

INDUGROUT-A100

HIGH PERFORMANCE, NON-SHRINK, NON OXIDIZED, FIBRE-REINFORCED DUAL EXPANSION, FREE-FLOWING CEMENTITIOUS GROUT

Product Description:

INDUGROUT-A100 is a ready-to-use high performance, non-oxidized, fiber-reinforced, dual expansion, cementitious grout which only requires the addition of water to produce a non-shrink, flowable grouting mortar. INDUGROUT- A100 contains hydraulic binders, special aggregates, fibers, modifiers and shrinkage-compensating materials. INDUGROUT- A100 is designed for application by pouring or pumping at thicknesses between 10 mm and 100 mm.

Advantages:

INDUGROUT-A100 is typically used for:

- Grouting machinery & equipments.
- Grouting general structural supports.
- Grouting pre-cast concrete elements.
- Grouting tank and vessel support.
- Grouting anchor bolts, crane rails and milling machines.
- Concrete repair & patching in walls (stiff consistency).
- Concrete repair and floor patching (flowable/fluid consistency) where a highly flowable replacement material is required.

Advantages:

- Easy to mix and apply.
- Designed for hot weather applications.
- Non-oxidized & non-shrink.
- > 95 % Effective Bearing Area (EFA).
- Low heat of hydration.
- Fibre-reinforced; reduces risk of cracking.

- Adjustable consistency for pouring or pumping.
- Microsilica content improves strength and durability.
- Low permeability extends durability & service life.
- Chloride-free, nitrate-free & non-toxic.
- High mechanical properties and high early and ultimate strengths.
- Excellent bond to concrete and steel.

Standards:

INDUGROUT-A100 is formulated to comply with all requirements of ASTM C-1107: "Packaged Dry, Hydraulic – Cement Grout (Non-shrink)" Grade C as well as CRD C- 621

Technical Properties:

Appearance consistency	: Free flow grey powder	Flowable	Fluid
Mixing water (litres)	: 3.75	4.00	
Yield/bag (litres)	: 13	13.2	
Mixture density (kg/l) at +20 °C	: 2.3	2.2	
Setting times (influenced by ambient temperatures)	: Initial 3-4 hrs	Final 5-6 hrs	
Flow: CRD C-cone (flowable consistency)	: 19-25 sec	-	
Chloride content (%)	: Nil		



Expansive behaviour	: Dual: Expansion occurs in both plastic & hardened states	
Expansion at 28 days	: +0.02%	
Compressive Strength (N/mm ²)	: Flowable	Fluid
at 24 hrs	30	25
at 3 days	50	45
at 7 days	70	65
at 28 days	90	75
Flexural Strength (N/mm ²):	Flowable	Fluid
at 24 hours	10	8
at 3 days	11	9
at 28 days	14	13
Modulus of Elasticity	: >3300 MPa	
Coefficient of thermal expansion	: 10X10 ⁻⁶ mm/mm/°C	

concrete. Maintain a maximum unrestrained (exposed) gap between the formwork and base plate edge of:
25 mm on inspection sides.
70 mm on pouring side.

Mixing:

Place the exact amount of water in a clean vessel and gradually add the contents of the bag while mixing with an electric drill (maximum 450 rpm) attached with the appropriate mixing paddle. Continue mixing until a homogenous, lump-free consistency is achieved. An appropriate grout mixer is recommended for large-volume grout pours. DO NOT mix more than what you can consume within 45 minutes at +25 °C. DO NOT RE-TEMPER grout to restore workability. Grouts that have lost workability must not be used.

Application Guide

Surface Preparation:

All surfaces must be sound, clean and free from dust, grease, oils, curing compounds, mould release agents or other adhesion inhibiting materials. Remove all surface laitance and maintain a surface profile between CSP 1 & CSP 5 as described by the International Concrete Repair Institute (ICRI). Thoroughly saturate all mineral substrates and remove standing/surface water prior to application of INDUGROUT-A100. Steel reinforcement must be grit blasted to SA 2½ (white clean metal) and immediately primed with INDUBOND®-VK4032-ACI or ASOCRET®-BIS-0/2 before new rust/scale is formed. Please refer to relevant technical data sheets.

Shuttering:

Always use water tight and smooth surfaced shuttering. Use rubber strips or appropriate sealant between the formwork and the host

Continuously pour - from the pouring side - the mixed materials onto the prepared substrate. Avoiding air pocket entrapment & allow air to escape. If base plate grouting is carrying out, ensure adequate head pressure is maintained throughout the pouring process. Voids should be removed by rodding or strapping.

Curing:

INDUGROUT-A100 is a cementitious grout. ACI recommendations should be followed during mixing, placement and curing. After placement, the grout must be properly cured for at least 3 days. REMICURE, curing compounds from the AQUAFIN Pakistan range can be used. Protect freshly placed grout from direct sunlight and/or extreme temperatures.

Cleaning:

Clean all tools & equipment with water immediately after finishing grouting works. Cured/hardened grout can only be removed mechanically.



Estimating & Supply:

Packaging:

INDUGROUT-A100 is available in 25 kg bags.

Yield:

13.0 litres/bag in the flowable state

13.2 litres/bag in the fluid state

Storage & Shelf-life:

12 months when stored in original, unopened bags and elevated from the floor in a covered & well-ventilated storage area away from extreme temperatures, and any source of moisture.

Health and Safety:

- INDUGROUT-A100 is non-toxic & non-hazardous during handling, storage & use.
- Do not dispose directly into water or onto soil. Expired or out of pot-life material should be disposed of in accordance with local environmental regulations.
- Splashes on skin can be washed with soap and water.
- For more details about any safety requirement, please refer to valid MSDS.

