



**Designation: C 955 – 01**

## **Standard Specification for Load-Bearing (Transverse and Axial) Steel Studs, Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Panel Products and Metal Plaster Bases<sup>1</sup>**

This standard is issued under the fixed designation C 955; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reappraisal. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reappraisal.

### **1. Scope \***

1.1 This specification covers steel studs, runners (tracks), and bracing or bridging (with a base metal thickness range of not less than 0.0329 in. (0.836 mm)) for screw application of gypsum panel products and metal plaster bases in load-bearing (transverse and axial) construction assemblies. Steel of lesser thickness shall be permitted in additional engineered products.

1.2 The values stated in inch-pound units are to be regarded as the standard. The SI (metric) values given in parentheses are provided for information purposes only.

1.3 The following precautionary caveat pertains only to the test method portion, Section 8, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

### **2. Referenced Documents**

#### **2.1 ASTM Standards:**

A 653/A 653M Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dipped Process<sup>2</sup>

A 792/A 792M Specification for Steel Sheet, 55 % Aluminum–Zinc Alloy-Coated by the Hot-Dip Process<sup>2</sup>

A 875/A 875M Specification for Steel Sheet, Zinc-5 % Aluminum Alloy-Coated by the Hot-Dip Process<sup>2</sup>

A 1003 Specification for Steel Sheet, Carbon, Metallic and Non-Metallic Coated for Cold-Formed Framing Members<sup>2</sup>

C 36 Specification for Gypsum Wallboard<sup>3</sup>

C 954 Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness<sup>3</sup>

#### **2.2 AISI Standard:**

Specification for the Design of Cold-Formed Steel Structural Members<sup>4</sup>

#### **2.3 ISO Standard:**

ISO 9223 Corrosion of Metals and Alloys—Corrosivity of Atmospheres—Classification<sup>5</sup>

### **3. Terminology**

3.1 *Definitions:* Definitions shall be in accordance with Terminology C 11.

#### **3.2 Definitions of Terms Specific to This Standard:**

3.2.1 *members, n*—studs, runners, tracks, bracing, bridging, accessories or other items manufactured in accordance with this standard.

3.2.2 *structural member, n*—a member in a steel framed system in which the loading exceeds any of the following conditions: a transverse load of 20 lbf/ft (290 N/m) of member length, or an axial load, exclusive of sheathing, of 200 lbf (890 N) per member.

### **4. Materials and Manufacture**

4.1 The mechanical properties of the steel shall meet the requirements of the AISI Specification for the Design of Cold-Formed Steel Structural Members.

4.2 The minimum steel thickness (base steel) shall be not less than 0.0329 in. (0.84 mm).

4.3 Individual measurements before the application of protective coating shall be not less than 95 % of the specified design thickness.

4.4 Members shall have a protective coating conforming to Specification A 653/A 653M, G60 minimum, or equivalent corrosion resistance, or shall have a rust-inhibitive coating providing equivalent corrosion resistance.

4.5 Edges of members shall be manufactured to minimize burrs and sharp edges.

4.6 Factory punch-outs, when provided, shall be located along the centerline of the webs of members and shall have

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee C11 on Gypsum and Related Building Materials and Systems and is the direct responsibility of Subcommittee C11.02 on Specifications and Test Methods for Accessories and Related Products.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 01.06.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 04.01.

<sup>4</sup> Available from the American Iron and Steel Institute, 1000 16th St., N.W., Washington, DC 20036.

<sup>5</sup> Available from International Organization for Standardization, 1, Rue de Varembe, Case Postale 56, CH-1211, Geneva 20, Switzerland.

**\*A Summary of Changes section appears at the end of this standard.**