
*****GENERAL REWRITE – PLEASE READ CAREFULLY.*****

PRINCIPAL FACTORS IN QUALITY CONTROL

1. Management Commitment to Quality
 - a. All producers shall develop a statement describing their commitment to quality.
 2. Safety-Management Commitment to Safety
 - a. Safety Policy
 - b. Safety Program
 - c. Designated Safety Officer
 - d. Compliance with applicable laws, rules, regulations and ordinances governing safety.
 3. Qualified personnel for all stages of fabrication (See requirements of [Section 2407.01.](#))
 - a. Maintain a list of plant personnel skilled and experienced for each fabrication process and the minimum number of skilled and experienced personnel needed for each process. (superintendents, lead workers & foremen)
 - b. Identify personnel who prepare shop and/or production drawings.
 - c. Maintain a list of personnel who are trained, certified and are responsible for QC inspection.
 - d. Maintain a list of specially trained and authorized personnel to do tension and detensioning.
 4. Testing and inspection of the various materials selected for use
 - a. Identify all materials sources.
 - b. Procedures used to assure that only approved materials will be incorporated into the work
 - c. Storage methods and stockpiling of various materials
 5. Clear & complete shop drawings
 - a. Procedures for developing and distributing shop and production drawings
 - b. Procedures for submittal of drawings for approval by the Design Engineer and/or the Consulting Engineer.
 6. Accurate stressing procedures
 - a. Calculation procedures
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- b. A prescribed stressing procedure repeated every time the bed is used
 - c. Description of tensioning equipment and stressing beds
 - d. Checking for line and grade
7. Control of dimensions and tolerances
- a. Form condition assessment procedures
 - b. Strand placement accuracy methods
 - c. Form alignment procedure methods
 - d. Overall dimensional accuracy methods
8. Positioning of all embedded items
- a. Procedures for accurate placement of reinforcing steel, sole plates and inserts, etc.
9. Proportioning and adequate mixing of concrete
- a. List of all approved mix designs & applications
 - b. Description of mixing units, including manufacturer's recommended capacity
 - c. Procedures for producing concrete of uniform quality batch after batch
 - d. Description of maintenance and up-keep procedures
10. Handling, placing and consolidation of concrete
- a. Description of consolidation method (number and type of vibrators, consolidation zones)
 - b. Number of lifts during placement and placement procedures
 - c. Cold and hot weather concrete placement procedures
 - d. Timeliness of placement
 - e. Delivery (hauling and handling) methods
 - f. Finishing methods
 - g. Procedures to avoid cold joints in concrete placement
11. Curing
- a. Procedures and equipment used to cure the concrete
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- b. Procedures used when artificial heat is used in curing
- c. Equipment used to monitor curing temperatures
- d. Corrective action (methods & procedures)
- e. Form removal

12. Accurate detentioning procedure

- a. Single strand detentioning procedure (if used)
- b. Multiple strand detentioning procedure (if used)
- c. Draped strands detentioning procedure (if used)

13. Final finish, storing and transporting units

- a. Procedure for preparing and finishing facia girders
- b. Final finishing procedures
- c. Maintenance and upkeep of dunnage
- d. Overhang, tie down and protection procedures
- e. Notification for final inspection and approval

14. Record keeping

- a. Timeliness of documentation
- b. Samples of records kept
- c. Samples of forms used
- d. Availability of records and documentations

15. Problem resolution procedures

16. Repair procedure

- a. Minor repair
- b. Structural repair