STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Parameters: Product Category: 45 - MASH Approved Safety Hardware

Approved Begin Date: 01/01/1990
Approved End Date: 01/01/2050
Display Expired Materials? No
Expired Begin Date: 01/01/1990
Expired End Date: 01/01/2050
Display Address Info For Sources? No

Product Category: 45 - MASH Approved Safety Hardware

Seciton: A-Longitudinal Barriers

Material: QPL.45.002 Thrie Beam Guardrail

89901059 - Gregory Industries Inc

<u>Trade Name</u> <u>Evaluation #</u>

Guardian 5 18015

MASH TL-5 Thrie beam

Product Category: 45 - MASH Approved Safety Hardware

Seciton: A-Longitudinal Barriers

Material: QPL.45.003 Cable Barrier Systems

89900132 - Brifen USA

Trade Name Evaluation #

Brifen MASH O-Post and MASH MGT 20093

MASH TL-3. Brifen Wire Rope Safety Fence, O-Post; Brifen End Terminal. For slopes 6:1 or flatter.

89900409 - Gibraltar

<u>Trade Name</u> <u>Evaluation #</u>

MASH 2016 Cable Barrier System 21072

MASH TL-3. Gibraltar Cable Barrier System with 4 cables, C-section steel posts, hardware, and Gibraltar end terminals. Shall be installed with 7-foot post spacing. For 4:1 slopes or flatter.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: A-Longitudinal Barriers

Material: QPL.45.007 Alt. Systems: Roller barriers

89901533 - ETI USA, Inc.

Trade Name Evaluation #

ETI-GR02-TL4 18094

MASH TL-4. Approved by MASH Committee for use with Thrie Beam to ETI Roller Barrier Transition.

89901529 - KSI

Trade Name Evaluation #

KSI Global Safety Roller Barrier 18095

MASH TL-4. Approved by MASH Committee for use with Safety Roller Barrier MASH TL-3 Transition to W-Beam.

Product Category: 45 - MASH Approved Safety Hardware

Seciton: A-Longitudinal Barriers

Material: QPL.45.011 Attachments

89901574 - Durisol USA, Inc.

<u>Trade Name</u> <u>Evaluation #</u>

Acrylite Soundstop Structure Mounted NB 21014

TL-4 Noise barrier system. Max. Height from Pavement = 17 ft. Actual height will depend on required height as determined by noise study, allowable height as determined by wind load calculations, and other factors.

Ground Mounted NB System TL-3 22069

TL-3 Noise barrier system. Max. Height from Pavement = 17.3 ft. Actual height will depend on required height as determined by noise study, allowable height as determined by wind load calculations, and other factors.

Ground Mounted NB System TL-4 22070

TL-4 Noise barrier system. Max. Height from Pavement = 17.3 ft. Actual height will depend on required height as determined by noise study, allowable height as determined by wind load calculations, and other factors.

Structure Mounted Aluminum NB System 22071

TL-4 Noise barrier system. Max. Height from Pavement = 17 ft. Actual height will depend on required height as determined by noise study, allowable height as determined by wind load calculations, and other factors.

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Product Category: 45 - MASH Approved Safety Hardware

Seciton: B-Guardrail End Terminals

Material: QPL.45.014 Tangential

89900775 - Road Systems	Inc
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Trade Name	Evaluation #
MSKT (TL-2)	17033
MASH TL-2 (S-GRT-3) Type 21 Guardrail Terminal	

MSKT (TL-3) MASH TL-3

(S-GRT-2) Type 38 Guardrail Terminal

89901319 - SPIG Industry, LLC

<u>Trade Name</u>	Evaluation #	
SPIG Guardrail End Treatment		
		
SPIG Guardrail End Treatment (SGET)	19069	
MASH TL-3.		

89900959 - Valtir, LLC

Trade Name	Evaluation #	
SoftStop (TL-2)	17029	
MASH TL-2 (S-GRT-3) Type 21 Guardrail Terminal		
SoftStop (TL-3)	13058	
MASH TL-3 (S-GRT-2) Type 38 Guardrail Terminal		

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: B-Guardrail End Terminals

Material: QPL.45.016 Median Guardrail End Terminals

89900959 - Valtir, LLC

Trade Name Evaluation #

MATT (Median Attenuating TREND Terminal) 22030

MASH TL-3. Median W-beam tangent redirective guardrail end terminal (approach or departure).

Product Category: 45 - MASH Approved Safety Hardware

Seciton: C-Crash Cushions

Material: QPL.45.017 Reusable

89900950 - Traffix Devices Inc

<u>Trade Name</u> <u>Evaluation #</u>

Delta Crash Cushion 21032

MASH TL-3.

89900959 - Valtir, LLC

Trade Name Evaluation #

QuadGuard M Wide 20144

MASH TL-3. Redirective, non-gating, reusable crash cushion.

QuadGuard M10 12009

MASH TL-3 Non-gating reusable system. Hazards norrower than 36". Concrete pad required.

QuadGuard M10 24 in, TL-2 22059

MASH TL-2. Redirective, non-gating, reusable crash cushion.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: C-Crash Cushions

Material: QPL.45.018 Low Maintenance

89900959 - Valtir, LLC

Trade Name Evaluation #

QuadGuard Elite M10 24-inch 19082

MASH TL-3. Redirective, non-gating. Can be used to shield fixed objects up to 24 inches wide.

QuadGuard Elite M10 Wide 20090

MASH TL-3. Redirective, non-gating crash cushion used to shield fixed objects up to 69 in. wide. Has transitions to concrete barrier, guardrail, etc.

89901033 - Work Area Protection Corp

Trade Name Evaluation #

SCI-100 GM (Narrow) 03151

MASH TL-3

Non-gating, low maintenance system

Hazards narrower than 36" Concrete pad required

SCI-100 GM (Wide) 03151

MASH TL-3

Non-gating, low maintenance system

Hazards wider than 36" Concrete pad required

Product Category: 45 - MASH Approved Safety Hardware

Seciton: C-Crash Cushions

Material: QPL.45.019 Self-Restoring

89900959 - Valtir, LLC

Trade Name Evaluation #

REACT M 21004

MASH TL-3. Redirective, non-gating, self-restoring crash cushion.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: D-Category I Work Zone Devices

Material: QPL.45.009 Pedestrian Channelizers (< 100lbs.)

89900950 - Traffix Devices Inc

<u>Trade Name</u> <u>Evaluation #</u>

ADA Urbanite Longitudinal Device 18028

MASH TL-3.

Product Category: 45 - MASH Approved Safety Hardware

Seciton: E-Category II Work Zone Devices

Material: QPL.45.025 Long. Channelizers for Traffic Control

89900678 - Pexco LLC

<u>Trade Name</u> <u>Evaluation #</u>

FG 300 Interstate Grade Curb System 06073

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FG 300 Turnpike Grade Curb System 13015

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89901545 - Traffic Safety Service LLC

Trade Name Evaluation #

TSS-590 Water Barrier 20076

MASH TL-3.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: E-Category II Work Zone Devices

Material: QPL.45.025 Long. Channelizers for Traffic Control

89900959 - Valtir, LLC

<u>Trade Name</u> <u>Evaluation #</u>

ArmorZone TL-2 Barrier 23053

Limited to use for zones with traffic < 45mph. Use in accordance with TDOT Work Zone Design Manual.

SiteGuide TL-3 Long. Channelizing Device 22082

Limited to use for zones with traffic < 45mph. Use in accordance with TDOT Work Zone Design Manual.

Yodock 2001M 21115

Limited to use for zones with traffic < 45mph. Use in accordance with TDOT Work Zone Design Manual.

Yodock 2001MB 21116

Limited to use for zones with traffic < 45mph. Use in accordance with TDOT Work Zone Design Manual.

Product Category: 45 - MASH Approved Safety Hardware

Seciton: E-Category II Work Zone Devices

Material: QPL.45.028 Other Lightweight TCDs

89901576 - Eastern Metal of Elmira, Inc.

Trade Name Evaluation #

Apex Compact Sign Stand 22064

TL-3. Aluminum legs on steel sign stand base. For roll-up signs.

Apex Dual Recoil Max Sign Stand 23007

TL-3. Aluminum legs on steel sign stand base. For roll-up signs.

Apex Recoil Sign Stand 22063

TL-3. Aluminum legs on steel sign stand base. For roll-up signs.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: E-Category II Work Zone Devices

Material: QPL.45.028 Other Lightweight TCDs

89900678 - Pexco LLC

<u>Trade Name</u> <u>Evaluation #</u>

WZ-380 Type III Barricade 06074

MASH TL-3. With perforated square steel tube (PSST) feet and uprights.

WZ-381 Type III Barricade 06074

With angle iron feet and X-tube upright.

89900689 - Plasticade Products

<u>Trade Name</u> <u>Evaluation #</u>

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Plasticade SS100 Tripod	20078	
Plasticade SS105 Tripod	20079	
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Plasticade SS300 Sign Stand	20080	
	20000	
	20004	
Plasticade SS300A Sign Stand	20081	
		
Plasticade SS310 Sign Stand	20082	
Plasticade SS310A Sign Stand	20083	
Plasticade SS340A Sign Stand	20084	
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Plasticade SS410A Sign Stand	20085	
Plasticade SS420A Sign Stand	20086	
	2000	
Disationals CCFOO Circa Chand	20007	
Plasticade SS520 Sign Stand	20087	
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Plasticade SSRB800 Sign Stand	20077	
Safetycade Type 1 & 2 Barricade	23056	
Verticade Vertical Panel Barricade	23057	

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: F-Category III Work Zone Devices

Material: QPL.45.029 Portable Barriers: Concrete, free-standi

89900294 - Easi-Set Worldwide

<u>Trade Name</u> <u>Evaluation #</u>

12" J-J Hooks Free Stdg 20' F Shape 19038

MASH TL-3. Easi-Set Worldwide certifies producers of this product. Chris-Hill Construction Company is an approved producer of this barrier. Ross Prestess is an

approved producer of this barrier.

12" J-J Hooks Free Stdg 20' Jersey Shape 19038

MASH TL-3. Easi-Set Worldwide certifies producers of this product. Chris-Hill Construction Company is an approved producer of this barrier. Ross Prestess is an

approved producer of this barrier.

J-J Hooks MASH Free Standing 17095

MASH TL-3. Easi-Set Worldwide certifies producers of this product. Chris-Hill Construction Company is an approved producer of this barrier. Ross Prestess is an

approved producer of this barrier.

89900450 - Hill & Smith Inc

Trade Name Evaluation #

ZoneBloc 19055

MASH TL-3 (REBLOC RB80S 12)

89901558 - Rockingham Precast

Trade Name Evaluation #

F-Shape Precast Concrete Traffic Barrier 21033

TL-3. T-LOK 11A.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: F-Category III Work Zone Devices

Material: QPL.45.030 Portable Barriers: Concrete, anchored

89901575 - Eagle Precast

<u>Trade Name</u> <u>Evaluation #</u>

12.5' F Shape K Wall 21106

12'-6" sections, 22-1/2" width, 32" height, 8" top. Ends of barrier wall section must be anchored. Eagle Precast facilities at Kings Mountain, NC and Forsyth, GA

are approved producers for this barrier.

89900294 - Easi-Set Worldwide

<u>Trade Name</u> <u>Evaluation #</u>

J-J Hooks MASH 20' Bolt/Pin Down Barrier 13092

MASH TL-3. Jersey Shape or F-shape with 8-inch top and 22-1/2-inch base. F-shape with 9-inch top and 24-inch base. 10- and 15-foot sections with 2-bolt

configuration. 20-foot sections with 3-bolt (or 4-pin) configuration. Easi-Set Worldwide certifies

producers of this product. Chris-Hill Construction Company is an approved producer of this barrier. Ross Prestess is an approved producer of this barrier.

Product Category: 45 - MASH Approved Safety Hardware

Seciton: F-Category III Work Zone Devices

Material: QPL.45.031 Portable Barriers: Steel, anchored

89900450 - Hill & Smith Inc

<u>Trade Name</u> <u>Evaluation #</u>

Zoneguard 21015

MASH TL-3.

89901535 - Safe Barriers, LLC

Trade Name Evaluation #

Defender 100 LDS 20029

MASH TL-3.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: F-Category III Work Zone Devices

Material: QPL.45.031 Portable Barriers: Steel, anchored

89900959 - Valtir, LLC

Trade Name	Evaluation #
HighwayGuard Barrier Transition	21078
TL-3.	
HighwayGuard Low Deflection Barrier LDS	21078
TL-3 and TL-4.	
HighwayGuard Min. Deflection Barrier MDS	22084
TL-3.	
HighwayGuard Standard Barrier SDS	21077
TL-3.	

Product Category: 45 - MASH Approved Safety Hardware

Seciton: F-Category III Work Zone Devices

Material: QPL.45.032 Portable Barriers: Steel, free-standing

89901530 - Saferoads

Trade Name	Evaluation #
HV2 Safety Barrier	18100
MASH TL-3 and TL-4. Steel barrier with concrete ballast.	
HV2 Transition to Crash Cushion	18100
MASH TL-3 and TL-4. To be used with HV2 Safety Barrier.	

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: F-Category III Work Zone Devices

Material: QPL.45.034 Crash Cushions: Redirective

89900959 - Valtir, LLC

Trade Name	Evaluation #	
QuadGuard Elite M10 24-inch	19082	
MASH TL-3. Redirective, non-gating. Can be used to shield fixed objective.	MASH TL-3. Redirective, non-gating. Can be used to shield fixed objects up to 24 inches.	
QuadGuard Elite M10 Wide	20090	
MASH TL-3. Redirective, non-gating, reusable crash cushion.		
QuadGuard Elite System (Narrow)	12010	
MASH TL-3. Hazards narrower than 36". Concrete pad required.		
QuadGuard Elite System (Wide)	12011	
MASH TL-3. Hazards wider than 36". Concrete pad required.		
QuadGuard M Wide	20144	
MASH TL-3. Redirective, non-gating, reusable crash cushion.		
QuadGuard M10	12009	
MASH TL-3. Non-gating reusable system. Hazards narrower than 36". Concrete pad required.		
REACT M	21004	
MASH TL-3. Redirective, non-gating, self-restoring crash cushion.		

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: F-Category III Work Zone Devices

Material: QPL.45.034 Crash Cushions: Redirective

89901033 - Work Area Protection Corp

<u>Trade Name</u> <u>Evaluation #</u>

SCI-100 GM (Narrow) 03151

MASH TL-3

Non-gating, low maintenance system

Hazards narrower than 36" Concrete pad required

SCI-100 GM (Wide) 03151

MASH TL-3

Non-gating, low maintenance system

Hazards wider than 36" Concrete pad required

Product Category: 45 - MASH Approved Safety Hardware

Seciton: G-Category IV Work Zone/Traffic Control

Material: QPL.45.035 Attenuators: Truck-mounted

89900959 - Valtir, LLC

<u>Trade Name</u> <u>Evaluation #</u>

SS180M Truck-Mounted Attenuator 20003

MASH TL-3.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION Qualified Products List Report



Product Category: 45 - MASH Approved Safety Hardware

Seciton: G-Category IV Work Zone/Traffic Control

Material: QPL.45.036 Attenuators: Trailer-mounted

89901059 - Gregory Industries Inc

<u>Trade Name</u> <u>Evaluation #</u>

TTMA-200 Trailer Mounted Attenuator 19027

MASH TL-3. Roll-ahead distance 35 feet for non-blocked wheels.

89900950 - Traffix Devices Inc

<u>Trade Name</u> <u>Evaluation #</u>

Scorpion II Truck-Mounted Attenuator 18027

MASH TL-3.

89900959 - Valtir, LLC

<u>Trade Name</u> <u>Evaluation #</u>

SMT 20004

MASH TL-3.

VORTEQ M Trailer-Mounted Attenuator 23016

MASH TL-3.

Number of Approved Materials in Report:

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