QUADGUARD® SYSTEM

FEATURES

The new standard in crash cushions... NCHRP 350, TL-3! The new family of QuadGuard® crash cushions offers the latest technology for shielding hazards 610 to 1755 mm. Each QuadGuard® System consists of crushable, energy-absorbing cartridges surrounded by a framework of steel Quad-BeamTM panels. These new crash cushions redefine NCHRP 350, Test Level 3 performance for redirective, non-gating attenuators.

Benefits

- Compact, modular design (1 to 12 bays) accommodates speeds from 40 km/h to 120 km/h.
- Quad-Beam panels provide 30% higher beam strength than thrie beam.
- "Staged" cartridge design safely decelerates both light cars and heavier, high centre-of-gravity vehicles.
- Monorail base eliminates the need for anchoring chains and tension cable – easier installation!
- Self-supporting nose – no legs mean reduced installation and maintenance time.
- Simplified backups – choose from Tension Strut or Concrete.
- Quick and easy refurbishment – QuadGuard® System offer high efficiency 80% reusability, allow for quick refurbishment and keep repair costs low. After a head-on impact, typically only the cartridges and plastic nose are expended. The cartridges contain the debris, further reducing refurbishment time.

Design Table (Avg G deceleration values)

Number of Bays	Effective Length	Design Velocity km/h	40	50	60	70	80	90	100	105	110	115	120
7*	7.21 m	105	–	–	–	–	–	5.2	6.4	7.1	7.8	8.5	9.2
6	6.30 m	100	–	–	–	–	4.7	5.9	7.3 _TL3_	8.1	8.9	9.7	–
5*	5.38 m	90	–	–	–	4.2	5.5	7.0	8.6	9.5	10.4	–	–
4*	4.47 m	80	–	–	3.7	5.1	6.6	8.4	10.4	–	–	–	–
3	3.56 m	70	–	3.2	4.7	6.4 _TL2_	8.3	10.5	–	–	–	–	–

* System capacity estimated through calculation
Above G's are based upon average values calculated for vehicles 820 to 2000 kg that stop in a distance equal to 85% of the system's length.
Warning: Shaded area denotes excessive decelerations based upon occupant risk recommendations outlined in NCHRP 350 for 2000 kg vehicles. Armco Road safety products does not recommend choosing systems from this area of the chart.