

# TECHNICAI DATA SHEET n° 408

Code 1.967.0535

# ardcoat S8

siliceous adhesive filler for thermal insulation systems, compliant to EAD 040083-00-0404 requirements

# GENERAL PROPERTIES

ARDCOAT S8 is a ready-mix based on high quality Portland cement, fluvial silica sands and additives, suitable for the bonding and filling in interior and exterior of thermal insulation panels such as EPS, Stiferite, mineral wools (glass or rock) or cork intended for the realization of thermal insulation systems.

The remarkable mechanical properties guarantee a 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 ect.

Furthermore, the particular granulometry and optimum workability make ARDCOAT S8 a filling mortar which offers an excellent uniforming power, easy application with a finishing similar to two-coat plaster work. It is also suitable for reinforced fillings on coplanar surfaces with old paintwork or bonded coatings.

ARDCOAT S8 is compliant to the requirements on the European evaluation EAD 040083-00-0404 as adhesive filler for thermal insulation systems.

#### **INSTRUCTIONS**

### Support preparation

- Surfaces to treat must be dry, coherent, free of dust and grease, oil, wax and, in case of concrete, of detaching agents.
- Support must have a uniform water absorption and it does not have irregularities more than 1 cm; otherwise even the surface with ARDPLAN AS/BS.
- In case of hot and dry climate we recommend dampening the substrate before application.
- In presence of chalky surfaces apply a layer of ISOREST diluted appropriately.

## **Application**

- Throughly mix a 25 kg pack of ARDCOAT S8 with 6,7 litres of clean water avoiding the formation of lumps, until homogeneous and of plastic like consistency. For this it is suggested 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 S8 within 3 hours of mixture preparation.
- Do not apply below 5°C or above 35°C. Do not apply on frozen substrates or with frost risk within 24 hours; evitare superfici molto bagnate, avoid extremely wet surfaces, strong sunlight and winds.

- Do not apply directly on plaster based surfaces.
- Apply ARDCOAT S8 by trowel or spatula on the insulating panels and stick them on the substrate.
- Allow at least 48 hours, smooth the surface with ARDCOAT S8, 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.
- The dowelling can be made after at least 2 days from the panel application; allow 5-6 days from the even and proceed with the desired finishing coat.
- Store the product at environment temperature and protect against humidity.
- Wash equipment with water before the mortar begins to harden.
- The mixed product is highly alkaline: use gloves & protective eyeweare and in case of eye contact, wash with plenty of water. For further details refer to the PSDS.

# **TECHNICAL DATA** according to UNI EN 998-1

CLASSIFICATION ACCORDING TO UNI EN 998-1	GP CS IV – W2
MAX AGGREGATE SIZE	0,8 mm
APPARENT VOLUME MASS OF POWDER	1480 kg/m³
HARDENED MORTAR VOLUMIC MASS AFTER 28DAYS	1500 kg/m³
COMPRESSION RESISTANCE AFTER 28 DAYS	11,0 N/mm <sup>2</sup>
FLEXURE RESISTENCE AFTER 28 DAYS	5,0 N/mm <sup>2</sup>
CAPILLARY WATER ABSORPTION	< 0,20 kg/m²min <sup>0,5</sup> (W2)
WATER VAPOUR PERMEABILITY μ	30
DYNAMIC ELASTIC MODULUS AFTER 28 DAYS	9000 N/mm²
ADHESION TO CONCRETE SUBSTRATES	>1,0 N/mm <sup>2</sup> B fracture
ADHESION TO EPS SUBSTRATE	>0,1 N/mm <sup>2</sup> C fracture
POT - LIFE	Max 3 hrs
THERMAL CONDUCTIVITY $\lambda$	0,50 W/mK
FLASH POINT	Euroclass A1
VOC	< 0,01 %

#### **YIELD**

ARDCOAT S8 yield varies according to the substrate's planarity and filling thickness. Approximately 9 kg/m² of powder product is expected to be used, considering the usage both as an adhesive and as filler in the thermal insulation systems.

# TENDER SPECIFICATION ADHESIVE FOR THERMAL INSULATION SYSTEM ITEM

Application on treated surfaces of insulation system adhesive cement, synthetic unsaponifiable copolymers and selected quartz flour based, like ARDCOAT S8 with a minimum consumption of 3-5 kg/m² of powdered product. €/m²

### FILLER FOR THERMAL INSULATION SYSTEM

Application on treated insulating surfaces, of insulation system filler cement, synthetic unsaponifiable copolymers and selected quartz flour based, like ARDCOAT S8 with a minimum consumption of 4 kg/m² of powdered product for a 3 mm thickness. €/m²

### SKIMMING LAYER

Application on treated surfaces, of cement, synthetic unsaponifiable copolymers and selected quartz flour based filler, like ARDCOAT S8 with a minimum consumption of 4 kg/m² of powdered product for a 3 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.

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