

• Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

CONSTRUCTION OBSERVATION REPORT

Project: The Park Danforth **Client:** The Park Danforth **Client's Rep.:** Ron Norton S.W.COLE Project No.: 14-0065.2 Date: 7-8-16 Weather: Seasonal

Work in Progress: Northern Plasterwork: Remedial work at basement spray fire resistant material (SFRM) to address concerns regarding adhesion/cohesion.

Work Performed by S.W.COLE Rep.: Performed additional adhesion/cohesion testing in accordance with ASTM E736.

General Observations and Discussions: We understand Northern Plasterwork applied a water based bonding agent (Cafco Bond-Seal manufactured by Isolatek International) to the surface of the previously installed SFRM in the basement area during the last week of June. Isolatek technical sales representative Gary Krapish advocated for use of the sealer as a remedial measure in response to indications that the in-situ adhesion values were found to be below the project minimum value of 150-pcf during initial testing. We understand the goal of applying the sealer to the surface of the exposed SFRM was to help bind the surface together in hopes of distributing forces throughout the material. We also understand that some of the beams identified by Northern Plasterwork as having obvious issues with bond were scraped clean and had new SFRM applied prior to the application of the bond-seal.

On 7/5/16, we made a site visit to set up four additional adhesion/cohesion tests and returned on 7/8/16 to complete the testing. Results of retesting performed are as follows:

| Test Location | Failure Type | Force (lbs) | Bond (pcf) | Specification (pcf) |
|---------------------------------|--------------|-------------|------------|---------------------|
| Deck: E to F by 8 to 9 | Cohesion | 10 | 174 | 150 |
| Deck: C to D by 2 to 3 | Cohesion | 20 | 347 | 150 |
| Beam: A.1(+5) from 2 to 3-lines | Adhesion | 8.5 | 148 | 150 |
| Beam: F to G on 7-line | Adhesion | 8 | 139 | 150 |

Time Onsite: Various Attachments: Photos Sheet: 1 of 1 S.W.COLE Rep.: K. Gimpel Rev. by: RED

S.W.COLE was on-site at the request of our client to provide construction materials testing and to observe and document construction activities. The contractor has sole responsibility for schedule, site safety, methods, completeness and quality control.

347 pet 2 4 N 139 pcf on 7-4. Des 544 Beer 174 pcf 148964 1 4 4 8 4 9 Dec A. K.S.) fron 2 4 Bean