Architectural Testing

NFRC U-FACTOR, SHGC, VT, & CONDENSATION RESISTANCE COMPUTER SIMULATION REPORT

(Revised)

Rendered to:
UNITED STATES ALUMINUM

SERIES/MODEL:
7200/7300 Project Out Awning

Baseline Product for Validation Testing	
Simulated Thermal Transmittance (U-Factor)	**0.545**
Unit Size:	23.63 inches wide by 59.00 inches high
Glazing Layer 1:	0.250 inch Clear
Gap 1:	0.500 inch Aluminum Spacer (A1-D) - Air Fill
Glazing Layer 2:	0.250 inch AFG Comfort TiAC36 (e=0.034, #3)
Gap 2:	
Glazing Layer 3:	
Notes:	Casement was tested

Report Number: **96067.03-116-45**
Original Report Date: **01/15/10**
Expiration Date: **12/10/13**
Revised Report Date: **09/30/10**

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NFRC U-FACTOR, SHGC, VT, & CONDENSATION RESISTANCE
COMPUTER SIMULATION REPORT
(Revised)

Rendered to:
UNITED STATES ALUMINUM
200 Singleton Drive
Waxahachie, Texas 75165

Report Number:	96067.03-116-45
Simulation Date:	12/10/09
Original Report Date:	01/15/10
Expiration Date:	12/10/13
Revised Report Date:	09/30/10

Project Summary:
Architectural Testing, Inc. was contracted to perform U-Factor, Solar Heat Gain Coefficient, Visible Transmittance, and Condensation Resistance* computer simulations in accordance with the National Fenestration Rating Council (NFRC). The products were evaluated in full compliance with NFRC requirements to the standards listed below.

**NFRC's Condensation Resistance rating is NOT equivalent to a Condensation Resistance Factor (CRF) determined in accordance with AAMA 1503.*

Standards:

NFRC 100-2010:	*Procedure for Determining Fenestration Product U-Factors*
NFRC 200-2010:	*Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence*
NFRC 500-2010:	*Procedure for Determining Fenestration Product Condensation Resistance Values*

Software:

Frame and Edge Modeling:	THERM 5.2.14
Center-of-Glass Modeling:	WINDOW 5.2.17
Total Product Calculations:	WINDOW 5.2.17
Spectral Data Library:	17.4

Simulations Specimen Description:

Series/Model:	7200/7300 Project Out Awning
Type:	Projected , Awning
Frame Material:	AT Aluminum w/ Thermal Breaks - All Members
Sash Material:	AT Aluminum w/ Thermal Breaks - All Members
Standard Size:	1500mm x 600mm

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Technical Interpretations:

None

Modeling Assumptions:

1) To prevent air infiltration, tape was applied to all interior sash crack locations.
2) The 7200 Series and 7300 Series were frame grouped per NFRC 100-2010 section 4.2.4.5 B i.

Specialty Products Table:

The specialty products method allow the manufacturer to determine the overall product SHGC and VT for any glazing option. The center of glass SHGC and/or VT must be determined using WINDOW 5.2. The method gives overall product SHGC and VT indexed on center of glass properties. All values used in the calculations are truncated to six decimal place precision.

(7200 Series)	No Dividers	Dividers < 1	Dividers > 1
SHGC0	0.019926	0.022025	0.024018
SHGC1	0.677514	0.615509	0.556625
VT0	0.000000	0.000000	0.000000
VT1	0.657588	0.593484	0.532607

SHGC = SHGC0 + SHGCc (SHGC1 - SHGC0)
VT = VT0 + VTc (VT1 - VT0)

(7300 Series)	No Dividers	Dividers < 1	Dividers > 1
SHGC0	0.023140	0.025149	0.027052
SHGC1	0.629535	0.570198	0.513981
VT0	0.000000	0.000000	0.000000
VT1	0.606395	0.545049	0.486929

SHGC = SHGC0 + SHGCc (SHGC1 - SHGC0)
VT = VT0 + VTc (VT1 - VT0)

Validation Matrix:

The following products are part of a validation matrix. Only one is required for validation

Product Line	*Report Number*
7200/7300 Outswing Casement	96062.01-116-45
7200/7300 Project Out Awning	96067.01-116-45

Spacer Option Description

	Sealant		
Spacer Type	*Primary*	*Secondary*	*Desiccant*
Standard Aluminum Spacer (A1-D)	Butyl Rubber	Butyl Rubber	Yes
Stainless Steel Spacer (SS-D)	Polyisobutylene	Silicone	Yes
Intercept Spacer (CU-S)	Butyl Rubber		Yes
Edgetech Super Spacer (ZF-S)	Butyl Rubber		

Grid Option Description

Grid Size	*Grid Type*	*Grid Pattern*
None	-	-

Reinforcement Option Description

Location	*Material*
None	-

Gas Filling Technique Description

Fill Type	*Method*
90% Argon	Single Probe Timed

Edge-of-Glass Construction

Interior Condition	EPDM gasket
Exterior Condition	Glazing tape

Weatherstripping

Type	*Quantity*	*Location*
Bulb Gasket	1 row	Frame perimeter
Bulb Gasket	1 row	Sash perimeter

Frame/Sash Materials Finish

Interior	Painted Aluminum
Exterior	Painted Aluminum

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
1	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	A1-D	N
	U-Factor		**0.61**	**SHGC (N)**				**0.48**	**VT (N)**	**0.52**	**CR**	**35**
2	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	A1-D	N
	U-Factor		**0.59**	**SHGC (N)**				**0.48**	**VT (N)**	**0.52**	**CR**	**35**
3	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**36**
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.31**	**VT (N)**	**0.46**	**CR**	**36**
4	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**36**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**36**
5	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.20**	**VT (N)**	**0.35**	**CR**	**36**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.22**	**VT (N)**	**0.35**	**CR**	**36**
6	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**36**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**36**

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
7	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	A1-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**36**
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	A1-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**36**
8	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	A1-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**36**
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	A1-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**36**
9	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	A1-D	N
	U-Factor		**0.48**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**36**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	A1-D	N
	U-Factor		**0.48**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**36**
10	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**36**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**36**
11	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**36**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**36**

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
12	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.26**	**VT (N)**	**0.43**	**CR**	**36**
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**36**
13	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**36**
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**36**
14	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**36**
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.32**	**VT (N)**	**0.25**	**CR**	**36**
15	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**36**
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	A1-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.33**	**VT (N)**	**0.25**	**CR**	**36**
16	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.43**	**VT (N)**	**0.48**	**CR**	**36**
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.46**	**VT (N)**	**0.48**	**CR**	**36**

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
17	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	A1-D	N
	U-Factor 0.50			SHGC (N) 0.43					VT (N) 0.48		CR 36	
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	A1-D	N
	U-Factor 0.50			SHGC (N) 0.46					VT (N) 0.48		CR 36	
18	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	A1-D	N
	U-Factor 0.51			SHGC (N) 0.38					VT (N) 0.50		CR 36	
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	A1-D	N
	U-Factor 0.51			SHGC (N) 0.40					VT (N) 0.50		CR 36	
19	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	A1-D	N
	U-Factor 0.49			SHGC (N) 0.18					VT (N) 0.31		CR 36	
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	A1-D	N
	U-Factor 0.49			SHGC (N) 0.21					VT (N) 0.31		CR 36	
20	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	A1-D	N
	U-Factor 0.46			SHGC (N) 0.17					VT (N) 0.31		CR 36	
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	A1-D	N
	U-Factor 0.46			SHGC (N) 0.21					VT (N) 0.31		CR 36	
21	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	A1-D	N
	U-Factor 0.50			SHGC (N) 0.22					VT (N) 0.35		CR 36	
22	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	CU-S	N
	U-Factor 0.60			SHGC (N) 0.48					VT (N) 0.52		CR 36	

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
23	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	CU-S	N
	U-Factor		**0.58**	**SHGC (N)**				**0.48**	**VT (N)**	**0.52**	**CR**	**36**
24	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**37**
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.31**	**VT (N)**	**0.46**	**CR**	**37**
25	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**38**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**38**
26	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.20**	**VT (N)**	**0.35**	**CR**	**37**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.22**	**VT (N)**	**0.35**	**CR**	**37**
27	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**37**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**37**
28	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	CU-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**38**

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	CU-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**38**
29	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	CU-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**37**
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	CU-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**37**
30	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	CU-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**38**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	CU-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**38**
31	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**37**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**37**
32	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**38**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**38**
33	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.26**	**VT (N)**	**0.43**	**CR**	**37**

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**37**
34	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**38**
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**38**
35	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**37**
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.32**	**VT (N)**	**0.25**	**CR**	**37**
36	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**38**
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	CU-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.33**	**VT (N)**	**0.25**	**CR**	**38**
37	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.43**	**VT (N)**	**0.48**	**CR**	**37**
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.46**	**VT (N)**	**0.48**	**CR**	**37**
38	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.43**	**VT (N)**	**0.48**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.46**	**VT (N)**	**0.48**	**CR**	**37**
39	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**37**
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**37**
40	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.18**	**VT (N)**	**0.31**	**CR**	**37**
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.21**	**VT (N)**	**0.31**	**CR**	**37**
41	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	CU-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.17**	**VT (N)**	**0.31**	**CR**	**38**
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	CU-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.21**	**VT (N)**	**0.31**	**CR**	**38**
42	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.22**	**VT (N)**	**0.35**	**CR**	**37**
43	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	SS-D	N
	U-Factor		**0.60**	**SHGC (N)**				**0.48**	**VT (N)**	**0.52**	**CR**	**36**
44	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	SS-D	N
	U-Factor		**0.59**	**SHGC (N)**				**0.48**	**VT (N)**	**0.52**	**CR**	**36**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
45	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**37**
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.31**	**VT (N)**	**0.46**	**CR**	**37**
46	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**37**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**37**
47	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.20**	**VT (N)**	**0.35**	**CR**	**37**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.22**	**VT (N)**	**0.35**	**CR**	**37**
48	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	SS-D	N
	U-Factor		**0.48**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**37**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	SS-D	N
	U-Factor		**0.48**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**37**
49	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**37**
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
50	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	SS-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**37**
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	SS-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**37**
51	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	SS-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**37**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	SS-D	N
	U-Factor		**0.47**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**37**
52	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**37**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**37**
53	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**37**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**37**
54	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.26**	**VT (N)**	**0.43**	**CR**	**37**
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
55	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**37**
56	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**37**
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.32**	**VT (N)**	**0.25**	**CR**	**37**
57	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**37**
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.33**	**VT (N)**	**0.25**	**CR**	**37**
58	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.43**	**VT (N)**	**0.48**	**CR**	**37**
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.46**	**VT (N)**	**0.48**	**CR**	**37**
59	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.43**	**VT (N)**	**0.48**	**CR**	**37**
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.46**	**VT (N)**	**0.48**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
60	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	SS-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**37**
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	SS-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**37**
61	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.18**	**VT (N)**	**0.31**	**CR**	**37**
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.21**	**VT (N)**	**0.31**	**CR**	**37**
62	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.17**	**VT (N)**	**0.31**	**CR**	**37**
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	SS-D	N
	U-Factor		**0.46**	**SHGC (N)**				**0.21**	**VT (N)**	**0.31**	**CR**	**37**
63	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.22**	**VT (N)**	**0.35**	**CR**	**37**
64	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	ZF-S	N
	U-Factor		**0.59**	**SHGC (N)**				**0.48**	**VT (N)**	**0.52**	**CR**	**37**
65	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	ZF-S	N
	U-Factor		**0.57**	**SHGC (N)**				**0.48**	**VT (N)**	**0.52**	**CR**	**38**
66	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**38**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			**Solar Heat Gain Coefficient (SHGC)** Grids (None / <1 / >=1)					**Visible Transmittance (VT)** Grids (None / <1 / >=1)		**Condensation Resistance**	
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.31**	**VT (N)**	**0.46**	**CR**	**38**
67	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**39**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**39**
68	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.20**	**VT (N)**	**0.35**	**CR**	**38**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.22**	**VT (N)**	**0.35**	**CR**	**38**
69	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**39**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**39**
70	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	ZF-S	N
	U-Factor		**0.44**	**SHGC (N)**				**0.20**	**VT (N)**	**0.42**	**CR**	**39**
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	ZF-S	N
	U-Factor		**0.44**	**SHGC (N)**				**0.26**	**VT (N)**	**0.42**	**CR**	**39**
71	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	ZF-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**38**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	ZF-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**38**
72	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	ZF-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**39**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	ZF-S	N
	U-Factor		**0.46**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**39**
73	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	ZF-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**38**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	ZF-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**38**
74	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.27**	**VT (N)**	**0.46**	**CR**	**39**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.32**	**VT (N)**	**0.46**	**CR**	**39**
75	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.26**	**VT (N)**	**0.43**	**CR**	**38**
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**38**
76	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**39**

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.32**	**VT (N)**	**0.43**	**CR**	**39**
77	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	ZF-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**38**
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	ZF-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.32**	**VT (N)**	**0.25**	**CR**	**38**
78	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.17**	**VT (N)**	**0.25**	**CR**	**39**
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	ZF-S	N
	U-Factor		**0.45**	**SHGC (N)**				**0.33**	**VT (N)**	**0.25**	**CR**	**39**
79	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.43**	**VT (N)**	**0.48**	**CR**	**38**
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.46**	**VT (N)**	**0.48**	**CR**	**38**
80	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.43**	**VT (N)**	**0.48**	**CR**	**39**
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.46**	**VT (N)**	**0.48**	**CR**	**39**
81	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	ZF-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.38**	**VT (N)**	**0.50**	**CR**	**38**

NFRC 100/200/500 Summary Sheet
7200 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	ZF-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.40**	**VT (N)**	**0.50**	**CR**	**38**
82	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.18**	**VT (N)**	**0.31**	**CR**	**39**
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.21**	**VT (N)**	**0.31**	**CR**	**39**
83	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	ZF-S	N
	U-Factor		**0.44**	**SHGC (N)**				**0.17**	**VT (N)**	**0.31**	**CR**	**39**
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	ZF-S	N
	U-Factor		**0.44**	**SHGC (N)**				**0.21**	**VT (N)**	**0.31**	**CR**	**39**
84	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.22**	**VT (N)**	**0.35**	**CR**	**38**

NFRC 100/200/500 Summary Sheet
7300 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
85	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	A1-D	N
	U-Factor		**0.62**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**34**
86	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	A1-D	N
	U-Factor		**0.61**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**34**
87	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**35**
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**35**
88	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**35**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**35**
89	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.19**	**VT (N)**	**0.32**	**CR**	**35**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.21**	**VT (N)**	**0.32**	**CR**	**35**
90	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**35**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**35**

NFRC 100/200/500 Summary Sheet
7300 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
91	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**35**
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**35**
92	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	A1-D	N
	U-Factor		**0.53**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**35**
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	A1-D	N
	U-Factor		**0.53**	**SHGC (N)**				**0.37**	**VT (N)**	**0.46**	**CR**	**35**
93	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	A1-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**35**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	A1-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.38**	**VT (N)**	**0.46**	**CR**	**35**
94	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**35**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**35**
95	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**35**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**35**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
96	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.24**	**VT (N)**	**0.39**	**CR**	**35**
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.30**	**VT (N)**	**0.39**	**CR**	**35**
97	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.24**	**VT (N)**	**0.39**	**CR**	**35**
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.30**	**VT (N)**	**0.39**	**CR**	**35**
98	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.16**	**VT (N)**	**0.23**	**CR**	**35**
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.30**	**VT (N)**	**0.23**	**CR**	**35**
99	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.16**	**VT (N)**	**0.23**	**CR**	**35**
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	A1-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.31**	**VT (N)**	**0.23**	**CR**	**35**
100	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	A1-D	N
	U-Factor		**0.54**	**SHGC (N)**				**0.40**	**VT (N)**	**0.44**	**CR**	**35**
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	A1-D	N
	U-Factor		**0.54**	**SHGC (N)**				**0.43**	**VT (N)**	**0.44**	**CR**	**35**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
101	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.40**	**VT (N)**	**0.44**	**CR**	**35**
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.43**	**VT (N)**	**0.44**	**CR**	**35**
102	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	A1-D	N
	U-Factor		**0.53**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**35**
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	A1-D	N
	U-Factor		**0.53**	**SHGC (N)**				**0.38**	**VT (N)**	**0.46**	**CR**	**35**
103	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.17**	**VT (N)**	**0.29**	**CR**	**35**
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.20**	**VT (N)**	**0.29**	**CR**	**35**
104	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.16**	**VT (N)**	**0.29**	**CR**	**35**
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	A1-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.20**	**VT (N)**	**0.29**	**CR**	**35**
105	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	A1-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.21**	**VT (N)**	**0.32**	**CR**	**35**
106	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	CU-S	N
	U-Factor		**0.61**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**35**

NFRC 100/200/500 Summary Sheet
7300 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
107	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	CU-S	N
	U-Factor		**0.60**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**35**
108	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
109	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
110	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.19**	**VT (N)**	**0.32**	**CR**	**37**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.21**	**VT (N)**	**0.32**	**CR**	**37**
111	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**37**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**37**
112	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**37**
113	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	CU-S	N
	U-Factor		**0.52**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**37**
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	CU-S	N
	U-Factor		**0.52**	**SHGC (N)**				**0.37**	**VT (N)**	**0.46**	**CR**	**37**
114	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**37**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	CU-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.38**	**VT (N)**	**0.46**	**CR**	**37**
115	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
116	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
117	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.24**	**VT (N)**	**0.39**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.30**	**VT (N)**	**0.39**	**CR**	**37**
118	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.24**	**VT (N)**	**0.39**	**CR**	**37**
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.30**	**VT (N)**	**0.39**	**CR**	**37**
119	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.16**	**VT (N)**	**0.23**	**CR**	**37**
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.30**	**VT (N)**	**0.23**	**CR**	**37**
120	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.16**	**VT (N)**	**0.23**	**CR**	**37**
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.31**	**VT (N)**	**0.23**	**CR**	**37**
121	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	CU-S	N
	U-Factor		**0.53**	**SHGC (N)**				**0.40**	**VT (N)**	**0.44**	**CR**	**36**
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	CU-S	N
	U-Factor		**0.53**	**SHGC (N)**				**0.43**	**VT (N)**	**0.44**	**CR**	**36**
122	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.40**	**VT (N)**	**0.44**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.43**	**VT (N)**	**0.44**	**CR**	**37**
123	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	CU-S	N
	U-Factor		**0.52**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**37**
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	CU-S	N
	U-Factor		**0.52**	**SHGC (N)**				**0.38**	**VT (N)**	**0.46**	**CR**	**37**
124	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.17**	**VT (N)**	**0.29**	**CR**	**37**
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.20**	**VT (N)**	**0.29**	**CR**	**37**
125	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.16**	**VT (N)**	**0.29**	**CR**	**37**
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	CU-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.20**	**VT (N)**	**0.29**	**CR**	**37**
126	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	CU-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.21**	**VT (N)**	**0.32**	**CR**	**37**
127	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	SS-D	N
	U-Factor		**0.62**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**35**
128	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	SS-D	N
	U-Factor		**0.60**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**35**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
129	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**35**
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**35**
130	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**36**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**36**
131	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.19**	**VT (N)**	**0.32**	**CR**	**35**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.21**	**VT (N)**	**0.32**	**CR**	**35**
132	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**35**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**35**
133	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	SS-D	N
	U-Factor		**0.48**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**36**
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	SS-D	N
	U-Factor		**0.48**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**36**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
134	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	SS-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**35**
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	SS-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.37**	**VT (N)**	**0.46**	**CR**	**35**
135	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	SS-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**35**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	SS-D	N
	U-Factor		**0.50**	**SHGC (N)**				**0.38**	**VT (N)**	**0.46**	**CR**	**35**
136	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**35**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**35**
137	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**36**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**36**
138	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.24**	**VT (N)**	**0.39**	**CR**	**35**
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.30**	**VT (N)**	**0.39**	**CR**	**35**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
139	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	SS-D	N
	U-Factor	0.49		SHGC (N)	0.24				VT (N)	0.39	CR	36
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	SS-D	N
	U-Factor	0.49		SHGC (N)	0.30				VT (N)	0.39	CR	36
140	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	SS-D	N
	U-Factor	0.51		SHGC (N)	0.16				VT (N)	0.23	CR	35
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	SS-D	N
	U-Factor	0.51		SHGC (N)	0.30				VT (N)	0.23	CR	35
141	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	SS-D	N
	U-Factor	0.49		SHGC (N)	0.16				VT (N)	0.23	CR	36
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	SS-D	N
	U-Factor	0.49		SHGC (N)	0.31				VT (N)	0.23	CR	36
142	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	SS-D	N
	U-Factor	0.54		SHGC (N)	0.40				VT (N)	0.44	CR	35
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	SS-D	N
	U-Factor	0.54		SHGC (N)	0.43				VT (N)	0.44	CR	35
143	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	SS-D	N
	U-Factor	0.51		SHGC (N)	0.40				VT (N)	0.44	CR	35
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	SS-D	N
	U-Factor	0.51		SHGC (N)	0.43				VT (N)	0.44	CR	35

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
144	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	SS-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**35**
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	SS-D	N
	U-Factor		**0.52**	**SHGC (N)**				**0.38**	**VT (N)**	**0.46**	**CR**	**35**
145	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.17**	**VT (N)**	**0.29**	**CR**	**35**
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.20**	**VT (N)**	**0.29**	**CR**	**35**
146	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.16**	**VT (N)**	**0.29**	**CR**	**36**
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	SS-D	N
	U-Factor		**0.49**	**SHGC (N)**				**0.20**	**VT (N)**	**0.29**	**CR**	**36**
147	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	SS-D	N
	U-Factor		**0.51**	**SHGC (N)**				**0.21**	**VT (N)**	**0.32**	**CR**	**35**
148	clr / air / clr											
	0.225	0.500	0.225					AIR		CL	ZF-S	N
	U-Factor		**0.61**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**36**
149	clr / arg / clr											
	0.225	0.500	0.225					ARG90		CL	ZF-S	N
	U-Factor		**0.59**	**SHGC (N)**				**0.45**	**VT (N)**	**0.48**	**CR**	**36**
150	SB60 / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
151	SB60 / arg / clr											
	0.223	0.500	0.223					ARG90	0.035(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / arg / SB60											
	0.223	0.500	0.223					ARG90	0.035(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
152	SB60 on ATL / air / clr											
	0.223	0.500	0.223					AIR	0.035(#2)	GR	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.19**	**VT (N)**	**0.32**	**CR**	**37**
	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.21**	**VT (N)**	**0.32**	**CR**	**37**
153	SB70XL / air / clr											
	0.223	0.500	0.223					AIR	0.018(#2)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**37**
	clr / air / SB70XL											
	0.223	0.500	0.223					AIR	0.018(#3)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**37**
154	SB70XL / arg / clr											
	0.223	0.500	0.223					ARG90	0.018(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.19**	**VT (N)**	**0.39**	**CR**	**37**
	clr / arg / SB70XL											
	0.223	0.500	0.223					ARG90	0.018(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.25**	**VT (N)**	**0.39**	**CR**	**37**
155	VE185 / air / clr											
	0.223	0.500	0.225					AIR	0.088(#2)	CL	ZF-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**37**

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ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / air / VE185											
	0.225	0.500	0.223					AIR	0.088(#3)	CL	ZF-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.37**	**VT (N)**	**0.46**	**CR**	**37**
156	VE185 / arg / clr											
	0.223	0.500	0.225					ARG90	0.088(#2)	CL	ZF-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**37**
	clr / arg / VE185											
	0.225	0.500	0.223					ARG90	0.088(#3)	CL	ZF-S	N
	U-Factor		**0.49**	**SHGC (N)**				**0.38**	**VT (N)**	**0.46**	**CR**	**37**
157	VE12M / air / clr											
	0.223	0.500	0.225					AIR	0.040(#2)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / air / VE12M											
	0.225	0.500	0.223					AIR	0.040(#3)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
158	VE12M / arg / clr											
	0.223	0.500	0.225					ARG90	0.040(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.25**	**VT (N)**	**0.43**	**CR**	**37**
	clr / arg / VE12M											
	0.225	0.500	0.223					ARG90	0.040(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.30**	**VT (N)**	**0.43**	**CR**	**37**
159	TiAC36 / air / clr											
	0.222	0.500	0.225					AIR	0.034(#2)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.24**	**VT (N)**	**0.39**	**CR**	**37**
	clr / air / TiAC36											
	0.225	0.500	0.222					AIR	0.034(#3)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.30**	**VT (N)**	**0.39**	**CR**	**37**
160	TiAC36 / arg / clr											
	0.222	0.500	0.225					ARG90	0.034(#2)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.24**	**VT (N)**	**0.39**	**CR**	**37**

NFRC 100/200/500 Summary Sheet
7300 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / arg / TiAC36											
	0.225	0.500	0.222					ARG90	0.034(#3)	CL	ZF-S	N
	U-Factor		**0.47**	**SHGC (N)**				**0.30**	**VT (N)**	**0.39**	**CR**	**37**
161	TiAC23 / air / clr											
	0.228	0.500	0.225					AIR	0.041(#2)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.16**	**VT (N)**	**0.23**	**CR**	**37**
	clr / air / TiAC23											
	0.225	0.500	0.228					AIR	0.041(#3)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.30**	**VT (N)**	**0.23**	**CR**	**37**
162	TiAC23 / arg / clr											
	0.228	0.500	0.225					ARG90	0.041(#2)	CL	ZF-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.16**	**VT (N)**	**0.23**	**CR**	**37**
	clr / arg / TiAC23											
	0.225	0.500	0.228					ARG90	0.041(#3)	CL	ZF-S	N
	U-Factor		**0.48**	**SHGC (N)**				**0.31**	**VT (N)**	**0.23**	**CR**	**37**
163	EADV / air / clr											
	0.222	0.500	0.223					AIR	0.157(#2)	CL	ZF-S	N
	U-Factor		**0.52**	**SHGC (N)**				**0.40**	**VT (N)**	**0.44**	**CR**	**37**
	clr / air / EADV											
	0.223	0.500	0.222					AIR	0.157(#3)	CL	ZF-S	N
	U-Factor		**0.52**	**SHGC (N)**				**0.43**	**VT (N)**	**0.44**	**CR**	**37**
164	EADV / arg / clr											
	0.222	0.500	0.223					ARG90	0.157(#2)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.40**	**VT (N)**	**0.44**	**CR**	**37**
	clr / arg / EADV											
	0.223	0.500	0.222					ARG90	0.157(#3)	CL	ZF-S	N
	U-Factor		**0.50**	**SHGC (N)**				**0.43**	**VT (N)**	**0.44**	**CR**	**37**
165	S100 / air / clr											
	0.223	0.500	0.223					AIR	0.087(#2)	CL	ZF-S	N
	U-Factor		**0.51**	**SHGC (N)**				**0.35**	**VT (N)**	**0.46**	**CR**	**37**

NFRC 100/200/500 Summary Sheet
7300 Project Out Awning

ID	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	Tint	Spacer	Grid Type
	U-Factor			Solar Heat Gain Coefficient (SHGC) Grids (None / <1 / >=1)					Visible Transmittance (VT) Grids (None / <1 / >=1)		Condensation Resistance	
	clr / air / S100											
	0.223	0.500	0.223					AIR	0.087(#3)	CL	ZF-S	N
	U-Factor	0.51		SHGC (N)				0.38	VT (N)	0.46	CR	37
166	SB80 / air / clr											
	0.223	0.500	0.223					AIR	0.024(#2)	CL	ZF-S	N
	U-Factor	0.50		SHGC (N)				0.17	VT (N)	0.29	CR	37
	clr / air / SB80											
	0.223	0.500	0.223					AIR	0.024(#3)	CL	ZF-S	N
	U-Factor	0.50		SHGC (N)				0.20	VT (N)	0.29	CR	37
167	SB80 / arg / clr											
	0.223	0.500	0.223					ARG90	0.024(#2)	CL	ZF-S	N
	U-Factor	0.47		SHGC (N)				0.16	VT (N)	0.29	CR	37
	clr / arg / SB80											
	0.223	0.500	0.223					ARG90	0.024(#3)	CL	ZF-S	N
	U-Factor	0.47		SHGC (N)				0.20	VT (N)	0.29	CR	37
168	Atlantica / air / SB60											
	0.223	0.500	0.223					AIR	0.035(#3)	GR	ZF-S	N
	U-Factor	0.50		SHGC (N)				0.21	VT (N)	0.32	CR	37

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.

Ratings values included in this report are for submittals to an NFRC-licensed IA and 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. The ratings values were rounded in accordance to NFRC 601, NFRC Unit and Measurement Policy.

Architectural Testing is an NFRC accredited simulation laboratory and all simulations were conducted in full compliance with NFRC approved procedures and specifications. The NFRC procedure requires that the computational results be verified through actual test results.

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Attachments (pages): This report is complete only when all attachments listed are included.
Appendix A: Drawings and Bills of Material (12)