NORMAN SHUTTERS
INSTALLATION INSTRUCTIONS

4 Sided Z Frame
(Inside Mount - 2 panel)

Getting Started

Recommended Tools: Nail Gun or Drill, Tape Measure, Torpedo Level, Box Knife, 6” Philips head driver

Make sure ITEM# (In Red) matches on both panel box and frame box. Each window will have 1 box for shutter panels and 1 box for frames.

- Do not dispose of packaging until the shutters are operating appropriately.
- Use of a moving blanket or drop cloth is recommended.
- Find ample working space to assemble your frame (preferably in front of the window).
- Check the diagram to make sure you have all the parts indicated for an appropriate installation.

Installation Steps

1. Carefully remove panels and frames from the packaging. Do not mix panels or frames from other windows. All frame pieces are labeled (top, bottom, right, left).

2. Set all frames on floor face up.
3. Position the left frame and the top frame onto a flat surface (small wood block is recommended to prevent damage to floor and to ensure a flush fit by the Hoffman Key) and line up the Hoffman key.

![Hoffman Key](image)

Set Hoffman Key round side up and push top frame down onto the Hoffman Key

*Tip: The Hoffman Key has a rounded and a flat side to it. The rounded side goes in face up.*

Repeat step 3 for remaining corners to complete the 4 sided assembly.

**If not installing with T-POST, skip to Step 5.**

4. The top and bottom of the t-post are labeled. Locate and identify.

![Top and Bottom Labels](image)

Line up the pre-drilled holes with the top and bottom frame and secure with screws provided.

![Pre-Drill Holes](image)

*All Z-Frame T-Post installations are exactly alike.*

5. If SCREWS will be used, **PRE-DRILL** in the top left and right frame, bottom left and right frame, and in the middle of the top and bottom frame before bringing the frame onto the window.

![Pre-Drill Holes](image)

*Tip: Use a counter sink bit for best results.*
6. Position the assembled frame **evenly** into the window opening by using a tape measure and shims.

   ![Measure Right & Top frame for spacing.](image1)
   ![Measure Left & Top frame for spacing.](image2)
   ![Frame EVENLY in the window.](image3)

7. Once you have evenly spaced the frame into the window opening, secure with a nail/screw (pre-drill) into the upper left frame **ONLY**. Shutter will be fully secured in later steps.

   ![Using Screws](image4)
   ![Using Nail Gun](image5)

8. Once the left side is secured, level the frame on the window and secure with a nail/screw (pre-drill) into upper right frame. Shutter will be fully secured in later steps.

   ![Using Screws](image6)
   ![Using Nail Gun](image7)

9. With the top right and left frame secured, place the left shutter panel in the frame and slide into position. Insert the hinge pins into hinges.

   ![Position panel in the frame.](image8)
   ![Slide panel into frame hinges.](image9)
10. Place the right shutter panel(s) in the frame, slide into position, insert hinge pins into hinges.

11. Once panels have been positioned and secured with the hinge pins, make sure shutter panels are even across the top and bottom. If panels are not even, shift (rack) your frame left to right until your reveal is even.

12. Once the panels are lined up, nail/screw at the bottom of the left frame below the hinge.

**DOUBLE CHECK AND MAKE SURE PANELS ARE STILL EVEN ACROSS THE TOP**
13. After securing the bottom left, secure with a nail or screw at the bottom right.

![Using Screws](image1)

![Using Nail Gun](image2)

**Tip:** Step away from the window and open louvers to make sure shutter is evenly positioned to window.

**Things to look for:** Window mullions, sectioned glass with shutter lines of stile or louvers.

14. Check gaps between panels and adjust accordingly with hinge spacers provided if needed.

15. Once reveal (gap between the panel and the frame) is aligned, secure the top and bottom frame.

![Using Screws](image3)

![Using Nail Gun](image4)

**Tip:** Move top & bottom frame up and down to achieve proper tolerance between panel and frame.

**Tip:** Move side frames in and out to achieve proper tolerance between panel and frame.

16. After the top and bottom frame are secured, check that the shutter operates properly. Secure the shutter by installing additional nails/screws (pre-drill) to all sides of the frame of the shutter.

**Tip:** It is recommended to apply 2 nails or screws for every hinge, and 1 nail or screw between hinges.