



Swaging of Hinges

Butt hinges for full mortise application are swaged. Swaging is a slight offset in the leaves of hinges at the barrel that permits the leaves to come closer together (parallel) when the door is closed. Standard swaging of regular and extra-heavy gauge mortise hinges when closed to the parallel position provides $\frac{1}{16}$ " clearance between the leaves.



PIN OR TIP STYLE

In addition to the regular button-tip pins, *National* also furnishes a non-rising and a non-removable pin. Non-rising pins can be removed without damage to the pin and do not allow the pin to rise. The non-rising pin, with pinched or knurled ears, is regularly furnished on ball-bearing and template butt hinges. A non-removable pin is secured in its position so that it cannot be removed when the door is closed. *National's* non-removable pin, with set screw in barrel, has a threaded set screw that fits through a tapped hole in the sidewall of the knuckle. When the door is in a closed position, the set screw cannot be removed.

Spring Hinge Information

Where to install spring hinges



NFPA #80 requires a minimum of two (2) Spring Hinges on labeled fire door applications.

Additional information on spring hinges can be found under individual product entries within this catalog.