Build Your Own Feeders
Double-sided or Single-sided using Premier's panels!

800-282-6631
premier1supplies.com
Premier’s Double-Sided Feeder
For large sheep and rams

Material List

1. From Premier
   a. Four 24” x 48” Feeder Inserts at $32 ea. 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)—$40
   d. Six 2 x 4 x 48” (vertical legs); treated—$15
   e. Two 2 x 4 x 35” floor supports—$3
   f. One 2 x 4 x 32” center floor support—$2 (not pictured).
   g. 2/3 sheet 1/2” treated plywood floor cut into two 32” x 48” pieces—$20
   h. One third sheet of 1/2” CDX plywood cut into two 8’ x 96” pieces—$20
   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 & 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.
2. **(Figure 4)** Place three 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 great 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 2.5” deck screws at each joint. Repeat with 2 x 4s at the 38.5” and 17.5” marks.

4. **(Figure 6)** Place the 8” x 96” piece of CDX plywood so that it covers the gap between the top two 2 x 4s. Note that it does not fully cover the 2 x 4s. Secure with nails or screws every 12”.

D. Repeat steps 1 – 4 to make the other vertical feeder side.

E. Screw or nail the **(Figure 7)** plywood floor boards (32” x 48”) in place on a vertical side. Below, but against the 17.5” 2 x 4 board.

1. **(Figure 7)** 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 17.5” 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 8**. Get the plywood in place and nail or screw the free 48” long edge of plywood to the 2 x 4.

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

1. **(Figure 8)** 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 2.5” 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.

H. Keep the feeder upside down & place two 8’ 2 x 4s between the 10” & 13.5” marks. Then place two 8’ 2 x 4s between the 4” & 7.5” marks. (These boards are essential if you’re feeding 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 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 four more 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 of plywood can be obtained from the remaining sections of your original plywood sheet.

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.

**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 at $32 ea. Item #9660001.
   - 6 barbed staples per panel. Item #360200 (bag of 6).

2. From local sources
   - Eight 2 x 4 x 96” (horizontals)—$25
   - Three 2 x 4 x 48” (vertical legs); treated—$6
   - Three 2 x 4 27” (short legs); treated—$4
   - Three 2 x 4 x 25” floor supports—$3
   - 1/3 sheet of 1/2” treated plywood floor (16” x 96”)—$20
   - 1/3 sheet of CDX 1/2” plywood (16” x 96”)—$20
   - One 8” x 96” piece of CDX plywood—$5
   - 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—$6

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 hand carts 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.
Premier’s Double-Sided Feeder
For goats and other sheep

**Material List**

1. **From Premier**
   a. Four 30” x 48” Feeder Inserts at $38 ea. 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)—$33
   d. Six 2 x 4 x 48” (vertical legs); treated—$15
   e. Two 2 x 4 x 35” floor supports—$3
   f. One 2 x 4 x 32” center floor support—$2 (not pictured).
   g. 2/3 sheet 1/2” treated plywood floor cut into two 32” x 48” pieces—$40
   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).

**A.** See material list above.

**B.** Cut wood to correct lengths & 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.

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 three 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 great 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.

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.

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” & 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.

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.

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 4 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.

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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.

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**Premier Tip**

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**Figure 8 - Stapling the Panel**

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

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

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

*Note: Drawing not to scale.*
Material List

1. From Premier
   • Two 30” x 48” Feeder Inserts at $38 ea. Item #9661001.
   • 6 barbed staples per panel. Item #360200 (bag of 6).

2. From local sources
   • Seven 2 x 4 x 96” (horizontals)—$23
   • Three 2 x 4 x 48” (vertical legs); treated—$7
   • Two 2 x 4 27” (short legs); treated—$4
   • Three 2 x 4 25” floor supports—$3
   • 1/3 sheet of 1/2” treated plywood floor (16” x 96”)—$20
   • 1/3 sheet of CDX 1/2” plywood (16” x 96)—$20
   • Sixty 16d nails and 40 1-1/2” roofing nails, or 60 2-1/2” decking screws and 40 1-1/2” sheeting screws.
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• Width of a Single-Sided Feeder will be 25” with the plywood feeding edge extending another 3”. Double-Sided width is 35 inches.

• 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.

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.
Connecting Pin & Eyebolt
Use to attach gates or panels to feeders. Also use with our orphan headgate and creep gate.
Connecting Pin, 2.10 lb #151200 ..........$5.80
Eyebolt, 0.50 lb #936100 .............$2.10

PowerBilt® panels – 36” 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.

PowerBilt® panels – 48” tall

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<tr>
<th>STANDARD PANELS</th>
<th>POWERBILT® PANELS</th>
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<td><strong>Lengths</strong></td>
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*Shipped only by commercial truck lines.

Ways to connect panels

Wire Connector Hinges
Strong, reliable connection system that’s also a 360º hinge. Stainless steel—so they won’t rust.
Hinge, 36”, 0.28 lb ..........#964500 $3.15
Hinge, 40”, 0.30 lb ..........#964600 $3.55
Hinge, 48”, 0.40 lb ..........#964700 $4.17

PowerBilt® panels – 48” tall

Snap Clips
Use to attach panels. Choice of stainless steel (won’t rust) or zinc plated.
Snap Clip, stainless, 0.20 lb ..........#965406 $7.00
Snap Clip, zinc plated, 0.20 lb ..........#965405 $2.68

Linking Stake & 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 #197800 ..............$8.10
Lag Bolt, 0.30 lb #917820 ..............$2.40

Prices are subject to change without notice.