



# TECHNICAL BULLETIN

Last Revision: March 2017

## Subject: Cold Weather Shingle Installation Recommendations

It is acceptable to install asphalt shingles in colder weather as long as a few precautions and recommendations are followed during installation. Asphalt shingles may become less flexible at temperatures of approximately 40F. Asphalt shingles that are being handled and/or installed in colder weather should be handled with care as outlined below.

The most important precaution when installing asphalt shingles in colder weather is the activation of the sealant. Asphalt shingles are manufactured with a thermally activated asphalt sealant, which bonds the shingles together once they are applied to the roof and exposed to a few weeks of sufficient heat from sunlight. Atlas requires to hand-seal a roof or slope of a roof if there has been insufficient heat or sun exposure to seal shingles and blow-off damage has occurred. This does not mean that the sealant is defective, only that there has not been sufficient heat to activate the sealant. Failure of a shingle to seal due to insufficient heat is not a manufacturing defect. In order to provide adequate protection from wind blow-off in very cold weather, asphalt shingles must be hand-sealed with an approved asphalt roofing cement.

The following recommendations will assist in completing a trouble free installation under cooler weather conditions with little inconvenience to the installers.

- Use caution when handling bundles of shingles and individual shingles in cold weather as they may crack, or in severe cases, break apart. As with most materials, asphalt shingles tend to become less flexible in cold weather (<40°F). Note that when cold, shingle bundles will tend to keep the shape of the surface upon which they are stacked. When nailing, make sure the shingles are flat; otherwise, the nail may break through the shingle surface during installation. Avoid bending, throwing, or dropping bundles of shingles in cold weather. For best results, store shingles indoors to keep them warm prior to application.
- Lay the bundles out flat and individually across the roof to allow them to acclimate to the ambient air temperature and to allow the bundles/shingles to relax and flatten away from the pallet storage configuration. Shingles will lay flatter on the deck as they are nailed.
- Allow any obviously distorted shingles to relax in the sunlight for a couple of hours, if possible, to allow them to relax and flatten out.
- DO NOT drape the shingles or shingle bundles across the ridge or across other bundles prior to opening and installing, especially in temps below 70 F – this may cause the shingles to “take a set” and then not lay flat when fastening.
- Don’t crowd the shingles too tightly together end to end – let them lightly touch, or leave a slight gap of up to 1/16” to allow for natural warming and expansion and to allow the shingles to flatten further with the sun’s exposure over a few days.
- Adjust the nail gun to set the nail head just snug to the granules, or hand nail – don’t over-drive the nails or nail too tightly – this will also allow the cool shingles to continue to relax from the sun and to continue to flatten after the job is completed.
- Asphalt shingles are manufactured with a thermally activated asphalt sealant, which bonds the shingles together



# TECHNICAL BULLETIN

once they are applied to the roof and exposed to a few weeks of sufficient heat from sunlight. In order to provide improved protection from wind blow-off in very cold weather, hand sealing is required using an approved flashing cement/asphalt shingle cement meeting ASTM D 4586 or CAN/CSA-A 123.5-M90. Seal down every tab with one or two 1 inch (25 mm) diameter spot(s) of asphalt roofing cement. Ensure that the shingles are pressed into the asphalt cement causing it to be near the shingle edges, but not exposed. For laminated shingles, at least three spots of sealant may be used. Rakes and eaves of the roof are especially susceptible to wind blow-off if they are not sealed. Shingles installed in fall or winter and not exposed to adequate surface temperatures, or other conditions which temporarily or permanently preclude activation of the sealant, may never seal and must be hand sealed at the time of installation. It is not a manufacturing defect if shingles fail to seal under the above circumstances.

- While StormMaster SBS asphalt modified shingles are easier to handle in cold temperatures and the shingles are much more crack resistant, the sealant materials will react and perform the same as with other standard asphalt shingles in cold conditions.
- When finishing the top of the roof, the Ridge Cap shingles are bent over the roof planes. To ensure that the shingles do not crack during installation, it is suggested to leave the Ridge Cap shingles in a warm area prior to installation.
- If roof maintenance or inspection is required in cold weather, take special care when walking on shingles. Shingles applied to an uneven surface, or that are slightly curved or buckled, are very susceptible to breakage underfoot in frigid weather.
- Certain North American regions receive very high snowfall amounts, requiring snow and ice removal from the roof. Extreme caution must be taken when removing snow from the roof so that the shingles are not damaged by shovels, scrapers, or foot traffic.