

MS40 Grout

Medium Strength Non-shrink Structural Grout

Composition

MS40 contains very clean specially graded quartz aggregate (maximum particle size 1400 um) combined with a blend of Cem I 52.5, Cem II 32.5, 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.

MS40 contains crystalline waterproofing and in the hardened state not only supports structures but also acts as a corrosion inhibiting encasement for steel.

Flow

By varying water addition rates the flowability of **MS40** can be suited to various applications:

- 14% water to mass of grout produces a thixotropic flowable mortar
- 16% water to mass of grout produces a semi self levelling mortar
- 18% water to mass of grout produces a fluid flow non-bleeding self levelling grout

Dimensional Stability

MS40 Grout is designed to be mildly expansive in the plastic phase to final set. Together with the non-bleeding characteristic of **MS40**, 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.

Compliance

MS40 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

Binder to water ratio / Compressive Strength

The total active binder content of **MS40** is 36% and accordingly the following total active binder to water ratios apply.

Strength range (28 days)

14%	0.40	55 to 60 MPa
16%	0.44	50 to 55 MPa
17%	0.47	45 to 50 MPa
18%	0.50	40 to 45 MPa

Compressive Strength

	18%
1 day	10 MPa
2 days	15 MPa
7 days	30 MPa
28 days	45 MPa

Placing

Various practical requirements of each circumstance for grout placement determine the method and viscosity needed. Do not use **MS40** 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. Request Samson detailed method statement for fuller instructions.



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

Warranty

Samson warrants that its products will perform as declared in its literature and this warranty extends only to the replacement of any of its products that may be proven to be defective.

Disclaimer

Samson Technologies retains the right to change any information in our literature, at any time, without prior notification.