

Boat 035 – Specification

Measurements	Metric system throughout, unless otherwise noted (screw lengths and gauges for example). All linear dimensions are given in millimetres (and “mm” is not always suffixed to the numbers).
Solid Timber	Mahogany, Brazilian or African. Most other hardwoods and softwoods are suitable but avoid Teak, Iroko and Oak. Avoid softwoods with a high resin content (e.g. Pitchpine) or softwoods with large or loose knots.
Plywood	Must be WBP (water & boil proof) grade minimum. 5-ply is better than 3-ply (applies to 6mm thickness - thicker ply will automatically be 5-ply or more). Far Eastern WPB grade is usually satisfactory but the surface finish is not always very good. BS 1088 is marine grade - but this is not structurally necessary. If the boat is to be clear finished, choose a ply with a good face veneer (Makore or similar fine grain red timber). Anchor brand is a good make. If the boat is to be painted, good quality WBP Douglas Fir or Birch ply is satisfactory.
Coating system	WEST™ wood epoxy materials. Use #105 Resin with #205 fast hardener (#206 slow hardener will seldom be necessary). If a clear (varnish) finish is required to large panels (like the topsides) then use # 207 coating hardener (note different ratio mix). Minimum three coats on all structures and areas of the boat.
Glue	WEST™ #105/#205 resin mix modified with #403 microfibres (about 7% to 10% by weight - but you will soon judge better by consistency which should be a thickish paste, but still runny). End grain and absorbent timbers to be wetted out with #105/#205 and allowed to stand for 15 minutes before gluing with resin/#403 mix. Pre-coated areas (where the WEST™ coating has gone off to be sanded thoroughly and any surface “sweat” removed. Timber direct from the saw is suitable for gluing. Timber from the planer can be shiny, with the surface cells compressed - roughen slightly with medium abrasive paper.
Filleting	WEST™ #105/#205 resin mix modified with #405 filleting blend.

Boat 035 – Specification

Decorative finishes	Clear finishes should be UV resistant. We recommend that one coat of 2-pot varnish is applied before using conventional varnishes - otherwise the conventional varnish may have difficulty in curing. The same applies to paint finishes - one coat of 2-pot first, then conventional or acrylic.
Fastenings	Very few fastenings are required. Brass or stainless countersunk wood screws are fine. Use a Stanley “screwsink” of the correct size for the screw when boring off for screws to obtain best hold and clean countersinks. Stanley “plugcutters” are available for each gauge of screw and the dowels produced match the countersink made by the screwsink. Where screws are not to be dowelled over (glue dowels in with WEST™), or filled over with WEST/#407 microballons, fudge plenty of WEST™ down screw hole (a pipe cleaner is ideal for this). Wax screw if it is required to be withdrawn later (perhaps on the floorboards for example).
Topsides	6mm plywood.
Bottom	6mm plywood.
Transoms	6mm plywood.
Fashion pieces	16mm mahogany.
Shelves	16 x 40 mahogany.
Chines	20 x 50 mahogany.
Hog	75 x 16 mahogany.
Keel	36mm sided. 20mm moulded at stem, deepening out to 98mm at stern. Laminated up from 36 x 20 material.
Frames	16mm sided mahogany for futtocks, chine chocks and doublers.
Floors	16mm sided mahogany for futtocks and doublers.
Gunwhales	16 x 20, in short lengths between frames and between frames and transoms. 40 x 10 trim on sheer.

Boat 035 – Specification

Thwarts	200 x 20 mahogany for aft thwart; 180 x 20 for centre and forward thwarts. Additional stiffening for thwarts from 16mm mahogany and 6mm ply.
Floorboards	10mm mahogany.
Transom knees	25mm sided mahogany with approx. 20mm deep laminated face (6 x 3mm laminates).
Quarter knees	20mm sided mahogany with approx. 20mm deep laminated face (6 x 3mm laminates).
Thwart knees	20mm sided mahogany with approx. 20mm deep laminated face (6 x 3mm laminates).
Mast step	Mahogany.
Centrecase	10mm ply sides; 20 x 26 mahogany posts. Mahogany trim and stiffening.
Centreboard	12mm ply.
Rudder	10mm ply blade. Mahogany and 12mm ply head.
Tiller	Mahogany, Oak or Ash.
Spars	Douglas fir (B C Pine) or Silver Spruce.
Useful WEST™ System reading and viewing	Basic application technique VHS training video The Gougeon Bros. on Boat Construction WEST™ system Technical Manual