# Thank you!

Thank you for ordering a DOWNLOADABLE WOOD PLAN. We hope you enjoy being a part of this new hi-tech experience, and that you have fun building your woodworking project.

Please remember that this copyrighted material is for your use only. It is unlawful to share this file with someone else or to reprint it in any form.

Larry Clayton
Editor
*WOOD*® magazine

Adobe Acrobat Troubleshooting Guide

My printer won't print the text
Try setting the print quality at normal or economy rather than best quality or reduce dpi to 150 rather than 300 dpi. These settings are selected in the printer setup or printer options.

Patterns are not printing full size
Make sure your printer is set to print at 100% and that "print to fit" is not checked. These settings are selected in the printer setup or printer options.

HP printers
Make sure you are using the latest printer drivers. Printer drivers are available from Hewlett Packard's web site: http://www.hp.com:80/cposupport/eschome.html. Printer driver installation instructions are also available at its web site.

I can't save a file after it downloads
Adobe Acrobat does not have a save function. You must save the file when you download the file. Download the file again, except this time try right-clicking on the download button or link to plan file. A menu window will open. Select "Save target as" or "Save link as" to save the file to your hard drive. Once saved, you can open it with Adobe Acrobat Reader.
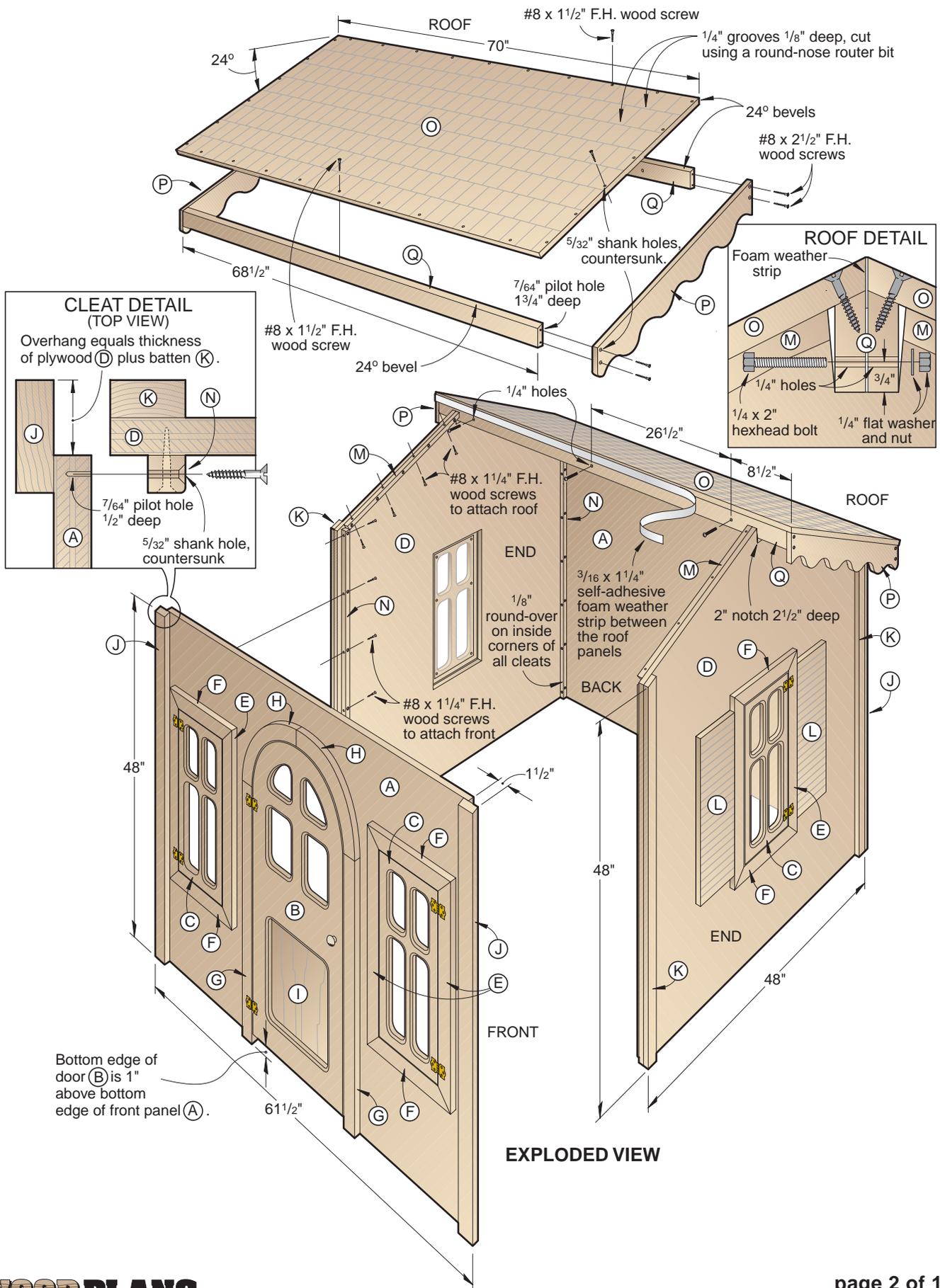
## Make-believe will abound in this playhouse
# KIDS' COUNTRY COTTAGE



*Even if you don't make your children or grandchildren anything else this year, surprise them with this winner of a project. We guarantee that they'll spend hundreds of hours in it and cherish every minute. They'll think you're pretty special, too.*
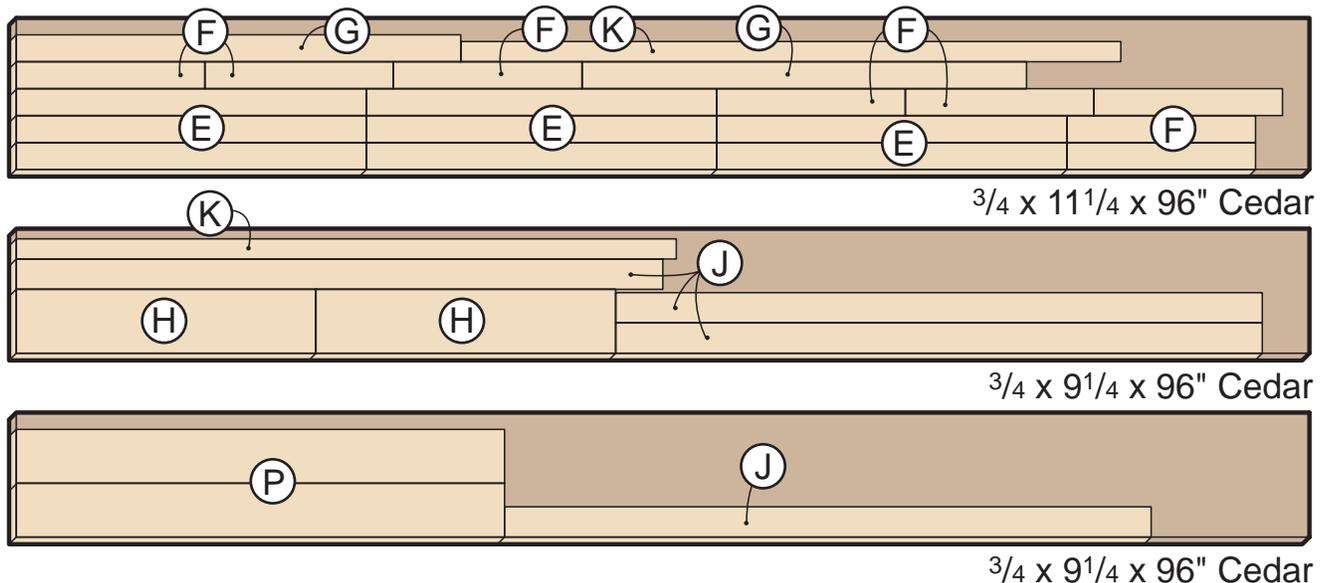
*Note: The walls and roof panels disassemble easily when it's time to store away the cottage.*
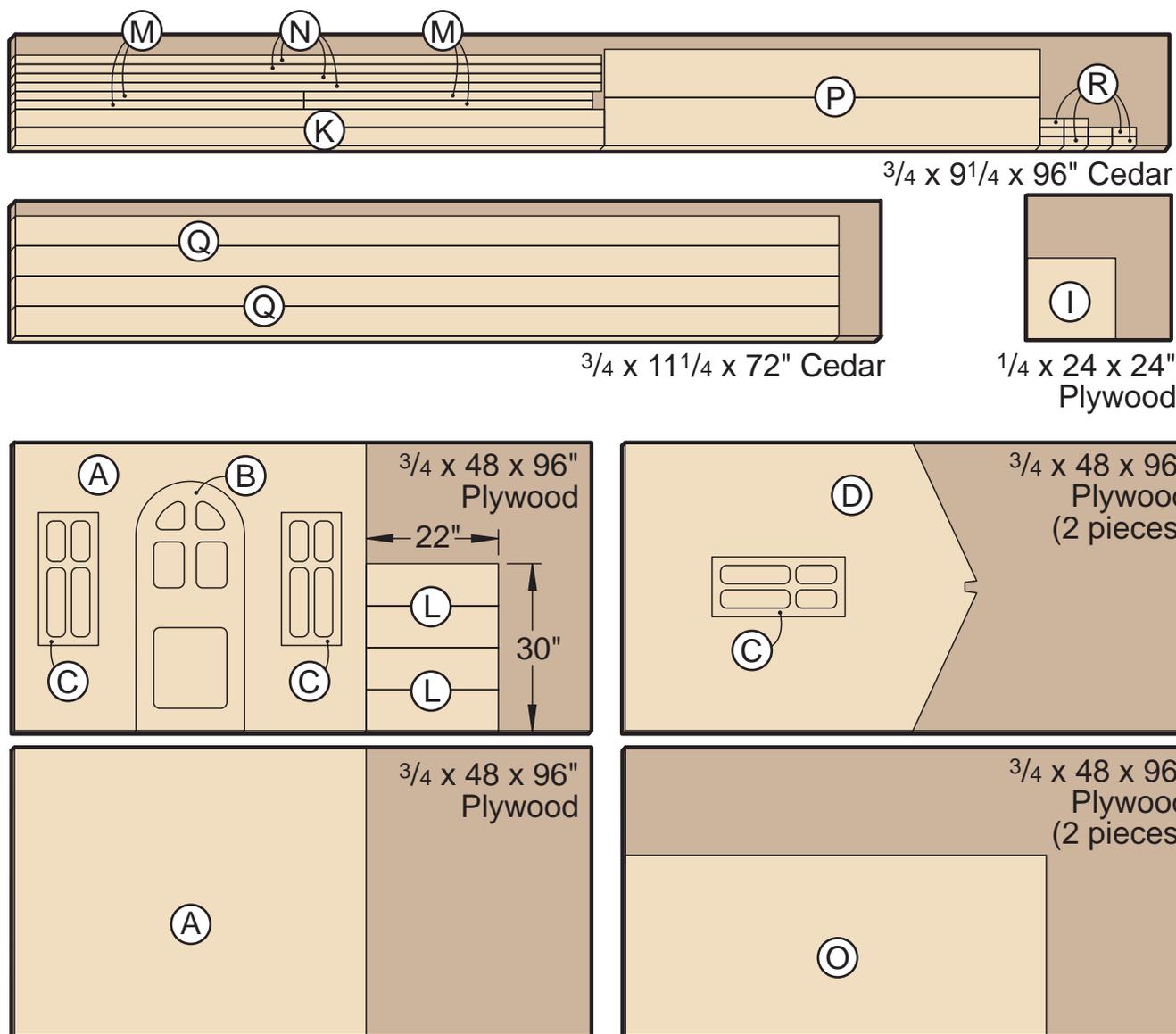
ROOF

70"

24°

#8 x 1½" F.H. wood screw

¼" grooves ⅛" deep, cut using a round-nose router bit

24° bevels

#8 x 2½" F.H. wood screws

O

P

Q

Q

68½"

5/32" shank holes, countersunk.

7/64" pilot hole 1¾" deep

#8 x 1½" F.H. wood screw

24° bevel

**CLEAT DETAIL**
(TOP VIEW)

Overhang equals thickness of plywood D plus batten K.

K

N

J

D

A

7/64" pilot hole ½" deep

5/32" shank hole, countersunk

**ROOF DETAIL**

Foam weather strip

O

O

M

M

Q

¼" holes

¼ x 2" hexhead bolt

3/4"

¼" flat washer and nut

P

¼" holes

26½"

8½"

M

ROOF

K

#8 x 1¼" F.H. wood screws to attach roof

N

A

END

O

D

F

2" notch 2½" deep

Q

P

D

K

J

#8 x 1¼" F.H. wood screws to attach front

3/16 x 1¼" self-adhesive foam weather strip between the roof panels

⅛" round-over on inside corners of all cleats

BACK

L

L

E

C

F

J

F

E

H

H

END

48"

48"

A

C

B

I

F

G

48"

K

1½"

J

E

FRONT

48"

Bottom edge of door B is 1" above bottom edge of front panel A.

61½"

G

F

**EXPLODED VIEW**

## Bill of Materials

| Part | Finished Size T | W | L | Matl. | Qty. | Part | Finished Size T | W | L | Matl. | Qty. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FRONT, BACK, AND ENDS | | | | | | ROOF AND CATCH SUPPORTS | | | | | |
| A  front & back | ¾" | 48" | 58½" | PL | 2 | O  roof panels | ¾" | 30" | 70" | PL | 2 |
| B  door | ¾" | 17⅞" | 41" | PL | 1 | P  roof end blanks | ¾" | 4" | 31¼" | C | 4 |
| C  windows | ¾" | 9⅞" | 21⅞" | PL | 4 | Q  eaves & ridgeboards | ¾" | 2½" | 68½" | C | 4 |
| D  ends | ¾" | 48" | 58¾" | PL | 2 | R  catch supports | ¾" | ¾" | 2" | C | 10 |
| WINDOW AND DOOR TRIM | | | | | | | | | | | |
| E  window sides | ¾" | 2" | 26" | C | 8 | | | | | | |
| F  window tops & btm. | ¾" | 2" | 14" | C | 8 | | | | | | |
| G  door sides | ¾" | 2" | 33" | C | 2 | | | | | | |
| H  arched door tops | ¾" | 4¾" | 22¼" | C | 2 | | | | | | |
| I  door panel | ¼" | 13⅜" | 14¾" | PL | 1 | | | | | | |
| BATTENS, SHUTTERS, AND CLEATS | | | | | | | | | | | |
| J  front battens | ¾" | 2¼" | 48" | C | 4 | | | | | | |
| K  end battens | ¾" | 1½" | 48¹¹⁄₁₆" | C | 4 | | | | | | |
| L  shutters | ¾" | 7" | 22" | PL | 4 | | | | | | |
| M  roof cleats | ¾" | ¾" | 23⅞" | C | 4 | | | | | | |
| N  wall cleats | ¾" | ¾" | 48⅜" | C | 4 | | | | | | |

**Materials Key:** PL—plywood, C—cedar.

**Supplies:** 1½"-diameter wooden knob, 10 ornamental cabinet hinges (Stanley #1475), 10 magnetic catches and strike plates, ⅛" acrylic for window and doors, #6×½" flathead wood screws, #8×1¼" flathead wood screws, #8×1½" flathead wood screws, #8×2½" flathead wood screws, 3–¼×2" hexhead bolts with washers and nuts, ³⁄₁₆×1¼" self-adhesive foam weatherstrip, wood putty, acrylic caulk, primer, exterior latex paints.

## CUTTING DIAGRAM



¾ x 11¼ x 96" Cedar

¾ x 9¼ x 96" Cedar

¾ x 9¼ x 96" Cedar

# CUTTING DIAGRAM

$^3/_4$ x 9$^1/_4$ x 96" Cedar

M  N  M

K

P  R

Q

Q

$^3/_4$ x 11$^1/_4$ x 72" Cedar

I

$^1/_4$ x 24 x 24"
Plywood

A  B

$^3/_4$ x 48 x 96"
Plywood

←22"→

L

30"

L

C  C

D

$^3/_4$ x 48 x 96"
Plywood
(2 pieces)

C

A

$^3/_4$ x 48 x 96"
Plywood

A

$^3/_4$ x 48 x 96"
Plywood
(2 pieces)

O

## Start with the plywood front, back, and ends

**1** Using the dimensions on *page 10* and the layout on the Cutting Diagram *above*, mark the outlines for the front and back (A) on ¾" plywood. Mark the door and window openings. (For interior use, we recommend birch or fir plywood; for outdoor use you'll need exterior-grade plywood. Use the best grade available. The time you save not having to fill, sand, and repaint the voids of a less-expensive plywood will make up for the extra expense.)

**2** Using a straightedge and a circular saw, cut the front and back panels to size.

**3** To form the openings, use a jigsaw fitted with a plywood-cutting blade. Cut the front-door opening to shape, creating the front door (B). Next, cut the window openings to shape. (To avoid drilling blade-start holes when forming the window openings, we made plunge cuts with our jigsaw. To do this, tip the saw as shown in Photo A. Start the saw (if you have a variable-speed jigsaw, start with a medium to high speed and the blade set for straight reciprocation rather than the orbital motion). With the front end of the saw's bottom plate firmly against the plywood, lower the reciprocating blade into the plywood at the marked line as

shown in Photo B. Keeping the front end of the plate firmly against the plywood, continue lowering the saw until the plate is in full contact with the plywood. Make the cut. Cut carefully, and save the cutouts: you'll use them for the windows (C).

**4** Using the dimensions on *page 9*, lay out the outline, notch, and window opening, and cut each end (D) to size. Again, save the cutout from each end panel for the windows.

**5** Carefully mark the panel openings on *one* of the four window cutouts (C), and cut the four openings in each window to size. Use a drum sander to sand the rounded corners.

Now, using this window as a template, mark the openings on the three remaining windows. Cut and sand the openings in the windows to shape.

**6** Mark the openings on the door, and cut them to shape.

**7** Rout ⅜" round-overs along the *outside* face of the window openings on the door (B) where shown on the Front drawing. Switch bits, and rout ¼" round-overs along the *outside* face of window-pane openings where shown on the End drawing.

**8** Buy a wooden door knob (we used a 1½"-diameter knob), and drill a mounting hole through the door for adding the knob later.

### Cut the trim, door panel, and window panel next

**1** From ¾" solid stock (we recommend cedar or redwood), cut the window trim (E, F) and door-side trim (G) to size.

**2** Using a waterproof glue (we used Titebond II), glue and clamp the solid-wood trim around the window openings.

**3** Using the patterns on *page 11* for reference, miter-cut the door-top trim (H) to size. Then, mark a 9" and 11" radius on each piece where shown on the drawing. Cut the pieces to shape, and check that the inside radius on the door-top trim is flush with the door opening. Sand the trim to match. Glue and clamp the door trim pieces (G, H) in place.

**4** Cut the door bottom panel (I) to the size listed in the Bill of Materials from ¼" plywood. Drill mounting holes, and screw the panel to the back side of the door.

### Now, let's add the battens, shutters, and cleats

**1** Cut the corner battens (J, K) to size. As shown on the Front and End drawings, miter-cut the top ends of the battens to match the roofline on the ends (D).

**2** Glue and clamp the corner battens (J) to the front and back panels (A), using a scrap piece of ¾" plywood and a piece of scrap batten material to

## MAKING A PLUNGE CUT WITH A JIGSAW

To start the plunge cut for the window, position the jigsaw on the plywood with the blade not touching the wood but centered over the cutline.

Turn on the saw, and lower the blade into the wood, causing the reciprocating blade to cut through the plywood at the marked cutline.

gauge the overhang. See the Cleat detail accompanying the Exploded View drawing for reference. Also make certain that the beveled top tip of the batten is flush with the top edge of the front panel.

**3** Glue and clamp the corner battens (K) to the end panels (D). Make certain the mitered top end of the batten is flush with the top edge of the end panel and that the edge of the batten is flush with the outside edge of the end panel.

**4** To rout the numerous grooves in the shutters, start by cutting a shutter blank to 22×30" as shown on the Cutting Diagram. Mark a series of lines 1" apart across the front face of the 30"-wide blank. Fit your router with a ¼"

**To start the plunge cut for the window, position the jigsaw on the plywood with the blade not touching the wood but centered over the cutline.**

round-nose bit. Using a straightedge, rout ⅛"-deep grooves across the front of the shutter blank. For reference, see Photo C for how we used this same setup to rout the shingle facsimiles on the roof panels. Cut the four shutters (L) to size from the large routed blank.

**5** Rip ¾" square stock for the roof cleats (M) and corner cleats (N). Miter-cut the top end of the roof cleats (M) to match the notch at the top center of the end panel.

**6** Rout a ⅛" round-over along what will be the *inside corner* of each cleat (M, N). See the Exploded View and accompanying Cleat detail for reference.

**7** Drill countersunk holes for #8 flathead wood screws through the cleats for securing them to the mating panels. Glue and screw the cleats to the end panels.

### A roof to keep the rain out

**1** From ¾" plywood, cut the two roof panels (O) to size. As shown on *page 12*, lay out the shingle grooves where dimensioned.

**2** Chuck a ¼" round-nose bit in a hand-held router, and adjust it to cut ⅛" deep. Measure from the edge of the router base to the center of the bit, and cut a piece of plywood to this width. Using the plywood strip as a gauge to space a straightedge parallel with each marked line, rout a series of grooves the length of each roof panel (O).

**3** Using the straightedge perpendicular to the top and bottom edges of the roof panel, rout the 3¾"-long grooves between the long grooves to form the individual shingles as shown in Photo C.

**4** Bevel-rip the top edge of each roof panel (O) at 24°.

**5** Cut the roof-end blanks (P) to the size listed in the Bill of Materials. Transfer the full-sized roof-end pattern to one of the blanks. Cut the roof end to shape, and use it as a template to mark the other three pieces.

**6** Cut the eaves and ridgeboards (Q) to size. Bevel-rip one edge of each piece to match the slope of the roof (24°).

**7** Clamp the two ridgeboards (Q) together face-to-face. Drill three ¼" holes through both ridgeboards where

shown on the Roof detail accompanying the Exploded View drawing. Later, you'll fit bolts through these holes to pull the roof sections tightly together .

**8** Clamp the roof ends (P) and ridgeboard and eaves (Q) to the bottom side of the roof panels (O). Check the fit, and trim if necessary. Now, glue and screw each roof section together in the configuration shown on the Exploded View drawing.

### Final assembly and painting come next

**1** With the aid of a helper, clamp and then screw the ends (D) to the front and back (A). To save time, don't drive all the screws now; do just enough to hold the pieces together to check the fit. A cordless screwdriver comes in handy for assembling and disassembling the pieces.

**2** Drill mounting holes, and hinge the door to the left-hand door trim piece (G). Hinge the windows (C) to window trim pieces (E).

**3** Cut 10 catch supports (R) to size, and use a pair at each window and a pair at the door to mount the magnetic catches. See the patterns on *page 10* for location and the Magnetic Catch detail *below* for reference.
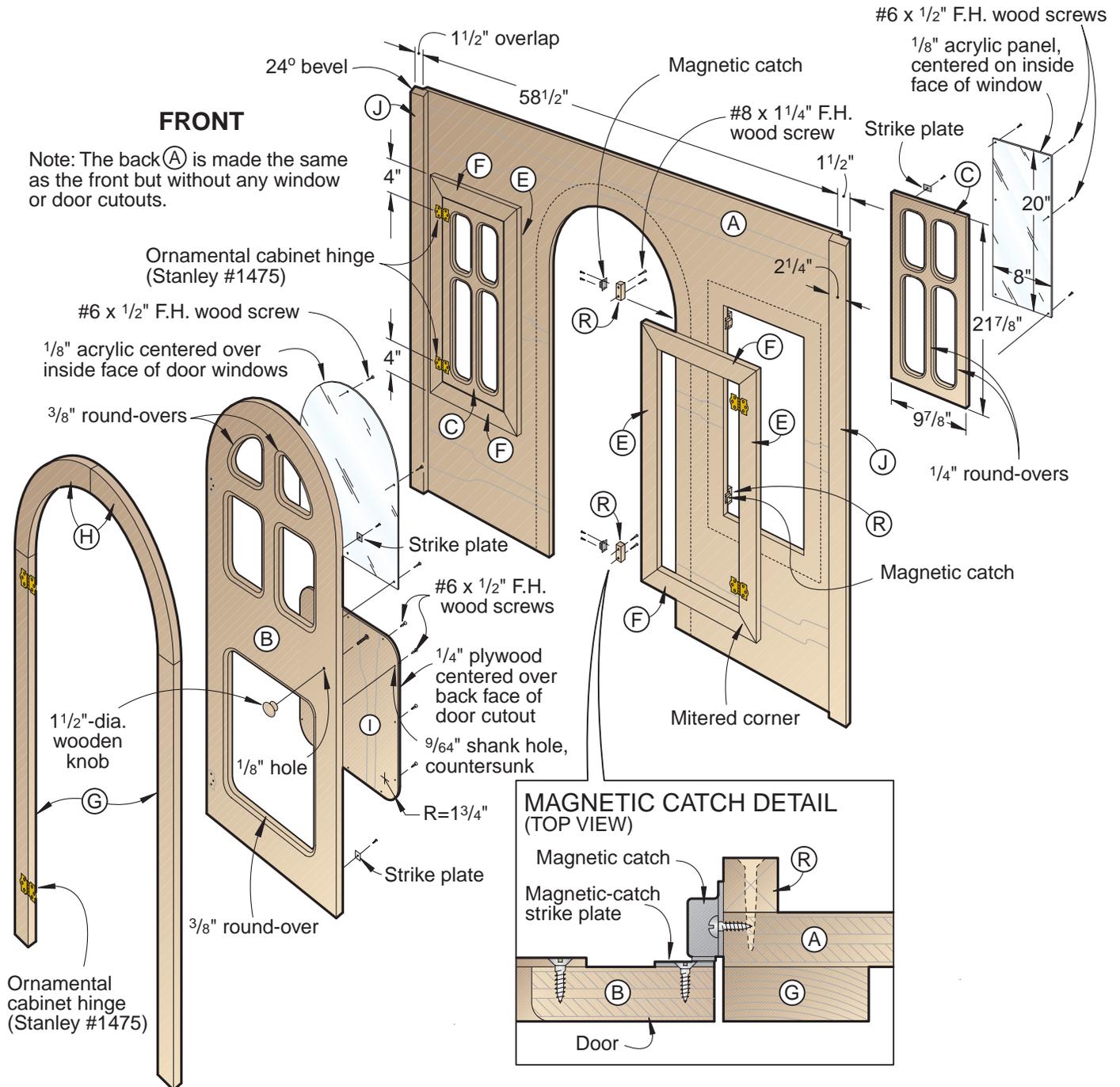
**4** Check the fit of the two roof sections on the walls, and verify that the three ¼" holes align for inserting the ¼" bolts later. See the Roof detail accompanying the Exploded View for reference.
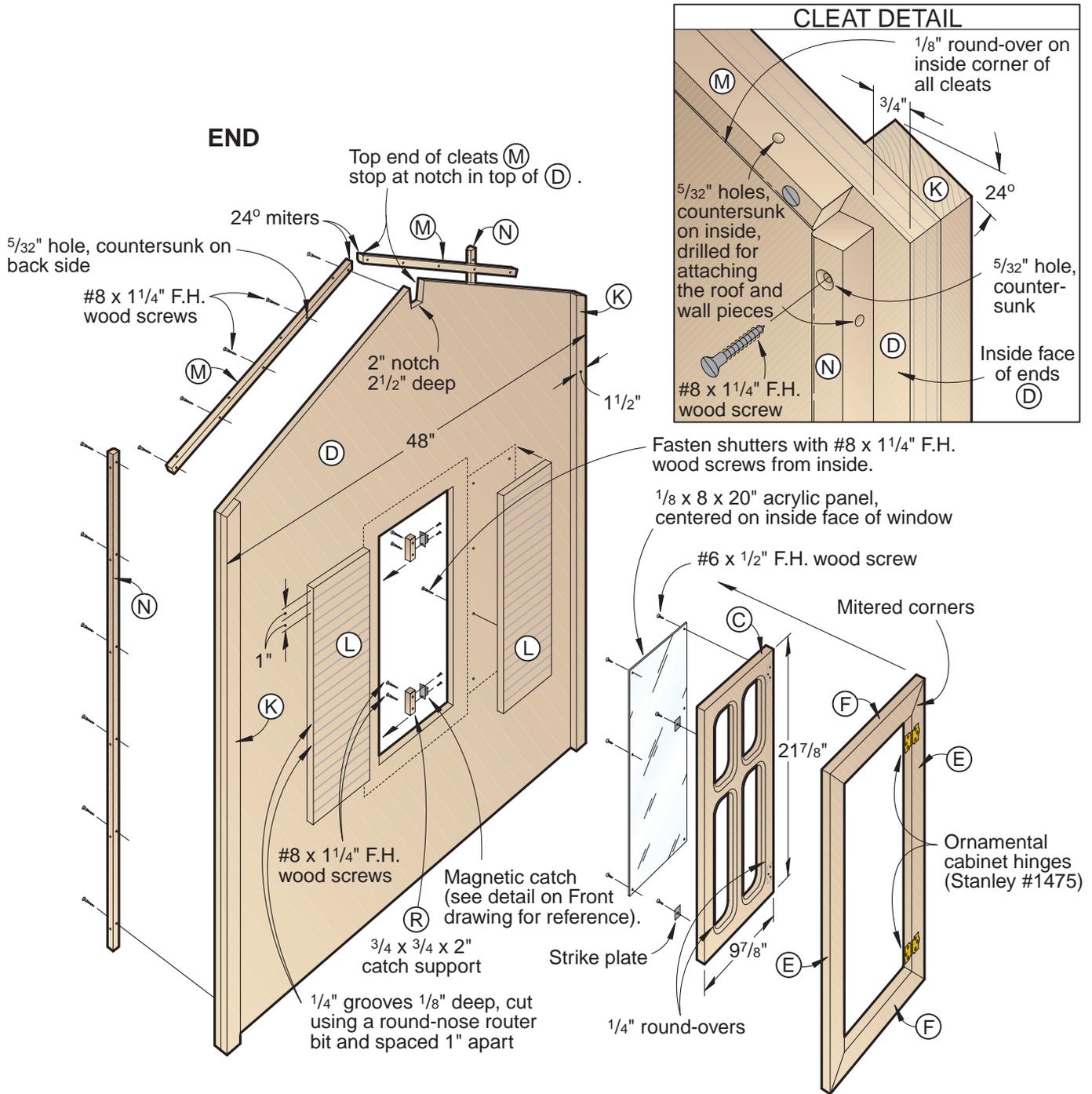
**5** Use an exterior wood putty to fill the screw heads and voids in the plywood. (Inspect the roof carefully; we exposed a couple of voids when routing the shingles. Due to the size of the voids in the roof, we used acrylic caulk to seal them rather than the wood putty.)

**6** Remove the catches, strike plates, and hinges from the assemblies. Prime all the wood pieces (we used a latex primer). The edges of the plywood and

the end grain on the solid stock should have at least two coats of primer, sanded lightly with 220-grit sandpaper between coats. Don't forget to prime the routed edges at the window openings.

**7** Using an exterior paint compatible with the primer, paint the house to match the one shown in the opening photograph, or paint it to match the color of your house. (We used an exterior semigloss latex for the walls,



**FRONT**

Note: The back Ⓐ is made the same as the front but without any window or door cutouts.

Ornamental cabinet hinge (Stanley #1475)

#6 x ¹/₂" F.H. wood screw

¹/₈" acrylic centered over inside face of door windows

³/₈" round-overs

1¹/₂"-dia. wooden knob

Ornamental cabinet hinge (Stanley #1475)

1¹/₂" overlap

24° bevel

58¹/₂"

Magnetic catch

#8 x 1¹/₄" F.H. wood screw

#6 x ¹/₂" F.H. wood screws

¹/₈" acrylic panel, centered on inside face of window

Strike plate

1¹/₂"

2¹/₄"

20"

8"

21⁷/₈"

9⁷/₈"

¹/₄" round-overs

Magnetic catch

Strike plate

#6 x ¹/₂" F.H. wood screws

¹/₄" plywood centered over back face of door cutout

⁹/₆₄" shank hole, countersunk

R=1³/₄"

¹/₈" hole

³/₈" round-over

Strike plate

Mitered corner

**MAGNETIC CATCH DETAIL** (TOP VIEW)

Magnetic catch

Magnetic-catch strike plate

Door

## END

$^1/_8$" round-over on inside corner of all cleats

$^3/_4$"

M

K

24°

$^5/_{32}$" holes, countersunk on inside, drilled for attaching the roof and wall pieces

$^5/_{32}$" hole, counter-sunk

#8 x 1$^1/_4$" F.H. wood screw

N

D

Inside face of ends

D

Top end of cleats M stop at notch in top of D .

24° miters

$^5/_{32}$" hole, countersunk on back side

#8 x 1$^1/_4$" F.H. wood screws

M

M

N

N

K

2" notch 2$^1/_2$" deep

1$^1/_2$"

D

48"

Fasten shutters with #8 x 1$^1/_4$" F.H. wood screws from inside.

$^1/_8$ x 8 x 20" acrylic panel, centered on inside face of window

#6 x $^1/_2$" F.H. wood screw

Mitered corners

1"

L

L

C

21$^7/_8$"

F

E

K

E

Ornamental cabinet hinges (Stanley #1475)

#8 x 1$^1/_4$" F.H. wood screws

Magnetic catch (see detail on Front drawing for reference).

R

$^3/_4$ x $^3/_4$ x 2" catch support

Strike plate

9$^7/_8$"

E

F

$^1/_4$" grooves $^1/_8$" deep, cut using a round-nose router bit and spaced 1" apart

$^1/_4$" round-overs

both inside and out. Then, we used an exterior gloss for the door, windows, trim, shutters, door knob, and roof.)
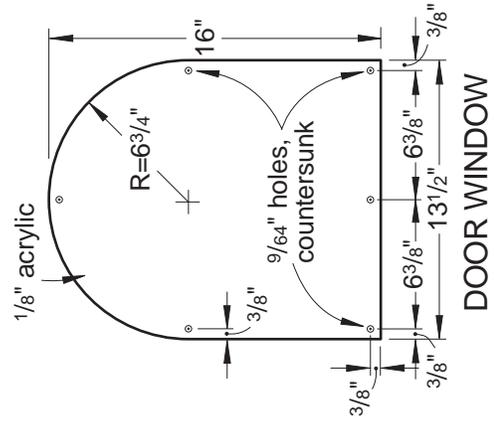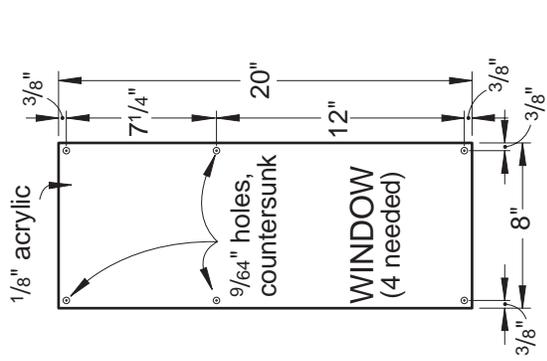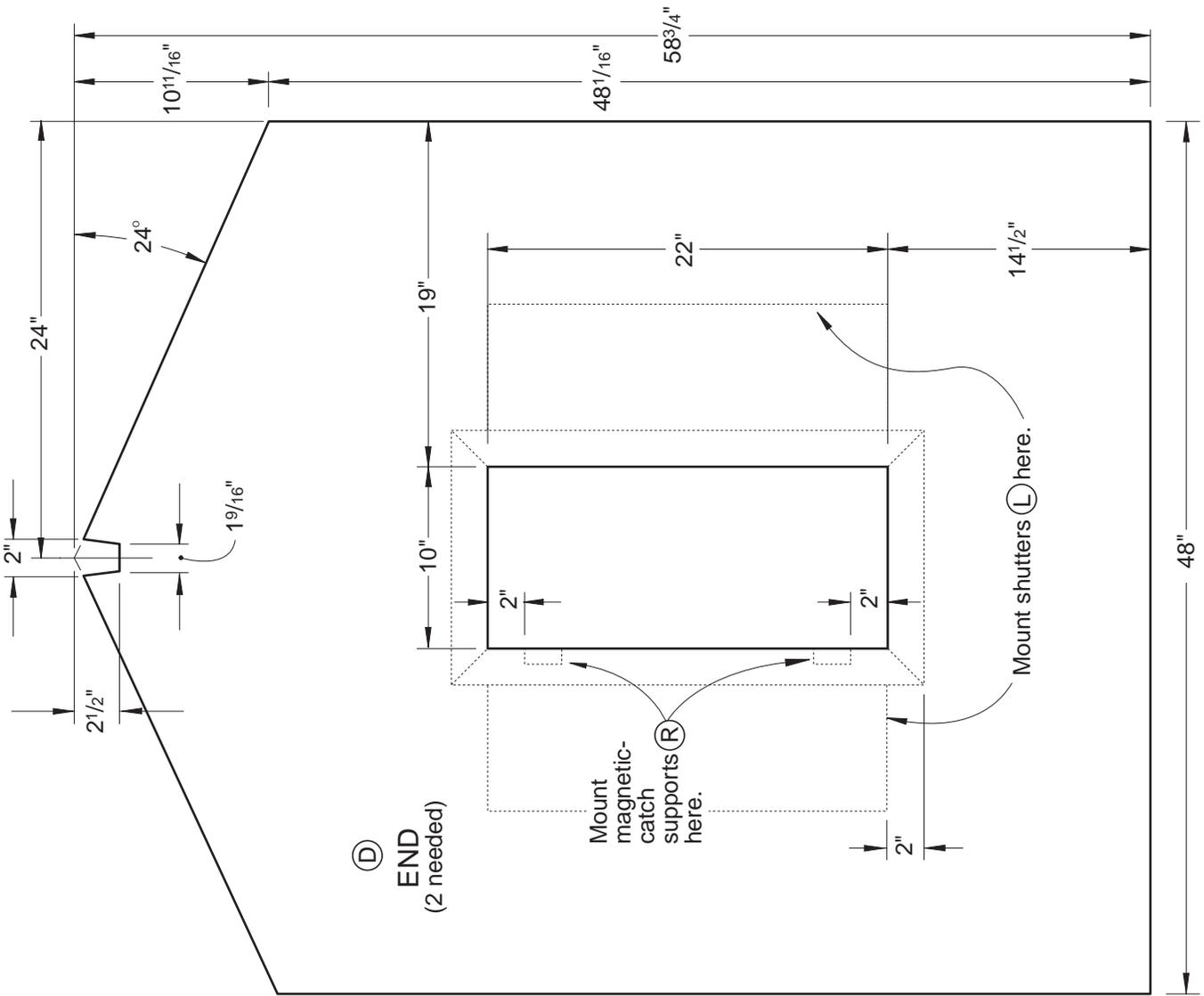**8** Screw the shutters in place.
**9** Using a fine toothed-blade, cut $^1/_8$" acrylic for the doors and windows. See the patterns on *page 9* for size and shape. Drill mounting holes, and secure the acrylic in place with #6×$^1/_2$" flathead wood screws. Be careful not to over-tighten the screws; too much pressure can cause the acrylic to crack.

**10** Reattach the door and windows. Adhere the weather strip to one edge of an assembled roof section where shown on the Roof detail accompanying Exploded View drawing.
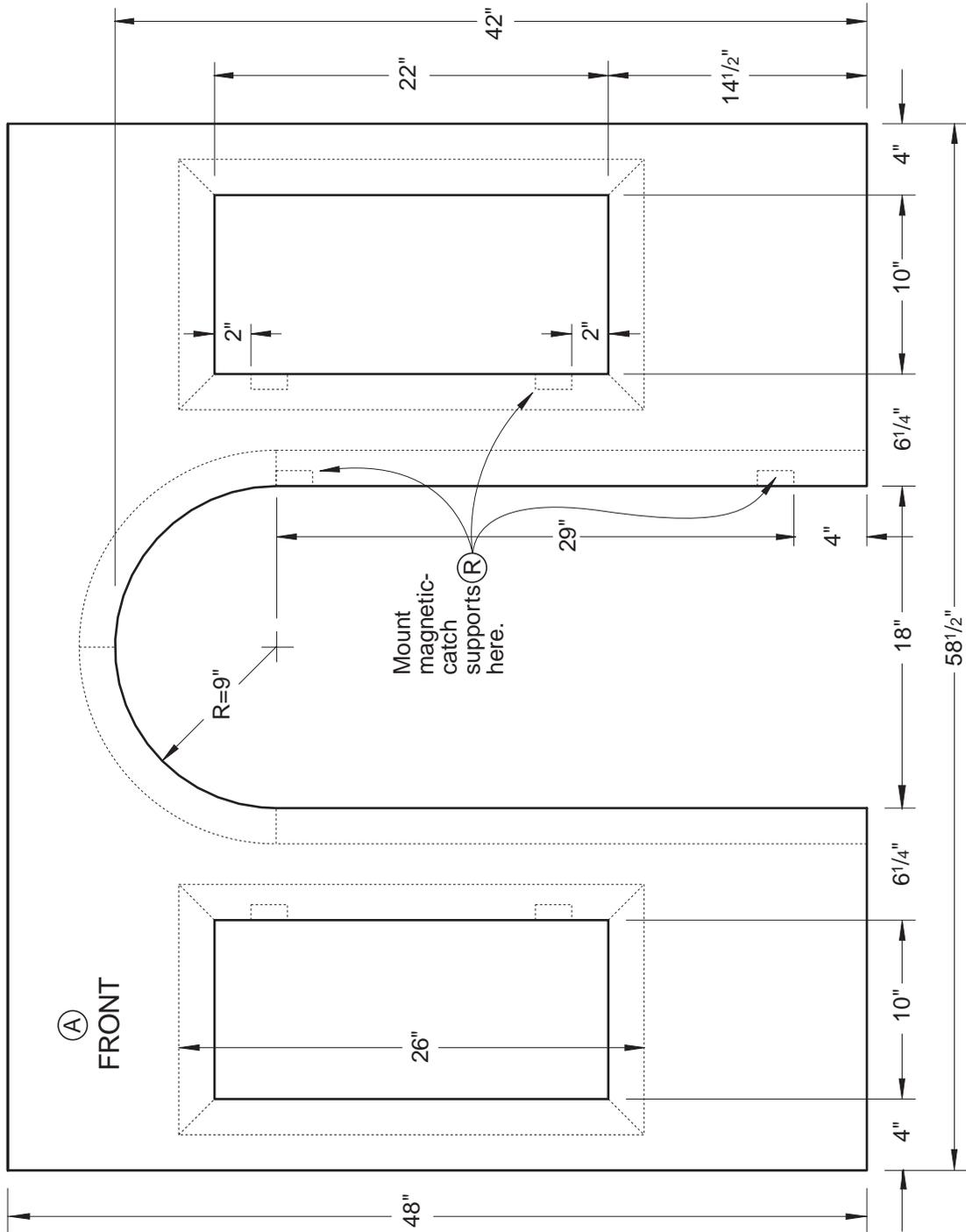**11** With the aide of a helper, reassemble the cottage front, back, and ends. Check for square. Position the roof sections in place. Then, use three $^1/_4$" bolts and nuts to pull the roof-sections/ridgeboards tightly together. Secure the roof sections to the cleats (M) with #8 wood screws.

## WINDOW (4 needed)
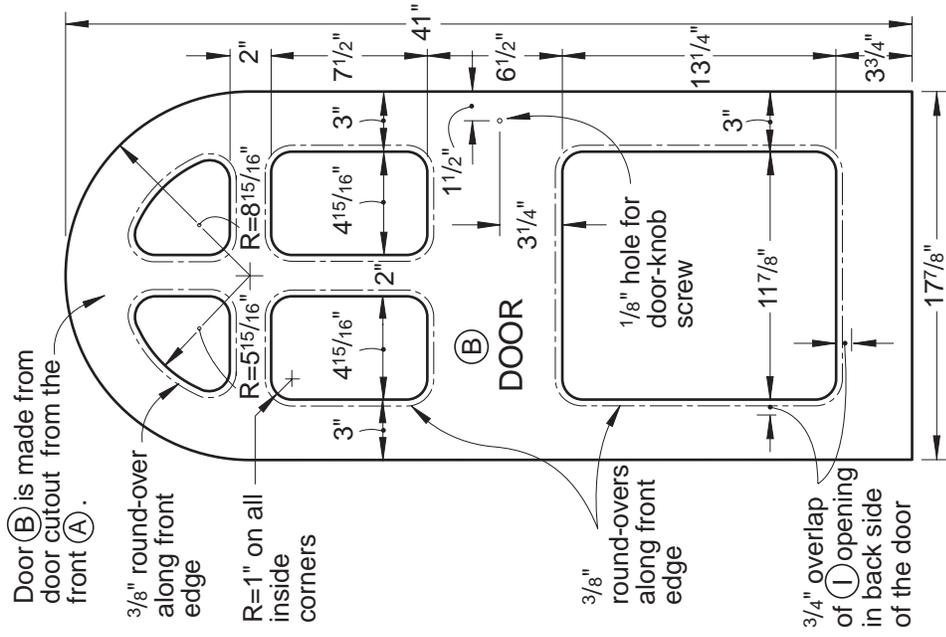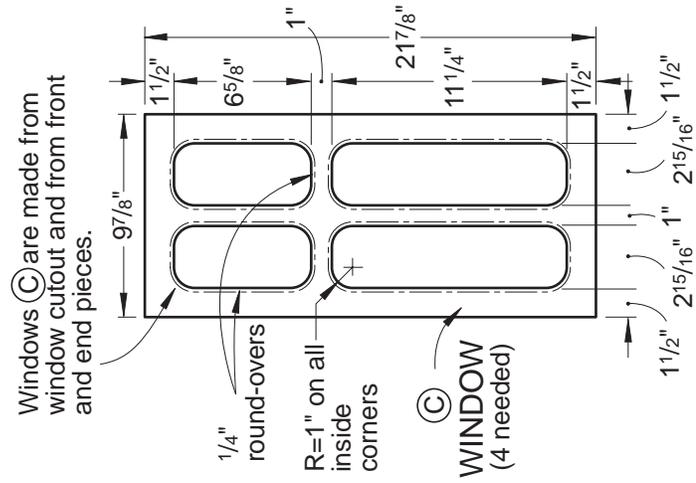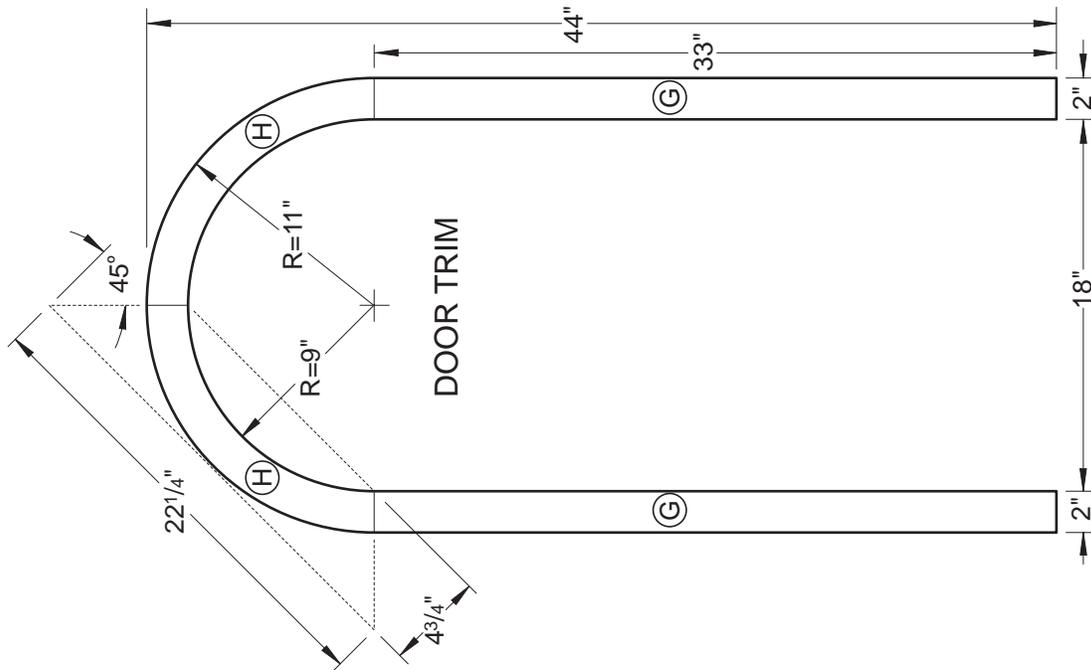
1/8" acrylic

3/8"
7 1/4"
20"
12"
3/8"
3/8"
8"
3/8"

9/64" holes, countersunk

## DOOR WINDOW

1/8" acrylic

16"
3/8"
R=6 3/4"
6 3/8"
13 1/2"
6 3/8"
3/8"
3/8"
3/8"

9/64" holes, countersunk

## END (2 needed)

D

58 3/4"
48 1/16"
10 11/16"
24°
24"
2"
1 9/16"
2 1/2"
19"
10"
22"
14 1/2"
48"
2"
2"
2"

Mount magnetic-catch supports R here.

Mount shutters L here.

The back (A) is the same size as the front. The back (A) has no cutouts for the windows and door.

FRONT (A)

22"

42"

14 1/2"

4"

10"

2"

2"

6 1/4"

4"

29"

R=9"

Mount magnetic-catch supports (R) here.

18"

58 1/2"

6 1/4"

10"

26"

4"

48"

Door (B) is made from door cutout from the front (A).

³/₈" round-over along front edge

R=8¹⁵/₁₆"

R=5¹⁵/₁₆"

R=1" on all inside corners

2"

7¹/₂"

41"

6¹/₂"

13¹/₄"

3³/₄"

3"

4¹⁵/₁₆"

1¹/₂"

3¹/₄"

2"

4¹⁵/₁₆"

3"

¹/₈" hole for door-knob screw

11⁷/₈"
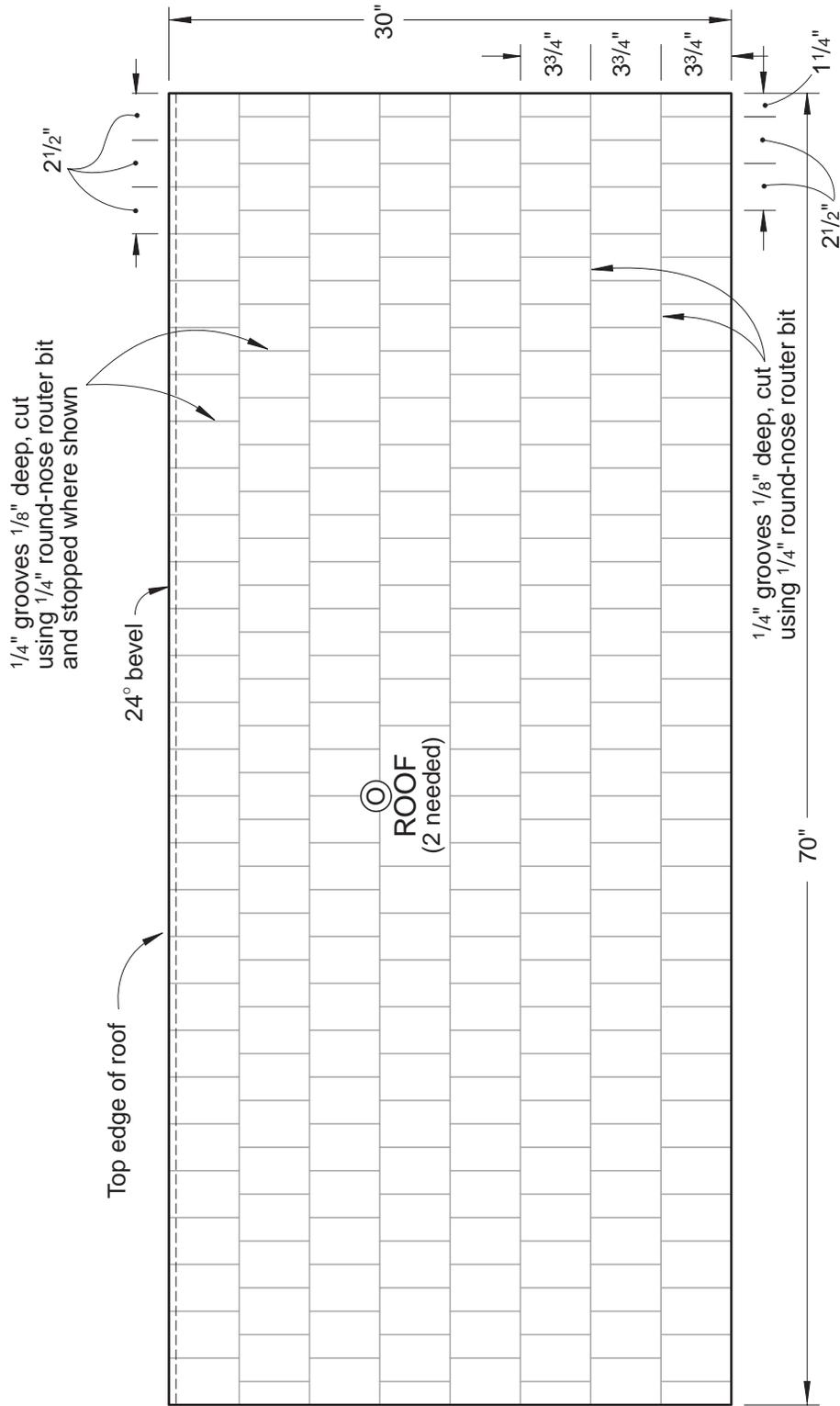
17⁷/₈"

(B) DOOR

³/₈" round-overs along front edge

³/₄" overlap of (I) opening in back side of the door

Windows (C) are made from window cutout and from front and end pieces.

¹/₄" round-overs

R=1" on all inside corners

1"

1¹/₂"

6⁵/₈"

21⁷/₈"

11¹/₄"

1¹/₂"

1¹/₂"

9⁷/₈"

2¹⁵/₁₆"

1"

2¹⁵/₁₆"

1¹/₂"

(C) WINDOW (4 needed)

DOOR TRIM

R=11"

R=9"

45°

22¹/₄"

4³/₄"

44"

33"

(H)

(G)

(H)

(G)

2"

18"

2"

30"

3³/₄"

3³/₄"

3³/₄"

1¹/₄"

2¹/₂"

2¹/₂"

1/4" grooves 1/8" deep, cut
using 1/4" round-nose router bit
and stopped where shown

1/4" grooves 1/8" deep, cut
using 1/4" round-nose router bit

24° bevel

ROOF
(2 needed)

70"

Top edge of roof

**To ensure full-sized patterns are correct size, your printer should be set to print at 100% (not fit to page). Measure full-sized patterns to verify size.**

SCALE

1/4  1/2  3/4  1"

5/32" shank holes, countersunk

24°

4"

24°

4"

ROOF END
P

24°

29 5/8"

31 1/4"

ROOF END
(P)
(4 needed)

⁵/₃₂" shank holes,
countersunk

24°