

T3 Solutions



Joerg Birkelbach, Rob Brath

jbirkelbach@tremcoinc.com

rbrath@tremcoinc.com

Friday, April 26, 2013



Agenda

- Making the connections
- What is T3?
- Technical - Testing Update



Agenda

- Making the connections
- What is T3?
- Technical - Testing Update



Integrated Building Solutions

What does “integrated” building solutions mean to Tremco?

CONNECTIVITY



Integrated Building Solutions

Connectivity:

- It's not about the window or wall but how they come together!
- It's about addressing issues like sequence of installation and compatibility.
- It has always been about bridging the gap between similar or dissimilar substrates.
- It's about Tremco being “uniquely” positioned to address the matter of integrated solutions.

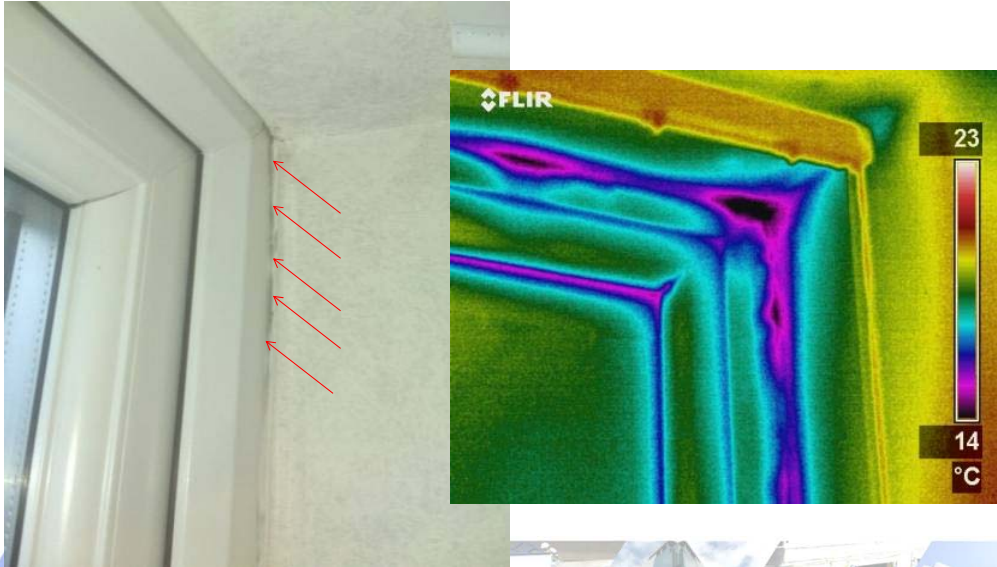


Envelope Performance

“Distributed Blame” is why forensic building envelope engineering is quickly growing component in design practice.



Thermal Seal



Traditional Seal





Self-Adhering Air Barrier Membranes

- How would you span this size gap with SAM with-out support



Self-Adhering Air Barrier Membranes



It is not about the
WINDOW OR WALL
but how they come together!



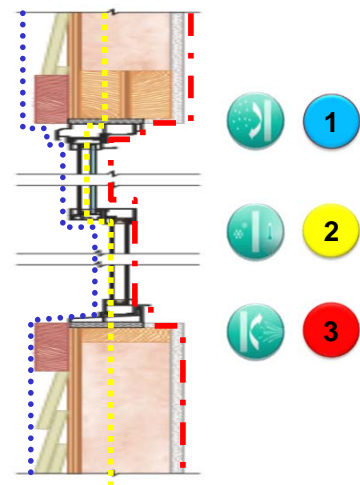
LAST WEAK LINK

Agenda

- Making the connections
- What is T3?
- Technical - Testing Update



What's The Answer?



TREMCO
Commercial Sealants & Waterproofing



What is T3?

T3 is a systems approach to seal out weather around window and doors while sealing in comfort and energy savings. The system is comprised of an outer, middle and inner layer which can be a single product or consist of a series of products based on application needs.



Outer seal

Provides a weather protection level while allowing for vapor diffusion.



Middle layer

Provides a thermal layer by filling the gap between the window frame and the wall.



Inner seal

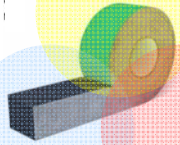
Provides an airtight separation for the inside environment, serving as a vapor retarder to ensure occupant comfort.



What is the T3 Toolbox?

ExoAir Trio

3 sealer in one



ExoAir LEF

Low Expansion PU Foam for Sound & Thermal Insulation



ExoAir Duo Membrane

Intelligent Seal for Airtight Internal & Weather tight External Joints

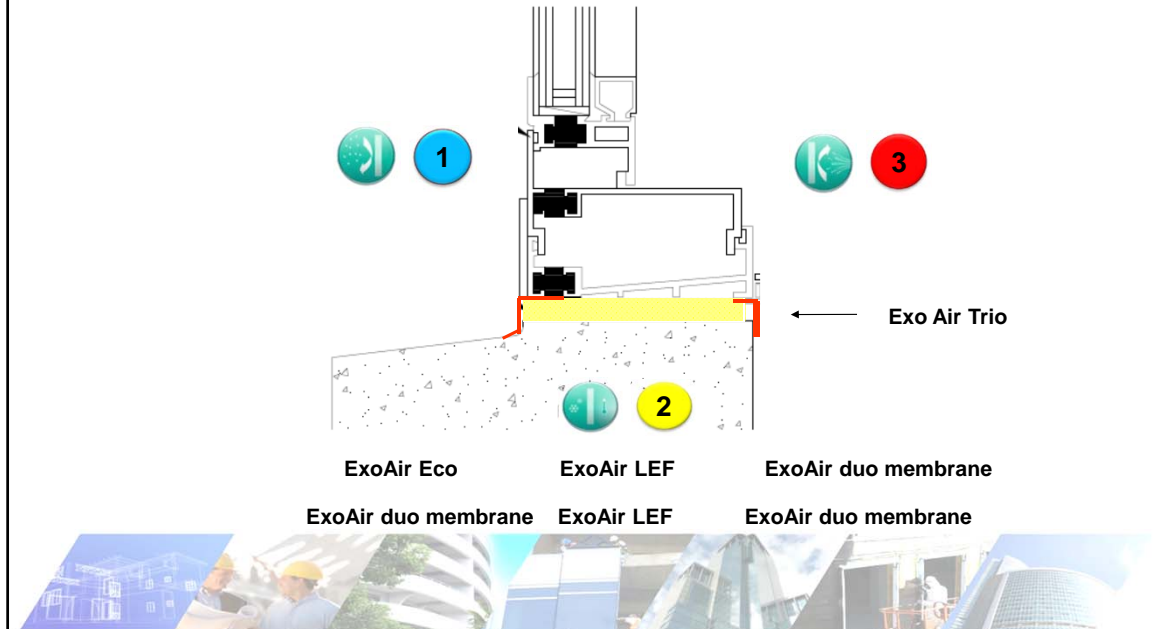
ExoAir eco



ETA



What Makes T3 Technology Stand Out?



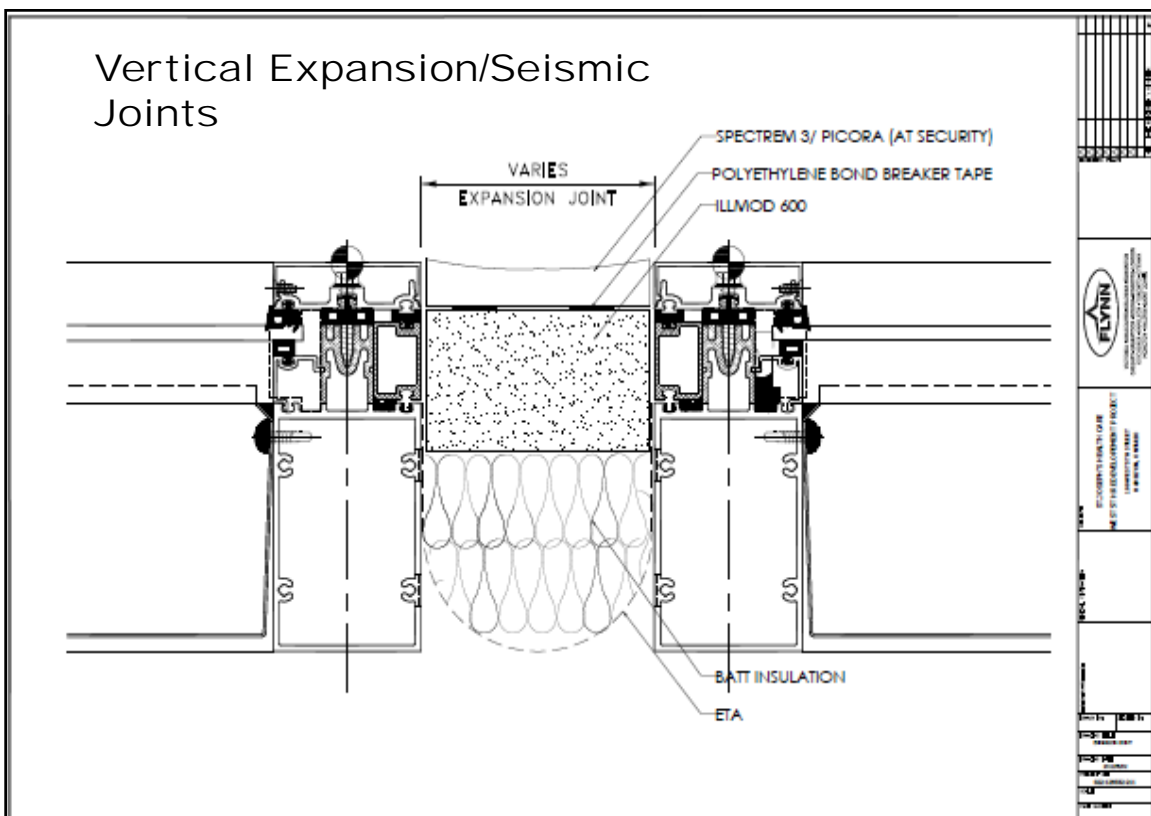
Application Opportunities, Success Stories















School Project in Newcastle



School Project in Newcastle



Self-Adhering Air Barrier Membranes



Testing



Test Mock-up ASTM E2357

Plywood window does not equal



Real-World

So I ask, where should the focus be to deliver an effective REAL-WORLD Air Barrier?



Custom made testing



Proglaze ETA

System 3 – Pressure Bar System



Title	Summary of Results
Air Infiltration	< 0.01 cfm/ft²
Static Water Resistance Test Pressure	15.0 psf
Dynamic Water Resistance Test (115 mph)	34.6 psf
Uniform Load Deflection Test Pressure	±100.0 psf
Uniform Load Structural Test Pressure	±150.0 psf





Testing- Air Leakage

Standard	ECO-LEF-DUO	Trio	Duo-LEF-Duo
ASTM E 283 – Standard Test method for determining rate of leakage through exterior windows	0.0045 CFM/sft @ 75 Pa	0.0075CFM/sft @ 75 Pa	0.004 CFM/sft @ 75 Pa



Testing-Water Leakage

Standard	ECO-LEF-DUO	Trio	Duo-LEF-Duo
ASTM E 331 – Standard Test method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain walls by Uniform Static Air Pressure	1500 Pa	750 Pa	1200 Pa

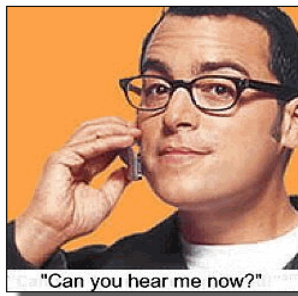
100 Pa (28.8 mph) 300Pa (50 mph)



43

Sound Transmission Class

Standard	ECO-LEF-DUO	Trio	Duo-LEF-Duo
ASTM E 90 – Standard Test method for laboratory measurement of sound transmission loss of building partitions and elements	STC 50	STC 54	STC 50



44