



Sealants, Adhesives and Membranes Oh My!

By Rich Porayko

I confess that as a glass marketing guy with a background in IG manufacturing most of my experience with sealants has been geared toward the primary and secondary seals of an insulated glass unit.

Which is why I was pleased to hear that the topic of the GCABC's latest breakfast session was "New Innovations in Structural Adhesives, Insulations and Membranes". And as usual, the breakfast meeting did not disappoint. I walked away from the panel session with a much better understanding of some of the current challenges and solutions facing the industry.

Case in point, Viracon has been receiving a ton of press recently due to the recall of thousands of IGUs made with defective Dow 982 silicone. The ripple effect of how this impacts glazing contractors and other IG manufacturers is significant. Coincidentally, Chris Combs, Sales Manager of GCABC member Dow Corning Canada Inc. was one of the presenters at the meeting, who provided a summary of the recall as well as a great presentation on their new Dow Corning 758 Silicone Weather Barrier Sealant.

Dow 758 is a neutral one part (primerless) silicone sealant, designed for adhering to low-energy and high-energy surfaces common in sheet or peel and stick weather resistant barriers. According to Chris, the product exhibits durability and physical characteristics similar to other typical silicone sealants including passing 5,000 QUV accelerated weather testing.

The product provides primerless adhesion to commercially available weather barriers:

- Spun bond polyolefin
- Foil
- Polyethylene

Dow Corning 758 Silicone Weather Barrier Sealant also allows primerless adhesion to common building substrates

- Anodized aluminum
- Galvanized steel
- Fluoropolymer coatings
- Mill-finish aluminum
- PVC

Blair Bennett of Soprema presented a very informative session on self-adhered pressure sensitive air and vapour barrier membranes. According to Bennet, the advantages of self-adhesive membranes compared to torch and liquid applications are:

- Much cleaner application
- No specialized equipment
- Fast and cost effective
- No fire safety concerns
- Factory controlled thickness
- No curing time required

Soprasedal Stick 1100T is available in a 40 mil (1.0 mm) thickness and has 225 square feet gross coverage in a vertical or horizontal application. Soprasolin HF is available in 1 metre x 10 metre rolls and is 40 mil (1.0 mm) thick with a foil facer for UV stability.

Steve Austin, Global Technical Service Specialist for 3M provided a very comprehensive presentation on 3M's VBH Structural Glazing Tape which 3M is promoting as the Next Generation Adhesive for Curtain Wall Glazing.

According to Austin, the product is a double-sided, pressure-sensitive, closed-cell, all acrylic foam tape which is extremely durable and UV & Weather Resistant for permanent exterior and interior bonding. 3M claims the VBH Structural Glazing Tape is "Emerging Bonding Technology" that replaces traditional wet glazing structural sealants and spacer tape/gaskets, is very high-strength and can bond to variety of materials.

Austin stated that the advantages/benefits of the 3M's VBH Structural Glazing Tape includes:

- Alternative to wet glazing
- Increased productivity
- Process and quality control
- Overall reduction in cost
- Performance requirements
- Durability
- Viscoelasticity
- Energy absorption - provides strength
- Stress relaxation - protects the bond
- 100% closed cell - provides sealing
- Fully tested to meet global structural glazing requirements
- Immediate handling strength
- Proven since 1990 in thousands of structural glazing applications

Dave Nowak, Technical Sales Representative for GCABC member Crossroads C&I Distributors, provided a complete overview on Roxul Insulation including the origins of mineral wool and the manufacturing process as well as the product's impact on LEED and Green Building.

Essentially, stone wool (Roxul Insulation) originates as a byproduct from volcanic activity on the islands of Hawaii. In its manufactured state, stone wool combines the power of rock with the characteristics of typical insulation wool.

Novak claims that Roxul blanket and board insulations add value to commercial buildings by enhancing the sound transmission, fire resistance and thermal resistance qualities of several types of wall systems. Novak also stated that Roxul products help builders earn up to 22 points towards LEED certified projects in the USA and Canada.

Have a great summer! I look forward to seeing you all at the Canadian Glass Association's Glass Connections 2010 in September!

Rich Porayko is the Social Media Correspondent for the GCABC and is a professional writer & founding partner of Construction Creative, a marketing and communications company located in Metro Vancouver, BC richp@constructioncreative.com