



Gibraltar
4303 Innovation Loop
Marble Falls, TX 78654

Attention: Mr. Bill Neusch

Date: 07/0615

Mr. Neusch,

Based upon the test performed on Monday, June 1, 2015 at KARCO Engineering, LLC., the as-tested configuration of the G-5550 Anti-Ram Sliding Gate has received an impact rating of P2 at the M50 test level, based on the ASTM F 2656-07 standard test method. This test evaluated the G-5550 Anti-Ram Sliding Gate for an impact to the center of the gate's clear width opening.

The M50 test level of the ASTM F 2656-07 is evaluated using a 6,800 kg test vehicle traveling at a nominal velocity of 80 km/h. The P2 penetration rating is given when penetration beyond the protected side of the barrier is between 1.01 m and 7.0 m at the lower leading edge of the test vehicle's cargo bed. Penetration was measured from the back side of the G-5550 Anti-Ram Sliding Gate's blocking beam.

The G-5550 Anti-Ram Sliding Gate completely disabled the test vehicle, causing severe damage to the engine, drivetrain, and occupant compartment. The impact pushed the engine rearward and crushed the cab into the headache rack. The driveshaft detached and the transmission dropped from the frame. The maximum penetration recorded was 2.35 m on the driver's side of the vehicle.

The impact deformed the blocking beam around the vehicle and in the direction of vehicle motion. The lower portion of the gate frame broke away from the gate's vertical members and the I-beam blocking member tore at the driver's side as a result of the impact. The concrete foundations broke around each of the gate's buttresses and were pulled up and out of the soil. The line post foundation was lifted up and out of its soil embedment. The gate remained latched throughout the impact event.

Complete information relating to the test can be found in report number TR-P35115-01-NC and CD serial number 2015-3487 from KARCO Engineering, LLC., including test conditions, test vehicle information, test article specifications, manufacturer drawings and any deviations from the drawings in the as-tested configuration. This letter should not be considered complete documentation of this test without consideration of the test report and deliverable CD.

Sincerely yours,

A handwritten signature in black ink that reads "Frank D. Richardson".

Frank D. Richardson
President
KARCO Engineering, LLC.