

Product Data Sheet

Trash Rack Load Tests (Teledyne Engineering Services)

In September 1990, Teledyne Engineering Services (TES) completed the subject testing of two (2) Hydrothane trash racks.

The racks were clamped at the ends between two six inch (6") wide pieces of channel iron, set five feet (5') apart for the 1/2 x 6" test and eight feet (8') apart for the 1/2 x 4" test. An eight inch (8") wide box beam was used to load the racks in the center of the span.

The results for the 1/2 x 4" blades are shown below. Also presented are the load versus deflection charts recorded for each sample. The maximum load attained, P, for each sample is used to calculate the flexural strength (modulus of rupture). Flexural strength is calculated as follows:

$$S = 3PL/2bd^2$$

Where:

- S = Flexural Strength, psi
- P = Load at fracture or maximum load, lb.
- L = Distance between supports, in.
- B = Sample width, in.
- D = sample height, in.

Results:

Sample	Span	Maximum Load Lbs	Deflection Inches	Flexural Strength psi
1/2 x 4"	8 ft.	2,020	10.08	9000