

# Build Your Own Feeders

*Double-sided or Single-sided using Premier's panels*



800-282-6631  
[premier1supplies.com](http://premier1supplies.com)

# Premier's Double-Sided Feeder

*For large sheep and rams*

## Material List

### 1. From Premier

- a. Four 24" x 48" feeder inserts  
Item #9660001
- b. 6 barbed staples per panel  
Item #360200 (bag of 6)

### 2. From local sources

- c. Twelve 2 x 4 x 8' (horizontals)
- d. Six 2 x 4 x 48" (vertical legs); treated
- e. Two 2 x 4 x 35" floor supports
- f. One 2 x 4 x 32" center floor support (not pictured)
- g. 2/3 sheet 1/2" treated plywood floor cut into two 32" x 48" pieces
- h. One third sheet of 1/2" CDX plywood cut into two 8" x 96" pieces
- i. Approximately 80 16d nails and 50 1-1/2" roofing nails, or 80 2-1/2" decking screws and 50 1-1/2" sheeting screws (not pictured)

*Caution: Not for use with small lambs/kids.*

**A.** See material list above.

**B.** Cut wood to correct lengths and widths.

**C.** Assemble a vertical feeder side. We use a separate 4' x 8' sheet of plywood to provide a flat, clean working surface with pre-squared edges. To save time we pre-mark the plywood where the three pieces of vertical legs should lay.

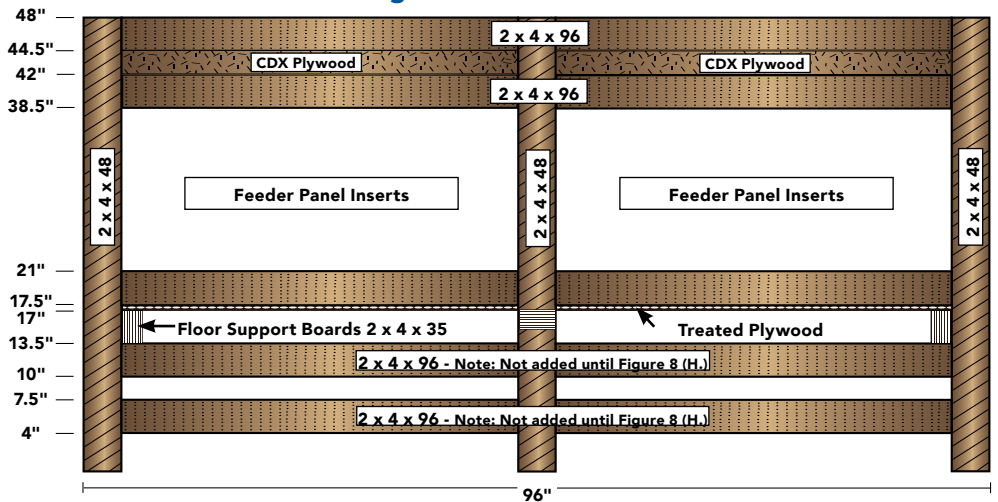
1. Take each 48" long treated 2 x 4 and lay it flat in front of you. Use a ruler, a pencil and a square to mark the following points on it where the lower edges of the horizontal 2 x 4s will cross it: 4", 10", 17.5", 38.5" and 44.5".

**Figures 1, 2 & 3** illustrate this positioning. To save time, we lay all six legs beside each other in a row and mark them all at once.

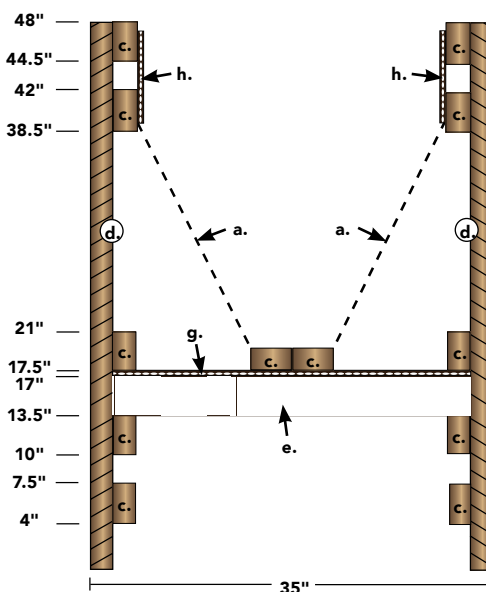
*Dimensions given assume use of purchased lumber (i.e. a 2 x 4 is actually 1-1/2"). If rough sawn lumber is used, the instructions and numbers will need to be adjusted accordingly. **Please note:** These plans have been modified for use with our 24" x 48" Inserts.*



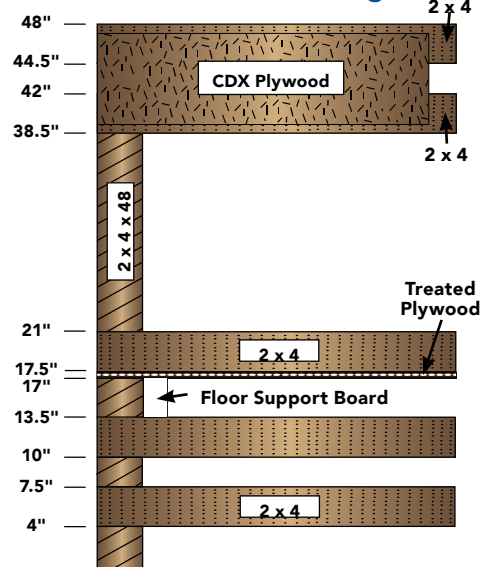
**Figure 1 - Final Side View**



**Figure 2 - Final End View**  
(Coded to Material List - at left)



**Figure 3 - Position Marks**  
of Material on Legs





I. Carefully turn the feeder right side up to fit the feeder inserts in place.

J. For fitting the feeder panel inserts, we've learned it's easier if they are pre-stapled to the center 8' 2 x 4 supports **before** they are put into the trough.

1. Lay one of the two remaining 8' 2 x 4s flat on the ground (**Figure 9**). Place the long edge of the 4' feeder panel on top of the 2 x 4 approximately 1" from the 2 x 4's edge. Staple it down with two barbed staples.

We've found that the barbed staples will split some 2 x 4s, especially those made of fir. You may want to predrill a small hole for both legs of the staples for these situations. We wish we could use something other than barbed staples but have tried many other types of fasteners and all fail within a year.

Do the same with a second 4' feeder panel, thus making the feeder panel attached the entire 8' length.

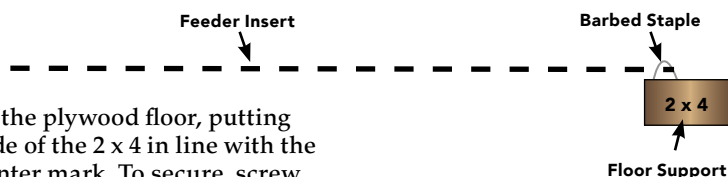
2. Repeat the procedure for the other 8' 2 x 4.
3. Mark the center of the trough with a pencil. (The center is 16" in from the vertical corner legs.)
4. Pick up a 2 x 4 with its two attached panels and place it in the trough on

top of the plywood floor, putting the side of the 2 x 4 in line with the 16" center mark. To secure, screw or nail the 2 x 4 down through the plywood into your three support 2 x 4s located at the ends and in the middle. Flip the wire panels out so they hit the 2 x 4 on the side. Repeat the same with the other 2 x 4. You should now have both 2 x 4s lying side by side in the center of the trough with the upper edge of the wire panels resting against the side 2 x 4s.

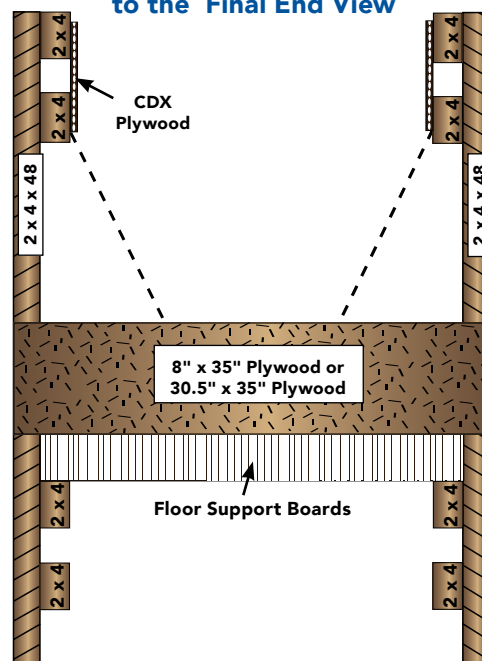
5. Secure the wire panels to the 2 x 4s with 4 barbed staples per 8' side.

K. The feeder is now complete except for the ends (**Figure 10**). At Premier, we secure an 8" wide piece of ply over the end of the trough even with the horizontal treated plywood, to keep grain and feed from spilling out the end. If the feeder ends in the middle of a pen, then an entire 30-1/2" x 35" piece of 1/2" plywood can be nailed over the end to keep animals from jumping into the feeder. These pieces can be obtained from the remaining sections of your original plywood sheet.

**Figure 9 - Stapling the Panel**



**Figure 10 - Applying the Ends to the Final End View**



## Feeding Design Setups

### Double-Sided Feeder Design (Figure 11)

They do double duty by subdividing pens. Hay and/or grain is carried to them by machine, hand-cart or other method and actually placed into the feeder by hand.

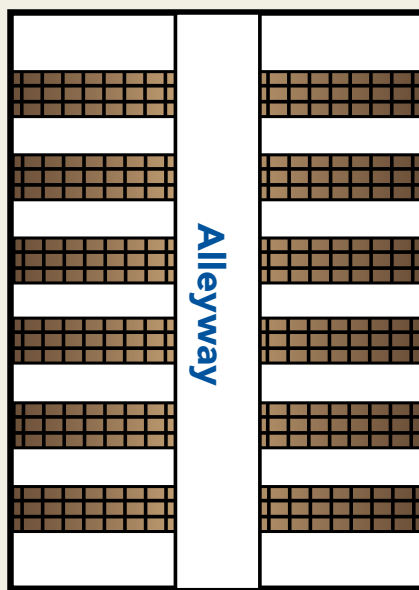
The Double-Sided Feeder was first designed and built for our own flock needs and tested on our 350 ewes. Results from our usage look very good.

### Single-Sided Feeder Design (Figure 12)

They are set in a long continuous row, so they also serve as the side of a pen. Hay, grain and/or silage is then supplied directly from the alley either from a machine, or by hand from a feed cart.

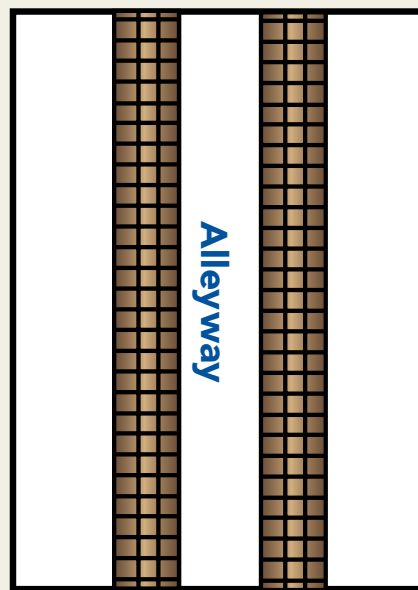
The Single-Sided design allows us to feed sheep with greater speed and accuracy, and to do so with machines if the flock size so requires. Single-Sided Feeders cost 29% more per adult fed to build (\$14.50/head vs. \$11.25/head), but in return, they allow for significant savings in feeding time, human energy and feeding accuracy.

**Figure 11 - Double-Sided Feeder (Top View of Barn)**



Note: Drawing not to scale.

**Figure 12 - Single-Sided Feeder (Top View of Barn)**



Note: Drawing not to scale.

### Premier Tip

If the feeder is being used outdoors, drill holes in the plywood floor. This will help if drainage is needed.

# Premier's Single-Sided Feeder

*For large sheep and rams*

## Material List

### 1. From Premier

- Two 24" x 48" Feeder Inserts  
Item #9660001
- 6 barbed staples per panel.  
Item #360200 (bag of 6)

### 2. From local sources

- Eight 2 x 4 x 96" (horizontal)
- Three 2 x 4 x 48" (vertical legs); treated
- Three 2 x 4 x 27" (short legs); treated
- Three 2 x 4 x 25" floor supports
- 1/3 sheet of 1/2" treated plywood floor (16" x 96")
- 1/3 sheet of CDX 1/2" plywood (16" x 96")
- One 8" x 96" piece of CDX plywood
- Sixty 16d nails and 40 1-1/2" roofing nails, or 60 2-1/2" decking screws and 40 1-1/2" sheeting screws.
- Two sheets 13" x 25" CDX plywood



Dimensions given assume use of purchased lumber (i.e. a 2 x 4 is actually 1 1/2"). If rough sawn lumber is used, the instructions and numbers will need to be adjusted accordingly. **Please note:** These plans have been modified for use with our 24" x 48" Inserts. Figure 13, indicates the intended placement of the following materials.

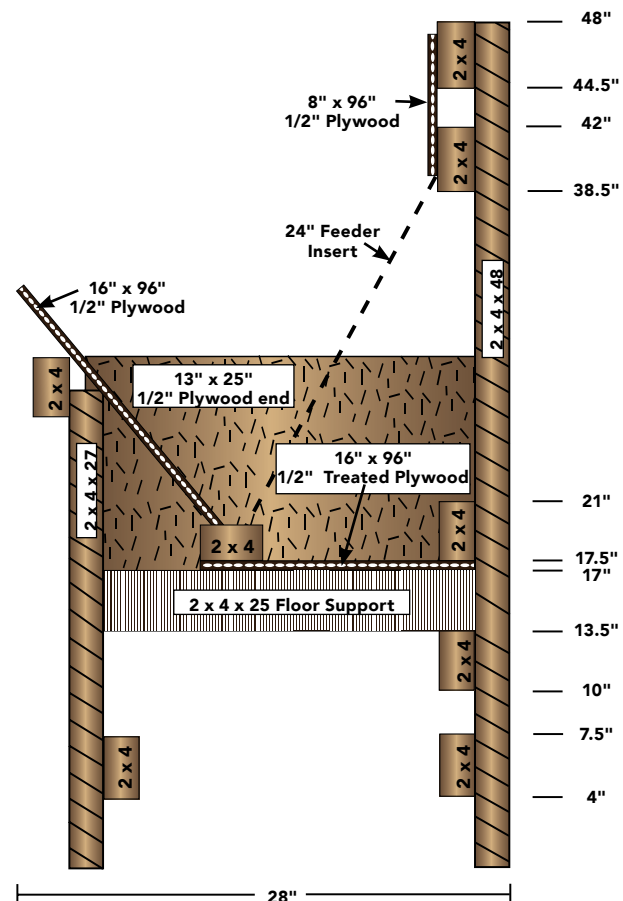
*Caution: Not for use with small lambs/kids.*

**Figure 13** is an end view of Premier's Single Sided Feeder. We developed it so it could serve as the front of a long drive-thru feeding passage, allowing us to fill the troughs by machine. (At Premier we're still using handcarts with either hay or grain on them to move the feed to the feeder. Doing so enables us to limit the alley to 5' wide, putting our buildings to better use.)

It's simply half the Double-Sided Feeder with the following modifications:

- An extra 16" wide sheet of 1/2" CDX plywood is set at approximately 60° to the feeder's floor. Supported on the outside edge with an extra 8' 2 x 4 attached to both 2 x 4s with sheeting screws or nails every ft.
- Width of a Single-Sided Feeder will be 25" with the plywood feeding edge extending another 3". Double-Sided width is 28".
- Height of the tallest legs are 48" but height of the shortest legs are 27".
- The treated plywood floor for Single-Sided Feeders is cut differently than for Double-Sided Feeders. Instead of two 32" x 48" pieces we cut one 16" x 96" piece of plywood.
- The floor support 2 x 4s (25" long) are all cut and attached on the edge.
- As a last step to add structural strength to the feeder and to prevent feed from falling out the ends of the trough, we nail a piece of 1/2" plywood (13" x 25") to each end.

**Figure 13 - Single-Sided Feeder**



# Premier's Double-Sided Feeder

For goats and other sheep

## Material List

### 1. From Premier

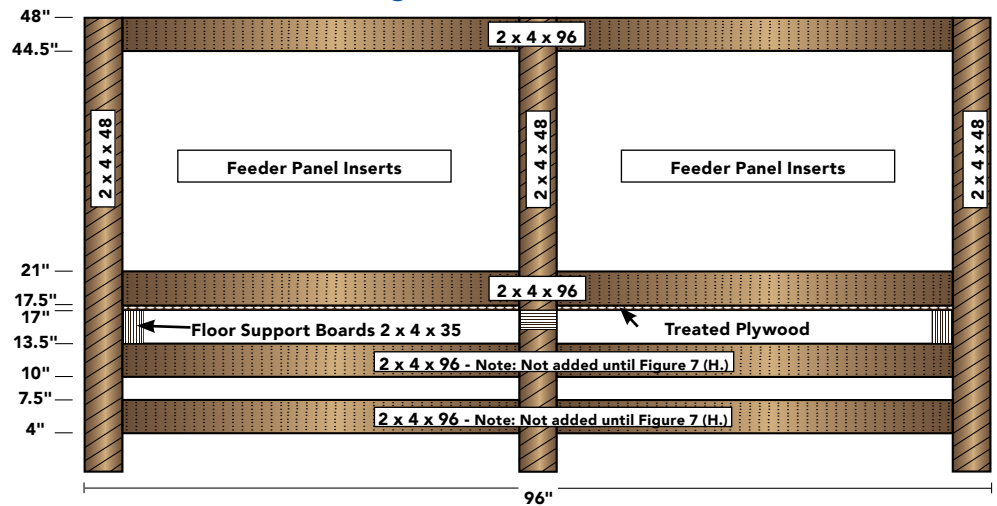
- a. Four 30" x 48" Feeder Inserts Item #9661001
- b. 6 barbed staples per panel. Item #360200 (bag of 6)

### 2. From local sources

- c. Ten 2 x 4 x 8' (horizontals)
- d. Six 2 x 4 x 48" (vertical legs); treated
- e. Two 2 x 4 x 35" floor supports
- f. One 2 x 4 x 32" center floor support (not pictured)
- g. 2/3 sheet 1/2" treated plywood floor cut into two 32" x 48" pieces
- h. Approximately 80 16d nails and 20 1-1/2" roofing nails, or 80 2-1/2" decking screws and 20 1-1/2" sheeting screws (not pictured).



Figure 1 - Final Side View



A. See material list above.

B. Cut wood to correct lengths and widths.

C. Assemble a vertical feeder side. We use a separate 4' x 8' sheet of plywood to provide a flat, clean working surface with pre-squared edges. To save time we pre-mark the plywood where the three pieces of vertical legs should lay.

1. Take each 48" long treated 2 x 4 and lay it flat in front of you. Use a ruler, a pencil and a square to mark the following points on it where the lower edges of the horizontal 2 x 4s will cross it: 4"; 10"; 17-1/2" and 44-1/2".

Figures 1, 2 & 3 illustrate this positioning. To save time, we lay all six legs beside each other in a row and mark them all at once.

Figure 2 - Final End View (Coded to Material List)

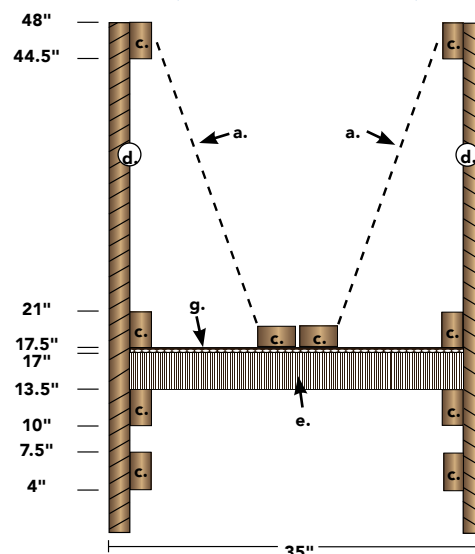
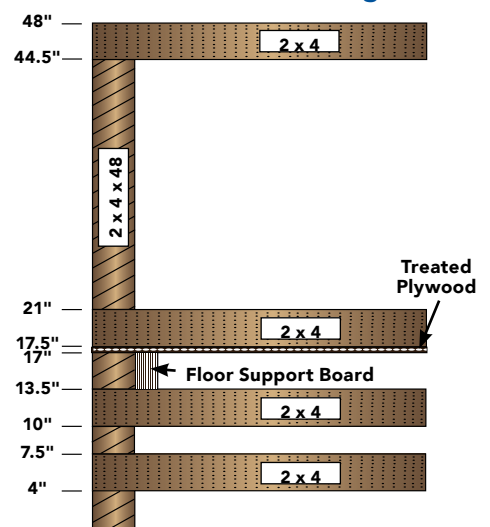


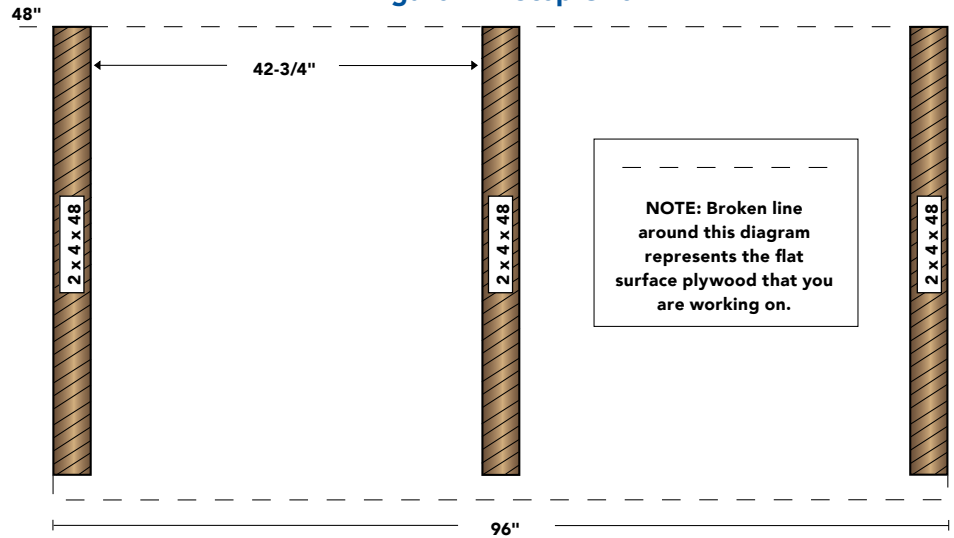
Figure 3 - Position Marks of Material on Legs



Dimensions given assume use of purchased lumber (i.e. a 2 x 4 is actually 1-1/2"). If rough sawn lumber is used, the instructions and numbers will need to be adjusted accordingly. **Please note:** These plans have been modified for use with our 30" x 48" Feeder Inserts.

2. **(Figure 4)** Place 3 marked 48" treated vertical 2 x 4s flat on the full sheet of plywood, one at each end and one exactly in the middle (with the marks facing up). From each end of the plywood the sides of the center 2 x 4 should be 46-1/4" and 49-3/4" respectively. Quick grip clamps work to hold them to plywood as you nail or screw your horizontal 2 x 4s on.
3. **(Figure 5)** Place an 8' 2 x 4 at the 44-1/2" mark on the legs and secure with two 16d nails or two 2-1/2" deck screws at each joint. Repeat with 2 x 4 at the 17-1/2" mark.

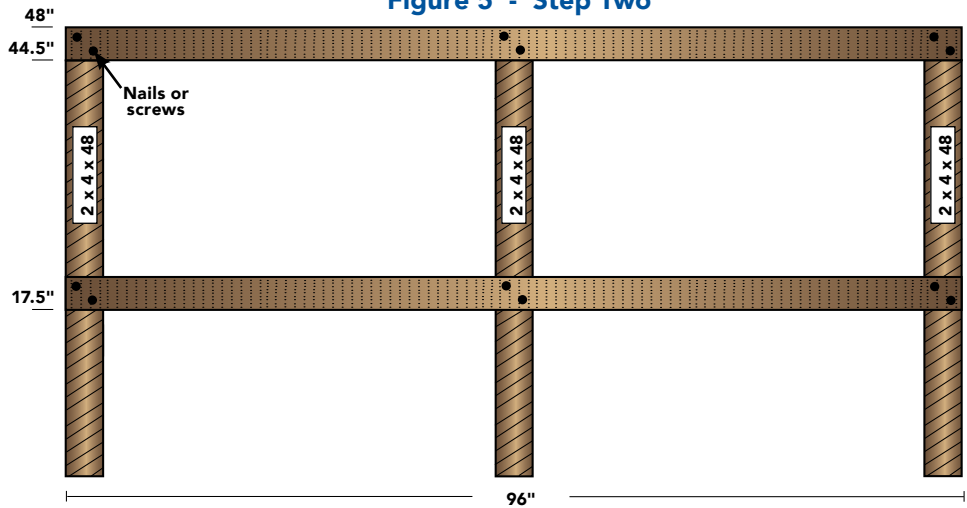
**Figure 4 - Step One**



**D.** Repeat steps 1 – 3 to make the other vertical feeder side.

**E.** Screw or nail the **(Figure 6)** plywood floor boards (32" x 48") in place on a vertical side. Below (but against) the 17-1/2" 2 x 4 board.

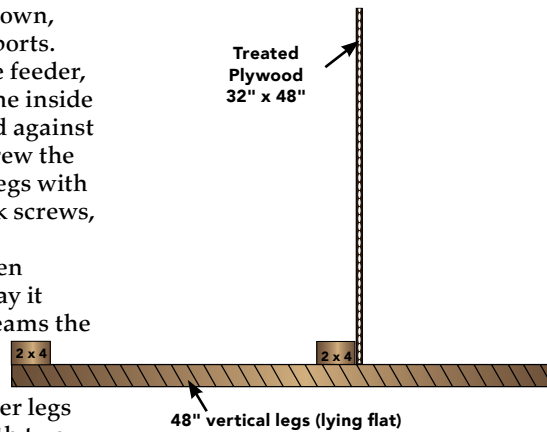
**Figure 5 - Step Two**



1. **(Figure 6)** We leave a vertical side lying flat on our plywood jig, and place the 48" side of the plywood on edge between the 17" and 17-1/2" marks of the vertical legs. This forms an L-shaped angle. We secure the plywood to the 8' 2 x 4 with either roofing nails or sheeting screws every 12".
2. Do the same with the other piece of treated plywood, resulting in a vertical side with floor attached for one entire 8' length.

**F.** Secure the plywood to the other vertical side. This is best done with two people as it requires setting both sides upside down as illustrated in **Figure 7**. Get the plywood in place and nail or screw the free 48" long edge of plywood to the 2 x 4.

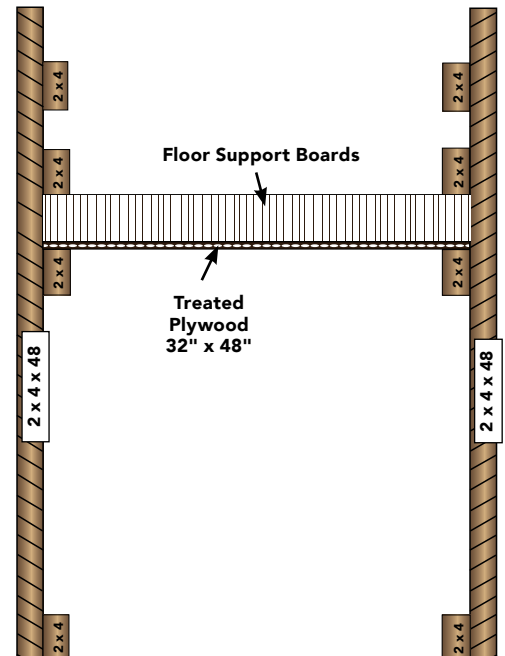
**Figure 6 - End View**



**G.** While the plywood is upside down, install the horizontal floor supports.

1. **(Figure 7)** At each end of the feeder, place a 35" 2 x 4 on edge on the inside of the vertical corner legs and against the plywood floor. Nail or screw the floor support to the vertical legs with either 16d nails or 2-1/2" deck screws, two per joint.
2. Place the 32" 2 x 4 flat between the two center legs. In this way it provides floor support and seams the two pieces of plywood floor together. Secure by nailing or screwing through the center legs and into the floor support with two nails or screws on each side.

**Figure 7 - Upside Down View**



**H.** While the feeder is still upside down, fit two 8' 2 x 4s on the legs between the 10" and 13-1/2" marks. Fit two 8' 2 x 4s between 4" and 7.5". (These boards are essential if you intend to feed females with offspring.)

I. Carefully turn the feeder right side up to fit the feeder inserts in place.

J. For fitting the feeder panel inserts, we've learned that it is easier if they are pre-stapled to the center 8' 2 x 4 supports **before** they are put into the trough.

1. Lay one of the two remaining 8' 2 x 4s flat on the ground (**Figure 8**). Place the long edge of the 4' feeder panel on top of the 2 x 4 approximately 1" from the 2 x 4's edge. Staple it down with two barbed staples.

We've found that the barbed staples will split some 2 x 4s, especially those made of fir. You may want to predrill a small hole for both legs of the staples for these situations. We wish we could use something other than barbed staples but have tried many other types of fasteners and all fail within a year.

Do the same with a second 4' feeder panel, thus making the feeder panel attached the entire 8' length.

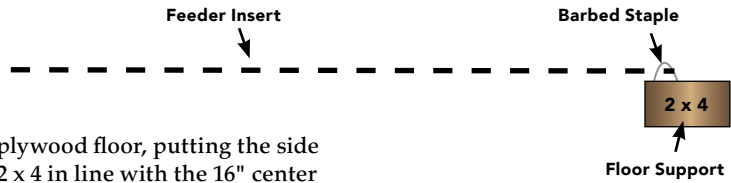
2. Repeat the procedure for the other 8' 2 x 4.
3. Mark the center of the trough with a pencil. (The center is 16" in from the vertical corner legs.)
4. Pick up a 2 x 4 with its two attached panels and place it in the trough on top

of the plywood floor, putting the side of the 2 x 4 in line with the 16" center mark. To secure, screw or nail the 2 x 4 down through the plywood into your three support 2 x 4s located at the ends and in the middle. Flip the wire panels out so they hit the 2 x 4 on the side. Repeat the same with the other 2 x 4. You should now have both 2 x 4s lying side by side in the center of the trough with the upper edge of the wire panels resting against the side 2 x 4s.

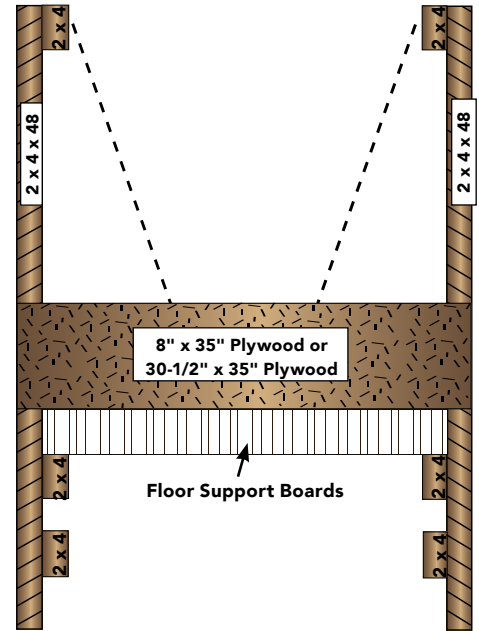
5. Secure the wire panels to the 2 x 4s with 4 barbed staples per 8' side.

K. The feeder is now complete except for the ends (**Figure 9**). At Premier we secure an 8" wide piece of plywood over the end of the trough even with the horizontal treated plywood, to keep grain and feed from spilling out the end. If the feeder ends in the middle of a pen, then an entire 30-1/2" x 35" piece of 1/2" plywood can be nailed over the end to keep animals from jumping into the feeder. These pieces of plywood can be obtained from the remaining sections of your original plywood sheet.

**Figure 8 - Stapling the Panel**



**Figure 9 - Applying the Ends to the Final End View**



## Feeding Design Setups

### Double-Sided Feeder Design (Figure 10)

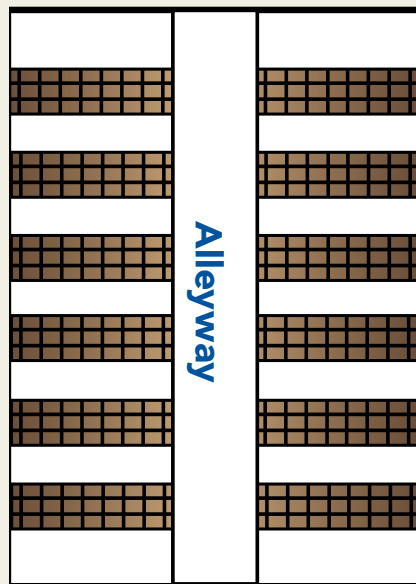
They do double duty by subdividing pens. Hay and/or grain is carried to them by machine, hand-cart or other method and actually placed into the feeder by hand. It was first designed and built for our own flock needs and tested on our 350 ewes. Results from our usage look very good.

### Single-Sided Feeder Design (Figure 11)

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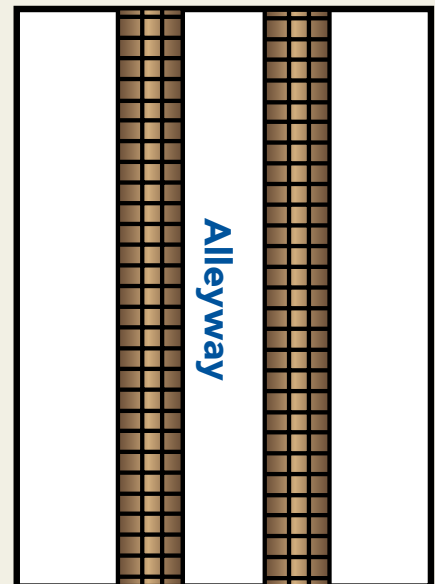
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**Figure 10 - Double-Sided Feeder (Top View of Barn)**



Note: Drawing not to scale.

**Figure 11 - Single-Sided Feeder (Top View of Barn)**



Note: Drawing not to scale.

### Premier Tip

If the feeder is being used outdoors, drill holes in the plywood floor. This will help if drainage is needed.



# Premier's Single-Sided Feeder

For goats and other sheep

## Material List

### 1. From Premier

- Two 30" x 48" Feeder Inserts. Item #9661001.
- 6 barbed staples per panel. Item #360200 (bag of 6).

### 2. From local sources

- Seven 2 x 4 x 96" (horizontals)
- Three 2 x 4 x 48" (vertical legs); treated
- Three 2 x 4 27" (short legs); treated
- Three 2 x 4 x 25" floor supports
- 1/3 sheet of 1/2" treated plywood floor (16" x 96")
- 1/3 sheet of CDX 1/2" plywood (16" x 96")
- Sixty 16d nails and 40 1-1/2" roofing nails, or 60 2-1/2" decking screws and 40 1-1/2" sheeting screws.
- Two sheets 13" x 25" CDX plywood



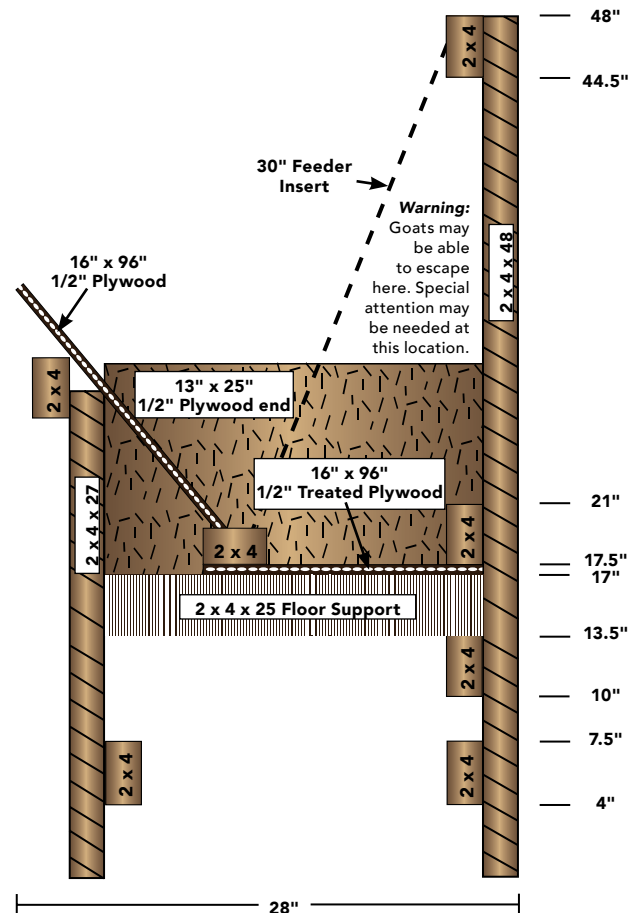
Dimensions given assume use of purchased lumber (i.e. a 2 x 4 is actually 1 1/2"). If rough sawn lumber is used, the instructions and numbers will need to be adjusted accordingly. Please note: These plans have been modified for use with our Large Sheep and Ram Inserts (30" x 48"). **Figure 13**, indicates the intended placement of the following materials.

Figure 12 - Single-Sided Feeder

**Figure 12** is an end view of Premier's Single Sided Feeder. We developed it so it could serve as the front of a long drive-thru feeding passage, allowing us to fill the troughs by machine. (At Premier we're still using handcarts with either hay or grain on them to move the feed to the feeder. Doing so enables us to limit the alley to 5' wide, putting our buildings to better use.)

It is simply half the Double-Sided Feeder with the following modifications:

- An extra 16" wide sheet of 1/2" CDX plywood is set at approximately 60° to the feeder's floor. Supported on the outside edge with an extra 8' 2 x 4 attached to both 2 x 4s with sheeting screws or nails every ft.
- Width of a Single-Sided Feeder will be 25" with the plywood feeding edge extending another 3". Double-Sided width is 35".
- Height of the tallest legs are 48" but height of the shortest legs are 27".
- The treated plywood floor for Single-Sided Feeders is cut differently than for Double-Sided Feeders. Instead of two 32" x 48" pieces we cut one 16" x 96" piece of plywood.
- The floor support 2 x 4s (25" long) are all cut and attached on the edge.
- As a last step to add structural strength to the feeder and to prevent feed from falling out the ends of the trough, we nail a piece of 1/2" plywood (13" x 25") to each end.



# Welded Wire Panels



## Specifications

- **Versatile and lightweight**
- **Hot-dip galvanized**
- **Heights:** 36", 40" or 48"
- **Lengths:** 48", 60", 72" or 96"
- **Openings:** 3"x 3" or 4"x 4"
- **Both 36" and 48" tall panels** have 3"x 3" openings; 3/16" dia. internal rods; and 3/8" dia. reinforcing rods at the ends, top and middle.
- **Standard 40"** are made with 4"x 4" openings with 1/4" dia. rods throughout. This is our original welded wire panel design and it is still widely used on our farms.
- **Stronger, larger, stainless-steel connector hinges.**

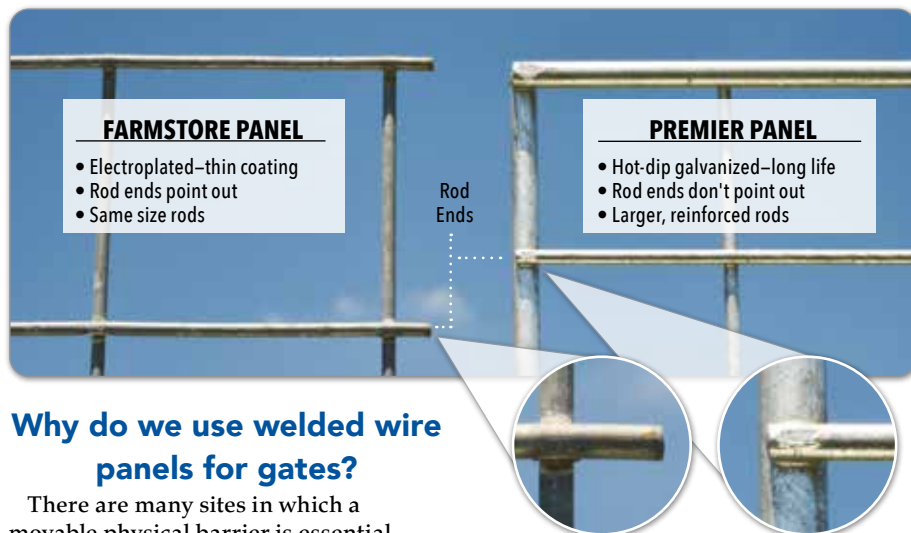
## The Premier difference...

- **Rod ends do not project past the ends and sides**, so they can't snag.
- **Hot-dip galvanized instead of zinc-plated.** Lasts longer and looks new for years.
- **Square, small, safer openings**—3"x 3" and 4"x 4" openings stop most small animals (lambs, kids, dogs, etc). 8" long rectangles of most other wire panels can entrap heads of animals.
- **Deeper welds at every joint resist breakage** from impact.
- **Shorter—easier to move, stack and use;** 16 ft and 20 ft panels are difficult to handle and maneuver.
- **Easily connected** by our wire connectors for 360° movement.

## Why did we design our own wire panels?

Many years ago we found ourselves disappointed by farmstore welded panels (those in our area are for pigs and/or cattle). So we designed our Standard and later our PowerBilt® panels specifically for sheep and goats.

In 2007 we enhanced the design of our standard panels to provide more rigidity and less weight to make them easier to carry. The result was our PowerBilt® panels—featuring thick reinforcement rods on all 4 sides and through the center.



### FARMSTORE PANEL

- Electroplated—thin coating
- Rod ends point out
- Same size rods

### PREMIER PANEL

- Hot-dip galvanized—long life
- Rod ends don't point out
- Larger, reinforced rods

## Why do we use welded wire panels for gates?

There are many sites in which a movable physical barrier is essential (gates, pens, etc).

Wood is heavy—and prone to breakage and rotting.

Steel bar gates are strong but heavy and expensive. And they don't stop lambs, kids or dogs. So we only use them when their strength is essential.

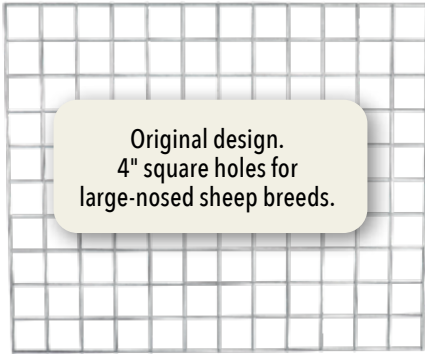
But when a less-strong barrier will work, the lower cost of galvanized welded wire panels makes them an attractive alternative.

## Why hot-dip galvanized?

All Premier welded wire panels are hot-dip galvanized *after* all welds are completed. This ensures a heavy zinc coating that resists rusting and extends panel life for years.

# Welded Wire Panels

## STANDARD PANELS



Original design.  
4" square holes for large-nosed sheep breeds.

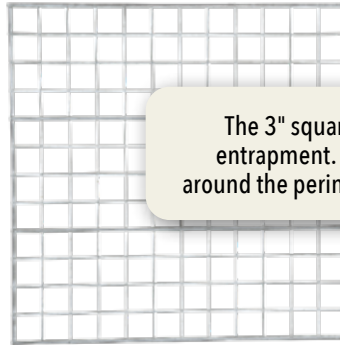
### Standard panels – 40" tall

- Lambing pens.
- Movable corrals and pens.
- Pen subdivisions.
- Tall enough for most sheep (unless they're flighty or rams during the breeding season).

40" x 48", 15 lb.....	#964700
40" x 60", 21 lb.....	#964600
40" x 72", 25 lb.....	#964500*
40" x 96", 33 lb.....	#964400*

\*Subject to shipping charges due to oversized and/or overweight items

## POWERBILT® PANELS



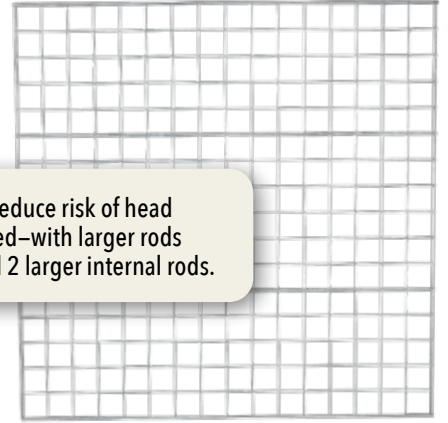
The 3" square holes reduce risk of head entrapment. Reinforced—with larger rods around the perimeter and 2 larger internal rods.

### PowerBilt® panels – 36" tall

- Short enough for many adults to conveniently step over.
- Works for smaller sheep breeds.
- Front panel for lambing pens.
- Orphan lamb pens—use several to make size of enclosure you need.

36" x 36", 13 lb.....	#965500
36" x 48", 18 lb.....	#965550
36" x 60", 21 lb.....	#965600*

\*Subject to shipping charges due to oversized and/or overweight items



### PowerBilt® panels – 48" tall

- Made with our meat goats in mind—because they don't always respect 40" tall panels or gates.
- Provides extra height and strength.
- Stops most goats (but not jumpers) and sheep.
- Workable solution for medium-usage field gates.

48" x 48", 21 lb.....	#965700*
48" x 72", 30 lb.....	#965800*
48" x 96", 37 lb.....	#965900*

\*Subject to shipping charges due to oversized and/or overweight items

	STANDARD PANELS		POWERBILT PANELS	
	40" Standard	36" PowerBilt	48" PowerBilt	
Lengths	48", 60", 72" & 96"	36", 48" & 60"	48", 72" & 92"	
Hole Sizes	4" x 4"	3" x 3"	3" x 3"	
Internal Rods	1/4"	3/16"	3/16"	
Reinforced Rods (2 - Internal)	no	3/8"	3/8"	
Perimeter Rods	1/4"	3/8"	3/8"	
Hot-dip Galvanized	✓	✓	✓	

## Need product prices?

Check our website or current Equipment catalog.

## Ways to connect panels

### Wire Connector Hinges

Strong, reliable connection system that's also a 360° hinge. Stainless steel—so they won't rust.

Hinge, 36", 0.28 lb.....	#965402
Hinge, 40", 0.30 lb.....	#965400
Hinge, 48", 0.40 lb.....	#965401



### Snap Clips

Use to attach panels. Choice of stainless steel (won't rust!) or zinc plated.

Stainless, 0.20 lb.....	#965406
Zinc plated, 0.20 lb.....	#965405



### Connecting Pin and Eyebolt

Use to attach gates or panels to feeders. Also use with our orphan headgate and creep gate.

Connecting Pin	
2.10 lb.....	#151200
Eyebolt	
0.50 lb.....	#936100



### Linking Stake and Lag Bolt

Use to connect panels. Strong and versatile. Hot-dip galvanized. Also use with our orphan headgate and creep gate.

Linking Stake	
3.30 lb.....	#917800
Lag Bolt	
0.30 lb.....	#917820





Single-Sided Feeder

Double-Sided Feeder



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