



Designation: F 547 – 77 (Reapproved 1995)

## Standard Terminology of Nails for Use with Wood and Wood-Base Materials<sup>1</sup>

This standard is issued under the fixed designation F 547; 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 reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### INTRODUCTION

The terms included in these definitions are listed in alphabetical order under six headings to facilitate quick reference. They are intended to apply to metal nails. Some of these terms are also applicable to plastic nails. Omitted are terms relating to tacks, pins, drift pins, dowels, studs, spikes, staples, and other fasteners, such as nail plates. Also omitted are terms relating to the testing and the performance of nails, that is, their drivability, withdrawal resistance, lateral load transmission, creep, protrusion resistance, and splitting; and methods of use, such as face, toe, side, and end-nailing, spacing, loading conditions, etc. These subject matters will be covered in a separate definition of terms relating to mechanical fasteners.

Common acceptance and usage are the basis for most of the definitions listed. In some instances, this common usage results in more than one definition for a given term. In other cases, registered trademarks have become generic in nature; hence, they are included among the terms listed.

Any such listing cannot be complete. As additional terms are referred to the Society's attention, they will be included.

An asterisk (\*) behind the name of a nail indicates that this particular nail type is described in Federal Specification FF-N-105 on Nails, Wire, Brads, and Staples.<sup>2</sup>

Whereas dimensions are normally not part of a definition, they are included in this standard because they are essential in fully describing the fastener under consideration.

The definitions are listed under the following headings:

Nail  
Nail Types

Nail Heads  
Nail Points

Nail Threads  
Miscellaneous Terms

### NAIL

**nail**—straight, slender fastener, usually pointed and headed; 6 in. or less in length; designed to be driven; to hold two or more pieces together or to act as support. (See **screw nail**; **drive screw**.)

**DISCUSSION**—In contrast to screw—fastener, usually pointed and headed; designed to be turned with a screwdriver or other device; having in its simplest form one or two continuous spiral threads (such as a wood screw thread) or a helical thread (such as a machine screw thread) or combinations thereof (such as a sheet-metal screw thread).

### NAIL TYPES

**aluminum common nail\***—plain-shank, aluminum-alloy, 1 by 0.072 to 6 by 0.262-in. nails with flat  $\frac{5}{32}$  to  $\frac{17}{32}$ -in. head and medium diamond point.

**apple-box nail**—coated, regular-stock-steel,  $\frac{15}{8}$  and  $1\frac{3}{4}$  by 0.080-in. nails with flat  $\frac{15}{64}$ -in. head and medium diamond point.

**asbestosboard nail\***—galvanized, hardened-steel, helically threaded,  $\frac{1}{4}$  and  $1\frac{1}{2}$  by 0.083-in. screw nails with flat, slightly countersunk,  $\frac{3}{16}$ -in. head and blunt diamond point.

**asbestos-shingle nail**— See **shingle nail**.

**asphalt-shingle nail**— See **roofing nail**.

**auto nail**—nail of  $\frac{1}{4}$  to  $5\frac{1}{4}$ -in. length, sheared off bright, smooth, knurled, or helically fluted, regular-stock-steel or stiff-stock, 0.032-in. (21-gage) to 0.162-in. (8-gage) wire and driven subsequently by the same machine at a rapid rate. This nail has a sheared-bevel or sheared-square point.

**barrel nail\***—bright or coated, regular-stock-steel,  $\frac{5}{8}$  by 0.067 to  $1\frac{1}{2}$  by 0.092-in. nails with flat 0.148 to 0.219-in. head and medium diamond point.

**basket nail**—bright, regular-stock-steel,  $\frac{5}{8}$  and  $\frac{3}{4}$  by 0.048-in. nails with large flat head and medium needle point.

**beer-case cleat nail**—bright, regular-stock-steel, 1 by 0.080 to  $1\frac{7}{8}$  by 0.106-in. nails with  $\frac{3}{16}$  to  $\frac{1}{4}$ -in. oval head and duckbill or clinch point.

<sup>1</sup> These definitions are under the jurisdiction of ASTM Committee F-16 on Fasteners and are the direct responsibility of Subcommittee F16.05 on Driven and Other Fasteners.

Current edition approved Oct. 28, 1977. Published December 1977.

<sup>2</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.