

## ROOF CLIP ADHESIVES

3M™ VHB™ 4951 Pads  
SB-190 EVERSEAL Adhesive



SB-190 EVERSEAL ADHESIVE



3M™ VHB™ 4951 Pad

### Roof Clip Adhesive

- For a variety of substrates
- Superb Tensile Strength (2000 PSI)
- Flexible - 500% Elongation/impact-resistant
- Easy one-part application
- 50°F (10°C) Minimum Application Temperature
- Water- and weather-proof. Lasts up to 30 years.

SB-190 EVERSEAL is a roof clip adhesive that creates a permanent bond between roof clips and metal or asphalt shingle roofs. One 10oz. tube will adhere 50-75 clips.

**NOTE: SB-190 cannot be used with copper clips or on copper surfaces.**

**NOTE: SB-190** is recommended for asphalt, wood, metal, EPDM and TPO roof membranes if temperatures are above 50 degrees F during the application and for 2 weeks after. Not recommended for use with soft expansion joints, polystyrene or styrene containing plastic.

#### SPECIFICATIONS FOR SB-190

**Bond Strength/  
Cure Time:** 100% in 7-28 days depending on conditions. At temperatures of 50°F or higher. SB-190 is 80% cured after 3 days, and 90% cured within 2 weeks. Colder temperatures slow the curing process.

**Minimum Application  
Temperature:** 50°F (10°C)

**Made in the USA**

### Double Sided Acrylic Foam Pads

- For metal to metal materials only
- High Tensile Strength
- High shear and peel adhesion
- Conformability
- 32°F (0°C) Minimum Application Temperature

3M™ VHB™ 4951 Pads utilize high performance adhesives which have excellent long-term holding power. The peel adhesion and tensile holding power of this pad is significantly higher than typical pressure sensitive pads.

**NOTE: VHB pads are for adhering metal-to-metal surfaces only.** They CANNOT be used on asphalt shingles, coated metals or rubber membrane materials.

**ATTENTION: Do not use VHB pads with DT-AS-50 clips.**

#### SPECIFICATIONS FOR VHB PAD

**Length:** 2" (6cm)  
**Width:** 3" (8cm)  
**Thickness:** .0312" (.079cm)  
**Bond Strength:** 100% at 70°F (21°C) in 72 hours  
**Minimum Application  
Temperature:** 32°F (0°C)

### APPLICATION 3M™ VHB™ 4951 PADS

The VHB pads are to be used with The RM-25-AL clips or other non coated metal clips, not with the DT-AS-50 clips.

### SURFACE PREPARATION

A pad location must be clean and dry. Typical surface cleaning solvents are a 50/50 isopropyl alcohol (rubbing alcohol) and water mixture. Scrubbing the surfaces with a solvent saturated mild abrasive pad (i.e. Scotchbrite brand surface preparation products) and then wiping the surface clean provides good results.

Some materials; i.e. copper or brass, will require coating with lacquer or varnish to prevent oxidation of the surface.

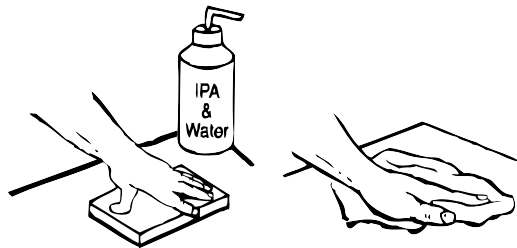
VHB pads cannot be used on asphalt shingles or rubber membrane materials.

### RUB DOWN PRESSURE

Bond Strength is dependent upon the amount of adhesive-to-surface contact development. Firm application pressure develops better adhesive contact and thus improves bond strength. Apply pad to the first surface and press down with very firm pressure. Then apply the second surface and provide very firm pressure to the entire bond line.

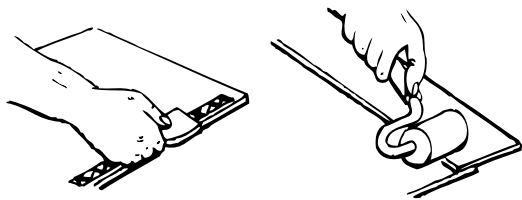
### DWELL TIME

After application, the bond strength increases and approaches the ultimate bond strength after 72 hours at 70°F (21°C). In some cases bond strength can be increased and ultimate bond strength can be achieved more quickly by exposure of the bond to elevated temperatures; i.e. 150°F (66°C) for 1 hour. This provides quicker and more thorough adhesive wetout onto the surface.



Step A. Solvent Wipe.

Step B. Wipe Dry.



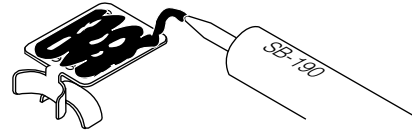
Step C. Squeegee onto Surface.

Step D. Roll finished Joint

**Detail 1.** Surface preparation and application instructions prior to installing VHB Pad.

### APPLICATION OF SB-190

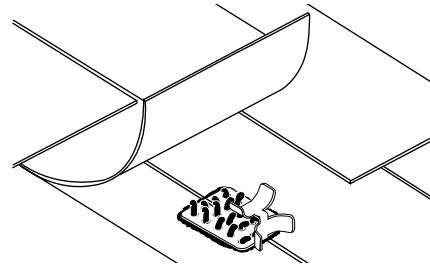
1. Apply 0.2oz. of SB-190 to the back of DT-AS-50 roof clip. Refer to Detail 1. SB-190 minimum application temperature is 50°F (10°C). NOTE: SB-190 can not be used over rubber membrane.



**Detail 1.** Apply SB-190 to back of clip.

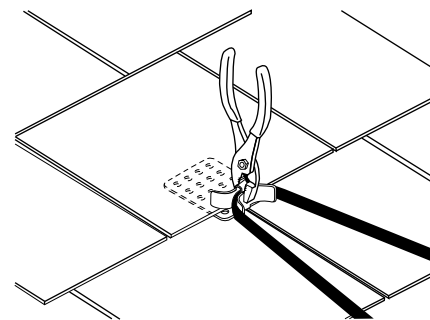
2. Orient the DT-AS-50 roof clip as needed. Press down to ensure SB-190 adhesive flows through holes. Do not trim back SB-190 adhesive beads because they help hold the clip down. Refer to Detail 2.

Allow 24 hours for SB-190 adhesive to cure before installing de-icing cable.



**Detail 2.** Press cable to roof surface.  
**Allow 24 hours before installing de-icing cable.**

3. Install de-icing cable and use pliers to close clamps, ensuring not to damage cable. Refer to Detail 3.



**Detail 3.** Close clamps with pliers.

### TECHNICAL SUPPORT

A full set of installation instructions is included with order. Please call 1-800-526-7887 with any questions.