CHRISTIAN BUILDING INSPECTORS INCORPORATED ®

Home Tips®

• CHRISTIAN BUILDING INSPECTORS, INC., 1003 STAR COURT, NORCROSS, GEORGIA 30093, (770) 925-8518 • MARCH 1999 •

Q & A

Defective Roof Shingles?

We noticed some of our roof shingles are splitting. Is this normal or are the shingles defective?

"Thermal splitting" or "cracking" which in fact is in most cases actually a tearing of the shingles is considered by experts to be the principal current problem with fiberglass-based shingles. We prefer the term tearing as a more accurate description of what's probably happening. Originally observed on the lightest-weight (15-year life) shingles this problem has now been found across all shingle styles, weights (life ratings), and we suspect, probably across most or all manufacturers of this type of product.

What Does It Look Like?

We have observed a variety of torn or split shingles:

Probable Cause:

- It's possible that shingles made by some manufacturers do not meet the ASTM Standards for tear resistance.
- Even where shingles meet the Standards, it's possible that the standards themselves were defective.
- In any case, the fiberglass mat may lack adequate tear resistance.
- Self-sealing tabs on shingle backs may glue shingles together with too much strength, causing the roof covering to form a single large membrane which cannot accommodate large temperature changes.
- Reduced total amount of asphalt in thin fiberglass mats might become brittle after exposure to heat and sunlight.
- Temperature swings probably contribute to the onset and extent of tearing, and we'd expect worse tearing where temperature swings are more extreme such as in Northern climates.
- Nailing or placement pattern of shingles: "laddering" vs. "staggered." On laminate and strip type shingles we have inspected roofs on which damage is found occurring at the corners of shingles rather than in the middle of the shingle material. It appears that as temperatures dropped and the glued-together-roof-membrane cools and contracts, the natural point at which movement occurs is where shingles are end-butted together. When the pattern of end-butts is laddered rather than staggered up the roof we have found corners tearing off of shingles following the laddering pattern exactly. (Laddering is not a recommended installation pattern according to NRCA and ARMA publications nor according to instructions from some manufacturers.) Laddering alone cannot be blamed for this failure however, as we have seen similar shingle tearing following a staggered end-butt pattern up other roofs. However laddering may indeed create a more localized natural point of separation on a roof, causing most of the movement to occur in a smaller area when the roof material contracts with cooling this type of product.

What About Warranties?

In certain instances specific roofing products have shown common early failure, failing in a characteristic pattern which is easily identified (such as the thermal splitting defect). Some manufacturers offer limited warranty coverage of their products. Many roofers also guarantee their work to be free from leaks, but usually for a time period substantially shorter than the manufacturer's rated life of the roof material.

Some manufacturers (such as GAF) offer a limited product warranty. Following a fairly involved claims procedure requiring documentation, photographs, and a sample of damaged material the manufacturer may elect to warrant the roofing material on a pro-rated basis depending on the age of the roof and its warranted life. Sometimes the manufacturer's warranty covers only material cost, not installation cost (labor, demolition, removal of old materials) unless the roofing contractor chooses to extend such coverage.

The cost of roofing material is not the main ingredient in roofing cost. Labor and possibly disposal of old roofing

material are significant costs. Out of concern for future roof life, some roofers are reluctant to install new roofing atop failed material even where additional layers of roofing are permitted by local codes.

If you are experiencing problems with your roofing shingles, contact the roofer who installed the roof or contact the manufacturer direct.

To Contact Manufacturers:

- Atlas Roofing, 802 Highway 19 N, Suite. 190, Meridian MS 39307 601-484-8900
- Bird Inc., 1077 Pleasant St., Norwood MA 02062 617-5551-0656
- Celotex Corp., 4010 Boy Scout Blvd., Tampa FL 33607-5750 813-873-1700
- Certainteed, 570 E. Swedesford Rd., Box 860, Valley Forge PA 19482 610-341-7000
- Elk Corp., 14643 Dallas Pkwy, Suite 1000, Dallas TX 75240-8871 214-851-0400
- GAF, 1361 Alps Rd., Wayne NJ 07470 201-628-3000 - Technical Services & Guarantee Status Office 1-800-ROOF-411 (GAF class action settlement - call 800-414-4370 for more information.)
- Globe Building Materials, 2230 Indianapolis Blvd, Whiting IN 46394 219-473-4500
- IKO Chicago, Inc., 6600 South Central Ave., Bedford Pk, IL 60638 708-496-2800
- Intec/Permaglas, P.O. Box 2845, Port Arthur TX 77643 404-724-7024
- Malarkey Roofing, 3131 N. Columbia Blvd., Portland OR 97217 503-283-1191
- Owens-Corning Fiberglas, Fiberglas Tower, Toledo OH 43659 419-248-8000
- PABCO Roofing, 1715 Thorne Rd., Tacoma WA 98241 206-272-0374
- TAMKO Roofing, 220 W. Fourth St., Joplin MO 64802 417-624-6644

This information was taken from Dan Friedman with The Home Inspection & Construction Information Website located at www1.mhv.net/~dfriedman/.

If you have a question, change of address, comment, home tip or would like to send *Home Tips* to your clients, send your letter to *Home Tips*, Christian Building Inspectors, Inc., 1003 Star Court, Norcross, Georgia 30093. You can E-Mail your questions to us at cbii@mindspring.com/.

We reserve the right to edit questions for length.

Quote Of The Month

"TRUE HAPPINESS IS NOT HAVING WHAT YOU WANT - BUT WANTING WHAT YOU HAVE?"

- CLOUD

A Tip Of The Hat To:

Tammy Park

Re/Max North Atlanta
International Office
3510 Shallowford Road
Atlanta, Georgia 30341

Thank You

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• Member: ASHI, GAHI, MAIA, SBCCI •

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• For Additional Information, Contact Rod Harrison or Leslie Young •

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