

# PEMKO

## PEMKONNECT®

### FULL MORTISE SHORT LEAF MODULAR HINGE

Experience a safer  
and more open world

Applies to the following product:

#### FM\_SLF\_HD1-M

– Heavy-Duty, Full-Mortise Short Leaf Flush Modular, Continuous Geared Hinge

#### Attributes:

##### PemkoHinge® Attributes:

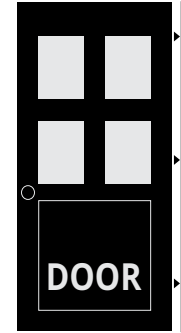
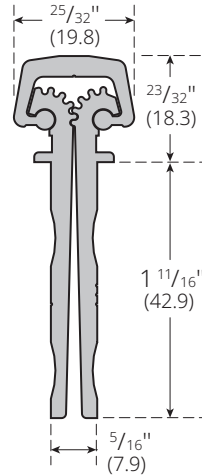
- Modular configuration helps with freight costs as well as transit and storage challenges versus full length hinges.
- With a continuous hinge, typical alignment problems, such as door sag and binding, are eliminated. Unlike conventional hinges, the continuous hinge distributes load stress uniformly along the full length of the door and frame.
- The gear design of the continuous hinge ensures identical operation of each leaf; therefore, very little effort is required to open heavy commercial doors.
- Continuous hinge installation screws are located along the full length of the hinge, thereby preventing warping of the door along the hinge jamb.
- The continuous hinge acts as reinforcement for both door and frame.
- A high degree of security can be achieved for exterior openings or restricted spaces by using a continuous hinge. With the geared construction and the full-length channel cap, the common gap between the door and frame is sealed, which provides security against prying.
- In addition, the closing of this gap protects against pinching fingers in doors in public areas, particularly those where children are present.
- Sightproof design of the continuous hinge provides privacy for lavatories, executive offices, or file rooms.
- PemkoHinge® products are GUARANTEED FOR THE LIFE OF THE OPENING against defects in material or workmanship with the exception of residential and Standard duty aluminum hinges which carry a 10 year warranty.

##### Full Mortise-Short Leaf Flush Modular:

- Designed mainly for new doors and frames.
- HD1 Hinges conform to Grade 2-150 and Grade 1-300.
- Applied to conceal both leaves.

##### Why PemkoHinge®?

- Tested and certified with the best warranty in the industry.
- No restrictions on frame gauge and wall conditions.
- No restriction on cutting hinges in field.
- No special cutting instructions or voided warranties.
- No special door and frame preps up to and including 90 minute doors.



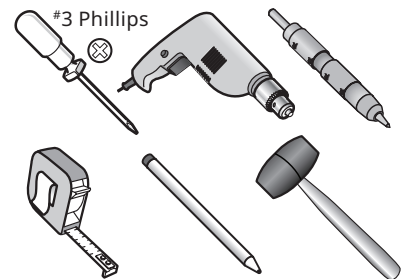
Attaches Door  
to Door Frame

#### Testing/Ratings:

Aluminum continuous hinge for use on swinging type fire doors of the hollow metal, tin-clad, sheet metal and steel covered composite type rated up to 3 hours, wood covered composite type rated up to and including 1 1/2 hours. Also wood core rated up to and including 20 minutes without hose stream. Meet criteria of UBC 7.2 for positive pressure.



#### Tools Required:



#### Product/Available Finishes:

**C** Clear Anodized Aluminum

**D** Dark Bronze Anodized Aluminum

Installation Instructions:

Full mortise units are designed mainly for new doors and frames, and are applied so as to conceal both leaves.

In retrofit applications, the door width must be reduced for proper clearance as shown in **FIGURES A & B**.

1. Choose one section of the hinge to be the top section, and with the hinge leaves open, position the hinge section against the frame rabbet.
  - a) The leaf alignment flange should be tight against the face of the frame.
  - b) Allow 1/8" between the frame header and the top of the hinge leaf for door clearance.
2. Mark and center punch each hole on frame with hinge held firmly in place. Remove hinge. (A center punch can help center hole, so that fasteners will enter straight.)
3. Drill the top two holes per **DRILL SIZE CHART** (below). (**Do not install**).
4. Maintaining the same top-section orientation as used in step 1, position the door leaf of the hinge on the door.
  - a) Fit all hinge segments together by sliding the extended hinge cap over hinge gears as shown in **FIGURE C**. For 95" hinges use the shortest hinge section in the middle.
  - b) If applicable, the door leaf alignment flange should be seated along the full length of the door edge.
  - c) The top edge of the hinge should be flush with the top edge of the door.
5. Mark and drill all holes per **DRILL SIZE CHART**. Thread tapping not required.
6. Screw the door leaf portion of the hinge to the door using the #12-24 x 7/16" thread forming screws with #3 Phillips drive. (Use wax or soap on screws to aid installation.)
7. Position the door at 90° to the frame. Install the top two screws in the frame leaf.
8. Close door and inspect for proper clearance and fit. Make adjustments as required to ensure proper operation of the complete assembly.
9. Mark and drill remaining frame leaf holes per **DRILL SIZE CHART**.
10. Install remaining screws.

NOTE: Special **FirePins** are required on 3 hour (A-Label) assemblies.  
(See page 3 for instructions).

Drill Size Chart:

MATERIAL	THICKNESS	DRILL SIZE
ALUMINUM	.090 - .140	13
METAL	20 GAUGE	17
METAL	16-18 GAUGE	15
METAL	12-14 GAUGE	13
WOOD	N/A	5/32"

Although self drilling screws are provided, pre-drilling is recommended.

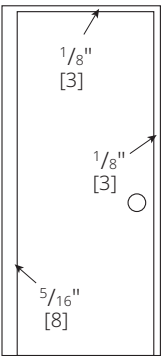


FIGURE A

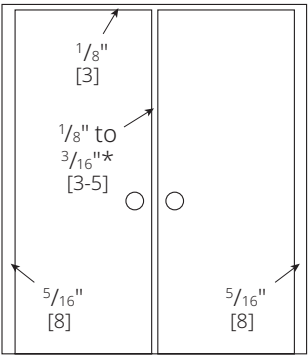
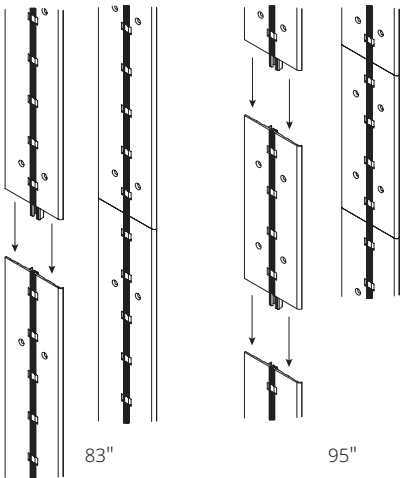


FIGURE B

\*Allow extra clearance as required per astragal manufacturer. Certain door and frame conditions may require an extra 1/32"-1/16" clearance. Excessive clearance on fire rated assemblies may violate the requirements of NFPA 80.

FIGURE C



The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, mechanical and smart locks, access control and service.



FIREPINS:

FIREPINS ARE REQUIRED ON 3 HOUR RATED DOORS ONLY.

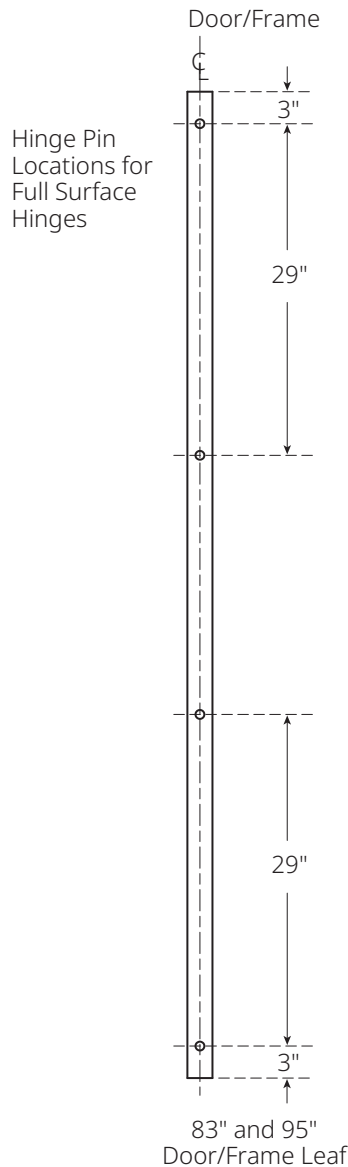
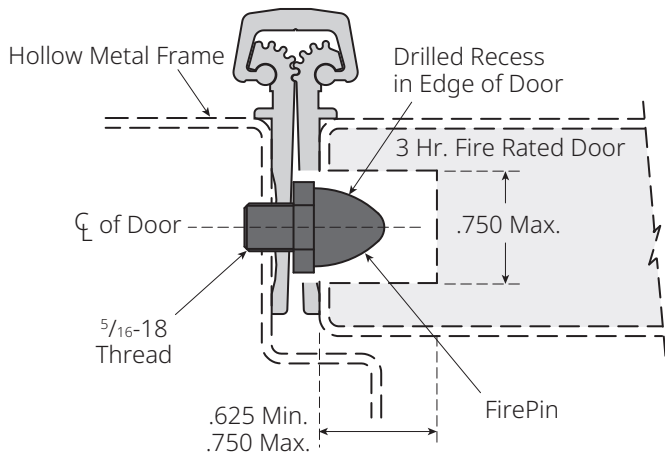
Pin Installation:

Full Mortise Hinge:

Install PemkoHinge® on door and frame prior to locating pins.

- 1. Drill and tap for 5/16-18 threads in frame as indicated on the template or the drilled frame leaf of the PemkoHinge®.
- 2. Insert **FirePin** in threaded hole.
- 3. Drill 3/4" hole 1/2" deep in edge of door where indicated on the template or the drilled door leaf of the PemkoHinge®.

FULL MORTISE SHORT LEAF FLUSH HINGE



NOTE: **FirePin** must be ordered with hinge, as hinge prep & UL180 stamp is required.