

A photograph of a white box truck parked next to a concrete noise barrier wall. The truck is positioned on the right side of the frame, with its front end facing left. The concrete barrier is on the left side of the frame. The background is a blurred landscape. The image is used as a background for the top half of the page.

EKHO

INFRASTRUCTURE
SOLUTIONS

MASH TL-4 CRASH TESTED NOISE BARRIER

MASH TL-4 ground-mounted absorptive noise barrier with inertial impact panel to stabilize box trucks in collisions



THE EKHO MASH TL-4 CRASH TESTED SYSTEM

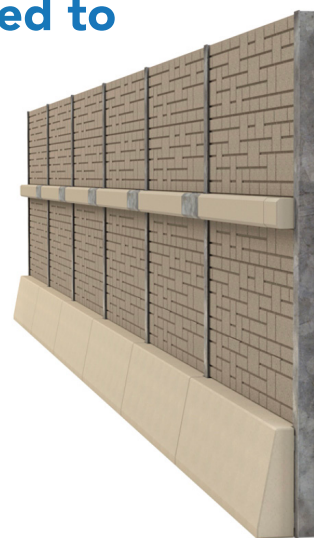


INERTIAL IMPACT PANEL

EKHO MASH TL-4 System is a modular, absorptive, ground-mounted noise barrier system just like the TL-3 system – however, it has been tested to MASH TL-4 conditions.

EKHO completes MASH (Manual for Assessing Safety Hardware) crash tests for our systems so that we have the peace-of-mind knowing they are going to hold up when they are needed most and aren't going to fail in real world scenarios.

As dictated by AASHTO (the American Association of State Highway and Transportation Officials), impact speed and angle represent the worst practical conditions. Our noise barrier system meets the TL-4 criteria of 80 kips.



Design Details at a Glance

- 39" (1,000 mm) high precast steel reinforced concrete single slope traffic barrier with proprietary connection to the noise barrier post.
- Integral inertial impact panel placed at 10' elevation to ensure protection of the wall from soft portions of the truck.
- W-10 (W250) post ground mounted post design.
- Overall crash tested height of noise barrier system installation above pavement was 17.3' (5.273 m), however, designs can vary.



MASH TL-4



AASHTO MASH TL-4 CRITERIA

Criteria	AASHTO MASH
FHWA Eligibility Letters	B-371
Vehicle	10,206 kg (22,500 lb) Box Truck
Speed	100 km/h (62 mph)
Impact Angle	15°
Test No.	4-12

FEATURES

- MASH TL-4 Crash Tested
- Additional precast concrete Panel
- Double sided absorptive – with 0.80 NRC on both highway and residential
- Modular design
- Easy installation
- Lightweight
- Non-combustible
- Non-absorptive panels are available

TYPICAL APPLICATIONS

- Roads and Highways
- Bridge Structures



TESTED TO MASH TL-4 IMPACT LOADS, ANGLES, AND SPEEDS.



**MASH TL-4
CRASH TESTED**



**NON
COMBUSTIBLE**



**NOISE
ABSORPTION**



**MODULAR
DESIGN**



**CUSTOM
FINISHES**

WHAT IS DURISOL®

Durisol® is the first absorptive noise wall products in North America.

A proprietary name for the durable, lightweight and cementitious/wood composition product utilized in noise wall panels to achieve ultimate noise absorption in engineered noise barrier systems.

The mix is made of chemically neutralized and mineralized organic softwood shavings which are processed to an acoustically engineered size and are bonded together under pressure with Portland Limestone Cement (PLC).

Durisol noise wall panels are:

- Self-draining and thoroughly tested for resistance to weather exposure including freeze-thaw, road de-icing chemicals, combustibility, and fungicides.
- Can be cast with noise absorptive surface on one side or both sides, sandwiching a concrete core.
- Cast in National Precast Concrete Association (NPCA), CSA certified precast concrete plant.

STANDARD COLOURS

The MASH TL-4 Noise Barrier System is available in the same range of existing Durisol standard colours and finishes.



1004B NATURAL



1082D TAN



1538B GREY



02589 TAN



09187 GREY



11988 BROWN

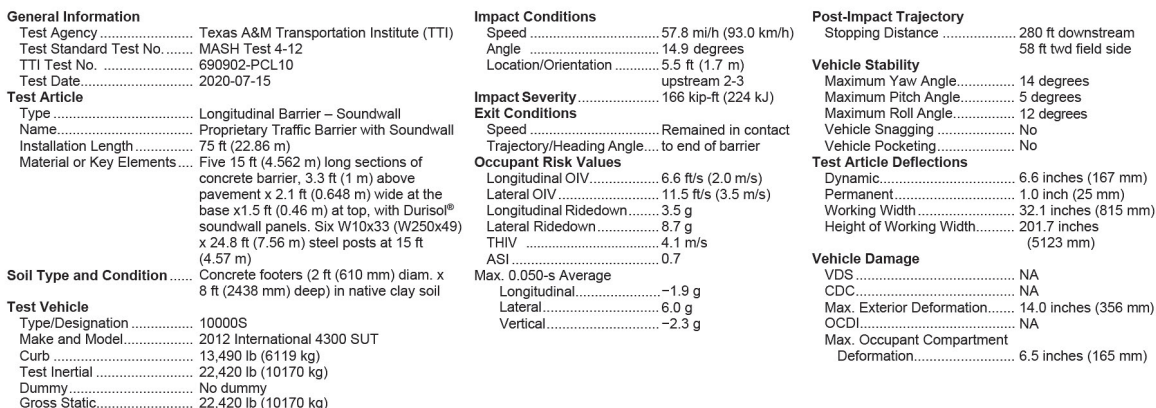
This palette serves as a guide only; Durisol's real-life texture will offer a variance in colour. Colour appearance also varies depending on time-of-day, light reflectance, etc.



Custom colours and finishes are available.

MASH TL-4 CRASH TEST RESULTS

2020-08-31



Note: OIV = Occupant Impact Velocity; THIV = Theoretical Head Impact Velocity; ASI = Acceleration Severity Index; NA = Not Applicable.

Figure 5.6. Summary of Results for MASH Test 4-12 on Proprietary Traffic Barrier with Inertial Panel and Soundwall System

0.000 s

0.100 s

0.200 s

0.400 s

0.500 s

0.700 s



MASH TL-4 CRASH TESTED NOISE BARRIER

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NPCA



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