

APPLICATION FOR CERTIFICATION

1	FOR APPLICATION TYPE PLEASE CHECK ONE OF THE FOLLOWING									
	☐ NEW APPLICATION									
	☐ REVISION TO EXISTING CERTIFICATION	N								
	TRANSFER OF CERTIFICATION FROM	1 ANY OTHER CB AND DETAILS OF CB								
	(Reasons for Transfer,)	(Reasons for Transfer,)								
	☐ CANCELLATION/ TERMINATION FROM (CANCELLATION/ TERMINATION FROM OTHER CB, IF ANY, WITH DETAILS								
2	CHECK ONE OR MORE OF THE FOLLOWING THAT APPLIES TO THIS APPLICATION									
	Renewal	☐ Technical Modifications								
	Reinstatement Name	Change/ Modification								
	☐ New Plant Additions Plant	□ Number Change/ Modification								
	☐ Additional Company Names									
	☐ Manufacturing Plant or Importer Change									
	Note : Separate Application to be submitted for	each plant								
3	FOR APPLICATION TYPE									
	RMC Capability Certificate									
Brief F	Plant Description (or Applicable Standard):									
Camta	of Name:									
Comp	act Name:									
	pany Legal Status:	Email Address:								
-	PSS:									
City.	State:	PinCode:								
•										
Countr	ry:Website:	Phone:Fax:								
3.	LOCATION OF RMC MANUFACTURING	UNIT OTHER THAN PLANT LOCATION								
4.	Activities carried out at applied plant location (Tie	ck as appropriate)								
	Manufacturing	Top Management								
	Testing	Purchase								
	Training	Maintenance								
	HR	Marketing								
	Finance Or any other									

IAPMO PLUMBING CODES & STANDARDS INDIA PRIVATE LIMITED

No. 22, 12th', B', Main, Indira Nagar, HAL 2ND STAGE, Bengaluru 560008 India T- 080 3071 4500



5.	Activities carried out at any other local Manufacturing Testing Training HR Finance	tions, if any (Tick as appropriate) Top Management Purchase Maintenance Marketing Or any other
6. 7. 8.	Table 1 to 11 attached and any other	supporting documents are to be sent along with filled application form. product can lead to potential hazard Yes No
	Applicant	IAPMO INDIA
Comp	any:	By:
Conta	ct:	Title:
Title:_		
	ture:	
STAN	IP	STAMP
		This Box is For IAPMO INDIA STAFFONLY
	Application Number	Date FiledFee
		Received byFile Number

IAPMO PLUMBING CODES & STANDARDS INDIA PRIVATE LIMITED

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APPLICATION FOR CERTIFICATION - POLICIES

- 1. This is an application for certification
- 2. Applicant agrees to furnish all necessary drawings, test data, laboratory test reports, and product samples, if any, as required by IAPMO India technical staff. IAPMO India is not responsible for loss or damage to any materials submitted.
- 3. The applicant must pay the tariff for delivery to IAPMO India for <u>all</u> samples.
- 4. The application must be complete (including signatures) and all steps of Sheet 1 completed. <u>If,</u> after an application is first received, a period of three months elapses without the steps of Sheet 1 being completed, the application/file will be closed.
- 5. All fees are non-refundable.
- 6. This application will be accepted for processing only if accompanied by an executed copy of the IAPMO India License Agreement.
- 7. For marking purposes, the appropriate certification mark shall be displayed on the product to indicate that it has been listed by IAPMO India and the certification mark shall be visible on the product after installation. The only exception to this rule is for decorative or highly polished items, for items which are too small to accept the marking. In such cases, the certification mark and/or qualifying statements may be applied on the closest level of packaging to the product or other accompanying information. Applicant shall contact IAPMO India technical staff for consent to permit such deviation.

The undersigned certifies that he/she has read, understands, and, on behalf of applicant, approves and agrees to all the foregoing provisions of this application.

Signature:						Date:
Print	or	type	name	and	title:	



Table 1: General Information of Ready Mixed Concrete Facility (refer 3.1.1 of Requirements for Production Control)

Company Name	
Company Address (Register office) Tel. Fax e-mail	
Location of Plant	
Address of Plant Tel. Fax e-mail	
Personnel information • Plant-in- charge/Manager	Name Telephone
QC personnelLiaison personnel	Name Telephone Name Telephone
Material Testing Facilities	Location and address Name of lab in-charge Telephone
Statutory Permissions*	1.Certificate from Pollution Control Board Yes No N.A. Expiry date: 2. Approval from factory inspector Yes No N.A. Expiry date: 3.Approval from Local Authorities (Municipal/Corporation/other) Yes No N.A. Expiry date:

^{*} It is essential to attach photocopies of all relevant statutory permissions and certificates.



Table 2: General Information on Concrete Production Facilities (3.1.1)

Name of Plant Manufacturer	
Type of Plant	
Plant's Rated capacity, m³/hour	
Type of Mixer*	Rotating-drum type Power mixer Planetary Mixer Pan type Pan-type with agitator Single shaft Twin shaft
Mixer batch size, m ³	
Storage Capacity	
Cement, tonnes	
Fly ash, tonnes	
Slag, tonnes	
Other cementitous material, tonnes	
Coarse aggregates, tonnes or m ³ 10-mm 20-mm 40-mm	
Fine aggregates, tonnes or m ³ River sand Manufactured sand	
Crusher fines, tonnes or m ³	
Water, litres	
Chemical admixtures, litres	
Plasticiser	
Superplasticiser	



Retarder	
Any other	
Others	
**Brief description of recycling facility, if any	
Number of trucks with rated capacities	
Name of drum and truck manufacturer	1
	2
	3
**Additional information on Plant & Trucks, if any	

^{*} Tick ($\sqrt{}$) in appropriate box. **Add extra sheets if essential

Table 3: General Information on Material Handling (3.1.1)

Material	Delivery to Plant	Storage	Storage to Weigher	
Cement	Bulk	Silo	Screw conveyor	
	Bags	Godown	Air Slide _; Gravity	
Coarse aggregates	Trucks	Star pattern	Conveyor	
		In-line bins	Skip bucket	
		compartments	Bucket conveyor	
		Tall/pocket silos		
Fine aggregates	Trucks	Star pattern	Conveyor	
		In-line bins	Skip bucket	
		compartments	Bucket conveyor	
		Tall/pocket silos		
Fly ash	Bulk	Silo	Screw conveyor	
	Bags	Bins	Manual	
Slag	Bulk	Silo	Screw conveyor	
	Bags	Bins	Manual	
Micro silica	Bags	Silo	Screw conveyor	
		Godown	Manual	
Other cementitious	Bags	Silo	Screw conveyor	
material (specify)		Godown	Manual	

IAPMO INDIA, No. 22, 12 th	I I	HAL 2 ND STAGE, Be : +91 8030714500	□ □ enga lu ru 5	60038India	IAPM HITE
				<u> </u>	
Water	Mun. mains	Underground/over	-gro un d	Pumping	
	Wells	tank		Gravity flow	throu gh pipe
	Ponds			network	
Chemical	Drums	Drums		Dispenser	
admixtures(Liquid)	Tankers	Tanks			
Chemical admixture or additives	Bags	Godown		Manual	
additivoo					
Special arrangement for	Occasional use	Not used			
supplying temperature- concrete	Arrangement				
controlled , if	1. Addition of tank	lice slabs in mixing	water \square		
used					
	2. Addition of 3. Chilling	ice flakes in mixing	drum		
	Plant				
	4. Combination	on of above (1/2/3)			

Table 4: List of Minimum Testing Equipment for Laboratory attached to RMC Facility (3.3)

SI. No.	Relevant test and BIS Standar d		Minimu m no. of units	Calibration frequency and relevant code	Whether calibration done as specified and records kept
1.	Slump test (I S 1199- 1959)	Slump cone test apparatus with all accessories such as base plate, tamping rod, etc.	2 sets	Yearly IS 1199	Ye s No
2. *	Compressive strength of concrete *(IS 516)	minimum 2000 kN capacity, conforming to IS	One no.	Yearly IS 516	

^{*} Tick ($\sqrt{\ }$) in appropriate box. If materials/ provisions not used, keep the boxes blank.



	Preparin	Cube moulds of			
3.	g concrete test specimens (IS 1199)	size:		Yearly IS 10086	
	ŕ				
4.	Sieve analysis of fine and coarse aggregates (IS 2386- Part	 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3mm, 4.75 	coarse and fine agg. each	Yearly IS 2386 – Part I	
	(13 2300- Fait	 10 mm, 4.75 mm, 2.36 mm, 1.18 mm, 600 μm, 300 μm, 150 μm, 75 μm, 45 μm and lid+pan 			
5.#	Samplin g of	Sieve shaker for fine aggregates #	On e	Yearly	
	aggregates # (IS 2430)	Sample divider for sampling of aggregates	On e	Yearly	
6.	Unit weight of concrete (IS 1199)	Bulk density pot for fresh concrete (10 lit)	one no.	Yearly IS 2386–Part III	
7.	Aggregates Bulk density(IS 2386- Part III)	Bulk density pot for fine (3 or 5 lit) and coarse aggregates (7 or 10 lit)	one no each for coarse & fine agg.	,	
8.	Silt content of sand	Graduated glass cylinder (500 ml) for determining silt content	one no.	-	
9.	Specific gravity of aggregates	Pyknometer and density basket or Gas Jar for determining specific gravity of aggregates (P.T.O)	one no.	Yearly IS 2386–Part III	
10.	Other accessories	Electroni c weighing balance of adequate capacity with accuracy of 1	One	Yearly	



g.			
Laboratory mixer (min 50 lit)	One	Man. specified	1
Electric microwave oven (IS 11332)	One	Yearly IS 6365	<u> </u>
Concret e compaction equipments	One	Yearly]
(Table vibrator / needle vibrator, tamping rods)]
Curing tank with provision to	One	-]
maintain 27±2° C temperature of water]
Shovels, trowels, flexible spatulas, meter, etc.	Sufficient nos.	-]

Notes:

- # Alternatively, shaking of sieves done manually and sampling of aggregates done by quartering technique shall be permitted.
- * In case the CTM lab is not available in the lab, concrete cubes shall be tested in the RMC Company/Organization's other lab in the same city, provided due care is taken to transfer the cubes with proper precaution and identification for standard curing for 28 days.

Wherever flexural strength is specified in addition to compressive strength, it is essential have nine nos. of beam moulds of 150x150x700mm size. It is also essential to have the facility of additional attachment for the CTM to carry out this test.





Table 5: List of Sources of Incoming Approved Materials (4.2)

(Valid as on date: DD/MM/YY)

Sr No.	Type Ingredient	of	Source and brand name (if any)	Supplier' address	name	and	Acceptance criteria followed for approval	Remarks



Table 6-A: Verification and Testing Frequency of Cement, SCMs, Water and Chemical Admixtures (4.3.8)

Admix	tures (4.3.8)			
SI. No	Material	Verificatio n	Scop e	Frequenc y
1.	Cement	Delivery Documents Manufacturer's test certificate for physical and chemical properties	Verify that the goods delivered match the purchase order (type, wee brand name, k of manufacture) In case the supply is by bulker, verify lock seal nos. and ensure that they tally with the nos. on Challan Manufacturer's test certificate traceable to each consignment	Each consignment
2.	Supplementar y Cementitious Materials (SCMs) 1. Fly ash (IS 3812 (Part1) 2. Ground Granulate d Blast Furnace Slag (IS 12089 and BS 6699)	 Delivery Documents Manufacturer's test certificate on physical and chemical properties Uniformity requirements as per relevant IS codes 	909	as per relevant IS code performed once in six months from NABL- accredited lab



	3. Microsilica (IS 15388) Metakaoli 4. n		consignment . • Verify all uniformity requirement tests as
3	Water	Delivery documents	Shall be tested for suitability for concrete making as per IS 456-2000 at frequencies specified by IS 4926 for mains and nonmains water: Initially every week for first six weeks and then at 3-monthly internal Fo water. r non-mains water: Jaminal six weeks and then or at 3-monthly internal Fo r mains water: Annual basis once all tests for source are satisfactory

C/	Marial	Manification	Scop	Frequenc
SI. No	Material	Verification	е	У
			Verif	
4.	Chemical	Delivery	 y that the goods 	 All tests specified by IS 9103
	admixtures	Documents	delivered match the	essential
		Manufacturer's	purchase order (type, bran	before finalizing
		test certificate for	d name, week of manufacture	source
		physical and) Verif	All Uniformity tests
		chemical	• y that each	as per IS 4926 performe
		properties,	consignment has a	d once in
		uniformity	manufacturer's test	six months from
		requirements and	certificate confirming	NABL-accredited
		compatibility	all physical and	lab.
			chemical properties, performance	 Compatibility tests
			, and	shall be conducted



	compatibility with the cement conforming to requirement	whenever there is change in
	s of IS	combination of
	9103 and is traceable	cement and admixture
	to each consignment Verif	
	y all Uniformity test requirement s as per IS 4926 done from NABL-accredited lab at specified frequencies	



TABLE 6-B: Verification and Testing Frequency for Aggregates (4.3.8)

Delivery documents

Delivery document shall be verified to check delivered aggregates match the purchase order and that their source is correct. Visual inspection shall be done to check normal appearance, shape, presence of excessive fines, impurities etc.

Testing frequencies

Aggregates shall be tested at a minimum frequency indicated below. The specified frequencies are in conformity

with provisions in IS 4926 or stringent from the same.

SI. No.	Aggregate property/parameter	Type of aggregate	Frequency of Testing	Relevant IS Standard
	Gradin			
1.	g	Fine aggregate	Weekly	IS 383-1970
		UncrushedCrushedCoarse aggregate		
		UncrushedCrushed		
		Both fine and coarse	_	
2.	Particle density	aggregates	3 monthly	IS 2386 (Part 3)
	Oven dry			
	Saturated surface dry			
	 Apparent 			
3.	Motor observion	Both fine and coarse	2 manthly	IC 2206 (Dort 2)
ა.	Water absorption	aggregates	3 monthly	IS 2386 (Part 3)
		Both fine and coarse		
4.	Bulk density	aggregates	6 Monthly	IS 2386 (Part 3)
	• Loose			
	 Compacted 			
5.	Particles finer than 75 µm	Fine aggregate-	Weekly	IS 2386 (Part 1)
		 Uncrushed 		
	Flatings and Flatters	Crushed		
6.	Flakiness and Elongation indices	Coarse aggregates	6 monthly	IS 2386 (Part)
0.	IIIdioos	Course aggregates	Cilionally	10 2000 (1 ait)
7.	Impact value	Coarse aggregate	Yearly or change in source	IS 2386 (Part 4)



8.	Crushing value	Coarse aggregate	Yearly or change in source	IS 2386 (Part 4)
9.	Abrasion value	Coarse aggregate	Yearly or change in source	IS 2386 (Part 4)
10.	10% Fines	Coarse aggregate	Yearly or change in source	IS 2386 (Part 4)
11.	Petrographic examination	Both fine and coarse aggregates	Once in 5 years or change in source	IS 2386 (Part 8)
12.	Alkali-aggregate reactivity	Both fine and coarse aggregates	Yearly or change in source	IS 2386 (Part 7)
13	Soundness	Both fine and coarse aggregates	Yearly or change in source	IS 2386 (Part 5)
14	Chloride content	Both fine and coarse aggregates	Yearly or change in source	
15	Deleterious materials	Both fine and coarse aggregates	Yearly or change in source	IS 2386 (Part 2)



Table 7: Concrete mix information to be supplied by the purchaser (5.4)
Name of RMC Producer:

Name of Client/Contractor:Site:	 	 	-
Mix code			
Grade (Characteristic strength), N/mm ²			
Minimum cement content, kg/m³ (if specified)			
Mineral additives, kg/m³ (if specified) • Pulverized fuel ash • Slag • Silica fume • Others (mention type)			
Maximum free water-binder ratio (if specified)			
Nominal maximum aggregate size, mm			
Cement type and grade (if specified)			
Target workability at plant, (Slump, mm)			
Target workability at site, (Slump, mm)			
Maximum temperature of concrete at the time of placing (if specified)			
Class of sulphate resistance (if applicable)			
Exposure condition (if specified)			
Class of finish (if applicable)			
Total SO₃ in Concrete (if specified)			
Mix application			
Method of placing			
Any other requirements (if applicable) [early strength, workability retention, permeability testing, chloride content restriction, etc.)			
Concrete testing frequency			
Material testing (any non-routine requirement)			
Method of curing to be used			
Quantity (m ³)			
Source: Adapted from IS 4926			



Table 8: Format for Mix Design (5.5)

5.5.1	Name of customer
5.5.2	Mix designed in RMC lab/NABL accredited lab
5.5.3	Date of mix design
5.5.4	Mix code, if any
5.5.5	Details of ingredients
	Grade of concrete :
	Specified workability at pour site :
	Maximum size of aggregate :
	Exposure class of IS 456, if specified :
	Minimum cementitious content, if specified :



TABLE 9: Production and Control of Final Product (6.4)

SI. No.	Name of Material/Test	Frequency of testing	Relevant IS Standard
1.	Fine Aggregate: a) Determination of Moisture content b) Water absorption	Moisture content on daily basis; twice in a) day during monsoon b) Weekly or change in source	IS 2386 (Part 3)
2.	Coarse aggregate a) Determination of Moisture content b) Water absorption	Moisture content on daily basis; twice in a) day during monsoon b) Weekly or change in source	IS 2386 (Part 3)
3.	Fresh Concrete a) Sampling (IS 4926 procedure) b) Slump test c) Density of fresh concret e d) Placing Temperature of the concrete #	c) At least once in a day	a) IS 4926b) IS 1199c) IS 1199d) IS 1199
4	Hardened concrete	 a) At least one sample for every 50 m³ Production or every 50 batches whichever b) is of greater frequency * c) When asked for 	IS 516

Optional test

^{*} One sample involves casting of 3 specimens of 150x150x150mm size, to be tested at 28 days.



Additionally, samples shall be cast for testing at earlier or later ages (3, 7, 56, 90 days), depending upon the agreement between the producer and the customer.

Table 10: Control on Process Control Equipments and Frequency of Inspection and Calibration (7.3)

Items	Check for	Frequency
Cementitious materials	Visual Inspection for weather-tightness and leaks	Weekly
Aggregate stockpile	Visual Inspection for segregation and contamination	Daily
Conveyor belts and rollers	Visual Inspection for wear and alignment	Weekly
Central mixer	Visual Inspection of blades and built up	Daily
Trucks	Visual Inspection of blades and built up	Weekly
Scale calibration for all weighing	Mechanical/knife edge systems Electrical/ load cell	Monthly
and measuring equipment	systems	Monthly
Water meters	Calibration	Monthly
Admixture dispensers	Calibration	Monthly
Gear boxes and oil baths	Oil change	Quarterly

Table 11 Tolerances in Measurement of different Constituent Materials (7.3)

Constituent materials	Tolerances	Indian
	(% of the quantity of the constituent	
	material being measured)	Standard
Cement	± 2%	IS 4926:2003
Water	± 3%	IS 4926:2003
Aggregates	± 3%	IS 4926:2003
Mineral admixtures	± 2%	IS 4926:2003
Chemical admixtures	± 3%	IS 4926:2003
Moisture		IS 2386