

Comparing the structural integrity and weight capacity of our 172L hybrid shopping cart versus a leading competitor's 172L hybrid shopping cart, we conducted a systematic testing procedure. The procedure involved incrementally loading each cart with weights of 105 lbs, 210 lbs, 315 lbs, and 420 lbs, and measuring the height of the bottom of the basket at the front of the cart at each stage. This approach allowed us to observe changes in the cart's structure under increasing stress.

The competitor's cart failed at 315 lbs. In contrast, our cart not only supported 420 lbs without failure it returned to its original height after the weight was removed and incurred no permanent deformation or damage.

It is important to note that this was a static load test, and according to EN and ASTM standards, a 172L shopping cart should be capable of carrying 378 lbs under dynamic load conditions.

COMPETITOR 172L HYBRID



EMPTY



Displacement: $\frac{15}{16}$ of an inch.



Displacement: $\frac{15}{16}$ of an inch.

VERSACART 172L HYBRID



EMPTY



Displacement: $\frac{3}{8}$ of an inch.



Displacement: $\frac{7}{16}$ of an inch.



105 lb total weight



210 lb total weight

Weight Capacity Comparison Test



Displacement: Destruction

105 lb 105 lb

105 lb

315 lb total weight



Displacement: $\frac{5}{16}$ of an inch.

105 lb 105 lb

105 lb 105 lb

420 lb total weight



Displacement: $\frac{3}{8}$ of an inch.

EMPTY



Cart returned to pre-test height when weight was removed. No deformation occurred.