

Congrout® FR

A UNIQUE CORROSION & FIRE RESISTANT NON-SHRINK GROUT

DESCRIPTION

Congrout FR is a unique non shrink cementitious grout containing special additives to give it corrosion and fire resistance properties.

USES & ADVANTAGES

Congrout FR is a non-shrink cementitious grout for grouting of pipelines, plinths, sewage treatment plants, structures exposed to sea water, under anchors and rails, machinery bases such as turbines, pumps, generators, bridge bearings, hydraulic steel structures in aggressive environments etc.

Advantages include:-

- High strength.
- Protects concrete and steel rebar from deterioration and oxidation.
- Non-toxic.
- Protects against harmful elements such as sulphates & chlorides.
- Cost effective.
- Environmentally friendly.
- No bleeding or segregation.
- Vibration and impact resistant.
- Easy to use.
- Neutralises chloride ion activity.
- Extended working times.
- Fire resistant.
- Corrosion resistant.

PROPERTIES

Appearance: Grey powder
Bulk Density: Approx. 1.66-1.70 kg/litre
Yield: Approx. 76 x 25 kg/bags/m³ of grout depending on water content

Expansion of up to 1% or greater in unset material according to ASTM C940.

Drying shrinkage is compensated for complying with the requirements of ASTM C1107, type C.

Rapid Chloride Penetration: <1000 Coulombs
ASTM C1202 at 28 days

SURFACE PREPARATION

Surfaces should be clean, sound and free from oil, grease, laitance and loose particles. Metal surfaces should also be clean & free from rust, oil & grease.

MIXING

Congrout FR is a pre-mixed non-shrink grout. Pour the required quantity of water into a mixing container and add 1 bag of **Congrout FR** gradually whilst mixing (max. 400 R.P.M.), mix for 3-5 minutes until lump free. Addition of water should be approximately 4 litres for a J rote flow of <14 seconds.

Do not add more than the maximum water content. This will result in loss of strength and increased segregation.

APPLICATION

Ensure the substrate is correctly prepared. No contamination and saturated with water at least 3 - 4 hours prior to pouring the grout. No free water should be left standing. During application ensure air entrained into the grout is able to escape through relief holes. Maintain continuous head when base-plate grouting. Mortar flow should not be interrupted.

CURING

To prevent rapid surface drying and crazing, use a suitable curing compound from Cormix's **Corcure** range **Corcure 90**.

IMPORTANT

- Min. gap 5 mm up to max. 150 mm.
- Cure the grout.
- Formwork should be secure, do not allow grout loss.
- Temperatures will affect the setting time and strength gain.

In temperatures over 35°C ice or chilled water may be used.

Note :- For large & deep volume pours saturated 10 mm down aggregate can be mixed with grout in the ratio of 1:1 or 1:2 as per site required conditions.

CONSUMPTION

76 x 25 kg bags & 285 litres of water for approx. 1 m³ of mortar.

CLEANING

Clean all tools with water immediately after use.

PACKAGING

25 kg bag. 4 ply plastic lined bags.

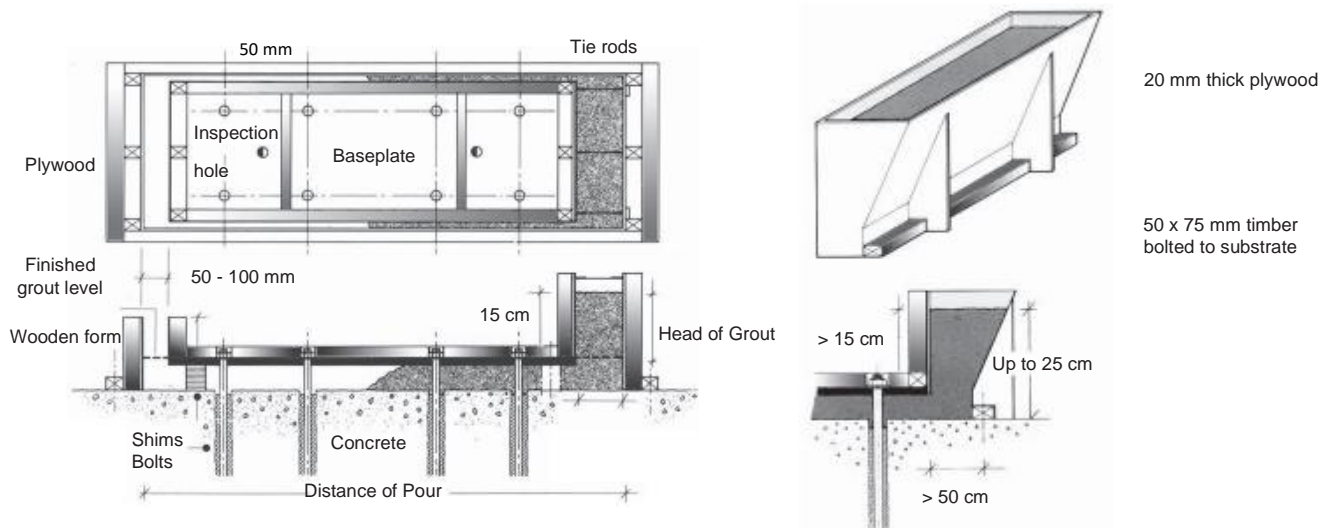
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TYPICAL CHARACTERISTICS AT 30°C UNDER LABORATORY CONDITIONS

Water Content (%)	Consistency (J rote)	Setting time@25°C (minutes) ASTM C191-01a / ASTM C807		Bleeding ASTM C940 / ASTM C232	Average Compressive Strengths (N/mm ²) - ASTM C109			Flexural Strengths (N/mm ²) ASTM C348 28 days
		Initial	Final		1 Day	7 Days	28 Days	
16	14 seconds	160-185	190-220	0	≥35	≥55	≥60	10-13

Typical drawing for baseplate installation



STORAGE & SHELF LIFE

Store in dry shaded conditions. The shelf life is at least 9 months if kept dry in original packaging. High temperatures and humidity may reduce shelf life.

HEALTH & SAFETY

Congrout FR is alkaline avoid contact with skin & eyes. Gloves, goggles and dust mask should be worn. Remove from skin with soapy water. Splashes in the eyes should be washed out with copious amounts of clean water and medical attention sought. Congrout FR is non-flammable.

TECHNICAL SERVICE

The Cormix International Limited Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2015 verified by TUV Nord.
ISO 14001 : 2015 verified by Lloyd's Register International.

DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc. Cormix does not take responsibility nor need to defend others testing that does not achieve the published data. The user must test the products suitability for the intended application and purpose. Cormix reserves the right to change the properties of the product. Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advise offered.

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