

# 20 Minute Fire Rated Wood Frame Installation Instructions

## Size and Configuration

Single door configuration only

Maximum size: 3'0" wide x 8'0" high

[1] Maximum 1/8" clearance between the frame and door slab is allowed

## Wall Opening Requirements

[2] Opening for the door frame is to be built with nominal 2x framing material with a minimum of one king and one jack stud on either side of opening (i.e. overall 3" thickness of framing material on either side of the opening)

[3] Maximum distance between the back of the jamb and framing is 1/2". This gap must have continuously fill of fiberglass insulation installed

## Hardware

Lockset used must meet a minimum 20 minute fire rating

[4] Hinges used must meet a minimum 20 minute fire rating  
Refer to NFPA 80 for more information

## Frame Installation

Head jamb must be fastened to the side jambs with three 2 1/2" #8 screws (per side) – pre drill before fastening.

Shims should be placed behind each hinge and approximately 2" from the top and bottom. Head jamb and strike side jamb should be shimmed every 16" o.c.

[5] Jambs to be fastened with 2 1/2" fasteners (12 gauge finish nail) in pairs 16" o.c.

[6] Behind each hinge and strike plate one 3" #8 screw must be installed that penetrates through the frame and into the jack stud.

Hinges and strike should be installed with fasteners supplied by the hardware manufacturer.

[7] Install weatherstrip – if weatherstrip was not supplied with the frame it must meet a minimum 20 minute fire rating.

[8] Install casing along the top and sides of the frame, install on both sides of the opening. Minimum width = 2 1/4" Minimum Thickness = 7/16". Solid wood material with a minimum density of 25 lb/ft<sup>3</sup>. May be finger jointed.

## Edge seal

[9] Installation of an intumescent edge seal between the doors' edge and wood frame is required. Intumescent edge seal must meet a minimum 20 minute fire rating.

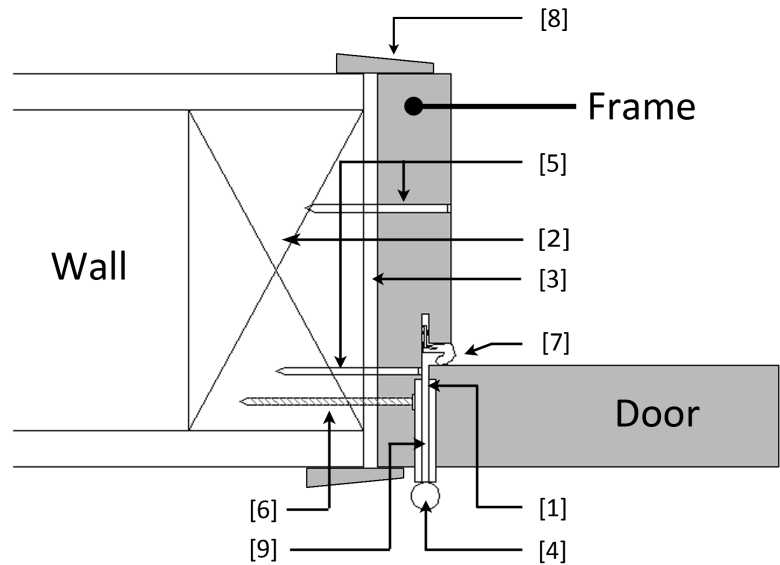
## Modifications

Per NFPA 80, job site modifications are restricted to the following:

- Circular or rectangular function holes for latch bolts
- Prepping area around function holes for strike plates
- Installing gasketing or seals to the frame if required

## Labeling

Fire rated labels shall not be removed at any time. Labeling must not be covered or painted over, they must be visible during the life of the product. Replacement labels are not available.



# 20 Minute Fire Rated Wood Frame Assembly Instructions

All pieces are cut to the proper size for assembly. No trimming of any material is required.

## Frame Assembly

**STEP 1:** On a smooth level surface lay (2) side legs, top jamb and threshold.

Note: the threshold should sit flush with the edge of the jamb at the location where the door will close (fig. 1)



Figure 1



Figure 2

**STEP 2:** Fasten the side jambs to the top jamb using min. #8 x 2" screw. (fig. 2)

Note: Pre drill at all locations to avoid splitting.

**STEP 3:** Fasten the side jambs to the threshold using min. #8 x 2" screw. Fasten into the wood core of the threshold (fig. 3)

Note: Pre drill at all locations to avoid splitting.



Figure 3