

Reliance Foundry CO., Ltd.
6450 148th Street, unit 207
Surrey, British Columbia V3S 7G7
CANADA



Date: 09/06/2023

Based upon the test performed on September 1st, 2023, at Applus IDIADA KARCO Engineering, the as-tested configuration of the Reliance Foundry Removable Bollard received an impact rating of P1 at the SC40 Test Level of the ASTM F2656-20 standard test method. This test evaluated the Removable Bollard for an impact at its center.

The Passive Bollard was evaluated using a Small Passenger Car (SC) weighing 2,478.00 lb. traveling at a velocity of 41.21 mph. The P1 penetration rating is given when the dynamic penetration of the vehicle reference point beyond the barrier reference point is between 0.00 ft. and 3.31 ft. For the Small Passenger Car (SC), the vehicle reference point is the leading edge of the base of the "A" pillar. The barrier reference point for the Removable Bollard is the attack side of the bollard. The maximum dynamic penetration recorded was 0.45 ft. on the passenger side of the vehicle. The maximum static penetration recorded was -0.43 ft. on the passenger side. The vehicle was disabled, and the pathway remained blocked after the impact.

Complete information relating to the test can be found in report number TR-P43167-01 and Deliverable No. 2023-6920 from Applus IDIADA KARCO Engineering, LLC., including test conditions, test vehicle information, test article specifications, and manufacturer drawings. This letter should not be considered complete documentation of the test without consideration of the test report and deliverable CD.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Brandon J. Ubina".

Brandon J. Ubina
Program Manager
Applus IDIADA KARCO Engineering, LLC.