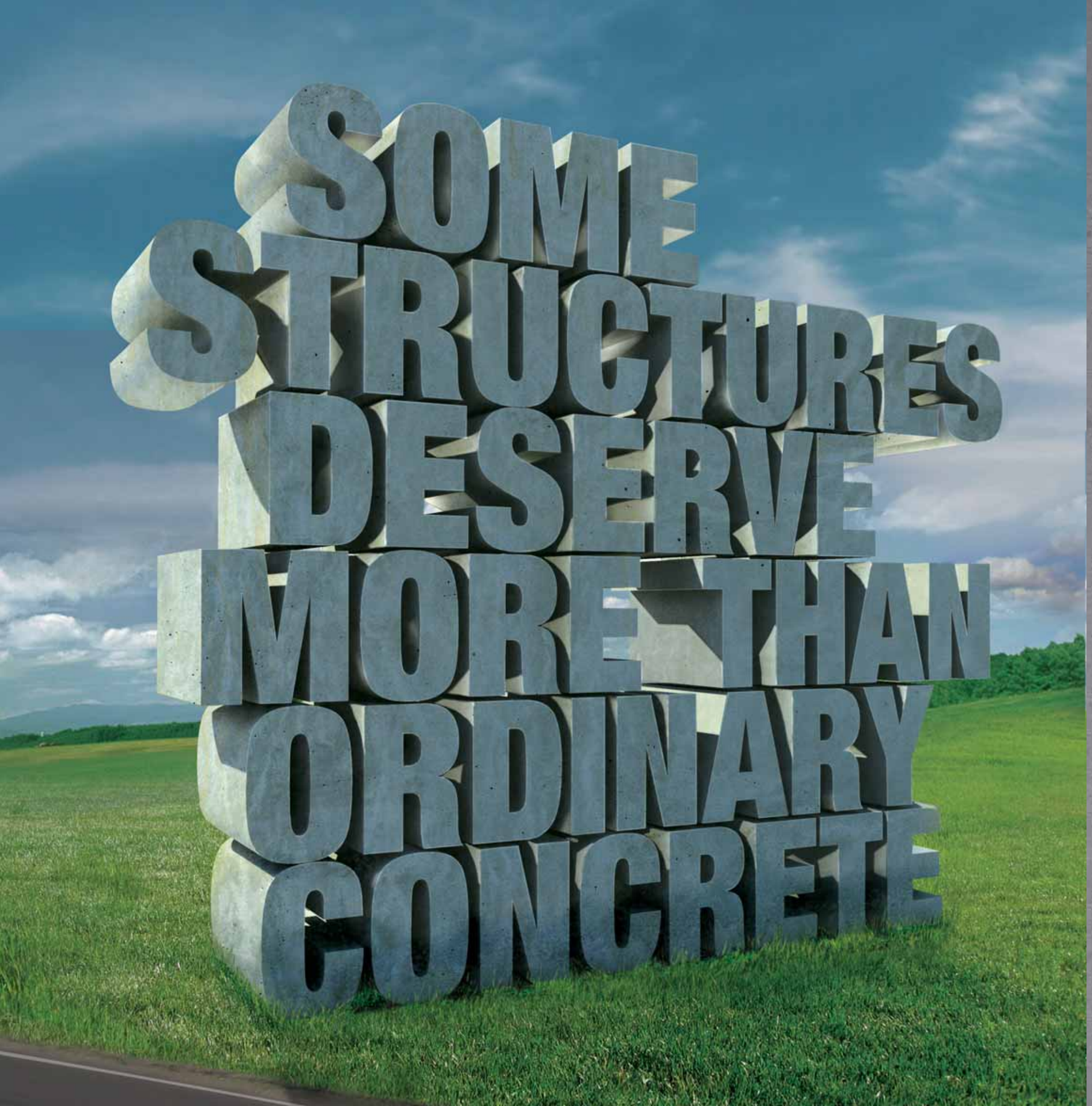


Reliance
Industries Limited
Growth is Life

Give them the additional strength of Recron® 3s secondary reinforcement.

Recron® 3s
Making a Stronger World

RECRON® 3S ADDS MUSCLE WHEN CONCRETE NEEDS IT THE MOST.

Concrete is widely used because of its valuable properties. It has high compressive strength and stiffness, low thermal and electrical conductivity, besides being non-combustible and non-toxic.

While these advantages are enough for many purposes, ordinary concrete falls short when used in certain construction projects. Faced with repeated stress, temperature variations and corrosion, it tends to become brittle, lacking tension and developing cracks. Given that most of these projects are of vital infrastructural importance, ordinary concrete will obviously not do.

That's when Recron® 3s can add muscle to concrete. A specialty secondary reinforcement additive, Recron® 3s adds toughness and tensile strength to concrete, while helping resist shrinkage and cracking. It also bonds better with the mix, thanks to a unique triangular cross section and dimensional stability.

Developed after extensive research at the Reliance Technology Centre, Recron® 3s has been widely used in a variety of applications. You can be sure that it will add value to the special structures you build.

HOW RECRON® 3S WORKS:

- Improves resistance to plastic & drying shrinkage/cracking
- Inhibits propagation of micro-cracks and provides stability to concrete
- Improves flexural toughness/increases split tensile strength
- Enhances abrasion resistance and increases energy absorption of concrete, thereby improving impact resistance
- Aids in making concrete more homogenous
- Reduces permeability in concrete
- Improves durability and enhances the longevity of the structure

HOW IS RECRON®3s DIFFERENT?

Recron® 3s has Unique Triangular Cross-Section which gives 40% more surface area for bonding compared to other shapes.

Recron® 3s is also designed so that the fibre stays dimensionally straight and uniformly dispersed, so as to safeguard against balling, curling and bunching.

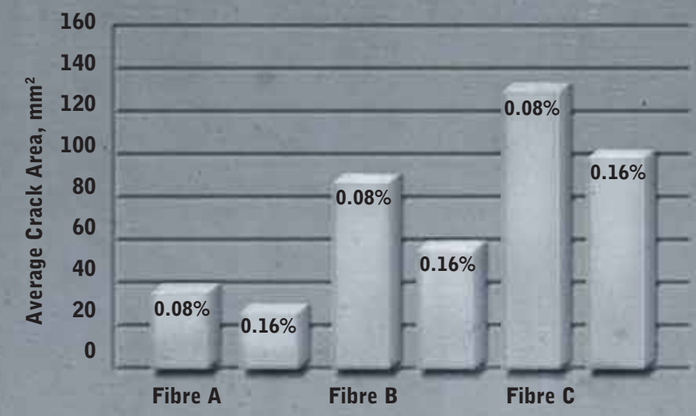
APPLICATION AREAS

Fibre length & dosage (kg/cum)

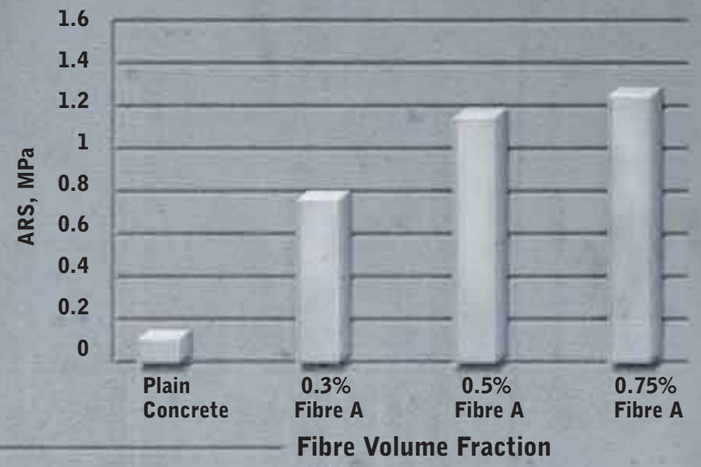
APPLICATION		6 mm	12 mm	18 mm
	Sub Application			
RCC	Slab-Normal/PSC		0.6-0.9	0.6-0.9
	Beams/Columns		0.6-1.2	
	Deck Slab		0.9-1.5	0.9
SLAB ON GRADE	Floorings		0.9	0.9-3.0
	Parking lots		0.9	0.9-2.0
	Ramps		0.9	0.9-3.0
WATER RETAINING STRUCTURES	Concrete		0.9-2.0	
	Canal Linings			0.9-1.5
	Drains			0.9
	Tanks		0.9-1.2	
	Cooling Towers		0.9-1.2	
PAVEMENTS	PQC		0.9-3.0	0.9-3.0
	Toppings/Overlays		0.9-3.0	0.9-3.0
	Parallel Taxi Track		0.9-3.0	0.9-3.0
	Runways		0.9-3.0	0.9-3.0
	Parking Bays		0.9-3.0	0.9-3.0
SCREEDS/MORTARS	Plaster	0.6-0.9		
	Screed	0.6-0.9	0.6-0.9	
	Mortar	0.6-0.9		
SHOTCRETE	Crown		0.9-1.5	0.9-1.5
	Walls		0.9	0.9
	Rehabilitation		0.9-1.5	0.9-1.5
PRECAST	Partition Walls	0.6-0.9		0.9-2.0
	Slabs		0.9	
	Manhole Covers			0.9-3.0
	Pavers/Tiles	0.6-0.9	0.6-0.9	
	Thin Sections	0.6-0.9	0.6-0.9	
PRE MIX MORTARS		0.9-1.5		

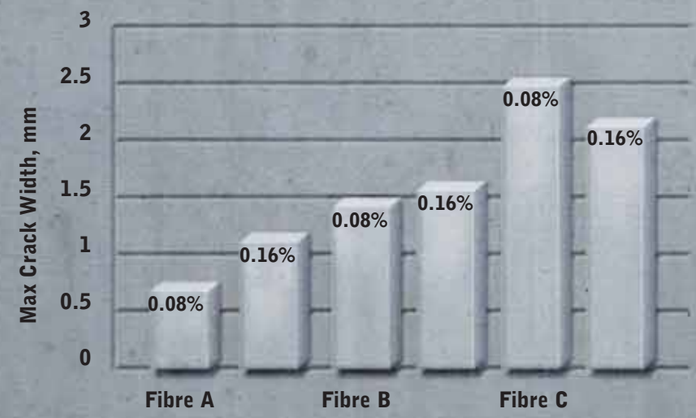
FIGURES DON'T LIE: THE RECRON® 3S ADVANTAGE

SR. NO.	PROPERTIES	GAIN OVER NORMAL MIX	TESTED BY
1	Compressive Strength (28 days)	+12 to 16% (Incremental gain noticed in select grades)	• CBRI Roorkee • IIT Madras • IPRI Punjab • CRRI - New Delhi • Al Futtaim Bodycote Dubai
2	Flexural Strength	+7 to 20%	• CBRI Roorkee • Civil-Aid-B'Lore • CRRI - New Delhi • IPRI Punjab • Al Futtaim Bodycote Dubai
3	Split Tensile Strength	+7 to 22%	• CBRI Roorkee • Civil-Aid-B'Lore • SVNIT Surat • IPRI Punjab • GERI Baroda • KCT Coimbatore
4	Drying Shrinkage	-48 to -80%	• CRRI - New Delhi • IIT Madras • UBC Canada • Civil-Aid-B'Lore
5	Water Percolation	-44 to -60%	• CRRI - New Delhi • Al Futtaim Bodycote Dubai
6	Permeability, K cm/sec under stressed conditions	Reduced to nil with fibre Reinforced Concrete under 5 bar pressure	• IPRI Punjab• IIT Madras • Civil-Aid-B'Lore
7	Abrasion Resistance	+25%	• CRRI • IIT Madras
8	Impact Resistance	+40 to 140%	• IIT Roorkee • IPRI Punjab
9	Damping of Material (under dynamic loading)	26%	• SVNIT Surat
10	Energy Absorption	55%	• SVNIT Surat
11	Young's Modulus	23.70%	• SVNIT Surat
12	Fatigue Life (cycle)	+ 230%	• M.S. University, Baroda
13	ARS (Average Residual Strength) of FRC	2-15 times of Plain Concrete	• UBC Canada
14	Toughness	6-12 times of Plain Concrete	• UBC Canada

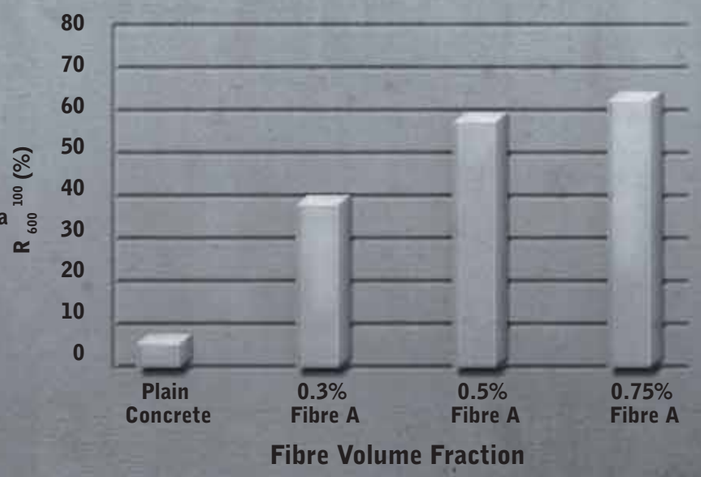


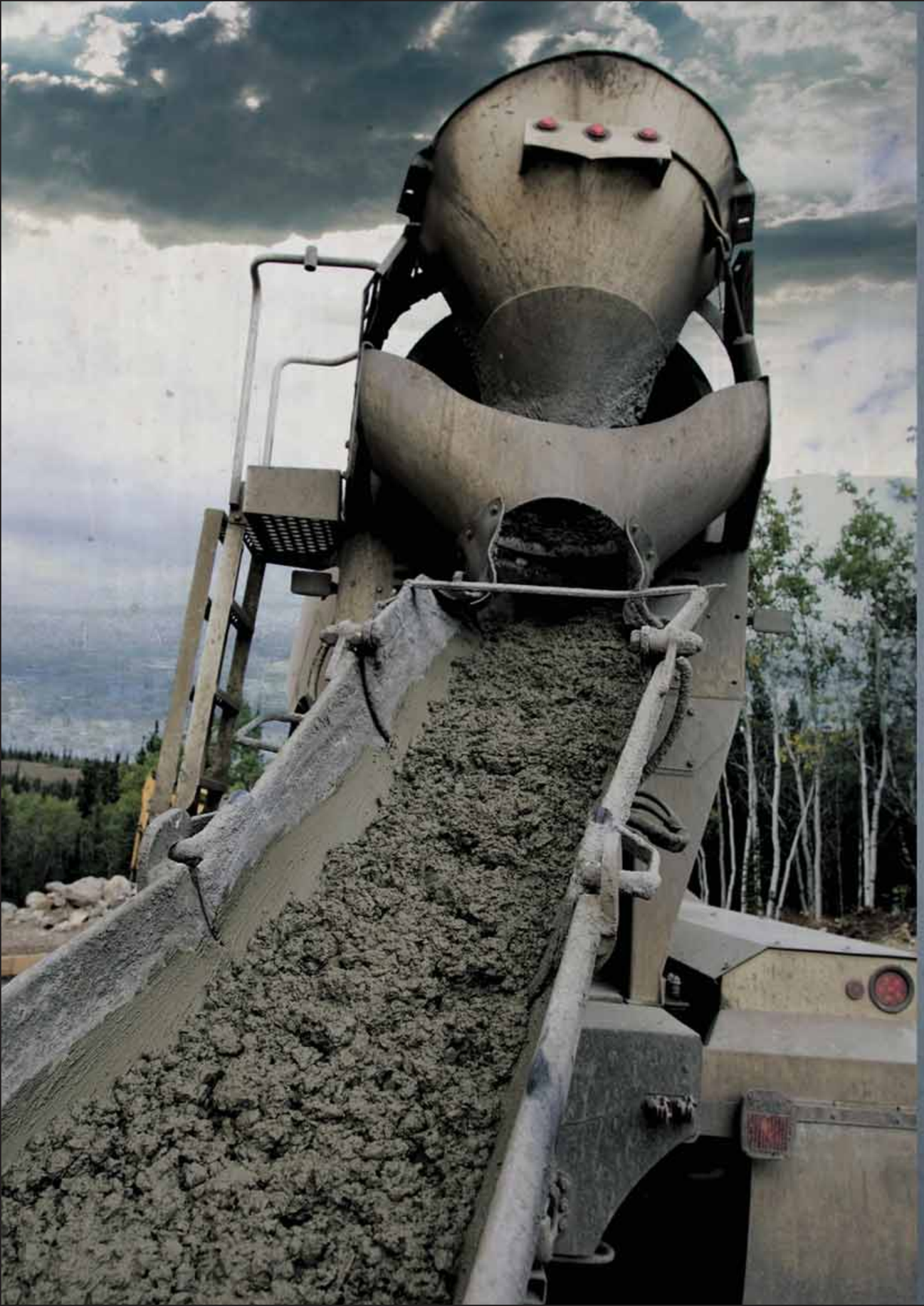
Fibre A - 18 mm Length
Fibre B - 12 mm Length
Fibre C - 6 mm Length





These figures are the result of rigorous testing by renowned national and international laboratories, including IIT Madras, IIT Roorkee, CRRI Delhi, CBRI Roorkee, IPRI Punjab, SVNIT Surat, Baroda University, Civil Aid Bangalore, BFRC Bangalore, Al Futtaim Bodycote Dubai and the University of British Columbia, Canada.





PACKAGING & DOSAGE

PRODUCT TYPE	LENGTH	POUCH SIZE
POLYESTER		
CT2012	6mm	125g
CT2024	12mm	125g
CT2436B/CT2436	18mm	450/900g
CT2424B/CT2424	12mm	450/900g
POLYPROPYLENE		
CTP2012	6mm	90g
CTP2024	12mm	125g
CTP2424B	12mm	450g
CTP2436B	18mm	450g

RECRON® 3S: TRIED AND TESTED ACROSS APPLICATIONS.

Recron® 3s has been adopted by construction industry across India, who have come to rely on its superior bonding and strengthening qualities. Here are a few figures:

- **Added to over 15 million cu. m. of concrete and 25 million square feet of plaster in India**
- **Used and accepted by India's top 100 realty companies**
- **Adopted by over 60 precast manufacturers**

- **Experience speaks with:**

*** 5 million cu. m. of concrete in Roads & Pavements * 1 million cu. m. of concrete in Flooring/Hardstandings**

*** 3 million cu. m. concrete in Housing-Residential sector * 3 million cu. m. concrete in Industrial sector**

*** 1 million cu. m. of concrete in Water Retaining Structures including Canal Linings**

*** Special Applications Undersea - Altitude above 3000 m & special thin sections precast**