R. W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

10 April 2013

Jeanie Bourke
City of Portland
Planning & Urban Development Dept./ Inspections Division
389 Congress St. Rm 315
Portland, ME 04101

Subject: Sprayed Fire-Resistive Materials Testing Services
The Bay House
Portland, Maine
RWG&A Project No.: 1403-001

Dear Ms. Bourke:

As requested by Marc Gagnon of Landmarc Construction, R.W. Gillespie & Associates, Inc., (RWG&A) would like to inform you that we will be performing testing and special inspection services of sprayed fire-resistive materials (SFRM) for The Bay House project located on Middle Street in Portland, Maine. RWG&A is currently providing materials testing services and special inspections for the project that include soils, concrete, reinforcing steel, structural steel, light gage steel framing and wood construction. It is our understanding that the City of Portland requires that the SFRM also be tested and inspected.

Descriptions of the SFRM services that would be provided are detailed below.

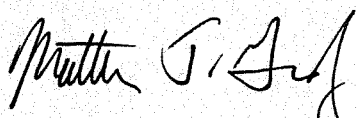
Sprayed Fire-Resistive Materials: A senior construction technologist would test SFRM for thickness, density and cohesion/adhesion strength at frequencies described in the 2009 IBC section1704.12. Tests would be performed in general accordance with the followings standards:

- ASTM E605 - 93(2011) *Standard Test Methods for Thickness and Density of Sprayed Fire-Resistive Material (SFRM) Applied to Structural Members*
- ASTM E736 - 00(2011) *Standard Test Method for Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members*
- AWCI Technical Manual 12-A Third Edition *Standard Practice for the Testing and Inspection of Field Applied Sprayed Fire-Resistive Materials; an Annotated Guide.*

Based on the 2009 IBC, structural beams and columns would be tested for thickness at a frequency of 25% of structural members per floor and for density and cohesion/adhesion at a frequency of 1 test per 2,500 square feet of floor Area. Thickness for decking would be tested at a frequency of 1 test per 1,000 square feet of floor Area and at a frequency of 2,500 square feet of floor area for density and cohesion/adhesion. It is estimated that 128 beams, 20 columns and 6 decks would be tested for thickness. A total of 15 beams, 15 columns and 3 decks would be tested for both density and cohesion/adhesion. Areas that are tested for density and cohesion/adhesion will require re-application of SFRM material.

A summary letter would be prepared at the completion of SFRM testing and sent to you stating whether or not the SFRM was in general accordance with the project specifications, ASTM standards and the 2009 IBC section 1704.12. Please contact me if you have any.

Very truly yours,
R. W. GILLESPIE & ASSOCIATES, INC.



Matthew T. Grady, P.E.
Manager, Materials Testing Services

MTG:md

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