

MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

IGNITION-RESISTANT MATERIAL SFM STANDARD 12-7A-5

12-7A-5.1 Application. The minimum design, construction and performance standards set forth herein for ignition-resistant materials are those deemed necessary to establish conformance to the provisions of these regulations. Materials and assemblies that meet the performance criteria of this standard are acceptable for use as defined in the California Building Standards Code.

12-7A-5.2 Scope. This standard determines the performance of ignition-resistant materials when exposed to embers and small flames.

12-7A-5.3 Referenced documents.

1. ASTM E 84, Standard Test Method for Surface Burning Characteristics of Building Materials.
2. UL 723, Test for Surface Burning Characteristics of Building Materials.
3. California Building Code, Chapter 7A.

12-7A-5.4 Definitions.

Ignition-resistant material A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildland-urban interface conflagrations under worst-case weather and fuel conditions with wild-fire exposure of burning embers and small flames, as prescribed in California Building Standards Code Section 703A.

12-7A-5.5 Equipment. Equipment is to be in accordance with the tests specified in Section 12-7A-5.9 Conduct of Tests.

12-7A-5.6 Materials. Materials used are to be in accordance with the tests specified in Section 12-7A-5.9 Conduct of Tests.

12-7A-5.7 Test specimen preparation. The test specimen is to be prepared in accordance with the tests specified in Section 12-7A-5.9 Conduct of Tests.

12-7A-5.8 Weathering. Weathering of materials shall be in accordance with California Building Code Section 703A Standards of Quality.

12-7A-5.9 Conduct of tests. When weathering is required by California Building Code Section 703A Standards of Quality, the materials to be tested shall be weathered in accordance with Section 12-7A-5.8 prior to testing in accordance with this Section. All materials shall be tested in accordance with the test procedures set forth in ASTM E 84 or UL 723 except that the test shall be continued for an additional 20 minutes for a total test period of 30 minutes.

12-7A-5.10 Report. The report shall include a description of the tested material, whether weathering was conducted, and the time and description of any degradation including but not limited to: structural failure, flaming drops or particles falling from the material during the test.

12-7A-5.11 Conditions of Acceptance:

1. **Flame spread.** Materials shall exhibit a flame spread index not exceeding 25 and shall show no evidence of progressive combustion following the 30-minute test period.
2. **Flame front.** Materials shall exhibit a flame front that does not progress more than $10\frac{1}{2}$ feet (3200 mm) beyond the centerline of the burner at any time during the 30-minute test period.