



TECHNOLOGIES

# LABORATORY TEST REPORT

Report for: DCI Products 100 Mill Street Clifton Heights, PA 19018 Date: September 8, 2009

Attention: Jack Henderson

Product Name:	SmartVent	Manufacturer: DCI Products	
Date Received:	August 27, 2009	Sampling Information: DCI Products to provide	
PRI Report No.:	DCIP-001-02-01	Dates Tested: 9/1/2009-9/3/2009	

Purpose:Determine the material properties of DCI Product's SmartVent as described per ICC-<br/>ES AC132: Acceptance Criteria for Attic Vents, Section 3.3.1: Approved<br/>Plastics. Rate of burn performance is tested in accordance with ASTM D 635:<br/>Standard Test Method for Rate of Burning and/or Extent and Time of Burning of<br/>Plastics in a Horizontal Position. Self-ignition temperature performance is tested in<br/>accordance with ASTM D 1929: Standard Test Method for Determining Ignition<br/>Temperature of Plastics.

Test Methods:Testing was completed as outlined in ASTM D 635-06: Standard Test Method for<br/>Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position,<br/>and ASTM D 1929-96: Standard Test Method for Determining Ignition Temperature of<br/>Plastics. The Spontaneous Ignition Temperature (SIT) procedure was followed for<br/>ASTM D 1929 testing.

# **Results of Testing:**

### ASTM D 635

Property	Test Method	Result	Requirement	
Burning Rate, [in/min]	ASTM D 635	ASTM D 635 2.17		
Burning Extent, [in]	ASTM D 635	3.0	Report	
Combustibility Classification	ASTM D 635	CC2	CC1 <sup>1</sup> or CC2 <sup>2</sup>	

<sup>1</sup>IBC 2606.4: Class CC1 is defined as having a burning extent  $\leq$  1 in

<sup>2</sup>IBC 2606.4: Class CC2 is defined as having a burning rate  $\leq$  2.5 in/min

## ASTM D 1929

Property	Test Method	Result	Requirement
Self-Ignition Temperature min; (°F)	ASTM D 1929	820 <sup>2</sup>	≥ 650 <sup>1</sup>

<sup>1</sup>IBC 2606.4: Shall have a self-ignition temperature of 650°F or greater.

<sup>2</sup>These test results relate only to the behavior of the test specimens under the particular conditions of the test. They are not intended to be used, and shall not be used, to assess the potential fire hazards of a material in use.

# **Statement of Attestation:**

The rate of burn performance of this material was determined in accordance with ASTM D 635: Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position. The self-ignition temperature performance of this material was determined in accordance with ASTM D 1929: Standard Test Method for Determining Ignition Temperature of Plastics. The laboratory test results presented in this report are representative of the material supplied.

Signed: Charlie Rumpeltin

Charlie Rumpeltin Laboratory Technician

September 8, 2009

Date:

Signed:

2545	Signed:	Bal Azala
Zach Priest		Brad Grzybowski
Manager		Director

Date:September 8, 2009Date:September 8, 2009

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# Appendix

- A. Test Data ASTM D 635 for SmartVent
- B. Test Data ASTM D 1929 for SmartVent

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#### TEST DATA WORKSHEET

#### ASTM D 635: Standard Test Method for

Rate of Burning and/or Extent and Timeof Burning of Plastics in a Horizontal Position

Client: Product Name: Product Decription:	DCI Products SmartVent Attic Ventilation System	PRI Project ID: ICC-ES Sampling: Miami-Dade Notification:	DCIP-001-02-01 DCI Products to provide N/A
Test Specimens:			
Length:	125.0 mm	Thickness:	4.5 mm
Width:	13.0 mm		
Material Color	r: Black		
Density:	N/A kg/m <sup>3</sup>		
Conditioning	5		

#### Test Data:

Specimen	Anisotropy Direction	Thickness (mm)	Burn Time (s)	Burn Length (mm)	Rate of Burn (mm/s)	Rate of Burn (in/min)
1	Axial	4.45	74	75	1.01	2.39
2	Axial	4.45	52	75	1.44	3.41
3	Axial	4.45	68	75	1.10	2.61
4	Transverse	4.45	126	75	0.60	1.41
5	Transverse	4.45	109	75	0.69	1.63
6	Transverse	4.45	114	75	0.66	1.55
7					NT	NT
8					NT	NT
9					NT	NT
10					NT	NT
Avg.		4.45	91	75	0.92	2.17
Std. Dev.		0.000	29.7	0.0	0.330	0.778

DCIP-001-02-01 PRI-CMT Accreditations: IAS-ES TL-189; State of Florida TST5878; Miami-Dade 06-1116.02; CRRC The test results, opinions, or interpretations are based on the material supplied by the client. This report is for the exclusive use of stated client. No reproduction or facsimile in any form can be made without the client's permission. This report shall not be reproduced except in full without the written approval of this laboratory. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

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#### **TEST DATA WORKSHEET**

ASTM D 1929: Standard Test Method for Determining Ignition Temperature of Plastics

Client:	DCI Products	PRI Project ID:	DCIP 001-02-01
Product Name:	SmartVent	ICC-ES Sampling:	DCI Products to provide
Product Decription:	Attic Ventilation System	Miami-Dade Notification:	NA

**Test Specimens:** 

Material Color:	Black	
Density:	N/A	kg/m <sup>3</sup>
Conditioning:	48h	at 73 °F & 50 %RH

Test Data:

#### Spontaneous Ignition Temperature

	Mass (g)	Temperatures			Combustion	
Specimen		Furnace, TC <sub>3</sub> (°F)	Air, TC <sub>2</sub> (°F)	Sample, TC <sub>1</sub> (°F)	lgnition (yes/no)	Glowing / Flaming
1	3.00	790	760	720	no	no
2	3.00	830	800	760	no	no
3	3.00	850	820	1060	yes	flaming
4						
5						
6						
7						
8						
9						
10						
Spontaneous Ignition Temperature (°F):		820				

Observations: All specimens melt to a liquid puddle All specimens smoke above 700°F All specimens char above 750°F