Anatomy of a Barn

Your Guide to Pacific Northwest Types, Styles & Character Defining Features

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October - 2016
Wing vs. Ell vs. Lean-to
Barn

Forms and Types
Barn classification can be based on:

- Use/Purpose,
- Plan and shape,
- Framing systems,
- Roof form
Barn - Forms & Types

**Gable** (sometimes referred to as an English / Yankee barn)

- Shed, OR
- Boyd, OR
- Champoeg State Park, OR
- Hillsboro, OR
- Kitsap County, WA
Barn - Forms & Types

**Gable** (sometimes referred to as an English barn)

Adams County, WA  
Adams, OR  
Skagit County, WA  
Dayville, OR  
Peirce County, WA  
Lincoln County, WA
Barn - Forms & Types

Salt Box (integrated lean-to)

Dayton, WA
Spokane County, WA
Wallowa Valley, OR
Brownsville, OR
Pierce County, WA
Barn - Forms & Types

**Salt Box** (integrated lean-to)

- Benton County, OR
- Waitsburg, WA
- Philomath, OR
- Poulsbo, WA

- Finley National Wildlife Refuge, Benton County, OR
Barn - Forms & Types

**Dutch Barn** (roof projecting down to 1st floor)

- Stevens County, WA
- Dufur, OR
- Benton County, OR
- Snohomish County, WA
- LaPine, OR
Barn - Forms & Types

**Dutch Barn** (roof projecting down to 1st floor)

Labanon, OR

Colfax, WA

Skagit County, WA

Victor Point, OR
Barn - Forms & Types

Broken Gable / Gable with High Lean-tos

Klamath Falls, OR

Walla Walla, WA

Mount Angel, OR

San Juan County, WA

Hayward, OR
Broken Gable / Gable with High Lean-tos

- Diamond, OR
- Deschutes County, OR
- Baker, OR
- Walla Walla County, WA
Barn - Forms & Types

**Gable-on-Hip**

Drake Crossing, OR

Snohomish, WA

Coupeville, WA

Burnt Wood, OR
Barn - Forms & Types

Gable-on-Hip

Walla Walla County, WA

Weston, OR

Dufur, OR

Molalla, OR

San Juan County, WA
Barn - Forms & Types

English Gambrel

Thurston County, WA
Ellensburg, WA
Enterprise, OR
Donald, OR
Lynden, WA
Barn - Forms & Types

English Gambrel

Tangent, OR

Columbia County, WA

Near Crater Lake, OR

Lincoln County, WA
Barn - Forms & Types

Dutch Gambrel (note flare at eave line)

Fairfield, WA

Grays Harbor, WA

Elgin, OR

Salem, OR
Barn - Forms & Types

Dutch Gambrel (note flare at eave line)

Woodburn, OR

Pendleton, OR

Pend Oreille County, WA

Island County, WA
Barn - Forms & Types

Gambrel w/Lean - To

Pierce County, WA

Mount Vernon, WA

Elgin, OR

Yakima County, WA

Deer Park, WA
Barn - Forms & Types

**Gambrel w/Lean - To**

Eugene, OR

Scholls, OR

Snohomish County, WA

Sheridan, OR
Barn - Forms & Types

**Hip**

- **Coupeville, WA**
- **Condon, OR**
- **Moxee, WA**
- **Vancouver, WA**
Barn - Forms & Types

Gothic  (pointed arch roof truss)

Keizer, OR

Lacey, WA

Vancouver, WA

Willamette Valley, OR

Wilbur, WA
Gothic (pointed arch roof truss)
Barn - Forms & Types

**Bow / Rainbow Truss**
(note completely arched trusses)

Grays Harbor County, WA
Pullman, WA
Ridgefield, WA
Satsop, WA
Sedro Wooley, WA
Barn - Forms & Types

Western Barn/ Monitor Barn / Basilican

Joseph, OR

Pousbo, WA

Yakima County, WA

Skagit County, WA
Barn - Forms & Types
Western Barn/ Monitor Barn / Basilican

Stanwood, WA

Joseph, OR

Linn County, OR

Thurston County, WA
Centric / Round / Conical Barns

Klickitat County, WA

Medical Lake, WA

Chehalis, WA

Joseph, OR

Diamond, OR

St. Johns, WA
Barn - Forms & Types

Centric / Round / Conical Barns

Lakeview, OR

Hillsboro, OR

Grandview, WA

Blachly, OR

Pullman, WA

Lookingglass, OR
Barn Paint

Paint Finishes for Every Surface

- Exterior Wood Siding
- Exterior House
- Exterior Barn
- Interior Wood
- Interior House
- Interior Barn
- Door Frames
- Window Frames
- Barn Doors
- Barn Roof

Gamble Stores Western Stores

Life is Colorful Down on the Farm


Barn Paint

- Red, 281
- White, 72
- Yellow, 8
- Green, 2
- Blue, 4
- Brown, 12
- Grey, 24
- Not Painted, 254

Gordon-Van Tine Co. Catalogue – c.1924

BARN PAINT
A most durable and handsome paint for barns and outbuildings. Prices of lead and zinc make gray cost more than reds. See index on opposite page.

- 4A2001 Light Gray
- 4A2002 Venetian Red
- 4A2003 Mineral Red

Use Gordon-Van Tine “Quality” barn paint and be assured of success with your painting.

Famers judge each barn. Keep your barns in repair, and the evidence of thrift and care will add years to the life of your buildings.

You may use this paint with perfect confidence. It is entirely free from lead, zinc, or any other harmful ingredients that may cause damage to the timber or metal in your barns.

One gallon of Quality barn paint can be applied to a square foot of surface. Measure the area to be painted and add about 1 gallon per 100 square feet. Only the best ingredients are used in our paints, and thoroughly mixed and tested by our experienced staff.

Flat

Gallon Barrels

Gallon Barrels

4A2002 Venetian Red

4A2003 Mineral Red

4A2001 Light Gray
• Farmer
• Itinerant Builder
• Architect
• Plan Service
• Extension Office
• Lumber Yard / Plan Service
• Pre Cut
Barn Plans
Lumber Yard / Plan Service

Radford’s Practical Barns Plans – 1907

1881

Professional Farm Buildings

Weberhauser Sales Company

Barn Plans and Outbuildings

1953

Out Buildings and Stock Sheds

1952
Barn Roofing

- Wood Shake / Shingle
- Standing Seam
- Corrugated Metal
- Asphalt
Barn Roofing – Wood Shingle / Shake
Barn

Roofing – Standing Seam

Sears & Roebuck Roofing Catalogue - 1908
**Barn Roofing – Corrugated Metal**

**EXTRA HEAVY Pressed Corrugated Steel – U. S. STANDARD WEIGHTS**

Made in HEAVY GRADE (U. S. Standard 28-Gauge) and EXTRA HEAVY GRADE (U. S. Standard 26-Gauge).

**Corrugated Steel is an Excellent Material for Roofing, Siding, Ceiling, Skirting, Awning Ends, etc.**

It requires only a hammer and a pair of scissors to lay corrugated metal over an old roof or side of a building, and for this reason it is especially desirable where a large quantity of work is to be done.

**Cheap and Easy to Lay.**

Roofing, in ordinary cases, makes the most economical roof for garages, stables, barns and similar buildings.

**Extra Strong on Account of Corrugation.**

**We Furnish Two Thicknesses:**


**We Make this Corrugated Sheet in all the following sizes:**

- **26-Gauge**
  - 24" x 120" for corrugated roofing
  - 24" x 60" for siding

**PRICES OF 24"-INCH CORRUGATED STEEL.**

<table>
<thead>
<tr>
<th>Color</th>
<th>Width x Length</th>
<th>Price</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24&quot; x 120&quot;</td>
<td></td>
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<tr>
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<td>24&quot; x 60&quot;</td>
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**TIN SHINGLES OR FLASHINGS.**

- Made of best grade of metal, tin plate, for roofing old roofs and new buildings.

**VALLEYS – IN ROLLS.**

- 24" x 120" for roof valleys.

**GALVANIZED STEEL VALLEY.**

- Made in United States standard 26-gauge steel.

**Sears & Roebuck Roofing and Catalogue - 1908**
Barn

Roofing - Asphalt

Gordon-Van Tine Co. Catalogue – c.1924

Asphalt Roofing on the Farm – c.1950
Barn Framing / Truss System

- Log
- Heavy Timber Frame
- Pole Construction
- Plank Truss Frame
  - Braced Truss
  - Iowa Truss
  - Shawver Truss
- Concrete
- Clay Tile / Brick
Barn

Log Framing

Saddle notch

V-notch

Half Dovetail notch

Diamond notch

Full Dovetail notch

Square notch
Barn

Heavy Timber - Framing

Timber Framing Diagram

Ridge
Collar tie
Purlins
Rafter
Plate
Knee brace
Girt
Posts
Joist
Sill Timbers

© 2011 MJ Logan
Barn

Pole Construction - Framing
Barn

Plank Framing - Gable Framing

1904
Barn

Plank Framing – Gambrel Framing
Barn

Plank Framing - Gambrel Framing

[Diagram of braced rafter and shawver with strap and metal anchor]

[Iowa gambrel barn and interior view]

[Image of gambrel barn in rural setting]
Barn

Braced Truss - Gambrel Framing

OSU Extension – Braced Truss
Barn

Iowa / Clyde Truss - Gambrel Framing

OSU Extension –
Iowa Truss

Truss developed around 1920
Barn

Shawver Truss - Gambrel Framing

Truss developed late 19th Century
Barn
Plank Framing - Gothic Arch

Bent
Plank
Truss
Barn

– Concrete – Poured & Block

Portland Cement Association – 1946

Atlas Portland Cement Company – 1916
Associated Farm Buildings

- Bunk Houses
- Fruit Dryers
- Granaries
- Hop Dryers
- Machine Shed
- Milk Houses
- Poultry Houses
- Root Cellars
- Silos
- Smoke Houses
- Water Towers
Associated Farm Buildings

Kibler Family Farm – 1918

Fender – Sapp Family Farm – 1904

Eriksen Barn – 1915

Homestead Farm – 1915

Smith Place – 1935

Rocky Hill Farm – 1948
Silos - Typology
Silos - Typology

Wooden Octagonal Silo
Asotin Co – c.1895

Vertical Wood Stave Silo
Clark Co. – c.1900

King Silo
Klickitat Co. – 1920
Silos - Typology

**Brick Silo**
Spokane Co. – 1919

**Concrete Stave Silo**
Pierce Co. – c.1920

**Glazed Tile Silo**
Clark Co. - 1920
Silos - Typology

Steel Paneled Silo
Pierce Co. – c.1935

Poured Concrete Silo
Grays Harbor Co. – c.1935

Harvestore Silos
Adams County - c. 1948
Barn

Hay Hoods

Hay Fork
Barn

**Hay Hoods**

Garfield County, WA

Linn County, OR

Graham, WA

Benton County, OR

Klickitat County, WA

Keizer, OR
Barn Ventilation

IN THE days of straw sheds when stock was not properly housed, very little attention was paid to pure air, and not much was known about its real food and life-giving value. It soon became apparent to those making a study of stock raising that these animals would be more productive when housed in warm buildings, and this is what has brought about the modern barn. It is true that the warm room has increased the product, for example, the flow of milk from the dairy cow; but this warm, tight building has also brought about a condition that breeds disease; and the disease is proving to be a menace to live stock and mankind.

It has been proved that pure air is two-thirds of a cow’s ration; in other words, for every pound of feed and water combined that is consumed it requires the oxygen from two pounds of pure air to properly assimilate this feed. It is true that no farm stock buildings are air tight; but if the stock can get only one-half the required amount of pure air, it would have the same effect as if they were given only a part of the feed and water they naturally require to sustain life and make them productive.

Much has been written on the subject of ventilation for farm buildings...

Winn Barn, Milton-Freewater, OR 1916

Sears & Roebuck Roofing Catalogue - 1908
Barn
Cupolas & Ventilators

Whitman Co. - The Smith Place – 1935

Snohomish Co. - Grimm-Jensen Farm – 1932

Adams Co. - Krause Barn – 1901

Pierce Co. - c1923

Spokane Co. - Hyslop Farm – 1926

Pend Oreille Co. - LaPorte Barn – 1901
Heritage Barn Nominations

Decoration

Heath Farm – c.1920

Bolick Farm – 1895

Ebby Road Farm – 1923

Brown Farm, Olympia – c. 1905
Heritage Barn Nominations

Decoration

Cochran-Rice Farm, Cottage Grove

Polson Farm, Waterville, WA – c. 1915

Barn, Oakland, OR

Gribble Barn, Canby, OR
The Washington State
Department of Archaeology & Historic Preservation

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