

# Diamond™ Dowel 20

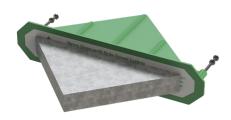
#### **Product Description**

**Diamond™ Dowels** are a plate dowel and sleeve system designed for construction joint applications in **heavy duty** concrete slabs and pavements. Diamond™ Dowels are designed as a fast fix system that **provides load transfer** across the joint and minimises differential deflection between adjacent slab panels. Diamond™ Dowels comply with the requirements of TR34 (4th Edition).

Diamond™ Dowels provide a low in-place cost solution by eliminating the need for the drilling or processing of formwork that is required with traditional round and square dowel systems. Diamond™ Dowels attach directly to wooden formboard or metal formwork plates and come pre-packaged with all components ready for installation.

#### **Features**

- Standard Diamond<sup>™</sup> Dowel plates are manufactured from steel to AS/NZS 3679.1 Grade 300.
- Maximises surface area at the joint.
- · Nailing flange provides secure attachment to formboards.
- Double-headed nails help retain the sleeve in the concrete when stripping the formboards.
- Sleeve system ensures the dowel is perpendicular to the formboard and is stable.
- Sleeves moulded from durable, non-compressible plastic.
- Hot-dip galvanised steel to AS/NZS 4680.





Diamond™ Dowels allows for perpendicular and parallel differential shrinkage. Patented Diamond shape reduces the risk of restraint.

Danley™ Diam	Danley™ Diamond™ Dowel 20			
Item Code:	DDSLPL20G			
Trade Pack Qty:	7 pcs			
Pack Weight:	16 kgs			
Pallet Qty:	630 pcs			

## **Applications:**

 Industrial, Commercial and Civil flooring applications. Heavy duty concrete slab-onground roadways & pavements.

## Product Performance Data Diamond™ Dowel 20

Slab Thickness (mm)	Single Dowel Design Capacity (kN)	Single Wheel Design Load (kN) (mid panel joint)	Single Wheel Design Load (kN) (edge loading)	
200	25.2	162	89	
250	38.4	281	154	
300	54.4	431	237	
350	73.1	635	349	
400	94.5	889	489	
450	118.7	1184	651	



Diamond™ Dowels comply with the requirements of TR34 (4th Edition), providing load capacity at joint width gaps up to 20mm.

#### **Concrete Compressive Strength Effect:**

Strength MPa	30	32	35	40	45
Factor	1	1.03	1.08	1.15	1.22

Notes: Dowel spacing: 450mm. Concrete strength: 30MPa. Joint opening: 10mm. Design capacities should be compared with factored loads

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