



April 6, 2016

Hohmann & Barnard, Inc.
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Hauppauge, New York 11788
WeAnchor@h-b.com

RE: Summary Letter on Fire Performance of Polymer Based Brick-ties Exterior Wall Systems for Project F4749.01-121-24.

To Whom It May Concern,

This letter is in response to a request for a summary a full scale fire performance test of polymer based brick-ties used in an exterior wall systems by Intertek-Architectural Testing.

The core wall components (steel framing, interior and exterior gypsum) were supplied by Intertek-ATI. All other exterior assembly components were provided by the client and Intertek-ATI accepts no responsibilities of any inaccuracies therein. This letter does imply certification of the products by Intertek-ATI.

Test Method:

Intertek-ATI performed tests on exterior wall systems in accordance with a modified version of NFPA 285-12, *Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load Bearing Wall Assemblies Containing Combustible Components*. **Modifications included limited instrumentation data, smaller system dimensions, and the observation of anchor integrity.**

Test Observations:

Test Assembly #1:

| Time (min:sec) | Observations |
|----------------|---|
| 00:00 | Ignition of the room burner. |
| 02:00 | Ignition of the interior gypsum. |
| 05:00 | Ignition of the window burner. |
| 15:00 | No observations from exterior surface. |
| 30:00 | Burners Extinguished. |
| Post-Test | After the burners were extinguished, the window opening header flashing was removed and the wall assembly was exposed to additional fire exposure from the room burner. The duration of the exposure was also 30 minutes with the calibrated gas flows from the room burner. At the completion of the exposure, it was observed that the “all plastic” thermal wing melted while the steel reinforced thermal wing remained intact. See Photos 6 & 7 in Appendix B. |

Test Assembly Construction:Test Assembly #1:

- Interior Sheathing – 5/8” Type X Gypsum Board
- Steel Framing – 3-5/8” 20 Gauge Galvanized Steel Framing
- Floorline Saffing – None Utilized
- Exterior Insulation – 2” thick Roxul mineral wool insulation
- Exterior Sheathing – 5/8 inch thick National Gypsum eXP Sheathing
- Air/Vapor Barrier – None Utilized
- Exterior Cladding Attachment – Every 24 inches vertically and 16 inches horizontally, both Hohmann & Barnard 2 Seal Thermal Wing Nut anchors with Hohmann & Barnard 4 inch ties along with nonspecific plastic thermal masonry anchors with 4 inch long metal ties were installed side by side and were fastened through the insulation, through the sheathing, and fastened to the steel studs.
- Exterior Cladding System – 3-5/8 in. x 2-1/4 in. x 7-5/8 in. Grade “A” bricks were used for the exterior cladding. The bottom row rested on the level surface of A 4 in. x 4 in. x 1/4 in. thick floating steel lintel at a distance of 2 in. from the exterior surface of the insulation. A mixture of Type S Mortar and Masonry Sand was used for all mortar joints.

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 specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Intertek-ATI.

For INTERTEK-ATI:

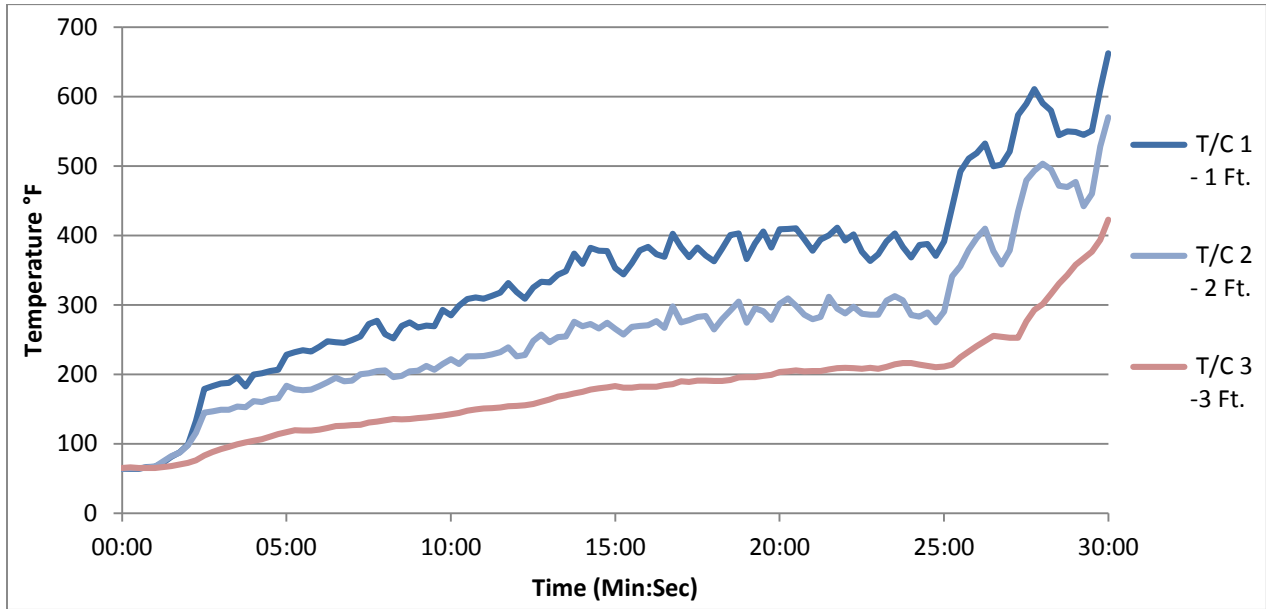
Ethan Grove
Project Manager – Fire Testing

Matthew Freeborn
Manager – Fire Testing

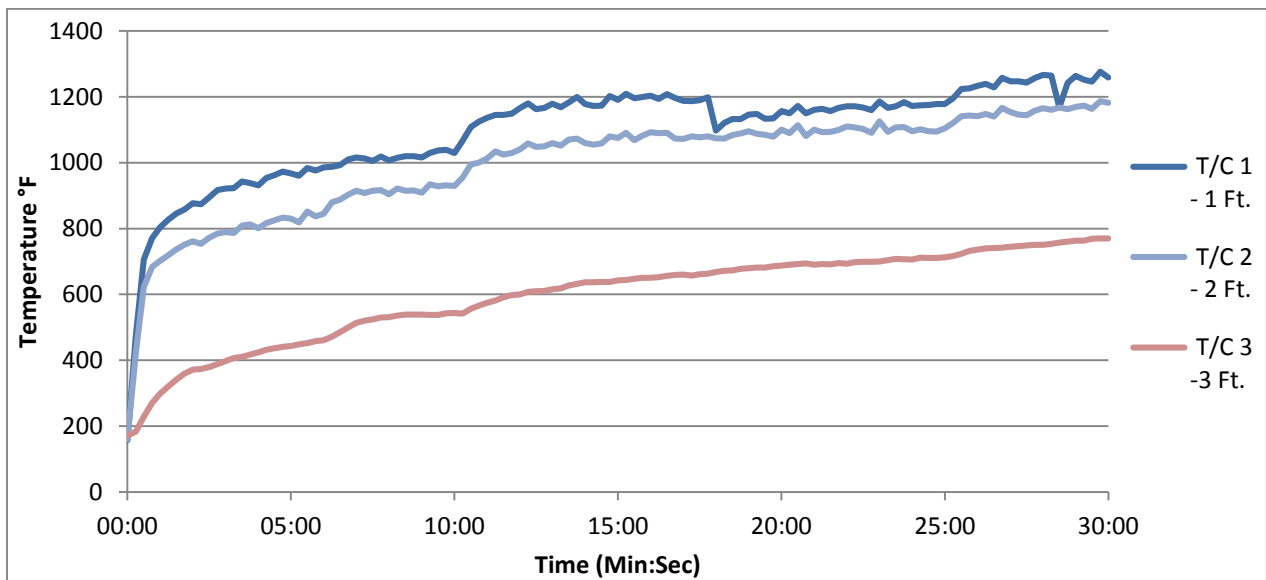
EJG:ddr

Appendix-A: Graphical Data (1)
Appendix-B: Photographs (4)
Appendix-C: Drawings (1)

Appendix A
Graphical Data



Graph No. 1
Air Cavity TC Data (First 30 Minutes)

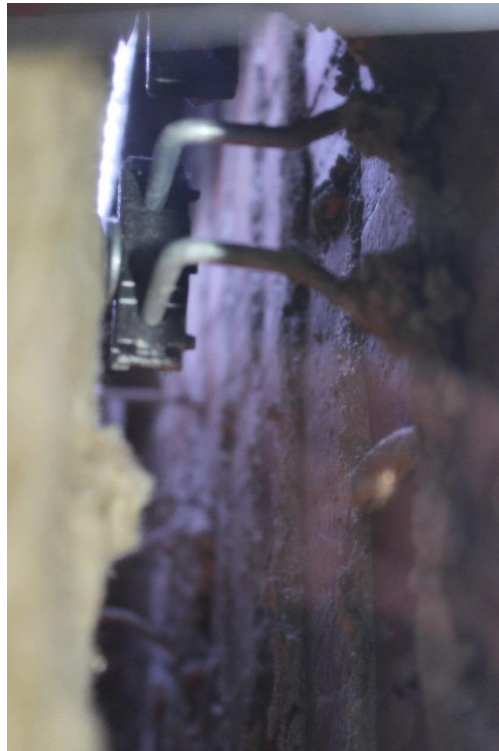


Graph No. 2
Air Cavity TC Data (Second 30 Minutes)

Appendix B
Photographs



**Photo No. 1
Anchor Installation**



**Photo No. 2
Anchor Installation**

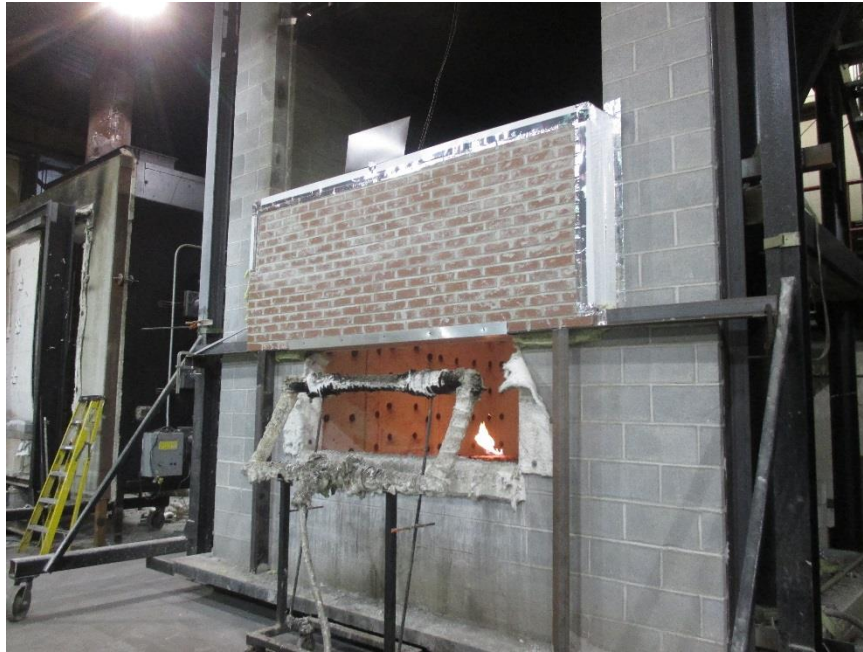


Photo No. 3
Complete Test Sample



Photo No. 4
Beginning of Test



Photo No. 5
Test #2 End of First 30 Minute Exposure



Photo No. 5
Air Cavity during Second Exposure

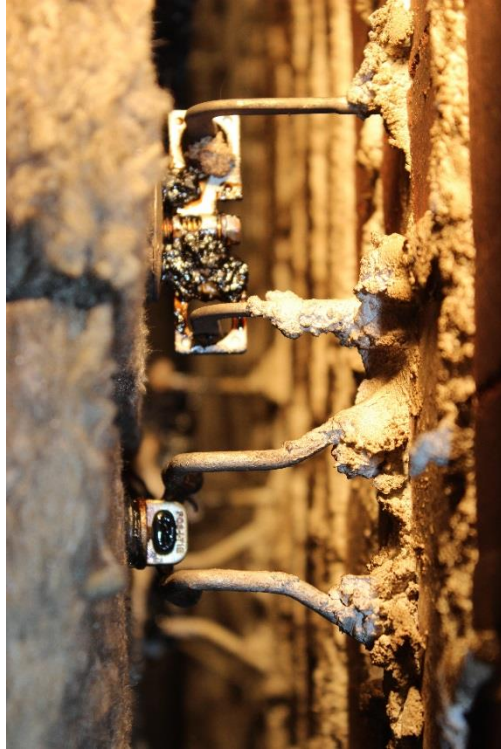


Photo No. 6
Brick Anchors and Ties (After Exposures)



Photo No. 7
Brick Anchors and Ties (After Exposures)

Appendix C

Drawings

