**PART 1-GENERAL**

**1.01 SUMMARY**

A. Provisions of Division 01 apply to this section.

B. Section Includes:

1. Slotted system for positive attachment of metal studs to fluted steel decks for head of wall expansion joint movement (cyclic) as indicated on Drawings.

B. Related sections:

1. Section 05 41 00: Structural Metal Studs.

2. Section 07 81 00: Cementitious Fireproofing.

3. Section 07 84 00: Fire Stops and Smoke Seals.

4. Section 09 10 00: Metal Support Assemblies.

5. Section 09 25 00: Gypsum Board.

* 1. **SYSTEM DESCRIPTION**

A. Performance Requirements: The top track fire-rated assembly, when incorporated into stud systems specified in Sections 05410 and 09100 and tested in conjunction with products specified in Sections 07810 and/or 07840, shall exhibit the following performance characteristics:

1. Cyclic System: When tested for cyclical movement, in accordance with UL 2079 and ICBO ES AC30, assembly shall achieve 500 cycles of wall movement at 35 to 40 cycles per minute. When subsequently tested for 1- and 2- hour fire-resistive rated construction, in accordance with ASTM E 119 and ASTM E 814, assembly shall conform to requirements for hose stream resistance.

**1.03 SUBMITTALS**

A. Shop Drawings: Submit manufacturer's standard and Project specific details.

B. Product Data: Submit manufacturer's descriptive literature, specifications, comprehensive lists of materials proposed for use, and other data necessary to prove compliance with specified requirements.

C. Samples: Submit section of track 6 inches in length.

D. Quality Control Submittals:

1. Test Reports: Submit certified laboratory test report confirming performance characteristics of manufactured units proposed for use, and in accordance with item 1.04.D—Quality Assurance Program, below.
2. Installation Instructions: Manufacturer's recommended written installation procedures, which shall be the basis for accepting or rejecting actual installation procedures used in the Work.

**1.04 QUALITY ASSURANCE**

A. Qualifications: Manufacturers Qualifications: Regularly engaged and specialized, for the preceding 5 years, in the design, manufacture and documented testing of steel stud systems equivalent in physical and functional characteristics to those required.

B. Regulatory Requirements: In addition to complying with relevant codes and regulations of governmental agencies having jurisdiction, comply with pertinent recommendations contained in the following:

1. UL 2079

2. UBC STD 7-1 (ASTM E 119)

3. UBC STD 7-5 (ASTM E 814)

4. ICBO ES AC30

5. ICBO ER 5344

C. Tests: Manufactured material for which performance characteristics have been stipulated shall have had such attributes confirmed by laboratory tests employing industry-recognized procedures. Both the laboratory performing the tests and the test methods used will be subject to review by the Architect.

1. Cyclic performance (UL 2079 & ICBO ES AC30)

2. Fire resistance of assembly (ASTM E 119 and ASTM E 814)

D. Quality Assurance Program: When required by the Architect, furnish copies of the manufacturer's quality assurance program, abstracts from such program relating to the products proposed for use in this Project. Accompany with manufacturer's certificates confirming that such products have been manufactured and tested in accordance with the quality assurance programs in question. Top track must be manufactured under a continuous inspection program by an ICBO certified laboratory.

E. ASTM Standards:

1. ASTM A 1011 –Standard Specification for Steel, Sheet and Strip, Hot Rolled, Carbon, Structural High Strength Low-Alloy and High Strength Low-Alloy with Improved Formability.
2. ASTM A 1008 – Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High Strength Low-Alloy and High Strength Low-Alloy with Improved Formability.
3. ASTM A 653/A 653M –Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
4. ASTM C 754 – Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Panel Products.
5. ASTM E 119 -Fire Tested of Building Construction and Materials.
6. ASTM E 814 -Fire Tests of Through-Penetration Fire Stops.
7. UBC STO. 7-1 -Fire Tests of Building Construction and Materials
8. UBC STO. 7-5- Fire Tests of Through-Penetration Fire Stops
9. UL 2079- Tests for Fire Resistance of Building Joint Systems
10. AC 30 -ICBO Evaluation Service -Acceptable Criteria for Joint

**1.05 DEFINITIONS**

A. Cyclic Anchoring Method: A system which provides for positive attachment (as described in ASTM C 754) of studs to upper track, and of track to overhead fluted deck, while permitting up to 1-inch of vertical movement.

B. System: The application of the above products in their entirety as tested. There can be no intermixing of components unless specifically outlined in the appropriate test reports.

**1.06 DELIVERY, STORAGE AND HANDLING**

A. Delivery: Deliver materials with manufacturer's identifying labels intact, affixed and legible. All steel sections shall be provided with permanent recognizable labeling.

B. Storage: Store materials off ground in dry and well ventilated areas, covered and otherwise protected from physical damage. Support in a manner, which will prevent deflection and/or damage to the material.

PART 2 – PRODUCTS

**2.01 MANUFACTURER**

1. Acceptable manufacturers:
2. Sliptrack System by Dietrich Industries., Inc. Downstanding legs shall be nominally 2-1/2 inches and shall be provided with 1-1/2 inch slots at 1 inch on center.
3. VertiTrack or VertiClip System by The Steel Network, Inc. Pre-assembled track with clips installed to match stud spacing. Clips with attached bushing and screws to allow stud movement.

B. System must provide for minimum tested overall movement of 1 inch: ½ inch plus / ½ inch minus.

C. Track shall be provided in standard widths of 6 and 4 inches and in 16, 18, and 20 gauge sheet steel thickness, as required by Project conditions and detailed accordingly.

**2.02 MATERIALS**

A. Forming steel shall be mill certified prime steel:

1. For 16 gauge sections, conform to ASTM A 1011, Grade 50 with a minimum yield point of 50,000 psi.

2. For 18 and 20 gauge sections, conform to ASTM A 1008, Grade C, with a minimum yield point of 33,000 psi.

3. Formed steel shall be provided with galvanizing in accordance with ASTM A 653 for a Class G90 zinc coating.

B. Fasteners:

1. For attachment of steel studs to slotted track or deflection clip, minimum No.8 corrosion resistant by 1/2" waferhead screws.

2. For attachment of track system to overhead structural element or metal decking, as provided for by the structural details affecting the Work.

C. Sprayed-on Fireproofing

1. Sprayed-on fireproofing shall be as specified in Section 07 81 00: Cementitious Fire Proofing. No other fireproofing products are permitted.

D. Dry Method.

1. Dry mineral wool and sealant system shall use only such products as are represented to have been fully tested and approved under ICBO ES AC30 and UL 2079 and as specified in Section 07840: Fire Stops and Smoke Seals.

2. Mineral wool shall be compressed to the degree as used on approval fire and hose stream test.

3. The system supplier shall provide a measuring device capable of determining compression to determine compliance with required density.

**PART 3 -EXECUTION**

**3.01 EXAMINATION**

A. Examine the areas and conditions under which Work of this Section will be performed. Schedule a pre-installation meeting with the Contractor, FUSD, Architect, OAR, PI, and installer to review procedures required of this product before commencement of Work. Correct conditions detrimental to a timely and proper completion. Do not proceed until unsatisfactory conditions are corrected.

**3.02 INSTALLATION**

A. Accurately layout partitions and wall lines from dimensions indicated on the Drawings.

B. Install metal stud anchoring system in accordance with the manufacturers recommendations and requirements of the Steel Stud Manufacturers Association (SSMA).

C. Align partition and wall assemblies in accordance with the Drawings.

D. Coordination: Install the tracks as required for compliance with referenced regulations, to provide proper support for the covering material and as indicated on the Drawings.

**3.03 CLEANING**

A. Remove debris, rubbish, and waste material and legally dispose of off the Project site.

**3.04 PROTECTION**

 A. Protect the Work of this section until Substantial Completion.

**END OF SECTION**