

Penn State **Extension**

Corn Cribs

Agricultural and Biological Engineering

abe.psu.edu

No. IP 732-40

This Idea Plan is intended to provide educational information and ideas concerning corn cribs for storing ear corn. The following attached drawings are based on historical plans and may not meet design and construction standards for your area:

28' Pole Corn Crib (clear span) (PSU 400)
Corn Crib (USDA 5679)
Pole Corn Crib (USDA 5878)

If you decide to build a facility similar to any of these plans, be sure to check building requirements for your area. Your local building inspector, engineer, building supplier, or building contractor can help you determine what is a safe and legal facility for housing rabbits in your area. In addition to the rules and regulations covering design and construction of buildings, be sure to consider how you will handle the manure and potential nuisance problems for neighbors, including flies, odor, and noise.

The Department of Agricultural and Biological Engineering at Penn State has a variety of educational material available related to agricultural and biological engineering. This material is intended to help Pennsylvania farmers and others develop buildings and facilities for modern, environmentally-compatible farm facilities. The material can be used in conjunction with county extension staff, builders, suppliers, consulting engineers, the Natural Resources Conservation Service, financial management advisors, farm lenders, veterinarians, and others to assemble a facilities plan suitable for local conditions.

Publications are available in the areas of agricultural safety and health, animal housing systems, building and farmstead planning, crops and greenhouses, machinery systems and tractors, residential housing, soil and water resources, and solid waste management. Contact your county Penn State Extension Office for more information on these subjects. You can also obtain an index of publications concerning the above areas by calling, writing, faxing or e-mailing:

Department of Agricultural and Biological Engineering
246 Agricultural Engineering Building
University Park, PA, 16802-1909
Telephone: 814-865-7685
Fax: 814-863-1031
Email: agbioeng@psu.edu

For more information, the following comprehensive handbook covering design and construction of small pole buildings is available:

NRAES-01—Post-Frame Building Handbook: Materials, Design Consideration, Construction Procedure (1997) 78 pages, \$14.00 (Contact the NRAES below for more information)

NRAES, Cooperative Extension
PO Box 4557
Ithaca, NY 14852-4557
Telephone: (607)255-7654 Fax: (607)254-8770
Email: NRAES@cornell.ed

The following handbook concerning grain drying is available from:

MWPS-13 Grain Drying, Handling and Storage Handbook (1998) 88 pages, \$14.00

Midwest Plan Services (MWPS)
122 Davidson Hall
Iowa State University
Ames, IA 50011 USA
Phone: 515-294-4337, Fax: 515-294-9589
Email: mwps@iastate.edu

An OUTREACH program of the
College of Agricultural Sciences

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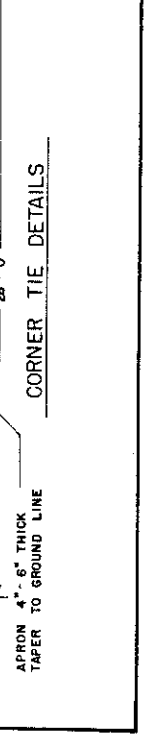
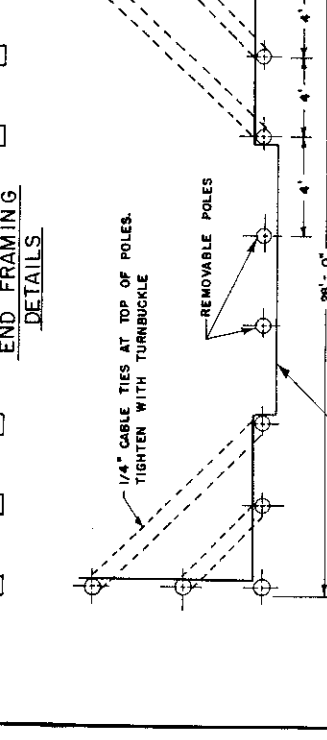
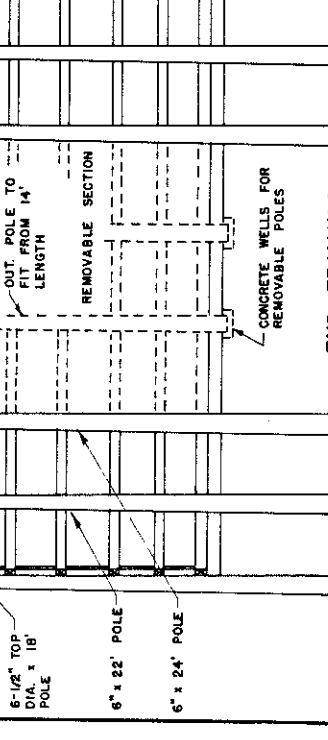
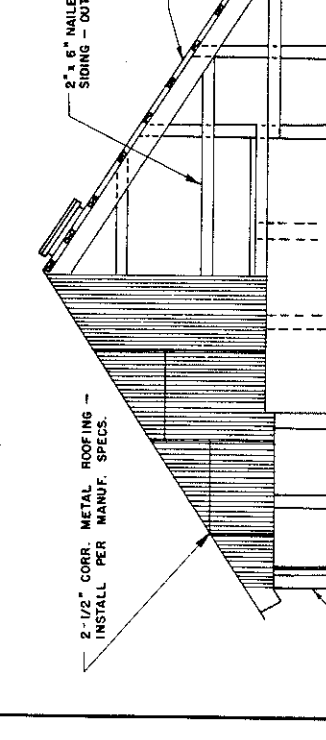
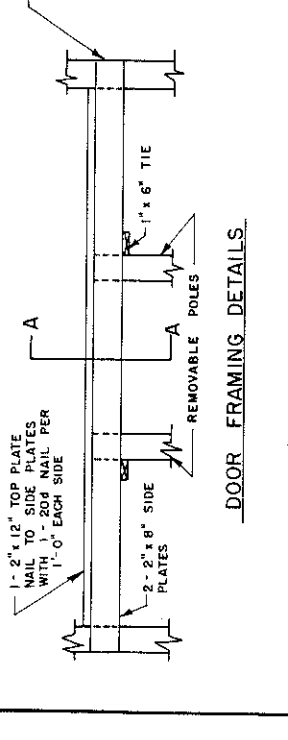
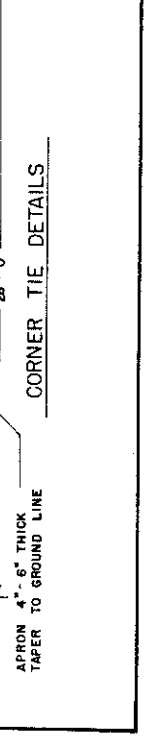
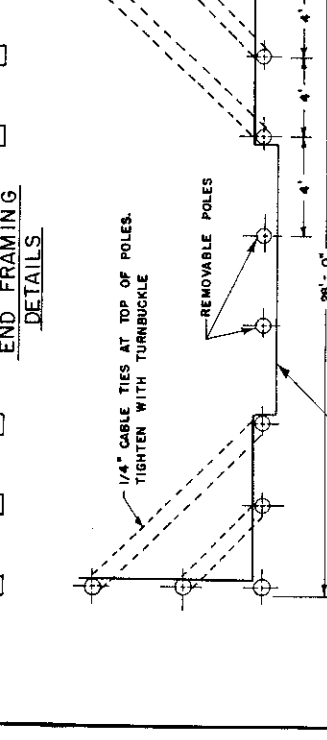
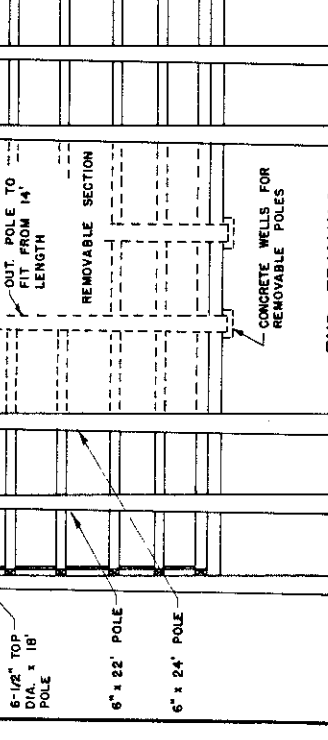
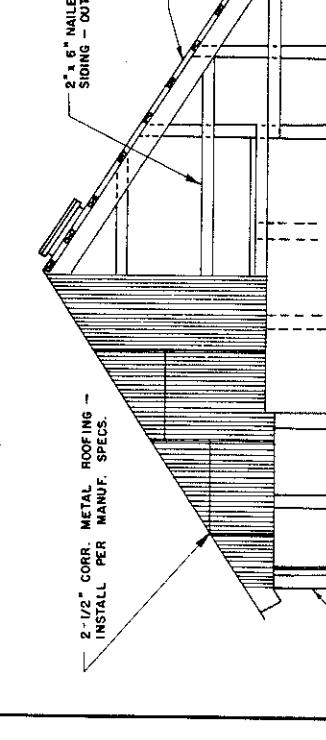
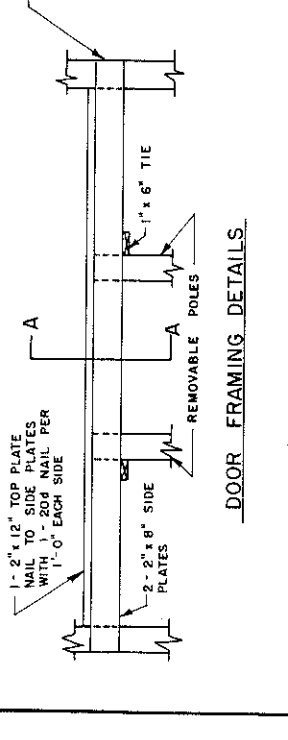
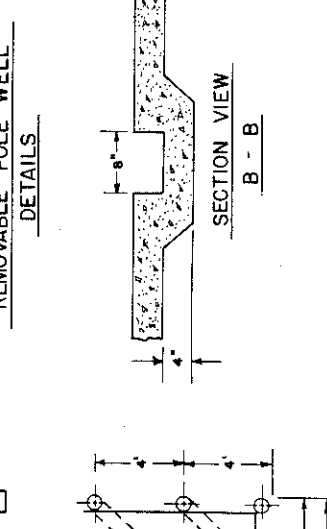
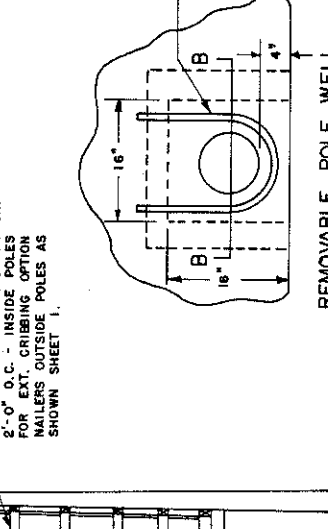
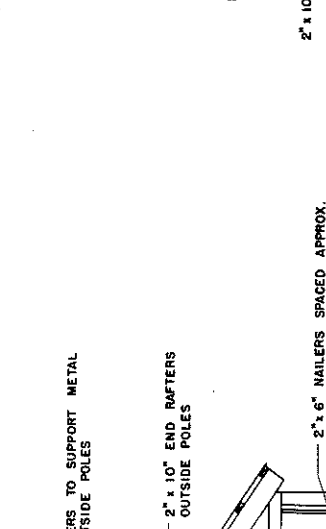
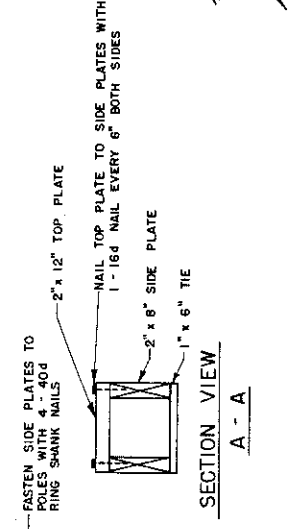
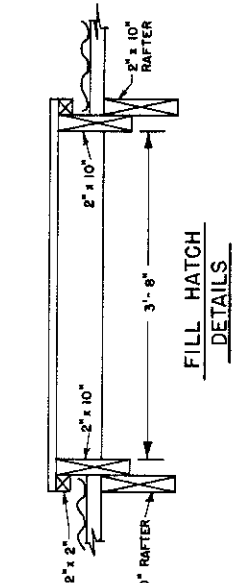
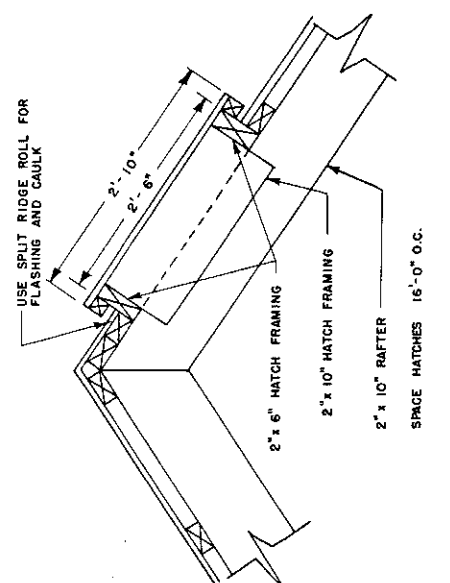
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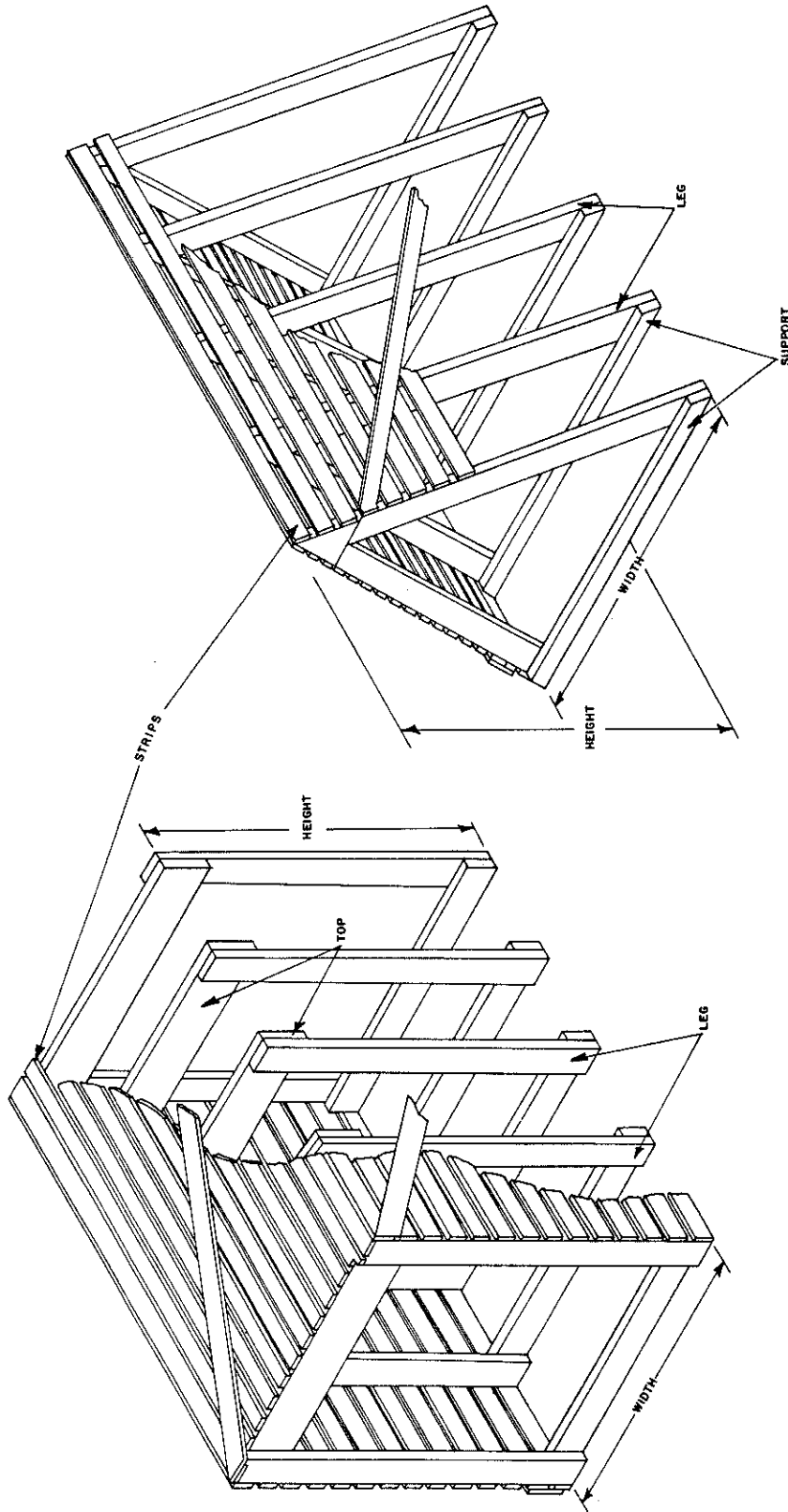
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This publication is available in alternative media on request.

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1-2x12 TOP PLATE NAIL TO SIDE PLATES WITH 1-20d NAIL PER 1'-0" EACH SIDE
 2-2x8 SIDE PLATES
 1x6 TIE
 REMOVABLE POLES
 2-1/2" CORR. METAL ROOFING - INSTALL PER MANUF. SPECS.
 6-1/2" TOP DIA. x 18" POLE
 6" x 22" POLE
 6" x 24" POLE
 2x12 CORR. METAL ROOFING - INSTALL PER MANUF. SPECS.
 2x6 NAILERS TO SUPPORT METAL SIDING - OUTSIDE POLES
 2x10 END RAFTERS OUTSIDE POLES
 2x6 NAILERS SPACED APPROX. 2'-0" O.C. - INSIDE POLES FOR EXT. CRIBBING OPTION NAILERS OUTSIDE POLES AS SHOWN SHEET 1.
 3/8 x 4'-0" REINFORCING ROD
 REMOVABLE POLE WELL
 DETAILS
 SECTION VIEW B - B
 1/4" CABLE TIES AT TOP OF POLES. TIGHTEN WITH TURNBUCKLE
 REMOVABLE POLES
 28'-0"
 APRON 4" - 6" THICK TAPER TO GROUND LINE
 CORNER TIE DETAILS
 END FRAMING DETAILS
 REMOVABLE SECTION
 CONCRETE WELLS FOR REMOVABLE POLES
 OUT. POLE TO FIT FROM 14" LENGTH
 2x12 CORR. METAL ROOFING - INSTALL PER MANUF. SPECS.
 2x6 HATCH FRAMING
 2x10 HATCH FRAMING
 2x10 RAFTER
 SPACE MATCHES 16'-0" O.C.
 2x10 RAFTER
 2x6 RAFTER
 FILL HATCH DETAILS
 1-2x12 TOP PLATE NAIL TO SIDE PLATES WITH 1-20d NAIL PER 1'-0" EACH SIDE
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 CONCRETE WELLS FOR REMOVABLE POLES
 OUT. POLE TO FIT FROM 14" LENGTH



AIR DUCT

BUILDING LENGTH FT.	CAPACITY BU.	FAN SIZE CFM @ 3/4" S.P.	AIR DUCT SIZE — TRIANGULAR		AIR DUCT SIZE — RECTANGULAR				
			WIDTH (OUTSIDE)	HEIGHT (OUTSIDE)	WIDTH (OUTSIDE)	HEIGHT (OUTSIDE)	AREA SQ. FT.	MEMBER SIZES LEG TOP	
28	4,750	24,000	6'-6"	7'-0"	4'-6"	5'-3"	16.6	2" x 6"	2" x 8"
32	5,400	27,000	7'-0"	7'-0"	5'-0"	5'-6"	18.0	2" x 6"	2" x 10"
36	6,000	30,000	7'-6"	7'-0"	5'-0"	5'-9"	19.0	2" x 6"	2" x 10"
40	6,650	33,500	8'-6"	7'-0"	5'-6"	6'-0"	22.5	2" x 6"	2" x 10"

THE PENNSYLVANIA STATE UNIVERSITY
AGRICULTURAL EXTENSION SERVICE

28' POLE CORN CRIB
(CLEAR SPAN)

TRGD. BY: S.L.B.
CHKD. BY: J.A.M.
DATE: NOV. 1971

ORDER NO.
732 - 400

SHEET 3 OF 3

