HOW TO BUILD FARM BUILDINGS *that last Longer!*

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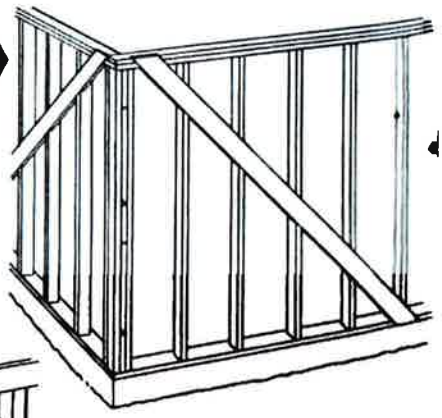
BETTER FARM BUILDINGS ARE BUILT OF WOOD

More than 90% of all farm buildings in the United States are made of wood. Even in view of such an impressive record, a more profitable use of lumber on the farm is possible through application of certain good building practices. These practices, plus the use of West Coast Woods—Douglas Fir, West Coast Hemlock, Western Red Cedar and Sitka Spruce—assure better buildings that last longer.

TWO TYPES OF CONSTRUCTION



STUD AND JOIST buildings have small dimension members, usually 2x4 or 2x6, evenly spaced along the walls at 16" or 24" intervals. The weight of the building is distributed uniformly along a continuous foundation.

POST AND GIRT buildings have posts 8 feet to 14 feet apart with horizontal girts to hold the siding in place. In this type of construction the building weight is concentrated at the posts.

In either type of structure, adequate foundations, good bracing and strong joints pay off in better service and longer building life.

The following pages deal with principles of good construction which, in some cases, should be modified to meet local conditions.

FOUNDATION FORMS

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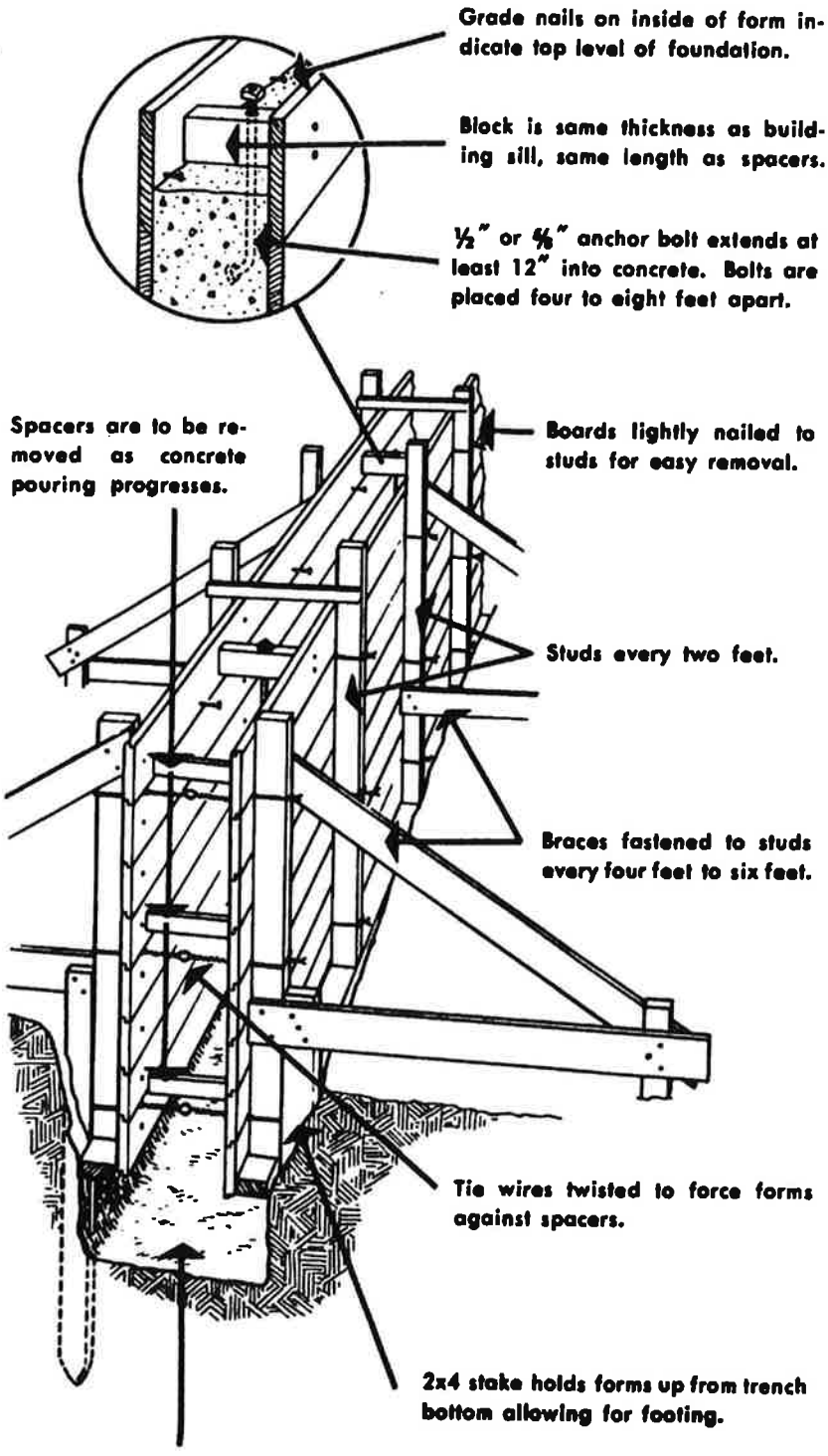

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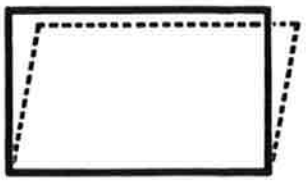
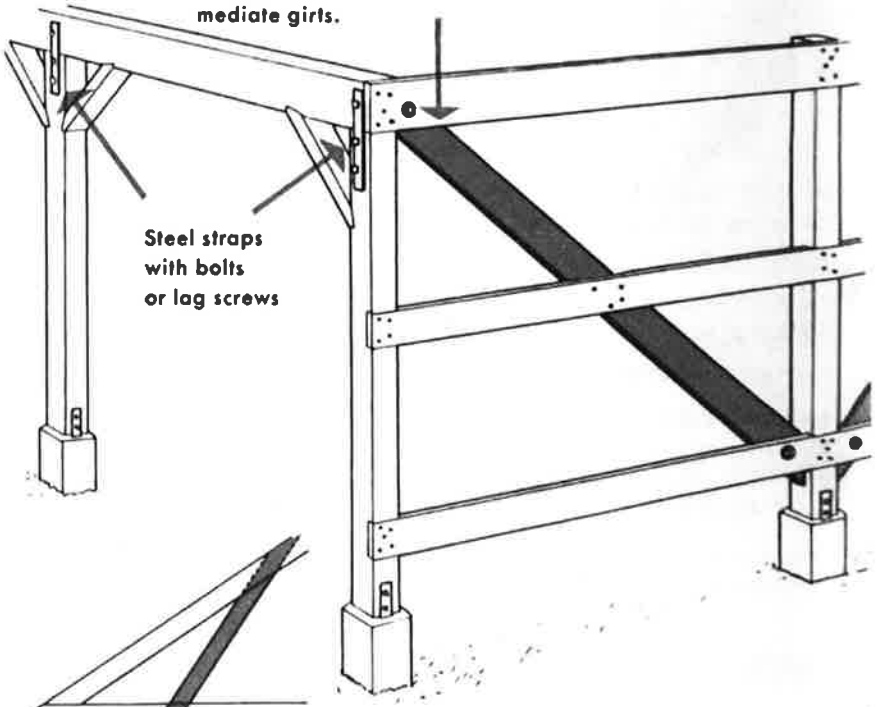
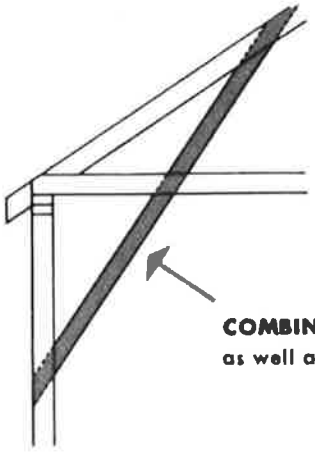
WALL BRACING



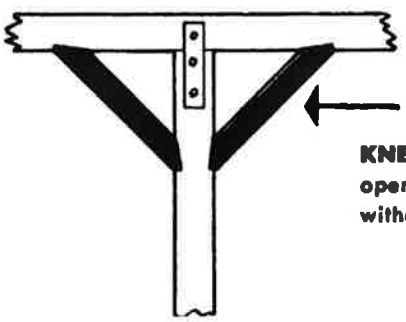
Diagonal braces at approximately a 45° angle — not the horizontal and vertical framing members — provide resistance to wind pressures and prevent racking.

DIAGONAL WALL BRACES in post and girt buildings are continuous from the top to the bottom girt. These braces should be heavily spiked or bolted at ends and intermediate girts.





COMBINATION BRACES tie down the roof as well as bracing the wall against leaning.



KNEE BRACES, used to brace building openings, should be as long as possible without restricting the opening.

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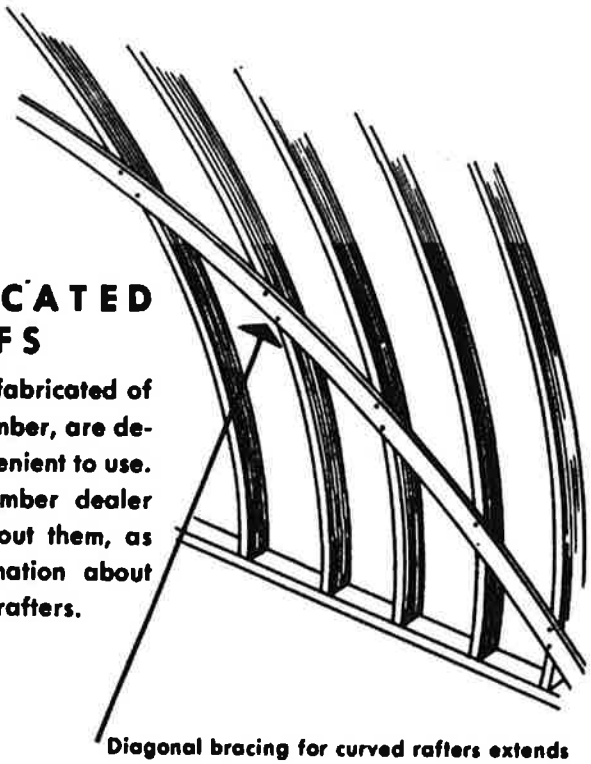
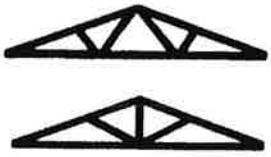
PREFABRICATED ROOFS

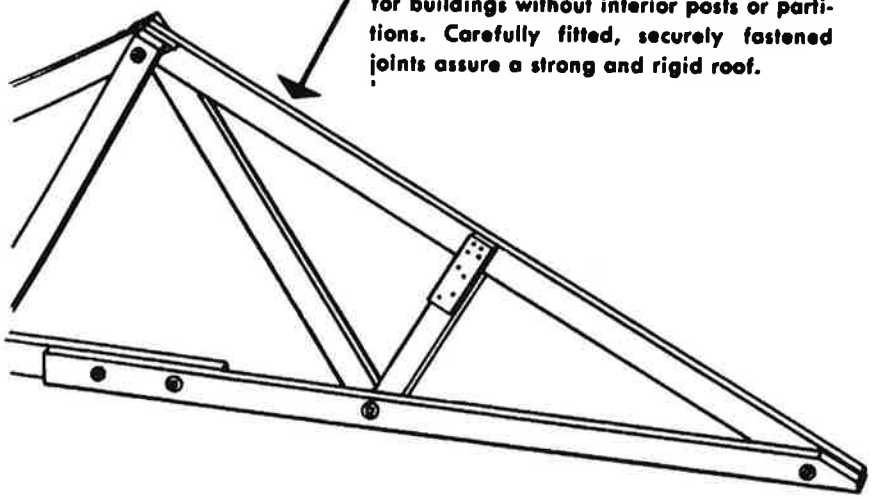
Curved rafters, prefabricated of glued laminated lumber, are dependable and convenient to use. Ask your retail lumber dealer for information about them, as well as for information about fabricated trussed rafters.



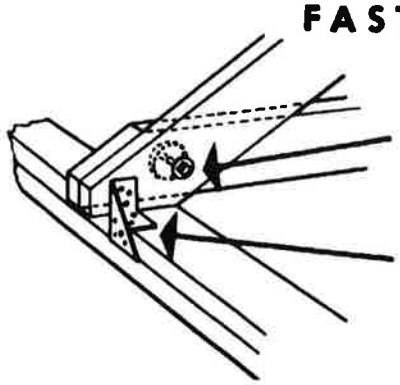
Diagonal bracing for curved rafters extends from the plate to the ridge, nailed to the underside of rafters.



Prefabricated trussed rafters are designed for buildings without interior posts or partitions. Carefully fitted, securely fastened joints assure a strong and rigid roof.



FASTENERS



Bolts and ring connectors are used in the joints of larger fabricated trusses.

Trip-L-grip framing anchors make stronger connections.

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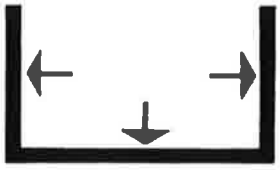
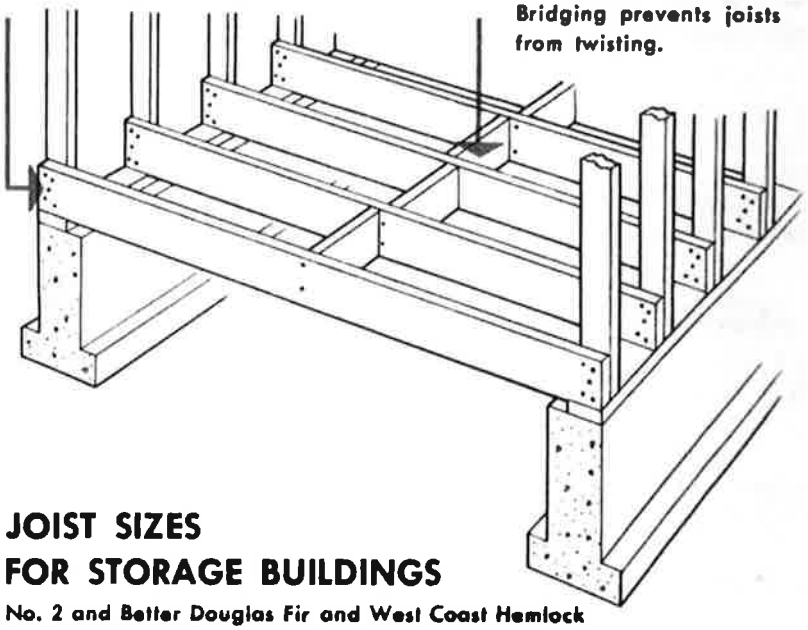
STORAGE BUILDINGS



Floors and walls of corncribs and granaries need special support to withstand both the great downward and outward pressure of stored grain.

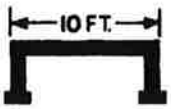
Well-spiked lap-joints prevent walls from being forced apart.

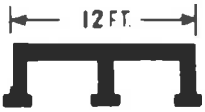
Bridging prevents joists from twisting.



JOIST SIZES FOR STORAGE BUILDINGS

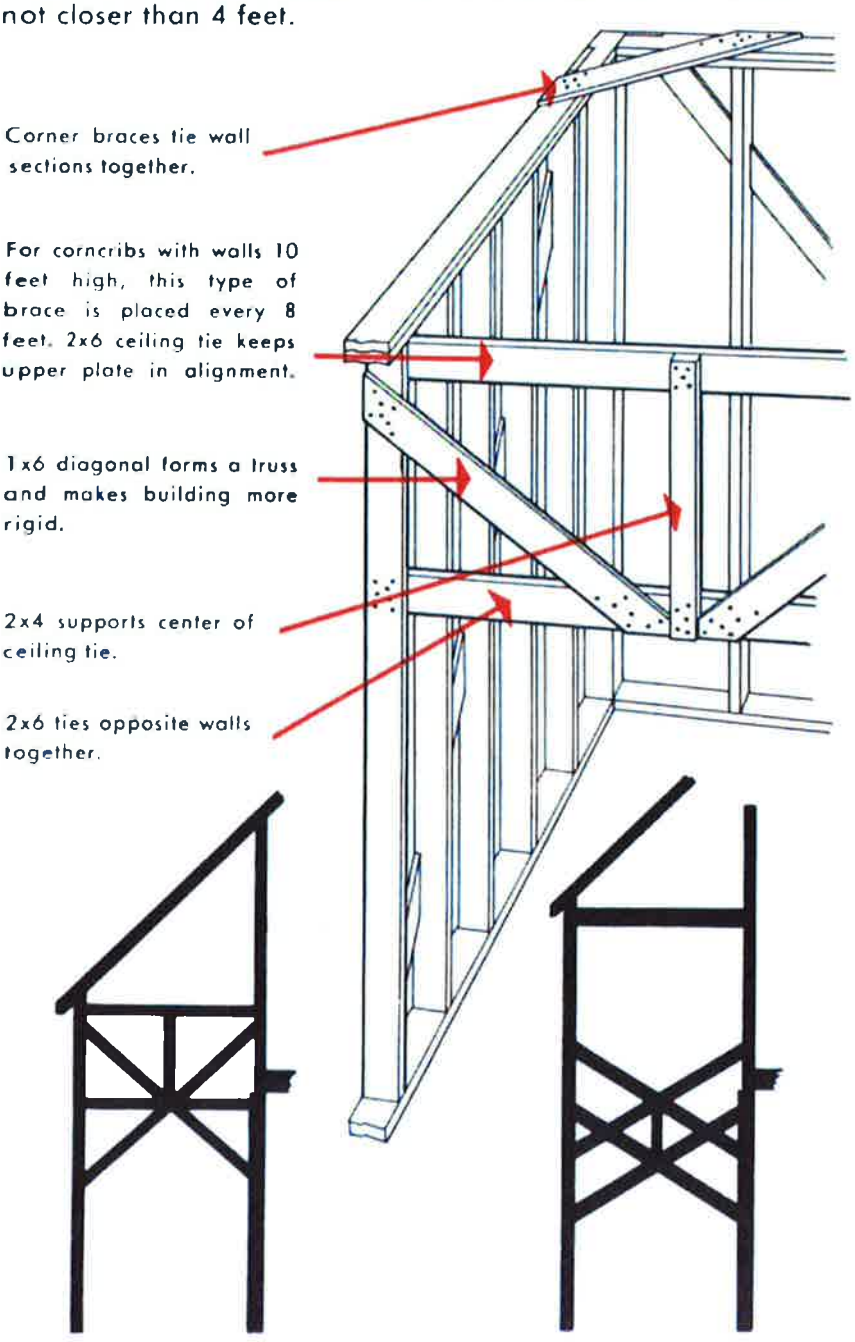
No. 2 and Better Douglas Fir and West Coast Hemlock

Foundation wall under each end of span. 	Grain Depth	Size of Joists	Spacing of Joists
	4 feet	2 x 12 2 x 10	24 inches 16 inches
	6 feet	2 x 12 2 x 10	16 inches 12 inches
	8 feet	2 x 12	12 inches

Foundation wall under each end and center of span. 	Grain Depth	Size of Joists	Spacing of Joists
	8 feet	2 x 12 2 x 8	24 inches 12 inches
	12 feet	2 x 12 2 x 10	16 inches 12 inches
	16 feet	2 x 12	12 inches

CORNCRIBS

Crossties between studs resist outward pressure of corn. Ends of crossties should be heavily nailed or bolted. Bottom of crossties should be high enough for a man to walk under. Must be designed to support load of settling corn and spaced not closer than 4 feet.



For cribs with walls 14 feet high, this type of brace is spaced every 6 feet. Mem-

For cribs with walls 18 feet high, this type of brace is spaced every 6 feet. 2x10 ceiling tie. All other mem-

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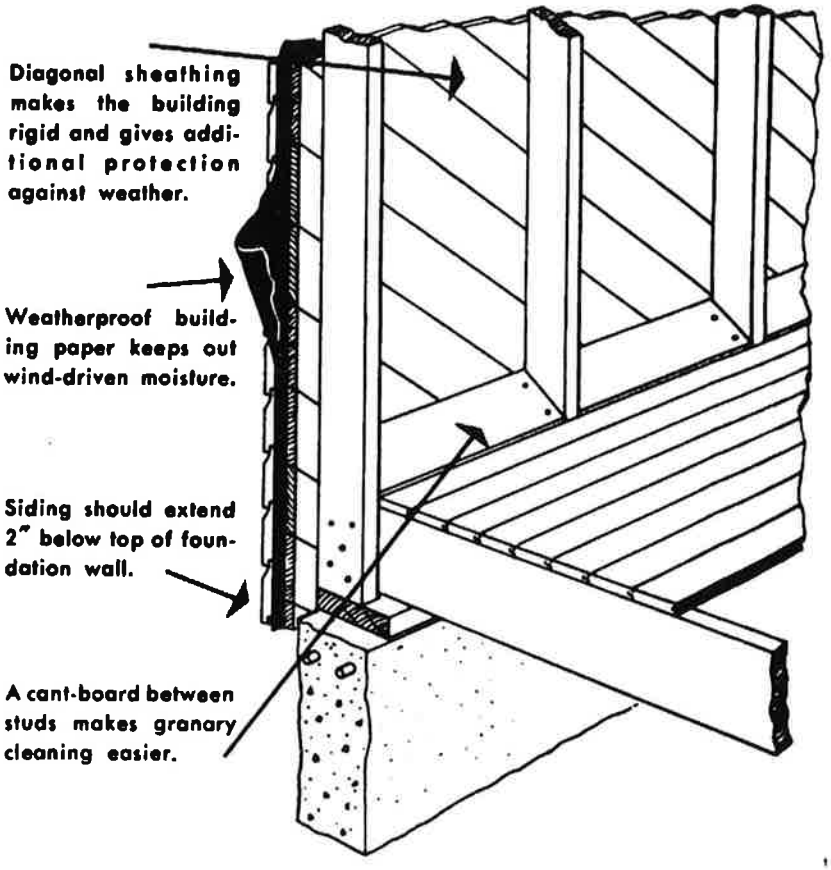
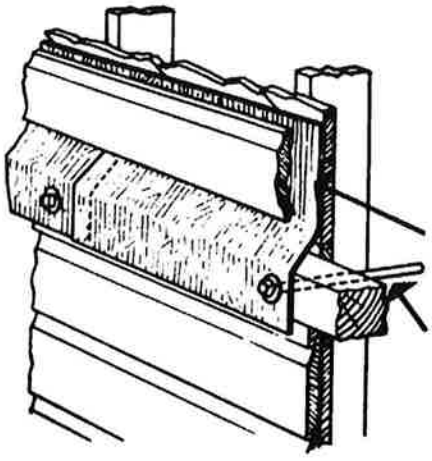
Wood granaries protect against driving storms. They should be rigid and weatherproof. Double wall construction gives a sturdy building, assuring years of service and protection for crops.





WALL TIES TO WITHSTAND GRAIN PRESSURES

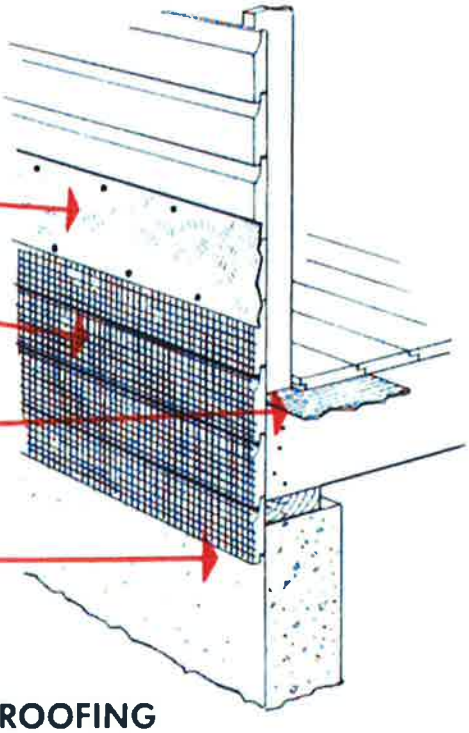
Metal flashing covers beam and extends at least 6" under siding.

Rods or heavy wire ties extend from wall to wall.

PROTECTION

Against Rodents and Weather

RAT-PROOFING



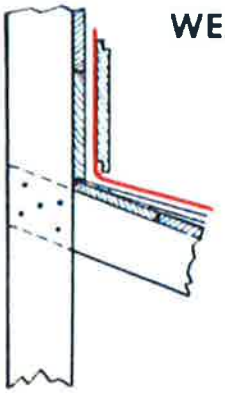
Metal strip 8″ wide around the building.

Heavy wire mesh 24″ wide around the building.

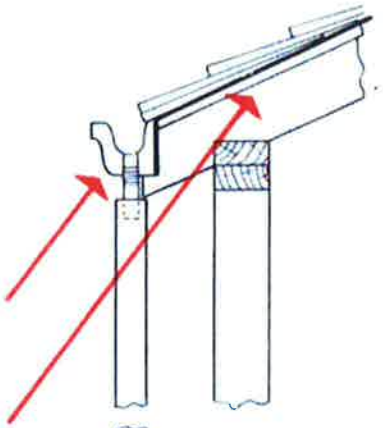
Floor is protected with wire mesh or metal strip.

Lower edge 2″ below top of foundation.

WEATHER-PROOFING

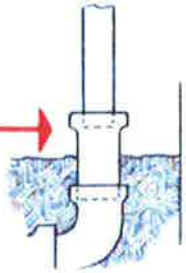


Use metal flashing above all openings and at junctions of roof surfaces. Flashing should extend at least 6″ underneath siding for maximum protection.



Gutter placement important to catch maximum roof drainage.

Building paper under shingles should extend three feet back from eaves.



Sufficient downspouts and drain tiles to carry water away from the building and prevent undermining foundation.

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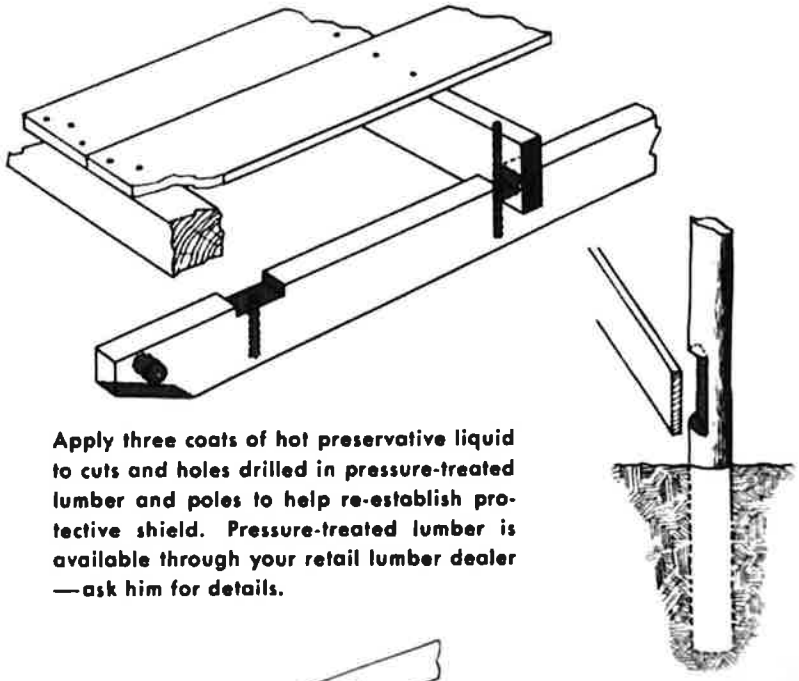
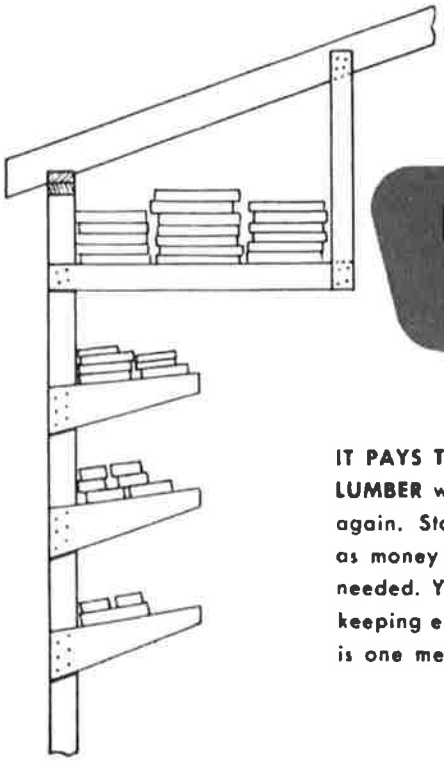
TREATED LUMBER

Some lumber, such as Western Red Cedar, has natural decay resistant qualities making it well suited for certain uses such as sills, skids, posts and splash boards. Other lumber put to such use should be pressure-treated in order to resist barnyard acids and remain durable in or on the ground.



Apply three coats of hot preservative liquid to cuts and holes drilled in pressure-treated lumber and poles to help re-establish protective shield. Pressure-treated lumber is available through your retail lumber dealer —ask him for details.



LUMBER STORAGE

IT PAYS TO KEEP A WORKING STOCK OF LUMBER which can be used over and over again. Stored in a dry place, it is as good as money in the bank; always ready when needed. You can save time and money by keeping extra lumber on hand. Shown here is one method of building a storage rack.

PROPER PLANNING

Farm building plans designed to meet the needs of your locality can be obtained from your State Extension Service, County Agent or Retail Lumber Dealer. Careful compliance with these plans will insure maximum service from your buildings at minimum dollar cost.

Helpful bulletins on farm planning and construction are available at nominal cost from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Carpentry	(T. M. 5-226)	55c
Farm Fences	(Farm Bul. 1832)	20c
Farm Plumbing	(Farm Bul. 1426)	10c
Foundations for Farm Buildings	(Farm Bul. 1869)	15c
Painting on the Farm	(Farm Bul. 1452)	15c
Rat Proofing	(Cons. Bul. 19)	10c
Storage of Ear Corn on the Farm	(Farm Bul. 2010)	10c
Storage of Small Grains and Shelled Corn on the Farm	(Farm Bul. 2009)	10c
Technique of House Nailing		15c
Use of Concrete on the Farm	(Farm Bul. 1772)	15c

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WEST COAST WOODS meet every test for modern farm buildings

Farm buildings of West Coast Woods have stood the test of time. Adaptability and ease-of-use make West Coast Woods the most practical of all farm building materials. The economy and efficiency of farm buildings of West Coast Woods has been proved over the years by relatively low initial cost, inexpensive maintenance and long life — just a few of the reasons why 90% of America's farm buildings are built of wood.

Your retail lumber dealer knows West Coast Woods, and can give you many valuable pointers on the proper use of each of the four species...

DOUGLAS FIR • WEST COAST HEMLOCK
WESTERN RED CEDAR • SITKA SPRUCE

For additional free copies of this booklet see your retail lumber dealer or write:

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