



**BEAVER STEEL SERVICES, INC.**

ROSSLYN FARMS INDUSTRIAL PARK  
1200 ARCH STREET • CARNEGIE, PA 15106  
(412) 429-8860 PHONE • (412) 429-8901 FAX

## IV. TESTING

The purpose of testing was to determine the maximum load capacity for the “A/C Bracket” and evaluate the results obtained for future questions concerning the product.

**TABLE 1 - Test Results for the A/C Bracket**

SIZE BRACKET	SIZE OF TEST RIG, L x W x H (inches)	GRAVITY LOAD (lbs)	SIDE LOAD AT FAILURE (lbs)	RECOMMENDED HORIZONTAL LOAD SPECIFICATIONS (lbs)	RECOMMENDED GRAVITY LOAD SPECIFICATIONS (lbs)
36	30 x 30 x 25	541	1200	600	500
48	36 x 36 x 25	400	1200	600	300
55	48 x 48 x 26	440	1200	600	300

**TABLE 2 - AC Unit Sizes for A/C Bracket**

SIZE, H x W x L (inches)	AC HANGER	TOTAL SQUARE FEET EXPOSED	SIDE FORCE AT 150 MPH (lbs)
25 x 24 x 20	36	5.56	336
35 x 34 x 30	45	10.29	621
40 x 33 x 30	45	11.23	678
48 x 33 x 30	45	13.03	787
43 x 39 x 35	45	13.66	825
45 x 39 x 35	45	14.22	858
43 x 40 x 36	55	14.76	891
50 x 37 x 34	45	14.88	898
51 x 40 x 36	55	17.02	1027

PATENT PENDING



**BEAVER STEEL SERVICES, INC.**

ROSSLYN FARMS INDUSTRIAL PARK  
1200 ARCH STREET • CARNEGIE, PA 15106  
(412) 429-8860 PHONE • (412) 429-8901 FAX

## TESTING (cont')

### LOAD RATING

A load test was also performed on the “A/C Bracket” using standard weights. The “A/C Bracket” was mounted to a simple angle iron holder. Weights were applied gradually until a load of 750 lbs was applied to the “A/C Bracket” with no structural failure. Beaver Steel has therefore rated the capacity at 500 lbs which gives a factor of safety of 1.5.

### PULL OUT RESISTANCE RATING

When anchoring the “A/C Bracket”, Beaver Steel recommends that the proper hardware be selected for the type of media, which the “A/C Bracket” will be anchored to. As there are many variations of anchoring hardware as well as media that the “A/C Bracket” will be anchored to, Beaver Steel has established a minimum pull out resistance that the anchoring hardware should conform to.

The anchoring hardware must provide a minimum pull out resistance of 1500 lb-f. The 1500 lb-f rating is applicable for the 36”, 45” and 55” “AC Hanger” units.\*

\* The Calculations are based on the following:

- Maximum weight of the unit not to exceed 300 lbs.
- Maximum wind loads of 125 mph.
- Maximum unit box size of 30” x 55”

**PATENT PENDING**



**BEAVER STEEL SERVICES, INC.**

**Beaver Steel's A/C Bracket** makes it easy for contractors to meet the standards regarding the height requirement of the Florida Building Code, Mechanical Volume, effective 3/03

