Explore limitless possibilities.

PERIMETER FIRE BARRIER SYSTEMS
A building’s facade is distinctive. Perimeter fire barrier systems in high rise construction are an important life safety consideration, but sound fire containment practices should not interfere with design aesthetics. As a designer or builder, you need perimeter fire barrier systems that afford adaptability to work with your design, and STI can help.

System Coverage Breadth Matters
Perimeter fire barrier systems are code mandated, and code officials or inspectors verifying building code compliance scrutinize slab-edge conditions. STI can keep your projects on track with more tested and listed systems that assure code compliance.

Codes & Technology
Curtain wall perimeter fire barrier systems are tested to ASTM E2307. This test method uses a two-story structure known as the intermediate scale multi-story test apparatus (ISMA). The ISMA structure subjects the test assembly to fire exposure from two sides simultaneously with an exterior burner that replicates a fire induced window break.

Tested and Listed Systems Ensure Code Compliance
STI Firestop understands the nuances of curtain wall and perimeter fire barrier systems because of our commitment to research and development. With more tested and listed systems for perimeter fire barrier systems than any other manufacturer, our versatile solutions conform to virtually any job site condition.

Protect your creative vision with real world firestop solutions.

Most UL® Systems
STI has more UL® Certified perimeter fire containment systems than all other suppliers combined.

* Source: UL® Directory as of 10/15/2016
STI offers the complete breadth of tested coverage that provides designers the flexibility to execute their creative vision while ensuring ongoing code compliance and life safety.

**Back Pan Curtain Walls**
Our patented safing shelf system replicates real-world curtain wall construction. It is the only practical system that can be built in a factory.

**Shorter Spandrels, Lower Sill Heights**
Accommodates more vision glass.

**More Facade Types**
Glass (opaque or clear), aluminum, stone, brick veneer, EIFS, GFRC, precast concrete, composite metal panels, and more.

**Multiple Insulation Attachments**
A variety of tested methods, to support and attach curtain wall insulation, offer unmatched flexibility in the field and lower the overall cost of installation.

**Pipes & Cables Through Floor Gap**
Pipes for radiators or electrical cables are tested to pass through the safing gap.

**Fire Ratings**
Tested and listed systems up to 4 hours.

**All Major Mineral Wool Brands**
Testing for all commercially available mineral wool brands.

**Block Smoke Leakage**
Low L Ratings (<1 CFM/LF) are included in the systems to confirm ability of coating to limit air and smoke movement.

**Real World Movement**
Dynamic tests replicate real-world movement ranges and remain practical to install for construction workers using common tools and methods.

"STI has the UL® tested designs and field support that limits liability and exposure while providing cost-effective peace of mind. It’s why CDC and STI work closely together."

J. Warbrouck
Senior Consultant, Curtain Wall Design & Consulting Inc.

STI offers the complete breadth of tested coverage that provides designers the flexibility to execute their creative vision while ensuring ongoing code compliance and life safety.


**Backpans**

Uniized backpan designs have become increasingly popular, presenting a multitude of new challenges under fire conditions. During a fire, deflection of the steel backpan can cause severe repercussions on the performance of the spandrel insulation, the safing insulation, and the firestop spray—all of which are designed to maintain the integrity of the wall to meet code requirements.

- One or two-piece tubular aluminum frames
- Minimum 22 gauge flush or recessed steel backpans vs. 18 gauge

**Aluminum Frames**

STI has the most extensive testing for aluminum framed curtain walls whether factory-built unitized or field-fabricated stick. Our UL® Certified Systems provide the flexibility you need to complete your project on time with demonstrated code compliance.

- Multiple spandrel types
  - Transparent or opaque glass panels
  - Aluminum or aluminum composite panels
  - Stone
- Optional shadow box systems for transparent glass panels
- Multiple spandrel insulation attachment methods
  - Continuous steel angles
  - Hat channels
  - Insulation hangers and steel pins
- Tested by multiple insulation manufacturers
- Optional penetrations in the safing slot
- Documented L Ratings

**Real world attachments**

Compatible with all major mineral wool brands

The Bow
Calgary, CAN

Westin Hotel
Charlotte, NC

The Residences at Marina Gate
Dubai, UAE

FMC Tower
Philadelphia, PA

1450 Brickell
Miami, FL

Wilshire Grand
Los Angeles, CA

1144 15th Street
Denver, CO

Comcast
Philadelphia, PA
Coverage for precast concrete or GFRC is another one of our specialties, and our UL® Certified Systems are the most comprehensive.

- Lower sill heights for windows
- Traditional precast panels or precast composite panels (e.g. Slenderwall®)

- Real world GFRC on tube steel frames with flex rods
- Insulated or non-insulated designs
- Tested by multiple insulation manufacturers
- Documented L Ratings

STI has extensive testing with steel-framed exterior walls with EIFS or a variety of different veneers, offering the very best package of UL® Certified systems for common jobsite conditions.

- Lowest sill heights for windows
- Common steel stud configurations
  - Coverage for cantilevered track conditions
  - King stud options

- Gypsum sheathing or cementitious backer units
- Multiple exterior finishes:
  - EIFS
  - Aluminum or steel siding
  - Brick veneer
  - Stucco
  - GFRC
- Glass fiber or mineral wool insulation options
- Penetrations through the safin slot
- Documented L Ratings
- No gypsum on underside of wall
Introducing a new firestop coating specifically designed for curtain wall safing applications, SpecSeal® Safing Spray. Safing Spray is a higher solids, elastomeric coating that meets the exacting criteria of ASTM E2307 for use in perimeter fire barrier systems.

Safing Spray features a premium latex binder system that, once dry, is totally resistant to water and will not re-emulsify. The fast-drying formula is tack free in <2 hours and completely dried through in 24-48 hours (dependent upon temperature and humidity). In the wet stage, it allows for easy cleanup with water and has extremely low VOC’s to meet demanding regulatory requirements. When dry, it forms a flexible shield against spread of fire, hot gases, and smoke.

Safing Spray’s unique chemistry makes it particularly well-suited for slab-edge conditions. It is able to bridge gaps or irregularities in mineral wool safing, and to work around curtain wall mounting anchors. It is the perfect balance of elasticity and hardness for the most demanding construction environments. It can even be applied to vertical surfaces without sagging, making it a great choice for slab-edge transitions to vertical columns or shear walls.

Dual-purpose firestop coatings that are used for both perimeter fire barrier systems and head-of-wall joint systems are made from the most flexible polymeric materials to allow for greater deflection movements in head-of-wall joint conditions where walls abut floors or roof decks. While curtain walls can also see movement caused by thermal cycling, windsway, or even seismic activity, the net effect of said movement on the safing system is not the same due to the method of anchoring. Accordingly, Safing Spray provides the perfect amount of elasticity to accommodate movement while also featuring a tougher surface to resist damage from construction debris, making it a better choice than so-called hybrid products. As a comparison of hardness, the durometer of most dual-purpose firestop coatings has the approximate hardness of a pencil eraser, whereas Safing Spray is more analogous to a high-performance vehicle tire. This attribute is desirable for slab-edge conditions on busy construction sites where the safing system can be unenclosed and vulnerable until finishes such as knee walls are applied.

SpecSeal® Safing Spray is approved as an alternate to SpecSeal® AS200 Elastomeric Spray and Fast Tack® Firestop Spray in all UL Certified perimeter fire barrier systems. Safing Spray is also acoustically tested to help mitigate sound transmission through the safing gap between floor and curtain wall.
STI offers two grades of elastomeric firestop spray developed to accommodate varying degrees of movement, vibration, and seismic activity. Each can be used within all STI Perimeter Fire Barrier Systems as deemed necessary by field conditions or project specifications.

AS200
SpecSeal® Series AS200 Elastomeric Spray is a flexible, water-based latex formula that offers up to 50% movement. It is easy to apply via airless spray equipment and easy to clean up with water. It dries quickly and is water-resistant once fully dry.

FastTack
SpecSeal® Fast Tack Firestop Spray is a flexible, hybrid-polymer formula that cures in the presence of moisture. It is suitable for all-weather conditions, including foul weather and extreme cold or impending rain.
- All-weather formula
- Applies and dries below freezing
- Tack-free in 35 minutes
- Water and washout resistant

CP100
CP100 represents another industry first and is now the only UL® Certified System (No. CW-D-1032) for protecting undermount curtain wall connections. The patented molded design encapsulates framing connections for optimal anchor insulation that provides superior heat resistance during a fire. It’s made with a refractory ceramic material that includes a proprietary intumescent technology, coupled with a compressible fiber blanket to withstand up to two hours of fire exposure, protecting aluminum anchors, maintaining the integrity of the connection, and minimizing potential panel shedding.
- Provides measurable anchor protection
- Eliminates job site application variables
- Helps ensure code compliance
- Simplifies passing inspections
- Installs in minutes with concrete fasteners
- Works with multiple anchor designs
- Encapsulates framing connections
- Offers superior heat resistance
Your **Success** is Our **Success**

STI is dedicated to providing our clients and partners with the industry’s most advanced cost-effective solutions for perimeter fire barrier systems. Whether you are an architect, curtain wall consultant, or glazing contractor, STI offers the products, training, and support to help you get it right from the onset throughout all phases of the project. Call STI to find out how we can help you with your next project.

**Prominent Curtain Wall Projects**

- **600 Brickell, Miami, FLA**
- **BofA Corporate Center, Charlotte, NC**
- **1180 Peachtree, Atlanta, GA**
- **Bank of America, New York, NY**
- **MTB Abu Dhabi Airport, Abu Dhabi**
- **Aldar HQ Building, Abu Dhabi**
- **Bab Al Qasar Hotel, Abu Dhabi**
- **State Audit Bureau Towers, Qatar**
- **World Trade Center – West Bay, Qatar**
- **Cleveland Clinic, Abu Dhabi**
- **KAFD – King Abdullah Financial District, SA**
- **ITCC, Riyadh, SA**

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**STI**

**FIRESTOP**

**SPECIFIED TECHNOLOGIES INC.**

[stifirestop.com](http://stifirestop.com/cw)

For more information visit www.stifirestop.com/cw or contact your local sales representative at 800-992-1180.

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