

IN SLAB

CANZAC FIBRE DOWEL CORROSION PROOF DOWEL BAR SYSTEM

In the construction of concrete slabs on grade, elevated or otherwise, joints known as construction or contraction are purposely positioned in the slab to control where cracks in, or movement of the slab will occur. These joints may be cut into the slab after the concrete has hardened, or defined by means of various joint making materials which are placed prior to the concrete placement.

The Fibre Dowel is the answer to corrosion! In addition, the material composition of the fibre dowel is non-conductive, which makes it an electrical and thermal insulator.

The Fibre Dowel has higher tensile strength than steel dowel bars of an equal diameter. The tensile strength of commercially available steel dowels is 41×10^3 MPa, while the Fibre Dowels are approx. 200×10^3 MPa. Shear values are taken typically as 124 MPa for the CANZAC Fibre Dowel and 256 MPa for steel. However, consideration must be given to the shear values of concrete where 20 MPa concrete may be considered having 4 MPa shear value.

KEY FEATURES / BENEFITS

- Excellent in weight sensitive applications
- Will not corrode under exposure to a wide variety of corrosive elements including chloride ions.
- Provides excellent electrical & thermal insulation
- Is not affected by electromagnetic fields
- Easily transported and assembled at the job site

TECHNICAL DATA

Diameters	14, 16, 19, 25, 32	Others available on request
Flexural Modulus	>53GPa (>7686ksi)	ASTM D 790
Transverse Shear Strength	>150 MPa (>21ksi)	ACI 440.3R-4 B.4
Short Beam Shear Strength	>58 MPa	ASTM D 4475
Moisture Uptake	<0.1%	ASTM D570
Glass Transition Temperature, T_g	110°C (230°F)	ASTM E1640-04

*values based on 32mm dowels

CODE	DESCRIPTION	UNIT
11 805	16x460mm	30 Lengths/Bundle
11 810	16x600mm	30 Lengths/Bundle
11 815	20x460mm	25 Lengths/Bundle
11 820	20x600mm	25 Lengths/Bundle
11 825	32x600mm	25 Lengths/Bundle