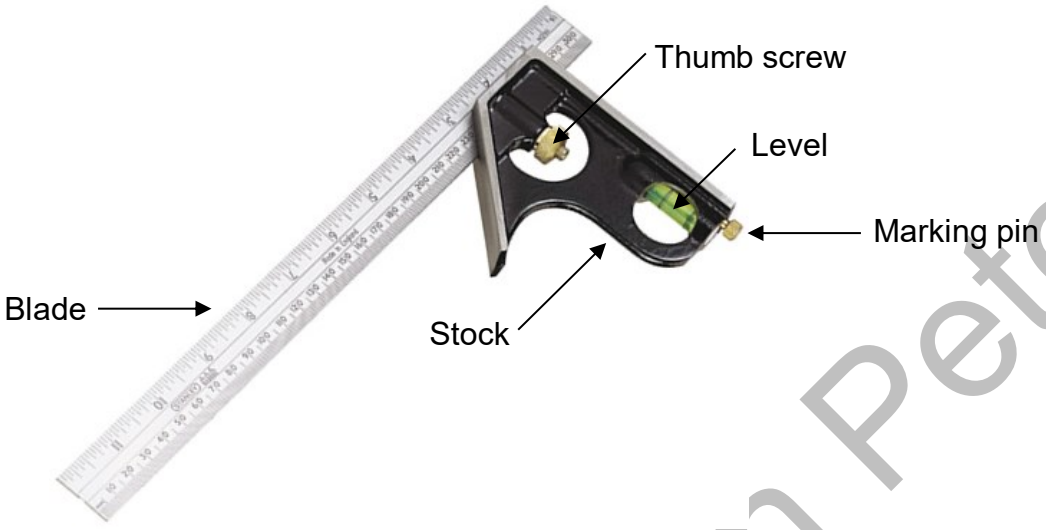
Combination Square



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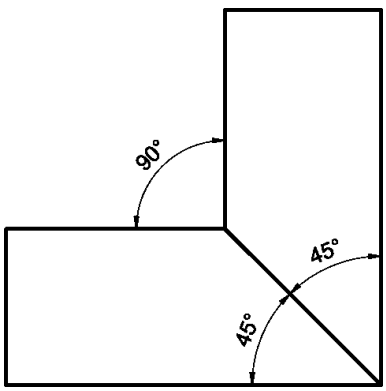
Function

A combination square combines both a try square and mitre square. It is used to check or try both 90^0 and 45^0 angles, it is also used to assist in marking 90^0 and 45^0 angles. The stock must be held tight against the timber when checking or marking the angles.

Description

The metal blade slides in the metal stock and can be fixed in position by tightening the thumb screw. Most combination squares include a small level in the stock, which can be used by removing the blade completely. Some include a small marking pin inserted in the stock.

To form a mitre joint, cut a 45^0 angle in two pieces of wood and join them together to form a 90^0 angle (right angle). These are the traditional joints used for picture frames and many other applications.



History

Laroy S. Starrett designed and patented the combination square in 1878[1]. It was originally intended for the engineer, where it was widely adopted. It took some time before it was accepted in the world of woodwork. The combination square is not mentioned in woodwork books of this period, with the try square and mitre square being in common use. Over time this has changed and most woodworkers now use a combination square. Apparently, the biggest challenge for Laroy S. Starrett was milling the parallel groove in the blade, which enables the stock to slide along the blade and be locked at the desired position. It is this that determines the accuracy of the tool. Care must be taken, as in my experience worn grooves and corresponding parts do diminish the accuracy of the square, although some of this is undoubtedly down to the quality of manufacture.

Health and Safety

There are no significant health and safety considerations.

[1] Combination Squares | Popular Woodworking