

### Planning a Typical Pocket Door Installation

#### SOLUTIONS:

Here is What You Will Learn:

- 1-The Parts Needed
- 2-Rough Opening Requirements
- 3-Header and Track Support Requirements
- 4-Pocket Sidewall Construction and Space Requirements

#### START:

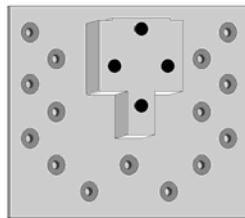
- 1- Figure 1 Shows the Parts Needed for Installation

**Figure 1**

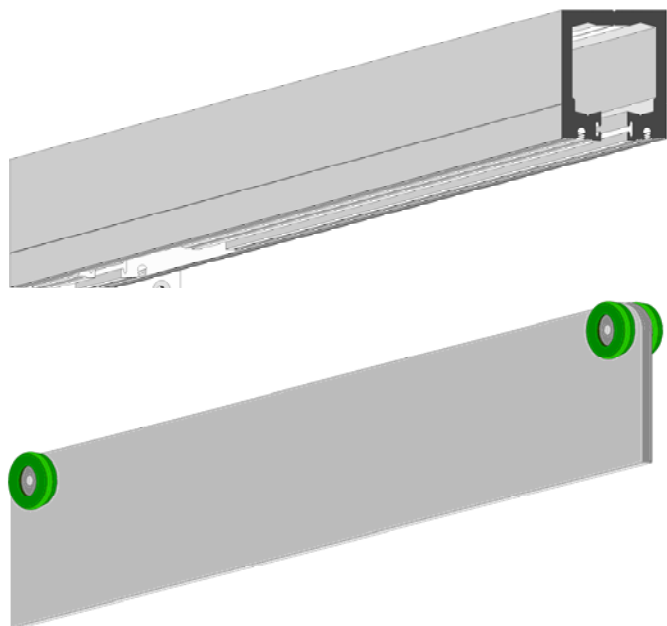
The Parts Needed for a Typical Installation

Track

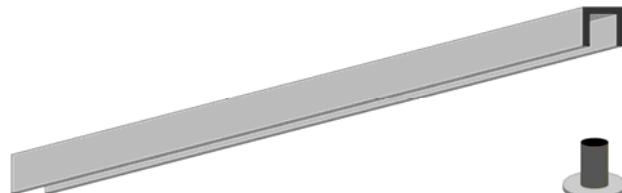
Mounting  
Plate



Wheels and Door Blade



Guide Channel



Plunger Door Guide



**2-The Rough Opening Size:**

Find the size of the door that is called out on the plans for this specific opening.

Once that is known, follow these general calculations:

**Width Calculation:**

(Door Width x 2) + 4". As an example, if the door is 2'-8" (32"), then the calculation is  $(32 \times 2) = 64" + 4" = 68"$  (5'-8") Rough Opening Width.

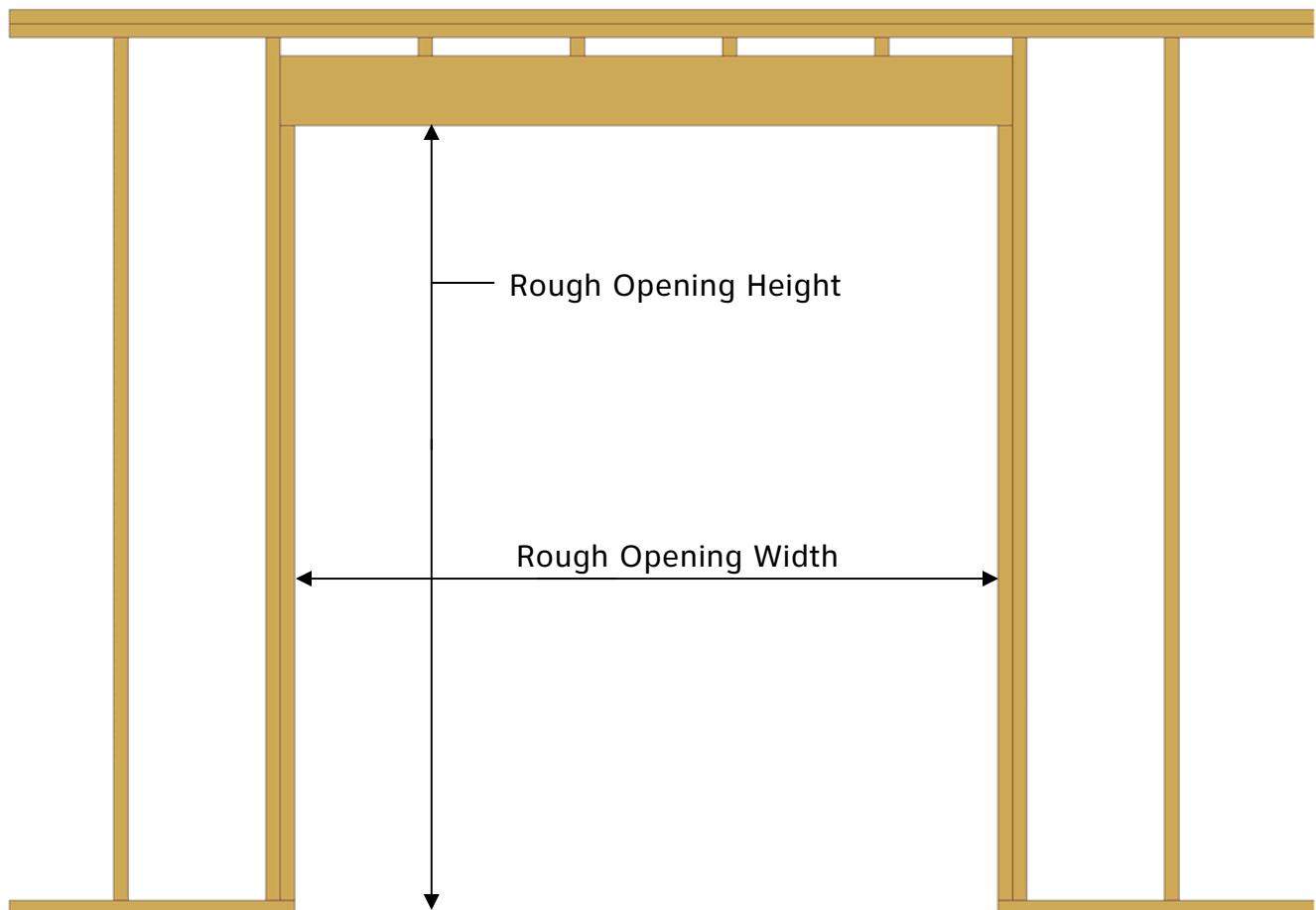
**Height Calculation:**

Door Height + 3" + Thickness of Head Jamb + Height of Finish Floor (above subfloor). An example: if the door is 6'-8" (80"), then the calculation is  $80" + 3" = 83"$  + thickness of head jamb + the height of the finish floor. For example, the head jamb is  $3/4"$  and the finish floor height is 1", then the Rough Opening Height becomes  $83" + 3/4" + 1" = 84 \frac{3}{4}"$  (7'-0  $\frac{3}{4}"$ ) Rough Opening Height.

On the next pages refer to the vertical and horizontal sections for detailed information.

**Figure 2**

Measuring the Rough Opening



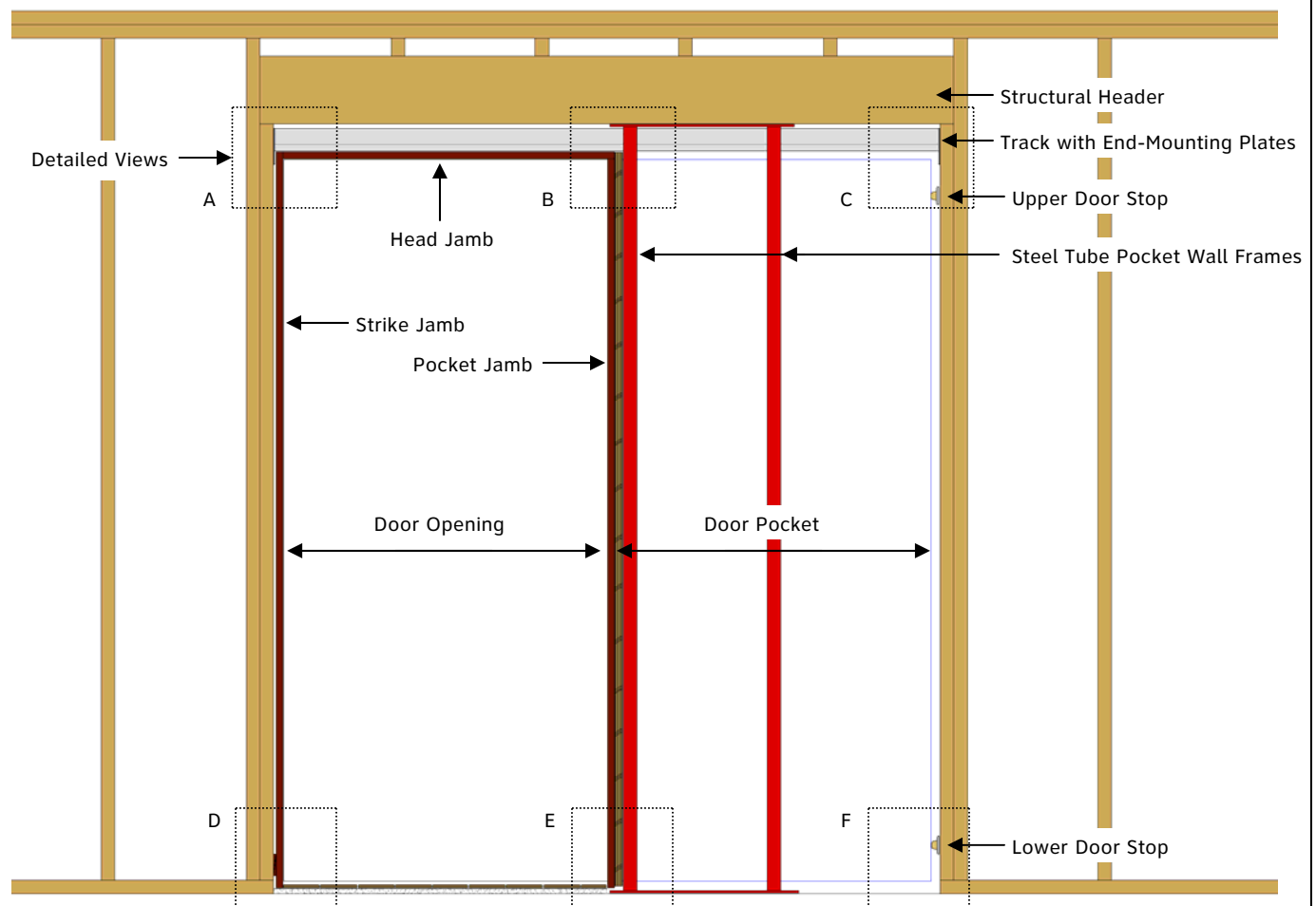
#### 2 (con't) -General Layout for Planning and Design:

This Full Elevation shows all of the components in their installed positions that would otherwise be covered by drywall or finishes. For more detail, these parts are shown in larger scale on the next page.

This is a typical installation, and it is possible that not all the parts would be used in every installation. For example, if the door were full-height (to ceiling) there might not be a head jamb depending on the look that is to be obtained. A full-height door might also move the structural header into the ceiling, or eliminate it if the joists were perpendicular to the door wall. These scenarios are detailed in Tek-Tip numbers 2 & 3.

**Figure 3**

General Parts and Details for Rolling Pocket Door Installation & Planning

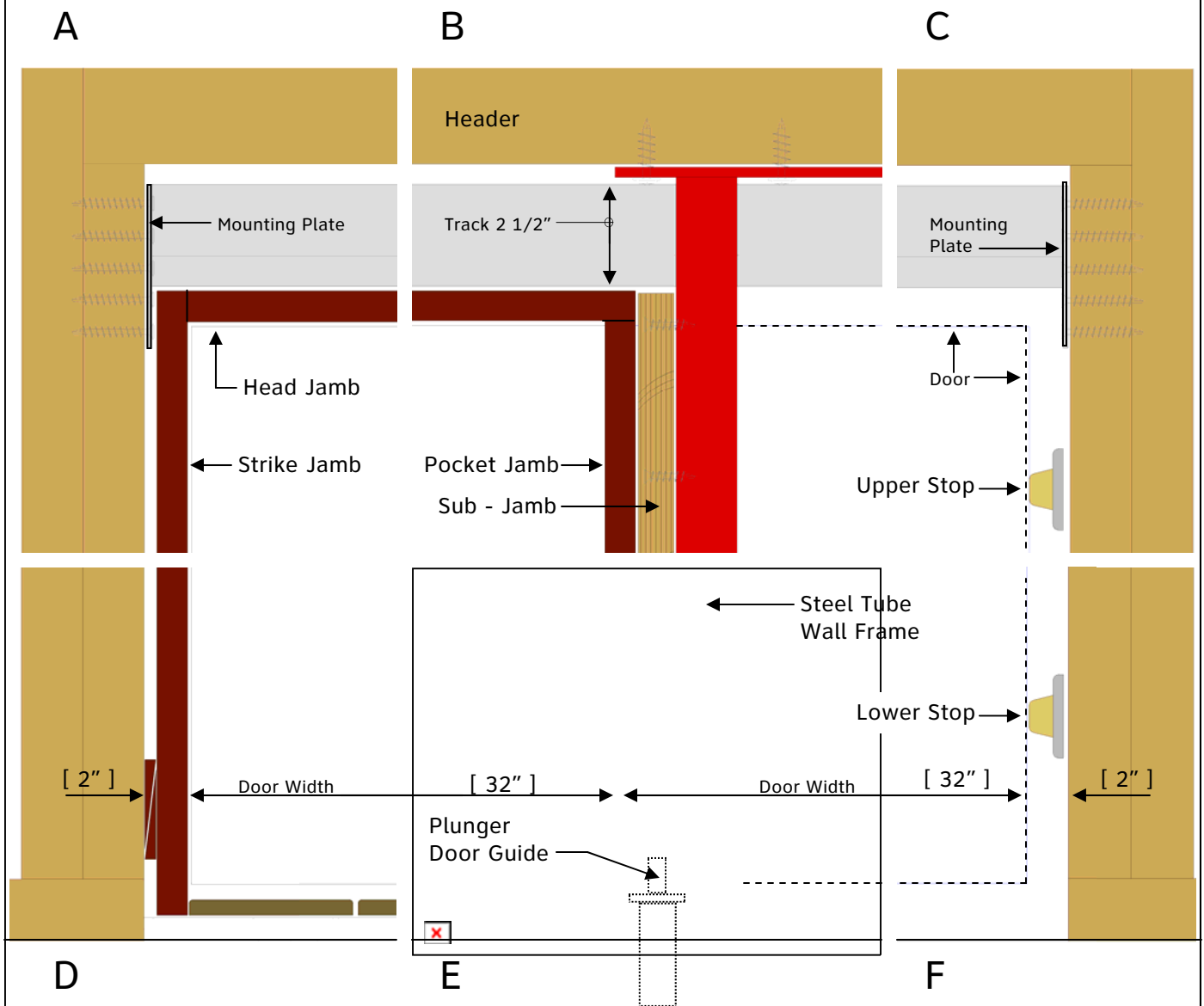


#### 2 (con't) -Detailed Parts for Planning and Design:

Notice that the track is not fastened to the "header". On doors up to 150 # or up to 3'-0" in width and 6'-0" of track length, the track does not need support between the end-mounting plates. This provides economy and simplicity of installation and greater design freedom. On heavier doors and longer spans, intermediate support will be required. We strongly recommend the use of manufactured lumber or steel for headers. The inherent dimensional stability makes them a great choice. Sawn lumber headers are not a good choice for track support. As they dry, the track will move upwards, creating havoc with the door fit and finishes! Another structural consideration is the design deflection of the

**Figure 4**

Large Scale Parts and Details for Rolling Door Installation & Planning



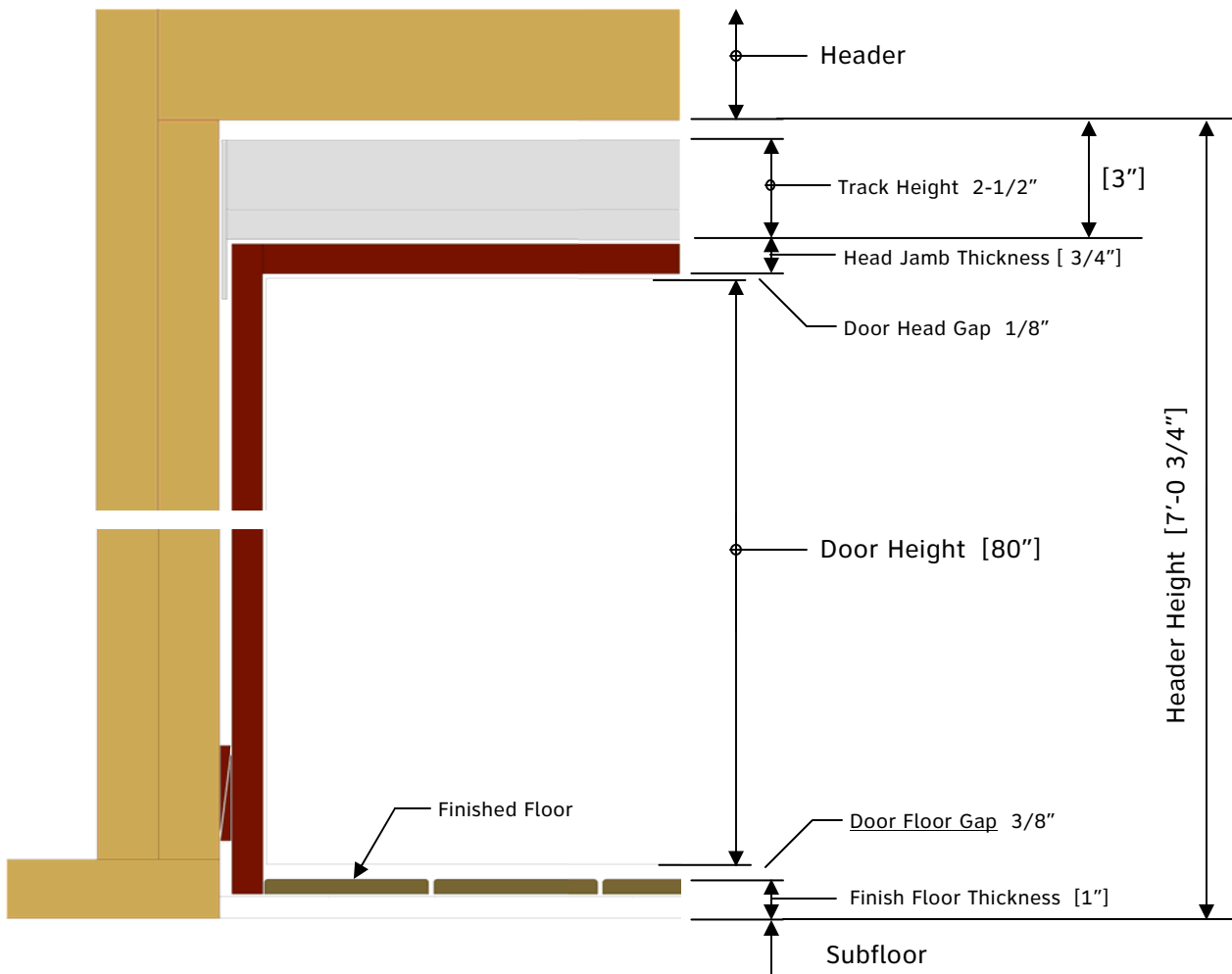
#### 2 (con't) -Detailed Vertical Dimensions for Planning and Design:

supporting headers or beams. This is usually expressed as  $L/360$ =deflection (in inches).  $L/360$ , if used for a 20 foot span, would yield a design deflection of about  $11/16"$ . Whether or not this is a workable solution depends on the situation. If you have rolling doors crossing this 20 foot span, and the door floor gap is  $3/8"$  (see Fig. 5) , the door would probably rub on the floor and require trimming. Had the engineer been asked to design for less deflection, (perhaps  $L/720$  or greater) the problem would be handled. The point is to figure this out as early in the project design phase as possible.

**Figure 5**

Vertical Dimensions for Rolling Door Installation & Planning

Note: Dimensions given in [parentheses] are from the example height calculations on page 2.

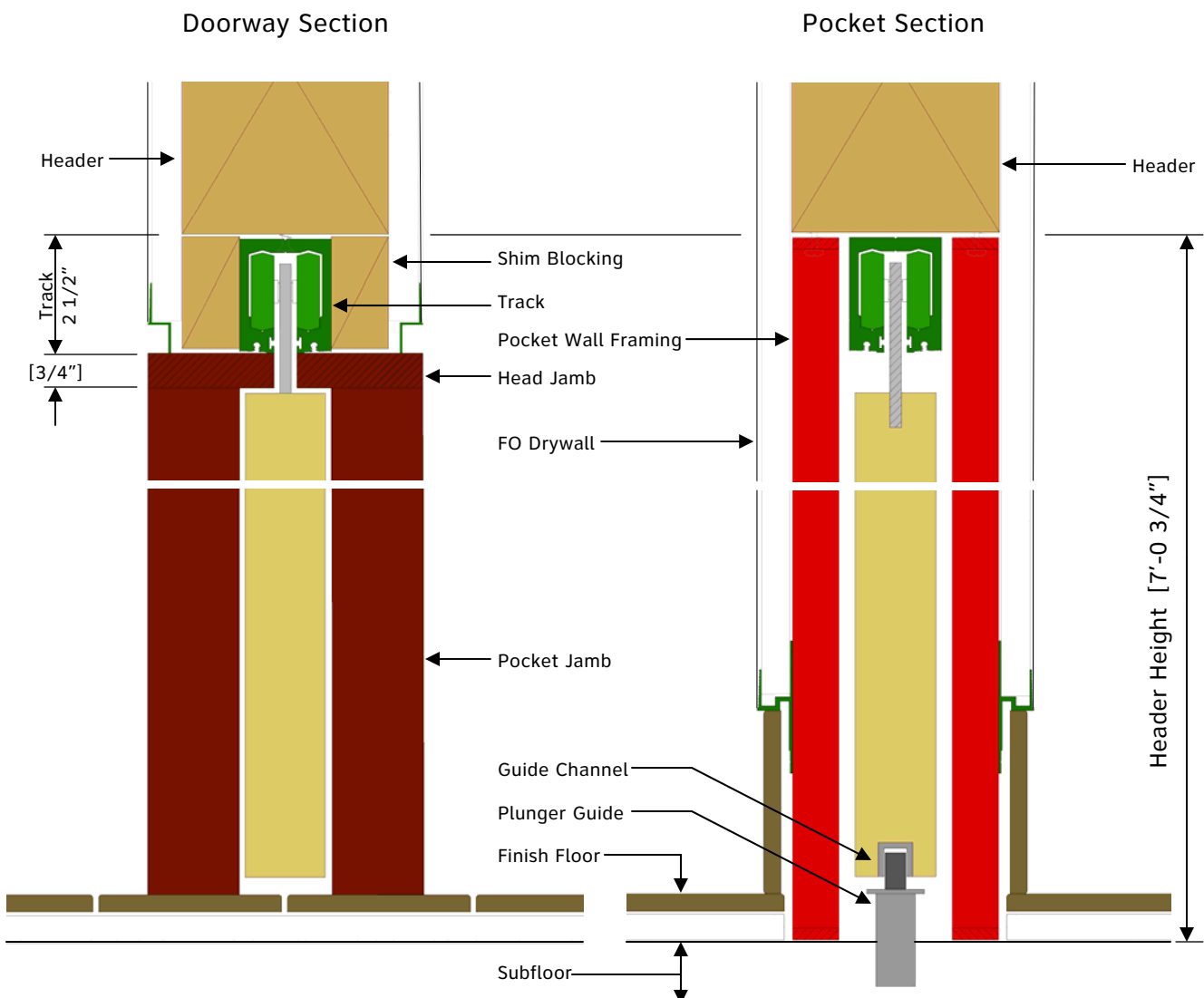


### 3-Header, Track Support and Other Conditions

Flush-in-Ceiling track with ceiling joists parallel or perpendicular to the track are detailed in Tek-Tip numbers 2 & 3. These examples also detail sawn joists and TJIs in perpendicular situations and how to notch or fur joists.

**Figure 8**

Large Scale Vertical Details (with dropped header)

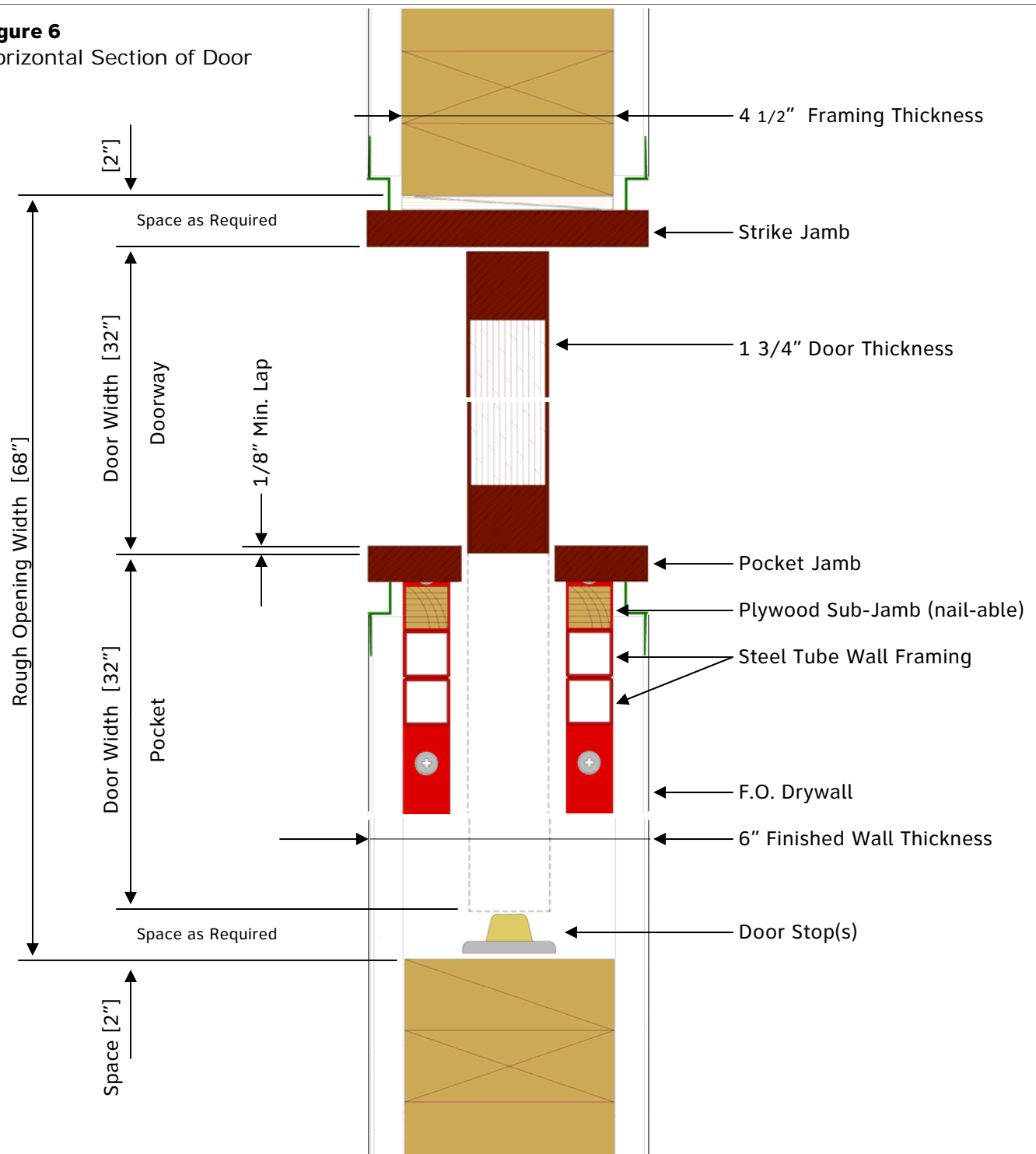


#### 4-Horizontal Section of Finished Door Installation with Dimensions and Notes

Note: Dimensions given in [parentheses] are from the example width calculations on page 2.

**Figure 6**

Horizontal Section of Door



### 4-Pocket Sidewall Construction Options

Tektrim has field-tested pocket wall construction options for many years. The materials and systems that we recommend are based on this experience. First and foremost: There are very real limitations on wall thickness vs. height that results in some pocket walls being too flexible (read: flimsy). The “classic” pocket door circa 1960’s was an 1 3/8” hollow-core door in a 3 1/2” thick wall. If you do the math, you see that the sidewall framing thickness is 3/4” + 1/4” space. As many of you know, if you push lightly on the pocket wall of this system, the wall deflects and rubs the door—even scratching it’s finish! None of our customers would accept that - would your clients? We don’t think so...

Tektrim offers materials and systems that feel solid and work flawlessly for years. We offer several pocket wall systems that solve the problems mentioned above.

For 1 3/4” doors we recommend a minimum 4 1/2” framed wall thickness. This allows one full inch for the pocket wall framing members (a 1” square steel tubing is a great choice). This works great for up to 7 foot doors. If your doors are taller than 7 feet, we recommend 1-1/2” tubes and a 5 1/2” framed wall thickness. In both cases, if walls are constructed in this fashion, you will not have pocket wall deflection and the installation will have an ambience of quality and solidity.

Some jobs require extreme measures to solve a unique challenges. There are other pocket wall systems that can perform equally to the systems mentioned and yet are thinner in cross section. These may use structural aircraft honeycomb panels that are very strong and are very stiff relative to other options. Contact us if this is your only option...

**Figure 7**

Pocket Side Wall Thickness and Other Important Dimensions to Know and Understand

