

Quick Reference Guide

Last Modified: 06/25/2007 03:02:56 PM
Reviewed for Version: SiteManager 3.7

SUPERPAVE - Create Mix Design (Long version)

By Policy, the creation and authorization of asphalt mix designs is the responsibility of the Materials Division. Creating a SUPERPAVE Mix Design requires several main steps. First a mix design is created in the SUPERPAVE Mix design windows. Second, a sample record is created for the purpose of attaching a spreadsheet used for reports. This QRG documents every step and essentially every keystroke necessary to create a SUPERPAVE mix design from scratch. Included are basic windows procedures for navigating between different windows and areas within SiteManager.

As part of this mix design documentation and approval process in SiteManager, it is most essential that the user verify that all selected Producer/Suppliers are currently approved to supply the materials used in the mix design. Except under unusual circumstances; (experimental evaluation of a new product for example) Approving a mix design that uses non-approved sources is a serious violation of Department policy.

First: Create the Mix Design:

1. Navigate to Materials Management > Mix Design > SUPERPAVE Mix Design
2. Click the open icon to display a list of existing mix designs.
3. Click in the mix ID column header to sort.
4. Locate the group of existing mix designs from the Qualified Lab. Determine the sequence number for the year. Write this down, you will need it later for the proper naming of the mix design.
5. Click cancel.
6. Click the New Icon.
7. Input the Mix ID. Consult the Policy and Procedure for the proper naming convention of SUPERPAVE Mix designs. <tab>
8. Right click in the Material Code window and choose search. Select the correct Material code by clicking on the correct line and choosing OK. Most asphalt mix material codes begin with asco_ __. <tab>
9. Select the correct Producer/Supplier. Hint: This is a long list. Clicking in the Producer Supplier Type column header will sort alphabetically, bringing 'ASPH' to the top of the list. You can do the same thing in the Producer Supplier Name column to sort all Producers by their name. <tab>
10. If the Qualified Lab submitting the mix design has its own name or number for the mix design, input that into the Designer Name Window. <tab>

11. Choose AC Type from the dropdown list. <tab>
12. Choose Mix Type from the dropdown list. <tab>
13. The Effective Date defaults to current date. This can be changed prior to saving.
14. Review all inputs. Review the mix design ID for proper naming convention. Correct any errors. Screen should appear similar to:

SUPERPAVE Mix Design Description

Description Properties Materials Gradations

Mix ID: s4pv0160600100

Material Code: asco012 Asphalt Concrete, Type S4 (PG 64-22 OK)

Producer Supplier Code: m00555 Circle "S" Paving

Designer Name: 3074-OAEST-06011

AC Type: PG 64-22 OK

Mix Type: Insoluble

Effective Date: 02/08/07 Termination Date: 00/00/00

Approved Date: 00/00/00 Approved By User ID:

- 15.
16. Click the Save Icon.
17. **Click on the Properties Tab.** Specific information (listed below) will be input in this window to document certain mixture properties.
 1. N (Design)
 2. N (Initial)
 3. N (Max)
 4. Specimen Weight
 5. Aggr. Correction Factor (IOC)
 6. VMA %
 7. AC. Gravity
 8. Gse
 9. Gsb

SUPERPAVE Mix Design Properties

Description **Properties** Materials Gradations

Mix ID: s4py0160600100

N (Design): N (Initial): N (Max):
 % Gmm @ N (Init): % Gmm @ N (Max):

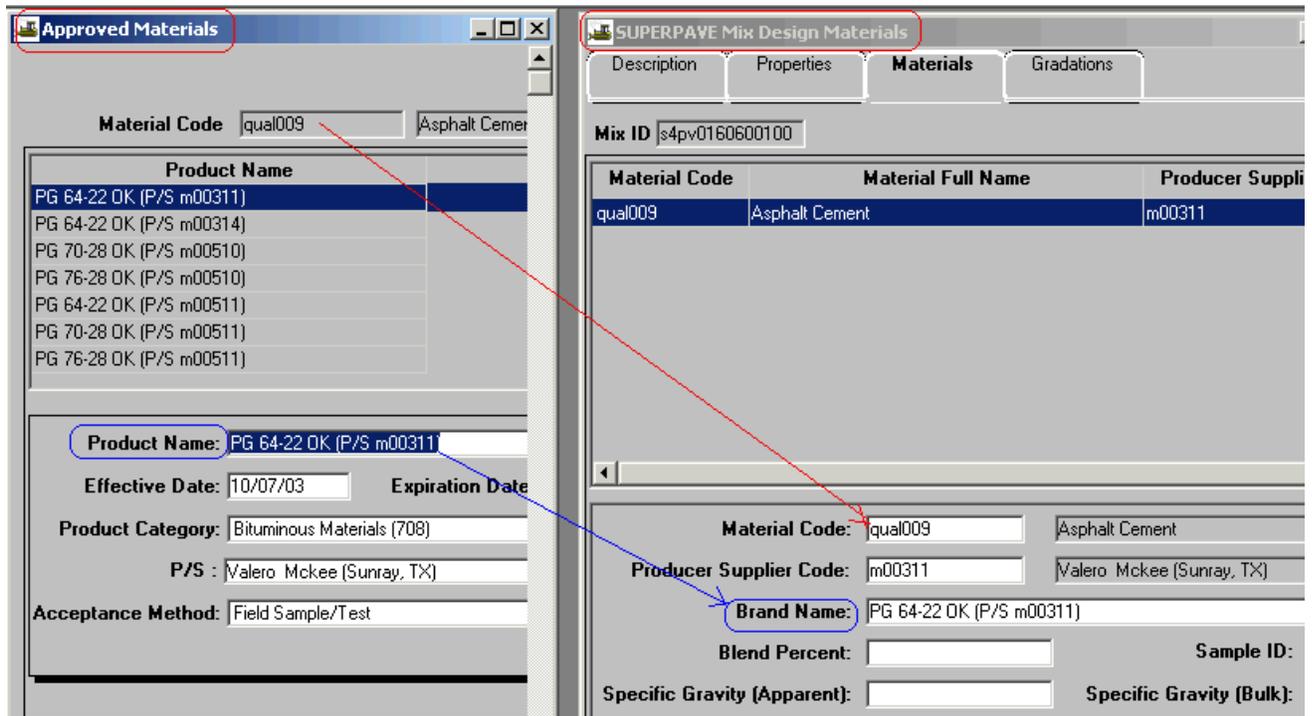
Results Recorded @ N (Design)

Specimen Weight:
 Aggr. Correction Factor (IOC): AC, Gravity:
 VMA %: Gse:
 Lottman TSR: Gsb:
 Maximum Specific Gravity: Sand Equivalent:
 Mixing Temperature: Spaces
 Compaction Temperature: Spaces
 High Air Temperature: Spaces

10.

18. **Click on the Materials Tab.** Information will be added in this window to document all of the materials in the mix (binder, aggregate, additives, mix)
19. Right click in Material Code window and select the proper material code for the Asphalt Binder. <tab>
20. Select the Producer/Supplier of the Binder. <tab>
21. In the Brand Name window, input the product name exactly as it appears on the Approved Materials List for qual009. It is strongly recommended to follow the procedure below, utilizing the Windows Tile feature to view the Mix Design Windows and Approved Lists windows side by side (copy and paste from the Approved Materials Window is not available with inquiry access).
 1. Click on SiteManager Panel icon (upper left) 
 2. Navigate to: Materials Management > Approved Lists > Approved Materials.
 3. Click in the Windows Menu and select Tile. (the mix design and approved Materials windows should now display side by side).
 4. In the Approved Materials Window, select the qual009 Material Code.
 5. Scroll through the list and select the correct grade and P/S combination. (Refer to the Binder information displayed in the mix design window to pick the correct P/S and grade combination in the Approved Materials Listing).
 6. When the correct Product Name is highlighted, Click in the mix design window > Brand Name field, and enter the Product Name exactly as displayed in the Approved Materials Window.

7.



22. Do NOT enter a blend % for the binder. You are finished with binder material entry.

23. Review for errors. Click the Save Icon.

24. Click the New Icon to add additional materials.

25. Input the Anti-strip additive information (if used).

1. Right click in Material Code window and select addi003. <tab>

2. Select correct Producer/Supplier (P/S) of the additive. <tab>

3. To find P/S of additive, you will need to navigate to the P/S Materials window.

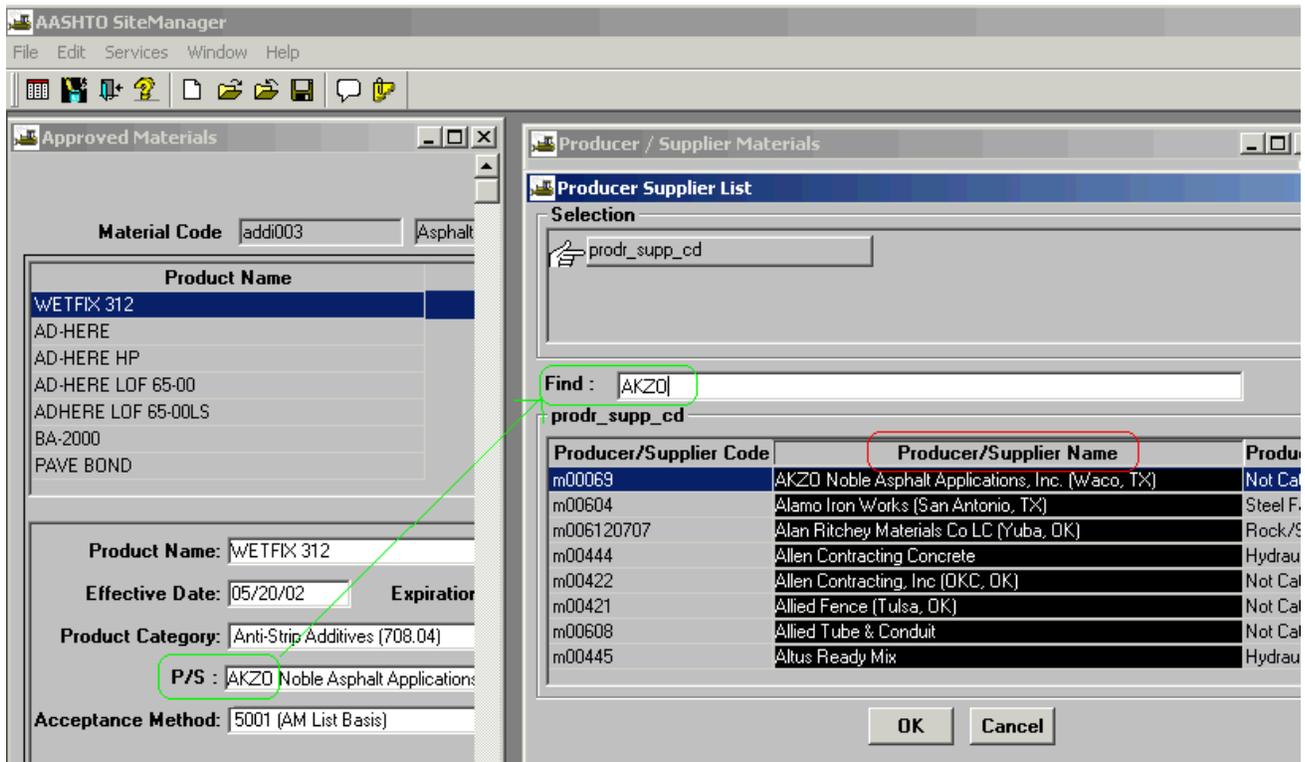
4. Click on the SiteManager Panel Icon. 

5. Choose Producer/Supplier Materials

6. Click in the Producer/Supplier name column, then type in the name of the source (from the approved list) in the Find window.

7. Make a note of the Producer/Supplier Code. You will need this later.

8.



9. Click back into the Approved Materials Windows Menu.

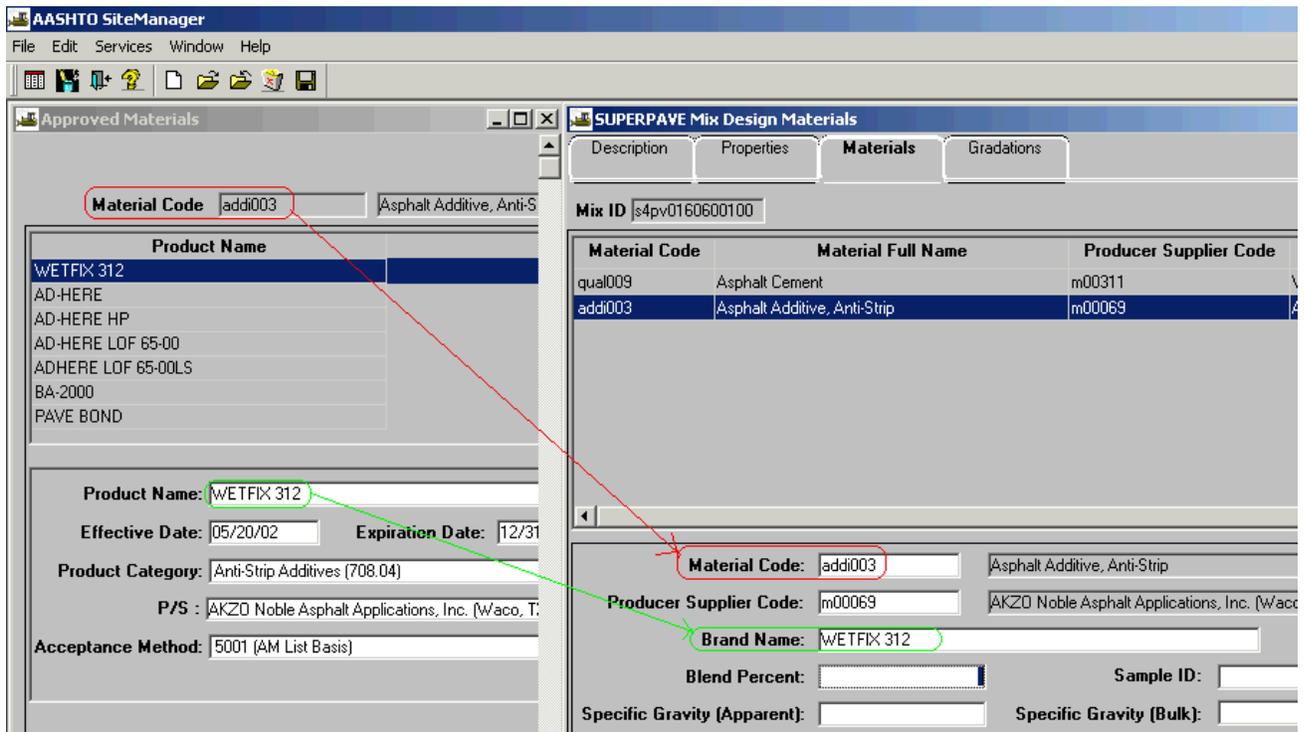
10. Click the Open Icon.

11. Scroll through list and select addi003.

12. Scroll through list of approved addi003 additives and select the Product Name being used. This should highlight the Product Name in the lower window.

13. Click back into the Mix Design Window > Brand name field, and enter the Product Name exactly as displayed in the Approved Materials Window.

14.



15. You are through with additives, review for errors. Click the Save Icon.

26. Now it is time to add the Aggregate Sources. Click the new icon.

27. Input aggr066 in Material Code window. <tab>

28. Select the P/S of the aggregate. <tab>

29. In the Brand Name window, input Material Name. (Example: 3/4" chips, manufactured sand, #57 aggregate, RAP, etc.) <tab>

30. Input Blend % of the aggregate.

31. Review for errors. Click Save.

32. Repeat steps 23 - 28 for each aggregate source used in the mix design; aggr067, aggr068, aggr069, aggr070, etc.

33. Now it is time to add one additional material code to the mix design. It is in this material that you will later associate to a sample record containing the rest of the mix design information.

1. Click the new icon.

2. Select the exact same material code as was selected on the Description tab, asco_ _ _ . (Navigate back to the description tab to verify) <tab>

3. Select the exact same P/S code as was selected on the Description tab. <tab>

4. In the Brand Name window, input, "Sample Information Record".

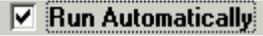
5. Click the Save Icon.
34. **Navigate to the Gradations Tab.** Here you will input the JMF and production tolerances.
35. Currently there is only one effective date defined. Click OK.
36. If the sieve sizes don't appear to be "stacked" correctly, click in the Sieve Size column header to sort. Click *Ctrl+f* to Refresh.
37. Click in the first sieve value, enter the JMF value. <tab>
38. Enter the Min and Max tolerances. (JMF value + and - standard tolerances, usually both are 100 on the largest sieve).
39. Use Tab key to navigate all the way through the sieves. Be sure to enter the Binder content and tolerances.
40. Review data. Click save icon.
41. You have finished creating the SiteManager Mix Design information. Now it is time to create a sample record.
42. Click the SiteManager Panel icon.
43. Navigate to Materials Management > Sampling & Testing > Sample Information.
44. Click the Open Icon.
45. Click in the Sample ID column header to sort.
46. Find a similar sample and click OK to open it.
47. Copy this sample by; going to the services menu > copy sample.
48. A duplicate of the sample will open with a blank sample ID. In the Sample ID window, name the sample following the sample ID naming convention defined in the policies and procedures exactly. ie: 93SSSSYYMMDDHHMM. <tab to the status field>
49. In the status field, select 4b: Information Only. (Hint, press the 4 key twice) <tab>
50. In the date field, enter todays date: MM/DD/YY
51. Smpl type should already be "Document". If not, select Document.
52. Acpt Method should already be "Materials Division". If not select Materials Division.
53. Look at the Material Code and description closely. If it is not the same as selected in the front tab of the mix design window, select the correct Material. (Hint, you should navigate back to the mix design window by going to the window menu to verify)
54. Look at the P/S and description closely. If it is not the same as selected on the front tab of the mix design window, select the correct P/S.

55. Click in the Intd Use Field and enter the SiteManager Superpave Mix ID, exactly as shown in the Mix Design Window.

1. Click on the Window menu.
2. Choose SUPERPAVE mix design.
3. Click on the Description tab.
4. Right Click in the Mix ID box and choose Show Details. This will open a green box with the mix id in it.
5. Highlight the mix id in the green box, and copy (ctrl + c).
6. Navigate back to the sample record using the window menu > Maintain Sample Information. (or use Window > Tile)
7. The cursor should be in the Intd Use field. Paste (Ctrl + v).

56. Review everything carefully for errors.

57. **Now is a good time to attach any documents (.pdf) to the sample record.** (Follow instructions exactly or the attachment will not open for others)

1. Click on the Attachments Icon. 
2. Choose the OLE Icon. 
3. The "Insert Object" Window will open. Make sure you are on the "Create New" Tab.
 - a. Double Click on the *Adobe Acrobat 7.0 Document* Selection.
 - b. Navigate to and select the file you wish to attach.
4. The "OLE Attachment" Window will open.
 - a. Input a name for the file. (use the mix design ID for the Name).
 - b. Input a Description.
 - c. Select the Add All Button. 
 - d. Click on the Run Automatically button. 
 - e. Click the Add Button
5. Click the Save Icon.

58. Now you need to associate this newly created sample record with the mix design.

59. Click on the Basic Sample Data Tab.
60. Right click in Smpl ID to open up green box.
61. Highlight the sample ID, copy using ctrl + c.
62. Navigate to the Mix design window: Go to Window menu > SUPERPAVE Mix Design Description.
63. Make sure you are in the correct mix design.
64. Click on the Materials Tab.
65. Click on the line with the asco _ _ _ material code.
66. Click in the sample ID window.
67. Paste sample ID using ctrl + v.
68. The Mix Design that you have just created and the sample information record you have just created will need to be reviewed and approved/authorized by someone. Let that person know you have a mix design ready for them to review and approve.

Revisions:

2/9/2007: Deleted all information pertaining to the C93001 template. Added a section on the properties folder tab and adding an attachment to the sample record. Added several screen shots illustrating proper documentation. Added language discussing the critical need to verify that Producer/Suppliers are approved to supply the materials in the design. Made a copy of the original QRG and archived in the "Drafts" section of the Policies and Procedures.

6/25/2007: Added specific language and instructions for attaching an OLE to the sample record (step 57).