



Bondlast[®]
Premium Adhesives & Coatings

NPT Product Range

Bondlast are the exclusive New Zealand stockist of NPT products - a premium range of bonding and sealing agents, primarily focused around polyurethanes and silicone modified polymers.

NPT are an example of European design and production excellence, imported directly from Italy, manufactured to be reliable, cost-effective and eco-friendly solutions.



NPT



NPT
S.r.l.
SEALING AND BONDING SOLUTIONS

About NPT

New Polyurethane Technologies (NPT), based in Italy, has been developing and producing high performance adhesives and sealants for over 20 years. From the beginning NPT have been offering innovative, advanced solutions to the global market. NPT has a strong team that works together to deliver the highest value in terms of customer satisfaction, innovation and sustainability.

NPT is supported by a talented and highly motivated research department featuring modern, up-to-date equipment, the latest analytical tools and impressive pilot plant facilities, with the purpose of not only improving their products and processes, but to do so in an economically and environmentally friendly way.

Bondlast

In late 2018, Bondlast (formerly RLA Polymers NZ Ltd) approached NPT in our search to improve our offerings in the Polyurethane and Modified Silicone markets. While NPT are new to the Australasia region, they've gained a reputation for their product quality in Europe, while maintaining a competitive pricing advantage.

This product guide outlines the range of products Bondlast stock, including basic technical details and specific use cases.



NPT is ISO 9001 Certified

Polyurethane:

U-Seal and U-Bond are trade names for products based upon NPT's polyurethane technology.

Features:

- Very high tear and abrasion resistance
- Fast curing properties
- High joint movement capabilities
- Good shock, peel, load and vibration resistance.
- High dynamic stress absorption
- Good adhesion to a wider variety of substrates
- Paintable

SiMP - Silyl-Modified Polymer:

SiMP-Seal and S-Bond are trade names for products based upon NPT's Silyl Modified polymer technology.

Features:

- Very high resistance to UV degradation and weathering
- Excellent primerless adhesion to a wide range of substrates
- Permanently elastic over a wide temperature range
- Paintable
- Outstanding mechanical properties
- Solvent and isocyanate free
- Good mould resistance
- Adhesion to wet surfaces

Technical data provided in this document is based off application in environments of 23°C and 50% relative humidity

Adhesives & sealants for construction**SEALANTS**

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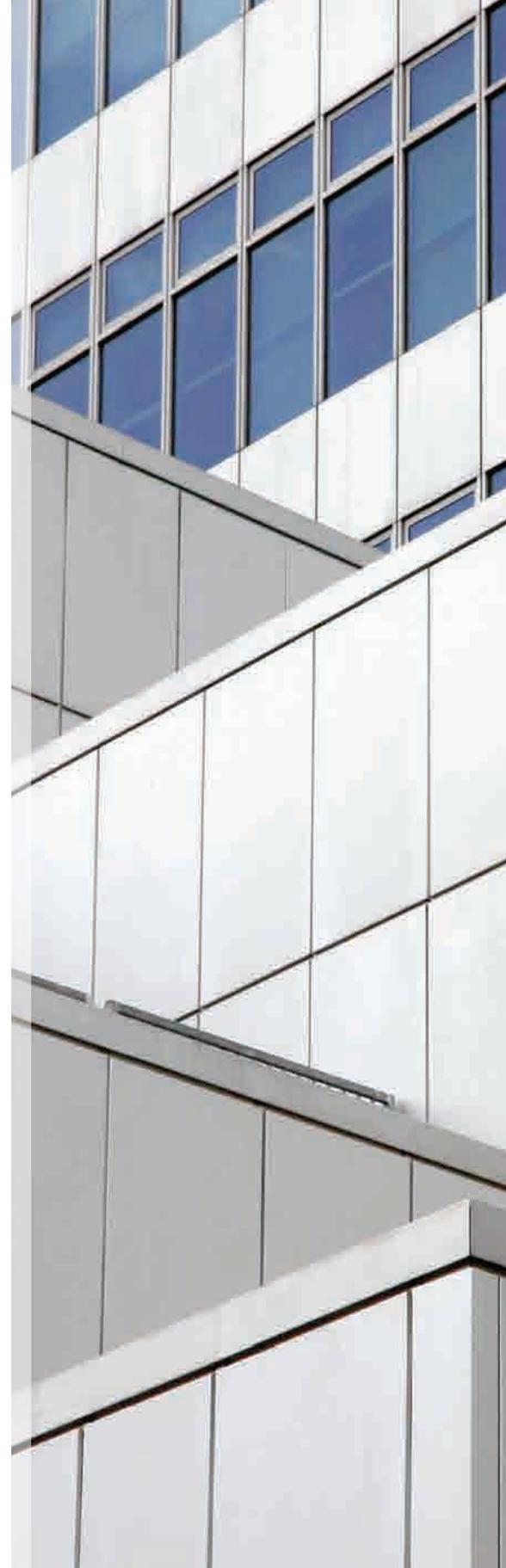
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SiMP-Seal 20

One-part SiMP low modulus construction sealant.

SiMP-Seal 20 is a one-component, gun-grade, non-sag SiMP – Silyl Modified Polymer low modulus construction sealant. It cures under the influence of atmospheric moisture to form a permanently elastic sealant with excellent adhesive properties and resistance to ageing and weathering. Solvent- and isocyanate-free, it has 0 VOC.

Available on request

ADVANTAGES

- Permanently elastic over a wide range of temperatures; accommodates joint movement of $\pm 25\%$
- Non-sag, exceptional thixotropy and short cut-off string
- Excellent primerless adhesion on all typical construction materials and substrates
- Excellent resistance to ageing and weathering; color stable and non-yellowing

AREAS OF APPLICATION

- Sealing expansion and construction joints in vertical and horizontal applications
- Joints in precast elements
- Joints in walls, floors, balconies, around window or door frames
- Metal roof and gutter sealing
- Excellent resistance to ageing and weathering

U-Seal 500

One-part polyurethane multipurpose adhesive sealant.

U-Seal 500 is a one-component, gun-grade, non-sag polyurethane high modulus multi-purpose sealant. It cures under the influence of atmospheric moisture to form a high performance compound with permanent elasticity and resistance to ageing and weathering.

ADVANTAGES

- Bonds and seals at the same time
- Permanently elastic over a wide range of temperatures; accommodates joint movement of $\pm 20\%$
- Easy to gun with excellent tooling consistency
- Performant adhesion on metal, plastic and construction materials

AREAS OF APPLICATION

- Sealing and bonding between different materials
- Elastic bonding between metal, plastic, glass and other materials
- Sealing joints in vertical and horizontal applications
- Metal roof and gutter sealing



TECHNICAL DATA

• Colours	White, Grey, Black
• Cure Rate	2mm/24h
• Shore A	20°
• Tack-Free Time	110 min
• Joint Movement Capability	+/- 25%
• Elongation	530%
• Elastic Modulus at 100%	$\geq 0.4 \text{ N/mm}^2$
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 600ml Sausage



TECHNICAL DATA

• Colours	Grey, Black
• Cure Rate	2.5mm/24h
• Shore A	35°
• Tack-Free Time	50 min
• Joint Movement Capability	+/- 20%
• Elongation	500%
• Elastic Modulus at 100%	$\geq 0.7 \text{ N/mm}^2$
• Tensile Strength	$\geq 1.7 \text{ N/mm}^2$
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 90°C

Packaging: 600ml Sausage

U-Seal 907

High-Performance Concrete Tilt-Slab Sealant

U-Seal 907 is a one-component, non-sag polyurethane low modulus construction sealant. It cures under the influence of atmospheric moisture.

Ideal for sealing expansion and construction joints in vertical and horizontal applications, in precast elements, external walls and cladding and weatherproofing of joints between brickwork, block-work, masonry, wood, concrete and metal frames. It is permanently elastic over a wide range of temperatures and can accommodate joint movement of up to 50%. It displays good adhesion to most construction materials and is weather and immersion resistant.

ADVANTAGES

- One-component for easy application
- Permanently elastic with +/-50% joint expansion accommodation
- Moisture curing
- Weather and immersion resistant

AREAS OF APPLICATION

- Joints in precast elements and external walls and cladding
- Weatherproofing of joints in brickwork, masonry, wood, etc
- Joints in water channels, suitable for hydraulic general sealing
- Bridge & balcony parapets and metal roofing/guttering



TECHNICAL DATA

• Colours	Grey, White, Black
• Cure Rate	2mm/24hr
• Skin-Forming Time	120 min
• Shore A	30°
• Elastic Modulus at 100%	0.4 MPa
• Tensile Strength	1.5 MPa
• Elongation at Break	> 800%
• Application Temperature	5°C - 40°C
• Final Temperature Resistance	-40°C - 150°C

Packaging: 600ml Sausage

SiMP-Seal 55 / SiMP-Seal 640

One-part SiMP elastic adhesive and sealant.

SiMP-Seal 55/640 is a one-component, gun-grade, non-sagging SiMP – Silyl Modified Polymer elastic adhesive and sealant. It cures under the influence of atmospheric moisture to form a high performance, permanently flexible elastic adhesive. Solvent- and isocyanate-free, it has 0 VOC. Outstanding body and thixotropy.

SiMP-Seal 55/640 is available on request in version LE (Lower Emissions EC1 plus & A+ certified).

ADVANTAGES

- Permanently elastic over a wide range of temperatures; accommodates joint movement of ±25%
- Non-sag, exceptional thixotropy and short cut-off string
- No change in volume – No shrinkage
- Excellent primerless adhesion on all typical construction materials
- Non-staining. Neutral behavior, does not attack support surface

AREAS OF APPLICATION

- Sealing and bonding between different materials
- Elastic bonding between metal, plastic, glass and other materials
- Sealing joints in vertical and horizontal applications
- Metal roof and gutter sealing



TECHNICAL DATA

• Colours	White, Grey, Black
• Cure Rate	3mm/24h
• Shore A	50°
• Tack-Free Time	20 min
• Elongation	250%
• Elastic Modulus at 100%	≥ 1 N/mm ²
• Tensile Strength	≥ 3 N/mm ²
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 600ml Sausage

U-Bond 301

One-part polyurethane liquid adhesive for wood and panel bonding.

U-Bond 301 is a one-part, solvent-free moisture curing polyurethane liquid adhesive suitable for bonding wood, wood derivatives and different cover and insulation materials in sandwich panel assembly due to the excellent resistance to water, temperatures, weathering and aging conditions according to EN 204 D4.

U-Bond 301 is available on request in faster and slower curing versions.

ADVANTAGES

- **Easy-to-use.** Pourable from twist cap bottle to automatic dispensing industrial equipment
- **Controlled foaming grade with good filling capacity**
- **Solvent free – Odourless**
- **Weathering resistance according to DIN 204 D4**

AREAS OF APPLICATION

- **Panel lamination and assembly**
- **Outdoor applications for woodworking**
- **Structural bonding of wood and derived products and insulating materials.**
- **Structural Bonding of construction materials.**

SiMP HIGH TACK

One-part SiMP high tack adhesive.

High thixotropy and very high initial tack.

SiMP HIGH TACK is a one-component, gun-grade, non-sag SiMP – Silyl Modified Polymer instant high tack adhesive. It cures under the influence of atmospheric moisture to form a high initial tack assembly adhesive with powerful green strength to instantly grab even heavy objects with no need of any support.

HIGH INITIAL TACK value (green strength) of approx 320 kg/m².

ADVANTAGES

- **Outstanding High Tack effect: maximum instant grab and load bearing capacity**
- **Non-sag and short cut-off string. Easy to gun**
- **Excellent primerless adhesion on all typical construction materials**
- **Non-staining. Neutral behavior, does not attack support surface**

AREAS OF APPLICATION

- **Glass, mirror and panel bonding**
- **Bonding between different materials**
- **Elastic bonding between metal, plastic, glass and other materials**
- **Replaces rivets and mechanical fasteners**



TECHNICAL DATA

• Colours	Translucent
• Skin Formation Time	20 min
• Pressing Time	60 min
• Complete Cure Time	24h
• Shear Strength D1	10 N/mm ²
• Shear Strength D4	4 N/mm ²
• Viscosity	5000 mPs
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 500ml & 1L Bottle



TECHNICAL DATA

• Colours	White
• Cure Rate	3mm/24hr
• Shore A	56°
• Tack-Free Time	15 min
• Green Strength	320 kg/m ²
• Elastic Modulus at 100%	≥ 2 N/mm ²
• Tensile Strength	≥ 3 N/mm ²
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 290ml Cartridge

U-Bond 305

One-part solvent-free paste

U-Bond 305 is a one-part, solvent-free moisture curing polyurethane paste adhesive suitable for bonding wood and construction materials in high mechanical resistance assembly joinery and outdoor applications due to the excellent resistance to water, temperatures, weathering and aging conditions according to EN 204 D4.

ADVANTAGES

- Very low foaming with good filling capacity
- Excellent adhesion on numerous substrates like insulating material, wood, plastic and metal

AREAS OF APPLICATION

- Fast setting beading and cord applications
- High mechanical resistance in assembly
- Powerful bonding of wood and derived wood products; chipboard, plywood, stones, plasterboard, cement cover and insulation panels

U-Bond 307 FC

One-part fast curing paste

U-Bond 307 FC is a one-part, solvent-free moisture curing fast setting polyurethane paste adhesive suitable for bonding wood and construction materials in high mechanical resistance assembly joinery and outdoor applications due to the excellent resistance to water, temperatures, weathering and aging conditions according to EN 204 D4.

Available on request

ADVANTAGES

- Fast curing with quick build-up strength
- Very low foaming with good filling capacity
- Excellent adhesion on numerous substrates like insulating material, wood, plastic and metal

AREAS OF APPLICATION

- Fast setting beading and cord applications
- High mechanical resistance in assembly
- Powerful bonding of wood and derived wood products; chipboard, plywood, stones, plasterboard, cement cover and insulation panels

U-Bond 309 TFC

One-part fast curing translucent paste adhesive

U-Bond 309 TFC is a one-part, solvent-free moisture curing fast setting translucent polyurethane paste adhesive suitable for bonding wood and construction materials in high mechanical resistance assembly joinery and outdoor applications due to the excellent resistance to water, temperatures, weathering and aging conditions according to EN 204 D4.

ADVANTAGES

- Translucent for invisible bonding line
- Fast curing with quick build-up strength
- Very low foaming with good filling capacity
- Excellent adhesion on numerous substrates like insulating material, wood, plastic and metal

AREAS OF APPLICATION

- Fast setting beading and cord applications
- High mechanical resistance in assembly
- Powerful bonding of wood and derived wood products; chipboard, plywood, stones, plasterboard, cement cover and insulation panels



TECHNICAL DATA

• Colours	Beige
• Cure Rate	2mm/24hr
• Skin-Forming Time	4-8 min
• Initial Set Time	25 min
• Final Set Time	24 hr
• Shear Strength D1	≥ 10 N/mm ²
• Shear Strength D4	≥ 4 N/mm ²
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 310ml Cartridge



TECHNICAL DATA

• Colours	Beige
• Cure Rate	2mm/24hr
• Skin-Forming Time	3-6 min
• Initial Set Time	15 min
• Final Set Time	24 hr
• Shear Strength D1	≥ 10 N/mm ²
• Shear Strength D4	≥ 4 N/mm ²
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 310ml Cartridge



TECHNICAL DATA

• Colours	Translucent
• Cure Rate	2mm/24hr
• Skin-Forming Time	5-8 min
• Initial Set Time	20 min
• Final Set Time	24 hr
• Shear Strength D1	≥ 10 N/mm ²
• Shear Strength D4	≥ 4 N/mm ²
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 310ml Cartridge

Eco-SiMP Flooring

Eco-Friendly Wood Floor Adhesive

Eco-SiMP Flooring is a one-part, solvent free wood flooring adhesive, notable for its low health and environmental impacts.

Ideal for the full-surface bonding of multiple-layer pre-finished parquet, wood planks, lamp parquet, mosaic and laminates on screeds and pre-existing wood, ceramic or marble flooring where environmental impacts must be kept low.

ADVANTAGES

- One-part, mixing-free, easy-to-use technology
- Environmentally friendly, free of solvents and harmful substances
- Permanently elastic with a wide adhesion spectrum

AREAS OF APPLICATION

- Full surface bonding of wood-based flooring
- Where environmental impact must be kept to a minimum



TECHNICAL DATA

• Colour	Ivory
• Traffic-Ready	24hr
• Laying Time	1hr
• Shear Strength (wood - wood)	2.2 N/mm ²
• Shear Strength (wood - concrete)	1.8 N/mm ²
• Tensile Strength	1.0 MPa
• Application Temperature	5°C - 40°C
• Final Temperature Resistance	-40°C - 90°C

Packaging: 16kg Pail

S-Bond Flex

High-Elasticity Wood Flooring Adhesive

S-Bond Flex is a one-part, solvent free, high-elasticity wood flooring adhesive based on silyl modified polymer technology.

Ideal for full-surface bonding of multi-layer pre-finished parquet, solid and engineered wood floors and chipboards on screeds or pre-existing wood, ceramic or marble flooring. It is ideally used with stable woods. Suitable for use over under-floor heating systems.

ADVANTAGES

- Advanced silyl modified polymer technology
- High elastic strength
- One-part, easy to use adhesive
- Elastic, reducing material stress and acoustics

AREAS OF APPLICATION

- Full surface bonding of wood-based flooring
- Over under-floor heating systems
- Where floor acoustics are of concern



TECHNICAL DATA

• Colour	Oak
• Traffic-Ready	12hr
• Laying Time	1hr
• Shear Strength (wood - wood)	1.5 N/mm ²
• Tear Strength	0.8 kN/mm ²
• Tensile Strength	1.3 MPa
• Application Temperature	5°C - 40°C
• Final Temperature Resistance	-40°C - 90°C

Packaging: 16kg Pail

U-Bond X-treme

High Shear Strength Wood Floor Adhesive

U-Bond X-Treme is a one-part solvent-free polyurethane wood flooring adhesive.

Displays extreme mechanical properties and bonds, consolidates and waterproofs simultaneously. Ideal for full surface bonding of lamp parquet, solid wood with and without tongue and groove, mosaic, industrial woods, laminates, and multiple-layer pre-finished woods on screeds or pre-existing flooring with ceramic, wood, or marble floor tiles. Suitable for use over under-floor heating systems.

ADVANTAGES

- One-part, mixing-free, easy-to-use technology
- Strong bond
- Multifunctional - bonds, consolidates & waterproofs

AREAS OF APPLICATION

- Full surface bonding of wood-based flooring
- Over under-floor heating systems



TECHNICAL DATA

• Colour	Oak
• Traffic-Ready	12hr
• Laying Time	1hr
• Shear Strength (wood - wood)	3.9 N/mm ²
• Shear Strength (wood - concrete)	2.9 N/mm ²
• Tensile Strength	3.8 MPa
• Application Temperature	5°C - 40°C
• Final Temperature Resistance	-40°C - 90°C

Packaging: 15kg Pail

U-Seal 816

One-part polyurethane self-levelling sealant. Resistant to hydrocarbons, oils and fuels.

U-Seal 816 is a one-component, polyurethane, concrete pavement self-levelling sealant. It cures under the influence of atmospheric moisture to form a permanently elastic sealant specifically developed to be used as a pourable joint sealant in rigid pavements in airfields, roads and concrete floors where high adhesion, abrasion resistance and high chemical resistance to fuels, oils and hydrocarbons is required.

U-Seal 816 is based on NPT's new and advanced LC-Technology, developed to avoid bubbling present in traditional one-part PU Sealants.

ADVANTAGES

- One part - no mixing on site. Self-levelling consistency
- Bubble-free curing
- Resistant to hydrocarbons, oils and fuels. Pitch free.
- Primerless adhesion on green concrete.

AREAS OF APPLICATION

- Joints in rigid pavements of airports and concrete roads
- Joints in concrete floors
- Indoor and outdoor applications for pedestrian and traffic areas (petrol stations, decks, car parks)
- Floor joints in warehouses and production areas



TECHNICAL DATA

• Colours	Grey, Black
• Joint Movement Capability	+/- 25%
• Shore A	30°
• Tack-Free Time	60-80 min
• Elongation	450%
• Elastic Modulus at 100%	≥ 0.5 N/mm ²
• Tensile Strength	≥ 1.5 N/mm ²
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 90°C

Packaging: 600ml Sausage, 7kg Bag

Silcoflex 450

Mould-Resistant Silicone Sealant

Silcoflex 450 is a silicone sealant suitable for sealing non-porous supports such as glass and metal joints. Highly resistant to mould and fungi. Suitable for applications in bathrooms and kitchens, and for furnishings for bars and shops.

Cannot be coated.

ADVANTAGES

- Ideal for applications on glass, ceramics and aluminium
- Great for generic applications
- Good resistance to weather conditions
- Ideal for DIY usage.

AREAS OF APPLICATION

- Sanitary applications such as bathrooms and kitchens
- Non-porous joints and surfaces such as glass and metal



TECHNICAL DATA

• Colours	Translucent, White
• Cure Rate	2mm/24hr
• Skin-Forming Time	15-30 min
• Shore A	16-20°
• Elastic Modulus at 100%	0.3 MPa
• Tensile Strength	0.6 MPa
• Elongation at Break	> 200%
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 280ml Cartridge

Silcoflex 470

Improved UV-Resistant Silicone Sealant

Silcoflex 470 is a UV-Resistant silicone sealant suitable for sealing non-porous joints where long-term elasticity and weathering resistance is required. Suitable for sanitary applications such as bathrooms and showers, glazing (both cap-beading and sealing), assembly of rigid metals and plastics, sealing gutters, downpipes and plumbing, and general bonding applications.

Cannot be coated.

ADVANTAGES

- Ideal for use with non-porous materials, including glass and rigid metals/plastics
- Highly weather-resistant and resistant to organic growths
- Suitable for both internal and external applications
- Temperature and moisture resistant

AREAS OF APPLICATION

- Sanitary applications such as bathrooms and showers
- Non-porous rigid surfaces and joints
- Guttering and plumbing applications



TECHNICAL DATA

• Colours	Translucent, White
• Cure Rate	2mm/24hr
• Skin-Forming Time	15-30 min
• Shore A	18-24°
• Elastic Modulus at 100%	0.4 MPa
• Tensile Strength	0.6 MPa
• Elongation at Break	> 200%
• Application Temperature	5° - 40°C
• Final Temperature Resistance	-40° - 100°C

Packaging: 280ml Cartridge

Silcoflex 581 Crystal

Crystal Clear Silicone Sealant

Silcoflex 581 Crystal is a acetoxy-curing silicone sealant with permanent elasticity and particular transparency. It's ideal for applications where appearance is important, such as shop window borders and joints and glass or transparent plastic furniture and benches. It displays excellent UV resistance and weather resistance, and forms a strong bond to non-porous rigid surfaces such as glass, metal and plastics.

Cannot be coated.

ADVANTAGES

- Formulated for maximum transparency
- Highly resistant to UV and weathering
- Temperature and moisture resistant

AREAS OF APPLICATION

- Glass joints and borders, particularly in display applications such as shop windows
- Rigid plastic and metal joints and surfaces
- Any application where maximum clarity is desired

Silcoflex 590

Elastic Neutral Curing Silicone Sealant

Silcoflex 590 is an alcoxy curing (neutral and odourless) elastic silicone sealant, protected against mould formation.

Ideal for architectural and heavy construction joint sealing, between concrete, glass, metals, ceramic, porous and non-porous refractory materials, rigid plastics and a number of other applications. Suitable for sanitary applications. Resistant to UV and weather effects for outdoor applications. Should not be applied on marble, natural stones, insulating glass or structural glazing bonding, and should not be used in permanent immersion applications. Not suitable for food grade application.

ADVANTAGES

- Neutral-curing, completely odourless
- Extremely elastic with over 300% elongation at break
- UV and weather resistant
- Highly temperature resistant and moisture resistant.

AREAS OF APPLICATION

- Sanitary applications such as bathrooms and showers
- Construction applications involving both porous and non-porous materials
- Applications where an acetoxy-curing silicone is not suitable or ideal



TECHNICAL DATA

• Colours	Transparent
• Cure Rate	2mm/24hr
• Skin-Forming Time	10 min
• Shore A	18°
• Elastic Modulus at 100%	0.4 MPa
• Tensile Strength	0.7 MPa
• Elongation at Break	> 400%
• Application Temperature	5° - 45°C
• Final Temperature Resistance	-50° - 150°C

Packaging: 300ml Cartridge



TECHNICAL DATA

• Colours	Translucent
• Cure Rate	2mm/24hr
• Skin-Forming Time	20 min
• Shore A	20-30°
• Elastic Modulus at 100%	0.34 MPa
• Tensile Strength	0.7 MPa
• Elongation at Break	> 300 %
• Application Temperature	5°C - 40°C
• Final Temperature Resistance	-40°C - 150°C

Packaging: 300ml Cartridge

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