

MDT Crash Cushions

Updated 6/18/2019

MASH Implementation Date: 12/31/2018*

**The Department may substitute NCHRP 350 crash cushions when an equivalent MASH 16 compliant crash cushion doesn't exist per [FHWA Memo HSST-1](#)*

Overview:

The Department is transitioning crash cushions from the Detailed Drawings (NCHRP 350 devices) to the QPL (MASH devices) in response to the AASHTO/FHWA Joint Implementation Agreement for MASH. Not every system listed below meets the requirements of MASH and the Department will continue to install those systems until an acceptable MASH system is approved.

System Name	Detailed Drawing	MDT Effective Date	Testing Status	FHWA Eligibility	Notes
MASH Crash Cushion – Sacrificial	Manufacturer Detail	Apr. 2019	MASH	FHWA Listing	See table below for available systems.*
MASH Crash Cushion – Reusable	Manufacturer Detail	Apr. 2019	MASH	FHWA Listing	See table below for available systems.*
MASH Crash Cushion – Low-Maintenance	Manufacturer Detail	Apr. 2019	MASH	FHWA Listing	See table below for available systems.*
Impact Attenuator - Quadguard	606-30A	Sept. 2014	350		Use this system if no MASH system is available for site conditions.
Impact Attenuator - TRACC	606-30B	Sept. 2014	350		Use this system if no MASH system is available for site conditions.
Impact Attenuator - QUEST	606-30C	Sept. 2014	350		Use this system if no MASH system is available for site conditions.
Impact Attenuator - Quadguard II	606-30D	Sept. 2014	350		Use this system if no MASH system is available for site conditions.

*The use of any of the systems listed in the table below requires a project-specific Public Interest Finding and coordination with MDT Maintenance.

SYSTEM: (Links below access the Roadside Safety Pooled Fund website for MASH systems)	NCHRP 350 (350) or MASH	Posted Speed (mph)	Approximate Outside Width (ft)	Maximum Shielded Object Width (ft)	Approximate System Length (ft)
LOW MAINTENANCE					
QuadGuard Elite M10 TL-3 (24"/30"/36" widths)	MASH	≥ 60	2.5/3.0 /3.5	2.0/2.5/3.0	27.1
QuadGuard Elite M10 Wide TL-3 (69"/90" widths)	MASH	≥ 60	6.3/8.0	5.8/7.5	27.1
SCI100GM	MASH	≥ 60	3.1	2.0/2.5/3.0	21.5/24.4/25.9
REUSABLE					
QuadGuard M10 TL-3 (24"/30"/36" widths)	MASH	≥ 60	2.5/3.0 /3.5	2.0/2.5/3.0	22
QuadGuard M10 Wide TL-3 (69"/90" widths)	MASH	≥ 60	6.3/8.0	5.8/7.5	22
SACRIFICIAL					
MAX-Tension - Median	MASH	≥ 60	2.5	2	55.5