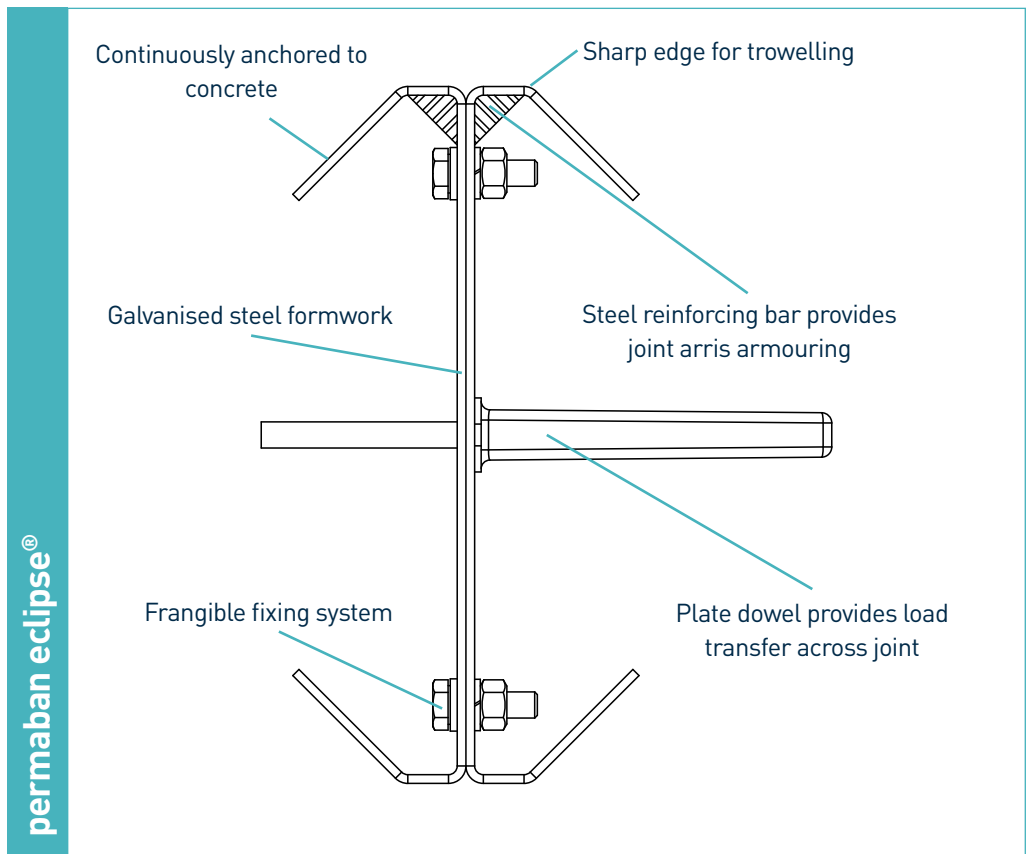
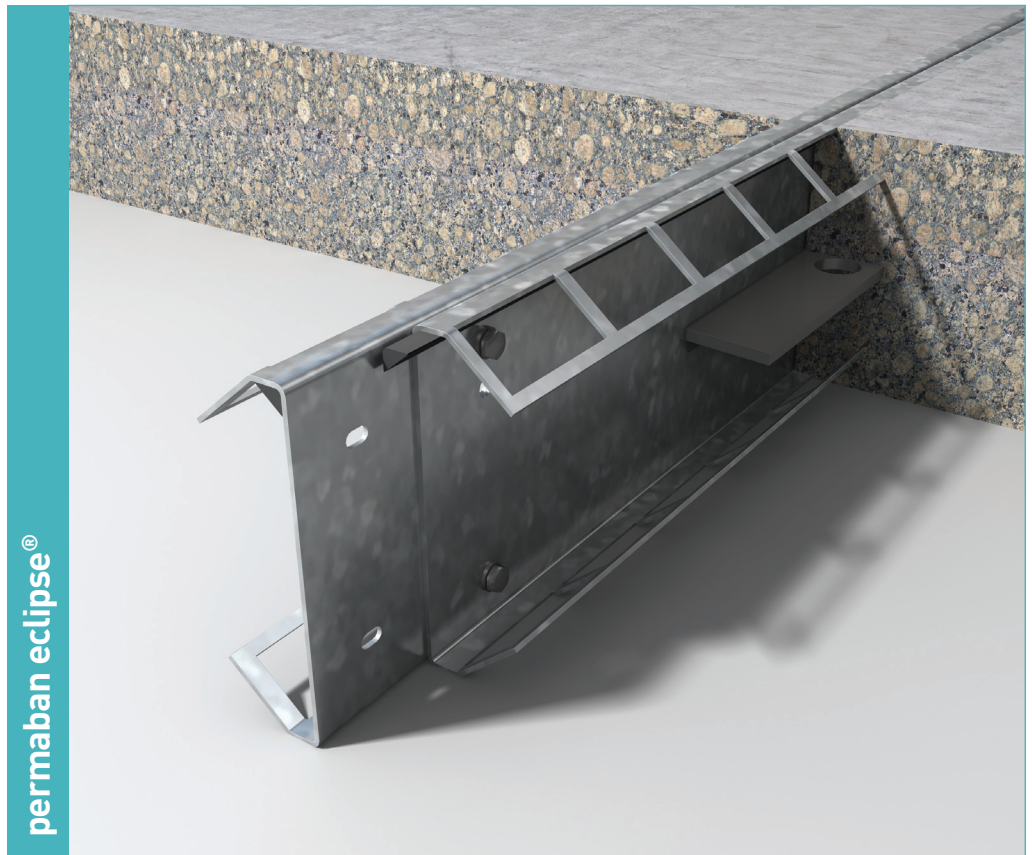


# permaban eclipse<sup>®</sup>

Specification Sheet

Issue 1.4

17/04/2013



# permaban eclipse<sup>®</sup>

Specification Sheet Issue 1.4

17/04/2013

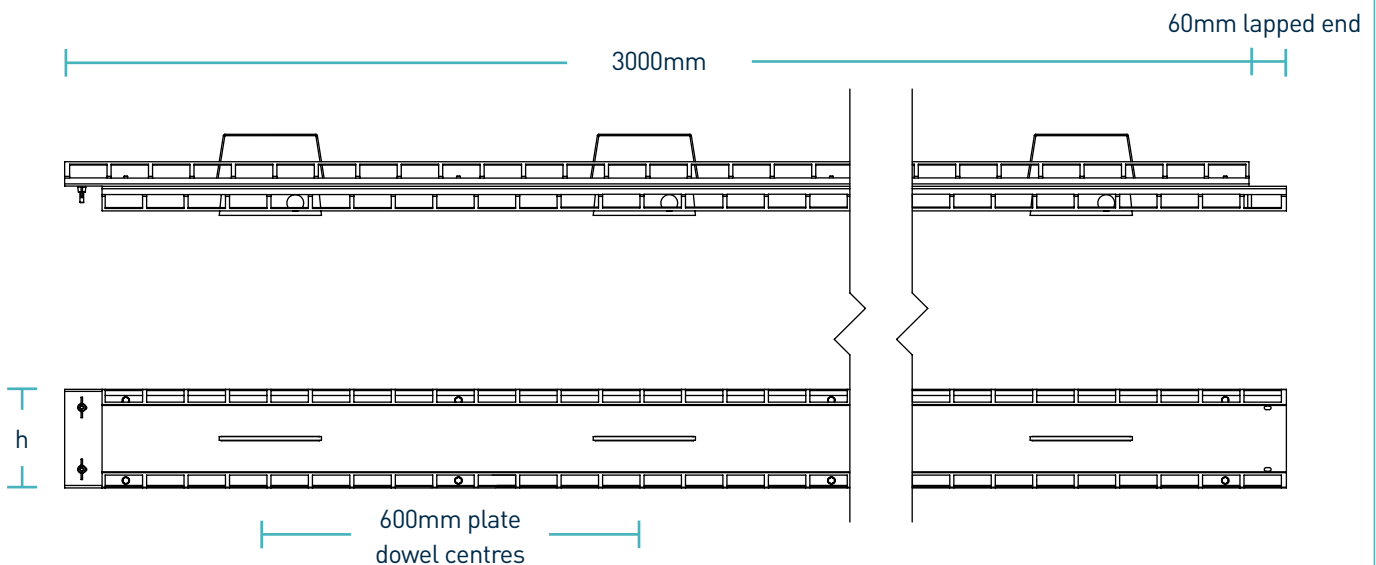
## manufacturing tolerances

**Length** ±2.0mm

**Height** ±1mm

**Straightness** ±0.5mm/600mm

## dimensions of permaban eclipse<sup>®</sup>



## dimensions and weight of permaban eclipse<sup>®</sup>

| Nominal Slab Depth (mm) | Joint Height, h (mm) | Dowel Size (mm)         | Dowel Centres (mm) | Length (mm) | Single Joint Weight (kg) | Number Per Bundle | Bundle Weight (kg) |
|-------------------------|----------------------|-------------------------|--------------------|-------------|--------------------------|-------------------|--------------------|
| 150                     | 120                  | 164 x 120 x 8 Trapeziod | 600                | 3000        | 22.6                     | 42                | 1034               |
| 170                     | 140                  |                         |                    |             | 24.6                     | 35                | 946                |
| 190                     | 160                  |                         |                    |             | 26.5                     | 35                | 1012               |
| 210                     | 180                  |                         |                    |             | 28.4                     | 28                | 880                |

Typical height and length values shown only. Weight values shown are based on Permaban eclipse<sup>®</sup> including TD8 dowels and are approximate.

## materials

| Component             | Material  |
|-----------------------|---|
| Joint arris armouring | BS 4449:2005 B5005                                    |
| Sheet steel formwork  | BS EN 10130:1999 DC01                                 |
| Plate dowel           | BS EN 10025-2:2004 S275JRG2 min 410 N/mm <sup>2</sup> |
| Plate dowel sleeve    | HDPP  |

# permaban eclipse<sup>®</sup>

Specification Sheet Issue 1.4  
17/04/2013

## theoretical calculated ultimate loads at failure of dowel or concrete

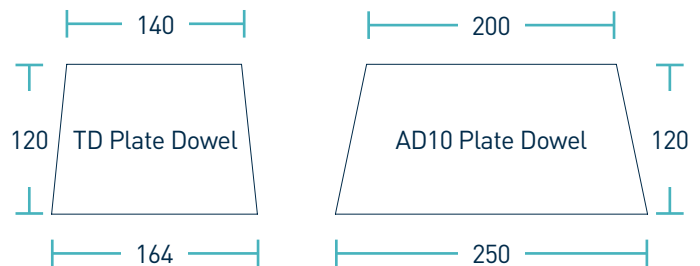
(For typical slabs, 40N/mm<sup>2</sup> concrete and 20mm joint opening)

| Slab Depth (mm) | Dowel Type | Unreinforced Slab |                | Steel Fibre Reinforced Slab (Re3 = 0.8) |                |
|-----------------|------------|-------------------|----------------|---|----------------|
|                 |            | Bursting (kN/m)   | Bending (kN/m) | Bursting (kN/m)                         | Bending (kN/m) |
| 150             | TD6        | 50.50             | 80.83          | 87.17                                   | 80.83          |
|                 | TD8        | 50.50             | 143.50         | 87.17                                   | 143.50         |
|                 | AD10       | 54.17             | 328.00         | 93.50                                   | 328.00         |
| 200             | TD6        | 82.00             | 80.83          | 141.67                                  | 80.83          |
|                 | TD8        | 82.00             | 143.50         | 141.67                                  | 143.50         |
|                 | AD10       | 63.17             | 328.00         | 108.83                                  | 328.00         |
| 250             | TD6        | 81.00             | 80.83          | 136.50                                  | 80.83          |
|                 | TD8        | 81.00             | 143.50         | 136.50                                  | 143.50         |
|                 | AD10       | 74.33             | 328.00         | 125.50                                  | 328.00         |
| 300             | TD6        | 87.33             | 80.83          | 147.50                                  | 80.83          |
|                 | TD8        | 87.33             | 143.50         | 147.50                                  | 143.50         |
|                 | AD10       | 83.67             | 328.00         | 141.17                                  | 328.00         |
| 350             | TD6        | 94.00             | 80.83          | 160.00                                  | 80.83          |
|                 | TD8        | 94.00             | 143.50         | 160.00                                  | 143.50         |
|                 | AD10       | 91.33             | 328.00         | 155.50                                  | 328.00         |

Ultimate load (kN/m)

This table shows the load at failure in bursting (failure of the concrete) and bending (failure of the dowel) for a joint opening of 20mm - larger joint openings can be accommodated. The ultimate load has been calculated in accordance with TR34 3rd Edition. For more detailed analysis please contact Permaban.

compatible dowel systems



dimensions in mm