FLOOR PLAN

NOTES:
1. ALL PERMANENT WIRING SHOULD COMPLY WITH THE NATIONAL ELECTRIC CODE AND ANY OTHER LOCAL CODES IN AUTHORITY.
2. NON-METALLIC WIRING, SWITCHES, LAMPHOLDERS AND RECEPTACLES ARE RECOMMENDED (SEE NEC ART. 314-31).
3. IF A 48 OR LARGER MOTORS SHOULD BE CONNECTED TO 230 VOLTS.
4. LIGHTING CIRCUITS SHOULD BE EQUALLY DIVIDED ON 115 VOLT SIDES OF THE SERVICE TO BALANCE LOAD ON SYSTEM.
   AMPERE LOAD ON ANY CIRCUIT SHOULD NOT EXCEED 80% OF RATING.
5. INCANDESCENT LAMPS, RATED AT 110 TO 120 VOLTS AND 25 WATTS ON 110-VOLTS CENTERS, ARE RECOMMENDED FOR USE WITH LIGHT COLORED CEILINGS OR WITH SHADEBRON REFLECTORS. LAMPS SHOULD NOT BE MORE THAN 6'-0" ABOVE THE LOWEST FEEDER OR PROVIDE AT LEAST ONE FOOT OF CANDELA MINIMUM INTENSITY FOR BIRDS IN LOWEST CASES.
6. CONSULT WITH EQUIPMENT MANUFACTURER FOR DETAILS AND DIMENSIONS OF CASES AND OTHER EQUIPMENT.

SPECIFICATIONS:
1. THE DESIGN IS EXPANDABLE IN 8'-0" SECTIONS OF LENGTH AND IS 38'-0" WIDE.
2. THE WINDOWLESS, CLEAR SPAN BUILDING USES TRUSSES 4'-0" O.C. WITH TRUSSES HANGING FROM BOTTOM CHORD OF TRUSSES.
3. THREE INCHES OF INSULATION IS USED IN THE CEILING AND TWO INCHES IN WALLS.
4. THE EGG COOLING ROOM USES 2 INCHES OF RIGID FOAM INSULATION.
5. THE DESIGN IS FOR EITHER FRAME OR POST CONSTRUCTION, WITH METAL ROOF AND SIDING.
6. THE VENTILATION SYSTEM USES EXHAUST FANS AND ADJUSTABLE SLOT INLETS.
7. THE MANURE IS REMOVED FREQUENTLY BY SCRAPER AND DEPOSITED IN A LOADER OR STORAGE AREA.

ELECTRICAL
- D© DUAL-OBJECTIVE OUTLET GROUNDED
- ☑ SPECIAL PURPOSE OUTLETS
- ☑ EGG PROCESSING AREA COOLER
- ☑ EGG WASHING AREA
- ☑ EGG ROOM COOLER
- ☑ FEED BIN AUGER
- ☑ VENTILATION FAN
- ☑ SPST SWITCH
- ☑ SPST SWITCH WITH LIGHT
- ☑ SPST TIME SWITCH (230 VOLTS)
- ☑ LOW VOLUME THERMOSTAT
- ☑ MEDIUM VOLUME THERMOSTAT
- ☑ HIGH VOLUME THERMOSTAT
- ☑ DISTRIBUTION PANEL (FUSE OR CIRCUIT BREAKER)
- ☑ EGG DINING SERVICE ENTRANCE SWITCH FOR USE WITH STAND-BY GENERATOR

BASED ON: W. UNIVERSITY PLAN PG-123

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
AND
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATIVE Extension

POULTRY HOUSE
CAGED LAYERS
W.VA '71 6131 SHEET 1 OF 3
TYPICAL CROSS SECTION

NOTES:
1. TWO TYPES OF WALL CONSTRUCTION ARE SHOWN: FRAME & POLE
2. INSTALL LOUVERS IN BOTH ENDS OF GABLE FOR ATTCK VENTILATION
3. VENTILATION RATE: LOW VOLUME 1 CFM PER BIRD
   HIGH VOLUME 4 CFM PER BIRD
4. PLACE AIR INLET SLOT OPENINGS ON BOTH SIDES, NO CLOSER THAN 6'-0" TO FANS. THE SLOTS HAVE A 3'-0" MAXIMUM ADJUSTMENT SIDE-WARD FOR AIR FLOW DOWN WALL OR DOWNWARD FOR AIR FLOW ACROSS CEILING OR BOTH.
5. EGG ROOM SIZE VARIES WITH SIZE OF HOUSE.

- POLYSTYRENE CLOSED-CELL FOAM, BOND TO OTHER PIECE AND TO FILLER BLOCK USE SETTING ADHESIVE SUCH AS EPOXY, PHENOLIC, RESORCINOL-PHENOLIC, OR RESORCINOL.
GUSSET PLATES
1. EACH JOINT REQUIRES TWO GUSSETS, ONE ON EACH SIDE.
2. ALL GUSSET PLATES ARE 3/8" C-C EXTERIOR PLYWOOD, SANDER TO SMOOTH AND EVEN FINISH FOR THE GLUED TRUSS.
3. MEMBERS MUST BE SURFACED AND CLEAN.
4. MOISTURE CONTENT SHOULD NOT EXCEED 6%.
5. USE RESORCINOL RESIN GLUE AND 64 BOX NAILS.
6. MIX GLUE ACCORDING TO MFR. SPECIFICATIONS AND APPLY TO BOTH SURFACES TO BE JOINED. FASTEN GUSSET PLATES IN PLACE WITH NAILS AS SHOWN ABOVE. ENOUGH GLUE SHOULD BE APPLIED SO IT DOWES OUT FROM JOINT WHEN NAILED.
7. GLUED TRUSS MAY BE MOVED CAREFULLY FROM THE JIG IMMEDIATELY AFTER GUSSET PLATES HAVE BEEN APPLIED.
8. TRUSSES MUST BE STACKED IN HORIZONTAL POSITION FOR AT LEAST 24 HOURS AFTER ASSEMBLY.
9. FABRICATE AT TEMPERATURE OF 70° OR SLIGHTLY HIGHER. KEEP MIXED GLUE BELOW 85°F.

NAILING SCHEDULE & GUSSET PLATE SIZE
1. NAILS HELICALLY THREADED 1/2.
2. USE NAIL SCHEDULE AS SHOWN ABOVE.
3. ALL NAILS MUST BE CLINCHED.
4. NAIL SIZE, TYPE, SPACING AND NUMBER ARE CRITICAL. USE A TEMPLATE TO ASSURE PROPER SPACING AND NUMBER OF NAILS AT EACH JOINT.
5. MINIMUM SPACING OF NAILS ALL JOINTS - 2" PARALLEL TO GRAIN - 2" ACROSS GRAIN AND AT EDGES.
6. SPACE NAILS FARTHER APART WHERE POSSIBLE.

BILLOF MATERIALS FOR ONE TRUSS LUMBER AND PLYWOOD

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<th>B.F.M.</th>
<th>2x6 @ 22&quot;</th>
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<th>1x4 @ 16&quot;</th>
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<td>74</td>
<td>40</td>
<td>6</td>
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1/2"-4"x8" SHEETS OF 3/8" EXTERIOR C.C. PLYWOOD

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING
Poultry House Case Laying
W. & W. '71 6131 sheet 3 of 3