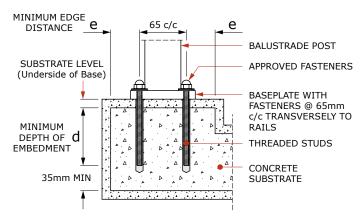
## FIXING SPECIFICATIONS

NZBAL-C12.0 | SPEC ID FS.3T.01.00

## CONCRETE - TOP FIXING, EPOXY-SET ANCHORS, 65MM CRS

Refer to all notes on Pages 100 and 101 which shall apply to this specification and the relevant pages in Chapter 5 Installation Guides. Refer also to Chapter 2 for the Style Specification.



- d = MINIMUM DEPTH OF EMBEDMENT OF SLEEVE INTO STRUCTURAL CONCRETE
- e = MINIMUM DISTANCE FROM EDGE OF STRUCTURAL CONCRETE

- For details of approved fasteners refer to General Notes on Page 100 note 3.
   All threaded studs shall have a minimum ultimate tensile stress of 560 MPa.
- Washers to be fitted under all stud dome 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.
  - For 10mm studs 21mm O.D. S/S washer (Part No. FW10-21) with a polymer washer (Part No. FWP10-22G) between the S/S and the aluminium.
- 3. For details of anchoring studs to the substrate refer to General Notes Page 101 note 6.
- Substrate design, including waterproofing, 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 |                            |   |        |      |   |                                  |       |      |      |      |      |      |      |                     |                                  |        |      |      |      |      |      |      |      |      |
|--|----------------------------|---|--------|------|---|----------------------------------|-------|------|------|------|------|------|------|---------------------|----------------------------------|--------|------|------|------|------|------|------|------|------|
|  | Baseplate<br>Size<br>D x W | Fasteners<br>- Qty and<br>Type <sup>(2)</sup> | 1/6001 | dia- | z | LOADING CLASS <sup>(1)</sup>     |       |      |      |      |      |      |      |                     |                                  |        |      |      |      |      |      |      |      |      |
| Height <sup>(3)</sup>  |                            |   |        |      |   | N07C/N07R                        |       |      |      |      |      |      | N03R | Not Preventing Fall |                                  |        |      |      |      |      |      |      |      |      |
|  |                            |   |        |      |   | Design Wind Speed <sup>(4)</sup> |       |      |      |      |      |      |      |                     | Design Wind Speed <sup>(4)</sup> |        |      |      |      |      |      |      |      |      |
|  |                            |   |        |      |   | VH                               | VH EH |      |      |      |      |      |      |                     | М                                | M H VH |      |      |      |      | Е    | Н    |      |      |
|  |                            |   |        |      |   | 50                               | 52    | 54   | 56   | 58   | 60   | 62   | 64   | N/A                 | 38                               | 40     | 42   | 44   | 46   | 48   | 50   | 52   | 54   | 56   |
| 1.0  | 90 x 115                   | 4 x M8  | 40     | 80   | 1 | 1.30                             | 1.30  | 1.30 | 1.30 | 1.20 | 1.13 | 1.06 | 0.99 | 2.79                | 2.54                             | 2.54   | 2.30 | 2.10 | 1.92 | 1.76 | 1.62 | 1.50 | 1.39 | 1.30 |
|  | or<br>90 x 90              | 4 x M10                                       | 40     | 90   | 2 | 1.44                             | 1.44  | 1.44 | 1.43 | 1.34 | 1.25 | 1.17 | 1.10 | 3.09                | 2.82                             | 2.82   | 2.55 | 2.33 | 2.13 | 1.95 | 1.80 | 1.66 | 1.54 | 1.43 |
| 1.1  | 90 x 115                   | 4 x M8  | 40     | 80   | 3 | 1.18                             | 1.18  | 1.15 | 1.07 | 1.00 | 0.93 | 0.87 | 0.82 | 2.53                | 2.31                             | 2.10   | 1.90 | 1.74 | 1.59 | 1.45 | 1.35 | 1.24 | 1.15 | 1.07 |
|  | or<br>90 x 90              | 4 x M10                                       | 40     | 90   | 4 | 1.31                             | 1.31  | 1.27 | 1.18 | 1.10 | 1.04 | 0.97 | 0.91 | 2.81                | 2.56                             | 2.33   | 2.11 | 1.92 | 1.76 | 1.61 | 1.49 | 1.37 | 1.27 | 1.18 |
| 1.2  | 90 x 115                   | 4 x M8  | 40     | 80   | 5 | 1.08                             | 1.04  | 0.97 | 0.90 | 0.84 | 0.78 | 0.73 | 0.69 | 2.32                | 1.96                             | 1.76   | 1.60 | 1.46 | 1.33 | 1.22 | 1.13 | 1.04 | 0.97 | 0.90 |
|  | or<br>90 x 90              | 4 x M10                                       | 40     | 90   | 6 | 1.20                             | 1.15  | 1.07 | 1.00 | 0.93 | 0.87 | 0.81 | 0.76 | 2.57                | 2.17                             | 1.96   | 1.77 | 1.62 | 1.48 | 1.35 | 1.25 | 1.15 | 1.07 | 1.00 |

- 1. LOADING CLASS: Refer to Page 176 for the scope of the Loading Class designations.
- 2. FASTENER DESIGNATIONS: D10 Fasteners in the table refer to UNEX Part No FD10 S/S Dynabolts
- 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.

