

EE FIBRESTEEL



The reinforcing of concrete with EE (Enlarged End) FIBRESTEEL[®] produces a durable concrete with high flexural and flexural fatigue strength and improved abrasion, spalling and impact resistance. Concrete reinforced with FIBRESTEEL[®], known as FIBRECRETE[®], is used extensively for the construction of light, medium and heavy duty pavements, sprayed and precast swimming pools, water retaining structures, embankment stabilisation, precast products, floor toppings and overlays. FIBRECRETE[®] is placed and finished using the same techniques as for conventional concrete and is readily pumped and sprayed.

The use of FIBRECRETE[®] may reduce concrete volumes and allows rapid site preparation and concrete placement, with the elimination of conventional reinforcing, accessories and steel fixing. All of these features combine to make FIBRECRETE[®] a technical and economic alternative to conventionally reinforced concrete.

FIBRESTEEL[®], manufactured by OneSteel Reinforcing (OSR) from high strength steel, is available from all OneSteel Reinforcing Branches, however, because there are specific mix designs and batching procedures, the product is normally purchased as FIBRECRETE[®] from premixed concrete companies.

OneSteel Reinforcing manufactures three FIBRESTEEL[®] products:

Type	Nom. Dimension (mm) (LXWXT)	Aspect Ratio (L/D)	Mass Per carton (kg)	Mass per pallet (Tonne)	Price (\$/Tonne)	Typical Applications
186EE	18 x 0.6 x 0.3	38	25	1.2		-slabs on ground -precast products -tunnel linings -swimming pools
184EE	18 x 0.4 x 0.3	46	20	0.96		Precast products
256EE	25 x 0.6 x 0.4	45	20	0.96		-slab on ground -tunnel lining -shotcrete

Depending on your project requirements there are a number of FIBRECRETE[®] mix options available, some of which are shown in the table below. Advice on FIBRECRETE[®] mix designs for a broad range of applications are available from Bekaert OneSteel Fibres Australasia (BOSFA) or through your nearest OneSteel Reinforcing branch.

FIBRECRETE[®] applications and general specifications:

Typical Application	Fibre Type	Fibre Content (kg/m3)	Some Recent Projects
Heavy Duty pavements	186EE	75	Komatsu workshop floor, Mt Thorley, NSW
Road/roundabout pavement	186EE	75	Gosford, Corowa, Lismore, Marsden(NSW)
Swimming pools (AS 2783-1992)	186EE	75	First pool built 1981 >6,000 built since 1990
Precast tanks products	186EE	75	CSR Humes, Kelly Precast, RI Industries, Rutherford CP
Marine structures	186EE	50-75	Vuda Pt, Marina, Fiji. Pontoon Dock NZ
Precast panels	184/186EE	50-120	Sound barriers, Ringwood Bypass, VIC
General shotcrete, stabilisation work	186EE	50-75	Stabilisation works, Sydney – Newcastle Fwy
Floor toppings & overlays	186/256EE	50-86	Wallaroo timber jetty overlay, SA
Light duty pavements	256EE	30-50	Carpark, driveway slabs (QLD)(VIC)(NSW)(TAS)(WA)
Medium duty pavements	186/256EE	50	Arnott's distribution centre, Virginia, QLD

Technical support in the use of both FIBRESTEEL[®] & FIBRECRETE[®] is available from your nearest Bekaert OneSteel Fibres Australasia (BOSFA) office.

BOSFA
1300 665 755