

भारतीय मानक

कंक्रीट, चिनाई और प्लास्टर सतहों की पेंटिंग —  
रीति संहिता

भाग 2 सूचियाँ

( पहला पुनरीक्षण )

*Indian Standard*

**PAINTING OF CONCRETE, MASONRY AND  
PLASTER SURFACES — CODE OF PRACTICE**

**PART 2 SCHEDULES**

*( First Revision )*

UDC 698.12 : 667.6 : 006.76

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**BUREAU OF INDIAN STANDARDS**  
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NEW DELHI 110002

## **FOREWORD**

**This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by Painting, Varnishing and Allied Finishes Sectional Committee had been approved by the Civil Engineering Division Council.**

**This standard was first published in 1967 and this is the first revision of the standard. In this revision the following changes have been effected:**

- i) Referred Indian Standards have been updated.**
- ii) In respect of primer coat it has now been clearly specified in this revision the application of one coat of respective finish as against a thinned coat of primer which was specified earlier. Further for every type of finish it has now been specified that the same may be thinned according to the manufacturers recommendation in the Tables for schedules.**

**This standard is Part 2 of the Indian Standard Code of practice for painting of concrete, masonry and plaster surfaces in building works, and deals with the painting schedules. Part 1 of this standard covers the painting operations and workmanship of calcareous surfaces. The painting operations and workmanship of asbestos cement building products are covered in IS 3140:1965 'Code of practice for painting asbestos cement building products'. Both the parts are interded to provide complete guidance with regard to the painting work of calcareous surfaces.**

**In the formulation of this standard due weightage has been given to international co-ordination among the standards and practices prevailing in different countries in addition to relating it to the practices in the field in this country.**

**The committee responsible for the preparation of this standard is given at Annex B.**

**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 2:1960 '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***PAINTING OF CONCRETE, MASONRY AND  
PLASTER SURFACES — CODE OF PRACTICE****PART 2 SCHEDULES***( First Revision )***1 SCOPE**

1.1 This standard (Part 2) lays down schedules for painting of calcareous surfaces with colour washes, distempers, cement paints, emulsion paints, solvent based paints, synthetic gloss paints, bituminous paints, etc.

**2 REFERENCES**

2.1 The Indian Standards listed in Annex A are necessary adjuncts to this standard.

**3 TERMINOLOGY**

3.1 For the purpose of this standard the definitions given in IS 1303 : 1983 and IS 2395 (Part 1) : 1994 shall apply.

**4 NECESSARY INFORMATION**

4.1 The necessary information required for the efficient application of paints and other pretreatments on calcareous surfaces is the same as given in 4 of IS 2395 (Part 1) : 1994.

**5 SCHEDULES FOR PAINTING CALCAREOUS SURFACES****5.1 New Work**

The surfaces of concrete, masonry and plaster shall be prepared as specified in 7 of IS 2395 (Part 1) : 1994 and the surfaces of asbestos cement build-

ing products shall be prepared as given in 5 of IS 3140 : 1965. However the following points shall be noted:

- a) The surfaces are alkaline and are likely to hold large quantity of water and so the painting should be carried out when the surface is dry. However, cement paint, lime wash and colour wash tolerate a certain amount of dampness.
- b) The paint for initial decoration shall be chosen in due relation to the ultimate scheme of painting.
- c) The variation in suction characteristics requires corresponding variation of the priming coat and if necessary, treatment recommended in 5.4.1 of IS 2395 (Part 1):1994 may be applied.
- d) The surface should be treated as recommended in 5.6.2 and 5.6.3 of IS 2395 (Part 1):1994, if infected with algae and mould.
- e) If efflorescence appears, painting should be deferred until it ceases or suitable remedial measures are taken as laid down in C-3 of IS 2395 (Part 1) : 1994.

**5.2 Finishing**

5.2.1 The different coats as specified in Tables 1 and 2 shall be applied along with pretreatments where necessary for corresponding types of paints.

**Table 1 Schedules for Painting New Calcareous Surfaces — Interior**  
*( Clause 5.2.1 )*

Sl No.	Final Finish Required	Primer Coat	Under Coat	Finishing Coats
(1)	(2)	(3)	(4)	(5)
i)	White wash	One coat of white wash	—	White wash (two coats)
ii)	Colour wash	One coat of colour wash	—	Colour wash (two coats)

Table 1 (Concluded)

Sl. No.	Final Finish Required	Primer Coat	Under Coat	Finishing Coats
(1)	(2)	(3)	(4)	(5)
iii)	Distemper a) Dry distemper	One clear coat or size, etc	Filler to be used; if required	Dry distemper (two coats) (IS 427 : 1965)
	b) Oil-bound distemper	One coat of alkali resistant primer	do	Oil bound distemper (two coats) (IS 428 : 1969)
iv)	Emulsion paint <sup>1)</sup>	One coat of emulsion paint	do	Emulsion paint (two coats) [IS 5411 (Part 1) : 1974]
v)	Flat/semigloss paint <sup>1)</sup>	One coat of alkali resistant primer	Under coat as required. Filler to be used, if required	Flat/semigloss paint (two coats)
vi)	Gloss paint <sup>1)</sup>	One coat of alkali resistant primer	Under coat as required. Filler to be used, if required	Gloss paint (two coats) (IS 133:1975)
vii)	Chemical resistant paint <sup>1)</sup>	One coat of the paint	Filler to be used, if required	Chemical resistant paint (two coats)
viii)	Cement paint <sup>1)</sup>	One coat of cement paint	Nil	Cement paint (two coats) (IS 5410:1969)
ix)	Bituminous paint <sup>1)</sup>	One coat of the paint	Nil	Bituminous paint (two coats) (IS 9862:1981)

<sup>1)</sup>May be thinned according to the manufacturer's recommendation.

Table 2 Schedules for Painting New Calcareous Surfaces — Exterior  
( Clause 5.2.1 )

Sl. No.	Final Finish Required	Primer Coat	Under Coat	Finishing Coats
(1)	(2)	(3)	(4)	(5)
i)	White wash	One coat of white wash	Nil	White wash (two coats)
ii)	Colour wash	One coat of colour wash	Nil	Colour wash (two coats)
iii)	Emulsion paint <sup>1)</sup>	One coat of emulsion paint	Filler to be used, if required	Emulsion paint (two coats) [IS 5411 (Part 2) : 1972]
iv)	Flat/semigloss paint <sup>1)</sup>	One coat of alkali resistant primer	Under coat as required	Flat/semigloss paint (two coats) [IS 168 :1973, IS 1232 : 1964]
v)	Gloss paint <sup>1)</sup>	One coat of alkali resistant primer	Under coat as required	Gloss paint (two coats), (IS 2932:1974) (IS 2933 :1975)
vi)	Chemical resistant paint	One coat of the paint	Filler to be used, if required	Chemical resistant paint (two coats)
vii)	Cement paint <sup>1)</sup>	One coat of cement paint	Nil	Cement paint (two coats) (IS 5410 :1969)
viii)	Bituminous paint <sup>1)</sup>	One coat of the paint	Nil	Bituminous paint (two coats) (IS 9862:1981) (IS 158:1981)

<sup>1)</sup>May be thinned according to the manufacturer's recommendation.

5.2.2 Normally stopping or filling as required should be carried out before any painting is done and care should be taken to see that any cracks between plaster and woodwork (for example, skirtings) are securely filled. If such cracks are wide, caulking with hemp or similar material may be necessary to support the filling and prevent it from falling away through the gaps. Minor defects are frequently more apparent once the priming or first

coat has been applied, and if any further stopping or filling is done over this first coat the area must be brought forward with appropriate paint to restore even porosity over the surface.

### 5.3 Maintenance Work

In the case of painting relating to maintenance work, the principles given in Table 3 should generally be adopted.

**Table 3 Recommended Practice for Maintenance Painting**

SI No.	Condition of Surface					Cleaning and Painting Practice
	Blistering and Softening	Efflorescence	Chalking	Cracking	Flaking	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
i)	Nil	Nil	Yes	Nil	Nil	Clean, rub down with abrasive paper, apply one finishing coat
ii)	Nil	Yes	Yes	Nil	Nil	Rub down the affected surface to bare plaster, allow to dry, touch up with primer coat and then apply the required number of finishing coats and follow by a reviver coat on the entire surface, if required
iii)	Yes	Nil	Nil	Nil	Nil	Scrape off the soft film, allow the surface to dry completely, touch up with primer coat and then apply the required number of finishing coats and follow by a reviver coat on the entire surface, if required
iv)	Nil	Nil	Nil	Yes (Localized)	Nil	Rub down and even up the surface with sand paper to remove cracked film. Touch up with primer, and apply the required number of finishing coats and follow by a reviver coat on the entire surface, if required
v)	Nil	Nil	Nil	Nil	Yes	Remove the paint from the affected portion completely and follow part or full schedule of painting as the case may be

#### NOTES

1 In case of any serious characteristics failure mentioned above (except chalking), the paint should be completely removed and the full schedule of painting be followed.

2 There is no effective remedy for efflorescence.

**ANNEX A**  
( Clause 2.1 )

**LIST OF REFERRED INDIAN STANDARDS**

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
133 : 1975	Enamel, interior: (a) undercoating, (b) finishing ( <i>second revision</i> )	2395 (Part 1) : 1994	Code of practice for painting concrete, masonry and plaster surfaces: Part 1 Operation and workmanship ( <i>first revision</i> )
158 : 1981	Ready mixed paint, brushing, bituminous, black, lead-free, acid, alkali and heat resisting ( <i>third revision</i> )	2932 : 1974	Enamel, synthetic, exterior: (a) undercoating (b) finishing ( <i>first revision</i> )
168 : 1973	Ready mixed paint, air-drying, semi-glossy/matt, for general purposes ( <i>second revision</i> )	2933 : 1975	Enamel exterior: (a) undercoating (b) finishing ( <i>first revision</i> )
427 : 1965	Distemper, dry, colour as required ( <i>revised</i> )	3140 : 1965	Code of practice for painting asbestos cement building products
428 : 1969	Distemper, oil emulsion, colour as required ( <i>first revision</i> )	5410 : 1969	Cement paint ( <i>first revision</i> )
1232 : 1964	Ready mixed paint, brushing, yellow ochre, semi-gloss, for general purposes ( <i>revised</i> )	5411(Part 1) : 1974	Plastic emulsion paint: Part 1 For interior use ( <i>first revision</i> )
1303 : 1983	Glossary of terms relating to paints ( <i>second revision</i> )	5411(Part 2) : 1972	Plastic emulsion paint: Part 2 For exterior use
		9862 : 1981	Ready mixed paint, brushing, bituminous, black, lead-free, acid, alkali, water and chloride resisting

**ANNEX B**  
**( Foreword )**  
**COMMITTEE COMPOSITION**

**Painting, Varnishing and Allied Finishes Sectional Committee, CED 34**

<i>Chairman</i>	<i>Representing</i>
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SHRI L. K. AGARWAL	Central Building Research Institute (CSIR), Roorkee
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SHRI N. S. BHARATHA	The Rashtriya Chemicals & Fertilizers Ltd, Bombay
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SHRI C. J. BHUMKAR	Indian Institute of Architects, Bombay
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DR H. N. JAGADEESH ( <i>Alternate</i> )	In personal capacity (44 Basant Lok, Basant Vihar, New Delhi)
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