DESCRIPTION

Drillcut Plumbers Silicone is a neutral cure sealant which does not corrode materials commonly used in roofs and gutters.

BENEFITS

- Tested by the Australian Water Quality Centre and meets the requirements of AS4020-2005, Products for Use in Contact with Drinking Water
- Permanently flexible
- Water resistant
- UV and weather resistant
- Resistant to temperature extremes: -50°C to 150°C
- 25% dynamic movement capability
- One part, ready to use
- Non-acidic, will not corrode metal
- 25 year guarantee against cracking and crumbling when used in standard conditions and applications.

USES

- Used in sheet metal and aluminium roofing applications
- exterior cladding
- guttering
- flashing
- downpipes

COVERAGE

300ml cartridge will give approximately 15 lineal metres of a 5mm bead.

PERFORMANCE DATA

PROPERTY	DATA
Specific Gravity	1.02 Trans, 1.02 Aluminium, 1.3 Grey
Sag	Nil
Tooling Time	5 minutes
Skinning Time	15-25 min, 25°C, 50% RH
Cure Rate	1-2 mm / day
Full Cure	Dependant on thickness
Service Temperature	-50°C to 150°C
Water Immersion	Not suitable
Joint Movement	+ 25%
Joint Size	Width 4 mm to 25 mm Depth = 0.5 - 1 x width (20mm maximum)
Shore A Hardness	19 trans, 19 Aluminium, 26 grey
Ultimate Tensile Strength (Full Cure)	Trans 0.36MPa, Grey 0.78MPa
Ultimate Elongation at Break (Full Cure)	Trans 220%, Grey 280%

COMPATIBLE SUBSTRATES

Steel	Stainless Steel
Galvanised iron	Aluminium
Ceramic tiles	Masonry
Lead	Terracotta
Glass	Zincalume
Fiberglass	Most plastics (pretest)

CLEAN UP

Best results are obtained by masking prior to sealing to avoid the necessity for clean up. However, if sealant is applied to areas where it is unwanted, clean up uncured sealant using toluene*, xylene*, methyl ethyl ketone*, or mineral turpentine* and a cloth. Cured sealant should be removed by abrasion or trimmed with a sharp knife. Do not undercut seal.

SURFACE PREPARATION

All surfaces must be clean, dry, sound and free of dust, oil, old sealant or other contamination.

Lightly contaminated surfaces should be wiped with Isopropyl Alcohol (IPA) using the 2-rag wipe method. Apply IPA to a clean lintfree cloth and wipe onto the surface to be cleaned to solubilise and remove the majority of the contaminant. A clean dry cloth should then be applied to remove remaining contamination and dry the surface. Ensure wet cleaner is not allowed to dry on surface. For more heavily contaminated surfaces or where the IPA does not remove the contaminant, a generic wax and grease remover should be applied using the same 2- rag wipe method. Once this has been completed the surface should be given a final clean with IPA using the 2-rag wipe method to ensure the surface is adequately prepared.

Adhesion to metals and some surface finishes can be further improved by light abrasion prior to cleaning with IPA using the 2 rag-wipe method. For glazing applications IPA should be used to clean and prepare the surface. Manufacturers of plastics should be consulted about suitable cleaning solvents. Adhesion to plastics should be pre-tested. Mask either side of joint to produce a neat finish. Use a suitable sized foam backing rod or polyethylene bond breaker tape to prevent three sided joint contact impeding the free and even deformation of the sealant in a cyclic joint.

PRODUCT APPLICATION

Cut seal on top of cartridge. Screw on nozzle and cut to desired bead size. Hold gun at 45° angle. Push forward, squeezing trigger to gently fill joint.

Within 5 minutes of application tool the sealant, ensure the sealant wets the sides of the joint. If masking tape is used to produce a neat finish, remember to remove the masking tape before the sealant skins. Trim with a knife once cured, if needed.

PAINTING

Mask all areas not requiring sealant. Paint will not adhere to silicone. Complete any painting and allow to thoroughly dry before applying sealant.

CHEMICAL RESISTANCE

Resistant to water, salt water, grease, oils, fuels, defrosting liquid, detergents, aliphatic fats, mildew, weak acids and bases (pre testing required).

LIMITATIONS

- Not for structural glazing
- Not suitable for use below ground
- Not for permanent or continuous water immersion
- Not recommended as a plug or seal on burst water pipes or rusted guttering
- Pre test on coated surfaces to establish suitability
- Do not use on marble or other highly porous stone - finish may be affected
- Do not use on copper or brass as discolouration may occur
- Powder coated metal surfaces may have high wax contents. Ensure that these surfaces are solvent cleaned. Pre test silicone to ensure adhesion to surface
- Not recommended in situations where movement exceeds ± 25% of the original joint dimensions
- Maximum joint depth 20mm
- Not recommended for use on polycarbonate plastic sheeting
- Not suitable for use where high abrasion, e.g. foot traffic is expected
- Do not use to construct aquariums
- Not paintable
- Do not use on freshly painted surfaces
- Do not use on bituminous surfaces
- Do not use on materials that bleed oils, plasticisers or solvents as this will affect adhesion
- Not a fire rated sealant
- Do not use in direct contact with silver coating of mirrors (e.g. on the edge of the mirror)
- Will not cure in absence of moisture

CURING

The rate of cure depends on the air temperature and humidity, the cross sectional area of the bead of sealant and the surface area of sealant exposed to the air. At 25°C and 50% relative humidity cure rate is 2 mm / 24 hours. In general, low humidity and/or low temperature will result in longer cure times. Thicker sections of sealant will have longer cure times. A small surface area in relation to the volume of sealant will also extend the cure time. Ensure that the depth of the sealant in a joint never exceeds its width.

SHELF LIFE

Drillcut Plumbers Silicone will remain suitable for use for 12 months from date of manufacture, if stored in original container, unopened, in cool dry place in temperatures less than 30°C. Once opened, the contents should be used as soon as possible. The life of contents of an opened cartridge can be extended if the nozzle is left in place after use and the tip is wrapped in plastic film.