

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG, NEW DELHI 110002

व्यापक परिचालन मसौदा

हमारा संदर्भः सीईडी 44/टी-13

15 मार्च 2024

तकनीकी समिति : सिविल इंजीनियरिंग के कार्यों के मापन की पद्धतियाँ (जल संसाधन विकासको छोडकर) विषय समिति, सीईडी - 44

प्राप्तकर्ता :

- क) सिविल इंजीनियरी विभाग परिषद, सीईडीसी के सभी सदस्य
- ख) सीईडी 44 व उसकी उपसमितियों, के सभी सदस्य
- ग) रूचि रखने वाले अन्य निकाय

प्रिय महोदय/महोदया,

निम्नलिखित भारतीय मानक का मसौदा संलग्न हैं:

प्रलेख संख्या	शीर्षक
सीईडी 44 (25069)WC	भवन निर्माण और सिविल इंजीनियरिंग कार्यों की मापन पद्धतियाँ भाग 13 भवन की सतहों की पेंटिंग
	[IS 1200 (भाग 13) का <i>छठा पुनरीक्षण</i>] ICS 17.020; 91.040.01; 93.010

कृपया इस मानक के मसौदे का अवलोकन करें और अपनी सम्मतियाँ यह बताते हुए भेजे कि यदि यह मानक के रूप में प्रकाशित हो तो इस पर अमल करने में आपके व्यवसाय अथवा कारोबार में क्या कठिनाइयाँ आ सकती हैं।

सम्मतियाँ भेजने की अंतिम तिथि : 15 अप्रैल 2024

सम्मति यदि कोई हो तो कृपया अधोहस्ताक्षरी को उपरिलिखित पते पर संलग्न फोर्मेट में भेजें या divya.s@bis.gov.in पर ईमेल कर दें ।

यदि कोई सम्मति प्राप्त नहीं होती है अथवा सम्मति में केवल भाषा सम्बन्धी त्रुटि हुई तो उपरोक्त प्रलेख को यथावत अंतिम रूप दिया जाएगा। यदि सम्मित तकनीकी प्रकृति की हुई विषय समिति के अध्यक्ष के परामर्श से अथवा उनकी इच्छा पर आगे की कार्यवाही के लिए विषय समिति को भेजे जाने के बाद प्रलेख को अंतिम रूप दे दिया जाएगा।

यह प्रलेख भारतीय मानक ब्यूरो की वैबसाइट <u>www.bis.gov.in</u> पर भी उपलब्ध हैं।

धन्यवाद ।

भवदीय, (**दिव्या एस.**) सदस्य सचिव सीईडी 44 वैज्ञानिक 'डी'(सिविल इंजीनियरिंग) ई-मेल: divya.s@bis.gov.in

संलग्नः उपरलिखित



MANAK MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG, NEW DELHI 110002

WIDE CIRCULATION DRAFT

Our Ref: CED 44/T-13

15 March 2024

TECHNICAL COMMITTEE: Method of Measurement of Works of Civil Engineering (Excluding Water Resources Development) Sectional Committee, CED 44

ADDRESSED TO:

- a) All Members of Civil Engineering Division Council, CEDC
- b) All Members of CED 44 and its Subcommittees
- c) All others interests

Dear Sir/Madam,

Please find enclosed the following document:

Doc No.	Title
CED 44 (25069)WC	Draft Indian Standard Method of Measurement of Building and Civil Engineering Works Part 13 Painting of building surfaces [Sixth Revision of IS 1200 (Part 13)] ICS 17.020; 91.040.01; 93.010

Kindly examine the draft standard and forward your views stating any difficulties which you are likely to experience in your business or profession, if this is finally adopted as National Standard.

Last Date for comments: 15 April 2024

Comments if any, may please be made in the enclosed format and mailed to the undersigned at the above address or preferably through e-mail to <u>divya.s@bis.gov.in</u>.

In case no comments are received or comments received are of editorial nature, you will kindly permit us to presume your approval for the above document as finalized. However, in case of comments of technical in nature are received then it may be finalized either in consultation with the Chairman, Sectional Committee or referred to the Sectional Committee for further necessary action if so desired by the Chairman, Sectional Committee.

The document is also hosted on BIS website www.bis.gov.in.

Thanking you,

Yours faithfully,

(**Divya S.**) Member Secretary CED 44 Scientist 'D' (Civil Engineering) E-mail: <u>divya.s@bis.gov.in</u>

Encl: As above

FORMAT FOR SENDING COMMENTS ON BIS DOCUMENTS

(Please use A-4 size sheet of paper only and type within fields indicated. Comments on each clause/sub-clause/table/fig etc. be started on a fresh box. Information in column 3 should include reasons for the comments and suggestions for modified working of the clauses when the existing text is found not acceptable. Adherence to this format facilitates Secretariat's work) {Please e-mail your comments to divya.s@bis.gov.in

Doc. No.: CED 44 (25069)WC

Title:Draft Indian Standard Method of Measurement of Building and Civil
Engineering Works Part 13 Painting of Building Surfaces

[Sixth Revision of IS 1200 (Part 13)]

ICS 17.020; 91.040.01; 93.010

LAST DATE OF COMMENT: 15 April 2024

NAME OF THE COMMENTATOR/ ORGANIZATION:

Clause/ Para/ Table/ Figure No. commented	Comments/Modified Wordings	Justification of Proposed Change

NOTE - Kindly insert more rows as necessary for each clause/table, etc

DRAFT FOR COMMENTS ONLY

<u>CED 44 (25069) WC</u> January 2024

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

(Not to be reproduced without the permission of BIS or used as an Indian Standard)

Draft Indian Standard

METHODS OF MEASUREMENT OF BUILDING AND CIVIL ENGINEERING WORKS PART 13 PAINTING OF BUILDING SURFACES (Sixth Revision)

ICS 17.020; 91.040.01; 93.010

Method of Measurement of Works of Civil Engineering	Last date of Comments
Sectional Committee, CED 44	15 April 2024

FOREWORD

(Formal clause shall be added later)

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

Among various civil engineering items, measurement of building had been first to be taken up for standardization and this standard, having provisions relating to all building works, was first published in 1958 and then revised in 1964. In its second revision, the standard was issued in different parts corresponding to different trades in building and civil engineering works. This part covering methods of measurement of white washing, colour washing, distempering and painting applicable to building as well as civil engineering works was, therefore, issued as a second revision in 1970. The third revision of the standard was published in 1976, the fourth revision in 1987 and the fifth revision on 1994..

This sixth revision has been brought out to incorporate the changes found necessary in light of the usage of this standard and the suggestions made by various bodies implementing it.

Significant modifications in this revision are

- a) The standard title has been modified.
- b) Acrylic emulsion has also been included under decorative treatments
- c) The previous amendments have been included.

This standard contributes to the Sustainable Development Goal 9 'Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation'.

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 test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (second revision)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Draft Indian Standard

METHODS OF MEASUREMENT OF BUILDING AND CIVIL ENGINEERING WORKS PART 13 PAINTING OF BUILDING SURFACES

(Sixth Revision)

1 SCOPE

This standard (Part 13) covers the methods of measurement of painting of surfaces in building and civil engineering works.

2 TERMS AND DEFINITIONS

2.1 Clubbing of Items

Items may be clubbed together provided these are on the basis of detailed description of item, stated in this standard.

2.2 Booking of Dimensions

In booking of dimensions the order shall be consistent and generally in the sequence of length, breadth or width and height.

2.3 Description of Items

Description of each item shall unless otherwise stated, be held to include, where necessary, conveyance; delivery; handling; unloading; storing; waste; return of packings; necessary scaffolding; protective cover; and cleaning stains from floors, walls, glass panes, etc.

2.4 Bills of Quantities

Item of work shall fully describe materials and workmanship, and accurately represent the work to be executed.

2.5 Number of Coats

Decorative treatment shall be fully described stating the number of coats in each case.

2.6 Preparatory Work

Preparatory work, such as brooming down, steel wire brushing, scrapping, washing and rubbing down, shall be described and included in the main item.

2.6.1 Preparatory work on new surfaces and primary coats, if any, shall be described and included in the main item.

2.6.2 Preparatory work on old treated surfaces shall be described and included in the main item.

3 Classification

Various decorative treatments shall be measured separately under the various classification as given below and materials and type of surfaces to be treated shall be fully described:

- a) Whitewash, colour wash, etc;
- b) Non-washable distemper;
- c) Washable distemper;
- d) acrylic emulsion;
- e) Waterproof paint (colour/colourless);
- f) Chalk whiting to cloth or hessian surface;
- g) f) Linseed oil and cement to steel and iron work; Cement slurry wash, etc

2.7.1 Priming and alkali neutralizing treatments, scrapping of surface, washing surfaces spoilt by smoke soot, removal of oil and grease spots, treatment for disinfection with efflorescence, moulds, moss, fungi, algae and litchen shall be measured separately and materials described.

2.8 Walls, Ceilings, etc

Work on walls, ceilings and sloping roofs shall each be measured separately.

2.9 Old Treated Surfaces

Work on old treated surfaces shall be measured separately and so described.

3 MEASUREMENT

3.1 All work shall be measured net in square metres, the decimal system as executed and as given below:

- a) Dimensions shall be measured to the nearest 0.01 m, and
- b) Areas of individual items shall be worked out to the nearest 0.01m²

3.2 Deductions

3.2.1 For jambs, soffits, sills, etc; for openings not exceeding 0.5 m^2 each in area; for ends of joists, beams, posts, girders, steps, etc, not exceeding 0.5 m^2 each in area; and for openings exceeding 0.5 m^2 and not exceeding 3 m^2 each in area, deductions and additions shall be made in the following manner:

a) No deduction shall be made for ends of joists, beams, posts, etc, and openings not exceeding 0.5 m^2 each and no addition shall be made for reveals, jambs, soffits, sills, etc, of these openings nor for finish around ends of joists, beams, posts, etc.

b) Deductions for openings exceeding 0.5 m² but not exceeding 3 m² each shall be made as follows and no addition shall be made for reveals, jambs, soffits, sills, etc, of these openings:

1) When both faces of wall are provided with the same finish, deduction shall be made for one face only.

2) When each face of wall is provided with a different finish, deduction shall be made for that side on which width of reveal is less than that of the other side but no deduction shall be made on the other side; where width of reveals on both faces of wall are equal or deduction of 50 percent of area of opening on each face shall be made from area of finish.

3) When only one face is treated and other face is not treated, full deduction shall be made if width of reveal on the treated side is less than that on the untreated side, but if width of reveal is equal or more than that on the untreated side, neither deduction for the opening nor addition for reveals, jambs, soffits, sills, etc, shall be made.

4) When width of door frame is equal to thickness of wall or is projecting beyond the thickness of wall, full deduction for opening shall be made from each face of wall.

5) When the reveal is only on one side, full deduction for the face having no reveal shall be made and for the face having reveal, deduction of 50 percent of the opening shall be made.

3.2.2 In case of openings of areas above 3 m² each, deductions shall be made for openings, but jambs, soffits and reveals shall be measured

3.3 No deduction shall be made for attachment, such as casings, conduits, pipes, electric wiring and the like.

3.4 Corrugated surfaces shall be measured flat as fixed and not girthed. Quantities so measured shall be increased by the following percentages and the resultant shall be included in general areas:

a)	Corrugated steel sheets	14 percent
b)	Corrugated asbestos cementSheets	20 percent
c)	Semi-corrugated asbestos cement sheets	10 percent
d)	Nainital pattern roofs (plain sheeting with rolls)	10 percent
e)	Nainital pattern roofs	25 percent

with corrugated sheets

3.5 Cornices and other wall features, when not picked out in a different finish/ colour, shall be girthed and included in general area.

3.6 The painting for building surfaces shall be kept separate and the surfaces to be painted shall be described. It shall be stated whether measurements are flat or girthed. Alternatively, different surfaces may be grouped into one general item, areas of uneven surfaces be converted into equivalent plain areas by increasing the areas as under:

a) External walls of plain brickwork faced with recessed, raised or weather stuck pointing - 20 percent

- b) Sand face plaster with up to 4 mm Size 50 percent.
- c) Rough cast plaster with stone aggregate up to 10 mm 100 percent.
- d) Pebble dash finish beyond 10 mm 275 percent.
- e) Sponge finished plaster 25 percent.

3.7 For RCC jallies the quantity of area shall be increased by the following percentages:

a)	for painting of one side	100 percent
b)	for painting of one side and inside (that is through the thickness)	150 percent
c)	for painting of both sides and inside (that is through the thickness)	200 percent