



# Traffic Operations

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# Material Quality Assurance Processes

## Electrical Accessories

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 1 of 2

Source Level Materials	Specification	Comments
Audible PED Push Button		
Cabinets and Junction Boxes	811.02.03	
Cable Rings	819	
Clamps for Signing and Lighting		
Closed Circuit TV Assemblies		
Connector Kit	950.14.01	
Connector Kit and Component	950.14	
Control and Distribution Equipment (Electrical)	950.13	
Control Cabinet	950.13	
Digital Message Sign		
Electrical Cable and Wire		
Electrical Hardware		
Guy Wire		
Luminaires and Lamps, Other	950.12	
Other Electrical Accessories		
Pedestrian Signal Heads	814	
Sign Lighting System		
Traffic Signal Head	950.15	
Video Detection Camera		

## Plant or Product Qualification

### Review of Misc Production Location

Limited Producer Check

General review of producer information. No production qualification required.

### Production facility data maintained to track the material supply chain.

Address and low level information is maintained to provide data of facilities that produce materials in this category. Facilities that produce material in this category will be given a status of "Project Specific Review Required."

1 per 1

Prior to Source Request

## Source Approval

### Source Submission

Source of Supply Submittal

A name and address of the material sources of supply shall be sent to MMD for review. The producer is the organization that creates the material, the supplier is the one that delivers it to the project.

# Material Quality Assurance Processes

## Electrical Accessories

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 2 of 2

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### Source of Supply Processing

1 per 1 Prior to Usage on Project

### Material Production

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#### Approval of Material Prior to Shipment

*Material Certification for Project Usage*

A Manufacturer's catalog descriptions matching the specific electrical item shall be submitted to the Office of Traffic and Safety for approval.

**Producer to submit Catalog Cuts to the Office of Traffic and Safety.**

1 per 1 Prior to Usage on Project

### Project Construction

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#### OOTS Material Verification

*Material Verification*

The Project Engineer shall ensure that the materials received on the project are from the correct source and match the approved catalog description.

**Project Engineer to verify material product, submit Form 14.**

1 per 1 Delivery to Project

# Material Quality Assurance Processes

## Reflective Sheeting

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 1 of 2

Source Level Materials	Specification	Comments
Reflective Sheeting	950.03	

### Plant or Product Qualification

#### Review Producer (OOTS)

Facility Qualification

#### Qualification of Production Facility

The manufacturer/producer shall submit a quality control plan that will be reviewed, approved, and filed with the Office of Materials Technology.

1 per 1 Prior to Source Request

#### SM Production QA

Facility Qualification

Random shop inspections shall be performed to ensure that the approved QC plan is being followed. The frequency of visits varies and may include sampling of materials, review of certifications and shop procedures. Random sampling of material may be performed at the fabrication shop or at a project location.

Random shop inspections will be performed to ensure that signing materials are fabricated in accordance with the approved shop drawings and contract requirements. Random samples of raw materials will be taken from various manufacturers/producers and OMT will perform verification testing. Testing may include as a minimum, visual, dimensional, mechanical and chemical testing.

#### Production Quality Assurance.

1 per 1 Prior to Usage on Project  
1 per 12 Months

#### Review Product (OOTS)

Product Qualification

#### Qualification of Material Product

Reflective Sheeting materials must be "Qualified for State Use" prior to being sourced for a state project.

1 per 1 Prior to Source Request

### Source Approval

#### Source Submission

Source of Supply Submittal

A name and address of the material sources of supply shall be sent to MMD for review. The producer is the organization that creates the material, the supplier is the one that delivers it to the project.

Material Producers and product must be on a qualified list and associated correctly prior to source approval. If the Contractor sources a producer or product that is not on the qualified list, he will be advised that the source approval is contingent on a qualification process, the procedures, and duration. If he still wishes to use this product, he will need to advise the material producer / vendor to contact the New Products Team for procedures.

When sheeting of different types is specified on the same sign (I.E. Type IV on Type IX) the sheeting shall come from the same manufacturer.

#### Source of Supply Processing

1 per 1 Prior to Usage on Project

### Project Construction

# Material Quality Assurance Processes

## Reflective Sheeting

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 2 of 2

### OOTS Material Verification

*Material Verification*

On arrival at the project site the Project Engineer shall ensure the material is from the correct source and is fit for usage. The Project Engineer shall verify that the materials match the shipping ticket/bill of lading and that the materials have been inspected, approved and stamped.

**See source response for "Aluminum Signs" for this item for acceptance**

1 per 1

Delivery to Project

# Material Quality Assurance Processes

## Traffic and Related Materials, Miscellaneous

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 1 of 1

Source Level Materials	Specification	Comments
Metallic Conduit and Fitting	921.07.01, 950.10	
Non-Metallic Conduit and Fitting	921.07.02, 950.10	

### Plant or Product Qualification

#### Review of Misc Production Location

Limited Producer Check

General review of producer information. No production qualification required.

#### Production facility data maintained to track the material supply chain.

Address and low level information is maintained to provide data of facilities that produce materials in this category. Facilities that produce material in this category will be given a status of "Project Specific Review Required."

1 per 1 Prior to Source Request

### Source Approval

#### Source Submission

Source of Supply Submittal

A name and address of the material sources of supply shall be sent to MMD for review. The producer is the organization that creates the material, the supplier is the one that delivers it to the project.

#### Source of Supply Processing

1 per 1 Prior to Usage on Project

### Project Construction

#### OOTS Material Verification

Material Verification

Upon delivery to project the Project Engineer shall visually inspect the conduit material and ensure that it is in good condition, embossed with the grade/type and has the appropriate UL or NEMA designation. The Project Engineer shall submit a form 14 to OMT.

#### Project Engineer to submit Form 14 to the Materials Management Division confirming the product is undamaged, acceptably placed, and conforms to specification.

1 per 1 Delivery to Project

# Material Quality Assurance Processes

## Traffic Control Materials, Qualified

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 1 of 1

Source Level Materials	Specification	Comments
Barrier Delineators		
Lane Separator System (Longitudinal Separator)	104	
Luminaires and Lamps, Roadway LED	Special Provisions	

### Plant or Product Qualification

#### Review Producer (OOTS)

Facility Qualification

#### Production facility data maintained to track the material supply chain and provide a basis for qualified products.

Address and low level information is maintained to provide data of facilities that produce this category's material types. Facilities that produce materials in this category will be given a status of "Product Qualification Required".

1 per 1 Prior to Source Request

#### Review Product (OOTS)

Product Qualification

#### Qualification of Material Product for use on State Projects.

New products for this category will be evaluated through the MPEL system. Navigate to "<http://www.roads.maryland.gov/index.aspx?PageID=600>" for the current qualified list and detailed procedures. Navigate to "<http://apps.roads.maryland.gov/MPEL/>" for new submissions.

1 per 1 Prior to Source Request

### Source Approval

#### Source Submission

Source of Supply Submittal

A name and address of the material sources of supply shall be sent to MMD for review. The producer is the organization that creates the material, the supplier is the one that delivers it to the project.

#### Source of Supply Processing

The products of materials for this group must be qualified for state use prior to the approval of the Source of Supply request. If the contractor requests a product that is not on the qualified list he will be provided the link to the MPEL system (<http://apps.roads.maryland.gov/MPEL/>). qualification procedures, anticipated review duration, and be advised thta the source approval is contingent on the product qualification.

1 per 1 Prior to Usage on Project

### Project Construction

#### OOTS Material Verification

Material Verification

#### Project Engineer to collect certifications (TC 1.03 w/o test data) and submit certs to the Materials Management Division for clearance.

1 per 1 Delivery to Project

# Material Quality Assurance Processes

## Traffic Control Materials, Qualified & Temporary

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 1 of 2

Source Level Materials	Specification	Comments
Arrow Panel	104.07	
Barricades	104.13	
Cones	104.14	
Drums	104.12	
Portable Rumble Strip		
Portable Sign Stands	104.08	
Portable Traffic Signals	104.30	
Portable Variable Message Sign	104.19	
Protection Vehicle Attenuator	104.23.02	
Speed Display Trailers	104.28	
Temporary Concrete Traffic Barrier	104.04	
Temporary Crash Cushion Sand Filled Plastic Barrel	104.10	
Temporary Steel Traffic Barrier	Special Provisions	
Temporary Traffic Sign	104.08	
Truck Mounted Variable Message Signs	104.29.02	
Tubular Marker	104.06	
Water Filled Barrier	104	

### Plant or Product Qualification

#### Review Producer (OOTS)

Facility Qualification

The Office of Traffic and Safety shall review the manufacturer's information for inclusion on their Qualified Product List.

#### Production facility data maintained to track the material supply chain and provide a basis for qualified products.

Address and low level information is maintained to provide for data of facilities that produce materials in this category. Facilities that produce materials in this category will be given a status of "Product Qualification Required".

1 per 1 Prior to Source Request

#### Review Product (OOTS)

Product Qualification

The Office of Traffic and Safety shall review the product information for inclusion on their Qualified Product List.

#### Qualification of Material Product for use on State Projects.

New products for this category will be evaluated through the MPEL system. Navigate to "<http://www.roads.maryland.gov/Index.aspx?PageId=600>" for the current qualified lists and detailed procedures. Navigate to "<http://apps.roads.maryland.gov/MPEL/>" for new submissions.

1 per 1 Prior to Source Request

### Source Approval



# Material Quality Assurance Processes

## Traffic Control Materials, Qualified & Temporary

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 2 of 2

### Source Submission

Source of Supply Submittal

A name and address of the material sources of supply shall be sent to MMD for review. The producer is the organization that creates the material, the supplier is the one that delivers it to the project.

Material Producers and product must be on a qualified list and associated correctly prior to source approval. If the Contractor sources a producer or product that is not on the qualified list, he will be advised that the source approval is contingent on a qualification process, the procedures, and duration. If he still wishes to use this product, he will need to advise the material producer / vendor to contact the New Products Team for procedures.

### Source of Supply Processing

1 per 1 Prior to Usage on Project

### Project Construction

#### OOTS Material Verification

Material Verification

Project Engineer shall ensure that the material is from the appropriate source and is in good condition.

**Project Engineer to submit Form 14 to the Materials Management Division confirming the product is undamaged, acceptably placed, and conforms to specification. Indicate the product manufacturer and model number (when available).**

*Product manufacturer and model number required for auditing purposes.*

1 per 1 Delivery to Project

# Material Quality Assurance Processes

## Traffic Control Materials, Specialty Items

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 1 of 2

Source Level Materials	Specification	Comments
Breakaway Base		
Other Specialty Traffic Control Materials		
Speed Display Signs		
Temporary Movable Type Concrete Barrier	104.09, 104.17, Special Provisions	

### Plant or Product Qualification

#### Review of Misc Production Location

Limited Producer Check

General review of producer information. No production qualification required.

#### Production facility data maintained to track the material supply chain.

Address and low level information is maintained to provide data of facilities that produce materials in this category. Facilities that produce material in this category will be given a status of "Project Specific Review Required."

1 per 1 Prior to Source Request

#### Review Product (OOTS)

Product Qualification

#### Product data maintained for historical purposes.

Product data is maintained by the Office of Traffic and Safety for historical and tracking purposes. This data does not need to be associated to the Source of Supply for approval.

1 per 1 Prior to Usage on Project

### Source Approval

#### Source Submission

Source of Supply Submittal

A name and address of the material sources of supply shall be sent to MMD for review. The producer is the organization that creates the material, the supplier is the one that delivers it to the project.

#### Source of Supply Processing

Specialty Traffic Control Materials are typically designed into the project and details included in its special provisions. It is recommended that the contractor converse with the Office of Traffic and Safety before submitting a source request if there are questions concerning the material or its usage.

1 per 1 Prior to Usage on Project

### Material Production

#### Approval of Material Prior to Shipment

Material Certification for Project Usage

#### Producer to submit Shop Drawings or Catalog Cuts to the Office of Traffic and Safety for evaluation.

The documentation to be submitted to the Office of Traffic and Safety for evaluation is dependent on what is available. If approved OOTS will distribute approvals to the PE, Contractor, and OMT. Contact the Office of Traffic and Safety for further information if required.

1 per 1 Prior to Usage on Project

### Project Construction

# Material Quality Assurance Processes

## Traffic Control Materials, Specialty Items

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 2 of 2

### OOTS Material Verification

Material Verification

Project Engineer to submit Form 14 to the Materials Management Division confirming receipt of approved documentation from OOTS and conformance to specifications.

1 per 1

Delivery to Project

# Material Quality Assurance Processes

## Traffic, Misc. Services and Products

Traffic Operations Division

QA / Frequency Guide, Source Level Material Listing Page 1 of 1

Source Level Materials	Specification	Comments
Drone Radar	104.24	
Flagger	104.15	
Traffic Manager	104.11	

### Plant or Product Qualification

**Review Producer (OOTS)** *Facility Qualification*

Facility data maintained to provide a basis for product data or historical reference.

1 per 1 Each

**Review Product (OOTS)** *Product Qualification*

Product data maintained for historical purposes.

1 per 1 Each

### Source Approval

**Source Submission** *Source of Supply Submittal*

A name and address of the material sources of supply shall be sent to MMD for review. The producer is the organization that creates the material, the supplier is the one that delivers it to the project.

Source of Supply Processing

1 per 1 Prior to Usage on Project

### Project Construction

**OOTS Material Verification** *Material Verification*

Project Engineer to submit Form 14 to the Materials Management Division confirming the product is undamaged, acceptably placed, and conforms to specification. Indicate the product manufacturer and model number (when available).

Product manufacturer and model number required for auditing purposes.

1 per 1 Delivery to Project