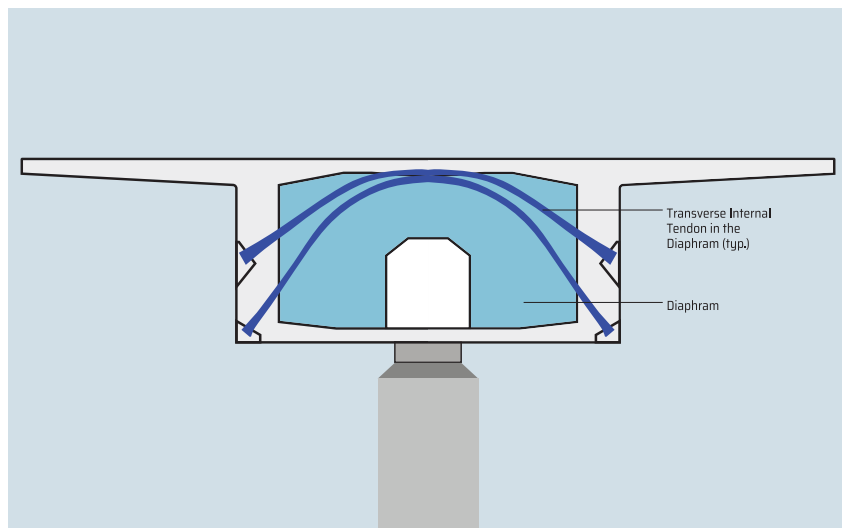


TS-168G

BRIDGE BEAM DUCT GROUTING MATERIAL



ABOUT THE PRODUCT

This is a dry material premixed with high-grade cement and a variety of inorganic and organic materials. It has the technical properties of non-segregation, non-bleeding, micro-expansion and high fluidity. After adding the water proportion, stir evenly at the construction site. This product is used for the duct grouting material of the post-tensioned, pre-stressed tendon of the bridge beam. The implementation standard of this product is JTG/T F50-2011.

TECHNICAL SPECIFICATION

All tests were carried out at max. Water addition of 5 liters at 20°C unless otherwise stated.

Water content (%)	16.7%
Cone flow (ASTM C939)	< 50 sec
Table flow (CRD C227)	77%
Final set (ASTM C191)	≤ 24h
Bleeding	None
Short-term expansion (ASTM C827)	1.0%
Plastic density	2100 kg/m ³
Long-term expansion (CRD C588)	None

USAGE

The product is used for the duct grouting material of post tensioned pre-stressed tendon of bridge beam and void filling.

FEATURES & BENEFITS

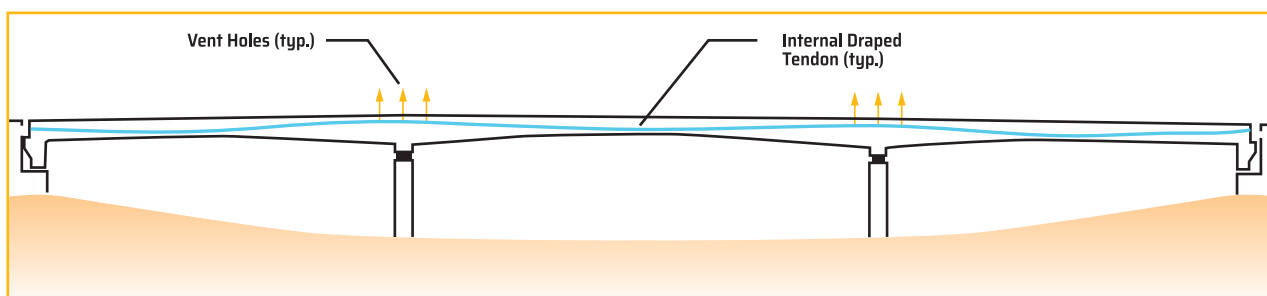
- ❖ Low water to binder ratio: Water to binder ratio of this product is 0.27±0.01
- ❖ High fluidity: The fluidity value of the slurry can reach in 13s and after 60m it still can remain less than 25s
- ❖ Suitable condensation time: Initial setting time is ≥5h and final setting time is ≤24h
- ❖ Good stability and no bleeding: The slurry test value of 3h inter-wire bleeding rate and the 24h free bleeding rate are both equal to 0
- ❖ Micro-expansion and no shrinkage: The slurry test expansion rate value after 3h is 0 ~ 2% and after 24h, it is 0 ~ 3% ;
- ❖ High durability: The test value of 28d anti-freeze level is greater than F50 and 28d chloride ion diffusion coefficient is 1.25 × 10⁻¹² m² / s

DOSAGE

The product is used for the duct grouting material of post tensioned pre-stressed tendon of bridge beam and void filling.

OPC	Concrete Sanding	Water	TS-168G	Yield
50 kg	-	20-22 ℓ	250 gm	36 ℓ
50 kg	50 kg	22-24 ℓ	250 gm	57 ℓ

Note: For grout, mortar or concrete mixers with an aggregate cement ratio more than 1, 4 x 250 gram units of TS-168G per 100 kg of cement shall be used



PREPARATION

All surfaces should be clean and sound. Concrete surfaces must be free from any contamination including oil, grease, laitance and dust – and for maximum bond, the surface should be roughened and pre-soaked with clean water.

MIXING

- ❖ Slurry feeding sequence for stirring: Add the amount of all the slurry water consumption in the mixer → Start the mixer → Evenly add all the grouting agent (material) → Evenly add all the cement → Stir for another 2 min till its uniform
- ❖ Pour the evenly mixed slurry into the storage tank through the filter and keep the slurry stirring in storage tank to ensure fluidity.

The grout needs only to be mixed with sufficient water to give the consistency required. Mixing should be carried out in a proprietary grout mixer or in a bucket (where the height is at least 1½ times its diameter) by using a medium-speed drill (650 rpm) with an MR4-type helical attachment.

Avoid entraining excessive quantities of air during mixing by keeping the mixing head below the grout level at all times.

To obtain consistency required, add water as follows:

Dry pack mix	Approx. 22.5 ml of water per 250 gm pack
Trowellable mix	Approx. 35 ml of water per 250 gm pack
Pourable mix	Up to 50 ml of water per 250 gm pack

CHEMICAL RESISTANCE

When properly placed and cured **QMAX Grout™** is a dense low permeability material which does not suffer damage from frost attack and freeze/thaw conditions. The product does not contain any chlorides, sulphate or other harmful chemicals. Its permeability means it is highly durable and resistant to petrol, oils, diesel fuels, anti-freeze liquid and de-icing salts.

APPLICATION

Mixing and placement can be carried out between +5°C and +40°C. In service, **QMAX Grout™** will perform similarly to other cementitious mixes based on Portland cement in the temperature range of -20°C to +150°C.

PACKAGING

QMAX Grout™ is supplied in 250 gram polythene lined bags.

COVERAGE

For pourable mix, each **QMAX Grout™** 250 gram pack produces approximately 7100 bags per cubic meter. For estimation purposes, 5% extra should be allowed for spillage during mixing and placing.

STORAGE & SHELF LIFE

It can be stored for 6 months under the condition of dry sealed bag. If stored more than 6 months need test before use.

HEALTH & SAFETY

Contains cement (contains chromium (VI) which may cause allergic reaction.) Harmful if inhaled. Irritating to eyes and skin. Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical help. After contact with skin, wash immediately with plenty of soap and water. Water suitable protective clothing, gloves and evey/face protection.

The technical information and application advice given in the Q-MAX Global Co. (BD) Ltd. technical data sheet are accurate which are based on the present state of our best scientific and practical knowledge. However, as conditions of use and any labor involved are beyond our control, the end user must satisfy himself by prior testing that the product is suitable for his specific application, and no responsibility can be accepted, or any warranty give by our Representatives, Agents or Distributors. Products are sold subject to our Standard Conditions of Sale and the end user should ensure that he has consulted our latest literature.



TECHNICAL SERVICES

QMAX Grout™ Customer Service Department has a team of experienced advisors available to provide on-site advice both at the specification stage and during application. Detailed specifications can be provided for specific projects or more general works. Site visit and on-site demonstrations can be arranged on request.

SALES ENQUIRIES

QMAX Grout™ products are distributed throughout Bangladesh via selected distributors and dealers. Please contact the relevant Sales team for all product orders and enquiries.



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Q-MAX™

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