

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

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Compa	ny Name			
Compa	ny Address			
	er office)			
	Tel.			
	Fax			
	e-mail			
	n of Plant			
Addres	s of Plant			
	Tel.			
	Fax			
	e-mail			
	nel information			
•	Plant-in-	Name		
	charge/Manager	Telephone		
•	QC personnel	Name		
		Telephone		
•	Liaison personnel	Name		
		Telephone		
Materia	al Testing Facilities	Location and add		
		Name of lab in-ch	arge	
		Telephone		
Statuto	ry Permissions*	1.Certificate from	Pollution	Control Board
		Yes 🗌	No 🗌	N.A.
		Expiry date:		
		2. Approval from	factory ins	spector
		Yes 🗌	No 🗌	N.A.
		Expiry date:		
		3.Approval from l	ocal Auth	orities (Municipal/Corporation/other)
		Yes 🗌	No 🗌	N.A.
		Expiry date:		

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 1 of 16	PC-01-QRF-ANNX-01, RMC
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^{*} It is essential to attach photocopies of all relevant statutory permissions and certificates.



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

Name of Plant Manufacturer	don't delittles (5.1.1 or Section A)
Type of Plant	
Plant's Rated capacity, m ³ /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 (v) in appropriate box. **Add extra sheets if essen al

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 2 of 16	PC-01-QRF-ANNX-01, RMC
------------------------	-------------------------------------	--------------	------------------------



Table 3: General Information on Material Handling (3.1.1 of Section A)

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 \square	Star pattern	Conveyor	
		In-line bins	Skip bucket	
		compartments	Bucket conveyor	
		Tall/pocket silos		
Fly ash	Bulk 🗆	Silo	Screw conveyor	
	Bags	Bins	Manual \square	
Slag	Bulk 🗆	Silo	Screw conveyor	
	Bags \square	Bins \square	Manual \square	
Micro silica	Bags	Silo	Screw conveyor	
	_	Godown	Manual \square	
Other cementitious	Bags	Silo	Screw conveyor	
material (specify)		Godown	Manual \square	
Water	Mun. mains 🗌	Underground/over-ground	Pumping	
	Wells	tank	Gravity flow through pipe	
	Ponds		network	
Chemical	Drums	Drums	Dispenser	
admixtures(Liquid)	Tankers	Tanks		
Chemical admixture or	Bags	Godown	Manual \square	
additives				
Special arrangement for	Occasional use	Not used		
supplying temperature-				
controlled concrete, if used	1. Addition of	ice slabs in mixing water tank		
4554	2. Addition of	ice flakes in mixing drum		
	3. Chilling Plan	t		
	4. Combinatio	n of above (1/2/3)		

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

Issued Date 01.03.2019 Rev. No: 0	Page 3 of 16 PC	C-01-QRF-ANNX-01, RMC
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Table 4: List of Minimum Testing Equipment for Laboratory attached to RMC Facility (3.3 of Section A)

SI. No.	Relevant test and BIS Standard	Name of equipment Minimo		Calibration frequency and relevant code	Wheth calibrat done specified records	tion as and
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	Yes	No 🗆
2. *		Compression Testing Machine with minimum 2000 kN capacity, 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	coarse and fine agg. each	Yearly IS 2386 – Part I		
5.#	Sampling of aggregates #	Sieve shaker for fine aggregates [#] Sample divider for sampling of	One One	Yearly Yearly		
6.	(IS 2430) Unit weight of concrete (IS 1199)	aggregates # 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.	Yearly IS 2386 – Part III		
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		

Lissued Date 01.03.2019	ev. No: 02 ate 01.04.2022	Page 4 of 16	PC-01-QRF-ANNX-01, RMC
-------------------------	------------------------------	--------------	------------------------



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10.	Other accessories	Electronic weighing balance of adequate capacity with accuracy of 1 g.	One	Yearly			
		Laboratory mixer (min 50 lit)	One	Man. specified			
		Electric microwave oven (IS 11332)	One	Yearly IS 6365			
		Concrete compaction equipments (Table vibrator / needle vibrator, tamping rods)	One	Yearly			
		Curing tank with provision to maintain 27±2° C temperature of water	One	-			
		Shovels, trowels, flexible spatulas, meter, etc.	Sufficient nos.	1			

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.

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 5 of 16	PC-01-QRF-ANNX-01, RMC
------------------------	-------------------------------------	--------------	------------------------



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

(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

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 6 of 16	PC-01-QRF-ANNX-01, RMC
------------------------	-------------------------------------	--------------	------------------------



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

SI. No	Material	Verification	Scope	Frequency
1.	Cement	 Delivery Documents Manufacturer's test certificate for physical and chemical properties 	· · · · · · · · · · · · · · · · · · ·	-
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 	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.	water: Initially every week for first

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 7 of 16	PC-01-QRF-ANNX-01, RMC
------------------------	-------------------------------------	--------------	------------------------



	all tests for Source
	are satisfactory

SI. No	Material	Verification	Scope	Frequency
740				
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	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.

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 8 of 16	PC-01-QRF-ANNX-01, RMC
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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 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
1.	Grading	Fine aggregate • Uncrushed • Crushed Coarse aggregate • Uncrushed • Crushed	Weekly	IS 383-1970
2.	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-UncrushedCrushed	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	IS 2386 (Part 4)
10.	10% Fines	Coarse aggregate	Yearly or	IS 2386 (Part 4)

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 9 of 16	PC-01-QRF-ANNX-01, RMC
------------------------	-------------------------------------	--------------	------------------------



			change in source	
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)

Rev. No: 02
Rev. Date 01.03.2019
Rev. Date 01.04.2022
Rev. Date 01.04.2022
Rev. Date 01.04.2022



Table 7: Concrete mix information to be supplied by the purchaser (5.4 of Section A)

Name of RIVIC Producer:		 	_	
Name of Client/Contractor:Site:		 	_	
Site:			_	
Mix code				
Grade (Characteristic strength), N/mm ²				
Minimum cement content, kg/m ³ (if specified)				
Mineral additives, kg/m ³ (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 tim placing (if specified)	e of			
Class of sulphate resistance (if applicable)				
Exposure condition (if specified)				
Class of finish (if applicable)				
Total SO ₃ in Concrete (if specified)				
Mix application				
Method of placing				
Any other requirements (if applicable) [estrength, workability retention, permeablesting, 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				

Rev. No: 02 Rev. Date 01.04.2022	Page 11 of 16	PC-01-QRF-ANNX-01, RMC
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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:



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

SI. No.	Name o	f Material/Test	Frequer	ncy of testing	Relevant IS Standard
1.	Fine Ag	gregate:	a)	Moisture content on daily basis; twice in day during monsoon	IS 2386 (Part 3)
	a) b)	Determination of Moisture content Water absorption	b)	Weekly or change in source	
2.	Coarse	aggregate	a)	Moisture content on daily basis; twice in day during monsoon	IS 2386 (Part 3)
	a) b)	Determination of Moisture content Water absorption	b)	Weekly or change in source	
3.	Fresh C	Concrete			
	a)	Sampling (IS 4926 procedure)	a)	Sampling: At least one sample for every 50 m ³ of production or every 50 batches whichever	a) IS 4926
	b)	Slump test	b)	is of greater frequency At least one sample for every 50 m ³ of production or every 50 batches whichever is	
	c)	Density of fresh concrete	c)	of greater frequency At least once in a day	b) IS 1199
	d)	Placing Temperature of the concrete #	d)	At least one sample for every 50 m ³ of	c) IS 1199
		of the concrete #		production or every 50 batches whichever is of greater frequency	d) IS 1199
4	Harden	ed concrete			
	a)	Compressive strength *	a)	At least one sample for every 50 m ³	IS 516
	b)	Density	b)	Production or every 50 batches whichever is of greater frequency *	
	c)	Flexural Strength#	c)	When asked for	

Optional test

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 13 of 16	PC-01-QRF-ANNX-01, RMC
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^{*} 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 of Section A)

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 and measuring equipment	1.Mechanical/knife edge systems 2.Electrical/ load cell systems	Monthly 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 of Section A)

Constituent materials	Tolerances (% of the quantity of the constituent material being measured)	Indian 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

Rev. Date 01.04.2022



Reviewer:

EQUALITAS SYSTEMCERT PVT. LTD. QUOTATION REQUEST FORM- RMCPCS

Annexure 01 RMC Review Checklist (To be filled by QRF Reviewer) Doc. Reference **Table Comment/ Finding** (if any) Table 1: General Information of Ready Mixed Concrete Facility (3.1.1 of Section A) Table 2: General Information on Concrete Production Facilities (3.1.1 of Section A) Table 3: General Information on Material Handling (3.1.1 of Section A) Table 4: List of Minimum Testing Equipment for Laboratory attached to RMC Facility (3.3 of Section A) Table 5: List of Sources of Incoming Approved Materials (4.2 of Section A) Table 6-A: Verification and Testing Frequency of Cement, SCMs, Water and Chemical Admixtures (4.3.8 of Section A) TABLE 6-B: Verification and Testing Frequency for Aggregates (4.3.8 of Section A) Table 7: Concrete mix information to be supplied by the purchaser (5.4 of Section A) Table 8: Format for Mix Design (5.5 Section A) **TABLE 9: Production and Control of Final** Product (6.4 of Section A) Table 10: Control on Process Control Equipments and Frequency of Inspection and Calibration (7.3 of Section A) Table 11 Tolerances in Measurement of different Constituent Materials (7.3 of Section A) Reviewer Comments:.... Reviewer Final Conclusion: Ready for Onsite audit Yes No

Issued Date 01.03.2019	Rev. No: 02 Rev. Date 01.04.2022	Page 15 of 16	PC-01-QRF-ANNX-01, RMC
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(For The Use Of Equalitas Systemcert Private Limited (ESCPL) Only)				
ESCPL Comments:				
Can this Application be further processed and ready for Onsite audit	□ No			
(if No, Details of COI condition)				
Note: Application review will be done within 7 day of receipt of application adequacy or deficiencies observed within but before expiry of 7 day.	and the applicant RMC Plant will be informed about			
Reviewed By :	Date:			