

SYSTEM FOR LAYING FLOOR AND WALL COVERINGS / ADHESIVES

# AZ 59 FLEX



# Composition

AZ 59 FLEX is a dry premixed adhesive made from white or grey Portland cement, graded sand, containing a high quantity of synthetic resins and specific additives to improve workability and adhesion.

#### Supply

- White and grey AZ 59 FLEX: Special sacks with protection against moisture, approx. 25 kg
- White AZ 59 FLEX: approx. 5 kg bags in boxes of 5

#### Use

AZ 59 FLEX is used for cementing ceramic tiles, gres, natural stones, if not susceptible to staining and moisture, etc. onto lime and cement based plasters, long-standing dry cementitious floor screeds and long-standing concrete floors with no deflection, on existing ceramic floors, gres, marble, heated floors, plasterboard, etc.

## Substrate preparation

The application surface must be free from dust, dirt, etc. Any traces of oil, grease, wax etc. must be removed beforehand, as well as any powdery or loose sections.

#### **Mixing**

Add about 28% of clean water to each sack of AZ 59 FLEX (approx. 7 litres for each 25 kg sack or approx. 1.5 litres for each 5 kg sack) and mix by hand or with a mechanical stirrer until you obtain a uniform and smooth mix. Then wait 10 minutes before application. Stir again and apply the adhesive using a notched trowel. The mix remains workable for around 8 hours. It is not necessary to moisten tiles before application. The tiles are laid by applying gentle downward pressure and then tapping them carefully so that the entire surface is in perfect contact with the adhesive. Any re-aligning of the tiles after laying must be carried out within 50-60 minutes. If the adhesive forms a film on the surface, do not moisten the surface but go over it again with the notched trowel. When cementing tiles for exteriors or laying floors that are polished on site, also apply a layer of adhesive onto the back of the tiles.





#### Sealing the joints

Use FC 830 GF 0-4 for joints from 0 to 4 mm, FC 869 GM 2-10 for joints from 2 to 10 mm, FC 872 GM 2-20 for joints from 2 to 20 mm and FC 854 GG 4-15 for joints from 4 to 15 mm. In case a high chemical resistance is required, use epoxide based joint grout FE 838 (for joints from 3 to 15 mm), BLUCOLORS (for joints from 2 to 20 mm) or BLUCOLORS ZERO (for joints from 0 to 2 mm). Seal joints (expansion and perimeter joints, corners between floor and covering, edges, etc.) with FASSASIL NTR (neutral-reticulation silicone sealant) or SYLAN 290 (silane-terminated polymer adhesive-sealant with low modulus of elasticity, moisture curing).

## Warnings

- Fresh adhesive should be protected from direct sun and rain for at least 24 hours.

AZ 59 FLEX must only be used in its original state, without the addition of other materials.

## Storage

Store in a dry place for no longer than 12 months.

# Quality

AZ 59 FLEX is subjected to careful and constant testing in our laboratories. The raw materials used are rigorously selected and checked.

# **Technical Data**

Appearance	white or grey powder		
Specific weight of the powder	approx. 1300 kg/m <sup>3</sup>		
Maximum thickness	10 mm		
Grading	< 0.6 mm		
Mixing water	approx. 28%		
Yield	approx. 3-4 kg/m <sup>2</sup>		
Maturing time	approx. 10 minutes		
Specific weight of the wet mortar	1650 kg/m³		
Density of hardened adhesive	1500 kg/m³		
рН	> approx. 12		
Duration of the mix at +20°C	approx. 8 hours		
Application temperature	from +approx. 5°C to +35 °C		
Open time	approx. 30 minutes		
Tile adjustment time	approx. 60 minutes		
Waiting time before grouting the joints	approx. 1 day		
Ready for normal use	after at least 14 days		
Flexural strength after 28 days	approx. 7 N/mm <sup>2</sup>		
Compressive strength after 28 days	approx. 13 N/mm <sup>2</sup>		
Modulus of elasticity after 28 days	approx. 6500 N/mm <sup>2</sup>		
Flexibility	good		
GEV Classification	GEV EMICODE EC 1 <sup>Plus</sup> - very low emission		
Complies with the EN 12004 standard	C2 TE-S1		





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Standard EN 12004/1348/1346/1308/120 02 C2TES1	Certified value for white colour	Certified value for grey colour	Requirement to meet standard
Initial tensile adhesion strength	approx. 2,6 N/mm <sup>2</sup>	approx. 2.3 N/mm <sup>2</sup>	≥ 1 N/mm²
Tensile adhesion strength after water immersion	approx. 1.5 N/mm <sup>2</sup>	approx. 1.5 N/mm <sup>2</sup>	≥ 1 N/mm²
Tensile adhesion strength after heating	approx. 3.1 N/mm <sup>2</sup>	approx. 2.1 N/mm <sup>2</sup>	≥ 1 N/mm²
Tensile adhesion strength after freeze-thaw cycles	approx. 1.9 N/mm <sup>2</sup>	approx. 1.9 N/mm <sup>2</sup>	≥ 1 N/mm²
Extended open time	30 minutes	30 minutes	30 minutes
Vertical slippage	0.26 mm	0.05 mm	≤ 0.5 mm
Transverse deformation	3.1 mm	3.2 mm	≥ 2.5 mm
Do not use for		In alternative	
Laying directly on gypsum or anhydrite substrates		PRIMER DG 74 – AZ 59 FLEX	
When the building has to be declared suitable for habitation as soon as possible		AQ 60 STONE	
Laying on wooden or metal surfaces		AX 91	
Thickness greater than 10 mm		AT 99 MAXYFLEX	

The above information refers to laboratory testing; it is possible that in practical applications on site it may differ according to the conditions in which the material is applied. In any case the user should verify that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.



