## **Technical Datasheet Tile Adhesives**



# ARDEX X 701 TW

## Flexible Tile Adhesive, White

- Cement based
- Highly flexible
- Water and frost resistant
- Excellent adhesion to tiles with poor water absorption
- For setting floor and wall tiles, glass mosaic, natural stone, etc.
- High strength
- Extended working time



### DESCRIPTION

ARDEX X 701 TW is a cement-based, floor and wall tile adhesives, with an extended open time of up to 30 minutes. Specifically formulated to have enhanced properties of adhesion and flexibility, the advanced slump resistance properties make ARDEX X 701 TW ideal for fixing large format wall tiles.

### USE

ARDEX X 701TW is ideal for fixing ceramic or fully vitrified tiles and other tiles with low porosity, as well as glass and porcelain mosaics, and terrazzo. The TS EN 12004 C2 TE S1 designation for ARDEX X 701 TW classifies the adhesives as an "improved cementitious adhesives with additional characteristics, reduced slip and extended open time". The additional characteristics for ARDEX X 701 TW determined in accordance with TS EN 12004, makes these products ideal for fixing all types of ceramic tiles and mosaics, in internal and external situations, including swimming pools.

The mixed mortar has a slump free consistency with very high initial grab enabling heavy wall tiles to be fixed, thus reducing the need for battens and spacers. ARDEX X 701 TW adheres strongly to most construction materials such as concrete, cement and sand renders and screeds, heated sub-floors, brickwork and blockwork, gypsum plaster, plasterboard and primed existing ceramic tiled surfaces.



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EN 12004:2007+A1:2012		
40059 ARDEX X 701 TW, EN 12004:C2TE-S1		
Improved deformable cementitious adhesive with reduced slip and extended open time for internal and external tiling		
Reaction to fire	:E	
Bond strength		
Initial tensile adhesion strength	$: \ge 1,0 \text{ N/mm}^2$	
Durability of bond strength		
Tensile adhesion strength after heat ageing	$:\ge$ 1,0 N/mm <sup>2</sup>	
Tensile adhesion strength after water immersion	$r_{1,0} \text{ N/mm}^2$	
Tensile adhesion strength after freeze- thaw cycles	$r_{\rm M} \geq 1,0~{ m N/mm^2}$	
Release of dangerous substances:	· NPD	



# ARDEX X 701 TW

# Flexible Tile Adhesive

#### SUBSTRATE PREPERATION

The backgrounds and surfaces to receive the tiles must be clean, firm, free of dust, dirt, oil, grease and other barriers to adhesion, as well as being strong enough to support the weight of the tiles being fixed. Ensure that the background has adequate drying time and correctly primed, where required, prior to fixing the tiles. Backgrounds to receive ceramic tiles should be finished to Surface Regularity 1 i.e. so any gap under a 2m straight edge does not exceed 3mm.

ARDEX X 701 TW can be applied to dry or moist surfaces, but moisture sensitive materials must be dry and remain dry after fixing. ARDEX 8+9 waterproofing compound can be used prior to tiling to create a waterproof protective coating that guarantees the prevention of water damage to floors and walls, by protecting moisture sensitive backgrounds in wet locations.

#### PRIMING

#### ARDEX P51

Concentrated Water-Based Primer and Bonding Agent for use on absorbent backgrounds, plaster and anhydrite/ calcium sulphate screeds prior to the use of ARDEX X 701 TW. Dilute ARDEX P 51 1:3 with water.

#### <u>ARDEX P 4</u>

Ready Mixed, Multipurpose, Rapid Drying Primer for use on ceramic and porcelain tiles, concrete and terrazzo. ARDEX P 4 Primer is solvent free, and dries after 60 minutes. It is suitable for use in dry, damp or wet (not submerged) internal and external locations.

#### ARDEX P 82

Non-Flammable, Water-Based Synthetic Primer for use on smooth impervious surfaces including existing ceramic tiling, internal asphalt, terrazzo, timber walls, sound and well adhered paint coatings and old adhesive residues, prior to the use of ARDEX X 701 TW.

#### MIXING

ARDEX X 701 powder is added to clean water in a clean container whilst stirring, and mixed thoroughly to give a slump free, easily worked mortar.

The mix proportions by volume is approx. 1 parts ARDEX X 701 TW powder to 1 part water. A 25 kg bag of ARDEX X 701 requires approx. 11.0 litres of water. DO NOT EXCEED the maximum water content.

The consistency of the adhesive can be adjusted to suit site conditions and the materials being fixed.

The mixed mortar should be applied at temperatures above 5°C.

The pot life of the mixed mortar is approximately 3 hours at 20°C.

#### APPLICATION

The mixed adhesive is applied to the prepared surface with a trowel and then combed through with a suitably sized notched trowel in straight ribs to give a ribbed mortar bed. The tiles should be fixed within the open time of the applied adhesive and pressed into place with a twisting and sliding action to achieve the required contact. For tiling to walls in dry internal locations the adhesive contact should be with at least 50% of the back of the tile. For maximum performance at least 80% adhesive contact of the back of the tile should be achieved.

When tiling to floors, wet areas such as showers and swimming pools, or in external locations achieving a solid bed usually requires the back of the tiles to be buttered immediately prior to placing into the ribbed bed so no voids are left beneath the tiles. The size of notched trowel chosen depends on the tile size, the surface being tiled, the profile on the back of the tile and the degree of coverage required.

#### NOTES

When installing tiles or insulation materials on building boards, for example. chipboard, these must be screwed onto a wooden grid or fastened on similar way so that they can not move.

ARDEX 8 + 9 waterproofing compound is recommended for moisture protection of the substrate. For marble and other moisture-sensitive natural stones, using ARDEX N 23 W is recommended.

#### PRECAUTIONS

ARDEX FB 9 L contains Portland cement. Avoid eye and skin contact. Mix in a well ventilated area and avoid breathing powder or dust. KEEP OUT OF REACH OF CHILDREN. Carefully read and follow all cautions and warnings on product label. For complete safety information, please refer to the Material Safety Data Sheet or visit our website at www.ardex.com.tr

Physiologically and ecologically friendly when set.

#### **Technical Data According To ARDEX Quality Standards**

Mixing Ratio	Approx. 11.0 liters per 25kg bag	s of water
Density of dry powder	Approx. 1,10 kg/l	
Weight of fresh mortar	Approx. 1,50 kg/l	
Material Requirement	Depending on the substrate and the trowel size; (approx.)	
	Trowel Size	Consumption
	4x4x4mm	1,6 kg/m²
	6x6x6mm	2,2 kg/m²
	8x8x8mm	2,5 kg/m²
Pot Life *:	Approx. 5 hours	
Open Time *:	Approx. 30 minutes	
Fixing Time *:	Approx. 20 minutes	
Walkability / Grouting *:	Gets walkable and groutable after approx. 24 hours. (8 hours for walls)	

\*All data is approximately based on laboratory test made at a temperature of +20°C and 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.

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Tensile Strength:	For stoneware tiles; According to EN 12004 dry, 1.0 - 2.0 N/mm <sup>2</sup> wet, 1.0 - 2.0 N/mm <sup>2</sup> freeze-thaw,1.0 - 1.5 N/mm <sup>2</sup>
Suitable for underfloor heating:	Yes
GHS/CLP Classification:	GHS 05, Corrosive
GGVSEV/ADR Classification:	None
Packaging	25 kg paper bag
Storage and shelf life	Can be stored up to 12 months in its original unopened package, in a

its original unopened package, in a cool dry area. Do not expose bags to direct sunlight.

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