KingInsulate ® PF100

One component polyurethane, moisture cure, expanding foam

DESCRIPTION

KingInsulate PF100 is general purpose polyurethane assembly foam, based on a moisture curing polyurethane prepolymer, ready to use in aerosol cans for easy application.

The fresh foam will expand, depending on the gap/cavity dimensions and on the humidity, 1.5 - 2 times of its initial volume.

APPLICATIONS

KingInsulate PF100 is used for installing, fixing and filling gaps in many applications in the building industry, such as:

- Installation of new and replacement windows and doors, where clean and controlled backfill is required.
- Installation and filling of pipes and duct work entries.
- Filling of holes and gaps.
- Fixing of wall panels and roof stones.
- Thermal insulation.
- Roller blinds (sealing of connection joints).
- Entrance door linings.
- Any kind of small breakthroughs in walls and other cavities.

ADVANTAGES

- Cured foam is a good heat and sound insulator, prevent heat loss through gaps.
- Strong adhesive properties to most building materials with the exception of Teflon, polyethylene, silicone, oil and grease and similar substrates.
- Fast curing.
- Ease of application.
- Ozone friendly – The propellant mixture is free of CFC's.

STANDARDS

KingInsulate PF100 complies with EN29001.

METHOD OF USE

Substrate preparation

Surfaces must be firm, clean and free of dust, loose particles and grease, and then they must be moistened well with water.

TECHNICAL PROPERTIES

(Determined @ 23ºC and 50% relative humidity).

Bulk density:	≈ 17 gm/ cm³
Cell structure:	Fine – medium
Tack free time:	After ≈ 11 – 13 mins.
Cuttable (20 mm bead):	After ≈ 18 – 21 mins.
Full stability load bearing (20 mm bead):	After ≈ 12 hrs.
Working temperatures:	5 - 35ºC
Optimum working temperature:	20ºC
Tensile strength: DIN 53430	10 N/ cm²
Compressive strength at 10% stress: DIN53421	2 N/ cm²
Elongation at tension: DIN53430	≈ 26%
Shear strength: DIN53427	6 N/ cm²
Thermal conductivity:	30 - 35 W/ mK
Temperature resis-tance of the cured bead: Long term Short term	 -40 - 80ºC -40 - 100ºC
Flammability: DIN4102	Class B3
Toxicity:	Toxic when wet, not toxic once cured

It is advisable to apply a primer well penetrating into the ground if necessary. All construction components must be properly prepared prior to foam application.

PACKAGING

KingInsulate PF100 is available in 750 ml tinplate cans. Carton: 12 cans each.

YIELD

Up to 35 liters in case of free expansion yield (750 ml can).

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APPLICATION

The ideal working temperature for both the can and the environment is 20ºC, chilled cans must be carefully warmed in warm water prior to usage. However, the can must not be heated above 50ºC, as there is a risk of bursting. Cans which are too hot, for example after having been left in a vehicle during summer, must be cooled in water with occasional shaking of the can to obtain the required temperature faster.

Prior to work the can must be shaken thoroughly at least 15 - 20 times. Tapestry, floor-covering and furniture to be covered with paper or plastic foil. Once the foam is cured, it can be painted.

Note: Moisture is needed for an even and rapid curing of the foam. Inadequate moistening or over filling of joints and cavities may lead to an unwanted post-expansion of the foam.

WARNINGS

- KingInsulate PF100 is sensitive to UV light and direct sunlight and may cause discoloration and deterioration.
- Once a can has been started, it should be used within four weeks.
- Not recommended for locations subject to continuous water immersion.

CLEANING

Fresh foam spills must be removed immediately within the tack free time, cured foam can only be removed mechanically.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative.

KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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