ENERGITE® III SYSTEM
NON-DIRECTIVE, EASY-TO-INSTALL CRASH CUSHION

OVERVIEW

The Energite III System is a non-directive, easy-to-install crash cushion consisting of a number of sand-filled, polyethelyne plastic modules that are installed in a specific geometric array in front of a hazard. Each module in the array consists of a one-piece barrel, a lid and, in some modules, a cone insert. The cone insert is used to adjust the sand height or center-of-mass and the overall weight of the barrel. The barrel's weight requirement is determined by its place within the array. The Energite III modules are available in 90, 180, 320, 640 and 960 kg (200, 400, 700, 1400 and 2100 lb) sizes. The 90, 180 and 320 kg modules consist of a Module 640 barrel, a cone and a lid. The 640 kg module consists of a Model 640 barrel and a lid. And the 960 kg module consists of a Model 960 barrel and a lid.

MEETS NCHRP 350 TL-3

The Energite III System meets NCHRP 350, Test Level 3 criteria for non-directive crash cushions when placed in appropriately designed arrays. It features many advantages, including a one-piece barrel design and a snap-on lid. The tapered shape allows easy stacking for storage and transport. The cone inserts are used to adjust sand capacities and ensure that the center-of-mass is at the proper elevation to discourage ramping.

FEATURES AND BENEFITS

- Meets NCHRP 350, Test Level 3 for non-redirective crash cushions.
- Decelerates impacting vehicles ranging in weight from 820 to 2000 kg (1810 to 4410 lbs) and traveling at speeds up to to 113 km/h (70 mph) during head-on impacts.
- Low initial cost.
- One-piece barrel requires no assembly which simplifies and speeds up installation.
- Stackable barrel design for easy transport and storage.
- Ideal for wide hazards in low frequency impact areas.
- Only 2 or 3 parts per module (as compared to 8 in competitive systems) reducing inventory costs.
- Solid barrel bottom allows for lifting and transporting barrels when assembled and filled.

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SAVING LIVES BY DESIGN

FEWER PARTS AND LESS ASSEMBLY

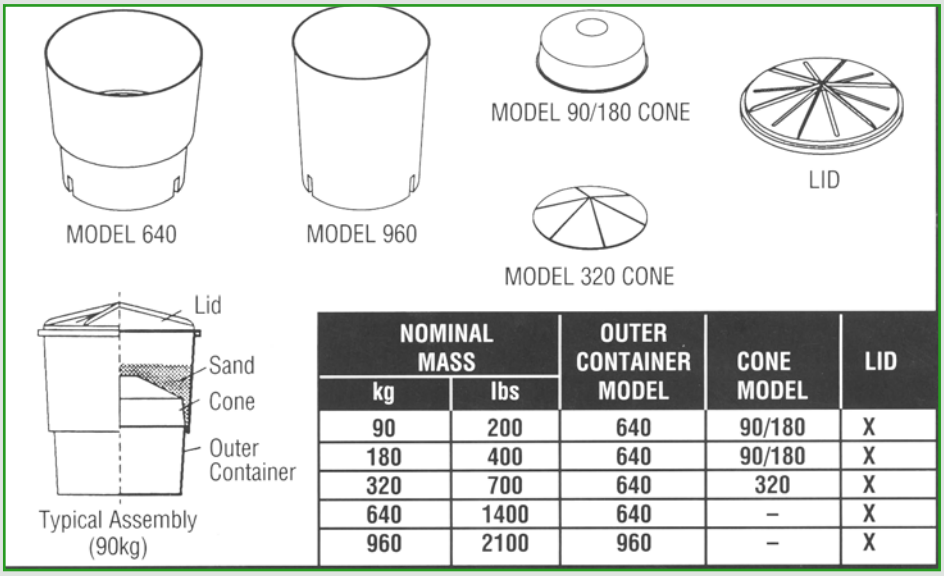
The cone inserts for the 90 and 180 kg (200 and 400 lb) modules have been combined into a single insert to be used with both modules. This reduction in parts saves in replacement part inventories and improves ease of installation.

LIFESAVING CRASH PERFORMANCE

The Energite III System breaks up during impact. As the impacting vehicle passes through the array, its speed is slowed by transfer of its momentum to the sand, allowing for safe, steady deceleration. Sand and plastic parts from the system will scatter in the direction of the impact. Because much of the system is destroyed on impact, repair and replacement costs are higher than with reusable systems. When properly designed for a given site, an array of Energite III modules can meet NCHRP 350, Test Level 3 criteria for non-redirective crash cushions. It can decelerate impacting vehicles ranging in weight from 820 to 2000 kg (1810 to 4410 lbs) and traveling at speeds up to 100 km/h (62 mph) during head-on impacts. The system does not redirect errant vehicles away from the hazard during angle impacts; therefore it should not be used if frequent angle impacts are expected.

EASY INSTALLATION

Energite III modules should be placed in an array designed by a qualified engineer. The lightest barrels are at the front of the array with progressively increasing weights from front to rear. A three-worker crew can install the Energite III system in less than an hour, depending on the application. The barrels may be filled and assembled off-site away from the hazard and traffic. The one-piece barrel has a solid bottom, allowing the barrels to be lifted and transported while fully assembled and filled to ease installation and refurbishment. To install the system, measurements are taken and barrel locations are marked on the pavement. The barrels are placed in their proper locations with no assembly required as in other systems. The cones are inserted (if applicable) and the sand.



NOMINAL MASS		OUTER CONTAINER MODEL	CONE MODEL	LID
kg	lbs			
90	200	640	90/180	X
180	400	640	90/180	X
320	700	640	320	X
640	1400	640	–	X
960	2100	960	–	X

Because of their convenient, one-piece construction, filled Energite III modules can be moved using a special lifting device, if desired.

Quixote Transportation Safety

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General specifications for the Triton Barrier are subject to change without notice to reflect improvements and upgrades. Additional information is available in the Product Manual for this system. Contact Energy Absorption Systems for details.