



LISTING INFORMATION OF Smoke Guard® Model 2100

SPEC ID: 30387

Smoke Guard, Inc.  
287 N. Maple Grove Road  
Boise, ID 83704

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

**Product Covered:**

Smoke Guard Model M2100 Smoke and Smoke & Fire curtain assemblies.

**Product Description:**

The Smoke Guard M2100 systems consist of an ASTM E84 Listed flame and smoke resistance rated filament glass fabric (either SGTex-11 or SGTex-32) wound onto a tube containing an internal drive system. Contained in a sheet metal housing, the curtain assembly is comprised of support rollers and associated electronics. The curtain edges are captured in vertical side guides during system deployment and the bottom edge of the curtain is attached to a weighted bottom bar. If the system encounters an alarm, the releasing device activates deploying the curtain. In the event of main power failure, an integrated battery system maintains the system. Should main and backup power systems fail, the curtain will deploy in a controlled manner under the influence of gravity (Gravity Fail Safe). If required, wall switches are provided on each side of the curtain, allowing occupants to momentarily raise the curtain to egress. After the alarm condition clears, the curtain automatically rewinds into the housing.

The Smoke Guard M2100 smoke and flame resistant system, utilizing the SGTex-32 fabric, is also recognized for use in fire-resistance rated construction (as tested in accordance with UL10B, UL10C, UL10D and NFPA 252, and as described below).

The following table pertains to the Smoke Guard M2100 flame and smoke resistant system with the SGTex-11 fabric curtain. A representative sample of the product, having maximum width and height dimensions of 144" x 144", was tested in accordance with the following Standard at Intertek: UL1784.

Test Method	Property	Results
UL1784	Max. air leakage: <3 cfm/ft <sup>2</sup> of opening at 0.3 in. of w.c. pressure differential @ ambient 96°F.	Complies
	Max. air leakage: <3 cfm/ft <sup>2</sup> of opening at 0.3 in. of w.c. pressure differential @ ambient 400°F.	Complies
2009 IBC Section 711.5.2 Criteria <sup>+</sup>	Where required elsewhere in the code, doors and smoke partitions shall meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.015424 m <sup>3</sup> /(s*m <sup>2</sup> )) of door opening at 0.10 inch (24.9 Pa) of water for both ambient temperature test and the elevated temperature exposure test. Installation of smoke doors shall	Complies

	be in accordance with NFPA 105.	
2012 IBC Section 710.5.2.2 Criteria <sup>+</sup>	Where required elsewhere in the code, doors and smoke partitions shall meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.015424 m <sup>3</sup> /(s*m <sup>2</sup> )) of door opening at 0.10 inch (24.9 Pa) of water for both ambient temperature test and the elevated temperature exposure test. Installation of smoke doors shall be in accordance with NFPA 105.	Complies
ASTM E84 Criteria	Test for Surface Burning Characteristics of Building Materials - SGTex-11 curtain fabric	FS<25 SD<450

+The Smoke Guard M2100 flame and smoke resistant system with SGTex-11 fabric meets the 2009 IBC Section 711.5.2, and 2012 IBC Section 710.5.2.2 criteria when limited to a minimum curtain dimension of 36" high x 48" wide. The determination presumes that the actual installation will include a bottom bar, gasketing and a flat level floor or sill that will provide an equivalent seal between the bottom bar and floor to that obtained in the referenced tests.

The following table pertains to the Smoke Guard M2100 flame and smoke resistant system with SGTex-32 fabric curtain. The fabric was evaluated in accordance with the following Standards ASTM E2178, UL1784, and ASTM E84 .

Test Method	Property	Results
UL1784	Max. air leakage: <3 cfm/ft <sup>2</sup> of opening at 0.2 in. of w.c. pressure differential @ ambient 96°F.	Complies
	Max. air leakage: <3 cfm/ft <sup>2</sup> of opening at 0.2 in. of w.c. pressure differential @ ambient 400°F.	Complies
2009 IBC Section 711.5.2 Criteria <sup>++</sup>	Where required elsewhere in the code, doors and smoke partitions shall meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.015424 m <sup>3</sup> /(s*m <sup>2</sup> )) of door opening at 0.10 inch (24.9 Pa) of water for both ambient temperature test and the elevated temperature exposure test. Installation of smoke doors shall be in accordance with NFPA 105.	Complies
	Where required elsewhere in the code, doors	

2012 IBC Section 710.5.2.2 Criteria <sup>++</sup>	and smoke partitions shall meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.015424 m <sup>3</sup> /(s*m <sup>2</sup> )) of door opening at 0.10 inch (24.9 Pa) of water for both ambient temperature test and the elevated temperature exposure test. Installation of smoke doors shall be in accordance with NFPA 105.	Complies
ASTM E84 Criteria	Test for Surface Burning Characteristics of Building Materials - SGTex-32 curtain fabric	FS<25 SD<450

<sup>++</sup>The Smoke Guard M2100 flame and smoke resistant system with SGTex-32 fabric meets the 2009 IBC Section 711.5.2, and 2012 IBC Section 710.5.2.2 criteria when limited to a minimum curtain dimension of 96" high x 48" wide. The determination presumes that the actual installation will include a bottom bar, gasketing and a flat level floor or sill that will provide an equivalent seal between the bottom bar and floor to that obtained in the referenced tests.

The following table pertains to the Smoke Guard Model 2100 smoke and fire system with SGTex-32 curtain only. A representative sample of the product, having maximum width and height dimensions of 120" x 120", was tested in accordance with the following Standards at Intertek: UL10B, UL10C, UL10D and NFPA 252.

Test Method	Property	Result†
UL10D (2009)	Fire Tests for Fire Protective Curtains	120 Minutes
UL10B (2009), UL10C (2009) and NFPA 252 (2008)	Fire tests for Fire Protective Curtains without hose stream	20 Minutes

†The UL 10B, UL 10C, and NFPA 252 standards apply to 20 Minute Fire Endurance ratings without hose stream only. Please note that acceptance of the UL 10B, UL10C, and NFPA 252 ratings for the fire curtain product noted above is ultimately at the discretion of the Authority Having Jurisdiction.

**SIZE LIMITATIONS**

The following size limitation table pertains to the Smoke Guard M2100 fire-resistance rated system with SGTex-32 curtain fabric only.

Certification Procedure	Maximum Area	Maximum Width	Maximum Height
LABEL (Tested)	100 sq ft	10'-0"	10'-0"
CERTIFICATE/LABEL	unlimited‡	unlimited‡	unlimited‡

‡The AHJ may approve oversize doors with no size limitation based on an oversized certificate/label that states the door supplied is constructed in accordance with the certified design except for the size.

<u>Attribute</u>	<u>Value</u>
Criteria	NFPA 252 (2008)
Criteria	UL 10(c) (2009)
Criteria	UL 1784 (2009)
Criteria	UL 10(b) (2009)
Criteria	UL 10(d) (2009)
Criteria	NFPA 252 (2012)
Criteria	ASTM E84 (2013a)
CSI Code	08 30 00 Specialty Doors and Frames
CSI Code	08 34 00 Special Function Doors
Fire Resistance	20 Min w/out Hose Stream NP
Fire Resistance	2 Hour Positive Pressure
Fire Resistance	20 Min w/out Hose Positive Pressure
Intertek Services	Certification
Listed or Inspected	LISTED
Listing Section	CATEGORY I - SMOKE & DRAFT CONTROL DOOR ASSEMBLIES
Report Number	101264697MID-001, -008; 101372977MID-015; 101372977SAT-004a, 005, -019a, -019b
Spec ID	30387