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CAN/ULC-S102 Surface Burning Characteristics of "REAS-PLAST" PVC Wall Panel

A Report To:	**REAS PLAST** 3 Str. Kirpichnaya Moscow Russia
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Attention:	Vladimir Zaitev
Submitted by:	Fire Testing
Report No.	08-002-497 6 Pages
Date:	June 18, 2008

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 triplicate testing conducted in conformance with CAN/ULC-S102-07, as per our Quotation No. 08-002-4147RV1 and your correspondence dated May 27, 2008.

SAMPLE IDENTIFICATION

(Bodycote sample identification number 08-002-S0497)

PVC wall panel, nominally 10 mm in thickness, identified as: "REAS-PLAST".

TEST PROCEDURE

The method, designated as CAN/ULC-S102-07, "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies", is designed to determine the relative surface burning characteristics of materials under specific test conditions. Results of less than three identical specimens are expressed in terms of Flame Spread Value (FSV) and Smoke Developed Value (SDV). Results of three or more replicate tests on identical samples produce average values expressed as Flame Spread Rating (FSR) and Smoke Developed Classification (SDC).

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

Each sample, which consisted of 16 sections, each approximately 1003 mm in length by 508 mm in width by 10 mm in thickness, was conditioned at a temperature of 73 ± 3°F and a relative humidity of 50 ± 5% prior to testing. During testing the sample was supported by 6 mm steel rods spaced nominally at 610 mm intervals. The printed/coloured face of the material was exposed during testing.

The testing was performed on: Test #1: 2008-06-17 Test #2: 2008-06-17 Test #3: 2008-06-17

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 ledges of the tunnel so as to form a continuous ceiling 7315 mm long, 305 mm above the floor. The lid is then lowered into place.

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, FSV = 1.85·A; if greater, FSV = 1640/(59.4-A). The Smoke Developed Value 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

SAMPLE		FSV	SDV
"REAS-PLAST" PVC Wall Panel - 10 mm	Test #1	21	283
	Test #2	29	383
	Test #3	22	348
	Average:	24	338

Rounded Average Flame Spread Rating (FSR): **25**

Rounded Average Smoke Developed Classification (SDC): **340**

Observations of Burning Characteristics

- In all three tests, the samples ignited immediately after exposure to the test flame.
- The flame fronts advanced to maximum distances of 1.2, 1.5 and 1.2 metres at approximately 1.75, 1.5, and 1 minute into each respective test.
- Some sagging and melting was observed in all tests.
- Smoke Developed was recorded, coinciding with the flaming involvement of the samples (see accompanying charts).

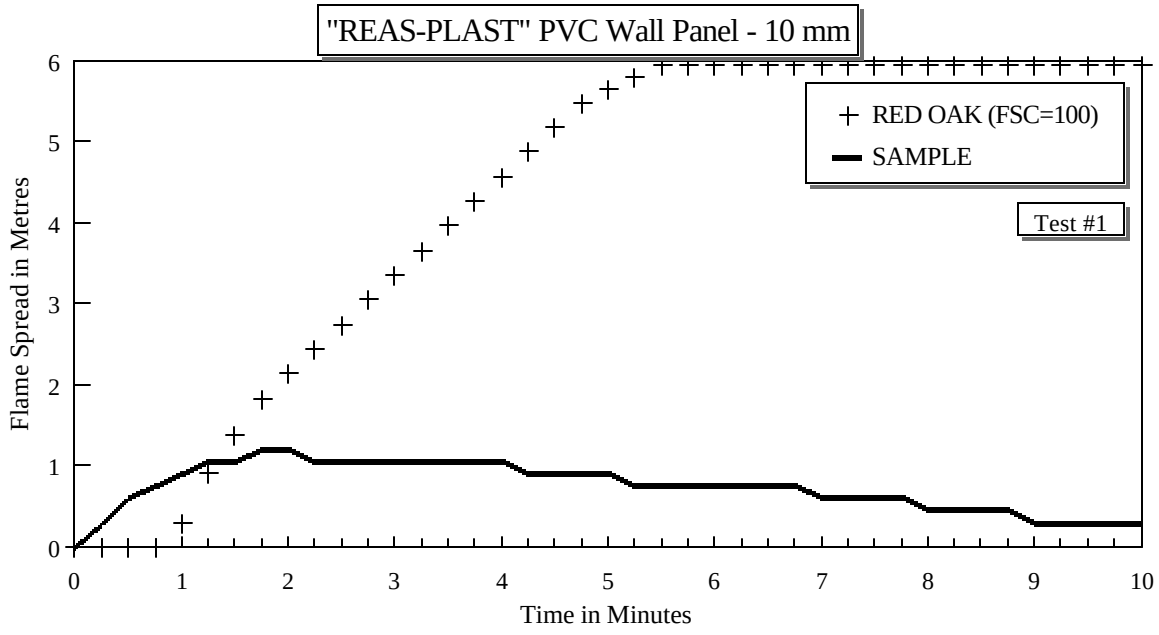
Note: This is an electronic copy of the report. Signatures are on file with the original report.

Robert A. Carleton,
Fire Testing.

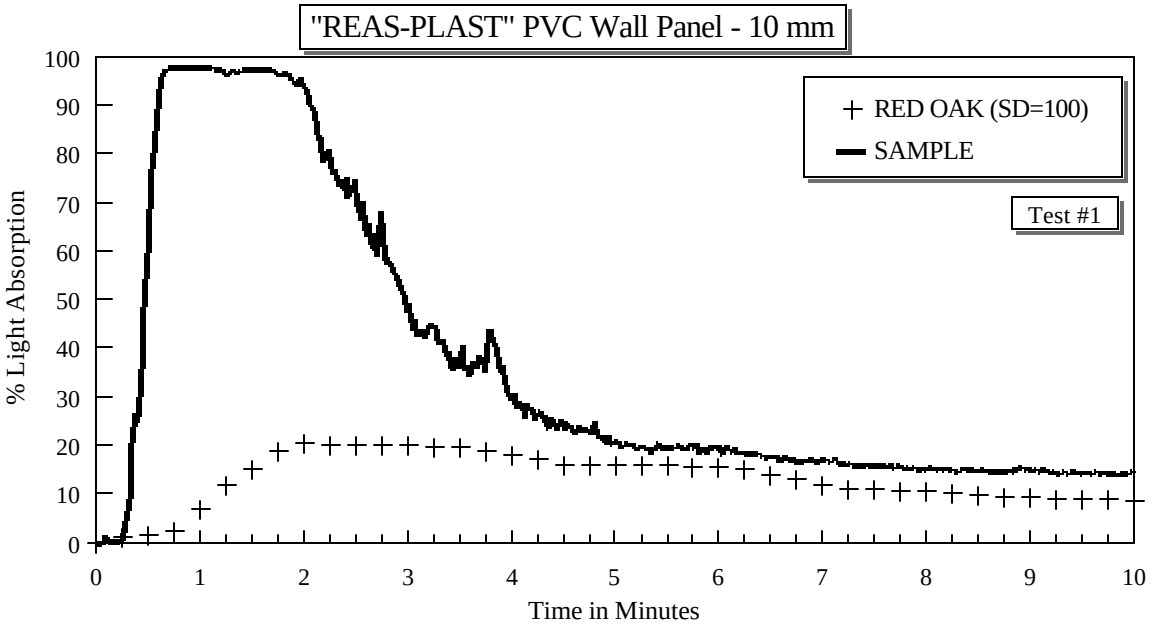
Ian Smith,
Fire Testing.

Note: This report consists of 6 pages, including the cover page, that comprises the report "body". It should be considered incomplete if all pages are not present.

FLAME SPREAD

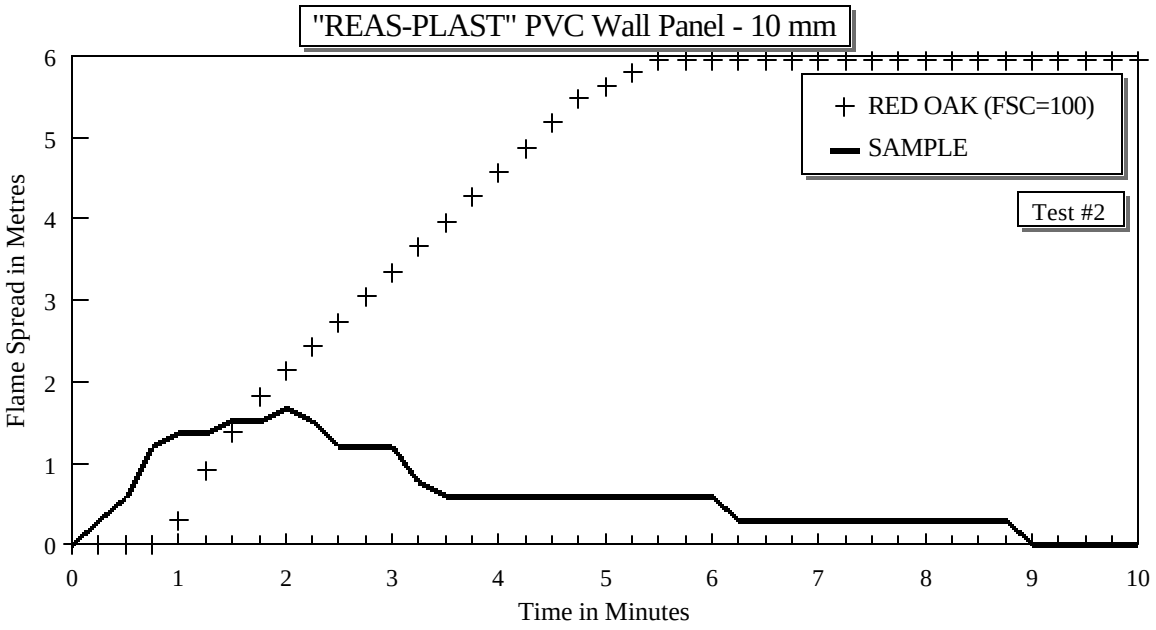


SMOKE DEVELOPED

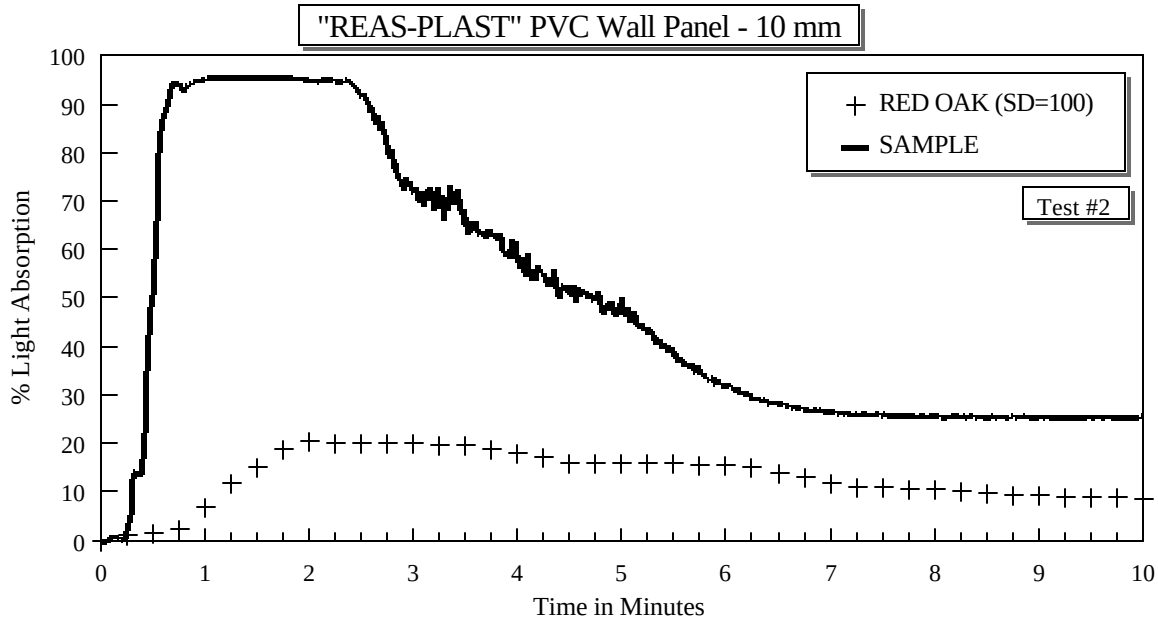


FSV	**SDV**
21	283

FLAME SPREAD

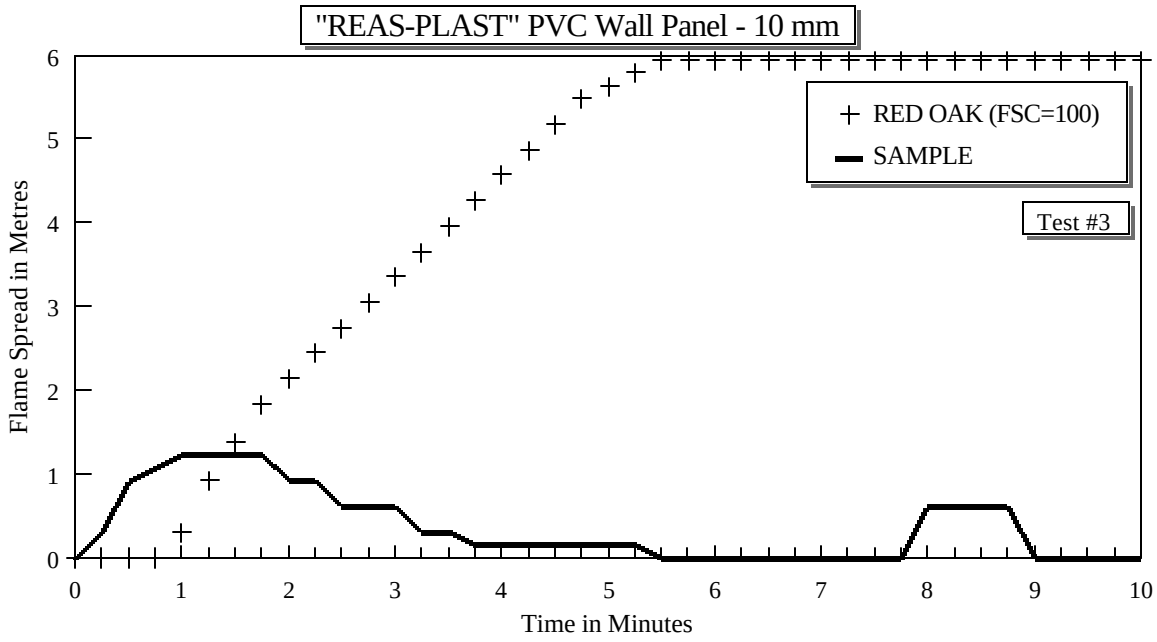


SMOKE DEVELOPED

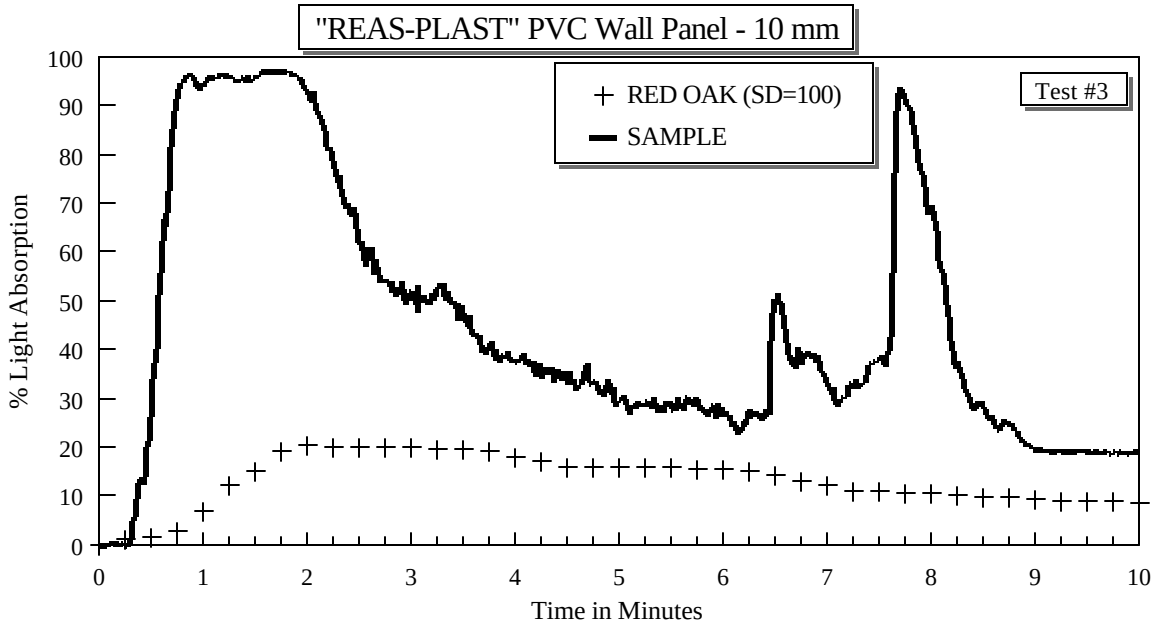


FSV	**SDV**
29	383

FLAME SPREAD



SMOKE DEVELOPED



FSV	**SDV**
22	348