Concrete Sample Records

1. Navigate to Sample Records under the Inspector component and click on the link
2. Select the white component arrow on the blue component ribbon
    a. Located next to the Save button
3. Select the **Add** link

The General Tab

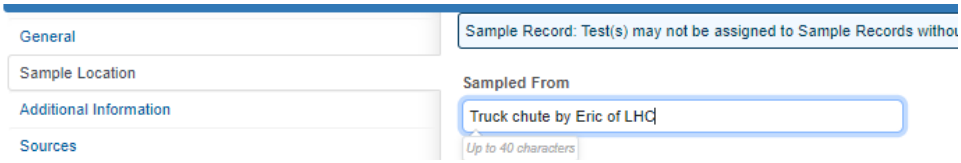
4. Enter the **Sample Date**
    a. This is the date the sample was obtained and tested
5. Enter in the **Material Code – Name**
    a. User can use the first 3 numbers of the material code if known
    b. User can start typing the name of the type of the material or
6. Enter in the **Witnessed by**
    a. This is by user last name
    b. If the user is completed the record for another inspector, the other inspector's name needs to be used
7. In the **Specimen(s) Number**, enter the lot number and specimen information
    a. Numbering is extremely important with concrete
    b. Verify that the numbering is correct for the **classification** of concrete the record represents
    c. Example:
        i. Lot 1, T1-3, S 1-8 (Lot 1, tests 1-3, specimens 1-8)
8. Enter in the **Intended Use**
    a. This information is what the sample represents
        i. Curb/gutter, Sidewalk, Roll curb, Special Design, ect
9. Enter the **District/Area**
    a. This is where the user is from, not where the sample is going
10. **Control Type and Control Number** can be used, but it is not a requirement.
    a. User can use this to track a lot number
11. Enter in any **remarks** as appropriate.
    a. It should be noted any time a truck was rejected, air content was low, ect
    b. Multiple rows can be used
12. Navigate to the Sources/Facilities tab.

Sources/Facilities Tab

13. Click on the Sources/Facilities Tab
14. Click on the **Select Primary Source** button
15. In the search box, enter in the source the material is coming from
    a. User can place the cursor in the box and hit enter or click on the Show first 10 link
16. Click on the **Add to Sample Record** after choosing the supplier
17. Save

Sample Location Tab

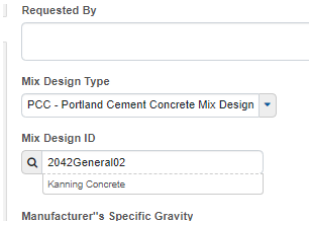
18. Click on the Sample Location Tab
19. Fill in the information in the **Sampled From** field
    b. This needs to be filled out every time
    c. This documents where the material was sampled



20. Save

Additional Information Tab

21. Select the Additional Information Tab
22. Click on the **Mix Design Type**
23. Select **PCC – Portland Cement Mix Design**
    d. Used for all concrete classifications
24. Enter in **the mix design number** for the classification of concrete being tested.
    e. If unknown the mix design, verify with the District/Area Lab, the FOP or the contract shared drive folder.
    f. If the mix design does not populate, enter the mix design ID in the Remarks Section on the General Tab. Let the lab be aware that the mix design is not populating. The lab can check and make sure that the mix design has been approved for use.
    g. Concrete should not be placed with out an approved mix design



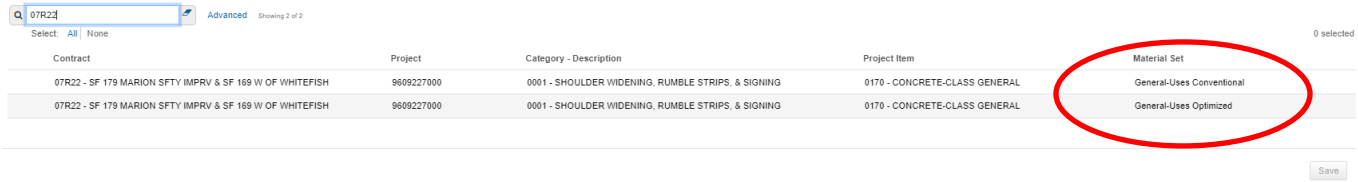
25. Save

Destination Lab(s) Tab

26. Select the Destination Lab(s) tab
27. Select **New**
28. Enter in **the date of the test**
    a. This is the date is the same date that the sample was obtained
29. Click on the **Lab Name** and enter **FIELD CREW**
    a. This is the chain of custody. This allows for sample tracking
    b. Field Crew has to be added if they tested or sampled the material
    c. Tests are populated based on the lab information on this screen
    d. The date that needs to be populated is the date of the sample
30. Click **New** again
31. Enter in the date that the cylinders are being given to the lab
32. Under the Lab Name field, enter in the the lab name for the lab that the cylinders are going to
    a. If cylinders are being routed through the District/Area lab for testing, the lab that the cylinders are going through MUST be added
        i. ***Example: If a set of cylinders are being broken in Helena, and they are being given to Missoula lab to ship, then Missoula Lab should be on this tab along with the field crew***
33. Save

Contract Tab

34. Select the Contract Tab
35. Click on the **Select Contract Project Item** button
36. Enter in the contract number this sample is referenced to
37. Select the correct item(s) that this sample represents
    a. Note: There will be 2 material sets for each item that has that specific material code.
    b. On the right side of the row, it will show the material set for that bid item
        ii. If user is unsure if the mix design is **Conventional** or **Optimized**, verify with the D/AL or FOP. It is extremely important that the correct item is chosen. This material is evaluated in QA for incentives/deducts.

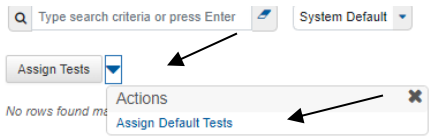


38. Click the **Save Button**
39. Select the **>** next to the Contract to expand the row
40. Enter in the **Represented Quantity**
    a. This is the Measured quantity. Not the amount on the batch ticket
    b. Note the Unit of Measure on the right side

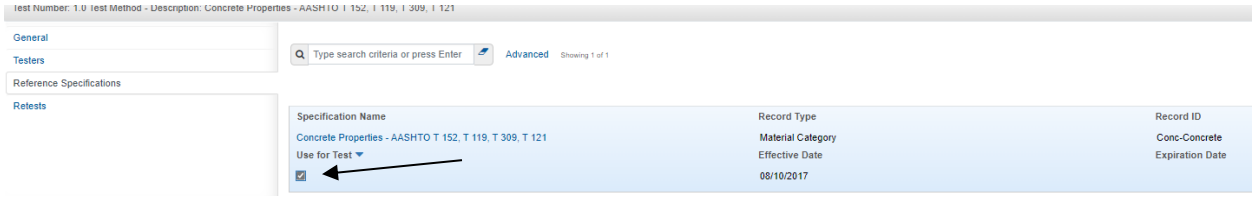
41. Enter the Station(s) in the Remarks section
42. Save

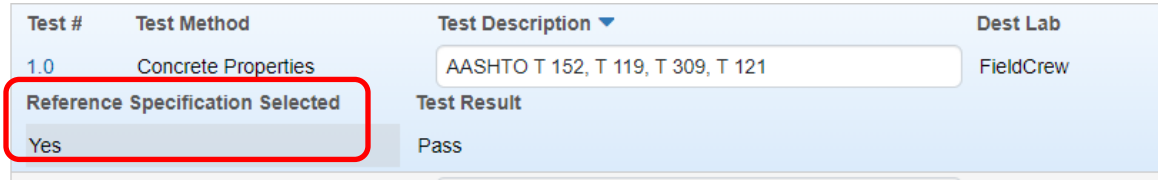
Test Tab

43. Select the Test Tab
44. Click on the Blue drop arrow next to Assign Tests and select **Assign Default tests**



45. Click on the **1.0** on the Concrete Properties field crew test
46. Add in the date tested in the **Test Start Date**, **Test Completion** and **Due date** fields
    a. These dates should be the same since the sample is collected and tested for properties the same day.
47. **Reference Specifications** Tab
    Verify that the **Use for Test** checkbox is checked
    b. If this checkbox is not checked, click on the checkbox. Reference data will not populate if this box is not checked
    a. Contracts let after August 18th, 2023 should have the reference specifications coming in automatically.
    b. It good practice to verify that the reference spec checkbox is checked





48. Save
49. Click on the white drop arrow on the blue component ribbon
50. Select the **MDT Concrete Properties** agency view
51. Fill out the agency view data fields with the testing information
    a. The checkbox for Performed with Cylinders **only** needs to be checked if cylinders were created with that specific Concrete Properties information

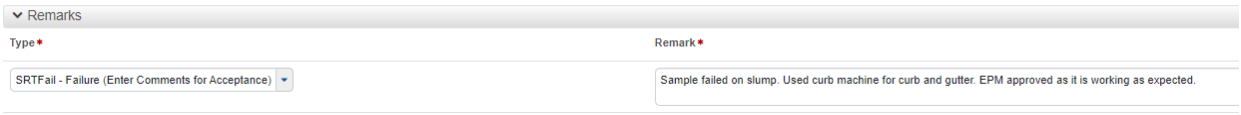
b. If it is a properties only test (following the 551 section of the spec book and/or 601 section in the Materials Manual) then the checkbox does not be checked

52. Enter **a Result Value** of Pass or Fail
53. Save

Click on the **Same Record Test Quick link** under the Home Button

Sample Record Test Summary

54. Navigate to the **Remarks** section if applicable
    a. If something has failed in the testing, then a remark has to be added specifying why the sample is still going to be used.
    b. Use the Remark type of **SRTFail (Enter Comments for Acceptance)**
        iii. These comments will show up on the report MICO uses



55. Save
56. Click on the white drop arrow on the component ribbon
57. Select **Mark test Complete**
58. Let the FOP/EPM be aware that it is ready to be level 2 authorized
    c. The FOP will get a notification after 30 days if it is not level 2 authorized
    d. Best practice is to mark tests complete when they are finished to save time later

Note: If the reference specification was not verified or checked prior to the user entering the agency view, the specification data for the material code will not populate. The agency view will need to be cleared first.

To clear the usage data:

- Inside of the agency view, navigate to the white drop arrow on the blue component ribbon.
- Select **Clear Usage Data**.
    - This will take the user to the Sample record Test Summary and allow the user to mark the reference spec checkbox. Follow steps 45 – 47

Notes:

In 2022, an enhancement to AWP allowed the user to enter multiple test runs into a single sample record and count towards the test requirements without the need to make another sample record for a properties only test. All concrete properties are added to 1 record for the day. The exception is if the day's pour *exceeds* the lot requirements. If it exceeds the lot requirements, then a new record will need to be completed. See the Materials Manual 601 section and/or 501 & 551 sections in the spec book.

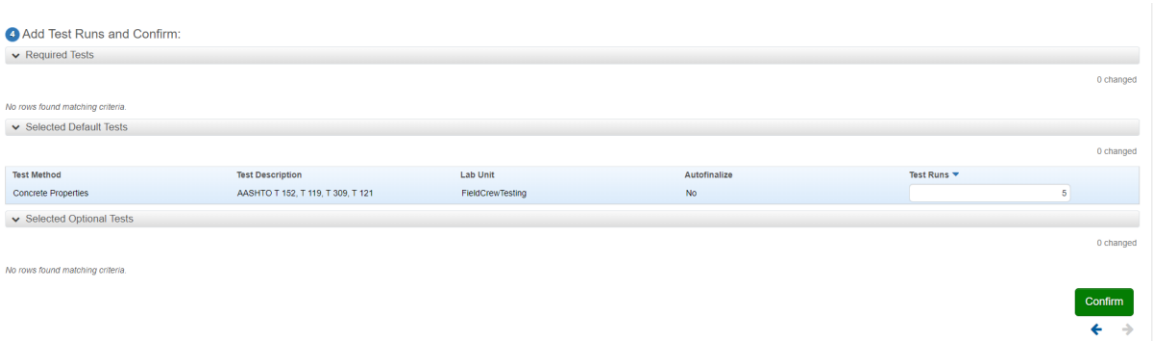
To add a new test run:

When a Test is already assigned on the sample record:

a. Click on the blue drop down on the row
b. Select **Add Test Run**
c. Follow the above steps to complete the testing data

When the test has not been assigned to the sample record:

d. Click on the **Assign Tests Button**
e. Use the blue -> on the bottom right corner to navigate through the pages
f. Click on the Default test for Concrete Properties – **FieldCrewTesting**
g. Click the -> until the user gets to the Confirmation page.
h. Enter in the number of required of test runs
i. Click the Green Confirm button



- **In 2021, the Materials Manual 601 section, calls out that 2 sets of cylinders are to be made per lot unless it is less than 30 cubic yards. Both sets of cylinders only need 1 record unless the amount poured for the day exceeds the lot requirements.**

MATERIAL/ MATERIAL CODE	TESTS	SAMPLE SIZE	SAMPLE/TEST FREQUENCY	FIELD	DISTRICT/ AREA LAB	MDT HQ LAB	NOTES
CLASS GENERAL CONCRETE 551.03.02.02	AASHTO R 60 SAMPLING FRESH CONCRETE	REFER TO TEST FOR SIZE		SAMPLE			
	MT 101 COMPRESSIVE STRENGTH CYLINDERS	1 CU FT (0.03 M^3)	MINIMUM OF 2 SETS PER LOT (200 YD^3 (150 M^3) OR EACH DAY'S POUR WHICHEVER IS LESS)	SAMPLE		TEST	1 SET MAY REPRESENT POURS OF 30 YD^3 (23 M^3) OR LESS [551.03.8(B)(1)(a)]
	AASHTO T 152 AIR CONTENT	1 CU FT (0.03 M^3)	ONE TEST EVERY 24 YD^3 (18 M^3) AND WHEN COMPRESSIVE STRENGTH CYLINDERS ARE MADE	SAMPLE TEST			INCLUDE IN QA
	AASHTO T 119 SLUMP						TEST EACH LOAD WHEN INCONSISTENT OR FAILING TEST RESULTS ARE ENCOUNTERED
	AASHTO T 309 TEMPERATURE OF FRESHLY MIXED CONCRETE						
	AASHTO T 121 UNIT WEIGHT						FOR INFORMATION ONLY
	INDEPENDENT ASSURANCE (PROCEDURAL CHECK)			FIELD	DISTRICT/ AREA LAB	MDT HQ LAB	NOTES