

CAN/ULC-S102.2 Surface Burning Characteristics of "Roll #1354412 Highline 910 - Woven Textile" Carpet

A Report To: **Tappatec**
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4 Pages

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ACCREDITATION Standards Council of Canada, Registration #1.

REGISTRATION ISO 9001:2000, registered by QMI, Registration #001109.

SPECIFICATIONS OF ORDER

Determine the Flame Spread and Smoke Developed Classifications based upon a single test conducted in conformance with CAN/ULC-S102.2-03, as per our Quotataion Number 07-002-11501 accepted October 15, 2007.

SAMPLE IDENTIFICATION

Carpet sample identified as: "Roll Number 1354412 Highline 910 - Woven Textile".

(Bodycote sample identification number 07-02-S0631-5)

TEST PROCEDURE

The method, designated as CAN/ULC-S102.2-03, "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering and Miscellaneous Materials", is designed to determine the relative surface burning characteristics of materials under specific test conditions. Results are expressed in terms of Flame Spread Classification (FSC) and Smoke Developed (SD).

Although the procedure is applicable to materials, products and assemblies used in building construction for development of comparative surface spread of flame data, the test results may not reflect the relative surface burning characteristics of tested materials under all building fire conditions.

SAMPLE PREPARATION The testing was performed on 2007-10-11

The carpet was bonded to glass reinforced cement board (GRC) using Roberts Multi 3095 adhesive. The carpet/GRC system, which consisted of three sections 2438 mm long and 445 mm wide, was conditioned at a temperature of $23 \pm 3^{\circ}\text{C}$ and a relative humidity of $50 \pm 5\%$ prior to testing.

SUMMARY OF TEST PROCEDURE

The tunnel is preheated to 85°C , as measured by the backwall-embedded thermocouple located 7090 mm downstream of the burner ports, and allowed to cool to 40°C , as measured by the backwall-embedded thermocouple located 4000 mm from the burners. At this time the tunnel lid is raised and the test sample is placed along the floor of the tunnel so as to form a continuous surface and then the lid is lowered.

SUMMARY OF TEST PROCEDURE (continued)


Upon ignition of the gas burners, the flame spread distance is observed and recorded every 15 seconds. Flame spread distance versus time is plotted ignoring any flame front recessions. If the area under the curve (A) is less than or equal to 29.7 m·min, $FSC1 = 1.85 \cdot A$; if greater, $FSC1 = 1640 / (59.4 - A)$. Smoke developed is determined by comparing the area under the obscuration curve for the test sample to that of inorganic reinforced cement board and red oak, arbitrarily established as 0 and 100, respectively.


TEST RESULTS

<u>SAMPLE</u>	<u>FSC1</u>	<u>SD</u>
"Roll #1354412 Highline 910 - Woven Textile"	86	190

Observations of Burning Characteristics

- The sample began to ignite after approximately 1 minute exposure to the test flame.
- The flame front propagated to a maximum distance of 6.0 metres (end point) at approximately 3.5 minutes and receded to the baseline by approximately 7.25 minutes.
- Maximum amounts of smoke developed were recorded coinciding with the flaming involvement of the sample during the test (see accompanying graphs).

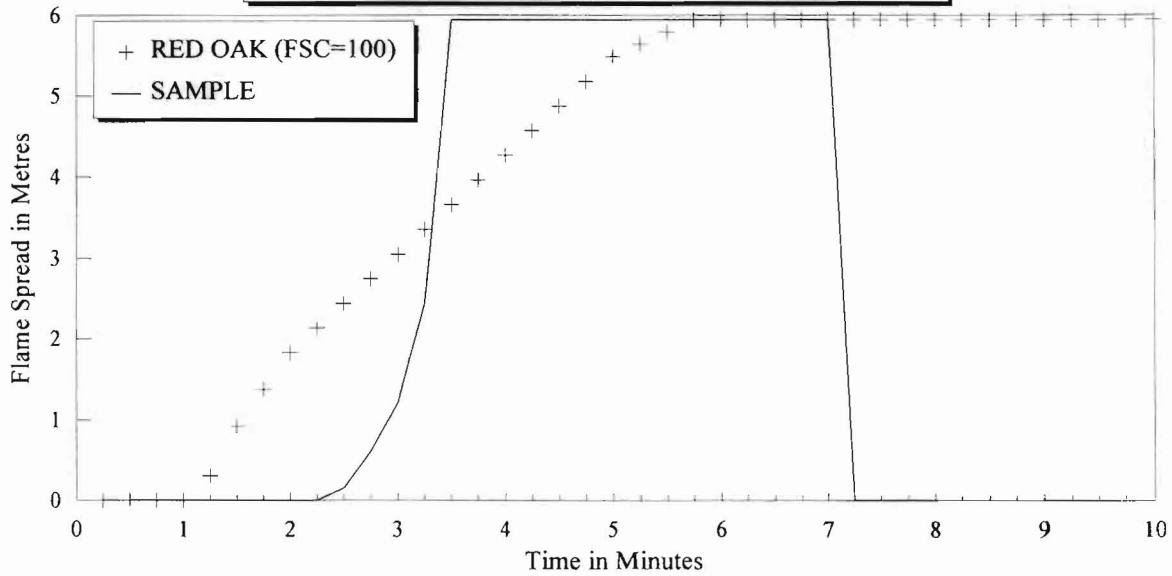

Robert A. Carleton
Fire Testing.


Richard J. Lederle,
Fire Testing.

Note: This report consists of 4 pages, including the cover page that comprise the report "body". It should be considered incomplete if all pages are not present.

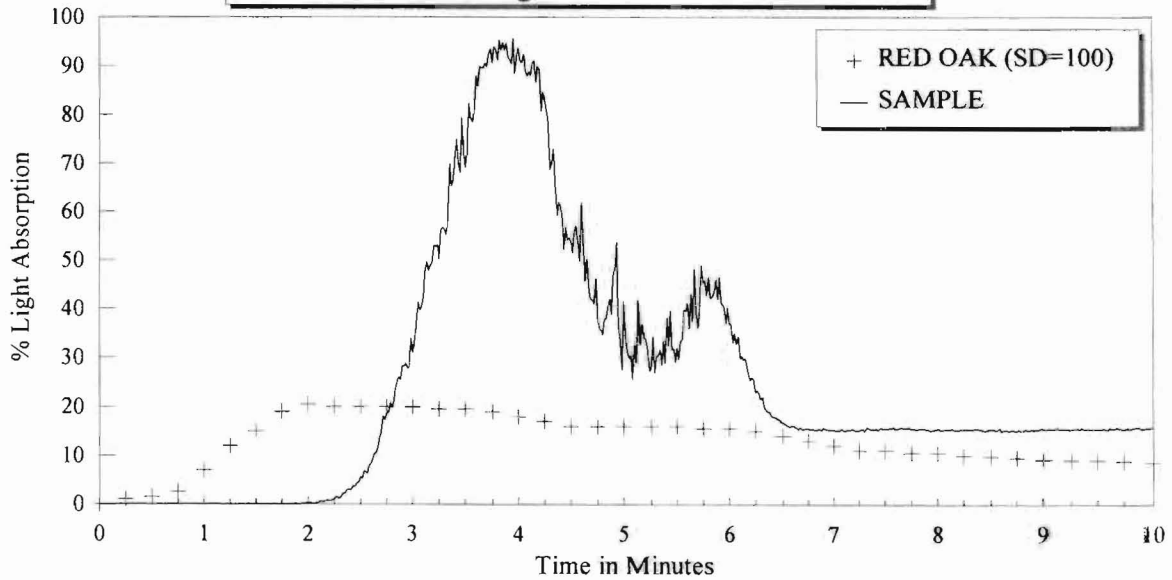
FLAME SPREAD CLASSIFICATION

"Roll #1354412 Highline 910 - Woven Textile"



SMOKE DEVELOPED

"Roll #1354412 Highline 910 - Woven Textile"



FSC1

86

SD

190