

Hi-Seal™ FC

Fast Curing Polyurethane Trafficable Sealant

Product

Hi-Seal FC is a fast cure high performance one component polyurethane elastomeric joint sealant.

Description

When fully cured Hi-Seal FC will provide a tough, flexible seal capable of cyclic expansion and compression to ± 25% of original joint width without primer on most substrates. Hi-Seal FC is unaffected by ultra-violet radiation, atmospheric contamination or pollution. Its excellent weatherability enables it to retain its original properties after years of exposure.

(C.S.I.R.O RILEM exposure study).

Recommended Uses

- Trafficable - Plates, stairs, roads, runways, aprons and pavements.
- Vertical - Precast, blockwork, aluminum, plasterboard, timber and most common building substrates.
- Pick resistant - Prisons, cells, schools and public amenities.
- Chemical resistant - Service stations, hangers, aprons and banded areas.
- Fungal resistance - Wet areas, wash down bays, food processing.

Features & Benefits

- Compliant - ISO 9002
- Aromatic Technology - No priming required on most substrates.
- U.V Resistant - No discolouration.
- ± 25% Movement - Low modulus elastomeric sealant.
- Abrasion & Pick Resistant - Security applications.
- Shore A 45 - Trafficable applications.
- AS 4020 - Potable water approval.
- Excellent Chemical Resistance - Petroleum & wash down environments.
- Resistant to Fungal attach AS 1157.2 - Chicken, poultry & food environments.
- Acoustic Properties
- Paintable

Approvals & Standards

ASTM C.920-87 & 98 (USA) as Type S, Grade NS, Class 25, use T,G,A,M&O as an external joint sealant.

Federal Specification TT-S-00230C, Type II, Class A. AS 4020-1992 Potable Water.

Performance Properties

Property	Typical Value
Typical Properties	after seven days cure at 25°C and 50% RH
Technology	Aromatic
Appearance	Non-sag smooth tixotropic paste
Cure System	Moisture Curing
Tack free time(minutes)	45 minutes
Rate cure	in mm/24h 3.5
Hardness	Shore A 45 + 5%
Tensile Strength	> 2.1 N/mm ²
Elongation at break	> 650%
Application Temperature	5°C to 35°C
Temperature Resistance	-40°C to + 70°C
Colour	Grey, black and white

Application Instructions

Preparation

Clean all surfaces by removing foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealants and any protective coating. Porous substrates should be cleaned by grinding saw cutting or blast cleaning (sand or water). Dust, loose particles, etc should be blown out of joints with oil free compressed air or vacuum cleaned. Non porous and plastic surfaces should be cleaned by solvent or mechanical means.

Cleaning solvents should not be allowed to air dry or evaporate without being wiped with a clean, dry cloth.

Priming

For maximum performance on porous surfaces use Ramset N49 Primer.

5077 cleaner / N40 primer is recommended for non-porous surfaces.

On applications involving glass, specially treated surfaces or critical structural fabrications consult Ramset for primer recommendations.



Application

Hi-Seal FC when used as an adhesive or sealant should be dispensed from the sausage sachet by means of a hand or air operated caulking gun designed for such application (available from Ramset).

Pierce the membrane from the top of the cartridge and screw on the supplied nozzle. Having previously cut this to give the required angle and bead size.

Place the cartridge in a suitable Ramset extrusion gun and press the trigger. For sausages, a barrel gun is required, this is available from Ramset. Clip the end of the sausage and place complete sausage with pierced end located at the top of the nozzle. Screw top of nozzle and housing on barrel of gun. Using the trigger on the gun extrude product from the sausage to stop product flow, using the thumb depress the catch plate mechanism located at the very rear of the gun, directly above the trigger.

Apply Hi-Seal FC in a continuous operation using positive pressure adequate to properly fill and seal a cavity.

Precaution

- Hi-Seal FC should not be used in highly chlorinated areas such as swimming pools, spas etc without prior consultation with Ramset Technical Services.
- Hi-Seal FC should not be used in glazing applications subject to UV light radiation or direct sunlight exposure without prior consultation with Ramset.
- Hi-Seal FC should not be applied or finished with wet tooling techniques, using solvents, water or detergent/ soap solutions.
- Hi-Seal FC sealant should not be applied to unpredictable absorptive surfaces such as marble, limestone or granite unless a standard of appearance has been agreed on as a result of testing for stain and/or discolouration.
- Do not use in interior or exterior structural sealing below the waterline in marine applications.
- Do not apply at temperatures below 5°C.
- Do not apply to surfaces with special protective or cosmetic coating such as mirrors, reflective glass or surfaces coated with Teflon, polyurethane or polypropylene. Will not adhere to polyethylene, polypropylene or PTFE.

Paintability

Ramset Hi-Seal FC can be painted as early as 24 hours after application using water borne coating and most epoxy coating systems. Coatings containing high solvent contents such as gloss enamels or high oil based undercoats may cause the surface of the sealant to react creating a tacky surface to develop. A field test is recommended to ensure compatibility. To obtain best appearance and performance the paint must approximate the elongation capabilities of the sealant. High build coatings with some elastomeric ability such as quality acrylic emulsions have the capability to absorb low movement without significant distortion of the paint film. Please contact Ramset Technical Department if unsure of any paint system.

Health & Safety

On contact, uncured sealant causes irritation. Gloves and protective goggles must be worn during application and use.

- Avoid contact with skin, eyes and avoid breathing in vapour.
- Wear protective gloves when mixing or using
- If poisoning occurs, contact a doctor or Poisons Information Centre.
- If swallowed, do not induce vomiting. Give a glass of water.
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly for a minimum of 15 minutes and see a doctor.
- For more detailed information refer to Safety Data Sheets.

Clean-Up

Clean up uncured material and equipment immediately after using solvent. Do not use solvents on skin.

Cured Hi-Seal FC is difficult to remove via chemical means and mechanical means may be necessary.

Storage

Store between 5°C and 30°C.

Shelf life is twelve months in original unopened cartridge or sausage.

Usage

Approximate usage based on a 10 x 10 joint

600ml sausage - 6 metres

Packaging

Colour	Pack Size	Order Number
Grey	600ml sausage	HSFCG600