



# M. A. INDUSTRIES, INC.

*Quality Products Through Creative Research*

05/23/03

## **STEP INSERT TEST RESULTS**

**PROJECT:** Pull-out Test on PS1-PF Manhole Steps utilizing PS1-PF Step Inserts  
Both items manufactured by M.A. Industries, Inc.

**REMARKS:** Pull-out test were performed on PS1-PF Manhole Steps after they were driven into PS1-PF Step Inserts. The tests were conducted on six (6) manhole steps that were driven in manually with an eight pound hammer in two (2) manhole sections located at Foley Products, Newnan, Georgia. Steps were driven in to maximum depth. The pull-out tests were performed using a calibrated hydraulic jack with a pressure gauge and hydraulic ram placed between the inside wall of the manhole and inside the center of the step. Test results are as follows:

<u>Step No.</u>	<u>Test Results</u>
1	2100 lbs.
2	2200 lbs.
3	1975 lbs
4	2000 lbs.
5	2125 lbs.
6	1950 lbs.

Test were performed by Nick Talley, Jerry Roosa and Scott Peacock.

If you have any questions, feel free to contact me at 800-241-8250.

Thank you,

Scott Peacock  
Vice President of Sales – Molding Division  
M.A. Industries, Inc.