SUPERPAVE Mix Design Window

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SUPERPAVE Mix Design Window Description

SUPERPAVE Mix Design window allows for the addition, modification, and approval of Marshall Mix Designs. A SUPERPAVE Mix Design may not be changed if it is approved. The test results on this window are used by SiteManager for comparison. A SUPERPAVE Mix Design may also be downloaded for a specific contract.

The SUPERPAVE Mix Design window has a copy function located under Services on the Description folder tab. The user will be able to open up an existing mix design and copy all the details on the existing SUPERPAVE Mix design to a new SUPERPAVE Mix Design and assign a new Mix ID. The copy functionality will copy all the values of the Descriptive tab, Properties tab, Material tab and Gradation tab data. The copy functionality will assign the Effective Date as the current system date on the new mix design. The Termination Date will be blanked out. The Approved Date and Approved By User ID fields will be cleared even if the original mix design had been approved. The user will have to save the data with the new Mix ID to view or change the data of Material tab or Gradation tab.

If the user changes the Material Code on the Description tab and there is Gradation data for that Mix Design ID then a message will be displayed prompting the user that the Gradation data associated to the mix will be deleted and based on users choice the new material code will be accepted and the Gradation data will be deleted.

The search lens on the Materials Tab - Sample ID field will display all the samples if the current user group is the same as assigned to the ‘Limited Access Sample Group’ or ‘Limited Access Standalone Group’ System Operational Parameter. The samples locked in “Limited Access” will be excluded from all other user groups.

Procedure

In KYTC, population of table data related to this window’s records shall only be done via the Spreadsheet Applet. All SUPERPAVE Mix Designs successfully imported via the Applet will be automatically approved. Any changes necessary to the data will need to be done by using the “replacement” function available with the Spreadsheet Applet. Please refer to the following procedures for details on the spreadsheets populating this data:

- Procedure - SUPERPAVE Mix Design Hand Out for Applet

DESCRIPTION FOLDER TAB

Description Folder Tab Description

The primary high-level mix data is entered or updated on this tab.

Procedure

Refer to individual Applet Spreadsheet procedures referenced above.

Field Table

Field Name	Description	KYTC Population Policy & Procedure
Mix ID	The ID for the SUPERPAVE mix.	Refer to individual Applet Spreadsheet procedures referenced above.
Material Code	The transportation agency-defined ID for a material. This is the material code for the SUPERPAVE mix.	Refer to individual Applet Spreadsheet procedures referenced above.
Producer Supplier Code	The transportation agency-defined ID for a source/location of the material. Producer/Supplier Code must have an active status on the Producer Supplier table, when entered.	Refer to individual Applet Spreadsheet procedures referenced above.
Designer Name	The name of the designer responsible for the SUPERPAVE mix.	Refer to individual Applet Spreadsheet procedures referenced above.
AC Type	Identifies the type of asphalt cement.	Refer to individual Applet Spreadsheet procedures referenced above.
Mix Type	This describes the type of mix design (e.g., A, D, etc.)	Refer to individual Applet Spreadsheet procedures referenced above.
Effective Date	Effective date for the SUPERPAVE mix. Defaults to current date when a new SUPERPAVE mix is entered.	Refer to individual Applet Spreadsheet procedures referenced above.
Termination Date	Date the SUPERPAVE mix is no longer available for use. Must be greater than Effective Date.	Refer to individual Applet Spreadsheet procedures referenced above.

Field Name	Description	KYTC Population Policy & Procedure
Approved Date	A system generated date to identify when the SUPERPAVE mix was approved. Defaults to current date when a SUPERPAVE mix is approved.	Refer to individual Applet Spreadsheet procedures referenced above.
Approved By User ID	A system generated value containing the user ID of the person approving the SUPERPAVE mix.	Refer to individual Applet Spreadsheet procedures referenced above.

PROPERTIES FOLDER TAB

Properties Folder Tab Description

The detailed mix data is entered or updated on this tab.

Procedure

Refer to individual Applet Spreadsheet procedures referenced above.

Field Table

Field Name	Description	KYTC Population Policy & Procedure
N (Initial)	The initial compaction gyrations of the specified bituminous mix design	Refer to individual Applet Spreadsheet procedures referenced above.
N (Max)	The maximum compaction gyrations of the specified bituminous mix design	Refer to individual Applet Spreadsheet procedures referenced above.
N (Design)	The design compaction gyrations of the specified bituminous mix design.	Refer to individual Applet Spreadsheet procedures referenced above.
% Gmm @ N (Init)	The percent of solids by volume @ initial compaction gyrations of the specified bituminous mix design.	Refer to individual Applet Spreadsheet procedures referenced above.
% Gmm @ N (Max)	The percent of solids by volume @ maximum compaction gyrations of the specified bituminous mix design.	Refer to individual Applet Spreadsheet procedures referenced above.
Equiv Single Axle Loads	Number of load axle equivalent weight that pavement can endure before damage occurs.	Refer to individual Applet Spreadsheet procedures referenced above.

Field Name	Description	KYTC Population Policy & Procedure
Optimum AC % by Tot Weight	The asphalt content that will be used to produce the specified bituminous mix in the field. This value will include virgin asphalt cement and any provided by the RAP, if applicable.	Refer to individual Applet Spreadsheet procedures referenced above.
Dust Proportion	The percent of material passing 0.075 mm sieve to the effective asphalt binder content.	Refer to individual Applet Spreadsheet procedures referenced above.
VMA %	The percentage of voids in the mineral aggregate for the specified bituminous mix design.	Refer to individual Applet Spreadsheet procedures referenced above.
VFA %	The percentage of VMA filled by the effective asphalt for the specified bituminous mix.	Refer to individual Applet Spreadsheet procedures referenced above.
Lottman TSR	The tensile strength ratio for the specified bituminous mix.	Refer to individual Applet Spreadsheet procedures referenced above.
Sand Equivalent	The ratio of material passing the No. 30 sieve and retained on the No. 200 sieve to material passing the No. 8 sieve and retained on the No. 200 sieve.	Refer to individual Applet Spreadsheet procedures referenced above.
Maximum Specific Gravity	The maximum specific gravity for the specified bituminous mix.	Refer to individual Applet Spreadsheet procedures referenced above.
Mixing Temperature	The mixing temperature for the specified bituminous mix.	Refer to individual Applet Spreadsheet procedures referenced above.
Bulk Specific Gravity	Bulk specific gravity of the SUPERPAVE mix design @ optimum AC %.	Refer to individual Applet Spreadsheet procedures referenced above.
Mixing Temperature	Design mixing temperature.	Refer to individual Applet Spreadsheet procedures referenced above.
Mixing Temperature Units Type	The unit of measure for the associated mixing temperature value (e.g. Centigrade, Fahrenheit). This field is required if the Mixing Temperature field is populated.	Refer to individual Applet Spreadsheet procedures referenced above.
Compaction Temp	The design compaction temperature for the specified bituminous mix.	Refer to individual Applet Spreadsheet procedures referenced above.

Field Name	Description	KYTC Population Policy & Procedure
Compaction Temperature Units Type	The unit of measure for the associated design compaction temperature value (e.g. Centigrade, Fahrenheit). This field is required if the Design Compaction Temperature field is populated.	Refer to individual Applet Spreadsheet procedures referenced above.
High Air Temperature	Average high air temperature.	Refer to individual Applet Spreadsheet procedures referenced above.
High Air Temperature Units Type	Unit of measure for high air temperature. Required when high air temperature entered.	Refer to individual Applet Spreadsheet procedures referenced above.

MATERIALS FOLDER TAB

Materials Folder Tab Description

The constituent material data that make up the mix is entered or updated on this tab.

Procedure

Refer to individual Applet Spreadsheet procedures referenced above.

Field Table

Field Name	Description	KYTC Population Policy & Procedure
Material Code	The unique identifier of a component material associated with the bituminous mix material with which the mix design will be associated. The full description for the highlighted material will display to the right of the material code.	Refer to individual Applet Spreadsheet procedures referenced above.
Producer Supplier Code	The unique identifier of the producer/ supplier approved to provide the component material for the bituminous mix material. The full name for the highlighted producer/supplier will display to the right of the code.	Refer to individual Applet Spreadsheet procedures referenced above.

Field Name	Description	KYTC Population Policy & Procedure
Brand Name	This is a freeform text field where the brand name of the component material may be entered.	Refer to individual Applet Spreadsheet procedures referenced above.
Blend Percent	The percentage of the component material contained within the bituminous mix material. For the bituminous component material (asphalt cement), the blend percent will reflect the virgin asphalt cement only.	Refer to individual Applet Spreadsheet procedures referenced above.
Sample ID	This field is populated with the unique identifier of a sample record created to capture test data during the evaluation process of the component material.	Refer to individual Applet Spreadsheet procedures referenced above.
Gsb Source (Contractor/State)	The apparent specific gravity of the component material contained within the bituminous mix material.	Refer to individual Applet Spreadsheet procedures referenced above.
Specific Gravity (Bulk)	The bulk specific gravity of the component material contained within the bituminous mix material.	Refer to individual Applet Spreadsheet procedures referenced above.

GRADATIONS FOLDER TAB

Gradations Folder Tab Description

If required, the gradations for the aggregates used in the mix is entered or updated on this tab.

Procedure

Refer to individual Applet Spreadsheet procedures referenced above.

Field Table

Field Name	Description	KYTC Population Policy & Procedure
Effective Date	The date the gradation specification becomes effective. Defaults to current date when a new set of material gradation specifications are created or copied.	Refer to individual Applet Spreadsheet procedures referenced above.
Status	Identifies the current status of this sieve size record (e.g., active or inactive). Status defaults to active.	Refer to individual Applet Spreadsheet procedures referenced above.
Sieve Size	AASHTO and ASTM standard sieve sizes (i.e., 1/2, No. 4, etc.). Sieve size required when Minimum or Maximum entered.	Refer to individual Applet Spreadsheet procedures referenced above.
Sieve Value	The percentage of bituminous mix material passing through the sieve screen.	Refer to individual Applet Spreadsheet procedures referenced above.
Minimum Range	The beginning value for the gradation specification limit.	Refer to individual Applet Spreadsheet procedures referenced above.
Maximum Range	The ending value for the gradation specification limit.	Refer to individual Applet Spreadsheet procedures referenced above.
Min Production Tolerance	The minimum production tolerance value specification. This field is required when the Sieve Value field is populated.	Refer to individual Applet Spreadsheet procedures referenced above.
Max Production Tolerance	The maximum production tolerance value specification. This field is required when the Sieve Value field is populated.	Refer to individual Applet Spreadsheet procedures referenced above.