLAUSE(S): SSUED BY:	JOB NUMBER:					
(Engineering Design Firm)		1				
TO: (Owner/Developer)						
TO BE SUPPLIED TO:						
(Building Consent Authority) IN RESPECT OF:						
(Description of Building Work)		1				
AT: (Address, Town/City)						
LEGAL DESCRIPTION:		N/A □				
We have been engaged by the owner/developer referred to above t	o provide (Extent of Engageme	ent):				
in respect of the requirements of the Clause(s) of the Building Code schedule, of the proposed building work.	specified above for Choose ar	n item., as specified in the				
The design carried out by us has been prepared in accordance with:						
 Compliance documents issued by the Ministry of Busines solution) 	ss, Innovation & Employment (Verification method/acceptable and/or;				
• Alternative solution as per the attached Schedule.		,				
The proposed building work covered by this producer statement is described on the drawings specified in the Schedule, together with the specification, and other documents set out in the Schedule.						
On behalf of the Engineering Design Firm, and subject to:						
Site verification of the following design assumptions:						
 All proprietary products meeting their performance specific 	cation requirements;					
I believe on reasonable grounds that:						
 the building, if constructed in accordance with the drawing Schedule, will comply with the relevant provisions of the Bu 		cuments provided or listed in the				
the persons who have undertaken the design have the necessary.						
I recommend construction monitoring as agreed with the owner of the	e project					
I, (Name of Engineering Design Professional)		, am:				
• CPEng number						
and hold the following qualifications						
The Engineering Design Firm holds a current policy of Professional III The Engineering Design Firm Choose one a member of ACE New Zeal		an \$200,000				
SIGNED BY (Name of Engineering Design Professional): (Signature below):						

ON BEHALF OF (Engineering Design Firm):

Date: 26/01/25 EXPIRES 25/01/26

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Engineering Design Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, 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.

SCHEDULE to PS1

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:		

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on the Engineering New Zealand website

https://www.engineeringnz.org/engineer-tools/engineering-documents/producer-statements/

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;

PS2 DESIGN REVIEW Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;

PS3 CONSTRUCTION Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011²

PS4 CONSTRUCTION REVIEW Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional

This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.

The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).

Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance

As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase

There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers³). The building Consent Authority is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4

Building Consent Authorities should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the Design Firm's engagement.

Refer Also:

- Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
- ² NZIA Standard Conditions of Contract SCC 2011
- Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
- ⁴ PN01 Guidelines on Producer Statements

www.acenz.org.nz www.engineeringnz.org



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