**Safety Factor Statement**

**The Institute of Caster and Wheel Manufacturers** (ICWM) is comprised of companies that design and manufacture casters and wheels. The load ratings/capacities for casters and wheels are determined through a series of endurance tests designed by the ICWM. This test standard is now an ANSI Standard (ANSI-ICWM-2018).

Because caster load capacities are primarily determined through endurance testing, safety factors are not published, nor generally provided, for caster or wheel products. There are a few exceptions. For more details, please speak with a member of the Northwest Caster team.

Following are short descriptions of the three major ICWM endurance tests:

**Dynamic Test**

* Load is to be applied at what is thought to be the capacity of the caster or wheel.
* A test machine is used – running at 2.0 mph – typically a drum tester – with a space for one obstruction on the outside of the drum.
* The obstruction should be .125” high.
* The test duration is two minutes running – followed by two minutes of rest.
* The caster or wheel must complete 10,000 revolutions/obstructions.
* If the caster or wheel fails, the load is lowered and another sample is tested.

**Static Test**

* Requires that a caster must hold 4 times the rated load for one minute without failure.

**Impact Test**

* Requires that a load equal to the rated capacity must be dropped from 2.0” onto the caster without failure.