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File R14710
Project 00NK5261

May 2, 2000

REPORT

on
PREPARED ROOF COVERING MATERIALS

Under The

LISTING PROGRAM

Tasman Roofing, Inc.
Corona, CA

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GENERAL

INVESTIGATION:

The purpose of this investigation was to evaluate a new metal roof shingle ("Decra Shingle") in accordance with ANSI/UL 790, "Tests For Fire Resistance of Roof Covering Materials".

Spread of flame tests were not necessary because spread of flame tests have been performed on similar systems.

DESCRIPTION

PRODUCT COVERED:

The product covered by this Report is the Tasman Roofing, Inc. "Decra Shingle."

The product in this Report is Listed as to external fire exposure only.

USE:

The product is intended for use as a building material as permitted by authorities having jurisdiction.

TEST RECORD NO. 1

EXAMINATION OF MATERIALS:

The materials used in this investigation were very similar to product that is already Listed, therefore a witnessed production run was not necessary. The composition of the finished materials is of a proprietary nature. Data on the composition is on file at the laboratories for use in the Follow-Up Service Program.

Various physical and chemical tests were conducted on the components and finished products. The results developed from these tests were employed in establishing specifications for use in the factory Follow-Up Service Program.

FIRE TESTS:

SAMPLES

1. Cap Sheet: Johns Manville "GlasKap" (Type G3), mechanically fastened.

Surfacing: "Decra Shingle", mechanically fastened.

Class A fire tests were conducted on the above samples. These tests were conducted in accordance with the Test Standard ANSI/UL 790, "Tests for Fire Resistance of Roof Covering Materials," (ASTM E-108, "Fire Tests of Roof Coverings").

In the intermittent flame tests described in this Report, the temperature of the test flame, as measured by a No. 14 gauge chromel-alumel wire thermocouple located as described in ANSI/UL Standard 790, was found to be $1400^{\circ} \pm 50^{\circ}\text{F}$. The physical appearance of the test flame when the test apparatus was calibrated for flame temperature, was generally triangular in shape, being about 3 ft wide at the deck's leading edge and gradually narrowing to a width of approximately 6 in. at the top of the 52 in. long calibration deck, with licks of flame extending approximately another 1 ft.

The wind velocity required by ANSI/UL 790 was determined by taking readings on a smooth deck (40 in. wide and 52 in. long) midway up the deck at the center and 3 in. from each vertical edge with a vane type anemometer and timer. The velocity measured at an incline of 5 in./ft was found to be 1050 ± 50 ft/min ($12 \pm 1/2$ mi./h) with the carriage in position.

The results of these tests are summarized on the following pages:

INTERMITTENT FLAME TEST - CLASS A

System No.	Class	Slope Of Deck, in./ft	Time of Smoke Underside, min:s	Asphalt Dripping Underside, min:s	Time of Glow Underside, min:s	Depth Of Char, in.	Duration Of Test, Min
1	A	5	21:14	28:21	-	0	65
1	A	5	18:48	34:08	-	0	65

At no time during these tests were any flying flaming brands of the roof covering material produced or did exposure of the roof deck occur. Also, at no time during these tests were any sparks or flames noted on the underside of the deck.

BURNING BRAND TEST - CLASS A

System No.	Class	Slope Of Deck, in./ft	Time of Smoke Underside, min:s	Asphalt Dripping Underside, min:s	Time of Glow Underside, Min:s	Depth Of Char, in.	Duration Of Test, Min
1	A	5	3:04	5:30	22:00	1/2	50
1	A	5	4:11	7:02	-	1/4	40
1	A	5	2:30	7:42	-	1/4	40
1	A	5	1:48	9:08	35:00	1/2	70

At no time during these tests were any flying flaming brands of the roof covering material produced or did exposure of the roof deck occur. Also, at no time during these tests were any sparks or flames noted on the underside of the deck.

PRACTICABILITY:

The construction materials used in the roofing systems were readily installed by qualified workers with tools and methods commonly used for construction work of similar nature. Materials and installation procedures in accordance with those previously described in this Report are significant factors in the exterior fire performance of the construction.

CONCLUSION

The following conclusion represents the judgment of Underwriters Laboratories Inc. based upon the results of the examination, tests and data analysis presented in this Report, as they relate to established principles and previously recorded data.

The product covered by this Report is judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the Laboratories' Listing Marking as shown below on such products which comply with the Follow-Up Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the Laboratories' Listing Marking are considered as Listed by Underwriters Laboratories Inc.

LISTING MARKING

The Listing Marking to be used with the "Decra Shingle" is illustrated below:

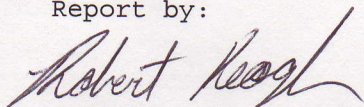
LISTED
PREPARED ROOF COVERING MATERIALS
SHINGLES CLASS A

DEGREE OF RESISTANCE TO EXTERNAL FIRE
AND FLAMMABILITY LIMITS
IN ACCORDANCE WITH STANDARD 790
WHEN APPLIED IN ACCORDANCE WITH
INSTRUCTIONS INCLUDED WITH THIS ROOFING

Following is the Listing as it will appear in our published advices:

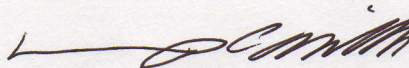
Formed steel tile covering, (stone coated) for installation as Class A prepared roof coverings. Suitable for use over 15/32 in. thick plywood decking covered with minimum of one layer Type G3 cap sheet.

Report by:



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Reviewed by:



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