



ASSY[®] 4

**Wood Screw
Head Types
and Bit Overview**



Summary of All Head Types with Shapes, Applications, and Advantages



FLAT WASHER HEAD = **WHII**



Shape: Completely flat top surface with large diameter.

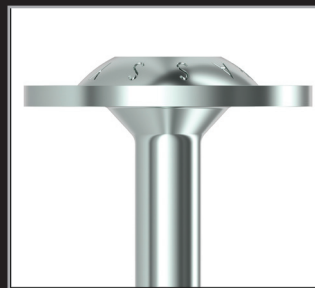
When to use: The flat washer head acts as an integrated washer, distributing load evenly over a large area. Sits extremely flush. Barely visible once driven in.

Applications: Timber-to-timber connections in structural construction, substructures & cladding, forestry/hunting platforms, carpentry.

ADVANTAGE: Minimum head height, very discreet, protects wood surface from head sinking.

Prefix: Fully threaded: 177.5xxxxxx

WASHER HEAD = **WH**



Shape: Domed/convex top surface with large diameter.

When to use: Combines large bearing surface with increased head rigidity due to dome shape. More resistant to deformation under high torque, better pull-out resistance.

Applications: Higher mechanical demands, visible timber structures (decking, facades), decorative connections, high axial tensile forces.

ADVANTAGE: Higher head rigidity, premium appearance, better under strong axial loads.

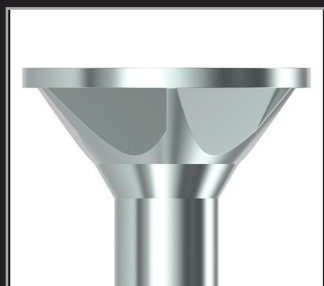
Prefix:

Fully threaded: 177.30xxxx

Partially threaded: 177.3xxxxx

Stainless Steel: 181.81xxxx

COUNTERSUNK HEAD (WITH MILLING POCKETS) = CSMP



Shape: Conical with milling pockets that cut through wood.

When to use: Sinks flush with material surface creating a smooth finish. Milling pockets help the head self-countersink cleanly.

Applications: Floors, door frames, facades, timber-to-concrete connections, cross-compression reinforcements, plastic anchors. Indoor dry or wet areas.

ADVANTAGE: Flush surface finish. Preferred for cross-compression reinforcements (head must sit flat on load distribution plate).

Prefix:

Fully threaded: 150.1xxxxx

Partially threaded: 190.1xxxxx

CYLINDER HEAD = WH



Shape: Cylindrical, slightly raised profile resting on surface.

When to use: Good torque transmission, suitable where head remains visible but needs to be flat and compact.

Applications: Full-thread timber connections, metal bracket fastenings, engineered timber, where flush mounting is not possible.

ADVANTAGE: Low-profile

Prefix: Fully threaded : 150.0xxxxx

COMBI (TRANSPORTATION) = COMBI (T)



Shape: External hexagon combined with internal RW drive.

When to use: Extremely versatile. Usable with both RW bit and hex socket wrench for varying tool situations on site.

Applications: High torque/shear force requirements, metal bracket fastenings (90° holes), joist hangers, beam connections, transport anchors.

ADVANTAGE: Reinforced shank base, high load transfer capacity, two drive options.

Prefix:

Transportation: 158.7xxxx1

Partially threaded: 158.7xxxx0

Fully threaded: 150.2xxxxx

REVERSE CYLINDER HEAD WITH EXTERNAL TORX = ETX



Shape: Cylindrical with internal TX/Torx recess, central conical tip and broad flange.

When to use: Where high torque and a compact head are needed. The inverted cone tip centres the bit and prevents cam-out. Suited for automated assembly and confined spaces.

Applications: Full-thread timber connections, engineered timber (CLT, LVL), metal-to-timber.

ADVANTAGE: High torque transfer, no cam-out, low profile, broad flange for even load distribution.

Prefix: Fully threaded: 165.3xxxxx

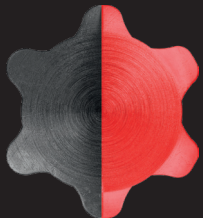


RW BIT - **VS** - TORX BIT



The **RW bit** is a further development of the Torx bit. Built on the same principle, but with an optimised geometry that unlocks the full potential of ASSY screws.

A standard Torx bit fits and works without any issues, but the unique benefits of the **RW bit** and ASSY screw will not be fully felt.



ADVANTAGES of the RW Bit:

- Higher torque transfer: Larger contact surface means more torque transmitted. Faster driving, especially in dense timber.
- No cam-out: Bit stays securely engaged under high torque. No slipping, no damage to head or bit.
- Longer bit life: Force distributed over a larger area reduces wear. Fewer bit changes on site.
- Perfect match for ASSY screws: Precisely matched to the ASSY drive recess for full screw performance and reduced fatigue on site.

ASSY®4 WOOD SCREW HEAD TYPES AND BIT OVERVIEW

Printed in Canada. All rights reserved. May not be reproduced, in part or in whole, without prior consent.
Promotions not applicable to National Account customers or those with an existing price agreement/trade discount.



SHOP ONLINE
SHOP.WURTH.CA

