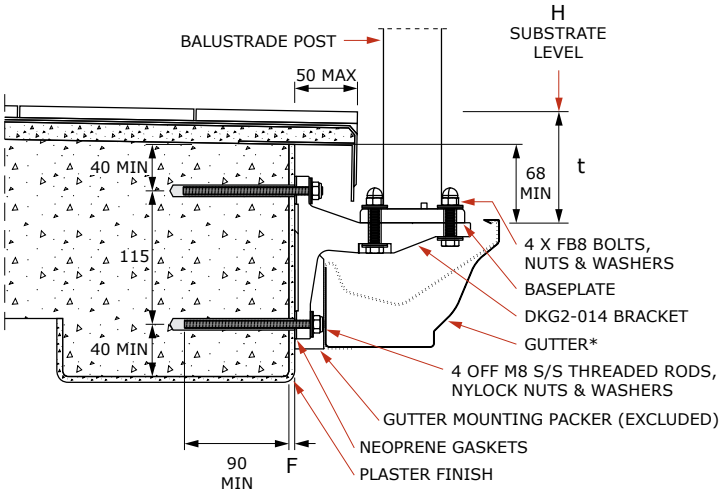
CONCRETE - DKG2 FIXING, EPOXY-SET ANCHORS

This specification for fixing UNEX balustrades to certain concrete substrates where a face gutter is also required. It applies to balustrade styles using APS or APE posts only. A separate specification must be referred to for the required balustrade style.

APS & APE POST TYPES ONLY



*Gutter and associated clips flashings and packers are not supplied by the Unex Systems or the balustrade installer. Additional flashings may be required for water deflection in some cases. Gutter profile illustrated is "150mm O/G" from "Continuous Spouting", for more information on supplier visit www.cspout.co.nz. Other gutter profiles may be used. We do not recommend using copper gutters with this detail.

1. The DKG2-014 brackets are required to be installed before the gutter and drip edge.
2. The APS or APE balustrade posts are attached to the BSMF or BEMF baseplate and DKG2-014 bracket as illustrated on pages 157 and 160.
3. Fixings shall be 8mm diameter 316 stainless steel threaded rod epoxied into the concrete substrate as shown using EPCON C6 epoxy.
4. Washers to be fitted under all stud Nyloc nuts as follows
   - For 8mm studs - 22mm O.D. S/S washer (Part No. FW8-22) with a polymer washer (Part No. FWP8-22G) between the S/S and the aluminium.
5. A neoprene adhesive gasket shall be fixed to the DKG2-014 bracket to prevent contact between the concrete and the aluminium bracket (Part No. SG24-12).
6. For details of anchoring studs to the substrate refer to General Notes Page 101 note 6.
7. Substrate design, including water-proofing, is beyond the scope of this specification and shall be carried out by others. Concrete shall have a 28 day Compressive Strength of 20MPa or more (as required for substrate design) and be adequately reinforced.

MAXIMUM POST CENTRES 'S max' (metres)

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

Height[3]	't' (See dia-gram)	Post Type	Fasteners - Qty and Type[2]	'F' (See dia-gram)	Line No.	LOADING CLASS[1]																		
						N07C/N07R								N03R	Not Preventing Fall									
						Design Wind Speed[4]									Design Wind Speed[4]									
						VH		EH							M			H			VH		EH	
						50	52	54	56	58	60	62	64	N/A	38	40	42	44	46	48	50	52	54	56
1.0	100	APS	4 x FC8-165	14-60	1	1.12	1.12	1.08	1.00	0.94	0.88	0.83	0.75	2.05	1.92	1.80	1.66	1.54	1.44	1.33	1.24	1.16	1.08	1.00
		APE	4 x FC8-165	14-60	2	1.30	1.30	1.25	1.16	1.10	1.04	0.97	0.92	2.25	2.10	1.98	1.86	1.74	1.62	1.52	1.43	1.34	1.25	1.16
	150	APS	4 x FC8-165	14-60	3	1.00	1.00	0.92	0.86	0.80	0.75	0.71	-	1.90	1.73	1.58	1.46	1.34	1.24	1.15	1.07	1.00	0.92	0.86
		APE	4 x FC8-165	14-60	4	1.17	1.15	1.07	1.01	0.95	0.89	0.83	0.78	2.10	1.93	1.80	1.66	1.54	1.44	1.34	1.24	1.15	1.07	1.01
	200	APE	4 x FC8-165	14-60	5	1.05	1.00	0.93	0.87	0.81	0.76	0.71	-	1.98	1.72	1.60	1.48	1.36	1.25	1.16	1.08	1.00	0.93	0.87
	250	APE	4 x FC8-165	14-60	6	0.95	0.87	0.80	0.75	0.70	-	-	-	1.84	1.54	1.42	1.30	1.19	1.09	1.01	0.93	0.87	0.80	0.75
	300	APE	4 x FC8-165	14-60	7	0.81	0.75	0.70	-	-	-	-	-	1.70	1.37	1.25	1.13	1.04	0.96	0.88	0.81	0.75	0.70	-
	350	APE	4 x FC8-165	14-60	9	-	-	-	-	-	-	-	-	1.58	1.20	1.09	1.00	0.91	0.83	0.77	0.71	-	-	-

1. LOADING CLASS: Refer to Page 176 for the scope of the Loading Class designations.
2. FASTENER DESIGNATIONS: beginning with 'F' are part numbers for fasteners supplied by UNEX eg. FC8-165: FC = Coach Screw Stainless Steel. 8 = 8mm diameter, 165 = length(mm) ; 4 x FC8-165 fasteners may be substituted with 4 x M8 bolts (Class 70 Stainless Steel); Substitution with other fasteners is not permitted.
3. HEIGHT 'H': is the overall height of the balustrade above the substrate level shown. Interpolate for Heights between those shown.
4. 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.