

Medium Duty 3 Rail Barrier

Impact test results



Facility

Testing was conducted at the Holmes Solutions testing facility, located at the Canterbury Street, Christchurch New Zealand. The facility has test pads available that consist of AASHTO standard soil, AASHTO weak soil, compacted sub-base, asphalt concrete (AC), and reinforced Portland cement concrete (PCC).

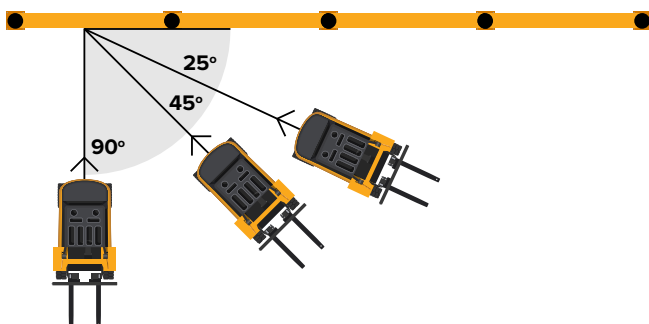
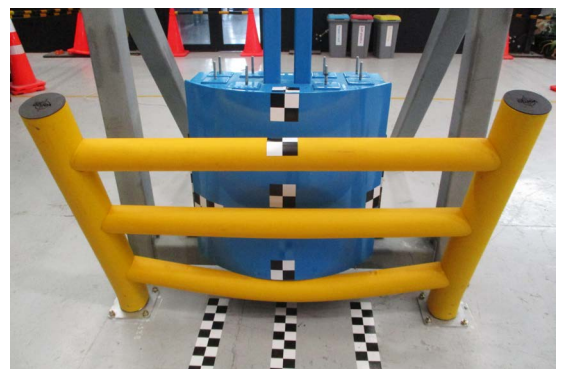
Objective

The objective of this study was to evaluate the performance of the Verge Safety Barriers Medium Duty Polymer barrier system when fitted to 150 mm concrete floor. The barrier should withstand an impact from a forklift moving at 8 km/h in a rearward's direction. The barrier was installed with a 1.5 m post spacing with M16 x105 mm mechanical anchors. The anchors were installed as per manufacturers installation instructions.

Conclusion

The test article when installed in accordance with manufacturer's recommendations, successfully contained an impact energy of 7.41 kJ at 90° being a representative errant forklift weight of 3000 kg at 8 km/h impacting the barrier.

The Verge Safety Barriers Medium Duty Polymer system was judged to have satisfied all of the impact evaluation criteria.



3000 kg forklift	Max speed x impact angle		
	90°	45°	25°
Speed (km/h)	8 km/h	11 km/h	18.4 km/h
Max deflection	280 mm		