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

This standard is issued under the fixed designation F547; 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~~ reference and in certain cases are sub-categorized. 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 Specification **F1667**.

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 Heads	Nail Threads
Nail Types	Nail Points	Miscellaneous Terms
Nail	Nail Types used in Engineered and Non-Engineered Building Construction	Nail Types used in Specialized Applications
Finish, Coating, and Galvanization Terms	Material Terminology	Nail Heads Terminology
Nail Points	Nail Shank Terminology	Miscellaneous Terms

## 1. Referenced Documents

### 1.1 ASTM Standards:<sup>2</sup>

**A510** Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel

**A700** Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment

<sup>1</sup> This terminology is under the jurisdiction of ASTM Committee **F16** on Fasteners and is the direct responsibility of Subcommittee **F16.05** on Driven and Other Fasteners. Current edition approved April 1, 2012; Sept. 1, 2017. Published May 2012; October 2017. Originally approved in 1977. Last previous edition approved in 2006 as **F547–06**; **F547–06(2012)**. DOI: 10.1520/F0547-06R12; 10.1520/F0547-17.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

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## 2. Terminology

### NAIL

**nail**—straight, slender fastener, usually pointed and headed; normally 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 USED IN ENGINEERED AND NON-ENGINEERED BUILDING CONSTRUCTION

#### NAIL TYPES FRAMING

**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,  $1\frac{1}{8}$  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,  $1\frac{1}{4}$  and  $1\frac{1}{2}$  by 0.083-in. screwnails 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.

**beer-case hinge, lock and latch nail**—bright, regular-stock-steel,  $\frac{5}{8}$  by 0.080 to  $1\frac{1}{4}$  by 0.092-in. nails with oval  $\frac{3}{16}$  to  $\frac{7}{32}$ -in. head and duckbill or clinch point.

**beer-case strap nail**—bright, regular-stock-steel,  $1\frac{1}{4}$  by 0.092 to 2 by 0.113-in. nails with oval  $\frac{15}{64}$  to -in. head and medium diamond point.

**berry-box nail**—bright, regular-stock-steel,  $\frac{3}{4}$  to  $1\frac{1}{4}$  by 0.054 and 0.062-in. nails with flat and medium diamond or needle point.

**boat nail\***—light-duty or heavy-duty, bright or galvanized, regular-stock-steel,  $1\frac{1}{2}$  by  $\frac{3}{16}$  to 4 by  $\frac{3}{8}$ -in., round-wire nails with oval, countersunk,  $\frac{13}{32}$  to  $\frac{3}{4}$ -in. head and medium chisel point. Also, bright, annularly or helically threaded, nonferrous or stainless-steel, 1 by 0.062 to 3 by 0.165-in., round-wire nails with flat or oval, slightly countersunk,  $\frac{1}{8}$  to  $\frac{3}{8}$ -in. head and medium diamond point. Also, galvanized, regular-stock-steel, 2 to  $2\frac{1}{2}$ -in. square, cut nails with oval head.

**box nail\***—carbon steel bright, coated or galvanized, regular-stock-steel, zinc coated or other coating as specified, stainless steel or aluminum, smooth or deformed shank 1 by 0.058 to 5 by 0.162-in. nails, made of lighter-gage wire than common nails and sinkers, with flat  $\frac{11}{64}$  to  $\frac{13}{32}$ -in. head and medium diamond point.

**brad\***—small nail with small head.

*brad, common wire*—slender, regular-stock-steel,  $\frac{3}{8}$  by 0.035 to 6 by 0.262-in. wire nails with brad 0.050 to 0.331-in. head and medium diamond point.

*brad, cut*—slender, usually small, regular-stock-steel nails of same thickness throughout, but tapering in width; with slight projection on one side serving as head. Also, tapering, square-bodied, finishing nail with countersunk head.

**brick-siding nail**—galvanized, colored (baked-lacquer finished), plain-shank barbed or annularly threaded, regular-stock-steel,  $\frac{7}{8}$  by 0.092 to  $2\frac{1}{2}$  by 0.099-in. nails with flat checkered  $\frac{3}{16}$  or  $\frac{1}{4}$ -in. head and medium diamond point.

- broom nail\***—bright, regular-stock-steel,  $\frac{5}{8}$  to  $\frac{3}{4}$  by 0.072 or 0.080-in. nails with flat  $\frac{1}{8}$  or  $\frac{7}{32}$  in. head and medium diamond point.
- cap nail**—bright, galvanized or electroplated, plain-shank or threaded, regular-stock-steel,  $\frac{3}{4}$  by 0.105 to 6 by 0.135-in. nails with integral nominal 1-in. cap head and medium diamond point.
- car nail**—light-duty or heavy-duty, bright or coated, barbed or helically threaded, regular-stock-steel,  $1\frac{1}{2}$  by 0.105-in. (light) or 0.135-in. (heavy) to 6 by 0.225-in. (light) or 0.244-in. (heavy) nails and screw nails with flat or oval countersunk head and medium diamond point. Also, light-duty or heavy-duty, coated, barbed or helically threaded, regular-stock-steel,  $1\frac{1}{2}$  by 0.092 or 0.106 to 6 by 0.207 or 0.225-in. nails with oval countersunk  $\frac{1}{8}$  to  $\frac{1}{32}$  in. head and medium diamond point.
- casing nail\***—bright or galvanized, slender, regular-stock-steel, 1 by 0.067 to  $3\frac{1}{2}$  by 0.135-in. nails with flat or cupped 0.099 to 0.177-in. casing head and medium diamond point for countersinking where concealment is important.
- cigar-box nail**—bright, smooth, or barbed, regular-stock-steel,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ , and by 0.044-in. nails with flat slightly countersunk 0.099-in. head and medium diamond point.
- cleat**—L-shaped nail.
- cleat nail**—bright, regular-stock-steel,  $1\frac{1}{8}$  by 0.080 to  $1\frac{7}{8}$  by 0.106-in. nails with oval  $\frac{3}{16}$  to  $\frac{1}{4}$ -in. head and duckbill or clinch point. (See **clinch nail**.)
- clinch nail**—any nail designed for clinching after driving. Bright, regular-stock-steel, 1 by 0.080 to 4 by 0.177-in. nails with oval  $\frac{3}{16}$  to  $\frac{3}{8}$ -in. head and duckbill or clinch point. (See **cleat nail**.)
- clout nail**—bright, regular-stock-steel,  $\frac{3}{4}$  by 0.072 to  $1\frac{1}{2}$  by 0.092-in. nails with large flat 0.225 to 0.262-in. head and long side point or duckbill point.
- collar nail**—See **collar head, gudgeon, projection head**.
- common brad**—See **brad**.
- common cut nail\***—normally, wedge-shaped,  $\frac{1}{2}$  to 6-in. nails of various types sheared from stiff-stock-sheet steel, with sheared-square point end narrower than upset head end.
- common nail\*, common wire nail**—bright, plain-shank, regular-stock-steel,  $\frac{1}{2}$  by 0.035 to 6 by 0.262-in. nails with flat  $\frac{1}{16}$  to  $\frac{1}{32}$ -in. head and medium diamond point. Diameter is larger than that for sinkers, coolers, corkers, and box nails of same length.
- concrete nail\*, concrete stub nail**—hardened-steel,  $\frac{1}{2}$  by 0.135 to  $3\frac{1}{2}$  by 0.207-in. nails with flat countersunk  $\frac{5}{16}$  to  $\frac{1}{2}$ -in. head and medium diamond point.
- conduit nail**—bright or copper-plated, regular-stock-steel or hardened-steel,  $1\frac{3}{4}$  to  $3\frac{1}{2}$  by 0.161-in. nails with annularly threaded shank; bent, curved hook head, and medium needle point. Different types of head designed for fastening  $\frac{1}{2}$ ,  $\frac{3}{4}$ , or 1-in. conduit, tubing, pipe, cable, etc.
- cooler nail—nail\***—usually coated, slender, regular-stock-steel, carbon steel or stainless steel, round smooth or deformed shank, bright or zinc coated or other coating as specified 1 by 0.062 to  $2\frac{7}{8}$  by 0.120-in. nails with flat  $\frac{1}{16}$  to  $\frac{1}{8}$ -in. head and medium diamond point, with head diameter same as or smaller than that of common wire nail of same length.
- metal hardware nail\***—carbon steel- bright or zinc coated, or stainless steel, smooth or ring shank  $1\frac{1}{4}$  by 0.131 to  $3\frac{1}{2}$  by 0.162-in. flat round head 0.281-in., diamond point meeting the minimum bending yield requirements of Supplementary section S1 and Table S1.1 and S1.2 of Specification **F1667**.
- post-frame ring shank nail\***—carbon steel, hardened carbon steel or stainless steel, bright or zinc coated, ring shank nail, ranging from 3 by 0.135 in. to 8 by 0.207 in., with specific dimensional values of ring geometry, flat head and diamond point, meeting minimum bending yield requirements of Supplementary Section S1 and Table S1.1 or Table S1.2 of Specification **F1667**.
- power-tool driven common nail\***—steel-bright, zinc coated or other coating as specified; stainless steel; aluminum, smooth or deformed shank, ranging from  $1\frac{1}{4}$  by 0.080 to  $4\frac{1}{2}$  by 0.162-in. flat full, altered heads or T-head; head dimensions as specified in order to be driven by power-tool, diamond, chisel, needle or no point
- sinker\***—steel-bright or coated as specified, smooth shank,  $1\frac{1}{8}$  by 0.067 to  $5\frac{3}{4}$  by 0.244-in. nails with  $\frac{1}{16}$  to  $\frac{1}{2}$ -in. sinker head and medium diamond point, with diameter of head smaller than that of cooler and common nail of same designation.
- steel common nail\***—steel-bright, zinc coated or other coating as specified, or stainless steel, smooth shank, 1 by 0.072 to 6 by 0.262-in. nails with flat  $\frac{1}{16}$  to  $\frac{1}{32}$ -in. head and medium diamond point. Diameter is larger than that for sinkers, coolers, corkers, and box nails of same length.

**ROOFING**  
**(SHINGLES, TILE, UNDERLAYEMENT)**

**aluminum common nail\***—smooth or square barbed shank, aluminum-alloy, 1 by 0.099 to 4 by 0.199 in. nails with flat  $\frac{5}{32}$  to 0.460 -in. head and medium diamond point

**aluminum roofing nail\*** —flat head 0.438-in. diameter, round smooth or deformed shank  $\frac{3}{4}$  by 0.120 to  $2\frac{1}{2}$  by 0.145 with diamond point.

**cap-nail hand-driven roofing nail\***—steel-bright or zinc coated, stainless steel, diamond point, smooth or deformed shank  $\frac{1}{2}$  by 0.105 to 8 by 0.162 in. Caps 1-in. round metal or plastic, square 1-in. flat or domed. With metal caps both nail / cap bright or both galvanized. Nail- cap integral units at manufacturing

**cap-nail power-driven roofing nail\*** —steel-bright or zinc coated, stainless steel, diamond point, smooth or deformed shank  $1\frac{1}{4}$  by 0.080 to 2 by 0.120 in. Caps 1-in. round or 1-in. square metal or plastic. With metal caps both nail / cap bright or both galvanized. Nail-cap assembled at point of application.

**copper common nail\***—bright, solid-copper,  $\frac{5}{8}$  by 0.065 to 6 by 0.284-in. nails with flat head and medium diamond point.

**copper-clad roofing nail\***—copper-clad wire, flat head 0.375-in. diameter, smooth shank 0.120-in. diameter 1 to  $2\frac{1}{4}$ -in. long.

**corker nail\***—**purlin nail**,—usually coated, slender, regular-stock-steel, 1 by 0.062 to 5 galvanized, regular-stock-steel, aluminum-alloy or copper, 4 to 16 by  $\frac{1}{8}$  by 0.244-in. nails with -in., 0.135 or 0.148-in. nails of desired length with flat  $\frac{1}{32}$  to -in., curved or  $\frac{15}{32}$ -in. sinkerhead,  $\frac{1}{16}$ head and medium diamond point. -in. cast lead head or plastic washer and sheared-square or diamond point; for securing corrugated roofing to I-beams.

**cork-insulationroofing-tile nail**— galvanized, regular-stock-steel, 35 to 97 by 0.148-in. nails with flat  $\frac{5}{16}$ -in. head and medium diamond point.

**corrugated roofing/siding nailshingle nail\***—See **roofing nail**.(Aluminum) flat head 0.191 to 0.312-in diameter, diamond point, smooth or deformed shank  $1\frac{1}{4}$  by 0.101 to  $1\frac{3}{4}$  by 0.113-in.  
(Steel) bright or zinc coated, flat head 0.205 to 0.406-in diameter, smooth or barbed shank  $1\frac{1}{4}$  by 0.092 to 2 by 0.113-in.

**shake nail, cedar-shake or shingle nail, wood-shake face nail**—hot dip galvanized steel or stainless steel, plain or ring shank,  $1\frac{1}{4}$  by 0.080 to 2 by 0.092-in with flat 0.19-in min head, diamond point

**dating nail—slating nail\***—galvanized, regular-stock-steel, copper or brass, 1 by 0.106 to  $\frac{1}{2}$  by 2 by 0.148-in. nails with slightly countersunk  $\frac{5}{16}$  to  $\frac{27}{16}$  by -in. flat head and medium diamond point. Also, aluminum-alloy, 1 by 0.106 to  $1\frac{1}{2}$ -in. by 0.135-in. nails with large flat  $\frac{5}{16}$  to  $\frac{3}{8}$ -in. head and medium diamond point. Also, solid copper,  $\frac{7}{8}$ flat numeral by 0.109 to 2 by 0.135-in. nails with large flat head and medium diamond point.

**diaphragm nail**—stout, bright or galvanized, regular-stock-steel or hardened-steel, helically threaded,  $1\frac{1}{2}$  by 0.135 to  $2\frac{1}{2}$  by 0.148-in. nails with flat slightly countersunk  $\frac{5}{16}$ -in. head and medium diamond point.

**double-headed\*, duplex-head, dual-head, nail—steel-reinforced head roofing nail\***—steel bright or zinc coated, regular-stock-steel, flat reinforced  $\frac{3}{4}$  by 0.113 to 4 by 0.207-in. nailshad 0.625-in. diameter, smooth round shank  $\frac{3}{4}$  with double to  $1\frac{1}{4}$ -in  $\frac{3}{4}$  to long  $\frac{7}{4}$ -in. head, medium diamond point, and  $\frac{1}{4}$  to 0.106  $\frac{7}{4}$ -in. distance between head to be struck by hammer and bearing head. Length of nails measured from bearing surface of head. and 0.120- in diameter.

**drive nail, drive screw—steel roofing nail\***—terms applied to helically threaded nails, twisted nails, steel bright or zinc coated, stainless steel nail, flat head 0.375 to 0.500-in diameter, round smooth or ring shank 0.106 to 0.162-in. diameter by  $\frac{3}{4}$  to  $4\frac{1}{2}$ and annularly threaded shoe nail. (See long, with diamond point. and 1 by 0.120-in to  $1\frac{3}{4}$  nail, thread by 0.135-in.) for stainless steel.

*drywall nail*—See **gypsum wallboard nail**.

*dual-head nail*—See **double-headed nail**.

*duplex-head nail*—See **double-headed nail**.

**egg-case nail**—coated, regular-stock-steel,  $1\frac{1}{8}$  by 0.072-in. nail with flat  $\frac{7}{32}$ -in. head and sharp medium diamond point.

**escutcheon pin—steel shingle nail\***—small, regular-stock-steel or nonferrous, steel bright or zinc coated, flat head 0.250 to 0.406-in diameter, diamond point, with  $1\frac{1}{4}$  by 0.0350.092 to 2 by 0.092-in. nails with oval head and medium diamond point. 0.113 smooth or ring round shank.

**face nailumbrella head— roofing nail\***—See **siding nail**.zinc coated steel, leak resistant umbrella head, diamond point, round smooth or deformed shanks  $1\frac{3}{4}$  by 0.135-in to 3 by 0.148.

**fence nail—underlay nail, underlayment nail\***—stout, bright, regular-stock-steel, bright, stiff-stock or hardened-steel, annularly threaded, 1 $\frac{3}{4}$  by 0.135-0.080 to 4 $\frac{3}{4}$  by 0.225-in.-0.148-in. nails with large flat flat or slightly countersunk  $\frac{3}{16}$  to  $\frac{5}{16}$ -in. head and medium diamond point.

**washed aluminum roofing nail\***—0.438 diameter flat head with neoprene washer under head, diamond point, smooth or deformed shank 1 $\frac{3}{4}$  by 0.135 to 2 $\frac{1}{2}$  by 0.145-in.

**washed steel roofing nail\***—steel bright or zinc coated nail, 0.438 diameter flat head with elastomer washer under head, diamond point, smooth or ring shank 1 $\frac{3}{4}$  by 0.135 to 2 $\frac{1}{2}$  by 0.145-in.

## ROOF SHEATHING, WALL SHEATHING, WALL SIDING NAILS

### Sheathing Nails

**fetter ring diaphragm/sheathing nail**—term applied to annularly threaded nail. (See bright, galvanized, hardened steel or stainless steel, smooth or deformed shank, 2 by 0.113 to 3 by 0.148 - thread-in.) with 0.266 to 0.312-in. diameter flat head and diamond point. Length dependent upon sheathing thickness and minimum penetration requirements.

**fiberboard nail**—bright or electroplated, regular-stock-steel or hardened-steel 1 by 0.054 to 2 by 0.062-in. nails with flat  $\frac{3}{32}$  or  $\frac{7}{64}$ -in. head and medium needle point.

**hardboard nail**—slender, usually colored (baked-lacquer finished), stiff-stock or usually hardened-steel, usually annularly threaded, 1 to 1 $\frac{5}{8}$  by 0.058-in. nails with small flat head and long needle point for fastening plain or prefinished  $\frac{1}{8}$  and  $\frac{1}{4}$ -in. hardboard for interior applications. Also, slender bright or colored (baked-lacquer finished), galvanized, stiff-stock, or usually hardened-steel, usually helically threaded, 2 to 3 by 0.105 and 0.120-in. nails with countersunk  $\frac{3}{16}$  or  $\frac{1}{4}$ -in. head and pilot needle point for fastening hardboard for exterior applications.

**roof sheathing ring shank nail\***—bright, galvanized or stainless steel ring shank nail, ranging from 2 $\frac{3}{8}$  by 0.113 in. to 3 by 0.131 in., with specific dimensional values of ring geometry, flat head, diamond point, meeting minimum bending yield requirements of Supplementary Section S1 and Table S1.2 of Specification F1667.

**field-boxroof-deck nail**—coated, barbed, regular-stock-steel, 2 by 0.099 to 2 galvanized, steel and bright steel, hardened steel, plain or annularly threaded, 3 by 0.135 to 4 $\frac{1}{2}$  by 0.106-in.-0.177-in. nails with flat or slightly countersunk  $\frac{9}{32}$  to  $\frac{25}{64}$ -in. oval head and medium diamond point.

### Siding Nails

**file-grip nail, file-thread aluminum-siding nail**—terms applied to helically threaded nails provided with file threads plain-shank or helically threaded, aluminum-alloy 1 by 0.099 to 2 $\frac{1}{2}$  by 0.135-in. nails with flat  $\frac{1}{4}$  (See to  $\frac{5}{16}$  thread-in.) head and medium diamond point

**common siding nail**—bright or colored (baked-lacquer finished), galvanized, regular-stock-steel or hardened-steel, plain-shank or threaded, 1 $\frac{3}{4}$  by 0.080 to 3 by 0.128-in. nails with flat  $\frac{5}{32}$  to  $\frac{19}{64}$ -in. head and medium diamond point.

**fine nail\*—insulated-siding nail**—slender, bright, regular-stock-steel, bright or colored (baked lacquer finished) aluminum-alloy, 1 $\frac{1}{2}$  by 0.035-0.113 to 4 $\frac{1}{2}$  by 0.072-in.-0.135-in. nails with flat  $\frac{7}{32}$  to  $\frac{9}{32}$ -in. head and medium diamond point. Also, slender, electroplated, hardened-steel, 1 $\frac{1}{4}$  by 0.054 to 2 $\frac{1}{2}$  by 0.083-in. nails with brad head and short diamond point.

**wood-siding nail**—bright and colored (baked-lacquer finished), plain-shank or helically threaded, aluminum-alloy, 1 $\frac{7}{8}$  by 0.106 to 2 $\frac{7}{8}$  by 0.148-in. nails with  $\frac{9}{64}$  to  $\frac{11}{32}$ -in. casing or  $\frac{17}{64}$  to  $\frac{5}{16}$ -in. sinker head and medium or blunt diamond point. Also, bright or colored (baked-lacquer finished), stainless-steel, annularly threaded, 2 $\frac{1}{8}$  and 2 $\frac{3}{8}$  by 0.083 and 0.095-in. nails with slightly countersunk  $\frac{3}{16}$ -in. head and medium diamond point. (See **common siding nail**.)

### Interior and Flooring

**brad\***—small nail with small head.

*brad, common wire*—slender, regular-stock-steel,  $\frac{3}{8}$  by 0.035 to 6 by 0.262-in. wire nails with brad 0.050 to 0.331-in. head and medium diamond point.

*brad, cut*—slender, usually small, regular-stock-steel nails of same thickness throughout, but tapering in width; with slight projection on one side serving as head. Also, tapering, square-bodied, finishing nail with countersunk head.

**casing nail\***—bright or galvanized, slender, regular-stock-steel, 1 by 0.067 to 3 $\frac{1}{2}$  by 0.135-in. nails with flat or cupped 0.099 to 0.177-in. casing head and medium diamond point for countersinking where concealment is important.

**fine nail\***—slender, bright steel or copper, 1 $\frac{1}{8}$  by 0.072 with flat 0.172-in head, diamond point.

**finishing nail\***—slender, bright, regular-stock-steel, 1 by 0.058 to 4 by 0.135-in. nails with flat or cupped 0.086 to 0.177-in. brad head and medium diamond point for countersinking where concealment of head is important. (See also, **fine nail, moulding and trim nails, wallboard nails.**)

**fire-door nail**—bright, regular-stock-steel, barbed, 1¼ by 0.092-in. nail (3d shingle nail) with flat ¼-in. head and medium diamond point and 2 by 0.099-in. nail (6d box nail) with flat 17/64-in. head and medium diamond point.

**flattened-shank nail**—round wire nail with portion of shank flattened for a certain distance between point and head to facilitate driving of nail between steel members and wrapping of flattened portion of shank around steel rod during driving.

**flooring brad**—bright, regular-stock-steel, 2 by 0.120 to 4 by 0.192-in. nails with deep (32°) countersunk flat or cupped 0.162 to 0.244-in. head and medium diamond point. Also, slender, bright, regular-stock-steel, 1¼ by 0.076 to 2 ½ by 0.113-in. nails with deep (32°) countersunk flat or cupped or brad 0.128 to 0.155-in. head and blunt diamond point.

*machine flooring brad*—bright, regular stock-steel, 1 by 0.072-in. nail with special 0.113-in. brad head with cylindrical rim and medium diamond point.

**flooring nail\***—bright, stiff-stock or hardened-steel, helically threaded, 1 by 0.072 to 3½ by 0.148-in. nails with flat or checkered 5/64 to 3/32-in. countersunk or casing head and blunt diamond point.

**furring nail, self-furring nail**—galvanized, regular-stock-steel, 1¼ to 2 ½ by 0.106-in. nails with 3/8-in. flat head, medium diamond point, and washer or spacer on shank; for fastening reinforcing wire mesh and spacing it from nailing member.

**moulding and trim nail**—bright zinc-plated, slim, hardened-steel, 1¼ by 0.054 to 2½ by 0.083-in. nails with blunt point and button head. (See **finishing nail, fine nail, hardboard nail, insulation building-board nail, tileboard nail, wallboard nail.**)

**parquet flooring nail**—hardened-steel, annularly threaded, 1⅛ by 0.062 to 1¼ by 0.072-in. nails with deep countersunk 0.080 to 0.113-in. casing head and diamond or needle point.

**wallboard nail**—slender, colored (baked-lacquer finished), hardened-steel, smooth or annularly threaded, 1⅛ by 0.062 to 2 by 0.083-in. nails with slightly countersunk 0.109 to 0.181-in. head and medium diamond or long needle point.

*Miscellaneous Construction*

**foundry nail, smooth foundry brick-siding nail**—bright, galvanized, colored (baked-lacquer finished), plain-shank barbed or annularly threaded, regular-stock-steel, 7/8 by 0.120-0.092 to 92 ½ by 0.162-in. 0.099-in. nails with large thin-flat checkered 3/16 to 1/4-in. head and medium diamond point.

**framing nail common cut—nail\***—See **common nail, threaded common nail, threaded nail**. normally, wedge-shaped, ½ to 6-in. nails of various types sheared from stiff-stock-sheet steel, with sheared-square point end narrower than upset head end.

**fruit-box nail—concrete nail\***—coated, regular-stock-steel, hardened-steel, smooth or deformed shank round or square ½ by 0.072-in. nail 0.148 to 3 by 0.181-in. nails with flat countersunk 5/16-in. to 0.284-in. head and medium diamond point.

**furniture nail**—plated, regular-stock-steel or brass, 3/8 to ¾-in. nails with extra large, decorative head and long diamond or needle point.

**furniture-carton nail—corker nail\***—bright, regular-stock-steel, usually coated, slender, regular-stock-steel, 1 by 0.062 to 5/8 to 2-in. by 0.244-in. nails with circular 5/32 1-in. to ½ cap-in. sinker head and medium diamond point. (See cap nail.)

**furring nail double-headed\*, duplex-head, — dual-head, nail**—See **self-furring nail**. bright or coated, regular-stock-steel, 1¾ by 0.113 to 4 by 0.207-in. nails with double 3/16 to 7/16-in. head, medium diamond point, and ¼ to 7/16-in. distance between head to be struck by hammer and bearing head. Length of nails measured from bearing surface of head.

*general-purpose nail*— See **common nail**.

**glulam rivet nail\***—plain or galvanized, flat, hardened-steel, 23/8 by ¼-in. nail with sheared V-shaped point and flat upset wedge-shaped head; designed to be driven through undersize truncated apertures in regular-stock-steel connector plates from which nails cantilever into wood.

**gudgeon**—bright, regular-stock-steel nails with annular flange or collar located along shank. (See **tile nail, acoustical.**)

**gypsum-deck nail**—helically threaded cap nails with special type of thread with extra large lead angle.

**gypsum-lath nail**—bright or blued, regular-stock-steel, 1 by 0.092 to 1¼ by 0.166 and 1¾ by 0.092-in. nails with large flat 1/64 to 3/8-in. head and long diamond point. Also, regular-stock-steel, 1 by 0.120 to 1½ by 0.148-in. nails with flat ½-in. head and medium diamond point. Also, aluminum-alloy, 1⅛ by 0.099 to 1½ by 0.105-in. nails with flat 1/64 or 5/14-in. head and medium diamond point.

**gypsum-sheathing nail**—galvanized, barbed, regular-stock-steel, 1¾ by 0.120-in. nail with flat 7/16-in. head and medium diamond point.

**gypsum-wallboard nail\***, **gypsumboard nail\***, **drywall nail\***—bright or blued, regular-stock-steel, annularly threaded, 1 1/8 by 0.098 to 2 by 0.105-in. nails with flat, nub, or crossed slightly countersunk ¼ to 1/64-in. head and long diamond point. Also, slender, colored (baked-lacquer finished), regular-stock-steel, smooth or annularly threaded, 1 1/8 by 0.062 to 2 by 0.083-in. nails with slightly countersunk 0.181-in. head and medium diamond or long needle point.

**hardboard nail**—slender, usually colored (baked-lacquer finished), stiff-stock or usually hardened-steel, usually annularly threaded, 1 to 1½ by 0.058-in. nails with small flat head and long needle point for fastening plain or prefinished 1/8 and 1/4-in. hardboard for interior applications. Also, slender bright or colored (baked-lacquer finished), galvanized, stiff-stock, or usually hardened-steel, usually helically threaded, 2 to 3 by 0.105 and 0.120-in. nails with countersunk 3/16 or 1/64-in. head and pilot needle point for fastening hardboard for exterior applications.

**hardened nail**—heat-treated medium-low or medium-high carbon-steel nail.

*heavy nail, heavy-gage nail*—See **stout nail**.

*high-density fiberboard nail*—See **shake nail, shingle nail, wood shingle** and **asbestos shingle nail**.

**hinge nail**—light or heavy, bright, regular-stock-steel, 1¼ by 3/16 to 4 by 3/8-in. nails with flat or oval countersunk (95°) or oval ¼ to ½-in. head and long diamond or chisel point.

**hob nail**—stout, regular-stock-steel, 3/8 to 5/8-in. nails with large decorative (high square, fancy, round bevel, checkered, grooved, etc.) head and sheared-bevel point.

*hook-head metal-lath nail*—See **metal-lath nail**.

**hoop fastener nail**—bright, blued or galvanized, regular-stock-steel, 3/8 by 0.092 to 1 by 0.162-in. nails with thin flat 3/8 to 1/16-in. long, 0.207 to 3/8-in. wide hook head and medium diamond point.

*insulating-siding nail*—See **brick-siding nail**.

**insulation building-board nail, tileboard nail**—galvanized, electro-galvanized or cadmium or nickel-plated, regular-stock-steel, 1¼ and 1¾ by 0.054-in. nails with flat 3/32-in. head and medium needle point. Also, plain or colored (baked-lacquer finished) hardened-steel, smooth or annularly threaded, 1¼ by 0.054 to 1¾ by 0.062-in. nails with slightly countersunk 0.109-in. head and medium diamond or long needle point.

**insulation-lath nail**—blued, regular-stock-steel, 1 1/8 and 1¾ by 0.092-in. nails with flat 3/8-in. head and long diamond point. (See **gypsum-lath nail**.)

**insulation-sheathing nail**—galvanized, barbed, regular-stock-steel, 1¾ and 2 by 0.115 or 0.120-in. nails with flat 7/16 or ½-in. head and medium diamond point.

*lath nail\**—See **metal-lath nail, wood-lath nail**.

*lead-head nail*—See **roofing nail**.

**lino-nail**—**lath nail\***, **metal-lath nail, hook-head metal-lath nail\***—bright, regular-stock-steel, 5/8 by 0.062-in. nail with oval head and medium diamond point.

*straight*—bright or blued steel 1 by 0.058 to 1½ by 0.080 shank, 0.141 to 0.218 flat round head, diamond point.

*hooked head\**—bright, blued or zinc coated steel, 1 1/8 by 0.106-in. nail with thin flat 7/16 or ½-in. hook head and medium diamond point.

*marking nail*—See **dating nail, marking head, numeral head**.

**masonry nail\***—plain, electro-zinc-plated or galvanized, hardened-steel, knurled (longitudinally or nearly longitudinally threaded or fluted), ½ to 4 by 0.148 or up to 0.250-in. nails with flat or checkered 5/16 to 9/16-in. head and medium diamond point.

**metal-lath nail, hook-head metal-lath nail\***—bright, blued or galvanized, regular-stock-steel, 1 1/8 by 0.106-in. nail with thin flat 7/16 or ½-in. hook head and medium diamond point. (See **self-furring nail**.)

**moulding and trim nail**—bright zinc-plated, slim, hardened-steel, 1¼ by 0.054 to 2½ by 0.083-in. nails with blunt point and button head. (See **finishing nail, fine nail, hardboard nail, insulation building-board nail, tileboard nail, wallboard nail**.)

**orange-box nail**—coated, regular-stock-steel, 1¼ by 0.072-in. nail with flat 7/32-in. head and medium diamond point.

**pallet nail\***—bright, stiff-stock or hardened-steel, helically threaded (with medium lead angle) or annularly threaded, 1½ by 0.105 to 4 by 0.177-in. nails with smooth or checkered flat 9/32 to 7/16-in. head and medium or blunt diamond or blunt chisel point.

**parquet flooring nail**—hardened-steel, annularly threaded, 1 1/8 by 0.062 to 1¼ by 0.072-in. nails with deep countersunk 0.080 to 0.113-in. casing head and diamond or needle point.



**peerless cut nail**—name for small, regular-stock-steel, cut nails with broad flat circular head and sheared long-tapered square point to facilitate clinching.

**pin**—small headless nail.

*plaster-base nail, plasterboard nail, plaster-board nail*—See **gypsum-lath nail, wood-lath nail**.

*pole-barn nail*—See **post-frame shank nail**.

**post-frame shank nail (formerly pole-barn nail)**—bright or galvanized, steel ring shank nail, ranging from 3 by 0.131 in. to 8 by 0.207 in., with flat head and diamond point, meeting minimum bending yield requirements of Supplementary Section S1 and Table S1.2 of Specification F1667.

**purlin nail, “straw”**—galvanized, regular-stock-steel, aluminum-alloy or copper, 4 to 16 by  $\frac{1}{8}$ -in., 0.135 or 0.148-in. nails of desired length with flat  $\frac{1}{2}$ -in., curved or  $\frac{1}{2}$ -in. head,  $\frac{1}{16}$ -in. cast lead head or plastic washer and sheared-square or diamond point; for securing corrugated roofing to I-beams.

**ratchet nail**—bright, regular-stock-steel,  $\frac{3}{4}$  to 2 by 0.120-in. nails with single-crest annular ratchet thread, flat  $\frac{3}{8}$ -in. head and medium diamond point.

**ring nail, ring-barbed nail, ring-grooved nail, ring-grip nail, ring-shank nail**—terms applied to annularly threaded nail. (See **thread, annular**.)

**roll-grooved nail**—bright or plated, helically grooved, round-wire, stiff-stock, 1 by 0.086 to 4 by 0.164-in. drive-screw nails with no clearance between flutes and head, with flat or slightly countersunk head and medium or long diamond point, with crest diameter being referred to as diameter.

**roof-deck nail**—galvanized, regular-stock-steel and bright, hardened-steel, plain or annularly threaded, 3 by 0.135 to 4  $\frac{1}{2}$  by 0.177-in. nails with flat or slightly countersunk  $\frac{9}{32}$  to  $\frac{25}{64}$ -in. head and medium diamond point.

*roofing fastener*—See **purlin nail**.

**roofing nail\*, asphalt-shingle nail, corrugated-roofing nail, sheet-roofing nail**—bright or galvanized, plain-shank, barbed or threaded, regular-stock-steel,  $\frac{3}{4}$  by 0.092 to 3 by 0.148-in. nails with flat, checkered, large, reinforced, umbrella lead or cast-lead  $\frac{1}{4}$  to  $\frac{3}{16}$ -in. head and medium or long diamond or needle point, often provided with lead conical neoprene or flat plastic washer. Also, aluminum-alloy, plain-shank or helically threaded,  $\frac{3}{4}$  by 0.120 to 2  $\frac{3}{4}$  by 0.150-in. nails with flat or checkered  $\frac{3}{8}$  to  $\frac{1}{16}$ -in. head and medium diamond or needle point, often provided with conical neoprene washer. (See **cap nail**.)

*scaffold nail*—See **double-headed nail**.

**screw nail, screwnail, screw-grip nail, screw-shank nail, scrus-shank nail, screw-thread nail**—terms applied to helically threaded nail and screw-threaded nail. (See **thread**.)

**self-furring nail**—galvanized, regular-stock-steel, 1  $\frac{1}{4}$  to 2  $\frac{1}{2}$  by 0.106-in. nails with  $\frac{3}{8}$ -in. flat head, medium diamond point, and washer or spacer on shank; for fastening reinforcing wire mesh and spacing it from nailing member.

**shade bracket nail**—bright, regular-stock-steel,  $\frac{3}{4}$  to 1 by 0.080 or 0.092-in. nails with slightly countersunk  $\frac{1}{2}$  or  $\frac{9}{32}$ -in. head and needle point.

**shake nail, cedar-shake or shingle nail, wood-shake face nail**—enameled (baked-lacquer finished), galvanized, regular-stock-steel, plain-shank or annularly threaded, aluminum-alloy, plain-shank or helically threaded, or stainless-steel, annularly threaded, 1  $\frac{1}{2}$  by 0.080 to 2  $\frac{1}{2}$  by 0.092-in. nails with flat  $\frac{1}{8}$  to  $\frac{9}{64}$ -in. head and medium diamond point. Also, aluminum-alloy 1  $\frac{1}{4}$  by 0.086 to 1  $\frac{3}{4}$  by 0.092-in. nails with flat  $\frac{5}{32}$ -in. head and blunt diamond point. Also, aluminum-alloy, annularly threaded, 1  $\frac{3}{8}$  and 2 by 0.099-in. nails with special type of thread and with flat slightly countersunk  $\frac{5}{32}$ -in. head and long needle point; for fastening cedar shakes to fiberboard nail-base sheathing.

*sheathing nail*—See **common nail, threaded common nail, diaphragm nail, fiberboard nail, gypsum-sheathing nail, hardboard nail**.

**sheathing/siding nail**—stainless-steel, annularly threaded, 1  $\frac{1}{2}$  by 0.120-in. nail with slightly countersunk  $\frac{7}{64}$ -in. head and sharp medium diamond point.

**sheet-metal nail**—nail stamped out of sheet metal and formed to desired shape. (See **roofing nail**.)

*sheet-roofing fastener nail*—See **purlin nail**.

*sheet-roofing nail*—See **roofing nail**.

*shingle-backer nail*—See **shake nail**.

**shingle nail\*—tile nail**—

**wood-shingle nail**—*acoustical-tile nail*—bright or galvanized, regular-stock-steel, plain-shank or annularly threaded, slender, electroplated, regular-stock-steel or stiff-stock, 1  $\frac{1}{4}$  by 0.076 to 2 by 0.106-in. nails with flat to  $\frac{7}{32}$  to  $\frac{9}{32}$ -in. head and medium

or blunt diamond point. Also, bright or colored (baked-lacquer finished), aluminum-alloy, plain-shank or helically threaded,  $\frac{7}{8}$  by 0.080 to  $\frac{1}{4}$  by 0.099-in. nails with flat  $\frac{5}{32}$  to  $\frac{9}{32}$ -in. head and medium or blunt diamond point. Also, aluminum-alloy, annularly threaded,  $\frac{1}{4}$  and 2 by 0.101-in. nails with special type of thread and with flat slightly countersunk 0.062-in. nails with  $\frac{1}{4}$ -in. head and long needle point for fastening cedar shingles to fiberboard nail-base sheathing. projection head with 0.135-in. collar and sharp, blunt, or medium diamond point.

*asbestos-shingle nail*—bright or galvanized, regular-stock-steel, annularly threaded, 1 to 2 by 0.113-in. nails with flat  $\frac{1}{32}$ -in. head and long diamond or needle point. Also, aluminum-alloy, helically threaded,  $\frac{1}{8}$  to  $2\frac{1}{2}$  by 0.099 to 0.135-in. nails with smooth or striated flat  $\frac{3}{16}$  to  $\frac{7}{16}$ -in. head or  $\frac{9}{64}$  to  $\frac{5}{32}$ -in. casing head and medium diamond or needle point. Also, aluminum-alloy, annularly threaded,  $\frac{1}{8}$  and 2 by 0.101-in. nails with special type of thread and with flat slightly countersunk 0.190-in. striated head and long needle point; for fastening asbestos shingles to fiberboard nail-base sheathing.

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

*siding nail\**—See **brick-siding nail, hardboard nail, roofing nail, sheathing/siding nail**.

*aluminum-siding nail*—plain-shank or helically threaded, aluminum-alloy 1 by 0.099 to  $2\frac{1}{2}$  by 0.135-in. nails with flat  $\frac{1}{4}$  to  $\frac{5}{16}$ -in. head and medium diamond point.

*asbestos-siding face nail*—bright, colored (baked-lacquer finished) or galvanized, regular-stock-steel, hardened-steel, bronze, aluminum or stainless-steel, annularly threaded, file-grip or screw-thread,  $1\frac{1}{4}$  by 0.080 to 2 by 0.105-in. nails with smooth or striated flat  $\frac{3}{16}$ -in. or button head and medium diamond or needle point.

*common siding nail*—bright or colored (baked-lacquer finished), galvanized, regular-stock-steel or hardened-steel, plain-shank or threaded,  $1\frac{3}{4}$  by 0.080 to 3 by 0.128-in. nails with flat  $\frac{5}{32}$  to  $\frac{1}{4}$ -in. head and medium diamond point.

*corrugated-siding nail*—See **roofing nail**.

*hardboard-siding nail*—See **hardboard nail**.

*insulated-siding nail*—bright or colored (baked-lacquer finished) aluminum-alloy,  $1\frac{1}{2}$  by 0.113 to  $2\frac{1}{2}$  by 0.135-in. nails with flat  $\frac{7}{32}$  to  $\frac{9}{32}$ -in. head and medium diamond point.

*insulating-siding nail*—See **brick siding nail**.

*wood-siding nail*—bright and colored (baked-lacquer finished), plain-shank or helically threaded, aluminum-alloy,  $1\frac{7}{8}$  by 0.106 to  $2\frac{7}{8}$  by 0.148-in. nails with  $\frac{9}{64}$  to  $\frac{1}{32}$ -in. casing or  $\frac{1}{64}$  to  $\frac{5}{16}$ -in. sinker head and medium or blunt diamond point. Also, bright or colored (baked-lacquer finished), stainless-steel, annularly threaded,  $2\frac{1}{8}$  and  $2\frac{3}{8}$  by 0.083 and 0.095-in. nails with slightly countersunk  $\frac{3}{16}$ -in. head and medium diamond point. (See **common siding nail**.)

**wood-lath nail**—blued, regular-stock-steel, 1 and  $1\frac{1}{8}$  by 0.054 and 0.072-in. nails with flat  $\frac{1}{8}$  to  $\frac{1}{64}$ -in. head and medium diamond point.

### NAIL TYPES USED IN SPECIALIZED APPLICATIONS

**broom nail\***—bright, regular-stock-steel,  $\frac{5}{8}$  to  $\frac{3}{4}$  by 0.072 or 0.080-in. nails with flat  $\frac{13}{64}$  or  $\frac{7}{32}$  in. head and medium diamond point.

**cleat**—L-shaped nail.

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

**clinch nail**—any nail designed for clinching after driving. Bright, regular-stock-steel, 1 by 0.080 to 4 by 0.177-in. nails with oval  $\frac{3}{16}$  to  $\frac{3}{8}$ -in. head and duckbill or clinch point. (See **cleat nail**.)

**clout nail**—bright, steel,  $\frac{3}{4}$  by 0.072 to  $1\frac{1}{2}$  by 0.092-in. nails with large flat 0.225 to 0.262-in. head and long side point or duckbill point.

**conduit nail**—bright or copper-plated, steel or hardened steel,  $1\frac{3}{4}$  to  $3\frac{1}{2}$  by 0.161-in. nails with annularly threaded shank; bent, curved hook head, and medium needle point. Different types of head designed for fastening  $\frac{1}{2}$ ,  $\frac{3}{4}$ , or 1-in. conduit, tubing, pipe, cable, etc.

**cork-insulation nail**—galvanized, regular-stock-steel, 3 to 9 by 0.148-in. nails with flat  $\frac{1}{2}$ -in. head and medium diamond point.

**sinker\***—**escutcheon pin**—bright or coated, slender, regular-stock-steel, 1—small, regular-stock-steel or nonferrous,  $\frac{1}{4}$  by 0.0670.035 to  $52\frac{3}{4}$  by 0.244-in. 0.092-in. nails with  $\frac{1}{64}$  to oval  $\frac{1}{2}$ -in. sinker head and medium diamond point, with diameter of head smaller than that of cooler and common nail of same designation. point.

**slating nail\***—**fence nail**—galvanized, regular-stock-steel, 1 by 0.106 to 2 by 0.148-in. nails with slightly countersunk stout, bright, regular-stock-steel,  $1\frac{3}{4}$  to  $\frac{7}{16}$ -in. flat head and medium diamond point. Also, aluminum-alloy,  $\frac{7}{8}$  by 0.1060.135 to  $14\frac{1}{2}$  by