Making Pipe Wind Chimes

Skill Level: Intermediate

Wind chimes are a beautiful addition to outdoor living.

The musical notes of wind chimes help soothe and relax you on a windy day. You can make your own wind orchestra from items purchased at your local Lowe's. Making your own set of wind chimes will involve working with metal and wood. Make sure you have the appropriate tools for both. Lowe's is happy to provide this information as a service to you.

Article Content

Tools & Materials

Click a text link below to shop for that item.
Click the information icon for a product buying guide.

Tools

- Pipe cutter or Hacksaw
- Clamp
- Drill/driver
- 1/8" metal drill bit/s

Materials

- Aluminum or galvanized conduit 3/4" or 1" diameter
- Medium grit sandpaper
- Sandpaper for metal
- Heavy nylon fishing line (string) or 18-

- 1/16" drill bit
- Wire cutter
- Marker
- Jig saw
- Dust mask
- Goggles
- Compression punch
- Tape measure

gauge copper wire
- Hard wood scraps (from 1" planks)
- Metal washer
- Carbon paper
- Exterior-grade polyurethane
- Paint or Stain
- Glue (quick-setting)

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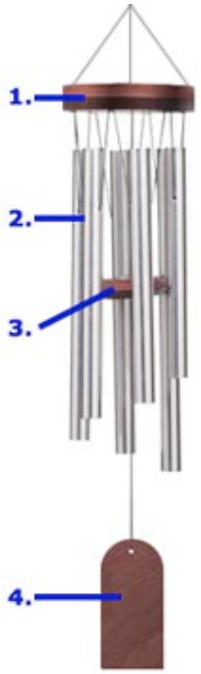
Selecting Chime Material

One of the most important things you will choose is the actual chime material. Each type of metal makes a different sound.

- Hard metals, such as steel or aluminum, produce a sharp tone.
- Soft metals, such as copper, make a more mellow sound than steel pipe.
- Galvanized conduit consists of steel with an outside coating of zinc to resist rusting. Look for galvanized conduit in the electrical department. We used 1" diameter galvanized conduit in our example.

The sound is almost the same as the hard metal pipes but it isn't as sharp of a tone because of the coating of zinc. The difference in sound is minor and once the assembly is done, most people can't distinguish between steel pipe and galvanized conduit.



1. Platform
2. Pipes/Chimes
3. Clapper
4. Weight

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Determining the Length of Each Chime

No matter what material you choose, the length of the chime will also influence the tone.

- Sharper tones are common when you make small chimes anywhere from a 2" to 6" in length.
- If the chime is longer, 1' or more, softer tones are produced.

The following lengths are for a four chimer, a six chimer and an eight chimer.
The order of the chimes is important for balance so the platform won't tilt.

Number of Chimes	Length of Pipe	Diameter of Platform	Hanging order should start at 12:00 from the top.
Four-Chimer (Download PDF Template)	6", 8", 10" and 12"	7"	6", 8", 10" and 12" evenly spaced
Six-Chimer (Download PDF	16 1/2", 17 1/2", 19 1/4", 20 1/2", 21 1/2"and 23 3/4"	7"	16 1/2", 20 1/2", 17 1/2", 21 1/2", 19 1/4", 23 3/4" evenly spaced

Template)			
Eight- Chimer (Download PDF Template) You will need access to a copier to enlarge.	16", 17", 18", 19", 20", 21", 22", 24"	11"	16", 20", 17", 21", 18", 22", 19", and 24" evenly spaced

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Cutting the Chimes

1. Measure and mark each chime length on your pipe using a marker.

Pipe cutter.

2. You can use a pipe cutter or hacksaw to cut the pipes into number of chimes you have selected.
3. If you use a hacksaw, use a clamp to hold the pipe in place.
4. When using a pipe cutter, tighten the cutter so it circles the pipe and makes a sharp score line without denting the pipe. After the first score line is made, place a drop of oil in the groove to lengthen the life of the cutting wheel.

Hacksaw.

5. Tighten the pipe cutter by one-quarter turn each time a complete revolution is made around the pipe. Continue this process until the pipe is cut through.

As you are scoring the pipe, make sure it doesn't start to spiral cut. The blade should stay in the same track each time you score the pipe.

6. Remove the burr from the ends of the pipe with sandpaper rated for metal use.

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Drilling the Chimes

1. From the top of each pipe, measure and mark a spot 2" down.
2. Use a compression punch to make a dimple or flat spot on the pipe at the mark to prevent the drill bit from sliding. Clamp the pipe to hold it in place.
3. Using a 1/8" metal bit, drill a hole through both sides of the pipe.
4. Sand the drilled areas with medium-grit sandpaper.

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Making the Wooden Platform and Clapper

You can use wood scraps to make a wooden platform, weight and clapper. The wood you use should be at least a 1x material that is 3/4" thick. We've provided templates to make a platform based on the number of chimes you use.

1. Print the PDF templates for the parts. Click here for a PDF of the templates for the platform, the weight and the clapper.
2. Place a piece of carbon paper over the specified material for the part you are cutting. Lay the template over the carbon paper and trace the template onto the stock. Be sure to press hard so the pattern transfers completely.

3. Use a jig saw to cut the platform and the weight along the template's edges.

4. Use a 1/8" bit to drill two pilot holes as indicated on the platform template. Use one hole as a starting point for the jigsaw.

5. Using the template provided, drill the holes for the chimes and the suspension cords using a 1/16" bit.

6. Use a 1/16" bit to drill one hole through the center of the clapper.

7. Use a 1/16" bit to drill the hole in the weight about 1/2" down from the top.

8. Sand the platform, the weight and the clapper.

9. Paint or stain the pieces. Allow them to dry.

10. Add a coat of exterior-grade polyurethane to protect the wood. Allow the pieces to dry completely before assembling.

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Assembling Chimes

The chimes and clapper should be spaced so the clapper will hit one chime or two chimes at a time.
Be sure to place the chimes in the order listed above, based on the length. Again, the correct order of the chimes is important because it:

- Keeps the weight distributed so the whole assembly does not tilt.
- Ensures the sound quality of the chimes.

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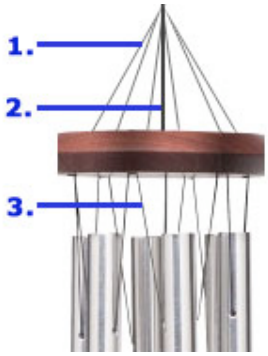
Cutting the Cord/Wire

The length of each piece of cord/wire will be based upon how far you want the chimes to hang from the platform. We are using pieces of cord that are 15" long so the chimes will hang 5 1/2" from the platform.
The middle cord that will support the clapper and the weight must be as long as the longest chime plus 6" for the clearance at the top, 5 1/2" to accommodate the length the chimes are hanging from the platform and 2 1/4" for the weight clearance at the bottom and to accommodate the knots.
In our example, 23 3/4" chime + 6" suspension + 5 1/2" hanging length from platform + 2 1/4" for the weight clearance=37 1/2" piece of cord for the middle.



1.Suspension Cords
2. Clapper Cord
3. Chime Cords

1. Thread nylon cord or copper wire down through the drilled holes in the top of the platform for one of the pipes. The holes should be spaced 1" apart.

2. Thread the ends of the cord through the holes you drilled in one of the pipes.

3. Knot the ends of the cord or twist the ends of the wire together.

4. Repeat the above steps for each chime. Make sure they are in the proper order.

5. Cut three pieces of cord 13" long. These will be used to hang the entire assembly.

6. The six holes drilled near the middle of the platform are to attach the suspension cords.

7. The wind chimes will be supported by a washer at the top. Thread the cord through the holes from the bottom of the platform. Tie the cord to the ring at the top of the platform. Keep the assembly level when attaching the cord to the washer.

8. Tie the longest cord you cut to the washer. This will be the clapper cord.

9. Thread it through the middle of the platform and slide the clapper about halfway up the cord.

10. Tie a knot at the base of the clapper large enough so the clapper won't slide over it.

11. Thread the end of the cord through the top of the weight and tie a knot.

12. Hang the wind chimes and make sure that they are fairly level. If not, adjust the length of the cords.

13. Once the wind chime is level, use a drop of quick setting glue to secure each of the knots.

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