

# **Specifying Fire Rated Frames at Warm Springs Composites**

(4/2/2015)

## **1. Approvals & Basic Construction**

- 1.1. Warm Springs is currently approved for fire rated veneered jambs in 20 minute neutral pressure, 20 minute positive pressure, 45 minute positive pressure, 60 minute positive pressure and 90 minute positive pressure.
- 1.2. Maximum approved opening is 96" x 96" commonly noted as 8/0 x 8/0.
- 1.3. 20 Min PP (positive pressure), 45 Min PP, and 60 Min PP are the same construction up to 48" wide. Frames wider than 48" will have to be made as 90 Min PP. Basic frame construction below 90 minutes and less than 48" wide is veneered or phenolic covered medium density fiberboard with intumescent applied front and back.
- 1.4. 90 Min PP frames are composed of a 3.125" Tectonite jamb body with MDF edge glued to the jamb body and intumescent applied front and back to the Tectonite jamb body.
- 1.5. Minimum wall width is 4.5" and there is no maximum wall width.
- 1.6. Frames can be available ready to laminate and ready to edge band.
- 1.7. Transom's and sidelights are available. All transom's and sidelights must fit within the maximum allowed opening of 8/0 x 8/0. If the total height or width exceeds this dimension, a new fire opening needs to be created with either a double stud or double header. If the combined width of a frame and sidelight exceeds 48" all components but be made to a 90 minute construction. Glass cannot be glazed directly to the transom or sidelight and there must be a minimum of 3" of non-combustible material surrounding the fire rated panel being installed in the frame.

## **2. Machining & Finishing**

- 2.1. Warm Springs Composites does not machine frames. Our frames are sold only to approved OEM's who are ITS certified and approved by Warm Springs to do the machining.
- 2.2. The fire label is applied by the firm doing the machining.
- 2.3. Warm Springs Composites can flat lam (we do not wrap) veneer of any species to our frames but we do not provide a factory final finish. This can be factory applied by the OEM buying the frame or field applied.

## **3. Frame Types**

- 3.1. Two basic constructions are sold; single rabbet or double rabbet.
  - 3.1.1. Minimum base jamb element double rabbet must be .750" thick with a stop that is at a minimum 1.25" wide and .625" thick.
  - 3.1.2. Stops can be shipped loose or attached.

- 3.1.3. For a 1.75" standard door the distance from the stop to the frame edge on the door side is 1.875." If your set-back requirements are greater than the standard 1.875" please specify that on the order.
- 3.2. The base element of the single rabbet frame is .750" thick combined with the stop element thickness of .625" gives a minimum approved thickness of 1.375" (1 3/8").
  - 3.2.1. A smoke seal kerf can be applied to a single rabbet frame if required. This changes the dimension from the edge of the stop to the edge of the frame for a standard 1.75" door to 2.125." If you need a larger set-back after applying the kerf for a smoke seal, please specify that with our order.
- 3.3. Jamb Body Thickness
  - 3.3.1. For MDF frame bodies multiply layers of MDF can be laminated together to make a jamb body as thick as required.
  - 3.3.2. Standard jamb body thickness is .875" for a double rabbet and the minimum is .750" as noted above. This applies to both single rabbet and double rabbet but the stop must be .at least 625" thick for each type
  - 3.3.3. For Tectonite frame bodies the maximum thickness that can be made is 2.125."
  - 3.3.4. If the jamb body is more or less than standard, clearly call it out on the PO. Thus if you want a 1.125" thick double rabbet body call out 1.125:" thick jamb body and the same applies for single rabbet frames.

#### 4. Trim Requirements

- 4.1. If you specify in your order the exact cut to size dimensions of the frame we all add allowances for trim.
  - 4.1.1. For Standard thickness frames we will add 2" of trim for the headers and 1" of trim for the legs.
  - 4.1.2. For thicker than standard we will add a minimum of 4" or more trim for the heads and 1" of trim for the legs.
  - 4.1.3. If you are including the trim in your specified dimensions please note on the order that you want the frame heads and legs cut to the exact dimensions ordered.
  - 4.1.4. For non-standard jamb constructions, please include a cross section drawing of how you want the jamb body to be made.

#### 5. How To Write up the Order

- 5.1. Double Rabbet
  - 5.1.1. **Jamb PP 20,45,60,90 Min 36" x 96" x 8.25" Walnut**
  - 5.1.2. Jamb PP 90 Min (this specifies that the frame will be a standard double rabbet frame rated for a 90 minute positive pressure opening. Thus chose the rating you want then write it like this: **Jamb PP 90 Min 36" x 96" x 8.25" Walnut.**

- 5.1.3. 84" x 96" (this specifies the dimensions you want the frame head and length to be made to. If you do not specify exact dimensions we will add the trim as noted above)
- 5.1.4. 8.25" (this is the wall width you want the frame to fit. This is critical and is often left off an order)
- 5.1.5. Walnut (this specifies the type of veneer you want, for a paint grade surface specify phenolic paint grade, if this is a RTL (ready to laminate) or RTE (ready to edge band) so note where the veneer would be.)
- 5.1.6. If you want a thicker or thinner than standard jamb body write the order like this: **Jamb PP 90 Min 36" x 96" x 8.25" Walnut Jamb Body 1.25"**
- 5.1.7. If you want a wider than standard stop write the order like this:  
**Jamb PP 90 Min 36" x 96" x 8.25" Walnut Jamb Body 1.25" Stop 2.25"**

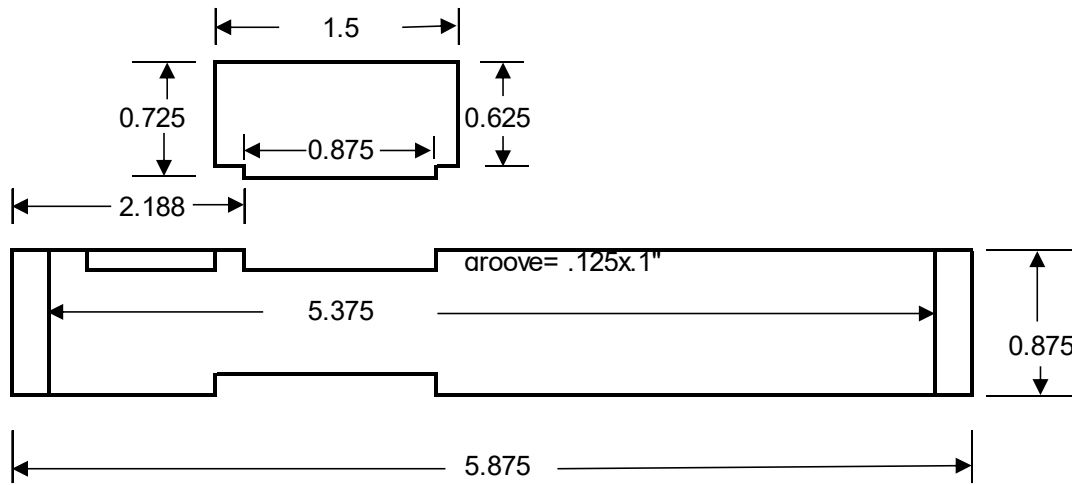
## 5.2. Single Rabbet

- 5.2.1. **Jamb PP 20,45,60,90 Min SR 36" x 96" x 8.25" Walnut**
- 5.2.2. Note that the only change from the double rabbet order is the addition of the SR notation that indicates a single rabbet frame.
- 5.2.3. If you want a smoke seal kerf added, write the order like this: **Jamb PP 45 Min SR 36" x 96" x 8.25" Walnut with Kerf.**
- 5.2.4. Our standard kerf is noted on the drawings. If you want a kerf that is different from the standard, please spell it out in your order.
- 5.2.5. If you want a thicker or thinner than standard Jamb body write the order like this: **Jamb PP 45 Min SR 36" x 96" x 8.25" Walnut with Kerf Jamb Body 1.75"**

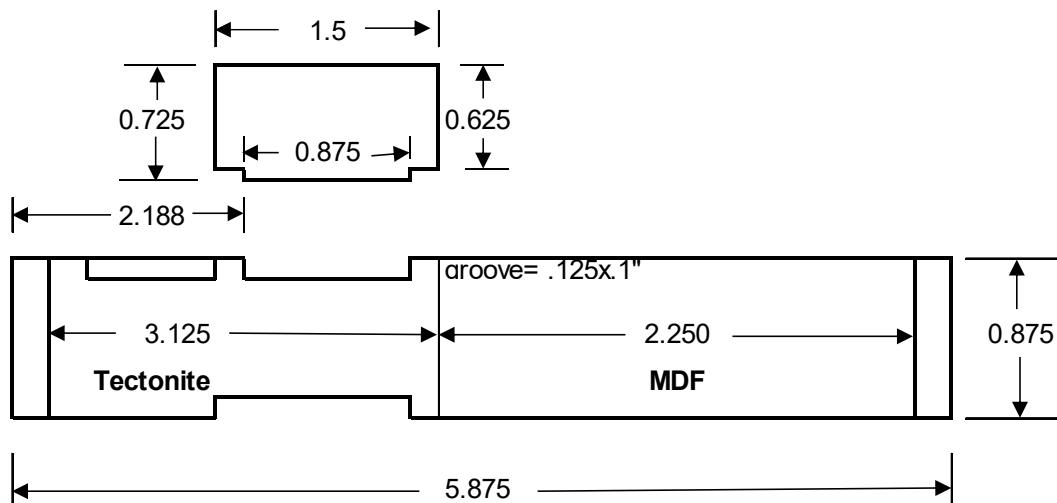
## 6. Special Considerations

- 6.1.1. Frame Thickness – if the frame body is different than .875" clearly specify with the order. Our standard thickness will be .875" for double rabbet (1.5" overall including stop); and 1.5" overall for a single rabbet. If you do not specify otherwise, you will get the standard thickness.
- 6.1.2. Drawings should be included for any frame outside of our standard cross-section in order to ensure we build exactly what you want. Included in this guide are blank examples you can fill out with your dimensions and send to the factory with your order.
- 6.1.3. Please specify stop size if different from standard as noted on the sample standard cross sections.
- 6.1.4. It is extremely easy to miss frame design specs that are not clearly included with each line item or when not standard that do not include drawings. Please follow these directions to make sure what you order is what you get.
- 6.1.5. See the appendix for sample standard-cross sections.

## Appendix



### Double Rabbet – 20 to 60 Minute Positive Pressure



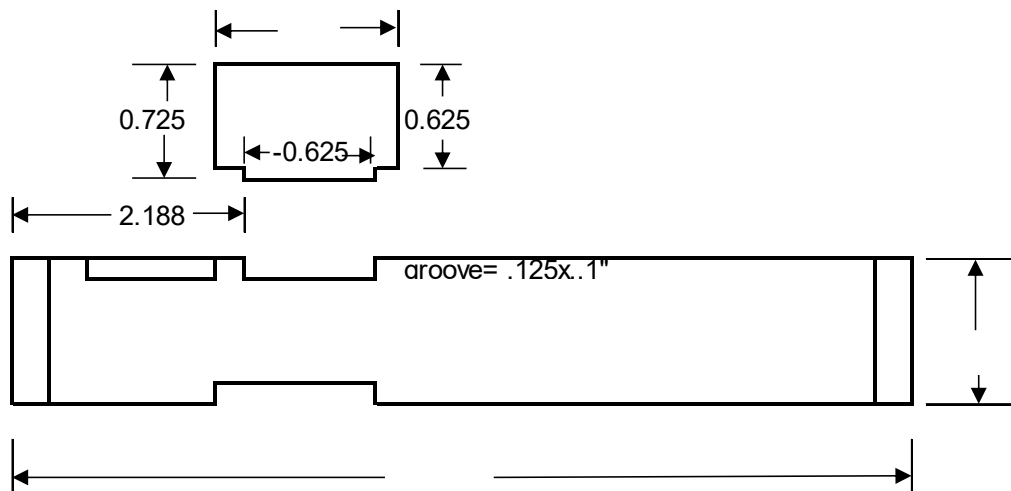
### Double Rabbet – 90 Minute Positive Pressure



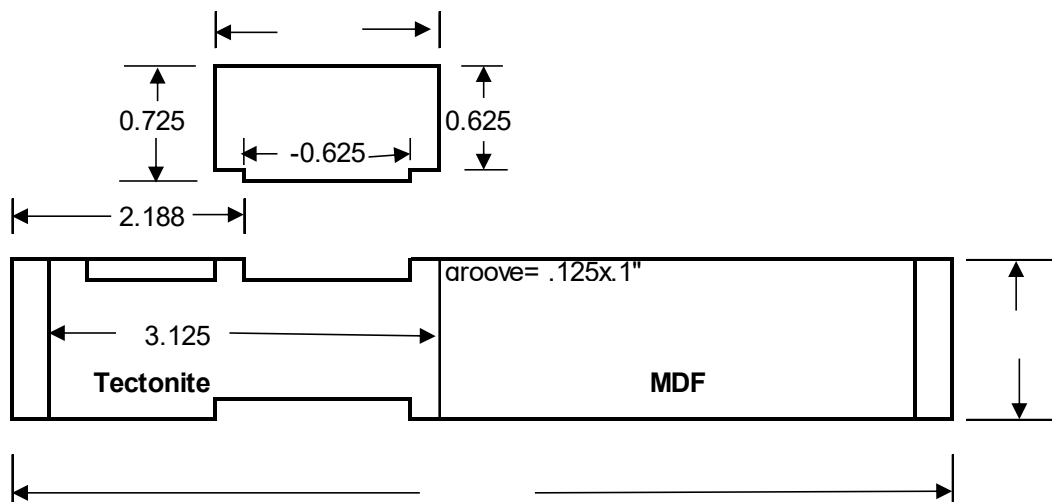
# Drawing To Fill Out and Send with PO When Dimensions Are Not Standard

## Double Rab.

20 Minute, 45 Minute and 60 Minute Positive Pressure

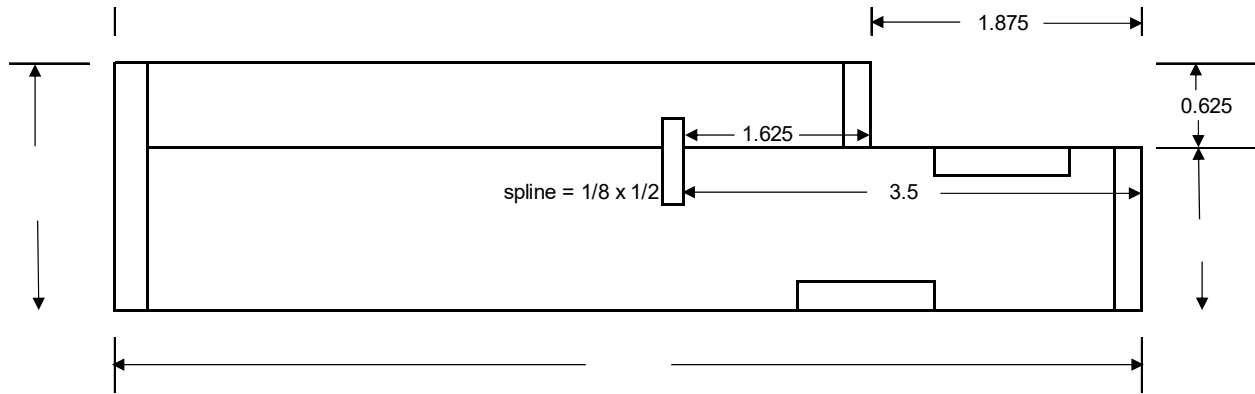


## Double Rab. 90 min



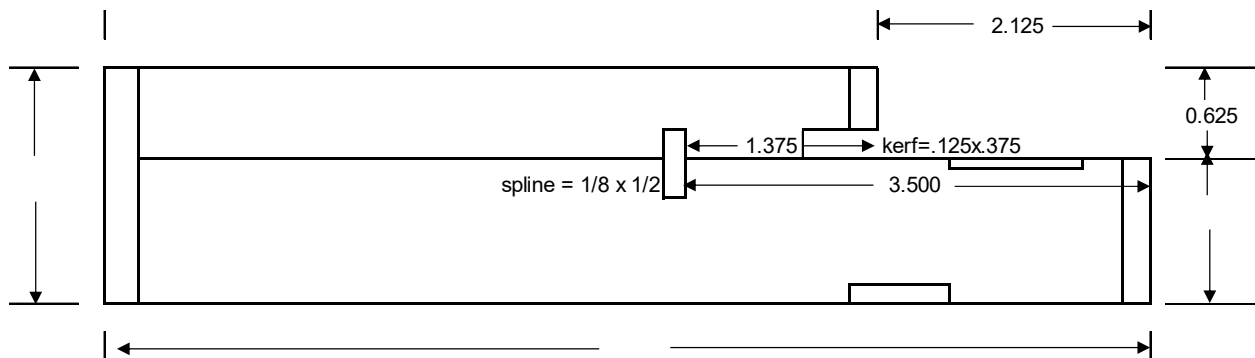
## Single Rabbet Jamb/Spline

20 Minute, 45 Minute 60 Minute Positive Pressure

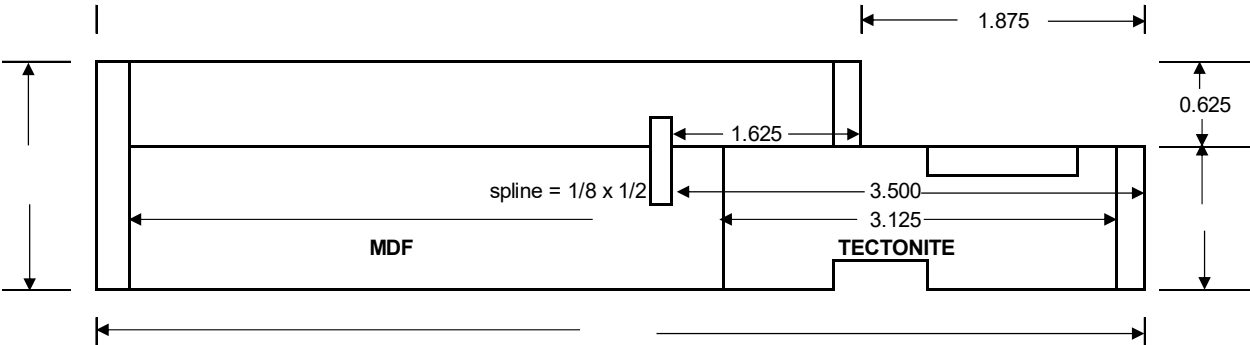


## Single Rabbet Jamb/Spline w/kerf

20 Minute, 45 Minute 60 Minute Positive Pressure



Single Rabbet Jamb/Spline 90 min



Single Rabbet Jamb/Spline w/kerf 90 min

