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MODEL CLAUSES FOR CIVIL ENGINEERING WORKS

SECTION 161 DESIGN REQUIREMENTS FOR STRUCTURAL TIMBER

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SECTION 161

DESIGN REQUIREMENTS FOR STRUCTURAL TIMBER

Design of structural timber generally

161.001 The design of structural timber, structural timber composites, and other wood based materials shall be carried out in accordance with Section 160: General requirements for structural timber as modified by the requirements of this Section. The design of timber composites and other wood based materials shall, in addition, be carried out using the strength properties provided by the manufacturer and in accordance with their recommendations.

The strength of replacement timber shall be not less than that of the original timber.

Structures constructed from temperate hardwoods shall be designed using the design procedures given in BS 5268-2 or BS EN 1995-1-1 (Eurocode 5) and its UK National Annex.

The design of trussed rafter roofs shall be carried out in accordance with BS 5268-3 or BS EN 1995-1-1.

The design of timber wall panels shall be carried out in accordance with BS 5268-6.1 or BS EN 1995-1-1.

Where indicated on the Contract Drawings, timber shall be designed for fire resistance in accordance with BS 5268-4.1 or BS 5268-4.2 as applicable, or BS EN 1995-1-1.

All structural timber for marine use shall be designed in accordance with BS 5268-2, BS EN 1995-1-1, BS 6349-1 and BS 6349-7.

Moisture content

161.002 The service class and moisture content of the timber as installed shall be within $\pm 2\%$ of that in service unless otherwise shown on the Contract Drawings.

Hazard class

161.003 All parts of the structure shall be assessed to identify their hazard class in accordance with BS EN 335-1, using the guidance procedures for solid wood given in BS EN 335-2 and for wood based panels in BS EN 335-3.

Durability

161.004 The timber species selected shall be of adequate durability as defined in BS EN 460 for the hazard class as defined in BS EN 335-1 to which the timber is to be exposed.

The natural durability of the timber species shall be identified by reference to BS EN 350-2 or, for timber not covered by BS EN 350-2, to other publications produced by an authoritative body.

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