- Standard Specification for Steel Sheet, Zinc-Coated



THIS SECTION IS BASED ON CHICAGO METALLIC'S "SPANFAST™ DRYWALL GRID SYSTEM"

### **PART 1 - GENERAL**

### 1.1 RELATED DOCUMENTS

.1 Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

### 1.2 SUMMARY

- .1 Section Includes: Provide metal suspension system for gypsum drywall in typical ceilings and soffits including but not limited to:
  - 1. metal suspension systems for gypsum ceilings.
  - 2. metal suspension systems for gypsum soffits.
- .2 Related Requirements:
  - 1. Section 09 21 16, Gypsum Board Assemblies.
  - 2. Section 09 51 13, Acoustical Panel Ceilings.
  - 3. Section 09 53 23, Metal Acoustical Ceiling Suspension Assemblies.
  - 4. Section 09 54 00, Specialty Ceilings.
  - 5. Section 09 58 00, Integrated Ceiling Assemblies.
  - 6. Section 13 48 00, Sound, Vibration, and Seismic Control.
  - 7. Section 23 50 00, Central Heating Equipment.
  - 8. Section 26 50 00, Lighting.

ASTM A653/A653M

## 1.3 REFERENCES

1.

- .1 Abbreviations and Acronyms:
  - 1. CISCA: Ceilings & Interior Systems Construction Association; <a href="www.cisca.org">www.cisca.org</a>.
- .2 Reference Standards:

		(Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed)
		by the Hot-Dip Process
2.	ASTM C635/C635M	- Standard Specification for Manufacture, Performance,
		and Testing of Metal Suspension Systems for Acoustical
		Tile and Lay-in Panel Ceilings
3.	ASTM C636/C636M	- Standard Practice for Installation of Metal Ceiling
		Suspension Systems for Acoustical Tile and Lay-In
		Panels
4.	ASTM C645	- Standard Specification for Nonstructural Steel Framing
		Members
5.	ASTM C754	- Standard Specification for Installation of Steel Framing
		Members to Receive Screw-Attached Gypsum Panel
		Products



6. ASTM C841 - Standard Specification for Installation of Interior Lathing and Furring

#### 1.4 **SUBMITTALS**

- Product Data: Submit sheets listing dimensions, load carrying capacity and standard .1 compliance.
- .2 Samples: Submit samples of main and furring tees, furring and wall angle.

#### 1.5 **MAINTENANCE MATERIAL SUBMITTALS**

- .1 Supply additional material equal to []% of ceiling area. Additional material should match products installed and have the appropriate labels and identification.
- .2 Supply extra materials that match Products installed and are packaged with protective covering for storage and identified with labels describing contents.

#### 1.6 **QUALITY ASSURANCE**

.1 Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.

#### 1.7 **DELIVERY, STORAGE, AND HANDLING**

.1 Protect system components from excessive moisture in shipment, storage, and handling. Deliver in unopened bundles and store in a dry place with adequate air circulation. Do not deliver material to building until wet conditions such as concrete, plaster, paint, and adhesives have been completed and cured to a condition of equilibrium.

#### 1.8 WARRANTY

- Manufacturer Warranty: Submit a written warranty executed by manufacturer for a period of 40 years from date of Substantial Performance, agreeing to repair or replace suspension system components that fail or are compromised within the specified warranty period. Failed or compromised parts can include, but are not limited to:
  - Rusting or defects directly made by the manufacturer. 1.

### **PART 2 - PRODUCTS**

#### 2.1 **MANUFACTURERS**

Chicago Metallic Heavy Duty Double Web Suspension System manufactured by ROCKFON, .1 4849 South Austin Avenue, Chicago, IL 60638. 1-800-323-7164; www.rockfon.com.

#### 2.2 **MATERIALS**

Basic Steel Material and Finish: Commercial quality, CS Type A to ASTM A653/A653M, hot-dip .1 galvanized to not less than Z120 (G40) zinc coating designation.



- .2 Main Tees and Cross Tees: All suspension components are manufactured from commercial quality steel with hanger holes made with 0.530 mm (0.020") thick steel with a 35 mm (1-3/8") knurled face.
  - Structural Classification Standard: ASTM C635/C635M Heavy Duty.
  - 2. Colour: Bare steel.
  - 3. Specified Product: "Chicago Metallic Span Fast™ Drywall Grid System" by ROCKFON.
- .3 Perimeter Treatment Components:
  - 1. Wall Track: Manufactured from 0.530 mm (0.020") thick steel with 19 mm (3/4") top flange x 39 mm (1-9/16") high x 25 mm (1") bottom flange x 3048 mm (120") long.

### **PART 3 - EXECUTION**

### 3.1 EXAMINATION

- .1 Examine substrates, areas and conditions, including structural framing to which suspension assemblies attach or abut, with installer present, for compliance with requirements specified in this and other Sections affecting ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of suspension assemblies.
- .2 Proceed with installation only after unsatisfactory conditions have been corrected.

# 3.2 INSTALLATION

- .1 Install metal ceiling suspension assemblies to comply with ASTM C636/C636M and seismic design requirements indicated, according to manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- .2 Furring Runners: Installed [[406 mm (16")] [610 mm (24")] on centre in span of [1220 mm (48") [1524 mm (60"] [1829 mm (72")] [2134 mm (84")] with no direct midspan support] [[2438 mm (96")] [3048 mm (120")] [3658 mm (144")] with midspan support] [4267 mm (168") with a support at 1/3 points] in accordance with ASTM C754 and ASTM C841 with not less than 2.642 mm (12 ga) steel hanger wires, wrapped tightly 3 full turns at each end.
- .3 Install components per load data based on L/240 in accordance with ASTM C645.
- .4 Wall Track: Installed on vertical surfaces, intersection suspension components by appropriate method in accordance with industry accepted practices.
- .5 Attachment of Wall Track 1450.00SF to wall structure is critical. Connection to withstand 45 kg (100 lb) in shear and pull-out.

# 3.3 REPAIR

.1 Remove damaged or compromised components; replace with undamaged components.

**END OF SECTION**