~~Designation:D3161–06~~ Designation: D 3161 – 08

Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method)[1]

This standard is issued under the fixed designation D 3161; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This test method covers the procedure for testing the wind resistance of asphalt shingles when applied to a test deck on low slopes in accordance with the manufacturer's instructions at the most susceptible slope for wind damage of ~~2 in. in 12 in.~~2:12 (17 %) permitted by those instructions. It is used to benchmark the blow-off resistance of sealed and interlocked shingles at a given wind velocity, but may be used to test unsealed or sealed shingles at other wind velocities as is applicable.

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

~~2. Type and Classes of Shingles~~

~~2.1Shingles are of two types:~~

~~2.1.1~~*Referenced Documents*

2.1 *ASTM Standards:* [2]

D 1079 Terminology Relating to Roofing and Waterproofing

3. Terminology

3.1 *Definitions*—For definitions of terms used in this test method, refer to Terminology D 1079.

4. Type and Classes of Shingles

4.1 Shingles are of two types:

4.1.1 *Type I*—Shingles with a factory-applied adhesive (self-sealing shingles).

~~2.1.2~~

4.1.2 *Type II*—Shingles of the lock type, with mechanically interlocking tabs or ears.

~~2.2Shingles are of three classes:~~

~~2.2.1~~

4.2 Shingles are of three classes:

4.2.1 *Class A*—Pass at a test velocity of 97 km/h (60 mph).

~~2.2.2~~

4.2.2 *Class D*—Pass at a test velocity of 145 km/h (90 mph).

~~2.2.3~~

4.2.3 *Class F*—Pass at a test velocity of 177 km/h (110 mph).

~~3.~~

5. Significance and Use

~~3.1Most~~5.1 Most asphalt shingles that have demonstrated wind resistance by this test have also performed well in use. Natural wind conditions differ with respect to intensity, duration, and turbulence; these conditions are beyond the means of this test to simulate. The results of this test do not directly correlate to wind speeds experienced in service, and no accommodation is made

[1] This test method is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.02 on Prepared Roofings, ~~Shingles,~~Shingles and Siding Materials.

Current edition approved ~~Aug. 1, 2006.~~Jan. 15, 2008. Published ~~August 2006.~~March 2008. Originally approved in 1972. Last previous edition approved in ~~2005~~2006 as D 3161 – 0~~5~~6.

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.