

ASPHALT SHINGLES TEST STANDARDS

Asphalt roofing shingles sold in Canada may have various agency conformances shown in short form on the bundle packaging. Those most commonly found are described briefly below to help the consumer understand their meaning and assist him in purchasing the product best suited to his needs. More information can be obtained by contacting the manufacturers directly.

CSA A123.5: this references the CANADIAN STANDARDS ASSOCIATION specification for "Asphalt Shingles Made with Glass Felt and Surfaced with Mineral Granules". Shingles meeting this specification are the standard glass fibre mat shingles used in Canada. Compliance is ensured by the manufacturer.

ASTM D 3462: Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules. This is very similar to the CSA A123.5 standard referenced above.

ULC S-107: this is an UNDERWRITERS' LABORATORIES OF CANADA test method for "Fire Tests of Roof Coverings". Shingles labelled with this have been tested to establish their degree of fire resistance, and will typically have a "Class A" (the highest) rating. Class A is suitable for residential and most commercial roof covers, and may be required on public use buildings such as hospital and schools.

ASTM E 108: this is the test method for "Fire Tests of Roof Systems". It is essentially identical to the ULC S-107 test. Typically the E-108 tests are performed by qualified third party test laboratories such as Factory Mutual Research Corporation, who also perform periodic in-plant manufacturing audits.

ASTM D 3161: this test outlines a test method to establish the "Wind Resistance of Asphalt Shingles". Shingles bearing this designation have been tested at wind speeds of 60 mph (Class A), 90 mph (Class D), or 110 mph (Class F). It should be noted that these tests are carried out on fully sealed shingles, in a carefully controlled laboratory environment. In actual service, there are many variables which affect roof system wind resistance, such as roof design, shingle application procedures, gust effects, temperature, age of the roof, etc.

ASTM D 7158: this test is "Wind Resistance of Asphalt Shingles" (Uplift Force/Uplift Resistance Method). Shingles bearing this designation have been tested at wind speeds of 90 mph (Class D), 120 mph (Class G), or 150 mph (Class H). This test is an

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alternative method to D 3161 referenced above. As with the other wind test, it is conducted in a carefully controlled laboratory environment and does not represent all the naturally occurring elements that shingles face in actual roof-top service.

It is important for anyone who plans to use or purchase asphalt shingles to ensure that the materials meet the desired standard. The fact that a product is advertised locally is not a guarantee that it satisfies an appropriate CANADIAN standard.

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