

# Fiber Dowels

## Fiber Glass dowels

### Technical description



**Fiber Dowels:** Dowels are the most common form of load transfer in concrete pavements. They come in various sizes, shapes, and materials, but to perform optimally over the course of the pavement life, they need to be oriented appropriately and within tolerable location limits in the slab.

### Usage

The location and alignment of dowel bars is important to achieve intended performance. This is true regardless of whether dowels are placed using a mechanical dowel bar inserter (DBI) or placed before paving with baskets,

### Scope

Specifications require that dowels be located within mid-depth of the slab. Dowels that are significantly misaligned or mislocated may not function as intended and, if well out of tolerance, can cause detrimental pavement damage.

### Benefits

- Less weight than Steel
- CO<sub>2</sub> friendly, fiber glass can be re-used directly after breaking up concrete
- Higher tensile strength
- Corrosion isn't possible so longer life span of the concrete

### Product description

Fiber glass dowels are on demand available in all sizes. The standard sizes are diameter 12, 25, 30, 32 and 38 with the lengths 500 mm or 600 mm.

### Technical details

Shear strength	141 MPa
Tensile strength	985 MPa
E-Modulus	50 – 55 GPa
Metal free	100 %
Diameter tolerance	0,1 mm +/-
Density	1900 - 2000 kg/m <sup>3</sup>
fiber volume	70% fiberglass
Thermal extension coefficient Longitudina Transverse	9x10 <sup>-6</sup> /C 52x10 <sup>-6</sup> /C
Components	70% fiberglass with 30% resin
Corrosion resistant	Yes
Higher tensile strength	600-1600 N/mm <sup>2</sup>
Chloride and phosphate resistant	Yes
Conducts radio waves	No
Thermal Conductivity	0,25%
Diagmagnetic	Yes
Color	mint

### Storage

Can easily stored outside cause the dowels arent sensitive for corrosion.

### Test results

Dowels are completely tested and researched. Results can be sent on demand.

### Safety

This dowels are safe in use when used properly and placed 100% horizontally.

