

(All Fleetwood Products)

**Description:** This procedure defines the methods in which all Fleetwood products are packaged. Apply a QC green dot label on windows, doors, components packaging bag if passed QC inspection, before cardboard box or plastic wrapping.

#### Packing Types (As Specified on Order):

- 1. Boxing: None (Default for product delivered by Fleetwood)
- 2. Boxing: Cardboard (Foam) (Default for shipped product)
- 3. Boxing: Cardboard with Plywood Liner (Customer specified option)
- 4. Boxing: Customer Specified Per Line Item
- 5. Boxing: Container
- 6. Boxing: Wood Framed Cardboard (Customer Specified Option)
- 7. Boxing: L-Framed Wood Pallet
- 8. Special Packaging Considerations
- 9. Labeling Rules for All Packaging
- 10. Packaging:
  - a. KD Frames
  - b. Glazed Panel or Frames
  - c. Awning Windows
  - d. Projected Window Screens
- 11. Shipping L-framed wood crate

Appendix A: Constructing L-Framed Wood Pallets

#### **Packing Procedures:**

1. **Boxing: None** (Default for product delivered by Fleetwood)

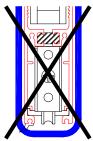
When the order specifies "Boxing: None", all assembled product is to be padded with white foam, stretch wrapped and labeled as defined below. All unassembled product (KD frames and panels) are to be cardboard boxed as defined in Section 2.

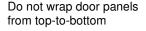
Materials required: White foam, stretch wrap and label with order and item number

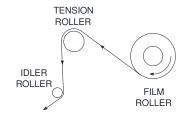
#### Procedure:

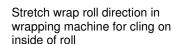
#### **Special Notes**

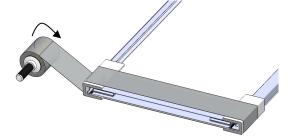
- Sliding door panels: Place foam around the width of the panel to prevent compression of the bottom weather seal. (See figure below)
- Stretch Wrap: All stretch wrap must be applied with the cling side towards the product. (See figures below)









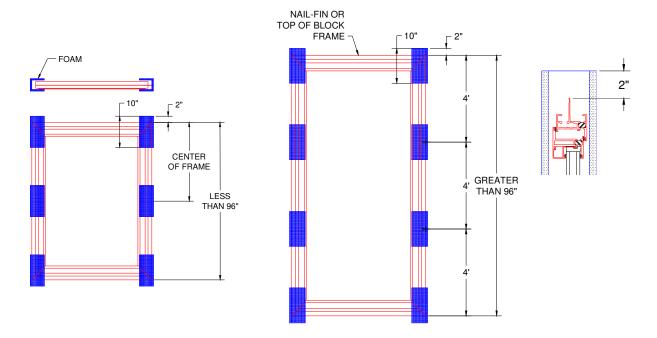


Hand wrapping panel to maintain tautness with stretch wrap coming off the top of the roll towards the panel when cling is on both sides



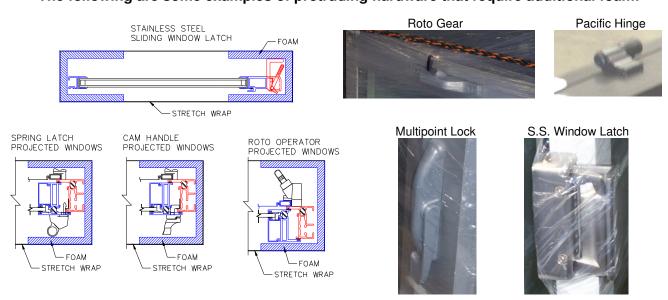
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a. Apply four (4) 10" long pieces of white foam edging at the corners on the long side of the product. For product less than 96" long apply two (2) 10" pieces of foam at the center locations as shown in the figure below. For product greater than 96" apply foam at a minimum of every 4' (48"). Allow an approximate 2" overhang of the white foam at the ends, which includes the nail-fin (see figure below). Apply stretch wrap around the white foam to hold it in place.



**b.** Apply foam and stretch wrap to all protruding hardware. Hardware will potentially be damaged or cause damage to other products during shipping.

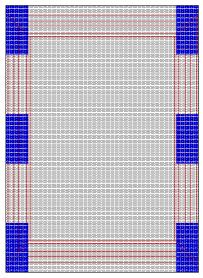
#### The following are some examples of protruding hardware that require additional foam:





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**c.** Apply stretch wrap around short side of the product and wrap entire length.



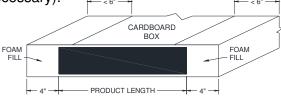
- **d.** Attach installation instructions and screw packs.
- e. Add labeling as defined in Section 9.
- 2. Boxing: Cardboard (Foam) (Default for product shipped using freight company)

When the order specifies "Boxing: Cardboard (Foam)" all product is to be packaged as defined below.

Materials required: Cardboard, plastic liner, foam, label with order and item number

#### Procedure:

- **a.** Build cardboard box 8" longer than product length and to fit for width and depth. Overlap of cardboard flaps at ends where stapled must not exceed 6" in width from the edge.
- **b.** Insert first plastic liner into cardboard box (liner used to protect cardboard from adhering to the foam to aid in recycling and product removal).
- **c.** Insert a second plastic liner into cardboard box (liner must be large enough to wrap product).
- **d.** Insert Fleetwood product in center of box leaving a 4" gap at each end.
- **e.** Insert installation instructions and screw packs (if necessary).
- **f.** Wrap product with the second plastic liner.
- g. Foam fill box including 4" gaps at each end.
- **h.** Wrap product and foam with the first plastic liner.
- i. Close cardboard box and seal shut with staples.
- j. Add labeling as defined in Section 9.



#### 3. Boxing: Cardboard with Plywood Liner (Customer specified option)

When the order specifies "Boxing: Cardboard with Plywood Liner" all product is to be packaged as defined below with the following exceptions:

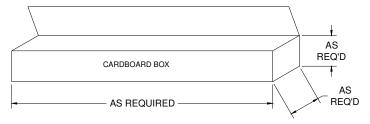
- Assembled Panels Use Cardboard Boxing Only
- Screens Use Cardboard Boxing Only

Materials required: Cardboard, 1/4" plywood, plastic liner, foam, label with order and item number

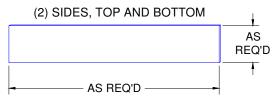
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#### Procedure:

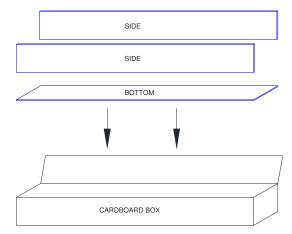
**a.** Assemble cardboard box, but leave top flap open.



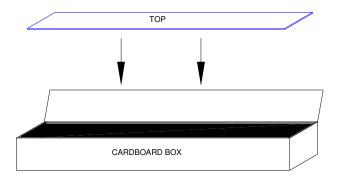
**b.** Cut four (4) pieces of 1/4" plywood, two (2) sides, top and bottom. Additional pieces of plywood at sides, top and bottom will be required for box lengths greater than 8' (96").



c. Insert bottom and two (2) sides of plywood into cardboard box.



- **d.** Place product inside box and fill with liquid foam.
- e. Insert top piece of plywood into cardboard box.



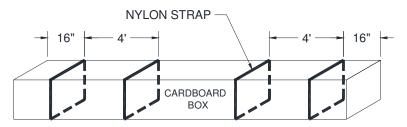


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**f.** Close box and staple where required.



g. Add nylon straps 16" from each end and then at 4' (48") centers.



**h.** Add labeling as defined in Section 9.

#### 4. Boxing: Customer Specified Per Line Item

When the order specifies "Boxing: Customer Specified Per Line Item" all line items to be packaged per the instructions specified on the order.

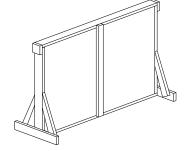
## 5. Boxing: Container

When the order specifies "Boxing: Container" all items to be packaged using "Boxing: None" (see Section 1) before being loaded into the container.

6. Boxing: Wood Framed Cardboard (Customer specified option)

When the order specifies "Wood Framed Cardboard" all product is to be packaged as defined below with the following exceptions:

- KD Frame Use Cardboard Boxing Only
- Screens Use Cardboard Boxing Only



Materials required: Cardboard, 2x4 wood, 2x6 wood, nails, plastic liner, foam, label with order and item number.

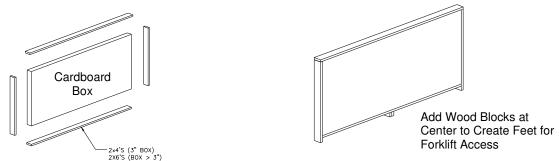
#### Procedure:

a. Assemble cardboard box, as specified in Section 3, "Boxing: Cardboard (Foam)".

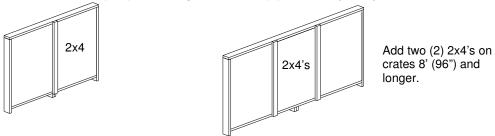


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**b.** Use 2x4's for a 3" deep cardboard box and 2x6's for a cardboard box deeper then 3", build a rectangular wood frame using nails around the cardboard box as shown below. Extend the vertical members and add a couple of wood blocks at the center to create feet for forklift access.

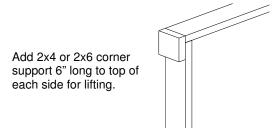


**c.** Attach a 2x4 on both sides (across the short side) of the wood crate at the center and secure with nails. On wood crates 8' (96") and longer use two (2) 2x4's equal spaced on both sides.

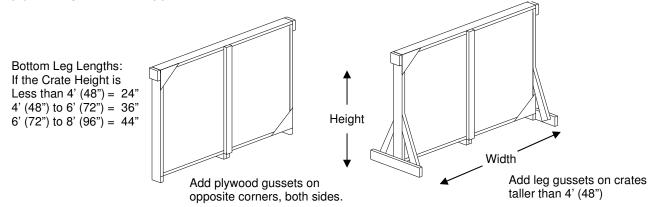


d. Attach a 6" long 2x4 or 2x6 at the sides of the top corners for lifting.

CAUTION!! – Make sure adequate nails are used to accommodate the lifting cable.



**e.** Add legs to bottom of crate to allow free standing. Make the leg lengths as shown in the table below. On crates taller than 4' (48"), add 2x4 gussets to the legs for support as shown. Also add plywood gussets on opposite corners of crate, both sides.



**f. Note:** After crating box, make sure packing label is fully visible.



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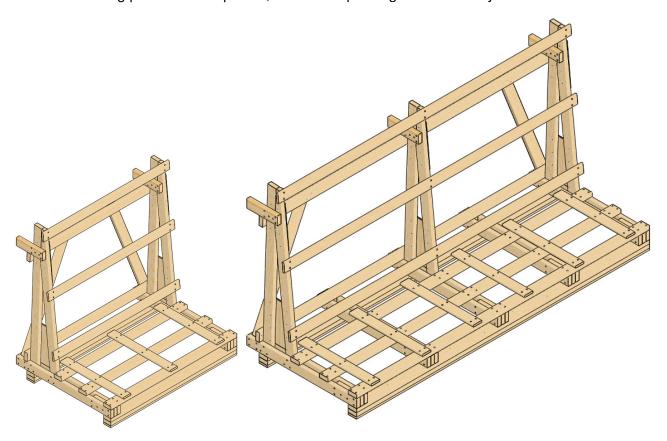
#### 7. Boxing: L-Framed Wood Pallet

When "L-Framed Wood Pallet" is specified for shipping product, this is used regardless of other boxing types (none, or cardboard). Do not load more than 1000 pounds of product on each L-Framed Wood Pallet.

For complete building procedure for L-Framed Wood Pallets, see **Appendix A: Constructing L-Framed Wood Pallets.** 

#### Notes:

- **a.** Build two (2) struts for all L-Frame Wood Pallets less than or equal to 5' (60") and three (3) struts for pallets longer than 5' (60"). Build two (2) strut bases for 10' (120") L-Frame Wood Pallets.
- **b.** After securing product to the pallets, make sure packing labels are fully visible.



5' and 10' L-Framed Wood Crates

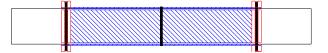


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#### 8. Special Packaging Considerations

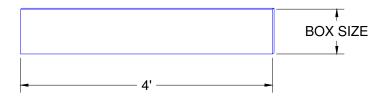
The following packaging rules apply as defined:

All "KD" products in cardboard packaging weighing over 100 pounds will contain "Fork Lift Blocking".



#### Procedure:

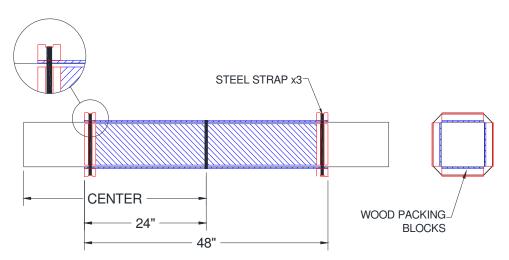
a. Cut (4) pieces of 1/4" plywood 4' (48") long x box size.



**b.** Cut eight (8) pieces of 2-1/4" X 1-1/2" grooved wood block to match box size.



**c.** Place plywood around center of package and secure with a combination of wood blocks and metal strapping as shown. Note: Locate plywood and wood blocks at center of package.





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## 9. Labeling Rules for all Packaging

NOTE: Two (2) labels on ALL.

- a. Minimum label information for local deliveries:
  - i. Invoice number
  - ii. Item number
  - iii. Shipping Order which includes customer name, shipping address and shipping instructions



- **b.** Minimum label information for deliveries using common carrier:
  - i. Customer name
  - ii. Shipping address
  - iii. Invoice number
  - iv. Item number
  - v. Box number
  - vi. Packing list (each order) which includes customer name, shipping address, shipping instructions and itemized box list defining the contents of each box

#### 10. Packaging:

- a. KD Frames
  - i. KD Boxes 12' (144") or less in length, stack on one (1) pallet and strap as shown below.
  - ii. KD Boxes 12' (144") or greater in length, stack on two (2) pallets and strap as shown below.
  - iii. 8" KD Frame boxes must be stacked below 6" KD Frame boxes.



KD Product 12' (144") or less on one (1) pallet



KD Product 12' (144") or greater on two (2) pallets

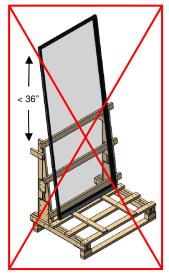


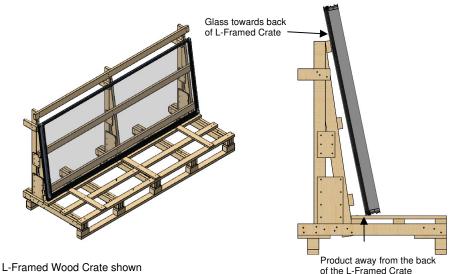
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#### **b.** Loading Glazed Panels or Frames

#### Notes:

- Product must not exceed 36" above the top of the rack.
- Position the base of the glazed products a few inches away from the back of the L-Framed Pallet as shown below to prevent the panel from tipping forward off the pallet.
- Use the correct size L-Framed Pallet.
  - L-Framed Steel Pallets
    - 1. The longest side must be laid horizontally if greater than 120" for shipping.
    - 2. Ensure the panel is centered with the glass towards the back of the L-Framed Steel Pallet, as shown below
  - ii. L-Framed Wood Pallets
    - 1. All panels must have the longest side laid horizontally for shipping.
    - 2. Ensure the panel is centered with the glass towards the back of the L-Framed Wood Pallet, as shown below.

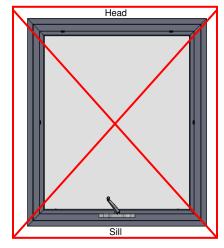


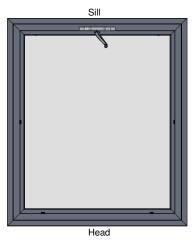


E i famed Wood Orale Sin

**c.** Awning Windows (Series 250-T)

Pack and ship awning windows upside down.







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d. Projected Window Screens

To prevent screen damage and improve overall efficiency, window screens will be shipped loose. Screens will be combined into as few boxes as possible, and noted on the packing list.

#### 11. Shipping L-framed wood crate:

If product is to be shipped on the L-framed wood crates the following must occur:

1. Product must be secured to wood crate using the metal tie down straps.

Exception: If product is going to Hawaii please use rope instead of metal bands

- **a.** If banded horizontally, one band is to be placed approx. 12" below the top of the crate and 12" below the shortest product on wood crate.
- **b.** If banded vertically, place one band on each side approx. 24" from edges of crate.
- 2. After the product has been secured with the metal tie down straps cover the top with clear plastic and cover in stretch wrap, leaving space at the bottom and back for the forklift to maneuver the crate.

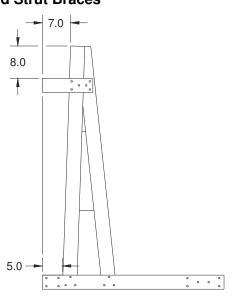


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# **Appendix A: Constructing L-Framed Wood Pallets**

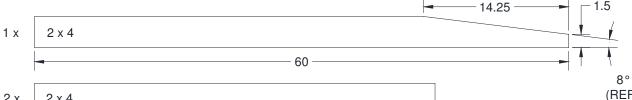
Follow the instructions below for creating 5-foot and 10-foot L-Framed Wood Pallets.

## A-I. Struts and Strut Braces

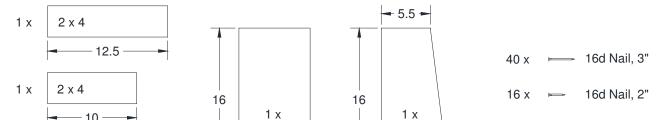








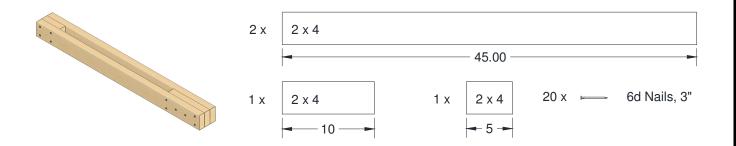




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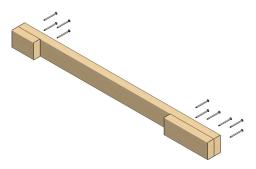


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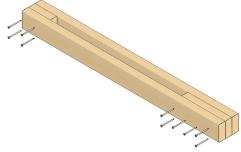


#### **Procedure for Strut and Strut Base:**

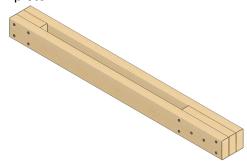
1. Attach the 5" 2x4 to one end (back) of a 45" 2x4 with four (4) 16d 3" nails. Attach the 10" 2x4 to the opposite end (front) of the 45" 2x4. To complete the strut base continue to Step 2, otherwise skip to Step 3.



2. To complete the strut base, place the second 45" 2x4 over the 5" and 10" 2x4's and secure with ten (10) 16d 3" nails.



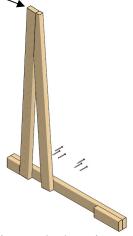
The strut base is complete.



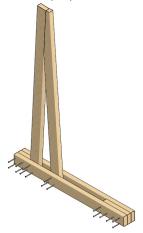


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3. Place the end of the 60" 2x4 without the angle cut flush with the bottom of the 45" 2x4 and against the 5" 2x4. Slide the top end of the 60" 2x4 towards the front so that it is 7" from the back of the strut. Place the angle cut 60" 2x4 flush with the top of the other 60" 2x4. Secure with six (6) 16d 3" nails.



4. Attach the other 45" 2x4 with sixteen (16) 16d 3" nails.



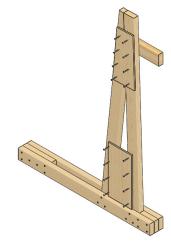
5. Place the 12.5" 2x4 so that one end is even with the back of the bottom of the strut and the top is offset 8" from the top of the strut. Make sure the 12.5" 2x4 does not extend behind the back of the strut or past the front of the angle cut 2x4. Attach with five (5) 16d 3" nails.



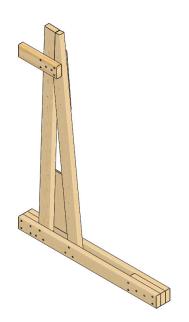


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6. Spin the strut around and place the two pieces of 3/8" plywood centered between the 60" 2x4s. Attach the rectangular piece so that one end is touching the bottom 2x4 with eight (8) 16d 2" nails. Attach the trapezoidal piece towards the top such that it covers where the two 60" 2x4s meet.



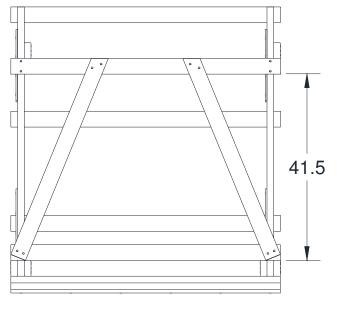
7. The strut is complete.



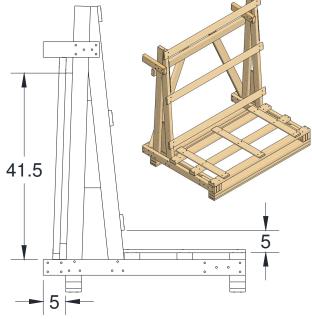


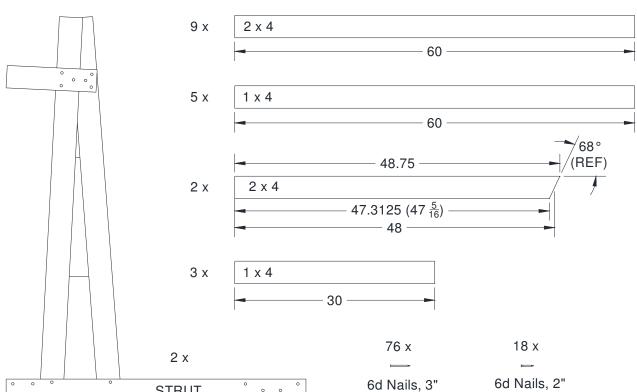
(All Fleetwood Products)

# A-II. 5-Foot L-Framed Wood Pallet



**STRUT** 



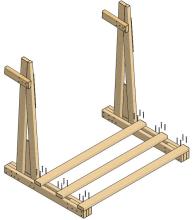




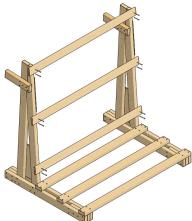
(All Fleetwood Products)

#### **Procedure for 5-Foot L-Framed Wood Pallet**

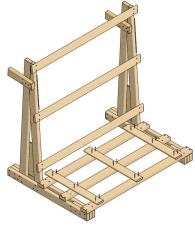
1. Place the two (2) struts 60" apart on center. Across the bottom of the struts, place one (1) 60" 2x4 flush with the front, one (1) 60" 2x4 up against the strut, and one (1) 60" 2x4 centered between them. Attach to each strut using four (4) 16d 3" nails at each end.



2. Attach one (1) 60" 1x4 flush against the top of the struts using two (2) 16d 3" nails at each end. Attach one (1) 60" 1x4 offset 5" from the bottom 2x4s using two (2) 16d 3" nails at each end. Attach one (1) 60" 1x4 centered between them using two (2) 16d 3" nails at each end.



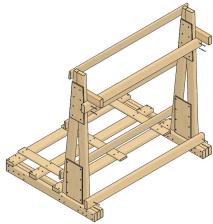
3. Evenly space the three (3) 30" 1x4s across the bottom 2x4s. Ensure they are placed flush with the front. Attach them each using two (2) 16d 2" nails at each intersection with the 2x4s.



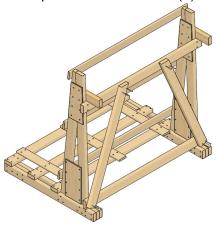


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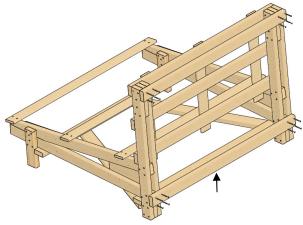
4. Turn the L-Framed Wood Pallet around and place one (1) 60" 2x4 across the back and offset 41.5" from the base of the struts and one (1) 60" 2x4 on top of the base of the struts. Attach using two (2) 16d 3" nails at each end.



5. Cut a 96" (8') 2x4 in half at approximately 68º. Place the square ends on the bases of the struts and angle the tops towards the center of the L-Framed Wood Pallet until the angle cut is flush with the top 2x4 from Step 4. Secure with two (2) 16d 3" nails at each end.



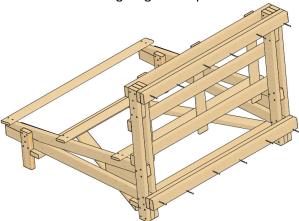
6. Lay the L-Framed Wood Pallet on its back to access the bottom of the strut bases. Attach one (1) 60" 2x4 flush with the front of the L-Framed Wood Pallet using four (4) 16d 3" nails at either end. Attach one (1) 60" 2x4 offset 5" from the back of the L-Framed Wood Pallet using four (4) 16d 3" nails at either end.



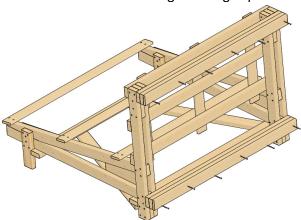


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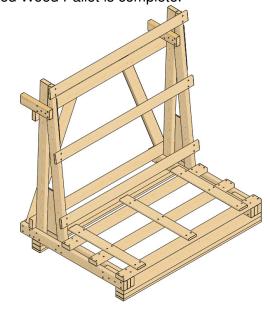
7. Attach two (2) 60" 2x4s, one (1) over each of the 2x4s from Step 6 using six (6) equally spaced 16d 3" nails in an alternating "high-low" pattern.



8. Finally, attach two (2) 60" 1x4s, one (1) over each of the 2x4s from Step 7 using six (6) equally spaced 16d 3" nails in an alternating "low-high" pattern.

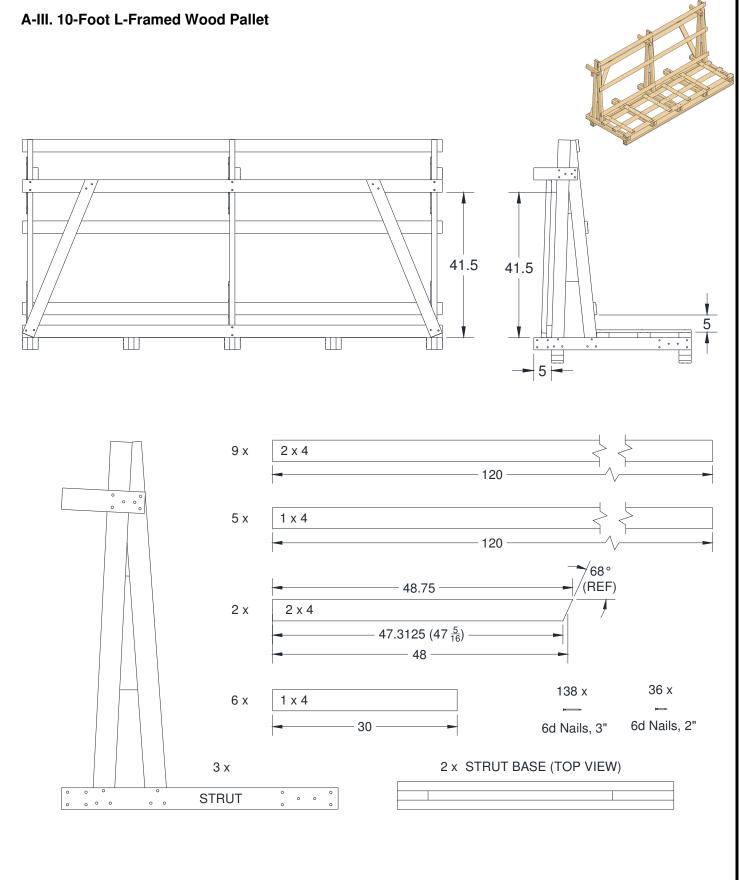


9. The 5-Foot L-Framed Wood Pallet is complete.





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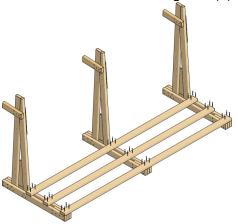




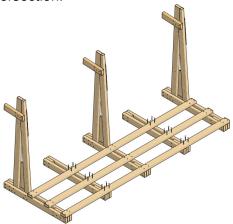
(All Fleetwood Products)

#### **Procedure for 10-Foot L-Framed Wood Pallet**

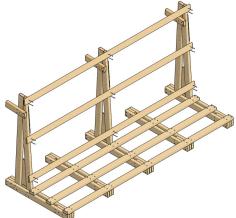
1. Place the three (3) struts 120" apart on center. Across the bottom of the struts, place one (1) 120" 2x4 flush with the front, one (1) 120" 2x4 up against the strut, and one (1) 120" 2x4 centered between them. Attach to each strut using four (4) 16d 3" nails at each intersection.



2. Place the two (2) strut bases centered between each strut. Attach to each 2x4 using four (4) 16d 3" nails at each intersection.



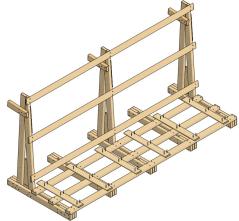
3. Attach one (1) 120" 1x4 flush against the top of the struts using two (2) 16d 3" nails at each end. Attach one (1) 120" 1x4 offset 5" from the bottom 2x4s using two (2) 16d 3" nails at each end. Attach one (1) 120" 1x4 centered between them using two (2) 16d 3" nails at each end.



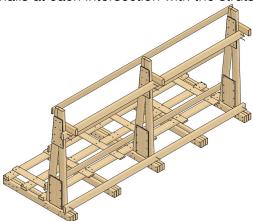


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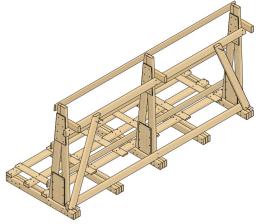
4. Evenly space the six (6) 30" 1x4s across the bottom 2x4s. Ensure they are placed flush with the front. Attach them each using two (2) 16d 2" nails at each intersection with the 2x4s.



5. Turn the L-Framed Wood Pallet around and place one (1) 120" 2x4 across the back and offset 41.5" from the base of the struts and one (1) 120" 2x4 on top of the base of the struts. Attach using two (2) 16d 3" nails at each intersection with the struts.



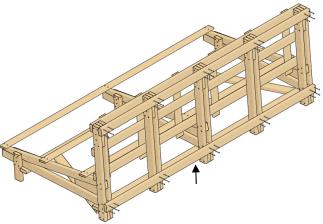
6. Cut a 96" (8') 2x4 in half at approximately 68º. Place the square ends on the base of the struts and angle the tops towards the center of the L-Framed Wood Pallet until the angle cut is flush with the top 2x4 from Step 5. Secure with two (2) 16d 3" nails at each end.



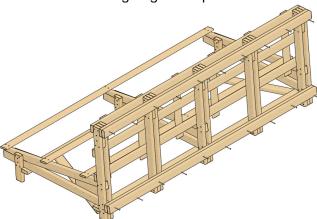


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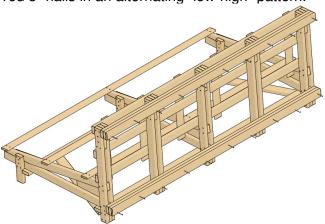
7. Lay the L-Framed Wood Pallet on its back to access the bottom of the strut bases. Attach one (1) 120" 2x4 flush with the front of the L-Framed Wood Pallet using four (4) 16d 3" nails at each intersection with the struts and strut bases. Attach one (1) 120" 2x4 offset 5" from the back of the L-Framed Wood Pallet using four (4) 16d 3" nails at each intersection with the struts and strut bases.



8. Attach two (2) 120" 2x4s, one (1) over each of the 2x4s from Step 7 using ten (10) equally spaced 16d 3" nails in an alternating "high-low" pattern.



9. Finally, attach two (2) 120" 1x4s, one (1) over each of the 2x4s from Step 8 using ten (10) equally spaced 16d 3" nails in an alternating "low-high" pattern.





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10. The 10-Foot L-Framed Wood Pallet is complete.

