Firestop Sprays **Expansion Joint Systems**

Spray applied firestopping coatings for curtain wall and fire resistive joint applications as well fire rated expansion joint systems.



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Firestop vs Expansion Joints



- ✤ Expansion joints tested for 50 100 % movement
- Designed for aesthetics with various cover plate or elastomeric seal designs.
- Significant cost using an EJC system
- Joints designed up to 72 inches (Seismic & Thermal)
- Dry System "No Cure Time"
 - ce in Existing
- Curtain Wall and FRJ joints tested for 15 30 % movement.
- ✤ Most FS spray applications are hidden from sight.
- More Cost effective regarding cost & labor.
- Joints designed up to a max 8 inches (Seismic, Thermal & Wind sway).
- ✤ Wet System "Requires Cure Time"



3rd Party Testing Requirements



- ✤ ASTM E 1966 & E 1399 (UL 2079)
- ✤ W Ratings Not Recommended
- L Ratings Optional
- ✤ Seismic & Thermal (25 100 %)



- * ASTM E 1966 & E 1399 (UL 2079)
- ✤ ASTM E 2307
- W Ratings Optional
- ✤ L Ratings (< 1 CFM)</p>
- Seismic, Thermal & Wind Sway (30 % or Less)



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Types of Firestop Spray (Chemistry)

Waterbase Sprays



- Limited Flexibility
- Longer Cure time (7 14 days)
- Temperature Dependent (40 Degrees)
- Competitively Priced
- Easily wash out

Silicone Sprays



- Flexible and Excellent Adhesion
- Short cure time and pot life
- Applied at colder temperatures
- ✤ 2 3 X cost compared to waterbase



Firestop Contractors International Association



Types of Curtain Wall Applications

Spandrel Glass

No Mullion Covers Required

Full Vision Glass





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FCI/

Types of Curtain Wall Applications

Exterior Gypsum Sheathing

6 – 8 in. Steel Stud Framing

Types of Curtain Wall Applications

Concrete Panel

Tilt up Panels

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Fire Resistive Joint Applications

Head of Wall Gypsum

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Wall to Wall

Types of Fire Barrier Products

Ceramic Fiber or Blanket (5 – 72 in.) joints

Intumescent Sheets / Rolls (2 – 4 in.) joints

Types of Fire Barrier Products

Intumescent coated (Compressed Foams) (1 – 6 in.) joints Intumescent Foams (1 – 4 in.) joints

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Types of Floor EJ Cover Plate DesignsOut Applications 50 – 100% MovementSurface Mounted 50 – 100% Movement

Block Out Applications 50 – 100% Movement

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Floor Expansion Joints – 2 in. or Less

Elastomeric Seals – 25 % movement

Intumescent Strip – 25 % movement

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Floor Expansion Joints – 2 in – 4 in.

Block Out EJ Cover Plate 50 – 100 % Movement

Intumescent Foam 50 - 75 % Movement

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Floor Expansion Joints 2 – 4 in.

Surface Mounted EJ Cover Plate 50 – 100 % Movement

Intumescent Sheets or Troughs 50 - 100 % Movement

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Floor Expansion Joints 1 – 6 in.

Surface Mount or Block Out EJ Cover 25 – 50 % Movement

Intumescent Coated (Compressed Foam) 25 – 50% Movement

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Floor Expansion Joints 6 – 24 in.

Surface Mount or Block Out EJ Cover 50 - 100 % Movement

Ceramic Fiber or Blanket 50 – 80% Movement

Types of Wall EJ Designs Elastomeric Seal & Compressed Foam

Surface Mounted Applications

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Wall Expansion Joints – 2 in – 4 in.

Surface Mounted or Elastomeric EJC 50 – 100 % Movement

Intumescent Foam FB 50 - 75 % Movement

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Wall Expansion Joints 2 – 4 in.

Surface Mounted EJ Cover Plate 50 – 100 % Movement Intumescent Sheets or Troughs 50 - 100 % Movement

Floor Expansion Joints 1 – 6 in.

Intumescent coated (Compressed Foam) 25 – 50% Movement

Wall Expansion Joints 20 – 48 in.

Surface Mount or Block Out EJ Cover – 50 – 80 % Movement Ceramic Fiber or Blanket 50 – 80% Movement

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Questions & Answers

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