## **GE Engineering**

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## LOAD BEARING TESTING OF EGRESS WINDOW WELL COVER

Manufacture: WellCraft, Inc.

Model Number: 2060, Polycarbonate Cover

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 of the 2060 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 | Loading in pounds | Deflection in |
|-------------------|---------------|-------------------|---------------|
|                   | inches        |                   | inches        |
| 0                 | 0             | 370               | **            |
| 135               | 2.00          | 395               | **            |
| 215               | 2.50          | 420               | **            |
| 250               | 3.00          | 440               | **            |
| 285               | **            | 460               | **            |
| 320               | **            | 480               | **            |
| 345               | **            | 500               | **            |

<sup>\*\*</sup> The load shifted at this point and deflection points changed. The cover held the 500 lb. Test load for the 24 hour test period..

<u>Conclusion</u>: The polycarbonate cover for the WeilCraft model 2060 can sufficiently support a concentrated load of **500** lbs.as tested above and used as indicated by the manufacturer.

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