

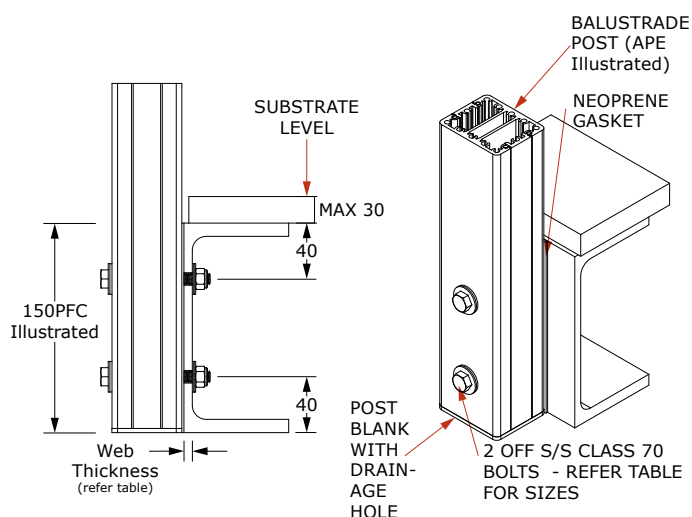
# FIXING SPECIFICATIONS

NZBAL-C12.0 | SPEC ID FS.5S.06.03

## STEEL - SIDE FIXING, BOLTS

Refer to all notes on Pages 72 and 73 which shall apply to this specification and the relevant pages in Chapter 5 Installation Guides. Refer also to Chapter 2 for the Style Specification.

### APE POST TYPES ONLY



- All bolts, washers and nyloc nuts fixings shall be Class 70 316 stainless steel.
- Washers to be fitted under all bolts as follows;
  - For 8mm bolted - 22mm O.D. S/S washer (Part No. FW8-22) with a polymer washer (Part No. FWP8-22G) between the S/S washer, aluminium post and the steel beam.
  - For 10mm tapped - 21mm O.D. S/S washer (Part No. FW10-21) with a polymer washer (Part No. FWP10-22G) between the S/S washer, aluminium post and the steel.
- The maximum post spacing permitted is the LESSER of the spacing tabulated in the Style Specification in Section 3 and spacing shown on the table below.
- Substrate design, including waterproofing and the structural design of the steel substrate and its connections are not included in this specification and must be carried out by others.
- The steel beam shall be painted with a good quality paint system consisting of a primer and top coat.



### MAXIMUM POST CENTRES 'S max' (metres)

ALWAYS TAKE THE LESSER OF THE VALUE BELOW AND THE VALUE FROM THE STYLE SPECIFICATION

Height <sup>(3)</sup>	Post Type (Refer Ch 1)	Steel Size (Depth)	Fasteners - Qty and Type <sup>(2)</sup>	Web Thickness (See diagram)	Line No.	LOADING CLASS <sup>(1)</sup>																		
						N07C/N07R						N03R	Not Preventing Fall											
						Design Wind Speed <sup>(4)</sup>							Design Wind Speed <sup>(4)</sup>											
						VH	EH	EH	EH	EH	EH	M	H	VH	EH	EH	EH							
50	52	54	56	58	60	62	64	N/A	38	40	42	44	46	48	50	52	54	56						
1.0	APE	150	2 x M8 BOLTS	NA	1	1.48	1.48	1.48	1.48	1.48	1.36	1.27	1.19	3.18	3.18	3.06	2.78	2.53	2.31	2.12	1.96	1.81	1.68	1.56
		200+	2 x M8 BOLTS	NA	2	1.67	1.67	1.67	1.67	1.67	1.62	1.52	1.43	3.58	4.06	3.66	3.32	3.03	2.77	2.54	2.34	2.16	2.01	1.87
		150	2 x M10 TAP	6	3	0.77	0.77	0.77	0.77	0.77	0.74	0.70	0.65	1.66	1.86	1.68	1.52	1.39	1.27	1.16	1.07	0.99	0.92	0.85
		200+	2 x M10 TAP	6	4	1.08	1.08	1.08	1.08	1.08	1.08	1.02	0.95	2.32	2.71	2.45	2.22	2.02	1.85	1.70	1.56	1.45	1.34	1.25
1.1	APE	150	2 x M8 BOLTS	NA	5	1.37	1.37	1.37	1.30	1.21	1.13	1.06	0.99	2.93	2.93	2.54	2.31	2.10	1.92	1.77	1.63	1.50	1.39	1.30
		200+	2 x M8 BOLTS	NA	6	1.53	1.53	1.53	1.53	1.44	1.35	1.26	1.18	3.28	3.37	3.04	2.76	2.51	2.30	2.11	1.94	1.80	1.67	1.55
		150	2 x M10 TAP	6	7	0.71	0.71	0.71	0.71	0.66	0.62	0.58	0.54	1.53	1.54	1.39	1.26	1.15	1.05	0.97	0.89	0.82	0.76	0.71
		200+	2 x M10 TAP	6	8	1.00	1.00	1.00	1.00	0.96	0.90	0.84	0.79	2.15	2.25	2.03	1.84	1.68	1.54	1.41	1.30	1.20	1.11	1.03
1.2	APE	150	2 x M8 BOLTS	NA	9	1.27	1.27	1.18	1.09	1.02	0.95	0.89	0.84	2.72	2.38	2.15	1.95	1.77	1.62	1.49	1.37	1.27	1.18	1.09
		200+	2 x M8 BOLTS	NA	10	1.41	1.41	1.41	1.31	1.22	1.14	1.06	1.00	3.02	2.84	2.57	2.33	2.12	1.94	1.78	1.64	1.52	1.41	1.31
		150	2 x M10 TAP	6	11	0.66	0.66	0.64	0.60	0.56	0.52	0.49	0.46	1.42	1.30	1.18	1.07	0.97	0.89	0.81	0.75	0.69	0.64	0.60
		200+	2 x M10 TAP	6	12	0.93	0.93	0.93	0.87	0.81	0.76	0.71	0.67	2.00	1.90	1.72	1.56	1.42	1.30	1.19	1.10	1.01	0.94	0.87

- LOADING CLASS: Refer to Page 176 for the scope of the Loading Class designations.
- FASTENER DESIGNATIONS: M8 and M10 Fasteners in table refer to UNEX Part No's FB8 and FB10 bolts. "M8 Bolts" = bolted with washers and nyloc nuts. "M10 Tap" = bolts threaded into pre-tapped holes in the steel to good workmanship and threads completely smeared with lanoline grease.
- HEIGHT 'H': is the overall height of the balustrade above the substrate level shown. Interpolate for Heights between those shown.
- DESIGN WIND SPEED: in m/s, Refer to Pages 51 to 52 for details of applicable wind codes and the methods for determining the Design Wind Speed.

Specifications subject to change without notice