

PART V
Chapter 1
Scope and Definitions

1.1 Scope

This Part specifies the minimum requirements of materials to be complied with in buildings and works under the provisions of the Code.

For each of the building materials the applicable standard specifications and test methods are listed. All materials shall conform to these Standards.

The list of standards given in this Part of the Code would be augmented from time to time by amendments, revisions and additions of which the Authority shall take cognizance. The latest version of a specification shall, as far as practicable, be applied in order to fulfil the requirements of this Part.

In view of the limited number of Bangladesh Standards (BDS) for building materials available at the present time, a number of standards of other countries have been referenced in this Code as applicable standards. As more standards of BDS regarding building materials become available and adopted by amendment of this Code, they shall supplement and/or replace the relevant standards listed in this Part.

1.2 Terminology

This Section provides an alphabetical list of the terms used in and applicable to this Part of the Code. In case of any conflict or contradiction between a definition given in this Section and that in Part 1, the meaning provided in this Part shall govern for interpretation of the provisions of this Part.

ACTUAL DIMENSIONS	Measured dimensions of a designated item.
ADMIXTURE	Material other than water, aggregate, or hydraulic cement used as an ingredient of concrete and added to concrete before or during its mixing to modify its properties.
AGGREGATE	Granular material, such as sand, gravel, crushed stone, crushed brick and iron blast-furnace slag, when used with a cementing medium that forms hydraulic cement concrete or mortar.
AGGREGATE, LIGHT WEIGHT	Aggregate with a dry, loose weight of 11.25 kN/m ³ or less.

CONCRETE	A mixture of Portland cement or any other hydraulic cement, fine aggregate, coarse aggregate and water, with or without admixtures.
CONCRETE, PLAIN	Concrete that does not conform to the definition of reinforced concrete.
CONCRETE, PRECAST	Plain or reinforced concrete element cast separately before they are fixed in position.
CONCRETE, PRESTRESSED	Reinforced concrete in which internal stresses have been introduced to reduce potential tensile stresses in concrete resulting from loads.
CONCRETE, REINFORCED	Concrete containing adequate reinforcement, prestressed or non-prestressed, and designed on the assumption that the two materials act together in resisting forces.
FIBRE BOARD	A fibre-felted, homogenous panel made from lignocellulosic fibres (usually wood or cane) and having a unit weight between 1.6 kN/m ³ and 5 kN/m ³ .
HARD BOARD	A fibre-felted homogenous panel made of lignocellulosic fibres consolidated under heat and pressure in a hot press to a density of 4.9 kN/m ³ or above.
MASONRY UNIT	Brick, tile, stone, glass-block or concrete-block used in masonry constructions.
MASONRY UNIT, GROUTED HOLLOW	Form of grouted masonry construction in which certain designated cells of hollow units are continuously filled with grout.
MASONRY UNIT, HOLLOW	A masonry unit whose net cross-sectional area in every plane parallel to the bearing surface is less than 75 percent of the gross cross-sectional area in the same plane.
MASONRY UNIT, SOLID	A masonry unit whose net cross-sectional area in every plane parallel to the bearing surface is 75 percent or more of the gross cross-sectional area in the same plane.
NOMINAL DIMENSIONS	Nominal dimensions of masonry units are equal to their specified dimensions plus the thickness of the joint with which the unit is laid.

PARTICLE BOARD	A manufactured panel product consisting of particles of wood or combinations of wood particles and wood fibres cemented together with synthetic resins or other suitable bonding system by an appropriate bonding process.
PLYWOOD	A built-up panel of laminated veneers.
REINFORCED MASONRY	Form of masonry construction in which reinforcement acting in conjunction with the masonry is used to resist designed forces.
REINFORCEMENT	Reinforcing bars, plain or deformed, excluding prestressing tendons, bar and rod mats, welded smooth wire fabric and welded deformed wire fabric used in concrete.
REINFORCEMENT, DEFORMED	Deformed reinforcing bars, bar and rod mats, deformed wire, welded smooth wire fabric and welded deformed wire fabric.
REINFORCEMENT, PLAIN	Reinforcement that does not conform to definition of deformed reinforcement.
REINFORCEMENT, SPIRAL	Continuously wound reinforcement in the form of a cylindrical helix.
STIRRUP	Reinforcement used to resist shear and torsion stresses in structural member; typically bars, wires, or welded wire fabric (smooth or deformed) bent into L, U or rectangular shapes and located perpendicular to or at an angle to longitudinal reinforcement. (The term "Stirrup" is usually applied to lateral reinforcement in flexural members and the term "ties" to those in compression members).
STRUCTURAL GLUED LAMINATED TIMBER	Any member comprising an assembly of laminations of lumber in which the grain of all laminations is approximately parallel longitudinally in which the laminations are bonded with adhesives.
TENDON	Steel element such as wire, cable, bar, rod or strand, or a bundle of such elements, used to impart prestress to concrete.
TIE	A loop of reinforcing bar or wire enclosing longitudinal reinforcement.
YIELD STRENGTH	The stress at which plastic deformation takes place under constant or reduced load.

PART V
Chapter 2
Building Materials

2.1 General

Materials used for the construction of buildings shall conform to standard specifications listed in this Part of the Code. Any deviation from the type design or architectural detail from those specified in these standards may be accepted by the Building Official as long as the materials standards specified therein are conformed with.

2.1.1 New or Alternative Materials

The provisions of this Part are not intended to prevent the use of any new and alternative materials. Any such material may be approved provided it is shown to be satisfactory for the purpose intended and at least equivalent of that required in this Part in quality, strength, effectiveness, fire resistivity, durability, safety, maintenance and compatibility.

Approval in writing shall be obtained by the owner or his agent before any new, alternative or equivalent materials are used. The Building Official shall base such approval on the principle set forth above and shall require that specified tests be made as per Sec 2.1.4 or sufficient evidence or proof be submitted, at the expense of the owner or his agent, to substantiate any claim for the proposed material.

2.1.2 Used Materials

The provisions of this Part do not preclude the use of used or reclaimed materials provided such materials meet the applicable requirements as for new materials for their intended use.

2.1.3 Storage of Materials

All building materials shall be stored at the building site(s) in such a way as to prevent deterioration or the loss or impairment of their structural and other essential properties (Part 7 of this Code).

2.1.4 Methods of Test

Every test of material required in this Part, or by the Building Official, for the control of quality and for the fulfillment of design and specification requirements, shall be carried out in accordance with a standard method of test issued by the Bangladesh Standards and Testing Institution (BSTI). In the absence of Bangladesh Standards, the Building Official shall determine the test procedures. Laboratory tests shall be conducted by recognized laboratories acceptable to the Building Official.