



PRODUCT CODE: 5624

SmartCare General Purpose Grout

PRODUCT DESCRIPTION

SmartCare General Purpose Grout is a free-flowing, high strength, non-shrink cementitious grout. It is a blend of portland cement, graded fillers and other additives which imparts controlled expansion in the plastic/hardened state in addition to minimizing water demand. The graded fillers are assigned to assist uniform mixing and produce a consistent grout mix.

PRODUCT FEATURES

- Shrinkage compensation:** Dual shrinkage compensated & hence crack resistant
- Flow:** Self compacting flowable grout which ensures high level of contact with load bearing areas
- Strength:** Develops high initial and ultimate compressive strength
- Consistency:** No bleeding & segregation
- Easy to use:** Single component ready to use powder which only requires addition of water

RECOMMENDED USAGE SmartCare General Purpose Grout can be used for

- > Core/bore packing
- > Filling gaps between concrete members, masonry cavities, anchor bolts etc.
- > Foundation grouting

PRODUCT INFORMATION

APPEARANCE

Free flowing grainy grey powder

PACK SIZE

25 kg

**STORAGE CONDITIONS/
SHELF-LIFE**

Shelf life is 6 months from the date of manufacturing. Store at cool and dry place in unopened condition

YIELD

11.8 litres at w/p ratio of 0.15 for 25 kg bag

TECHNICAL DETAILS

Properties	Specification	Results
Water to Powder Ratio	-	0.15+/-0.01
Initial Setting Time	-	> 300 mins
Final Setting Time	-	< 600 mins
Flow in mm (Flow Meter) @ 30°C	ASTM C 1437	260 mm @ 20 mins
Compressive strength (Mpa) @ 30°C	ASTM C 109:99	25 Mpa at 1 day
		50 Mpa at 7 days 65 Mpa at 28 days
Tensile Strength (Mpa) @ 30°C	ASTM C 307	5 Mpa at 28 days
Flexural Strength (Mpa) @ 30°C	ASTM C 580	8 Mpa at 28 days
Fresh wet Density	ASTM C 138	2430 Kg/m ³
Bleeding, %	ASTM C 940	0%
Settling/ Segregation	-	Nil

APPLICATION PROCESS

SURFACE PREPARATION

- › Clean the surface and remove loose concrete, dust, oil, paint, grease, waterproof coating etc.
- › If the concrete surface is defective or has laticence, it must be cut back to a sound base.
- › Bolt holes and fixing pockets must be cleaned properly.
- › Wash the grouting area with water and saturate it for at least 24 hours before starting the grouting process.
- › Prior to grouting any free water should be removed.

MIXING

- › A pan mixer should be used so that a homogeneous concrete mix is obtained.
- › Charge approx. 80% of the total required water i.e. 2.8 – 3.2 Litres to pan mixer, start addition of powder slowly under continuous mixing.
- › After complete addition of powder, check the flow and add remaining 20% water i.e. 0.7-0.8.Litres (Note – Check for bleeding & if bleeding occurs overall water content should be reduced) and mix for 2-3 minutes to get a homogeneous free flowing, uniform & lump free mix.
- › Total water required: 3.5 to 4 Litres per 25 kg bag i.e., 15+/-1% of the weight of powder.
- › Make sure that for a 25 Kg bag, volume of water should not exceed 4 Litres.
- › Temperature of the mix should be maintained at approx. 30°C. During summer, use cold water & in winters use warm water to regulate the temperature of the mix.
- › Water used for mixing should be clean and potable.

PLACING

- › SmartCare General Purpose Grout can be placed up to thickness of 100 mm in a single pour when used as an under-plate grout.
- › Placement should be done within 20 minutes post mixing. Make sure the temperature of the mix is Approx. 30°C.
- › Pour the homogeneous mix of the grout into a hopper maintaining the grouting shoulder (150-250 mm)
- › Stop pouring the grout once it reaches the other end & touches center of the base plate.
- › Cover the exposed areas of grout by wet jute sacks to prevent cracking due to heat generation during curing of grout.

Other Area of Use: SmartCare General Purpose Grout can be also used for core/bore packing, filling gaps between concrete members, masonry cavities, anchor bolts etc.

PRECAUTIONS & LIMITATIONS

- › Wash the grouting area with water and saturate it for at least 24 hours before starting the grouting process.
- › Make sure that for a 25 Kg bag, volume of water should not exceed 4 Litres.
- › For depth, more than 80 mm add 25-30% of 8-10 mm aggregates by the wt. of powder.
- › For ambient temperature below 10°C, use warm water (30-40°C) to accelerate strength development process.
- › For ambient temperature above 40°C, use cold water (below 20°C) so that the grout achieves the required flow & retention time.