



Building Cost Estimates-Beef Related Facilities

University of Wisconsin-Extension Beef Team

The cost estimates here are “ballpark” estimates for initial budgeting and decision purposes. It can help in the decision making process to know the approximate or “ballpark” costs for financial long range planning.

The information in this fact sheet is not a comprehensive list of facility and equipment costs. Costs have been gathered from discussions with farmers giving their estimated costs associated with their project. Other costs were collected by reviewing prices from suppliers. These costs may not reflect some of the out-of-pocket costs to complete a project nor the entire cost of the project. Some costs represent material costs only and do not include installation labor. Some costs such as plumbing and electrical installation are more difficult to quantify on a per square foot or per head basis. Costs are for 2015 and do not account for future inflation. Costs do not reflect the supply and demand cycle of the construction industry and the construction season.

Accurate costs can only be determined by obtaining competitive bids for equipment and buildings from suppliers and builders and should include materials, installation labor, and project management costs.

Prices for calf housing and equipment are included in this document due to the size and importance of raising dairy steers in Wisconsin.

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Outside Lots & Fencing	Estimated Cost per Unit
Concrete Lot	\$2.75 per square foot
Corral panels	\$20 per linear foot
50" high 2" pipe fence panels	\$15 Per linear foot
Highway Guard Rail– 12" W beam	\$3.00 per linear foot
Highway Guard Rail—20" beam	\$4.25 per linear foot
Cattle Panel– 16' x 50" high	\$1.90 per linear foot

Building Frame	Estimated Cost per Unit
Post frame roof, open front/no floor	\$9.00 per square foot
Materials 2015	\$5.60 per square foot
Construction labor	\$2.70 per square foot
Post frame with truss, posts in ground, 100' long, width ranges from 30' to 120'	\$7.00-\$12.00 per square foot
Additional 8' to 10' bay	\$6.00-\$9.00 per square foot
Post frame w truss posts on frost foundation 100' long, width ranges from 30' to 120'	\$10.00-\$15.00 per square foot
Additional 8' to 10' bay	\$8.00-\$11.00 per square foot
Calf barn, 30' wide includes building frame, 20' wide concrete floor, curtains, and doors	\$10.00-\$12.00 per square foot
Cattle barn, open front 40' wide includes building frame, 25' wide concrete floor, curtains, and doors	\$16.50 per square foot
Post frame overhang	\$8.00 per square foot
Steel frame on pier foundation, 100' long	\$12.00 per square foot
Steel frame on frost foundation, 100' long	\$20.00 per square foot
Additional 20' bay	\$15.00 per square foot
Hoop structure (FarmTek®) includes materials only package, no concrete	\$4.00 per square foot
Hoop structure (FarmTek®) includes frame only with labor, no concrete	\$6.00 per square foot
2' x 6' stud frame wall (insulated)	\$25.00 per square foot
2' x 4' stud frame wall (uninsulated)	\$15.00 per square foot

Pens and Stall Work	Estimated Cost per Unit
Rubber flooring, 1/2" thick	\$2.50 per square foot
Fiberglass post and rod gates or fence	\$12.50 per linear foot
Steel tube gates or fence	\$7.50 per linear foot
4" x 7' galvanized steel post	\$100 each
6" x 8" x 8' treated wood post	\$54 each

Doors	Estimated Cost per Unit
3'x 7' personal door steel/fiberglass	\$400 each
Slider	\$5.00 per square foot
Overhead	\$9.00 per square foot
Door opener, large door	\$800 each
Door opener, small door	\$400 each

Shade/Shelter	Estimated Cost per Unit
Shade shelter pipe frame	
< 400 square foot	\$3.00 per square foot
< 1,600 square foot	\$2.00 per square foot
< 3,600 square foot	\$1.80 per square foot
< 10,000 square foot	\$1.40 per square foot
< 40,000 square foot	\$1.25 per square foot
Shade cloth, 16' roll	\$0.22 per square foot
Shade cloth panels, hemmed grommetted	\$0.40 per square foot
Windbreak shelter pipe frame, 10' high	\$20.00 per linear foot

Wall Sheathing	Estimated Cost per Unit
Painted steel corrugated	\$1.00 per square foot
Plastic corrugated flat panel (8mm thick)	\$1.50 per square foot
Plastic, $\frac{1}{16}$ " corrugated	\$1.00 per square foot
Plastic, $\frac{1}{8}$ " corrugated	\$1.75 per square foot
Plastic, $\frac{1}{4}$ " corrugated	\$3.25 per square foot
Polycarbonate	\$1.75 per square foot
OSB, $\frac{1}{2}$ " thick	\$0.60 per square foot

Roof Insulation	Estimated Cost per Unit
Bubble	\$0.50 per square foot
2" vinyl covered fiberglass, material only	\$0.60 per square foot
2" vinyl covered fiberglass, labor and material	\$1.25 per square foot
1" foil covered rigid board	\$0.75 per square foot
Dripex covering	\$1.00 per square foot

Concrete Walls and Floors	Estimated Cost per Unit
6" high curb with footing	\$24.00 per linear foot
12" high curb with footing	\$30.00 per linear foot
24" high curb with footing	\$33.00 per linear foot
8" x 4' wall with footing	\$56.00 per linear foot
8" x 5' wall with footing	\$72.00 per linear foot
8" x 6' wall with footing	\$87.00 per linear foot
8" x 8' wall with footing	\$123.00 per linear foot
8" x 6" curb on top of flat work	\$2.50 per linear foot
8" x 1' curb on top of flat work	\$5.00 per linear foot
8" x 2' curb on top of flat work	\$10.00 per linear foot
5" flatwork #3 rebar ($\frac{3}{8}$ " diameter), 18" on center	\$3.60 per square foot
5" flatwork #4 rebar ($\frac{1}{2}$ " diameter), 18" on center	\$4.00 per square foot
4" concrete with welded wire mesh	\$2.75 per square foot
Concrete, material only	\$100 per cubic yard
Concrete, labor and material	\$200 per cubic yard
Saw concrete	\$7.60 per linear foot
Concrete flat work removal	\$1.80 per square foot

Calf Pens	Estimated Cost per Unit
Calf pen 4' x 7', plastic	\$500 each
Calf hutch, individual	\$250 each
Calf transition group hutch (4 calves)	\$650 each
Double pail holder	\$20 each
Pail	\$10 each

Ventilation	Estimated Cost per Unit
Covered Ridge	\$10.00 per linear foot
Curtain Gathered	
4' wide rollup	\$13.50 per linear foot
6' wide rollup	\$16.50 per linear foot
8' wide rollup	\$18.00 per linear foot
Welded wire panel protection for curtain	\$0.50 per square foot
Panel Fans	
3' diameter panel fan	\$500 each
4' diameter panel fan	\$700 each
Exhaust Fans (in wall)	
12" diameter	\$350 each
18" diameter	\$600 each
24" diameter	\$700 each
36" diameter	\$800 each
48" diameter	\$1,000 each
Tunnel Ventilation Fans with Cone	
24" diameter	\$650 each
36" diameter	\$1,300 each
48" diameter	\$1,500 each
Large Diameter 20' Paddle Fan (High Volume Low Speed, HVLS)	\$6,000 each
Ceiling Fan 5' Diameter	\$200 each

Positive Pressure Tube System	Estimated Cost per Unit	
	Plastic Tube	Fan
12" diameter	\$3.50 per linear foot	\$400 each
18" diameter	\$3.75 per linear foot	\$425 each
24" diameter	\$4.00 per linear foot	\$500 each
36" diameter	\$5.00 per linear foot	\$600 each



Cattle Handling	Estimated Cost per Unit
Hydraulic chute with headgate	\$15,000.00 each
Squeeze chute restraint with headgate	\$5,000.00 each
Self-catch headgate, mechanical	\$1,500.00 each
Scissors headgate	\$900.00 each
Palpation cage	\$900.00 each
Portable loading chute	\$5,700.00 each
Crowding tub 180 degree	\$2,700.00 each
Scale, 2400 lb capacity	\$5,000 each
Working alley, 2 panels/sides	\$60.00 per linear foot
Holding pen, 10' x 10'	\$28.00 per square foot

Feeding System	Estimated Cost per Unit
Flat floor, 3' wide with 21" high curb, posts 10' on center, and feed rail barrier	\$30 per linear foot
Precast concrete J-bunk	\$25-\$30 per linear foot
Precast concrete j-bunk with cable fence	\$29-\$35 per linear foot
Precast concrete j-bunk with pipe fence	\$35-\$40 per linear foot
Precast concrete H-bunk	\$30-\$40 per linear foot
Headlocks	\$40-\$45 per linear foot
Diagonal bar feeder barrier	\$36 per linear foot
Mechanical bunk feeder	\$100 per linear foot
Mechanical conveyor	\$75 per linear foot
Round bale feeder	\$400 each
Feeder wagon on running gear, feed on both sides	\$140 per linear foot
Slant bar feeder wagon	\$275 per linear foot
Portable steel feed bunk, feed on both sides	\$50 per linear foot
Portable poly feed bunk, feed both sides	\$30 per linear foot

Steer Stuffers

65 bushel - 30 head	\$1500 each
100 bushel - 50 head	\$1700 each
150 bushel - 75 head	\$2300 each



Waterer (Frost Free)	Cost per Unit	Water Tanks	Cost per Unit
24" long	\$500 each	50 gallon	\$100 each
36" long	\$700 each	100 gallon	\$125 each
48" long	\$800 each	300 gallon	\$200 each
72" long	\$900 each	600 gallon	\$300 each
84" long	\$1,100 each		
Energy Free			
2 holes	\$700 each		
4 holes	\$900 each		

Fencing- no labor costs included	Estimated Cost per Unit
Woven wire	\$1.23 per foot
Barb wire- five strands	\$0.94 per foot
+/- 1 strand	\$0.05 per foot
High tensile wire- 8 strands	\$0.91 per foot
+/- 1 strand	\$0.02 per foot
High tensile electric fence- 5 strands	\$0.60 per foot
+/- 1 strand	\$0.02 per foot
Polywire electric fence- single strand	\$0.18 per foot
+/- 1 strand	\$0.03 per foot
Polytape electric fence- single tape	\$0.24 per foot

Feed Storage	Estimated Cost per Unit
Vertical silo	\$1.40 per cubic foot
Horizontal silo concrete walls	\$0.52 per cubic foot
5" concrete feed storage pad with #4 rebar ($\frac{1}{2}$ "), 18" on center	\$4.00 per square foot
Asphalt feed storage pad	\$2.30 per square foot
Bulk feed bin	
3 ton	\$1,200 each
6 ton	\$1,500 each
9 ton	\$2,200 each
12 ton	\$3,000 each
10,000 bu. Grain bin with conveyance etc.	\$3.00 per bu.
25,000 bu. Grain bin with conveyance etc.	\$2.25 per bu.

For additional extension resources regarding beef production, please visit <http://fyi.uwex.edu/wbic>

Excavation	Cost per Unit
Excavation for site preparation	\$4.00 per square foot or \$3.00 per cubic yard
Top soil stripping	\$2.20 per cubic yard
Earth fill, on site	\$3.00 per cubic yard
Lane with screenings, 16' wide	\$6.00 per linear foot
4" crushed stone (from off site)	\$12.50 per cubic yard
Grass waterway	\$3.75 per linear foot

Manure Storage	Cost per Unit
Concrete stacking pad with buck wall	\$3.50 per square foot
Slatted floor tank under shelter	\$1.50 per cubic foot
Concrete vertical wall tank	\$0.90 per cubic foot
Clay lined lagoon	\$36,000 + \$0.08 per cu. ft.
Concrete lined lagoon	\$47,500 + \$0.40 per cu. ft.
18" double wall corrugated HDPE (installed)	\$19.00 per linear foot
24" double wall corrugated HDPE (installed)	\$30.00 per linear foot
1" diameter water line, installed below ground	\$2.00 per linear foot
4' deep huffcut channel	\$93 per linear foot
4' deep huffcut channel with lid	\$150 per linear foot
8' x 8' x 8' concrete transfer tank with lid	\$5,000 each

Manure Handling Equipment	Cost per Unit
Chopper pump	\$11,000 each
Piston pump	\$18,000 each
Vertical piston pump	\$27,000 each
Agitator	\$6,000 each

Runoff Control	Cost per Unit
Vegetative treatment area	\$1,000 per acre

