

4 1/2" SPRING HINGES-INSTALLATION FOR RATED FIRE DOORS

GENERAL NOTES

1	NFPA-80 stipulates that minimum two spring hinges be used on Fire Rated doors.
2	Selection of size and number of spring hinges shall be based on the spring capacity, the door size and door weight.
3	The springs hinges should be used alone or in combination with antifriction template butt hinges of the same size and swage.
4	Wind conditions, excessive air pressure on one side of opening, weather striping, or other adverse conditions may require the uses of all spring hinges.

HINGES SELECTION GUIDE

	Door Size and Weight	Number of Spring Hinges	Number of anti-friction template butt hinges	Spring Hinge location
1	Door up to 70 lbs (32 kg) and not exceeding 1 3/4" (44 mm) thickness, 36" (914 mm) width and 90" (2286 mm) height	1	2	Center
2	Door up to 90 lbs (41 kg) and not exceeding 1 3/4" (44 mm) thickness, 36" (914 mm) width and 90" (2286 mm) height	2	1	Center & Bottom
3	Door up to 120 lbs (54 kg) and not exceeding 1 3/4" (44 mm) thickness, 36" (914 mm) width and 96" (2438 mm) height	3	0	All

INSTALLATION INSTRUCTIONS

1	Verify that spring hinges and antifriction butt hinges are of the same size.
2	Install spring hinges with spring tension adjustment up as shown in the picture.
3	Secure hinges with supplied mounting screws.
4	Close door and use supplied allen-key as shown in the pictorial to adjust the spring tension (door closing force).
5	Turn allen-key clockwise to desired spring tension, align hole in hinge knuckle with hole in inner stud and insert locking-pin partially in the knuckle hole, until it engages the inner stud. To increase spring tension turn the allen-key clockwise and to decrease the spring tension turn the allen-key counter-clockwise.
6	Remove allen-key and test door closing force.
7	If spring force needs to be changed, insert the allen-key and turn it slightly clockwise to free the load from the cross-pin. Remove the locking-pin and repeat step 5.
8	After the hinges tension is adjusted to the correct tension, insert locking-pin and ensure that its is flush with in the hinge knuckle surface.
9	For longer spring operating life, adjust spring tension to minimum tension required to close the door.
10	Caution: Do not exceed turning of the inner studs more than 3 holes for 180° door opening or 7 holes for 90° door opening.

