

**TECHNICAL DATA**

Name of the Material: Free flow high strength, non shrink, cementitious precision grout

Properties:

**Comprehensive strength: (BS 1881 – PART 116: 1983)**

Age (days)	Compressive strength (Nmm <sup>2</sup> )	
	Consistency	
	Flowable (W/P 0.18)	Pourable (W/P 0.165)
1	24	27
3	45	54
7	55	66
28	65	78

**Compressive Strength with Addition of Aggregates**

Age (days)	Compressive Strength (N/mm <sup>2</sup> ) W/P 0.18		
	%of aggregates (IS 516 – 1959)		
	50%	75%	100%
1	28	30	32
3	50	52	55
7	60	63	68
28	70	75	78

**Flexural Strength (BS 4551, 1998)**

Age (days)	Flexural Strength (Nmm <sup>2</sup> )
	W/P 0.18
1	2.5
3	7.0
7	9.0
28	10.0

Tensile Strength  
(W/P – 0.18) 3.5 N/mm<sup>2</sup> @ 28 days

Pull out bond Strength  
(W/P - 0.18) 17 Nmm<sup>2</sup> @7 days  
20 Nmm<sup>2</sup> @28 days

Time for Expansion  
(After Mixing) Start : 20 Mins.  
Finish : 120 Mins.

Freshwet Density Approximately 2220 Kgs/M<sup>3</sup>  
Depending on actual

Consistency used

Young's modulus  
(ASTM D469 – 94)

28 KN/mm<sup>2</sup>

Dynamic load resistance

Not less than 5 N/Mm<sup>2</sup> and 25 N/Mm<sup>2</sup> @  
500 cycles / minute for two million cycles.

Coefficient of Thermal expansion

11 X 10<sup>-6</sup> / ° C

Unrestrained Expansion

2 – 4% in the Plastic state  
to overcome shrinkage

Pressure to restrain  
Plastic Expansion

0.004 NN/mm<sup>2</sup> approx.

Flow characteristics : Flow design immediately after mixing grout

Grout Consistency	Maximum flow distance in mm			
	Gap width (mm)	50mm head	100mm head	250mm head
Flowable	30	350	1000	1500
	40	500	1500	2000
	50	900	2000	3000+

**Note : Minimum unrestricted flow width is 300mm.**

	Pourable:	Flowable
Yield (liters):	12.5	13.3

Packing : Should be in 25 Kgs. Moisture resistant bags.

Shelf Life: Shelf life should be 6 months