



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

(Revised)

Rendered to: SPECIALTY WHOLESALE SUPPLY

SERIES/MODEL: 4000 / 4500 DuraGard XT Double Hung

Report Number:E7526.11-116-45Original Report Date:01/18/17Revised Report Date:02/13/17





NFRC U-FACTOR, SHGC, VT, & CONDENSATION RESISTANCE <u>COMPUTER SIMULATION REPORT</u>

(Revised)

Rendered to: SPECIALTY WHOLESALE SUPPLY 101 Linus Allain Avenue Gardner, Massachussetts 01440

E7526.11-116-45
12/02/15
01/18/17
02/13/17

Project Summary:

Architectural Testing, Inc., an Intertek Company (Intertek-ATI) 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

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

Standards:

ANSI/NFRC 100-2014:	Procedure for Determining Fenestration Product U-Factors
ANSI/NFRC 200-2014:	Procedure for Determining Fenestration Product Solar Heat
	Gain Coefficient and Visible Transmittance at Normal Incidence
NFRC 500-2014:	Procedure for Determining Fenestration Product Condensation
	Resistance Values

Software:

Frame and Edge Modeling:	THERM 7.4.4
Center-of-Glass Modeling:	WINDOW 7.4.14
Total Product Calculations:	WINDOW 7.4.14
Spectral Data Library:	IGDB 52.0

Simulations Specimen Description:

Series/Model:	4000 / 4500 DuraGard XT Double Hung		
Type:	Vertical Slider, Double Hung		
Frame Material:	VY Vinyl		
Sash Material:	VI Vinyl w/ Reinforcement - Interlock		
Standard Size:	1200mm x 1500mm		



Modeling Assumptions/Technical Interpretations:

- 1) To prevent air infiltration, tape was applied to all interior sash crack locations.
- 2) Grids did not require modeling in some options per the NFRC 3mm rule.

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 7.4.14. 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.

	No Dividers	Dividers < 1	Dividers > 1
SHGC0	0.003449	0.006187	0.008765
SHGC1	0.760074	0.679648	0.603901
VT0	0.000000	0.000000	0.000000
VT1	0.756625	0.673461	0.595136

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

VT = VT0 + VTc (VT1 - VT0)

Validation Matrix:

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

Product Line	Report Number
None	-



Spacer Option Description

	Sealant		
Spacer Type	Primary	Secondary	Code
Quanex Standard Super Spacer	Butyl Rubber	None	OF-S

Grid Option Description

Grid Size	Grid Type	Grid Pattern
5.5mm x 18mm	Aluminum Contour Grid (Painted)	NFRC Standard
0.220" x 0.875"	SDL Bar	NFRC Standard
0.111" x 0.875"	SDL Bar	NFRC Standard

Reinforcement Option Description

Location	Material
Interlocks	Composite

Gas Filling Technique Description

Fill Type	Method
92% Argon	Two-probe with concentration sensor

Edge-of-Glass Construction

Interior Condition	Vinyl glazing leg with Silicone
Exterior Condition	Vinyl glazing bead

Weatherstripping

Туре	Quantity	Location
Finpile	1	Sill Frame, Sash Stiles, Top rail
Vinyl Bulb	1	Sill Rail, Head Frame

Frame/Sash Materials Finish

Interior	Vinyl
Exterior	Vinyl





E7526.11-116-45 Page 4 of 10 Revised Report Date: 02/13/17

NFRC 100/200/500 Summary Sheet 4000 / 4500 DuraGard XT Double Hung

Ð	Pane Thickness 1	Gap Width 1	Pane Thickness 2	Gap Width 2	H Pane Thickness 3	Gap Width 3	Pane Thickness 4	Gap Fill	Low-e (Surface#)	smittance (V	Tint	Spacer	Grid Type
	τ	J-Facto	or	Johan	Gri	ids (None	/ <1 / >=1)	Grids (Not	ne / <1 / >=1)	1)	Resis	tance
1	No Fo	am: Cle	ear/Air/	Clear (SS) 7/8	"							
	0.090	0.688	0.090					AIR			CL	OF-S	N,G,S
	U-Facto	r	0.45	SHGC ((N / <1)		0.	61 / 0.54	VT (N / <1)	0.63 / 0.56		CR	45
	No Fo	am: Cle	ear/Air/	Clear (DS) 7/8	8"							
	0.117	0.625	0.117					AIR			CL	OF-S	N,G,S
	U-Facto	r	0.45	SHGC ((N / <1)		0.	60 / 0.54	VT (N / <1)	0.62 / 0.55		CR	45
2	No Fo	am: 713	38/Air/	Clear (S	SS) 7/8'	'	-						
	0.090	0.688	0.090					AIR	0.027(#2)	CL	OF-S	N,G,S
	U-Facto	or 71/	0.32	SHGC ((N / <1)		0	30 / 0.27	VT (N / <1)	0.54 / 0.48		CR	54
	No Fo	am: $/1$.	38/A1r/	Clear (I	JS) //8			4.10	0.027		CT		NGG
	0.117	0.625	0.117	a== a a				AIR	0.027(#2)	CL	OF-S	N,G,S
3	U-Facto	or om: 71	$\frac{0.32}{38/\Lambda ray}$	SHGC ($\frac{(N / < I)}{r (SS)}$	7/8"	0	30 / 0.27	VT (N / <1)	0.54 / 0.48		CR	54
5	0.000	0 699			1 (55) .	//0		APC02	0.027((#2)	CI	OF S	NGS
	U.U90	0.088	0.090	SUCC	(N/<1)			ARC 92	0.027(VT (N / <1)	#2)	CL		IN,O,S
	No Fo	am: 712	38/Arg	on/Clea	r (DS)	7/8"	0	30/0.27		0.34 / 0.40	-	CK	57
	0 1 1 7	0.625	0 117		- (_ ~)			ARG92	0.0270	#2)	CL	OF-S	NGS
	U-Facto	or.025	0.29	SHGC	(N / < 1)		0.1	30 / 0.27	VT (N / <1)	0.54 / 0.48	CL	CR	57
4	No Fo	am: Cle	ear/Air/	7257 (\$	SS) 7/8'	"							
	0.090	0.688	0.090					AIR	0.045(#3)	CL	OF-S	N,G,S
	U-Facto	r	0.33	SHGC ((N / <1)		0.4	44 / 0.40	VT (N / <1)	0.54 / 0.48		CR	54
	No Fo	am: Cle	ear/Air/	7257 (I	OS) 7/8	"			•				
	0.117	0.625	0.117					AIR	0.045((#3)	CL	OF-S	N,G,S
	U-Facto	or	0.33	SHGC ((N / <1)		0.4	44 / 0.39	VT (N / <1)	0.54 / 0.48		CR	54
5	No Fo	am: Cle	ear/Arg	on/725′	7 (SS) 7	7/8"			_				
	0.090	0.688	0.090					ARG92	0.045(#3)	CL	OF-S	N,G,S
	U-Facto	r	0.29	SHGC ((N / <1)		0.4	45 / 0.40	VT (N / <1)	0.54 / 0.48		CR	57
	No Fo	am: Cle	ear/Arg	on/725′	7 (DS)	7/8"				1			
	0.117	0.688	0.117					ARG92	0.045(#3)	CL	OF-S	N,G,S
	U-Facto	or	0.29	SHGC ((N / <1)		0.4	44 / 0.40	VT (N / <1)	0.54 / 0.48		CR	57





NFRC 100/200/500 Summary Sheet 4000 / 4500 DuraGard XT Double Hung

Ð	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#)	nittance (1	Tint	Spacer	Grid Type
	τ	J-Facto	or	50141	Gri	ids (None	/ <1 / >=1)	Grids (None	/<1/>/>=1)	1)	Resis	tance
6	No Fo	am: 713	38/Arg	on/Clea	r/Argoi	n/Clear	(DS-SS	S-DS) 1"					
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#	2)	CL	OF-S	N
	U-Facto	or	0.27	SHGC ((N)			0.28	VT (N)	0.49		CR	63
7	No Fo	am: 713	38/Arg	on/Clea	r/Argoi	n/Clear	(DS-SS	S-DS) 1"					
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#	2)	CL	OF-S	G,S
	U-Facto	r	0.29	SHGC ((<1)			0.25	VT (<1)	0.44		CR	63
8	No Fo	am: Cle	ear/Arg	on/Clea	ur/Argo	n/7257	(DS-SS	S-DS) 1"			<u> </u>		
	0.117	0.250	0.090	0.438	0.117			ARG92	0.045(#	5)	CL	OF-S	N
0	U-Facto	or Cl	0.24	SHGC ((N)		(DC C)	0.40	VT (N)	0.49		CR	64
9	No Fo	am: Cle	ear/Arg	on/Clea	r/Argo	n//25/	(DS-S:	$S-DS)T^{n}$	0.045(1)	<u></u>	CT		0.0
	0.117	0.250	0.090	0.438	0.117			ARG92	0.045(#	5)	CL	OF-S	G,S
10	U-Facto Foam(or Sash O	0.24	SHGC (138/Arc	<1) ron/Cle	ar (SS)	7/8"	0.36	V1 (<1)	0.44		CR	64
10	0.090	0 688	0.090			ai (55)	//0	ARG92	0.027(#	2)	CI	OF-S	NGS
	U-Facto	0.000	0.28	SHGC	N/<1)		0.2	ARC)2	0.027(#	0.54/0.48	CL	CR	58
	Foam(Sash O	nly): 7	138/Arg	gon/Cle	ar (DS)) 7/8"			0.017 0.10		<u>o</u> n	20
	0.117	0.625	0.117					ARG92	0.027(#	2)	CL	OF-S	N,G,S
	U-Facto	r	0.28	SHGC ((N / <1)		0	30 / 0.27	VT (N / <1)	0.54 / 0.48		CR	58
11	Foam(Sash O	nly): C	lear/Arg	gon/725	57 (SS)	7/8"		-				
	0.090	0.688	0.090					ARG92	0.045(#	3)	CL	OF-S	N,G,S
	U-Facto	r	0.29	SHGC ((N / <1)		0.4	45 / 0.40	VT (N / <1)	0.54 / 0.48		CR	57
	Foam(Sash O	nly): C	lear/Arg	gon/725	57 (DS)) 7/8"		1				
	0.117	0.688	0.117					ARG92	0.045(#	3)	CL	OF-S	N,G,S
	U-Facto	or	0.29	SHGC (N/<1)		0.4	44 / 0.40	VT (N / <1)	0.54 / 0.48		CR	57
12	Foam(Sash O	nly): 7	138/Arg	gon/Cle	ar/Argo	on/Clea	r (DS-SS-D	S) 1"				
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#	2)	CL	OF-S	N
12	U-Facto	or Cash O	0.27	SHGC ((N)	a		0.28	VT (N)	0.49		CR	63
15	roam(Sash O	my): /	138/Arg	gon/Cle	ar/Argo	on/Clea	r (DS-SS-D	S) 1" 0.007///	2)	CT		0.0
	U.II7	0.250	0.090	0.438	0.117			AKG92	0.027(#	2)	LCT	OF-S	63
	U-racto	1	0.20	SHGC ((1)			0.25	VI (<1)	0.44		CK	03





NFRC 100/200/500 Summary Sheet
4000 / 4500 DuraGard XT Double Hung

Ð	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 Co Grids (None /) efficie: / <1 / >=1	nt (SHGC)	Visible Transm Grids (None	littance (V / <1 / >=1)	/ T)	Conde: Resis	nsation tance
14	Foam(Sash O	nly): C	lear/Ar	gon/Cle	ear/Arg	on/725′	7 (DS-SS-D	S) 1"				
	0.117	0.250	0.090	0.438	0.117			ARG92	0.045(#5	5)	CL	OF-S	N
	U-Facto	r	0.24	SHGC ((N)			0.40	VT (N)	0.49		CR	64
15	Foam(Sash O	nly): C	lear/Ar	gon/Cle	ear/Arg	on/725′	7 (DS-SS-D	S) 1"		-		
	0.117	0.250	0.090	0.438	0.117			ARG92	0.045(#5	5)	CL	OF-S	G,S
	U-Facto	r	0.24	SHGC ((<1)			0.36	VT (<1)	0.44		CR	64
16	Foam()	Frame	& Sash): 7138	/Argon	/Clear ((SS) 7/8	3"	1				
	0.090	0.688	0.090					ARG92	0.027(#2	2)	CL	OF-S	N,G,S
	U-Facto	r	0.27	SHGC ((N / <1)		0.	30 / 0.27	VT (N / <1)	0.54 / 0.48		CR	58
	Foam()	Frame	& Sash): 7138	/Argon	/Clear ((DS) 7/3	8"			-		
	0.117	0.625	0.117					ARG92	0.027(#2	2)	CL	OF-S	N,G,S
17	U-Facto	r 	0.27	SHGC ((N / <1)	17257	0. 	30 / 0.27	VT (N / <1)	0.54 / 0.48		CR	58
17	Foam()	Frame	& Sash): Clear	/Argon	//25/((22) //8		0.045(#2	2)	CI		NCC
	0.090	0.688	0.090	anda				AKG92	0.045(#3)) 0 54 (0 40	CL	OF-S	N,G,S
	U-Facto	r Frame	0.27 & Sash	SHGC ((N / <i)< th=""><th>/7257 (</th><th>0.4 DS) 7/3</th><th>45 / 0.40 8"</th><th>VT (N / <1)</th><th>0.54 / 0.48</th><th></th><th>CR</th><th>57</th></i)<>	/7257 (0.4 DS) 7/3	45 / 0.40 8"	VT (N / <1)	0.54 / 0.48		CR	57
	0.117	0.688	0 117		Aigon	11231 (APG02	0.045(#3	2)	CI	OF S	NGS
	U-Facto	0.088	0.117	SHCC	$(\mathbf{N}/<1)$			ARC 92	$0.045(\pi)$,) 0 54 / 0 48	CL		57
18	Foam()	Frame	& Sash): 7138	/Argon	/Clear/	Argon/	Clear (DS-S	S-DS) 1"	0.247 0.40		CR	57
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2	2)	CL	OF-S	Ν
	U-Facto	r	0.26	SHGC ((N)			0.28	VT (N)	0.49		CR	63
19	Foam(1	Frame	& Sash): 7138	/Argon	/Clear/A	Argon/	Clear (DS-S	S-DS) 1"				
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2	2)	CL	OF-S	G,S
	U-Facto	r	0.27	SHGC ((<1)			0.25	VT (<1)	0.44		CR	63
20	Foam()	Frame	& Sash): Clear	Argon	/Clear/	Argon/	7257 (DS-S	S-DS) 1"				
	0.117	0.250	0.090	0.438	0.117			ARG92	0.045(#5	5)	CL	OF-S	Ν
	U-Facto	r	0.22	SHGC ((N)			0.40	VT (N)	0.49		CR	64
21	Foam(1	Frame	& Sash): Clear	/Argon	/Clear/	Argon/	7257 (DS-S	S-DS) 1"				
	0.117	0.250	0.090	0.438	0.117			ARG92	0.045(#5	5)	CL	OF-S	G,S
	U-Facto	r	0.23	SHGC ((<1)			0.36	VT (<1)	0.44		CR	64





NFRC 100/200/500 Summary Sheet 4000 / 4500 DuraGard XT Double Hung

Ð	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
	τ	J -Fact o	or	Solar	Heat Gri	Gain Co ids (None	>efficie / <1 / >=1)	nt (SHGC)	Visible Transmittance (VT) Grids (None / <1 / >=1)			Condensation Resistance	
22	Foam(Partial	Frame	& Sash): 7138	/Argon	/Clear ((SS) 7/8"					
	0.090	0.688	0.090					ARG92	0.027	(#2)	CL	OF-S	N,G,S
	U-Facto	r	0.28	SHGC ((N / <1)		0.3	30 / 0.27	VT (N / <1)	0.54 / 0.48		CR	58
	Foam(Partial	Frame	& Sash): 7138	/Argon	/Clear ((DS) 7/8"	1		-		
	0.117	0.625	0.117					ARG92	0.027((#2)	CL	OF-S	N,G,S
	U-Facto)r	0.28	SHGC ((N / <1)		0.3	30 / 0.27	VT (N / <1)	0.54 / 0.48		CR	58
23	Foam(Partial	Frame	& Sash): Cleaı	r/Argon	/7257 ((SS) 7/8"			-		
	0.090	0.688	0.090					ARG92	0.0450	(#3)	CL	OF-S	N,G,S
	U-Facto		0.28	SHGC ((N/<1)		0.4	45 / 0.40	VT (N / <1)	0.54 / 0.48		CR	57
	Foam(Partial	Frame	& Sasn): Cleai	r/Argon	//25/(DS) 7/8	0.045	(112)	CT		NGG
	0.117	0.688	0.117	anaa				ARG92	0.045	(#3)	CL	OF-S	N,G,S
24	U-Facto	or Partial	0.28 Frame	SHGC (& Sash	(N / < I)) · 7138	/Argon	U.4 /Clear//	44 / 0.40 Argon/Clear	(N / < I)	0.54 / 0.48		CK	57
	0.117	0.250	0.090	0.438	0 117	// ii goii		ARG92	0.027	(#2)	CI	OF-S	N
	U-Facto	0.250	0.26	SHGC (N)	ļ	ļ!	0.28	VT (N)	0.49	CL	CR	63
25	Foam(Partial	Frame	& Sash): 7138	/Argon	/Clear//	Argon/Clear	(DS-SS-DS) 1'		-	<u>o</u> n	00
	0.117	0.250	0.090	0.438	0.117			ARG92	0.0270	(#2)	CL	OF-S	G,S
	U-Facto	r	0.28	SHGC ((<1)			0.25	VT (<1)	0.44		CR	63
26	Foam(Partial	Frame	& Sash): Clear	r/Argon	/Clear/	Argon/7257	' (DS-SS-DS) 1'	1			
	0.117	0.250	0.090	0.438	0.117			ARG92	0.0450	(#5)	CL	OF-S	N
	U-Facto	or	0.23	SHGC ((N)			0.40	VT (N)	0.49		CR	64
27	Foam(Partial	Frame	& Sash): Clear	r/Argon	/Clear/	Argon/7257	(DS-SS-DS) 1'	1			
	0.117	0.250	0.090	0.438	0.117			ARG92	0.045	(#5)	CL	OF-S	G,S
	U-Facto	r	0.23	SHGC ((<1)			0.36	VT (<1)	0.44		CR	64
28	No Fo	am: 713	38/Argo	on/Clea	r/Argoi	n/7138	(DS-SS	-DS) 1"					
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)/	0.027(#5)	CL	OF-S	N
- 20	U-Facto	or	0.21	SHGC ((N)		0000	0.26	VT (N)	0.42		CR	68
29	No Fo	am: 713	38/Argo	on/Clea	r/Argoi	n/7138	(DS-SS	5-DS) 1"					
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)/	0.027(#5)	CL	OF-S	G
	U-Facto	or	0.22	SHGC ((<1)			0.23	VT (<1)	0.38		CR	68





NFRC 100/200/500 Summary Sheet	
4000 / 4500 DuraGard XT Double Hung	g

Ð	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	
	т	I-Facto)r	Solar	Heat G	lain Co	oefficie	nt (SHGC)	Visible Tra	ansmittance (V	T)	Condensation		
	Ľ	-racu	л		Grids (None / <1 / >=1) Grids (None / <1 / >=1)								tance	
30	Foam(Sash O	nly): 71	138/Arg	gon/Cle	ar/Argo	on/7138	B (DS-SS-D	S) 1"					
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)	/ 0.027(#5)	CL	OF-S	N	
	U-Facto	r	0.21	SHGC ((N)			0.26	VT (N)	0.42		CR	68	
31	31 Foam(Sash Only): 7138/Argon/Clear/Argon/7138 (DS-SS-DS) 1"													
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)	/ 0.027(#5)	CL	OF-S	G	
	U-Facto	r	0.21	SHGC ((<1)			0.23	VT (<1)	0.38		CR	68	
32	Foam(Frame	& Sash): 7138	/Argon/	/Clear/A	Argon/7	7138 (DS-S	S-DS) 1"					
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)	/ 0.027(#5)	CL	OF-S	N	
	U-Facto	r	0.19	SHGC ((N)			0.26	VT (N)	0.42		CR	68	
33	Foam(Frame	& Sash): 7138	/Argon/	/Clear//	Argon/7	7138 (DS-S	S-DS) 1"					
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)	/ 0.027(#5)	CL	OF-S	G	
	U-Facto	r	0.20	SHGC ((<1)			0.23	VT (<1)	0.38		CR	68	
34	Foam(Partial	Frame	& Sash): 7138	/Argon	/Clear//	Argon/7138	(DS-SS-DS)	1"				
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)	/ 0.027(#5)	CL	OF-S	N	
	U-Facto	r	0.20	SHGC ((N)			0.26	VT (N)	0.42		CR	68	
35	Foam(Partial	Frame	& Sash): 7138	/Argon	/Clear/A	Argon/7138	(DS-SS-DS)	1"		T		
	0.117	0.250	0.090	0.438	0.117			ARG92	0.027(#2)	/ 0.027(#5)	CL	OF-S	G	
	U-Facto	r	0.21	SHGC ((<1)			0.23	VT (<1)	0.38		CR	68	





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.

Intertek-ATI is an NFRC accredited simulation laboratory and all simulations were conducted in full compliance with NFRC approved procedures and specifications. The values included in this report are not considered in compliance with ANSI/NFRC 100, ANSI/NFRC 200, and/or NFRC 500 unless the associated validation test requirements have been satisfied, as applicable.

This report is reissued in the name of Specialty Wholesale Supply through written authorization of Chelsea Building Products, to whom the original report was rendered. The original Chelsea Building Products report number is E7526.01-116-45.

Intertek-ATI will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Intertek-ATI for the entire test record retention period. The test record retention end date for this report is August 11, 2020.

Results obtained are simulated values and were secured by using the designated test methods. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the product simulated. This report may not be reproduced, except in full, without the written approval of Intertek-ATI

For INTERTEK-ATI:

SIMULATED BY:

DCW:dcw

REVIEWED BY:

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E7526.11-116-45

Attachments (pages): This report is complete only when all attachments listed are included. Appendix A: Drawings and Bills of Material(28)





Revision Log

Rev. #	Date	Page(s)	Revision(s)
.01R0	12/02/15	All	Original report issued to Chelsea Building Products.
.09R0	01/18/17	All	Reissue report in the name of Specialty Wholesale Products.
.09R1	01/31/17	All	Revise report to add options 22-27.
.11R0	02/13/17	All	Revise report to add options 28-35

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All drawings and Bills of Material used to simulate this product are enclosed in this Appendix Some drawings may be omitted at the extruder's request.

















