



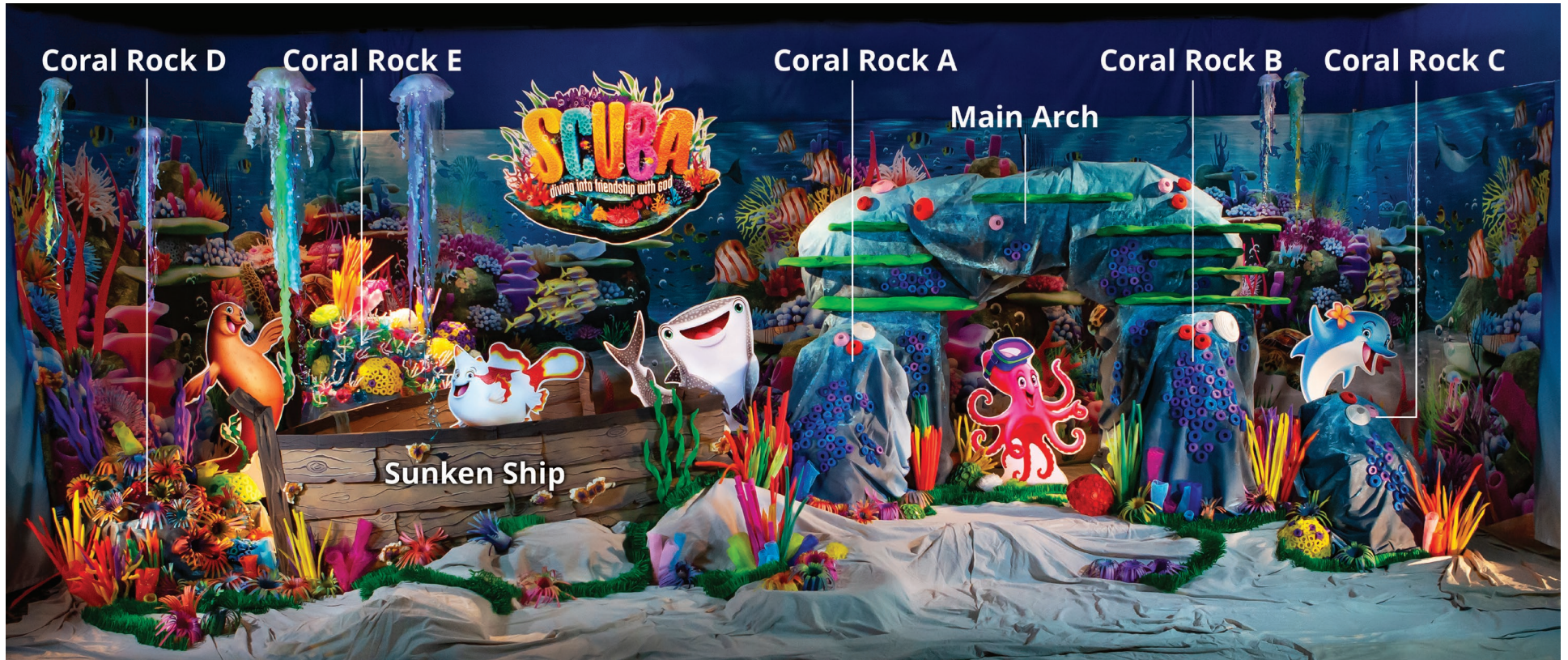
Scuba Main Set Decorating Instructions



Scuba VBS captivates kids with cool corals, colorful Buddies, and sunken boats! Group's imaginative design team makes it easier than ever to effortlessly transform your church into an underwater playground with easy-to-find items like kiddie pools, foam noodles, and fabric-dyed canvas cloth. (We'll even show you how to use items around your house like cupcake liners and paper plates!)

Check out instructions for how to build the following pieces and create a main set that's a colorful coral reef!

- Main Arch
- Coral Rock A
- Coral Rock B
- Coral Rock C
- Coral Rock D
- Coral Rock E
- Sunken Ship
- Paper Lantern Barnacle
- Pool Noodle Barnacle
- Coral
- Cup Coral
- Bottle Cap Coral
- Brain Coral
- Tube Sponges
- Jelly Fish



Coral Arch

What you'll need:

- ~ cardboard boxes (see schematic and box list for sizes and number of boxes needed)
- ~ 3 carpet tubes
- ~ 2 carpet tube stands (see our DIY instructions, or Christmas tree stands work great too)
- ~ tape measure
- ~ marker
- ~ jigsaw
- ~ utility knife
- ~ packing tape
- ~ packing paper
- ~ 1 $\frac{7}{8}$ -inch screws (drywall screws work great, project uses around $\frac{1}{2}$ pound of screws)
- ~ 3-inch screws
- ~ pallet wrap
- ~ 9 x 12 paper poly dropcloths—about 8 (or if you prefer, craft paper)
- ~ stapler
- ~ Cool Connectors
- ~ paint—1 pint of each:
 - Blue Vista (medium blue)
 - Sea of Tranquility (light blue)
 - Living Stream (dark blue)
 - Clover Patch (dark green)
 - Pencil Point (dark gray)
- ~ small multipurpose sprayer
- ~ 3 sheets (4 x 8) of 1 $\frac{1}{2}$ -inch foam
- ~ Great Stuff foam insulation
- ~ hot knife
- ~ sanding block
- ~ paintbrushes
- ~ paint sponge
- ~ hot glue gun and glue sticks
- ~ 2 wood furring strips (1 x 2 x 8)

Tip: Several steps to this build are much easier with 2-3 people helping.

What you'll do:

Note: Our Scuba Arch was about 7½ feet tall and about 10 feet wide when completed.

You may wish to scale up or down depending on your space.

Step 1

Begin by placing the appliance boxes open end down and about 5 feet apart. This is the base of each side column. (See schematic.)

Step 2

Next stack an extra-large box on top of each appliance box. (See schematic.)

Step 3

To create the middle section of the arch that bridges the gap between the stacks, place a box in the gap on the floor first.

Step 4

Cut carpet tubes to the following lengths:
2—64 inches; 1—84 inches.

Step 5

Notch the two upright (64-inch) carpet tubes to create a cradle for the horizontal (84-inch) piece to rest in.

Step 6

Cut large access holes in the bottom back of the base box of each side column. Cut doors in the back of each box, large enough for a drill to be able to fit inside the box.

Step 7

Place carpet tube stands at the base of each pillar.

Step 8

Determine where the upright will pass through each box and cut a 4-inch circle in the box.
(Tip: Trace around a smaller scrap piece of tube.)

Step 9

Determine where the horizontal tube will pass through each box. Trace and cut 4-inch round holes to allow the tube to pass through.

Step 10

Add additional boxes to the top, securing with screws or Cool Connectors. Note that each side column and the horizontal piece are built to come apart. When securing boxes together, be sure to secure column boxes to one another and not to the middle bridge piece boxes.

Step 11

Next build the Coral Rock A and B pieces. These pieces add width to the arch, make the arch easy to move, and ensure it will fit through doorways.

Step 12

Next stack the boxes for the Coral Rock C, which will be on the right side of the set. While this rock sits off a bit on its own from the arch, it helps complete the finished look of the arch. Stack boxes (see schematic), and secure together with screws and Cool Connectors. Tip: Build all the rocks you plan on having on your set at the same time. See Coral Rock D and E.

Step 13

Once the basic structure is together and the leg and side pieces are stacked and set in place, verify you like the size, shape, and scale of the arch for your space. Make any adjustments needed before moving on to the next step.

Step 14

Round the edges of the boxes by cutting out the corner of the box. (See picture.) To round out the ledges between the boxes, add packing paper. Use tape or pallet wrap to attach packing paper to box edges. This process helps give the arch a nice, rounded rock look, allowing the boxes to disappear under the final paper layer.



Step 15

Once the basic form of the structure is complete, label each piece on the back and disassemble the arch. (See diagram or picture.)

Step 16

Wrap each piece of the structure with paper poly dropcloths, leaving the back and access doors on the boxes accessible. Add more packing paper between the boxes and the dropcloth if needed as you cover with the dropcloth. Use screws to secure the dropcloth to the boxes.



Step 17

Fit all the pieces back together.



Step 18

Mix dark gray (Pencil Point) paint with 3 parts water 1 part paint in a handheld multi-purpose pump sprayer. Spray a base coat of gray on the Arch pieces. (See picture.) While the gray is still wet, load the sprayer with the medium shade of blue paint (Blue Vista). Spray each of the rock structures, and allow the blue to run down and muddle with the gray. Allow both colors to fully dry. Tip: If you are using craft paper in place of poly dropcloth, test a small area first; you may need to do lighter coats and allow it to dry between each coat.



Step 19

Sponge on details with dark blue (Living Stream) and white. (See video or picture.)

Step 20

Prep 4 x 8 x 1½-inch foam pieces to be carved into ledges. Remove the film covering on both sides of the foam. Next glue together 2 pieces of 1½-inch foam using Great Stuff. Think of it like a great big foam sandwich with Great Stuff as the filling. For the remaining piece of 4 x 8 foam, cut in half before gluing together. Allow to dry.



Tip: Having Great Stuff spray insulation throughout the middle helps the ledges have cleaner edges. After you have sandwiched it together, press together firmly. The foam will continue to expand. Let it expand, then peel the pieces apart and press together again. Peel the layers apart one more time, then press firmly. This process knocks the air out of the foam and will keep it from expanding. We weighed our foam down while allowing it to dry. On the video you will see we did not do a good job getting the air out of the foam and it expanded quite a bit.

Step 21

Cut and carve foam ledge pieces. (See schematic for sizes.) Sand smooth.



Step 22

Paint the ledge pieces dark green (Clover Patch).



Step 23

Assemble the painted Arch on your Scuba set.



Step 24

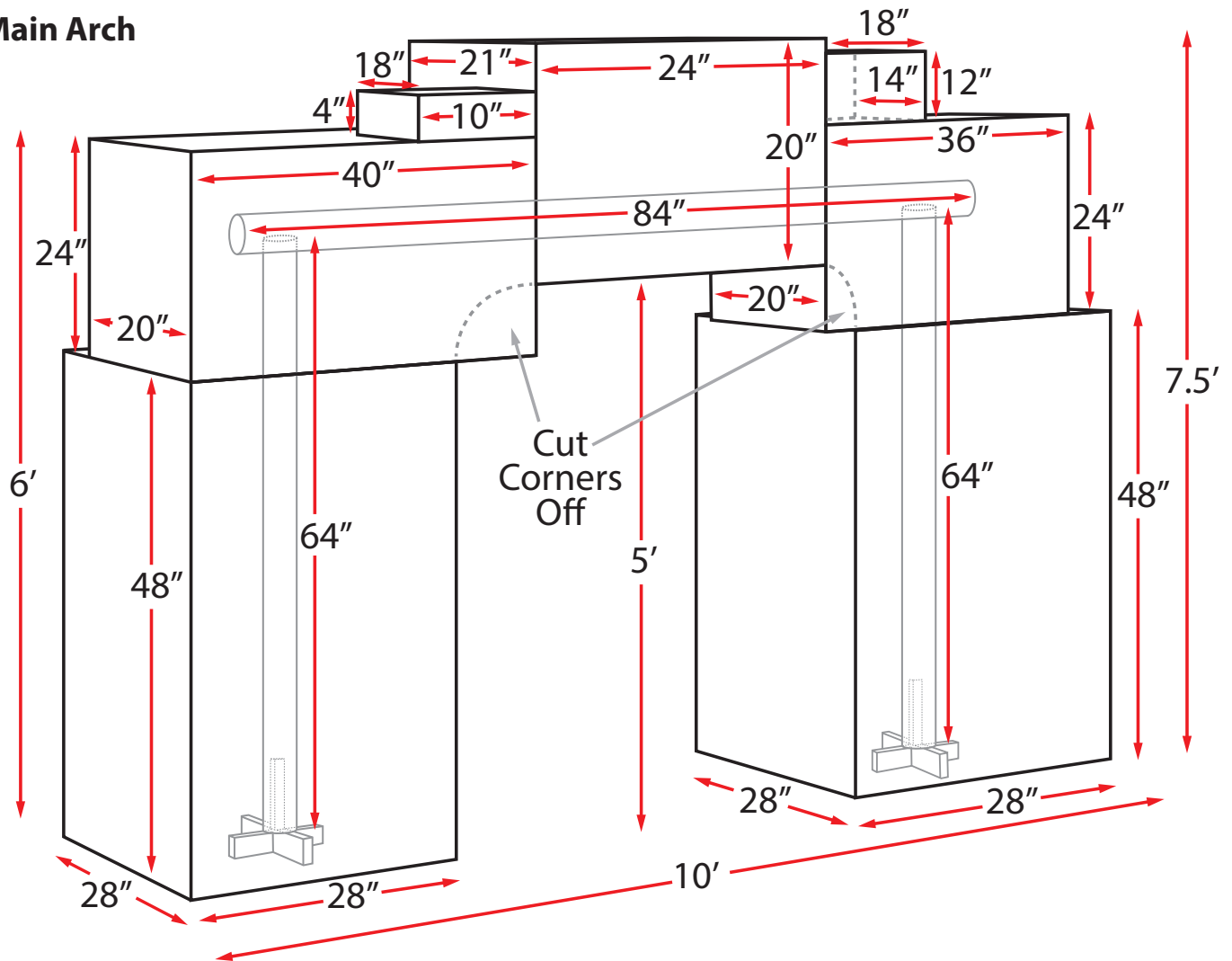
Determine where each ledge will go. To install the ledge pieces, place a wood furring strip inside the box and hot glue it in place. Next, one person presses the ledge onto the Arch while another drills through the furring strip inside the box through to the foam of the ledge. Do this on each end and every 8-10 inches along the length of the ledge.



Step 25

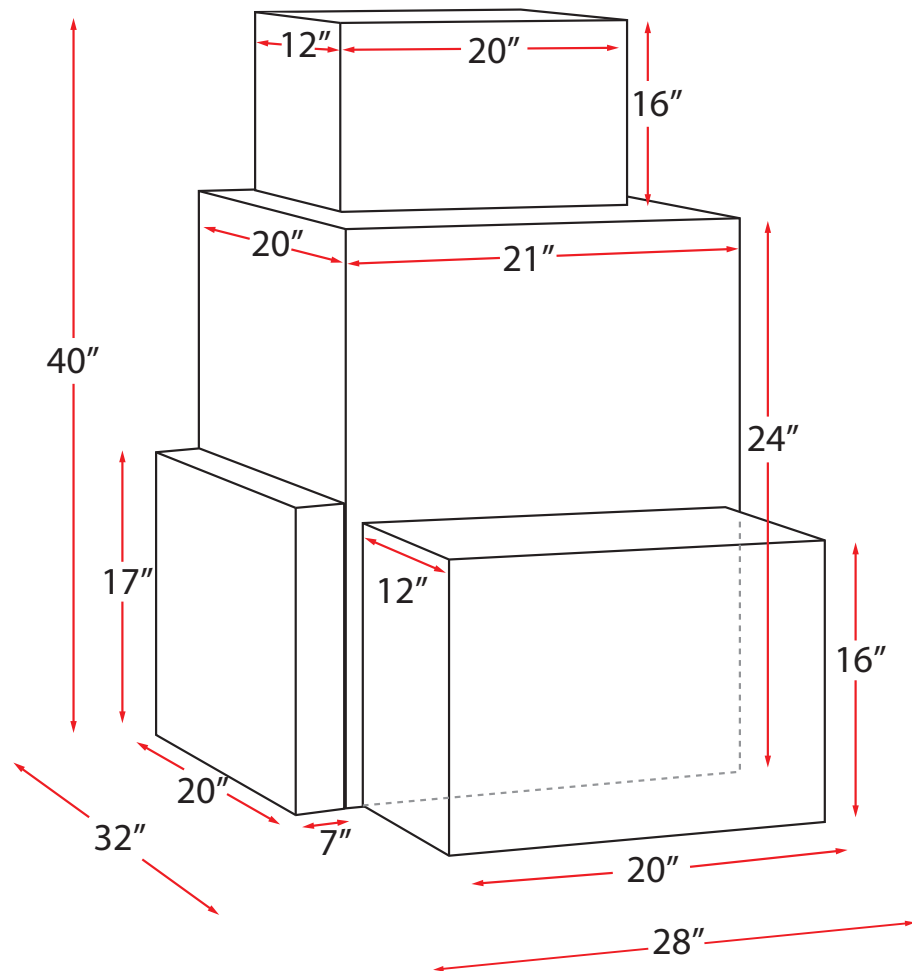
Attach coral pieces. (See individual build instructions and videos on group.com/vbsTools to create colorful coral.) Hot glue, Cool Connectors, and screws were used to attach coral to the arch.

Main Arch



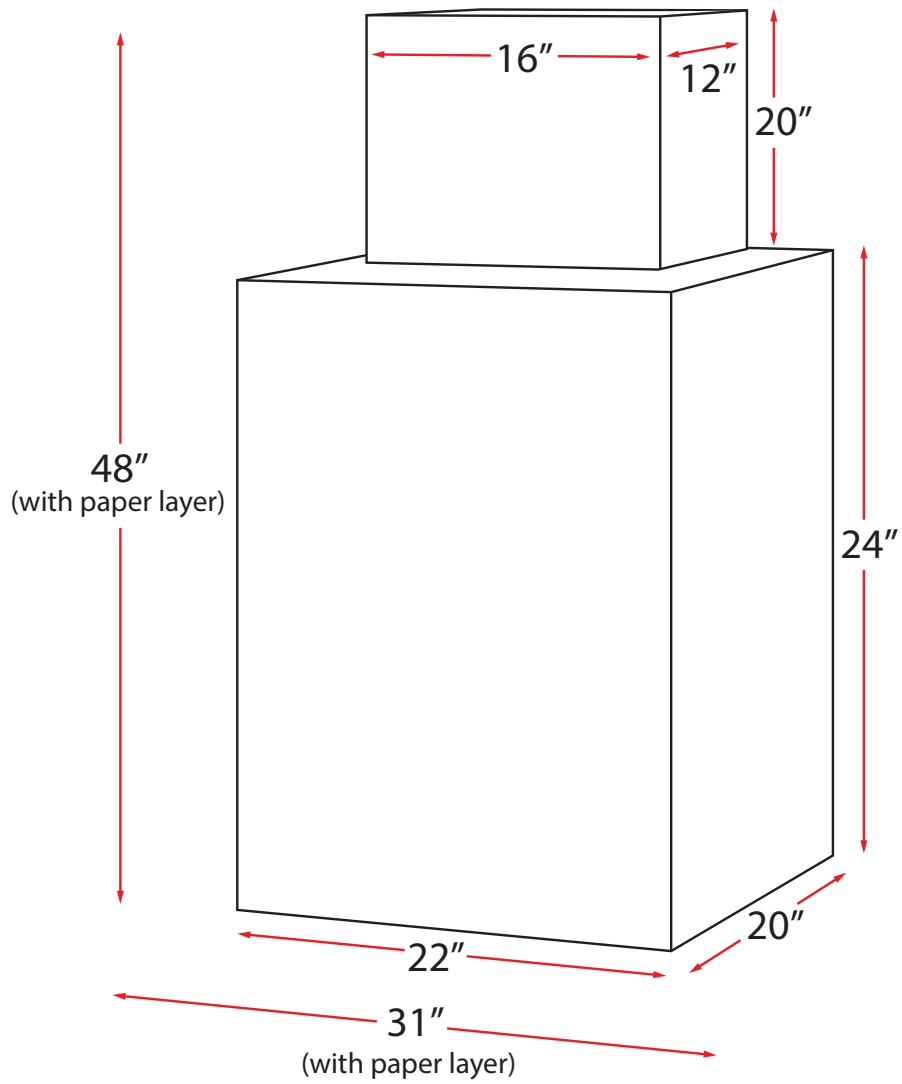
- 2 appliance boxes (48 x 28 x 28)
- 3 extra-large boxes (40 x 24 x 20) (36 x 24 x 20) (24 x 20 x 21)
- 1 medium size box (18 x 14 x 12)
- 1 small box (18 x 10 x 4)

Coral Rock A



1 extra-large box (24 x 21 x 20)
2 medium boxes (20 x 16 x 12)
1 small box (20 x 17 x 7)

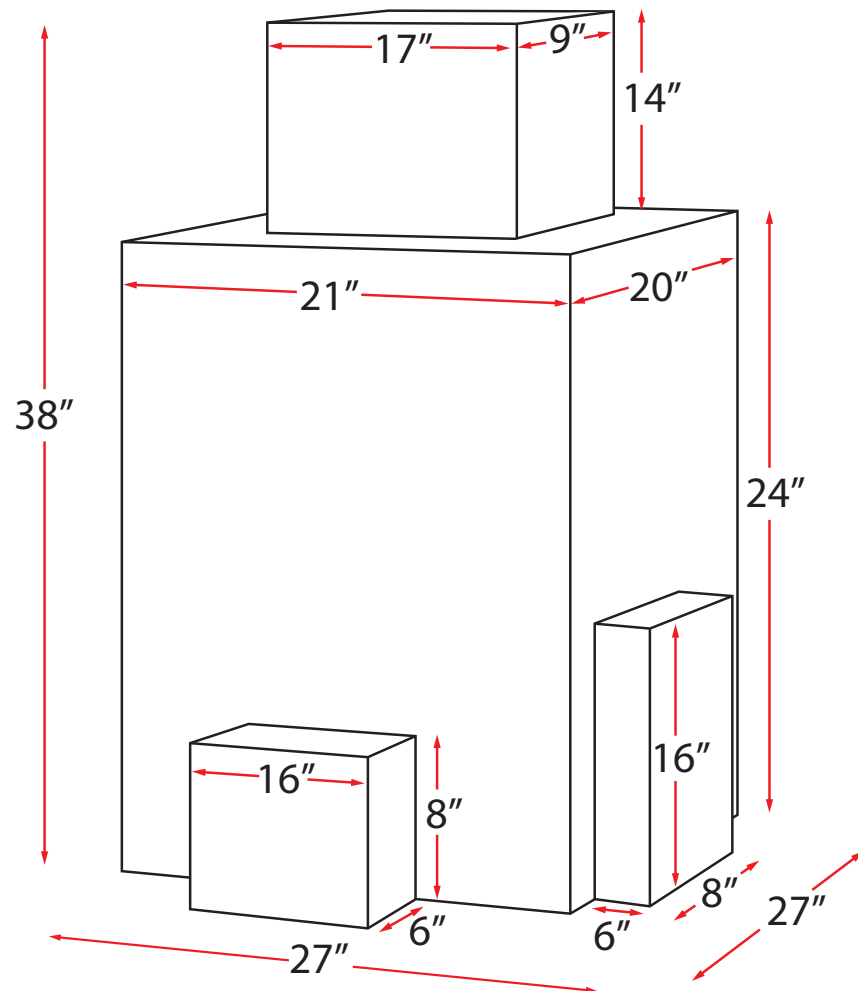
Coral Rock B



1 extra-large box (24 x 22 x 20)

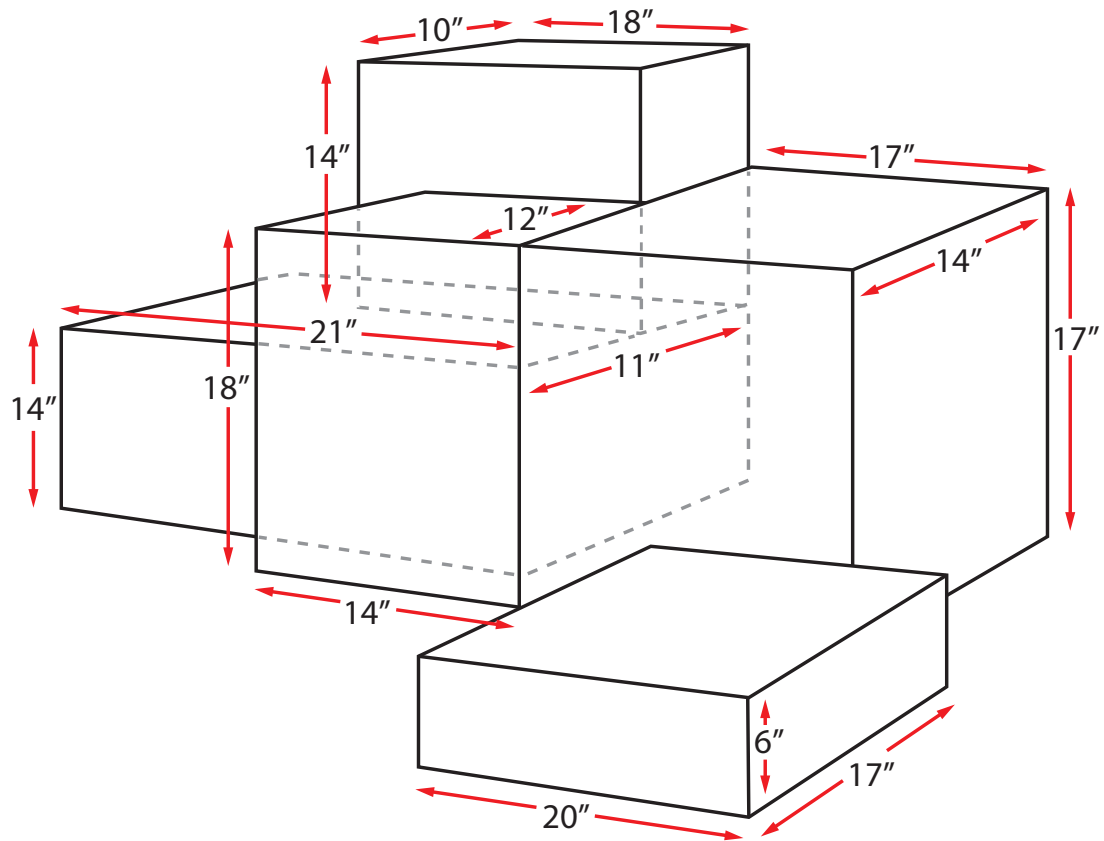
1 medium box (20 x 16 x 12)

Coral Rock C



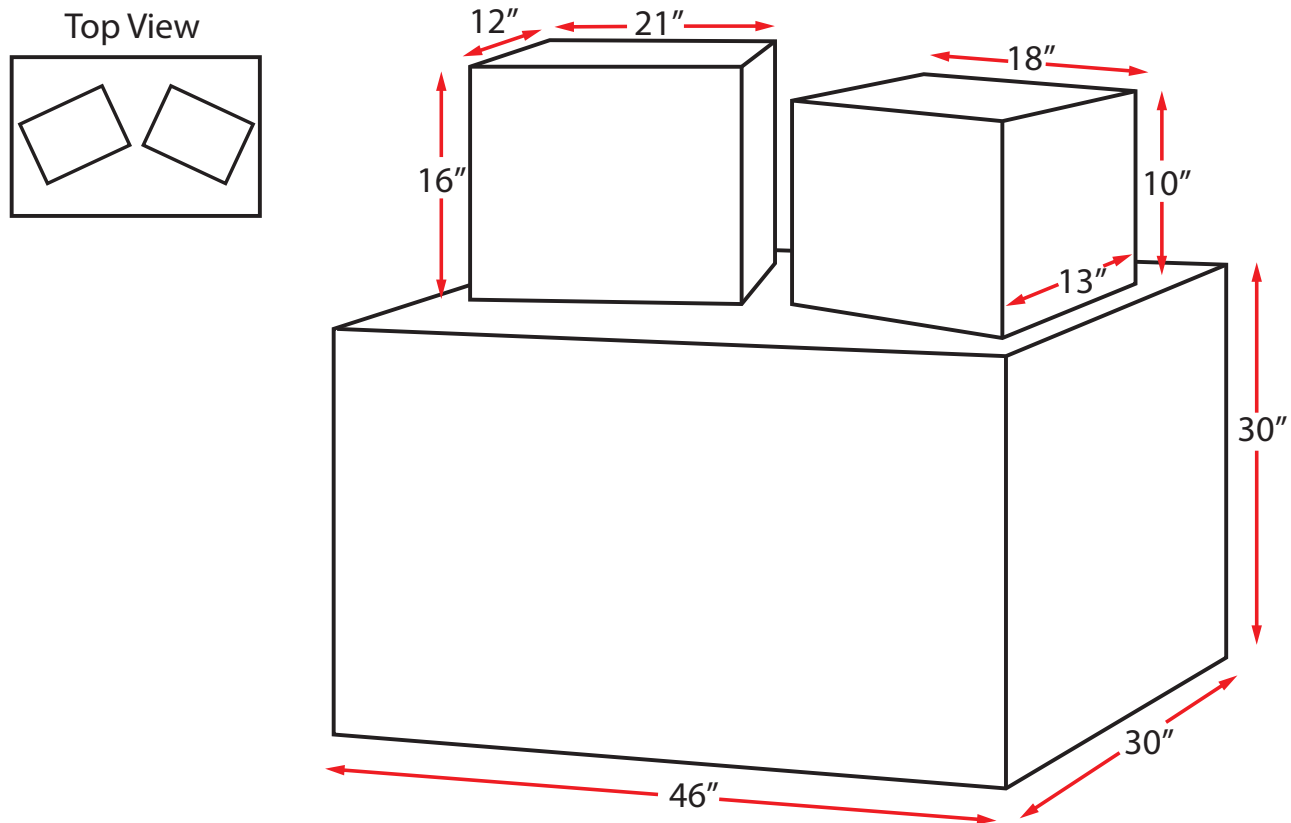
1 extra-large (24 x 21 x 20)
1 medium (17 x 14 x 9)
2 small (16 x 8 x 6)

Coral Rock D



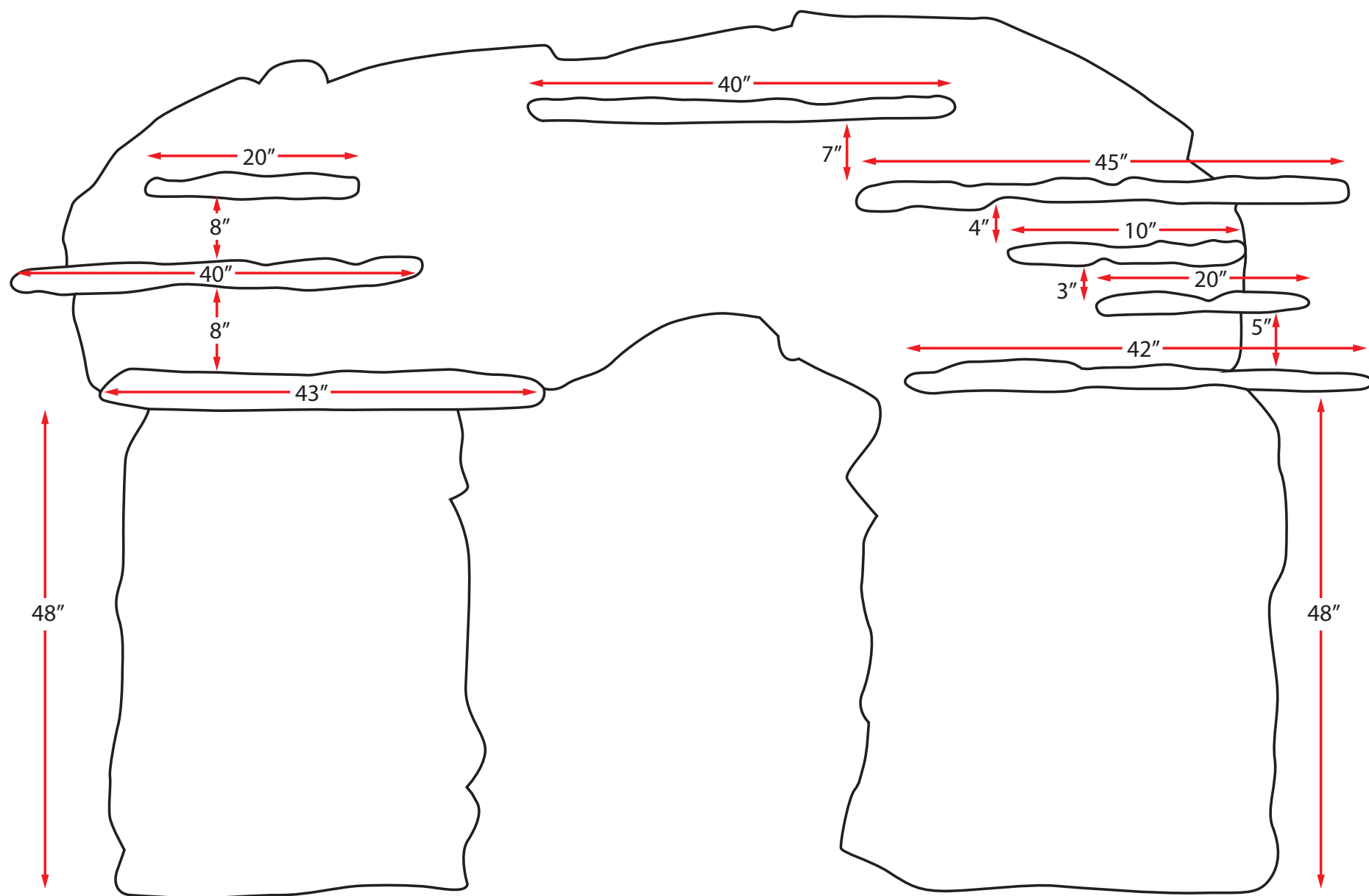
1 medium (18 x 14 x 12)
1 medium (17 x 17 x 14)
1 large (21 x 14 x 10)
1 medium (18 x 14 x 10)
1 large (20 x 17 x 6)

Coral Rock E



1 extra-large box (30 x 30 x 46)
1 large box (20 x 16 x 12)
1 medium box (18 x 13 x 10)
Plus one large box (used as riser,
not covered or painted)

Green Table Coral



Paper Lantern Barnacles

What you'll need:

- ~ small paper lanterns in a variety of colors
- ~ hot glue gun

What you'll do:

Step 1

Fully pop open the paper lantern, but do not insert the wire frame.

Step 2

Depress the bottom so that only half the lantern is popped open.

Step 3

Glue the flat side directly to rock or coral structure.



Pool Noodle Barnacle

What you'll need:

- ~ pool noodles
- ~ serrated knife or hot knife
- ~ heat gun
- ~ heat resistant gloves
- ~ scrap piece of wood (to use with the heat gun)

What you'll do:

Step 1

Cut the pool noodles into 1-inch slices.

Step 2

Lay a few pool noodle slices (5-7) on the board. Heat the slices by carefully waving the heat gun over them so that the edges melt. The result looks like a big soggy cereal ring.



Cup Coral

What you'll need:

- ~ neon hard plastic 9-ounce cups
- ~ heat gun
- ~ gloves
- ~ paint stick
- ~ needle nose pliers
- ~ hot glue gun and glue sticks
- ~ large beanbag filling
- ~ 20-gauge floral wire
- ~ cutting board
- ~ wooden surface for heating plastic on (such as a scrap of plywood)



What you'll do:

Step 1

Place the cup rim-side down on the wooden surface. Heat the cup by waving the heat gun about 4 inches away from the rim. Press down firmly with a paint stick to create wavy ridges around the rim.

Step 2

Allow cup to cool.



Step 3

Bend 2 pieces of floral wire in half. Twist and coil the wire at the fold to create a base and 4 prongs.

Step 4

Thread the beanbag filling on the four wire prongs.

Step 5

Hot glue the wire base in the bottom of the cup.

Note: We left some cups plain with only melted edges.

Coral

Spiky Coral

What you'll need:

- ~ pool noodles
- ~ tape
- ~ utility knife or hot knife
- ~ cutting mat

What you'll do:

Step 1

Cut pool noodles at different lengths.

Step 2

Slice the noodles in half. Then slice the half in several sticks, leaving 2-3 inches attached at the bottom.

Step 3

Gather several colors, and tape a grouping of the sticks together.



Brain Coral

What you'll need:

- ~ large plastic bowl
- ~ 2 pool noodles (2 different colors)
- ~ hot glue gun with a low temperature setting and glue sticks
- ~ hot knife

What you'll do:

Step 1

Cut 1-foot sections of each color of pool noodle.

Step 2

Trim each piece with a hot knife to create flat sides, like peeling a vegetable. Cut the trimmed piece into ½-inch slices. Repeat this process until you have enough slices to cover the bowl.

Step 3

Glue the slices on the overturned bowl.

Note: We liked the color of bowls we found and were able to use them as is without painting.



Tube Sponges

What you'll need:

- ~ 10-inch-wide roll of mesh ribbon
- ~ stapler
- ~ scissors

What you'll do:

Step 1

Cut 5-7 pieces of ribbon in varying lengths no longer than about 18 inches.

Step 2

Roll each piece of ribbon to create a tube, turning the ribbon edge under while rolling it.

Step 3

Staple to secure the tube.

Step 4

Arrange in groups and staple them to each other. After stapling together, the bottom of the grouping can be trimmed flat to allow it to stand.

Note: With lots of places on the set to T pin them in, it is not necessary for them to be free standing.



Bottle Cap Coral

What you'll need:

- ~ plastic bottle tops
- ~ large plastic bowl
- ~ hot glue gun
- ~ primer spray paint
- ~ 3 bright colors of spray paint
- ~ scrap cardboard and dropcloth
- ~ packing tape

What you'll do:

Step 1

Lay packing tape sticky-side up on the cardboard and secure the ends. Then arrange the bottle caps along the pieces of tape with the open end up.

Step 2

Spray with primer. (The flat top of the cap will be glued to the bowl and does not need to be painted.)

Step 3

Allow the primer to dry.

Step 4

Hot glue the bottle caps open side up to the bowl. (If you are using a high temp glue gun, test to make sure the bowl and bottle caps do not melt.)

Step 5

Spray paint. Lightly coat the whole structure with the base color. Your base color should be the darkest color of the three. In this case red. Allow the paint to dry.

Step 6

Add a light dusting of the next color. In this case orange. The idea of dusting is to let the paint land on the rims and edges of the caps, creating great texture. Let dry.

Step 7

Then add a final dusting of a bit of a contrasting fun pop of color. In this case pink. Again, this is to create shading and texture to the piece.



Paper Sea Anemone

What you'll need:

- ~ colored paper
- ~ paper cutter or a cutting mat and X-Acto knife
- ~ ruler
- ~ pencil
- ~ tape
- ~ spray paint

What you'll do:

Step 1

On the short edge of the paper, measure in 3 inches and draw a faint line down the paper.

Step 2

Next turn the paper on the long edge and mark every $\frac{1}{4}$ - $\frac{1}{2}$ inch.

Step 3

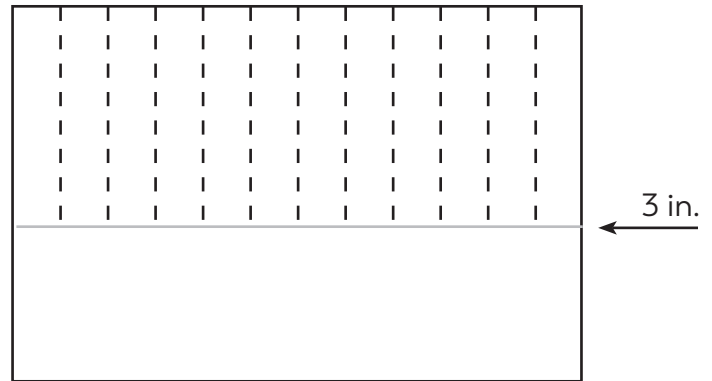
Make a cut from the edge of the paper to the 3-inch line every $\frac{1}{4}$ - $\frac{1}{2}$ inch all across the length of the paper.

Step 4

Wrap in a tube, and tape together at the base.

Step 5

Spray paint for added color.



Jellyfish

What you'll need:

- ~ clear plastic bowl
- ~ 3 battery-powered fairy lights (6-foot strands)
- ~ clear packing tape
- ~ hot glue gun and glue sticks
- ~ white plastic tablecloth
- ~ colored plastic tablecloth
- ~ scissors
- ~ spray paint
- ~ 3 colored plastic bead necklaces
- ~ 3-inch-wide roll of white tulle
- ~ curling ribbon
- ~ crepe paper streamers
- ~ quilt batting

What you'll do:

Step 1

Tape fairy lights on the bottom inside of the bowl. Bunch up one of the strands in the bowl. String the rest so that they hang down from the center of the bowl.

Step 2

Cut a circle of batting that covers the entire outside of the bowl. Glue the batting to the outside edges of the bowl, forming a ruffle around the top of the bowl.

Step 3

Cut 3 white strips and 3 color strips of the plastic table covers 2-3 inches in width and the length of your choice, taper one end.

Step 4

Stretch the sides of the plastic on each side every 1-2 inches the full length, and glue to the center of the inside of the bowl.

Step 5

Repeat steps for 8 smaller tentacles, approximately 1 inch wide and 12-24 inches long, gluing them closer to the edge of the inside of the bowl.

Step 6

Cut about 3 pieces of approximately 6-inch crepe paper streamers, and zigzag fold the streamers (so that it's easy to cut all the layers at a time). Cut half-circle notches from the sides. Glue to the center of the inside of the bowl.

Step 7

Fill in the blank spaces with lengths of curling ribbon, bead strands, and tapered strips of tulle.

Step 8

When everything is glued into place, gently spray some color with spray paint.



Sunken Ship

What you'll need:

- ~ ½-inch PVC pipe (6 pieces 10 feet long to be cut)
- ~ chop saw or PVC cutter
- ~ 6 three-way PVC joint fittings
- ~ cardboard (about 2 large appliance boxes worth, will be cut into pieces)
- ~ utility knife
- ~ cutting mat
- ~ 7-inch zip ties (20)
- ~ paint (brown, black, white) + barnacle colors (purple, yellow, orange)
- ~ Cool Connectors (100)
- ~ hot glue gun and glue sticks
- ~ Great Stuff foam insulation (optional)



What you'll do:

Step 1

Cut PVC so that you have the following pieces:

- 4—8 feet
- 1—34 inches
- 2—2 feet
- 2—5 feet
- 1—10 inches

Step 2

Build the PVC frame of the boat. (See schematic.)

Step 3

Cut 2 pieces of cardboard large enough to cover each side of the boat.

Step 4

Cut an additional piece large enough to cover the back. (This helps make it sturdy for the building process and will be modified and cut away later along with the top piece of PVC.)

Step 5

Zip tie these large pieces to the PVC frame.

Step 6

Cut 18 10x36-inch pieces of cardboard to be used as wooden planks for the side of the boat. We cut a few extra knowing we were going to piece them together and trim the length.

Step 7

Cut 54 2x32-inch strips of cardboard. (These will be glued to the back of the planks and used as spacers.)

Step 8

Hot glue the 2x32-inch pieces in stacks of 3 to the back of each plank about 2 inches from the bottom edge.

Step 9

Cut and score side rail pieces—the pieces that wrap over the edge of the side of the boat. (See schematic.)

Step 10

Cut pieces for the bow of the boat. (See schematic.)

1 bow upright piece 12x41 inches, score

1 bow cap piece (See template.)

Step 11

Score any pieces that need to be scored. (See schematic.)

Step 12

Paint the planks to look like wood. Start by painting a solid base coat of lighter brown, then add wood grain accents of darker brown, white, and black.

Step 13

Fold and tape the top of the bow cap together, and add this top piece to the upright piece of the bow.

Step 14

Paint the side rail and bow pieces with a darker brown base coat, then add wood grain accents with lighter brown, white, and black. Note: Paint the non-scored side.

Step 15

Attach the planks to the boat sides using Cool Connectors. Start at the bottom edge of the boat, and attach one row of planks at a time. The spacers should be at the bottom edge. Let the planks overlap at the ends by about 3-4 inches. Continue this process to completely cover the outside of one side of the boat, part of the inside of the other side (only what will be visible), part of the inside sides, and bottom of the back. (See schematic.)

Step 16

Fasten the side rail pieces to the top edge with Cool Connectors.

Step 17

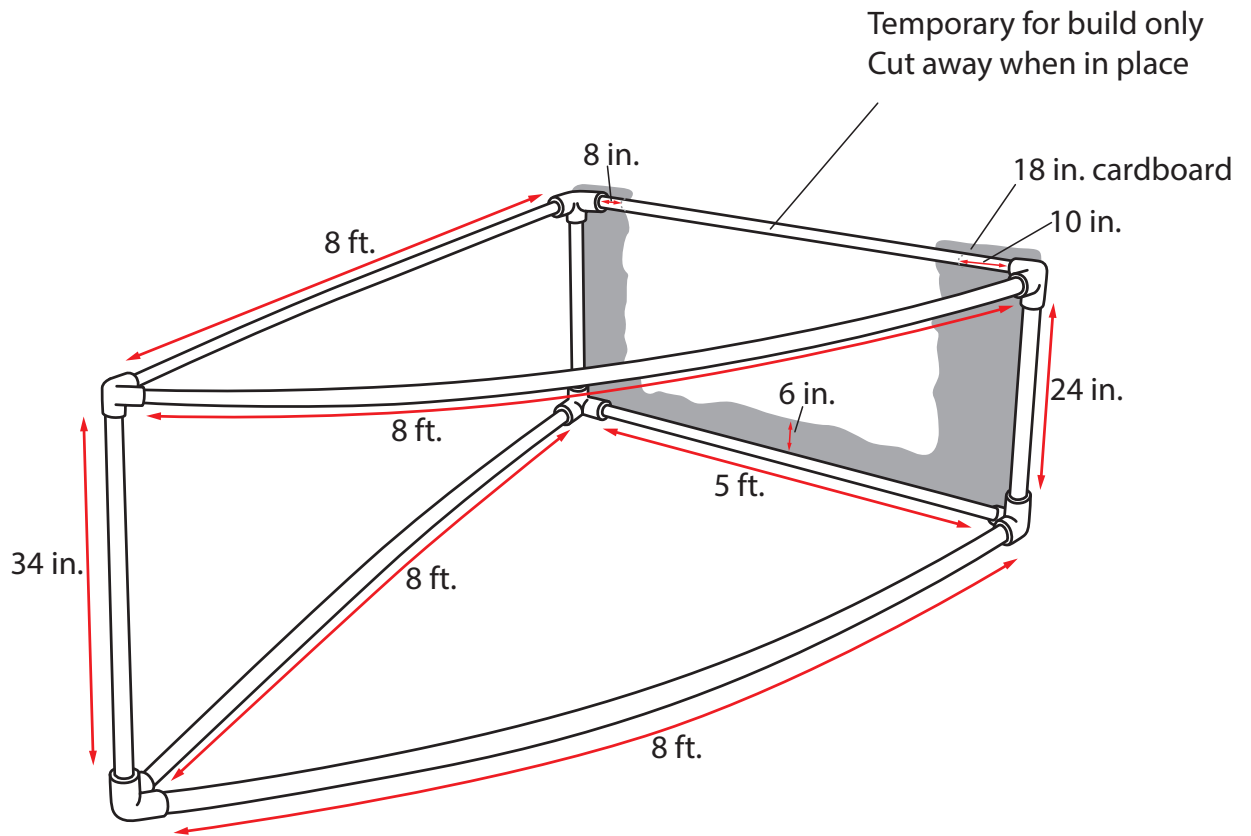
Attach the bow of the boat to the front of the boat with Cool Connectors.

Step 18

Add Great Stuff foam barnacles to the side of the boat, and allow to dry. Add paint details to barnacles.

Sunken Ship

PVC frame



Four - 8 ft. pieces

One - 34 in. piece

Two - 2 ft. pieces

One - 5 ft. piece

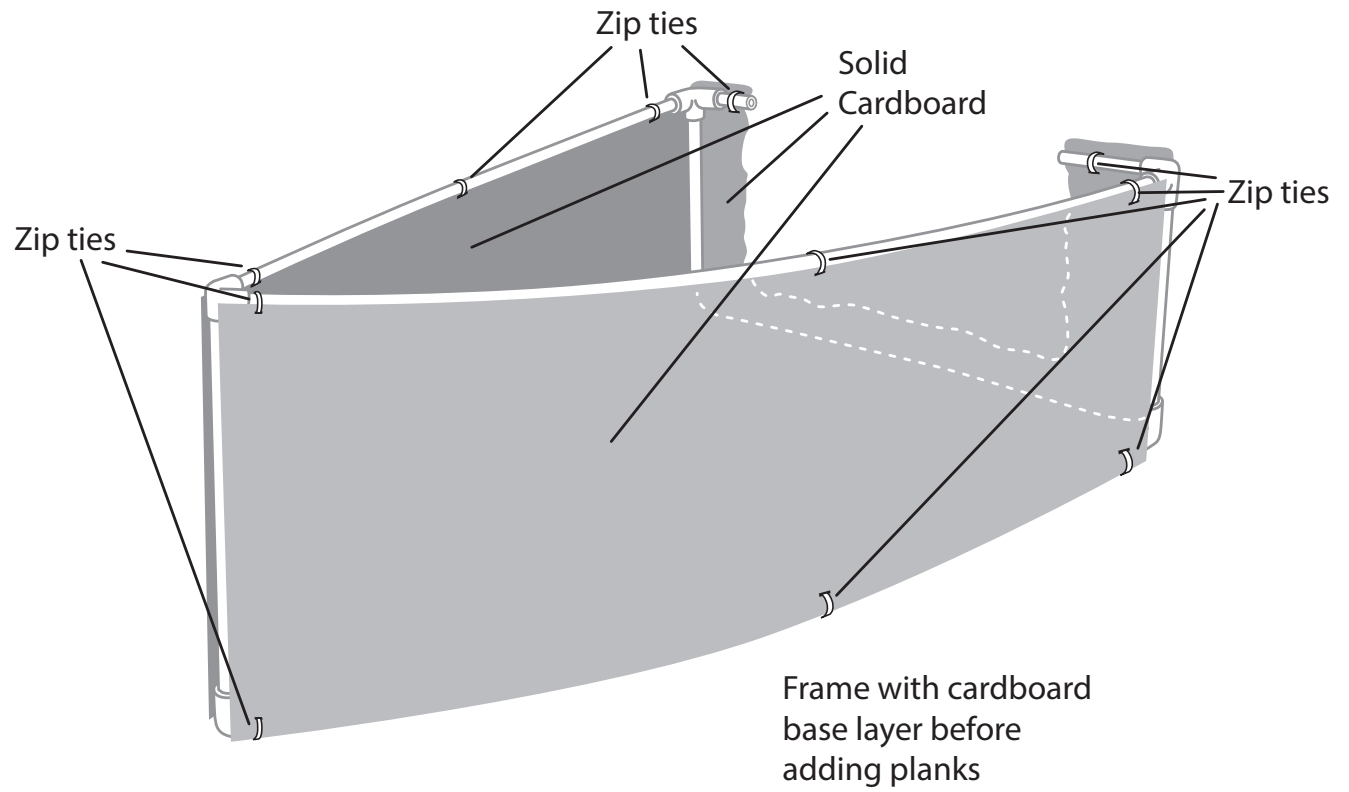
One - 10 in. piece

$\frac{1}{2}$ in. pvc pipe

Six - $\frac{1}{2}$ in. pvc 90° side outlet fittings

Sunken Ship

Cardboard



Sunken Ship

Planks

