Explore limitless possibilities.

PERIMETER FIRE BARRIER SYSTEMS
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.

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.

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

Protect your creative vision with real world firestop solutions.

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.

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.

“STI provides unmatched technical support for perimeter fire barrier systems.” — Jim Warbrouck, Senior Consultant, Curtain Wall Design & Consulting Inc.

“STI provides unmatched technical support for perimeter fire barrier systems.”
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."

Jim 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

Unitized 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

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

Aluminum Frames

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

Lowest sill and spandrel heights

Optional framing covers above the slab

Multiple insulation attachment methods

Lower sill heights allows for more vision glass

ALUMINUM FRAMES

- Lowest sill and spandrel heights
- Multiple spandrel types
  - Transparent or opaque glass panels
  - Aluminum panels and stone panels
  - Aluminum composite panels
- Optional shadow box for transparent glass panels
- Tested by multiple insulation manufacturers
- Shortest transom spacing
- Shortest sill heights
- Documented "L ratings"
- Penetration in the safing slot
- Vertical shear movement

STI Tower
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
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.

**Fast Tack**

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**

For more information visit [www.stifirestop.com/cw](http://www.stifirestop.com/cw) or contact your local sales representative at 800-992-1180.

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