

FIREPRO[®] **GLUE**

Fire resistant adhesive for FIREPRO fire protection systems



FIREPRO® GLUE

FIREPRO® Glue has been specially formulated for use with FIREPRO® BEAMCLAD and ROCKWOOL Fire Duct Systems where glued joints or noggins are required.

FIREPRO® Glue can also be used where there is a requirement for a fire resistant adhesive. The product has been widely used in fire tests conducted on ROCKWOOL Fire Protection Systems - achieving fire ratings of up to four hours.



Advantages

- LUL Approved
- Easy to apply
- Sets in as little as 4 hours
- Can be used from -10°C upward

Description

ROCKWOOL FIREPRO® Glue is a water based, fire resistant adhesive which is supplied in 17kg tubs and 300ml cartridges.

Applications

FIREPRO® Glue is suitable for use with FIREPRO® BEAMCLAD and ROCKWOOL Fire Duct Systems where glued joints or noggins are required. FIREPRO® Glue can also be used in conjunction with other ROCKWOOL Stone Wool products where there is a requirement for a fire resistant adhesive.

Frost exposure does not remove curing ability.

The use of FIREPRO® glue is not limited to particular temperatures and has been tested when applied to surfaces with temperatures of -10°C and upwards, but the curing rate in-situ can be affected by:

- Temperature (see Table 1)
- Air humidity
- Thickness of glue layer in a joint
- Air access to glued joint (i.e. not sealed off)

Important note: The temperature of FIREPRO® glue must be 5°C or more when applied to surfaces at lower temperatures.

Performance

FIREPRO® Glue has been widely used in fire tests conducted on ROCKWOOL FIREPRO® Fire Protection Systems where fire ratings of up to 4 hours have been achieved. For further information tested applications please contact ROCKWOOL.

Technical information

Standards and approvals

This product has been authorised for use in LUL surface and sub-surface premises when installed in accordance with this datasheet - please refer to the LUL Approved Product Register website www.LU-apr.co.uk for specific details.

Product information

Property	Description: Tub	Description: Cartridge
Pack Size	17kg Tub	300ml Cartridge
Application Temperature	Surface temperature of $\geq -10^{\circ}\text{C}$ (Glue must be $\geq 5^{\circ}\text{C}$)	Surface temperature of $\geq -10^{\circ}\text{C}$ (Glue must be $\geq 5^{\circ}\text{C}$)
Ph	11	11
Shelf Life	12 months	18 months
Fire Rating	Up to 4 hours (When tested with ROCKWOOL Fire Protection Systems)	Up to 4 hours (When tested with ROCKWOOL Fire Protection Systems)

Installation

Application of glue from tub is typically made by a pallet knife or trowel before pressing surfaces together. The product must always be stirred before use to ensure a uniform product consistency. Application of glue from cartridge is made using a sealant gun and spread evenly over the surface with a spatula or similarly flat bladed tool. Fixing boards together is supplemented by nails, pins or staples through noggin board joints and board joints.

Whilst steel surfaces may be acceptable when just moist to the touch, heavy water droplets, grease, scale oxide, dust etc should be removed prior to the application of FIREPRO® glue.

Testing has shown that even if glued joints are immediately subjected to heavy frost exposure, the final glued joint strength is not threatened, but curing is retarded.

Glue fixed noggins must be allowed to set fully before any attempt is made to fix cover boards. Table 1 suggests minimum times to allow such setting to occur between ROCKWOOL BEAMCLAD® noggins and steelwork.

FIREPRO® Glue may be used to attach cover boards onto cured noggins (and in glued board joints), provided that a 24 hour interval is acceptable before further trades work on such protected steelwork.

Important note: when friction fitted glued joints are exposed to sub-zero temperatures either immediately, or at some time during the curing process, adequate bond stability will form in approximately 1 hour. This bond will be sufficient for cover boards to be applied. Full setting will continue as in Table 1 when frost free conditions return, but stability will be provided by the supplementary pins or nails. The final strength of the glued joints will not be affected by exposure to sub-zero temperatures during the curing process.

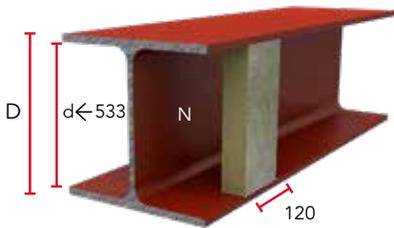
Noggins to steelwork

Exhaustive testing has been made under various application conditions. All noggins fitted into steelwork should be cut to provide an interference friction fit of approximately 0.5mm. Excessive oversizing causing the noggins to bend should be avoided (refer to Figures 1-3).

The noggins should be installed so as to be just proud of the flange tips. For web depths greater than 500mm 'solid' noggins or 'T' noggins ROCKWOOL BEAMCLAD® must be used.

Again a nominal 0.5mm interference fit is recommended for all ambient conditions, but particularly for winter working. All noggin edges in contact with steelwork must be glued.

Figure 1



Soldier noggin depth
 $N = d + 0.5\text{mm}$, approx

Figure 1a

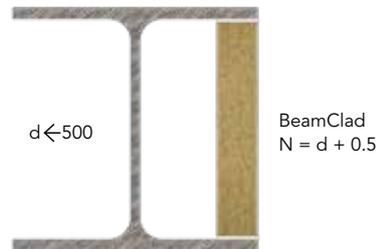
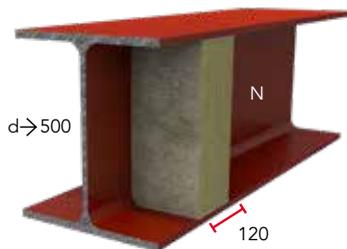


Figure 2



Soldier noggins may be laminated provided
 FIREPRO® Glue is used between laminated surfaces

Figure 2a



Figure 3

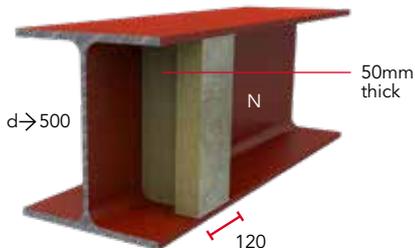
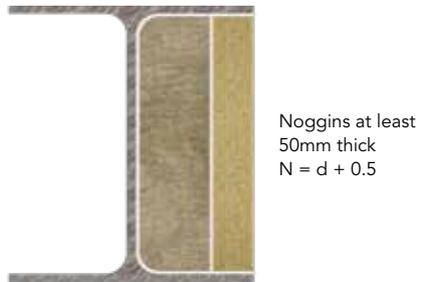


Figure 3a



Ambient conditions & curing times

For all year round working, noggins should be cut to provide approximately 0.5mm interference fit into steelwork. Some friction in the fitting is required to satisfy all conditions and to provide a sensible limit to glue thickness.

In typical dry summer conditions of 20°C, curing of the basic glue will occur in approximately 4 hours before cover boards should be added onto the noggins.

The setting times of glue in moist air conditions is approximately 6-8 hours if the temperature is above freezing point, or in approximately 1 hour at 20°C.

Table 1
Setting times
for different
conditions

Conditions	Setting time
Approx 20°C dry conditions	Approx 4 hours
Approx 3°C+ with moist air conditions -10°C to 0°C	Greater than 24 hours expected Adequate bond forms within 1 hour but full cure may be delayed over 24 hours when temperatures 0 - 6°C

Storage

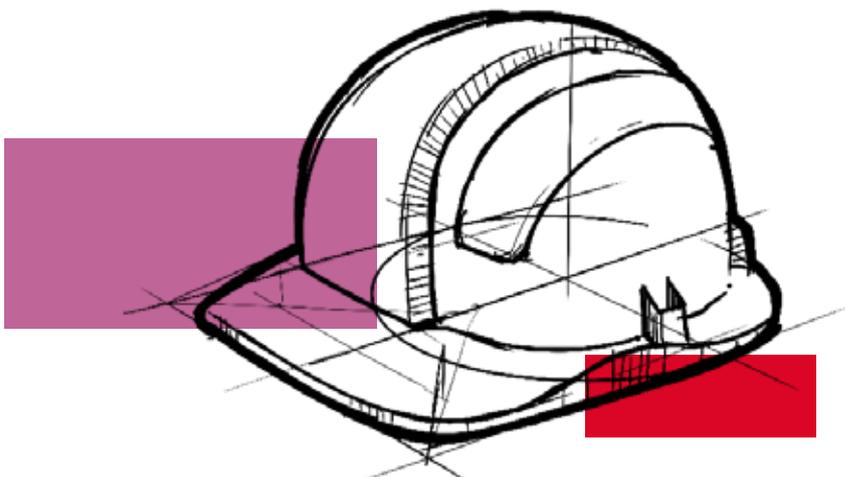
Generally storage should be made in frost free conditions. Should frost exposure occur, the glue should be thawed out and thoroughly stirred.

Disclaimers

This product should only be utilised for applications as outlined in the relevant ROCKWOOL product datasheet and in accordance with the relevant ROCKWOOL Fire Resistance Testing. Additionally, the product must be installed in accordance with the current ROCKWOOL guidelines. For further information please visit www.rockwool.co.uk or contact our Technical Solutions Team on 01656 868490.

Supporting information

For further information relating to any aspect of the FIREPRO range, please refer to the applicable ROCKWOOL standard details at www.rockwool.co.uk or contact the ROCKWOOL technical solution team on 01656 868490 or technical.solutions@rockwool.co.uk.



Sustainability

As an environmentally conscious company, ROCKWOOL promotes the sustainable production and use of insulation and is committed to a continuous process of environmental improvement.

All ROCKWOOL products provide outstanding thermal protection as well as four added benefits:



Fire resistance



Acoustic comfort



Sustainable materials



Health & Safety

The safety of ROCKWOOL stone wool is confirmed by current UK and Republic of Ireland health & safety regulations and EU directive 97/69/EC: ROCKWOOL fibres are not classified as a possible human carcinogen.

A Material Safety Data Sheet is available and can be downloaded from www.rockwool.co.uk to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

Environment

Made from a renewable and plentiful naturally occurring resource, ROCKWOOL insulation saves fuel costs and energy in use and relies on trapped air for its thermal properties.

ROCKWOOL insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

ROCKWOOL is approximately 97% recyclable. For waste ROCKWOOL material that may be generated during installation or at end of life, we are happy to discuss the individual requirements of contractors and users considering returning these materials to our factory for recycling.



Interested?

For further information, contact the Technical Solutions Team on 01656 868490 or email technical.solutions@rockwool.co.uk

Visit www.rockwool.co.uk to view our complete range of products and services.

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The ROCKWOOL Trademark

ROCKWOOL® - our trademark

The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the world.

The ROCKWOOL trademark is one of the largest assets in the ROCKWOOL Group, and thus well protected and defended by us throughout the world.

If you require permission to use the ROCKWOOL logo for your business, advertising or promotion. You must apply for a Trade Mark Usage Agreement. To apply, write to:
marketcom@rockwool.com.

Trademarks

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ROCKCLOSE®

RAINSCREEN DUO SLAB®

HARDROCK®

ROCKFLOOR®

FLEXI®

BEAMCLAD®

FIREPRO®

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marketcom@rockwool.com.

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September 2018

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