



## Standard Terminology Pertaining to Metal Connector Plates<sup>1</sup>

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### 1. Scope

1.1 The definitions of terms pertaining to metal connector plates provide meanings and explanations of 46 technical terms which are in common use by both the technical expert, such as the plate fabricator and user, and the non-expert architect, engineer, specification writer, building code official, and others who deal with metal connector plates in one way or another.

1.2 This terminology does not cover terms relating to the mechanical properties of the materials used for fabricating metal connector plates nor does it cover their use.

1.3 The terms are listed in alphabetic sequence. Compound terms appear in the natural spoken order. Where the definitions are adopted verbatim from other sources, they are identified and fully referenced.

### 2. Referenced Documents

#### 2.1 ASTM Standards:

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

E 8 Test Methods for Tension Testing of Metallic Materials<sup>3</sup>

E 489 Test Method for Tensile Strength Properties of Metal Connector Plates<sup>4</sup>

F 547 Terminology of Nails for Use with Wood and Wood-Base Materials<sup>5</sup>

### 3. Terminology

#### 3.1 Definitions:

**angle of placement of metal connector plate**—angle of inclination of lengthwise axis of metal connector plate parallel to longitudinal axis of coiled metal strip, that is, main direction of metal connector plate to direction of test-load application to wood member of connection; with *zero-degree angle* defined as that of lengthwise plate axis being parallel to load direction; and *angle greater than zero* defined as that of lengthwise plate axis being rotated

clockwise away from the loading axis when facing the plated connection.

**butted wood member**—wood member with its squared end or side placed adjoining the squared end or side of another wood member; with both abutting members of same thickness and in a single plane.

**connection**, *n*—structural junction of two or more wood members, components, or assemblies, designed to be connected with mechanical fasteners, adhesives, welds, or a combination thereof, to transmit structural forces safely. Colloquially, the term *joint* is used in place of the term *connection*.

**connector**, *n*—within the restrictions of this terminology, abbreviation for **metal connector plate**.

**connector hole**—opening in metal connector plate, resulting from punching integral tooth from, or nail hole in, connector plate during its fabrication. Also called *slot* when opening is not round.

**control plate**—See **solid metal-coupon control specimen**.

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**fastener**, *n*—integral tooth of connector plate and/or separate nail used to fasten connector plate to wood member.

**finished metal connector plate**—galvanized or chemically surfaced steel connector plate, with or without prepunched holes.

**gross cross-sectional connector plate area**—cross-sectional area of metal connector plate determined by multiplying gross thickness of plate by gross dimension of plate perpendicular to direction of load application.

**integral tooth of metal connector plate**—plate projection punched from metal connector plate at right angle to its surface which remains attached to plate and serves as a fastening element.

**lateral resistance of metal connector plate**—resistance to slip or pulling, or both, from wood, in direction of applied external shear force, of integral teeth or separate nails, or both, fastening connector plate to wood members. Also called *tooth holding resistance*, *grip resistance*, and *peel resistance* to cover specific events; yet, preferably called *lateral resistance*. See **shear strength of metal connector plate**.

**length of metal connector plate**—dimension of metal connector plate parallel to longitudinal axis of coiled metal strip

<sup>1</sup> This terminology is under the jurisdiction of ASTM Committee E-6 on Performance of Buildings and is the direct responsibility of Subcommittee E06.13 on Structural Performance of Connections in Building Constructions.

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

<sup>3</sup> Annual Book of ASTM Standards, Vol 03.01.

<sup>4</sup> Annual Book of ASTM Standards, Vol 04.11.

<sup>5</sup> Annual Book of ASTM Standards, Vol 15.08.