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| **DOTLOGO2** | | | **QA Log for Precast Concrete Plant** | |
|  | | | | |
|  | Plant Name | | Plant Address Line 1 |  |
|  |  | |  |  |
|  | Date of Inspection | P/S# | Plant Address Line 2 |  |
|  |  |  |  |  |
|  | Inspector Contact Information | |  |  |
|  | Phone: | Fax: | E-mail: |  |
|  | **GENERAL**  Precast concrete products depend on process controls and inspection during manufacturing to ensure quality and uniformity. This Quality Assurance (QA) Log for Precast Concrete Plant is intended for providing the Inspector a monthly/periodic record of the Producer’s Quality Control (QC) tests performed at the plant during production. It can be used by the Inspector during the witnessing of QC testing or during a QC/QA split sample testing conducted by the Producer and Inspector.  Each item on the checklist shall be marked in the appropriate space or column. Items can typically be marked: Yes, No, or Not Applicable (NA). There are also areas where Inspector comments may be provided. | | |  |
|  | Inspection Review Personnel: | | |  |
|  |  | | |  |
|  | Weather Conditions: | | |  |
|  |  | | |  |
|  | Products Being Produced During Inspection: | | |  |
|  |  | | |  |
|  | Findings and Recommendations | | |  |
|  |  | | |  |

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| **COMPONENT MATERIALS** | | | | | | |
|  | **QC Plan (Yes/No/NA)** | **Approved Material**  **(Yes/No/NA)** | **Steel USA Manf. (Yes/No/NA)** | **Visually Confirmed**  **(Yes/No/NA)** | **Remarks** | **Last Date** |
| CEMENT |  |  | NA |  |  |  |
| FINE AGG. |  |  | NA |  |  |  |
| COARSE AGG. |  |  | NA |  |  |  |
| FLY ASH |  |  | NA |  |  |  |
| MICROSILICA |  |  | NA |  |  |  |
| GGBF SLAG |  |  | NA |  |  |  |
| HRM |  |  | NA |  |  |  |
| ADMIXTURES: AIR, A to G, S |  |  | NA |  |  |  |
| WELD WIRE FAB |  |  |  |  |  |  |
| BLACK RE-BAR |  |  |  |  |  |  |
| EPOXY COATED RE-BAR |  |  |  |  |  |  |
| REPAIR MATERIALS |  |  | NA |  |  |  |
| MASTIC |  |  | NA |  |  |  |

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| **3-EDGE TEST/ WITNESSED** | | | | | | | | |
| **Pipe Description** | **Date Made** | **Date Tested** | **Lower Beams Spacing (in./ft. diam.) (mm/m diam.)** | **Test** | **Required Load Minimum (lb/lin. ft.) (kN/lin. m)** | **Calibration Corrected Load Min. (lb/lin. ft.) (kN/lin. m)** | **Actual Load (lb/lin. ft.) (kN/lin. m)** | **Remarks** |
|  |  |  |  | 0.01 |  |  |  |  |
|  |  |  |  | 0.01 +10% |  |  |  |  |
|  |  |  |  | ULT |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **CYLINDER TEST/WITNESSED** | | | | | | | |
| **Date Made** | **Age Tested** | **Cyl #**  **1** | **Cyl #**  **2** | **Cyl #**  **3** | **Average Strength**  **(psi or kPa)** | **Required Strength**  **(psi or kPa)** | **Remarks** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Cylinder (Cyl) #3 is included when casting 4-in. x 8-in. (100- x 200-mm) cylinders. | | | | | | | |

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| **CORE TEST/WITNESSED** | | | | | |
| **Date Made** | **Core Location on Product** | **Date Tested** | **Test Strength (psi or kPa)** | **Required Strength**  **(psi or kPa)** | **Remarks** |
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| **OTHER QC TESTS/WITNESSED** | | | | | | |
|  | **Date Tested** | **First Batch Yes/No** | **Specs** | **Results** | | **Remarks** |
| Air Content (%) |  |  |  |  | |  |
| Slump (in. or mm) |  |  |  |  | |  |
| Aggregate moisture (%) |  |  |  |  | |  |
| Concrete Temperature (°F or °C) |  |  |  |  | |  |
| SCC Slump Flow (in. or mm) |  |  |  |  | |  |
| SCC J-Ring or L-Box (in. or mm) |  |  |  |  | |  |
| SCC HVSI |  |  |  |  | |  |
|  | | | | | | |
| **ACCELERATED CURING** | | | | | | |
|  | | | | | **Yes/No** | **Remarks** |
| If steam, supplemental heat, or insulated blankets (with or without steam/supplement heat) is used, is it done according to Section 3.3.4 of the *Manual for* *Fabrication of Precast Prestressed Concrete Products*? | | | | |  |  |
| Are concrete temperature recording devices used for accelerated or cold weather curing, and are they in accordance with Section 3.3.4 of the *Manual for* *Fabrication of Precast Prestressed Concrete Products*? | | | | |  |  |
| If the preset period is determined by the Producer, is it a minimum of 3 hours, and is the preset period temperature-time graph determined according to ASTM C 403and the *Precast/Prestressed Concrete Institute* (PCI) *Manual for Quality Control for Plants and Production of Structural Precast Concrete Products* (MNL 116) (Section 3.3.4 of the *Manual for* *Fabrication of Precast Prestressed Concrete Products*)? | | | | |  |  |
| If ASTM C 403 is not used by the Producer, is the (*circle or fill in to the right*):(a) Preset period at least 4 hours for Type III cement? (b) Preset period at least 5 hours for other types of cement? or (c) Preset period at least 7 hours when a retarder is used (Section 3.3.4 of the *Manual for* *Fabrication of Precast Prestressed Concrete Products*)? | | | | |  |  |

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| **OTHER CHECKS** | | | | | | | |
|  | | | **Yes/No** | | **Remarks** | | |
| Are Daily Check-Off List(s) Current and Complete? | | |  | |  | | |
| Are Test Records Current and Complete? | | |  | |  | | |
| Are Weekly Shipment Logs Current and Complete? | | |  | |  | | |
| Are All Required Tests Being Performed/Recorded? | | |  | |  | | |
| Are Markings On Units As Per Specification? | | |  | |  | | |
| Is Mix Design(s) As Per Submitted Plan? | | |  | |  | | |
|  | | | | | | | |
| **REINFORCEMENT AREA CHECKS** | | | | | | | |
| **Product Description** | **Diameter**  **(in. or mm)**  **In/Out** | **Spacing**  **(in. or mm)**  **In/Out** | | **Total Area (in.2 or in.2/ft.) (mm2 or mm2/m)**  **In/Out** | | **Area Required (in.2 or in.2/ft.) (mm2 or mm2/m)**  **In/Out** | **Remarks** |
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| **AGGREGATE STOCKPILES** | | | |
|  | **CA  Yes/No** | **FA  Yes/No** | **Remarks** |
| Is Stockpile Area Clean? |  |  |  |
| Is Pile Contaminated? |  |  |  |
| Are Sources Separated? |  |  |  |
| Are Excess Fines Visually Noticeable? |  |  |  |
| Sample Taken For Wash Test? |  |  |  |
| CA = Coarse Aggregate and FA = Fine Aggregate | | | |

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| **YARD CHECKS** | | |
|  | **Yes/No/NA** | **Remarks** |
| Do Tags On Black Rebar Indicate Certified Stock? |  |  |
| Do Tags On Epoxy Coated Rebar Indicate Certified Stock? |  |  |
| Do Tags On Welded Wire Fabric Indicate Certified Stock? |  |  |
| Do Tags On Cold Drawn Wire Stock Indicate Sampled Material? |  |  |
| Are Epoxy Coated Bars Stored and Protected According  To Article 508.03 of the *Std. Specs.*? |  |  |

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| **TEST SAMPLES** | | |
|  | **Yes/No/NA** | **Remarks** |
| Are Cyls/Cores Being Cured Under Same Conditions As Units? |  |  |

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| --- | --- | --- |
| **IN-PLANT TEST** | | |
|  | **Yes/No/NA** | **Remarks** |
| Is Proper Reinforcement Area On Set-Up Forms? |  |  |
| Are Adequate Spacers Being Used To Obtain Minimum Concrete Cover? |  |  |
| Are Cages Free From Contamination (I.E. From Oil, Mud, Rust, Etc.)? |  |  |
| Are Markings On Stripped Units As Per Specification? |  |  |
| Damaged Epoxy Bars Touched Up? |  |  |

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| **SPLIT SAMPLE QC/QA** | | | | | |
| **Plant Test** | **QC Test Result** | **QA Test Result** | **Comparison (OK?)** | **Specs** | **Remarks** |
| Air (%) |  |  |  |  |  |
| Slump (in. or mm) |  |  |  |  |  |
| Aggregate Moisture (%) |  |  |  |  |  |
| Conc. Temperature (°F or °C) |  |  |  |  |  |
| Ambient Temperature (°F or °C) |  |  |  |  |  |
| SCC Slump Flow (in. or mm) |  |  |  |  |  |
| SCC J-Ring (in. or mm) or  L-Box (%) |  |  |  |  |  |
| SCC HVSI |  |  |  |  |  |
| Other |  |  |  |  |  |
| Other |  |  |  |  |  |