

SEALANTS

877 SUPER SPACER SEALANT

PRODUCT NAME

CRL 877 Super Spacer Sealant
One-Component Polyurethane Adhesive/Sealant

PRODUCT DESCRIPTION

CRL 877 Super Spacer Sealant is a one-component, fast cure, low solvent, permanently flexible polyurethane adhesive/sealant. CRL 877 Super Spacer Sealant cures in the presence of atmospheric moisture to provide a permanently elastic bond to fasten materials which have dissimilar coefficients of expansion. It is ideal for the fabrication of quality single-seal insulating glass units as well as for general purpose sealing application.

BASIC USES

CRL 877 Super Spacer Sealant is especially designed for the fabrication of quality single-seal insulating glass units. The special low-solvent formulation is made to be compatible with Super Spacer's adsorbent, and does not require a polyisobutylene primary seal. CRL 877 Super Spacer Sealant may also be used to fabricate I.G. units made with adsorbent fill aluminum spacers.

CRL 877 Super Spacer Sealant is also used in the fabrication and repair of trailers, trucks, buses, trains, RV utility bodies, van conversions and specialty vehicles. Applications include: vehicle bodies and cab construction including panels, underbody components, roofing, front and rear spoilers, auto trim, moldings, body seams and welding joints; waterproof lap seams and molding in truck trailers, RV's and auto body repair. Construction applications for new or repair of joints on such materials as pre-painted metals plywood, glass, aluminum, steel, and many plastics and composites.

LIMITATIONS

CRL 877 Super Spacer Sealant should not be used in the following applicaitons:

- Assembly of I.G. units when the temperature is under 40°F (5°C) and the humidity is less than 40%.
- Frozen surfaces or through standing water..
- Over silicones or in the presence of curing silicones.
- In contact with alcohol and solvents during cure.

TECHNICAL DATA

The physical properties of CRL 877 Super Spacer are shown in Table 1.

TABLE 1 - PHYSICAL PROPERTIES

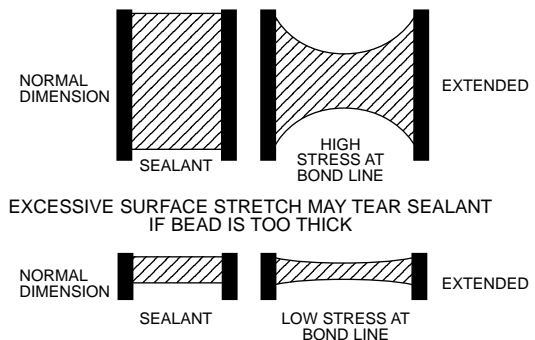
Property/Test Methods	Value
Tack Free Time 77°F (25°C), 50% RH	45 to 60 minutes
Curing Time 77°F (25°C), 50% RH.	3/16 inch per 24 hours
Durometer Hardness, Shore A (ASTM D-2240)	45-50
Ultimate Tensile Strength (ASTM D-412)	350 psi
Elongation at Ultimate Break, (ASTM D-412)	700%
Sag or Slump (ASTM C-639)	Nil
Application Temperature	40°F (4°C) to 110°F (43°C)
Service Temperature	-40°F (-40°C) to 200°F (93°C)

PRINCIPLES OF JOINT DESIGN

Figure 1 illustrates why a thin bead of polyurethane sealant will accommodate more movement than a thick bead. Obviously, the thin bead is the most desirable.

FIGURE 1

SURFACE OF BEAD

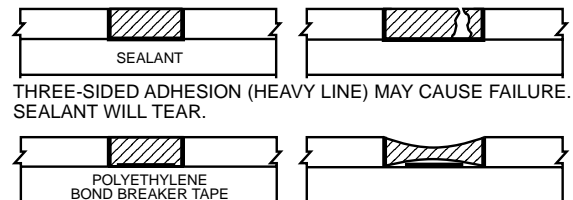


SURFACE STRETCH IS NOT EXCESSIVE IF A THIN BEAD IS USED
NOTE: WITH SILICONE SEALANTS MORE IS NOT USUALLY BETTER!

Figure 2 illustrates why polyurethane sealants need bond breaker tape to prevent undesirable three-sided adhesion.

FIGURE 2

BOND BREAKER



USE OF A BOND BREAKER GIVES TWO-SIDED ADHESION AND ALLOWS SEALANT TO STRETCH FREELY WITH JOINT.

JOINT DIMENSIONS

Joint depths should be no thicker than 1/2 inch (12.7 millimeter) and no thinner than an 1/8 inch (3.175 millimeter). For perimeter sealing or expansion joint design, the ratio of the joint width to sealant depth should be about 2:1.

Polyurethane or polyethylene foam backer rod is recommended for deep joints. Use polyethylene tape on joints too shallow to accommodate foam rod. These materials permit the application of a thin bead and act as bond breakers, which allow the sealant to stretch freely with joint movement.

INSTALLATION

CLEANING

Clean all joints and glazing pockets, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants and protective coatings.

Metal, glass and plastic surfaces should be cleaned by mechanical or solvent procedures. Detergent or soap and water treatments are not acceptable. In all cases where utilized, solvents should be wiped on and off with clean, oil and lint-free cloths. Excess sealant should be cleaned from glass, metal and plastic surfaces while still uncured using a commercial solvent such as methyl ethyl ketone, xylol, or toluol. Cured sealant must be removed by mechanical means such as a razor knife.

CAUTION

When using any solvent always follow solvent manufacturers safety and handling recommendations. Always use CRL 877 Super Spacer Sealant with adequate ventilation and avoid prolonged breathing of vapor and prolonged skin contact.

MASKING

Areas adjacent to joints should be masked to assure neat sealant lines. Do not allow masking tape to touch the clean surfaces to which the silicone is to adhere. Tooling should be completed in one continuous stroke immediately after sealant application and before a skin forms. Masking should be removed immediately after tooling.

PRIMING

CRL 877 Super Spacer Sealant is designed to adhere to most surfaces without primer. Consult CRL for priming recommendations on substrates where there is not adequate adhesion. NOTE: Prior to general job use, place a bead of sealant on the substrate material to test adhesion.

APPLICATION

- The substrate must be clean, dry, free of oils or greases and of sound quality. Thoroughly remove all loose particles. Clean surfaces with compressed air or solvent.
- For sealing insulating glass units, simply attach a CRL SGT Nozzle to match your Super Spacer width and backfill to the edge of the glass.
- Install backup material or joint filler, setting blocks, spacer shims and tapes as specified.

- Apply CRL 877 Super Spacer Sealant with hand gun or pressure equipment in a continuous operation using a positive pressure adequate to properly fill and seal the joint. Tool or strike the sealant with light pressure to spread the material against the backup material and the joint surfaces. A tool with concave profile is recommended to keep the sealant within the joint.

PRECAUTION

Read Material Safety Data Sheet before using product for the first time. Uncured sealant may irritate the eyes. Avoid contact with eyes and skin. Contact lens wearers take appropriate precautions. IN CASE OF CONTACT, FLUSH EYES WITH WATER. CALL A PHYSICIAN. Remove from skin with dry cloth or paper towel. KEEP OUT OF REACH OF CHILDREN.

SHELF LIFE/STORAGE

Store at or below 90°F (32°C). Dispose of empty containers in accordance to federal, state and local regulations.

CRL 877 Super Spacer Sealant has a shelf life of 12 months.

WARRANTY LIMITATIONS

The warranty specifically excludes sealant failure due to:

1. Appearance changes due to deposits of dirt and other materials.
2. Decomposition of the underlying substrates.
3. Excess movement of the structure which exceeds published specification for movement caused by building settlement, design error, or construction error.
4. Mechanical damage caused by external sources.
5. Natural disasters such as fires, lightning, earthquakes, tornadoes, or hurricanes.

MAINTENANCE

No maintenance should be needed. If silicone sealant becomes damaged, replace damaged portion. Clean surfaces in damaged area and repair with fresh CRL 877 Super Spacer Sealant.

PACKAGING

CRL 877 Super Spacer Sealant is packed in 11 fluid ounce cartridges. 12 cartridges per case, which fit standard cartridge caulking guns.

TECHNICAL SERVICE

Complete technical information and literature is available from C.R. Laurence Co., Inc. Any technical advice furnished by the company or any representative of the company concerning any use or application of any sealant is believed to be reliable, but the company makes no warranty, expressed or implied, for any use or application for which such advice is furnished.

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JANUARY 2003



CRL

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LIMITED WARRANTY NOTICE

CRL and its manufacturer warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products but also upon many factors beyond our control in the application process. Therefore, except for such replacement or refund CRL and its manufacturers make no warranty or guarantee, expressed or implied, including warranties of fitness or merchantability, respecting its products. CRL and its manufacturers shall have no other liability with respect thereto. User shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the CRL Product Manager.

COOPERATIVE TESTING

Materials submitted for testing should be sent to:

C.R. Laurence Co., Inc.
Technical Sales Department
PO Box 58923
Los Angeles, CA 90058-0923

This program is intended to eliminate potential field problems by pretesting CRL construction sealants with samples of the building materials on which the sealant will be applied. The test will aid in determining the proper surface preparation method, effective solvents for cleaning and whether priming is necessary to achieve optimum adhesion. Following this procedure will remove many of the unknown variables which affect field success.

Test samples of substrates should be identified as to manufacturer, origin, designed use, building project, person and firm originating the request. Appropriate sketches or drawings showing the intended use can be helpful.

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