



## Roton Fire Ratings

Fire Ratings - Underwriters Laboratory Fire Rating   File #R14627			
Fire Rated Roton	Fully Concealed	Half Surface	Full Surface
20 Minute Fire Rated Wood Door x Hollow Metal Frame	U/L - FF	U/L - FF	U/L - FF
20 Minute Fire Rated Metal Door x Hollow Metal Frame	U/L - FF	U/L - FF	U/L - FF
30 Minute Fire Rated Wood Door x Hollow Metal Frame (Canada)	U/L - FF	U/L - FF	U/L - FF
30 Minute Fire Rated Metal Door x Hollow Metal Frame (Canada)	U/L - FF	U/L - FF	U/L - FF
45 Minute Fire Rated Wood Door x Hollow Metal Frame	U/L - FF	U/L - FF	U/L - FF
45 Minute Fire Rated Metal Door x Hollow Metal Frame	U/L - FF	U/L - FF	U/L - FF
60 Minute Fire Rated Wood Door x Hollow Metal Frame	U/L - FF	U/L - FF	U/L - FF
60 Minute Fire Rated Metal Door x Hollow Metal Frame	U/L - FF	U/L - FF	U/L - FF
90 Minute Fire Rated Wood Door x Hollow Metal Frame	U/L - Stud	U/L - Stud	U/L - Stud
90 Minute Fire Rated Metal Door x Hollow Metal Frame - All Gauges	U/L - FF	U/L - FF	U/L - FF
3 Hour Fire Rated Hollow Metal Door x Hollow Metal Frame	U/L - Stud	U/L - Stud	U/L - Stud

**PLEASE SPECIFY IF UL STAMP IS REQUIRED.**

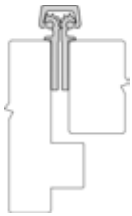
### Ordering Examples :

**Fire rating must be specified as below.**

**-780-112LL 83" Clear U/L - FF**

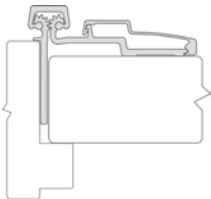
**-780-211HD 95" DB U/L - Stud**

Please note that the maximum size of a single rated door leaf is 4'0" wide by 10'0" high. The maximum rated opening size for a single door is 4'0" wide by 10'0" high. And the maximum rated opening size for a pair of doors is 8'0" wide by 10'0" high.



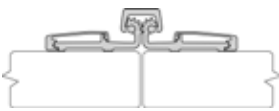
#### Fully Concealed

These models are concealed between the rabbet of the frame and the hinge edge of the door. Models available include 780-041, 780-041HD, 780-110, 780-110HD, 780-111, 780-111HD, 780-112, 780-112HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, and 780-226LL.



#### Half Surface

These models have the frame leaf concealed between the rabbet of the frame and the edge of the door. The door leaf is mounted to the door with through bolts. Models available include 780-045, 780-045HD, 780-046, 780-048HD, 780-058, 780-058HD, 780-054, 780-054HD, and 780-211HD.



#### Full Surface

These models have the frame leaf mounted to the face of the frame and the face of the door. The door leaf is mounted to the door with through bolts. Models available include 780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, 780-257HD, and 780-300HD.

### Hager's Roton Continuous Geared Hinges:

- Are for use on swing type doors of hollow metal, tin-clad, sheet metal, and steel covered composite type that are rated up to and including 3 hours.
- Are rated for use on wood composite doors that are rated up to and including 1-1/2 hours.
- Are rated for use on wood core doors that are rated up to 20 minutes without hose stream and non-studded.
- Come in standard lengths of 79", 83", 85", 95", and 119". Custom lengths are available under 119".