What Are Wood Construction Screws (Partially Threaded) Used For?

Engineering Hardware & Fasteners · engineeringhardware.com/applications/wood-construction-screws

Wood Construction Screws (Partially Threaded) are used for fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole. They are manufactured to EN 14592, and selection is driven by the screw size, the fit and tolerance the assembly requires, and the service environment.

Primary duty

Fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole

Governing standard

EN 14592

Screw size range

4 to 10

Category

Screws

Application notes are general engineering guidance. Verify the property class and any approval requirement against your own design calculation.



The primary duty of Wood Construction Screws (Partially Threaded) is fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole. Below: the sectors that specify them in volume, the checklist used to select the right size and material for the application, installation notes, and the known limits of the type. Stocked across roughly 4 to 10, they cover general to heavy-duty work.

Typical Applications for Wood Construction Screws (Partially Threaded)

The most common settings where these are specified:

General machine building: fastening covers, brackets, motors and sub-assemblies on production equipment.

Maintenance & repair (MRO): a stocked size for servicing existing plant where the original fastener spec must be matched.

Fabrication & metalwork: bench and on-site assembly of steel frames, enclosures and weldments.

Electronics & enclosures: mounting PCBs, panels and lids where the drive style and head height matter.

Appliances & consumer goods: high-volume assembly with power tools and consistent seating.

Product catalog

Related Wood Construction Screws products



(https://engineeringhardware.com/product/drywall-screw-hex-washer-coach-screw-head-chipboard-screw-self-drilling-screw/)

Wood, Deck & Lag Screws

Drywall Screw Hex Washer Coach Screw Head Chipboard Screw Self-Drilling Screw (https://engineeringhardware.com/product/drywall-screw-hex-washer-coach-screw-head-chipboard-screw-self-drilling-screw/)

Pan Head · DIN, GB, ANSI, BSW, JIS, GOST

US$624.00 MOQ 3 tons



(https://engineeringhardware.com/product/hexagon-socket-countersunk-head-wood-screws-for-decoration-construction-fixing/)

Wood, Deck & Lag Screws

Hexagon Socket Countersunk Head Wood Screws for Decoration & Construction Fixing (https://engineeringhardware.com/product/hexagon-socket-countersunk-head-wood-screws-for-decoration-construction-fixing/)

Hexagon Head · DIN, GB, ANSI, BSW, JIS, GOST

US$0.048 – 0.06 MOQ 1,000 pieces



(https://engineeringhardware.com/product/hex-lag-screw-hex-head-wood-screw-din-571-asme-manufacturer-20-years/)

Wood, Deck & Lag Screws

Hex Lag Screw Hex Head Wood Screw DIN 571/ASME Manufacturer 20 Years (https://engineeringhardware.com/product/hex-lag-screw-hex-head-wood-screw-din-571-asme-manufacturer-20-years/)

Hexagon Head · DIN, GB, ANSI, BSW, JIS, GOST

US$0.12 MOQ 1,000 pieces



(https://engineeringhardware.com/product/malaxy-carbon-steel-flat-head-torx-wood-screws-countersunk-star-drive-timber/)

Wood, Deck & Lag Screws

Malaxy Carbon Steel Flat Head Torx Wood Screws Countersunk Star Drive Timber Fasteners Wood Screws
(https://engineeringhardware.com/product/malaxy-carbon-steel-flat-head-torx-wood-screws-countersunk-star-drive-timber/)

Countersunk Head · DIN, GB, ANSI, BSW, GOST

US$0.012 – 0.036 MOQ 50 pieces



(https://engineeringhardware.com/product/carbon-steel-hexagonal-head-coach-screw/)

Wood, Deck & Lag Screws

Carbon Steel Hexagonal Head Coach Screw
(https://engineeringhardware.com/product/carbon-steel-hexagonal-head-coach-screw/)(https://engineeringhardware.com/product/carbon-steel-hexagonal-head-coach-screw/)

Hexagon Head · DIN

US$0.024 – 0.096 MOQ 3,000 pieces



(https://engineeringhardware.com/product/hot-dip-galvanized-pigtail-hook-lag-screw-pigtail-screw/)

Wood, Deck & Lag Screws

Hot DIP Galvanized Pigtail Hook Lag Screw Pigtail Screw
(https://engineeringhardware.com/product/hot-dip-galvanized-pigtail-hook-lag-screw-pigtail-screw/)(https://engineeringhardware.com/product/hot-dip-galvanized-pigtail-hook-lag-screw-pigtail-screw/)

Stainless Steel · Customized Size

US$1.20 MOQ 1,000 pieces

View all Wood, Deck & Lag Screws →
(https://engineeringhardware.com/fastener-products/screws/wood-deck-lag-screws/)

Full product catalog (https://engineeringhardware.com/products/)

How to Specify Wood Construction Screws (Partially Threaded) for Your Application

Size: Match the nominal size to the mating thread or hole. This product spans 4–10; check the full table below for the exact dimensions of each size.

Drive & head: Pick the drive (socket, cross, slot) and head style for the tool access and seating surface; a recessed drive resists cam-out under power tools.

Environment: For damp, coastal or chemical exposure prefer A4/316 stainless or a suitable coating; indoors, plated steel or A2 is usually sufficient.

Standard: This product is supplied to EN 14592. Quoting the standard on your order guarantees interchangeable dimensions between suppliers.

Installation & Assembly Practice

Match the driver exactly to the recess (PH ≠ PZ; hex key sizes per ISO 2936) and keep the tool axial — side load is the main cause of stripped drives.

In tapped holes, engage a thread length of at least 1× the nominal diameter in steel, 2× in aluminum.

Set power tools to a torque that seats the head without embedding it into the mating surface.

Common Selection Mistakes with Wood Construction Screws (Partially Threaded)

Under-sizing the drive for the installation torque — a small recess at high torque strips before the screw is seated.

Using a countersunk head in thin sheet where the countersink removes most of the load-bearing material.

Specifying stainless in high-strength duty: A2-70 is roughly class 7 steel, not a 10.9 substitute.

Where Wood Construction Screws (Partially Threaded) Are Not the Right Choice

Not for high-preload structural joints (use a property-class bolt and nut), and not in thin sheet where a self-drilling or self-tapping type suits better.

Custom manufacturing · Made to drawing

Need a wood construction screws (partially threaded) outside the standard range?

Dimensions, material, finish and form are specified from the drawing — a screw outside the standard range is a variation on existing tooling rather than a new design. Made by cold heading or warm forging.

Minimum order from 2,000 pieces; samples within 7 days of drawing approval.

Custom screw manufacturing (https://engineeringhardware.com/custom/screws/)

Send a drawing (https://engineeringhardware.com/custom/screws/#rfq)

Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose. Changing the size will snap the other fields to that size's standard values; you can then override any individual value.

Dimensioned line drawing of 4.0 Wood Construction Screws (Partially Threaded) to EN 14592. Side view and top view, drawn to the dimensions in the table below and redrawn for any size selected.

Sends the selected values to the quote form below.

Request a Quote

The form below follows the current technical drawing configuration. Change the drawing values above and the request details update automatically.

Dimensions & Specifications (EN 14592)

Nominal diameter (mm)	Head diameter dk (mm)	Drive	Thread length (mm)	Pilot ho
4.0	8.0	TX20	40	2.5
5.0	10.0	TX25	50	3.0
6.0	12.0	TX30	60	3.5
8.0	16.0	TX40	80	5.0
10.0	20.0	TX50	100	6.0

Video: What Are Wood Construction Screws (Partially Threaded) Used For? in use



https://www.youtube.com/watch?v=W9HAd

► Watch video: https://www.youtube.com/watch?v=W9HAd-n65dg (https://www.youtube.com/watch?v=W9HAd-n65dg)

Third-party video, selected automatically for this topic. It is not produced by Engineering Hardware and is not a specification source — use the tables on this page for dimensional data.

Inside the plant

Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.



01

Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

Head dimensions and under-head radius checked at set-up and per shift.



02

Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

Go / no-go ring gauges to ISO 965 tolerance class 6g.



03

Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

Core hardness and tensile tested per lot to ISO 898-1.



04

Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

Coating thickness and neutral salt spray hours to ISO 9227.

Frequently Asked Questions

What are Wood Construction Screws (Partially Threaded) used for?

Fixing into sheet, timber or plastic by forming their own thread as they are driven, without a tapped hole. They are supplied to EN 14592.

Which industries use Wood Construction Screws (Partially Threaded)?

They are commonly specified in appliances & consumer goods, machine guarding & panels and general machine building, among other sectors.

How do I choose the right size of Wood Construction Screws (Partially Threaded)?

Match the nominal size to the mating thread or hole. This product is available from 4 to 10; the full dimension table on this page lists each size.

What drive type do Wood Construction Screws (Partially Threaded) use?

Drive depends on the head style — socket (hex key), cross (Phillips/Pozi) or slot. A recessed drive resists cam-out when driven with power tools; check the product head style on this page.

Can I get a quote for Wood Construction Screws (Partially Threaded) in the size and material I need?

Yes. Use the technical drawing and quote form on this page to set the size and options, then send the exact configuration to our team for pricing and lead time.

Related Pages

Product page: Wood Construction Screws (Partially Threaded) — specifications & sizes (https://engineeringhardware.com/fastener/wood-construction-screws/)

Wood Construction Screws (Partially Threaded) Specification Guides

- **A4 stainless Wood Construction Screws (Partially Threaded) (https://engineeringhardware.com/guide/material/a4-stainless-steel-wood-construction-screws/)**

Related Fastener Applications

- **4IP Internal Service Screws for Mobile Devices applications (https://engineeringhardware.com/applications/4ip-internal-service-screws-for-mobile-devices/)**
- **Ball-Ended Thrust Screws applications (https://engineeringhardware.com/applications/ball-ended-thrust-screws/)**
- **Bicycle General Threaded Fasteners applications (https://engineeringhardware.com/applications/bicycle-general-threaded-fasteners/)**
- **Bicycle Spoke Nipples applications (https://engineeringhardware.com/applications/bicycle-spoke-nipples/)**
- **Button Head Socket Cap Screws, UNC applications (https://engineeringhardware.com/applications/asme-b18-3-3a-unc-button-head-socket-cap-screw/)**
- **Button Head Socket Screws applications (https://engineeringhardware.com/applications/button-head-socket-screws/)**