भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
BUREAU OF INDIAN STANDARDS
(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India

मानक भवन, 9, बहादुर शाह ज़फर मार्ग, नई दिल्ली – 110002
Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi – 110002
Phones: 23230131 / 2323375 / 23239402
Website: www.bis.org.in . www.bis.gov.in

व्यापक परिचालन मसौदा

हमारा संदर्भः सीईडी 44/टी-3 **27 जून 2025**

तकनीकी समिति : सिविल इंजीनियरिंग के कार्यों के मापन की पद्धतियाँ (जल संसाधन विकास को छोड़कर) विषय समिति, सीईडी - 44

प्राप्तकर्ता :

क) सिविल इंजीनियरी विभाग परिषद्, 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 (28249)WC	**भवन निर्माण और सिविल इंजीनियरिंग कार्यों की मापन पद्धत का भारतीय मानक कार्यकारी मसौदा** **भाग 3 ईंट का काम** [IS 1200 (भाग 3) का *चौथी पुनरीक्षण*] ICS 17.020; 91.040.01; 93.010

कृपया इस मानक के मसौदे का अवलोकन करें और अपनी सम्मतियॉ 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 : **27/07/2025**

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 नही 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 www.bis.gov.in पर भी उपलब्ध हैं।

धन्यवाद ।

भवदीय,

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

संलग्न: उपरलिखित

भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
BUREAU OF INDIAN STANDARDS
(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India

मानक भवन, 9, बहादुर शाह ज़फर मार्ग, नई दिल्ली – 110002
Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi – 110002
Phones: 23230131 / 2323375 / 23239402
Website: www.bis.org.in . www.bis.gov.in

WIDE CIRCULATION DRAFT

27 June 2025

Our Ref: CED 44/T-3

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 interested

Dear Sir/Madam,

Please find enclosed the following document:

Doc No.	*Title*
CED 44 (28249)WC	**Draft Indian Standard on Method of Measurement of Building and Civil Engineering Works Part 3 Brickwork** [(*Fourth Revision*) of IS 1200 (Part 3)] 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: **27 July 2025**

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 **divya.s@bis.gov.in**.

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: **divya.s@bis.gov.in**

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 (28249) WC**

Title: **Draft Indian Standard Method of Measurement of Building and Civil Engineering Works Part 3 Brickwork**
[(*Fourth Revision*) of IS 1200 (Part 3)]

ICS 17.020; 91.040.01; 93.010

LAST DATE OF COMMENT: **27 July 2025**

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

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

Draft Indian Standard

METHOD OF MEASUREMENT OF BUILDING AND CIVIL ENGINEERING WORKS

PART 3 BRICKWORK

(*Fourth Revision* of IS 1200 part 3)

ICS 17.020; 91.040.01; 93.010

Method of Measurement of Works of Civil Engineering Sectional Committee, CED 44	Last date of comments **27 July 2025**

FORWARD

(*Formal Clause will be added later.*)

Measurement occupies a very important place in planning and execution of any civil engineering work from the time of first estimate to final completion and settlement of payments for the project. Methods followed for measurement are not uniform and considerable differences exist between practices followed by one construction agency and another 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 inadequate understanding of various systems followed.

Among the various civil engineering items, measurement of buildings was the first to be taken up for standardization and this standard having provisions relating to all building works, was first published in 1958 and was subsequently revised in 1964.

In the course of usage of this standard by various construction agencies in the country, several clarifications and suggestions for modifications were received and as a result of study, the Sectional Committee decided that its scope, besides being applicable to

buildings, should be expanded so as to cover civil engineering works like industrial and river valley project works.

Since various trades are not related to one another, the Committee decided that method of measurement for each trade as given in IS 1200: 1964 be issued separately as a different part, which will be helpful to specific users in various trades. This part covering method of measurement of brickwork 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 major modifications in this revision are:

a) The provision to measure work executed where utilities exist, have also been incorporated,
b) The emphasis on English bond has been removed, and
c) The hole left for cables have also been included in the list of general brickwork

This standard contributes to the Sustainable Development Goal 9 ‘Build resilient infrastructure, promote 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 measurement 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

METHOD OF MEASUREMENT OF BUILDING AND CIVIL ENGINEERING WORKS PART 3 BRICKWORK

(*Fourth Revision* of IS 1200 part 3)

1 SCOPE

This standard (Part 3) covers the method of measurement of brickwork in buildings and civil engineering works.

NOTE- The method of measurement of refractory brickwork is covered in IS 1200 (Part 6): 2024 'Method of measurement of building and civil engineering works: Part 6 refractory work (*Third Revision*)'.

2 REFERENCE

The standards given below contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards:

IS no.	*Title*
IS 1200	Methods of measurement of building and civil engineering works:
(Part 1) : 1992	Part 1 earthwork (*under revision* Doc: CED 44(28109) WC)
(Part 5) : 2025	Part 5 formwork (Fifth Revision)
(Part 8) : 1998	Part 8 steelwork and ironwork (Fourth Revision)
(Part 21) : 1973	Part 21 wood - Work and joinery (Second Revision)

3 GENERAL

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

3.2 Booking of Dimensions — In booking dimensions, the order shall be consistent and generally in the sequence of length, breadth or width and height or depth or thickness.

3.3 Clubbing of Items — Items may be clubbed together provided that break up of clubbed items is on the basis of detailed descriptions of items as stated in this standard.

3.4 Deduction — Where minimum area is defined for deduction of an opening, void or both, such area shall refer only to opening or void within the space measured.

3.5 Description of Item — 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, tools and tackle.

3.6 Measurement — All work shall be measured net in the decimal system, as fixed in place, as given below:

a) Dimensions shall be measured to the nearest 0.01 m,
b) Areas shall be worked out to the nearest 0.01 m^2, and
c) Cubic contents shall be worked out to the nearest 0.01 m^3.

3.7 Measurement in Stages — Work shall be measured in the following categories in convenient stages stating height or depth:

a) Below ground/datum line, and
b) Above ground/datum line.

NOTE — Ground/datum line may be specified in each case.

3.8 Waste — All measurements of cuttings shall, unless otherwise stated, be deemed to include consequent waste.

3.9 Work to be Measured Separately- Work executed in the following conditions shall be measured separately:

a) Work executed in or under water,
b) Work executed in liquid mud,
c) Work executed in or under foul positions,
d) Work interrupted by tides,
e) Work executed where utilities exist; and
f) Work executed in snow

3.9.1 Levels of high and low water tides, where these occur, shall be stated.

3.9.2 Where springs requiring pumping are encountered, dewatering shall be measured against a separate specific provision made for the purpose [*see* IS 1200 (Part 1)].

4 BRICKWORK GENERAL

4.1 Bricks and mortar to be used for brickwork shall be fully described. The type of bond executed may also be stated.

4.1.1 The item of general brickwork shall be deemed to include the following:

a) Raking out joints for plastering or for pointing done as a separate process or finishing joints flush as work proceeds;
b) Preparing tops of existing walls and the like for raising;
c) Rough cutting and waste for forming gables, cores of arches, splays at eaves and the like and all rough cutting in the body of brickwork, unless otherwise stated;
d) Plumbing to angles;
e) Forming reveals to jambs where fair cutting on exposed faces is not involved;
f) Leaving holes for pipes, cables etc;
g) Building in holdfasts, air bricks, fixing bricks, etc;
h) Building in ends of beams, joists, slabs, lintels, sills, trusses, etc;
j) Forming openings and flues for which no deduction is made (*see* **5.1.4**);
k) Bedding wall plates, lintels, sills, roof tiles, corrugated sheets, etc, in or on walls if not covered in respective trade; and
m) Leaving chases of section not exceeding 50 cm in girth.

4.1.2 The following categories of brickwork shall be included with general brickwork:

a) Footings;
b) Battered (measured net). Battered surfaces shall, however, be measured, separately in square metres as an extra-over;
c) Eaves or beam fillings, no deduction being made for joists, rafters, etc;
d) Brickwork (excluding refractory brickwork) in chimney breasts, chimney stacks, smoke or air flues (except independent chimney shaft as in factories for steam boilers); and
e) Pilasters, plain copings and sills.

NOTE — In the case of receding courses of panels, recess shall not be deducted.

5 MEASUREMENT

5.1 Brickwork shall generally be measured in cubic metres, unless otherwise stated.

5.1.1 Walls one brick thick and less shall each be measured separately in square metres stating thickness.

5.1.2 Walls exceeding one brick thick but not exceeding three bricks in thickness shall be measured in multiples of half-brick which shall be deemed to be inclusive of mortar joints. Where fractions of half-brick occur due to architectural or other reasons, measurement shall be taken as follows:

a) Up to $\frac{1}{4}$ brick–actual measurement, and
b) Exceeding $\frac{1}{4}$ brick–full half-brick.

5.1.3 For walling which is more than three bricks in thickness actual thickness of wall shall be measured.

5.1.4 No deductions or additions shall be made on any account for the following:

a) Ends of dissimilar materials (that is, joists, beams, lintels, posts, girders, rafters, purlins, trusses, corbels, steps, etc); up to 0.1 m^2 in section;
b) Opening up to 0.1 m^2 area (*see* Note);
c) Wall plates, bed plates, and bearing of slabs, CHAJJAS and the like, where thickness does not exceed 10 cm and bearing does not extend over the full thickness of wall;
d) Cement concrete blocks as for hold fasts and holding down bolts;
e) Iron fixtures, such as wall ties, pipes up to 300 mm diameter and hold fasts for doors and windows; and
f) Chases of section not exceeding 500 mm in girth.

NOTE — In calculating area of an opening, any separate lintel or sills shall be included with the size of the opening but end portions of lintel shall be excluded [*see* **5.1.4**(a)] and extra width of rebated reveals if any, shall also be excluded.

5.1.5 *Fireplaces, Chimneys, etc* — Brickwork (excluding refractory brickwork) in chimney breasts, chimney stacks, smoke or air flues not exceeding 0.2 m^2 in sectional area shall be measured as solid, and no extra measurement shall be made for pargetting and coring such flues. Where flues exceed 0.2 m^2 in sectional area, deduction shall be made for the same, and pargetting and coring flues measured in running metres, stating size of flue. Apertures for fireplaces, shall not be deducted and no extra labour shall he measured for splaying of jambs and throating.

5.1.6 *Pillars / Columns* — Pillars shall be fully described and measured in cubic metres. Where pillars of different sections and shapes are involved, their numbers shall be stated in addition in each case. Pillars shall be measured and kept separate as under:

a) Rectangular or polygonal on plan,
b) Curved on plan to any radius, and
c) Any other type.

NOTE — Rectangular pillar/column shall mean a detached masonry portion such that its breadth does not exceed 3 times its thickness and thickness itself does not exceed 3-brick lengths.

6 CIRCULAR BRICKWORK

6.1 Brickwork circular on plan to a mean radius not exceeding 6 m shall be measured separately and shall include all cutting and waste and templates.

6.1.1 Brickwork circular on plan to a mean radius exceeding 6 m shall he measured separately and included with general brickwork.

7 BACKING TO MASONRY

Brickwork in backing to masonry shall be measured separately stating average thickness; description shall include, all cutting and waste for bonding.

8 HONEYCOMB BRICKWORK

Honeycomb brick walling shall be measured in square metres stating thickness and pattern of honeycombing. Honeycomb opening shall not be deducted.

9 INDEPENDENT CHIMNEY SHAFTS

9.1 Brickwork in independent chimney shafts (as for large steam boilers) shall be measured net inclusive of all cutting, waste and templates and kept under the following categories:

a) Rectangular on plan,
b) Polygonal on plan, and
c) Curved on plan to any radius.

9.1.1 Height of chimney from ground/datum line shall be stated (*see* **3.7**).

10 CAVITY WALLS

10.1 Forming of cavity shall be measured in square metres stating width of cavity and shall include ties and their number per square metre. Material, size and shape of ties shall be described.

10.2 Measurement of cavity shall be taken along a plane at centre of cavity, deduction being made for all openings and solid portions of walls.

10.3 Labour and material for closing cavities at jambs, sills and heads of openings shall be described and measured separately in running metres.

10.4 Use of cores for keeping cavity clear and forming requisite weep and vent holes shall be described.

11 REINFORCED BRICKWORK

11.1 Reinforced brickwork shall be measured and kept separate from general brickwork and unless otherwise stated reinforcement shall be measured separately [*see* IS 1200 (Part 8)].

12 BRICK NOGGING

12.1 Brickwork above one brick in thickness shall be included with general brickwork; brickwork one brick and less in thickness shall be measured as described in **5.1.1**. Dimensions shall be measured overall.

12.1.1 Timber work shall be measured separately [*see* IS 1200 (Part 21)].

13 BRICKWORK WITH FAIR FACE OR ARCHITECTURAL APPEARANCE

Brickwork with fair face or architectural appearance shall be measured separately.

14 BRICKWORK IN ARCHES, VAULTS OR STAIRCASES

Brickwork in arches, vaults or staircases shall be measured separately; work in selected uncut bricks and in purpose made or fair cut and rubbed bricks shall be so described and measured separately and shall include centering for spans up to 2 m. For spans exceeding 2 m, centering shall be measured separately [*see* IS 1200 (Part 5):]. Cutting to skews shall be included in the description.

15 UNDERPINNING

Brickwork in underpinning shall be measured separately and an item for extra labour and material in wedging up on top of underpinning shall be measured in square metres as length multiplied by width of top course.

16 FAIR CUTTING OF BRICKWORK

16.1 Fair cutting exceeding 100 mm in width or in girth in splayed angles, weatherings, cornices, quoins, etc (where purpose-made bricks are not used), shall be measured separately in square metres.

16.2 Fair cutting not exceeding 100 mm in width or girth, such as in splays and chamfers, shall be measured in running metres, stating width/girth.

16.3 Circular fair cutting shall be measured separately in square metres.

17 BRICK EDGINGS

Brick edgings, as to roads and the like, shall be described and measured in running metres.

18 FILLETING

Filleting in mortar, as in flashings on roofs, shall be described and measured in running metres stating shape and sectional area of fillets.

19 BROKEN GLASS COPING

Broken glass coping laid along with brickwork shall be measured in square metres and described stating thickness of mortar and weight of broken glass per square metre of coping.

20 DAMP-PROOF COURSES

20.1 Damp-proof course shall be described and measured in square metres stating thickness. Description shall include levelling up and/or preparing brickwork to receive the treatment and use of form work, if required.

20.1.1 Vertical and horizontal damp-proof courses shall be measured separately.

21 BRICKWORK AROUND STEEL JOISTS (ENCASING)

21.1 Encasing brickwork to steel joists or beams, steel stanchions, etc, shall be measured in cubic metres.

21.2 Volume occupied by joists shall not be deducted except in case of boxed stanchions or girders in which case box portion only shall be deducted.

21.3 the cutting and fitting of brickwork around steel joists, stanchions, girders, etc, requiring extra labour shall be measured separately in square metres of finished surfaces.

22 SILLS, CORNICES, ETC

22.1 Plain corbels, string courses, aprons, friezes, sills, cornices, drip courses, over sailing courses, and other projections, etc, of splayed, bullnose or any other type of purpose-made or cut bricks shall be fully described and measured in running metres stating depth and width of projection. No deduction shall be made from masonry of wall for the bearing portion of drip course, bearing of moulding and cornice.

23 BRICK TILE WORK

Brick tile work shall be measured separately and the rules for measuring ordinary brickwork shall be followed.

24 CHASES, REBATES, ETC

24.1 Cutting chases, rebates, throatings, grooves, etc, in brickwork shall be measured in running metres stating girth and classified as follows:

a) Not exceeding 10 cm in girth, and
b) Exceeding 10 cm but not exceeding 20 cm in girth.

24.1.1 Chases, rebates, etc, exceeding 20 cm in girth shall be measured in square metres (girth x length).

25 CUTTING HOLES

Cutting holes through brickwork including making good shall be measured per centimeter of depth of cutting and shall be classified as follows:

a) Holes not exceeding 400 cm^2 in area, and
b) Holes exceeding 400 cm^2 and not exceeding 0.1 m^2 in area.

26 CUTTING OPENINGS

Cutting openings exceeding 0.1 m^2 in area in walls one brick thick and less shall be measured in square metres and in walls exceeding one brick thick shall be measured in cubic metres.

27 TOOTHING AND BONDING

Where new walls are bonded to existing walls, requiring labour and material in cutting, toothing and bonding shall be measured in square metres of vertical face in contact with new work only.