

KingInsulate[®] FA100

Fire resistant silicone sealant.

DESCRIPTION

KingInsulate FA100 is a one part Low Modulus Fire Resisting and Acoustic Silicone Sealant which cures on exposure to moisture vapour to form a very elastic silicone rubber.

KingInsulate FA100 has good adhesion to concrete, brickwork, metals and many other common construction substrates.

APPLICATIONS

- 🔧 For perimeter sealing of fire doors and screens.
- 🔧 High movement fire-resistant joints.

Note: Not recommended for overpainting and for use against natural stone.

STANDARDS

- 🔧 ISO11600 25 LM.
- 🔧 BS5889, Type A : 1989.
- 🔧 US Federal TT-S-001543A, Class A.
- 🔧 German DIN18545, Class E.
- 🔧 German DIN4102 - B1, Part 1.
- 🔧 Tested to BS476, Part 22 : 1987.
- 🔧 Warres # 122635.
- 🔧 Fire integrity in excess of 4 hours.

METHOD OF USE

Joint Backing

Where applicable, an appropriate joint filler e.g. mineral wool should be used to provide the correct joint depth.

Priming

Brick/concrete	KingSeal Primer
Stained timber frame	KingSeal Primer
Glass	-
Stainless steel	KingSeal Primer S
PPC steel	-
Galvanized steel	KingSeal Primer S
Glazed tile (face)	-
Glazed tile (unglazed edge)	KingSeal Primer
GR cement	KingSeal Primer

Note: N/A = not applicable, Dash = check with KINGKRETE Technical Department.

PAINTABILITY

Painting is not recommended.

TECHNICAL PROPERTIES

Colour:	White
Service temperature:	-40 - 120°C
Curing time:	7 - 14 days depending upon joint configuration and conditions
UV resistance:	Very good
Service life:	25 years +
Movement accommodation: Butt joints (movement in tension and compression)	50% (not to exceed ± 30% in
Lap joints (movement in shear)	100% (not to exceed ± 70% in any one direction)

STAINING

KingInsulate FA100 should not cause migratory staining on porous surfaces when used in accordance with our recommendations. (Pattern staining may occur due to dirt and dust washed into/around the joint by rainwater). The sealant itself may discolor if it is in contact with rubbers, bituminous or pitch based DPC's etc.

Some metals may also cause discoloration.

MAINTENANCE

Correctly applied, the sealant should not require maintenance. However, sealant that has become damaged can be replaced by cutting out the affected area, cleaning and priming the joint surfaces and applying fresh sealant as in the original specifications.

PACKAGING

KingInsulate FA100 is available in 25 x 380 ml plastic cartridges. Polyethylene nozzles are included in each box. **KingSeal Primer S** and **KingSeal Primer** are available in 500 ml tin.

SEALANT QUANTITY ESTIMATOR

Joint size mm	Meters per Litre
6 x 6	27.75
9 x 6	18.50
12 x 9	9.25
18 x 12	4.75
25 x 10	4.00
KingSeal Primer S	200 m/ 500 ml
KingSeal Primer	125 m/ 500 ml

JOINT SIZE SUITABILITY

KingInsulate[®] FA100

Joint Width

- ☞ Minimum 6 mm.
- ☞ Maximum 25 mm (single application); (for multiple applications contact KINGKRETE Technical Department).
- ☞ Design Joint Width
- ☞ Butt Joint expected movement x 3
- ☞ Lap joint expected movement x 1

Joint Depth

- ☞ Minimum 10 mm on porous substrates.
- ☞ Minimum 10 mm on non-porous substrates.
- ☞ Maximum 25 mm.
- ☞ Width: Depth ratio (within above min/max restrictions) In general, joints should be as narrow as possible to prevent passage of fire.

Joint Width Calculation

$$\text{Width} = \frac{M \times 100}{F} + M$$

Where

M: Movement

F: Movement accommodation factor

ACCESSORIES

- ☞ Flex Cleaner TB130: 1 liter tin (Toluene based – not suitable for use with plastics or delicate finishes).
- ☞ Flex Cleaner AB160: 1 liter tin (Alcohol based).
- ☞ Equipment: Polyethylene nozzles and Flex caulking guns.

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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R3-2601

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.