

# ANSI/NFRC 100/200-2014/NFRC 500-2014 **Simulation Test Report**

**Styleline Door & Window Systems** Manufacturer:

**NEW PRODUCT LINE** Contact: Dylan Ward

Address: 4685 Industrial St. Suite 3J

Simi Valley, CA 93063

(805) 522-6300 Phone:

Model/Series: Pivot Series Door

Operator Type: Swinging Door-Single Leaf Entrance Door

Frame Type: Aluminum (Non-thermal) (AL)

Sash Type: No Sash

**Baseline Product for U-Factor Validation Testing:** 

**Description:** Not Applicable

Simulated U-factor:

Test Size (mm):

WESTLab Report No.:

STY16001-RH

WESTLab Report Date:

7/5/2016

Revision/Addendum Date:

7/5/2016

NFRC Product Line ID:

STY-A-NEW

Report Type:

New

X

**Physical Test Tolerance:** 

NFRC Standard Size: \_ Note: if the test product is not an NFRC standard size, see the Window mdb file

for U-factor calculation.

Notes: Manufacturer must have the product described above tested by an accredited physical testing laboratory. Physical test window U-factor results must be within the tolerance range listed above. The baseline product simulated U-factor is within 20% or 0.10 of the lowest simulated U-factor listed in the matrix (as allowed by ANSI/NFRC 100-2014) unless otherwise noted in the "Other Notes and Comments" section.

> Signature of Simulator In-Responsible-Charge:

> > Ross DePaola, Certified Simulator

#### Disclaimers/Notes:

The window U-factor, SHGC, VT & CR values presented in this report were determined using the Therm and Window computer programs in full compliance with ANSI/NFRC 100-2014, ANSI/NFRC 200-2014 and 500-2014, and from information supplied by the manufacturer. This report does not constitute certification of this product and only relates to the fenestration products simulated. Authorized use of any U-factor, SHGC Visible Transmittance and Condensation Resistance ratings may only be granted by the Certification Program Administrator.

WESTLab does not imply or claim that the product simulated in this report will perform as stated in actual use conditions. This report is the property of WESTLab and the client, and must not be reproduced, except in full, without written approval from WESTLab and the client.

Ratings values included in this report are for submittal to an NFRC-licensed IA are not meant to be used directly for labeling purposes. Only those values identified on a valid Certification Authorization Report (CAR) by an NFRC accredited Inspection Agency (IA) are to be used for labeling purposes. Rounding of values in this report is per NFRC 601 NFRC unit and measurement policy.

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#### **NFRC Product Line Summary (2014 Std)**

Simulation Report # STY16001-RH

Manufacturer Name: Styleline Door & Window Systems Product Line ID: STY-A-NEW Simulation Orig Report Date: 7/5/2016

Series/Model: Pivot Series Door Model Size: 1000mm x 2000mm Simulation Revision Date: 7/5/2016

Operator Type: Swinging Door-Single Leaf Entrance Door Frame Abs.: 0.3 Report Type: New

Frame/Sash Type: Aluminum (Non-thermal) (AL) / No Sash

Simulation Lab Code: SWWW

Note: If options in this matrix are grouped (i.e. there are group ID numbers), the option numbers will not match the NFRC database option numbers												No Dividers		Dividers < 1"		Dividers ≥ 1"	
Opt#	#Grp'd	Description/Code	Glass Thicknesses	Gap Width(s)	Gas	Emissivity(sfc)	Spacer/Seal	Divider	U-Factor	CR	Tint	SHGC	VT	SHGC	VT	SHGC	VT
001	1	SB60-Air-CL - Aluminum	0.236, 0.236	0.500	AIR	0.035(2)	A1-D	N	0.52	14	CL	0.32	0.54				
002	1	SB70-Air-CL - Aluminum	0.236, 0.236	0.500	AIR	0.018(2)	A1-D	N	0.51	14	CL	0.23	0.49				
003	1	SBR100-Air-CL - Aluminum	0.236, 0.236	0.500	AIR	0.036(2)	A1-D	N	0.52	14	CL	0.20	0.32				
004	1	SGSN68-Air-CL - Aluminum	0.236, 0.236	0.500	AIR	0.039(2)	A1-D	N	0.52	14	CL	0.31	0.52				
005	1	SGSNX 62/27-Air-CL - Aluminum	0.236, 0.236	0.500	AIR	0.020(2)	A1-D	N	0.51	14	CL	0.22	0.47				
006	1	SGSNX 51/23-Air-CL - Aluminum	0.221, 0.236	0.500	AIR	0.021(2)	A1-D	N	0.51	14	CL	0.20	0.39				
007	1	SB60-Arg-CL - Aluminum	0.236, 0.236	0.500	ARG	0.035(2)	A1-D	N	0.49	14	CL	0.31	0.54				
800	1	SB70-Arg-CL - Aluminum	0.236, 0.236	0.500	ARG	0.018(2)	A1-D	N	0.48	14	CL	0.22	0.49				
009	1	SBR100-Arg-CL - Aluminum	0.236, 0.236	0.500	ARG	0.036(2)	A1-D	N	0.49	14	CL	0.19	0.32				
010	1	SGSN68-Arg-CL - Aluminum	0.236, 0.236	0.500	ARG	0.039(2)	A1-D	N	0.49	14	CL	0.30	0.52				
011	1	SGSNX 62/27-Arg-CL - Aluminum	0.236, 0.236	0.500	ARG	0.020(2)	A1-D	N	0.48	14	CL	0.22	0.47				
012	1	SGSNX 51/23-Arg-CL - Aluminum	0.221, 0.236	0.500	ARG	0.021(2)	A1-D	N	0.48	14	CL	0.19	0.39				
013	1	SB60-Air-CL - SuperSpacer	0.236, 0.236	0.500	AIR	0.035(2)	ZF-S	N	0.52	14	CL	0.32	0.54				
014	1	SB70-Air-CL - SuperSpacer	0.236, 0.236	0.500	AIR	0.018(2)	ZF-S	N	0.51	14	CL	0.23	0.49				
015	1	SBR100-Air-CL - SuperSpacer	0.236, 0.236	0.500	AIR	0.036(2)	ZF-S	N	0.52	14	CL	0.20	0.32				
016	1	SGSN68-Air-CL - SuperSpacer	0.236, 0.236	0.500	AIR	0.039(2)	ZF-S	N	0.52	14	CL	0.31	0.52				
017	1	SGSNX 62/27-Air-CL -	0.236, 0.236	0.500	AIR	0.020(2)	ZF-S	N	0.51	14	CL	0.22	0.47				
018	1	SGSNX 51/23-Air-CL -	0.221, 0.236	0.500	AIR	0.021(2)	ZF-S	N	0.51	14	CL	0.20	0.39				
019	1	SB60-Arg-CL - SuperSpacer	0.236, 0.236	0.500	ARG	0.035(2)	ZF-S	N	0.48	14	CL	0.31	0.54				
020	1	SB70-Arg-CL - SuperSpacer	0.236, 0.236	0.500	ARG	0.018(2)	ZF-S	N	0.48	14	CL	0.22	0.49				
021	1	SBR100-Arg-CL - SuperSpacer	0.236, 0.236	0.500	ARG	0.036(2)	ZF-S	N	0.48	14	CL	0.19	0.32				
022	1	SGSN68-Arg-CL - SuperSpacer	0.236, 0.236	0.500	ARG	0.039(2)	ZF-S	N	0.48	14	CL	0.30	0.52				
023	1	SGSNX 62/27-Arg-CL -	0.236, 0.236	0.500	ARG	0.020(2)	ZF-S	N	0.48	14	CL	0.22	0.47				
024	1	SGSNX 51/23-Arg-CL -	0.221, 0.236	0.500	ARG	0.021(2)	ZF-S	N	0.48	14	CL	0.19	0.39				

The Condensation Resistance results obtained from this procedure are for controlled laboratory conditions and do not include the effects of air movement through the specimen, solar radiation, and the thermal bridging that may occur due to the specific design and construction of the fenestration system opening. (NFRC 500, Sec. 4.4)



Report # STY16001-RH

## **Summary - Frame, IG Unit & Dividers:**

Date: 7/5/2016

Rev: 7/5/2016

Manufacturer: **Styleline Door & Window Systems** 

Model/Series: **Pivot Series Door** 

**Operator Type: Swinging Door-Single Leaf Entrance Door** 

Frame Type: Aluminum (Non-thermal) (AL)

Sash Type: No Sash

Frame Description & Comments:

TB Type: Reinforced Nylon Frame Clad Type: Extruded Aluminum Unique Cross Sections: 3

> TB Material: Polyamide Sash Clad Type: Extruded Aluminum

Frame Core Material: Aluminum Extrusion Frame Finish: Anodized Sash Core Material: Aluminum Extrusion Sash Finish: Anodized

Sash Type: Full Sash Glazing Seal(s): Silicone

Reinforcement: N/A Weatherstrip Types: VY Flap/Mohair

Hardware: Non-continuous. Not modeled. Weatherstrip Locations: All Sections

Frame Comments: Frame and sash are anodized aluminum. The frame for the head and jamb are thermally broken.

Glazing Description & Comments:

IG OA(s): 1" Nominal Glass Thicknesses: 6mm

Low E Products/Sfcs: PPG "Solarban 60" (e=0.035); PPG "Solarban 70" (e=0.018); PPG "Solarban R100" (e=0.036); Guardian "SunGuard® SNX

62/27" (e=0.020); Guardian "SunGuard® SNX 51/23" (e=0.021); Guardian "SunGuard® Super Neutral 68" (e=0.039)

Fill Method: Single-probe, Timed Gas Fill and Ratio: 90% Argon

**IG Comments:** 

Spacer Types: Helima Aluminum, Edgetech SuperSpacer Spacer Backings: Helima: PIB & Polysulphide; Edgetech: Butyl

**Divider Description & Comments:** 

Divider 1: Divider 2: Divider 3: Divider 4:

Type:

Internal Bar Shape/Matl:

Dimension (W x D):

Modeled:

**Divider Patterns:** Res (H x V): (Per Lite) NFRC Std. Pattern

**Comments:** 

Report # STY16001-RH

## **Summary - Simulation & Other Notes:**

**Date:** 7/5/2016 **Rev:** 7/5/2016

Manufacturer: Styleline Door & Window Systems

Model/Series: Pivot Series Door

Operator Type: Swinging Door-Single Leaf Entrance Door

Frame Type: Aluminum (Non-thermal) (AL)

Sash Type: No Sash

#### Simulation Notes & Comments:

Sim Program Used: Therm 7.4 Window Program Vers: 7.4 Spectral Data Version: 47.0

Project File Path: C:\Users\WESTLab\Dropbox (WESTLab)\- WESTLab\W7\Styleline\

**Therm File Convention:** i.e: HD\_001.THM Where: HD=Head, 001=Option# **Project Simulator:** 

Divider File Convention: N/A

Spacer Origin: Modeled from Drawings provided

Steve Coble, Certified Simulator

**Sim Comments:** 

#### **Grouping/Simplification Notes & Comments:**

U-Factor Groupings/Interpretations: Reference/TI:

Type 1: Nominal Glass Thickness NFRC 100, 4.2.5.D.

Type 2:

Type 3:

Type 4:

Type 5:

Validation Test Matrix: No

Other Comments:

SHGC Simplifications:

Frame Absorptivity: 0.3 Reference: NFRC 200, Sec. 4.7

Generic Frame Option #('s): 8 (for SHGC 0 & 1 Table) Reference: NFRC 200, Sec. 4.2.3 A.

Default Divider for SHGC: Yes Reference: NFRC 200, Sec. 4.2.3 B.

Generic Glass Thickness: Yes Reference: NFRC 200, Table 4-1

Comments: SHGC & VT values were calculated from the SHGC 0 & 1, and VT 0 & 1 Generic Frame options

listed above.