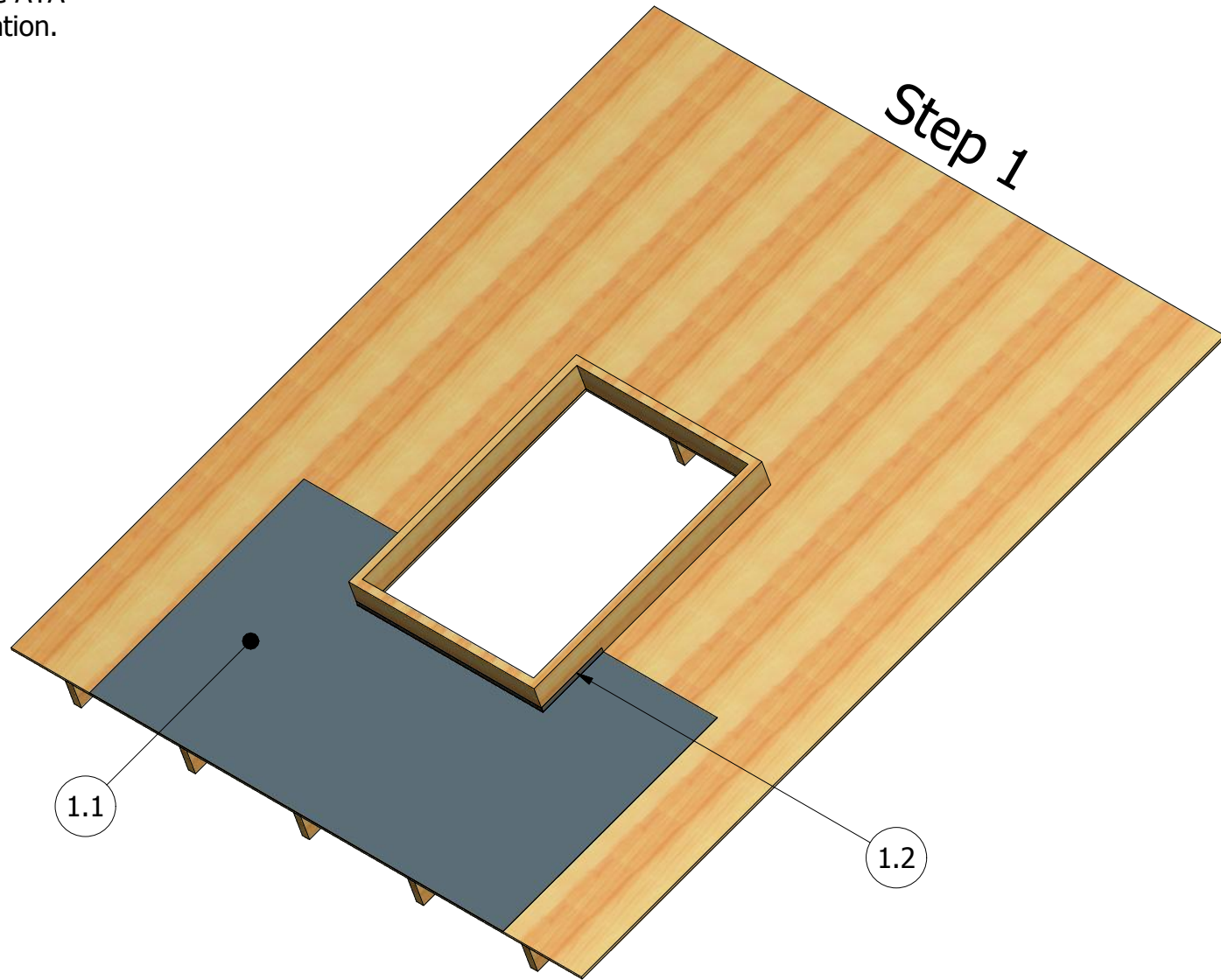


**Step 1.1** Install ATA Shield at Bottom of Penetration and extend to the Eave.

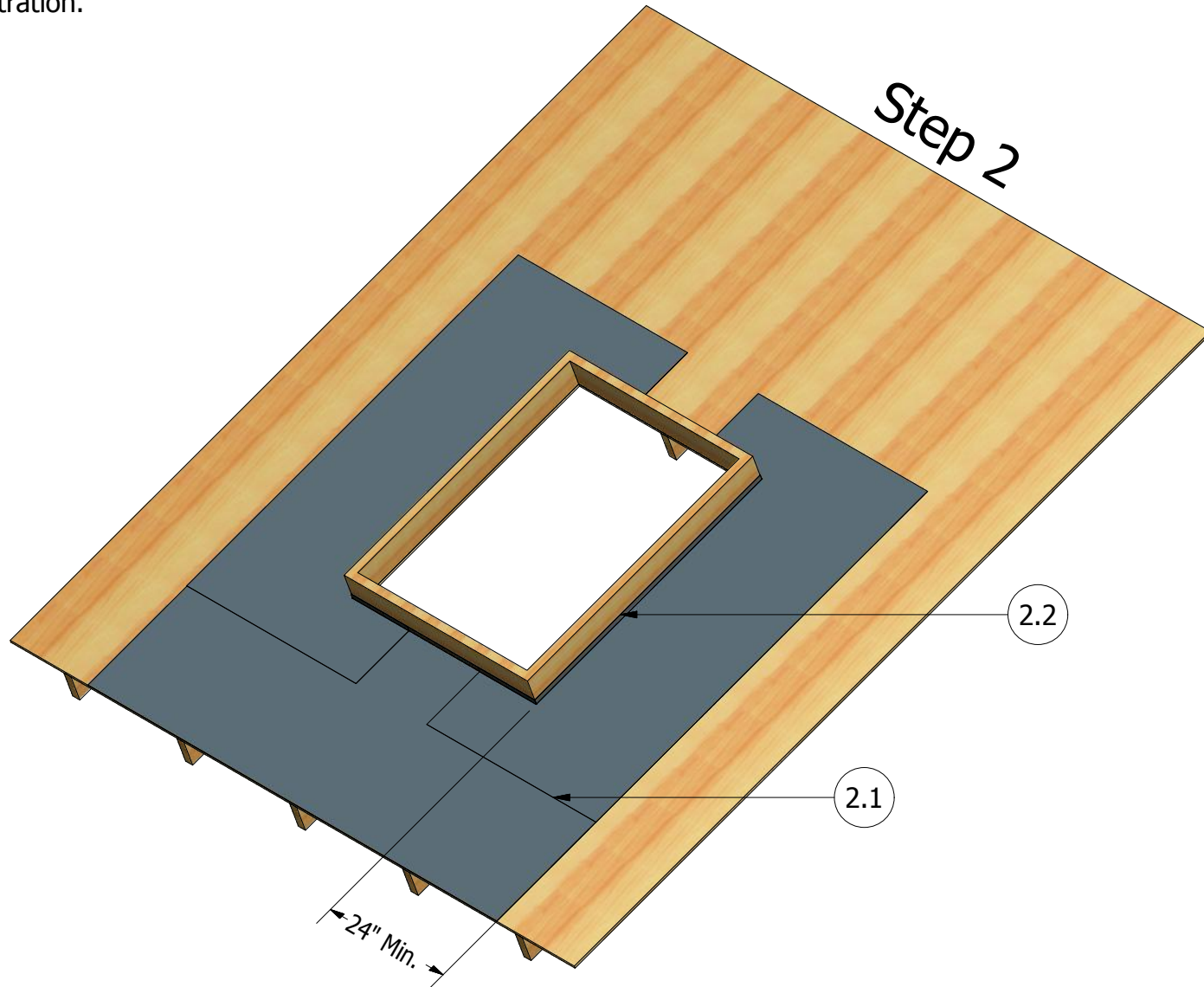
**Step 1.2** Fold sides of the ATA Shield up onto the Penetration.



This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 2.1** Install ATA Shield at sides of Penetration, overlapping on top of the bottom ATA Shield.

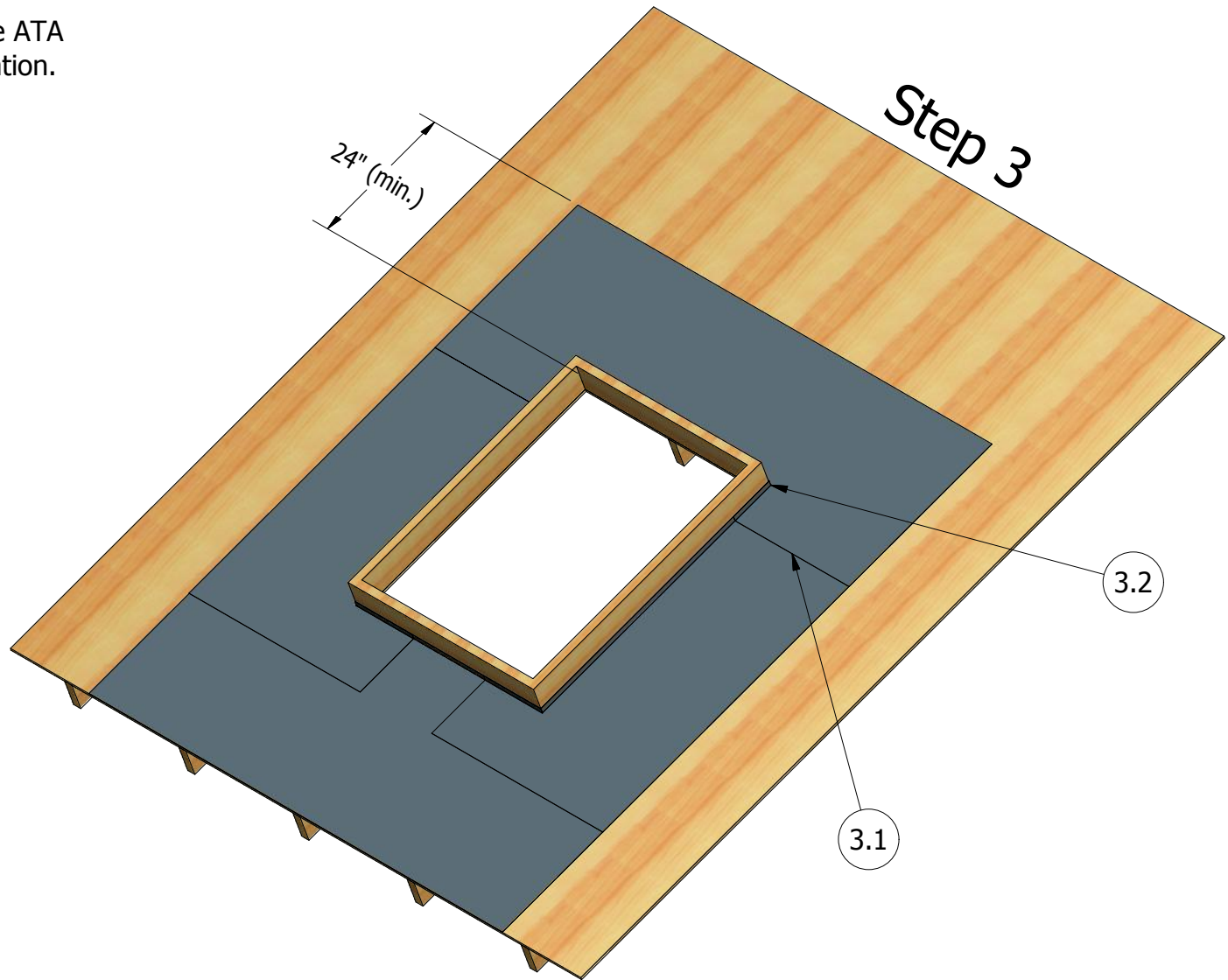
**Step 2.2** Fold sides of the ATA Shield up onto the Penetration.



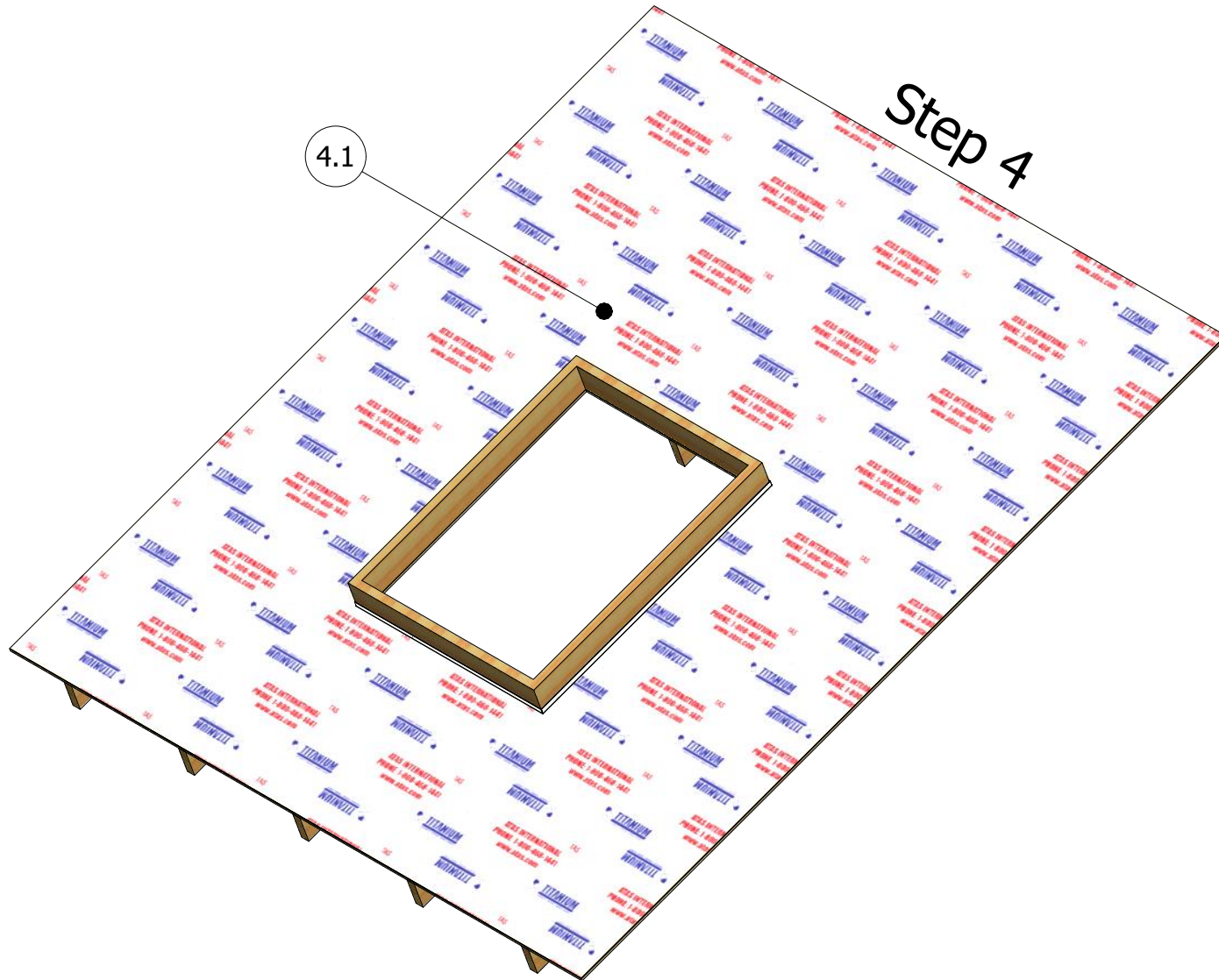
This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 3.1** Install ATA Shield at the top of Penetration, overlapping on top of the side ATA Shield.

**Step 3.2** Fold sides of the ATA Shield up onto the Penetration.



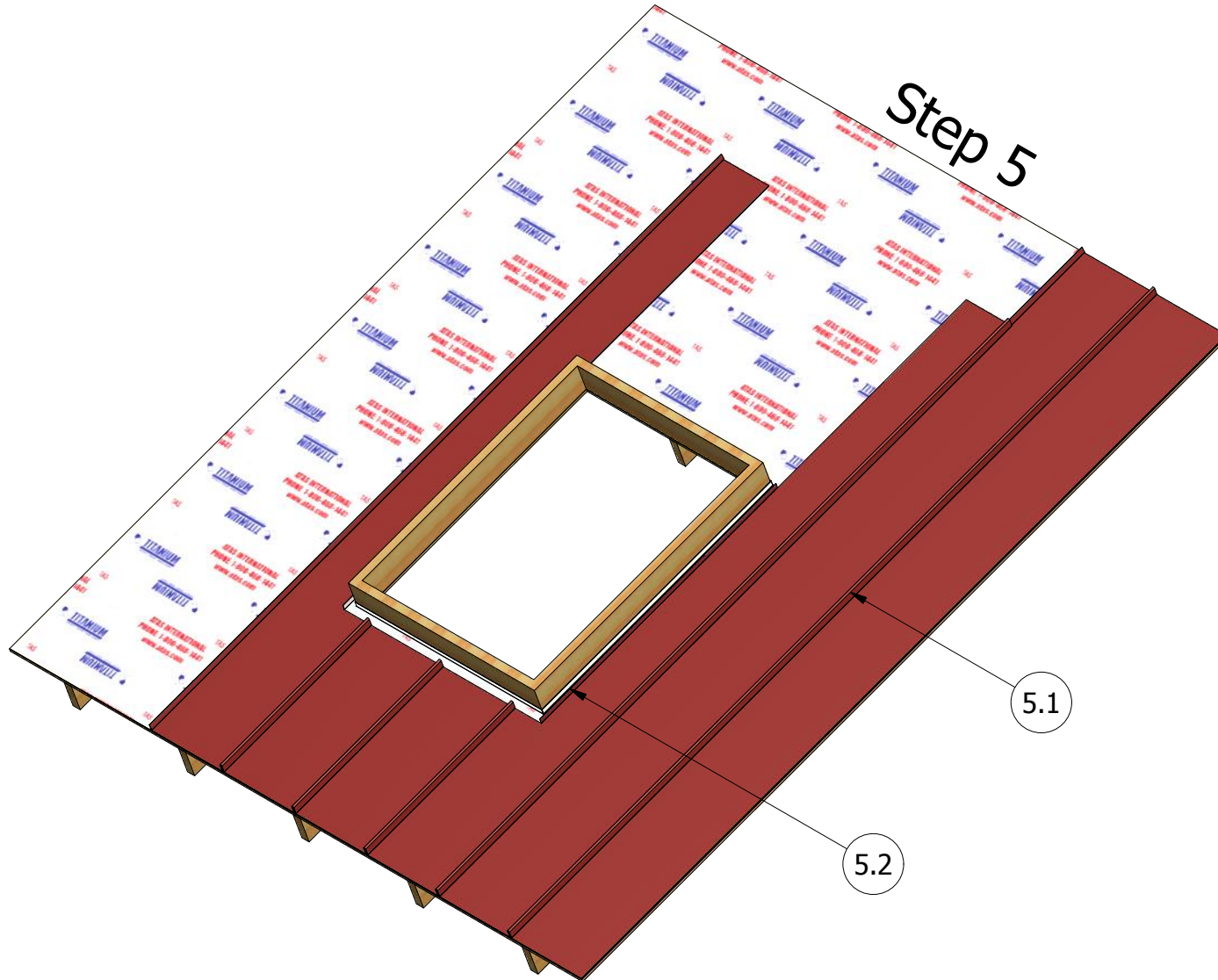
This square penetration method can be used for all vertical seam roof systems with minor modifications.



This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 5.1** Install Roof Panels up to and around the Penetration.

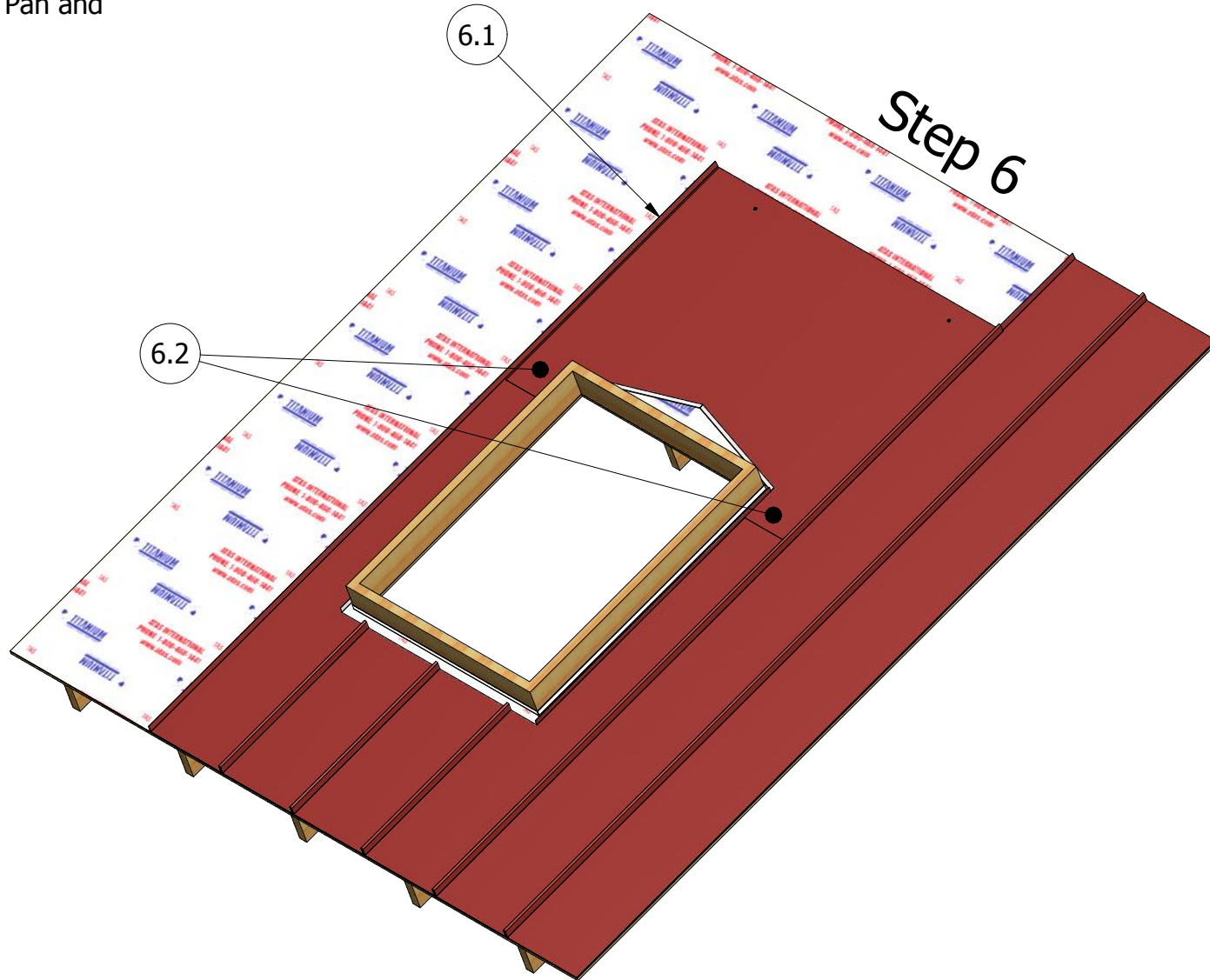
**Step 5.2** Field Trim and Bend Roof Panel around Penetration to provide a Water Leg.



This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 6.1** Field Fabricate Flashing Pan as shown.

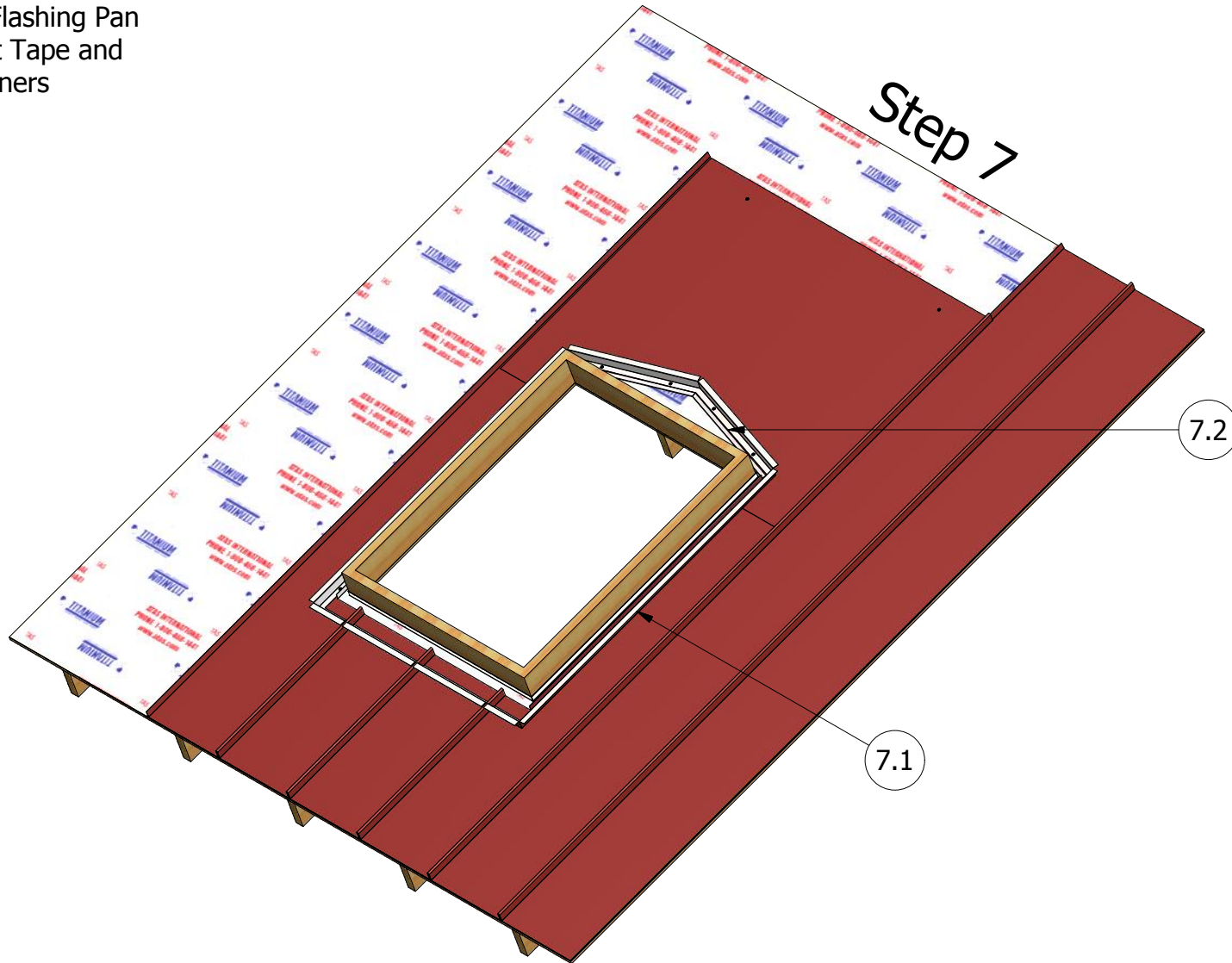
**Step 6.2** When installing Flashing Pan, apply two beads of Sealant between Pan and Roof Panels.



This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 7.1** Field Notch and Bend  
Z Closures to fit around  
Penetration.

**Step 7.2** Install Z Closures on  
Roof Panels and Flashing Pan  
with Butyl Sealant Tape and  
Appropriate Fasteners

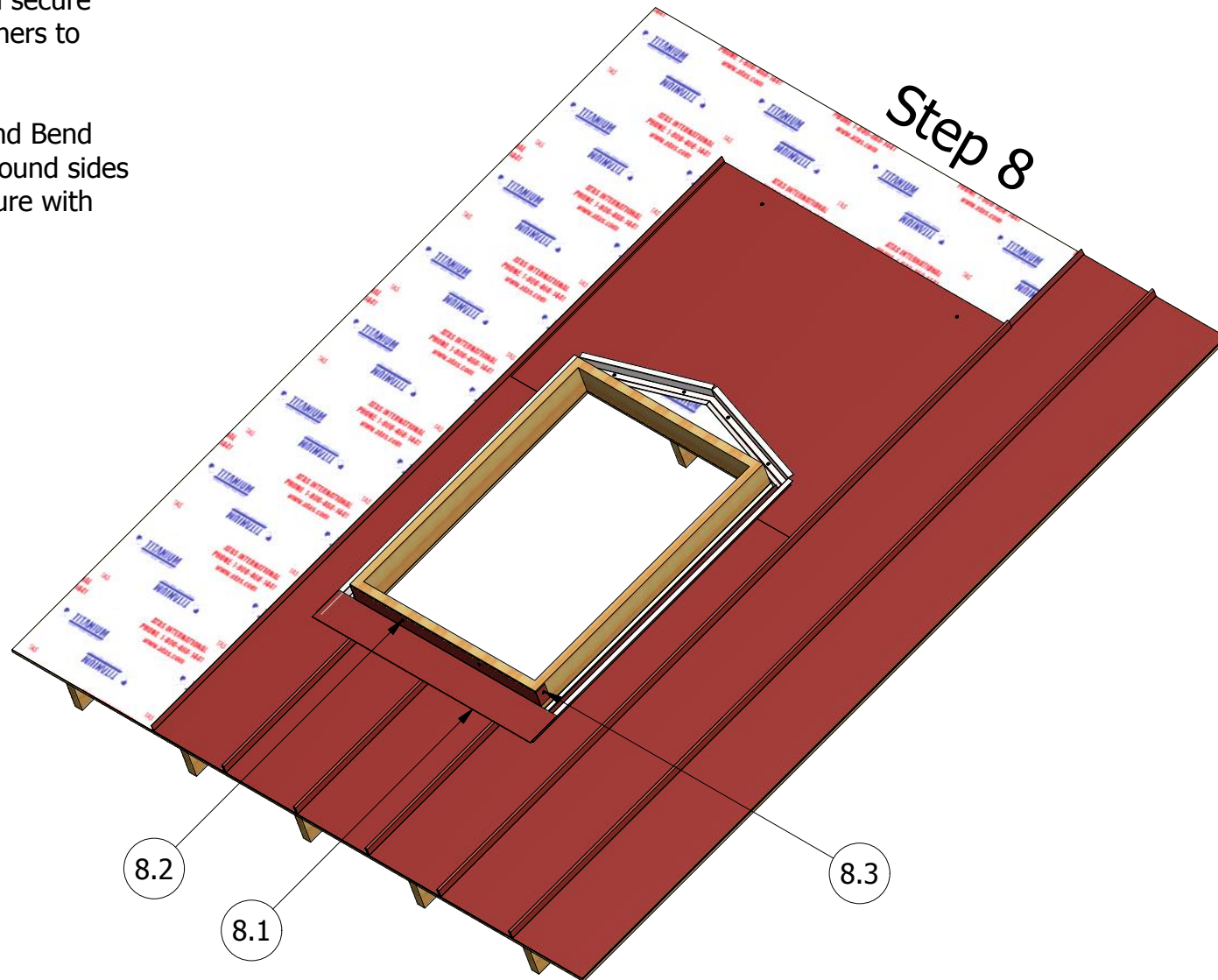


This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 8.1** Field Fabricate Lower Sidewall Trim.

**Step 8.2** Install Lower Sidewall Trim on Z Closures and secure with Appropriate Fasteners to Penetration.

**Step 8.3** Field Trim and Bend Lower Sidewall Trim around sides of Penetration and secure with Appropriate Fasteners.



This square penetration method can be used for all vertical seam roof systems with minor modifications.

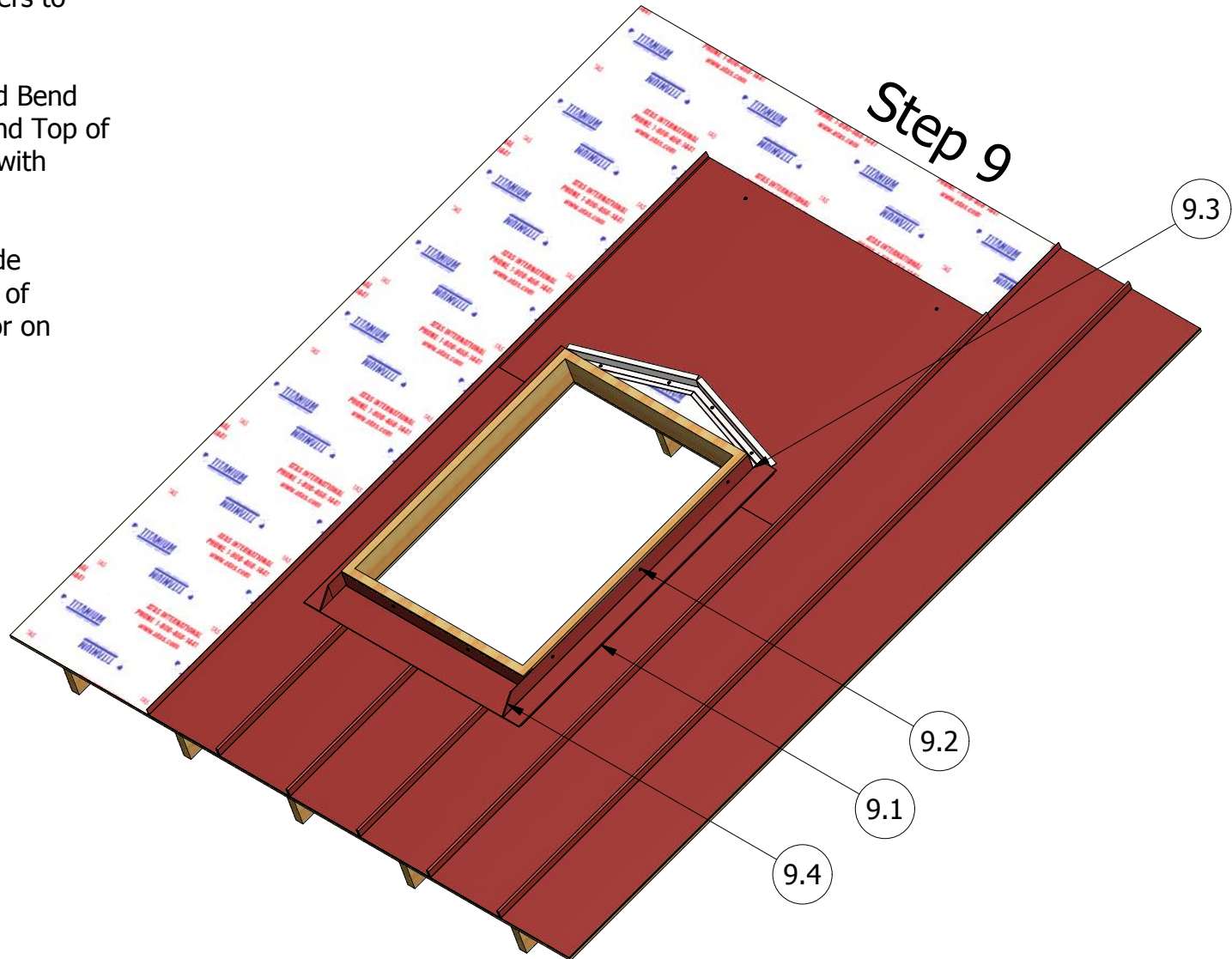


**Step 9.1** Field Fabricate Side Sidewall Trim.

**Step 9.2** Install Side Sidewall Trim on Z Closures and secure with Appropriate Fasteners to Penetration.

**Step 9.3** Field Trim and Bend Side Sidewall Trim around Top of Penetration and secure with Appropriate Fasteners.

**Step 9.4** Field Bend Side Sidewall Trim at bottom of Penetration to have color on both sides of trim.

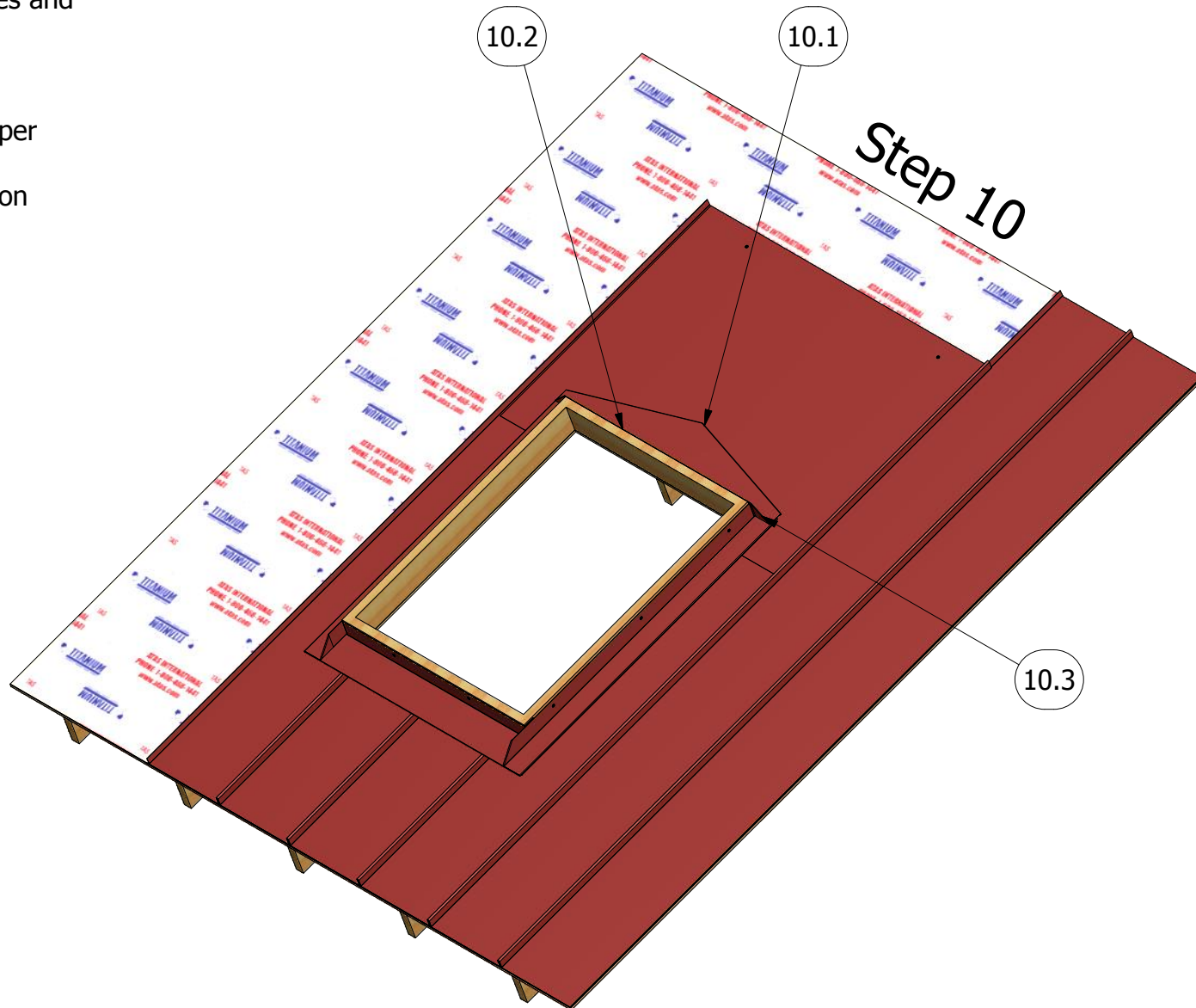


This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 10.1** Field Fabricate Upper Flashing Trim.

**Step 10.2** Install Upper Flashing Trim on Z Closures and secure with Appropriate Fasteners to Penetration.

**Step 10.3** Field Bend Upper Flashing Trim at Sides of Penetration to have color on both sides of trim.

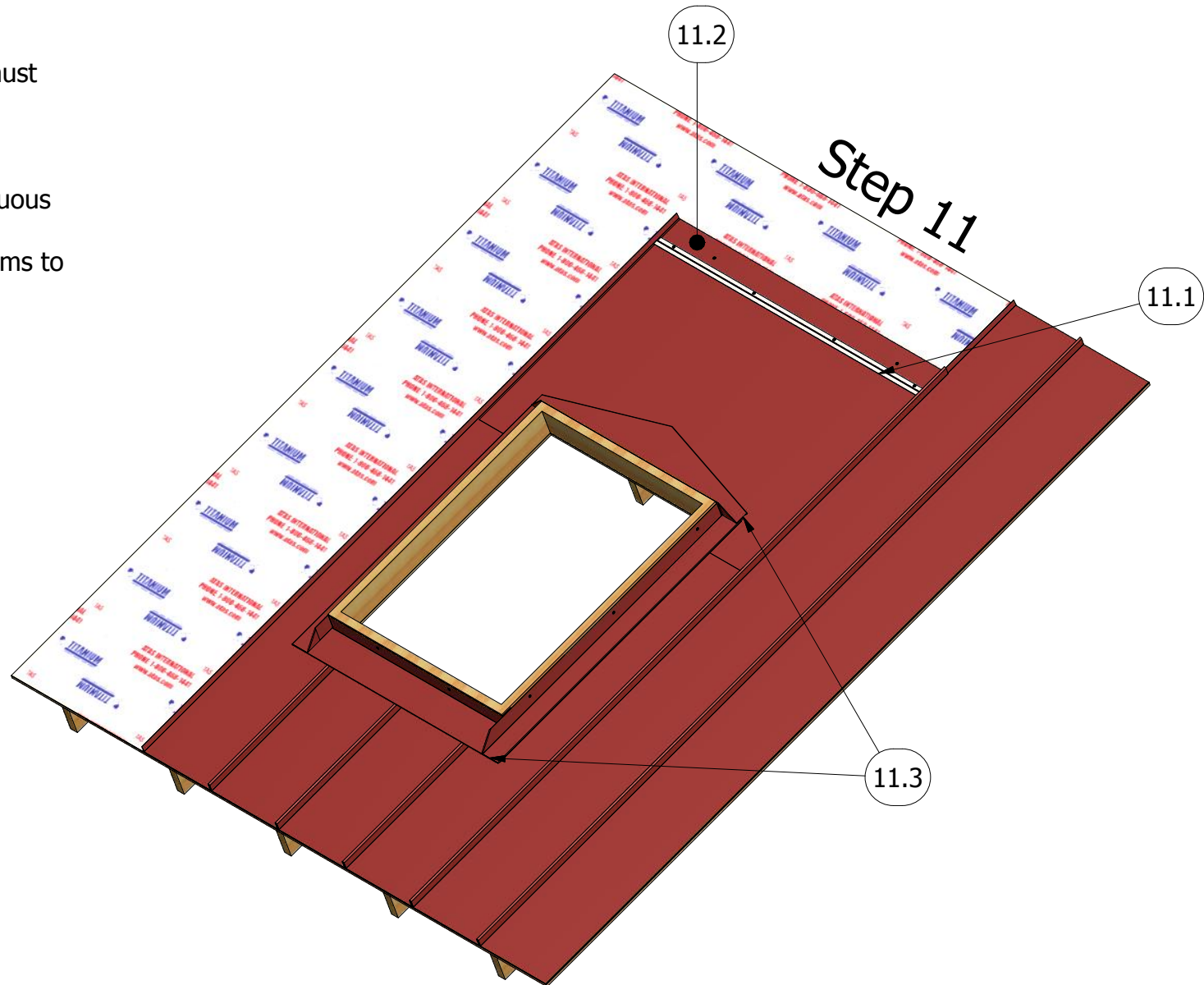


This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 11.1** Install Joggle Cleat set in Butyl Sealant Tape and secured with Appropriate Fasteners.

**Step 11.2** Joggle Cleat must have 4" minimum lap with Flashing Pan.

**Step 11.3** Apply a continuous bead of Sealant to all intersection of Flashing Trims to completely seal the unit.

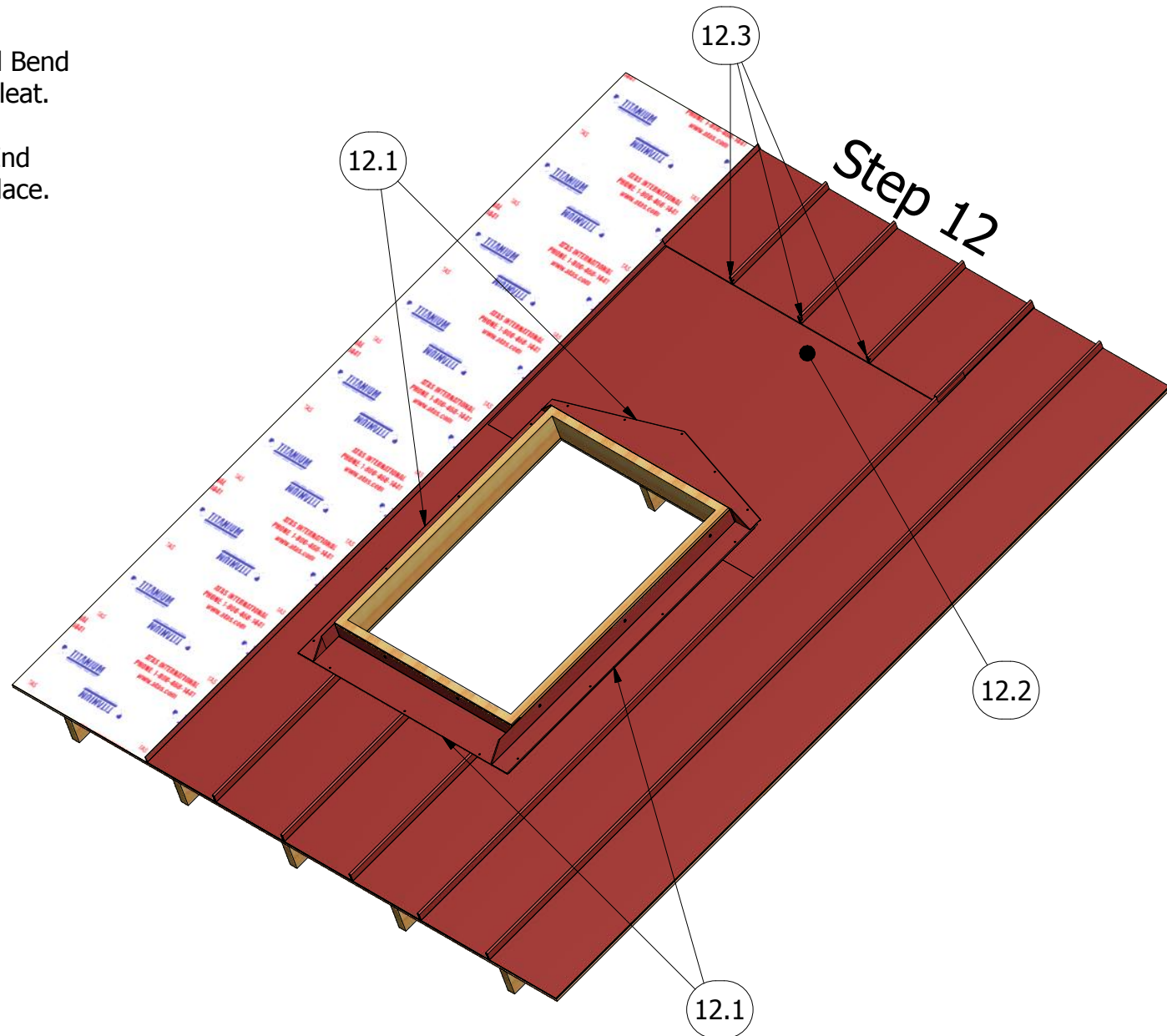


This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 12.1** Install Painted Pop Rivets securing Lower Sidewall, Side Sidewall and Upper Flashing Trims to the Z Closures. 8" O.C. Max.

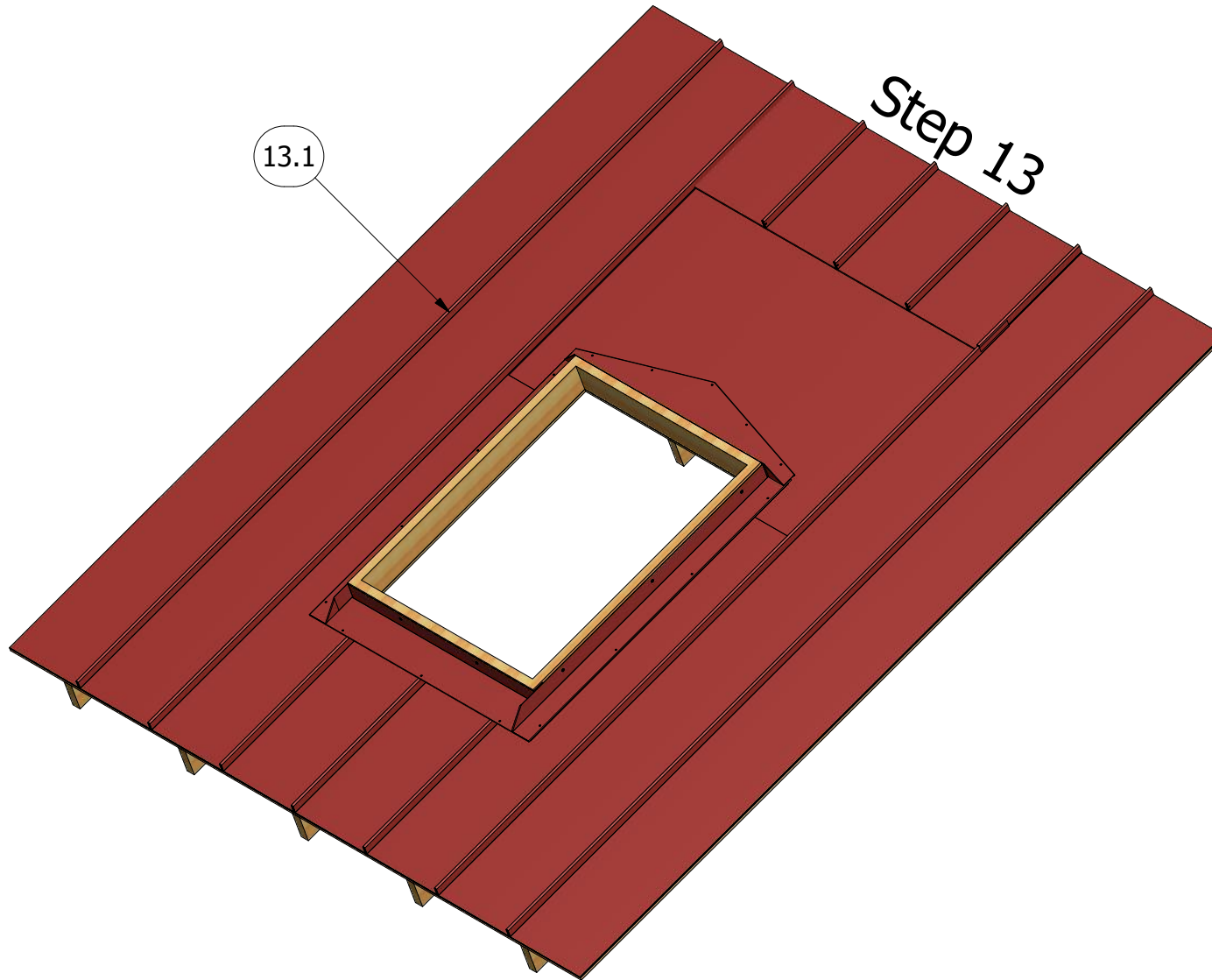
**Step 12.2** Field Trim and Bend Roof Panels onto Joggle Cleat.

**Step 12.3** Install Panel End Caps and Pop Rivet into Place.



This square penetration method can be used for all vertical seam roof systems with minor modifications.

**Step 13.1** Continue installing  
Roof Panels as Usual.



This square penetration method can be used for all vertical seam roof systems with minor modifications.