

Materials & Tests Unit



2023 Concrete Batchers Yearly Assessment / On-Site Evaluation

Select one of the following:

- Assessment:** (Active Bachers: to Be Conducted Once Per Calendar Year, and email to [Roman Loshinskiy](#).)
- Evaluation:** (Batchers: to be conducted after Batch School, and email to [Curtina Reynolds](#) or [Sandra Williams](#))

| | |
|--|---------------------------------------|
| Batcher Name: | Assessment Date: |
| Batch Certification Number: | Certification expiration date: |
| For On-Site Evaluation School Date: | School Location |
| Producer Name & Location: | NCDOT State Plant # |

The batcher must successfully complete or demonstrate the correct operations with regards to NCDOT specifications and/or policies.

Operation

Trial 1
(Pass/Fail)

Trial 2
(Pass/Fail)

| | | |
|---|-------|-------|
| 1. Perform fine aggregate (FA) moisture determination: | | |
| Representative Sample obtained from area of use | _____ | _____ |
| Sample correct size | _____ | _____ |
| Wet weight correctly determined | _____ | _____ |
| Uniformly dried to consistent mass | _____ | _____ |
| Dry weight of sample correctly determined | _____ | _____ |
| Calculations correctly performed (Total and Free Moisture) | _____ | _____ |
| Ability to correlate moisture probe information according with actual | _____ | _____ |
| Ability to adjust moisture probe information in computer (if needed) | _____ | _____ |
| Ability to adjust FA moisture information in computer | _____ | _____ |
| 2. Perform coarse aggregate (CA) moisture determination: | | |
| Representative Sample obtained from area of use | _____ | _____ |
| Sample correct size | _____ | _____ |
| Wet weight correctly determined | _____ | _____ |
| Uniformly dried to consistent mass | _____ | _____ |
| Dry weight of sample correctly determined | _____ | _____ |
| Calculations correctly performed (Total and Free Moisture) | _____ | _____ |
| Ability to adjust CA moisture information in computer | _____ | _____ |
| 3. Complete moisture records into M&T form 250: | _____ | _____ |

- 4. How many times a day moisture tests should be performed: _____
- 5. Calculate moisture adjustments/Batch Weights
 - Cement _____
 - Pozzolan _____
 - Fine Aggregate _____
 - Coarse Aggregate _____
 - Water _____
 - Air Entraining Agent _____
 - Retarder _____
- 6. Demonstrate procedure for moisture adjustments prior to batching Operations (Adjust Pull Weights) _____
- 7. Routing duties:
 - a) Verify the producer & source (Mix Design / actual) for the following:
 - Cement _____
 - Pozzolan _____
 - Fine Aggregate _____
 - Coarse Aggregate _____
 - Water (Well or Municipal Source) _____
 - Admixture _____
 - b) Verify the compliance of each kind of material from the Mix Design and amount of appropriate material in batching system. _____
 - c) Determine maximum water allowed on NC DOT concrete: _____
 - d) Verify Max allowed slump: _____
 - e) Max/Min amount of concrete allowed to be batched into mixer (agitator) _____
 - f) Verify Truck Mixers (Agitators) doesn't have any wash water or any other materials in the drum _____
 - g) Keeping aggregate stockpiles above SSD condition all the time. _____
- 8. Batch Concrete _____
- 9. Complete the batch record M&T form 903: _____

(Circle One)

Overall Score (Pass or Fail): Pass/Fail Pass/Fail

Comments:

I certify that I have not helped, coached, or in any way interfered with the batcher during this Evaluation.

Evaluator: _____ Date: _____

| OFFICE USE ONLY | |
|---------------------------|--|
| Date Evaluation received: | |
| Date certificate granted: | |

Moisture Determination Worksheet

Fine Aggregate:

Trial 1

Time: _____

Wet Wt. _____ Minus Dry Wt. _____ = _____ X 100 = _____ % Total Moisture

Dry Wt. _____

Total Moisture _____ Minus Absorbed Moisture _____ = _____ % Free Moisture

Trial 2

Time: _____

Wet Wt. _____ Minus Dry Wt. _____ = _____ X 100 = _____ % Total Moisture

Dry Wt. _____

Total Moisture _____ Minus Absorbed Moisture _____ = _____ % Free Moisture

Coarse Aggregate:

Trial 1

Time: _____

Wet Wt. _____ Minus Dry Wt. _____ = _____ X 100 = _____ % Total Moisture

Dry Wt. _____

Total Moisture _____ Minus Absorbed Moisture _____ = _____ % Free Moisture

Trial 2

Time: _____

Wet Wt. _____ Minus Dry Wt. _____ = _____ X 100 = _____ % Total Moisture

Dry Wt. _____

Total Moisture _____ Minus Absorbed Moisture _____ = _____ % Free Moisture
