# भारतीय मानक

# भवन निर्माण और सिविल इंजीनियरिंग कार्यों की मापन पद्धतियाँ

भाग 28 आवाज रोधी निर्माण

Indian Standard METHOD OF BUILDING AND CIVIL ENGINEERING WORKS PART 28 SOUND INSULATION WORK

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**Price Group 1** 

Method of Measurement of Works of Civil Engineering (Excluding River Valley Projects), CED 44

#### FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Method of Measurement of Works of Civil Engineering (Excluding River Valley Projects) Sectional Committee had been approved by the Civil Engineering Division Council.

Measurement occupies a very important place in the planning and execution of any civil engineering work from the time of first estimates to the final completion and settlement of pavements of projects. Methods followed for measurement are not uniform and considerable difference exist between practices followed by different construction agencies and also between various Central and State Government Departments and their undertakings. While it is recognized that each system of measurement has to be specifically related to administrative and financial organizations within a department responsible for the work, a unification of the various systems at technical levels has been accepted as very desirable, specially as it permits a wider range of operation for civil engineering contractors and eliminates ambiguities and misunderstandings arising out of inadequate understanding of various systems followed.

Since different trades are not related to one another, the Sectional Committee decided that for each separate standards shall be issued as different parts as it would be helpful to users in using the specific standard. This Part 28 covers method of measurement of sound insulation on work applicable to building as well as to civil engineering work.

Sound insulation work is required to be done in some of the insulation buildings. The method of measurement of insulation varies from organization to organization. The technical committee responsible for formulation of this standard has, after considering practices being followed by some of the major organizations, decided to prepare this standard which adopts simplest type of measurement.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a measurement, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

# Indian Standard METHOD OF BUILDING AND CIVIL ENGINEERING WORKS

# PART 28 SOUND INSULATION WORK

#### **1 SCOPE**

1.1 This standard (Part 28) covers the method of measurement of sound insulation for building and other civil engineering works.

### **2 GENERAL RULES**

#### 2.1 Clubbing of Items

Items may be clubbed together.

# **3 BILL OF QUANTITIES**

3.1 Items of work shall fully describe materials and workmanship and accurately represent the work to be executed.

# **4 SOUND INSULATION TREATMENT**

4.1 Work of sound insulation shall be treated according to the material used and each classification shall be measured separately. The following particulars shall be given for each work:

- a) Specification of the material used;
- b) Number of coats and thickness of each coat;
- c) Nature of surface treatment;
- d) Nature of base; and
- e) Curved work, conical work, special work and elliptical work stating the radius.

# **5 METHOD OF MEASUREMENT**

5.1 All works shall be measured, net, in decimal system, as fixed in its place as given below:

- a) Each dimensions shall be measured to the nearest 0.01 m, where any dimensions is more than 25 metre it shall be measured nearest to 0.1 m, and
- b) Areas shall be calculated to the nearest  $0.01 \text{ m}^2$ .

#### 5.2 Ceiling Work/False Ceiling Work

It shall be measured on the basis of finished work.

#### **5.3 Flooring Work**

It shall be measured on the basis of finished work.

#### 5.4 Work in Walls

Actual finished area shall be measured.

### 5.5 Work in Curved Walls

It shall be measured separately on the basis of 'finished surface measurement.

#### 5.6 Work in Curved Ceiling

It shall be measured separately on the basis of finished surface measurement.

#### 5.7 Work in Roof

It shall be measured on the basis of finished work.

5.8 Sound insulation work in isolated widths ( as in bands, corners, window cills, door and window jambs, sunk panels, etc ) and in rounded angles shall be measured separately.

#### **6 GENERAL RULES**

6.1 Description shall include rises and other roundings and shapes.

**6.2** Work in repairs shall be so described stating thickness of dubbing, if any.

**6.3** Sound insulation work on ceilings, walls and floor shall be measured separately.

#### **7 METHOD OF MEASUREMENT**

7.1 Work in isolating area not exceeding  $1 \text{ m}^2$  each shall be so described stating the nature thereof.

7.2 Curved work, conical work and spherical work shall be described separately stating the radius.

7.3 Opening dia  $0.3 \text{ m}^2$  or less shall not be deducted for the purpose of measurement.

7.4 Sound insulation work at a height greater than 10 m above ground/datum level shall be measured separately in stages of 5 m height in case there is no floor in between. If there is a floor at a height not exceeding 5 m, then it shall be measured separately for each storey.

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