

**Vehicle Impact Test of CR25
Drop Arm Security Gate
May 5, 1988**

Prepared for:

B&B Electromatic
B&B ARMR
B&B Roadway
Divisions of B&B Roadway and Security Solutions
2009 Chenault Drive
Suite 114
Carrollton, TX 75006

The following is an excerpt from the Model CR25 Crash Gate report generated by an internationally recognized, independent research and development laboratory. The report describes the crash test conducted by this facility and results.

For additional information please contact B&B Roadway and Security Solutions at 800-367-0387.

CR25 Crash Test Certification Information

Table 1. Summary of Results - Test B & B-1

| | |
|---|--------------------------------------|
| Date..... | 12/04/87 |
| Test Article..... | B&B Electromatic CR-25 Security Gate |
| Vehicle | |
| Type..... | 1980 Ford F-350 Truck |
| Inertial Mass (lb)..... | 10,070 |
| Impact Conditions | |
| Speed (mph)..... | 17.8 |
| Angle (deg)..... | 0.6 |
| Maximum 50 msec Average Vehicle Accelerations | |
| Longitudinal (g's)..... | -3.24 |
| Lateral (g's)..... | -0.22 |
| Occupant Risk Summary | |
| Velocity after 2-ft displ (ft/sec)..... | 19.58 |
| Maximum Acceleration (g's)..... | -2.94 |
| Maximum Barrier Deflections | |
| Dynamic (ft)..... | 6.1 |
| Permanent (ft)..... | 4.0 |

Vehicle Damage

As shown in Figure 5, much of the vehicle damage consisted of sheet metal deformation of both front fenders, the hood, and the headlight/grill areas. Both front fenders were deflected into the front tires and the radiator was displaced into the front of the engine. The vehicle was not considered operable after the test.

Analysis of Results

Based on the test results described in the preceding paragraphs, the security gate appears to meet the operational requirements of the Department of the Navy Specifications OR-098-09-88 and M-56-86-05 with a Level 1/L2 rating. In addition, the gate should be given a Department of the Army rating level of KN 1-LN2.