



Calspan Test No.: BR0112  
Test Standard: ASTM F2656-20  
Impact Condition Designation: SC40  
Client: Reliance Foundry  
Model: R-1040-C40 Bollard  
Product Rating: SC40 – P1

March 12, 2020

To whom it may concern:

This letter is to certify that the subject barrier, R-1040-C40 Bollard provided by Reliance Foundry was tested to the requirements of the ASTM standard F2656-20, with a SC40 impact condition designation. This was the standardized Test Method for Vehicle Crash Testing of Perimeter Barriers, at the time the barrier test was performed.

Testing performed at Calspan Corporation, on March 11, 2022, for Reliance Foundry. The Reliance Foundry, model R-1040-C40 Bollard was impacted by a small car (SC), weighing 1,111.6 kg (2,450 lbs.) travelling at 65.6 kph (40.8 mph). Post-test measurements of the dynamic movement of the test vehicle's lower leading edge of the base of the "A" pillar show that the left and right, leading edges, were stopped at \*-.130 meters and \*-.074 meters respectively, before the leading edge (reference line) of the impacted test article. 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 SC40 – P1.

(\* - a negative value indicates that the lower leading edge of the base of the "A" pillar was stopped prior to entering the protected zone or before reaching the established reference line.)

Calspan 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*