

Topic: Repair and Removal Instructions for TREMstop Sealants

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For more information, contact the Technical Service Department at 866-209-2404.

TREMstop firestop sealants are designed to provide effective firestopping solutions for the life of the building. However, a variety of conditions can require repair or removal and replacement of firestop sealant. On projects requiring sealant removal, a technique and quality standard should be established prior to starting the project.

Repairs

Firestop systems found to have been damaged should be repaired with the same Tremco Fire Protection Sealant, in accordance with the originally installed listed system or Tremco Engineering Judgment. Tremco Firestop Sealants will adhere to clean surfaces of similar material, so various types of minor repairs in seals (such as areas of lost adhesion) can be repaired or cut out and replaced. While performing repairs, bear in mind:

1. All surfaces must be clean, dry, and free from debris. What appears to have been an adhesive failure of the sealant may, in fact have been a cohesive failure of the substrate, leaving debris bonded to the surface of the sealant.
2. Adequate pressure against the bonding surfaces should be achieved by tooling the material into the area to be repaired.
3. Cured and uncured sealants have different tolerances for stress (i.e. vibrations, compression, extension); repaired areas should be allowed to fully cure prior to being exposed to typical stress, if possible.

Removal

In some cases the existing sealant must be removed completely. The sealant is first removed by cutting it out with a razor knife. An alternate to cutting out the sealant by hand with a razor knife is to use a power oscillation blade cutter. This can improve efficiencies on larger jobs. Typically, this will leave a thin layer of sealant on the substrate.

In gypsum board, a narrow strip of gypsum board around the periphery of the opening can be removed using a gypsum saw or reciprocating saw to expose a clean bonding surface. Care must be taken to ensure that newly exposed edge of the gypsum board is not damaged by the cutting process and that the resulting opening size or joint width falls within the allowable limitations of the firestop system to be installed later.

On resilient substrates, such as concrete, most sealants can be removed by using an abrasive grinding wheel. It is usually also necessary to remove a fine layer of substrate to insure a clean bonding surface. If a grinding wheel cannot be used, the sealant must be removed with another abrasive material.

For non-porous substrates such as galvanized steel, the use of an abrasive pad soaked with an appropriate solvent is usually required for complete removal. The abrasive pads are available in various grits, similar to sandpaper. The abrasive pad should remove the sealant without damaging the substrate.

On occasion, it may not be necessary to entirely remove the existing sealant. Partial removal is sometimes done when the replacement sealant is the same type and the existing sealant is still well bonded. In these cases, a 1/16" to a 1/8" thickness of old sealant is left at the bond line. This removal technique is often used on resilient substrates such as concrete when the firestop system and material to be installed is the same as or similar to the system and material previous used.

Replacement

When replacing a firestop system, the new firestop must be installed in accordance with a listed firestop system of Tremco Engineering Judgment. Refer to the Tremco Firestop Manual or the UL/ULC Fire Resistance Directory for specific application instructions. The firestop system details will cover the required sealant depth, necessary amount of packing material and the permitted joint size or annular space.