

Insulation



Kooltherm® K12 Adhesive

Adhesive and Sealant for Low-rise Insulated Wall Solution (Type C)



- Permanently flexible
- Fast skinning and curing
- Non-hazardous; isocyanate and solvent free
- Mould resistant



Product Details

Product Description



Figure 1. Kingspan Kooltherm K12 Adhesive

Kingspan Kooltherm K12 Adhesive is a hybrid moisture curing adhesive and sealant with grab strength for use in low-rise insulated wall applications (Type C). Kingspan Kooltherm K12 Adhesive cures to form a tough, and waterproof seal. Its versatility means it can replace most water based and solvent based construction adhesives, polyurethane adhesive and sealants as well as silicones in construction applications. Kingspan Kooltherm K12 Adhesive is available in white colour.

Compatible Substrates

Kingspan Kooltherm K12 Adhesive is compatible with any plasterboard.

Benefits and Uses

Benefits

- Cures to form a permanently flexible and elastic bond
- Rapid skinning and curing
- High bond strength - suited to professional and DIY construction
- Interior – High UV resistance
- Heat resistant to 100° C
- Solvent and isocyanate free
- Resistant to salt and chlorinated water
- Suitable for bonding wet non-porous substrates (refer Surface Preparation details)
- Mould resistant – will not support fungal growth

Uses

- Kingspan Kooltherm K12 Adhesive is used for bonding Kingspan Kooltherm K12 Framing Board to the plasterboard.

Performance Summary

S.G	1.47 g/mL
Skin Time	10-15 minutes at 22 degrees
Reposition Time	25 minutes @ 20°C
Cure Rate	2-3mm per day
Tear Strength DIN 53504	3.2MPa
Elastic recovery	75%
Modulus of Elasticity DIN 53504 @100%	1.6MPa
Elongation at break DIN 53504	400%
Maximum joint movement capability	±20%
Thermal Conductivity	ca. 0.5 W.m-1K-1
Hardness Shore A	55±5

Packaging Options

Kooltherm K12 Adhesive Cannister 400g
Kooltherm K12 Adhesive Sausage 600ml

Application Instructions & Other Information

Surface Preparation

The surface of Kingspan Kooltherm must be clean, dry, free of dust, oil, old sealant or other contamination. The second substrate i.e., the plasterboard, should be dry and free of dust, oil, old sealant, or other contaminants. It must be brought into contact with Kingspan Kooltherm K12 Adhesive in a manner that ensures complete adhesion.

Coverage

400g cartridge will give approximately 15 lineal metres of a 5mm bead.

Service Temperature

Kingspan Kooltherm K12 Adhesive can withstand service temperatures between -40°C and 100°C.

Product Application – Adhesive

Cut tip off cartridge. Angle cut nozzle to desired size. Screw nozzle onto cartridge. Apply product to one surface to be bonded. Before product skins, mate with other surface. When bonding a sheet or panel to a large, flat surface, apply 5mm diameter beads every 30–40cm along the entire length. Press into position and brace until set.

Additional mechanical fixings are required on the plasterboard. Bond will develop dependant upon thickness of adhesive, and ambient conditions. Higher humidity and warmer temperatures will hasten bond development. Minimum film thickness for bonding applications is approx 1mm.

Application

Kingspan Kooltherm K12 Adhesive should be applied below 35°C, and can be applied in temperatures below 0°C. However, ensure that the substrates are clean and dry when Kingspan Kooltherm K12 Adhesive is applied and do not apply where conditions may interfere with good bonding/sealing.

Cure Time

Kingspan Kooltherm K12 Adhesive will form a tack free skin in 10-15 minutes depending upon conditions. Cure rate is 2-3mm per day depending upon temperature and humidity.

Clean Up

Clean up uncured adhesive with mineral spirits. Cured material can be removed by trimming with a knife or scraper.

Limitations

- Maximum gap 30mm and maximum movement of +/-20%

Safety Information

Kingspan Kooltherm K12 Adhesive is not classified as hazardous according to criteria of Worksafe Australia. A Material Safety Data Sheet is available from the Kingspan Insulation representative or customer service.

Contact Details

Australia

Kingspan Insulation Pty Ltd

T: 1300 247 235

E: info@kingspaninsulation.com.au

www.kingspaninsulation.com.au



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