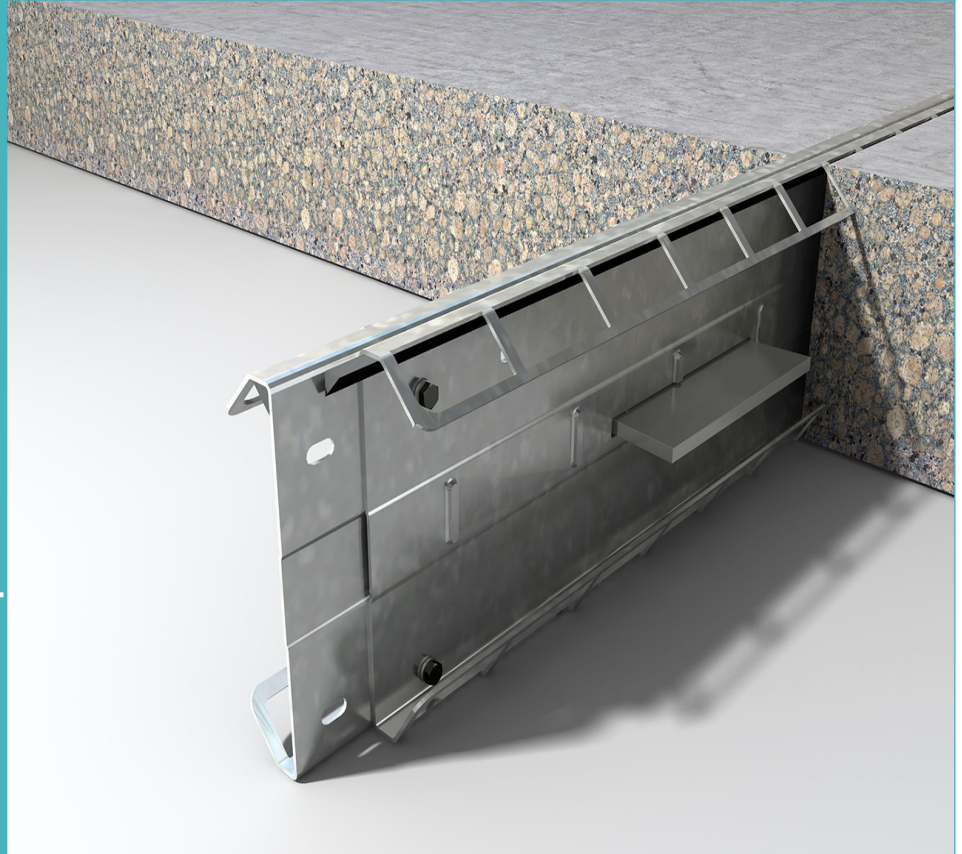


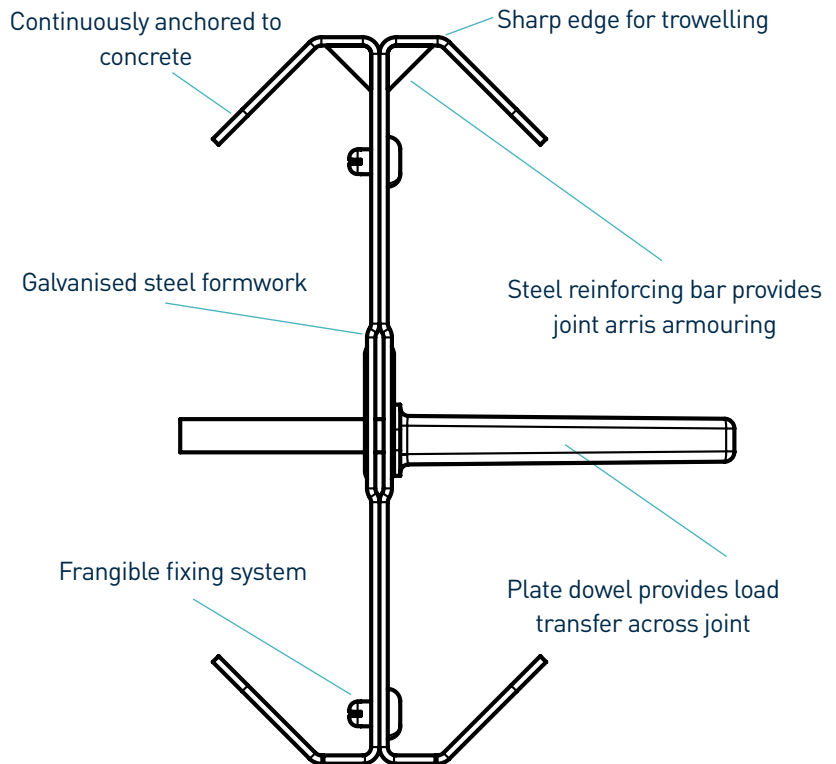
Permaban Eclipse®

Specification Sheet
Issue 3.4
12/11/2019

Permaban Eclipse®



Permaban Eclipse®



Permaban Eclipse®

Specification Sheet Issue 3.4
 12/11/2019

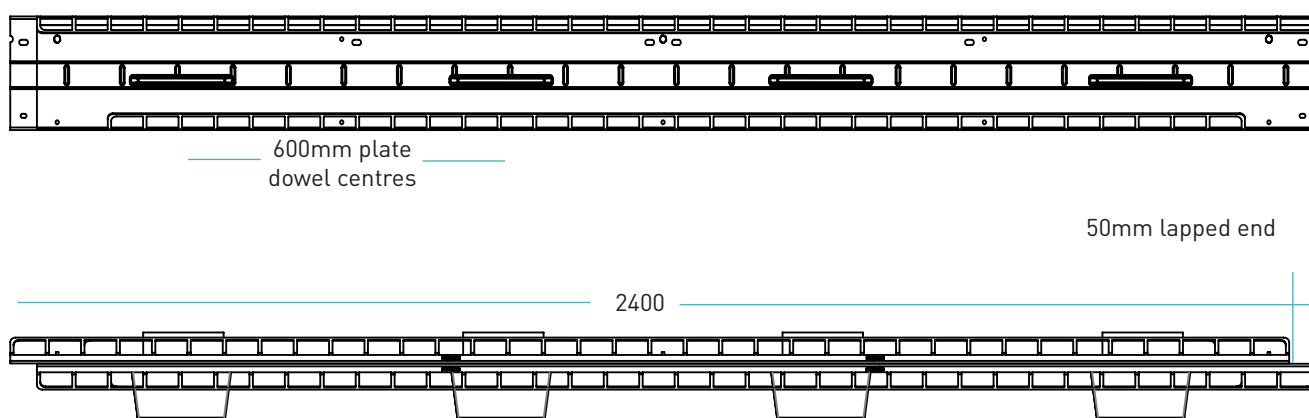
manufacturing tolerances

Length ±2.0mm

Height ±1mm

Straightness ±0.5mm/600mm

dimensions of Permaban Eclipse®



Dimensions in mm

dimensions and weight of Permaban Eclipse®

| 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 | 130 | 151 x 120 x 8 | 600 | 2400 | 18.305 | 75 | 1493 kg |
| 175 | 150 | | | | 19.366 | 65 | 1379 kg |
| 200 | 175 | | | | 22.124 | 52 | 1271 kg |
| 225 | 200 | | | | 22.7 | 52 | 1300.4 kg |

Typical height and length values shown only. Weight values shown are based on Permaban eclipse® including TD6 dowels and are approximate.

materials

| Component | Material |
|-----------------------|-------------------------|
| Joint arris armouring | EN 10346: 2015 Dx514+Z |
| Plate dowel | EN 10025-2: 2004 S275JR |
| Plate dowel sleeve | HDPP |

Permaban Eclipse®

Specification Sheet Issue 3.4
12/11/2019

theoretical calculated ultimate loads at failure of dowel or concrete

(For typical slabs, 40N/mm² concrete and 20mm joint opening)

| Slab Depth (mm) | Dowel Type | Unreinforced Slab | |
|-----------------|------------|-------------------|-----------------|
| | | Bending (kN/m) | Bursting (kN/m) |
| 150 | TD6 | 31.2 | 53.4 |
| | TD8 | 31.2 | 87.2 |
| | TD10 | 31.2 | 124.7 |
| 175 | TD6 | 40.0 | 53.4 |
| | TD8 | 40.0 | 87.2 |
| | TD10 | 40.0 | 124.7 |
| 200 | TD6 | 49.9 | 53.4 |
| | TD8 | 49.9 | 87.2 |
| | TD10 | 49.9 | 124.7 |
| 225 | TD6 | 60.7 | 53.4 |
| | TD8 | 60.7 | 87.2 |
| | TD10 | 60.7 | 124.7 |
| 250 | TD6 | 72.4 | 53.4 |
| | TD8 | 72.4 | 87.2 |
| | TD10 | 72.4 | 124.7 |
| 275 | TD6 | 85.6 | 53.4 |
| | TD8 | 85.6 | 87.2 |
| | TD10 | 85.6 | 124.7 |
| 300 | TD6 | 86.9 | 53.4 |
| | TD8 | 86.9 | 87.2 |
| | TD10 | 86.9 | 124.7 |

Permaban Eclipse®

Specification Sheet Issue 3.4
12/11/2019

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 4th Edition. Dowel position taken at mid depth of slab. For more detailed analysis please contact RCR Flooring Products Ltd.

*All design calculations should be verified by a suitably qualified structural engineer

compatible dowel systems

