

# ARDEX N 22\*

# Rapid curing natural stone adhesive, white

- Ideal for use with moisture-sensitive stone, virtually eliminates staining, warping and discoloration
- Fast setting walk on and grout in 3 hours
- Ideal for use with heavy and large format tiles
- Easy to mix and apply; mixes using just water
- \* We've upgraded ARDEX Marble and Granite Adhesive, introducing the advanced ARDEX N 22.



### USE

ARDEX N 22 is a versatile multipurpose tile adhesive, with enhanced properties of adhesion, suitable for fixing ceramic, porcelain, glass mosaics, and most non-moisture sensitive natural stone floor and wall tiles. ARDEX N 22 is frost and weather resistant, and can be used internally and externally as well as in wet areas and swimming pools.

### **DESCRIPTION**

ARDEX N 22 is classified as C2 FE "improved fast setting cementitious adhesive with extended opentime" in accordance-with TS EN 12004.

ARDEX N22 is a special rapid hardening and drying, cement-based adhesive for fixing natural stone floor and wall tiles including moisture sensitive natural stone tiles and uncalibrated natural stone floor tiles. It may also be used for con-crete slabs and ceramic tiles including porcelain tiles in internal and external situations. Tiles fixed with ARDEX N 22 can be grouted and subjected to foot traffic 3 hours after fixing at nor-mal temperatures (20°C), even at maximum thickness.

It is particularly suitable for use in situations where the adhesive bed has to dry quickly to reduce the risk of moisture staining of the stone. ARDEX N 22 is a white powder based on special cements, high quality synthetic resins and fillers, which is mixed with-water to produce an easily applied mortar with a working time of ap-proximately 30 minutes. The mortar adheres strongly to most building materials such as concrete, cement/sand render and screeds, brickwork, blockwork, etc. In some cases surface preparation, such as priming may be required prior to fixing. For fixing on wooden or asphalt floors consult ARDEX Technical Department.

### **SURFACE PREPARATION**

The surface being adhered to must be clean, firm, free of dust, dirt, oil, grease and other barrier materials as well as being strong enough to support the weight of the tiles being fixed.

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### 40024 EN 12004:2012

### 40024 ARDEX N 22, EN 12004:C2FE

Improved fast setting cementitious adhesive with extended open time for internal and external tiling

Reaction to fire : E

**Bond Strength** 

Initial tensile adesion strength
Early tensile adhesion strength

 $: \ge 1,0 \text{ N/mm}^2$  $: \ge 0,5 \text{ N/mm}^2$ 

Durability of Bond Strength

Tensile adhesion strength after heat aging
Tensile adhesion strength after water immersion

: ≥ 1,0 N/mm<sup>2</sup> : ≥ 1,0 N/mm<sup>2</sup>

Tensile adhesion strength after freeze-thaw cycles

: ≥ 1,0 N/mm²

Release of dangerous substances

: NPD





ARDEX Turkey is a subsidiary of the International ARDEX Group.

# **ARDEX N 22**

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Ensure that the drying time for the background has elapsed prior to fixing the tiles. ARDEX N22 can be applied to dry or moist surfaces, e.g. cement/sand, concrete etc., but moisture sen-sitive materials must be dry and remain dry after fixing. Screeds and wall plasters based on calcium sulfate, e.g. anhydrite/hemihydrate screeds, should be dry and the surface suitably prepared before priming with ARDEX P 51 primer, diluted 1 part to 3 parts water.

**NOTE:** The surface of calcium sulfate based screeds should be prepared in accordance with the screed manufacturer's instructions. When fixing to very smooth, dense and impervious surfaces, such as existing ceramic floor tiles (glazed or unglazed), terrazzo etc., the surface should be initially primed with ARDEX P 82 primer, for internal dry areas. Before application on glass, glass brick and similar nonabsorbent surfaces, ARDEX N22 is mixed with ARDEX E75 and water in a 1:1 ratio and applied to the application area and the back surface of the material to be applied in order to form an adherence bridge

#### ARDEX P 4

Solvent free, ready mixed rapid drying primer used prior to the application of ceramic tile adhesives and levelling compounds. ARDEX P 4 Primer produces a textured surface and dries in as little as one hour, it is particularly useful for tile on tile applications.

#### **MIXING**

Add the ARDEX N 22 powder to water in a clean container, whilst stirring and mixing thoroughly to give a slumpfree, easily worked mortar. The use of an ARDEX mixing paddle with a 10mm chuck, variable speed electric drill, makes light work of mixing.

The mixing proportions by volume are: Approximately  $4^{\mathcal{V}4}$  –  $6^{\mathcal{V}4}$  parts of ARDEX N 22 powder: 1 part water. A 25kg bag of ARDEX N 22 requires approximately 4,0 - 6,0 litres of water.

The consistency of the adhesive can be adjusted to suit site conditions and the materials being fixed, but must always be slumpfree. The pot life of the mixed mortar is approximately 1 hour at normal temperatures (20°C). The mortar should be applied at temperatures above  $5^{\circ}\text{C}$ .

### APPLICATION

For fixing natural stone tiles, use a suitably sized notched trowel to give a ribbed mortar bed on the substrate, into which the tiles are firmly bedded whilst the mortar is moist and soft. Floor tiles, slabs with keyed back profiles and translucent stones need to be buttered to ensure solid bedding.

The area covered with ARDEX N22 mortar should be limited so that tiles can be fixed within the open time. If the mortar is applied immediately after mixing, the open time is approximately 30 minutes but this time will be greatly reduced if the mixed mortar is left longer before applying. ARDEX Marble & Granite Adhe-sive is classified as having an extended open time of no less than 30 minutes when measured in accordance with TS EN 12004.

For optimum performance under typical site conditions tiles should be fixed within 20 minutes. On particularly rough or uneven floor or wall surfaces it is advisable to pre-level the surface with ARDEX N 22 and once this initial layer has hardened, (approxi-mately 3 hours after application) proceed with the normal fixing tech-nique. Holes and depresions can be pre-filled and substrates levelled providing that the substrate is sufficiently strong and the total thickness of adhesive and pre-levelling mortar does not exceed 30mm.

### **GROUTING**

Natural stone tiles and slabs fixed in ARDEX N22 may be grouted as soon as the tile bed is sufficiently firm, usually 3 hours after fixing at  $20^{\circ}\text{C}$ .

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

Mixing ratio:	4 - 6 liters of water per 25kg bag	
Bulk density:	Approx. 1.4 kg/l	
Weight of fresh mortar	Approx. 1.4 kg/l	
Material Requirement	Depending on the substrate and the trowel size; (approx.)	
	Trowel Size	Consumption
	3x3x3mm	1,7 kg toz/m²
	6x6x6mm	2,4 kg toz/m²
	8x8x8mm	3,5 kg toz/m²
Working time / Pot life *:	Approx. 1 hour	
Open time *:	Approx. 30 minutes	
Fixing time *:	Approx. 20 minutes	
Walkability / Grouting *:	Gets walkable and groutable after approx. 3 hours.	

\*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.

Suitable for underfloor heating:	Yes
EMICODE:	EC 1 Plus - Very low emmission
GHS/CLP classification:	GHS 05, Corrosive
GGVSEV/ADR classification:	None
Packaging:	25 kg paper bag

## Storage and Shelf Life:

ARDEX N 22 must be stored in unopened packaging, clear of the ground in cool dry conditions and be protected from excess ve draught. If stored correctly, as detailed above, the shelf life of this product is 12 months from the date shown on the packaging

Recommended mixing paddle:



