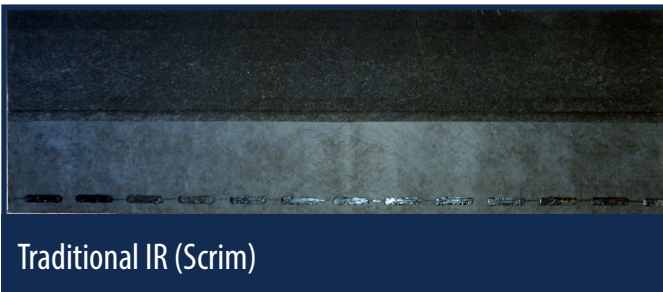


IMPACT RESISTANT SHINGLES

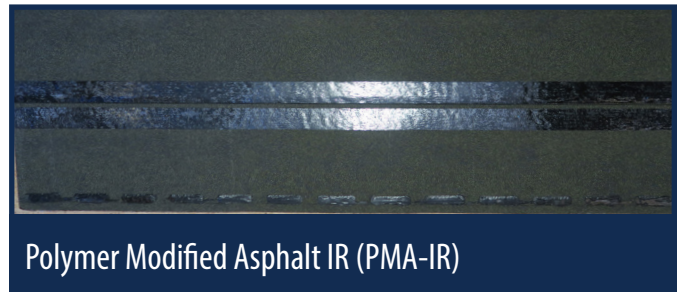
Types of Asphalt Shingles

- ⊕ **Basic 3-tab:** Oxidized shingle with three single-ply tabs; typically, a 20- to 30-year product warranty.
- ⊕ **Basic architectural:** Oxidized shingle with single- and double-ply portions; typically, a 30- to 50-year product warranty.

Impact Resistant (IR) Asphalt Shingles



Traditional IR (Scrim)



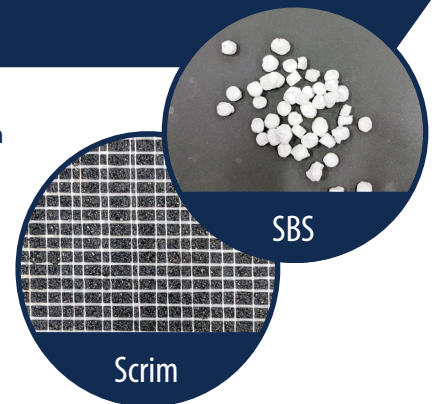
Polymer Modified Asphalt IR (PMA-IR)

Both are UL 2218, Class 4 impact rated.

Ways to Make Impact Resistant (IR) Shingles

- ⊕ **Traditional IR (Scrim) Shingles:** Made by adding a scrim or mesh on the back side of an oxidized asphalt shingle, which may improve tear resistance.
- ⊕ **PMA-IR Shingles:** Made by modifying the asphalt with synthetic polymers (i.e., SBS or SEBS), which increase the flexibility of the material.

Traditional IR (scrim) and PMA-IR shingles should be installed to manufacturer instructions.



Impact Class Rating

- ⊕ Impact class refers to the size of the steel ball used for impact testing. Shingles are impacted twice, in the same spot, by a steel ball dropped onto the shingle surface from a height of 12–20 ft. The shingle passes if it sustains impact and shows no evidence of fractures or cracks on the back side.

NOTE

Getting the roof right is an essential part of IBHS' FORTIFIED superior building standards program. To learn more about FORTIFIED Home™, please visit www.fortifiedhome.org.

Classes

- Class 1: 1.25-in. steel ball test
- Class 2: 1.50-in. steel ball test
- Class 3: 1.75-in. steel ball test
- Class 4: 2.00-in. steel ball test

Manufacturers and Impact Resistant Products

⊕ Products listed below include 3-tab and architectural IR shingles currently available in regional markets. Additional IR products, including premium and designer products, are also available from manufacturers and are not listed. Because product offerings from manufacturers change, IBHS recommends reviewing information annually or bi-annually.

 <ul style="list-style-type: none"> • StormMaster Shake (PMA) 	 <ul style="list-style-type: none"> • Landmark (Scrim) • NorthGate (PMA) 	 <ul style="list-style-type: none"> • ArmorShield II (PMA) 	 <ul style="list-style-type: none"> • Cambridge IR (PMA)
 <ul style="list-style-type: none"> • Alaskan (3-tab, PMA) • Legacy (PMA) • Vista* (PMA) • Ecoasis Premium (Solar, PMA) 	 <ul style="list-style-type: none"> • Duration Storm (Scrim) • Weatherguard HP (Scrim) 	 <ul style="list-style-type: none"> • Premier Elite* (Scrim) • Premier Radiance Elite* (Solar, Scrim) 	 <p>None Currently Available</p>

*Class 3 Products

Shingle Labeling

⊕ Labeling to identify impact class rating for IR shingles may vary. Labeling for polymer modified shingles may include words like “SBS” or “Polymer Modified” to signify a PMA-IR shingle.



IR
Impact resistant,
tested per UL 2218



Class 4
Class 4, a 2-in steel ball,
double impact test



SBS
Styrene-butadiene-styrene,
a commonly used polymer

Shingle Pricing

⊕ Pricing* may vary by region and depends on manufacturer, basic characteristics, and/or class ratings. Contractors may also purchase shingles at a discounted price. Shingle pricing below is based on price per bundle.



*Retail pricing is based on South Carolina prices from two local suppliers, and does not include shipping. The local price ranges were compared with 2016 data compiled by IBHS, which averaged costs for five different suppliers and two different manufacturers across six cities in the central United States.