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*Indian Standard*

# RECOMMENDATIONS FOR MODULAR CO-ORDINATION: CO-ORDINATING SIZES FOR DOORSETS AND WINDOWSETS

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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
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# *Indian Standard*

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# *Indian Standard*

# RECOMMENDATIONS FOR MODULAR CO-ORDINATION: CO-ORDINATING SIZES FOR DOORSETS AND WINDOWSETS

## 0. FOREWORD

**0.1** This Indian Standard was adopted by the Bureau of Indian Standards on 30 April 1987, after the draft finalized by the Modular Co-ordination Sectional Committee had been approved by the Civil Engineering Division Council.

**0.2** A series of Indian Standards on recommendations for co-ordination of dimensions in buildings with respect to arrangements of building components and assemblies have been formulated. These components will be required to fill the spaces determined by preferred sizes for horizontal and vertical coordinating and controlling dimensions. The components considered in this standard are the doorsets and windowsets for which the coordinating widths and heights are being specified.

**0.3** The following Indian Standards on doors and windows have been formulated which recommend modular sizes and dimensions for the doors, windows and ventilators:

IS : 1003 ( Part 1 )-1977 Specification for timber panelled and glazed shutters: Part 1 Door shutters ( *second revision* )

IS : 1003 ( Part 2 )-1983 Specification for timber panelled and glazed shutters: Part 2 Window and ventilator shutters ( *second revision* )

IS : 1038-1983 Specification for steel doors, windows and ventilators ( *third revision* )

IS : 1361-1978 Specification for steel windows for industrial buildings ( *first revision* )

IS : 1948-1961 Specification for aluminium doors, windows and ventilators

IS : 1949-1961 Specification for aluminium windows for industrial buildings

IS : 2191 ( Part 1 )-1983 Specification for wooden flush door shutters ( cellular and hollow core type ): Part 1 Plywood face panels ( *fourth revision* )

IS : 2191 ( Part 2 )-1983 Specification for wooden flush door shutters ( cellular and hollow core type ): Part 2 Particle board and hardboard face panels ( *third revision* )

IS : 2202 ( Part 1 )-1983 Specification for wooden flush door shutters ( solid core type ): Part 1 Plywood face panels (*fourth revision* )

IS : 2202 ( Part 2 )-1983 Specification for wooden flush door shutters ( solid core type ): Part 2 Particle board and hard board face panels ( *third revision* )

IS : 4021-1983 Specification for timber door, window and ventilator frames ( *second revision* )

IS : 4351-1976 Specification for steel door frames (*first revision* )

IS : 6198-1983 Specification for ledged, braced and battened timber door shutters (*first revision* )

IS : 6523-1983 Specification for precast reinforced concrete door and window frames (*first revision* )

**0.4** In the preparation of this standard, considerable assistance has been rendered by National Buildings Organization, New Delhi.

## 1. SCOPE

**1.1** This standard specifies the coordinating sizes for doorsets and windowsets of all materials to be used in buildings and which will fill the coordinating spaces in dimensionally coordinated buildings.

## 2. FIELD OF APPLICATION

**2.1** This standard applies to external and internal doorsets and windowsets for use in construction of buildings of all types.

## 3. TERMINOLOGY

**3.1** For the purpose of this standard the definitions given in IS : 4993-1983* and IS : 6408-1971† shall apply.

## 4. GENERAL PRINCIPLE

**4.1** The horizontal coordinating spaces for doorsets and windowsets have been related to the horizontal preferred multimodules which are controlling widths of doors and windows; and the vertical coordinating spaces of these components are considered depending on the controlling reference lines to which their vertical dimensions are related ( *see* Fig. 1 ). The coordinating sizes of doorsets and windowsets are based on the principle of modular coordination and are in accordance with IS : 7921-1986‡ and IS : 7922 1986§.

*Glossary of terms relating to modular co-ordination ( *second revision* ).

†Recommendations for modular co-ordination—application of tolerances in building industry.

‡Recommendations for modular coordination in building industry: horizontal co-ordination (*first revision* ).

§Recommendations for modular co-ordination in building industry: vertical co-ordination ( *first revision* ).

**4.2** 'M' is the symbol for the basic module defined in IS : 10316-1986* having the value 100 mm.

**4.3** For the details of material specification, manufacturing process tolerances and for frames and shutters, the relevant Indian Standards shall be referred.

## 5. CO-ORDINATING SIZES

**5.1** The coordinating sizes for external and internal doorsets shall be as follows:

*Widths* — 6M ( *see* Note 1 ), 7M ( *see* Note 2 ), 8M ( *see* Note 2 ), 9M, 10M, 12M, 15M, 18M, 21M, 24M, 27M, 30M

*Heights* — 18M ( *see* Note 3 ), 20M, 21M, 24M, 27M, 30M

NOTE 1 — For shafts.

NOTE 2 — For low cost housing, cellars, basements, corridors and toilets.

NOTE 3 — For low cost housing and toilets.

**5.1.1** The recommended co-ordinating sizes of doorsets are given in Fig. 2. 'Small dots' in Fig. 2 indicate recommendations of second preference of coordinating sizes.

**5.1.2** If doorsets of higher co-ordinating sizes are required then widths and heights of such doorsets shall be multiples of 3M.

**5.2** The co-ordinating sizes for external and internal windowsets shall be as follows:

*Widths* — 5M, 6M, 9M, 10M, 12M, 15M, 18M, 21M, 24M

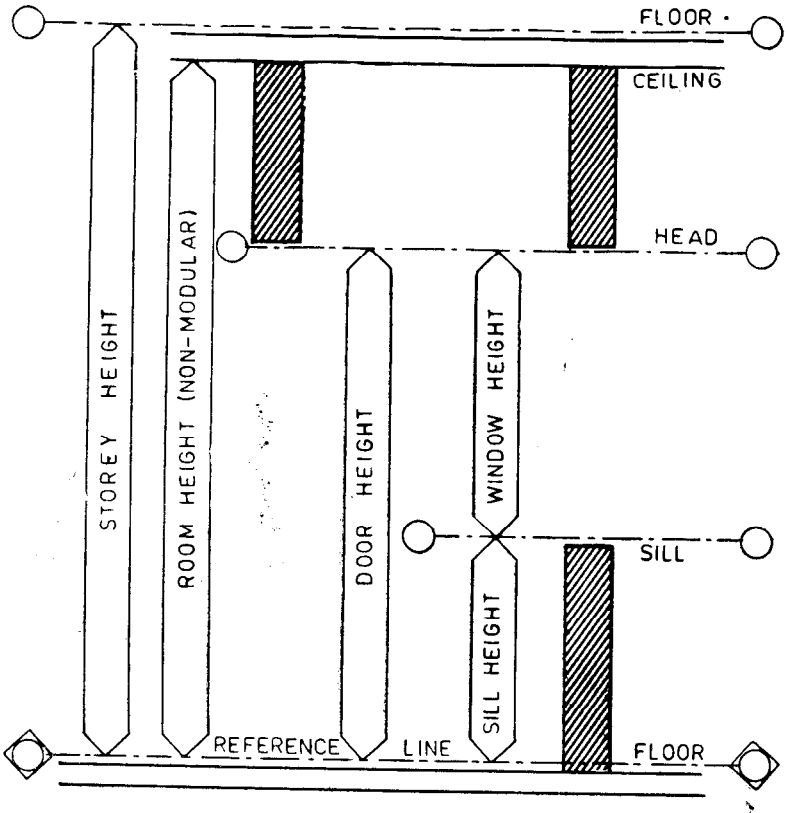
*Heights* — 3M ( *see* Note 1 ), 5M ( *see* Note 1 ), 6M ( *see* Note 1 ), 7M ( *see* Note 1 ), 9M, 12M, 13M, 15M, 18M, 21M

NOTE 1 — For ventilators, cellar and basement windows.

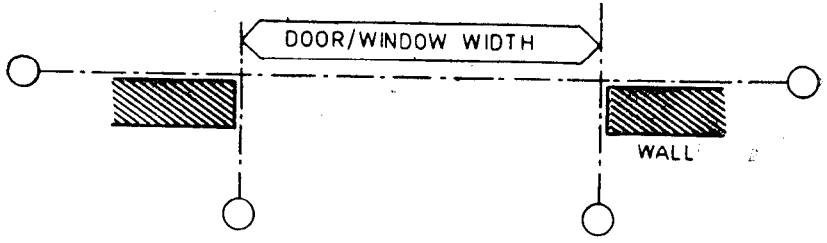
**5.2.1** The recommended co-ordinating sizes of windowsets are given in Fig. 3. 'Small dots' in Fig. 3 indicate recommendations of second preference of coordinating sizes.

**5.2.2** If windowsets of higher co-ordinating sizes are required then widths and heights of such windowsets shall be multiples of 3M.

*Recommendations for modular co-ordination: Basic module and sub-modular increments ( *first revision* ).




1A VERTICAL COORDINATING SPACE




1B HORIZONTAL COORDINATING SPACE

FIG. 1 COORDINATING WIDTH AND HEIGHT

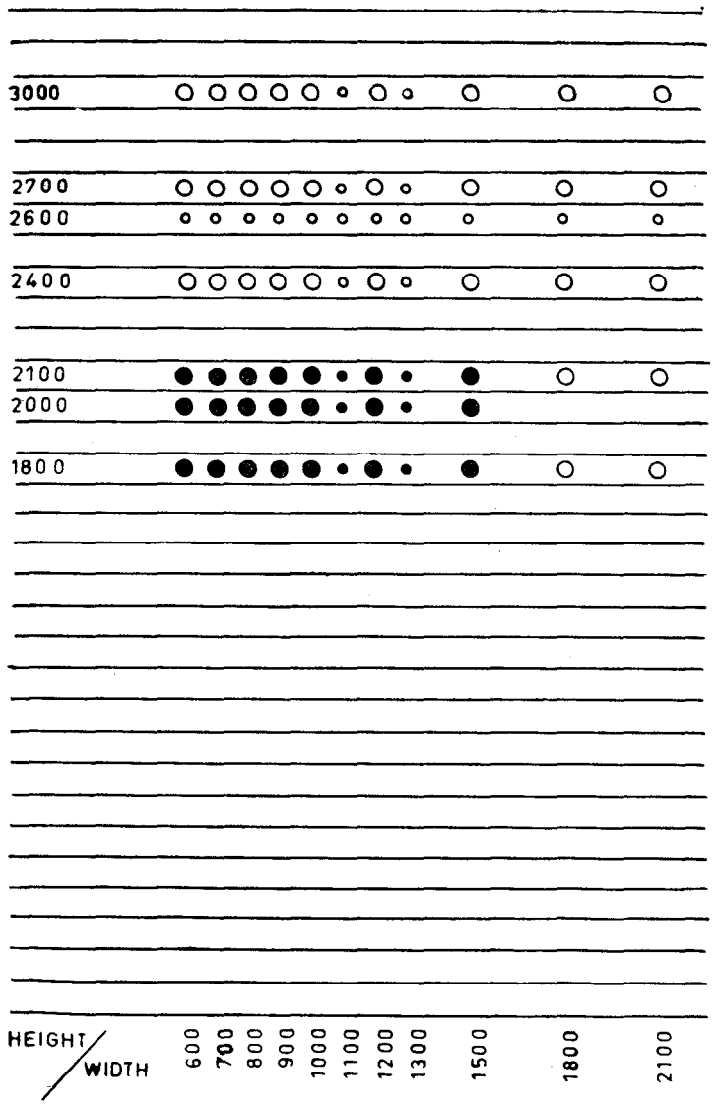



FIG. 2 COORDINATING SIZES FOR DOORSETS

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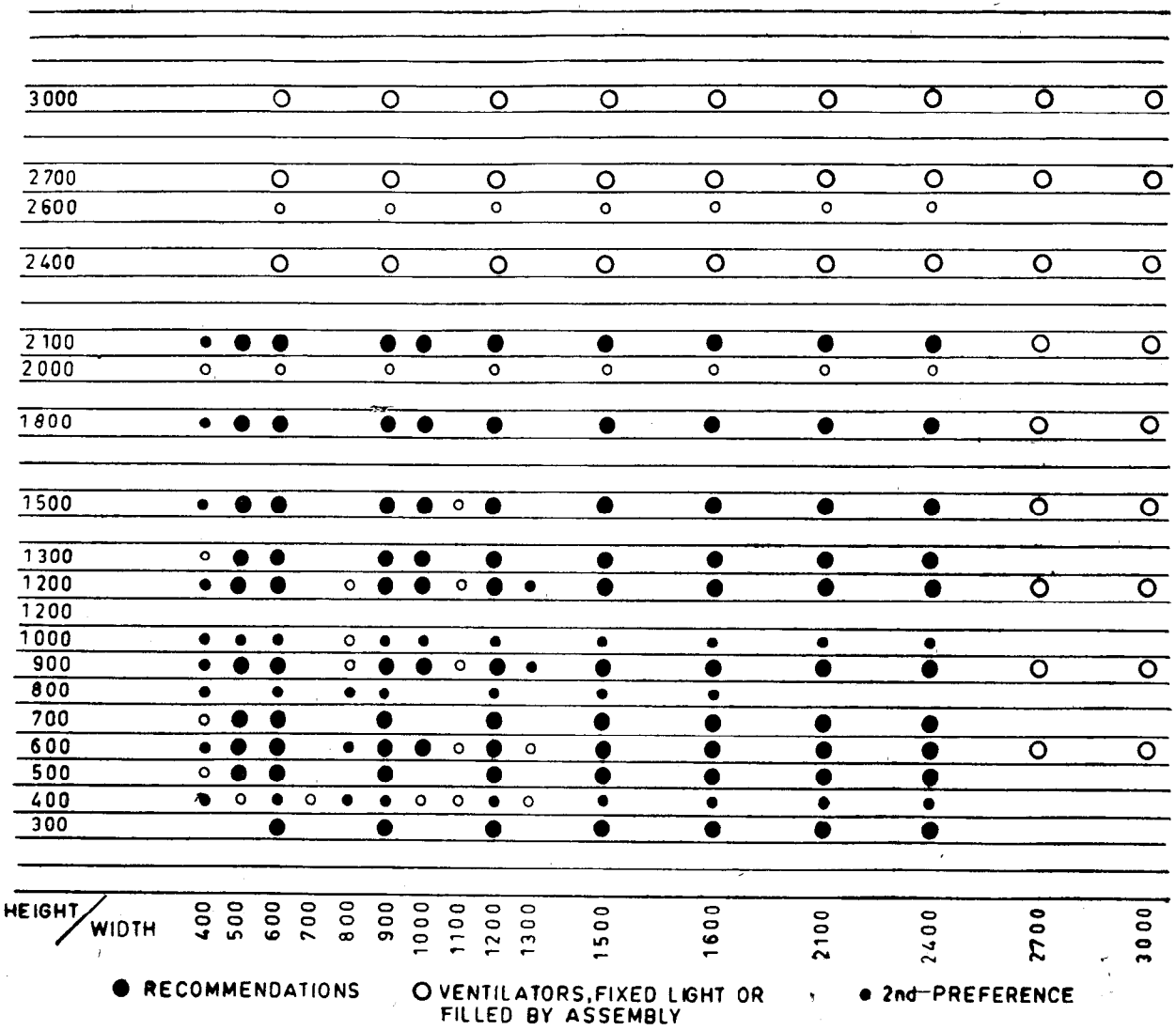


FIG. 3 COORDINATING SIZES FOR WINDOWSETS