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South Dakota Controlled Environment Poultry House

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Boyd Bonzer

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4000 OR MORE BIRD UNIT
1 WORK END UNIT WITH 12'X36'
WORK ROOM
2 OR MORE BASIC UNITS
1 END UNIT

3000 BIRD UNIT
1 WORK END UNIT WITH 12'X36'
WORK ROOM
1 BASIC UNIT
1 END UNIT

3000 BIRD UNIT WITH 10'X30'
WORK ROOM

SEE SHEET 2 FOR FAN CAPACITIES
NOTE: EITHER CORRUGATED METAL ROOFING OR PLYWOOD SHEATHING & SHINGLES MAY BE USED.

TRUSS DETAIL  DESIGN VALUES: 30 PSF HORIZONTAL PROJECTION, GUTS 2'-0" O.C. & METAL ROOFING, ALLOWABLE BENDING STRESS: 2000 PS, ALLOWABLE COMPRESSION STRESS: 1500 PS

USE Sanded EXTERIOR TYPE PLYWOOD FOR GUSSET PLATES ON BOTH SIDES OF JOINTS.

MIX & USE RESORCIAL RESIN GLUE ACCORDING TO MANUFACTURER'S SPECIFICATIONS. APPLY TO BOTH SURFACES TO BE JOINED..install GUSSET PLATES IN PLACE WITH 6D BOX OR CEMENT-COATED NAILS.

WIRE FLOOR FRAMING
FULL THICK INSULATION IN CEILING

FULL THICK INSULATION - 3/8" PLYWOOD

VAPOR BARRIER

LATCH AVAILABLE FROM COMMERCIAL REFRIG DEALERS

1/2" PLYWOOD

SAFETY RELEASE

GASKET

COOLER DOOR DETAILS

FULL THICK INSULATION IN CEILING

FULL THICK INSULATION - 3/8" PLYWOOD

VAPOR BARRIER

LATCH AVAILABLE FROM COMMERCIAL REFRIG DEALERS

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SAFETY RELEASE

GASKET

COOLER DOOR DETAILS
2000 CFM CAPACITY AT 15" SP
REVERSIBLE FANS (2 PER 36' SECTION)

NOTE: THE 36' BASIC UNIT IS
IS TO BE USED TO OBTAIN THE SIZE OF
BUILDING DESIRED. THE WORK ROOM AND
END SECTIONS REMAIN THE SAME, AND
ENOUGH BASIC UNITS ARE ADDED
TO OBTAIN THE DESIRED SIZE.

THIS PLAN OFFERS TWO
ALTERNATIVES FOR FLOORS. THEY ARE
A SLATTED OR WIRE FLOOR OVER PIT,
OR A SLATTED OR WIRE FLOOR OVER
PIT WITH LITTER. EITHER ONE OF
THE TWO MAY BE USED.

WIRE FLOOR OVER PIT
(SLATTED FLOOR OPTIONAL)

4' SLATTED WALK AREA
IN FRONT OF NESTS

ALLEY

LITTER

BASIC UNIT
### GENERAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>1,000</th>
<th>3,000</th>
<th>5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor space per bird</td>
<td>1.17 sq. ft.</td>
<td>1.21 sq. ft.</td>
<td>1.21 sq. ft.</td>
</tr>
<tr>
<td>Fan capacity—4 CFM @ ¼ inch static pressure per bird with windows. 6 CFM without windows Note: Provide cabinet (with damper) for continuously operating fan. (To 16 inches above floor)</td>
<td>2 fans 1-1,000, 1-3,000 CFM @ ¼ inch static pressure. Add 2,000 CFM if windowless</td>
<td>6 fans 2,000 CFM @ ¼ inch static pressure each. 6 fans with 3,000 CFM each if windowless house</td>
<td>10 fans 2,000 CFM @ ¼ inch static pressure each. 10 fans with 3,000 CFM each if windowless house</td>
</tr>
<tr>
<td>Birds per foot of feeder trough</td>
<td>40 hanging feeders</td>
<td>440 feet total=8.8 birds per foot</td>
<td>664 feet total=7.5 birds per foot</td>
</tr>
<tr>
<td>Birds per foot of water trough</td>
<td>48 feet total=20.1 birds per foot</td>
<td>191 feet total=15.7 birds per foot</td>
<td>312 feet total=16.0 birds per foot</td>
</tr>
<tr>
<td>Birds per square foot of roll-a-way nest areas</td>
<td>120 nests 12 inches x 12 inches=8.3 birds per nest</td>
<td>360 nests 12 inches x 12 inches=8.3 birds per nest</td>
<td>656 nests 12 inches x 12 inches=7.6 birds per nest</td>
</tr>
<tr>
<td>Bulk bin capacity</td>
<td>10 day feed supply=2,500 lbs.</td>
<td>10 day feed supply=7,500 lbs.</td>
<td>10 day feed supply=12,500 lbs.</td>
</tr>
<tr>
<td>Egg cooler capacity</td>
<td>¼ H.P. Unit 5 cases per day and 25 cases maximum capacity (or 15-case cooler)</td>
<td>½ H.P. Unit 12 cases per day and 80 cases maximum capacity</td>
<td>¾ H.P. Unit 18 cases per day and 120 cases maximum capacity</td>
</tr>
<tr>
<td>Light (Proximity of feeding area)</td>
<td>7 bulbs—40 or 60 watt</td>
<td>21 bulbs—40 or 60 watt</td>
<td>35 bulbs—40 or 60 watt</td>
</tr>
<tr>
<td>Service entrance</td>
<td>60 amp</td>
<td>100 amp</td>
<td>100 amp</td>
</tr>
</tbody>
</table>