CONSTRUCTION CHECKLIST

Name of the Project: Date of inspection:

Name of the building:

Location of inspection in the building:

Name of the Sub-Division:

Name of the Division:

STEP E-1: CHECKLIST FOR CONCRETEING WORK (Equipment and Material Preparation)

SL. NO.	CHECK ITEM					1st Level Checked	2nd Level Checked	
		Refference	YES	NO	NA	SAE	SDE	Comments
1	**Aggregate for concrete material:**							
1)	Excessive dust is screened out from coarse aggregate.							
2)	Size of aggregates is satistifactory as per specification.							
3)	Stone chips must be made of crushed stone or boulder							
4)	Both coarse and fine agreegates are free from all organic and deleterious materials.							
5)	Aggregates are well stored on brick solling platform.							
6)	Percent wear of stone chips is below 30% tested by Los Angles Abration test.							
7)	Compresive stone of stone agreegate shall not be less than 36.1 MPa or 5240 Psi.							
8)	Laboratory tests confirm specifictions mentioned in Sl. No. (8) and (9)							
2	**Grading of coarse aggregates:**							
1)	19mm sieve size- passing 95-100% is confirmed.							
2)	9mm sieve size- passing 25-55% is confirmed.							
3)	No. 4 (4.76mm) sieve size- passing 0-10% is confirmed.							
4)	No. 8 (2.38mm) sieve size- passing 0-5% is confirmed.							
5)	Sieve analysis is done and the report confirms above criteria							
3	**Cement for concrete:**							
1)	Types of cement is CEM-1 as per specification .							
2)	Quality of cement is satisfied as per specification.							
3)	Cements are well stored, not in a moist environment.							
4)	Laboratory test is done and the report confirms above criteria							
4	**Other materials for concrete:**							
1)	Admixture as per specification is presented.							
2)	Water is free from salt and other impurities.							
3)	Spare Vibrator machines and vibrator nozzles are available.							
4)	Proper levelling Instrument is available at site.							
5)	Aggregate measuring box, sand filter are present at the site.							
6)	Slump testing aparatus is present at site							
7)	Cylinder testing equipments are present and in well condition.							

CONTRACTOR : Name- Signature:

SAE : Name- Signature:

SDE: Name- Signature:

EE: Name- Signature:

CONSTRUCTION CHECKLIST

Name of the Project: Date of inspection:

Name of the building:

Location of inspection in the building:

Name of the Sub-Division:

Name of the Division:

STEP E-2: CHECKLIST FOR CONCRETEING WORK (During Construction) (page 1/2)

SL. NO.	CHECK ITEM	Refference	YES	NO	NA	1st Level Checked SAE	2nd Level Checked SDE	Comments
1	**Mix proportion is checked by the engineer:**							
1)	Volume of concrete is estimated and the target time is set.							
2)	Admixture is used as per design specification							
2	**Manpower for concreting:**							
1)	SDE, SAE are present while mixing and placing of concrete.							
2)	Work assistant at the mixing point is deputed to count and control the batch as per concrete pouring slip and load count slip.							
3)	Manpower for mixing is enough with respect to volume of work							
4)	During casting sufficient shuttering men are kept for constant watch on prop.							
3	**Adequacy of materials:**							
1)	Mixing portion of cement, aggregates and sand are investigated as per design specification.							
2)	Adequate Material such as cement, aggregates and sand are presented with respect to volume of work.							
3)	Aggregates are properly soaked							
4)	Aggregates are well graded.							
4	**Preparation at the site for concreting:**							
1)	For bonding with old concrete, the edges of old concrete are to be broken to give a firm bonding.							
2)	Grouting is used for construction joint.							
3)	Electrical conduit is ensured in proper place.							
4)	Rain protection is arranged.							
5)	Clear cover are monitored before placing of concrete.							
6)	Casting sequence are decided as per consent of engineer in charge.							
5	**Adequacy of equipments:**							
1)	Chutes, concrete buckets are cleaned and ready for use.							
2)	Adequate Vibrator nozles are checked and ready for use.							
3)	Tower crane for vertical lifting is provided.							
4)	Thickness checking device is provided.							
6	**Mixing of Concrete:**							
1)	Measured quantity of materials as per proportion are dumped in the drum of mixture machine.							
2)	Mixiing is executed with required quantity of water for a period of not less than 2 minutes after all material including the water are in the drum.							
3)	Proper water cement ratio is ensured by measuring slump as mentioned below:							
	a. Footing, pile cap, mass concrete 2" maximum							
	b. Precast pile, column, beam, slab 2.5" maximum							
	c. Ready mix concrete (with admixture) 4.0" maximum							

CONSTRUCTION CHECKLIST

Name of the Project: Date of inspection:

Name of the building: Which part of the building:

Name of the Sub-Division:

Name of the Division:

STEP E-2: CHECKLIST FOR CONCRETEING WORK (During Construction) (page-2/2)								
SL. NO.	CHECK ITEM					1st Level Checked	2nd Level Checked	
		Refference	YES	NO	NA	SAE	SDE	Comments
7	**After mixing concrete:**							
1)	Workability of concrete is adequate (slump is proper).							
2)	Cubes/ Cylinders are taken from the mixing for testing.							
3)	Slump test is conducted and found OK.							
8	**Placing of concrete:**							
1)	Water is sprayed on surface of shutter/ steel shutter.							
2)	Concrete is placed within 30 minutes after mixing the water.							
3)	Height of free fall concrete is within 3 feet.							
4)	Concrete is layed from one end, then continuously proceeded to the other end.							
5)	Fresh concrete is deposited against concrete which is in position within 45 minutes.							
6)	Thickness is checked @ 3'-0'' interval over the concrete slab.							
7)	Frequent movement of labours/others over reinforcement is avoided during casting. Use of plain sheet as walk way for carrying concrete at place.							
8)	During casting, immediate remedial measure are taken in case props get loosened.							
9	**Compacation of Concrete:**							
1)	For beam and column, concrete compaction is done properly by vibrator.							
2)	Compaction is done within the 15 minutes after the fresh concrete is placed in position.							
3)	Vibrating is stopped as soon as laitance of mortar appears on the surface. (Excessive vibration segregates the mix.)							
4)	Vibrating is executed properly in vertical placement of vibrator.							
5)	Vibrating is executed without touching the re-bar.							
6)	Proper surface vibration of slab surface with thick & plain wooden plank.							

STEP E-3: CHECKLIST FOR CONCRETEING WORK (After concreting)								
1	Movement over concrete surface is avoided within 24 hours.							
2	Concrete surface is kept wet with water till the removal of form work.							
3	Keys in the column-lift are provided for subsequent concreting in the proceeding days.							

CONTRACTOR : Name- Signature:

SAE : Name- Signature:

SDE: Name- Signature:

EE: Name- Signature: