



UL 2390

Underwriters Laboratories Inc. Standard for Safety

Test Method for Wind Resistant Asphalt Shingles with Sealed Tabs



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UL Standard for Safety for Test Method for Wind Resistant Asphalt Shingles with Sealed Tabs, UL 2390

First Edition, Dated May 30, 2003

Revisions: This Standard contains revisions through and including June 12, 2009.

Summary of Topics

The revisions dated June 12, 2009 were issued to update dated references to outside standards throughout the standard.

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Text that has been changed in any manner is marked with a vertical line in the margin. Changes in requirements are marked with a vertical line in the margin and are followed by an effective date note indicating the date of publication or the date on which the changed requirement becomes effective.

The revised requirements are substantially in accordance with UL's Proposal(s) on this subject dated September 12, 2008.

The revisions dated June 12, 2009 include a reprinted title page (page1) for this Standard.

As indicated on the title page (page 1), this UL Standard for Safety is an American National Standard. Attention is directed to the note on the title page of this Standard outlining the procedures to be followed to retain the approved text of this ANSI/UL Standard.

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New product submittals made prior to a specified future effective date will be judged under all of the requirements in this Standard including those requirements with a specified future effective date, unless the applicant specifically requests that the product be judged under the current requirements. However, if

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This Standard consists of pages dated as shown in the following checklist:

Page	Date
1-6	June 12, 2009
7	January 8, 2004
8	June 12, 2009
9-11	January 8, 2004
12-19	May 30, 2003
20	June 12, 2009
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MAY 30, 2003
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ANSI/UL 2390-2009

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UL 2390

Standard for Tests for Wind Resistant Asphalt Shingles with Sealed Tabs

First Edition

May 30, 2003

This ANSI/UL Standard for Safety consists of the First Edition, including revisions through June 12, 2009.

The most recent designation of ANSI/UL 2390 as an American National Standard (ANSI) occurred on June 12, 2009. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, or effective date information.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <http://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 This test method provides a means of determining wind uplift coefficients (DC_p 's) for asphalt shingles subjected to an air flow perpendicular to and across the shingle surface. DC_p 's are calculated by measuring pressures above and below the shingle surface at the windward and leeward sides of the sealant, taking into account shingle rigidity (EI). Uplift force acting on the sealant is then calculated in accordance with the provisions described in this standard based on the basic wind speeds prescribed in ASCE 7-05 (Minimum Design Loads for Buildings and Other Structures), which are also a function of building height, building exposure category and importance factor.

1.1 revised June 12, 2009

1.2 The value for shingle rigidity (EI) needed to calculate wind uplift coefficients is determined by one of two methods: testing shingle rigidity in accordance with Section 3, Shingle Rigidity, or selecting a conservative value of 2.5 lbf-in² (7.17 kN-mm²) for shingles that comply with ASTM D225-07, Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules, or ASTM D3462-07, Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.

1.2 revised June 12, 2009

1.3 This test method is applicable to any asphalt shingle surfaced with mineral granules where the shingle above is affixed to the surface of the shingle below with a sealant (factory or field applied) applied in a pattern aligned parallel to the windward edge of the shingle.

1.4 This test method does not address the following: determination of the resistance-force capability of the sealant; uplift forces due to wind acting on the fasteners used to apply the shingles to roof deck; and other factors that affect loading such as those occurring at the perimeter edge or at penetrations.

1.5 This laboratory test standard and the calculations used to determine the forces on shingles are based upon wind engineering studies. ASCE 7-05, Minimum Design Loads for Buildings and Other Structures, also contains related recognized practices. The findings obtained using this standard provide the means of determining a design value. Actual field performance is affected by numerous factors, including installation practices employed, job site conditions, time of year, weather, temperature, microclimate variations and other specific circumstances.

1.5 revised June 12, 2009