



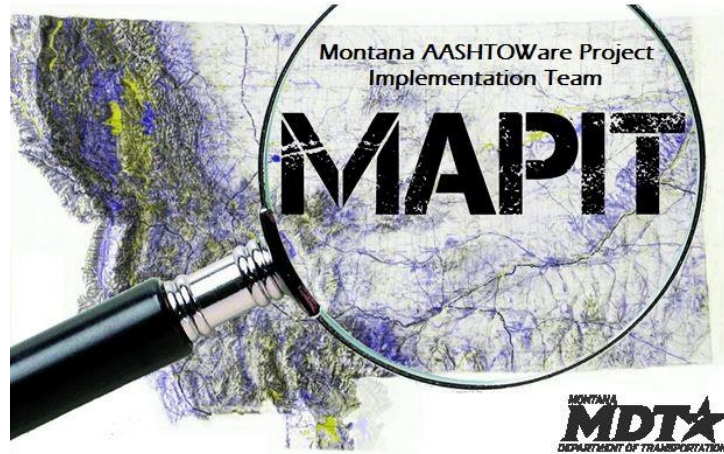
MONTANA DEPARTMENT OF TRANSPORTATION  
AASHTOWare Project Construction and Materials



# MDT Procedure

## Process: Reference Material Categories/Materials

Date: July 10, 2017  
Updated: August 26, 2019





## MONTANA DEPARTMENT OF TRANSPORTATION AASHTOWare Project Construction and Materials



### □ **Process Definition**

This is the process to create Reference Material Categories and Materials.

The material category is a way to categorize similar materials with the same or similar testing requirements.

The material is the individual material that is used on the contract.

Acceptance actions for the materials, which include the tests, frequencies, etc. can be added at the material category level or the material itself. See process XX for details on creating and maintaining acceptance actions.

All requests for new material categories/materials or modifications to existing material categories/materials are submitted to MBA or the Helpdesk. Once approved by the Materials Bureau, the State Materials Engineer, Testing Operations Supervisor or Inspection Operations Supervisor will modify the materials as appropriate.

- New materials or modifications are typically related to changes to specifications or the MT 601.
- Modifications typically require close coordination with specifications, MT 601 and testing to ensure contracts receive the correct requirements on the correct dates.

### □ **Acronyms and Definitions**

MBA – Material Bureau Administrator

QPL – Qualified Products List

MDT – Montana Department of Transportation

### □ **MDT Procedure – Material Category**

Navigation: Reference Data > Material Categories

1. Under the component actions, select Add
2. Enter the Material Category Code
3. Enter the Material Category Full Name
4. Enter the Specification Reference
5. Enter the English Unit
6. Enter the Metric Unit
7. If all materials in the category are required to be on the QPL, check the box QPL Required
8. If all materials in the category are on the QPL but are not required, check the box QPL Material
9. If all materials in the category require a source (pit) be selected on the sample record, check the box Source Facility Required



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10. Enter the Effective Date
11. Change the status to Active
12. Click Save

Material Category Summary

Material Category: 551.02 Save ?

General	Material Category Code *	Remarks
Qualifications	551.02	0
Associated Materials	Material Category Full Name *	Specification Reference
Acceptable Alternates	Cementitious Material	551.02
Associated Sources	English Unit	Metric Unit
Associated Facilities	LB - Pound	KG - Kilogram
Action Relationships	QPL Required	Source Facility Required
Acceptance Actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	QPL Material	Control Number Required
	<input type="checkbox"/>	<input type="checkbox"/>
	Effective Date	Active
	03/01/2016	Yes
	Status	
	ACTIVE - Active	

□ **MDT Procedure – Material**

Navigation: Reference Data > Material Categories

1. Open the material category to which the material will be added
2. Under the component actions, select Create New Material
3. Enter the Material Code
4. Enter the Material Full Name
5. Enter the Material Short Name
6. Update the Specification Reference for the material
7. Modify the following fields if they are different than the material category:
  - a. English Unit
  - b. Metric Unit
  - c. QPL Required
  - d. QPL Material
  - e. Source Facility Required
8. Enter the default number of labels that will be printed for a sample in the Print Label Copies field
9. Change the effective date, as appropriate



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Note, the material will not be active until the status is Active and the Effective Date is equal to or less than the current date. This allows materials to be created that will be effective at a later date, such as an upcoming specification.

### 10. Save

Material Summary

Material: 551.02.10.01 - Fly Ash

<b>General</b>	<b>Material Code *</b> 551.02.10.01	<b>Remarks</b> 0
<b>Qualifications</b>	<b>Material Full Name *</b> Fly Ash	<b>Material Short Name</b> Fly Ash
<b>Component Materials</b>	<b>Material Category Code</b> 551.02	<b>Material Category Full Name</b> Cementitious Material
<b>Acceptable Alternates</b>	<b>Specification Reference</b> 551.02	<b>Metric Unit</b> KG - Kilogram
<b>Associated Sources</b>	<b>English Unit</b> LB - Pound	<b>Control Number Required</b> <input type="checkbox"/>
<b>Associated Facilities</b>	<b>QPL Required</b> <input checked="" type="checkbox"/>	<b>Source Facility Required</b> <input checked="" type="checkbox"/>
<b>Action Relationships</b>	<b>QPL Material</b> <input checked="" type="checkbox"/>	<b>Print Label Copies</b> 1
<b>Acceptance Actions</b>	<b>Effective Date</b> 03/01/2016	<b>Active</b> Yes
<b>Cost Sheet Rates</b>	<b>Status</b> ACTIVE - Active	

- ❑ **IT Systems Interfaces Outside of AASHTOWare Project**
- ❑ **Process Exceptions**
- ❑ **Business Change Summary**

This is a major change. It requires a significant amount of thought to categorize materials in a manner that makes sense with testing and downstream in the process. Material is similar in concept.

- ❑ **Comments**

There is a checkbox Control Number Required that can be used if the material requires that field to be entered on a sample record. At this time, the field will not be used but is being left in case a use is found.

Current contracts need to be reviewed before making any materials inactive.

There is a tab Acceptable Alternates on the Material Category and Material. An acceptable alternate is a material that can be used in place of the planned material without having to modify the contract acceptance actions. For example, if the contract requirement is Class General concrete but the contractor wants to use Class Deck concrete, and Class Deck is an acceptable alternate, the crew can use the deck concrete material on the sample and it will satisfy the contract requirements.



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When the acceptable alternate material is used, the testing can be performed using the reference specification from the material or alternate material (e.g. test PG 70-28 under the specifications for PG 64-28).

It is not known if acceptable alternates will be used. It will be available for future use if the need arises. Following are the steps:

Navigation: Reference Material Categories/Materials > (select material) > Acceptable Alternates tab

1. Click Select Acceptable Alternate Materials
2. Start typing the material code or name in the search box
3. Click on the material(s) to add
4. Click the button Add to Material

Material Code - Name	English Unit	Metric Unit	Material Category Code - Name
701.02.06.01 - Crushed Top Surfacing Grade 2A	CUYD - Cubic Yards	M3 - Cubic Meter	301 - Aggregate Surfacing
701.02.07.01 - Crushed Top Surfacing Grade 3B	CUYD - Cubic Yards	M3 - Cubic Meter	301 - Aggregate Surfacing

5. Save
6. If the specifications for the alternate material should be used instead of the specifications for the existing material, check the box Use Alt Material Specs

Material Code	Material Name	English Unit	Metric Unit	Use Alt Material Specs
701.02.06.01	Crushed Top Surfacing Grade 2A	CUYD - Cubic Yards	M3 - Cubic Meter	<input type="checkbox"/>
301	Aggregate Surfacing			<input checked="" type="checkbox"/>
701.02.07.01	Crushed Top Surfacing Grade 3B	CUYD - Cubic Yards	M3 - Cubic Meter	<input type="checkbox"/>
301	Aggregate Surfacing			<input checked="" type="checkbox"/>

7. Save