TECHNICAL BULLETIN

Last Revision: January 2016

Subject: **Facts about Buckled Shingles**

Buckling is the result of asphalt shingles not laying flat due to the wrinkling of the roofing underlayment or movement of the wood deck.

Causes	• High humidity conditions and/or environments: As the old roof is torn off the wood deck is exposed and absorbs moisture. As the wood increases in moisture content it can cause movement of the decking. • As the new roof is installed, moisture is trapped in the system and roofing felt used as underlayment can absorb moisture and wrinkle. • Because homes are built tighter and with higher insulation levels they may not be properly ventilated. See Atlas's recommendations for ventilation requirements. • Roof sheathing that is not spaced a minimum of ⅛" can cause buckling due to expansion and contraction.
Solutions	• Allow moisture to escape the roofing system. Once the roofing system reaches the proper moisture content the roof should lie flat and the buckling problem should not return. • Remove the shingles that are affected, and if the felt is wrinkled repair the felt wrinkles by cutting and re-nailing the felt so that it's flat then replace the shingles. • Ensure the attic is property vented. See Atlas ventilation requirements listed in our shingle installation instruction.
Prevention	• Use only approved roof decking materials. • Do not expose decking material to water either before or after application. • Cover wood deck with approved asphalt roofing underlayment. • Ensure adequate attic ventilation. • Apply shingles in accordance with Atlas' printed installation instructions.
Correction	• Ventilate the attic space to eliminate excess moisture. The addition of exhaust fans maybe necessary. • When buckling persists, remove and replace the affected shingles.

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