

[2309]

Product Name: 1-1/2" Drywall System
Manufacturer: CertainTeed Architectural

SECTION 09 22 26.23 (092226) – METAL SUSPENSION SYSTEMS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract apply to this section. This includes General and Supplementary Conditions of Division 01 (1) Specification Sections.

1.2 SUMMARY

- A. Section includes Drywall System components for gypsum and plaster board assemblies
- B. Related Sections
 1. Section 09 20 00 (09250) – Plaster and Gypsum Board
 2. Section 09 50 00 (09500) – Ceilings
 3. Section 09 51 00 (09510) – Acoustic Ceilings
 4. Division 23 (15) – Heating, Ventilating and Air Conditioning (HVAC)
 5. Division 26 (16) – Electrical

1.3 REFERENCES

- A. ASTM A641 – *Specification for Steel Sheet, Zinc-Coated (galvanized) Carbon Steel Wire*
- B. ASTM A653 – *Standard Specification for Steel Sheet, Zinc-Coated (galvanized) or Zinc-Iron Alloy-Coated (galvannealed) by the Hot-Dip Process*
- C. ASTM A1008 – *Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability*
- D. ASTM C635 – *Standard Specification for Metal Suspension Systems for Acoustic Tile and Lay-in Panel Ceilings*
- E. ASTM C636 – *Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings*
- F. ASTM C645 – *Standard Specification for Nonstructural Steel Framing Members*
- G. ASTM C754 – *Installation of Steel Framing Members to Receive Screw-Attached Gypsum Board*
- H. ASTM C841 – *Standard Specification for Application of Interior Gypsum Plaster*
- I. ASTM C842 – *Standard Specification for Installation of Interior Lathing & Furring*
- J. ASTM C847 – *Standard Specification for Metal Lath*
- K. ASTM C1002 – *Standard Specification for Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Bases*
- L. ASTM D610 – *Standard Test Method for Evaluating Degree of Rusting on Painted Steel Surfaces*

- M. ASTM E119 – *Fire Test of Building Construction and Materials*
- N. CISCA (Ceilings & Interior Systems Construction Association) – *Ceilings Systems Handbook*
- O. International Code Council-Evaluation Services Report - Seismic Engineer Report
- P. ISO 14025 - *Environmental Labels and Declarations -- Type III Environmental Declarations -- Principles and Procedures*
- Q. Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers Version 1.2
 - a. California Dept. of Public Health CDPH/EHLB/Standard Method v1.2, 2017
- R. International Living Future Institute – *LBC Declare Label*
- S. Health Product Declaration Standard v2.0 – hpdcollaborative.org

1.4 SUBMITTALS

- A. Product Data
 - 1. Submit manufacturer’s published technical information for each product indicated
- B. Shop Drawings
 - 1. Submit reflected ceiling plans drawn to scale prescribed by Architect
 - a. Include coordinated penetrations and ceiling-mounted items
 - b. Include any necessary details or drawings from the manufacturer regarding recommended installation
- C. Samples
 - 1. Submit 12 inch long samples of suspension system components, including main runner, cross tee, wall angle
 - 2. Submit representative manufacturer’s sample of each suspension member indicated
- D. Certifications
 - 1. Provide manufacturer’s written certification that products submitted meet or exceed all specified requirements
 - 2. Provide third party verified life cycle information with published environmental product declaration (EPD)
 - a. Per ISO 14025 *Environmental Labels and Declarations - Type III Environmental Declarations - Principles and Procedures*

1.5 QUALITY ASSURANCE

- A. Source Limitations
 - 1. Drywall Suspension System
 - a. Obtain all drywall framing components through one source from a single manufacturer
- B. Installer Qualifications
 - 1. Must be experienced in the installation of systems similar to those specified herein
- C. Fire Resistance Ratings

1. When drywall ceiling is functioning as the fire protective barrier, specific performance is referenced in UL Fire Resistance Directory, tested according to ASTM E119. Installation in accordance with specific UL Design referenced.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery of drywall suspension system will be in the original unopened packages with the manufacturer's label intact
- B. Handling and storage should be in accordance with the manufacturer's Safety Data Sheets (SDS)
- C. Product cartons should be handled carefully to avoid damage

1.7 COORDINATION

- A. Coordinate the installation of the drywall suspension system with any and all trades whose work is impacted by that installation

1.8 EXTRA MATERIALS

- A. Provide extra materials in the manufacturer's unopened packaging, with the manufacturer's label intact, as detailed below
 1. Suspension System Components – Minimum 5% of each type installed

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. CertainTeed Architectural
 1. Address: 20 Moores Road, Malvern, PA 19355
 2. Telephone: 800-233-8990
 3. Web: www.certainteed.com/architectural

2.2 SUSPENSION SYSTEM

- A. Manufacturer: CertainTeed Architectural
- B. Product
 1. Name: 1-1/2" Drywall System
- C. Physical Characteristics
 1. Double web design manufactured of hot-dipped galvanized steel
 2. Knurled face for ease of screw installation
 3. Heavy-duty materials for maximum rigidity and screw grip
 4. 0.020" metal thickness
 5. Cross-tees feature staked-on end tabs to facilitate tightness, ease of installation
 6. System incorporates G40 hot-dipped galvanization as standard galvanization
 - a. G90 available on all components for extreme or exterior environments
 7. Tee height: [1-19/32"]
 8. Flange size: [1-1/2"]
 9. Recycled content:

- a. Main Runners: 88%
 - i. 19% (pre-consumer)
 - ii. 69% (post-consumer)
- b. Cross Tees: 87%
 - i. 19% (pre-consumer)
 - ii. 68% (post-consumer)
- c. Wall Angle: 88%
 - i. 19% (pre-consumer)
 - ii. 69% (post-consumer)

D. Components

- 1. Main Runners
 - a. Size: [144"]
- 2. Cross Tees:
 - a. [Size: 14", 24", 26", 36", 48", 50", 72"]
- 3. Wall Molding
 - a. Type: [angle]
 - b. Profile [90° L-angle]
 - c. Size: [144"]
- 4. Terminus Drywall Perimeter Trim
 - a. Drywall Straight
 - i. TTDW-2 WHT
 - 1. Size: L:120" x H:2.688" x F:1"
 - ii. TTDW-4 WHT
 - 1. Size: L:120" x H:4.688" x F:1"
 - iii. TTDW-6 WHT
 - 1. Size: L:120" x H:6.688" x F:1"
 - iv. TTDW-8 WHT
 - 1. Size: L:120" x H:8.688" x F:1"
 - b. Drywall Curved
 - i. TTDWR-2
 - 1. Size: L:120" x H:2.688" x F:1"
 - ii. TTDWR-4
 - 1. Size: L:120" x H:4.688" x F:1"
 - iii. TTDWR-6
 - 1. Size: L:120" x H:6.688" x F:1"
 - iv. TTDWR-8
 - 1. Size: L:120" x H:8.688" x F:1"
 - c. Drywall Corners
 - i. TTDWCKI-2 WHT
 - 1. Size: L:2" x H:2.688" x F:1"
 - ii. TTDWCK0-2 WHT
 - 1. Size: L:2" x H:2.688" x F:1"
 - iii. TTDWCKI-4 WHT
 - 1. Size: L:2" x H:4.688" x F:1"
 - iv. TTDWCK0-4 WHT
 - 1. Size: L:2" x H:4.688" x F:1"
 - v. TTDWCKI-6 WHT
 - 1. Size: L:2" x H:6.688" x F:1"
 - vi. TTDWCK0-6 WHT

- 1. Size: L:2" x H:6.688" x F:1"
 - vii. TTDWCKI-8 WHT
 - 1. Size: L:2" x H:8.688" x F:1"
 - viii. TTDWCK0-8 WHT
 - 1. Size: L:2" x H:8.688" x F:1"
- E. Structural Classification
 - 1. Main Runners classified as heavy duty, per ASTM C635 and ASTM C645
 - a. For C635, suspension system deflection limited to L/360
 - b. For C645, suspension system deflection limited to L/240
 - 2. Seismic Restraints: Pursuant to CISCA recommendations, ASTM E580 and local code requirements
 - 3. ICC-ES Evaluation Service Report (ESR-3941)
 - a. Suspended Drywall Ceiling Framing System
- F. Independent Certifications
 - 1. VOC content
 - a. Third-party certification of compliance
 - 1. Per California Dept. of Public Health *CDPH/EHLB/Standard Method v1.2, 2017*
 - 2. Environmental Product Declaration
 - a. Third-party verified Type III Environmental Product Declaration
 - 1. Per ISO 14025 - *Environmental Labels and Declarations - Type III Environmental Declarations -- Principles and Procedures*
 - 3. Health Product Declaration
 - a. Per Health Product Declaration Standard v2.0
 - 1. hpd-collaborative.org
 - 4. Living Building Challenge Declare Label
 - a. *LBC Red List Free*, per International Living Future Institute

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Ascertain acceptability of substrates and building conditions under which the ceiling system is to be installed. Do not proceed with the installation until any and all unacceptable conditions have been rectified. The CertainTeed Drywall System can be installed in both interior and exterior applications.

3.2 INSTALLATION

- A. Install the ceiling system in accordance with the following:
 - 1. Manufacturer's printed instructions
 - 2. ASTM C636
 - 3. Ceilings & Interior Systems Construction Association (CISCA) recommendations
 - 4. Applicable local code requirements
 - 5. Approved shop drawings

END OF SECTION

**CertainTeed Architectural shall be held harmless for any damages resulting from
the use of this specification guide**