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This is a Report summarizing the results of a test conducted under the Commercial Inspection and Testing Services (CITS) program identified as Assignment No. 08CA61319.

GENERAL:

The results relate only to items tested.

METHOD:

Each test was conducted in accordance with Standard ANSI/UL723, Tenth Edition, dated September 10, 2008, "Test for Surface Burning Characteristics of Building Materials", (ASTM E84-08).

The test determines the Surface Burning Characteristics of the material, specifically the flame spread and smoke developed indices when exposed to fire.

The maximum distance the flame travels along the length of the sample from the end of the igniting flame is determined by observation. The Flame Spread Index of the material is derived by plotting the progression of the flame front on a time-distance basis, ignoring any flame front recession, and using the equations described below:

- A. CFS = $0.515 \text{ A}_{\text{T}}$ when A_{T} is less than or equal to 97.5 minute-foot.
- B. $CFS = 4900/(195-A_T)$ when A_T is greater than 97.5 minute-foot.

Where A_T = total area under the time distance curve expressed in minute-foot.

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The Smoke Developed Index (SDI) is determined by rounding the Calculated Smoke Developed (CSD) as described in UL 723. The CSD is determined by the output of photoelectric equipment operating across the furnace flue pipe. A curve is developed by plotting the values of light absorption (decrease in cell output) against time. The CSD is derived by expressing the net area under the curve for the material tested as a percentage of the area under the curve for untreated red oak.

The CSD is expressed as:

 $CSD = (A_m/A_{ro}) \times 100$

Where:

$$\begin{split} CSD &= Calculated \ Smoke \ Developed \\ A_m &= The \ area \ under \ the \ curve \ for \ the \ test \ material. \\ A_{ro} &= The \ area \ under \ the \ curve \ for \ untreated \ red \ oak. \end{split}$$

SAMPLES:

The samples utilized in this investigation were neither prepared nor selected by a Laboratories' representative such that no verification of composition can be provided.

	Sample Description
Test No.	System
1	5/8 in. Butyl Sealant Tape.

Samples were prepared by applying them to 1/4 in. thick inorganic reinforced cement board in one 5/8 in. wide strip down the center of the board.

Each test sample consisted of three 8 by 2 ft wide boards butted end-to-end to form the required 24 ft. long surface.

RESULTS:

The results are tabulated below are considered applicable only to the specific samples tested.

Data sheets and graphical plots of flame travel versus time and smoke developed versus time are also enclosed.

Table 1: Test Summary

Test No.	Test Code	Sample Description	CFS Calculated Flame Spread	FSI Flame Spread Index	CSD Calculated Smoke Developed	SDI Smoke Developed Index
1	12160809	5/8 in. Butyl Sealant Tape.	0.00	0	1.8	0

The Classification Marking of Underwriters Laboratories Inc. on the product is the only method provided by Underwriters Laboratories Inc. to identify products, which have been produced under its Classification and Follow-Up Service. No use of a Classification Marking has been authorized as a result of this investigation.

Since the anticipated work has been completed, we have instructed our Accounting Department to terminate the investigation and invoice you for the charges incurred to date.

Should you have any questions, please contact the undersigned.

Very truly yours

Robert & Kufe

Robert S. Kiefer (ext. 42014) Senior Engineering Associate Fire Protection Division

Reviewed by:

June 4 Inth

James F. Smith (ext. 42666) Staff Engineering Associate Fire Protection Division

Underwriters Laboratories Inc.

Project:	08CA61319	File:	SV17613	Test Code:	12160809
Tested by:	KNIGHTON	Engineer:	KIEFER	Date:	12/16/08
Employee #:	1291	Emp. #:	98874		

TEST METHOD: The test was conducted in accordance with UL 723 Tenth Edition

Client Name:	GSSI Sealants				
Test Duration	10 Minutes	Test No.:	1	Hot Test:	No
Mounting:	RCB	Test Type:	CITS	Burn-Out Required:	No

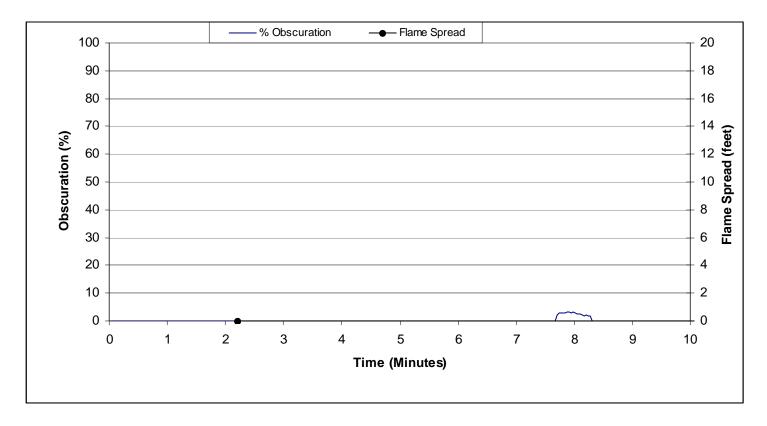
Test Sample: 5/8 in. Butyl Sealant Tape applied to cement board in one 5/8 in. wide strip down the center

FLAME SPREAD RESULTS

	<u>Flame Spread Data</u>		
	Distance (Feet)	Time (Sec)	
	Ignition	132	
Calculated Flame Spread (CFS):		0.00	
Flame Spread Index (FSI):		0	
Time to Ignition (sec):		132	
Maximum Flame Spread (ft):		0.0	
Area Under the Flame Spread	Curve (ftmin):	0.0	
SMOKE RESULTS			
Calculated Smoke Developed	(CSD):	1.8	
Smoke Developed Index (SDI)):	0	
Area Under the Smoke Curve	(sq. in.):	1.53	
Area Under Red Oak Curve (sq. in.):	83.83	

Flame Spread / Smoke Results

GSSI Sealants 5/8 in. Butyl Sealant Tape.



Test No. 1 08CA61319 / SV17613 12160809 Flame Spread Index: 0 Smoke Developed Index: 0 Max. Flame Spread: 0.0