

H I N G E S

Cabinet Standards

QUICK NOTES

- ◆ Inconsistent climatic conditions found on construction sites create stress on doors and materials to cup or warp.
- ◆ Without the correct placement and the correct number of hinges, doors cannot be positioned and held securely in place to minimize the movement.
- ◆ CKCA has published a Construction & Material Testing manual, which has set the industry standards and guidelines to be followed.
- ◆ The number of hinges and the placement of the hinges depends on the load bearing capacity of the hinge, and the weight and size of door.
- ◆ Check technical specifications on the hardware chosen.
- ◆ Please see table on Hinges (Spacing & Placement).
- ◆ Please see section on Raw Material Requirements.

Pentco has seen a shift towards taller doors being utilized in today's Kitchens, together with standard height doors affected by climatic conditions putting more stress on the materials used to produce these door products. Pentco has found taller 36" to 42" tall doors secured with only 2 hinges, resulting in doors moving out of position.

Generally, the construction site does not provide very stable climatic condition for products during delivery and installation, which can lead to taller doors and other kitchen components trying to adjust to those surroundings which could lead to a slight cup or warp in the door if not correctly hinged to the cabinet.

Cabinetry and doors are often installed into sites with interior conditions of extreme cold, dampness, extreme heat, dryness, excessive moisture and high humidity depending on the region or the season in which the installation is taking place. Doors as wide as 24"x 42" in height may be utilized in some installations, combined with deep unsupported fridge gables and large doors on storage and pantry cabinets, all with the potential to move based on the job-sites conditions.

Without the correct placement and correct number of hinges installed, the door cannot be positioned and held securely in place while trying to acclimate to the surrounding conditions prior to a more stable and temperate environment in the home once occupied.

The Canadian Kitchen Cabinet Association (CKCA) has published a Construction & Material Testing Standards manual that outlines the parameters that need to be met into today's kitchen industry. It has now been adopted as the rule book that our industry should be observing in order to ensure the same standards are being followed by all cabinet makers.

Pentco has adopted CKCA standards as a guideline to be observed and followed so there can be some consistency when evaluating a potential warranty situation, when doors are subjected to difficult conditions on the job-site during installation and prior to occupancy of the home.

HINGES (SPACING, PLACEMENT)

The number of hinges and the placement of the hinges depends on many factors, like load bearing capacity of the hinge, and the weight and size of door.

As a general recommendation the standard suggests additional hinges according to the table below.

DOOR HEIGHT	WEIGHT RANGE	REQUIRED NUMBER OF HINGES
0-914mm (0-36")	4 to 6Kg	2
915mm-1600mm (36 1/16" to 63")	6 to 12Kg	3
1601mm-2200mm (63 1/32" to 86")	12 to 17Kg	4
2200mm-2700mm (86" to 108")	17 to 22Kg	5

3.2.3 RAW MATERIAL REQUIREMENTS

Doors – Maximum Warp - Doors less than 812 mm (32") in height shall have a maximum deflection of 2.5 mm (3/32").

Doors greater than 812 mm (32") in height shall have a maximum deflection of 5 mm (3/16").

5-piece wood doors 1270 mm (50") or greater in height should have a mid-rail.

Doors shall also be installed and aligned so that they are square with the cabinet and can operate freely without excessive looseness or binding. Installed doors shall have a device sufficient to hold the door closed.