Expansion Joint Systems

J & JP Series Sealing Systems Installation

Responsibility

It is the responsibility of installer to understand all the requirements of this document before attempting to install J and JP seals.

Failure to perform any of the steps outlined in this document will result in underperformance or failure of the product.

Failure to perform any of the steps outlined in this document shall void any warranties, either expressed or inplied, regarding J and JP seals.

Product Safety

Please review each component's SDS before installation to fully understand the safety concerns related to this system. Failure to do so could result in serious injury or death.

All jobsite safety rules and regulations as specified by the owner or project management are to be followed and are not superseded by any statement in this document.

Equipment Needed

- Sandblaster
- Compressor (185)
- Drill with small mixing paddle
- Margin trowels (2 or more)
- Flat bar
- Cardboard sheets or other suitable material to spread out epoxy (extends curing time)
- Duct Tape or masking material
- Rubbing/Denatured alcohol
- Acetone (for clean-up)
- Rags
- Wire Brushes (2)
- Stiff nylon paint brush
- Rubber Kitchen Spatula

Pre-Application Inspection

- Visual inspeciton of expansion joint is first task to be completed by the installer.
- New concrete shall have a minimum of 14 days of cure.
  - Moisture content of the concrete shall be less than 5%
- All formwork must be removed.
- Substrate temperature and air temperature must be above 45°F and rising.
- In applications where the J-SEAL system will be replacing an existing seal system the old system must be completely removed before installation of the J-SEAL system.
  - Joint components, such as armor angle or strip seal channels may remain in place but must be inspected to ensure that they are soundly secured in concrete.
  - Steel profiles should be grit blasted to an SSP 8 finish or better in the bonding area.
  - Any steel surfaces with a galvanized surface must have the galvanizing removed from it before the installation/placement of the epoxy material.
- Loose, contaminated, weak, spalled, deteriorated and/or delaminated concrete must be removed to sound concrete.
  - Any spalls, voids, or structural cracking at joint interfaces must be repaired.

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- Concrete should be grit blasted to a finish between coarse sandpaper and a 1/4" profile.

- Joint openings must be free of all contaminants, loose materials, dry and free of frost/
  - Epoxy adhesive will not bond to water.

Installation

Do not proceed with the work when temperatures are below 45°F or expected to fall below 45°F. Do not proceed with the work when temperatures are above 90°F unless approved in writing by the manufacturer.

Step 1 - Uncoil the seal and place it on the deck allowing it to relax.

Step 2 - Using duct tape or other suitable masking material, tape the top edges of the rail or joint to keep it clean.

Step 3 - Using paint brushes apply the conditioner onto both sides of the ribs. Work conditioner into the ribbed areas with wire brushes. Allow the conditioner to set for approximately 5 minutes.

Step 4 - Using rags or stiff nylon brushes vigorously scrub with rubbing/denatured alcohol to clean off the conditioner. Dry with clean dry cloth rags. The surface of the fins should have a dull tacky finish.

Step 5 - Adhesive Mixing Instructions: Pre-mix DSB High Strength Epoxy Parts A and B individually if not using entire container. Proportion equal parts by volume of Part A and Part B into a clean mixing container. When measuring, do not use one tapered container such as a Dixie paper cup, filling it half full of A and half full of B; the correct ration (1:1) cannot be achieved due to tapered feature of container. Thoroughly mix using low speed drill (400 to 600 RPM) and paddle mixer for 3 minutes, scraping sides of container until a uniform gray color is achieved. Only mix amount of epoxy that can be used within its gel time. Spread mixed epoxy out on the cardboard about 1/4" thick to extend gel time. If you pile it up or leave it in the can, the gel time will be shortened due to the greater mass and exotherm.

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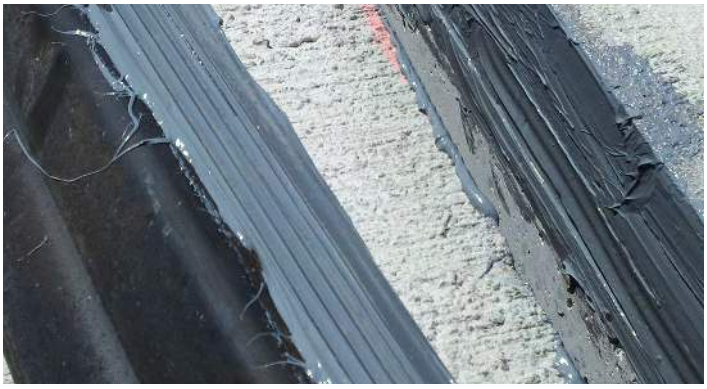

Step 6 - Using margin trowels, spread a thin layer of epoxy on the sidewalls of the joint. At the same time lay the seal on the masked off area on top of the joint. Apply epoxy to one side of the seals ribs, making sure to fill the ribs with epoxy. Flip the seal over and fill the other side of the seals ribs with epoxy.

Note: If you are installing by hand do not apply more than 8 ft. of epoxy at a time.

Step 7 - D.S. Brown Company recommends J-seal be installed ¼" to 3/8" below the deck surface. For ADA/ Walking surfaces 1/8" depth is recommended.

Step 8 - The bottom of the seal in the joint and squeeze the seal together. The seal should be in the joint far enough that it doesn't pop out on its own. Using a flat bar, push the top of the seal in the middle to get it to the desired depth.

- If installing entirely by hand, keep squeezing the seal by hand and pushing it in the joint with the flat bar to the desired depth. Do this for the length of the seal being extra careful to keep the epoxy off the top of the seal.

Clean-up

IMPORTANT: Immediately after J or JP seal placement in the joint, clean any excess drips or puddles of adhesive from the top of the seal. Remove any excess adhesive using organic solvents (Acetone) and a clean cloth rag. Failure to clean excess epoxy could cause damage to the seal.

Remove Masking material from the top of joint and dispose of properly.

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