## Annexure-II

## List of Wate Water Items for Standardised QAP's

| Sl. No. | | Description | QAP Reference |
|---|---|---|---|
| 1 | Waste Water Items | RCC Pipe | Std QAP/ 23-24/ WW-01 |
| 2 | | Inspection chamber | Std QAP/ 23-24/ WW-02 |
| 3 | | Manhhole cover | Std QAP/ 23-24/ WW-03 |
| 4 | | Vent Shaft | Std QAP/ 23-24/ WW-04 |

# STANDARD QUALITY ASSURANCE PLAN

| | | | |
|---|---|---|---|
| RUIDP / STC | Manufacturer Logo & Adddress | Item Description : RCC Pipe NP2/NP3/NP4 ( Vertical Cast) | Project : |
| | | QAP NO: Std QAP/ 23-24/ WW-01 | Client: RAJASTHAN URBAN INFRASTRUCTURE DEVELOPMENT PROJECT |
| | | REV.NO: 00 | Consultant: SHAH TECHNICAL CONSULTANT (STC) |
| | | DATE: | Contractor: |

| Sr. No. | Component & Operation | Characteristics | Type of Check | Quatum of check | Reference Document | Acceptance Norms | Inspection | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Manu | Client | TPI/Client/ Consultant | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| A.Raw Material | | | | | | | | | | |
| 1 | Cement SRC | Fineness | MTC | One per each consignment | IS 12330&IS: 4031 | Saecific surface shall not be less 225 M2/KG | R | R | R | |
| | | Standard Consistency | MTC | One per each consignment | IS 12330&IS: 4031 | .... | R | R | R | |
| | | Setting time ( Initial& Final) | MTC | One per each consignment | IS 12330&IS: 4031 | Initial setting time shall be not less than 30 min. Final setting time shall be not more than 600 max | R | R | R | |
| | | Compressive Strength | MTC | One per each consignment | IS 12330&IS: 4031 | 3 days (72+/-1 hr)= min 10n/mm2 , days(168+/-2hr)=min 16N/mm2 , days (672+/-4 hr )=min 33 N/mm2 | R | R | R | MTC showing 28 days under testing shall be accepted only if it is passed in 7 days |
| | | Soundness | MTC | One per each consignment | IS 12330&IS: 4031 | Cement shall not have expansion more than 10mm & 0.82 | R | R | R | |
| 2 | Coarse Aggregates | Sieve Analysis | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 383-2016 | Table 7 ( IS:383-2016) | P | R | R | |
| | | Specific gravity | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 383-2016 | 2.1 to 3.2(Table 3,IS :383-2016) | P | R | R | |
| | | Water absorption | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 383-2016 | less than 5%(Table 3,IS :383-2016) | P | R | R | |
| 3 | Fine Aggregates | Sieve Analysis | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 383-2016 | Table 9(IS:383-2016) | P | R | R | |
| | | Specific gravity | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 2386-1963(Part-III) | 2.1 to 3.2(Table 3,IS :383-2016) | P. | R | R | |
| | | Bulk density | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 2386-1963(Part-III) | | P | R | R | |
| | | Deleterious Material | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 383-2016 | (Table 2,IS :383-2016) | P | R | R | |
| | | Silt and clay | Lab test | Once per source per year or for every 500 cum, whichever is earlier | IS : 458-2003 | not more than 3% | P | R | R | |
| 4 | Rubber Ring | Dimensions | Measurement | Once per Batch | IS: 5382-2018 | CL. 3.6( IS:5382-2018) & ISI mark "SEWER" it should be mentioned | R | R | R | |
| | | Physical Test | MTC | Once per Batch | IS: 5382-2018 | CL. 3.7( IS:5382-2018) | R | R | R | |
| B.Reinforcement | | | | | | | | | | |
| 5 | Physical & Mechanical property | Dimensions | MTC | Once per Batch | IS:432-1982(Part-II)& IS: 1786 | Clause 5&6 | R | R | R | |
| | | Ultimate tensile stress | MTC | Once per Batch | IS:432-1982(Part-II)& IS: 1786 | More than 570 N/SQMM | R | R | R | |
| | | 0.2% proof stress | MTC | Once per Batch | IS:432-1982(Part-II)& IS: 1786 | More than 480 N/SQMM | R | R | R | |
| | | Elongation | MTC | Once per Batch | IS:432-1982(Part-II)& IS: 1786 | More than 7.5% | R | R | R | |
| | | Reverse bend test | MTC | Once per Batch | IS:432-1982(Part-II)& IS: 1786 | CL.8.3 (IS :432-1982 Part-II) | R | R | R | |
| 6 | Water | Physical and mechanical properties | Lab test report | Once per source | IS : 3025 | CL.5.4(IS:456-2000) | P | R | R | |
| 7 | Admistures if used | Physical and mechanical properties | MTC | Once per source | IS : 9103-1999 | Table 1&2( IS:9103-1999) | R | R | R | |
| C.PROCESS CONTROL | | | | | | | | | | |
| 8 | Concrete Mix | Design (Mix Aggregate Size 20mm) | Visual | Once per source/per year | IS : 458-2021 Table 8 | Min. Compressive strength 35N/SQMM | P | R | R | |
| | | Design (Mix Aggregate Size 20mm) | Visual | Once per source/per year | IS : 458-2021 Table 8 | Min. Compressive strength 35N/SQMM | P | R | R | |
| | | Compressive Strength | Compressive Strength of cube | 6 cube per day | IS : 458-2021 Table 8 | 35N/SQMM at 28 days | P | RW | RW | |
| | Reinforcement | Weight | Measurement | Each cage before casting | IS : 458-2021 Table 8 | CL. 6.2 IS : 458-2021 | P | R | R | |
| | Dimensions | Pipe Dia & Thickness | Measurement | one pipe per day | IS : 458-2021 Table 8 | Table 15B | P | RW | RW | |
| | Curing | Proper Curing | Visual | each pipe | IS : 458-2021 Table 8 | CL. 7.4 IS : 458-2021 | P | RW | RW | |
| D.FINAL INSPECTON & TESTING: | | | | | | | | | | |
| 9 | Final Cured pipe | Workmanship & Finish | Visual | 100% | IS : 458-2021 | CL.9 IS : 458-2021 | P | W | W | |
| | | Dimension test | Measurement | IS : 458-2021 Table 23 | IS : 458-2021 | Table 15B | P | W | W | |
| | | Three edge bearing test | Strenth Test | IS : 458-2021 Table 23 | IS : 458-2021 | Table 8 | P | W | W | |
| | | Hydrostatic Test | Pressure Test | IS : 458-2021 Table 23 | IS : 458-2021 | As per latest IS code | P | W | W | |
| | | Permeability Test | Cup & Tube | IS : 458-2021 Table 23 | IS : 458-2021 | As per latest IS code | P | R | R | |
| | | Ultimate Load Test | Strenth Test | IS : 458-2021 Table 23 | IS : 458-2021 | Table 8 | P | W | W | |
| | | Marking | Visual | IS : 458-2021 Table 23 | IS : 458-2021 | CL.12 IS : 458-2021 | P | W | W | |
| | | | | | | | | | | |
| E.SAMPLING & SEALING: | | | | | | | | | | |
| 10 | Stenciling Stamp | Legilibility Stamp | Visual | 100% | .... | ISI Mark | P | W | W | |
| | | Marking | Visual | 100% | Employer's Spec./IS:458 | Project Town CL.12 of IS : 458-2021 Identification mak of Client (RUIDP) | P | W | W | |

**LEGENDS:**

M-MANUFACTURER C- CONTRACTOR TPI- THIRD PARTY INSPECTION P-PERFORM R- REVIEW W- WITNESS R/W-RANDOM WITNESS

*Refer latest revisions of IS code for above

Note: 1. Copies of material report shall be given to inspection authority (IA) for scrutiny be fore commencement of inspection.

# STANDARD QUALITY ASSURANCE PLAN

| | | | |
|---|---|---|---|
| RUIDP RAJASTHAN URBAN INFRASTRUCTURE DEVELOPMENT PROJECT STC | Manufacturer Logo & Adddress | Item Description : RCC Pipe NP2/NP3/NP4 ( Vertical Cast) | Project : |
| | | QAP NO: Std QAP/ 23-24/ WW-01 | Client: RAJASTHAN URBAN INFRASTRUCTURE DEVELOPMENT PROJECT |
| | | REV.NO: 00 | Consultant: SHAH TECHNICAL CONSULTANT (STC) |
| | | DATE: | Contractor: |

| Sr. No. | Component & Operation | Characteristics | Type of Check | Quatum of check | Reference Document | Acceptance Norms | Inspection | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Manu. | Client | TPI/Client/ | |

2. All measuring INSTRUMENTS AND TESTING EQUIEPEMTS. Calibrated periodically shall be submitted to IA on inspection time.
3. We hereby deciare that we abide by this quality assurance pan and follow the same in all stages of production.
4. Before despatch of items at casting yard same can be checked at random to confirm all QAP Requirements.
5. Manufacture shall provide all test certificates & internal & external test veports with supply as per QAP,

| Manufacturer / Vendor | Contractor | CONSULTANT /CLIENT / TPI |
|---|---|---|
| Signature: | Signature: | Signature: |
| Name: | Name: | Name: |

# STANDARD QUALITY ASSURANCE PLAN

| | | | |
|---|---|---|---|
| RUIDP / STC | Manufacturer Logo & Adddress | Item Description : SRFC (MD-10) RCC PRECAST CIRCULAR INSPECTION CHAMBER & COVERS 1. 300 (ID) X 450 (OD) 2. 450 (ID) X 600 (OD) 3. 450 (ID) X 900 (OD) | Project : |
| | | QAP NO: Std QAP/ 23-24/ WW-02 | Client: RAJASTHAN URBAN INFRASTRUCTURE DEVELOPMENT PROJECT |
| | | REV.NO: 00 | Consultant: SHAH TECHNICAL CONSULTANT (STC) |
| | | DATE: | Contractor: |

| Sr. No. | Component & Operation | Characteristics | Type of Check | Quatum of check | Reference Document | Acceptance Norms | Format of Record | Inspection | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Manu | Client | TPI/Client/ Consultant | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Raw Material | | | | | | | | | | | |
| 1 | Cement SRC | Physical & Chemical Properties | As per IS 12330 : 1988 | Every batch/ week no | IS 12592 : 2002 (Cause 4.1) | IS 12330 : 1988 & Note 2 of RIDP Dwg | MTC | P | R | R | |
| 2 | Fine Aggregates | Physical Properties | As per IS 383 : 2016 | One test for every 100 cu.mts,or else every change of source | IS 12592 : 2002 (Cause 4.2) & 383 : 2016 | IS 12386 : 1963 | internal test register for 100cum & External lab test for one year/source change | P | R | R | |
| 3 | Coarse Aggregate (Max. size of aggregate shall not exceed 20 mm) | Physical Properties | As per IS 383 : 2016 | One test for every 100 cu.mts,or else every change of source | IS 12592 : 2002 (Cause 4.2) & 383 : 2016 | IS 12386 : 1963 | internal test register for 100cum & External lab test for one year/source change | P | R | R | |
| 4 | Reinforcement | Physical, Chemical & Mechanical Properties | IS 1786:2008 & IS : 2062 | One for each batch of supply | IS 12592 : 2002 (Cause 4.4 & 4.5) & IS : 2062 | IS 1786 : 2008 & IS : 2062 | Manugacturer test Certificate | P | R | R | |
| 5 | Steel Fibre | Physical & Mechanical Properties | Manufacturer TC | Every batch | IS 12592 : 2002 (Cause 4.5) | IS 2592 : 2002 (Clause 4.5) | Manufacturer TC | P | R | R | |
| 6 | Water | Suitability of concrete | External lab test Report | Once in a year/ Change in source | Every Batch | IS 456-2000) (Clause 5.4) | External lab test Report | P | R | R | |
| Manufacturing Process | | | | | | | | | | | |
| 7 | Conrete (M40 Grade) | Cube Strength | Compressive Strength of Cubes | Every batch IS:516 | IS 456 & IS :12592 : 2002 (Clause 4.3) IS :516 | Min cement ciontent-360kg/m3 max,w/c Rato-0.40 Table 5-IS 456:2000 & IS:516 | lab test report | P | R | R | |
| | | Mix Design | | One Mix Design | IS 456, 2000 | As per 456:2000 | Design Mix Report | P | R | R | |
| 8 | Curing | Curing | Visual / Register Check | Every batch | IS 12592:2002 (Clause 7.3)& IS 456 | 07-14 days water curing as mentioned in the IS Code . IS:456-2000 | Curing Registre | P | R | R | |
| 9 | Reinforcement Quality & Arrangement | Design Considerations | Visual & Measurement | Random IS : 456 | IS 12592:2002 (Clause 6,7,8&9)& IS 456 | IS 12592:2002(Clause 6,7,8&9)& as per design IS 456-2000 | Internal Test Reports | P | W | W | |
| 10 | Lifting Hooks | Dimensions | Visual | 100 % / Randam | IS 12592:2002(Clause B) | 12mm dia steel rod protect anti corrosive paint or hot dip galvanlsed | Manufacture TC | P | R/W | R/W | |
| 11 | Edge Protection & Finishing | Frame | Visual | 100 % / Randam | IS 12592:2002(Clause 7.4.1) | 1. Top outer edgr shall be protected by 25 mmx3mm mild steel elat as apart of the frame.2. Enough steel be welded to the inner surface of mild steel flat to connect in to the frame reinforcement & these shall be embedded in the concrete during casting 3. Exposed surface of mild steel flat shall be given suitable treatment with anticorrosive paint. | Internal Test Reports | P | W | W | |
| | | Cover | Visual | 100 % / Randam | IS 12592:2002(Clause 7.4.2) | 1. edges of the cover shall be cst with aprotective mild steel sheet of min. 2mm thickness. Around the periphery of covers. Width of flat 90mm. ,2.The ring made out of mild steel flat shall be given anti corrosive treatment. | Internal Test Reports | P | W | W | |
| Final Inspection - Inspection Chember Covers & Frames. | | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | Dimensions & Visual check on manhole & rings | Dimensions & visual defects if any | Measurement | IS 12592:2002 Table-3 | IS 12592:2002 | IS 12592:2002 (Clause 5.9,1.9.2 Table 1 & Annex B) | Joint Inspection Reports | P | W | W | |
| 13 | Load test on covers | Breaking load | Applying load | IS 12592:2002 Table-3 | IS 12592:2002 (Clause 9,3,Table 2 & Annex C) | Breaking load shall not be less than 200KN cover shall not show cracks in the course of the test and on top and bottom surface of cover after the test IS :12592(clause C-1.2.1 -Annexure C | Joint Inspection Reports | P | W | W | |
| 14 | Marking | Identificaton of class , size & source of Manufacture | Visual | 100% | IS 12592:2002 Clause 14 | Marking on cover 1. Manufacture name, month & year 2. Designation as HD-20-SFRC. 3. Identification Mark of client ( RUIDP) Marking on manhole & ring & town name . | | P | W | W | |

**LEGENDS:**

M-MANUFACTURER C- CONTRACTOR TPI- THIRD PARTY INSPECTION P-PERFORM *Refer latest revisions of IS code for above activities

Note: 1. Copies of material report shall be given to inspection authority (IA) for scrutiny be fore commencement of inspection.
2. All measuring INSTRUMENTS AND TESTING EQUIEPEMTS. Calibrated periodically shall be submitted to IA on inspection time.
3. We hereby deciare that we abide by this quality assurance pan and follow the same in all stages of production.
4. Before despatch of items at casting yard same can be checked at random to confirm all QAP Requirements.
5. Manufacture shall provide all test certificates & internal & external test veports with supply as per QAP,

| Manufacturer / Vendor | Contractor | CONSULTANT /CLIENT / TPI |
|---|---|---|
| Signature: | Signature: | Signature: |
| Name: | Name: | Name: |

# STANDARD QUALITY ASSURANCE PLAN

| | | | |
|---|---|---|---|
| RUIDP / STC | Manufacturer Logo & Adddress | Item Description : SRFC (MD-10) RCC PRECAST CIRCULAR INSPECTION CHAMBER & COVERS 1. 300 (ID) X 450 (OD) 2. 450 (ID) X 600 (OD) 3. 450 (ID) X 900 (OD) | Project : |
| | | QAP NO: Std QAP/ 23-24/ WW-03 | Client: RAJASTHAN URBAN INFRASTRUCTURE DEVELOPMENT PROJECT |
| | | REV.NO: 00 | Consultant: SHAH TECHNICAL CONSULTANT (STC) |
| | | DATE: | Contractor: |

| Sr. No. | Component & Operation | Characteristics | Type of Check | Quatum of check | Reference Document | Acceptance Norms | Format of Record | Inspection | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Manu | Client | TPI/Client/ Consultant | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Raw Material | | | | | | | | | | | |
| 1 | Cement SRC | Physical & Chemical Properties | As per IS 12330 : 1988 | Every batch/ week no | IS 12592 : 2002 (Cause 4.1) | IS 269-2015 Table-2 | MTC | P | R | R | |
| 2 | Fine Aggregates | Physical Properties | As per IS 383 : 2016 | One test for every 100 cu.mts,or else every change of source | IS 12592 : 2002 (Cause 4.2) & 383 : 2016 | IS 12386 : 1963 | internal test register for 100cum & External lab test for one year/source change | P | R | R | |
| 3 | Coarse Aggregate (Max. size of aggregate shall not exceed 20 mm) | Physical Properties | As per IS 383 : 2016 | One test for every 100 cu.mts,or else every change of source | IS 12592 : 2002 (Cause 4.2) & 383 : 2016 | IS 12386 : 1963 | internal test register for 100cum & External lab test for one year/source change | P | R | R | |
| 4 | Reinforcement | Physical, Chemical & Mechanical Properties | IS 1786:2008 & IS : 2062 | One for each batch of supply | IS 12592 : 2002 (Cause 4.4 & 4.5) & IS : 2062 | IS 1786 : 2008 & IS 2062 | Manugacturer test Certificate | P | R | R | |
| 5 | Steel Fibre | Physical & Mechanical Properties | Manufacturer TC | Every batch | IS 12592 : 2002 (Cause 4.5) | IS 2592 : 2002 (Clause 4.5) | Manufacturer TC | P | R | R | |
| 6 | Water | Suitability of concrete | External lab test Report | Once in a year/ Change in source | Every Batch | IS 456-2000) (Clause 5.4) | External lab test Report | P | R | R | |
| Manufacturing Process | | | | | | | | | | | |
| 7 | Conrete (M40 Grade) | Cube Strength | Compressive Strength of Cubes | Every batch IS:516 | IS 456 & IS :12592 : 2002 (Clause 4.3) IS :516 | Min cement ciontent-360kg/m3 max,w/c Rato-0.40 Table 5-IS 456:2000 & IS:516 | lab test report | P | R | R | |
| | | Mix Design | | One Mix Design | IS 456, 2000 | As per 456:2000 | Design Mix Report | P | R | R | |
| 8 | Curing | Curing | Visual / Register Check | Every batch | IS 12592:2002 (Clause 7.3)& IS 456 | 07-14 days water curing as mentioned in the IS Code . IS:456-2000 | Curing Registre | P | R | R | |
| 9 | Reinforcement Quality & Arrangement | Design Considerations | Visual & Measurement | Random IS : 456 | IS 12592:2002 (Clause 6,7,8&9)& IS 456 | IS 12592:2002(Clause 6,7,8&9)& as per design IS 456-2000 | Internal Test Reports | P | W | W | |
| 10 | Lifting Hooks | Dimensions | Visual | 100 % / Randam | IS 12592:2002(Clause B) | 16mm dia steel rod protect anti corrosive paint or hot dip galvanlsed | Manufacture TC | P | R/W | R/W | |
| 11 | Edge Protection & Finishing | Frame | Visual | 100 % / Randam | IS 12592:2002(Clause 7.4.1) | 1. Top outer edgr shall be protected by 25 mmx3mm mild steel elat as apart of the frame.2. Enough steel be welded to the inner surface of mild steel flat to connect in to the frame reinforcement & these shall be embedded in the concrete during casting 3. Exposed surface of mild steel flat shall be given suitable treatment with anticorrosive paint. | Internal Test Reports | P | W | W | |
| | | Cover | Visual | 100 % / Randam | IS 12592:2002(Clause 7.4.2) | 1. edges of the cover shall be cst with aprotective mild steel sheet of min. 2mm thickness. Around the periphery of covers. Width of flat 90mm. ,2.The ring made out of mild steel flat shall be given anti corrosive treatment. | Internal Test Reports | P | W | W | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Final Inspection - Inspection Chember Covers & Frames. | | | | | | | | | | | |
| 12 | Dimensions & Visual check on manhole & rings | Dimensions & visual defects if any | Measurement | IS 12592:2002 Table-3 | IS 12592:2002 | IS 12592:2002 (Clause 5.9.1.9.2 Table 1 & Annex B) | Joint Inspection Reports | P | W | W | |
| 13 | Load test on covers | Breaking load | Applying load | IS 12592:2002 Table-3 | IS 12592:2002 (Clause 9,3,Table 2 & Annex C) | Breaking load shall not be less than 200KN cover shall not show cracks in the course of the test and on top and bottom surface of cover after the test IS :12592(clause C-1,2,1 -Annexure C | Joint Inspection Reports | P | W | W | |
| 14 | Reinforcement Cage | Weight | Measurement | Randam | Not 14 of RUIDP Dwg | As per approved RUIDP Dwg. | Joint Inspection Reports | P | W | W | |
| 15 | Dimension of footrest | Dimensions & visual defects if any | Measurement | IS 12592 : 2002 Table-3 | Not 9.10 of RUIDP Dwg | Not 9.10 of RUIDP Dwg | Joint Inspection Reports | P | W | W | |
| 16 | Marking | Identificaton of class , size & source of Manufacture | Visual | 100% | IS 12592:2002 Clause 14 | Marking on cover 1. Manufacture name, month & year 2. Designation as HD-20-SFRC. 3. Identification Mark of client ( RUIDP) Marking on manhole & ring & town name . | | P | W | W | |

**LEGENDS:**
M-MANUFACTURER C- CONTRACTOR TPI- THIRD PARTY INSPECTION P-PERFORM *Refer latest revisions of IS code for above activities

Note:
1. Copies of material report shall be given to inspection authority (IA) for scrutiny be fore commencement of inspection.
2. All measuring INSTRUMENTS AND TESTING EQUIEPEMTS. Calibrated periodically shall be submitted to IA on inspection time.
3. We hereby deciare that we abide by this quality assurance pan and follow the same in all stages of production.
4. Before despatch of items at casting yard same can be checked at random to confirm all QAP Requirements.
5. Manufacture shall provide all test certificates & internal & external test veports with supply as per QAP,

| Manufacturer / Vendor | Contractor | CONSULTANT /CLIENT / TPI |
|---|---|---|
| **Signature:** | **Signature:** | **Signature:** |
| **Name:** | **Name:** | **Name:** |

# STANDARD QUALITY ASSURANCE PLAN

| | | | |
|---|---|---|---|
| RUIDP / STC | Manufacturer Logo & Adddress | Item Description : Vent Shaft | Project : |
| | | QAP NO: Std QAP/ 23-24/ WW-04 | Client: RAJASTHAN URBAN INFRASTRUCTURE DEVELOPMENT PROJECT |
| | | REV.NO: 00 | Consultant: SHAH TECHNICAL CONSULTANT (STC) |
| | | DATE: | Contractor: |

| Sr. No. | Control Test / Inspection | Application Specification | Type of Tosts | Frequency | Inspection | | Remarks |
|---|---|---|---|---|---|---|---|
| | Description | Material grade | | | Performed by | Reviewed ( R )/ Witnessed(W) by | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Manufacturing Process | IS 456:2003 | | | Manufacturer | | |
| 2 | Raw Materials | | | | Manufacturer | Client / Third Party ( R ) | |
| | a) Cement OPC (43 Grade ) with sulphide resisting paint inside | IS : 8112/IS : 12269 | Review of Mfr's Certificate | Once each batch | Manufacturer | Client / Third Party ( R ) | |
| | b) Reinforcement Bar | IS : 432 | Review of Mfr's Certificate | | Manufacturer | Client / Third Party ( R ) | |
| | c) Fine Aggregate | IS : 383 | Sieve Analysis | Once each batch | Manufacturer | Client / Third Party ( R ) | |
| | d) Coarse Aggregate | IS : 383 | Sieve Analysis | Once each batch | Manufacturer | Client / Third Party ( R ) | |
| | e) Water | IS : 456 | PH chlorides, sulphates, aciidity/Alkanility | Once each batch | Manufacturer | Client / Third Party ( R ) | |
| 3 | Test of concrete cubes | | Compressive Strength | | Manufacturer | Client / Third Party ( R ) | |
| 4 | Factory Test on Ventshaft | | | | Manufacturer | Client / Third Party ( R ) | |
| | a) Visual Inspection | | Visual | | Manufacturer | Client / Third Party ( R ) | |
| | b) Dimensional Test | As per approved drawing | | As per IS : 458 | Manufacturer | Client / Third Party ( R ) | |
| | 1) Internal Diameter of Ventshaft | As per approved drawing | By Gauge | As per IS : 458 | Manufacturer | Client / Third Party ( R ) | |
| | 2) Outer Diameter of Ventshaft | As per approved drawing | By Gauge | As per IS : 458 | Manufacturer | Client / Third Party ( R ) | |
| 5 | Marking-Visual-Manufacturer's Name, Client, Project Town & Package Name | | As per specification | Each | Manufacturer | Client / Third Party ( R ) | |
| 6 | Final Document | | | | Manufacturer | Client / Third Party ( R ) | |
| 7 | Test Certificate | As per specification | | | Manufacturer | Client / Third Party ( R ) | |
| Note: | 1. All raw material and finish material test reports should be submitted to client with supply and to TPI. | | | | | | |
| | 2. Visual inspection to be done following IS : 456. | | | | | | |
| | 3. All equipments calibration certification shall be submitted to TPI. | | | | | | |

| Manufacturer / Vendor | Contractor | CONSULTANT /CLIENT / TPI |
|---|---|---|
| Signature: | Signature: | Signature: |
| Name: | Name: | Name: |