1:20.3-scale elevated watchman's tower

by Ted Stinson | Wiscasset, Maine

This is a generic, 1:20.3-scale watchman's tower. It is based on drawings that appeared in the August 1964 issue of *Model Railroader*. On a small, narrow-gauge railroad, it could serve just as well as an interlocking tower for a system of switches at a throat yard.

Construction

Begin construction by cutting out the subsides from $\frac{1}{8}$" plywood. Also, cut a base from $\frac{1}{4}$" plywood. Make 11 identical window sashes using $\frac{1}{16}$" stripwood.

Now make the four subwalls. Use the precut $\frac{1}{8}$" plywood parts for these subassemblies. Add the $\frac{1}{4}$"-wide clapboard siding. If you want to save a little money, make the clapboards from cereal-box cardboard. Cut strips about $\frac{5}{16}$" wide. You will need about 40'. One big box of corn flakes should work fine.

Also cut about 18" of $\frac{1}{16}$"-wide stock to be run around the base of each wall as a starter. I would glue the strips down using carpenter's glue, which will be quite waterproof once dry. The cardstock can be waterproofed with three coats of clear lacquer, which comes in spray cans and will dry quickly. It is easier to paint the walls at this time.

Make the window sashes and prepaint them before gluing the glazing to the back surface. Fit and glue the windows in place.

Now, assemble the walls, fitting the assembled walls over the base. If you want to fit in a floor, cut a square piece of $\frac{1}{8}$" ply that is $3\frac{15}{16}$" on a side. Add some square stripwood, about 4" long, at the corners of the tower to support the floor, and fit the floor in place.

When the substructure has been assembled to your satisfaction, make the roof, using the two roof panels you cut. Add the roof supports, which should be placed so that the roof is centered when set in place. Add the $\frac{1}{16}$" x $\frac{1}{4}$" stripwood around the edges of the roof. Sand the roof smooth and apply $1\frac{1}{4}$"-wide strips of 330-grit wet-or-dry sandpaper to represent the tar-paper roof. Details, such as the smokehead, can now be added. They should be sealed with clear lacquer and painted before gluing in place.

Now make the entrance stairs. Use the appropriate-sized stripwood and waterproof glue. Once assembled, seal with clear lacquer and paint to suit. The $\frac{1}{4}$" x $1\frac{1}{2}$" x $3\frac{1}{4}$" plywood base should be painted to look like concrete. Once finished, the stairs should be fitted and glued to the tower. Except for installing it on your railroad, you're done.

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This is an online supplement to the June 2007 issue of *Garden Railways* magazine. To purchase previously published paper plans, see the list of those available at *www.side street.info*

A kit for this watchman's tower (#NNG287), including laser-cut windows, is available from Northeast Narrow Gauge for $60 + $6.00 s&h. Order from Northeast Narrow Gauge, PO Box 191, Wiscasset ME 04578. Web site: *www.nemodel.com*

Are you working in a different scale?

If you are working in 1:32 scale, reduce these drawings to 63%.
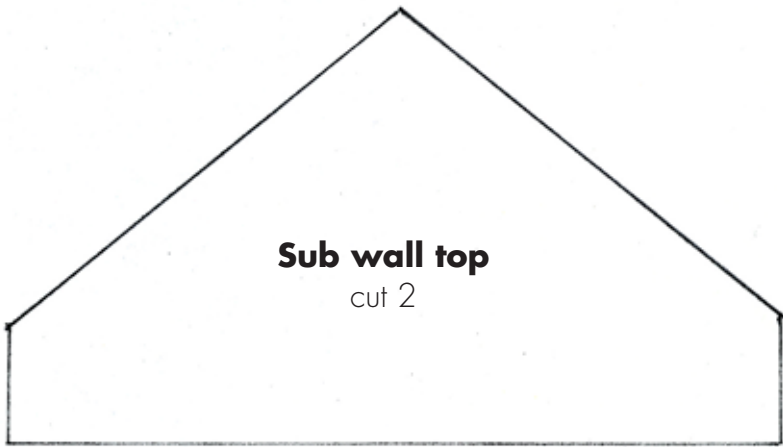If you are working in 1:29 scale, reduce these drawings to 70%.
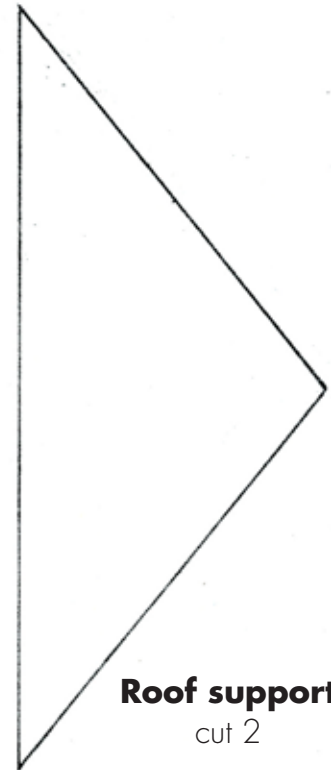If you are working in 1:24 scale, reduce these drawings to 88%.
If you are working in 1:22.5 scale, reduce these drawings to 90%.
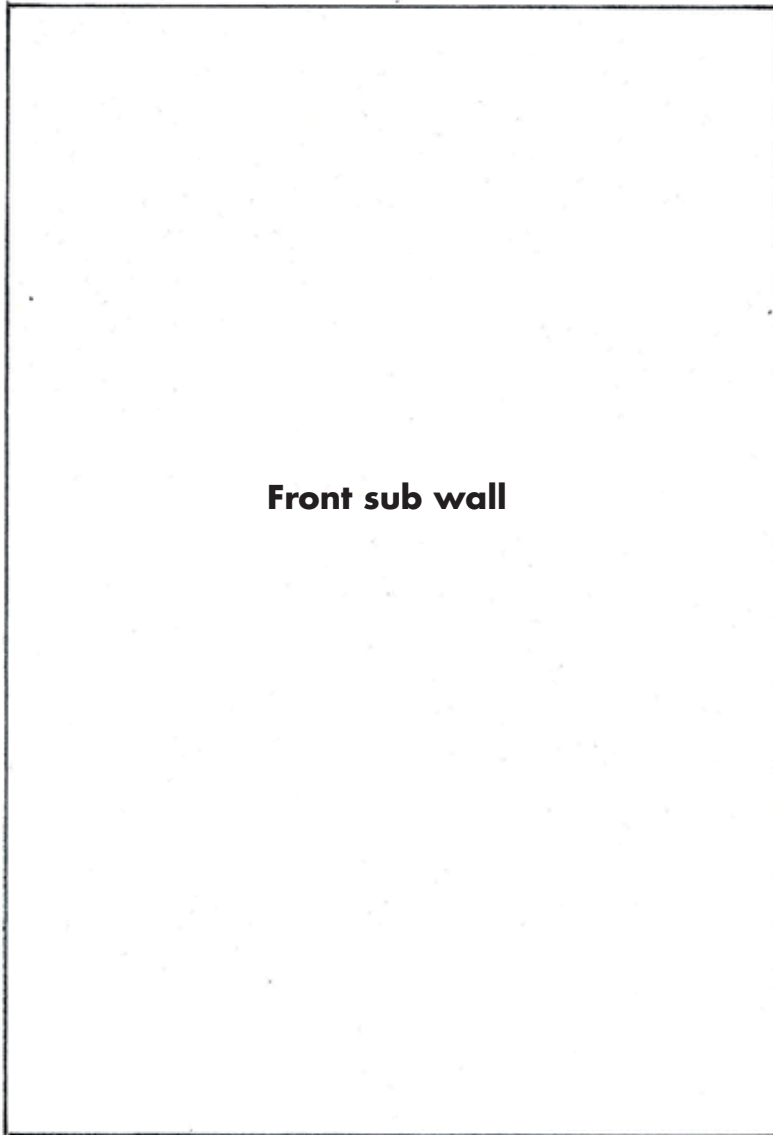If you are working in 16mm scale, enlarge these drawings to 107%.
If you are working in 1:13.7 ($\frac{7}{8}$") scale, enlarge these drawings to 148%.
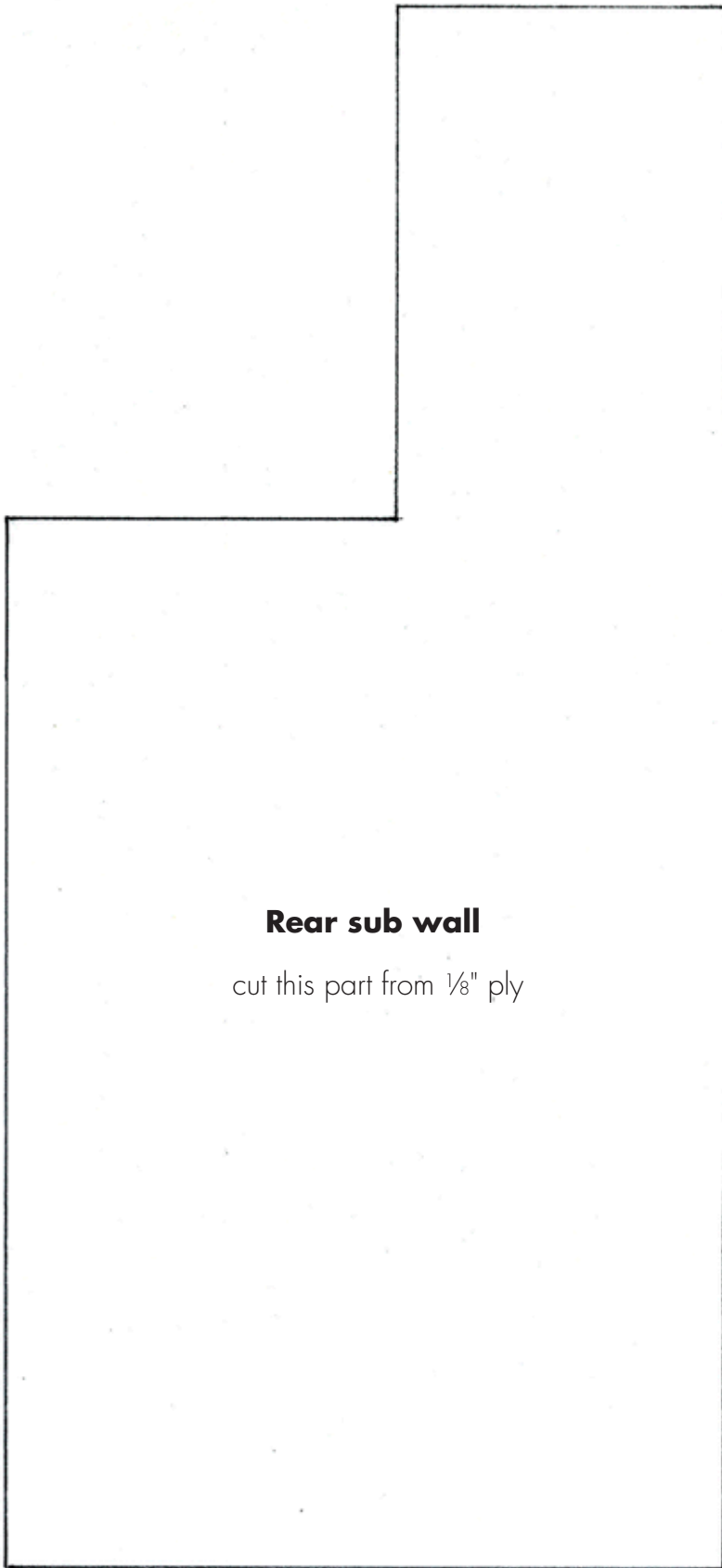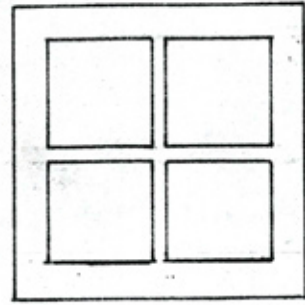
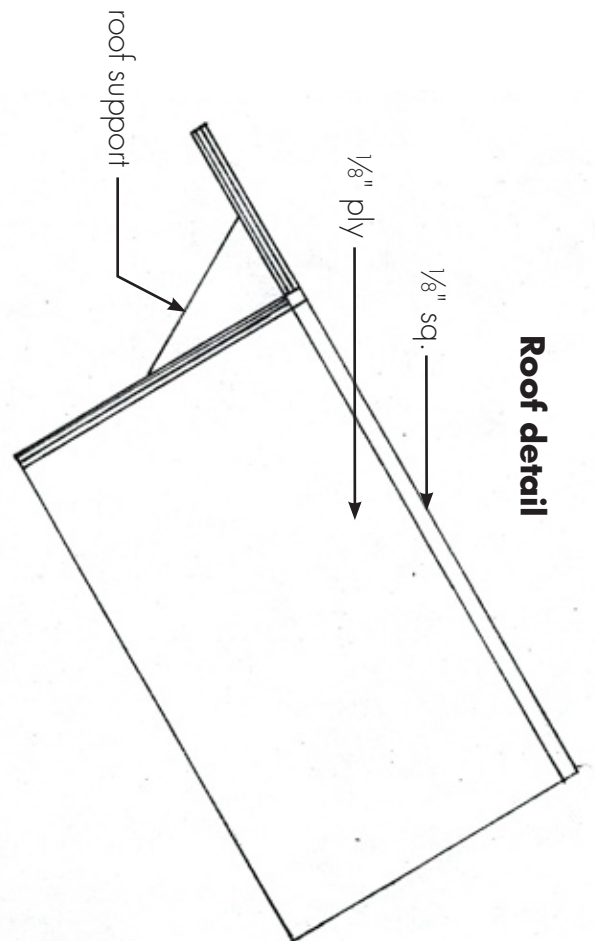**Sub wall top**
cut 2

Roof support
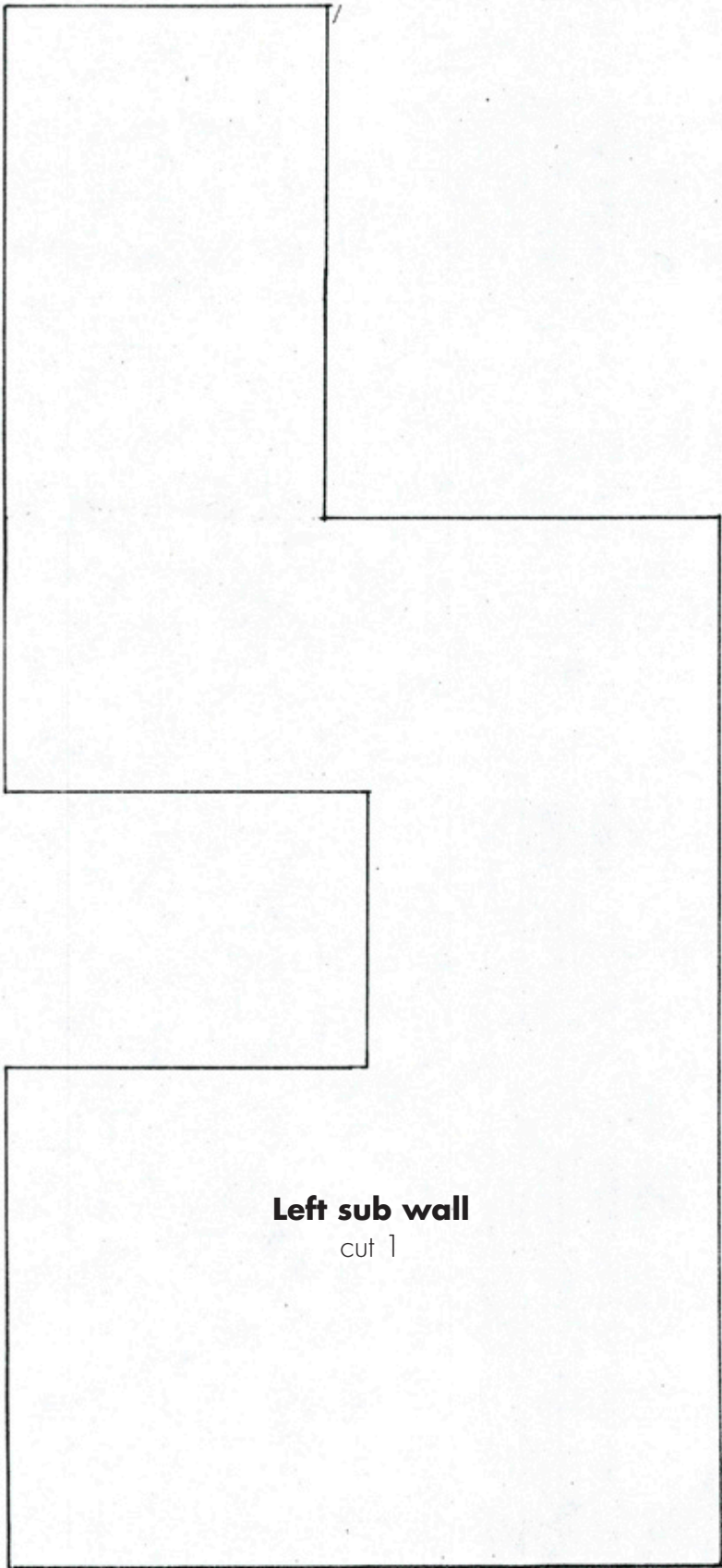cut 2

Front sub wall

cut these parts from ⅛" ply

make 11 windows from
1⁄16" strip
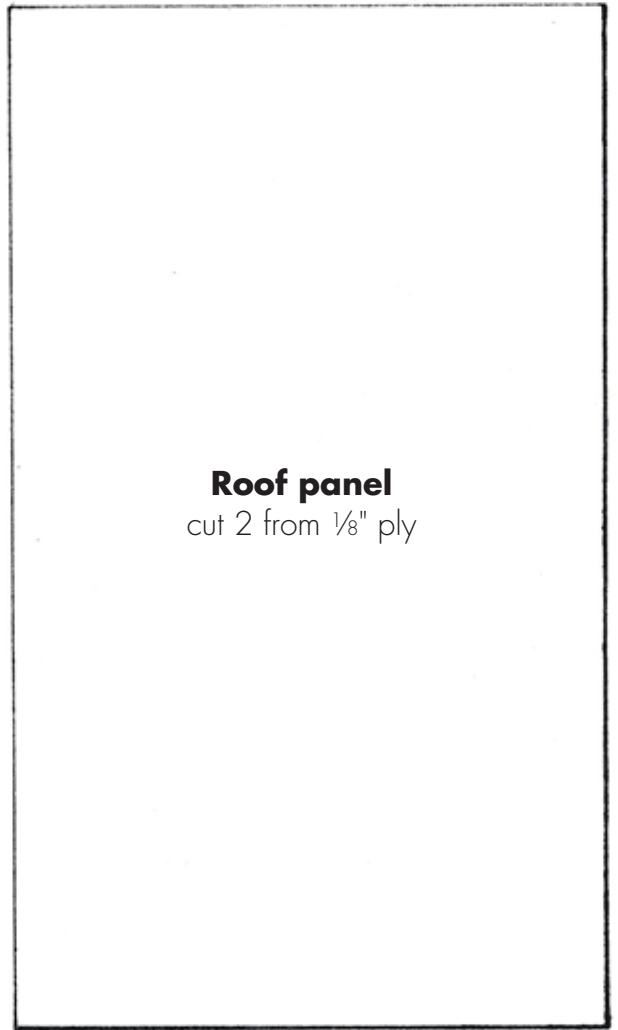
roof support

1⁄8" ply

1⁄8" sq.

Roof detail

Rear sub wall

cut this part from 1⁄8" ply

Roof panel
cut 2 from ⅛" ply
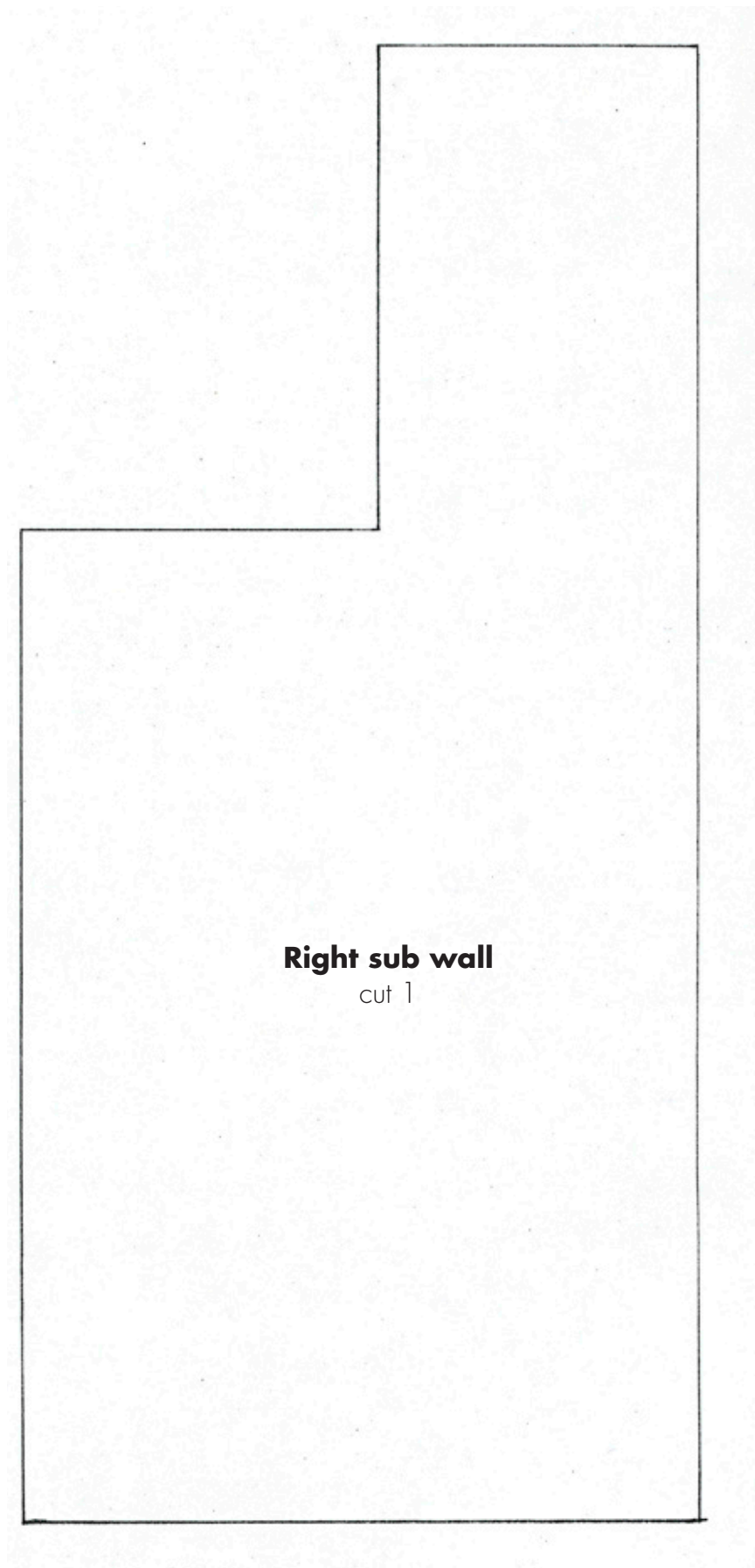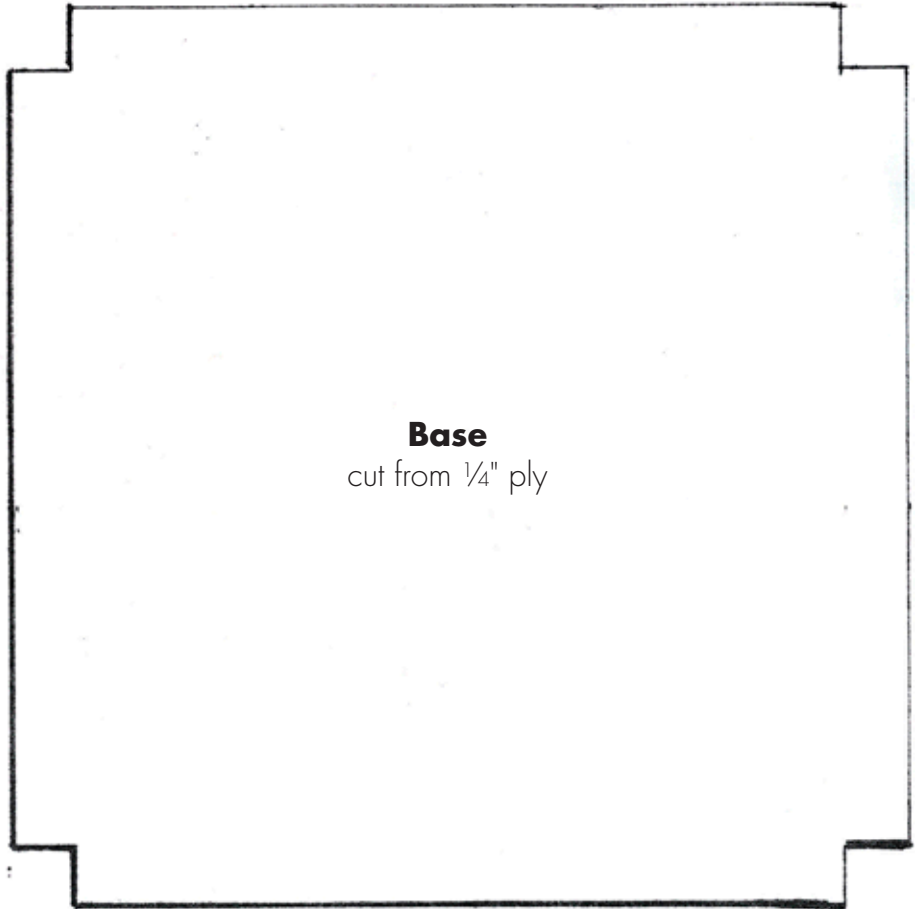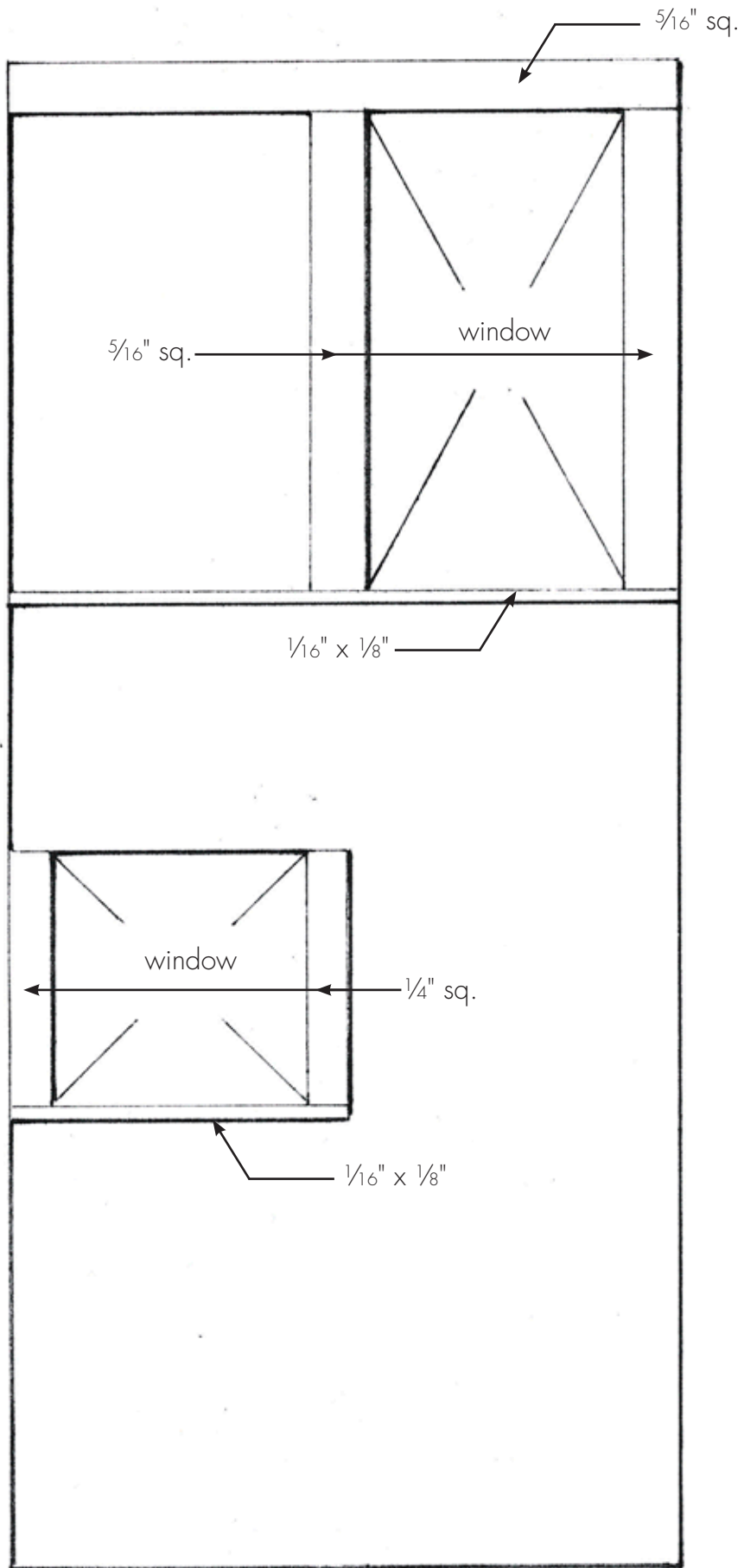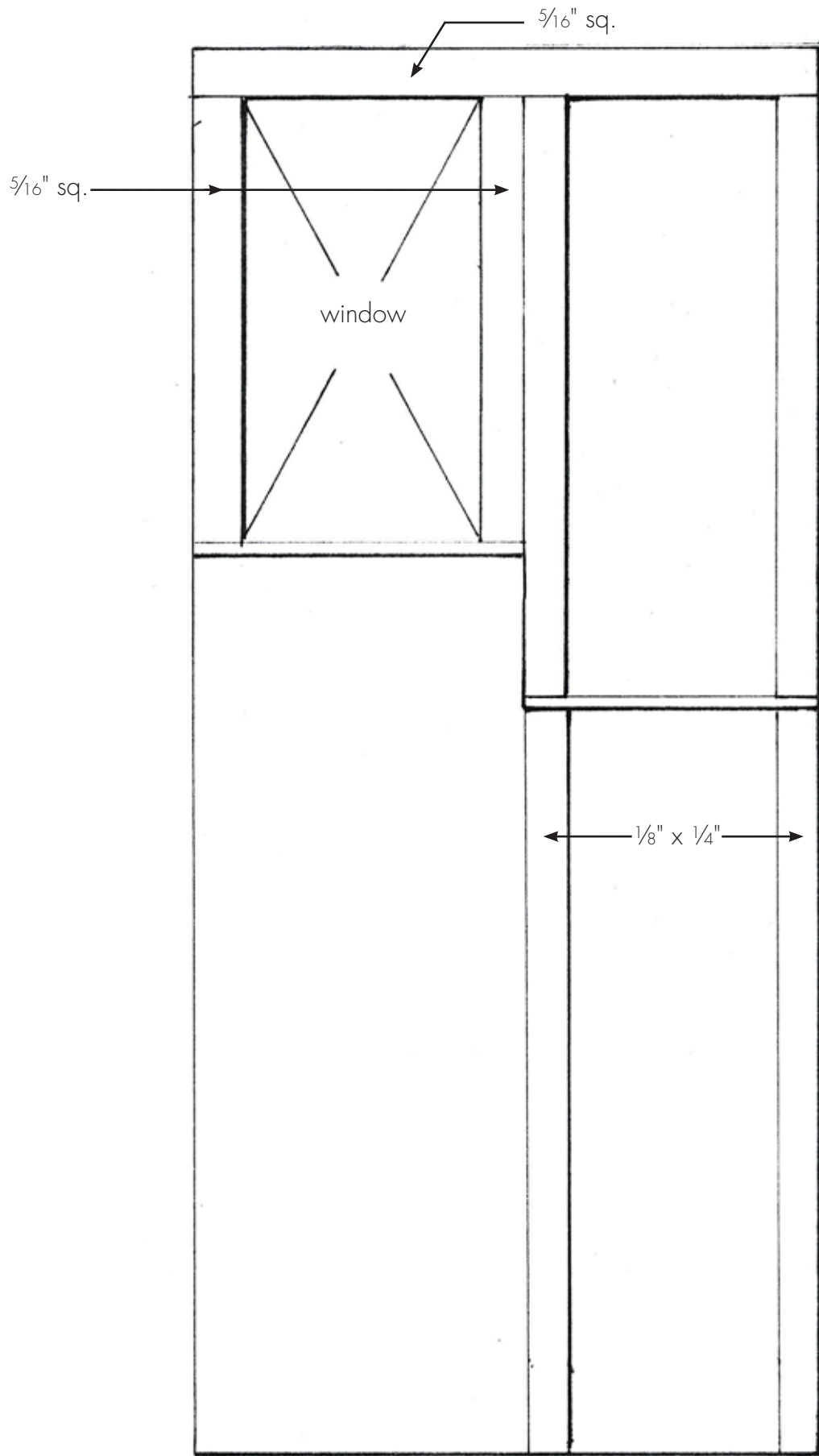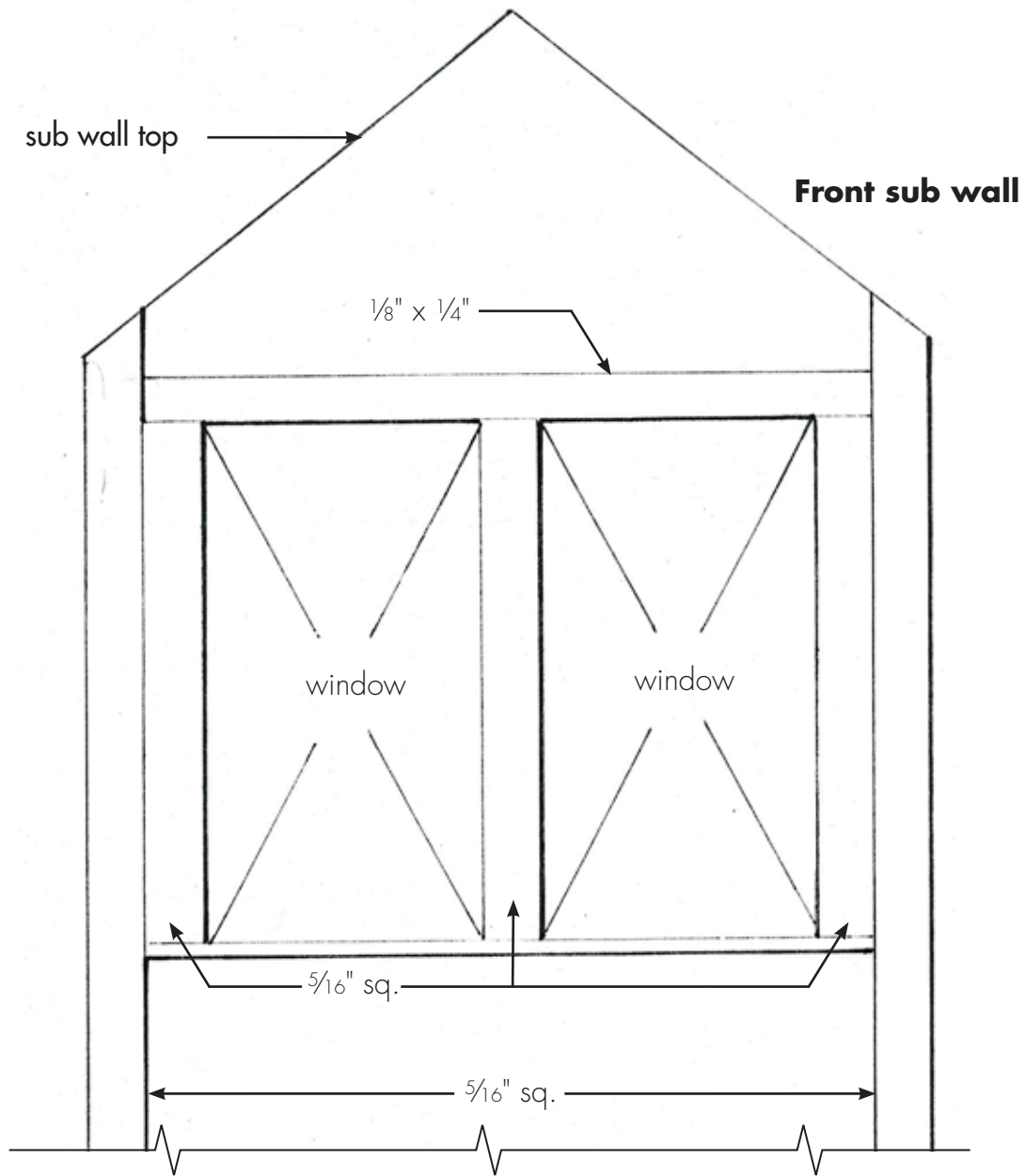
Left sub wall
cut 1

Right sub wall
cut 1

Base
cut from ¼" ply

5/16" sq.

5/16" sq. → window →

1/16" x 1/8"

window ¼" sq.

1/16" x 1/8"

Left sub side

⁵⁄₁₆" sq.

⁵⁄₁₆" sq.

window

⅛" x ¼"

Right sub side

sub wall top →

Front sub wall

⅛" x ¼"

window   window

⁵⁄₁₆" sq.

⁵⁄₁₆" sq.

Front sub wall

⅛" × ¼"

Rear sub wall

window

3⁄16" x 5⁄16"

5⁄16"sq

1⁄16" x 1⁄8"

Rear sub wall

Front side

¼6" x ¼" stripwood

¼6"-thick, ¼" space
clapboard siding
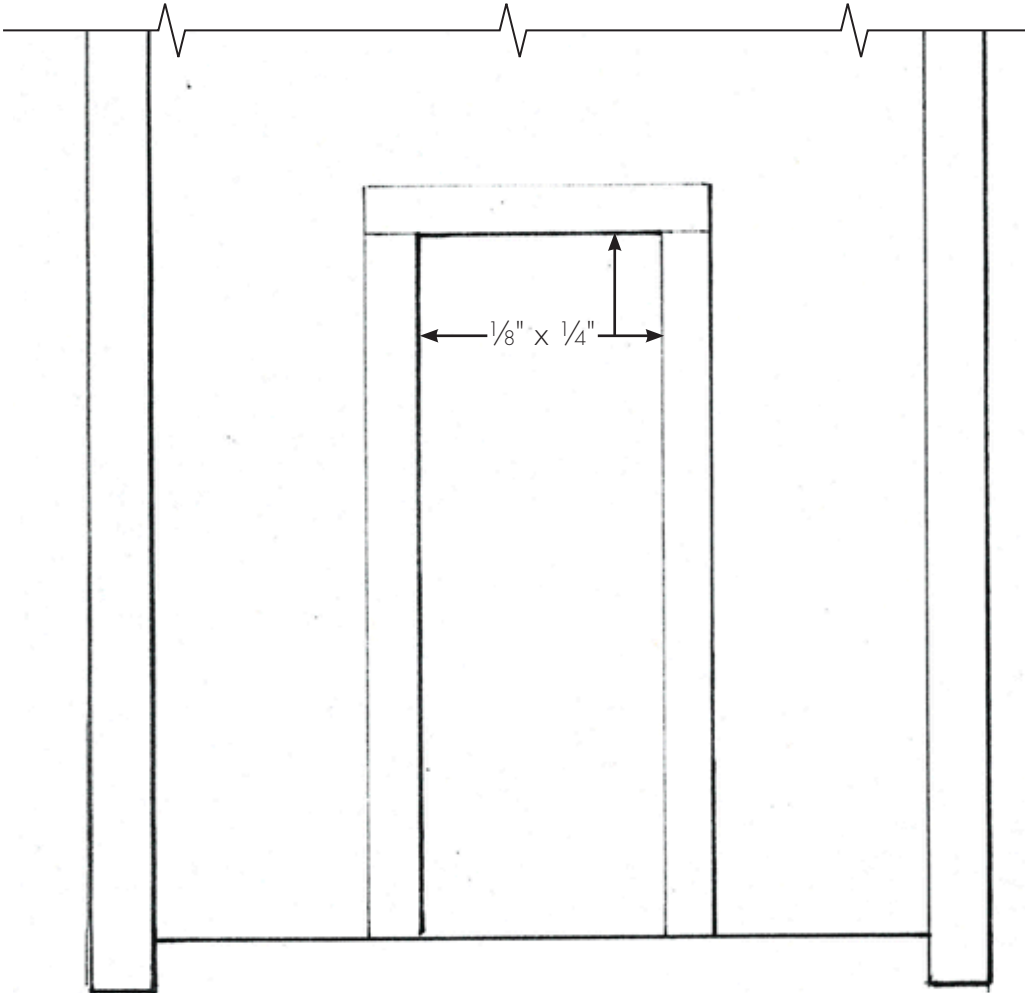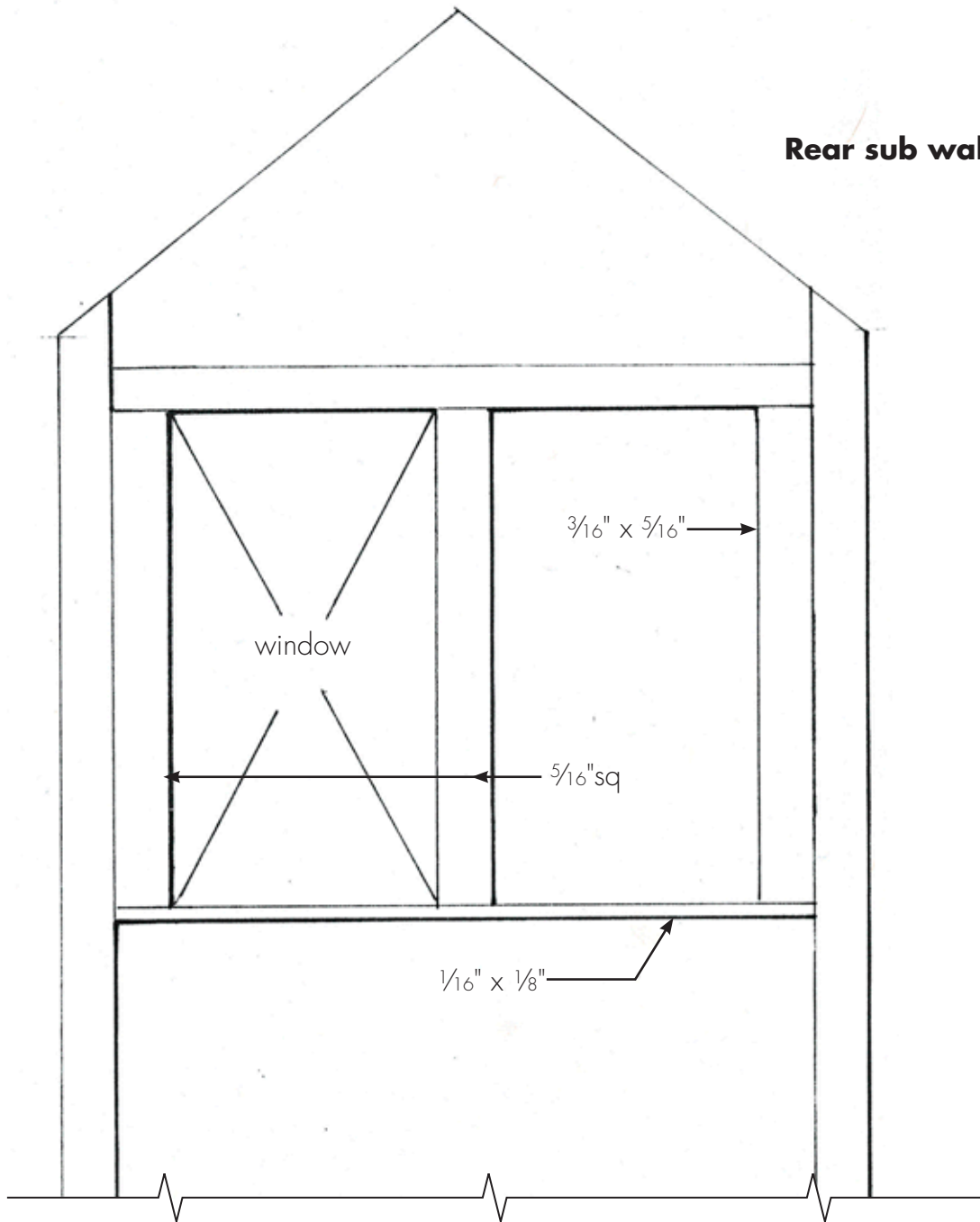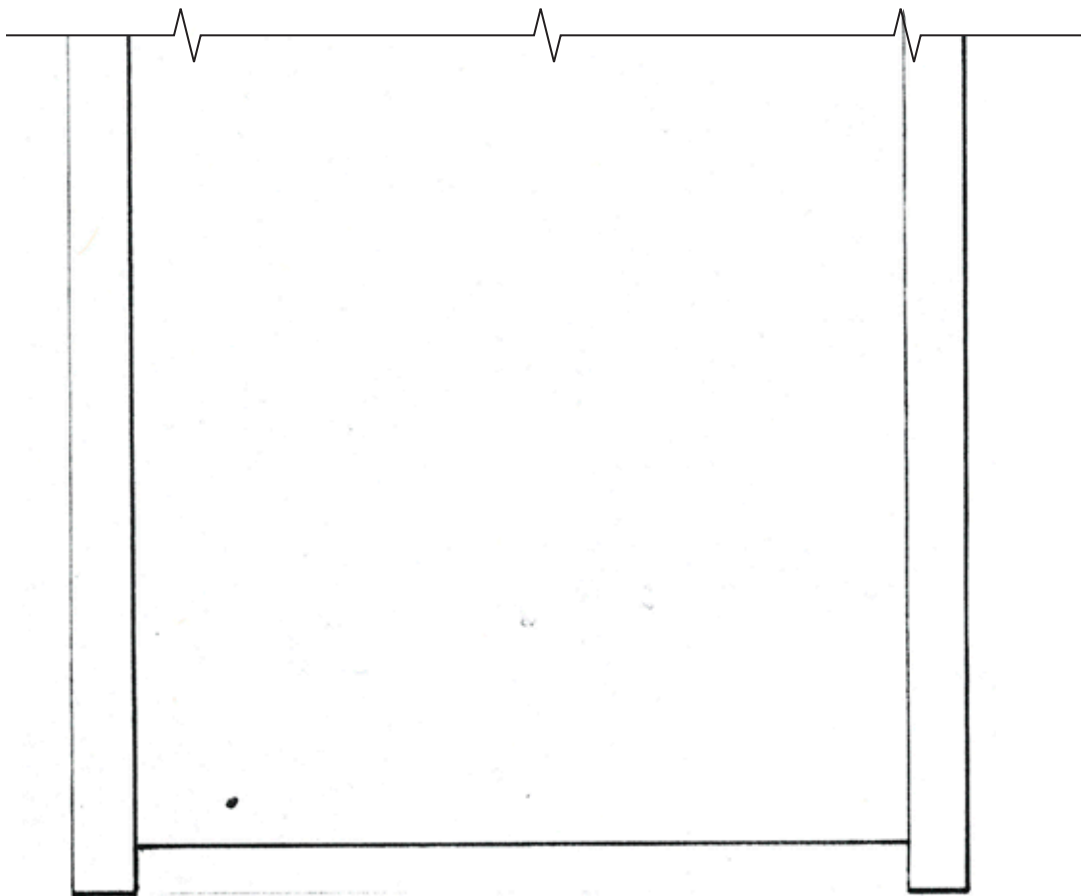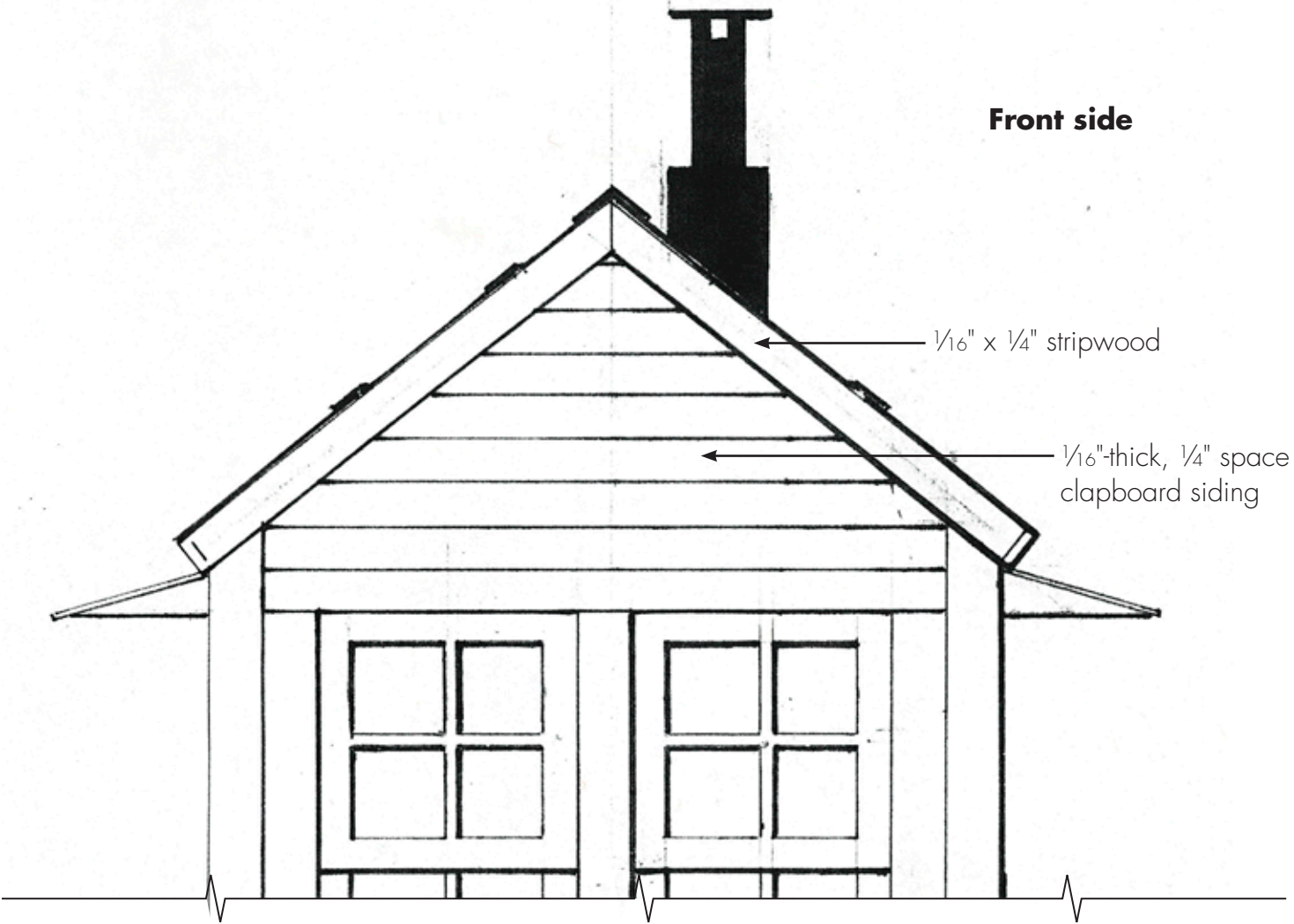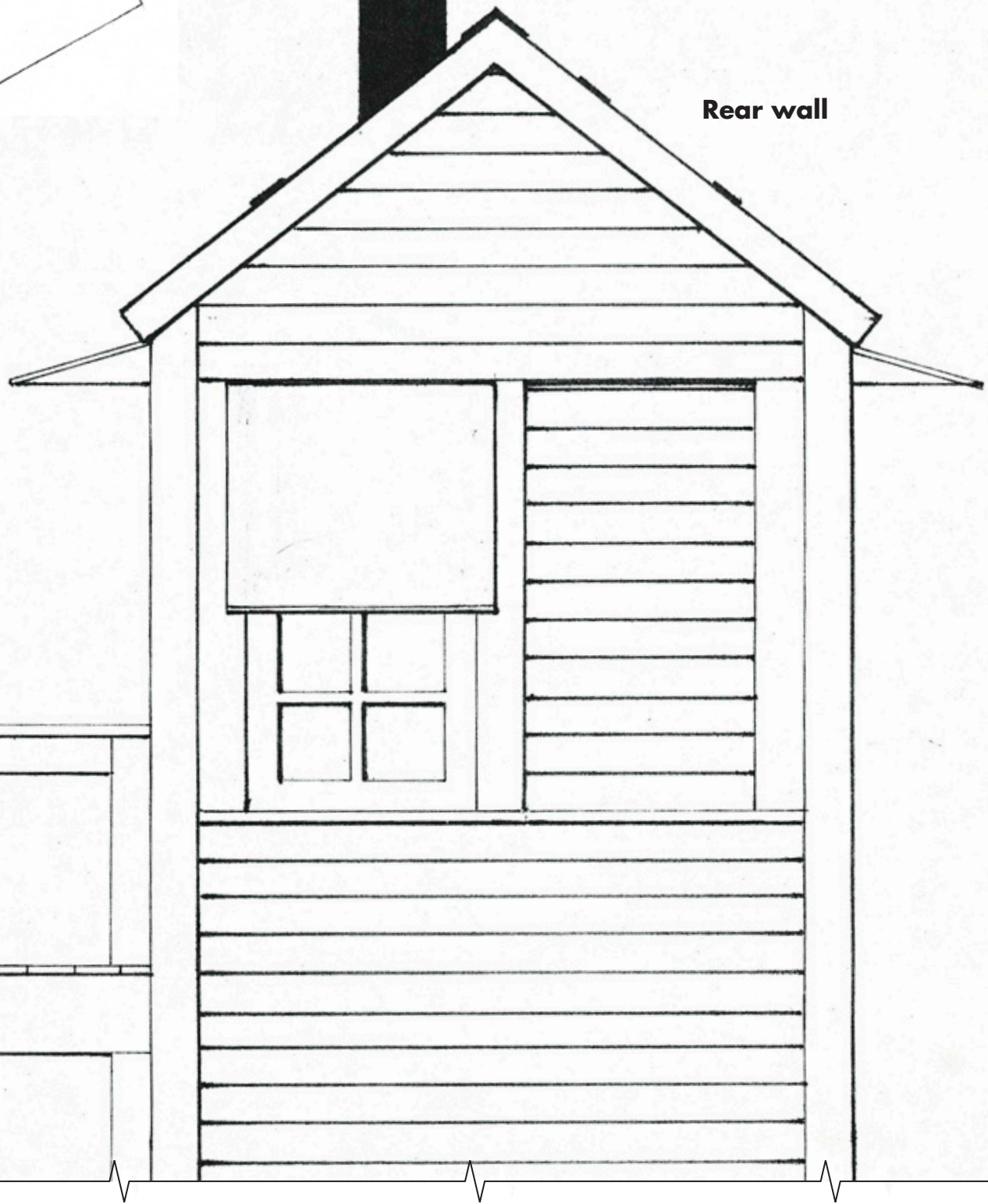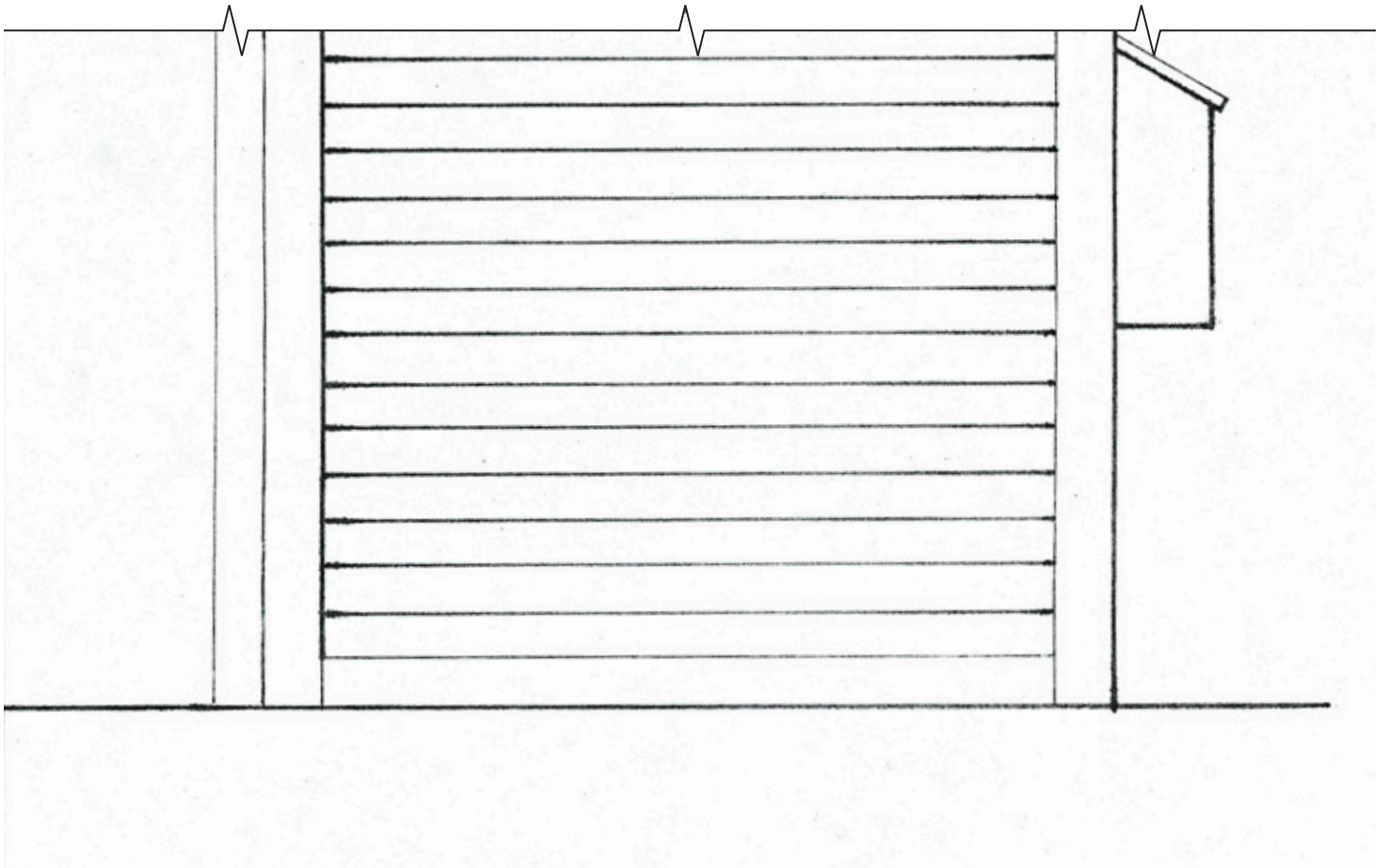
Door

make from ⅛" spaced,
scribed wood
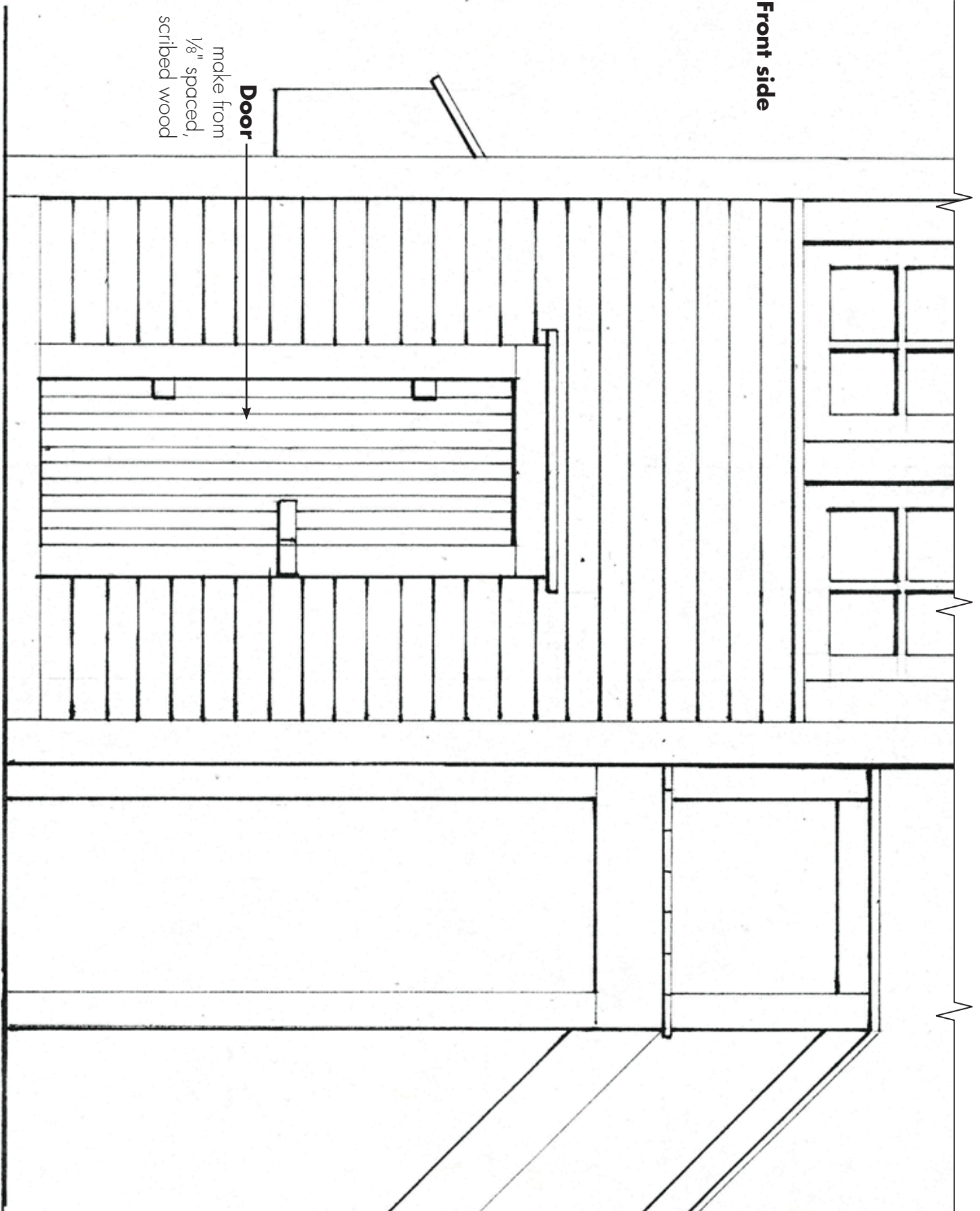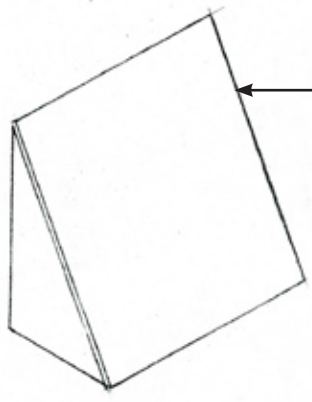
Awning
make from 1⁄16"
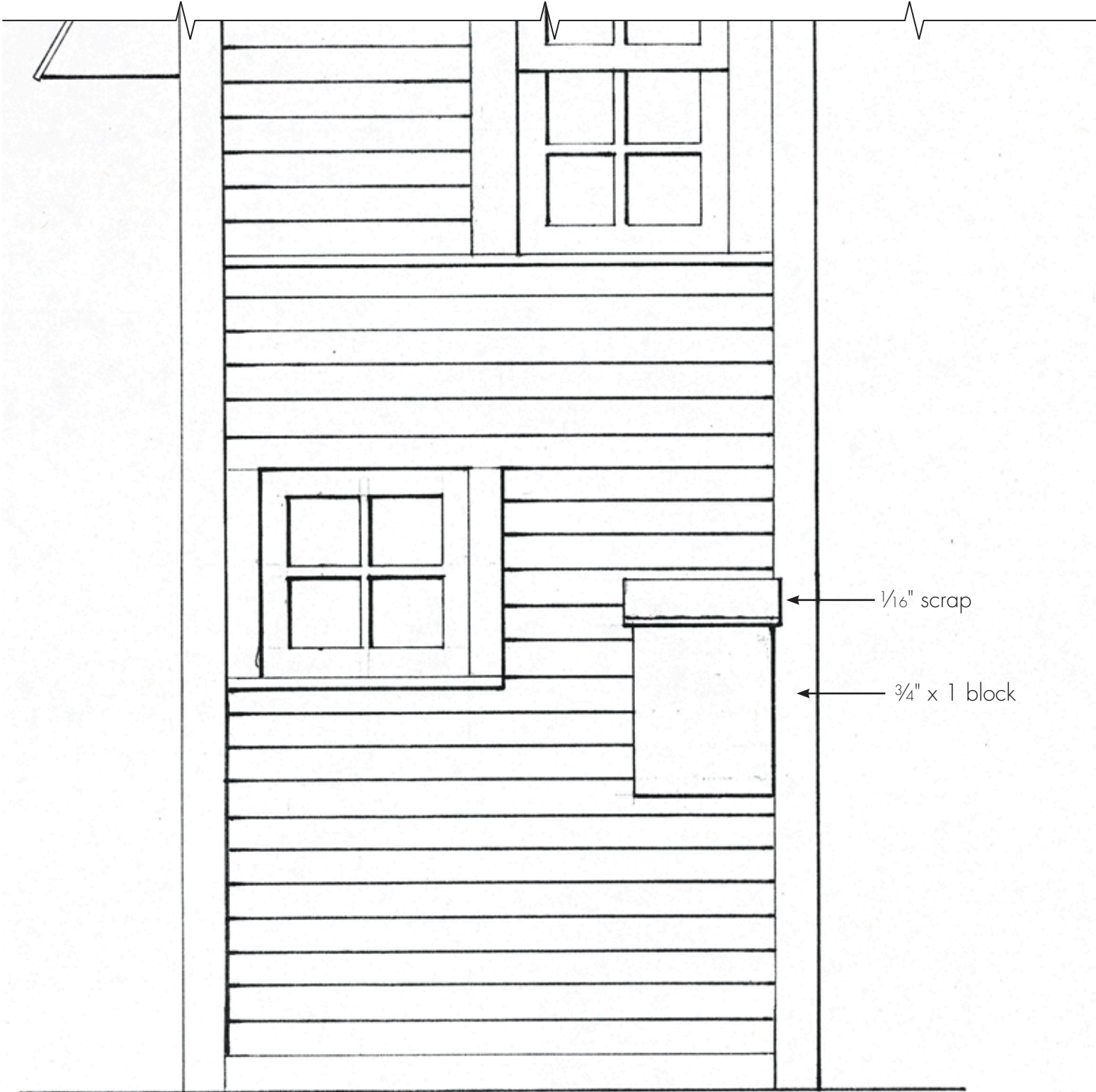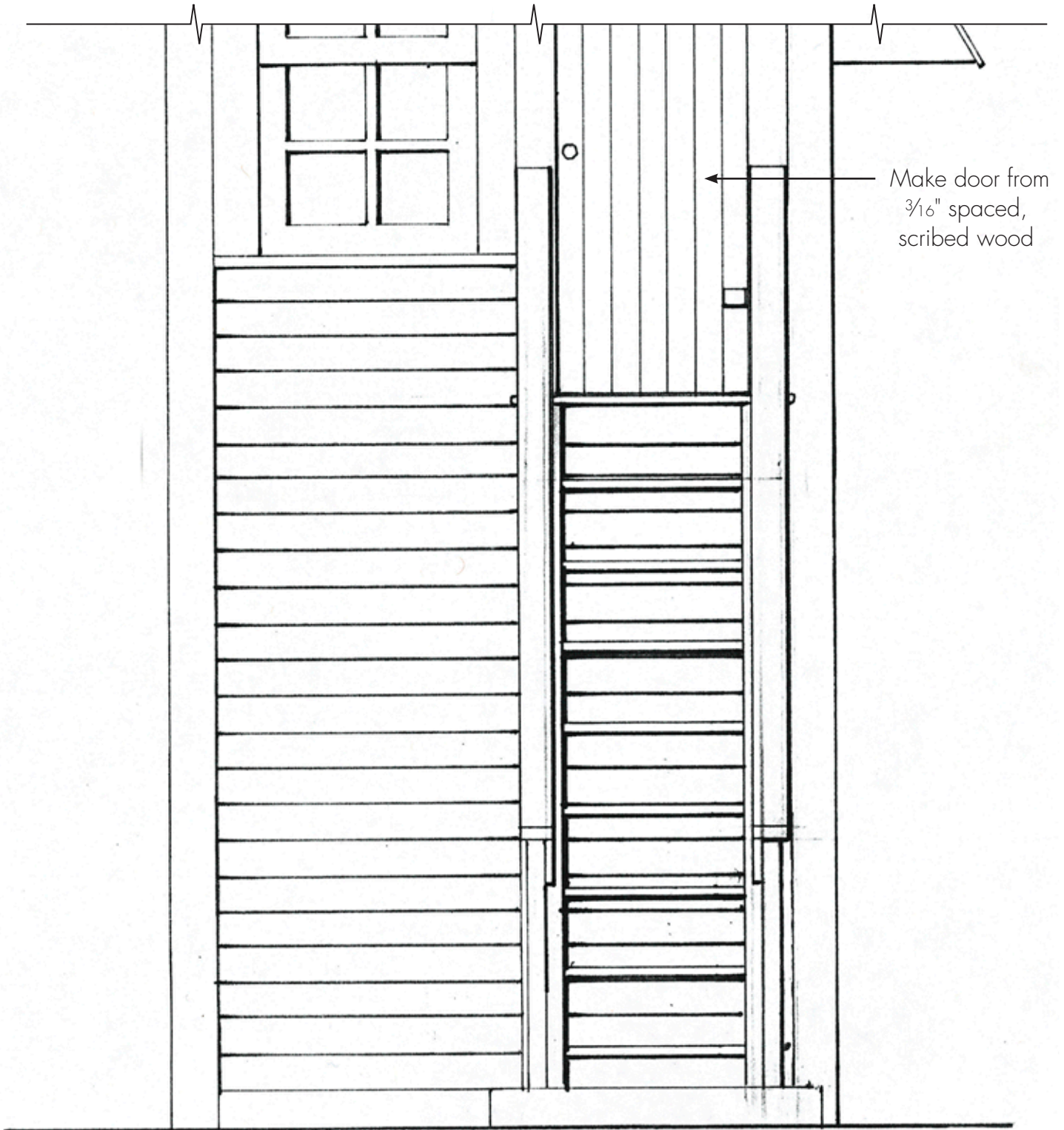scrap and 1⁄32" ply

Rear wall

Rear wall

Left side

Roofing
make from 1¼"-wide
strips of wet & dry
sandpaper

Awning
make from ¹⁄₁₆" scrap
and ¹⁄₃₂" plywood

¼₆" scrap

¾" x 1 block

cardstock disk ———→

⁵⁄₁₆" dia. dowel ———→

Right side

⁵⁄₈" dia. dowel
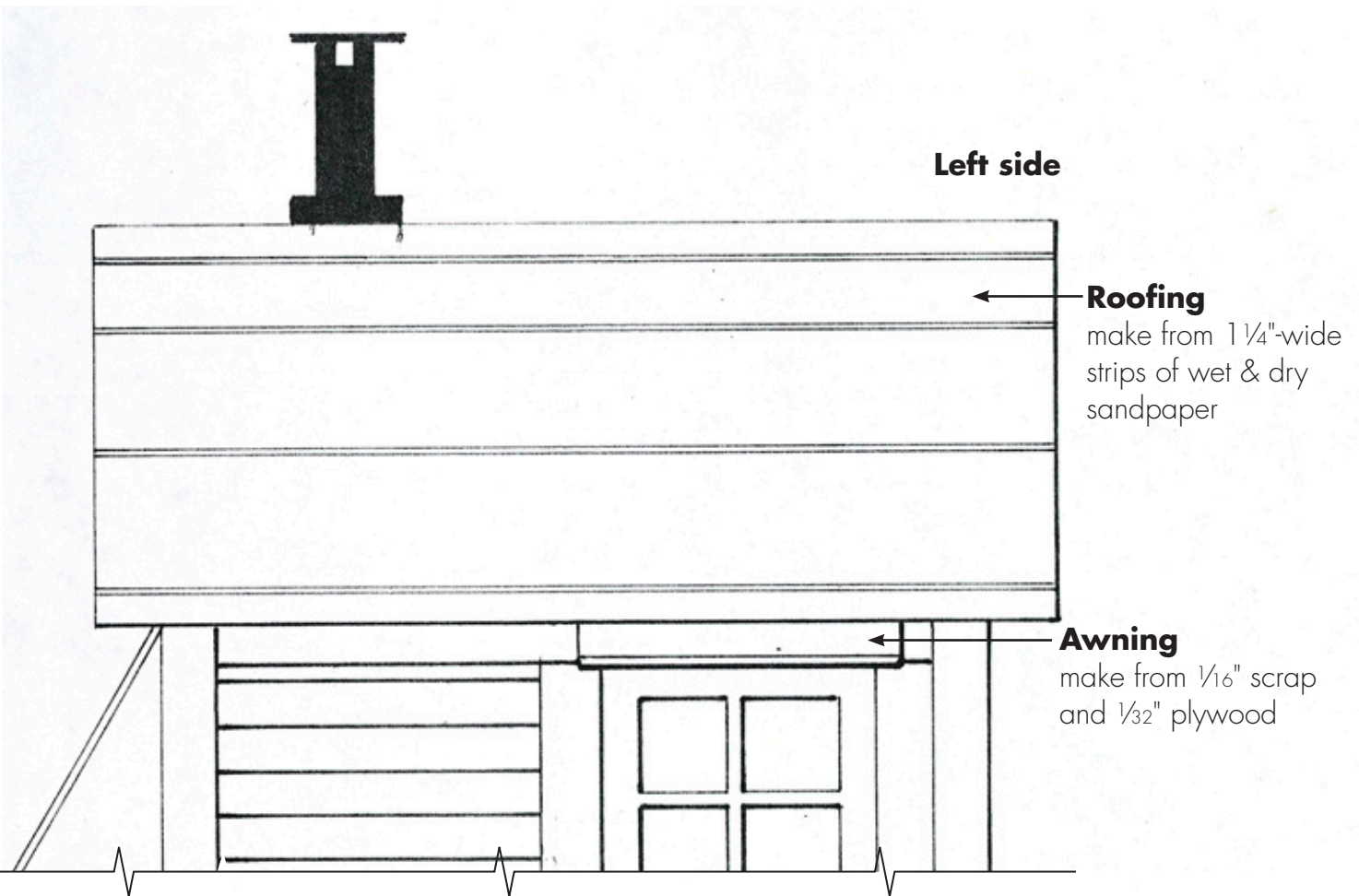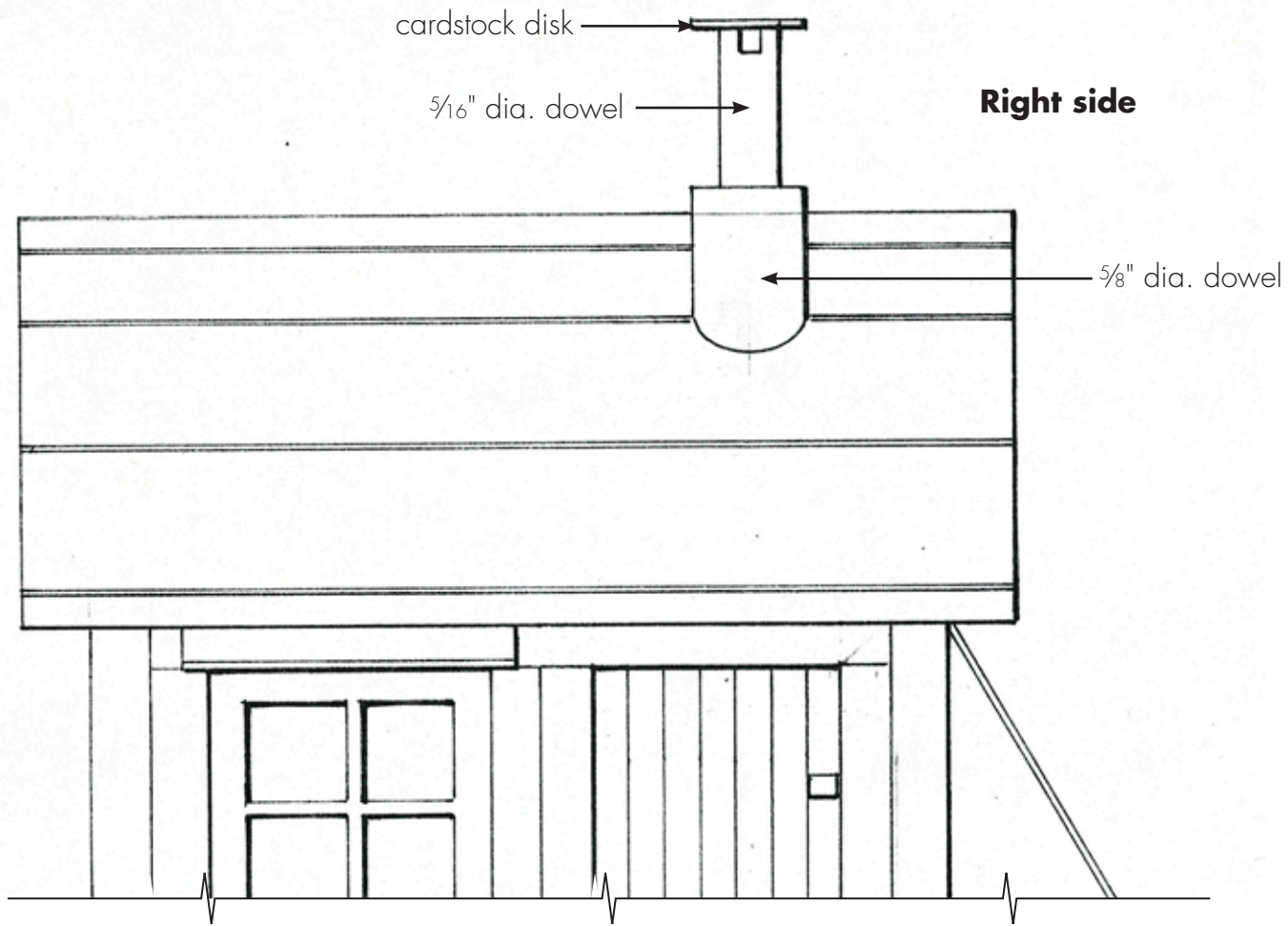
Make door from
³⁄₁₆" spaced,
scribed wood

$\frac{1}{16}$" x $\frac{1}{4}$"

$\frac{1}{8}$" x $\frac{1}{4}$"

$\frac{1}{16}$" x $\frac{1}{4}$"

$\frac{1}{16}$" x $\frac{9}{16}$" x $1\frac{1}{4}$" stair tread

$\frac{1}{4}$" ply base

$\frac{1}{8}$" x $\frac{1}{4}$"

$\frac{1}{4}$" sq.

$\frac{1}{8}$" x $\frac{1}{2}$"

Elevated deck base detail

$\frac{1}{4}$" ply base

RAILWAYS
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1/8" × 1/2"

Elevated deck base detail