



Calspan Test No.: BR0023
Test Standard: ASTM F2656-20
Impact Condition Designation: M30
Client: 1-800-Bollards
Model: Removable Bollard
Product Rating: M30 – P1

September 24, 2020

To whom it may concern:

This letter is to certify that the subject barrier, Removable Bollard provided by 1-800-Bollards, was tested to the requirements of the ASTM standard F2656-20, with M30 impact condition designation. This was the standardized Test Method for Vehicle Crash Testing of Perimeter Barriers, at the time the barrier test was performed.

The test was performed at Calspan Corporation, on September 24, 2020, for 1-800-Bollards. The 1-800-Bollards, model Removable Bollard was impacted by a medium duty truck, weighing 6,815 kg (15,020 lbs.) travelling at 47.3 kph (29.4 mph). Post-test measurements of the dynamic movement of the test vehicle's payload (truck bed) show that the left and right, leading edge of the truck bed, were stopped at -.687 meters and -.507 meters respectively, before the leading edge (reference line) of the impacted bollard. As such, based on the test vehicle mass, impact velocity and penetration into the protected zone, the barrier rating per the ASTM standard F2656-20, is M30 – P1.

Calspan is accredited to ISO/IEC 17025:2017 to perform ASTM F2656-20 testing by Perry Johnson Laboratories Accreditation, Inc. (PJLA) under Certificate Number L18-546-R2 and Accreditation Number 76654.

Respectfully,

A handwritten signature in blue ink that reads "David Casey".

David Casey

Test Director

Safer Highways...Safer Skies