TEST REPORT

Rendered to:

VINYLAST, INC.

For:

*Atlas-Pro Quik-Mount Post Mount System*

Report No.: F8818.01-119-19
Report Date: 01/19/17
Test Record Retention Date: 07/25/20
TEST REPORT

F8818.01-119-19
January 19, 2017

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1.0 General Information

1.1 Product

Atlas-Pro Quik-Mount Post Mount System

1.2 Project Description

Architectural Testing, Inc., an Intertek company (“Intertek-ATI”), was contracted by Vinylast, Inc. to perform structural performance testing on their Atlas-Pro Quik-Mount post mount for wood deck and concrete installation. This report is in conjunction with Intertek-ATI Report No. F9614.01-117-38 which includes product sampling information. The purpose of the testing is code compliance evaluation in accordance with the following criteria:

ICC-ES™ AC273 (March 1, 2008 - Editorial Revised March 2016), Acceptance Criteria for Handrails and Guards

ICC-ES™ AC273-08 was developed by the ICC Evaluation Service, Inc. (ICC-ES™) as acceptance criteria to evaluate compliance with the following building codes:


1.3 Qualifications

Intertek-ATI in York, Pennsylvania has demonstrated compliance with ISO/IEC International Standard 17025 and is consequently accredited as a Testing Laboratory (TL-144) by International Accreditation Service, Inc. (IAS).
1.4 Limitations

The test specimen evaluated included post, post spacers and post sleeve only and did not include an assembled guardrail attached to the post mount. Qualification of guardrail assemblies was outside the scope of this testing and would need to be evaluated separately.

Structural testing conducted and reported herein was limited to the design load times an adjustment factor of 2.5. Guardrail configurations with material adjustment factors in excess of 2.5 would need to be evaluated separately.

Anchorage of support post to the simulated concrete support structure is not included in the scope of this testing and would need to be evaluated separately.

1.5 Product Description

The Atlas-Pro Quik-Mount post mount system is comprised of a steel tube and base plate with PVC spacers and sleeve. Drawings are included in Appendix A to verify the overall dimensions and other pertinent information of the tested product, their components, and any constructed assemblies.

1.6 Product Sampling

A representative of Intertek-ATI visited Trigo Enterprises Ltd. facility located in Dongsheng, Zhongshan of the Guangdong Province, China on 06/08/16 to select the components used for testing. All samples selected for testing were marked for identification and were the samples used for all tests reported herein. Reference Intertek-ATI Report No. F9614.01-117-38 for additional product sampling information. See photograph in Appendix B for typical sampling mark.

1.7 Witnessing

Steven J. Leary of Vinylast, Inc. was present on 07/25/16 to assemble and witness structural performance testing of the post mount system.

1.8 Conditions of Testing

Unless otherwise indicated, all testing reported herein was conducted in a laboratory set to maintain temperature in the range of 68 ± 4°F and humidity in the range of 50 ± 5% RH.
2.0 Structural Performance Testing of Post Mount Systems
Re: ICC-ES™ AC273 - Section 4.2.5

2.1 General

Post mount system was tested in a self-contained structural frame designed to accommodate anchorage of a post assembly and application of the required test loads. The specimen was loaded using an electric winch mounted to a rigid steel test frame. High strength steel cables, nylon straps, and load distribution beams were used to impose test loads on the specimen. Applied load was measured using an electronic load cell located in-line with the loading system. Deflections were measured to the nearest 0.01 in using electronic linear displacement transducers.

2.2 Post Mount Assembly Description

The Atlas-Pro Quik-Mount post mount system consisted of a square steel tube welded to a base plate. PVC post stabilizers were placed over the steel tube to support a 4 in post sleeve. Post mount system was attached to a steel channel (simulated concrete application) for IBC-All Use Groups or mock wood deck for IRC – One- and Two-Family Dwellings in accordance with manufacturer's installation instructions. Drawings are included in Appendix A to verify the overall dimensions and other pertinent information of the tested product, its components, and any constructed assemblies.

2.3 Component Descriptions

The scope of testing performed and reported herein was intended to evaluate the Atlas-Pro Quik-Mount post mount system with the following component details:

- **Post Sleeves**: 4 in square (0.10 in wall), hollow, PVC sleeve, installed over post mount
- **Post Mount**: 1.60 in square steel tube with 0.14 in wall welded to 3.50 in square by 0.43 in thick steel base plate with a 5/16 in fillet weld all around - four 0.54 in diameter holes were located at each corner of the plate, with the center of the holes 0.51 in from each edge and 2.49 in apart. Four 5/16-18 threaded leveling holes were located at the midpoint between the mounting holes. One 1.36 in square hole was located in the center of the plate.
- **PVC Post Stabilizer**: Top / Bottom Stabilizer: 3-5/8 in square by 6-3/4 in long with 0.24 in wall
2.3 Component Descriptions (Continued)

Post Mount Reinforcement Plates (used with mock wood decks only):

- Top (between post mount base plate and wood deck surface): 5 in square by 0.14 in thick steel plate with four 0.44 in diameter holes located at each corner of the plate, with the center of the holes 1.22 in from each edge and 2.57 in apart.

- Bottom (between the underside of the wood deck and the washers/nuts): 5 in square by 0.14 in thick steel plate with eight 0.44 in diameter holes. See drawing in Appendix A for hole spacing.

Mock Wood Deck: 2x8 preservative treated Southern Yellow Pine joist and 1x6 preservative treated Southern Yellow Pine decking with blocking as detailed in the figure below.

See drawings in Appendix A and photographs in Appendix B for additional details.

2.4 Fastening Schedule

<table>
<thead>
<tr>
<th>Connection</th>
<th>Fastener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Mount to Substructure</td>
<td><strong>Wood Deck</strong></td>
</tr>
<tr>
<td></td>
<td>Four 3/8-16 by 6 in long Grade 5 hex-head bolts with two nuts and four washers</td>
</tr>
<tr>
<td>Simulated Concrete</td>
<td>Four 3/8 in Grade 8 hex-head bolts with washers and two nuts</td>
</tr>
<tr>
<td>Simulated Concrete – secured through bottom spacer</td>
<td>Four 1/2-13 by 12&quot; long zinc plated threaded rod with one nut and one washer at the top of the bottom PVC spacer, one nut at the top of the post mount base plate, and two nuts and one washer on the bottom.</td>
</tr>
<tr>
<td>Top PVC Spacer to Post</td>
<td>#10-32 x 1&quot; hex-washer head / Phillips drive zinc plated machine screw</td>
</tr>
</tbody>
</table>
2.5 Test Setup

The post mount assembly was installed and tested by directly securing (surface-mounting) the base of the post mounts to either a rigid steel test frame or a mock wood deck. The post mount was assembled by Steven J. Leary of Vinylast, Inc. Transducers mounted to an independent reference frame were located to record movement of reference points on the post mount to determine net component deflections. See photographs in Appendix B for test setups.

2.6 Test Procedure

Testing and evaluation was performed in accordance with Section 4.2.5 of ICC-ES™ AC273. The test specimen was inspected prior to testing to verify size and general condition of the materials, assembly, and installation. No potentially compromising defects were observed. Each design load test was performed using the following procedure:

Mock Wood Buck Installation:
1. Zeroed transducers and load cell at zero load;
2. Increased load to 40 lbs (0.2 times design load) and zeroed transducers
3. Increased load to 200 lbs (design load) in no less than ten seconds.
4. Increased load to 400 lbs (2.0 times design load)
5. Load removed for a recovery period for no less than one minute
6. Increased load to 40 lbs (0.2 times design load), capture deflection
7. Increased load to 500 lbs (2.5 times design load)
8. Held test load for no less than one minute.

Simulated Concrete Installation(s):
1. Zeroed transducers and load cell at zero load;
2. Increased load to 200 lbs (design load) in no less than ten seconds
3. Increased load to ultimate failure.

2.7 Test Results

Unless otherwise noted, all loads and displacement measurements were normal to the post (horizontal). The test results apply only to the post mount assembly. The test load adjustment factor was maintained at 2.5 x design load.

Key to Test Results Tables:

Load Level: Target test load

Test Load: Actual applied load at the designated load level (target). Where more than one value is reported, the test load was the range (min. - max.) that was held during the time indicated in the test.

Elapsed Time (E.T.): The amount of time into the test with zero established at the beginning of the loading procedure. Where more than one value is reported, the time was the range (start-end) that the designated load level was reached and sustained.
2.7 Test Results (Continued)

**Test Series No. 1**
*Atlas-Pro Quik-Mount Post Mount on Wood Deck*
Limited to Use in IRC - One- and Two-Family Dwellings / ICC-ES™ AC273

<table>
<thead>
<tr>
<th>Load Level</th>
<th>Test Load (lb)</th>
<th>E.T. (min:sec)</th>
<th>Post Displacement (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Load</td>
<td>41</td>
<td>00:00</td>
<td>0.00</td>
</tr>
<tr>
<td>Design Load</td>
<td>205</td>
<td>00:12</td>
<td>0.85</td>
</tr>
<tr>
<td>2.0x Design Load</td>
<td>403</td>
<td>00:25</td>
<td>3.06</td>
</tr>
<tr>
<td>Initial Load</td>
<td>40</td>
<td>02:32</td>
<td>0.59</td>
</tr>
</tbody>
</table>

81% Recovery from 2.0 x Design Load

Deflection Evaluation:
Maximum post deflection at 205 lb = 0.85 in

Limits per AC273:
\[
\frac{h}{12} = \frac{36}{12} = 3.00" > 0.85" \therefore \text{ok} \quad \text{and} \quad \frac{h}{12} = \frac{42}{12} = 3.50" > 0.85" \therefore \text{ok}
\]

1 Post was conservatively tested without a railing attached.
2 Deflection limit calculation based on 36" and 42" railing height for One- and Two-Family Dwelling requirements.

---

**Test No. 2 - Test Date: 07/25/16**

**Design Load: 200 lb Concentrated Load at Top of Stand-Alone Post Mount (42 in High)**

<table>
<thead>
<tr>
<th>Load Level</th>
<th>Test Load (lb)</th>
<th>E.T. (min:sec)</th>
<th>Post Displacement (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Load</td>
<td>42</td>
<td>00:00</td>
<td>0.00</td>
</tr>
<tr>
<td>Design Load</td>
<td>215</td>
<td>00:10</td>
<td>0.87</td>
</tr>
<tr>
<td>2.0x Design Load</td>
<td>405</td>
<td>00:23</td>
<td>3.36</td>
</tr>
<tr>
<td>Initial Load</td>
<td>45</td>
<td>01:47</td>
<td>0.79</td>
</tr>
</tbody>
</table>

76% Recovery from 2.0 x Design Load

Deflection Evaluation:
Maximum post deflection at 215 lb = 0.87 in

Limits per AC273:
\[
\frac{h}{12} = \frac{36}{12} = 3.00" > 0.87" \therefore \text{ok} \quad \text{and} \quad \frac{h}{12} = \frac{42}{12} = 3.50" > 0.87" \therefore \text{ok}
\]

1 Post was conservatively tested without a railing attached.
2 Deflection limit calculation based on 36" and 42" railing height for One- and Two-Family Dwelling requirements.
3 Test load dropped below the target load for 0.5 seconds during the 1 minute duration.
2.7 Test Results (Continued)

Test Series No. 1 (Continued)

Test No. 3 - Test Date: 07/25/16
Design Load: 200 lb Concentrated Load at Top of Stand-Alone\(^1\) Post Mount (42 in High)

<table>
<thead>
<tr>
<th>Load Level</th>
<th>Test Load (lb)</th>
<th>E.T. (min:sec)</th>
<th>Post Displacement (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Load</td>
<td>41</td>
<td>00:00</td>
<td>0.00</td>
</tr>
<tr>
<td>Design Load</td>
<td>204</td>
<td>00:13</td>
<td>0.84</td>
</tr>
<tr>
<td>2.0x Design Load</td>
<td>403</td>
<td>00:27</td>
<td>3.63</td>
</tr>
<tr>
<td>Initial Load</td>
<td>45</td>
<td>02:15</td>
<td>0.93</td>
</tr>
</tbody>
</table>

74% Recovery from 2.0 x Design Load

2.5x Design Load | 499 - 510 | 03:07 - 04:16 | Achieved Load without Failure\(^3\)

Deflection Evaluation:
Maximum post deflection at 204 lb = 0.84 in

Limits per AC273\(^2\): \( \frac{h}{12} = \frac{36}{12} = 3.00" > 0.84" \cdot \text{ok} \) and \( \frac{h}{12} = \frac{42}{12} = 3.50" > 0.84" \cdot \text{ok} \)

\(^1\) Post was conservatively tested without a railing attached.
\(^2\) Deflection limit calculation based on 36" and 42" railing height for One- and Two-Family Dwelling requirements.
\(^3\) Test load dropped below the target load for 0.5 seconds during the 1 minute duration.

Test Series No. 1 Recovery Summary

<table>
<thead>
<tr>
<th>Specimen Number</th>
<th>Recovery (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81</td>
</tr>
<tr>
<td>2</td>
<td>76</td>
</tr>
<tr>
<td>3</td>
<td>74</td>
</tr>
<tr>
<td>Average:</td>
<td>77</td>
</tr>
</tbody>
</table>
2.7 Test Results (Continued)

Test Series No. 2
*Atlas-Pro Quik-Mount* Post Mount on Simulated Concrete
IBC – All Use Groups / ICC-ES™ AC273

<table>
<thead>
<tr>
<th>Test No. 1 - Test Date: 07/25/16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Load:</strong> 200 lb Concentrated Load at Top of Stand-Alone(^1) Post Mount (42 in High)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Load Level</th>
<th>Test Load (lb)</th>
<th>E.T. (min:sec)</th>
<th>Displacement (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 lb (D.L.)</td>
<td>211</td>
<td>00:21</td>
<td>0.84</td>
</tr>
<tr>
<td>Ultimate Load</td>
<td>914</td>
<td>01:22</td>
<td>Result: Post broke along the top of the weld.</td>
</tr>
</tbody>
</table>

Deflection Evaluation:
Maximum post deflection at 211 lb = 0.84 in

Limits per AC273 \(^2\): \[
\frac{h}{12} = \frac{36}{12} = 3.0" > 0.84" \therefore \text{ok} \quad \text{and} \quad \frac{h}{12} = \frac{42}{12} = 3.50" > 0.84" \therefore \text{ok}
\]

\(^1\) Post was conservatively tested without a railing attached.
\(^2\) *Deflection limit calculation based on 36" and 42" railing height for One- and Two-Family Dwelling requirements.*

<table>
<thead>
<tr>
<th>Test No. 2 - Test Date: 07/25/16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Load:</strong> 200 lb Concentrated Load at Top of Stand-Alone(^1) Post Mount (42 in High)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Load Level</th>
<th>Test Load (lb)</th>
<th>E.T. (min:sec)</th>
<th>Displacement (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 lb (D.L.)</td>
<td>210</td>
<td>00:10</td>
<td>0.84</td>
</tr>
<tr>
<td>Ultimate Load</td>
<td>970</td>
<td>01:10</td>
<td>Result: Post broke along the top of the weld.</td>
</tr>
</tbody>
</table>

Deflection Evaluation:
Maximum post deflection at 210 lb = 0.84 in

Limits per AC273 \(^2\): \[
\frac{h}{12} = \frac{36}{12} = 3.0" > 0.84" \therefore \text{ok} \quad \text{and} \quad \frac{h}{12} = \frac{42}{12} = 3.50" > 0.84" \therefore \text{ok}
\]

\(^1\) Post was conservatively tested without a railing attached.
\(^2\) *Deflection limit calculation based on 36" and 42" railing height for One- and Two-Family Dwelling requirements.*
2.7 Test Results  (Continued)

Test Series No. 2 (Continued)

<table>
<thead>
<tr>
<th>Test No. 3 - Test Date: 07/25/16</th>
<th>Design Load: 200 lb Concentrated Load at Top of Stand-Alone(^1) Post Mount (42 in High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Level</td>
<td>Test Load (lb)</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>200 lb (D.L.)</td>
<td>208</td>
</tr>
<tr>
<td>Ultimate Load</td>
<td>937</td>
</tr>
</tbody>
</table>

Deflection Evaluation:
Maximum post deflection at 208 lb = 0.82 in

Limits per AC273 \(^2\): $\frac{h}{12} = \frac{36}{12} = 3.0" > 0.82" \therefore \text{ok}$ and $\frac{h}{12} = \frac{42}{12} = 3.50" > 0.82" \therefore \text{ok}$

\(^1\) Post was conservatively tested without a railing attached.

\(^2\) Deflection limit calculation based on 36” and 42” railing height for One- and Two-Family Dwelling requirements.

---

Test Series No. 2 Test Summary

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Ultimate Load (lb)</th>
<th>Deviation From Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>914</td>
<td>-2.8%</td>
</tr>
<tr>
<td>2</td>
<td>970</td>
<td>3.2%</td>
</tr>
<tr>
<td>3</td>
<td>937</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Average:</td>
<td>940</td>
<td></td>
</tr>
<tr>
<td>Allowable Span (^1): (center-to-center of posts)</td>
<td>7.5 ft</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Average ultimate load divided by 125 plf (reference AC273 Section 4.2.5)
### 2.7 Test Results (Continued)

**Test Series No. 3**

**Atlas-Pro Quik-Mount Post Mount on Simulated Concrete Bolted Through Bottom Spacer**

IBC – All Use Groups / ICC-ES™ AC273

<table>
<thead>
<tr>
<th>Test No. 1 - Test Date: 07/25/16</th>
<th>Design Load: 200 lb Concentrated Load at Top of Stand-Alone Post Mount (42 in High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Level</td>
<td>Test Load (lb)</td>
</tr>
<tr>
<td>200 lb (D.L.)</td>
<td>206</td>
</tr>
<tr>
<td>Ultimate Load</td>
<td>1345</td>
</tr>
</tbody>
</table>

**Deflection Evaluation:**
Maximum post deflection at 206 lb = 0.91 in

Limits per AC273 2: 
\[
\frac{h}{12} = \frac{36}{12} = 3.0\" > 0.91\" : \text{ok} \quad \text{and} \quad \frac{h}{12} = \frac{42}{12} = 3.50\" > 0.91\" : \text{ok}
\]

1 Post was conservatively tested without a railing attached.
2 Deflection limit calculated on 36” and 42” railing height for One- and Two-Family Dwelling requirements.

<table>
<thead>
<tr>
<th>Test No. 2 - Test Date: 07/25/16</th>
<th>Design Load: 200 lb Concentrated Load at Top of Stand-Alone Post Mount (42 in High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Level</td>
<td>Test Load (lb)</td>
</tr>
<tr>
<td>200 lb (D.L.)</td>
<td>203</td>
</tr>
<tr>
<td>Ultimate Load</td>
<td>1250</td>
</tr>
</tbody>
</table>

**Deflection Evaluation:**
Maximum post deflection at 203 lb = 0.71 in

Limits per AC273 2: 
\[
\frac{h}{12} = \frac{36}{12} = 3.0\" > 0.71\" : \text{ok} \quad \text{and} \quad \frac{h}{12} = \frac{42}{12} = 3.50\" > 0.71\" : \text{ok}
\]

1 Post was conservatively tested without a railing attached.
2 Deflection limit calculation based on 36” and 42” railing height for One- and Two-Family Dwelling requirements.
2.7 Test Results (Continued)

Test Series No. 3 (Continued)

Test No. 3 - Test Date: 07/25/16
Design Load: 200 lb Concentrated Load at Top of Stand-Alone¹ Post Mount (42 in High)

<table>
<thead>
<tr>
<th>Load Level</th>
<th>Test Load (lb)</th>
<th>E.T. (min:sec)</th>
<th>Displacement (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 lb (D.L.)</td>
<td>220</td>
<td>00:12</td>
<td>0.79</td>
</tr>
<tr>
<td>Ultimate Load</td>
<td>1472</td>
<td>01:48</td>
<td>Result: Post yielded.</td>
</tr>
</tbody>
</table>

Deflection Evaluation:
Maximum post deflection at 220 lb = 0.79in

Limits per AC273 ²:
\[
\frac{h}{12} = \frac{36}{12} = 3.0" > 0.79" \therefore \text{ok} \quad \text{and} \quad \frac{h}{12} = \frac{42}{12} = 3.50" > 0.79" \therefore \text{ok}
\]

¹ Post was conservatively tested without a railing attached.
² Deflection limit calculation based on 36" and 42" railing height for One- and Two-Family Dwelling requirements.

Test Series No. 3 Test Summary

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Ultimate Load (lb)</th>
<th>Deviation From Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1345</td>
<td>-0.8%</td>
</tr>
<tr>
<td>2</td>
<td>1250</td>
<td>-7.8%</td>
</tr>
<tr>
<td>3</td>
<td>1472</td>
<td>8.6%</td>
</tr>
<tr>
<td>Average:</td>
<td>1356</td>
<td></td>
</tr>
<tr>
<td>Allowable Span ³: (center-to-center of posts)</td>
<td>10.8 ft</td>
<td></td>
</tr>
</tbody>
</table>

³ Average ultimate load divided by 125 plf (reference AC273 Section 4.2.5)
2.8 Summary and Conclusions

The post mounts reported herein meet the structural performance requirements of Section 4.2.5 of ICC-ES™ AC273 for the attachment methods and code occupancy classifications listed in the table below:

<table>
<thead>
<tr>
<th>Test Specimen</th>
<th>Attachment</th>
<th>Max Allowable Span (ft)(^1)</th>
<th>Code Occupancy Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlas-Pro</td>
<td>Mock Wood Deck</td>
<td>N/A</td>
<td>IRC – (One- and Two-Family Dwellings)</td>
</tr>
<tr>
<td>Quik-Mount</td>
<td>Simulated Concrete</td>
<td>7.5</td>
<td>IBC – (All Use Groups)</td>
</tr>
<tr>
<td>42 in Post Mount</td>
<td>Simulated Concrete – Bolted through bottom spacer</td>
<td>10.8</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Max allowable span is measured from center of post to center of post.

Anchorage of support posts to the simulated concrete supporting structure is not included in the scope of this testing and would need to be evaluated separately.
3.0 Closing Statement

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.

Results obtained are tested values and were secured 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 specimens tested. This report may not be reproduced, except in full, without the written approval of Intertek-ATI.

For INTERTEK-ATI:

[Signatures]

Steven A. Neff  
Technician II

V. Thomas Mickley, Jr., P.E.  
Senior Project Engineer

SAN: vtm/jas

Attachments (pages): This report is complete only when all attachments listed are included.

- Appendix A - Drawings (2)
- Appendix B - Photographs (5)
### Revision Log

<table>
<thead>
<tr>
<th>Rev. #</th>
<th>Date</th>
<th>Page(s)</th>
<th>Revision(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>01/19/17</td>
<td>N/A</td>
<td>Original report issue</td>
</tr>
</tbody>
</table>

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APPENDIX A

Drawings
Steel/Ruspert or double printed

Thickness = 0.135in

New

- Surface treatment: Double coating
- Surface treatment: Sealed coating

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report #: FBB18-01-119-19
Date: 9/2/16
Tech: SAN

Steel/Ruspert or double printed
RPM05 Atlas3642SQHDSC
4"x36"/42" Square tube Post Mount
Finish: HDG + powder coated
Galvanized steel GB/T13912-2002
Powder coat paint 915 under AAMA2603
More detail SEE BOM/Instruction sheet AND CCRR Ver. 2015.07.15a

Architectural Testing
Test sample complies with these details. Deviations are noted.
Report # F8818.01-119-19
Date 9/2/16 Tech SAN

Vinylast Inc.
APPENDIX B

Photographs
Photo No. 1
Typical Sampling Mark

Photo No. 2
Concentrated Load Test at Top of Post Mount
Mock Wood Deck
Photo No. 3
Concentrated Load Test at Top of Post Mount
Simulated Concrete

Photo No. 4
Concentrated Load Test at Top of Post Mount
Simulated Concrete Bolted Through Bottom Spacer
Photo No. 5
Post Mount Connection
Mock Wood Deck (Top Side)

Photo No. 6
Post Mount Connection
Mock Wood Deck (Bottom Side)
Photo No. 7
Post Mount Connection
Simulated Concrete (Top Side)

Photo No. 8
Post Mount Connection
Simulated Concrete (Bottom Side)
Photo No. 9
Post Mount Connection
Simulated Concrete Bolted Through Bottom Spacer (Top Side)
(Washers shown were replaced with smaller washers to allow post sleeve installation)

Photo No. 10
Post Mount Connection
Simulated Concrete Bolted Through Bottom Spacer (Bottom Side)