LymTal International, Inc.

ISO-FLEX MOISTURE SEAL INSTALLATION PROCEDURES

1. Preparatory Work

The expansion joint blockout and stem openings shall be a consistent width and depth along the entire length. They shall be the required widths and depths for the specified seal on this project.

Edge spalling, sharp projections and concrete voids shall be repaired prior to proceeding with the joint installation. All repair materials used should have reached full cure conditions as specified by the manufacturer.

Slightly chamfered or rounded the top corners of the concrete at the expansion joint are recommended to help prevent edge spalling and damage to these edges during subsequent use.

The EPDM Moisture Seal shall be unrolled and allowed to lie in a relaxed position. Once rolled out the seal can be cut to length and any splicing can be made (See section "Splicing").

The expansion joint blockout and opening should be sandblasted to remove laitance, loosely bonded material and any other contaminant, which may inhibit bonding of the system to the concrete. Should sandblasting not be feasible the surfaces must be ground with a coarse wheel disc grinder to produce and abraded surface. Care must be taken not to polish the concrete surface, as this can lessen the adhesion.

2. Installation

Tape both sides of the top edges of the concrete at the blockout.

Thoroughly mix one unit of Iso-Flex Primer #10 and with a disposable brush apply to the horizontal and vertical surfaces of the blockout. Ensure that the Primer #10 does not puddle. Allow the Primer #10 to cure to a point where it is dry to touch. Typical coverage rate is 60 ft./unit.

Note: If the primer dries for longer than 4 hours prior to the application of the Iso-Flex 910 Tack Coat, the area must be re-primed with a mixture of Primer #10/MEK 1:1 by volume.

Wipe the Moisture Seal with a clean absorbent rag soaked in toluene.

Insert the Moisture Seal into the stem opening and align so that the perforated flanges of the seal will align properly with the blockout base. The seal can be held in place with compressible foam seal, backer rod or polystyrene. 12” long pieces spaced at 6 Ft intervals will hold the Moisture Seal in place temporarily.

Combine one liquid unit of Iso-Flex 910 Tack Coat part A and B and briefly mix (approximately one minute) until they are fully blended. Typical coverage rate is 60 ft./unit.

Note: 15 minute work life, move quickly.

Using a bulk-caulking gun, or by carefully pouring the unit of material, immediately apply the Iso-Flex 910 Tack Coat on the base of the blockout. Spread out to a uniform film thickness. Once applied, push the perforated flanges of the Moisture Seal down into the 910 Tack Coat.

With the Moisture Seal laid into the Tack Coat the next step is to cover the installation with plastic sheeting and apply weight to the surface while curing. Typically 2 x 4 wood lengths or plywood works well for this process. With the Moisture Seal held down securely in place allow the Tack Coat to cure. This will typically take 2 hours to become firm.

Next you will need to remove the weight from the Moisture Seal and pull up the plastic sheeting. With the Moisture Seal now exposed a top film of 910 Tack Coat is applied to the Moisture Seal. Mix and apply a film of the 910 tack Coat on the top surface of the Moisture Seal using a margin trowel so that the top side of the Moisture Seal is fully encapsulated into the 910 Tack Coat. It is important that the Moisture Seal lays flat in the blockout.

Allow the Tack Coat to cure out for approximately 3 hours, or until fully cured. After which you can pursue the remainder of the expansion joint system installation.

3. Clean Up

Immediately after placement of the Iso-Flex Moisture Seal remove the tape from the seal and concrete and dispose of properly.

Wipe the seal with an organic solvent to remove any remaining Tack Coat or tape residue.

4. Splicing

Splices of the Iso-Flex Moisture Seal can be easily completed in the field by using Carlisle "Secure Tape". The Moisture Seal material lengths can be effectively spliced together using this method. Lay out the 2 lengths of Moisture Seal to be spliced and assure they are clean and dry. The splice overlap should be 3" wide. Cut the Secure Tap (also 3" wide) to the proper length for this purpose. Using a clean cotton rag, prime the interfacing areas of both pieces of Moisture Seal with Carlisle HP-250 Primer using a circular motion. Allow about 1 minute for the primer to flash off.

Once the primer is applied, align and press-apply the Secure Tape over the first primed surface. Be sure to align correctly since there is **no ability to reposition** the rubber due to the bond strength. Next, pull the protective backing sheet from the Secure Tape. Carefully align the adjoining length of Moisture Seal over the Secure Tape and press-apply. Apply even and uniform pressure along the splice line to develop the material bond. The final step in the process is to apply Carlisle SS Lap Sealant (provided in caulking cartridges) along the edges of the overlapping material.

5. Downspouts

The LymTal provided down spouts can be applied to the Moisture Seal sheet using similar bonding methods as covered in Splicing. Simply locate your downspout, cut the circular hole for the spout. Begin the bonding process by applying the Carlisle HP-250 Primer in a circular motion as was done with splicing. Once the primer has time to flash off, peel the backing tape from the downspout. Carefully align the downspout over the cut hole and press apply to the primed surface. Once again be sure to properly align since there is no ability to reposition once the bond is made. The final step in the process is to apply Carlisle SS Lap Sealant (provided in caulking cartridges) along the circumference of the downspout.

6. Cure Time

The installation can be opened to traffic once the Iso-Flex 910 has fully cured, approximately 4-6 hours.

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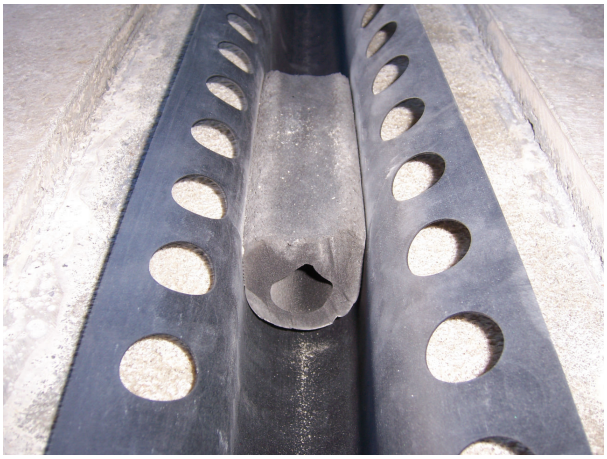
Iso-Flex Moisture Seal
Photo Sequence Installation Procedure

The process begins with rolls of the properly sized Iso-Flex Moisture Seal. This is a factory punched EPDM barrier.

Ensure that the blockout is properly repaired so that it has a flat bottom surface. Slip the Moisture Seal into the joint gap as shown.



The Moisture Seal is held in place with sections of Iso-Flex Foamflux seal or properly sized backer rod. Be sure that 2.5” of the seal is on the blockout base and that the hole pattern will be fully sealed into the Tack Coat Material.

Mix the Iso-Flex Primer #10 and apply to the base of the blockout. Allow to dry. The primer should be dry to the touch but tacky like duct tape when touched.

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Combine & mix Part A & B of the Iso-Flex Tack Coat. The Tack Coat can be applied with a bulk gun or poured out and then spread with a margin trowel.

Apply a complete film of the Tack Coat to the base of the blockout and lay the Moisture Seal into the wet material.

Over the top of the installed Moisture Seal, lay a plastic sheet to act as a bond breaker. Over the plastic sheet place plywood or cut lumber to apply a uniform pressure while the Tack Coat cures.

Once the Tack Coat is cured, remove the weight and the plastic sheet. With the Moisture Seal exposed, apply a top layer of Tack Coat to encapsulate the Moisture Seal.encapsulate the Moisture Seal.

After 1-2 hours of cure, remove the foam seal or backer rod used to hold the Moisture Seal in-place.
The Moisture Seal is now ready for typical installation of the expansion joint system.

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