

Bahrain Improve Safety with Raptor® 600

Solution Summary

Raptor® is used where light gantries are identified as being in substantial risk locations through the road design process or where a site safety audit has later identified the need. These are either sites with higher incident history, or exposed sites with high potential. Most sites require protection from multiple possible angles of impact. Al Ala Trading has been installing the Raptor® on behalf of the Ministry of Works in Bahrain after recent audits.

The Ministry of Works audits identified multiple locations throughout Bahrain where there is a high risk of vehicle collision with road infrastructure. The specified improvements would need to: Reduce risk of damage to infrastructure resulting in lower repair costs to incident sites and fewer road closures or subsequent works. Reduce occupant impact severity resulting in improved accident survival rates, reduced medical intervention and improving roadsafety. Improve protection from alternative angles as a result of secondary collision events.

THE CHALLENGE:

With minimal space available, a solution that would be slim and provide 360° protection is required. Gantry foundations are typically too wide to seat the protective crash cushion. Conventional crash cushions would offer protection, but not from multiple angles and, in some places, would not fit well in the available space; creating obstructions for pedestrian traffic.

THE SOLUTION:

Raptor® is a non-redirective crash cushion safety device, purposely designed to reduce the impact severity of errant vehicles with any utility pole, gantry, tree and other single point hazards.

It has exceptional vehicular control and energy absorbing capabilities during end-on impacts or glancing blows. Due to its clever design, installation and repair can be done in under 30 minutes, minimising the need for traffic management requirement.

Extended foundations were easily created to site Raptor® at a suitable height that enabled product fitment and ensured performance, while ensuring smooth passage for pedestrians. A fully recyclable compact solution, Raptor® is suitable for protection of hazards within limited space, the slim side width of Raptor® enables fitment and protection.

“Raptor® has been an excellent product to install and has already demonstrated improvement to the risks identified through the audit process. When the product has been impacted, it is so quick to replace or even to repair. This means that the site is quickly and cost effectively returned to the pre-incident condition. Highway Care has provided excellent support of this product.”

Denzil Monteiro Director, Al Ala Trading



FEATURES

Reduces Severity

Highly reduces the severity of vehicle impacts against poles and trees. Meets NCHRP 350 test criteria (TL-1). Additional testing has been carried out at 80 kph, demonstrating enhanced occupant protection.

Usable

Usable in places typically impossible to protect. Compact size and easy installation (under 30 minutes). Two sizes available to fit multiple width hazard. After a collision occurs, the non-impacted side can still be re-used.

Reduced Maintenance and Simple Installation

Zero maintenance, UV Stabilized, expected lifespan 25 years Smooth surfaces and geometry, suitable for vulnerable road users. No foundations are required. Fully recyclable very low cost protection. Fire and vandal resistant.

