NOTE: CONTINUOUS AT 1 CFM, PER BIRD
FRESH AIR SYSTEM—TWO INLET
LOUVERS EACH END, TWO PERF.
PE TUBES AT 150' FROM EACH END
ONE EXHAUST FAN EACH SIDE.

NOTE: CONSULT LOCAL HEALTH
AND BUILDING CODE
AUTHORITIES BEFORE
STARTING CONSTRUCTION.

COOPERATIVE EXTENSION WORK IN
AGRICULTURE AND HOME ECONOMICS

UNITED STATES DEPARTMENT OF AGRICULTURE

LAYER HOUSE
3,000 BIRDS

PA 75 6189 SHEET 1 OF 4

BASED ON: PENN. STATE UNIV. PLAN NO. 727-362
VENTILATION CONTROL SEQUENCE

1. CENTER EXHAUST FAN ON EACH SIDE ON LOW SPEED CONT.
   LOWERS IN EACH END OPEN. SLOT INLETS CLOSED. 7,500 CFM.
2. CENTER EXHAUST FANS SWITCH TO HIGH SPEED. 15,000 CFM.
3. TWO SINGLE SPEED FANS ON. 30,000 CFM.
4. TWO SINGLE SPEED FANS ON. SLOT INLETS OPEN. 45,000 CFM.
5. TWO SINGLE SPEED FANS ON. 60,000 CFM.
6. TWO SINGLE SPEED FANS ON. 75,000 CFM.

EQUIPMENT

FANS: 2 ACME DC 308 29 (TWO SPEED) 15,000 CFM.
6 ACME DC 308 (SINGLE SPEED) 60,000 CFM.
LOUVERS: 4 ACME WP 4040 MT MOTORIZED INLET (20,200 CFM)
SHUTTER FOR 30" DIA. PE INLET TUBE
OR EQUIVALENT EQUIPMENT

CONTROL FANS & LOUVERS WITH 5-2 STAGE THERMOSTATS
PROVIDE 200 AMP ELECTRIC SERVICE TO THE BUILDING.

NOTE:
SET KNOCKOUT PANEL IN FRAMED OPENING. Secure with 4 BUTTONS, ONE CENTERED EACH SIDE ON INSIDE WALL. LAP CORRUGATED METAL ON SIDES, LAP 2" ON BOTTOM, EXTEND TO SOFFIT.

INTAKE LOUVER FRAMING DETAIL

TCO TRIP-L-GRIP FRAMING ANCHOR AR, AL, RAFTER TO BEAM
2X4 STUD 2X4 A-4" LONG WIND BRACE
2X10 RAFTER 1-4" G.C. 22' LONG
CORRUGATED METAL ROOFING
4 MIL PE FILM VAPOR BARRIER
2X4 PURLIN 2'-6" G.C.
SCREENED SOFFIT
2X4 FASCIA

2X4 PLATE
CORRUGATED METAL SIDING
2X4 WINDOW-2 EACH SIDE FIBER GLASS GLAZED
2X4 STUDS, 2'-0" G.C.
2" GLASS FIBER INSULATION BATT OR BLANKET
2X4 EXT. TYPE CC GRADE PLYWOOD
6 MIL PE FILM VAPOR BARRIER
2X8 SILL

TOP OF PLATE
FINISH FLOOR
6" CRUSED ROCK
4" CONCRETE

EMERGENCY KNOCKOUT PANEL DETAIL

SCALE: 1/4"=1'-0"
UNLESS OTHERWISE NOTED
2"-4" G.C. CONCRETE
1/2" PLYWOOD OR 1 T&B FLOORING

COOPERATIVE EXTENSION WORK IN
AGRICULTURE AND HOME ECONOMICS

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UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

LAYER HOUSE
15,000 BIRDS

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