

TECHNICAL DATA SHEET

Description

Selleys® Liquid Nails® Flex is a flexible construction adhesive designed for demanding applications that require strong, long-lasting bonds. It adheres to all building materials, including porous, non-porous, and damp surfaces. The adhesive can accommodate high movement transferred from the substrates, maintaining flexibility and bond integrity. Suitable for both indoor and outdoor bonding applications, and once cured, creates a water-resistant seal.

Features

- Strong, flexible and high bond strength
- Max 400% stretch
- Adheres to all building materials*
- Bonds to damp and dry surfaces
- Interior/Exterior
- Paintable*
- Remains flexible even in extreme weather conditions
- Fast curing

Benefits

- Highly stable and durable
- Low VOC, suitable for indoor use
- Bridges gaps up to 9mm
- Once cured, creates a water-resistant seal

Usages

- Bonding for internal and external applications
- Bonding and fixing common building and construction materials such as tiles, natural stones, trims, timber, etc.
- Bonding materials where flexibility is required and have a capacity to bridge up to a 9mm gap
- Bonding materials onto a damp surface

Product and Technical Information

Product Data		Technical Performance		
Technology	SMP	Shore A	39	ASTM C661
Cure Mechanism	Moisture curing	Tensile Strength	2.28 MPa	ISO 37
Specific Gravity	1.48	Shear Strength	1.33 MPa (timber)	AS 2329 (E)
Skin Time	18 min	Elasticity Modulus	0.99 MPa	ISO 37
Curing Rate	3mm/24 hrs	Elongation @ Break	400 %	ISO 37
Application Temperature	+5 °C to +40 °C	VOC	14 g/L	ASTM D3960
Service Temperature	-20 °C to +70 °C	Shelf life	12 months	
Storage Temperature	+5 °C to +27 °C			

The results in the table are based on the current product material data, quality test methodology and testing conditions, such as temperature, moisture, and substrate type.

Standards & Conformities

ASTM D3960	<i>Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings</i>
AS 2753:2018	<i>Adhesives- For Bonding Gypsum Plaster Linings to Wood and Metal Framing Members</i>
AS 2329:1999 (E)	<i>Mastic Adhesives for Fixing Wallboards</i>

Substrate⁺**Porous**

- Timber / Plywood
- Weatherboard
- Plasterboard
- Fibre Reinforced Cement
- Bricks
- Concrete
- Masonry
- Sandstone
- AAC – (Hebel®)
- Terracotta

Non-porous

- Aluminium
- Copper
- Zinc alum
- Steel / Stainless Steel
- Mild / Galvanised Steel
- Powder-coated steel*
- PVC
- Polycarbonate
- EPS
- Ceramic tiles

EXCEPTION

- Not for use on polyethylene, polypropylene or PTFE (Teflon®).
- Pre-test compatibility with substrates before use.

Method of Applications**Surface**

- Ensure all surfaces to be bonded are clean, sound, and free of dust, oil, rust, and other contaminants.
- Clean non-porous surfaces with a clean cloth dampened with IPA or white spirit, wiping in one direction only, then immediately followed by wiping with a clean, dry cloth.
- Remove all existing adhesives or sealants before use on remedial work.

Cartridge

- Cut the cartridge tip, screw on the nozzle, and trim to the desired bead size.
- Insert the cartridge into the caulking gun.

Gun

- Use a good-quality gun. Best to use a high-thrust-ratio caulking gun for high-viscosity products.

Application

- Apply a continuous bead of adhesive to the bonding surface. Space the beads at least 15cm apart on wide or broad surfaces.
- Press the material firmly to the opposite surface within 10 minutes. Reposition as needed before skin formation.
- Provide temporary support if the material is heavy. Let the adhesive set for at least 4 hours before removing supports. Use mechanical fasteners for high-stress applications.
- Allow the adhesive to cure completely before applying any load.

Coverage and Consumption

Linear joint estimate consumption in meters (m) of 430 grams **Selleys® Liquid Nails® Flex**

	Nozzle Inner Diameter Opening (Ø) mm							
	5	6	8	9	10	12	15	20
meter	14.7	10.2	5.7	4.5	3.6	2.5	1.6	0.9

The coverage and consumption are based on theoretical calculation without wastage. Allow at least 10% for wastage.

Cleaning

- Excess adhesive on tools and equipment can be removed with turps.
- Cured adhesive can be removed mechanically or with Selleys Sealant Remover.

Paintability*

- Paint Selleys Liquid Nails Flex with water-based paint.
- Wait 24 hours before painting.
- May affect the drying of alkyd /oil-based paints
- For oil-based paints, first apply a water-based primer. A pre-test is recommended due to the wide range of paint types available on the market.

Limitations

- Do not apply if the ambient or substrate surface temperature is below +5 °C or above +40 °C
- Do not use for applications exceeding the temperature requirements below -20 °C or above +70 °C
- Not recommended for continuous submersion or below water line use.
- The adhesive requires atmospheric moisture to cure. On non-porous substrates or in low-humidity conditions, curing speed slows.
- Do not use for structural or general glazing.
- Avoid using in tightly clamped joints.
- Avoid contact with materials containing high levels of plasticisers, such as rubber and bituminous substrates.
- **Selleys®** recommends users conduct their own risk assessment before use to determine the product's suitability. A sample should be applied to the intended area to ensure acceptable appearance, finish, and performance on the surface.

Storage

- Store unopened packaging below 27 °C in a cool, dry place away from direct sunlight.
- Unopened packaging is best used within 12 months from the date of manufacture.
- Opened packaging may skin and form a lump near the opening. Discard any lumps or skin, then use the remaining product.
- Warm the sealant to the recommended application temperature before using or if stored below the recommended storage temperature.

Packaging

Cartridge Size	Available colour	Item Code
430 grams	White	104265

Health and Safety

This information is available in the product Safety Data Sheet (SDS) on our website at www.selleys.com.au. Refer to the product label for full conditions.

Disclaimers

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