



# FirePro FR

Water based, fire-rated, flexible intumescent sealant.

FirePro FR 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.

FirePro FR 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. FirePro FR 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, hebel block, speed panel and brick walls
- · Building services' penetrations pipes, cable trays, conduit and ducts
- Adheres strongly to common construction materials such as cement, concrete, brick, plasterboard, timber, steel, aluminium, glass, hebel block and speed panels.

#### FEATURES & BENEFITS:

- Premium quality, flexible construction sealant accommodating <u>+</u>20% joint movement.
- Up to 4 hour fire rating when tested in accordance with AS1530.4
- Low VOC green star project compliant sealant 8g/L
- Priming not normally required
- Excellent adhesion to most building materials
- Easy application, tooling and finishing
- Good flexibility accommodating joint movement of ±20%
- Excellent UV & weather resistance
- Interior and exterior use
- Non-hazardous, 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/bondbreakers and other chemicals or debris. Where 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.

#### 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 WIDTH (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 the FirePro FR 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 Polymers for advice on a suitable acrylic sealer to apply over all high porosity substrates.

#### **APPLICATION INSTRUCTIONS CONTINUED:**

For best results, FirePro FR 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.

Install suitably sized backing rod to fit the joint width to be sealed/caulked. Gun FirePro FR 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, FirePro FR removed by mechanical means.

#### **CURE TIME:**

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

| Joint<br>Width | Joint<br>Depth | Coverage per<br>sausage (600ml) |
|----------------|----------------|---------------------------------|
| 10mm           | 10mm           | 6.0m                            |
| 20mm           | 10mm           | 3.0m                            |
| 25mm           | 15mm           | 1.6m                            |
| 30mm           | 15mm           | 1.5m                            |
| 40mm           | 15mm           | 1.0m                            |
| 40mm           | 20mm           | 0.8m                            |
| 50mm           | 20mm           | 0.6m                            |
| 50mm           | 25mm           | 0.5m                            |



#### PAINTING:

FirePro FR 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 hours after application, and for best results week after application. Paints with similar flexibility to FirePro FR will result in the best appearance and performance over the longer term.

#### PRECAUTIONS:

FirePro FR 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 FirePro FR temperatures are below 5°C or higher than 35°C.

#### FirePro FR is not recommended for:

- Trafficable and loadbearing joints.
- Sealing coated metal panels such as Colorbond™
- Use with absorbent materials such as stone, granite and limestone as it may
- stain.
- Use in water-retaining structures or in submersed conditions
- Exposure to corrosive chemicals

| TYPICAL PROPERTIES                         |   |
|--|---|
| Colour                                     | Concrete Matt Grey & White available                      |
| Viscosity                                  | 800,000 – 1.2 million<br>cps TF/5/20°C                    |
| Specific Gravity                           | Approx 1.53   |
| Maximum Permissible<br>Joint Movement      | +/- 20%   |
| Skin Time                                  | Approx 30-45 minutes<br>(@ 20°C & 70% R.H.)               |
| Paintable                                  | 6-8 hours (@ 70% R.H.) or once a suitable skin has formed |
| Full Cure (20mm wide /<br>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 Safety Data Sheet prior to use, available through RLA Polymers Customer Service (1800 242 931), or at www.rlapolymers.com.au Ensure Occupational Health and Safety requirements are observed and standard industrial hygiene practices are followed during use. For more detailed information, please read the SDS for this product.

#### **TECHNICAL SUPPORT:**

RLA Polymers manufactures a comprehensive range of high quality, high performance construction products. In addition, RLA Polymers offers technical support and on-site advice to specifiers, end users and contractors. Please contact your RLA Polymers sales representative or RLA Head Office for this service

#### DISCLAIMER

The information and any recommendations relating to the application and end-use of all RLA products are provided in good faith based on RLA'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. 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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