

**TYPES OF TIMBER****150 STRENGTH GRADING OF TIMBER**

- Grader: Any company currently registered under a third party quality assurance scheme operated by a certification body approved by the UK Timber Grading Committee.
- Grading and marking of timber:
  - Timber of a target/ finished thickness less than 100 mm and not specified for wet exposure: Graded at an average moisture content not exceeding 20% with no reading being in excess of 24% and clearly marked as 'DRY' or 'KD' (kiln dried).
  - Timber graded undried (green) and specified for installation at higher moisture contents: Clearly marked as 'WET' or 'GRN'.
  - Structural timber members cut from large graded sections: Re-graded to approval and marked accordingly.

**210 GRADED SOFTWOOD FOR – flat roof extension area/flat roof bays/main entrance porch and covered way/roof over stair well/packing between steels /wall plates/bearing plates/studwork to stairwell recessed windows/timber studwork/below reception desk studwork/stud walling to lift shaft/**

- Grading standard: To BS 4978 or BS EN 519 or other national equivalent and so marked.
- Strength class to BS EN 338: C 16 and C24.
- Treatment: CCA specification C8
- Type: desired service life 40 years-provide certification.
  - Moisture content at time of erection: As clause 450.

**230 WROT SOFTWOOD FOR: studwork under reception desk and to for shutter reveal**

- Grading standard: To the appropriate standard or rules for the specified grade and so marked..
- Treatment: C8
- Moisture content at time of erection: As clause 450.

**270 UNGRADED SOFTWOOD FOR –framing out pipe boxing/waste boxing / and noggins to support plasterboard.**

- Quality of timber: Free from decay, insect attack (except pinhole borers) and with no knots wider than half the width of the section.
- Surface finish: regularised.
- Treatment: CCA specification C8 .
- Moisture content at time of erection: As clause 450.

**311 PLYWOOD FOR Roof decks plus backing sections within plant room to fix electrical equipment and control units**

- Standard: To an approved national standard.
- Thickness: 22 mm. T&G jointed all around
- Appearance class to BS EN 635:11/111 .
- Bond quality to BS EN 314-2: Class 2.
- Finish : sanded one face.
- Treatment: preservative treated C8.
- Fixing sheradised screw fixings to roof deck at 150mm centres, countersunk

**WORKMANSHIP GENERALLY**

401	CROSS SECTION DIMENSIONS OF STRUCTURAL SOFTWOOD AND HARDWOOD TIMBER						
	<ul style="list-style-type: none"> <li>- Dimensions: Dimensions in this specification and shown on drawings are target sizes as defined in BS EN 336.</li> <li>- Tolerances: The tolerance indicators (T1) and (T2) specify the maximums permitted deviations from target sizes as stated in BS EN 336, clause 5.3: <ul style="list-style-type: none"> <li>- Tolerance class 1 (T1) for sawn surfaces.</li> <li>- Tolerance class 2 (T2) for further processed surfaces.</li> </ul> </li> </ul>						
402	CROSS SECTION DIMENSIONS OF NONSTRUCTURAL SOFTWOOD TIMBER						
finished sizes.	<ul style="list-style-type: none"> <li>- Dimensions: Dimensions in this specification and shown on drawings are finished sizes.</li> <li>- Maximum permitted deviations from finished sizes: As stated in BS EN 1313-1: <ul style="list-style-type: none"> <li>- Clause 6 for sawn sections.</li> <li>- Clause NA.2 for further processed sections.</li> </ul> </li> </ul>						
403	CROSS SECTION DIMENSIONS OF NONSTRUCTURAL HARDWOOD TIMBER						
finished sizes.	<ul style="list-style-type: none"> <li>- Dimensions: Dimensions in this specification and shown on drawings are finished sizes.</li> <li>- Maximum permitted deviations from finished sizes: As stated in BS EN 1313-2: <ul style="list-style-type: none"> <li>- Clause 6 for sawn sections.</li> <li>- Clause NA.3 for further processed sections.</li> </ul> </li> </ul>						
430	SELECTION AND USE OF TIMBER						
their grading: Do not use.	<ul style="list-style-type: none"> <li>- Timber members damaged, crushed or split beyond the limits permitted by their grading: Do not use.</li> <li>- Notches and holes: Position in relation to knots or other defects such that the strength of members will not be reduced.</li> <li>- Scarf joints, finger joints and splice plates: Do not use without approval.</li> </ul>						
440	PROCESSING TREATED TIMBER						
thickened, planed, ploughed, etc.	<ul style="list-style-type: none"> <li>- Cutting and machining: As much as possible before treatment.</li> <li>- Extensively processed timber: Retreat timber sawn lengthways, thickened, planed, ploughed, etc.</li> <li>- Surfaces exposed by minor cutting and/ or drilling: Treat with two flood coats of a solution recommended by main treatment solution manufacturer.</li> </ul>						
450	MOISTURE CONTENT						
Not more than:	<ul style="list-style-type: none"> <li>- Moisture content of timber and wood based products at time of installation: <table> <tr> <td>- Covered in generally unheated spaces:</td><td>24%.</td></tr> <tr> <td>- Covered in generally heated spaces:</td><td>20%.</td></tr> <tr> <td>- Internal in continuously heated spaces:</td><td>20%.</td></tr> </table> </li> </ul>	- Covered in generally unheated spaces:	24%.	- Covered in generally heated spaces:	20%.	- Internal in continuously heated spaces:	20%.
- Covered in generally unheated spaces:	24%.						
- Covered in generally heated spaces:	20%.						
- Internal in continuously heated spaces:	20%.						
510	PROTECTION						
sections or components during transit, storage, lifting, erection or fixing.	<ul style="list-style-type: none"> <li>- Generally: Keep timber dry and do not overstress, distort or disfigure sections or components during transit, storage, lifting, erection or fixing.</li> <li>- Timber and components: Store under cover, clear of the ground and with good ventilation. Support on regularly spaced, level bearers on a dry, firm base. Open pile to ensure free movement of air through the stack.</li> <li>- Trussed rafters: Keep vertical during handling and storage.</li> </ul>						
520	EXPOSED END GRAIN						
site: _____ .	<ul style="list-style-type: none"> <li>- Components: Seal exposed end grain of the following before delivery to site: _____ .</li> <li>- Sealer: _____ .</li> </ul>						
530	PAINTED FINISHES						

- Structural timber to be painted: Primed as specified before delivery to site.

540

#### CLEAR FINISHES

- Structural timber to be clear finished: Keep clean and apply first coat of specified finish before delivery to site.

550

#### EXPOSED TIMBER

- Planed structural timber exposed to view in completed work: Prevent damage to and marking of surfaces and arises.

### JOINTING TIMBER

570

#### JOINTING/ FIXING GENERALLY

- Generally: Where not specified precisely, select methods of jointing and fixing and types, sizes and spacings of fasteners in compliance with section Z20.

580

#### FRAMING ANCHORS

- Manufacturer: \_\_\_\_\_ .
  - Product reference: \_\_\_\_\_ .
- Material/ finish: \_\_\_\_\_ .
- Fasteners: Nails not less than 30 x 3.75 mm galvanized or sherardized square twist.
- Fixing: Secure using not less than the number of nails recommended by anchor manufacturer.

630

#### BOLTED JOINTS

- Holes for bolts: Located accurately and drilled to diameters as close as practical to the nominal bolt diameter and not more than 2 mm larger.
- Washers: Placed under bolt heads and nuts that would otherwise bear directly on timber. Use spring washers in locations which will be hidden or inaccessible in the completed building.
- Bolt tightening: So that washers just bite the surface of the timber. Ensure that at least one complete thread protrudes from the nut.
  - Checking: At agreed regular intervals up to Practical Completion. Tighten as necessary.