

# **Building Plan for Cat Cabins**

#### **Materials**

- Plywood (5/8 " CDX Exterior)
  - o 4x8 ft sheet
- Styrofoam
  - o 2" thickness, 4x8 ft sheet
- Pine Wood
  - o 2" x 2" (8 ft length), cut into:
    - (2) 3 ft sections
    - (2) 1 ft sections
  - o 1" x 3" pine, 15 ft
- Miscellaneous Supplies
  - o 30" piano hinge
  - Vinyl/coroplast
  - o 30" aluminum angle iron
  - o 3" chain
  - o 1.25" construction screws
  - o 2.5" construction screws
  - o #10 ¾ " wood screws (to attach angle iron on cover)
  - Fender washers
  - Staples
  - o Paint

#### **Tools Needed**

- Circular saw
- Jig saw
- Drill
- Mat knife
- Stapler
- Hand saw
- Keyhole saw

# **Step-by-Step Instructions**

## Step 1: Cutting the Plywood

- Cut pieces for the cabin structure:
  - o (1) 3' x 24" for the bottom
  - o (2) 24" x 21" for the sides
  - o (2) 24" x 21" for the ends
  - o (1) 28" x 41" for the cover
- **Optional**: Stain or paint the plywood with exterior paint (green or brown). Apply at least two coats for durability.

## Step 2: Assembling the Sides

- Align the 24" x 21" sides with the bottom 3' x 24" panel.
- Attach sides to the bottom using 1.25" screws. Use clamps to hold the pieces in place while attaching. Note: the 24"x21" ends will help align while attaching sides.

# **Step 3: Attaching the Ends**

- Trim the top of the ends as needed.
- Attach the 24" x 21" ends to the sides using screws.
- You should now have a rectangular box.

## Step 4: Adding the 2" x 2" Pine

- Attach 2" x 2" pine pieces to the bottom:
  - o Along the sides and 1' on each end. Place each about 5" from perimeter.

- o 1' from each end
- Position pine pieces about 5" from the perimeter.

#### **Step 5: Trimming the Top Perimeter**

- Attach 1" x 3" pine trim around the top perimeter of the box (sides first, then ends).
- Trim as needed to ensure a snug fit.

## **Step 6: Creating the Entrance**

- Mark a 5.5" x 9" rectangle on one end for the entrance. We suggest 4.5" from the bottom and 4" from the side.
- Drill holes in each corner of the rectangle.
- Use a jigsaw to cut out the entrance.

## **Step 7: Cutting and Installing Styrofoam (Interior)**

- Cut Styrofoam pieces:
  - o Break the 4x8' sheet in half, creating two 2'x 8' sections.
  - Cut the following:
    - (2) 24" x 18" pieces for the ends
    - (3) 24" x 16" pieces for the sides
- Place the Styrofoam end pieces into the box, ensuring a snug fit. Ends should be about 2" from the top of the box.
- Trim the foam as necessary. Mark one of the ends through the opening, remove and use the keyhole saw to remove the 5.5"x9" foam to create entrance.

#### **Step 8: Installing Bottom Foam Panel**

- Leaving the ends in place, measure and cut a foam piece approximately 30.5" x 24" for the bottom.
- Place this piece at the bottom of the box, holding the ends in place.

## **Step 9: Installing Side Foam Panels**

- Place a 16" x 24" Styrofoam panel on each side. This should leave about 6.5' x 16" space on each side.
- Measure and trim additional 16"pieces as needed to ensure a tight fit in the remaining space.

## Step 10: Securing the Foam

You should now have a fully lined cabin w/o the top.

- Use 2.5" screws with fender washers, usually 2 on each side and 1 on each end to secure the foam panels to the cabin walls.
- Place screws about 10-12" from the bottom, securing both sides and ends.

## Step 11: Cutting and Installing the Top Foam Panel

- Cut the final foam piece to approximately 24" x 34.5".
- This piece should sit on top of the interior foam panels with the top closed.

## **Step 12: Attaching the Cover**

- Attach the 28" x 41" cover to the box using a 30" piano hinge.
- Ensure the leading edge of the cover overhangs about 2" for easy opening.

## **Step 13: Installing the Cover Retaining Chain**

- Attach one end of a 3" chain about 6" from the leading edge of the cover.
- Attach the other end to the bottom of the cabin, on the trim.
- Ensure the cover can open approximately 120 degrees.

# Step 14: Attaching the Vinyl on the top

- Cut vinyl to fully cover the top of the cabin.
- Staple vinyl around the perimeter of the cover: 5 staples on the back, 3 on the sides, and 2 on the leading edge.

## Step 15: Installing the Aluminum Angle Iron

- Drill 3 holes in the aluminum angle iron and attach it to the leading edge of the cover (opposite the hinge).
- Position the angle iron about 2.5" from each end to stabilize the cover and provide a handle. Use the #10 x 34" screws to attach.

#### Step 16: Building the Entry Tunnel

- Use leftover plywood to build an entry tunnel for the cabin.
- The tunnel should be approximately:
  - o 12" deep
  - o 9" wide for the roof and floor
  - o 12" tall for the sides
- Attach the tunnel to the side of the entry, covering the roof with vinyl for protection.

