

# BENFERFLEX N

WHITE AND GREY  
SPECIAL FLEXIBLE ADHESIVE WITH  
A HIGH SYNTHETIC RESIN CONTENT  
FROST-RESISTANT



## TECHNICAL FEATURES:

**Benferflex N** is a powder adhesive made up by grey or white cements, aggregate with selected granulometry, synthetic resins and special additives. Its formula has been conceived and developed for quick and sure laying of almost the total type of ceramic materials also onto non-absorbing foundations, or onto foundations that are subject to slight dimensional variations.

## FIELDS OF APPLICATION:

For laying porcelain tiles and non-absorbing ceramic tiles.

For interior or exterior laying of ceramic floor and wall tiles or natural stones of all types also onto smooth and non absorbing foundations.

Interior or exterior laying of ceramic floor and wall tiles and natural stones, in size up to 60x60.

Laying of heated floors.

Laying of prefabricated or casted concrete.

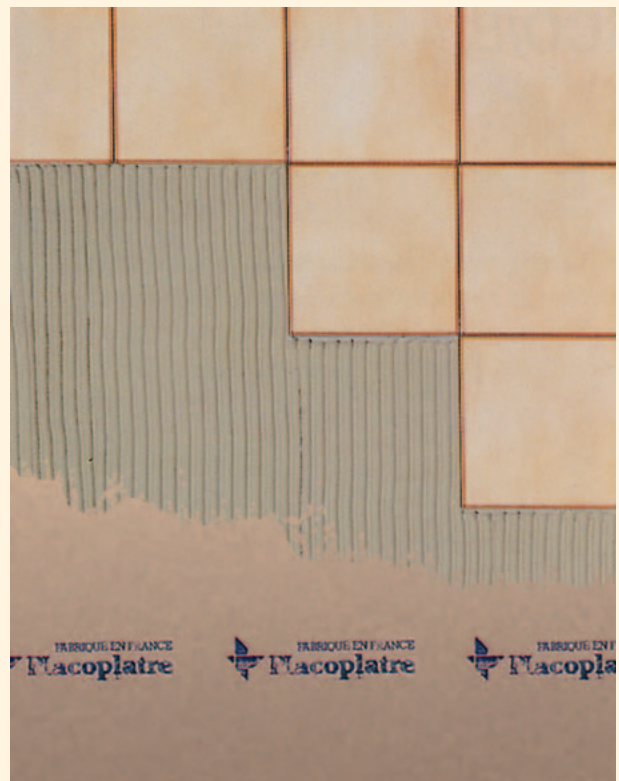
Laying of cardboard-plaster or plaster card boarded panels.

Laying of insulating polystyrene or cork panels.



## METHOD OF USE AND CONTRA-INDICATIONS:

Foundations must be free from oils, greases or powders. Eventual painted surfaces must be in best condition, washed and degreased; in the contrary case, it is indispensable to eliminate accurately any paints from the plaster. For laying on old floors of ceramics tiles, gres, marble or similar materials, it is necessary to ensure that these are properly fixed to the foundation, washed and degreased. Do not use on substrates in gypsum, scagliola and anhydrite or on particularly absorbent substrates without first





**EXTERIOR:** The contact between tile and adhesive must be 95-100% so to avoid the eventual rain infiltrations that in case of frost could cause the detachment of the tiles. Therefore, it is suggested to spread also a layer of **Benferflex N** on the back of the tiles. Such precautions must be taken also by interior wall coatings and floors of industrial cold-storage rooms, tanks, swimming pools etc. At 23° and 50% of relative humidity the open time is of about 20 minutes and that of correction is of about 30 minutes. Under unfavourable conditions these time intervals reduce notably, therefore it is important to spread the adhesive gradually, using little quantities every time, and to verify often that it hasn't formed a superficial film before tiling. To make better the workability especially during the summer, it is useful to damp the working milieu and to eliminate the eventual currents of air. During the first 48 hours following the tiling the glue cannot stand the frost. The floors tiled with **Benferflex N** can be opened to foot-traffic cautiously after about 24 hours for grouting, and they are ready for normal traffic after 14 days.

treating them with **Benferprim**.

It is indispensable always to leave a joint of at least 3 mm between tile and tile, and for laying wall tiles it is necessary to respect the expansion joints of the structure, which must be filled up elastically, and the joints between wall and wall and between wall and floor. In any case expansion or perimetric joints must be left every 20 m<sup>2</sup>.

#### **PREPARATION OF THE MIXTURE:**

Mix **Benferflex N** with 28% of water (pour the powder in the water and not vice versa) until you obtain a homogeneous, bright, plastic adhesive. Leave it rest for 5 minutes, and then re-mix rapidly. The adhesive is now ready for use and it must be used within 2 hours.

#### **TILING:**

**INTERIOR:** Lay the tiles while exerting a good pressure on the tiles surface, so that contact between tile and adhesive will be at least of 80% of their surface for wall coatings and of 95-100% for floor.



**COVERAGE:**

It depends on the foundation and the type of trowel utilized. For smooth foundation and adhesive thickness of 5-6 mm the coverage of **Benferflex N** is 4-5 kg per m<sup>2</sup> and it increases to 0,5-1 kg per m<sup>2</sup> for rough foundations.

**CLEANING:**

The cleaning of the coating must be effected by means of a damp cloth or sponge when the adhesive has already started to set and it can be done by using greater quantity of water only after 48 hours from the

tiling.

**PACKAGING:**

BENFERFLEX N is available in 25 kg poly-lined bags and 1000-1500 kg pallet loads.

**STORAGE:**

In the original unopened packaging in a dry and cool place.

**SHELF LIFE:**

12 months.

**PRODUCT TECHNICAL DATA**

APPEARANCE	WHITE / GREY POWDER
CONSERVATION	IN THE ORIGINAL CLOSED PACKAGE, IN A COOL DRY PLACE
DURATION	12 MONTHS
DANGER OF HARM	NO POSSIBLE IRRITATION OF THE EYES AND SKIN FOR CONTACT DUE TO THE CEMENT CONTENT. ADEQUATE PROTECTION IS RECOMMENDED.
FLAMMABILITY	NO
MIXING RATIO	28 PARTS WATER WITH 100 PARTS POWDER BY WEIGHT
LIQUID MIXTURE	7 LITERS PER 25 KG SACK OF POWDER
MAXIMUM APPLICATION DEPTH	10 MM
COVERAGE	FROM 3,5 TO 5 Kg/m <sup>2</sup>
APPLICATION TEMPERATURE	FROM + 5°C TO + 40°C
MIXTURE POT LIFE	2 HOURS
OPEN TIME AT 23°C AND 50% HUMIDITY	30 MINUTES
WALKOVER TIME WITH CAUTION FOR GROUTING ON DRY SUPPORTS AT 23°C	24 HOURS
FINAL HARDENING ON DRY SUPPORTS	14 DAYS

**FINAL PERFORMANCES**

	VALUE	MINIMUM REQUIREMENT
INITIAL TENSILE ADHESION STRENGTH 28 DAYS	≥ 1 N/mm <sup>2</sup>	≥ 1 N/mm <sup>2</sup>
ADHESION AFTER HEATING (14 DAYS + 14 DAYS AT 70°C)	≥ 1 N/mm <sup>2</sup>	≥ 1 N/mm <sup>2</sup>
ADHESION AFTER WATER (7 DAYS + 21 DAYS IN WATER)	≥ 1 N/mm <sup>2</sup>	≥ 1 N/mm <sup>2</sup>
FROST RESISTANCE (25 CYCLES)	≥ 1 N/mm <sup>2</sup>	≥ 1 N/mm <sup>2</sup>
COMPRESSIVE STRENGTH	7,5 N/mm <sup>2</sup>	
SHEAR STRENGTH	≥ 0,7 N/mm <sup>2</sup>	≥ 0,7 N/mm <sup>2</sup>
RESISTANCE TO TEMPERATURE	FROM - 30°C TO + 80°C	
CONFORMS TO	EN 12004 CLASS C2E	

data collected at 23°C and 50% of r.h.

PLEASE NOTE: The data and information contained herein are dictated by our best results, and are purely indicative and must be verified by the user of the product who assumes complete responsibility for its use.