



UNDERWRITERS LABORATORIES INC.

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Revision page for

STANDARD FOR

MATERIALS FOR BUILT-UP ROOF COVERINGS

UL 55A, ELEVENTH EDITION

Attached to this transmittal notice is a revision of the eleventh edition of UL 55A.

A CHANGE IN REQUIREMENTS IS INDICATED BY A VERTICAL LINE IN THE MARGIN ON PAGE DATED NOVEMBER 23, 1989. EDITORIAL CHANGES ARE NOT SO MARKED.

THESE REVISED REQUIREMENTS ARE NOW IN EFFECT.

The revised requirements are substantially in accordance with UL's bulletin on this subject dated June 23, 1989. The bulletin is now obsolete and may be discarded.

Revised and/or additional pages may be issued from time to time.

With the inclusion of the accompanying material, the standard consists of pages dated as shown in the following check list:

Page	Date
1	October 5, 1983
2	—
3 — 5	October 5, 1983
6	November 23, 1989
7, 8, 8A	October 31, 1985
9	October 5, 1983
10, 10A	October 31, 1985
11	October 5, 1983

(2)

GENERAL

1. Scope

1.1 These requirements cover the following materials for use in the construction of built-up roof coverings:

A. Hot-Mopping Asphalt — For use in the construction of coverings having either no surfacing or utilizing surfacings of cold-application roof coating on inclines not exceeding 12 inches (305 mm) to the horizontal foot, and for use in the construction of coverings surfaced with gravel, crushed stone, or crushed slag, on inclines not exceeding 3 inches (76 mm) to the horizontal foot.

B. Asphalt-Saturated Organic Felt — Type 15 (plain or perforated) and Types 20 and 30 (plain), including cap and base sheets.

C. Coal-Tar Pitch — For use in the construction of coverings surfaced with gravel, crushed stone, or crushed slag, on inclines not exceeding 3 inches to the horizontal foot.

D. Coal-Tar Saturated Organic Felt — Type 15.

E. Asphalt-Saturated Asbestos Felt — Type 15 (plain or perforated) and Type 30 (plain), including cap and base sheets.

F. Asphalt-Coated Glass-Fiber Mat (Felt) — Type G1 (ply sheets), Type G2 (cap and base sheets), and Type G3 (granular-surfaced cap sheets).

2. Glossary

2.1 For the purposes of this standard, the following definitions apply.

2.2 FELT, ASBESTOS — Felt produced by the felting of material that is at least 85 percent asbestos fiber by weight.

2.3 FELT, ORGANIC — Felt produced by the felting of organic fibers.

2.4 MAT (FELT), GLASS FIBER — A thin, porous sheet formed of randomly distributed glass fibers bonded with a water-resistant, nonbituminous binder.

2.5 SATURATED FELT — A single thickness of roofing felt saturated with an asphaltic or refined coal-tar compound.

3. General

3.1 If a value for measurement is followed by a value in other units in parenthesis, the second value may be only approximate. The first stated value is the requirement.

MATERIAL

4. Hot-Mopping Asphalt

4.1 Asphalt shall be free from water.

4.2 Freshly-melted asphalt shall be homogeneous. The surface of the melted asphalt shall not become visibly dull due to the separation of oil, grease, paraffin, scale, or similar materials after 1 week of aging at room temperature.

4.3 Asphalt shall have a softening point of not less than 135°F (57°C) and not more than 225°F (107°C). See Softening Point Tests, Section 13.

4.4 Asphalt shall have a flash point of not less than (1) 225°C (437°F) as determined by Method I or (2) 210°C (410°F) as determined by Method II of the Flash Point Tests, Section 14.

5. Coal-Tar Pitch

5.1 Coal-tar pitch shall be free from water.

5.2 Freshly-melted coal-tar pitch shall be homogeneous, having a glossy black color. The surface of the melted coal-tar pitch shall not become visibly dull due to the separation of oily constituents after 1 week of aging at room temperature. Freshly-fractured material shall have a satiny black surface.

5.3 Coal-tar pitch shall have a softening point of not less than 130°F (54°C) and not greater than 155°F (68°C), as determined by the Softening Point Test, Section 13.

5.4 Coal-tar pitch shall have a flash point of not less than (1) 120°C (248°F) as determined by Method I or (2) 116°C (241°F) as determined by Method II of the Flash Point Tests, Section 14.

6. Felt

Organic Felt

6.1 Organic felt shall be uniformly smooth and, upon splitting or tearing on the bias, shall be sufficiently free from knots or lumps of stock that have not been beaten or shredded into fiber in the process of manufacture to permit obtaining the required saturation of the felt (see paragraphs 8.1–8.3). It shall also be sufficiently free from coarse sawdust, shives, and foreign substances, such as fragments of stone, metal, leather, and rubber.

6.2 The weight of moisture-free organic felt (desaturated when determined from a sample of the finished product) shall be not less than (1) 5.2 pounds per 100 square feet (0.253 kg/m²) for Type 15 felt, (2) 6.8 pounds per 100 square feet (0.331 kg/m²) for Type 20 felt, and (3) 10.0 pounds per 100 square feet (0.488 kg/m²) for Type 30 felt. See paragraphs 15.1–15.3.

6.3 The weight of ash from organic felt shall be not more than 10 percent of the weight of the moisture-free felt as determined by the Percent of Ash in Felt Test, Section 16.

Asbestos Felt

6.4 Asbestos felt shall be uniformly smooth and, when split or torn on the bias, shall be sufficiently free from knots or lumps of stock that have not been beaten or shredded into fiber in the process of manufacture to permit obtaining the required saturation of the felt (see paragraphs 8.4–8.6). It shall also be sufficiently free from foreign substances.

6.5 The weight of moisture-free asbestos felt (desaturated when determined from a sample of the finished product) shall be not less than (1) 8.5 pounds per 100 square feet (0.409 kg/m²) for Type 15 felt and (2) 17.5 pounds per 100 square feet (0.849 kg/m²) for Type 30 felt. See paragraphs 15.1–15.3.

6.6 The thickness of moisture-free asbestos felt shall be not less than (1) 0.02 inch (0.5 mm) for Type 15 felt and (2) 0.04 inch (1.0 mm) for Type 30 felt.

6.7 The weight of ash from asbestos felt shall be not less than 70 percent of the weight of the moisture-free felt as determined by the Percent of Ash in Felt Test, Section 16.

Glass-Fiber Mat (Felt)

6.8 Mat shall be (1) uniformly thick, (2) free of delaminations, tuftings, oil, and grease, and (3) sufficiently free of wrinkles, torn edges, tears, and lumps to permit uniform coating of the mat (see paragraph 9.1).

6.9 For the purposes of the requirement of paragraph 6.8:

A. Delamination is the separation of the top and bottom strata of mat.

B. Tufting is the breaking loose of the upper strata of mat so as to protrude as a flare.

6.10 The weight of moisture-free mat (desaturated when determined from a sample of the finished product) shall be not less than 1.0 pound per 100 square feet (0.108 kg/m²). See paragraphs 15.4–15.6.

6.11 The weight of ash from mat shall be not less than 70 percent of the weight of the moisture-free mat after being heated to 1000 ± 25°F (538 ± 14°C).

Paragraph 6.11 revised November 23, 1989

**Replaces page 6 dated October 5, 1983*

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