

MATERIALS

CATEGORIES OF WOOD

HARDWOODS, SOFTWOODS AND MANUFACTURED BOARDS

HARDWOODS

COME FROM **DECIDUOUS** TREES - TREES WITH BROAD, FLAT LEAVES WHICH FALL OFF IN WINTER.

EXAMPLES: ASH, BEECH, OAK, TEAK, MAHOGANY, BIRCH

HARDWOODS TAKE A LONG TIME TO GROW WHICH MAKES THEM MORE EXPENSIVE AND LESS SUSTAINABLE THAN SOFTWOODS.

SOFTWOODS

COME FROM **CONIFEROUS** TREES - TREES WITH NEEDLE-LIKE LEAVES WHICH DO NOT FALL OFF (EVERGREEN).

EXAMPLES: SCOTS PINE, RED PINE, CEDAR, DOUGLAS FIR.

GROW QUICKLY COMPARED TO HARDWOODS WHICH MAKES THEM LESS EXPENSIVE AND MORE SUSTAINABLE. MANY ARE GROWN IN EUROPE WHICH MAKES THEM MORE READILY AVAILABLE FOR USE IN THE UK.

MANUFACTURED BOARDS

ALSO REFERRED TO AS MAN MADE BOARDS. THESE ARE MADE FROM RECYCLED WOOD.

EXAMPLES: **PLYWOOD (LID OF BOX), HARDBOARD (BASE OF BOX), MDF, BLOCKBOARD, CHIPBOARD.**

ADVANTAGES OVER NATURAL WOODS: CHEAPER, MORE STABLE, LESS PRONE TO WARPING OR TWISTING, AVAILABLE IN LARGE SHEETS.

HEALTH AND SAFETY

GENERAL MACHINE SAFETY

- ALWAYS WEAR SAFETY GLASSES
- TIE TUCKED IN
- LONG HAIR TIED BACK
- LONG SLEEVES ROLLED UP

PILLAR DRILL SAFETY:

- MAKE SURE DRILL BIT IS STRAIGHT AND SECURE IN THE CHUCK.
- MAKE SURE THE CHUCK KEY IS REMOVED.
- MAKE SURE THE WOOD IS SECURED WHEN DRILLING.

MACHINES

PILLAR DRILL

USED TO MAKE HOLE INTO WOOD.



SANDER

USED TO SMOOTH AN EDGE OF A PIECE OF WOOD DOWN TO A LINE AFTER SAWING.



S2 WOOD REVISION

TOOLS



TENON SAW

USED FOR GENERAL CUTTING OF WOOD.



MARKING GAUGE

USED TO MARK A LINE PARALLEL TO AN EDGE.



BEVEL EDGED CHISEL

USED TO REMOVE WASTE WOOD FROM A JOINT AFTER SAWING.



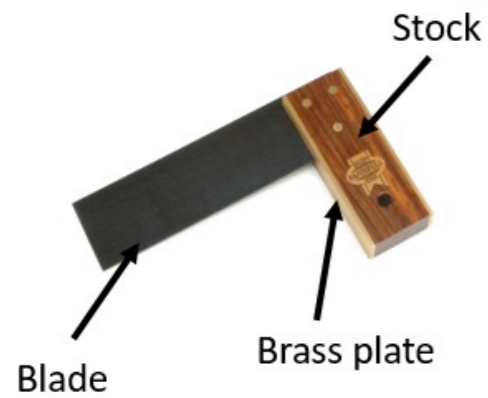
TRY SQUARE

USED TO MARK A LINE AT RIGHT ANGLES TO AN EDGE.



STEEL RULE

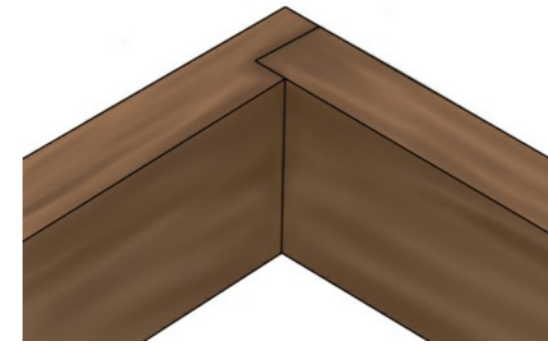
USED FOR MEASURING IN MILLIMETRES.



TRY SQUARE PARTS



MARKING GAUGE PARTS



THE JOINT SHOWN OPPOSITE IS CALLED A **CORNER REBATE JOINT**.

THIS IS THE JOINT USED FOR THE CORNERS IN THE WOODEN BOX PROJECT.

DRILL BITS

THE DRILL BITS SHOWN WERE USED TO MAKE THE HOLES IN THE WOODEN BOX AND THE CANDLE HOLDER.



CHISEL SAFETY

- ALWAYS WORK WITH A SHARP CHISEL
- ALWAYS KEEP YOUR HANDS BEHIND THE CUTTING EDGE
- ALWAYS SECURE YOUR WOOD IN THE VICE WHEN CHISELLING
- NEVER CHISEL TOWARDS YOURSELF
- ALWAYS CHISEL TOWARDS THE CENTRE OF THE WORKBENCH
- DO NOT WAVE THE CHISEL AROUND



TWIST DRILL BIT

THIS DRILL BIT IS USED TO MAKE HOLES IN WOOD UP TO 13mm IN DIAMETER.



FLAT DRILL BIT

THIS DRILL BIT IS USED TO MAKE LARGER DIAMETER HOLES. THIS WAS USED TO MAKE THE HOLE IN THE LID OF THE WOODEN BOX.



FORSTNER DRILL BIT

THIS DRILL BIT IS USED TO MAKE LARGER DIAMETER HOLES. THIS WAS USED TO MAKE THE HOLES IN THE TOP OF THE CANDLE HOLDER.

CLAMPS

IT IS IMPORTANT TO **DRY CLAMP** WOODEN PROJECTS BEFORE FINAL ASSEMBLY. THIS MEANS CLAMPING WITHOUT GLUE FIRST. THIS ALLOWS YOU TO CHECK THAT THERE ARE NO GAPS THAT NEED TO BE FIXED AND THAT IT IS SQUARE (RIGHT ANGLED) BEFORE GLUING.



G CLAMP

THIS IS USED TO CLAMP WOOD TO THE BENCH WHEN CHISELLING.



BAND CLAMP

THIS IS USED TO CLAMP THE BOX TOGETHER WHEN GLUING. IT HOLDS THE FOUR CORNERS TOGETHER AT THE SAME TIME.