SuperFlow ™

Super Flowable Non-shrink Structural Grout

Composition

SuperFlow Grout contains very clean specially graded quartz aggregate (maximum particle size 1400 um) combined with 52.5 Cem I, binders and specialised chemicals and minerals. The composition when mixed with water, produces a fluid flow grout for tortuous path filling of base plates, bolt holes, keyways and the like where limited access precludes plastic packing.

Flow

By varying water addition rates the flowability of **SuperFlow Grout** can be suited to various applications:

- 16% water to mass of grout produces a thixotropic flowable mortar
- 18% water to mass of grout produces a semi self-levelling mortar
- 20% water to mass of grout produces a fluid flow non-bleeding self-levelling grout

Dimensional Stability

SuperFlow Grout is designed to be mildly expansive in the plastic phase to final set. Together with the non-bleeding characteristic of **SuperFlow Grout**, this mild expansion ensures complete contact of the hydrating grout to its encasement.

Being non-bleeding care must be taken that the fluid grout does not loose water by "suck" of encasing structural elements. Accordingly all concrete, brick, plaster or similar materials must be soaked to be saturated but without standing water at the surface.

The hardened grout will remain in contact with and give full support to base plates and other containments, and will have extremely good bearing capacity. Correct placing methods will expel air eliminating of entrapped bubbles (see below).

Compliance

SuperFlow Grout complies to ASTM C1107/CRD-C621

Volume control	Grade A – expands during set
Fluid flow	exists flow cone within 30 seconds
Strength	Exceeds 34.5 MPa at 28 days
Temperatures	May be placed at 4°C to 32°C

Samson Technologies cc
Unit 4, Trevallyn Park East, Hyskraan Close, Kya Sands, Randburg, ZA
Tel: +27 (0)11 462 2666 **Email:** info@samson.co.za **Web:** www.samson.co.za

Binder to water ratio / Compressive Strength

The total active binder content of **SuperFlow Grout** is 40% and accordingly the following total active binder to water ratios apply.

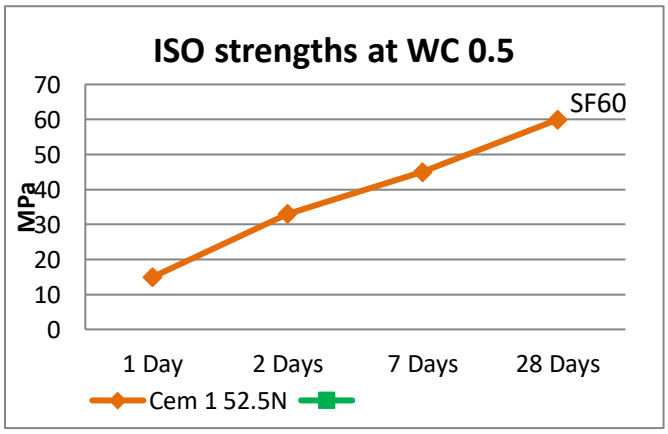
Strength range (28 days)

	Water/binder	
16%	0.40	60 to 65 MPa
18%	0.44	55 to 60 MPa
19%	0.47	50 to 55 MPa
20%	0.50	45 to 50 MPa

SuperFlow Grout gains strength more rapidly than FG40. **SuperFlow Grout** is formulated on Afrisam Cem 1 52.5 Rapo whereas FG40 contains Afrisam Eco cement.

The ISO strengths below relate below to **SuperFlow Grout** mixed at the maximum water content of 20%.

Afrisam Cem I 52.5N tested to EN51097



Placing

Various practical requirements of each circumstance for grout placement determine the method and viscosity needed.

Do no use **SuperFlow Grout** for dry-pack grouting. Typical installation is by "letterbox head" shutter or by pump. Techniques required include allowing the liquid grout to flow through and circulate under a base plate to ensure complete filling and expulsion of air. Mix and place promptly.

Contact Samson for a method statement for your requirements.

Yield

When mixed with 16% water, the average yield of **SuperFlow Grout** is 12.5L per 25kg bag and approximately 80 bags per m^3. Any increase in water addition will increase the yield.

Samson Technologies cc
Unit 4, Trevallyn Park East, Hyskraan Close, Kya Sands, Randburg, ZA
Tel: +27 (0)11 462 2666 **Email:** info@samson.co.za **Web:** www.samson.co.za