

# Congrout® WT

AN ULTRA HIGH STRENGTH CEMENT BASED GROUT WITH LATEST NANOSCIENCE TECHNOLOGY FOR GROUTING WIND TURBINES

## DESCRIPTION

**Congrout WT** is a cement based shrinkage compensated ultra high strength grout produced using latest nano molecular, polymer and fibre technology. When mixed with water it produces a homogeneous high flow, high strength grout which may be pumped or poured into place.

## USES & ADVANTAGES

**Congrout WT** has been specifically formulated using Cormix extensive grout nano and polymer technology for the grouting of wind turbine baseplates and anchors using pre stressing techniques.

### Advantages include:-

- Extended pot life.
- Voids from 10 mm to 310 mm may be filled in one application.
- Very high strength.
- Improved ductility and impact resistance.
- No bleeding or segregation.
- Contains nano binders, fillers and fibres for added durability and reduced shrinkage.
- Excellent chloride resistance and other salt resistance.
- Pumpable to the most demanding areas.
- Exceptional flow reducing pump pressures.
- Excellent fatigue resistance.

## PROPERTIES

**SG:** Approx. 2.4 kg/litre

**Mix Water:** Approx. 2.5 - 3.0 litre per 25 kg bag.

**Application Temperature:** 2 - 40°C

**Mixing Time:** 4-5 minutes

**Setting Time:** 3 hours depending on ambient temperature.

**Application Thickness:** 10 mm - 310 mm.

### Compressive Strength:

EN 12190	20°C	30°C
- 1 day :	≥ 50 N/mm <sup>2</sup>	≥ 70 N/mm <sup>2</sup>
- 7 days :	≥ 75 N/mm <sup>2</sup>	≥ 95 N/mm <sup>2</sup>
- 28 days :	≥ 110 N/mm <sup>2</sup>	≥ 120 N/mm <sup>2</sup>

Strengths are temperature & mix water content dependent.

<b>Flexural Strength:</b> EN 196-1	≥ 14 N/mm <sup>2</sup>
<b>Shrinkage:</b>	≤ 0.25 mm/m
<b>Crack Resistance:</b>	No cracking after 1 year
<b>Water Absorption:</b>	<0.04
<b>Bond Strength to concrete:</b>	> 2 N/mm <sup>2</sup>
<b>Tensile Strength:</b>	≥ 9 N/mm <sup>2</sup>
<b>Static Modulus of Elasticity:</b> EN 13412	> 42
<b>Flow J rote:</b>	< 24 seconds
<b>Flow cone:</b>	> 22 cm.

## SUBSTRATE PREPARATION

Ensure the surface is sound, free of curing compound, mould oils, grease, dirt or other materials that will interfere with the bond.

Saturate the surface to be grouted preferably for 24 hours before pouring grout and remove all standing water before placing the grout. Do not apply to hot dry substrates.

Shade area to be grouted prior to grouting and afterward.

At very high or low temperatures Consult Cormix International Technical Service Team.

## MIXING AND PLACING

- Do not add any other materials to the grout nor more water than is specified. Chilled water may be used in very hot weather conditions to reduce temperatures.
- Mix with a grout mixer( preferably forced action pan mixer), do not use high speed drills as they will entrain air, mix for 4-5 minutes longer mixing times are required than normal grouts to ensure good dispersion and activation of polymers in the grout .
- Always mix the complete bag.
- The grout should be poured or pumped continuously from one side, ensure enough material is available to continuously grout the area and to maintain contact with the base plate and foundation throughout the process. Do not vibrate the grout.
- Exposed areas should be protected from direct sunshine and wind or rain. Cure the surface with **Corcure 90** or polythene sheet taped at all edges.
- In very high temperatures chilled water or ice may be used, ensure all equipment, mixers, bags of grout are shaded.

## PACKAGING

**Congrout WT** is supplied in 20 or 25 kg bags.

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## STORAGE & SHELF LIFE

Store in dry cool conditions away from direct sunlight. The shelf life when stored in original unopened bags correctly is 12 months.

## HEALTH & SAFETY

During use avoid inhalation of dust & contact with skin & eyes. Wear protective clothing. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately.

- DO NOT induce vomiting.

## TECHNICAL SERVICE

Cormix provides technical service as and when required. Quality control procedures and an Application manual is available from Cormix with onsite training in the installation of the material to ensure successful grouting. Grouting is a specialist field and should only be undertaken by qualified applicators.

## QUALITY ASSURANCE

ISO 9001 : 2008 verified by TUV Nord



Cormix International Limited 89 Romklao Rd, Sansab, Minburi, Bangkok 10150 09 1073-CPR-269-01 <b>EN 1504-6</b> <b>Anchoring Product</b>	Pull-Out Strength:	Displacement ≤ 0.6mm at load of 75 kN
	Chloride ion Content:	≤ 0.05 %
	Reaction to fire:	Euroclass A1
	Dangerous substances:	Comply with 5.3 (EN 1504-6)

## 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.

## CONTACT DETAILS

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