

AUSSIE Skin 550G/560G Cold Weather Installation

In colder temperatures, adhesives and sealants don't bond as well due to the temperatures causing reduced adhesion strength. During these conditions, additional procedures may be required to ensure proper bonding and performance as noted below.

1. Keep all Aussie Skin rolls and accessories in a warm (approx. 70°F) area such as a tented area or heated trailer.
2. Aussie Skin factory laps: When seaming the Aussie Skin laps use a Leister heat welding machine, heat gun or a propane weed burner to soften the material and adhesive per the below steps.
 - a. Align the Aussie Skin seams, remove the release liners, and firmly roll into place.
 - b. Apply heat to the seam and reroll the seam to ensure full adhesion.
3. Detail Strips: Use the same steps as noted for the factory lap seaming.
4. Non-Factory Laps: When installing non-factory laps use a Leister heat welding machine, heat gun or a propane weed burner to soften the material and adhesive per the below steps.
 - a. Use a wire brush to remove all loose granules.
 - b. Preheat the area to receive Aussie Skin Double Sided Tape and firmly roll tape into place.
 - c. Remove the top release liner of the tape and apply Aussie Skin membrane over tape and firmly roll into place.
 - d. Apply heat to the taped area and reroll to ensure proper adhesion.
5. Applying double sided tapes to metal and metal I-Beams. Pre-heat the metal surfaces by lightly going over them with a heat gun or torch. Then immediately apply the double-sided tape to the metal surfaces and roll over the tapes with the steel pressure roller. Check for proper adhesion once installed.
6. Applying the sanded tapes – keep sanded tapes warm prior to use. Apply the sanded tapes and roll with pressure roller while still warm. If needed, use a heat gun to blow hot air over them while rolling the pressure roller over them to improve adhesion. Check for proper adhesion once installed.
7. Seams can be enhanced by “wet” setting Sanded tape into Aussie Seal M. First install a one-inch-wide bead of sealant over the seam. Immediately after “wet” set the Aussie Skin Sanded tape into the Sealant. Roll the sanded tape, squishing the sealant flat. The tape should extend a bit beyond the sealant underneath. It is important to note, that if left exposed for an extended period of time the edges of the tape may release but the sealant will lock the tape in place permanently sealing the lap underneath.
8. Applying the sealant in cold weather (20°F - 50°F) keep the sealant warm prior to use. Apply the sealant while still warm. If needed, use at heat gun to blow hot air to pre-heat the substrates. Check for proper adhesion once installed. Sealant should be allowed to fully cure before exposed to hydrostatic pressures. In very cold weather this may take 14+ days. Therefore, make sure to keep dewatering systems active for a minimum 30 days after sealant installations.



LEISTER HANDHELD HEAT WELDER



LEISTER WALK BEHIND HEAT WELDER

SEAM INSPECTION

Aussie Skin 550G and 560G are very thick (50 and 80 mils respectively). The thickness provides excellent protection against damage in the field caused by standard construction traffic. Unfortunately, thick HDPE based materials are sensitive to UV exposure. It is not uncommon for HDPE based materials to expand and contract throughout a 24-hour period and this expansion and contraction is a bit worse when the product is very thick. For this reason, AVM has added significant amounts of plasticizers and enhanced our seams to include dual adhesives. Yet, even with the extra effort, exposure to UV light and temperature swings can result in opened seams.

There are several steps that can be taken to reduce the number of opened seams and there are simple solutions for those few areas that do separate. Importantly, it is our general recommendation to not address opened seams until 24 hours before placement of concrete. This is because the expansion and contraction of plastic will often result in some areas opening and closing throughout the time the material is left exposed. Thus, it is best practice to wait until 24 hours prior to placing the concrete to address any seam issues at one time versus trying to attack the problem throughout the installation process.



ACCEPTABLE SEAM: 2 INCHES OF ADHESION

Definition of Seam Needing Repair:

Not all seams must be addressed. Our standard lap is 3 inches wide, however two inches has been shown in testing to provide a full 100 PSI protection against failure. For this reason, AVM does not require a seam to be addressed unless a full 1 inch is unbonded from the edge.

How to Repair Seams:

The following options can be utilized to address opened seams:

1. Simply reroll the seam. In many cases, especially during warm and hot weather, the adhesive is still sticky, and the applicator simply needs to reroll the seam.
2. Utilize Aussie Bond 930 spray adhesive. This product can be easily sprayed into the open seam to provide fresh adhesive to glue the opened seam shut.
3. Utilize Aussie Seal M and Sanded Tape. Install a 1-inch-wide bead of sealant over the seam and “wet set” the Aussie Skin tape into the adhesive.
4. For very cold environments, the installer may find it necessary to utilize a torch or Leister heat gun to heat up the popped seam. The heat should reactivate the adhesive and allow the opened seam to be rerolled.



SEAM REQUIRING REPAIR: REPAIR PER ABOVE STEPS