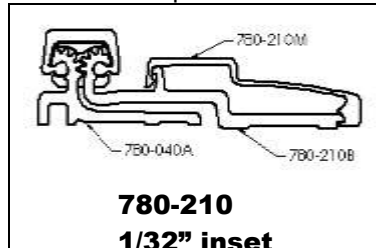


## **ROTON Hinge U.L. Fire-Rated Studs – 780-210**

These instructions outline how to install the optional stainless steel studs (4) for ROTON Hinge model 780-210. All four studs must be used in order to comply with U.L. requirements for composite wood fire doors rated up to 90 minutes and metal fire doors rated up to 3 hours.



### **A. Materials Needed**

1. Stainless steel studs (4).
2. Drill, 7/8" diameter bit, #16 (.177") bit, 12-24 thread tap.
3. #10 spanner screwdriver.

### **B. Installation**

1. Install the hinge in accordance with the standard installation instructions furnished with the hinge.
2. On the door leaf, drill a 7/8 diameter by 13/16" deep. Drill hole in the center of the door edge, using the chart below to locate the holes. The first measurement is from the top of the hinge to the centerline of hole #1. The second, third and fourth holes are measured from centerline to centerline.

Hinge Length	79"	83"	85"	95"	119"
Hole #1	13-9/16"	13-9/16"	13-9/16"	13-9/16"	13-9/16"
Hole #2	15-1/8"	15-1/8"	15-1/8"	21-1/4"	25-3/8"
Hole #3	21-5/8"	25-5/8"	27-5/8"	25-3/8"	41-1/8"
Hole #4	15-1/8"	15-1/8"	15-1/8"	21-1/4"	25-3/8"

3. Using the face of the frame as the reference point to locate the holes, drill and tap four (4) holes in the frame rabbet in the same vertical locations as the above chart. The horizontal location is 1/32" plus 1/2 of the door thickness.
4. Insert a stud into each of the four #12-24 threaded holes on the frame and tighten securely using a #10 spanner screwdriver.
5. Close the door slowly to assure that the studs are properly aligned. Any minor interference can be corrected using a rat-tail file.

