



<http://www.americanstep.com>

July 14, 2003

Pulling / Lifting Irons Certification and Load rating;

This is to certify that the cable used by American Step Company, Inc. in the manufacture of the pulling / lifting irons conforms to ASTM A 416, 7 wire, 270 Grade, 1/2 inch steel cable. American Step Company, Inc. also certifies that the pulling / lifting irons supplied to Mactec (formerly Law Engineering) of Atlanta, Georgia for testing and the subject of the enclosed test report are standard production parts fabricated from the above mentioned ASTM A 416, 7 wire, 270 Grade, 1/2 inch steel cable.

American Step Company, Inc. certifies a load rating of our pulling / lifting irons according to the tables below only when properly installed by the concrete structure manufacturer and per the minimum embedment depth listed and the 2 haunches of the pulling / lifting iron are securely wire tied under the steel reinforcement of the structure or to two 1/2" (minimum diameter) Grade 60 ASTM A615 (or equivalent) steel reinforcement rods 24" (minimum) in length perpendicular to the plane of the pulling/lifting iron. These load ratings are set in accordance with OSHA 1926.704 (c) which requires a safety factor of four to one.

Pulling/Lifting Iron	Concrete Compressive Strength	Minimum Embedment Depth in Concrete	Load Rating
10 1/2"	1,500 psi	5"	3,400 pounds
10 1/2"	2,500 psi	5"	3,800 pounds
10 1/2"	4,000 psi	5"	4,000 pounds
12"	1,500 psi	7"	4,500 pounds
12"	2,500 psi	7"	6,300 pounds
12"	4,000 psi	7"	7,400 pounds
15"	4,460 psi	9"	9,800 pounds
18"	4,460 psi	12"	13,800 pounds
44"	4,000 psi	37 1/2"	14,000 pounds
44" double cable	4,000 psi	37 1/2"	29,250 pounds

**Precautionary note:** American Step Company, Inc. does not certify nor recommend for use the pulling/lifting irons in non-reinforced concrete or in non-reinforced concrete without the two 24" (minimum) length by 1/2" (minimum diameter) ASTM A615 Grade 60 reinforcing steel rods perpendicular to the plane of the pulling/lifting iron because such use will cause premature tensile failure of the concrete above the haunches of the pulling/lifting iron leading to damage or destruction of the concrete structure and potential serious injury or death to anyone close to the structure being lifted.

**Plastic Injection Molders**

830 East Broadway- P.O. Box 137- Griffin, GA 30224-0137  
770-467-9844 office 770-467-8011 fax