

# air-one mc hd

04/21 241



## AIR-ONE MC HD

Lightened multi-consistency cement-based adhesive with very low emission of dust for fixing porcelain stoneware in medium and large sizes even in a single coat.

**bonding agents  
and adhesives**





31-38±1% grey  
31-37±1% white



5-35°C



30 min



6-15 mm



4 h



25 mm



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**LOW VOC**  
product  
**TESTED BY:**  
EUROFINS

## MAIN FEATURES

- Very low dust emission
- Multi-consistency, can be used in both thixotropic or fluid consistencies
- layers up to 25 mm thick (thixotropic consistency)
- Highly deformable
- No vertical creep (thixotropic consistency)
- Extended open time
- VOC emissions: EC1 plus, very low emission

## APPEARANCE

Grey and white powder

## STORAGE

12 months in a dry place

## FIELDS OF USE

- Fixing ceramic tiles of all types, even large sizes, on indoor and outdoor walls and floors.
- Fixing stone materials if not liable to staining.
- Suitable for use when high performance is required, such as: tile laying in industrial environments, swimming pools or façades.
- Over-tiling on top of old ceramic tiles.
- Suitable for fixing thin porcelain stoneware slabs.
- Fixing on electric or water heating screeds.
- Spot-glueing insulating panels made of polystyrene, polyurethane foam, rock or glass wool and cork.

## SUBSTRATES

Cement-based plaster, cement-lime mortar, gypsum-based plaster<sup>1</sup>, anhydrite screeds<sup>1</sup>, cement-based screeds, concrete, aerated concrete, old ceramic floors, resilient floors perfectly adherent (excluding polyolefin coatings)<sup>2</sup>, plasterboard, RASOLASTIK-PLUS line and RASOGUM+.

<sup>1</sup> after application of PRIMER-T PLUS

<sup>2</sup> after application of PRIMER-101 PLUS

## NATURE OF THE PRODUCT

AIR-ONE MC HD mainly consists of high-strength cements, selected silicon/quartz mineral charges and specific additives. Ask the technical office for the safety sheet containing further details or download it from the web site [www.technokolla.com](http://www.technokolla.com).



## OPERATIONS PRIOR TO APPLICATION

Small localized hollows or gravel pockets in the case of concrete can be levelled (max. 5 mm thick) with AIR-ONE MC HD 24 h prior to fixing. If thicker layers are required, use GAP or GAP-R respectively 24 h and 6 h before fixing tiles.

## HOW TO PREPARE THE MIXTURE

GREY POWDER		WHITE POWDER	
Thixo	Fluid	Thixo	Fluid
6.2 l water (31% ± 1%) per 20 kg	7.6 l water (38% ± 1%) per 20 kg	6.2 l water (31% ± 1%) per 20 kg	7.6 l water (38% ± 1%) per 20 kg

Blend the contents of the powder bag in a clean vessel with the quantity of water indicated above, depending on the required consistency. Use a blender fitted with blending tool at a low rate until mixture is smooth and lump-free. Use the blender at max. 500 rpm. After blending, allow mixture to stand for about 3 min, then stir again before applying.

## APPLICATION

AIR-ONE MC HD is applied to substrate with a serrated trowel. Regardless of the consistency used, the amount of product applied must be sufficient to completely wet the underside of the tiles. The tiles must be laid with freshly made adhesive. Apply sufficient pressure to tiles to ensure full contact with adhesive and achieve a perfect bond. Pass the serrated trowel over the previously applied coat of adhesive again if a skin forms on the surface. Do not wet the adhesive with water once it has been applied as this impairs its bonding properties.

If tiles measure 900 cm<sup>2</sup> (e.g. 30 x 30 cm) or more, always use the double coating technique or use the product in a fluid consistency and apply with a trowel suited to the tile size.

## WARNINGS AND RECOMMENDATIONS

It is always advisable to apply two coats or use in fluid consistency when laying tile sizes measuring 900 cm<sup>2</sup> or more.

### Do not apply to:

- wood, metal
- old tiles outdoor

### Do not use:

- at temperatures lower than 5°C or higher than 35°C
- in layers thicker than 6 mm if consistency is fluid
- in layers thicker than 25 mm if consistency is thixotropic.

## CONSUMPTION

Trowel	6x6 mm	10x10 mm	15x15 mm
Air-One MC HD	2.1 kg/m <sup>2</sup>	2.9 kg/m <sup>2</sup>	3.5 kg/m <sup>2</sup>

The consumption data refer to use of the product in the fluid consistency.

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TECHNICAL DATA	VALUE				REQUIREMENT	STANDARD
Curing time	3 min					
Pot life	*~4 h					
Open time	*30 min				°30 min	EN 1346
Ready for traffic	*After 24-36 h					
Floor tiles can be grouted	*After 24-36 h					
Wall tiles can be grouted	*After 4-6 h					
Surface can be used	*After 14 days ( 21 days in tanks and swimming pools)					
Creep on vertical wall	≤ 0.5 mm				°≤ 0.5 mm	EN 1308
	GREY		WHITE			
	Thixo	Fluid	Thixo	Fluid		
Initial tensile strength	~2.2	~2.2	~1.8	~1.5	°≥ 1 N/mm <sup>2</sup>	EN 1348
Tensile strength after the action of heat	~2.3	~2.0	~2.1	~1.5	°≥ 1 N/mm <sup>2</sup>	EN 1348
Tensile strength after immersion in water	~1.4	~1.3	~1.2	~1.2	°≥ 1 N/mm <sup>2</sup>	EN 1348
Bond after freezing/thawing cycles	~1.9	~1.5	~1.6	~1.2	°≥ 1 N/mm <sup>2</sup>	EN 1348
Transverse deformation mm	~2.7	~2.6	~2.6	~2.6	≥ 2.5 mm	EN 12002

° according to standard "EN 12004".

\* these time intervals refer to a temperature of 23°C-50% R.H. They become shorter with higher temperatures and longer at lower temperatures.

## EMICODE

Emission class	r.p. No. Eurofins
EC1 Plus	392-2015-00379201_G_EN_01

## SPECIFICATION

Ceramic floor and wall tiles must be fixed with class "C2TE S1 cement-based self-wetting powder adhesive according to standard EN 12004", such as TECHNOKOLLA's AIR-ONE MC HD, which can be applied in layers up to 25 mm thick on cement-based substrates.

**Technokolla** reminds you to examine the "notes" document that completes the information in this data sheet. The document can be downloaded in the pdf format from the website [www.technokolla.com](http://www.technokolla.com).

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