



TECHNICAL DATA SHEET

Aftek Fyreflex

Water-based, fire-rated, flexible intumescent sealant

DESCRIPTION

Aftek Fyreflex Fire Rated Intumescent Sealant is a water-based acrylic sealant suitable for use in internal and external expansion joints and for penetrations requiring a fire-resistant seal.

Fyreflex expands when exposed to fire to form an inorganic plug in joints and voids, assisting in the prevention of fire transmission across partitions in a building. **Fyreflex** combines exceptional UV and water resistance with excellent flexibility, non-slump properties and ease of application, making it ideal for internal and external application.

RECOMMENDED USES

- interior & exterior joints between concrete, plasterboard, blockwork, fibre cement and brick walls
- building services' penetrations including pipes, cable trays, conduit and ducts
- adheres strongly to common construction materials such as cement, concrete, brick, plasterboard, timber, steel, aluminium, glass, and polystyrene

PACKAGING CODES

Size / Colour	Grey	White
Carton of 20 x 600ml sausages	620545	620549
10lt pail	620546	620548

FEATURES & BENEFITS

- Up to 4 hour fire rating when tested in accordance with AS1530.4 (FCO-1579)
- Excellent adhesion to most common building materials
- Easy application, tooling and finishing
- Good flexibility accommodating joint movement of $\pm 20\%$
- Excellent UV & weather resistance
- Interior and exterior use
- Water-based, non-flammable & non-toxic
- Paintable with water based paints
- Proudly manufactured in Australia

APPLICATION INSTRUCTIONS

Surface preparation

Joint substrate should be clean and free of standing water, oil/grease, concrete spatter, dirt and dust, concrete release agents, bond breakers and other chemicals or debris. Where chemicals or debris are present, these must be removed by chemical or mechanical means prior to application (consult the chemical manufacturer for correct removal process). Failure to do so will risk adhesion failure at the sealant edge/interface.



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Joint Dimensions and Design

It is recommended that expansion joint sealants are installed using a 2:1 width to depth ratio to achieve maximum flexibility, except where joint widths are less than 10mm where a 1:1 ratio will suffice. Please refer to the table below for acceptable designs.

Joint Width (mm)	Joint Depth (mm)
10	10
20	10
30	15
40	20
50	25

Joints must be designed such that adhesion of the sealant occurs only on two sides of the joint – three way bonding must be avoided. Where **Fyreflex** bonds to three different surfaces, it becomes susceptible to tearing under movement of the substrates.

Priming

Where the substrate is highly porous, such as blockwork and concrete, surfaces should be primed prior to application to avoid excessive moisture loss and subsequent weakness in the sealant.

Contact RLA Group for advice on a suitable acrylic sealer to apply over all high porosity substrates.

Application

For best results, **Fyreflex** should be applied at temperatures between 5°C and 35°C.

Cut the end of the sausage and place sausage barrel gun nozzle over the sausage's cut end. Place the sausage into the sausage barrel gun's housing and screw the nozzle head onto the housing of the barrel. For bulk product (10lt pails), use a bulk barrel gun.

Application Continued

Install suitably sized backing rod to fit the joint width to be sealed/caulked. Gun **Fyreflex** into the joint space, facing the gun tip forward to ensure complete filling of the joint such that no voids are present which would weaken the strength of the joint. Finish tooling the joint within 15 minutes and wipe up excess material with a damp cloth immediately.

Protect from water until suitably cured.

CLEAN UP

Clean tools and equipment immediately after use with water. Once cured, **Fyreflex** must be removed by mechanical means.

CURE TIME

Cure times can vary substantially and are dependent on weather conditions such as temperature and humidity, porosity of the substrate, and joint dimensions.

Typically, a joint will form a firm skin in 2 – 3 hours and take up to seven days to fully cure (dependent on joint thickness and weather conditions). Joints exceeding 10-15mm in thickness/depth may take more than seven days to cure. Cold or very humid climates will extend cure time beyond seven days.

COVERAGE RATES

Joint Width	Joint Depth	Coverage per litre	Coverage per sausage (600ml)
10mm	10mm	10.0m	6.0m
20mm	10mm	5.0m	3.0m
25mm	15mm	2.7m	1.6m
30mm	15mm	2.2m	1.3m
40mm	15mm	1.7m	1.0m
40mm	20mm	1.2m	0.8m
50mm	20mm	1.0m	0.6m
50mm	25mm	0.8m	0.5m



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PAINTING

Fyreflex may be painted with water based acrylic paints. It is the painting contractor's responsibility to ensure the sealant has cured sufficiently to withstand the paint application process without sustaining damage.

For optimum results, do not paint for at least 6-8 hours after application, and for best results, one week after application. Paints with similar flexibility to **Fyreflex** will result in the best appearance and performance over the longer term.

PRECAUTIONS

- **Fyreflex** must be protected from water exposure for at least 24 hours after application to avoid washout and bleeding/running of the sealant.
- Do not apply **Fyreflex** when substrate temperatures are below 5°C or higher than 35°C, or substrate is exposed to direct sunlight.

DO NOT USE **Fyreflex** in the following applications:

- trafficable and loadbearing joints
- sealing coated metal panels such as Colorbond™
- use with absorbent materials such as stone, granite and limestone – staining may result
- use in water-retaining structures or in submersed conditions
- exposure to corrosive chemicals

TYPICAL PROPERTIES

Colour	Concrete Matt Grey and White available
Viscosity	800,000 – 1.2 million cps TF/5/20°C
Specific Gravity	Approx 1.53
Maximum Permissible Joint Movement	+/- 20%
Skin Time	Approx 30-45 minutes (@ 20°C & 70% R.H.)
Paintable	6-8 hours (@ 20°C & 70% R.H.) or once a suitable skin has formed
Full Cure (20mm wide / 10mm deep joint)	Approx 7 days (@ 20°C & 70% R.H.)
Service Temperature	-10°C to 80°C
Maximum Joint Width	50mm x 25mm

SAFETY DIRECTIONS

Shelf Life & Storage

Shelf Life is at least 12 months when stored at 20°C in original sealed containers. Store material out of direct sunlight at temperatures between 5°C and 35°C. Do not freeze.

Disposal

Dispose of empty containers and residue in accordance with local waste management regulations.

First Aid

Please read the **Aftek Fyreflex** Material Safety Data Sheet prior to use, available through your Account Manager, RLA Group Customer Service (1800 242 931), or at www.aftek.com.au



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Ensure Occupational Health and Safety requirements are observed and standard industrial hygiene practices are followed during use.

For more detailed information, please read the MSDS for this product.

Consult RLA Group for technical advice, installation tips, or general enquiries.

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TECHNICAL SUPPORT

RLA Group manufactures a comprehensive range of high quality, high performance construction products. In addition, RLA Group offers technical support and on-site advice to specifiers, end users and contractors.

Please contact your RLA Group sales representative or RLA Group Head Office for this service.

The information and any recommendations relating to the application and end-use of all RLA Group products are provided in good faith based on RLA Group's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by RLA Group. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions. All users should always refer to the most recent and up to date issue of the Technical Data Sheet for the product concerned, which is available on request. It is recommended that products should always be properly stored, handled and applied under tested and recommended conditions.
PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.



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Product: Aftek Fyreflex Sealant
Issue Date: June, 2014
Issue No: DO2