

BUREAU OF INDIAN STANDARDS

Program of Work

CED 48 : Rock Mechanics

Scope: FORMULATION OF INDIAN STANDARD IN THE FIELD OF ROCK MECHANICS COVERING FIELD AND LABORATORY TESTS, ROCK SAMPLING, CLASSIFICATION OF ROCK AND ROCK MASSES FOR ENGINEERING PURPOSES, LOAD BEARING CAPACITIES OF ROCK MASSES, IMPROVEMENT OF ROCK MASS AND ROCK SLOPES.

Liaison:

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10050:1981 Reviewed In : 2021	Method for determination of slake durability index of rocks	April, 2021	-	Indigenous
2	IS 10082:1981 Reviewed In : 2021	Method of test for determination of tensile strength by indirect tests on rock specimens	April, 2021	-	Indigenous
3	IS 10782:1983 Reviewed In : 2021	Method for the laboratory determination of dynamic modulus of rock core specimens	April, 2021	-	Indigenous
4	IS 11309:2023	Method for Conducting Pull-Out Test on Anchor Bars and Rock Bolts (First Revision)		-	Indigenous
5	IS 11315 (Part 1):2023	Methods for Quantitative Description of Discontinuities in Rock Masses: Part 1 Orientation (First Revision)		-	Indigenous
6	IS 11315 (Part 2):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 2 Spacing (First Revision)		-	Indigenous
7	IS 11315 (Part 3):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 3 Persistence (First Revision)		-	Indigenous
8	IS 11315 (Part 4):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 4 Roughness (First Revision)		-	Indigenous
9	IS 11315 (Part 5):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 5 Wall Strength (First Revision)		-	Indigenous
10	IS 11315 (Part 6):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 6 Aperture (First		-	Indigenous

		Revision)			
11	IS 11315 (Part 7):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 7 Filling (First Revision)		-	Indigenous
12	IS 11315 (Part 8):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 8 Seepage (First Revision)		-	Indigenous
13	IS 11315 (Part 9):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 9 Number of Sets (First Revision)		-	Indigenous
14	IS 11315 (Part 10):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 10 Block Size (First Revision)		-	Indigenous
15	IS 11315 (Part 11):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 11 Core Recovery and Rock Quality Designation (First Revision)		-	Indigenous
16	IS 11315 (Part 12):2023	Methods for Quantitative Description of Discontinuities in Rock Masses Part 12 Drill Core Study(First Revision)		-	Indigenous
17	IS 11358:1987 Reviewed In : 2020	Glossary of terms and symbols relating to rock mechanics	April, 2020	-	Indigenous
18	IS 12608:1989 Reviewed In : 2020	Method for determination of hardness of rock	April, 2020	-	Indigenous
19	IS 12634:2025	Determination of Direct Shear Strength of Rock Joints - Method of Test (First Revision)		-	Indigenous
20	IS 12634:1989 Reviewed In : 2020	Rock Joints - Direct Shear Strength - Laboratory of Method of Determination	April, 2020	1	Indigenous
21	IS 12955 (Part 1):1990 Reviewed In : 2021	Code of practice for in - Situ determination of rockmass deformability using a flexible dilatometer: Part 1 with volume change	April, 2021	-	Indigenous
22	IS 12955 (Part 2):1990 Reviewed In : 2021	In-situ determination of rock mass deformability using a flexible dilatometer - Code of practice: Part 2 with radial displacement	April, 2021	-	Indigenous
23	IS 13030:2025	Laboratory Determination of Water Content Porosity Density and Related Properties of Rock Material - Method of Test (First Revision)		-	Indigenous
24	IS 13030:1991 Reviewed In : 2021	Method of test for laboratory determination of water content, porosity, density and related properties of rock material	April, 2021	-	Indigenous
25	IS 13047:1991 Reviewed In : 2021	Method for determination of strength of rock materials in triaxial compression	April, 2021	1	Indigenous
26	IS 13063:1991 Reviewed In : 2021	Structural safety of buildings on shallow foundations on rocks -	April, 2021	-	Indigenous

		Code of practice			
27	IS 13365 (Part 1):2025	Quantitative Classification Systems of Rock Mass - Guidelines: Part 1 Rock Mass Rating (RMR) for Predicting Engineering Properties (First Revision)		-	Indigenous
28	IS 13365 (Part 2):2019 Reviewed In : 2024	Quantitative Classification Systems of Rock Mass — Guidelines Part 2 Rock Mass Quality for Prediction of Support Pressure, Support System and Engineering Properties in Underground Openings (First Revision)	March, 2024	-	Indigenous
29	IS 13365 (Part 3):2025	Quantitative Classification Systems of Rock Mass - Guidelines: Part 3 Determination of Slope Mass Rating (First Revision)		-	Indigenous
30	IS 13365 (Part 4):2014 Reviewed In : 2024	Quantitative Classification System of Rock Mass - Guidelines Part 4 Geological Strength Index (GSI)	July, 2024	-	Indigenous
31	IS 13372 (Part 1):1992 Reviewed In : 2021	Seismic Testing of Rock Mass - Code of Practice: Part 1 Within a Borehole	April, 2021	-	Indigenous
32	IS 13372 (Part 2):1992 Reviewed In : 2021	Seismic Testing of Rock Mass - Code of Practice: Part 2 Between the Borehole	April, 2021	-	Indigenous
33	IS 13414:2025	Monitoring of Rock Movements using Multi-Point Borehole Extensometers - Guidelines (First Revision)		-	Indigenous
34	IS 13414:1992 Reviewed In : 2021	Monitoring of Rock Movement Using Multi-point Borehole Extensometers - Guidelines	April, 2021	-	Indigenous
35	IS 13946 (Part 1):2022	Determination of Rock Stress - Code of Practice: Part 1 Using the Hydraulic Fracturing Test and Hydraulic Tests on Pre-Existing Fractures Techniques (First Revision)		-	Indigenous
36	IS 13946 (Part 2):1994 Reviewed In : 2020	Determination of rock stress-Code of practice: Part 2 Using USBM type drill hole deformation gauge	April, 2020	-	Indigenous
37	IS 13946 (Part 3):1994 Reviewed In : 2020	Determination of rock stress- Code of practice: Part 3 Using a CSIR or CSIRO type cell with 9 or 12 strain gauges	April, 2020	-	Indigenous
38	IS 13946 (Part 4):1994 Reviewed In : 2021	Determination of rock stress-Code of practice Part 4 Using flat jack technique	April, 2021	-	Indigenous
39	IS 14243 (Part 1):1995 Reviewed In : 2020	Selection and development of site for building in hill areas - Guidelines: Part 1 Microzonation of urban centres	April, 2020	-	Indigenous
40	IS 14243 (Part 2):1995 Reviewed In : 2020	Selection and development of site for building in hill areas - Guidelines: Part 2 Selection and development	April, 2020	-	Indigenous
41	IS 14395:1996 Reviewed In : 2022	Monitoring of rock movements using probe inclinometer -	April, 2022	1	Indigenous

		Guidelines			
42	IS 14396 (Part 14):1996 Reviewed In : 2021	Argillaceous Swelling Rocks - Methods for Laboratory Testing	April, 2021	-	Indigenous
43	IS 14436:1997 Reviewed In : 2022	Guidelines on determination of resistivity of rock specimen	April, 2022	1	Indigenous
44	IS 14448:1997 Reviewed In : 2022	Code of practice for reinforcement of rock slopes with plane wedge failure	April, 2022	1	Indigenous
45	IS 14881:2001 Reviewed In : 2021	Method for blast vibration monitoring - Guidelines	April, 2021	-	Indigenous
46	IS 15026 (Part 1):2022	Tunnelling in Rock Masses - Guidelines: Part 1 Conventional Tunnelling Methods (First Revision)		-	Indigenous
47	IS 15026 (Part 2):2023	Tunnelling in Rock Masses - Guidelines: Part 2 Mechanized Tunnelling Methods by Tunnel Boring Machines		-	Indigenous
48	IS 15180:2002 Reviewed In : 2022	Guidelines for use in prediction of subsidence and associated parameters in coal mines having nearly horizontal single seam workings	April, 2022	-	Indigenous
49	IS 17446:2020	Observational Method for Tunnelling in Rock Masses - Guidelines		-	Indigenous
50	IS 17511:2020	Borehole Jack Test for Determination of Modulus of Deformation of Rock Mass - Code of Practice		-	Indigenous
51	IS 18300:2023	Determination of Rock Mass Shear Strength of Landslide Affected Slopes - Guidelines		-	Indigenous
52	IS 19339:2025	Numerical Modelling in Rock Engineering - Guidelines		-	Indigenous
53	IS 7317:2020	Uniaxial Jacking Test for Deformation Modulus of Rock Mass — Code of Practice (Second Revision)	-	-	Indigenous
54	IS 7746:2022	In-Situ Shear Test on Rock Mass - Code of Practice (Second Revision)		-	Indigenous
55	IS 8764:1998 Reviewed In : 2024	Method for determination of point load strength index of rocks (First Revision)	March, 2024	2	Indigenous
56	IS 9143:1979 Reviewed In : 2021	Method for the determination of unconfined compressive strength of rock materials	April, 2021	-	Indigenous
57	IS 9179:1979 Reviewed In : 2021	Method for preparation of rock specimen for laboratory testing	April, 2021	-	Indigenous
58	IS 9221:1979 Reviewed In : 2021	Method for the determination of modulus of elasticity and Poisson's ratio of rock materials in uniaxial compression	April, 2021	-	Indigenous

Standards under Development

Projects Approved		
Sl. No.	Doc No.	Title
No Records Found		
Preliminary Draft Standards		
Sl. No.	Doc No.	Title
No Records Found		
Drafts Standards in WC Stage		
Sl. No.	Doc No.	Title
No Records Found		
Draft Standards Completed WC Stage		
Sl. No.	Doc No.	Title
1	CED 48 (27737)	Structural Safety of Buildings on Shallow Foundations on Rocks - Code of Practice First Revision
2	CED 48 (28182)	Determination of Rebound Hardness of Rock - Method of Test First Revision
Finalized Draft Indian Standard		
Sl. No.	Doc No.	Title
No Records Found		
Finalized Draft Indian Standards under Print		
Sl. No.	Doc No.	Title
No Records Found		
Total Published Standards:54 Total Standards Under development:2		
Aspect Wise Report		
Product : 0 Code of Practices : 28 Methods of Test : 25 Terminology : 1 Dimensions : 0 System Standard : 0 Safety Standard : 0 Others : 1 Service Specification : 0 Process Specification : 0 Unclassified : 0		
Annexure-I :List of Indian Standards Withdrawn/Superseded		
Sl. No.	IS No. & Year	Title
1	IS 10785:1983 Reviewed In : 1995	Method for determination of compressive and tensile strength for point load tests on rock lumps
2	IS 13519:1992 Reviewed In : 2002	Guidelines for Inspection of Fixed Steel Offshore Structures During Fabrication and Installation
3	IS 13746:1993 Reviewed In : 2007	Code Of Practice For Geotechnical Investigation Of Offshore Jacket Structure
4	IS 13802:1993	Guidelines for planning and execution of seabed engineering Geophysical survey for offshore

	Reviewed In : 2003	platforms and pipelines
5	IS 7292:1974 Reviewed In : 1991	Code of practice for in-situ determination of rock properties by flat jack

Annexure-II :List of Indian Product Standards
--

Sl. No.	IS No. & Year	Title
No Records Found		