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| LOGO2LIN | | | | | | | | | | | **Concrete Air,** Slump and Quantity | | | | | | | | | | | | | | | | | | | | | |
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| Conc. Prod. No (6): | | | | |  | | | | | Concrete Code (7): | | | | | |  | | | | AEA (8): | | |  | |  | | |  | Route: |  |  | |
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| Prod. Name (9): | |  | | | | | | | | | | | |  | Prod. Location (10): | | | |  | | | | | | | |  |  | District: |  |  | |
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| Cement Prod (11): | | | |  | | | | | Cement Code (12): | | | |  | | | | | | | | Admixture (13): | | |  |  | | |  | Job No.: |  |  | |
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| Responsible Loc (14): | | | | | |  | | Lab (15): |  | | Lab Name (16): | | | | | |  | | | | | | | | |  | |  | Project: |  |  | |
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| SFX  (18) | Contract  Number  (19) | Job  Number  (20) | Design  Number  (21) | Date  Cast  (22) | Location  (23) | Water  Gal  (24) | Conc  Temp  (25) | Air Temp  (26) | Air  %  (27) | Slump inches  (28) | Type  Const  (29) | AEA oz/cwt  (30) | Admix oz/cwt  (31) | Qnty cuyd  (32) | Series  (33) | Result  (34) | Load  No.  (35) |
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| SFX | Contract  Number | Job  Number | Design  Number | Date  Cast | Location | Water  Gal | Conc  Temp | Air Temp | Air  % | Slump inches | Type  Const | AEA oz/cwt | Admix oz/cwt | Qnty cuyd | Series | Result | Load  No. |
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| Reported By (36): | |  | | | | |  | Remarks (37): | |  | | | Copies To (40): | | |  |
| (Printed Name and signature are required) | | | | | | |  | | | | | | | | |  |
| Tester (38): |  | | | | | |  | Agency (39): |  | | **C** (41): |  | |  | |  |
| (Printed Name and signature are required) | | | | | | |
| MISTIC INPUT | | | |  |  |  | | | | | | | | | /FOR DTY03654  BMPR MI654 (Rev. 11/01/12)  (Formerly MI 654) | |
| Date Entered (42): | | |  |  |  |  | | | | | | | | |  | |
| Initials (43): | | |  |  |  | | | | | | | | | | | |
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Printed

This form has instructions hidden in red. To view the hidden text, the “hidden text” option must be on. Select the Office button (upper left corner of your screen), select “Print”, select “Options” (lower left corner of the dialog box), select “Hidden text” (under the “Always show these formatting marks on screen” heading) and select “OK”. “Close” out of the print menu to view only. To print the hidden test, select “Print hidden text” (under the “Printing options” heading) and select “OK”.

**CONCRETE AIR, SLUMP AND QUANTITY**

**INSTRUCTIONS**

**BMPR MI654**

1. **I.D. NUMBER:** MISTIC test identification number. Leave blank because MISTIC will generate the test identification number.

2. **PROJECT IDENTIFICATION:** Enter the project identification.

3. **INSPECTOR NO.:** Identify the individual who took the sample. For split samples, the same inspector number should be used for both halves of the sample.

a) IDOT personnel enter their MISTIC inspector number.

b) Contractor, Subcontractor and Producer personnel enter a "9", followed by the District number and seven zeros (0's).

Example: 960000000 for District 6.

c) Consultant personnel enter their company’s MISTIC inspector number.

d) Local agency personnel enter a "9",followed by the District number, which is repeated until field is filled.

Example: 966666666 for District 6 local agency.

4. **DATE:** Enter the date the report is prepared as month, day, and year in mmddyy format.

Example: 103112

5. **SEQUENCE NO.:** Enter any combination of letters and/or numbers up to 6 characters in length. It is used to differentiate multiple samples of the same materials taken on the same day.

6. **CONC. PROD. NO.:** Enter the MISTIC code number for the concrete producer. Only one plant may be shown on one report. Example: 5362-05

7. **CONCRETE CODE:** Enter the MISTIC material code for the concrete mixture. Only one code number is allowed per report. The "M" in the material code signifies a metric mixture. The unit of measure for metric mixtures is cubic meters. All metric contracts should be using metric mixtures.

Enter 21601 or 21601M for a portland cement concrete mixture.

Enter 21605 or 21605M for a portland cement and fly ash concrete mixture.

Enter 21606 or 21606M for a portland cement and latex concrete mixture.

Enter 21609 or 21609M for a portland cement and microsilica concrete mixture.

Enter 21611 or 21611M for a portland cement and ground granulated blast-furnace slag concrete mixture.

Enter 21613 or 21613M for a portland cement and high reactivity metakaolin concrete mixture.

Enter 21614 or 21614M for a portland cement, fly ash, and high reactivity metakaolin concrete mixture.

Enter 21620 or 21620M for a fabric formed concrete revetment mat mixture.

Enter 21621 or 21621M for a controlled low-strength mixture.

Enter 21622 or 21622M for a portland cement, fly ash, and microsilica concrete mixture.

Enter 21627 or 21627M for a portland cement, ground granulated blast-furnace slag, and microsilica concrete mixture.

Enter 21628 or 21628M for portland cement, fly ash, ground granulated blast-furnace slag, and microsilica concrete mixture.

Enter 21629 or 21629M for portland cement, ground granulated blast-furnace slag, and high reactivity metakaolin concrete mixture.

Enter 21632 for a portland blast-furnace slag cement and fly ash concrete mixture.

Enter 21633 for an insertion lining of pipe culverts grout mixture.

Enter 21634 for a portland cement pervious concrete mixture.

Enter 21635 for a portland cement and fly ash pervious concrete mixture.

Enter 21636 for a portland cement and ground granulated blast-furnace slag pervious concrete mixture.

Enter 21637 for a portland cement and Type K concrete mixture.

Enter 21638 for a portland cement, fly ash, and Type K concrete mixture.

Enter 21801 or 21801M for a cement aggregate mixture II.

Enter 21803 or 21803M for a cement aggregate mixture II with fly ash.

Enter 22106 or 22106M for a concrete mixture which uses a rapid hardening cement from the Department’s Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs.

Enter 22107 or 22107M for a concrete mixture which uses calcium aluminate cement.

8. **AEA:** Air-entraining admixture. Enter the 5 digit MISTIC material code number for the air-entraining agent used. Refer to the IDOT Approved List of Concrete Admixtures.

9. **PROD. NAME:** Enter the name of the ready mix or jobsite plant.

l10. **PROD. LOCATION:** Enter the location of the ready mix or jobsite plant.

11. **CEMENT PROD.:** Enter the MISTIC code number for the plant that produced the portland cement. Refer to IDOT Approved List of Qualified Cement Plants.

Example: 4116-08

12. **CEMENT CODE:** Enter the 6 character MISTIC material code number for the type of cement used.

Only one code number is allowed per report.

Enter 37601M for Type I cement.

Enter 37603M for Type II cement.

Enter 37605M for Type III cement.

Enter 37608M for Type V cement.

Enter 37609M for Type II (MH) cement.

Enter 37701M for Type IS cement.

Enter 37703M for Type IP cement.

Enter 37901M for rapid hardening cement.

Enter 37902M for calcium aluminate cement.

13. **ADMIXTURE:** Enter, left justified, the last 3 digits of the MISTIC material code number for the admixture(s) being used. Refer to the IDOT Approved List of Concrete Admixtures. A total of 3 different admixtures may be entered. For example, if a superplasticizer, a retarder, and a corrosion inhibitor are used, the entry may read:

Example: 738758725 for Melment, Recover, and DCI.

14. **RESPONSIBLE LOC.:** Enter the District identification number as a “9” followed by the District number. Example: 96 for District 6

15. **LAB:** Enter the 2 letter MISTIC lab code.

Laboratory Locations MISTIC Lab Codes

Producer Plant Site Laboratory PP

Producer NonPlant Site Laboratory PL

Producer Construction Site PC

Independent Plant Site Laboratory IP

Independent NonPlant Site Laboratory IL

Independent Construction Site IC

Independent Laboratory IN

IDOT/Local Agency Plant Site Laboratory FP

IDOT/Local Agency Construction Site FC

NOTE**:** A Contractor, Subcontractor, and Producer are to use one of the “Producer” lab codes.

An IDOT Consultant, Contractor Consultant, Subcontractor Consultant, and Producer Consultant are to use one of the “Independent” lab codes.

16. **LAB NAME:** Enter the name of the company which cannot exceed 20 characters.

17. **TYPE TEST:** See below for the correct 3 letter designation. For additional information see Attachment 4 in the Project Procedures Guide.

**AGENCY** **QC/QA** **NON QC/QA**

Contractor/Producer/

Consultant PRO -----

IDOT/Consultant IND (split), INV ACC

ACC = Acceptance

IND = Independent Assurance

INV = Investigative

PRO = Process Control

18. **SFX:** Suffix. Leave blank because MISTIC will generate the MISTIC test identification number suffix.

19. **CONTRACT NUMBER:** Enter the 5 digit contract number. If it is a local agency contract without a 5 digit number, then enter the 16 or 17 character MFT (Motor Fuel Tax) contract number.

20. **JOB NUMBER:** Enter the 8 character job number that corresponds with the 5 digit contract number. If the contract number is not 5 digits, leave this field blank.

21. **DESIGN NUMBER:** Enter the 9 character mixture design number assigned by the District, for the concrete mixture being used. Example: 86PCC1234

22. **DATE CAST:** Enter the date of the pour as month, day, and year in mmddyy format.

23. **LOCATION:** Enter the location of the pour such as abutment, pier footing, sidewalk, etc. Station number may be shown. The field is 15 spaces long. For "IND" tests the sample comparison information should be entered in this field.

For “IND” inspection, a comparison remark is required for slump and air content, because the assurance test is from a split sample. For an acceptable comparison, enter the following:

• Enter “C” when tests compare within acceptable limits of precision.

• Enter date of comparison.

• Enter initials for “IND” inspector.

• If the sample was witnessed by the “IND” inspector, indicate as “ws”.

Note: The sample should always be witnessed.

• Example: C - 100197 TCS ws.

For an unacceptable comparison, enter the following:

• Enter “X” when tests do not compare within acceptable limits of precision.

• Enter date of comparison.

• Enter initials for “IND” inspector.

• If the sample was witnessed by the “IND” inspector, indicate as “ws”.

Note: The sample should always be witnessed.

• Explain reason for unacceptable comparison under “Remarks”.

• Examples are: Contractor obtained sample incorrectly; IDOT equipment required repair; Contractor performed test method incorrectly; Problem was not identified, will investigate further if problem continues.

* Example: X - 100297 TCS ws Contractor performed test method incorrectly.

24. **WATER:** Enter the total liters of water per cubic meter (gallons per cubic yard) of concrete. This includes mixing water, free moisture in the aggregates and water added at the jobsite. The quantity must be between 0.0 and 999.9 liters (gallons).

(Note: Water in admixtures and water used to rinse the discharge opening of a truck mixer should be included, if significant. Refer to Section 5.6 “Water-Cement Control” of the PCC Level II Technician Course manual for additional information.)

25. **CONC. TEMP.:** Enter the concrete temperature. It must be between 0.0 and 99.9 degrees Celsius (Fahrenheit).

26. **AIR TEMP.:** Enter the air temperature. It must be between 0.0 and 999.9 degrees Celsius (Fahrenheit).

27. **AIR %:** Enter all final results of air tests. It must be between 0.0 and 99.9 percent.

28. **SLUMP:** Enter all the final results of slump tests. It must be between 0.0 and 999.99 millimeters. Round to the nearest 5 mm (1/4 inch).

29. **TYPE CONST.:** Enter the 2 letter code for the type of construction.

|  |  |  |  |
| --- | --- | --- | --- |
| MISTIC Code |  | Construction Type | |
|  |  | |  |
| 01 |  | | PCC Base Course |
| 02 |  | | PCC Base Course Widening |
| 03 |  | | PCC Curb |
| 04 |  | | PCC Gutter |
| 05 |  | | PCC Combination Curb & Gutter |
| 06 |  | | PCC Step Curb & Gutter |
| 07 |  | | PCC Hub Guard & Gutter |
| 08 |  | | PCC Paved Ditch |
| 09 |  | | PCC Median |
| 10 |  | | PCC Pavement |
| 11 |  | | CRCP Pavement |
| 12 |  | | PCC Railroad Crossing |
| 13 |  | | PCC Sidewalk |
| 14 |  | | PCC Slope Wall |
| 15 |  | | Structures\* |
| 16 |  | | Bridge Deck |
| 17 |  | | Pavement Patching |
| 18 |  | | Bridge Deck Patching |
| 19 |  | | Precast Deck Slab |
| 20 |  | | Precast Prestressed Beams |
| 21 |  | | Headwalls |
| 22 |  | | Handrail |
| 23 |  | | Seal Coat |
| 24 |  | | Precast Piling |
| 25 |  | | Precast Prestressed Piling |
| 26 |  | | Pneumatic Concrete (Shotcrete) |
| 27 |  | | Bridge Deck Concrete Overlay |
| 28 |  | | Latex Concrete |
| 29 |  | | PCC Shoulders |
| 30 |  | | Sub-base |
| 31 |  | | Incidental |
| 32 |  | | CLSM for Backfill |

\* This item includes foundations such as drilled shafts, repairs such as formed concrete repair, bridge approach slab, and the “bridge approach footing” beneath the bridge approach slab.

30. **AEA:** Air-entraining admixture. Enter the dosage of the air-entraining admixture used. It must be between 0.0 and 9999.9 ml/100 kg (oz./cwt) of cement and finely divided minerals.

(Note: The completion of this field is a District option. Consultants need to verify with the District on the need to complete this field.)

31. **ADMIX:** Admixtures. Enter the dosage of any other admixture used. Must be between 0.0 and 9999.9 ml/100 kg (oz./cwt) of cement. If more than one admixture is used, the total combined dosage is entered in this field. The individual dosages can be written in the remarks.

(Note: The completion of this field is a District option. Consultants need to verify with the District on the need to complete this field.)

32. **QNTY.:** Enter the total quantity of the day's pour on the first test of the day. Round up to a whole cubic meter (cubic yard).

33. **SERIES:** Enter the 6 letter and/or number combination, assigned to the beam or cylinder series.

Example: 1P-A = Contractor 762 mm (30 in.) beam to be broken at 7 days.

1P-B = Contractor 762 mm (30 in.) beam to be broken at 14 days.

1P-C = IDOT 762 mm (30 in.) beam to be broken at 14 days.

Enter as “1P”, and not as “1P-A”, “1P-B”, and “1P-C”. If the A, B, C letter

designation is included, MISTIC would interpret this as 3 series instead of

1 series with 3 beams. The beams are differentiated by age in BMPR MI655.

(NOTE: Use same series designation for BMPR MI655.)

34. **RESULT:** Enter "APPR" for approved tests, "FAIL" for failures and "INVL" for invalid tests. All failures must have remarks detailing the action taken to address the failure. For example, retest, checked equipment, test method incorrect, will monitor.

35. **LOAD NUMBER:** Enter the load number that applies to the tests.

36. **REPORTED BY:** Print the name of the individual who completed the report. The individual's signature is also required.

37. **REMARKS:** Enter any remark that pertains to the report.

38. **TESTER:** Enter the name of the individual(s) who performed the slump and air content tests.

39. **AGENCY:** Enter the tester's employer.

40. **COPIES TO:** Enter the distribution of this report. QC/QA - The original goes to the District Materials Engineer. A copy goes to the Resident Engineer and the file copy goes to the QC Manager. Non-QC/QA - Same as above except that the file copy stays with the tester or the individual who completed the report.

41. **C:** MISTIC convert flag for English data. If the data on the form is in English units, then mark "Y" and the MISTIC system will convert it to metric values (except for quantity). If the data on the form is in metric units, then leave blank. All test data that is stored in MISTIC must be metric.

42. **DATE ENTERED:** Leave blank. IDOT will enter the date the results are entered into MISTIC as month, day, and year in mmddyy format.

43. **INITIALS:** Leave blank. IDOT will enter the initials of the person entering the test results into MISTIC.