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MONTANA DEPARTMENT
OF TRANSPORTATION

“BUY AMERICA”

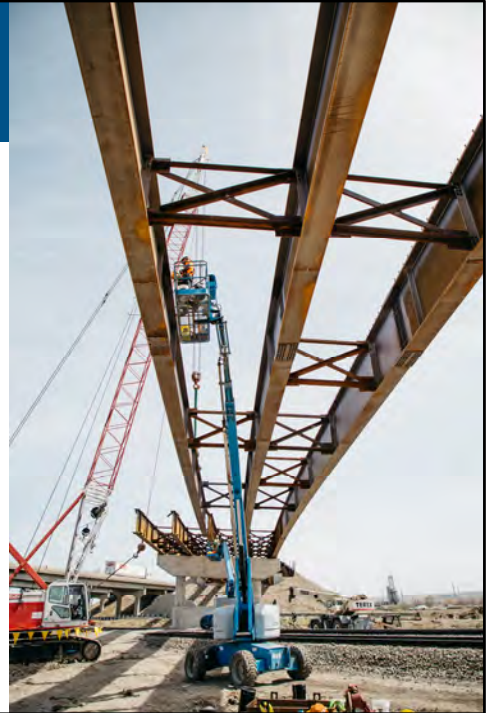
DOCUMENTATION FOR STEEL AND IRON

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&

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Certification Office (MICO)



Greetings! My name is Oak Metcalfe and I’m the State Materials Engineer for the Montana Department of Transportation and today I’m going to talk about something that has been complicated, confusing, and just down right aggravating over the years – and that’s Buy America. You’ll notice I put Buy America in quotation marks, and I’ll go into more detail about that later, but my goal over the next 45 minutes or so is to explain this regulation and take some of the mystery out of what it means, why it’s required, and how to deal with it. I’d also like to take this time to thank the auditors in the Materials Information and Certification Office for their assistance putting this together. I built this presentation on several other presentations MICO has put together over the years. →

“BUY AMERICA” REQUIREMENTS

All steel and iron materials incorporated into MDT projects must meet “Buy America” requirements.

- 23 USC Section 313 – All projects eligible for Federal Aid under the National Environmental Policy Act (NEPA), regardless of funding source.
- 23 CFR 635.410 – All manufacturing processes including coating must occur in the United States.
- FHWA “Buy America” Policy, Guidance, and Q&A (<https://www.fhwa.dot.gov/construction/cqit/buyam.cfm>)
- MDT Standard Specification 106.09 – Provides the contractual link to MDT projects.
- There is a “minimal use” exception for foreign steel. \$2,500 or 1/10th of 1% of the total contract value (0.001 x Contract Value), whichever is more, can be non-domestic. This includes cost to deliver to the project.

So...what does all this mean and how do we sort through it???



With very rare exceptions, the Buy America rules apply to all MDT projects. It all started back in 1982 with the “Surface Transportation Assistance Act.” This act laid the groundwork for “Buy America” by requiring all Federal **Aid** projects to use steel and iron that was domestically manufactured. This is where the first misconception about “Buy America” comes from. There is no such thing as the “Buy America Act”. “Buy America” was just a provision contained within the STAA. (Section 165) →

From that act, Title 23, section 313, of the United States Code was amended to require that all steel and iron be domestic for any project that was Federal Aid eligible under the National Environmental Policy Act. In other words, a project that has a NEPA document (Cat X, EA, or EIS). This means pretty much all MDT construction projects, however Maintenance and State funded projects without a NEPA document are exempt. Further complicating things... Since the STAA covered **all** federal aid projects, including the FAA, FTA, FRA, and AMTRAK, as well as FHWA, the result was 5 different definitions of Buy America! This is why stating something “meets Buy America” doesn’t really mean anything unless you follow it up with additional clarifying language. →

The rules are further defined for FHWA in Title 23, section 635, of the Code of Federal regulations. This is where we get the operating definition that you will see throughout this presentation – iron and steel must come from manufacturing processes, including coatings,

that occur entirely within the U.S. of A. →

If you ever want to learn more - FHWA has summarized all of this on their website at this link. This is where MDT goes for guidance and interpretation. →

Finally, the rules are incorporated into MDT contracts via standard specification 106.09. →

Having said all that, a “minimal” amount of foreign steel may be used. ***If*** the total dollar amount of the foreign steel, including delivery to the project, but not including labor, is less than ***either*** \$2500 ***or*** 1/10th of 1% of the contract value, whichever is more, then foreign steel is allowed. →

“BUY AMERICA” REQUIREMENTS

What does all this mean?

- The rules apply to ALL MDT projects using any federal funds, at any point in development or construction, including maintenance projects.
- Iron and Steel must be “melted and manufactured” in the U.S.A.
- What does “melted” mean?
 - The original source of steel or iron must be a U.S. foundry, smelter, or steel mill.
 - Foreign source steel billets are not allowed
- What does “manufactured” mean?
 - Any process that modifies the chemical content; physical shape or size; or final finish.
 - Includes initial melting through the bending and coating stages. Also includes rolling, extruding, machining, grinding, and drilling – or “Fabricating”. More on that later...



So where does that leave us? → Whenever Federal Aid is involved in a project, the rules apply, and it starts with preconstruction. If any Federal Aid dollars are spent in design but for some reason the project is State funded during construction, the rules still apply. If there is any steel on a Maintenance project that uses Federal Funds, the rules apply. Before we go to much further, it's important to note the rules apply to steel that is “permanently incorporated” into the project. If a steel item is only temporary, like shoring, and will be removed later, then the rules don't apply to that item. Therefore, if MDT allows foreign steel to be permanently installed, and the cost is in excess of the minimal use amount we just went over, that steel must be removed and replaced with domestic steel at contractor expense. If MDT were to decide to leave foreign steel in place for whatever reason, knowing it was non-domestic, the most likely outcome is the entire project would be “non-parred” – meaning FHWA would not “participate” in the project AT ALL - meaning MDT would have to pay for it with 100% state funds. And I'm here to tell you, we can't afford that. Technically, there is a chance FHWA would “non-par” a single item. However, because MDT has been warned by FHWA repeatedly to ensure this doesn't happen due to past transgressions, it is highly unlikely only the item would be non-parred. That is why we place such scrutiny on this topic. →

So... just what is domestic steel then? The term “melted and manufactured in the USA” is generally acceptable language for certifications indicating the steel and iron were just that,

“melted” and “manufactured” domestically. →

Melted means the liquid metal originated in the U.S. → The ore can be foreign, but the act of melting, forging, casting, etc. has to take place domestically. → Ingots or billets from other countries are not allowed. →

Manufactured means pretty much what you think it means. → Anything that affects the final form or chemical content of the steel or iron. →

We’ll talk a lot later about “fabrication”, but this is just another term for manufacturing. →

“BUY AMERICA” REQUIREMENTS

How does MDT deal with all this?

- Steel and iron products are categorized by “Material Code” in section MT 601 in the Montana Materials Manual.
- Steel Category 1 – Requires heat number traceability from the mill (mill cert) through final fabrication as well as certification all manufacturing processes, including coating, have taken place in the U.S. from each entity (each “step”) in the fabrication process
- Steel Category 2 – Requires certification from the final fabricator all manufacturing processes, including coating, have taken place in the U.S. (No heat numbers!)
- “Melted and Manufactured in the U.S.A.” or “Meets 23 CFR 635.410” or “All manufacturing processes, including coatings, have occurred in the U.S.A.”
- **NOT** “meets buy America”, “made in America”, or “meets buy American”.



Now... what does this mean for our field staff and the contractors and suppliers? This is where MDT works in conjunction with the Local FHWA Division office to figure out how to enforce the rules. →

Ever since MDT went to using SiteManager and the AASHTOWare programs for Contract Administration and Materials Lab Information, we have identified materials using 9-digit “Material Codes” that correspond to the section of the spec book that deals with them. This isn’t an absolute because there are always materials that are dealt with in Special Provisions or don’t have a specific section of the book - but it’s true in the majority of cases. These codes are itemized with their respective sampling and testing requirements in the Materials Manual, specifically in section MT 601. Once all the standard materials were given codes, the codes were placed into what we call Buy America Categories. →

Category 1 requires the highest level of documentation. Heat numbers from mill certs or MTRs are used to trace the steel back to the original mill (where it was melted). The heat numbers are also used to track the steel through the fabrication process to ensure the steel that ends up in the final product is the same steel that left the mill. This is also known as the “Step Process” where each entity responsible for manufacturing or fabrication certifies their “Step”, including coating (galv, epoxy, powder) happened in the US with US steel using the heat number. Currently there are only 7 material codes that are Cat 1. Guardrail (Box

& W-beam), Piling (structural, pipe, & sheet), structural steel tubing, and structural steel (plate). →

Category 2 only requires certification from the final “step” or “fabricator” in the process. Mill certs are not required to be submitted, but the “final fabricator” must certify the product they deliver was manufactured domestically using domestic steel, AND they must maintain all documentation to prove domestic origin of steel. (Mill certs/Heat #s) →

Here are some examples of language that is acceptable to certify all that we’ve discussed so far. “Melted and Manufactured in the USA” is still the standard. A cert could also say “meets 23 CFR 635.410” This addresses what we discussed previously about the 5 different definitions of “Buy America”. And finally, the language from the code, “all manufacturing processes , including coatings, have occurred in the USA.” →

Just “Buy America” doesn’t work because those alternate definitions I’ve been referring to allow higher amounts of foreign steel than is allowed by 23 CFR. “Made in America” doesn’t work either because that usually means something was “assembled” in America with no regard to the source of the raw materials. This is also known as “Buy Americann”, which is another law all together. This causes confusion because “Buy Americann” applies to direct federal spending while “Buy America” applies to Federal **AID** spending. This is an important distinction for contractors and suppliers. →

“BUY AMERICA” REQUIREMENTS

Tying it all together...

- Each contract’s Schedule of Values contains a list of Line Numbers or Line Items that correspond to the standard nine-digit Bid Items.
- Each Bid Item is assigned appropriate Material Codes with the relevant sampling, testing, and steel requirements in AASHTOWare. (see Steel Checklist Report)
- The Bid Item and the Material Code are entered on the Form 406 to track the required steel documentation.
- ALSO, Steel and iron products must meet MDT Specifications and quality requirements.
 - Just because something is domestic in origin and manufacture doesn’t mean it automatically meets spec.



Now that we’ve gone over the what and why, here’s the how...→

When it comes to administering MDT contracts, it starts with the Schedule of Values. Most are familiar with the list of line numbers and bid items that contractors provide unit prices for. →

Each 9-digit bid item is set up in AASHTOWare with the relevant materials associated to it. This association includes acceptance methods, the number and frequency of samples and tests, sample and test responsibilities, and most important for this discussion, which “Buy America” category a steel or iron item is in. At this point I want to address “uncategorized” materials and products. Many of you remember the “Off the Shelf” rule or the “less than 90%” rule that made these items exempt. Well, that rule was struck down by a federal judge back in December 2015. Ever since then, there are no exemptions to the law. However, recognizing that documentation might not exist for some of these items even though they contain 100% domestic material... IF A MATERIAL IS “UNCATEGORIZED”, DOCUMENTATION IS NOT REQUIRED TO BE SUBMITTED UNLESS IT IS SPECIFICALLY REQUESTED. The law still applies in these cases, but MDT’s level of documentation is lesser. So, make sure to read and understand section MT 601 in the Materials Manual and the Material Codes it contains. In a few moments I’ll show you a new report we have come up with that summarizes all this information so it’s at your fingertips. →

Now that we know the bid item, the material code, and the Steel Category, the next step is to enter the required information on the Form 406. The PRIME contractor must submit the 406 to MDT which includes their overall certification that all steel and iron materials meet these domestic origin rules. We'll go through that in a moment as well. →

Another note, today we're focusing on Domestic Steel requirements but it's important to remember that these items must also meet the design and quality requirements of the contract. →

Sometimes the steel documentation covers both these requirements but sometimes it does not, so it's important to remember there are two separate requirements and both must be satisfied. →

“BUY AMERICA” REQUIREMENTS

MT 601 Examples

https://www.mdt.mt.gov/publications/manuals/materials_man.shtml

– Category 1

MATERIAL/ MATERIAL CODE	TESTS	SAMPLE SIZE	SAMPLE/TEST FREQUENCY	FIELD	DISTRICT/ AREA LAB	MDT HQ LAB	NOTES
BOX BEAM GUARDRAIL 705.01.01.02	CERT/ VISUAL INSPECTION	1 EACH	ONE PER EACH	DATA SHEET VISUAL			
	STEEL CERT CATEGORY 1	1 EACH	ONE PER FORM 406	FORM 406			MANDATORY SUBMITTAL OF DOCUMENTATION FOR EACH HEAT #

– Category 2

MATERIAL/ MATERIAL CODE	TESTS	SAMPLE SIZE	SAMPLE/TEST FREQUENCY	FIELD	DISTRICT/ AREA LAB	MDT HQ LAB	NOTES
STEEL SIGN POSTS 704.01.04.01	CERT/ VISUAL INSPECTION	1 EACH	ONE PER EACH	DATA SHEET			
	STEEL CERT CATEGORY 2	1 EACH	ONE PER FORM 406	FORM 406			MANDATORY SUBMITTAL OF DOCUMENTATION PER SPECIFICATION 106.09

I’ve mentioned the Materials Manual a few times so here is an example of what it looks like and the information it contains. You can access the manual at this link as well as all the previous versions of materials manuals. Remember, the version in play at the time of letting sets the rules, but also remember, if a standard is lesser today than at the time of letting, the lesser standard is acceptable. And if a standard is higher today than at the time of letting, the standard at the time of letting is still acceptable, so that’s a best of both world’s situation.

Here we have an example of the two steel categories. In each example you can see the Material Description and the corresponding 9-digit Material code. The material acceptance requirement is above, and the steel requirement is in grey below. It shows the Steel Category, 1 or 2, and as I mentioned, it also shows the acceptance requirements (datasheet, visual, C-O-C, etc.). It also shows the tests and sample sizes & frequencies when appropriate. Then at the end there are notes for special instructions. →

V.1
Montana Department of Transportation
AASHTOWare Project Construction & Materials
Contract Steel Certification Report

Item Code corresponds with Bid Item in proposal

Material Code listed in MT Materials Manual Section MT 601

Buy America Category for each Material Code from Section MT 601

Contact Information: AASHTOWare Project Help Desk 7-406-4338
Report Name: AASHTOMAT012

DATE: 04/18/2020

Project Id	Project No	Project Description
NHPB 94-5(48)170	8127048000	TERRY-FALLON AREA NHS BRIDGES
STPB STW0(886)	8127686000	TERRY-FALLON AREA STP BRIDGES

Contract Nm:	Contract Description:	Fed/ST Pj Nbr:
02919	TERRY-FALLON AREA NHS BRIDGES	NHPB 94-5(48)170

Type of Work	County	Location
BRIDGE CONSTRUCTION, REHAB AND REMOVAL	Prairie	TERRY-FALLON AREA NHS BRIDGES

Item Code	Item Description	Unit	Project	Catg	Line Nbr	Curr Qty	Material Cd	Material Name	Acceptance Method	Steel Catg	Compl
00020008	REMOVE GUARD ANGLE	LNFT	8127048000	0002	0350	384.300	711 01 01 02	Rebar Grade 60	DPL Verification/Steel Certification	Catg 2	
901010401	CONCRETE-SHALLOW REPAIR	SQYD	8127048000	0002	0360	8.000	711 01 01 02	Rebar Grade 60	DPL Verification/Steel Certification	Catg 2	
901010401	CONCRETE-SHALLOW REPAIR	SQYD	8127686000	0002	0750	1.000	711 01 01 02	Rebar Grade 60	DPL Verification/Steel Certification	Catg 2	
603010370	EMBANKMENT PROTECTOR 18 IN	LNFT	8127048000	0001	0190	268.000	708 03 05 01	Corrugated Steel Pipe	Steel Certification	Catg 2	
603010370	EMBANKMENT PROTECTOR 18 IN	LNFT	8127048000	0001	0190	268.000	711 08 00 01	Galvanized Mesh	Steel Certification	Catg 2	
605000040	REINFORCING CONCRETE BARRIER RAIL-BR	LNFT	8127048000	0002	0440	2,851.500	711 07 01 02	Rebar Grade 60	DPL Verification/Steel Certification	Catg 2	
800010040	GUARDRAIL-STEEL BOX BEAM	LNFT	8127686000	0001	0790	218.000	708 03 05 02	Box Beam Guardrail	Steel Certification	Catg 1	
800010040	GUARDRAIL-STEEL BOX BEAM	LNFT	8127048000	0001	0450	4,140.000	708 03 05 02	Box Beam Guardrail	Steel Certification	Catg 1	
800010043	GUARDRAIL-STEEL BOX BEAM	LNFT	8127686000	0001	0780	218.000	708 03 05 01	Steel Guardrail Post	Steel Certification	Catg 2	
800010043	GUARDRAIL-STEEL BOX BEAM	LNFT	8127048000	0001	0450	4,140.000	708 03 05 01	Steel Guardrail Post	Steel Certification	Catg 2	
800010058	GRD RL BOX BEAM BR APP-SEC-TYPE 3	EACH	8127686000	0001	0600	4.000	708 01 01 02	Box Beam Guardrail	Steel Certification	Catg 1	
800010268	GRD RL BOX BEAM BR APP-SEC-TYPE 3	EACH	8127686000	0001	0600	4.000	708 01 05 01	Steel Guardrail Post	Steel Certification	Catg 2	
800010268	GRD RL BOX BEAM BR APP-SEC-TYPE 3	EACH	8127686000	0001	0600	4.000	711 02 00 01	Structural Steel	Steel Certification	Catg 1	
800010268	GRD RL BOX BEAM BR APP-SEC-TYPE 3	EACH	8127686000	0001	0600	8.000	711 13 00 01	Structural Anchor Bolts	Steel Certification	Catg 2	
800010325	GRD RL BOX BEAM TO W-BEAM TRANS	EACH	8127048000	0001	0480	18.000	708 01 01 01	Metal Beam Guardrail	Steel Certification	Catg 1	
800010325	GRD RL BOX BEAM TO W-BEAM TRANS	EACH	8127048000	0001	0480	18.000	708 01 01 01	Box Beam Guardrail	Steel Certification	Catg 1	
800010325	GRD RL BOX BEAM TO W-BEAM TRANS	EACH	8127048000	0001	0480	18.000	708 01 01 01	Cable Guardrail / Wire Rope	Steel Certification	Catg 2	
800010325	GRD RL BOX BEAM TO W-BEAM TRANS	EACH	8127048000	0001	0480	18.000	708 01 05 01	Steel Guardrail Post	Steel Certification	Catg 2	
800010325	GRD RL BOX BEAM TO W-BEAM TRANS	EACH	8127048000	0001	0480	18.000	711 01 01 01	Rebar Grade 40	DPL Verification/Steel Certification	Catg 2	
800010342	MASH THREE BEAM BR APPROX SECTION	EACH	8127048000	0001	0470	18.000	708 01 01 01	Metal Beam Guardrail	Steel Certification	Catg 1	
800010342	MASH THREE BEAM BR APPROX SECTION	EACH	8127048000	0001	0470	18.000	708 01 05 01	Steel Guardrail Post	Steel Certification	Catg 2	
800010841	OD RL BOX BEAM QP1 TERM SEC	EACH	8127686000	0001	0600	4.000	808 02 00 02	Box Beam Terminal Section	Steel Certification	Catg 2	

Same bid item on both tied projects, but report groups similar Material Codes together

Steel Checklist Report Example

- Bid Item (and description)
- Material Code (and description)
- Steel Category (Cat 1 or Cat 2)
- Also shows tied project information



Here we have an example of the new Steel Checklist. This report should be generated by the MDT field crew at the beginning of the project (Pre-Con) and provided to the Prime Contractor. It summarizes the bid items that have Cat 1 or Cat 2 steel materials associated to them. It also contains all the project information. This example shows two tied projects on the same contract. Another note: steel documents don't need to be submitted twice, once for each project, only once for each item on the contract, as long as the documentation covers the total amount of material paid for.

(Go through transitions)

**CONTRACTOR'S CERTIFICATE OF COMPLIANCE
FOR STEEL & IRON ITEMS**
For Compliance with the "Buy America" Law and Provision
Std. Spec. 106.05, 23 USC Section 313 & 23 CFR 638.410

MDT Contract No.: _____ Project Name: _____

The Materials listed herein; furnished to MDT for use in the construction of the above referenced project by _____

(Name of Prime Contractor) (Address) (City, State) (Phone)

have originated and/or been fabricated at the mills and fabricators indicated below.

MDT Bid Item No.	Material Code (Material Description)	Quantity	Unit: LF, YD, Tons, etc.	Heat Number		MT 601 Category 1 or 2
				Mill	Final Fabricator*	

*Category 1: Provide the www.mtsupply.com and the www.fabricator.com of the material. Heat numbers must be traceable from the mill through any intermediate fabricators, including any fabricator, to the final fabricator. Heat numbers are not required to be traced through brokers after final fabrication.
*Category 2: Provide the www.mtsupply.com and a copy of domestic material and manufacturer. MDT heat numbers are not required.

Submit all required documentation with this form including contract material and design certification. Refer to section [MT 601 of the Montana Materials Manual](#) for steel product Category identification as well as sampling & testing requirements.

Contractor's Statement of Certification

Domestic Material: I hereby certify that all manufacturing processes, including initial melting/recycling and application of coatings, occurred in the United States for the above listed materials and that those materials do meet all other requirements as set forth in the plans and specifications.

Non-Domestic Material: I hereby certify that the above listed materials do meet the requirements as set forth in the plans and specifications with the exception that all or part of the manufacturing process may have occurred outside the United States. The material is considered non-domestic. The cost of this material, including delivery to the project, is _____ [\(MDT to attach Foreign Steel Tracking Spreadsheet\)](#)

(Prime Contractor's Name, Typed or Printed) Title: _____


(Prime Contractor's Signature) Date: _____

Number of Items (pages) attached: _____

Form 406 Revised (May 2021)

"BUY AMERICA" REQUIREMENTS

- Form 406 - Contractor's Certificate of Compliance for Steel & Iron Items
- Updated in May of 2021
- Filled out and Signed by the Prime Contractor
- Required for both Category 1 and Category 2 Steel Items
- Must indicate "Final Fabricator"



Here is the "new" version of the Form 406. It's simpler and easier to get more items on a single sheet, but it requires basically the same information as before, with a few updates to the form...

This form is how MDT shares the risk with the Contractor as far as the accuracy of the documentation that is provided, that is why the Prime Contractor must sign. Remember, MDT's agreement is with the Prime Contractor, not the sub or the supplier or distributor or mill or foundry or whatever. Ultimately the Prime contractor is responsible for the information provided on this form and the materials furnished.

One change you might notice from older forms is there is a line for the "final fabricator" for each bid item and material. Previously that information was at the top of the form which limited the number of suppliers and fabricators on each form to one. This form also takes advantage of some other traceability changes that I'll get to later. Another note: Sometimes the Mill is also the Final Fabricator. Sheet Pile is a good example of this as in many cases the sheet pile leaves the mill in its final shape. →

How to fill out the new form 406

CONTRACTOR'S CERTIFICATE OF COMPLIANCE FOR STEEL & IRON ITEMS
 For Compliance with the "Buy America" Law and Provision
 Std. Spec. 106.09, 23 USC Section 313 & 23 CFR 635.410

MDT Contract No.: _____ Project Name: _____

The Materials listed herein; furnished to MDT for use in the construction of the above referenced project by

 (Name of Prime Contractor) (Address) (City, State) (Phone)

have originated and/or been fabricated at the mills and fabricators indicated below.

Category 1 example

Category 2 example

MDT Bid Item No.	Material Code (Material Description)	Quantity	Unit: LF, yd ³ , tons, etc.	Heat Number	MT 601 Category 1 or 2
				Mill* Final Fabricator*	
123 456 789	123.45.67.89	100	LF	8675309 NUCOR Oregon Universal Industrial Sales	1
123 456 789	123.45.67.89	100	Tons	Universal Industrial Sales	2



Here's a closer look at the form and we'll go through how to fill it out. Of course, it requires all the standard project information at the top. Below that is the statement the PRIME CONTRACTOR is making to MDT regarding these materials. This is one of the updates. →

For Cat 1, → we have the item number, → then the material code→ (with room for the description below if that provides clarification), → the quantity, → and the unit of measure. → The category goes in the far-right column. Then we have → the heat number from the mill, → the name of the mill, → and then the final fabricator. →

For Cat 2, → we have the same information up to the category, and then all that's required is the final fabricator. →

A couple of points here, the quantity must represent AT LEAST the amount installed, not necessarily the exact amount or plan quantity. Also, the total doesn't have to be all on one form, multiple forms may be submitted but the total amount indicated must cover the amount installed. The easiest way to look at this is when there is a delivery, the paperwork must represent the amount delivered. If more is needed, then submit paperwork representing the additional amount.

I alluded to this before but note distributors and suppliers are left out of this...that's on purpose...but we'll get to that...→

CONTRACTOR'S CERTIFICATE OF COMPLIANCE
FOR STEEL & IRON ITEMS

For Compliance with the "Buy America" Law and Provision
Std. Spec. 106.09, 23 USC Section 313 & 23 CFR 635.410

One copy of this certificate and attachments must be submitted to the MDT Engineering Project Manager for each bid item containing steel products before those items can be permanently incorporated into the project. **The Prime Contractor is responsible for providing proper documentation to MDT, and no payment will be made until that documentation is provided.**

All steel and iron products must meet Std. Spec. 106.09, 23 USC Section 313, and 23 CFR 635.410. All certifications must have the domestic steel statement on them and be signed by a representative of that company. **Simply stating "meets Buy America" is not sufficient. Examples of acceptable domestic steel statements are:**

- Melted and Manufactured in the United States
- Complies with 23 CFR 635.410
- All manufacturing processes, including application of coating, have occurred in the U.S.A.

All Category 1 domestic steel certifications must include certification with heat numbers from the original producing United States steel mill. Additionally, documentation must be provided tracing the heat number through final fabrication and **certifying** each fabrication process, **including coating**, as completed within the United States.

At a minimum, Category 2 domestic steel certifications must include a signed statement from the final fabricator indicating steel products as melted/recycled and manufactured entirely within the United States. **Heat numbers are not required to be submitted for Category 2 items however the final fabricator must maintain all original mill certs. Coating is considered fabrication however it may be impractical for a coating contractor or supplier to certify a fabricated item they were sent to coat is fabricated from domestic steel. In these cases, the fabricator of the item coated must make it clear the coating was performed in the US.**

At a minimum, the total amount of all steel and iron incorporated into the project must be covered by one or more form 406s. Multiple forms should be submitted for multiple deliveries. The total quantity indicated on multiple form 406s for the same item must equal at least the quantity of that item permanently incorporated into the project. This includes steel and iron materials that are incidental to the bid item.

This form must be completed and signed by the Prime Contractor. In signing, the Prime Contractor attests to the accuracy of the information provided.

"BUY AMERICA" REQUIREMENTS

From Instructions
on Form 406



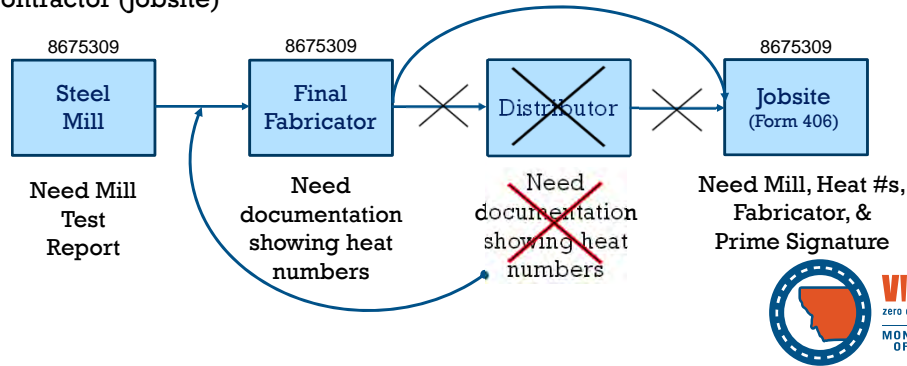
VISION ZERO
zero deaths - zero serious injuries
MONTANA DEPARTMENT
OF TRANSPORTATION

These are the updated instructions and I'll just go through them. Highlighted areas are updated from before, red is new, mostly...

For all you Marvel fans out there, I took a page from Dr. Strange and put the instructions in **Front** of the form, instead of after the form...because we know what happened when Kaecilius didn't read the warnings about Dormammu in the book of Cagliostro. (Nerd joke)
→

“BUY AMERICA” REQUIREMENTS CATEGORY 1

- Original Mill Test Report with Heat #s & domestic statement (Melted & Manufactured in USA)
- Heat #s traced from the original Mill Test Report, through any brokers, through any manufacturing, coating, etc., to the Final Fabricator.
- Each fabricator certifies fabrication (manufacturing & coating) has taken place in the USA.
- Heat #s on Final Fabricator certification and name of Mill listed on Form 406, signed by Prime Contractor (Jobsite)



Now we’ll go over the flow of what’s required for Category 1 documentation. This is where things are a bit different. Some of these slides were used in the presentation at the 2020 MDT Construction Conference so I’m using exes, red ink, and strike outs to highlight what has changed.

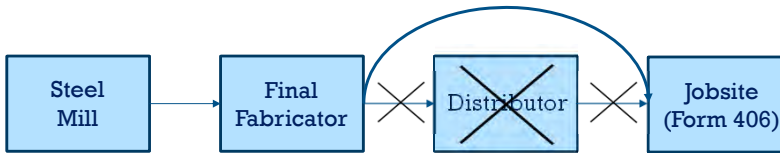
We still start at the mill, with the heat number and certification. That heat number must be traceable through any intermediate fabrication or distribution ***before*** the final fabricator. So, if a coil leaves a mill, goes to a supply house, and then to a rolling mill, we must be able to follow that number out of the mill and into the rolling mill.

Each “step” certifies their work took place in the US using domestic steel (heat number).

Now here’s what’s different. Once the product is “finally fabricated” we don’t need to trace the steps between the final fabricator and the project. So, no distributors or suppliers ***after*** the final fabricator are needed. Finally, the heat number, mill, and final fabricator are shown on the 406 and all the “step” documentation is attached. →

“BUY AMERICA” REQUIREMENTS CATEGORY 1 EXAMPLE

Material Provided from ~~Distributor~~ Final Fabricator



- Mill test Report
- Includes Heat #240943
 - Traceable to Final Fabricator
 - Includes M&M statement

- Includes Heat #240943
- ~~Traceable to Subcontractor~~
- ~~Traceable to Project~~
- Includes M&M statement

- Lists Heat #240943
- Lists Mill
- Lists Final Fabricator
- Signed by Prime Contractor



Now we’ll go through the same example we used at the 2020 construction conference to highlight the differences. We have some guardrail, with a heat number, a mill cert, and a final fabricator.

“BUY AMERICA” REQUIREMENTS CATEGORY 1 EXAMPLE

Following Guardrail heat #240943...

“Old” Form 406

- Filled out according to instructions

Jobsite
(Form 406)

- Lists Heat #240943
- Lists Mill
- Lists Final Fabricator
- Signed by Prime Contractor

**CONTRACTOR'S CERTIFICATE OF COMPLIANCE
FOR MISCELLANEOUS STEEL & IRON ITEMS**
For Compliance with the Buy America Law and Provision
Std. Spec. 106.00, 23 USC Section 313 & 23 CFR 635.410

MHI Project No. MT 406-240943 Project Name: Rockier Interchange Improv
The Universal Industrial Co. Box 808, Phone Area: 501-785-0505
State UT 84001

has furnished to Mountain West Holding Co. Box 31703, Billings MT 406-258-0199
Company 59107

The following materials for use in the construction of the above referenced project.

MHI Item No.	Product Description	Quantity*	Unit LF, YDS, sq, m3, etc.	Heat Number MHI Fabricator†	Category 1 or 2
000010023	One Way Departure Terminal Section	1.0	EA	See Below.	1
000010030	Guardrail Steel	187.5	LF	See Below.	1
	Guardrail			<u>240943</u>	1
	Guardrail			<u>North Star</u>	1
	Guardrail			<u>Steel Dynamics</u>	1
	Guardrail			<u>0002825</u>	1
	Guardrail			<u>Steel Dynamics</u>	1

*Only list actual quantities delivered to the job site.
†Provide name of steel producing/processing mill if Category 1 item or fabricator authenticating domestic material if Category 2 item.

Submit all required documentation with this form. See the back of this form for general guidance on "Buy America" documentation. Refer to MT 601 of the Montana Materials Testing Manual for steel product category identification as well as sampling & testing requirements.

Contractor's Statement of Certification

Domestic Material: I hereby certify that all manufacturing processes, including mill manufacturing and application of coatings, occurred in the United States for the above listed materials and that those materials do meet all other requirements as set forth in the plans and specifications.

Non-Domestic Material: I hereby certify that the above listed materials do meet the requirements as set forth in the plans and specifications with the exception that all or part of the manufacturing process may have occurred outside the United States. The material is considered non-domestic. The cost of this material, including delivery to the project, is _____.

By: Missoula River Contractors, LLC Title: Vice President
(Please Contractor's Name, Address & Project)
1000 S. New J. Blvd. Date: 9/10/15
(Please Contractor's Project)

Number of form copies attached: 1

Form 406 Revised (January, 2017)



Working backwards from the Jobsite or the form 406.... And using the old form 406...the final fabricator is shown as the “furnisher” or the entity that has “furnished” the item to the contractor/subcontractor. The heat number (240943) & mill are listed, along with the item and material; and the form is signed by the Prime.

UIS Universal Industrial Sales
 P.O. Box 699 - Pleasant Grove, UT 84062
 Phone: (801) 785-0105
 www.uisusa.com

Material Certificate of Compliance 7098 1/1

Order Number: 70535 Date: 07/31/18 Customer PO Number: 572-20

Customer: **Mountain West Holding Company** Ship To: **Mountain West Holding Company**
 P.O. Box 31793 C/O Rocky Mountain Traffic Control
 1107 Howard Ave
 Billings MT 59107 Butte MT 59701

Project ID: (OR) Rocker Interchange
 Project Description: (OR) Montana, Call # 100 **Rocker Interchange Improvements NRP 15-21(13)22 Contract No. 09A18**

1	1	EACH	12 / 12'-0" / 0'-0" W Beam Anchor Post @ Hole Sts.
2	1	EACH	Monaca One-Way Exposure Terminal Section Includes Cable Assembly, Terminal Flare & Terminal ONLY for steel post installation (Excludes Anchor Flange) (Excludes Steel Line Posts & CRT Wind Posts)
17	1	EACH	806 250 000 Markara SKT 350 Heavy Duty Post End Terminal Complete 10'-0" System w/ Plastic Becks
82	175	LF	12 / 25 / 0'-0" Guardrail w/ (1999) 14"38 Galv. Posts & Becks Excluder
48	98	EACH	(N1) W6 x 8.3 x 0'-0" Post (shaded @ 4", 7", 12")
49	48	EACH	14" Mondo Polymer W-Beam Rock w/ Hanger (GR400)
50	17.5	LF	12 / 25 / 0'-0" Guardrail w/ (1999) 14"38 Galv. Posts & Becks Excluder

This is to certify that the materials shipped meet the requirements of the above Contract Specifications and Special Provisions. Guardrail meets the requirements of AASHTO M-180, Type I, II, III, or IV as stamped. Steel Posts meet the requirements of AASHTO M-220 / M-183, ASTM A502-06a, A58 and are Galvanized per ASTM A-123 OR Galv Posts meet the requirements of ASTM A508 (if required per Contract Specifications). Anchor Cable meets the requirements of ASTM 741-11, AASHTO M24. Hardware meets the requirements of AASHTO M-183, ASTM A-307 and/or A-325 or A490 per contract requirements. Substrate per ASTM A-153. All Steel conforms to AASHTO M-220 / M-183 and the Buy America Act 23 CFR 635.410 and is **Melted and Manufactured in the USA**. All other Galvanized Materials conform to ASTM A-123 or ASTM A-153. The materials covered by this certification conform to the requirements specified in the contract documents. The individual signing has the legal authority to bind the manufacturer or supplier of material.

STATE OF UTAH, COUNTY OF UTAH
 Signed and Subscribed before me:
 By **Robert J. McDonald**
 Notary Public
 Universal Industrial Sales, Inc.
 Quality Control
 Sign Structures, Bridge Rail, Steel Fabrication,
 Anchor Bolts, Highway Construction Products

“BUY AMERICA” REQUIREMENTS CATEGORY 1 EXAMPLE

Documentation from **Distributor/Final Fabricator**
 (Universal Industrial Sales)

- ~~Traceable to Subcontractor and Project~~
- ~~Lists Subcontractor (Mountain West Holding Co/Rocky Mountain Traffic Control)~~
- ~~Identifies Project~~
- Lists Materials
- Includes “Melted and Manufactured in USA” statement

Final Fabricator

- Includes Heat #240943
- ~~Traceable to Subcontractor~~
- ~~Traceable to Project~~
- Includes M&M statement



And here is the final fabricator’s cert. Universal Industrial Sales is the guardrail manufacturer that takes the coil from the mill and makes “W” or box shapes. They have provided all sorts of good information that is helpful and was required previously but is no longer required. This information is still helpful, and MDT won’t say “Try Again” or return documents, but it’s just not required moving forward. Believe it or not, we ARE trying to cut down on paperwork. Focusing on what is required moving forward, the final fabricator provides a statement the fabrication was done in the US (including galvanizing and that it meets specifications for guardrail) and what materials or items the cert covers. You’ll note they say “Meets Buy America” but also include 23CFR635.410 and state it was melted and manufactured in the USA, so they have all the bases covered. It’s also signed by a representative. A word on signing, we’re not going to be the signature police. If the name is represented as the responsible party, then that name is responsible. It doesn’t have to be a wet signature or an electronic signature. →

W-BEAM GUARDRAIL MATERIAL TEST REPORT

Job No.	Spec	Lot	Sample	Yield	TS	ES	ES ₂	ES ₃	ES ₄	ES ₅	ES ₆	ES ₇	ES ₈	ES ₉	ES ₁₀	ES ₁₁	ES ₁₂	ES ₁₃	ES ₁₄	ES ₁₅	ES ₁₆	ES ₁₇	ES ₁₈	ES ₁₉	ES ₂₀
240943	18	73	213	024	01	11	0.08	0.04	0210	82000	27.8	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0220	82700	28.9	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0310	81100	29.8	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0320	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0330	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0340	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0350	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0360	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0370	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0380	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0390	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0400	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0410	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0420	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0430	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0440	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0450	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0460	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0470	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0480	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0490	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0500	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0510	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0520	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0530	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0540	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0550	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0560	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0570	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0580	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0590	82700	27.6	A	2	1 Day W-Beam											
240943	18	73	213	024	01	11	0.08	0.04	0600	82700	27.6	A	2	1 Day W-Beam											

This is to certify that the above chemical analysis and physical properties are representative of the guardrail shipment and that guardrail meets the requirements of AASHTO M-163, Type 1, B, or IV as stamped. We further certify that Type 1 and 2 panels have been fabricated in accordance with AASHTO M-163.

W-BEAM GUARDRAIL WBS
MELTED AND MANUFACTURED IN THE UNITED STATES OF AMERICA
IN ACCORDANCE WITH THE "BUY AMERICA" ACT.

By Buffy Ballard State of Utah, County of Utah,
Buffy Ballard, Inc.
Quality Control

By Buffy Ballard State of Utah, County of Utah,
This 27 th day of August 2019
WBS
WBS
Quality Control

ROBERT J. McDONALD
 NOTARY PUBLIC, STATE OF MONTANA
 COMMISSION #006178
 COMM. EXP. 08-08-2020

"BUY AMERICA" REQUIREMENTS CATEGORY 1 EXAMPLE

Documentation from ~~Distributor~~/**Final Fabricator**
(continued)

- Lists Heat #240943

Final Fabricator

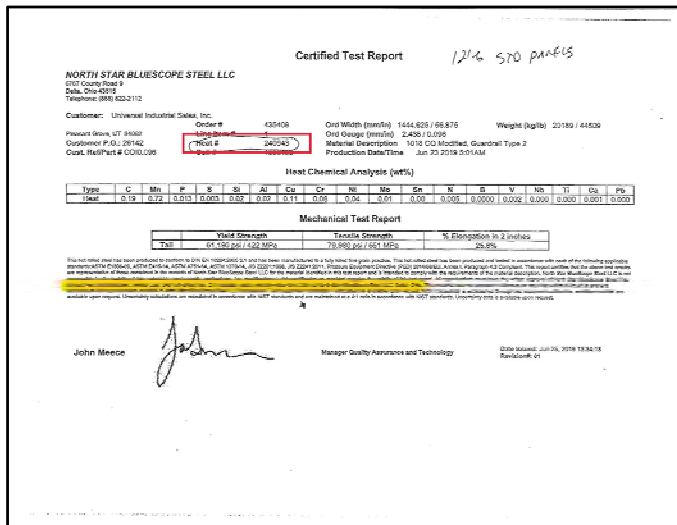
- Includes Heat #240943
- ~~Traceable to Subcontractor~~
- ~~Traceable to Project~~
- Includes M&M statement

VISION ZERO

zero deaths - zero serious injuries

MONTANA DEPARTMENT OF TRANSPORTATION

Here is page two where the heat number is shown. (240943) →



“BUY AMERICA” REQUIREMENTS CATEGORY 1 EXAMPLE

- Documentation from Mill (North Star)
- Traceable to **Distributor/Final** Fabricator
 - Lists Heat #240943
 - Lists **Distributor/Final** Fabricator
 - Includes “Melted and Manufactured in USA” statement

Steel Mill

- Mill Test Report
- Includes Heat #240943
 - Traceable to **Final** Fabricator
 - Includes M&M statement



And here is the mill cert showing the heat number and indicating the heat number was sold to Universal industrial Sales. This heat number is traced all the way through and listed on the 406 (240943) as well as the mill, and the fabricator. →

“BUY AMERICA” REQUIREMENTS CATEGORY 1 EXAMPLE

MDT Contract #: 05618 Project Name: Rocker Interchange Improvements

The Materials listed herein, furnished to MDT for use in the construction of the above referenced project by
Missouri River Contractors, LLC 3384 E US-12 Helena, MT 406-443-2524
(Name of Prime Contractor) (Address) (City, State) (Phone)

have originated and/or been fabricated at the mills and fabricators indicated below.

MDT Bid Item No.	Material Code (Material Description)	Quantity	Unit: LF, yd ³ , tons, etc.	Heat Number	MT 401 Category 1 or 2
				Mill*	
				Final Fabricator**	
606010023 One Way Departure	705 01 01 01 (w-beam)	1	Each	3144200	1
				Steel Dynamics	
				Universal Industrial Sales	
	705 01 01 01 (w-beam base)			725001	1
				North Star	
				Universal Industrial Sales	
	705 01 05 01 (post)			690200	2
				Universal Industrial Sales	
606010042 Metal Guardrail	705 01 01 01 (w-beam)	187.5	LF	3992005	1
				Steel Dynamics	
				Universal Industrial Sales	
	705 01 01 01 (w-beam)			248843	1
				North Star	
				Universal Industrial Sales	

*Category 1: Provide the steel.usdu.com/recycling.asp and the final.fabricator.com of the material. Provide heat number(s). Heat number(s) must be traceable from the mill through any intermediate fabricators, including any brokers, to the final fabricator. Heat numbers are not required to be traced through brokers after final fabrication.
 **Category 2: Provide the final.fabricator.com who is certifying domestic material and manufacture. (Mill/Heat numbers are not required).

Item Page

MDT Contract # 05618
 Project Name Rocker Interchange Improvements

MDT Bid Item No.	Material Code (Material Description)	Quantity	Unit: LF, yd ³ , tons, etc.	Heat Number	Category 1 or 2
				Mill*	
				Fabricator**	
	705 01 05 01 (post)			690200	2
				Universal Industrial Sales	
606010042 Terminal Section	705 01 01 01 (w-beam)	1	Each	3992005	1
				Steel Dynamics	
				Universal Industrial Sales	
	705 01 05 01 (post)			690200	2
				Universal Industrial Sales	

Same example using the “new” Form 406

- Heat #, Mill, and Final Fabricator on same row as the Material Code/Item number



Using the same example, I’ve mocked up what it would look like using the new form. The new 406 contains all the same information, item number, quantity, category, etc., but it now shows the material code that is attached to the item number making the exact tie back to the Materials Manual and by reference, the contract. The heat number, mill, and final fabricator, are all shown on the same row as the bid item for metal beam guardrail. It also just shows the Prime contractor and doesn’t deal with subcontractors or suppliers or distributors. Again, the 406 is from the PRIME to MDT. For the contracting community, it’s up to you if you want your subs to fill this out, but the Prime must still sign and indicate you have provided this material to MDT. MDT is paying the Prime for the item, not the sub or the supplier.

The table in the second column is from the second page of the 406 which will come into play in a few slides... →

“BUY AMERICA” REQUIREMENTS CATEGORY 1 EXAMPLE

MDT Contract #: 05618 Project Name: Rocker Interchange Improvements

The Materials listed herein; furnished to MDT for use in the construction of the above referenced project by
 Missouri River Contractors, LLC 3384 E US-12 Helena, MT 406-445-2624
(Name of Prime Contractor) (Address) (City, State) (Phone)

have originated and/or been fabricated at the mills and fabricators indicated below.

MDT Bid Item No.	Material Code (Material Description)	Quantity	Unit: LF, yd ³ , tons, etc.	Heat Number		MT 601 Category 1 or 2
				Mill*	Final Fabricator*	
60910023 One Way Delineator	705.01.01.01 (w-beam)	1	Each	31848300	Steel Dynamics	1
				Universal Industrial Sales		
				North Star		
	705.01.01.01 (w-beam flange)			225907	Universal Industrial Sales	1
				Universal Industrial Sales		
				North Star		
	705.01.05.01 (posts)			Universal Industrial Sales		2
				Universal Industrial Sales		
				Universal Industrial Sales		
60610030 Metal Guardrail	705.01.01.01 (w-beam)	187.5	LF	8902825	Steel Dynamics	1
				Universal Industrial Sales		
				246943	North Star	
	705.01.01.01 (w-beam)			Universal Industrial Sales		1
				Universal Industrial Sales		
				Universal Industrial Sales		

*Category 1: Provide the steel producer/recycling mill and the final fabricator of the material. Provide heat number(s). Heat number(s) must be traceable from the mill through any intermediate fabricators, including any brokers, to the final fabricator. Heat numbers are not required to be traced through brokers after final fabrication.
 *Category 2: Provide the final fabricator who is certifying domestic material and manufacture. Mill-Heat numbers are not required.

Item Page

MDT Contract #: 05618
 Project Name: Rocker Interchange Improvements

MDT Bid Item No.	Material Code (Material Description)	Quantity	Unit: LF, yd ³ , tons, etc.	Heat Number		Category 1 or 2
				Mill*	Final Fabricator*	
	705.01.05.01 (posts)			Universal Industrial Sales		2
				Universal Industrial Sales		
				Universal Industrial Sales		
60610042 Terminal Section	806.02.00.01 (W-Beam Terminal Section)	1	Each	Universal Industrial Sales		2
New Material Code						

Same example using the “new” Form 406

- Heat #, Mill, and Final Fabricator on same row as the Material Code/Item number
- **AND – ‘new’ Category 2 Material Code for “MASH W-Beam Terminal Section” (as of March 2018)**



Here’s the same example but using a “new” material code for W-beam terminal sections. This highlights how MDT is constantly trying to make things simpler. Previous to this code, we treated terminal sections as a combination of w-beam guardrail (Cat 1) and steel guardrail posts (Cat 2). So, heat numbers were required for the guardrail. But because a terminal section is a unit that contains cable, brackets, etc., and only a relatively small amount of actual w-beam, we created a Category 2 code that covers the entire “unit”. Now, all that is required is the certification from the fabricator that the terminal section was manufactured (and coated) in the US, using steel melted and manufactured in the US. This eliminates a material code and a line on the form 406. →

“BUY AMERICA” REQUIREMENTS CATEGORY 1 EXAMPLE

MDT Contract #: 05618 Project Name: Rocker Interchange Improvements

The Materials listed herein, furnished to MDT for use in the construction of the above referenced project by
Missouri River Contractors, LLC 3384 E US-12 Helena, MT 406-443-2524
(Name of Prime Contractor) (Address) (City, State) (Phone)

have originated and/or been fabricated at the mills and fabricators indicated below.

MDT Bid Item No.	Material Code (Material Description)	Quantity	Unit: LF, yd, tons, etc.	Heat Number		MT 601 Category 1 or 2
				Mill*	Final Fabricator**	
Proposed New Code 606010023 One-Way Departure	606 XX XX XX (departure section)	1	Each			2
				Universal Industrial Sales		
606010030 Metal Guardrail	705 01 01 01 (w-beam)	187.5	LF	6060325		1
				Steel Dynamics	Universal Industrial Sales	
	705 01 01 01 (w-beam)			240843		1
				North Star	Universal Industrial Sales	
705 01 05 D1 (post)					2	
				Universal Industrial Sales		
New Code 606010642 Terminal Section	606 02 00 01 (W-Beam Terminal Section)	1	Each			2
					Universal Industrial Sales	

*Category 1: Provide the steel producer/recycling mill and the final fabricator of the material. Provide heat number(s). Heat number(s) must be traceable from the mill through any intermediate fabricators, including any brokers, to the final fabricator. Heat numbers are not required to be traced through brokers after final fabrication.
 **Category 2: Provide the final fabricator who is certifying domestic material and manufacture. Mills/Heat numbers are not required.

Same example using the “new” Form 406

- Heat #, Mill, and Final Fabricator on same row as the Material Code/Item number
- Shows Category 2 Material Code for “MASH W-Beam Terminal Section”
- Shows potential new Category 2 Material Code for “Departure Section”



Going one step further, I’m proposing we treat departure sections the same way as terminal sections. Following the same logic, they don’t have quite as many parts, but are a “unit” with cable and brackets. This isn’t in place yet, but if/when it’s approved by FHWA, a new material code will be added to MT 601 and associated with the departure section bid item. Assuming all is approved, the same example we started with can now fit on a one page 406. →

“BUY AMERICA” REQUIREMENTS

Fabrication:

Any changes to the material
after the original mill

- Cutting
- Bending
- Rolling
- Welding
- Coating
- Extruding
- Etc.....

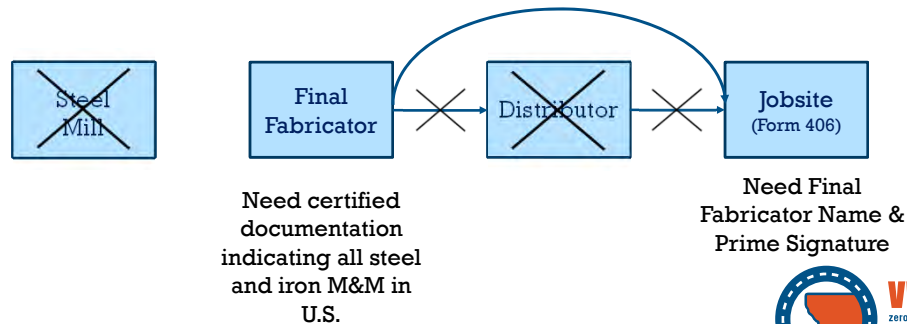


That takes care of Category 1. This list is a reminder of what we discussed at the beginning about manufacturing processes or “Fabrication”. Once one of these actions is performed, the entity who performed it becomes a fabricator and that action must take place in the US. As an example, I was reviewing a mill cert the other day that said some pipe was made in Canada but finished in the US. Since it was partially made in Canada, that pipe does not meet title 23 “Buy America”. It may meet “Buy American_n” because of trade agreements or meet other definitions of “Buy America” but does not for Federal Aid highway projects. This is why language is important. As another example, we had a project where some pipe piles used steel coil from an American Mill, were rolled and welded into piles in an American pipe shop, then were sold to a distributor in Canada, then reentered the US by way of a supplier who sold them to the contractor. Because no fabrication took place outside the US, these piles were Buy America compliant.

All this is important as we move on to Category 2...→

“BUY AMERICA” REQUIREMENTS CATEGORY 2

- Original Mill Test Report **NOT** required to be submitted to MDT but must be maintained by the Final Fabricator (No Heat #'s!!)
- Final Fabricator certifies all manufacturing processes, including coating, for iron and steel materials have occurred in the U.S. (melted, manufactured, & coated in the U.S.) including signature by fabricator representative
- Final Fabricator’s name on Form 406, signed by Prime Contractor

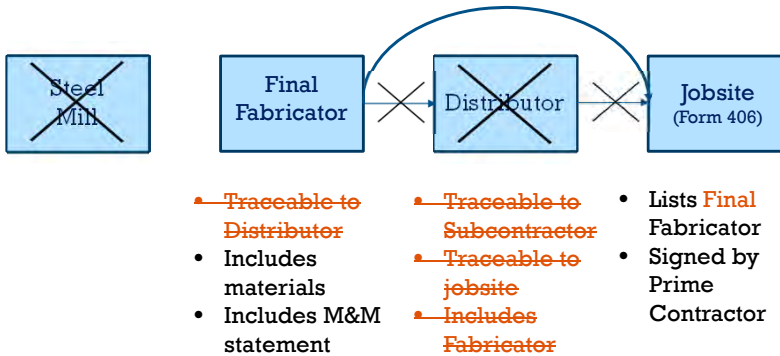


Now we have the flow of Category 2 documentation, again, using exes, strikeouts, and red ink to highlight the differences from the 2020 presentation.

Since this is a Category 2 item, we don’t need the mill, just the final fabricator. And as we just discussed, we don’t need the distributor anymore. Only the final fabricator’s certification. →

“BUY AMERICA” REQUIREMENTS CATEGORY 2 EXAMPLE

Materials Provided from ~~Distributor~~ Final Fabricator



Using the same Category 2 example from 2020, highlighting where things have changed...→

"BUY AMERICA" REQUIREMENTS CATEGORY 2 EXAMPLE

**CONTRACTOR'S CERTIFICATE OF COMPLIANCE
FOR MISCELLANEOUS STEEL & IRON ITEMS**
For Compliance with the Buy America Law and Provision
Std. Spec. 106.06, 23 USC Section 313 & 23 CFR 635.410

MDT Project No. NH 17-115923 Project Name Corral - North
 The Corral Sales Company PO Box 22285 Portland OR 97208-955-6361
 has furnished to Mountain West Holding Company PO Box 31793 Billings MT 406-258-0199
 59107

The following materials for use in the construction of the above referenced project.

MDT Item No.	Product Description	Quantity *	Unit Lf, Yds, ft, sq, cu.	Heat Number or Manufacturer	Category Tier 2
619010720	FB 53 x 5.7 QPL Approved	4.0	Es	Transpo	2
619010722	FB 54 x 7.7 QPL Approved	12.0	Es	Transpo	2

*Only list actual quantities delivered to the job site.
 *Provide name of steel producing/recycling mill if Category 1 item or fabricator authenticating domestic material if Category 2 item.

Submit all required documentation with this form. See the back of this form for general guidance on "Buy America" documentation. Refer to **BT 501 of the Montana Materials Testing Manual** for steel product category identification as well as sampling & testing requirements.

Contractor's Statement of Certification

Domestic Material. I hereby certify that all manufacturing processes, including initial melting/recycling and application of coatings, occurred in the United States for the above listed materials and that those materials do meet all other requirements as set forth in the plans and specifications.



Non-Domestic Material. I hereby certify that the above listed materials do meet the requirements as set forth in the plans and specifications with the exception that all or part of the manufacturing process may have occurred outside the United States. The material is considered non-domestic. The cost of this material, including delivery to the project, is _____.

By Max A. Coif Title Contract Eng.
(Prime Contractor's Name, Title & Print) Date 7/23/19
(Prime Contractor's Signature)
 Number of item pages attached - 0 -

Form 406 Revised (January, 2017)


Jobsite
(Form 406)

- Filled out according to instructions
- Lists **Final** Fabricator
- Signed by **Prime Contractor**

Once again working backwards from the form 406...

Fabricator is shown correctly in the table (Transpo), distributor is shown as the "furnisher".
 Item, Material, and quantity listed, and signed by the Prime... →



MATERIAL CERTIFICATION

CERTIFICATION OF: 16 Ea Type A Break-Safe AM Assembly with...

Sales Order: 61485
 Invoice: 84861
 Project #: NH 7-1(158)23
 Project Name: Conner - North

Sheri
 Sheri Mieschke, Coral Sales Company
 Manufacturer: Transpo Industries, Inc.

Consigned To: Mountain West Holding Company
 Destination: Your Yard
 Bill of Lading #: N/A
 Date of Shipment: 02/28/19

Distribution:
 1 Set: Mountain West Holding Company
 1 Set: Coral Sales Company
 Attachments: Manufacturer's Certifications

CSC# 030719em

Coral Sales Company | PO Box 22385 Portland, OR 97269 | www.coralsales.com
 main: 800-538-7245 | fax: 503-657-9649


Documentation from Distributor (Coral Sales)

- Traceable to Subcontract, Fabricator, and Project
- Lists Subcontractor
- Lists Fabricator
- Identifies Project

Distributor

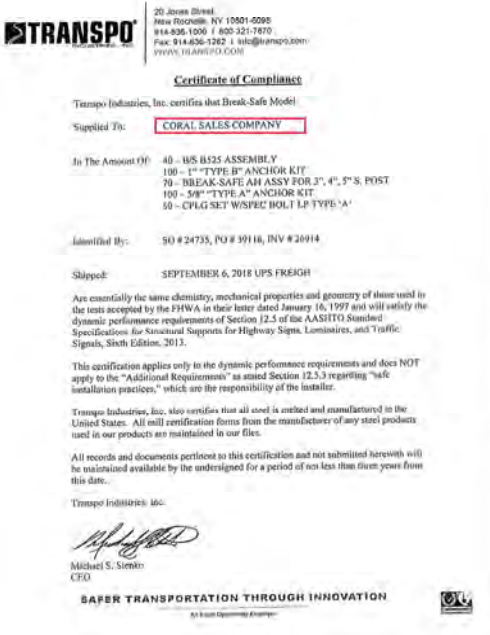
Subcontractor

- Traceable to jobsite
- Includes Fabricator



VISION ZERO
 zero deaths - zero serious injuries
 MONTANA DEPARTMENT OF TRANSPORTATION

This entire step has to do with the distributor/supplier, but since Coral Sales didn't do any fabrication, there is no longer a requirement for them to provide documentation. →



Transpo Industries, Inc. certifies that Break-Safe Model:

Supplied To: **CORAL SALES COMPANY**

In The Amount Of: 40 - 10S B525 ASSEMBLY
100 - 1" TYPE B ANCHOR KIT
70 - BREAKSAFE AH ASSY FOR 3", 4", 5" S. POST
100 - 5/8" TYPE A ANCHOR KIT
50 - C/PLG SET W/SPEC BOLT 1 LP TYPE "A"

Identified By: 90 # 24735, PO # 39116, INV # 20914

Shipped: SEPTEMBER 6, 2018 UPS FREIGHT

Are essentially the same chemistry, mechanical properties and geometry of those used in the tests accepted by the FHWA in their letter dated January 16, 1997 and will satisfy the dynamic performance requirements of Section 12.5 of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, Sixth Edition, 2011.

This certification applies only to the dynamic performance requirements and does NOT apply to the "Additional Requirements" as stated Section 12.5.3 regarding "safe installation practices," which are the responsibility of the installer.

Transpo Industries, Inc. also certifies that all steel is melted and manufactured in the United States. All mill certification forms from the manufacturer of any steel products used in our products are maintained in our files.

All records and documents pertinent to this certification and not submitted herewith will be maintained available by the undersigned for a period of not less than three years from this date.

Transpo Industries, Inc.
[Signature]
Michael S. Slemko
CEO

SAFER TRANSPORTATION THROUGH INNOVATION


"BUY AMERICA" REQUIREMENTS CATEGORY 2 EXAMPLE

Documentation from Fabricator (Transpo)

- ~~Traceable to Distributor~~
- Lists materials (item specs)
- Includes "Melted and Manufactured in US" statement

Final Fabricator

- ~~Traceable to Distributor~~
- Includes materials
- Includes M&M statement



VISION ZERO
zero deaths - zero serious injuries

MONTANA DEPARTMENT OF TRANSPORTATION

Here is the certification from the fabricator, in this case Transpo fabricated breakaway devices. They've provided the proper certification (melted and manufactured) and have indicated what items the cert applies to. In this case, break safe assemblies, which are required to be on the QPL. This also doubles as the materials cert because only the approved designs are listed on the QPL, and we can trace the brand name to the QPL to verify the approved design. →

“BUY AMERICA” REQUIREMENTS

Now we’ll discuss a few “special” situations...



That wraps up Category 2.

Before we move on, a quick note about “waivers”. FHWA may grant a waiver if there isn’t a domestic source of a certain material. However, in reality, waivers are complicated and basically impossible to get within the time frame of a project. So, it’s not **technically** impossible to get a waiver from FHWA, but those come directly from HQ in DC and require comment periods, research, etc. Therefore, if a project has been advertised, there is no real chance of getting a waiver. I just wanted to address that since that question comes up often. Moving on...

So far, we’ve covered the standard practice for steel and iron items, but there are some special situations where we have additional guidance and procedures...→

“BUY AMERICA” REQUIREMENTS

“Prefabricated” Steel Items

- Defined as items fabricated from Category I materials (e. g., structural steel, and structural steel tubing) at some point away from the project site
- Items fabricated away from the project may be inspected by the Department at the point of fabrication
- Items inspected at the point of fabrication still require a Form 406 from the Prime Contractor but will be accepted by a certification from the final fabricator, equivalent to Category 2 level documentation
- The certification must indicate “melted and manufactured in U.S.A.” or “all manufacturing processes have taken place in the U.S.A.” and the final fabricator must maintain all supporting documentation.

**NEVER ASSUME ITEMS ARE ACCEPTED AT THE POINT OF MANUFACTURE!
THE FORM 406 AND CERTIFICATION MUST BE SUBMITTED TO PROJECT STAFF!**



As you can imagine, all the paperwork involved in keeping track of this stuff can build up, especially for a bridge or structure. Also, because “all” steel and iron is included, it becomes difficult to keep track of small bits and pieces that go into things like diaphragms and cross braces but are still required to be domestic. After spending years trying to sort through reams and reams of paper on previous projects which takes a CONSIDERABLE number of man-hours, both for the contractor and MDT, MDT worked with FHWA Montana Division to come up with an alternative. →

The result was a spec change in the summer of 2017 that allowed items that are “prefabricated”, or fabricated away from the project site, to be accepted with a letter from the “prefabricator” equivalent to Category 2 level documentation. Unfortunately, the spec language omitted a key component of why FHWA allowed these “prefabricated” items to be accepted on the equivalent of Category 2...and that is “pre-inspection”. The intent of the spec change was to address the paperwork hassle of these large bridges and structures that MDT was *already inspecting at the point of fabrication*.

Part of pre-inspection is a review and verification of document tracking that is required by the third-party certification or audits that are also required of those prefabrication shops in MDT’s standard specifications. AISC, PCI, NPCA, etc. Since the spec wasn’t specific enough, MDT had to accept **any** prefabricated item on that basis, contractually, even if it wasn’t pre-

inspected or came from an uncertified shop. In essence, these “prefabricated” products contain what would be considered Category 1 materials separately, and even though the third-party certification assured documentation was being traced and tracked, those certifications have no assurance the steel is DOMESTIC. The combination of third-party certification **AND** MDT pre-inspection is what makes it acceptable. Without both those aspects, FHWA will no longer allow this level of acceptance. Therefore, a spec revision is working its way through the process to clean this up and address the pre-inspection part of the problem, effective as of the July 2021 version of the Spec Book. →

Moving forward, when a product is prefabricated from Category 1 materials, if it is not pre-inspected, Category 1 level documentation will be required. MDT reserves the right to determine which products will be pre-inspected, however certain items will always be pre-inspected, mainly prestressed concrete products and prefabricated steel bridges and bridge members, more on that in a moment. →

The good news is this change only applies to two products, overhead sign structures and bridge railing. These items are fabricated from structural steel and structural steel tubing/box beam guardrail, however since these items are not historically pre-inspected, they will require Category 1 documentation by default. There is already a specific Category 1 material code for Overhead Sign Structures and the Bid Items for bridge railing already contain structural steel tubing. This is where there was a contradiction since these items are “prefabricated”. Prestressed beams are already Category 2 since rebar and strand are Category 2. This is another case where the Steel Checklist will make things easier by showing what material codes are attached to what bid items. →

In any case, the cert must still contain the correct language. Also, this documentation must be delivered to the project with a form 406!!! Never assume that because something was pre-inspected it was “pre-approved.” →

“BUY AMERICA” REQUIREMENTS

“Prefabricated” Steel Items (Cont.)

- Items fabricated from Category 1 materials (e. g., structural steel and structure steel tubing) away from the project that ***are not*** inspected at the point of fabrication still need to provide Category 1 documentation regardless of the fact they were “prefabricated”.
- MDT reserves the right to determine which items it will inspect at the point of fabrication
 - Bridges and bridge members are always inspected at the point of fabrication
 - Overhead structures may or may not be inspected at the point of fabrication
 - Bridge rail is not usually inspected at the point of fabrication
 - Guardrail is not inspected at the point of fabrication
 - Piling is not inspected at the point of fabrication

**NEVER ASSUME ITEMS ARE ACCEPTED AT THE POINT OF MANUFACTURE!
THE FORM 406 AND CERTIFICATION MUST BE SUBMITTED TO PROJECT STAFF!**



So, to reiterate... →

Items fabricated from Category 1 materials that are NOT inspected at the point of fabrication must still provide Category 1 documentation regardless if they are “prefabricated” moving forward. →

MDT reserves the right to determine which items will be pre-inspected. →

These are the materials this applies to, in general. →→→→

“BUY AMERICA” REQUIREMENTS

Precast items

- Defined as items fabricated at a precast or prestressed plant listed on the QPL or certified by PCI, NCPA, or ACPA
- The Department will either inspect the precast item at the plant or inspect the plant periodically
- Precast items still require a Form 406 from the Prime Contractor but **will** be accepted by a certification from the final fabricator (precast plant), equivalent to Category 2 level documentation
- The certification must indicate “melted and manufactured in U.S.A.” or “all manufacturing processes have taken place in the U.S.A.” and the final fabricator must maintain all supporting documentation.
- The certification must indicate the designation and number of items covered
 - E.g., 24” RCP, 10’ X 7’ RCB, Type I Drop Inlet, Type M-72 Beam, etc.

NEVER ASSUME ITEMS ARE ACCEPTED AT THE POINT OF MANUFACTURE!

THE FORM 406 AND CERTIFICATION MUST BE SUBMITTED TO PROJECT STAFF!



Now let’s talk about precast items. For the purposes of this discussion, it’s important to understand what is considered precast. →

If a concrete item is not cast in a precast plant that is either listed on the QPL or certified by a third-party precast organization, it’s considered “cast in place” (more on that in a second...) →

MDT will either inspect the item or the facility to ensure documentation is being maintained. →

Precast items require a form 406 but will be accepted with Category 2 level documentation. All precast items are considered Category 2 in the Materials Manual. →

The proper language must be included on the certification. →

And the items the certification covers must be indicated. →

Again, documentation must come to the project with the form 406. →

“BUY AMERICA” REQUIREMENTS

Precast items (Cont.)

- Certification must indicate product(s) meet all MDT specifications for items indicated
 - “Meets Contract/Project Specifications” (Must include Project Name/Number), or
 - “Meets AASHTO XYZ” (Spec called for in MDT Standard Specifications), or
 - “Meets MDT Specifications (Only applicable if an item is obviously a standard item)
- MDT inspects precast plants periodically or during production to ensure documentation and test results are maintained in order to allow a more general certification
- Items from plants not listed on the QPL or not certified by PCI, NCPA, or ACPA are considered “cast-in-place” and all materials must be sampled, tested, and accepted according to the individual material requirements in MT 601, e.g., barrier rail – See Section 554 and 605 in the Spec Book

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Stepping away from Buy America proper for a moment here... →

The certs from a precast plant must also indicate the items meet the contract specifications. Here are some examples of acceptable language. →

If the contract or project is indicated, “meets contract or project specifications” is acceptable. Often times precast items are specific to contracts. →

If it's an item that is covered by an AASHTO or ASTM standard, certifying it meets that standard is acceptable. As an example, if a contract says provide concrete pipe in accordance with AASTHO XYZ. →

IF the items are identified AND they are obviously standard items, like 24” concrete pipe, then “meets MDT specifications” is also acceptable. This would ***not*** be acceptable for a project specific box culvert or a prestressed beam. →

As we just discussed, MDT is in the precast plants monthly and annually or at the time of construction to review other certifications and test results (cement, aggregate, etc.) which allows this more general level of certification. →

Getting back to the Cast-in-place discussion, when items are not made at plants that go through our inspection process, regardless if they are “precast” they are considered cast in place and must be inspected as such. So, if you have “precast” items on projects made at a non-certified or non-listed plant (which isn’t allowed in the first place for many items) then the individual materials must be sampled and tested as if the items were cast-in-place on the project. The classic example is barrier rail. These are routinely cast away from a listed plant and then transported to the project so they are treated as cast in place and must provide documentation for the individual materials contained within. (QA incentives also complicate Barrier Rail) →

“BUY AMERICA” REQUIREMENTS

Rebar

- Follow guidance in Rebar Memo https://www.mdt.mt.gov/other/webdata/external/const/const_memo/2021/REBAR-CERTS-BUY-AMERICA.pdf
- Rebar is Category 2
- Rebar mill must be listed on the QPL
- Rebar epoxy coater must be listed on the QPL
- Still requires a Form 406 from the Prime Contractor
- Mill certs and heat #'s are not required to be submitted, however the name and location of the mill and epoxy coater must be indicated on the Final Fabricator's certification
- Size and specification of Rebar must also be indicated on Final Fabricator's certification
- The certification must indicate “melted and manufactured in U.S.A.” or “all manufacturing processes have taken place in the U.S.A.”, the final fabricator must maintain all supporting documentation, and the certification must include the name of the individual making the statement



The last special situation is Rebar. →

There is a construction memo out there now with specific guidance on rebar that goes into greater detail and includes a lot of what we've discussed already today, but here are the high points. →

Rebar is category 2 →

Rebar must come from sources listed on the QPL. →

As do rebar epoxy coatiers. This is how we assure the quality of the material. These mills and coatiers go through annual third-party audits and random split sample tests. →

Rebar still requires a form 406. →

Mill certs and heat numbers are **not** required (Cat 2) however the name and location of the mill and/or epoxy coater must be shown on the certification. →

The size and specification of the Rebar must also be indicated so we can verify the right product and the right spec has been furnished. →

And finally, the correct domestic language must be included along with the name of the person making the certification. →

“BUY AMERICA” REQUIREMENTS

In Conclusion...

- This presentation has focused primarily on “Buy America” Documentation
- Always remember material acceptance documentation also required – ensure material meets specifications for design and quality
- Examples:
 - Rebar (A615, M 31, A1035, etc.), galvanizing (A123, A153, M 111), epoxy (A775), steel (M 270, A709, etc.), guardrail (M 180), section of MDT spec book, other AASHTO or ASTM spec., etc.



We Focused on Buy America today. At one time MDT tried to eliminate that reference due to all the confusion with the other domestic laws and different interpretations out there, but much like the imperial measurement system, it’s never going away so the goal is to explain it as best we can.

Remember material and quality specs must be provided. Just because it’s domestic doesn’t mean it meets spec.

Here are some examples of specifications that apply to the materials we’ve been discussing today...

→

“BUY AMERICA” REQUIREMENTS



THANK YOU FOR WATCHING!!

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Jim Davies – Materials Bureau Chief – jdavies@mt.gov – 406-444-3424



And that brings this presentation to a close. I hope this information is helpful to both MDT and Contractor personnel. This presentation will be posted internally and externally for anyone to reference in the future. Hopefully there won't be too many changes but there will always be some, so updates will be made as appropriate. The intent is for this to serve as a single source of information that both the Contracting community and MDT inspectors can reference. The PowerPoint slides will also be posted as a pdf file for download.

Please feel free to contact any of us with questions.

Thank you for your time and attention.