# BVS Agricultural

## **Occupancy Reference Guide**



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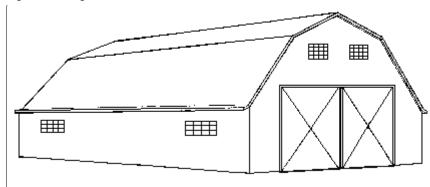
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### **Chapter 1: Agricultural Occupancies**

### Cattle

### 100 - One Story Dairy, Old Style



**Description:** A one-story barn is generally used to hold hay, feed, equipment, and/or cattle. The construction type of this occupancy is typically wood frame or masonry. The beams and rafters used in the older type of construction are much larger, rough cut, and use some joinery compared to newer construction which uses dimensional lumber, trusses, and newer methods of fastening structural members. The roof type is based on a gable type design, however, gambrel and gothic roofs are very common and will require an adjustment. If milking is still taking place in the barn, use the stanchion cost in the equipment section to make adjustments.

### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Plumbing

### Not Included:

- Storage in the roof area or loft
- Equipment Costs (i.e.: manure handling or ventilation)
- Interior partitions or perimeter wall finishes
   Note: If the property being valued has any interior partitions or perimeter wall finishes, either make the adjustment in BVS or consider using occupancy 101 Special Purpose Barn.

### **Related Topics:**

- 101 Special Purpose Barn
- 102 One Story Dairy with Loft, Old Style
- 104 Two Story Dairy, Old Style
- 105 Bank Barn, Special Purpose

### 101 - Special Purpose Barn

**Description:** These are often large, older buildings, built for a special purpose. An example would be an old fashioned dairy barn with post and beam framing, wood board siding, shingled roof, and manure gutter and aisles. The base story height of the building is 12'. As these buildings are typically handcrafted, rarely are two ever exactly alike.

#### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Plumbing
- Insulation
- Ceiling
- Minimal Interior Partitioning
- Minimal Perimeter Wall Finishes

**Note:** If the property being valued does not have interior partitioning and perimeter wall finishes, either make the adjustments in BVS or consider using Occupancy 100 - One Story Dairy, Old Style.

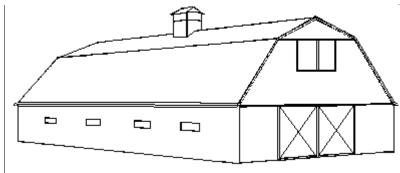
#### Not Included:

- · Heating and Cooling
- Equipment Costs (i.e.: manure, feed and livestock handling)
- Loft
- Ventilation Fans

### **Related Topics:**

- 100 One Story Dairy, Old Style
- 102 One Story Dairy with Loft, Old Style
- 104 Two Story Dairy, Old Style
- 105 Bank Barn, Special Purpose

### 102 - One Story Dairy with Loft, Old Style



**Description:** From the exterior, this building may look like a one story barn. The difference between a one story barn and this occupancy is that a structural floor capable of supporting hay and straw has been built into the rafters of the barn. The construction type of this barn is typically wood frame or masonry. The beams and rafters used in the older type of construction are much larger, rough cut, and use some joinery compared to newer construction which uses dimensional lumber, trusses, and newer methods of fastening structural members. The roof type is based on a gable type design, however, gambrel and gothic roofs are very common and will require an adjustment. If milking is still taking place in the barn, use the stanchion cost in the equipment section to make adjustments.

**Note:** If the barn being valued only has a loft on a portion of the building, consider using Occupancy 100 - One Story Dairy, Old Style. In the **Ceiling Finishes** section, enter the appropriate percentage of building it covers in the **Loft** field.

### Included:

- · Concrete Slab Floor
- · Electrical/Lighting
- Plumbing

### Not Included:

Equipment Costs (i.e.: manure handling or ventilation)

### **Related Topics:**

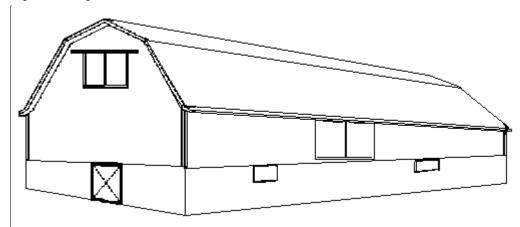
100 - One Story Dairy, Old Style

101 - Special Purpose Barn

104 - Two Story Dairy, Old Style

105 - Bank Barn, Special Purpose

### 104 - Two Story Dairy, Old Style



**Description:** The construction type of this barn is typically wood frame or masonry. The beams and rafters used in the older type of construction are much larger, rough cut, and use some joinery compared to newer construction which uses dimensional lumber, trusses, and newer methods of fastening structural members. The side wall on this building is generally 18' from the top of the slab to the start of the roofline. The roof type is based on a gable type design, however, gambrel and gothic roofs are very common and will require an adjustment. This occupancy also assumes that the side wall is made of all the same material, however, it is common to have masonry for the first floor and wood frame for the second. If milking is taking place in the barn, use the stanchion cost in the equipment section.

**Note:** This barn is very similar to Occupancy 105 – Bank Barn, Special Purpose. BVS distinguishes between the two in that the Two Story Dairy, Old Style assumes a larger building with slightly lower electrical and plumbing allowances.

#### Included:

- Concrete Slab Floor (1st floor)
- Electrical/Lighting
- Plumbing
- Heavy Duty Structural Wood Floor

#### Not Included:

- Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, and livestock handling)

### **Related Topics:**

- 100 One Story Dairy, Old Style
- 101 Special Purpose Barn
- 102 One Story Dairy with Loft, Old Style
- 105 Bank Barn, Special Purpose

### 105 - Bank Barn, Special Purpose

**Description:** These are often large, older buildings with a second level, and a base story height of 12', that are built for a special purpose. Access to the second level is gained by a bank of earth ramping up one exterior side of the building or trapdoors and ladders on the interior of the building. If milking is taking place in the barn, use the stanchion cost in the equipment section.

**Note:** This barn is very similar to Occupancy 104 - Two Story Dairy, Old Style. BVS distinguishes the two in that the Bank Barn, Special Purpose assumes a smaller building with slightly higher electrical and plumbing allowances.

#### Included

- Concrete Slab Floor (1st floor)
- Electrical/Lighting
- Insulation
- Ceiling
- Heavy Duty Structural Wood Floor (2nd Floor)
- · Partition Walls
- Plumbing

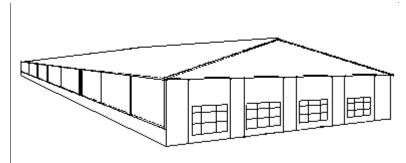
### Not Included

- · Heating and Cooling
- · Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, and livestock handling)

### **Related Topics:**

- 100 One Story Dairy, Old Style
- 101 Special Purpose Barn
- 102 One Story Dairy with Loft, Old Style
- 104 Two Story Dairy, Old Style

### 106 - Free Stall Barn



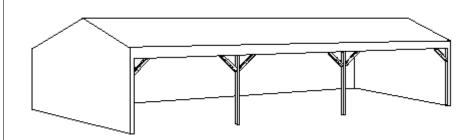
**Description:** This is the most typical type of barn being built for the dairy industry today. It is normally pole frame or pre-engineered steel frame construction. The barn is used to hold dairy cattle in an open format. The cows are allowed to wander freely inside the barn and have stall areas separated by a bar stanchion to help keep the cows from laying on top of each other.

#### Included:

- Curtain Wall
- · Steel Roof
- Electrical/Lighting
- Concrete Slab Floor (70%) with 100% Curbing
- Compacted Sand Floor (30%)
- Plumbing

- Interior Finishes
- Insulation
- Partitions
- Stanchions
- Offices or Separate Rooms

### 108 - Loafing Shed, Open One Side



**Description:** This building is designed to offer shelter to animals that are not in the barn. It is a very basic building consisting of three walls, a 14' base story height, and one exterior wall open. When entering the perimeter linear footage, consider all four sides. This is necessary because the open space has already been taken into consideration in the calculations.

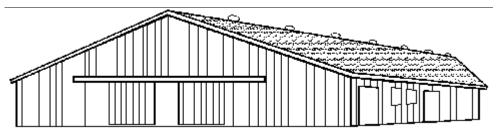
#### Included:

Concrete Slab Floor
 Note: It is common for this type of building not to have a concrete floor.

### Not Included:

- Electrical/Lighting
- Plumbing Hookups

### 110 - Livestock Feed Barn



**Description:** This is large open building used to feed livestock. The most noticeable feature in this occupancy is the drop curtains that cover between 40% and 50% of the exterior walls and that a metal roof is standard for all framing types.

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### 110 - Livestock Feed Barn

#### Included:

- · Concrete Slab Floor
- · Curtain Exterior Walls
- Steel Roof
- Plumbing
- · Electrical/Lighting

### Not Included:

 Equipment Costs (i.e.: barn cleaners, mechanical feeders, feed bunks, and watering systems)

### 112 - Calving Building

**Description:** Calving buildings are normally found on large dairy operations where they can separate the cows into an individual building during the calving time. Typically this building has a 14' base story height with curtain side walls and a steel roof.

### Included:

- · Concrete Slab Floor
- Partitions
- · Electrical/Lighting
- Plumbing Hookups
- Fiberglass Facing Ceiling Finish

**Note:** Partitions and ceiling finishes have been added to account for a small office or storage area.

### Not Included:

• Equipment Costs (i.e.: Pens, gates, slatted floors, auto watering and feeding systems)

continued on next page

### 114 - Three-Wall Addition

**Description:** This occupancy is intended to be used with another occupancy. It is used to add additional square footage to an existing building by adding three enclosed walls with a base story height of 14' and a sloped roof. The addition shares the remaining wall with the host building and is built on a slab. When entering the perimeter linear footage, consider all four sides. This is necessary because the open space has already been taken into consideration in the calculations.

### Included:

Electrical/Lighting

#### Not Included

- · Ceiling Finish
- · Heating and Cooling

### 115 - Lean To

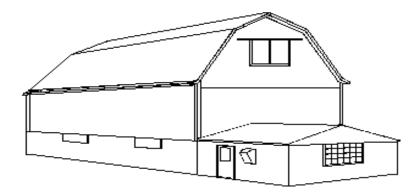
**Description:** This occupancy may only be used in conjunction with another occupancy. The structural framing of the lean to relies on another building for support. A lean to is an economical way to add minimal shelter square footage, as the lean to consists of a roof and no walls. The building has a base story height of 10'. When entering the perimeter liner footage, consider all four sides. This is necessary because the open space has already been taken into consideration in the calculations.

#### Included:

- Concrete Slab Floor
- Framing
- Roof

- Heating and Cooling
- Electrical
- Plumbing
- Ceiling

### 116 - Milking House



**Description:** This is a very small, single room building, generally found next to or attached to an old style dairy barn (100 - One Story Dairy, Old Style). Its purpose is to store the bulk milk tank and other equipment necessary for the milking process. Due to the size of this building, the cost per square foot will be much higher than many of the other occupancies.

**NOTE:** Typically, cows are not milked in this building but if they are, consider using Occupancy 118 - Milking Parlor.

#### Included:

- · Concrete Slab Floor
- Plumbing
- · Electrical/Lighting
- Insulated Walls
- Insulated Ceilings

#### Not Included:

• Equipment Costs (i.e.: Bulk tanks or milking equipment)

### **Related Topics:**

100 - One Story Dairy, Old Style

102 - One Story Dairy with Loft, Old Style

104 - Two Story Dairy, Old Style

118 - Milking Parlor

### 117 - Milkhouse Shed, Open One Side

**Description:** These buildings house tanks for cooling and short term storage of milk. They are open on one wall, have a base story height of 9', and are typically attached to another structure such as the building that the actual housing and milking of dairy cattle takes place. When entering the perimeter linear footage, consider all four sides. This is necessary because the open space has already been taken into consideration in the calculations.

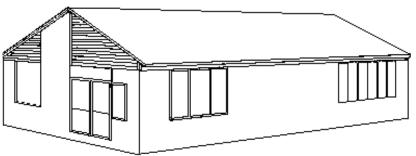
### Included:

- · Concrete Slab Floor
- Plumbing
- · Electrical/Lighting

#### Not Included:

- · Heating and Cooling
- Ventilation Fans
- Partitions
- Equipment Costs (i.e.: Tanks, chillers, pipelines, or milk handling)

### 118 - Milking Parlor



**Description:** This building is generally found next to or attached to a free stall barn. Its purpose is to provide an efficient means to milk cows.

### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Plumbing
- Insulation
- Partitions (used to divide the building into milk rooms, equipment room, office, and breakroom)

**Note:** If the workers are milking the cows from a pit, make sure this adjustment is made in the floor finish section.

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### 118 - Milking Parlor, continued

#### Not Included:

 Equipment Costs (i.e.: Bulk tanks, crowd gates, milking systems, and additional equipment)

### **Related Topics:**

106 - Free Stall Barn

### 120 - Hay Storage, Open One Side

**Description:** This is a very basic building with a 14' base story height, siding on three walls, and one open exterior wall. Besides storing hay, this building is often used to store equipment or other farm items. When entering the perimeter linear footage, consider all four sides. This is necessary because the open space has already been taken into consideration in the calculations.

### Included:

- · Concrete Slab Floor
- · Three Walls
- Electrical/Lighting

### Not Included:

Plumbing

### **Related Topics:**

122 - Hay Storage, Open Four Sides

### 122 - Hay Storage, Open Four Sides

**Description:** The construction type of this occupancy is typically pole or preengineered steel frame. The building has all exterior walls open. Besides storing hay, this building is often used to store equipment or other farm items. When entering the perimeter linear footage, consider all four sides. This is necessary because the open space has already been taken into consideration in the calculations.

### Included:

- · Concrete Slab Floor
- · Electrical/Lighting
- · Steel Clad Roof with Supports

### Not Included:

Plumbing

### **Related Topics:**

120 - Hay Storage, Open One Side

### **Swine**

#### 200 - Gestation Barn

**Description:** This barn is fully enclosed and specifically designed to house gestation (pregnant) sows. The barn may be divided into more than one section and used as a nursery for the sows and their litters.

#### Included:

- Insulation
- Slatted Floors (100%)
- 10' Concrete Pit (100%)
- Electrical/Lighting
- Partitions (used to divide the building into separate sections or create a small office or storage area)
- Polyethylene Board Walls and Ceilings
- Plumbing

#### Not Included:

• Equipment Costs (i.e.: space heaters, ventilation fans, gating, feeders, and computerized controlled environmental systems)

### 201 - Nursery

**Description:** These barns are built for the housing of young pigs that range between 10 to 80 lb. The building has a base story height of 10'. For large operations the nursery will consist of several small rooms. This will improve disease control and management operations.

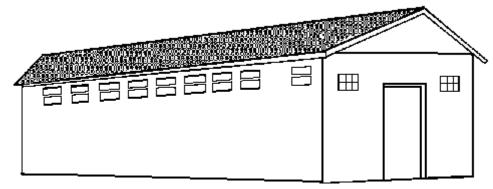
#### Included

- · Concrete Slab Floor
- Insulation
- Polyethylene Board Walls and Ceilings
- Partitions (used to divide the building into separate sections or create a small office or storage area)
- Electrical/Lighting
- Plumbing

- · Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling, pens and gating)
- Manure Pit
- · Slatted Floor

### Swine, continued

### 202 - Farrowing to Finish Barn



**Description:** This building is designed to address the expense of multiple buildings versus a single building with multiple rooms. All-in, all-out has become a common terminology for this type of operation. This barn is specifically designed for raising pigs after they have been weaned but could easily be configured to include gestation sows. Pigs in this barn may range between 40 to 300 pounds or larger. These buildings are usually long and narrow (40'x400') with an access aisle down the middle and pens on both sides. The sidewalls have curtains and a concrete kick wall.

#### Included:

- Slatted Floor (100%)
- 10' Concrete Pit (100%)
- Plumbing
- Electrical/Lighting
- Partitions (used to divide the building into separate sections or create a small office or storage area)

- The interior finish and gating to separate the pigs can vary dramatically between farms. To insure the most accurate results, make as many adjustments as possible to the program and add in the appropriate equipment.
- Equipment Costs (i.e.: Space heaters, ventilation fans, gating, feeders, and computerized controlled environmental systems.

### Swine, continued

### 204 - Finishing Barn

**Description:** These barns are built for the housing of hogs. Often they feature a continuous opening to allow ventilation, although some are completely enclosed and rely on fans. These buildings also have a base story height of 10' and partitions to aid in the segregation of hogs.

#### Included:

- Concrete Slab Floor (100%)
- Drop Curtains
- Electrical/Lighting
- Partitions (used to divide the building into separate sections or create a small office or storage area)
- Polyethylene Board Walls and Ceilings
- Plumbing

#### Not Included:

- Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling)
- Manure Pit
- Slatted Floor

### 205 - Hog Shed, Modified

**Description:** These barns are built for the housing of hogs and feature a modified open front that is actually hinged to allow ventilation. These buildings also have a base story height of 10' and partitions to aid in the segregation of hogs.

#### Included:

- Insulation
- Partition Walls
- · Interior Wall Liner
- Ceiling
- Plumbing
- Electrical/Lighting
- 6' Manure Pit (100%)
- Slatted Floor (100%)

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### Swine, continued

### 205 - Hog Shed, Modified, continued

#### Not Included:

- · Heating and Cooling
- Ventilation Fans
- · Equipment Costs (i.e.: Manure, feed, or livestock handling)

### **Related Topics:**

Occupancy 206 - Hog Shed

### 206 - Hog Shed

**Description:** These barns are built for the housing of hogs and feature an open front to allow ventilation. These buildings also have a base story height of 10' and partitions to aid in the segregation of hogs.

#### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Partitions (used to divide the building into separate sections or create a small office or storage area)
- Plumbing

### Not Included:

- · Heating and Cooling
- · Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling)
- Manure Pit
- · Slatted Floor

### **Related Topics:**

205 - Hog Shed, Modified

### Equine / Horse

### 300 - Arena, Riding and Show

**Description:** This building is very large and open on the inside to facilitate the exercising or showing of horses. The base story height of the building is 18'. Although most of the companies that build agricultural buildings provide a variety of standard arena plans to pick from, many existing buildings have been specifically designed for a client. For buildings that are unique, an additional 7% for architectural fees should be considered.

### Included:

- Concrete Slab Floor (10%)
- Compacted Sand Floor (90%)
- · Electrical/Lighting
- The building has an allowance for either an office or observation area
- Wood Knee Perimeter Walls
- Plumbing

**Note:** If the arena has an observation area or office on the second level, add the cost of the floor by adding a **Loft** under the **Ceiling Finishes**. In addition, add the appropriate ceiling, wall, and floor finishes for a more accurate valuation.

- Heating and Cooling
- Insulation
- Lot Storage Areas

### Equine / Horse, continued

### 301 - Stable, High End

**Description:** These barns are built for the housing of horses and features high quality appointments and ornamentation. These buildings have a base story height of 10', are well finished, and are often clad in wood, brick, stone, or stucco. Most will have offices, tack rooms, and feed rooms. Although most of the companies that build agricultural buildings provide a variety of standard arena plans to pick from, many existing buildings have been specifically designed for a client. For buildings that are unique, an additional 7% for architectural fees should be considered.

#### Included:

- Concrete Slab Floor (57%)
- Compacted Gravel and Sand Floor (43%)
- Plumbing
- · Electrical/Lighting
- Insulation
- Heating and Cooling (in the office and tack rooms)
- · Finished Office and Tack Room
- 12' x 12' Box Stalls with Water and Feeders
- Ceiling

- · Cooling in the Stall Area
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling)

### Equine / Horse, continued

### 302 - Stable

**Description:** This is a large building designed to house and feed domestic animals. The building has a base story height of 14', a gable roof, enclosed sides, and sliding access doors on each end. Although most of the companies that build agricultural buildings provide a variety of standard arena plans to pick from, many existing buildings have been specifically designed for a client. For buildings that are unique, an additional 7% for architectural fees should be considered.

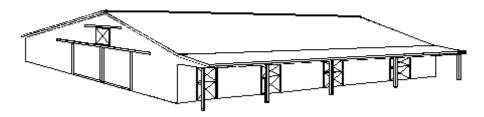
### Included:

- Concrete Slab Floor (30%)
- · Compacted Sand Floor (70%)
- · Electrical/Lighting
- Partitions (used to divide the building into a tack room, office or storage area)
- Plumbing

- Horse Stalls
- · Heating and Cooling
- · Fire Protection

### Equine / Horse, continued

### 304 - Hobby Barn



**Description:** This is a small building designed to house and feed domestic animals. The building has a base story height of 10', a sloped roof, enclosed sides and sliding access doors. If used to store horses, it would roughly hold about eight horses. Also, if the building includes an overhang, the additional square footage must be included with the building.

### Included:

- · Concrete Slab Floor
- Plumbing
- Electrical/Lighting

- Horse Stalls
- Equipment Costs

### **Poultry**

#### 400 - Brooder / Grower

**Description:** This is generally a long narrow building with a base story height of 9', typically 300 to 600 feet long, that is used to raise poultry. The floor of the building is sand and the farmer usually places a layer of mulch substance on the ground to help absorb the animal waste. The birds do not live in cages, but roam freely in the building.

#### Included:

- · Compacted Sand Floor
- Plumbing
- · Electrical/Lighting

### Not Included:

- Heating (because of the unique heating systems that can be found in this type of building)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

### 402 - One Story Layer

**Description:** This is a long narrow building with a base story height of 9' that is used to raise poultry inside cages.

### Included:

- · Concrete Slab Floor
- Plumbing
- · Electrical/Lighting

### Not Included:

- Pit
- Insulation
- · Ceiling and Interior Wall Finishes
- Cages
- Drop Curtains

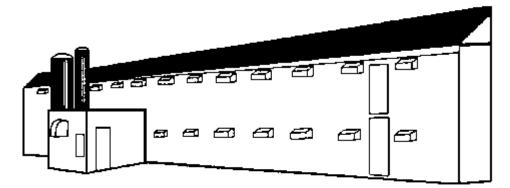
**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

### **Related Topics:**

404 - Multi-Story Layer

### Poultry, continued

### 404 - Multi-Story Layer



**Description:** This is a long narrow building, typically 2 to 3 stories in height with a base story height of 9' per floor, used to raise poultry inside cages.

### Included:

- Concrete Slab Floor
- Plumbing
- · Electrical/Lighting
- Load Bearing Structural Floor

### Not Included:

- Pit
- Insulation
- Ceiling and Interior Wall Finishes
- Cages
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

### **Related Topics:**

402 - One Story Layer

### Poultry, continued

### 405 - Poultry House, Cage Operation, One Story

**Description:** These barns are built for the housing of egg laying hens. They are typically large, simple rectangular buildings with a base story height of 8'.

#### Included:

- Concrete Slab Floor
- Plumbing
- Electrical/Lighting

### Not Included:

- · Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

### **Related Topics:**

407 - Poultry House, Cage Operation, Multi-Story

409 - Poultry House, Cage Operation, One Story Elevated

411 - Poultry House, Cage Operation, Multi-Story Elevated

### 407 - Poultry House, Cage Operation, Multi-Story

**Description:** These barns are built for the housing of egg laying hens. They are typically large, simple rectangular buildings with 2 to 3 stories and a base story height of 8' per floor.

### Included:

- · Concrete Slab Floor
- Plumbing
- Electrical/Lighting
- Load Bearing Structural Floor

### Not Included:

- Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

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### Poultry, continued

### 407 - Poultry House, Cage Operation, Multi-Story, continued

### **Related Topics:**

405 - Poultry House, Cage Operation, One Story

409 - Poultry House, Cage Operation, One Story Elevated

411 - Poultry House, Cage Operation, Multi-Story Elevated

### 409 - Poultry House, Cage Operation, One Story Elevated

**Description:** These barns are built for the housing of egg laying hens. They are typically large, simple rectangular buildings with a base story height of 18'. There are no cages at ground level to allow for manure removal. The chickens and walkways are above.

#### Included:

- · Concrete Slab Floor
- Plumbing
- Electrical/Lighting

#### Not Included:

- Heating and Cooling
- Ventilation Fans
- Walkways
- Equipment Costs (i.e.: Pits, automatic feeding or manure handling)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

### **Related Topics:**

405 - Poultry House, Cage Operation, One Story

407 - Poultry House, Cage Operation, Multi-Story

411 - Poultry House, Cage Operation, Multi-Story Elevated

### Poultry, Continued

### 411 - Poultry House, Cage Operation, Multi-Story Elevated

**Description:** These barns are built for the housing of egg laying hens. They are typically large, simple rectangular buildings with 2 to 3 stories and a base story height of 16'. There are no cages at ground level to allow for manure removal. The chickens and walkways are above.

#### Included:

- Concrete Slab Floor
- Plumbing
- Electrical/Lighting
- Load Bearing Structural Floor

#### Not Included:

- · Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Pits, automatic feeding and watering systems)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

### **Related Topics:**

405 - Poultry House, Cage Operation, One Story

407 - Poultry House, Cage Operation, Multi-Story

409 - Poultry House, Cage Operation, One Story Elevated

### 418 - Turkey Barn

**Description:** These barns are built for the housing of turkeys. They are typically large, simple rectangular buildings with a base story height of 8', sand floors, and no cages.

### Included:

- Compacted Sand Floor
- Plumbing
- Electrical/Lighting

### Not Included:

- Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Pits, automatic feeding or manure handling)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

### Commodity / Storage

### 500 - Cold Storage, Fruit and Vegetable

**Description:** This is a fully insulated and refrigerated building used to store perishable goods before they are shipped to market. The inside is open without structural partitions, the base story height is 18', and there are large overhead doors.

### Included:

- Concrete Floor with 4" of sand and 4" of gravel to aid in insulation
- Insulated Walls and Ceilings
- Cooling system (similar to a walk-in cooler)
- · Electrical/Lighting

### Not Included:

- Storage Racks
- Bins
- · Loading Docks
- Packaging Equipment

### 501 - Fruit Packing Barn

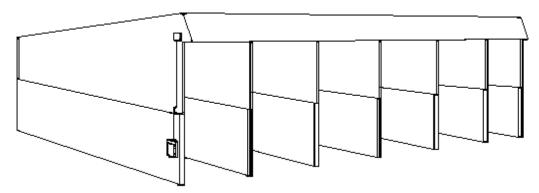
**Description:** This barn is intended for the packaging of fruits or vegetables for transportation to distributors and processing plants. The base story height of the building is 16'.

### Included:

- Insulation
- Plywood Wall Liner
- Office Space
- Partition Walls
- Concrete Slab Floor with a Sand and Gravel Base
- Plumbing
- Electrical/Lighting

- · Heating and Cooling
- Racks
- Equipment Costs (i.e.: Material handling or packaging)

### 502 - Commodity Building



**Description:** This building is used to store large amounts of feed. It is open on one side with an 18' story height that allows trucks to dump feed. Feed is generally pulled from this building through the use of a front-end loader. When entering the perimeter linear footage, consider all four sides. This is necessary because the open space has already been taken into consideration in the calculations.

### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Exterior Wall bottom 10' is concrete with the top 8' being the construction type you pick (you can override this ratio by changing the input in the Exterior Wall section)

- · Concrete Aprons
- Approaches beyond the square footage of the building

### 503 - Commodity Warehouse

**Description:** This occupancy is intended for the bulk storage of agricultural materials such as sand or lime. It is very common for them to have an office area with a restroom and a base story height of 10'.

#### Included:

- · Concrete Slab Floor
- Plumbing (office only)
- Heat (office only)
- Electrical/Lighting (office and warehouse)

#### Not Included:

- Storage Bins for loose commodities
- · Heating and Cooling in the warehouse

### 504 - Grain Storage, Flat

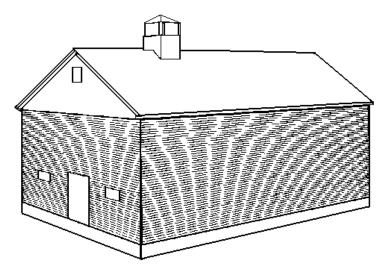
**Description:** This is an enclosed building which looks similar to a large machinery storage building, except the walls have been reinforced or have bunker retaining walls to resist the outward force of stored grain.

### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Bulkheads for the Side Walls

- Plumbing
- Equipment Costs (i.e.: Conveyors or grain handling)

### 506 - Granary



**Description:** Used to store grain, the construction type is typically wood frame. This building usually has a cupola on the roof which grain is loaded and distributed into the bins below. Granaries are not commonly built today and are more commonly replaced with the steel grain bins.

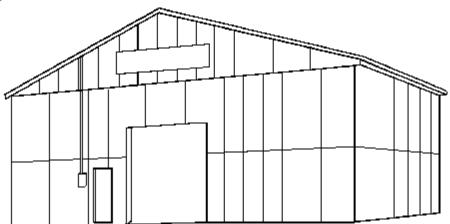
### Included:

- · Concrete Slab Floor
- Electrical/Lighting

### Not Included:

• Equipment Costs (i.e.: Conveyor)

### 508 - Potato Storage, Above Ground



**Description:** From the outside this building may look like a large machinery storage building. However, the exterior walls are insulated and have a plywood interior finish. The walls have bulkheads that make it possible to support the weight of the potatoes pushing against the side. If potatoes are being stored in a Quonset building, use the Quonset building cost for grain buildings found in the auxiliary buildings section.

### Included:

- · Concrete Slab Floor
- Insulation
- Electrical/Lighting

### Not Included:

- Plumbing
- Cooling
- Air Ventilation Systems

### **Related Topics:**

510 - Potato Storage, Below Ground

### 510 - Potato Storage, Below Ground

**Description:** This building takes advantage of the ground for insulation and replaces the need for bulkheads. Generally, the only part of the building that is exposed is one wall with a large door and the roof.

#### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Plywood on the inside of the Retaining Walls

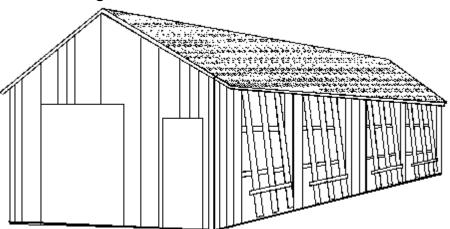
### Not Included:

- Plumbing
- Cooling
- · Air Ventilation Systems

### **Related Topics:**

508 - Potato Storage, Above Ground

### 512 - Air Curing Tobacco Building



**Description:** The construction type of this occupancy is typically wood frame. Normally this building is long and narrow, allowing the air to pass through the tobacco.

### Included:

- 4" Gravel Floor
- · Electrical/Lighting

### 512 - Air Curing Tobacco Building, continued

### Not Included:

- Heating and Cooling
- Electrical
- Concrete Floors
- Equipment Costs (i.e.: Racks)

### **Related Topics:**

514 - Flue Curing Tobacco Building

### 514 - Flue Curing Tobacco Building

**Description:** This building is typical of the buildings built in the past 50 years. The building is considerably smaller than an air curing building. Compared to an air curing building which is wide open, allowing for the natural flow of air through the tobacco, a flue curing building is closed, relying on controlled heat and humidity for the proper curing of the tobacco. The sidewalls are typically 18' high.

**Note:** This occupancy is built on site and should not be used for portable units that look similar to a shipping container or truck trailer without wheels.

#### Included:

· Electrical/Lighting

#### Not Included:

- Equipment Costs (i.e.: Dryers and humidity control)
- Floor

### **Related Topics:**

512 - Air Curing Tobacco Building

### 516 - Feed Handling and Mixing

**Description:** This building is generally found on large operations or at the coop and has a base story height of 14'.

#### Included:

- · Concrete Slab Floor
- Plumbing
- · Electrical/Lighting
- Plywood Interior Walls (covered halfway)

- Heating
- · Equipment Costs

# Commodity / Storage, continued

# 518 - Controlled Atmosphere Storage

**Description:** These structures are used for refrigerated storage of produce. They are relatively large, simple buildings with partition walls and a base story height of 24'.

#### Included:

- · Concrete Slab Floor
- Insulation
- Ceiling
- Partition Walls
- Plumbing
- · Electrical/Lighting

## Not Included:

- Heating and Cooling
- · Circulating Fans
- Storage Racks
- Equipment Costs (i.e.: Refrigeration)

## 519 - Vegetable Storage

**Description:** These structures are intended for the storage of produce. They are relatively large, simple buildings that are typically divided into several sections, with a base story height of 24'. It is not uncommon for the building to have a raised floor to help circulate the air (see below).

# Included:

- Concrete Slab Floor
- Insulation
- Partition Walls
- Plumbing
- Electrical/Lighting

## Not Included:

- Heating and Cooling
- · Circulation Fans
- Raised Floor

**Note:** The cost of the raised floor is not included but can be added by changing the floor assumptions in the **Floor Finish** section (i.e.: If the building has 100% raised floor, enter 100% in the **Concrete, Smooth** field and 100% in the **Slatted Floor, Plastic** field).

# Commodity / Storage, continued

## 520 - Dehydrator Building

**Description:** This structure is intended for the drying of fruits such as raisins, and is divided into many narrow corridors, with a base story height of 14'. The partition walls and electrical make up a large portion of the total cost of this building.

#### Included:

- · Concrete Slab Floor
- Electrical/Lighting
- Plumbing
- Plywood Lined Partition Walls

#### Not Included:

- Heating and Cooling
- Insulation
- Equipment Costs (i.e.: Burners, fans, racks, and other equipment)

## 522 - Cotton Gin

**Description:** This building houses the equipment used for ginning cotton. Typically these are large structures with a base story height of 30' that may have other buildings nearby or attached to provide storage for wagons and bales of cotton. If the attached structure used to store wagons looks like a large canopy, consider using Occupancy 115 - Lean To.

#### Included:

- Insulation
- Wall Liner
- · Partition Walls
- Plumbing
- · Concrete Slab Floor with Tunnels / Pits
- Electrical/Lighting
- Heating and Cooling (office area only)

# Not Included:

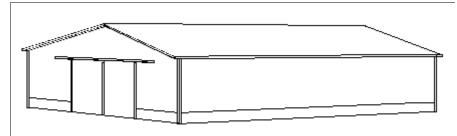
- Heating and Cooling (processing area)
- Equipment Costs

# Related Topics:

115 - Lean To

## General

## 600 - Machinery Storage



**Description:** The construction type of this building is typically pre-engineered metal or pole frame, and is one of the most common buildings found on a farm. The base building has one service door and one large door.

#### Included:

- Concrete Slab Floor
- Electrical/Lighting

#### Not Included:

- · Heating and Cooling
- Plumbing
- Equipment Costs

## **Related Topics:**

601 - Farm Implement Shed

# 601 - Farm Implement Shed

**Description:** This structure is typically 800 to 1,400 square feet, with a base story height of 10' and is typically smaller than occupancy 600 - Machinery Storage. It typically is used as a maintenance and storage building for general farm equipment and tools.

## Included:

- · Concrete Slab Floor
- · Electrical/Lighting

## Not Included:

- · Heating and Cooling
- Plumbing
- Insulation
- Ceiling

## **Related Topics:**

600 - Machinery Storage

# General, continued

# 602 - Small Storage Building / Garage

**Description:** This occupancy should be used on buildings that do not exceed 1,000 square feet. It is intended to be used for storage and as a detached garage.

## Included:

Lighting

## Not Included:

- · Interior Finishes
- Water Supply
- · Heating and Cooling

#### 604 - Small Office

**Description:** This is a freestanding building and should not be used as an office inside one of the other occupancies. If you need to add the cost of an office inside a different occupancy, adjust the assumptions of the interior finish items (typically these would include partition walls, floor finishes, ceiling finishes, heating, and plumbing).

## Included:

- Concrete Slab Floor
- Bathroom
- Partition Walls
- Electrical/Lighting
- Floor Finishes
- Ceiling Finishes
- Heating System

## Not Included:

- Service Counter
- Lockers
- Air Conditioning
- Office Furniture

# General, continued

# 606 - Bulk Fertilizer Storage

**Description:** This structure is intended for the storage and blending of dry fertilizer. Typically the fertilizer is kept in large piles placed on the floor in subdivided storage areas. The base story height of the building is 14'.

#### Included:

- · Concrete Slab Floor
- Partition Walls
- Insulation
- Plumbing
- Plywood Lined Bulkheads
- · Finished Office Area with Heat
- Electrical/Lighting

# Not Included:

- · Heating in the Warehouse
- Cooling
- Equipment Costs (i.e.: Mixing and handling)

## **Related Topics:**

610 - Bag Fertilizer Storage

## 608 - Tool Shed

**Description:** This structure is used for the storage of tools and is typically a small, simple building with a base story height of 8'.

## Included:

· Concrete Slab Floor

## Not Included:

- Heating and Cooling
- Plumbing
- Electrical/Lighting
- Insulation
- Ceiling

# General, continued

## 610 - Bag Fertilizer Storage

**Description:** This structure is intended for the storage of bagged fertilizer. Typically the bags of fertilizer are kept in piles placed on the floor in subdivided storage areas. The base story height of the building is 10'.

#### Included:

- · Concrete Slab Floor
- Insulation
- · Electrical/Lighting
- Plywood Lined Partitions

## Not Included:

- · Heating and Cooling
- Plumbing
- Equipment Costs (i.e.: Material handling)

## **Related Topics:**

606 - Bulk Fertilizer Storage

## 612 - Bulk Oil Storage

**Description:** This structure is intended for the storage of petrochemicals. Typically these buildings are open for the maneuvering of drums and to accommodate pallets and racks. The base story height of the building is 10'.

#### Included:

- · Concrete Slab Floor
- Insulation
- Plumbing
- Electrical/Lighting

## Not Included:

- Heating and Cooling
- Equipment Costs (i.e.: Racks and material handling)

## 650 - Additional Equipment Only

**Description:** You can use this model to create a policy without a building attached. For example, use this model when adding a steel grain bin.

# Sheep

## 700 - Sheep Barn, Lambing

**Description:** These barns are built for the housing of sheep. Some have openings in the walls and may utilize drop curtains, while others rely on fans for ventilation. The base story height of the building is 10'.

## Included:

- Concrete Slab Floor
- Plywood Ceiling Finish
- Plywood Wall Liner
- Insulation
- Partitions
- Plumbing
- Electrical/Lighting

## Not Included:

- · Heating and Cooling
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

## 702 - Sheep Shed, Open One Side

**Description:** These barns are built for the housing of sheep and feature an open front to allow ventilation. Some may have openings in the remaining walls and may utilize drop curtains.

## Included:

- Concrete Slab Floor
- Electrical/Lighting

## Not Included:

- Heating and Cooling
- Partitions
- Ventilation Fans
- Equipment Costs (i.e.: Manure, feed, or livestock handling)
- Drop Curtains

**Note:** Drop curtains may be considered common in some parts of the country and can be added to the valuation under **Exterior Wall Finish**.

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