

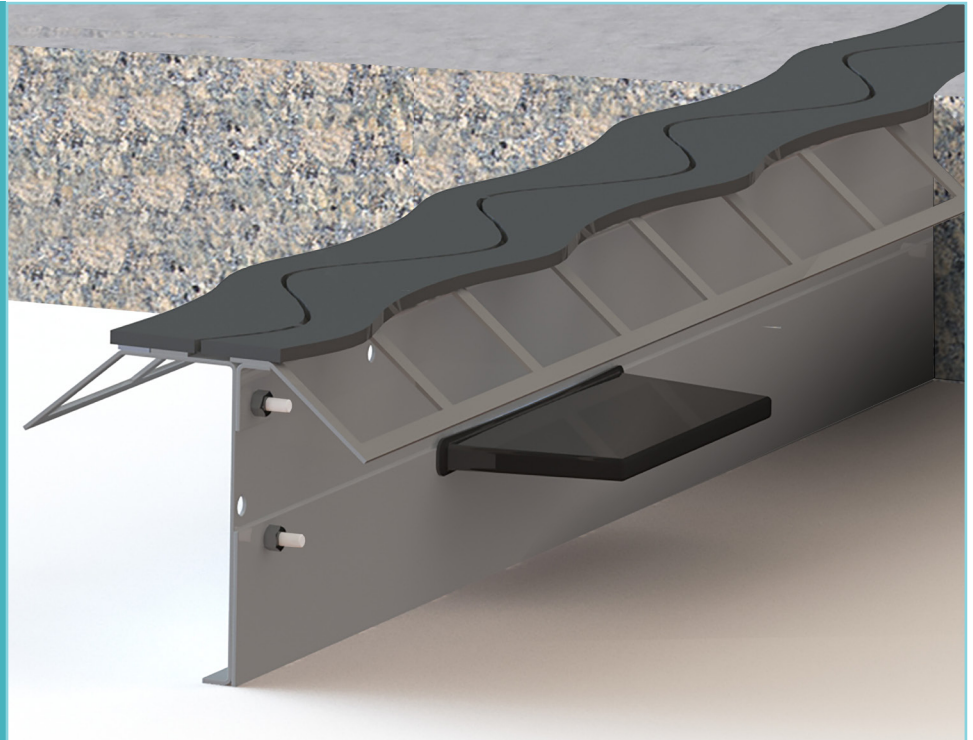
# ® Permaban Wave

Specification Sheet

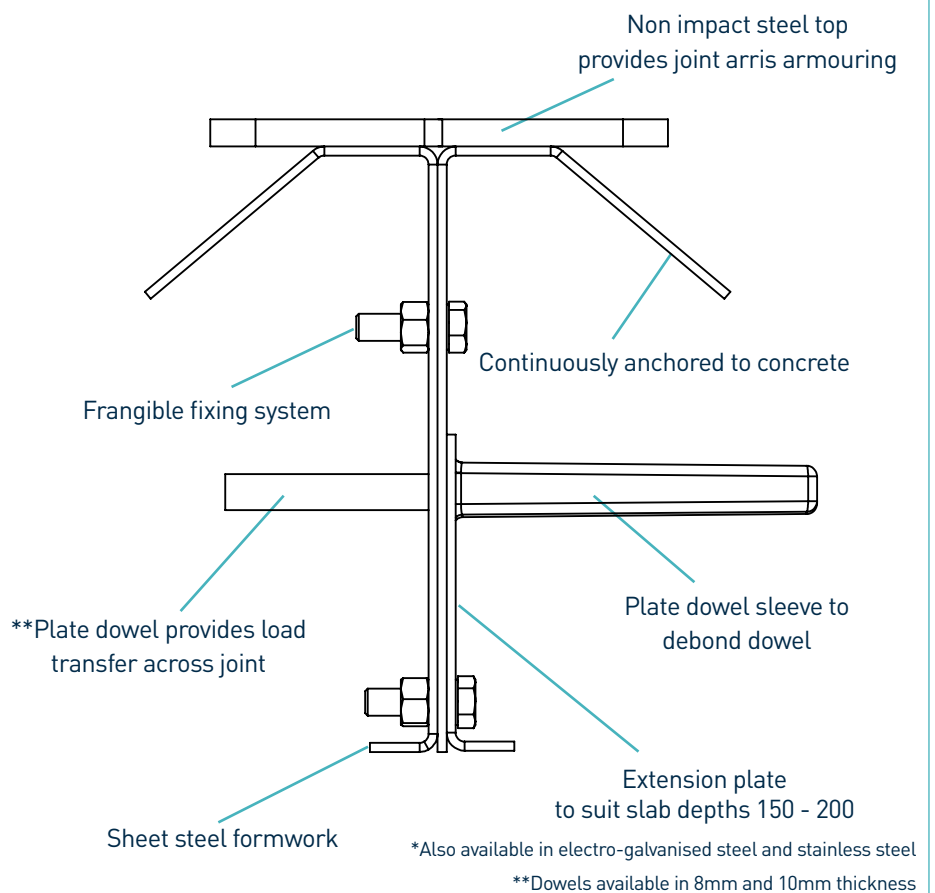
Issue 2.4

01/08/2023

Permaban Wave®



Permaban Wave®



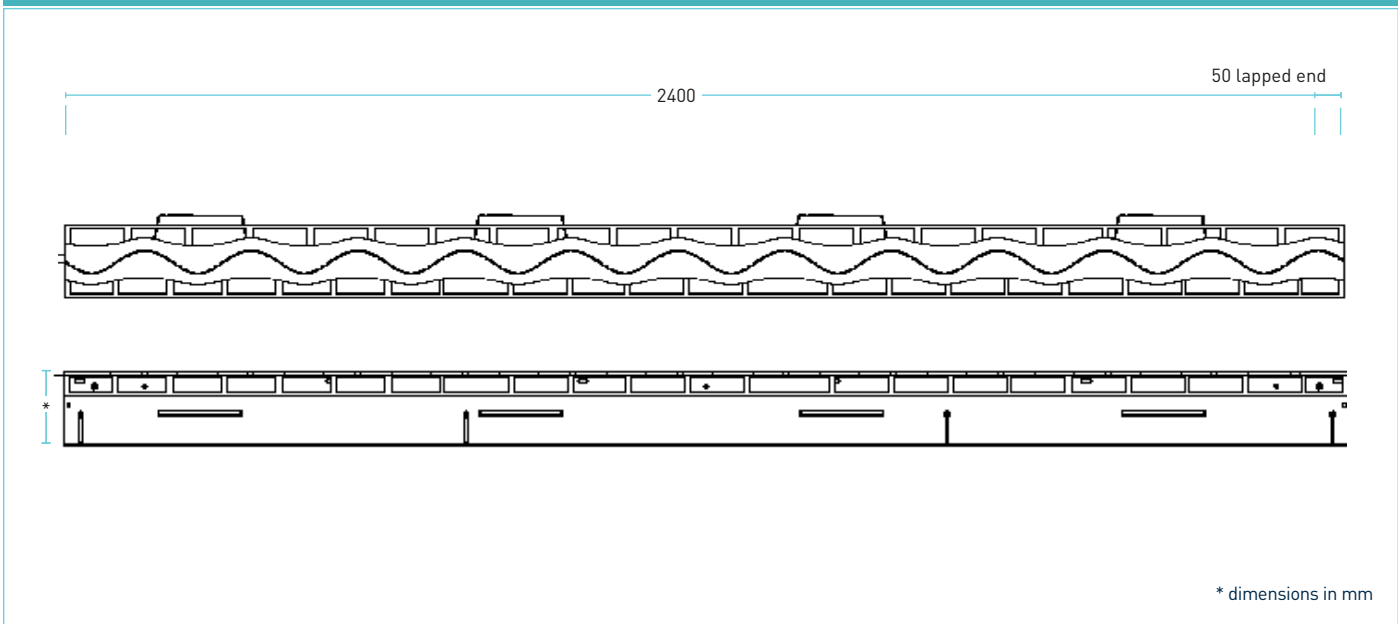
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## manufacturing tolerances

<b>Length</b>	±2.0mm	<b>Height</b>	±1mm	<b>Straightness</b>	±0.5mm/600mm
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## dimensions of Permaban Wave®



## dimensions and weight of Permaban Wave®

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 - 200	140 - 180	151 x 120 x 8	600	2400	28.5	50	1550
225	200				31.5	44	1511
250	225				32.5	44	1555
275	250				33.5	33	1230.5
300	275				34.5	33	1263.5
325	300				35.5	33	1296.5

Typical height and length values shown only. Weight values shown are based on Permaban Wave® including TD8 dowels and are approximate.

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## materials

Component	Material
Non impact steel top provides joint arris	EN 10277-1:2018 S235JRC
Sheet steel formwork	EN 10130:2006 DC01
Plate dowel	BS EN 10025-2:2004 S275JR
Plate dowel sleeve	HDPP

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

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

		Unreinforced Slab	
Slab Depth (mm)	Dowel Type	Bursting (kN/m)	Bending (kN/m)
Extender Plate To Suit 150 - 200	TD8	35.7	87.2
	TD10	35.7	124.7
225	TD8	60.7	87.2
	TD10	60.7	124.7
250	TD8	72.6	87.2
	TD10	72.6	124.7
275	TD8	85.6	87.2
	TD10	85.6	124.7
300	TD8	86.9	87.2
	TD10	86.9	124.7
325	TD8	82.1	87.2
	TD10	82.1	124.7

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## 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 positions 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

