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CURLING OF ASPHALT SHINGLES DURING WINTER

Winter curling is a phenomenon affecting asphalt roofing shingles whereby the front edge of the shingle lifts-up slightly from the roof deck when cold, then lays flat again during warmer weather.

This phenomenon is especially prevalent during damp winter conditions when frost forms on the top surface of the shingles. This cooling on the top surface of the shingles causes that part of the shingle to contract. At the same time, the underside of the shingle in contact with the deck, receives a certain amount of passive heat from the attic. As a result, the underside of the shingle is slightly warmer relative to the top and the shingle lifts or curls up slightly.

The effect of this phenomenon is noticeable to a greater or lesser degree with all shingles depending on shingle age, attic ventilation, shingle type, roof pitch, humidity, climate, etc. *Winter curling* has existed forever and can rarely be completely eliminated. Although this phenomenon is visible during cold weather, the shingle's durability and water shedding performance are not affected.

For more information on this subject or other asphalt shingle technical issues, you may contact CASMA by e-mail at casma@casma.ca, or visit our website: www.casma.ca. The information contained in this bulletin is for general education and is not intended to replace advice from a qualified contractor or direction on usage/installation from the manufacturer. Consumers should be aware of the safety hazards associated with work on roofs and, before doing so themselves, should consider following CASMA's advice of using qualified contractors. This bulletin may be reproduced with permission on condition that it be reproduced in whole, unedited, with attribution of copyright to CASMA.