



**TEST SUMMARY**

Rendered to:

DECK SUPPLY SERVICES LLC  
3977 160th Street  
Blue Grass, Iowa 52726

Project No.: F4203.01-119-19

Test Date: 01/18/16

Test Summary Date: 03/30/16

**Product:** 95 in by 43-1/2 in *Georgian* Aluminum Level Guardrail System.

**Scope:** Structural performance tests were conducted on the *Georgian* aluminum level guardrail system attached to 3-1/2 in square aluminum post mounts by Architectural Testing, Inc., an Intertek company (“Intertek-ATI”). Tested in accordance with Section 4.2.2 – 4.2.4 of ICC-ES™ AC273 (approved February 2008, editorially revised January 2012) *Acceptance Criteria for Handrails and Guards* for preliminary evaluations only.

**Test Results:** The test results are reported in the following tables.

**95-1/2 in by 43-1/2 in *Georgian* Aluminum Level Guardrail  
IBC – All Use Groups / ICC-ES™ AC273  
Specimen No. 1 of 3**

<b>Test Results Summary Table</b>			
<b>Test</b>	<b>Target Load</b>	<b>Test Load</b>	<b>Result</b>
Infill Load at Center of Two Balusters	2.5 x Design Load (125 lbs)	126 – 130	Held in excess of one minute (PASS)
Infill Load at Center of Two Balusters	2.5 x Design Load (125 lbs)	126 – 130	
Uniform Load Applied at 45°	125 plf (995 lbs)	997 – 1007	
Horizontal Concentrated Load at Midspan of Top Rail	Design Load (200 lbs)	203	0.69" Net Deflection vs. 2.49" Deflection Allowed <sup>1</sup> (PASS)
	2.5 x Design Load (500 lbs)	504 – 513	Held in excess of one minute (PASS)
Horizontal Concentrated Load at the End of Top Rail	2.5 x Design Load x 2 (1000 lbs) <sup>2</sup>	997 – 1010	

<sup>1</sup> Allowable deflection was based on 36" railing height to satisfy One- and Two-Family dwelling requirements.

<sup>2</sup> Load was imposed on both ends of rail using a spreader beam; therefore, loads were doubled.

**Test Results:** (Continued)

**Specimen No. 2 of 3**

<b>Test Results Summary Table</b>			
<b>Test</b>	<b>Target Load</b>	<b>Test Load</b>	<b>Result</b>
Infill Load at Center of Two Balusters	2.5 x Design Load (125 lbs)	127 – 133	Held in excess of one minute (PASS)
Infill Load at Center of Two Balusters	2.5 x Design Load (125 lbs)	130 – 136	
Uniform Load Applied at 45°	125 plf (995 lbs)	994 – 1013	
Horizontal Concentrated Load at Midspan of Top Rail	Design Load (200 lbs)	200	0.69" Net Deflection vs. 2.49" Deflection Allowed <sup>1</sup> (PASS)
	2.5 x Design Load (500 lbs)	501 – 517	Held in excess of one minute (PASS)
Horizontal Concentrated Load at the End of Top Rail	2.5 x Design Load x 2 (1000 lbs) <sup>2</sup>	1001 – 1026	

<sup>1</sup> Allowable deflection was based on 36" railing height to satisfy One- and Two-Family dwelling requirements.

<sup>2</sup> Load was imposed on both ends of rail using a spreader beam; therefore, loads were doubled.

**Specimen No. 3 of 3**

<b>Test Results Summary Table</b>			
<b>Test</b>	<b>Target Load</b>	<b>Test Load</b>	<b>Result</b>
Infill Load at Center of Two Balusters	2.5 x Design Load (125 lbs)	128 – 133	Held in excess of one minute (PASS)
Infill Load at Center of Two Balusters	2.5 x Design Load (125 lbs)	130 – 134	
Uniform Load Applied at 45°	125 plf (995 lbs)	997 – 1011	
Horizontal Concentrated Load at Midspan of Top Rail	Design Load (200 lbs)	204	0.69" Net Deflection vs. 2.49" Deflection Allowed <sup>1</sup> (PASS)
	2.5 x Design Load (500 lbs)	504 – 526	Held in excess of one minute (PASS)
Horizontal Concentrated Load at the End of Top Rail	2.5 x Design Load (500 lbs) x2 sides (1000 lbs) <sup>2</sup>	996 – 1028	

<sup>1</sup> Allowable deflection was based on 36" railing height to satisfy One- and Two-Family dwelling requirements.

<sup>2</sup> Load was imposed on both ends of rail using a spreader beam; therefore, loads were doubled.



This is a summary of the testing for your information only. Should you desire a complete and formal test report, Intertek-ATI shall require detailed assembly drawings that fully describe the tested assemblies.

For INTERTEK-ATI:

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