Successful architects, spec writers and commercial contractors know about Thermafiber’s superior fire protection properties.

- Thermafiber pioneered curtain wall fire containment with UL tested designs using high-density mineral wool curtain wall insulation.
- Then Thermafiber improved the systems with Firespan® curtain wall insulation, a better quality, performance engineered product.
- Now, Thermafiber has set a new benchmark for the industry with IMPASSE, the system design that stops fire and smoke, period.

What’s different about IMPASSE? It is designed for better integrity and greater reliability in the face of flames, smoke, and hot and turbulent air. It is faster and easier to install. And it is still budget conscious.
It’s About Time!

That’s what an investment in the IMPASSE® Curtain Wall Insulation System buys you.

- **Fire Protection Time** – Built with FireSPAN® Mineral Wool, this curtain wall insulation system enjoys ratings up to 3 hours and has demonstrated superior perimeter fire and smoke containment. That’s the time firefighters need to save lives and extinguish the blaze.

- **Supervision and Inspection Time** – This system improves the precision of the installation and virtually eliminates errors. No need to rework problem areas.

- **Inspection Time** – Most installers report a man-hour savings compared with other systems. This enables them to compensate for the added cost of specialized installation materials.

IMPASSE enables installers to position FireSPAN blankets more precisely, mount them faster, and secure them better than any other curtain wall insulation system available. It saves time for everyone involved – especially building occupants and first responders.

The IMPASSE Advantage

IMPASSE streamlines installation by employing some structural elements and changing the order of traditional installation steps so that components fit better, assemble faster and assure system performance. The system also takes full advantage of the fire-protective, sound control, thermal control and vapor barrier properties of Thermafiber FireSPAN Curtain Wall Insulation and Thermafiber Safing Insulation. The IMPASSE system has already been tested and approved by Underwriters Laboratories, Inc. Ratings up to 3 hours are achievable with this system.

Unlike traditional curtain wall insulation systems, which call for the installation of impaling pins on spandrel panel frames prior to installing the insulation blankets, the IMPASSE system calls for blade-like insulation support hangers to be inserted into pre-cut FireSPAN insulation blankets before attachment to framing. Following steps in this order makes it much easier for installers to position the insulation for maximum effectiveness, and simply requires that installers attach the insulation support hangers to the framing after the blanket is properly positioned. Screws used for attachment are then covered by another layer of FireSPAN insulation (mullion covers) to protect the fasteners and mullions from intense heat in the event of a fire.

While the IMPASSE method of installation can be used effectively with a number of tested and approved designs, the proprietary IMPASSE system uses a T-Bar backer to improve compression of Safing Insulation at the floor slab edge.
1. Attach T-Bar support brackets to curtain wall framing.

2. Position and attach backer bar (T-Bar).

3. Impale horizontal and vertical hangers into the insulation board then install locking washer. Bend one fork tyne up and the other fork tyne down.

4. Position lower curtain wall spandrel insulation with top edge against backer bar.

5. Screw attach the horizontal hangers to the T-Bar. Then screw attach the vertical hangers to the face of the mullions.

6. Install top curtain wall insulation blanket, with insulation support hangers inserted in the same fashion as for lower blanket, and screw attach.

7. Compression fit safing insulation between floor slab and FireSpan Curtain Wall Insulation at the T-Bar location.

8. Install mullion covers and secure with Thermafiber Spiral Anchors.

9. Apply smoke sealant.
Limitations
This system is not approved for use in systems that were not formerly approved for Thermafiber FireSpan curtain wall insulation. No substitution of materials is authorized. Any substitution of materials, including T-Bar assembly components, curtain wall insulation, safing insulation, insulation support hangers, or safing clips, will render the tested fire rating and any warranty, expressed or implied, null and void.

Insulation Hangers - Hanger blades are inserted into insulation boards first, then they are screw attached to the mullion face. Flat hanger blades make insertion more accurate and provide more support for keeping insulation in place. Speeds assembly.

T-Bar Support Brackets - These attach directly to vertical mullions to maintain proper position. Improves system integrity.

Lower FireSpan® Curtain Wall Spandrel Insulation - Pre-cut to size, this insulation installs against T-Bar backer bar and reaches to 2” below the top of the floor slab. Speeds assembly.

Locking Washers - Quickly fasten to ends of hanger blades to hold all insulation components together. Improves reliability.

T-Bar - This bar provides a rigid abutment to maintain compression of safing insulator at the floor slab edge. Improves system integrity. Speeds assembly.

T-Bar Clip - This clip secures one side of the T-Bar allowing for expansion and contraction.

Upper FireSpan® Curtain Wall Spandrel Insulation - Pre-cut to size, this insulation installs over the top of the T-Bar. Improves system integrity, reliability.

Mullion Cover - Insulation board protects mullions and hanger fasteners.

Safing Insulation - Compression fit between insulation blankets and the floor slab edge. The T-Bar makes this step easier and more predictable.

Mullion Cover Spiral Anchors - Screw-in attachment makes installation of mullion covers safer, easier and more secure. Speeds assembly, improves reliability.

Smoke Sealant - Spray-applied sealant seals seams and abutments to block the passage of smoke. Improves reliability.

Here’s what makes Impasse so different

Insulation Hangers

T-Bar Support Brackets

Locking Washers

T-Bar

T-Bar Clip

Upper FireSpan® Curtain Wall Spandrel Insulation

Mullion Cover

Safing Insulation

Mullion Cover Spiral Anchors

Smoke Sealant