

GE Engineering

473 White Oak Lane Barrington, IL 60010

LOAD BEARING TESTING OF EGRESS WINDOW WELL COVER

Manufacture: WellCraft, Inc.

Model Number: 5600, Polycarbonate Cover with Aluminum Supports

A full-scale test of the above model with the cover attached was performed to simulate how the polycarbonate cover would react to a predetermined loading. The safe weight that was to be obtained from the test was a concentrated load of **500 pounds**.

The labeling of the units indicated that the covers are not to be used as a step or as a working platform. These tests were conducted to provide assurances that the cover would be safe for unforeseen mishaps.

The test method consisted of attaching the top sections of the 5600 model with the test cover to an above ground wall with the bottom supported to resist any downward pressure during the test. A circular 12 inch wood pad was then positioned in the center of the cover to simulate the worse condition and provide a concentrated area for loading. Weights were then loaded onto the wood pad in various increments. Deflection measurements were recorded as indicated in the table below.

Loading in pounds	Deflection in inches	Loading in pounds	Deflection in inches
0	0	370	1-1/8
135	1/2	395	1-1/4
215	5/8	420	1-5/16
250	3/4	440	1-5/16
285	7/8	460	1-5/16
320	15/16	480	1-3/8
345	1-1/8	500	1-3/8

Note: The maximum load was retained on the cover for 24 hours and the maximum deflection was 2". Once the load was removed the cover substantially returned to its original shape.

Conclusion: The polycarbonate cover for the WellCraft model 5600 can sufficiently support a concentrated load of **500 lbs.** as tested above and used as indicated by the manufacturer.

By; Gerald J. Eckhoff, P.E.
Principal Engineer

