

Designation: F 547 - 01

# 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 ASTM Specification F 1667 Driven Fasteners: Nails, Spikes, 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:

NailNail HeadsNail ThreadsNail TypesNail PointsMiscellaneous Terms

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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, 15/8 and 13/4 by 0.080-in. nails with flat 15/64-in. head and medium diamond point.

asbestosboard nail—galvanized, hardened-steel, helically threaded, 1¼ and 1½ by 0.083-in. screwnails with flat, slightly countersunk, 3/16-in. head and blunt diamond point.

asbestos-shingle nail— See shingle nail.

asphalt-shingle nail— See roofing nail.

auto nail—nail of ½ to 5½-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, 5% by 0.067 to 1½ 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.

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

- **beer-case cleat nail**—bright, regular-stock-steel, 1 by 0.080 to 17/8 by 0.106-in. nails with 3/16 to 1/4-in. oval head and duckbill or clinch point.
- beer-case hinge, lock and latch nail—bright, regular-stock-steel, 5/8 by 0.080 to 15/16 by 0.092-in. nails with oval 3/16 to 7/32-in. head and duckbill or clinch point.
- **beer-case strap nail**—bright, regular-stock-steel, 1½ by 0.092 to 2 by 0.113-in. nails with oval <sup>15</sup>/<sub>64</sub> to -in. head and medium diamond point.
- **berry-box nail**—bright, regular-stock-steel, <sup>3</sup>/<sub>4</sub> to 1 <sup>1</sup>/<sub>4</sub> 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, 1½ by ¾6 to 4 by ¾8-in., round-wire nails with oval, countersunk, ½3 to ¾4-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, ½8 to ¾8-in. head and medium diamond point. Also, galvanized, regular-stock-steel, 2 to 2 ½-in. square, cut nails with oval head.
- box nail\*—bright, coated or galvanized, regular-stock-steel, 1 by 0.058 to 5 by 0.162-in. nails, made of lighter-gage wire than common nails and sinkers, with flat <sup>11</sup>/<sub>64</sub> to <sup>13</sup>/<sub>32</sub>-in. head and medium diamond point.
- brad\*—small nail with small head.
  - *brad, common wire* slender, regular-stock-steel, <sup>3</sup>/<sub>8</sub> 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, 7/8 by 0.092 to 2 1/2 by 0.099-in. nails with flat checkered 3/16 or 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  $\frac{13}{64}$  or  $\frac{7}{32}$  in. head and medium diamond point.
- cap nail—bright, galvanized or electroplated, plain-shank or threaded, regular-stock-steel, <sup>3</sup>/<sub>4</sub> 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, 1½ by 0.105-in. (light) or 0.135-in. (heavy) to 6 by 0.225-in. (light) or 0.244-in. (heavy) nails and screwnails with flat or oval countersunk head and medium diamond point. Also, light-duty or heavy-duty, coated, barbed or helically threaded, regular-stock-steel, 1½ by 0.092 or 0.106 to 6 by 0.207 or 0.225-in. nails with oval countersunk 15/64 to 15/32-in. head and medium diamond point.
- casing nail\*—bright or galvanized, slender, regular-stocksteel, 1 by 0.067 to 3½ 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, ½ , 5/8 , 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, 1½ by 0.080 to 1 ½ by 0.106-in. nails with oval ¾ to ¼-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 <sup>3</sup>/<sub>16</sub> to <sup>3</sup>/<sub>8</sub>-in. head and duckbill or clinch point. (See **cleat nail.**)
- **clout nail**—bright, regular-stock-steel, <sup>3</sup>/<sub>4</sub> by 0.072 to 1 <sup>1</sup>/<sub>2</sub> 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, ½ 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, ½ by 0.035 to 6 by 0.262-in. nails with flat ½ to ½ to 17/32-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, ½ by 0.135 to 3 ½ by 0.207-in. nails with flat countersunk 5/16 to ½-in. head and medium diamond point.
- conduit nail—bright or copper-plated, regular-stock-steel or hardened-steel, 13/4 to 31/2 by 0.161-in. nails with annularly threaded shank; bent, curved hook head, and medium needle point. Different types of head designed for fastening 1/2, 3/4, or 1-in. conduit, tubing, pipe, cable, etc.
- cooler nail—usually coated, slender, regular-stock-steel, 1 by 0.062 to 27/8 by 0.120-in. nails with flat 11/64 to 19/64-in. head and medium diamond point, with head diameter same as or smaller than that of common wire nail of same length.
- **copper common nail\***—bright, solid-copper, % by 0.065 to 6 by 0.284-in. nails with flat head and medium diamond point.
- **corker nail\***—usually coated, slender, regular-stock-steel, 1 by 0.062 to 57/8 by 0.244-in. nails with 5/32 to 1/2-in. sinker head and medium diamond point.
- **cork-insulation nail**—galvanized, regular-stock-steel, 3 to 9 by 0.148-in. nails with flat ½-in. head and medium diamond point.
- corrugated roofing/siding nail—See roofing nail.
- **dating nail**—galvanized, regular-stock-steel, copper or brass, 1½ by ¼ to 2½ by ¾6-in. nails with ¾8 to ½-in. flat numeral head and medium diamond point.
- **diaphragm nail**—stout, bright or galvanized, regular-stock-steel or hardened-steel, helically threaded, 1½ by 0.135 to 2½ by 0.148-in. nails with flat slightly countersunk 5/16-in. head and medium diamond point.
- double-headed\*, duplex-head, dual-head, nail—bright or coated, regular-stock-steel, 13/4 by 0.113 to 4 by 0.207-in. nails with double 3/16 to 7/16-in. head, medium diamond point, and 1/4 to 7/16-in. distance between head to be struck by hammer and bearing head. Length of nails measured from bearing surface of head.

**drive nail, drive screw**—terms applied to helically threaded nails, twisted nails, and annularly threaded shoe nail. (See **nail, thread.**)

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 1/8 by 0.072-in. nail with flat 7/32-in. head and sharp medium diamond point.

escutcheon pin—small, regular-stock-steel or nonferrous, ½ by 0.035 to 2 by 0.092-in. nails with oval head and medium diamond point.

face nail—See siding nail.

**fence nail**—stout, bright, regular-stock-steel, 1¾ by 0.135 to 4 by 0.225-in. nails with large flat ½ to ½ to ½ in. head and medium diamond point.

**fetter ring nail**—term applied to annularly threaded nail. (See **thread.**)

**fiberboard nail**—bright or electroplated, regular-stock-steel or hardened-steel 1 by 0.054 to 2 by 0.062-in. nails with flat <sup>3</sup>/<sub>32</sub> or <sup>7</sup>/<sub>64</sub>-in. head and medium needle point.

**field-box nail**—coated, barbed, regular-stock-steel, 2 by 0.099 to 2<sup>1</sup>/<sub>4</sub> by 0.106-in. nails with <sup>1</sup>/<sub>4</sub>-in. oval head and medium diamond point.

**file-grip nail, file-thread nail**—terms applied to helically threaded nails provided with file threads. (See **thread.**)

**fine nail\***—slender, bright, regular-stock-steel, ½ by 0.035 to 1 ½ by 0.072-in. nails with flat ½ to ½64-in. head and medium diamond point. Also, slender, electroplated, hardened-steel, 1½ by 0.054 to 2½ by 0.083-in. nails with brad head and short 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, 1½ by 0.092-in. nail (3d shingle nail) with flat ½-in. head and medium diamond point and 2 by 0.099-in. nail (6d box nail) with flat ½-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, 1½ by 0.076 to 2½ 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 poil with gracial 0.113 in brad head with gulindri

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 %4 to %32-in. countersunk or casing head and blunt diamond point.

**foundry nail, smooth foundry nail**—bright, regular-stock-steel, <sup>3</sup>/<sub>4</sub> by 0.120 to 9 by 0.162-in. nails with large thin flat <sup>7</sup>/<sub>16</sub> to <sup>1</sup>/<sub>2</sub>-in. head and medium diamond point.

framing nail—See common nail, threaded common nail, threaded nail.

**fruit-box nail**—coated, regular-stock-steel, 13/8 by 0.072-in. nail with flat 7/32-in. head and medium diamond point.

**furniture nail**—plated, regular-stock-steel or brass, 3/8 to 3/4-in. nails with extra large, decorative head and long diamond or needle point.

**furniture-carton nail**—bright, regular-stock-steel, <sup>3</sup>/<sub>4</sub> to 2-in. nails with circular 1-in. cap head and medium diamond point. (See **cap nail.**)

furring nail—See self-furring nail.

general-purpose nail— See common nail.

**glulam rivet nail\***—plain or galvanized, flat, hardened-steel, 23/8 by 1/4-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 1½ by 0.166 and 1¾ by 0.092-in. nails with large flat ½ to ¾s-in. head and long diamond point. Also, regular-stock-steel, 1 by 0.120 to ½ by 0.148-in. nails with flat ½-in. head and medium diamond point. Also, aluminumalloy, ½ by 0.099 to ½ by 0.105-in. nails with flat ½-in. head and medium diamond point.

**gypsum-sheathing nail**—galvanized, barbed, regular-stock-steel, 1¾ by 0.120-in. nail with flat ¾6-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 1/4 to 19/64-in. head and long diamond point. Also, slender, colored (baked-lacquer finished), regular-stock-steel, smooth or annularly threaded, 11/8 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 15/8 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 13/64-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, 1½ by 3/16 to 4 by 3/8-in. nails with flat or oval countersunk (95°) or oval ½ 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,  $\frac{3}{8}$  by 0.092 to 1 by 0.162-in. nails with thin flat  $\frac{3}{8}$  to  $\frac{11}{16}$ -in. long, 0.207 to  $\frac{3}{8}$ -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, 1½ and 1¾ by 0.054-in. nails with flat ¾32-in. head and medium needle point. Also, plain or colored (baked-lacquer finished) hardened-steel, smooth or annularly threaded, 1½ 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, 1½ and 1¾ by 0.092-in. nails with flat ¾-in. head and long diamond point. (See gypsum-lath nail.)
- insulation-sheathing nail—galvanized, barbed, regular-stock-steel, 1<sup>3</sup>/<sub>4</sub> and 2 by 0.115 or 0.120-in. nails with flat <sup>7</sup>/<sub>16</sub> or <sup>1</sup>/<sub>2</sub>-in. head and medium diamond point.

lath nail\*—See metal-lath nail, wood-lath nail. lead-head nail—See roofing nail.

- **lino-nail**—bright, regular-stock-steel, 5% by 0.062-in. nail with oval 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, 1½ by 0.106-in. nail with thin flat ½ in. hook head and medium diamond point. (See self-furring nail.)
- moulding and trim nail—bright zinc-plated, slim, hardenedsteel, 1½ 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, 1<sup>1</sup>/<sub>4</sub> by 0.072-in. nail with flat <sup>7</sup>/<sub>32</sub>-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 %32 to 7/16-in. head and medium or blunt diamond or blunt chisel point.
- **parquet flooring nail**—hardened-steel, annularly threaded, 1½ by 0.062 to 1½ 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**—bright or galvanized, stiff-stock or hardenedsteel, helically threaded, 2½ to 9-in. nails with flat head and medium diamond point. (See **threaded nail.**)
- **purlin nail, "straw"**—galvanized, regular-stock-steel, aluminum-alloy or copper, 4 to 16 by ½-in., 0.135 or 0.148-in. nails of desired length with flat ½-in., curved or ½-in. head, ½-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, <sup>3</sup>/<sub>4</sub> to 2 by 0.120-in. nails with single-crest annular ratchet thread, flat <sup>3</sup>/<sub>8</sub>-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, roundwire, 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 ½ by 0.177-in. nails with flat or slightly countersunk %32 to 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, <sup>3</sup>/<sub>4</sub> by 0.092 to 3 by 0.148-in. nails with flat, checkered, large, reinforced, umbrella lead or cast-lead <sup>1</sup>/<sub>4</sub> to <sup>9</sup>/<sub>16</sub>-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, <sup>3</sup>/<sub>4</sub> by 0.120 to 2<sup>3</sup>/<sub>4</sub> by 0.150-in. nails with flat or checkered <sup>3</sup>/<sub>8</sub> to <sup>9</sup>/<sub>16</sub>-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, scru-shank nail, screw-thread nail—terms applied to helically threaded nail and screw-threaded nail. (See thread.)
- self-furring nail—galvanized, regular-stock-steel, 1½ to 2½ 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.
- **shade bracket nail**—bright, regular-stock-steel, <sup>3</sup>/<sub>4</sub> to 1 by 0.080 or 0.092-in. nails with slightly countersunk <sup>1</sup>/<sub>2</sub> or <sup>9</sup>/<sub>32</sub>-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, 1½ by 0.080 to 2½ by

0.092-in. nails with flat ½ to ¾4-in. head and medium diamond point. Also, aluminum-alloy 1¼ by 0.086 to 1¾ by 0.092-in. nails with flat ⅓32-in. head and blunt diamond point. Also, aluminum-alloy, annularly threaded, 1¾ and 2 by 0.099-in. nails with special type of thread and with flat slightly countersunk ⅓32-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, 1½ by 0.120-in. nail with slightly countersunk 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\*

wood–shingle nail—bright or galvanized, regular-stock-steel, plain-shank or annularly threaded, 1¼ by 0.076 to 2 by 0.106-in. nails with flat ½2 to ½2-in. head and medium or blunt diamond point. Also, bright or colored (baked-lacquer finished), aluminum-alloy, plain-shank or helically threaded, ½8 by 0.080 to ½4 by 0.099-in. nails with flat ½2 to ½2-in. head and medium or blunt diamond point. Also, aluminum-alloy, annularly threaded, ½8 and 2 by 0.101-in. nails with special type of thread and with flat slightly countersunk ½32-in. head and long needle point for fastening cedar shingles to fiberboard nail-base sheathing.

asbestos-shingle nail—bright or galvanized, regular-stock-steel, annularly threaded, 1 to 2 by 0.113-in. nails with flat <sup>13</sup>/<sub>32</sub>-in. head and long diamond or needle point. Also, aluminum-alloy, helically threaded, 1½ to 2½ by 0.099 to 0.135-in. nails with smooth or striated flat ¾ to 7/16-in. head or %4 to 5/32-in. casing head and medium diamond or needle point. Also, aluminum-alloy, annularly threaded, 1¾ 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, 1½ by 0.080 to 2 by 0.105-in. nails with smooth or striated flat ¾16-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  $\frac{19}{64}$ -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  $7\frac{1}{32}$  to  $9\frac{1}{32}$ -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% by 0.106 to 2% by 0.148-in. nails with %4 to ½32-in. casing or ½4 to ½16-in. sinker head and medium or blunt diamond point. Also, bright or colored (baked-lacquer finished), stainless-steel, annularly threaded, 2½ and 2¾ by 0.083 and 0.095-in. nails with slightly countersunk ¾16-in. head and medium diamond point. (See **common siding nail.**)

**sinker\***—bright or coated, slender, regular-stock-steel, 1 ½ by 0.067 to 5¾ by 0.244-in. nails with ½-in. sinker head and medium diamond point, with diameter of head smaller than that of cooler and common nail of same designation.

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

**slender, slim nail**—nails with shank diameter usually at least one gage smaller than common nails of same length.

smooth-edge carpet plywood strip nail— hardened-steel, 11/16 by 0.105-in. nail with countersunk flat 7/32-in. head and long diamond point.

square-wire nail—bright, diagonally barbed, square-wire, regular-stock-steel, 2 by 0.113 to 4 by 0.192-in. common nails with ½ to ¾s-in. flat head and medium diamond point; also, 2 by 0.099 and 2½ by 0.113-in. box nails with ¼ and ½4-in. flat head and medium diamond point; also, 2 by 0.091 and 2½ by 0.099-in. finish nails with 0.124 and 0.131-in. flat head and medium diamond point; also, 1½ by 0.131-in. truss nail with ¾32-in. flat head and medium diamond point.

**stout nail**—nails with shank diameter usually at least one gage larger than common nails of same length.

straight nail—nail not bent or bowed.

**strap nail**—bright, regular-stock-steel, 1 ½ by 0.092 to 2 by 0.113-in. nails with oval ½ to ½ to ½ to 17/64-in. head and short diamond point.

straw—See purlin nail.

strip nail—steel, 1¼ to 2½-in. nails spot welded to disposable metal strip that feed nails into nailing machine provided with staple-type magazine. During punching of nail from strip, small washer is formed under head. Also, nail stored in special strip to serve as magazine for feeding nailing machine.

## subflooring nail—See threaded sinker (annularly threaded), diaphragm nail.

**T nail**—bright, etched, coated, galvanized, aluminum-coated, plastic-coated, knurled or annularly threaded, stiff-stock or aluminum-alloy, round-wire, 1 by 0.080 to 2½ by 0.131-in.

nails of T shape with 5/32 or 17/64-in. round, square or oval-finish head of sinker, with or without heavy fillet, and with diamond or chisel point; driven with special nailing machine provided with staple-type magazine.

### threaded nail

threaded common nail, threaded nail, threaded sinker, n—bright or galvanized, regular-stock-steel, stiff-stock or hardened-steel, annularly or helically threaded, 1 by 0.072 to 6 by 0.262-in. nails with flat  $\frac{3}{16}$  to  $\frac{17}{32}$ -in. head and  $\frac{11}{8}$  by 0.072 to  $\frac{5}{4}$  by 0.238-in. sinkers with  $\frac{11}{64}$  to  $\frac{1}{2}$ -in. sinker head and medium diamond point.

threaded shear-resistant nail—stout, short, helically threaded,  $1\frac{1}{2}$  to  $2\frac{1}{2}$  by 0.135 and 0.148-in. nails with  $\frac{5}{16}$ -in. sinker head and medium diamond point.

#### tile nail

acoustical-tile nail—slender, electroplated, regular-stock-steel or stiff-stock, 1 to 1<sup>3</sup>/<sub>4</sub> by 0.062-in. nails with <sup>1</sup>/<sub>4</sub>-in. projection head with 0.135-in. collar and sharp, blunt, or medium diamond point.

asbestos-tileboard nail—stainless steel or other nonferrous metal nails with casing or oval head. (See also asbestos-board nail.)

*roofing-tile nail*— galvanized, regular-stock-steel, 5 to 7 by 0.148-in. nails with flat <sup>5</sup>/<sub>16</sub>-in. head and medium diamond point.

tileboard nail— See asbestosboard nail, fiberboard nail, insulation building-board nail.

**toothed nail**—flat, L-shaped, ½ to 1½6-in. cleats, sheared from 16-gage steel sheet; provided with toothed serrations along narrow sides of long shank and with slightly tapered, dull point; driven with special nailing machine provided with staple-type magazine.

trim nail—See moulding nail.

**trunk nail**—bright, regular-stock-steel, ½ to 1¾-in. nails with rivet or oval head and extra long "V" point.

trussed rafter nail- See threaded nail.

tubing nail—See conduit nail.

**twisted nail**—helically twisted, squarewire, ½ by 0.072 to 6 by 0.250-in. drivescrew nails, usually of tempered stiff-stock, with flat or countersunk head and medium diamond point, with crest diameter being referred to as diameter.

**twist nail**—slender, copper or aluminum nails with flat head and medium needle point for twist clinching, that is, for having part of nail shank twisted to form a clinched point.

underlay nail, underlayment nail\*—bright, regular-stock-steel, stiff-stock or hardened-steel, annularly threaded, 1 by 0.080 to 3 by 0.148-in. nails with flat or slightly countersunk <sup>3</sup>/<sub>16</sub> to <sup>5</sup>/<sub>16</sub>-in. head and medium diamond point.

**upholstery nail**—bright, regular-stock-steel, two-piece nails with extra-large specially formed head and medium diamond or needle point.

"V" nail—headless nails with central V-shaped slot at head end.

**veneer-box nail**—coated, regular-stock-steel, 1½ by 0.080-in. nail with flat 15%4 or 1/4-in. head and medium needle point.

wagon nail—annealed, barbed, regular-stock-steel nails with round, oval, cone, flat countersunk, or steeple head and medium diamond point.

wallboard nail—slender, colored (baked-lacquer finished), regular-stock-steel or hardened-steel, smooth or annularly threaded, 11/8 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.

wire nail—nail manufactured from metal wire or rod.

wood-heel attaching nail—bright, regular-stock-steel, annularly threaded or helically threaded, 5% by 0.054 to 7% by 0.072-in. nails with slightly countersunk flat head and medium or long diamond point.

wood-heel top-lift nail—bright, regular-stock-steel, ½ by 0.041 to ¾ by 0.048-in. nails with flat or brad head and long diamond point.

wood-lath nail—blued, regular-stock-steel, 1 and 1½ by 0.054 and 0.072-in. nails with flat ½ to ½4-in. head and medium diamond point.

### **NAIL HEADS**

head—upset or deformation of shank, usually at or near end of shank opposite point end; formed during manufacture of nail to provide area to be struck by hammer during driving and to offer bearing resistance (see Fig. 1).

angle—on countersunk head, total included angle formed by

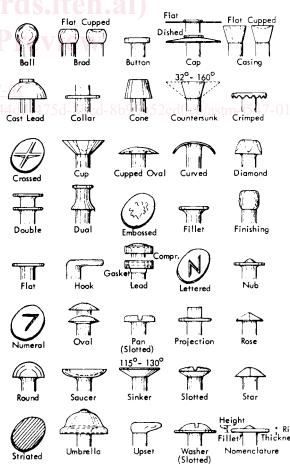


FIG. 1 Various Types of Nail Heads