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**CEYLON STANDARD GLOSSARY
OF TERMS USED IN MODULAR
CO-ORDINATION IN THE
BUILDING INDUSTRY**

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BUREAU OF CEYLON STANDARDS**

**CEYLON STANDARD GLOSSARY OF
TERMS USED IN MODULAR CO-ORDINA-
TION IN THE BUILDING INDUSTRY**

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CEYLON STANDARD GLOSSARY OF TERMS USED IN BUILDING INDUS- TRY WITH SPECIAL REFERENCE TO MODULAR CO-ORDINATION

FOREWORD

This Ceylon Standard was prepared by the Committee on Modular (Dimensional) Co-ordination under the authority of the Civil Engineering Divisional Committee of the Bureau of Ceylon Standards, and was approved for publication by the Council of the Bureau on 1972-03-29.

A glossary giving the definitions of the various terms used in Modular (Dimensional) Co-ordination is a pre-requisite for the successful introduction of this new concept into the building industry of Ceylon. It is hoped that this glossary will be a useful guide to the architects, manufacturers and engineers. In the preparation of this Standard, the efforts of the International Organization for Standardization (ISO) towards unification of terms used in the field of modular co-ordination has been given full recognition by the extensive use made of 'Modular Co-ordination Vocabulary', ISO Recommendation No. R. 1791 and the 'Vocabulary of tolerances for Building' Draft ISO Recommendation No. 1803.

The terms and definitions are arranged in alphabetical order. (See Appendix).

1. SCOPE

This standard contains terms used in the Building Industry with special reference to Modular Co-ordination.

2. TERMINOLOGY

Assembly Tolerance—Tolerances on the three dimensional location of a component specified for the erection and assembly of this component.

Basic Dimensions—Size by reference to which the limits of size are fixed.

Basic Module—Basic unit of length used in dimensional co-ordination, the value of which is given by $M = 100 \text{ mm}$.

Basic Modular Grid—A reference grid in which the lines of the grid are spaced one basic module apart.

Basic space—Space assigned to receive a component including allowance for joints.

Boundary condition—The dimensional relationship of a boundary of a basic space or co-ordinating space to an adjacent key modular plane.

Note: Eg. (1) A zero boundary condition exists where the boundary of the zone or space is coincident with the modular plane.

(2) A positive boundary condition exists where the zone or space extends beyond the modular plane.

(3) A negative boundary condition exists where the zone or space stops short of the modular plane.

Carcassing—All constructions contributing to protection of a building.

Clearance—(a) Empty space persisting after installation between two components of which one at least is movable.

(b) Size of this space.

Components—Industrially produced non functional element of equipment which has dimensions specified at least in two directions.

Controlling dimensions—A dimension between key reference planes.

Co-ordinating dimensions—The dimensions of co-ordinating space (generally the dimensions of a space to receive one or more components).

Co-ordinating Face—That part of a profile generally related to a module or other reference system.

Co-ordinating gap—Distance between side or face of a component and the corresponding co-ordinating plane or line.

Co-ordinating line—Any line which defines a co-ordinating surface.

Co-ordinating plane—Any plane which defines a co-ordinating space.

Co-ordinating space—A modular space allotted to a group of components or an element to ensure its dimensional co-ordination with the other component or elements taking into account the joints and the clearances.

Co-ordinating surface—The area in a specified plane allotted to a component, a group of components or an element to ensure its dimensional co-ordination with the other components or elements taking into account the joints and clearances.

Deviation—Algebraical difference between size (actual, maximum etc.) and corresponding basic size.

Functional Element—A complex constituent part of a building, having its functional identity (e.g. walls, floors, roofs).

Grade of Accuracy (Grade of Tolerance)—In a standardised system of limits, group of tolerances considered as corresponding to the same level of accuracy for all basic sizes.

Joint—Space between two adjacent components persisting after location irrespective of whether it is filled by any material or not.

Limits (Limit)—Limit is the maximum permissible variation in dimensional value.

Location deviation—Measurement by which the location of a component deviates in a given position from the intended location.

Location dimensions—Dimensions given on an assembly drawing, indicating the intended location of a component in relation to the modular grid.

Location tolerance—Tolerance specified for the location of a component.

Manufacturing size—A size within the specified permissible variation from a work size.

Manufacturing tolerance—Tolerance specified for the manufacture of a component.

Modular detail—Detailed drawing showing location and dimensions of a part, component or assembly of every component in relation to the modular grid.

Modular key plane—Planes in a modular space grid by reference to which are defined theoretical positions of the components and of the elements.

Modular line—A line of a modular reference system.

Modular Plane—A reference plane in a modular reference system.

Modular planing grid—A modular grid used in the design of a building.

Modular point—Point of intersection of two modular lines or three modular planes.

Modular space—A space bound by modular planes.

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Modular space grid—Three-dimensional cartesian co-ordinated systems of reference with lines spaced apart at the basic module or a multimodule. This multimodule may differ for each of the three dimensions of the reference system.

Modular structural axis—A line in a modular grid, defining the position on the plan of the main bearing systems (walls, rows of columns).

Modular structural grid—A structural grid in which the distance between consecutive parallel lines is the international basic module or a multiple thereof.

Modular zone—A space bound by specified modular planes.

Modulate (to modulate)—To use for linkage measurements of buildings, building components etc. Measurement which are based on a module or refer to a modular reference.

Module—A convenient unit of length which is used as an implement or co-efficient in dimensional co-ordination.

Neutral zone—A zone which interrupts the regular spacing of a modular reference system.

Nominal dimension—A dimension which is used for convenience to designate a component.

Observed Measurement—Any direct measurements taken on finished components.

Overall size—The greatest of the external size parallel to a given direction.

Partition—A vertical building element used to sub-divide a space.

Semi-modular dimension—Dimensions larger than the basic module and multiple of a sub-module.

Site operations—Any aspect of construction or production performed at site.

Sub-module—A module whose dimensional value is a sub-division of the basic module.

System of building—A method of using selected building components to form a building.

Thickness problem—A problem which may occur at corners where the thickness of one component becomes part of the length of another.

Tolerance volume—Enveloping of the volumes of tolerances of all the points of the surface of the component.

Tolerance zone or point—Volume or area enveloping the basic point given in the design and within which the corresponding actual point must lie.

Tolerance—The difference between the limits within which a size of component or position should lie.

Work dimension—A dimension specified or set out on a drawing against which the actual measurement of the finished work may be compared.

Work size—Size given with its permitted tolerance specified for manufacturing of a component.

Zero line—The line representing the nominal measurement.

APPENDIX

General—	Carcassing Components Functional element Module Partition Site operations System of buildings Thickness problem.
Control—	Basic dimensions Basic module Controlling dimensions Co-ordinating dimensions Co-ordinating face Modular structural axis Modular key plane Modular zone Sub-module.
Location—	Basic modular grid Basic space Boundary condition Co-ordinating grid Co-ordinating line Co-ordinating plane Location deviation Location dimensions Modular detail

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Location (Cont.)—
Modular line
Modular plane
Modular planing grid
Modular point
Modular space
Modular space grid
Modular structural grid
Neutral zone
Modulate (to modulate)
Zero line.

Dimensions—
Co-ordinating space
Co-ordinating surface
Limits (limit)
Manufacturing size
Nominal dimension
Observed measurement
Overall size
Semi-modular dimension
Work dimension
Work size.

Assembly and Tolerance—
Assembly tolerance
Clearance
Deviation
Grade of Accuracy
Joint
Location tolerance
Manufacturing tolerance
Tolerance volume
Tolerance zone or point
Tolerances.

Any newly coined terms not included in the standard will be incorporated into it in a subsequent revision.

BUREAU OF CEYLON STANDARDS

The Bureau of Ceylon Standards (BCS) is the national standards organisation of Ceylon and was established by the Hon. Minister of Industries & Fisheries, as provided for by the Bureau of Ceylon Standards Act, No. 38 of 1964.

The principal objects of the Bureau as set out in the Act are to promote standards in industry and commerce, prepare national Standard Specifications and Codes of Practice and operate a Standardisation Marks Scheme and provide testing facilities, as the need arises.

The Bureau is financed by Government grants and the sale of its publications. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The detailed preparation of Standard Specifications is done by Drafting Committees composed of experts in each particular field assisted by permanent officers of the Bureau. These Committees are appointed by Divisional Committees, which are appointed by the Council. All members of the Drafting and Divisional Committees render their services in an honorary capacity. In preparing the Standard Specifications the Bureau endeavours to ensure adequate representation of all view points.

In the international field the Bureau represents Ceylon in the International Organisation for Standardisation (ISO) and will participate in such fields of Standardisation as are of special interest to Ceylon.