

## **ARDEX ST**

# Neutral Cure and Non Staining Natural Stone Silicone

Ideal for use with sensitive natural stone such as marble, sandstone and granite

Contains fungicides to combat mould growth

Flexible sealant for use in tile movement and connecting joints

Colour matched to popular grout and sanitary ware

Easy to apply and smooth off, with low odour

UV and weather resistant

Water resistant - suitable for wet areas such as showers and underwater joints such as swimming pools

Use as a bond breaker with ARDEX waterproofing membranes

Internal and external, wall and floor

Low VOC content - meets Green Building Council of Australia Green Star IEQ-13 requirements

ARDEX Australia Pty Ltd 20 Powers Road Seven Hills NSW 2147 Tel: (02) 9851 9199

Fax: (02) 9674 5621

Email: techinfo@ardexaustralia.com

Internet: www.ardex.com

ARDEX New Zealand Ltd 32 Lane St, Woolston Christchurch, New Zealand

Tel: (03) 384 3029 Fax: (03) 384 9779

Email: techinfo@ardexaustralia.com

Internet: www.ardex.com

## ARDEX ST

### **Neutral Cure and Non Staining Natural Stone Silicone**

#### DESCRIPTION

ARDEX ST is a unique, neutral curing silicone sealant with good adhesion properties yet is easy to apply and smooth. It is also characterised by its antifungal agents to combat mould growth and its non corrosive properties. Once cured it forms a permanently elastic, water resistant seal that is able to accommodate movement up to 20% of the original joint width. ARDEX ST is a superior performing neutral cure silicone for all sensitive natural stone applications. The unique formula is free of standard ingredients that are present in acetic and most neutral cure silicones, which can cause staining of natural stone.

The cured silicone is strong enough to be used on floor joints and stair treads from 12-15mm, and is resistant to all climatic influences such as UV, commonly used cleaners and disinfectants. Being neutral cure, ARDEX ST is also suitable for use with all ARDEX waterproofing membranes and can also be used in underwater joints such as in swimming pools.

#### USE

ARDEX ST is ideal for applications such as movement joints (between tiles); corners (tiled wall and floor); connecting joints between tiled surface and bench tops, bath edges, cupboards and splashbacks. It is especially good where these applications involve sensitive natural stone due to the absence of ingredients that can cause discolouration. Ideal areas of application include bathrooms, showers and kitchens; doors, windows and fixtures; natural stone wall and floor tiling in living areas, balconies, patios and facades. Also suitable for use in joints that will be immersed, such as swimming pools.

#### **SUBSTRATES**

ARDEX ST is ideal for moisture sensitive natural stone prone to staining, such as marble, gneiss, granite, sandstone and limestone. It can also be used on glazed and unglazed tiles, enamel, laminated kitchen benches, aluminium, concrete, glass, porcelain, waterproofing membranes, wood and sanitary acrylics.

#### PREPARATION

Joints and surfaces must be firm, sound, dry, clean and free from grease, oil, dirt, soap and old paints. To achieve a neater finish and to avoid getting silicone on the tile or stone, mask joint edges with tape. Prime porous and underwater joints or other joints if necessary with ARDEX SP1.

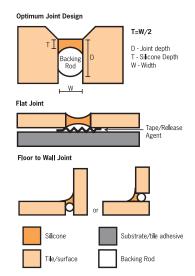
If the silicone is to be applied to copper or brass surfaces, ensure that air is able to circulate.

#### JOINT DESIGN

Where possible, the silicone should be at a 2:1 ratio (width:depth). For internal joints the width and the depth of the joint should be minimum 5mm, and for external joints 10mm. Maximum joint width is 30mm and depth 15mm. For joints greater than 10mm deep a backing rod should be used. The silicone should only be fixed to two surfaces to allow movement. Hence on flat joints use a polyethylene tape or release agent to prevent a 3 side adhesion of the silicone.

Please observe the following depth of silicone in regard to the width of the joint:

Width	Depth
6 · 10mm	as width min. 6mm
10mm	8 · 10mm
15mm	8 · 12mm
20mm	10 - 14mm
25mm	12 · 18mm



#### **APPLICATION**

Apply at temperatures between 5°C to 40°C. Trim end of nozzle to obtain the correct bead width and place cartridge in applicator gun. Apply sealant in a steady continuous bead ensuring good contact with both sides of the joint to achieve the required adhesion. Tool off with a moistened spatula to finish the joint smoothly before a skin forms, approximately 10 minutes. While the silicone is still wet, clean off any excess. If joint edges have been masked, remove tape whist the sealant is still wet. It is possible to work in sections as ARDEX ST adheres excellently to already cured ARDEX ST silicone if it is dry and free from dust.

If the silicone has dried on the surface, clean with white spirit solvent to soften the silicone then scrape off with a blade. Do not paint over the silicone.

#### COVERAGE

Coverage will vary according to joint width and depth, as well as the type and method of application. The figures below can be used as a guide for flat joints.

Joint Size (mm) width x depth	Linear Metres/ cartridge
5 x 5	12
10 x 10	3
20 x 10	1.5
30 x 15	0.7

#### **PACKAGING**

ARDEX ST is packed in plastic cartridges – net volume 310mL.

#### SHELF LIFE

ARDEX ST has a shelf life of not less than 15 months when stored in the original, unopened packaging, in a dry place at 23°C and 50% relative humidity.

#### Pay attention to the following:

To support the antifungal agent, it is recommended to regularly clean the joint and surrounding surfaces with detergents and disinfectants. Dirt and soap that often remains on the joint is ideal grounds for mould growth.

ARDEX ST is the ideal silicone for use with natural stone; however natural stone is by name a natural product that can differ greatly by quarry and position within a quarry. Therefore, it is highly advisable to use an appropriate silicone primer to guarantee no staining of natural stone.

Bituminous, tar, oil or acrylic impregnated fillers should not be used.

ARDEX ST is water resistant; however rules of undertile waterproofing must still be maintained.

Not suitable for painting over or load bearing construction.

Fresh spills can be removed with a thinner, after curing it is only possible by mechanical means if the substrate is suitable.

On painted surfaces and plastic substrates a trial application is recommended. In contact with bituminous substrates or if iodine developing cleaning agents are used, discolouration may occur.

ARDEX ST is not suitable for use with bitumen and tar due to discolouration or polyethylene, butyl, EPDM, rubber, neoprene and Teflon due to lack of adhesion.

#### SAFETY PRECAUTIONS

ARDEX ST is non-hazardous and non-dangerous. Contains 2-butanonozim. May cause allergic reaction. Keep the product out of the reach of children. Use in well-ventilated areas or with exhausting systems. Avoid skin and eye contact. If uncured material makes contact with the eye, rinse with plenty of clean water for at least 15 minutes and seek medical advice.

In case of skin contact, wipe off and wash with soap and running water. If respiratory discomfort is experienced, move to an area for fresh air. If swallowed, drink large quantities of water in small portions, do not induce vomiting and seek medical advice

For further material safety data, consult the latest Material Safety Data Sheet.

**TECHNICAL DATA** 

**Colours:** Travertine, Clear, Slate

Grey, Alabaster, Sand Beige, Charred Ash, Misty Grey, Ultrawhite

Form: Coloured paste Raw Material: Silicone,

neutral curing system

**Application Properties** at 23°C and 50% RH **Joint Width:**Up to 30mm Wall Up to 15mm Floor

Skin Forming Time: 10 – 12 minutes
Curing Time: Approx 1mm/day,
6mm/week

**Underfloor Heating:** Yes **Application Temperature:** 5°C to 40°C

Mechanical Properties AS 4992

Temperature Resistance:  $.40^{\circ}$ C to  $+180^{\circ}$ C Elongation:  $\pm 20\%$  of joint width E-Modulus 100%: Approx 0.7N/mm² Hardness, Shore A: Approx 30

ARDEX Australia Pty Ltd

NSW Ph (02) 9851 9100 Fax (02) 9838 7970 QLD Ph (07) 3817 6000 Fax (07) 3881 3188 VIC/TAS Ph (03) 9308 9255 Fax (03) 9308 9332 SA Ph (08) 8268 2511 Fax (08) 8345 3207 WA Ph (08) 9256 8600 Fax (08) 9455 1227

ARDEX New Zealand Ltd

 Auckland
 Ph (09) 2967 690
 Fax (09) 2967 689

 Wellington
 Ph (04) 5685 949
 Fax (04) 5686 376

 Christchurch
 Ph (03) 3843 029
 Fax (03) 3849 779

#### Technical Services Toll Free: 1800 224 070 DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. Vou should make yourself familiar with them.

All aforementioned products are the trade marks of ARDEX Australia Pty Ltd, its licensors and affiliates.

September 2009