

I-Stud for Fire Rated Cavity Shaftwall/Stairwell Assemblies

Product Benefits

- Phillips I-Stud for Fire Rated Cavity Shaftwall/Stairwell Assembly has been designed and tested to withstand positive and negative air pressure forces exerted by high-speed, high-rise elevators (pressure tables included in ICC ES, Inc. Legacy Report ER 3579). This I-Stud Shaftwall Assembly is non-load bearing.
- The I-Stud Shaftwall/Stairwell Assembly has been fire tested and has achieved fire resistance ratings from 1 to 4 hours as listed in the Gypsum Association GA-600 Fire Resistance Design Manual. All components are noncombustible.
- The I-Stud Fire Rated Cavity Shaftwall/Stairwell Assembly is very lightweight compared to conventional shaftwall/stairwell assemblies.
- The assembly would include 1" fire and moisture resistant gypsum board for protection against weather during installation.

Limitations

- Non-load bearing.
- This assembly should not be used where exposure to constant dampness or conditions under which free water can be formed.
- This assembly should not be exposed to temperatures over 125°F (52°C) for extended periods of time.

Assembly Certifications

- ASTM C 1396 Standard Specification for Gypsum Board
- ASTM C 645 Standard Specification for Nonstructural Steel Framing Members
- ASTM E 72 Standard Test Methods of Conducting Strength Test of Panels for Building Construction
- ASTM E 90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions
- ASTM E 119 Standard Test Methods for Fire Tests of Building Construction and Materials
- ICC ES, Inc. Legacy Report ER-3579 and ER-4924 One and Two Hour Fire-Resistive Shaftwall/Stairwell/Partition Systems
- ICC ES, Inc. Legacy Report 89-35.01 I-Stud Cavity Shaftwall System
- ICC ES, Inc. Legacy Report 95-25B Fire Resistance Construction and Sound Insulation
- UL Design No. V433, U497, U498, U499
- Warnock Hersey (Intertek) Design No. PMC/WA 60-01, PMC/WA 120-01, PMC/WA 120-02, PMC/WA 180-01

Accessories

- Vinyl E-Z strip or 093 zinc expansion control joint
- Wallboard corner bead
- Joint compound
- Joint tape
- Resilient furring channels
- Acoustical sealant – resilient, non-hardening
- Grout (plaster) (joint compound)
- Mineral wool or glass fiber insulation
- Type S-12 bugle head screws: 1", 1-5/8", 2-3/8" or 2-5/8"
- Type S bugle head screws: 1", 1-5/8", 2-1/4" or 2 5/8"
- Pan head screws 3/8", Type S 5/8" or 1/2" Type S-12

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Materials and Sizes

- Fire Rated Gypsum Board 1" x 24" x length, up to 14' (1" less than ceiling height)
- Shaftwall Coreboard (wallboard with fire resistance and water repellent paper) 1/2" x 5/8" x 48" x length (up to 16')
- I-Stud (2-1/2", 4", 6" widths; 25 and 20 gauge) x length (1/2" less than ceiling height)
- 2 1/4" leg J-Track (2-1/2", 4", 6" widths; 25 and 20 gauge) x 10' long
- 3" leg J-Track (2-1/2", 4", 6" widths; 20 gauge) x 10' long
- 2" x 2" x 20 gauge angle
- All commercial I-Studs and J-Track are fabricated from steel (25 and 20 gauge) with minimum yield strength of 40,000 psi

Storage

- Store in a dry place protected from moisture.

Installation Recommendations, Fire Endurance Ratings, Sound Transmission Data and Allowable Wall Heights

Phillips recommends installation in accordance with applicable ASTM standards and using prevalent industry standards. Reference documents include Gypsum Association GA-600 and ICC-ES Legacy Report ER-3579 available on Phillips Manufacturing's website (www.phillipsmfg.com).

Submittal Approvals:

Job Name: _____

Contractor: _____ **Date:** _____

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