

## UL 1256

# **STANDARD FOR SAFETY** Fire Test of Roof Deck Constructions

UL Standard for Safety for Fire Test of Roof Deck Constructions, UL 1256

Fourth Edition, Dated October 31, 2002

#### Summary of Topics

### This revision of ANSI/UL 1256 is being issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The requirements are substantially in accordance with Proposal(s) on this subject dated June 8, 2018.

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### OCTOBER 31, 2002 (Title Page Reprinted: August 10, 2018)



#### **HISTORICAL NOTE**

ANSI/UL 1256-2013 (R2018)

In August, 1953 the General Motors' thirty-five acre Hydro-Matic factory at Livonia, Michigan was destroyed by fire. Unprotected steel construction and the thin steel deck which permitted the asphalt built-up roof covering to melt, drip through joints, and thereby contribute to fire spread within the building was one of the factors cited as being responsible for the extent of the loss. As a means to analyze the potential for contribution of roof covering materials to fire spread within a building, a 20 by 100 foot test structure was constructed. This analysis consisted of a series of five large scale fire tests utilizing different roof deck constructions, one of which represented the roof deck construction used in the General Motors factory. Based upon these large scale fire tests, a roof deck construction evaluated for the purpose of establishing limits for underdeck fire spread consisted of a steel roof deck, without vapor retarder or adhesive, insulated with 1-inch thick plain vegetable fiberboard mechanically attached and covered with a 4-ply asphalt built-up roof covering with gravel surfacing.

Based on the time and expense associated with conducting the large scale fire test described in Part I of this Standard, UL investigated the use of a small scale fire test method to correlate the results of the small scale fire test to the results of the large scale fire test method. The small scale fire test method developed from this correlation utilized the Steiner tunnel test chamber described in Part II of this Standard.

Since the severity of the fire exposure in the large scale fire test method introduces performance factors which cannot always be measured effectively in the small scale fire test method described in Part II, subsequent large scale fire tests are conducted by UL on specific new types of roof deck constructions which are judged to require additional datum tests.

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#### Standard for Fire Test of Roof Deck Constructions

First Edition – January, 1985 Second Edition – August, 1993 Third Edition – March, 1998

#### **Fourth Edition**

#### October 31, 2002

This ANSI/UL Standard for Safety consists of the Fourth edition including revisions through August 10, 2018.

The most recent designation of ANSI/UL 1256 as a Reaffirmed American National Standard (ANS) occurred on August 10, 2018. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

The Department of Defense (DoD) has adopted UL 1256 on August 19, 1989. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.