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MINUTES

File: **BD-DBCO-Gen**
Date: **18 October 2016**
Time: **11:00 am**
Location: **Surrey City Hall**

Building Division
RS-Wire and Keene Driwal Rainscreen Mat

In Attendance

- Amy Lau, PowerHouse Building Solutions Inc. (PowerHouse)
- Mike Carroll, Trowel Trades Accessories Ltd. (Trowel)
- Mehran Nazeman, PEng, FEC, Manager Building Division
- Gilbert Larocque, CD, PEng, LLB, FEC, Deputy Chief Building Official|Field Inspections Section Manager
- Charlie Hoeller, Building Inspections Supervisor

Background

Mike Carroll and Amy Lau requested this meeting.

Trowel and PowerHouse are two Surrey-based companies. Trowel manufactures and distributes "RS-Wire", a 7/16" crimped self-furring stucco mesh for use with rainscreen drainage mats. It is a reinforcing stucco wire for use overtop of a rainscreen drainage mat – such as the Keene Driwall Rainscreen 10mm represented by PowerHouse – which provides an open drainage material, not less than 9.5 mm thick and with a cross-sectional area that is not less than 80% open, as required by both the 2015 National Building Code (Article 9.27.2.2) and the *2012 British Columbia Building Code* (Article 9.27.2.2).

Trowel and Powerhouse understand that, in the past, the City of Surrey may not have allowed the use of rain screen drainage mats on new construction projects. The City Staff indicated its willingness to meet to discuss rainscreen requirements and how the RS Wire and Driwall Rainscreen 10mm can conform to those requirements.

Discussion

When the *2006 British Columbia Building Code* (*2006 BCBC*), with its then-new capillary break requirements, came into effect, the City of Surrey and most other Authorities Having Jurisdiction (AHJs) were in not in a position to approve a new building component known simply as 'open drainage material'. As well, the *Building Code* did not, and still does not, contain any provision to deal with different cladding systems with respect to backing, attachment and fastening through the undescribed open drainage material. Initially, the City along with most AHJ's leaned heavily on recommending vertical wooden strapping to create the capillary break. Decision BCAB #1690 of the British Columbia Appeal Board dated 20 January 2011 (available at http://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards/building-code-appeal-board/building-code-appeal-board-decisions/bcab-1690) updated the prescriptive requirements of the *Building Code*. The City of Surrey and other AHJs have based their acceptance of any open drainage material 9.5 mm thick and 80% open between cladding, and its required nailing, on the BCAB #1690 decision.

Trowel and PowerHouse expressed their concern regarding the mode of acceptance by the City of Surrey of open drainage mats with flexible backing material and the installation of self-furring welded

wire mesh stucco lath. The City generally requires a third-party registered professional to review the installation of this specific combination of components. Trowel and PowerHouse contend that this requirement leaves them at a competitive disadvantage for it allows builders and stucco contractors other options, all requiring the use of wood furring strips, such as paper-backed wire reinforcement in stucco and stone applications, without the involvement of a registered professional.

RS-Wire (7/16" crimped wire)

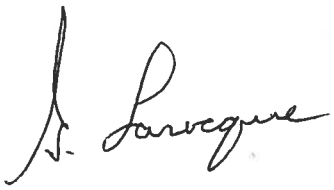
From the perspective of the *British Columbia Building Code*, regular-type welded wire stucco lath (1/4" crimped) applied to open drainage materials does not provide a stiff enough surface to prevent the wire lath from pressing into the drainage material, thereby reducing, or in most cases eliminating, the required 6 mm space between the lath and its surface.

To demonstrate that the RS-Wire with its 7/16" crimp sits off the rainscreen drainage mat, allowing for proper installation of ¾" stucco over top of the system, Mike Carroll exhibited samples of 1. the RS-Wire with the 7/16" crimp; 2. a regular ¼" crimped stucco mesh; and 3. the Keene Driwall Rainscreen 10mm. The City of Surrey Staff agreed that as long as the installer does not overdrive the stucco mesh into the open drainage mat, the 7/16" crimp on the stucco mesh suitably interfaces with the rainscreen drainage mat. The City Staff requested that Trowel and PowerHouse make it clear on their respective websites and through training, that only the specific RS-Wire – not regular ¼" self-furring lath – can be used with an open drainage material as a full system. This system, if installed to the specifications of the manufacturers of both the open drainage material and the self-furring stucco lath, will not require the involvement of a registered professional to review its installation.

Keene Driwall Rainscreen 10 mm

The City of Surrey Staff indicated their understanding that Decision BCAB #1690 of the Building Code Appeal Board allowed for the use of any approved open drainage material. The City Staff confirmed that the use of the Keene Driwall Rainscreen 10 mm is deemed compliant for the purpose of providing a capillary break and will be accepted by the City as a prescriptive solution under Clause 9.27.2.2.(1)(b) if adequate details are provided on the relevant drawings, without the reference to Part 5 of the *Building Code* or the need for a review by a registered professional. Futher, the use of the Keene Driwall Rainscreen 10 mm will be allowed in combination with the various claddings listed in Section 9.27 of the *Building Code*. In all cases, the proper detailing and installation of any approved open drainage material as per the manufacturer's installation instructions is required. Should issues arise with respect to the installation of the Driwall Rainscreen 10 mm and its associated cladding, the City of Surrey reserves the right to call upon PowerHouse to inspect same and to provide proper recommendations, or, in the alternative, the City may demand that a registered professional review and provide sealed documentation in a format and wording acceptable to the City Staff.

The meeting was adjourned at approximately 11:30 am.



G. Larocque, CD, PEng, LLB, FEC
Deputy Chief Building Official | Field Inspections Section Manager