

TECHNICAL SHEET n° 411

Code. 1.967.0525

ardcoat C10

adhesive filler medium-grained for thermal insulation systems, in compliance with EAD 040083-00-0404

GENERAL FEATURES

ARDCOAT C10 is a cementious monocomponent medium-grained ready-mix suitable for the bonding & filling of interior/exterior thermal insulating panels such as expanded polystyrene (EPS), Stiferite, mineral wools (glass or rock) or cork intended for the realization of thermal insulation systems (ETICS).

The remarkable mechanical properties guarantee a stable and solid adhesion to insulating panels, which are notoriously subject to creeping, as well as the most common mural substrates such as bricks, plastered walls, concrete etc.

ARDCOAT C10 is grey color, but it is also available in the white versione ARDCOAT C10 Bianco, code 1.967.0545.

ARDCOAT C10 complies with the requirements in the Guideline for European Technical Approval EAD 040083-00-0404 as adhesive and filler for thermal insulation systems.

INSTRUCTIONS

Substrate preparation

- Surfaces must be dry, coherent & free from dust, grease, oil, wax and, in the case of concrete, from detaching agents
- The substrate must have a uniform water absorption and not have irregularities exceed 1 cm; on the contrary uniform the surface with ARDPLAN AS/BS.
- In case of hot & dry climates we recommend to dampen the surface before the application.
- In presence of chalky surfaces apply a layer of ISOREST appropriately diluted.

Application

- Thoroughly mix a 25 kg pack of ARDCOAT C10 with 6,5 litres of clean water avoiding the formation of lumps, until obtaining an homogeneous and of plastic like consistency. For this we suggest using a mechanical mixer at a low speed.
- Leave to rest for at least 10 minutes, remix delicately without adding water and proceed with the application.
- Use ARDCOAT C10 within 3 hrs from the mix preparation.

- Do not apply below 5°C or above 35°C. Do not apply on frozen substrates or if frost is predicted within 24 hrs after the application; Avoid extremely wet surfaces, strong sunlight & winds.
- Do not apply directly on plaster based surfaces.
- Apply ARDCOAT C10 with trowel or spatula on the surface of the insulating panels and stick them on the surface.
- Allow at least 48 hrs from the application of the insulating panels, smooth the surface with ARDCOAT C10, position the alkali resistant reinforced mesh and apply a second filling which must cover the mesh perfectly. The recommended final finish should be at least 3mm thick.
- Allow at least 2 days before proceeding with the subsequent dowelling. After 5 - 6 days proceed with the desired finishing coat.
- Store the product at ambient temperature & protect against humidity
- Wash equipment with water before the mortar begins to harden.
- The mixed product is highly alkaline: use gloves & protective eyewear and, in case of eye contact, wash eyes immediately with plenty of water. Refer to the PSDS for further details.

TECHNICAL PROPERTIES

UNI EN 998-1 conformity

CLASSIFICATION WITH UNI EN 998-1	GP CS IV
MAX AGGREGATE SIZE	1 mm
APPARENT VOLUME MASS OF POWDER	1550 kg/m³
HARDENED MORTAR VOLUMIC MASS AFTER 28 DAYS	1450 kg/m³
COMPRESSION RESISTANCE AFTER 28 DAYS	10 N/mm ²
FLEXURE RESISTANCE AFTER 28 DAYS	4.5 N/mm ²
CAPILLARY WATER ABSORPTION	< 0,30 kg/m²min ^{0,5} (W1)
WATER VAPOUR PERMEABILITY μ	< 30
DYNAMIC ELASTIC MODULUS AFTER 28 DAY	8000 N/mm²
ADHESION TO CONCRETE SUBSTRATES	0,8 N/mm² type B fracture
ADHESION TO EPS SUBSTRATE	>0,1 N/mm² type C fracture
USEFUL LIFE OF THE MIX (Pot-Life)	3 hrs max
THERMAL CONDUCTIVITY λ	0,45 W/mK
FLASH POINT	Eclass A1
VOLATILE ORGANIC COMPOUND (VOC)	< 0,01 %

YIELD

The yield of ARDCOAT C10 varies according to the substrate's planarity and to the filling thickness. Approximately about 10 kg/m² of powdered product is expected to be used, considering its use both as adhesive and filler in the thermal insulation svstem.

ITEM

TENDER SPECIFICATION ADHESIVE FOR THERMAL INSULATION SYSTEM

Application on treated surfaces of cement based adhesive mediumgrained for ETICS', synthetic unsaponifiable copolymers & selected quartz flour, like ARDCOAT C10 with a minimum consumption of 3-5 kg/m² of powdered product. €/m²

FILLER FOR THERMAL INSULATION SYSTEM

Application on treated insulating surfaces of an medium-grained adhesive for cement based insulation systems (ETICS) synthetic unsaponifiable copolymers and selected quartz flour, type ARDCOAT C10 with a minimum consumption of 5 kg/m² of powdered product for a 4 mm thickness. €/m²

REINFIRCED FILLER

Application on treated surfaces of a cement medium-grained based filler synthetic unsaponifiable copolymers & selected quartz flour, type ARDCOAT C10 with a minimum consumption of 5 kg/m² of powdered product for a 4 mm thickness. €/m²

The data herein were correct at the time of Quality Control and refer to standardized environmental conditions. The mechanical resistance refers to standardized conditions and may differ to those in construction sites. The same are to be considered as a guide. Revisione 2024/04