Directions for Building Illinois Shed-Roof Poultry House

By E. G. Johnson and H. H. Alp

More detailed directions for building this type of house can be found in Circular 337, of this Station, which may be had on request.
Illinois Shed-Roof Poultry House

By E. G. Johnson, Extension Specialist in Farm Mechanics, and H. H. Alp, Extension Specialist in Poultry Husbandry

Locating the House. In locating a poultry house the factors of major importance are well-drained soil, good circulation of air, southern exposure, protection from prevailing winds in winter, relation to other farm buildings, allowance for future expansion, convenience in daily care and management, and the arrangement of poultry yards.

It is extremely desirable to locate the poultry house in such a way that the surrounding land may be cultivated and cropped. A double yarding system should be provided so that half the range area may be in crops each year. This practice will aid materially in reducing losses in the flock from parasites and disease. The importance of adequate sanitation of this sort cannot be too strongly emphasized.

Follow Plans Closely. Building according to specifications and plans from reliable sources is the only safe and economical procedure. Correcting mistakes once the house is built is costly. The specifications given in this circular are for a type of house commonly used in Illinois and other states. Properly constructed and managed, this house has proved very satisfactory.

Concrete Foundation Wall. Make walls 8 inches thick, extending 1 foot below the ground, and above ground enough to allow for a 6- or 8-inch fill for the floor. Use a 1:2:4 mix containing 6½ gallons of water per sack of cement. Reinforce the foundation wall against cracking, settling, and upheaval by embedding a ½-inch rod in the concrete near the bottom. Place ½-by-12-inch sill bolts in concrete 6 feet apart, 2 inches from outside edge of the wall and extending 3 inches above the top.

Fill for Floor.—To insure a dry floor, use a gravel or cinder fill, extending at least 6 or 8 inches above ground level. Good drainage is

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Enough cinder or gravel fill should be used to bring the inside floor surface well above ground level. This insures a dry floor. Note that 16 inches of cinder fill has been used in this foundation.
essential for a dry floor. Allow fill to settle thoroughly before pouring the concrete.

**One-Course Concrete Floor.** Make floor 3 inches thick and pour full thickness in one operation, using a 1:2:3 mix containing 6 gallons of water per sack of cement.

Use clean sand and gravel. After pouring the concrete, allow it to stand two or three hours until it has stiffened enough to permit finishing with a wood float. To permit proper curing of the concrete, keep floor surface damp for a week or ten days by covering with moist sand or earth.

**Frame Construction.** Construct framework for walls on the ground in units, then raise each unit into position and nail securely.

- **Sill.**—Use a single 2-by-4 member bolted to foundation wall by ½-by-12-inch bolts embedded in concrete every 6 feet.
- **Studding.**—Use 2-by-4 studding doubled at corners and at girder supports.
- **Plates.**—The plates are 2-by-4 members doubled in front.
- **Siding.**—Six-inch drop siding, No. 116, is recommended. Nail at each studding with two 6d nails, breaking joints and fitting closely to prevent cracks.
- **Rafters.**—Use 2-by-6 rafters spaced 2 feet 6 inches apart. The rafters are made 22 feet long by lapping 2-by-6 members 12 feet long at the mid-point.
- **Girder.**—Use two 2-by-8 members 20 feet long for the girder, supporting it with double studding at end walls and a 4-by-4 post in center of house.
- **Roof Sheathing.**—Use 6-inch flooring or 6-inch or 8-inch shiplap for roof sheathing. Fit it closely to prevent cracks.
- **Roofing.**—Use established brand of 3-ply slate-surfaced roll roofing. Cement all joints thoroughly and lay according to manufacturer's directions. If more permanent roof covering is desired, use 4-in-1 asphalt strip shingles.
- **Windows.**—For front and side windows use 6-light 10-by-12 barn sash; for rear windows use 3-light 10-by-12 basement sash. Make muslin-covered frames for the open front. Cover open front and windows with ¼-inch mesh hardware cloth.
- **Droppings Board.**—Build droppings board in two or more sections in form of tables. Use 6-inch flooring boards.
- **Roosts.**—Make roosts in two sections. For perches use 2-by-2 lumber slightly rounded at the top. Nail ½-inch poultry netting to underside of perches.
- **Insulation.**—For additional warmth, line wall and ceiling directly behind and over roosts with 6-inch flooring or some other insulating material.
Materials for 20'-by-20' Illinois Shed-Roof Poultry House

(Have your lumber dealer estimate costs)

Foundation:
- Sand, 2 cu. yds. @ $......
- Sand, 2 cu. yds. @ $......
- Gravel, 3/4 cu. yds. @ $......
- Gravel, 2 3/4 cu. yds. @ $......
- Cement, 25 sacks @ $......
- Cement, 21 sacks @ $......

Floor: (3" thick)
- Sand, 1 1/4 cu. yds. @ $......
- Gravel, 2 3/4 cu. yds. @ $......
- Sand, 1 1/4 cu. yds. @ $......
- Gravel, 2 1/4 cu. yds. @ $......
- Cement, 25 sacks @ $......
- Cement, 21 sacks @ $......

Lumber list:
- Sills and plates (front and rear), 7 pcs 2" x 4" x 20' @ $......
- Studding (rear and ends), 6 pcs 2" x 4" x 14' @ $......
- (front and ends), 6 pcs 2" x 4" x 16' @ $......
- (front and ends), 2 pcs 2" x 4" x 10' @ $......
- (ends), 3 pcs 2" x 4" x 12' @ $......
- Head jambs, (cross pieces above windows and doors) 3 pcs 2" x 4" x 10' @ $......
- Window sills, 3 pcs 1" x 6" x 12' @ $......
- Post (center of house), 1 pc 4" x 4" x 6' @ $......
- Girder, 2 pcs 2" x 8" x 20' @ $......
- Rafters, 18 pcs 2" x 6" x 12' @ $......
- Roof and inside sheathing, 785 board feet of 1" x 6" flooring or 1" x 8" shiplap @ $......
- Siding, 550 board feet of No. 116 1" x 6" drop siding @ $......
- Trim, 200 lineal feet of 1" x 4" B or better @ $......
- Drippings board, 24 pcs flooring 1" x 6" x 10' @ $......
- Drippings board and roost supports, 8 pcs 2"x4"x10' @ $......
- Perch bars, 8 pcs 2" x 2" x 10' @ $......
- Roofing, 6 rolls of 3-ply slate surface or 5 squares of 4-in-1 asphalt strip shingles @ $......
- Sash, 5 six-light 10" x 12" (barn type) @ $......
- 2 three-light 10" x 12" (basement type) @ $......
- Hardware and nails additional @ $......

A ventilator at the rear gives extra air circulation during hot weather. The windows allow more light under the droppings board.