

# WEATHERABLES TEST REPORT

**SCOPE OF WORK**

DYNAMIC WIND LOAD TESTING ON VARIOUS VINYL PRIVACY FENCE SYSTEMS

**REPORT NUMBER**

H6923.01-119-19 R0

**TEST DATE(S)**

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## TEST REPORT FOR WEATHERABLES

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Date: 01/15/18

### REPORT ISSUED TO WEATHERABLES

5795 Green Pointe Drive  
Groveport, OH 43125

### SECTION 1 SCOPE

Intertek Building & Construction (B&C) was contracted by Weatherables, Groveport, OH to perform dynamic wind load testing on various configurations of their 6 ft high by 8 ft wide vinyl privacy fence systems. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at Intertek B&C's test facility in York, PA.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

For INTERTEK B&C:

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<b>DATE:</b>	01/15/18

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<b>DATE:</b>	01/15/18

IWG:tah/gh/aaa

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### SECTION 2

#### MATERIAL SOURCE/INSTALLATION

Test samples were provided by the client. Test samples were inspected by a representative of Intertek B&C prior to testing. No compromising defects were observed. Representative samples of the test specimens will be retained by Intertek B&C for a minimum of four years from the test completion date.

Test specimens were assembled prior to shipping by the client.

### SECTION 3

#### EQUIPMENT

Two propeller fan wind generators were utilized for testing. The propeller of each fan was 84 in diameter and was comprised of four Kevlar composite airfoil units belt-driven by a high-output V8 engine. Wind speeds for the wind generators were calibrated according to AAMA 501.1-05. Deflections were measured with linear displacement transducers accurate to 0.01 inch.

### SECTION 4

#### LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Brad Halley	Weatherables
Isaiah Gebhart	Intertek B&C
Josh Dausinger	Intertek B&C
Gary Hartman, P.E.	Intertek B&C

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#### TEST PROCEDURES

One specimen (consisting of a 2-panel/3-post fully assembled fence section) of each vinyl privacy fence system listed below was tested. The fence assemblies measured approximately 8 ft wide by 6 ft high. See drawings in Section 10 for detailed descriptions of assembly and components.

A steel test fixture was designed and fabricated to simulate a rigid post embedment. The bottom of the bottom rail was fixed at two inches above the top of the test fixture. The wind generator outlet was located 4 ft. from the face of the specimen. Linear transducers were fixed on the top rail, middle of the in-fill area, and bottom rail for deflection measurements. See drawings in Section 10 for detailed descriptions of assembly and components and photographs in Section 9 for specimen orientation respective to wind direction.

Wind load testing began at 60 mph and increased until failure or a maximum wind speed of 130 mph. Wind loads were performed with a relaxation period following 80 mph and 115 mph to record permanent set measurements.

#### Limitations of Test

Test setup and procedure provides information for evaluation of the fence assembly to resist sustained wind speeds indicated in the test results. This evaluation includes the transfer of wind loads to the fence panels, rails, and support posts. The posts only support a single section of fence in this simulation and are therefore not fully evaluated for actual field conditions.

### SECTION 6

#### TEST CALCULATIONS

##### Wind Load Testing

The duration of the applied wind load at each wind speed was determined by using the following equation:

$$t = 3600 / V_{fm} \quad (\text{Equation 1})$$

where:

t = duration (s), required for a one mile long sample of air to pass

V<sub>fm</sub> = "fastest mile" wind speed (mph)

Wind speeds used in testing correlate with "fastest mile" wind speeds (V<sub>fm</sub>) for reference to codes and design standards. Maximum deflections were recorded at each load level.

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#### TEST SPECIMEN DESCRIPTIONS

Four different configurations of fence sections were evaluated. Those evaluated with physical testing include:

- 8 ft wide by 6 ft high PXPR-OT-6X8 *Tremont* PVC privacy fence
- 8 ft wide by 6 ft high PXPR-CT-6X8 *Mason* PVC privacy fence
- 8 ft wide by 6 ft high PXPR-LAT-6X8 *Ashton* PVC privacy fence
- 8 ft wide by 6 ft high PXPR-SQLAT-6X8 *Scottsdale* PVC privacy fence

Those qualified by comparison to tested fence sections with the tested sections deemed similar and weaker include:

- 8 ft wide by 6 ft high PXPR-OTS-6X8 *Halifax* PVC privacy fence (qualified by 8 ft wide by 6 ft high PXPR-OT-6X8 *Tremont* PVC privacy fence)
- 8 ft wide by 6 ft high PXPR-OTS2-6X8 *Louisville* PVC privacy fence (qualified by 8 ft wide by 6 ft high PXPR-OT-6X8 *Tremont* PVC privacy fence)
- 8 ft wide by 6 ft high PXPR-CTRND-6X8 *Bradford* PVC privacy fence (qualified by 8 ft wide by 6 ft high PXPR-CT-6X8 *Mason* PVC privacy fence)

Detailed test specimen descriptions of the fence panels tested are provided below.

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**Configuration No. 1**

<b>SERIES/MODEL</b>	PXPR-OT-6X8 - <i>Tremont</i>
<b>DESCRIPTION</b>	8 ft wide by 6 ft high PVC privacy fence
<b>RAILS</b>	Top- 1-3/4 in wide by 3.5 in. high by 95-3/4 in. long PVC slotted rail, Mid/Bottom- 1-1/2 in. wide by 5-1/2 in. high by 95-3/4 in. long PVC slotted rails, two notches per side on each rail end
<b>RAIL REINFORCEMENT</b>	Bottom Rail- 1-1/4 in. wide by 1-5/8 in. high by 95-5/8 long "I" shaped aluminum
<b>PANELS</b>	Fifteen 7/8 in. deep by 6 in. wide (6-1/4 in. including tongue) by 44-1/2 in. long PVC Tongue & Groove panels with notched ends. Each panel was secured by two (2) #10 by 1 in. capped stainless steel pan head screws (one at top and bottom). The two end panels were each secured by a 1-1/8 in. wide by 1-1/2 in. high by 41 in. long U-channel attached to the post with two #10 x 1 in. stainless steel pan head screws (one side only).
<b>PICKET ACCENT</b>	Twenty-eight 7/8 in. deep by 1-1/2 in. wide by 20-1/4 in. long PVC pickets. The pickets were inserted into routings in the top and mid rail. At the mid rail location, the pickets were captured in the routing via notches on the pickets and every fourth picket was secured by a #10 x 1 in. capped stainless steel pan head screw (one side only). At the top rail location, the picket passed through the routing in the rail and extended above approximately 7 in. Every fourth picket was then secured by a #10 x 1-1/2 in. capped stainless steel pan head screw (one side only).
<b>POSTS</b>	Three, 5 in. by 5 in. by 108 in. long PVC (0.150 in. wall) routed posts
<b>POST REINFORCEMENT</b>	Three, 4.6 in. wide by 4.6 in. high by 54 in. long "I"-shaped aluminum extrusions (0.110 in. thickness) <i>Note: in lieu of aluminum reinforcement post can be filled with concrete to a height of 22 in. above grade (54 in. from bottom of post to top of concrete).</i>
<b>RAIL ATTACHMENT</b>	Routed holes in the posts captured the ends of the rails. The notched rail ends engaged the rail in the post. Additionally, a #10 x 1 in. stainless steel pan head screw was inserted through the top of the top rail (inside of the post), 1-3/4 inches in at each end of the top rail.

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**Configuration No. 2**

<b>SERIES/MODEL</b>	PXPR-CT-6X8 - <i>Mason</i>
<b>DESCRIPTION</b>	8 ft wide by 6 ft high PVC privacy fence
<b>RAILS</b>	Top- 1-3/4 in. wide by 3.5 in. high by 95-3/4 in. PVC slotted rail, Mid/Bottom- 1-1/2 in. by 5-1/2 in. by 95-3/4 in. PVC slotted rails, two notches per side on each rail end
<b>RAIL REINFORCEMENT</b>	Bottom Rail- 1-1/4 in. wide by 1-5/8 in. high by 95-5/8 long "I" shaped aluminum
<b>PANELS</b>	Fifteen 7/8 in. deep by 6 in. wide (6-1/4 in. including tongue) by 52 in. long PVC Tongue & Groove Panels with notched ends. Each panel was restrained by two #10 x 1 in. capped stainless steel pan head screws (one at top and bottom). The two end panels were each restrained by a 1-1/4 in. wide by 1-1/2 in. high by 48-3/8 in. long U-channel attached to the post with two #10 x 1 in. stainless steel pan head screws (one side only).
<b>PICKET ACCENT</b>	Seventeen 7/8 in. deep by 1-1/2 in. wide by 14-1/4 in. long PVC pickets. The pickets were inserted into routings in the top and mid rail. Every other picket was then secured by two (2) #10 by 1-1/2 in. capped stainless steel pan head screws (one at top and bottom / one side only).
<b>POSTS</b>	Three, 5 in. by 5 in. by 108 in. long PVC (0.150 in. wall) routed posts
<b>POST REINFORCEMENT</b>	Three, 4.6 in. wide by 4.6 in. high by 54 in. long "I"-shaped aluminum extrusions (0.110 in. thickness) <i>Note: in lieu of aluminum reinforcement post can be filled with concrete to a height of 22 in. above grade (54 in. from bottom of post to top of concrete).</i>
<b>RAIL ATTACHMENT</b>	Routed holes in the posts captured the ends of the rails. The notched rail ends engaged the rail in the post. Additionally, a #10 x 1 in. stainless steel pan head screw was inserted through the top of the top rail (inside of the post), 1-3/4 inches in at each end of the top rail.

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**Configuration No. 3**

<b>SERIES/MODEL</b>	PXPR-LAT-6X8 - <i>Ashton</i>
<b>DESCRIPTION</b>	8 ft wide by 6 ft high PVC privacy fence
<b>RAILS</b>	Top- 1-3/4 in. wide by 3.5 in. high by 95-3/4 in. long PVC slotted rail, Mid/Bottom- 1-1/2 in. wide by 5-1/2 in. high by 95-3/4 in. long PVC slotted rails, two notches per side on each rail end
<b>RAIL REINFORCEMENT</b>	Bottom Rail- 1-1/4 in. wide by 1-5/8 in. high by 95-5/8 long "I" shaped aluminum
<b>PANELS</b>	Fifteen 7/8 in. deep by 6 in. wide (6-1/4 in. including tongue) by 52 in. long PVC Tongue & Groove panels with notched ends. Each panel was secured by two #10 x 1 in. capped stainless steel pan head screws (one at top and bottom). The two end panels were each restrained by a 1-1/4 in. wide by 1-1/2 in. high by 48-3/8 in. long U-channel attached to the post with two #10 x 1 in. stainless steel pan head screws (one side only).
<b>LATTICE ACCENT</b>	90 in. wide by 12 in. high PVC lattice panel. The lattice panel was contained within 7/8 in. deep by 1-1/2 in. wide PVC lattice rail end caps. The lattice was secured to the top rail and mid rail using #10 x 1-1/2 in. stainless steel pan head screws intermittently spaced along its length (one side only). Two #10 x 3/4 in. stainless steel pan head screws spaced 6 in. apart at each end secured the lattice to the lattice end caps (one side only).
<b>POSTS</b>	Three, 5 in. by 5 in. by 108 in. long PVC (0.150 in. wall) routed posts
<b>POST REINFORCEMENT</b>	Three, 4.6 in. wide by 4.6 in. high by 54 in. long "I"-shaped aluminum extrusions (0.110 in. thickness) <i>Note: in lieu of aluminum reinforcement post can be filled with concrete to a height of 22 in. above grade (54 in. from bottom of post to top of concrete).</i>
<b>RAIL ATTACHMENT</b>	Routed holes in the posts captured the ends of the rails. The notched rail ends engaged the rail in the post. Additionally, a #10 x 1 in. stainless steel pan head screw was inserted through the top of the top rail (inside of the post), 1-3/4 inches in at each end of the top rail.



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**Configuration No. 4**

<b>SERIES/MODEL</b>	PXPR-SQLAT-6X8 - <i>Scottsdale</i>
<b>DESCRIPTION</b>	8 in. wide by 6 in. high PVC privacy fence
<b>RAILS</b>	Top- 1-3/4 in. wide by 3.5 in. high by 95-3/4 in. long PVC slotted rail, Mid/Bottom- 1-1/2 in. wide by 5-1/2 in. high by 95-3/4 in. long PVC slotted rails, two notches per side on each rail end
<b>RAIL REINFORCEMENT</b>	Bottom Rail- 1-1/4 in. wide by 1-5/8 in. high by 95-5/8 long "I" shaped aluminum
<b>PANELS</b>	Fifteen 7/8 in. deep by 6 in. wide (6-1/4 in. including tongue) by 47-1/2 in. PVC Tongue & Groove panels with notched ends. Each panel was secured by two #10 x 1 in. capped stainless steel pan head screws (one at top and bottom). The two end panels were each restrained by a 1-1/4 in. wide by 1-1/2 in. high by 48-3/8 in. long U-channel attached to the post with two #10 x 1 in. stainless steel pan head screws (one side only).
<b>LATTICE PICKET ACCENT</b>	Eighteen 1-1/4 in. deep by 1-1/4 in. wide by 16-3/4 in. long PVC pickets running vertically with routings to allow the passage of two 7/8 in. deep by 1-1/2 in. wide by 89-1/2 in. long PVC pickets running horizontally and spaced at 5 in. on-center. The vertical pickets were inserted into routings in the top and mid rail. The horizontal pickets were captured at each end by a 1-1/4 in. deep by 1-1/4 in. wide by 16-3/4 in. long PVC end picket. Every other horizontal picket was then secured by a #10 by 1-1/2 in. capped stainless steel pan head screw at the top (one side only) and a #10 by 1 in. capped stainless steel pan head screw at the bottom (one side only).
<b>POSTS</b>	Three 5 in. by 5 in. by 108 in. PVC (0.150 in. wall) Routed Posts
<b>POST REINFORCEMENT</b>	Three, 4.6 in. wide by 4.6 in. high by 54 in. long "I"-shaped aluminum extrusions (0.110 in. thickness) <i>Note: in lieu of aluminum reinforcement post can be filled with concrete to a height of 22 in. above grade (54 in. from bottom of post to top of concrete).</i>
<b>RAIL ATTACHMENT</b>	Routed holes in the posts captured the ends of the rails. The notched rail ends engaged the rail in the post. Additionally, a #10 x 1 in. stainless steel pan head screw was inserted through the top of the top rail (inside of the post), 1-3/4 inches in at each end of the top rail.

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**SECTION 8  
TEST RESULTS**

PXPR-OT-6X8 - *Tremont* - Configuration No. 1a (no aluminum post reinforcement)

Test Date: 10/26/17

WIND SPEED	DURATION	MAXIMUM DEFLECTION (inches)					
		Top		Mid		Bottom	
		Left	Right	Left	Right	Left	Right
60 mph	60 sec	4.43	5.26	3.13	4.10	1.64	2.63
70 mph	51 sec	5.14	6.23	4.12	5.21	2.34	3.12
80 mph	45 sec	7.54	8.31	5.98	6.21	3.21	3.98
0 mph	Permanent Set	0.20	0.19	0.16	0.21	0.14	0.19

Observation: Specimen failed while trying to achieve 90 mph.

Maximum Sustained Wind,  $V_{fm} = 80$  mph

Equivalent 3-second gust,  $V_{3s} = (1.05 \times V_{fm}) + 10.5 = 95$  mph

PXPR-OT-6X8 - *Tremont* - Configuration No. 1b (aluminum post reinforcement)

Test Date: 10/26/17

WIND SPEED	DURATION	MAXIMUM DEFLECTION (inches)					
		Top		Mid		Bottom	
		Left	Right	Left	Right	Left	Right
90 mph	40 sec	6.23	7.78	5.31	6.36	3.14	4.76
100 mph	36 sec	7.23	8.56	6.10	7.83	3.44	5.83
110 mph	33 sec	6.43	9.96	5.83	9.03	3.32	6.90
115 mph	32 sec	6.93	10.02	6.34	9.63	4.43	7.49
0 mph	Permanent Set	0.33	0.61	0.29	0.71	0.34	0.89
120 mph	30 sec	10.43	11.88	7.93	10.99	6.31	8.86

Observation: Specimen failed while trying to achieve 130 mph.

Maximum Sustained Wind,  $V_{fm} = 120$  mph

Equivalent 3-second gust,  $V_{3s} = (1.05 \times V_{fm}) + 10.5 = 137$  mph

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**PXPR-CT-6X8 - Mason - Configuration No. 2 (aluminum post reinforcement)**

**Test Date: 10/26/17**

WIND SPEED	DURATION	MAXIMUM DEFLECTION (inches)					
		Top		Mid		Bottom	
		Left	Right	Left	Right	Left	Right
60 mph	60 sec	3.67	4.27	3.24	4.17	1.89	2.60
70 mph	51 sec	4.47	5.38	3.84	4.74	2.73	2.91
80 mph	45 sec	6.05	6.78	5.56	6.07	3.21	3.88
0 mph	Permanent Set	0.40	0.43	0.30	0.36	0.20	0.31
90 mph	40 sec	7.83	8.92	6.11	7.71	3.93	5.54
100 mph	36 sec	9.23	9.97	7.98	8.93	4.74	6.56
110 mph	33 sec	10.90	11.17	10.76	9.34	6.17	7.96
115 mph	32 sec	11.24	12.26	9.37	11.19	6.21	8.23
0 mph	Permanent Set	0.81	0.99	0.77	1.22	0.95	1.46
120 mph	30 sec	11.96	13.44	16.13	12.67	6.96	9.78

*Observation: Specimen failed while trying to achieve 130 mph.*

Maximum Sustained Wind,  $V_{fm} = 120$  mph

Equivalent 3-second gust,  $V_{3s} = (1.05 \times V_{fm}) + 10.5 = 137$  mph

**PXPR-LAT-6X8 - Ashton - Configuration No. 3 (aluminum post reinforcement)**

**Test Date: 10/27/17**

WIND SPEED	DURATION	MAXIMUM DEFLECTION (inches)					
		Top		Mid		Bottom	
		Left	Right	Left	Right	Left	Right
60 mph	60 sec	5.81	6.01	5.10	4.98	3.11	3.40
70 mph	51 sec	7.03	7.44	6.26	6.23	3.88	4.25
80 mph	45 sec	7.64	7.55	6.31	6.28	4.14	4.25
0 mph	Permanent Set	0.26	0.23	0.19	0.21	0.15	0.25
90 mph	40 sec	8.35	9.98	7.51	8.38	5.15	6.26
100 mph	36 sec	10.65	10.99	9.40	9.48	6.70	6.80
110 mph	33 sec	11.49	12.55	10.03	11.49	7.41	8.66
115 mph	32 sec	12.86	13.65	11.48	12.11	8.59	9.07
0 mph	Permanent Set	0.95	1.10	1.01	1.45	1.16	1.80

*Observation: Specimen failed while trying to achieve 120 mph.*

Maximum Sustained Wind,  $V_{fm} = 115$  mph

Equivalent 3-second gust,  $V_{3s} = (1.05 \times V_{fm}) + 10.5 = 131$  mph

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PXPR-SQLAT-6X8 - *Scottsdale* - Configuration No. 4 (aluminum post reinforcement)

Test Date: 10/27/17

WIND SPEED	DURATION	MAXIMUM DEFLECTION (inches)					
		Top		Mid		Bottom	
		Left	Right	Left	Right	Left	Right
60 mph	60 sec	7.84	5.29	6.64	4.62	4.57	3.07
70 mph	51 sec	9.15	6.53	7.67	5.46	6.05	3.56
80 mph	45 sec	10.88	7.27	9.53	6.13	7.53	4.11
0 mph	Permanent Set	0.96	0.39	0.66	0.35	0.80	0.28
90 mph	40 sec	8.31	8.68	6.53	8.01	8.04	5.94
100 mph	36 sec	9.53	9.60	7.87	8.80	8.04	6.60
110 mph	33 sec	11.95	10.95	10.36	9.84	8.04	7.73
115 mph	32 sec	12.41	12.40	10.36	11.45	8.04	8.98
0 mph	Permanent Set	1.03	0.87	0.75	1.14	0.89	1.38
120 mph	30 sec	14.22	14.07	13.33	15.75	9.40	17.07

Observation: Specimen failed while trying to achieve 130 mph.

Maximum Sustained Wind,  $V_{fm} = 120$  mph

Equivalent 3-second gust,  $V_{3s} = (1.05 \times V_{fm}) + 10.5 = 137$  mph

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### SECTION 9 PHOTOGRAPHS



**Photo No. 1**  
**Wind Generator Outlet Relative to Test Specimen**



**Photo No. 2**  
**Typical Dynamic Wind Load Setup**

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**Photo No. 3**  
**Fence Failure / Configuration 1b - Tremont**



**Photo No. 4**  
**Fence Failure / Configuration 2 - Mason**

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**Photo No. 5**

**Fence Failure (Left Side Disengaged) / Configuration 3 - Ashton**



**Photo No. 6**

**Fence Failure / Configuration 4- Scottsdale**



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### SECTION 10

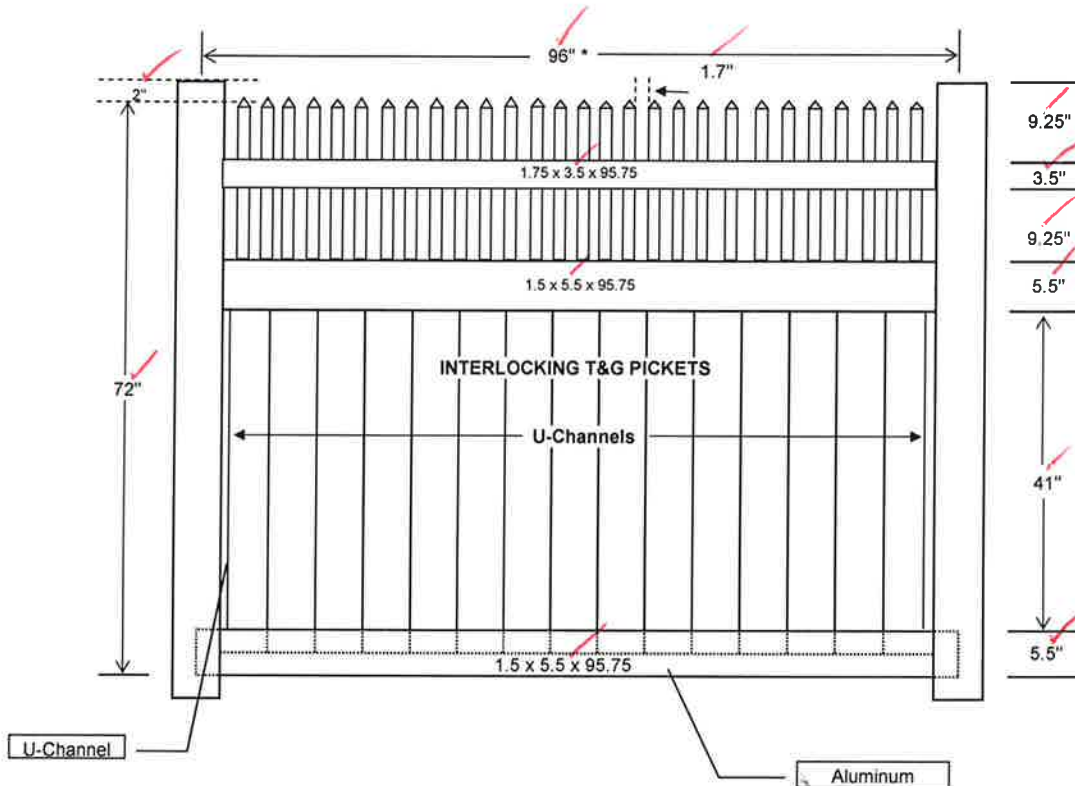
#### DRAWINGS

The "As-Built" drawings for the various PVC privacy fences which follow have been reviewed by Intertek B&C and are representative of the project reported herein. Project construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.



# Tremont 6x8

Use a small teardrop of glue in the inside corners of cap.



1

Material List			
Qty	Item	Dimension	WRHS USE ONLY
1	Top Rail	1-3/4" x 3-1/2" x 95-3/4"	1-3/4" X 3-1/2" X 8' Rail
1	Mid Rail	1-1/2" x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" X 8' Rail
1	Bottom Rail	1-1/2" x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" X 8' Rail
1	Aluminum	1-1/4" x 1-3/4" x 95-3/4"	1-1/4" x 1-3/4" x 8'
2	U-Channel	1-1/8" x 1-1/4" x 41"	48-1/2" U Channel
15	Picket	7/8" x 6" x 44-1/2"	7/8" X 6" X 52" T&G
28	Spindle	7/8" x 1-1/2" x 20-1/4"	7/8" x 1-1/2" x 47" Pickets
28	Picket Cap	7/8" x 1-1/2"	7/8" x 1-1/2" Spade Cap

\* Actual measurements may vary

\* Panel should be installed 2" off ground

Updated 01/31/2011

PWPR-OT-6X8UG

# intertek

Test sample complies with these details.

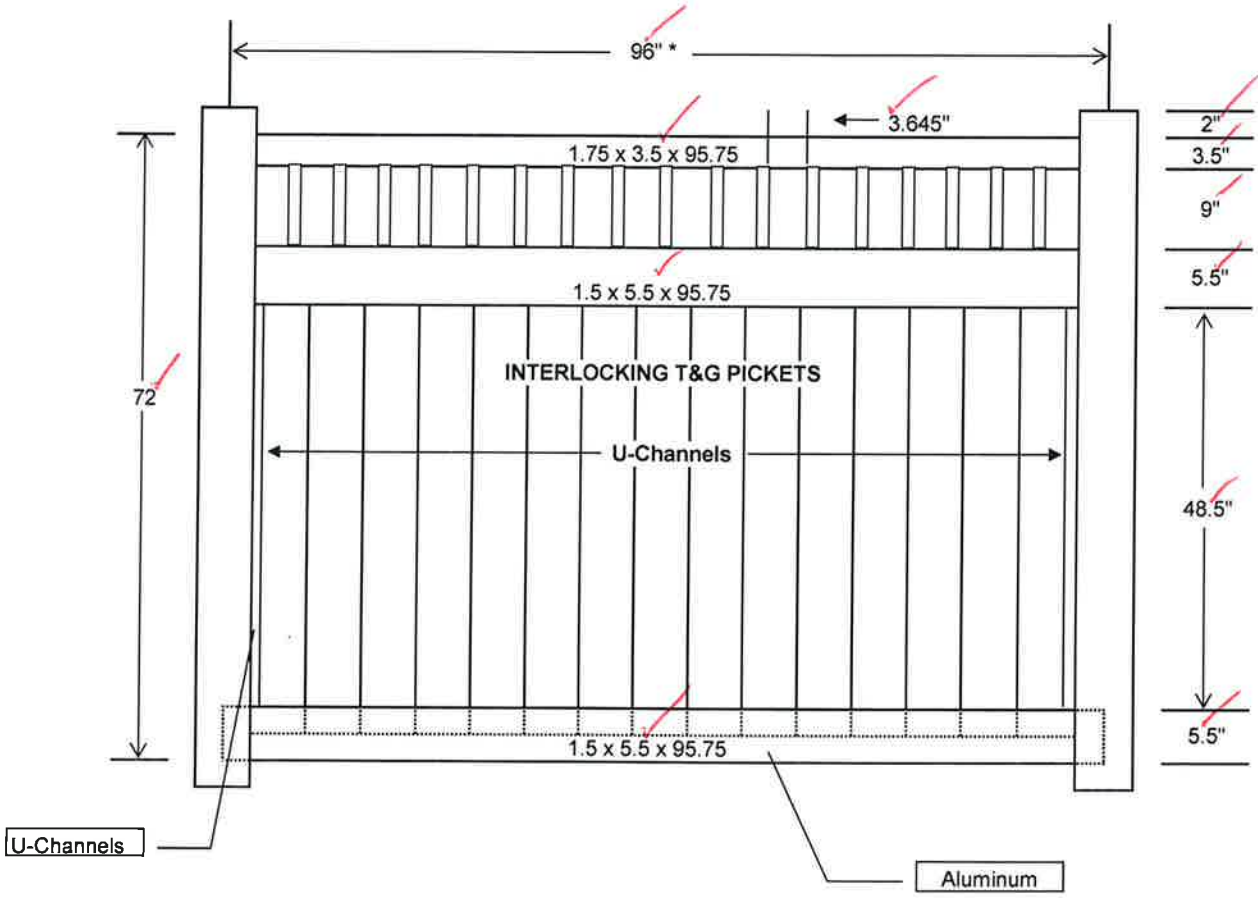
Deviations are noted.

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Date 1/12/18 Tech IWG

# Mason 6x8

**Note: If re-ordering additional product, please compare your existing specs with our current specs for any changes or updates.**  
 Apply a small amount of adhesive to backside of U-Channels (against post) to hold in place if needed .  
 Use a small teardrop of glue in the inside corners of cap.



1

Material List			
Qty	Item	Dimension	WRHS USE ONLY
1	Top Rail	1-3/4"x 3-1/2" x 95-3/4"*	1-3/4" X 3-1/2" X 8' Rail
1	Mid Rail	1-1/2"x 5-1/2" x 95-3/4"*	1-1/2" x 5-1/2" X 8' Rail
1	Bottom Rail	1-1/2"x 5-1/2" x 95-3/4"*	1-1/2" x 5-1/2" X 8' Rail
1	Aluminum	1-1/4"x 1-3/4" x 95-3/4"*	1-1/4" x 1-3/4" x 8'
2	U Channels	1-1/8"x 1-1/4" x 48-1/2"*	48-1/2" U Channel
17	Spindles	7/8"x 1-1/2" x 14 1/4"	7/8" x 1-1/2" x 59" Pickets
15	Pickets	7/8"x 6" x 52"*	7/8" X 6" X 52" T&G

\* Actual measurements may vary  
 \* Panel should be installed 2" off ground

Updated 01/31/2011



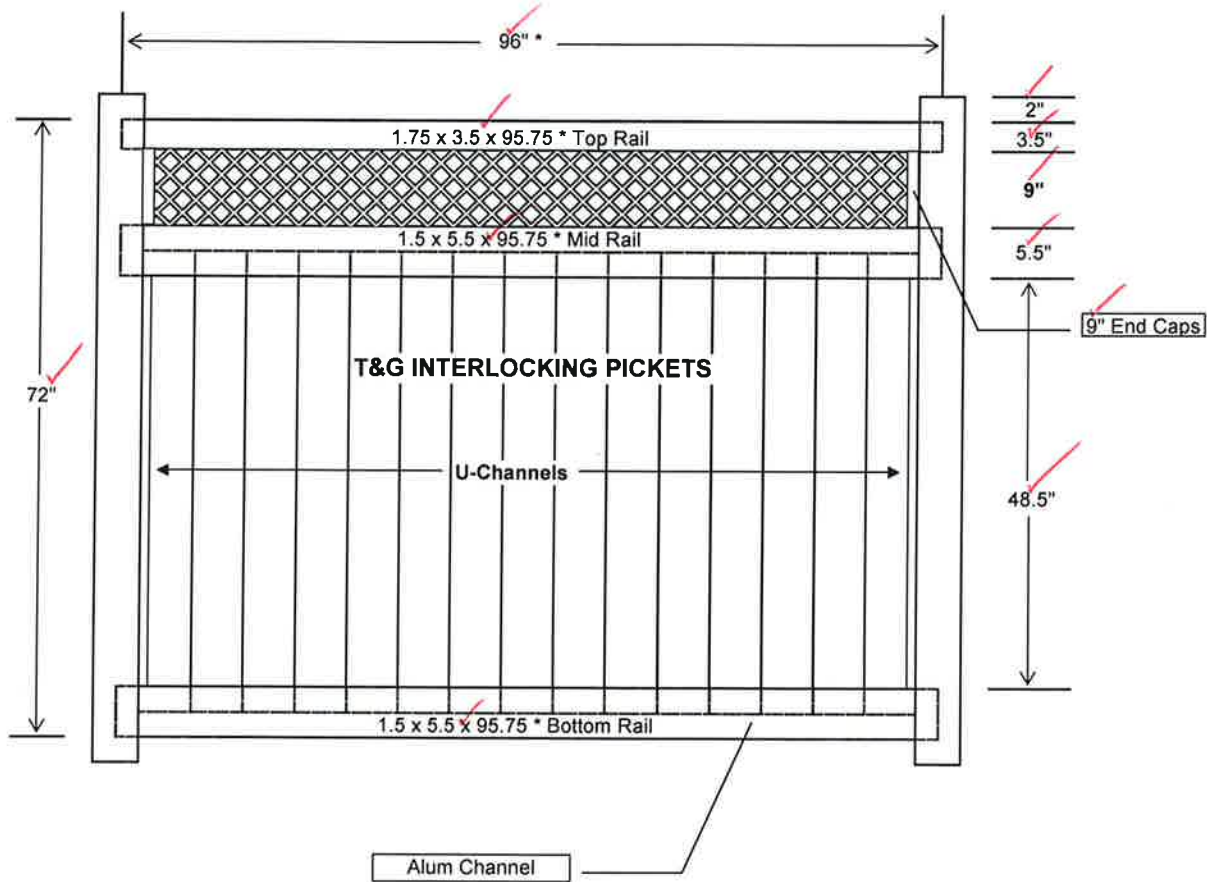
PWPR-CT-6X8

Test sample complies with these details.  
 Deviations are noted.  
 Report # H6923.01-119-19  
 Date 1/12/18 Tech IWG

# Ashton - Privacy with Lattice

## 6' High x 8' Wide Section

Note: If re-ordering additional product, please compare your existing specs with our current specs for any changes or updates.



**UPDATED 5/02/08**

PWPR-LAT-6X8UG		
Qty	Item	Dimension
1	Top Rail	1.75" x 3.5" x 95.75"
1	Mid Rail	1.5" x 5.5" x 95.75"
1	Bott Rail	1.5" x 5.5" x 95.75"
1	Alum Channel	Fits 1.5" x 5.5" x 95.75"
2	U Channels	1.25" x 48.5"
2	Lattice End Caps	.75" x 1.125" x 9"
1	Lattice	12" x 90"
15	Pickets	.875" x 6" x 52"

\*Actual measurements may vary.

**intertek**

**PWPR-LAT-6X8UG**

Test sample complies with these details.

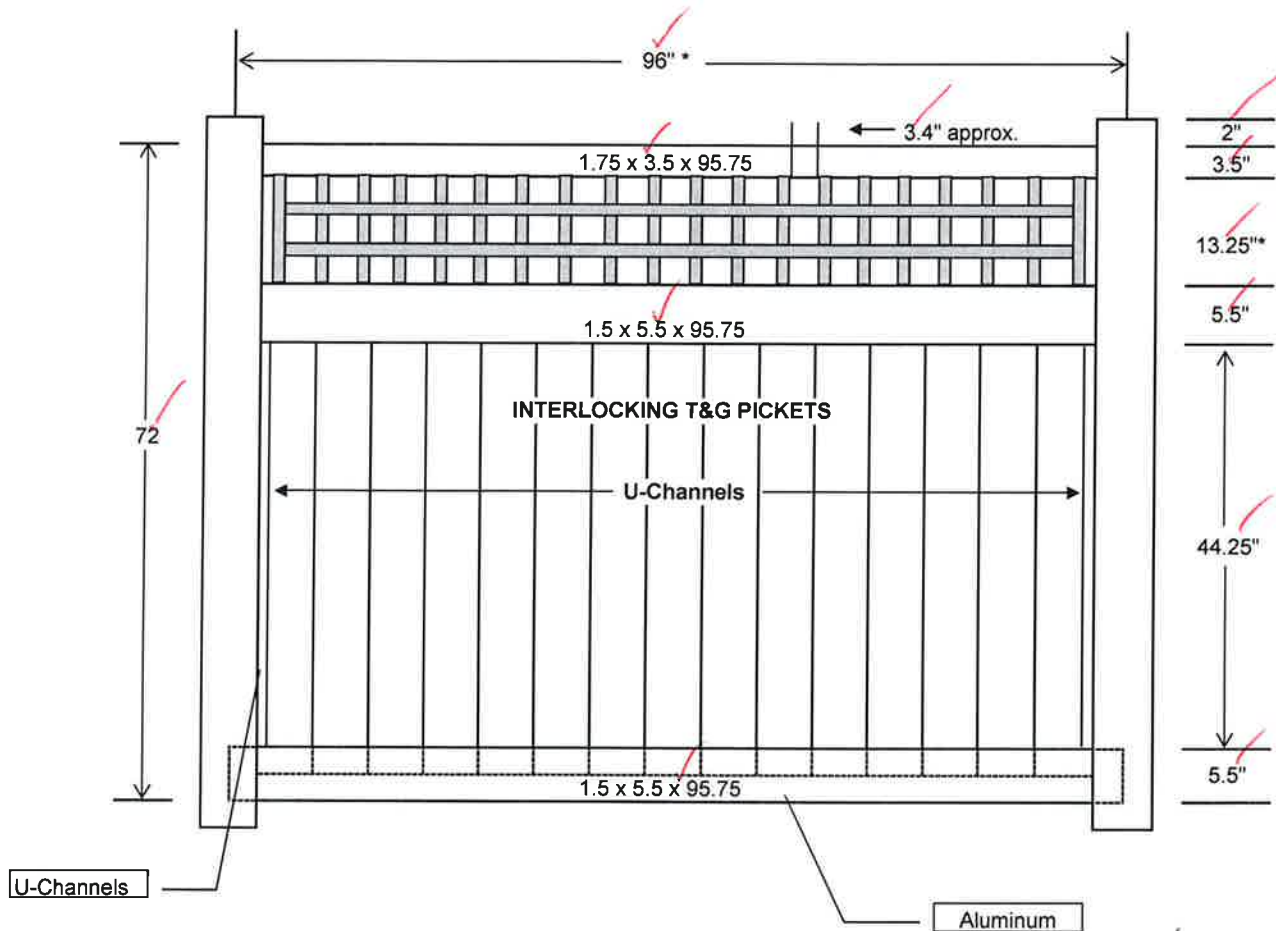
Deviations are noted.

Report # H6923.01-119-19

Date 1/12/18 Tech IWG

# SCOTTSDALE 6' X 8'

**Note: If re-ordering additional product, please compare your existing specs with our current specs for any changes or updates.**  
 Apply a small amount of adhesive to backside of U-Channels (against post) to hold in place if needed .  
 Use a small teardrop of glue in the inside corners of cap.



1

Material List			
Qty	Item	Dimension	WRHS USE ONLY
1	Top Rail	1-3/4"x 3-1/2" x 95-3/4"*	1-3/4"x 3-1/2" x 8' Rail
1	Mid Rail	1-1/2"x 5-1/2" x 95-3/4"*	1-1/2"x 5-1/2" x 8' Rail
1	Bottom Rail	1-1/2"x 5-1/2" x 95-3/4"*	1-1/2"x 5-1/2" x 8' Rail
1	Aluminum	1-1/4"x 1-3/4" x 95-3/4"*	1-1/4"x 1-3/4" x 8"*
2	U Channels	1-1/8"x 1-1/4" x 44-1/4"*	48-1/2" U Channel
15	T&G Pickets	7/8"x 6" x 47-1/2"*	7/8"x 6" x 52" T&G
2	Pickets	7/8"x 1-1/2" x 89-1/2"*	7/8"x 1-1/2" x 16'
2	End Spindles	1-1/4" x 1-1/4" x 16-3/4"*	1-1/4" x 1-1/4" x 192"
18	Spindles	1-1/4" x 1-1/4" x 16-3/4"*	1-1/4" x 1-1/4" x 192"

- \* Actual measurements may vary
- \* Panel should be installed 2" off ground

## intertek

Test sample complies with these details.  
 Deviations are noted.

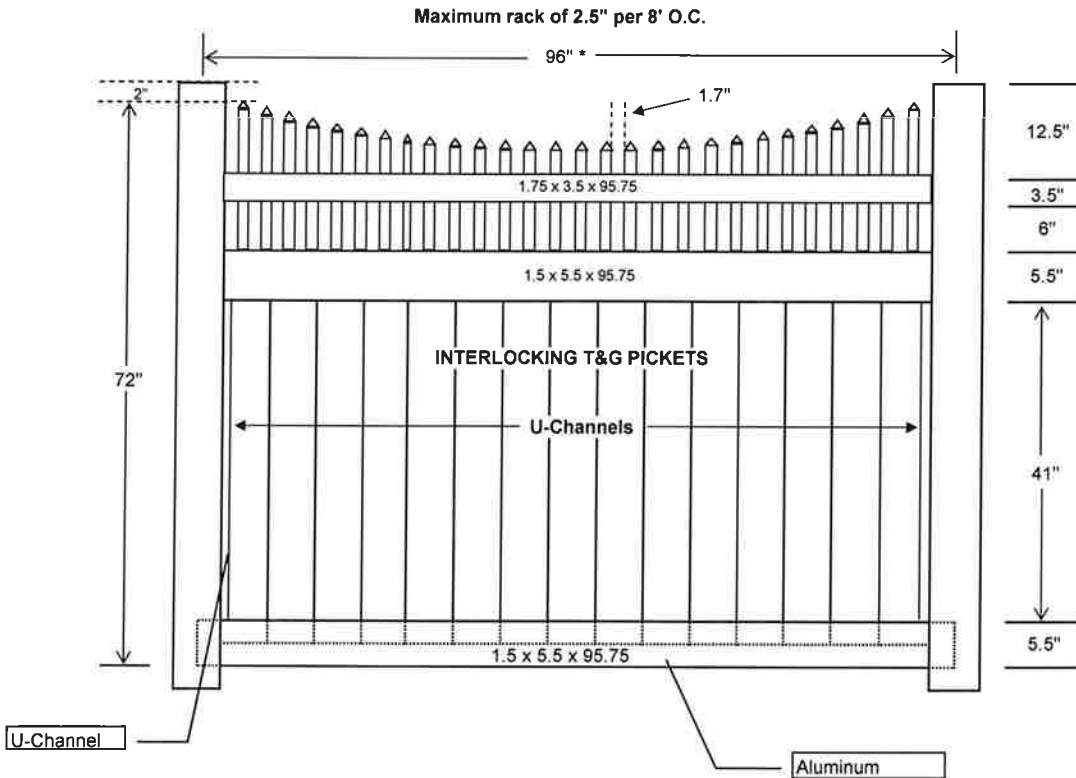
PWPR-SQLAT-6X8UG

Updated 01/31/2011

Report # H6923.01-119-19  
 Date 1/12/18 Tech IWG

# HALIFAX 6' x 8'

Use a small teardrop of glue in the inside corners of cap.



1

Material List			
Qty	Item	Dimension	WRHS USE ONLY
1	Top Rail	1-3/4" x 3-1/2" x 95-3/4"	1-3/4" x 3-1/2" x 8' Rail
1	Mid Rail	1-1/2" x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" x 8' Rail
1	Bottom Rail	1-1/2" x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" x 8' Rail
1	Aluminum	1-1/4" x 1-3/4" x 95-3/4"	1-1/4" x 1-3/4" x 8'
2	U Channels	1-1/8" x 1-1/4" x 41"	48-1/2" U Channel
15	T&G Picket	7/8" x 6" x 44-1/2"	7/8" x 6" x 52" T&G
2	Spindle	7/8" x 1-1/2" x 20-1/4"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 19-1/2"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 18-7/8"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 18-1/8"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 17-1/2"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 16-7/8"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 16-1/4"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 15-3/4"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 15-1/4"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 14-3/4"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 14-3/8"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 14"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 13-7/8"	7/8" x 1-1/2" x 59" Picket
2	Spindle	7/8" x 1-1/2" x 13-3/4"	7/8" x 1-1/2" x 59" Picket
28	Picket Caps	7/8" x 1-1/2"	7/8" x 1-1/2" Spade Cap

\*Actual measurements may vary

\*Panel should be installed 2" off ground

# intertek

Test sample complies with these details.

Deviations are noted.

Report # H6923.01-119-19

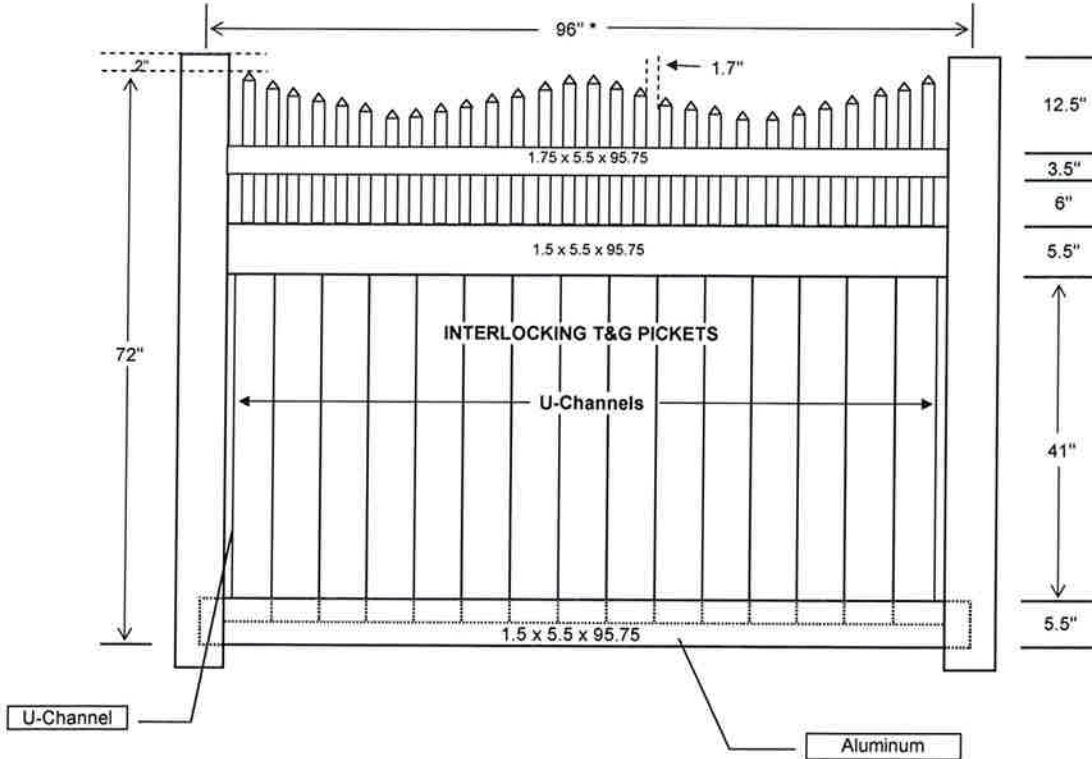
Date 1/12/10 Tech IWG

*Not tested, but qualified by Tremont PVC privacy fence.*

**PWPR-OTS-6X8**

# LOUISVILLE 6' x 8'

Use a small teardrop of glue in the inside corners of cap.



1

Material List			
Qty	Item	Dimension	WRHS USE ONLY
1	Top Rail	1-3/4" x 3-1/2" x 95-3/4"	1-3/4" x 3-1/2" x 8' Rail
1	Mid Rail	1-1/2" x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" x 8' Rail
1	Bottom Rail	1-1/2" x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" x 8' Rail
1	Aluminum	1-1/4" x 1-3/4" x 95-3/4"	1-1/4" x 1-3/4" x 8'
2	U-Channel	1-1/8" x 1-1/4" x 41"	48-1/2" U Channel
15	Picket	7/8" x 6" x 44-1/2"	7/8" x 6" x 52" T&G
4	Spindle	7/8" x 1-1/2" x 20-1/4"	7/8" x 1-1/2" x 59" Picket
4	Spindle	7/8" x 1-1/2" x 19"	7/8" x 1-1/2" x 59" Picket
4	Spindle	7/8" x 1-1/2" x 17-5/8"	7/8" x 1-1/2" x 59" Picket
4	Spindle	7/8" x 1-1/2" x 16-3/8"	7/8" x 1-1/2" x 59" Picket
4	Spindle	7/8" x 1-1/2" x 15"	7/8" x 1-1/2" x 59" Picket
4	Spindle	7/8" x 1-1/2" x 14-3/8"	7/8" x 1-1/2" x 59" Picket
4	Spindle	7/8" x 1-1/2" x 13-3/4"	7/8" x 1-1/2" x 59" Picket
28	Picket Cap	7/8" x 1-1/2"	7/8" x 1-1/2" Spade Cap

\*Actual measurements may vary

\*Panel should be installed 2" off ground

Updated 01/31/2011

# intertek

PWPR-OTS2-6X8UG

Test sample complies with these details.

Deviations are noted.

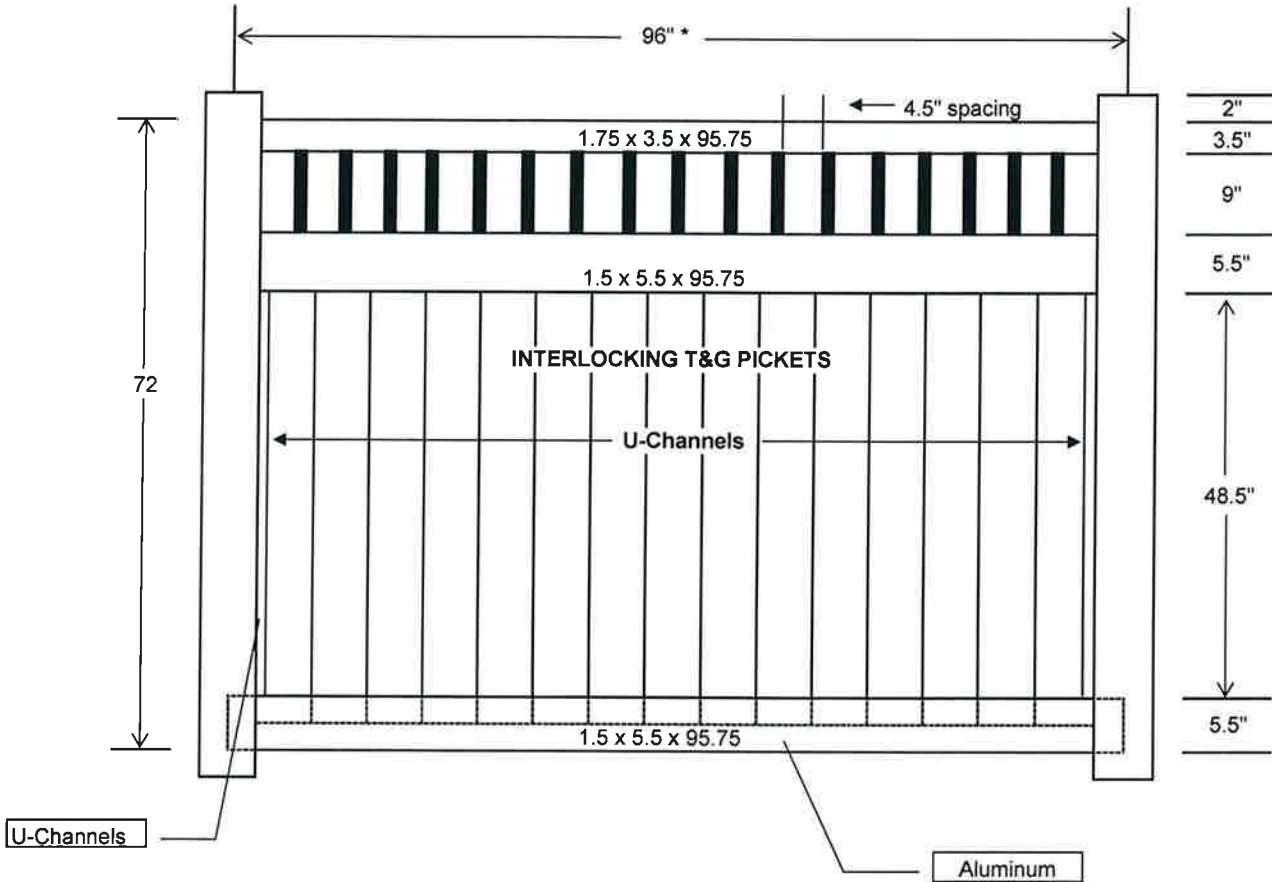
Report # H6923.01-119-19

Date 1/12/18 Tech IWG

*Not tested, but qualified by Tremont PVC privacy fence.*

# Bradford 6x8

**Note: If re-ordering additional product, please compare your existing specs with our current specs for any changes or updates.**  
 Apply a small amount of adhesive to backside of U-Channels (against post) to hold in place if needed .  
 Use a small teardrop of glue in the inside corners of cap.



1

Material List			
Qty	Item	Dimension	WRHS USE ONLY
1	Top Rail	1-3/4"x 3-1/2" x 95-3/4"	1-3/4" X 3-1/2" X 8' Rail
1	Mid Rail	1-1/2"x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" X 8' Rail
1	Bottom Rail	1-1/2"x 5-1/2" x 95-3/4"	1-1/2" x 5-1/2" X 8' Rail
1	Aluminum	1-1/4"x 1-3/4" x 95-3/4"	1-1/4" x 1-3/4" x 8'
2	U Channels	1-1/8"x 1-1/4" x 48-1/2"	48-1/2" U Channel
17	Spindles	.75" Round Black Spindle	.75" Round Black Spindle
15	Pickets	7/8"x 6" x 52"	7/8" X 6" X 52" T&G

\* Actual measurements may vary  
 \* Panel should be installed 2" off ground

# intertek

Updated 11/10/2014

Test sample complies with these details.  
 Deviations are noted.

Report # H6923.01-119-19  
 Date 1/12/18 Tech IWG

**PWPR-CTRND-6X8**

*Not tested, but qualified by Mason PVC privacy fence.*

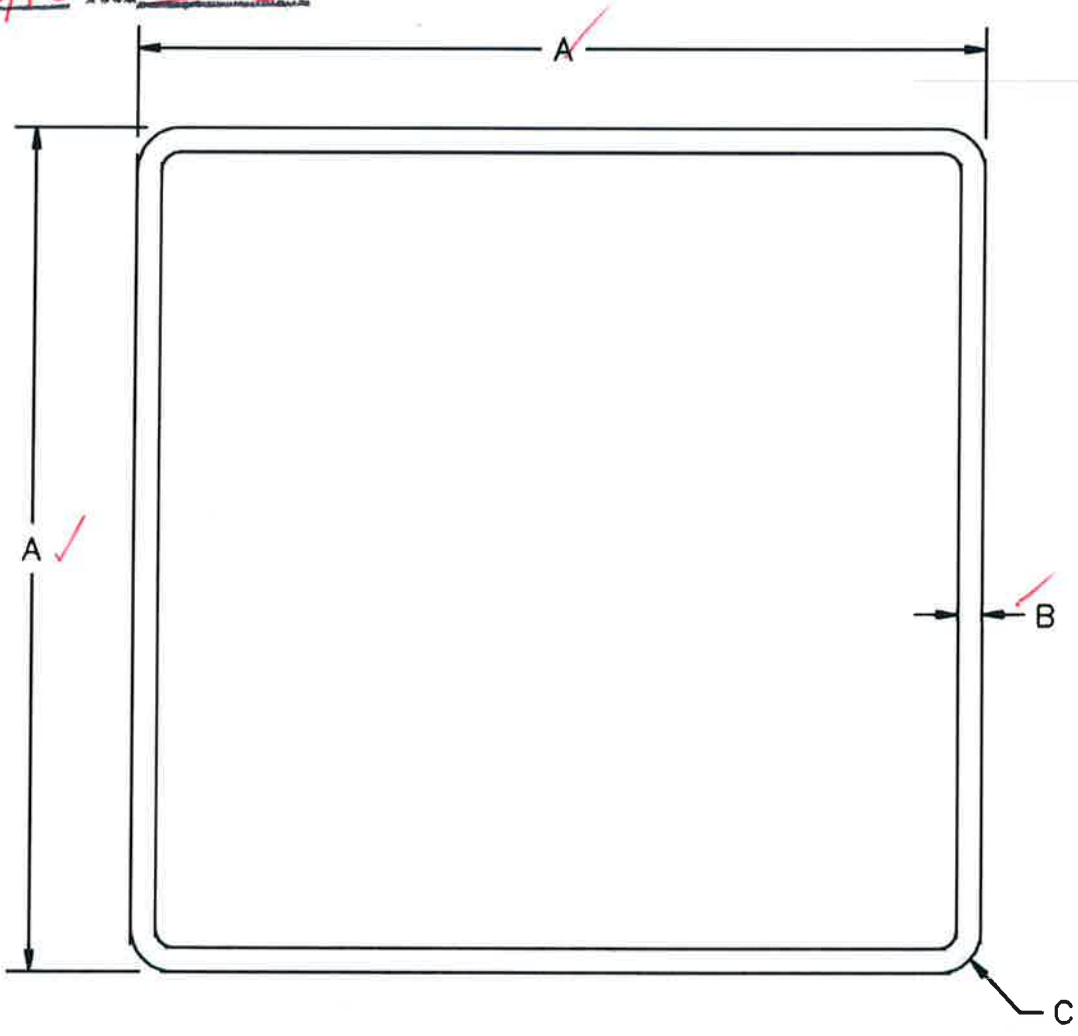
Test sample complies with these details.

Deviations are noted.

5"x5" POST

Report # H6923.01-119-19

Date 1/12/18 Tech ING



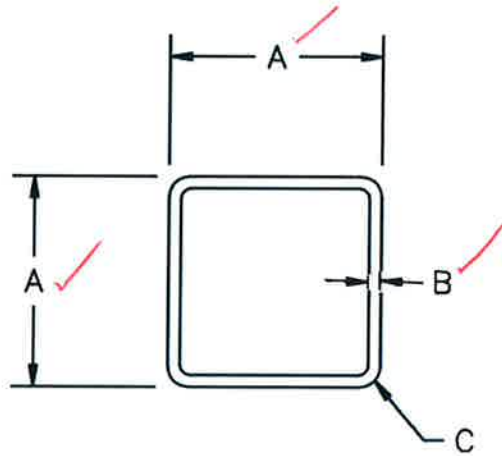
- A. WIDTH OUTSIDE =  $5.000 \pm 0.012$
- B. NOMINAL WALL THICKNESS =  $0.145 \pm 0.010$
- C. OUTSIDE CORNER RADIUS = 0.250

WEIGHT PER FOOT - - - = 1.700 LBS.  
OVERALL LENGTHS - - - = 5', 6', 6.5', 7', 7.5', 8', 8.5', 9', 9.5'  
10', 12', 16'



# USA Vinyl, LLC

1 1/4"x1 1/4" PICKET



- A. WIDTH OUTSIDE =  $1.250 \pm 0.015$
- B. NOMINAL WALL THICKNESS =  $0.071 \pm 0.006$
- C. OUTSIDE CORNER RADIUS = 0.125

WEIGHT PER FOOT - - - = 0.206 LBS.  
OVERALL LENGTHS - - - = 16' (BUNDLED)

## intertek

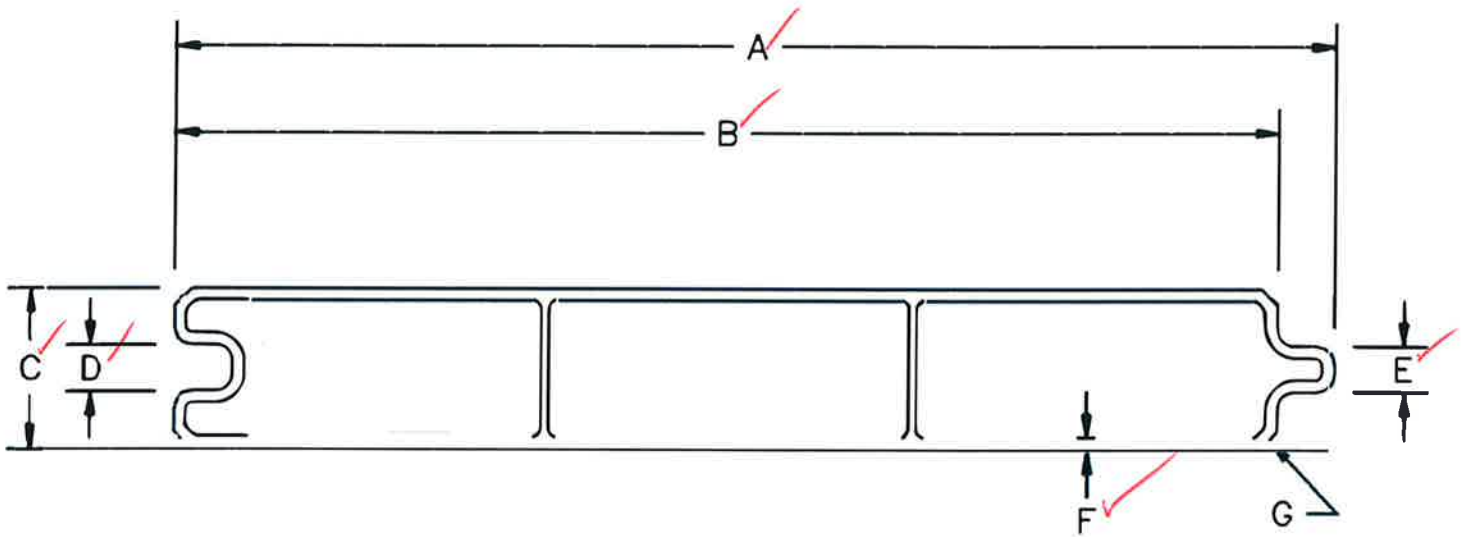
Test sample complies with these details.  
Deviations are noted.

Report # H6923.01-119-19

Date 1/12/18 Tech IWG

# USA Vinyl, LLC

## 7/8"x6" TONGUE & GROOVE PICKET



- A. OVERALL WIDTH OUTSIDE =  $6.312 \pm 0.020$
- B. INTERLOCKED WIDTH OUTSIDE =  $6.000 \pm 0.020$
- C. WIDTH OUTSIDE =  $0.875 \pm 0.015$
- D. GROOVE WIDTH =  $0.260 \pm 0.005$
- E. TONGUE WIDTH =  $0.240 \pm 0.005$
- F. NOMINAL WALL THICKNESS =  $0.065 \pm 0.005$
- D. CORNER CHAMFER =  $0.093 \times 0.093$

WEIGHT PER FOOT - - - = 0.634 LBS.  
OVERALL LENGTHS - - - = 16' (BUNDLED)

**intertek**

Test sample complies with these details.

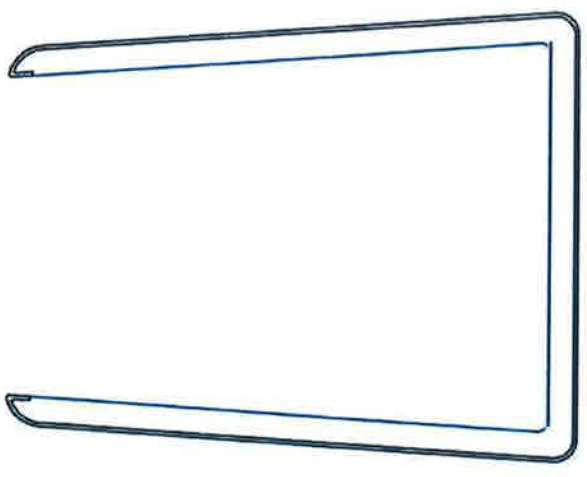
Deviations are noted.

Report # H6923.01-119-19

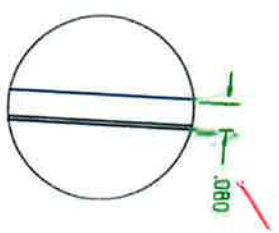
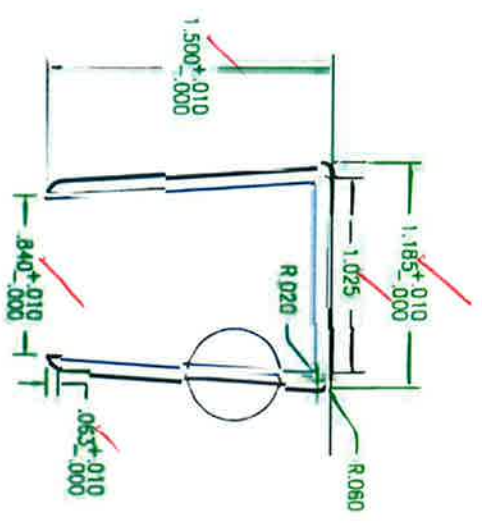
Date 1/2/18 Tech INJG

DRAWING - STATUS  
DATE

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SCALE 2X



OUTERWALL THICKNESS .080"

CAP-STOCK THICKNESS .010" MIN

**intertek**

Test sample complies with these details.  
Deviations are noted.  
Report # H6923.01-119-19  
Date 11/2/18 Tech INVS

TOLENANCE - DECIMAL AND FRACTION - U.S.

FABRICATION ± 1/16  
TOLERANCE  
ALL UNNOTED 125  
FINISH

**USA Vinyl, LLC**

TITLE: U-CHANNEL

DWG. NO. DRAWING

MATERIAL: MATERIAL

SHEET NO. SHEET

DRAWN BY: OSKERTUNE

CHECKED BY:

FILE NAME: FILE-NAME

ASSY NO. ASSY

REV. REVISION

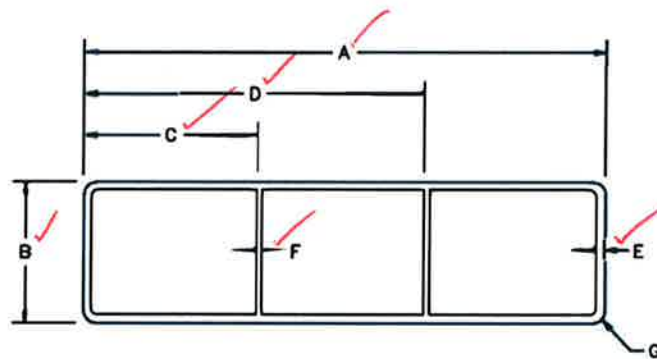
SCALE: 1:1

DATE: 9/28/12

REV.	DESCRIPTION	BY	DATE

USA Vinyl, LLC

1 1/2"x5 1/2" RAIL



- A. WIDTH OUTSIDE =  $5.500 \pm 0.020$
- B. WIDTH OUTSIDE =  $1.500 \pm 0.020$
- C. OUTSIDE TO FIRST RIB = 1.833 (REFERENCE)
- D. OUTSIDE TO SECOND RIB = 3.807 (REFERENCE)
- E. NOMINAL WALL THICKNESS =  $0.090 \pm 0.007$
- F. NOMINAL RIB THICKNESS =  $0.060 \pm 0.007$
- G. OUTSIDE CORNER RADIUS = 0.125

WEIGHT PER FOOT - - - = 0.840 LBS.  
OVERALL LENGTHS - - - = 6', 8', 12', 16'

intertek

Test sample complies with these details.

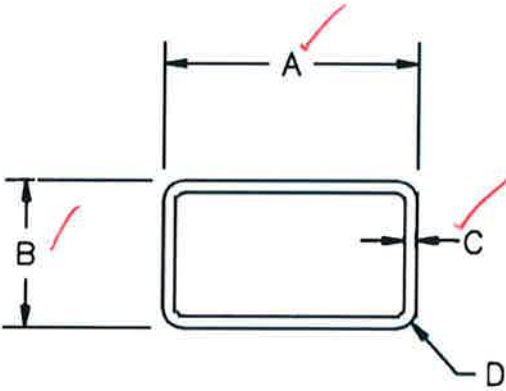
Deviations are noted.

Report # H6923.01-119-19

Date 1/12/18 Tech ING

USA Vinyl, LLC

7/8"x1 1/2" PICKET



- A. WIDTH OUTSIDE = 1.500±0.008
- B. WIDTH OUTSIDE = 0.875±0.005
- C. NOMINAL WALL THICKNESS = 0.071±0.006
- D. OUTSIDE CORNER RADIUS = 0.125

WEIGHT PER FOOT - - - = 0.196 LBS.  
 OVERALL LENGTHS - - - = 16' (BUNDLED)



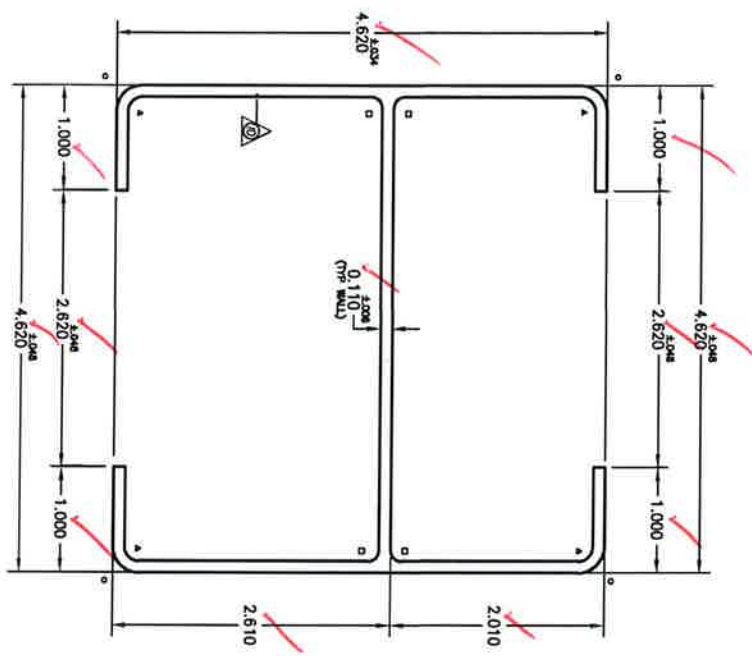
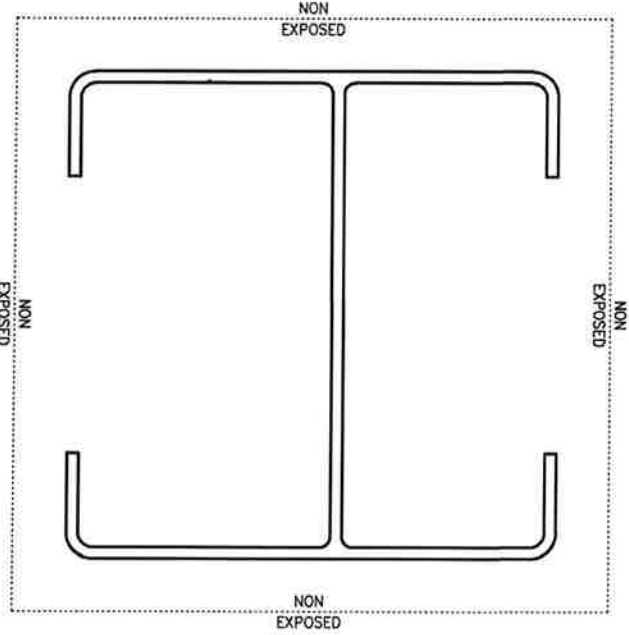
Test sample complies with these details.  
 Deviations are noted.

Report # H6923.01-119-19  
 Date 1/12/18 Tech IWG

Test sample complies with these details.  
 Deviations are noted.  
 Report # H6923.01-119-19  
 Date 11/2/18 Tech INW

DRN INITIAL RELEASE (NQA 12/09/02) 12079  
 DMC RELEASE NO. ASTRO DIE NO.

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(e) INDICATES 0.100 R (4)  
 (d) INDICATES 0.140 R (4)  
 (c) INDICATES 0.250 R (4)  
 ALL UNSPECIFIED CORNERS & FILLETS TO BE 0.015 R

~~ACTUAL SIZE~~  
 MILL FINISH

TITLE BLOCK THROUGH 12/21/09  
 Revision 1 10/09/03  
 Approval Number 0000-000

AREA	WIDTH	LENGTH	CROSS SECTION	SOLID
AREA	1.863 MM	2.236 MM	CROSS SECTION	SOLID
PERIMETER	33.796 MM	33.796 MM	PERIMETER	0.000 MM
DR DIA	6.33 MM	15	TYP WALL	0.110 ±.008

UNLESS SPECIFIED, STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ALUMINIUM ARE USED.  
 ▲ ASTRO ID MARK: 0.010 R X 0.010 DP

USA VINYL LLC	
ORDER PART NO.	NS-22771
SCALE	1=1 (DIMENSIONS)
DATE	12/03/02

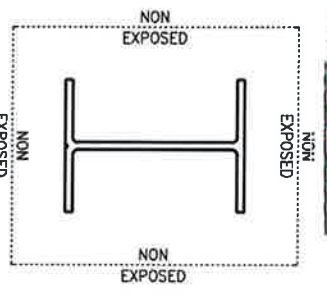
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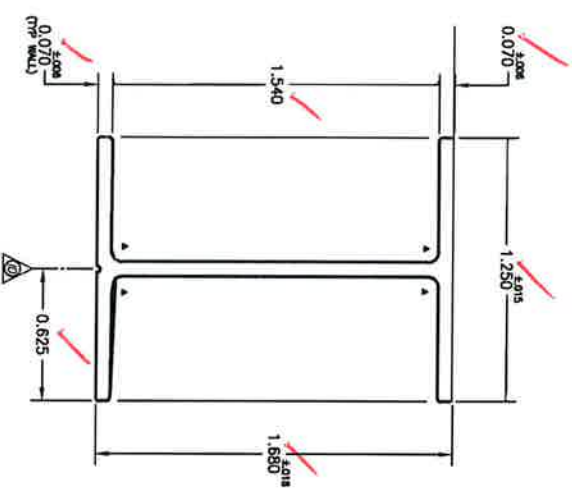
Test sample complies with these details.  
 Deviations are noted.

Report # H6923.01-119-19

Date 11/2/18 Tech EWG



~~ACTUAL SIZE~~  
 MILL FINISH



NOTE: ALLOY-TEMPER = 6005A-T5

(1) INDICATES 0.050 R (4) & FILLETS TO BE 0.015 R  
 (2) UNSPECIFIED CORNERS & FILLETS TO BE 0.015 R

DR	APR	SCALE	W/T	US	CLASS	SOLID
0.284	8.100	N.	0.341	8.100	N.	0.000
2.08	2.08	N.	2.4	2.4	N.	0.070 ± 0.008

UNLESS SPECIFIED, STANDARD COMMERCIAL TOLERANCES FOR EXTRUDED ALUMINIUM ARE USED.  
 ▲ ASTRO ID MARK: 0.010 R X 0.010 DP

USA VINYL LLC	
ORDER PART NO.	REV. ~
1.5 X 5.5 RAIL REINFORCEMENT	SCALE 2=1
AS REF. NO. AS-22029	DATE 10/29/02



Total Quality. Assured.

130 Derry Court  
York, PA 17406

Telephone: 717-764-7700  
Facsimile: 717-764-4129  
[www.intertek.com/building](http://www.intertek.com/building)

## TEST REPORT FOR WEATHERABLES

Report No.: H6923.01-119-19 R0

Date: 01/15/18

### SECTION 11

#### REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	01/15/18	N/A	Original Report Issue