

Indian Standard

PRESTRESSED CONCRETE — CODE OF PRACTICE

SECTION 1 GENERAL

1 SCOPE

1.1 This standard deals with the general structural use of prestressed concrete. It covers both work carried out on site and the manufacture of precast prestressed concrete units.

1.2 Special requirements of structures such as pipes and poles covered in respective standards have not been covered in this standard; these standards shall be used in conjunction with this standard. This standard does not cover specific provisions regarding bridges.

2 REFERENCES

The standards given in Annex A contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All the 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 the standards indicated in Annex A.

ANNEX A*(Clause 2)***LIST OF REFERRED INDIAN STANDARDS**

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
269 : 1989	Specification for ordinary Portland cement, 33 grade (<i>fourth revision</i>)	1893 : 1984	Criteria for earthquake resistance design of structures (<i>fourth revision</i>)
383 : 1970	Specification for coarse and fine aggregates from natural sources for concrete (<i>second revision</i>)	1893 (Part 1) : 2002	Criteria for earthquake resistance design of structures: Part 1 General provisions and buildings (<i>fifth revision</i>)
432 (Part 1) : 1982	Specification for mild steel and medium tensile steel bars and hard-drawn steel wire for concrete reinforcement: Part 1 Mild steel and medium tensile steel bars (<i>third revision</i>)	2090 : 1983	Specification for high tensile steel bars used in prestressed concrete (<i>first revision</i>)
455 : 1989	Specification for Portland slag cement (<i>fourth revision</i>)	2386 (Part 3) : 1963	Methods of test for aggregates for concrete: Part 3 Specific gravity, density, voids, absorption and bulking
456 : 2000	Code of practice for plain and reinforced concrete (<i>fourth revision</i>)	3812 (Part 1) : 2003	Specification for pulverized fuel ash: Part 1 For use as pozzolana in cement, cement mortar and concrete (<i>second revision</i>)
516 : 1959	Method of test for strength of concrete	4082 : 1996	Recommendations on stacking and storage of construction materials and components at site (<i>second revision</i>)
875	Code of practice for design loads (other than earthquake) for buildings and structures:	4845 : 1968	Definitions and terminology relating to hydraulic cement
(Part 1) : 1987	Dead loads — Unit weights of building materials and stored materials (<i>second revision</i>)	4925 : 2004	Specification for concrete batching and mixing plant (<i>first revision</i>)
(Part 2) : 1987	Imposed loads (<i>second revision</i>)	4926 : 2003	Code of practice for ready-mixed concrete (<i>second revision</i>)
(Part 3) : 1987	Wind loads (<i>second revision</i>)	5816 : 1999	Method of test for splitting tensile strength of concrete (<i>first revision</i>)
(Part 4) : 1987	Snow loads (<i>second revision</i>)		
(Part 5) : 1987	Special loads and load combinations (<i>second revision</i>)		
1199 : 1959	Methods of sampling and analysis of concrete		

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
1489	Specification for Portland pozzolana cement: (Part 1) : 1991 Fly ash based (<i>third revision</i>) (Part 2) : 1991 Calcined clay based (<i>third revision</i>)	6003 : 2010	Specification for indented wire for prestressed concrete (<i>second revision</i>)
1566 : 1982	Specification for hard-drawn steel wire fabric for concrete reinforcement (<i>second revision</i>)	6006 : 1983	Specification for uncoated stress relieved strand for prestressed concrete (<i>first revision</i>)
1785 (Part 1) : 1983	Specification for plain hard-drawn steel wire for prestressed concrete: Part 1 Cold drawn stress relieved wire (<i>second revision</i>)	6452 : 1989	Specification for high alumina cement for structural use (<i>first revision</i>)
1786 : 2008	Specification for high strength deformed steel bars and wire for concrete reinforcement (<i>fourth revision</i>)	6461	Glossary of terms relating to cement concrete:
1791 : 1985	General requirements for batch type concrete mixers (<i>second revision</i>)	(Part 1) : 1972	Concrete aggregates
(Part 7) : 1973	Mixing, laying, compaction, curing and other construction aspects	(Part 2) : 1972	Materials (other than cement and aggregate)
(Part 8) : 1973	Properties of concrete	(Part 3) : 1972	Concrete reinforcement
(Part 9) : 1973	Structural aspects	(Part 4) : 1972	Types of concrete
(Part 10) : 1973	Tests and testing apparatus	(Part 5) : 1972	Formwork for concrete
(Part 11) : 1973	Prestressed concrete	(Part 6) : 1972	Equipment, tools and plant
(Part 12) : 1973	Miscellaneous	8112 : 1989	Specification for 43 grade ordinary Portland cement (<i>first revision</i>)
6909 : 1990	Specification for supersulphated cement (<i>first revision</i>)	9103 : 1999	Specification for admixtures for concrete (<i>first revision</i>)
7861	Code of practice for extreme weather concreting:	12089 : 1987	Specification for granulated slag for manufacture of Portland slag cement
(Part 1) : 1975	Recommended practice for hot weather concreting	12119 : 1987	General requirements for pan mixers for concrete
(Part 2) : 1981	Recommended practice for cold weather concreting	12269 : 1987	Specification for 53 grade ordinary Portland cement
8041 : 1990	Specification for rapid hardening Portland cement (<i>second revision</i>)	12330 : 1988	Specification for sulphate resisting Portland cement
8043 : 1991	Specification for hydrophobic Portland cement (<i>second revision</i>)	12600 : 1989	Specification for low heat Portland cement
		14268 : 1995	Specification for uncoated stress relieved low relaxation seven ply strand for prestressed concrete