

ARDEX BG 60 HD*

Fluid structural non-shrink mortar for filling and anchors

- Cement-based, one-component, self-leveling grout mortar
- For anchoring metal components
- · Settling of walls or pillars
- No shrinkage
- Free of corrosive chlorides or metal components
- Very high resistance
- Certified according EN 1504-6
- * Optimized & improved version of ARDEX CEM GROUT.

Scope of Application

For internal and external areas.

Filling and anchoring on concrete flooring for machinery subject to intense mechanical loads.

Filling and sealing in concrete pillars, bridge supports, rails, filling between walls and pillars, etc.

Fixing the steel columns to the foundation, manufacturing the curtain and column heads, filling the machine foundations and assembling the prefabricated concrete structural elements.

Special repairs on horizontal concrete surfaces, injections to reinforce frames, pods, etc. (by pouring).

Properties

High short and long-term mechanical resistance.

No shrinkage (it expands very slightly); therefore, cracks are avoided, and the hardened product occupies the entire space to be filled.

Optimum adherence to metal surfaces and concrete.

Outstanding fluidity, self-levelling, even with little mixing water, therefore, the grout fills perfectly the whole anchoring area, even areas of difficult access.

Passives and protects metal surfaces in contact with it, making them lost longer.

Without chlorides or metal aggregates that could favour corrosion.

Application thickness is between 5-70mm





ARDEX Yapı Malzemeleri Ltd. Şti.

İstanbul Deri Organize Sanayi Bölgesi Desen Sok. No:14/A C1 Özel Parsel P.K. 34956 Tuzla / İstanbul / Türkiye

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TS EN 1504-6:2006

40089 ARDEX BG 60 HD EN 1504-6

Cementitious anchoring product

Reaction to Fire : A1Pull out strength $: \le 0.6 \text{ mm}$ at a load of 75 kN

Glass transition temperature : NPD

Creep under tensile load : NPD

Dangerous Substances : Compliance with 5.3 of

EN 1504-6



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Substrate Preparation

The substrate must be firm, non-slip and free from dust, dirt, paint, plaster residues, lime splashes and release agents. Not sustainable, loose or eg. damaged concrete is up on the remove rough and viable mineral core concrete, eventual reinforcement is to be exposed so that it is completely cleaned and with mortar can be sheathed.

The substrate must have a minimum temperature during installation and curing of +5°C and allowed a maximum temperature of +30°C exhibit

Steel column, machine foot etc. Anchors of all kinds of structures and machinery parts to be manufactured must be completely leveled and fixed beforehand. No possibility of correction after application.

The substrate on which the product will be applied must have an adhesion strength of at least $1.5~\rm N/mm^2$.

The edge molds must be smooth, solid and firmly fixed in such a way that they don't move. In order to avoid any gap between the main surface and the mold, if necessary, it should be completely covered with a suitable tape and it should be well insulated against the possibility of the flowing product flowing out.

Appropriate mold oil should be applied to the surfaces of the mold or wedges to be used in contact with the mortar for easy removal later. If the mortar cannot be placed directly from the top, a pipe or a funnel-like equipment that can be transferred into the mold from the side can be used by leaving enough space on the mold.

Preparation of Mortar

The substrate should be firm, rough and clean; it should be wetted so that it is damp but not flooded, when applying theproduct. Mix BG 60 HD with 2/3 of the water necessary and when homogeneous, add the rest of the water until the desired fluid consistency is achieved (4I. total amount of water, per 25 kg bag).

Avoid using excessive water, which can reduce the effectiveness of BG 60 HD. Since the product is a fast product, prepare only the amount of mortar to be applied.

In order to reach hard-to-reach areas, the water rate can be increased to 4.5-5 liters. However, if the water content is increased, it will not be possible to reach the strength values specified in the sheet.

If a thicker consistency mortar is desired, the amount of water in the mixture can be left at around 3 - 4 liters.

Application

The prepared mortar is slowly poured into the mold. The mortar will spread on its own, but while the mortar in the mold is still fresh, a thin stick or trowel is gently moved in the mortar to allow possible air spaces inside to come out and the mortar is placed well. It is not recommended to use a vibrator!

The mortar thus obtained allows fillings up to 70 mm, for higher thicknesses 2 bags of BG 60 HD should be mixed with a bag for approx. 6 mm aggregate. The exposed mortar surface during drying is covered with a PE nylon foil or wet felt for 1-2 days and excessive drying of the surface is prevented. The molds should be removed after at least 1-2 days.

One must ensure proper curing of the mortar being convenient to keep it moist for 2-3 days. When using BG 60 HD formwork must wait at least 12 hours to proceed with the release. Do not apply with temperatures under +5°C and above +30°C. After the mortar starts to dry, water should not be added or mixed again.

Warnings

Contains cement, can act as an irriant to eyes and skin. Must be kept

away from children. Avoid contact with eyes and skin. Should it get into your eyes, rinse immediately and thoroughly with water and consult your doctor. Wear suitable safety gloves. In its cemented state, it is non-toxic and ecologically safe.

Considerations

For the assessment of the load-bearing capacity of the damaged concrete component, in particular for the assessment of reinforcement, concrete cover, etc. and for the determination of the resulting necessary refurbishment is in doubtful cases a knowledgeable planner or structural engineer to consult.

Technical Data According to ARDEX Quality Standards

Mixing Ratio:	approx. 4.0 I water per 25 kg of powder
Weight of fresh mortar:	Approx. 2,2 kg/l
Consumption:	Approx. 1,9 kg powder/m²-mm
Working Time *:	Approx. 30 minutes
Opening Time *:	Approx. 24 hour
Compressive Strength*:	After 1 days, approx. 34 N/mm ² After 3 days, approx. 58 N/mm ² After 7 days, approx. 62 N/mm ² After 28 days, approx. 70 N/mm ²
Flexural Strength*:	After 1 days, approx. 6 N/mm ² After 3 days, approx. 7 N/mm ² After 7 days, approx. 9 N/mm ² After 28 days, approx. 10 N/mm ²
Expansion*:	After 28 days: approx. + %0,1

*All data is approximately based on laboratory test made at a temperature of +20°C nd relative humidity of %65. Environmental conditions may change these values. Higher temperatures and lower relative humidity decrease these duration whereas lower temprature and higher relative humidty increases them.

Application Thickness:	from 5mm to 70 mm
Application Temperature:	below +5°C above +30°C
Packaging:	25 kg paper bag
Storage and Shelf Life:	Can be stored up to 12 months in its original unopened package, in a cool dry area. Do not expose bags to direct sunlight.

Recommended Collomix Mixing Paddle



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