Table 1: General Information of Ready Mixed Concrete Facility (3.1.1 of Section A)

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 • QC personnel • Liaison personnel	**Name** **Telephone** **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 ☐

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

Name of Plant Manufacturer			
Type of Plant			
Plant's Rated capacity, m^3/hour			
Type of Mixer*	Rotating-drum type ☐		
	Power mixer ☐	Planetary Mixer	☐
	Plant Type ☐	Pan-type with agitator	☐
	Single shaft ☐	Twin shaft	☐
Mixer batch size, m^3			
Storage Capacity			
Cement, tones			
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 (√) in appropriate box. **Add extra sheets if essential

Table 3: General Information on Material Handling (3.1.1 of Section A)			
Material	*Delivery to Plant*	*Storage*	*Storage to Weigher*
Cement	Bulk ☐ Bags ☐	Silo ☐ Godown ☐	Screw conveyor ☐ Air Slide ; Gravity ☐
Coarse aggregates	Truck	In-line bins ☐ Compartments ☐ Tall/pocket silos ☐	Skip bucket. ☐ Bucket conveyor ☐
Fine aggregates	Truck ☐	Star pattern ☐ In-line bins ☐ Compartments ☐ Tall/pocket silos ☐	Conveyor ☐ Skip bucket. ☐ Bucket conveyor ☐
Fly ash	Bulk ☐ Bags ☐	Silo ☐ Bins ☐	Screw conveyor ☐ Manual ☐
Slag	Bulk ☐ Bags ☐	Silo ☐ Bins ☐	Screw conveyor ☐ Manual ☐
Micro silica	Bags ☐	Silo ☐ Godown ☐	Screw conveyor ☐ Manual ☐
Other cementitious material (specify)	Bags ☐	Silo ☐ Godown ☐	Screw conveyor ☐ Manual ☐
Water	Mun. mains ☐ Wells ☐ Ponds ☐	Underground/over-ground tank ☐	Pumping ☐ Gravity flow through pipe network ☐
Chemical	Drums ☐ Tankers ☐	Drums ☐ Tanks ☐	Dispenser ☐
Chemical admixture additives	Bags ☐	Godown ☐	Manual ☐
Special arrangement for supplying temperature-controlled concrete, if used	Occasional use ☐ Arrangement	Not Used ☐ I. Addition of ice slabs in mixing water tank II. Addition of ice flakes in mixing drum III.Chilling Plant IV. Combination of above (1/2/3)	

* Tick (√) in appropriate box. If Materials/ Provisions not used, keep the boxes Blanks

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

Sl. No.	Relevant test and BIS Standard	Name of Equipment	Minimum no. of Units	Calibration frequency and relevant code	Whether calibration done as specified and records kept	
					Yes	No
1	Slump test (IS 1199-1959)	Slump cone test apparatus with all accessories such as base plate, tamping rod, etc.	2 sets	Yearly IS 1199	☐	☐
2	Compressive strength of concrete 8(IS 516)	Compression Testing Machine with minimum 2000 kN capicity, conforming to IS 14858*	One No.	Yearly IS 516	☐	☐
3	Preparing concrete test specimens (IS 1199)	Cube moulds of size: • 150 mm x 150 mm x 150 mm • 100 mm x 100 mm x 100 mm	30 nos.	Yearly IS 10086	☐	☐
4	Sieve analysis of fine and coarse aggregates (IS 2386-Part I)	IS Test sieves for fine and coarse aggregates • 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3mm, 4.75 mm, and lid+pan • 10 mm, 4.75 mm, 2.36 mm, 1.18 mm, 600 µm, 300 µm, 150 µm, 75 µm, 45 µm and lid+pan	one set for coarse and fine agg.each	Yearly IS 2386-Part I	☐	☐
5	Sampling of aggregates # (IS 2430)	Sieve shaker for fine aggregates#	One	Yearly	☐	☐
		Sample divider for sampling of aggregates	One	Yearly	☐	☐
6	Unit weight of concrete (IS 2386- Part III)	Bulk density pot for fresh concrete (10	One no.	Yearly IS 2359-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.	Yearly IS 2359-Part III	☐	☐
8	Silt content of sand	Graduated glass cylinger (500 ml) for determining silt content	one no.	—	☐	☐
9	Specific gravity of aggregates	Pyknometer and density basket or Gas Jas for determining specific gravity of aggregates	one no.	Yearly IS 2359-Part III	☐	☐
10	Other accessories	Electronic weighing balance of adequate capacity with accuracy of 1 g.	One	Yearly	☐	☐
		Laboratory mixer (min 50 lit)	One		☐	☐
		Electric microwave oven (IS 11332)	One		☐	☐

		Concrete compaction equipments (Table vibrator / needle vibrator, tamping rods)	One		☐	☐
		Curing tank with provision to maintain 27±2^{o} C temperature of water	One	—	☐	☐
		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

Table 5: List of Sources of Incoming Approved Materials (4.2 of Section A)					
Sr No.	Type of Ingredient	Source and brand name (if any)	Supplier' name and address	Acceptance criteria followed for approval	Remarks

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

Sl. No	Material	*Verification*	*Scope*	*Frequency*
1	Cement	*Delivery Documents * Manufacturer's test certificate for physical and chemical properties	• Verify that the goods delivered match the purchase order (type, brand name, week 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	Supplementary Cementitious Materials (SCMs) 1. Fly ash (IS 3812 (Part1) 2. Ground Granulated Blast Furnace Slag (IS 12089 and BS 6699) 3. Microsilica (IS 15388) 4. Metakaolin	• Delivery Documents • Manufacturer's test certificate on physical and chemical properties • Uniformity requirements as per relevant IS codes	• Verify that the goods delivered match the purchase order (type, brand name, week of manufacture) • Verify that each consignment has a manufacturer's test certificate confirming all physical and chemical properties and performance conform to requirements of relevant IS codes traceable to each consignment. • Verify all uniformity requirement tests as per relevant IS code done from NABL- accredited lab at specified frequencies.	• All tests on physical and chemical requirements and performance specified by relevant IS code essential before • finalizing source All Uniformity tests as per relevant IS code performed once in six months from NABL-accredited lab

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 non-mains water.	• For non-mains water: Initially every week for first six weeks and then at 3-monthly internal • For mains water: Annual basis once all tests for source are satisfactory
4	Chemical admixtures	• Delivery Documents • Manufacturer's test certificate for physical and chemical properties, uniformity requirements and compatibility	• Verify that the goods delivered match the purchase order (type, brand name, week of manufacture) •Verify that each consignment has a manufacturer's test certificate confirming all physical and chemical properties, performance, and compatibility with the cement conforming to requirements of IS 9103 and is traceable to each consignment • Verify all Uniformity requirement tests as per IS 4926 done from NABL-accredited lab at specified frequencies	• All tests specified by IS 9103 essential before finalizing source • All Uniformity tests as per IS 4926 performed once in six months from NABL-accredited lab. • Compatibility tests shall be conducted whenever there is change in combination of cement and admixture.

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

Delivery documents

Delivery document shall be verified to check delivered aggregates match the purchase order and that their

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

Sl. No.	Aggregate property/parameter	Type of aggregate	Frequency of Testing	Relevant IS Standard
1	Grading	Fine aggregate • Uncrushed • Crushed Coarse aggregate • Uncrushed • Crushed	Weekly	IS 383-1970
2	Particle density • Oven dry • Saturated surface dry • Apparent	Both fine and coarse aggregates	3 monthly	IS 2386 (Part 3)
3	Water absorption	Both fine and coarse aggregates	3 monthly	IS 2386 (Part 3)
4	Bulk density • Loose • Compacted	Both fine and coarse aggregates	6 Monthly	IS 2386 (Part 3)
5	Particles finer than 75 µm	Fine aggregate- • Uncrushed • Crushed	Weekly	IS 2386 (Part 1)
6	Flakiness and Elongation indices	Coarse aggregates	6 monthly	IS 2386 (Part)

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	S 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 of Section A)					
Name of RMC Producer: _____					
Name of Client/Contractor:_____					
Site: _____					
Mix code					
Grade (Characteristic strength), N/mm2					
Minimum cement content, kg/m^3 (if specified)					
Mineral additives, kg/m3 (if specified) • Pulverized fuel ash • Slag • Silica fume • Others (mention type)					
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					
Method of curing to be used					
Quantity (m3)					

Table 8: Format for Mix Design (5.5 Section A)
1. Name of customer
2. Mix designed in RMC lab/NABL accredited lab
3. Date of mix design
4. Mix code, if any
5. Details of ingredients
a. Grade of concrete :
b.Specified workability at pour site :
c. Maximum size of aggregate :
d. Exposure class of IS 456, if specified :
e. Minimum cementitious content, if specified :