

# 9/16" Smoothline Bolt Slot Systems

The SmoothLine Bolt Slot System offers contemporary flair and extended design flexibility. Complementing many of today's modern designs, this system provides a uniform ceiling plane surface when installed with appropriate reveal edge ceiling tile products.

### Smoothline Bolt Slot System

- Narrow 9/16" (15mm) face features a 1/4" (6mm) center regress for a contemporary appearance.
- Mitered design on cross tee and main runner intersections produces a clean, continuous slot.
- Intermediate and heavy duty load bearing capabilities.
- Special T-bolt fitting available to facilitate installation of partitions, projection screens, track lighting and signage.
- Compatible with many standard lay-in lighting fixtures and air handling equipment components.

### Protectone<sup>®</sup> Smoothline Fire-Rated Bolt Slot System

- Similar features and benefits as Smoothline Bolt Slot System.
- Specific UL fire resistance, time-rated assemblies available.
- Intermediate duty load bearing capabilities.

### Smoothline Bolt Slot System

Main Runner Item #	Length	Height	Face	Metal Thickness	Allowable Load Lbs./Lin.Ft (kg/m) Hanger Spacing		
					ASTM C 635 4' (1220mm)	5' (1525mm)	6' (1830mm)
SL12-13-15	12' (3660mm)	1-5/8" (41mm)	9/16" (15mm)	.015" (.38mm)	Intermediate Duty 12.0 (17.9)	5.8 (8.6)	3.5 (5.2)
SL12-13-20	12' (3660mm)	1-5/8" (41mm)	9/16" (15mm)	.020" (.51mm)	Heavy Duty 16.0 (23.8)	8.4 (12.5)	4.6 (6.8)

Cross Tee Item #	Length	Height	Face	Metal Thickness	Allowable Load Lbs./Lin.Ft (kg/m) Hanger Spacing		
					ASTM C 635 4' (1220mm)	2' (610mm)	4' (1220mm)
SL2-13-15	2' (610mm)	1-5/8" (41mm)	9/16" (15mm)	.015" (.38mm)	-	*55.0 (81.8)	-
SL4-13-15	4' (1220mm)	1-5/8" (41mm)	9/16" (15mm)	.015" (.38mm)	-	-	12.1 (18.0)

\*Weight limited by a safety factor of 2.



### Protectone<sup>®</sup> Smoothline Fire-Rated Bolt Slot System

Main Runner Item #	Length	Height	Face	Metal Thickness	Allowable Load Lbs./Lin.Ft (kg/m) Hanger Spacing		
					ASTM C 635 4' (1220mm)	2' (610mm)	4' (1220mm)
PSL12-13-20	12' (3660mm)	1-5/8" (41mm)	9/16" (15mm)	.020" (.51mm)	Intermediate Duty 12.0 (17.9)	-	-

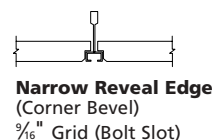
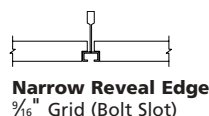
Cross Tee Item #	Length	Height	Face	Metal Thickness	Allowable Load Lbs./Lin.Ft (kg/m) Hanger Spacing		
					ASTM C 635 4' (1220mm)	2' (610mm)	4' (1220mm)
PSL2-13-20	2' (610mm)	1-5/8" (41mm)	9/16" (15mm)	.020" (.51mm)	-	*55.0 (81.8)	-
PSL4-13-20	4' (1220mm)	1-5/8" (41mm)	9/16" (15mm)	.020" (.51mm)	-	13.9 (20.7)	-

\*Weight limited by a safety factor of 2.

### Smoothline Accessories

Item #	Description
 SLNC	Notch Cover, 7/8" (22mm) Length
 SLB	Head Bolt with nut, 3/4" (19mm)

### Selected Popular Edge Details



# Long Form Specifications Smoothline Bolt Slot/Protectone® Smoothline Fire-Rated Bolt Slot Systems

## Section 09510 - Acoustical Ceilings

### PART 1 - GENERAL

#### 1.1 Section Includes

Provide metal suspension system for acoustical lay-in panel ceiling.

#### 1.2 Related Sections

- A. Section 09120 - Ceiling Suspension Systems
- B. Section 09545 - Special Ceiling Surfaces
- C. Section 13020 - Integrated Ceilings
- D. Section 13080 - Sound, Vibration, and Seismic Control
- E. Section 15500 - Heating, Ventilating, and Air Conditioning
- F. Section 16500 - Lighting

#### 1.3 References

- A. American Society for Testing and Materials (ASTM)
  - 1. C 635 - Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
  - 2. C 636 - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels.
  - 3. E 580 - Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels in Areas Requiring Moderate Seismic Restraint.
- B. Underwriters Laboratories (UL) Fire Resistance Directory (latest edition).
- C. Ceiling & Interior Systems Construction Association (CISCA)
  - 1. Ceiling Systems Handbook
  - 2. Guidelines for Seismic Restraint Direct Hung Suspended Ceiling Assemblies

#### 1.4 Submittals

- A. Product data sheets listing dimensions, load carrying capacity and standards compliance.
- B. 12 inch long samples of main runner and cross tee with end couplings.

#### 1.5 Project Conditions

- A. Environmental Requirements:
  - 1. Verify weathertightness of area to receive suspension system prior to installation.
  - 2. Wet trades work shall be dry and complete prior to installation.
  - 3. Installation to begin only when temperature and humidity conditions closely approximate interior conditions which will exist when area is complete and occupied.
  - 4. Heating and air conditioning systems to be operating prior to, during, and after installation.

#### 1.6 Maintenance

Furnish additional material equal to \_\_\_\_\_ percent of ceiling area.

### PART 2 - PRODUCTS

#### 2.1 Manufacturers

##### A. Suspension Systems:

- 1. Celotex® Brand [Smoothline] [Protectone Smoothline Fire-Rated (Type PSL)] Bolt Slot System

#### 2.2 Suspension System Components

##### A. Main Runners:

- 1. Manufactured from [0.015] [0.020] inch thick corrosion-resistant steel 9/16 inch wide with 1/4 inch center regress by 1-5/8 inches high by 144 inches long with factory punched cross tee slots, hanger holes, mitres, and integral bayonet-style end couplings. Double web [intermediate] [heavy] duty [fire] [non-fire] rated suspension system.
- 2. Manufactured with fire expansion reliefs on fire-rated components.
- 3. Coated with factory-applied [standard] [architect select] color baked-on enamel paint with a [standard] [architect select] color regress.

##### B. Cross Tees:

- 1. Manufactured from [0.015] [0.020] inch thick corrosion-resistant steel 9/16 inch wide with 1/4 inch center regress by 1-5/8 inches high by [24] [48] inches long with factory punched cross tee slots, hanger holes, mitres, and integral stab-in end couplings.
- 2. Finish and regress identical to main runners.

##### C. Perimeter Treatment Components:

- 1. Angle Moldings: Manufactured from 0.018 inch thick corrosion-resistant steel [9/16 by 15/16] [2 by 2] inch by 144 inches long with hemmed edges, finished identical to main runners and cross tees.
- 2. Shadow Line Moldings: Manufactured from 0.020 inch thick corrosion-resistant steel with [1/2 inch by 3/4 inch flanges, 3/8 inch by 3/8 inch] [3/4 inch by 3/4 inch flanges, 1/4 inch by 1/4 inch] recess, 144 inches long and [hemmed] [straight] edges. Finished identical to main runners and cross tees with factory-applied baked-on enamel paint finish.

##### D. Attachment Devices:

Size for five times design load indicated in ASTM C 636, Table 1, Direct Hung unless otherwise indicated.

##### E. Wire for Hangers and Ties:

Class 1 zinc coating, soft temper, pre-stretched, with yield stress load of at least three times design load, but not less than 12 gage.

##### F. Accessories

### PART 3 - EXECUTION

#### 3.1 Examination

Examine area receiving suspension system to identify conditions which will adversely affect installation. Do not begin installation until adverse conditions have been remedied.

#### 3.2 Installation - NON-FIRE-RATED SYSTEM

- A. Install suspension system in compliance with ASTM C 636, CISCA recommendations and with the authorities having jurisdiction.
- B. Install suspension system requiring seismic restraint in compliance with ASTM E 580, CISCA recommendations and with the authorities having jurisdiction.
- C. Main Runners:
  - Installed 48 inches on center, by direct suspension from existing structure, with not less than 12 gage hanger wires paced 48 inches on center along main runner length. Wrap hanger wires tightly 3 full turns at each end.
- D. Cross Tees:

- 1. Installed perpendicular to main runners [24] [48] inches on center to form \_\_\_\_\_ by \_\_\_\_\_ inch modules.
- 2. Installed perpendicular to module forming cross tees 24 inches on center forming \_\_\_\_\_ by \_\_\_\_\_ inch modules.
- 3. Installed adjacent to each unsupported side of recessed fixtures.

E. [Angle] [Shadow Line] Moldings: Installed on vertical surfaces, intersecting main runners and cross tees, by appropriate method in accordance with industry-accepted practice.

F. Additional Hanger Wires: Wrapped tightly 3 full turns to structure and component at locations where imposed loads could cause deflection exceeding 1/360 span.

#### 3.3 Installation - FIRE-RATED SYSTEM

##### A. Suspension System Components:

- 1. Install suspension system in accordance with UL Design Number \_\_\_\_\_ guidelines.
- 2. Install suspension system in compliance with ASTM C 636, CISCA recommendations and with the authorities having jurisdiction.
- 3. Install suspension system requiring seismic restraint in compliance with ASTM E 580, CISCA recommendations and with the authorities having jurisdiction.

#### 3.4 Adjustments and Cleaning

A. Remove damaged components, replace with undamaged components. Clean with non-solvent based non-abrasive commercial cleaning solution.

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