

## ce200SF™

Steel fiber enhanced Ultrahigh Performance Concrete (UHPCFRC)

### Description

ce200SF™ is a family of steel fibers enhanced Ultrahigh Performance Concrete on the basis of ceEntek's proprietary carbon nanofibers UHPC technology. Steel fibers further enhance the ductility and flexural strength of the UHPC meeting the most stringent requirements for structural use.

### Features and Benefits

- All Features and Benefits are similar to ce200™.
- Flexural Strength >40MPa.
- Superior tensile strength
- Excellent ductility

### Advantages

ce200SF™ replaces LafargeHolcim 'Ductal'

### Mechanical Properties

PROPERTIES		ce200SF™- B	ce200SF™- Q	ce200S™- Q1
Compressive strength <sup>1</sup> (MPa)	7-day	>140	>140	>140
	28-day	>170	>170	>170
Flexural strength <sup>2</sup> (MPa)	7-day	>30	>30	>30
	28-day	>40	>40	>40
Tensile strength <sup>3</sup> (MPa)		>8	>8	>8
Elastic modulus <sup>4</sup> (GPa)		>45	>45	>45
Water absorption <sup>5</sup> (%)		1	1	1
Air content <sup>6</sup> (%)		< 3	< 3	< 3
Density (kg/m <sup>3</sup> )		2500	2450	2400
Flow <sup>7</sup> (mm)		260	260	260
Shrinkage (%)		<0.03%	<0.03%	<0.03%

<sup>1</sup> Compressive strength in accordance to NF P18-470 test in a 100mm cylinder specimen.

<sup>2</sup> Flexural strength in accordance to NF P18-470 test in a 40mm prism specimen.

<sup>3</sup> Tensile strength in accordance to NF P18-470 test in a 70mm prism specimen.

<sup>4</sup> Elastic modulus in accordance to BS 1881-121:1983 test in a 100mm cylinder specimen.

<sup>5</sup> Water absorption in accordance to BS 1881-122:2011 test in a 75mm cylinder specimen.

<sup>6</sup> Air content in accordance to ASTM C231 test.

<sup>7</sup> Flow in accordance to ASTM C230 test.