



mga research corporation

TEST REPORT
18 MPH FRONTAL GATE IMPACT

MGA Report No. C99C3-007

Test Date: March 9, 1999

Report Date: March 23, 1999

Prepared For:

ARMR Services Corporation
2724 Dorr Avenue
Bay # 4
Fairfax, VA 22031

Prepared By:

MGA Research Corporation
5000 Warren Road
Burlington, WI 53105

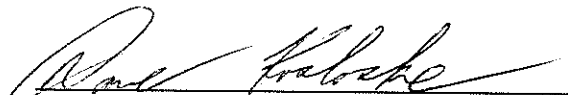


SIGNATURE APPROVAL PAGE


Procedure Number: MGA Low Speed Frontal Impact Test Checklist
dated April 24, 1998

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Prepared By:


Dave Kosloske, Project Engineer

Approved By:


Dave Winkelbauer, Program Manager

Technicians:

Tim Beison
Al Chalmers
John Healey
Chris Kulis
Erika Miller
Eric Nelson
Chris Novak
Paul Schlimmer
Todd Stevenson
John Wistert

Secretary:

Carol Beck

The results presented in this report relate only to the specified test items.

SECTION 1

PURPOSE AND SUMMARY OF FRONTAL POLE IMPACT TEST

The purpose of this test was to verify the structural integrity of a security gate when subjected to a frontal impact of greater than 15 mph (24.1 kph).

The security gate supplied by ARMR Services Corporation was installed in concrete as per drawings and instructions also supplied by ARMR. The center of the gate was impacted by a 1979 Ford F250 Pickup ballasted to 10,015 lbs. at a velocity of 18.3 mph (29.5 kph). The gate remained intact and succeeded in stopping the test vehicle. The maximum post-test deflection of the beam was 19.1 inches (485 mm). The test was performed at the MGA Proving Grounds and Crash Test Center on March 9, 1999.

The frontal gate impact event was documented by one real-time camera and four (4) high speed cameras. Camera locations and other pertinent camera information can be found in this report. Appendix A contains pre and post test photographs of the gate and test vehicle. Appendix B contains the vehicle response data traces and Appendix C contains the vehicle instrumentation calibration.