

Zip Tie Domes – How to Cut Your Own Struts

Use the Dome Calculator at www.ZipTieDomes.com to determine your strut lengths. The Blue struts on the calculator are always the longest struts, and this is the place to enter your data. For maximum strength, the longest struts should not be greater than 5 feet in length.

The hubs are designed for 1" PVC pipe with 1.315" OD. If you want to use 3/4" or 1" EMT conduit, upon request we will drill the hubs with the correct apertures for these ODs as a special order.

The Dome Calculator Material Utilization Chart will indicate the number of pipes that you will need to purchase.

Common sizes for 10' pipe material are:

16' 2V Dome:	35 Blue Struts – 5' length
	30 Red Struts – 4' 5" length
Total pieces of 10' Pipe needed:	33

10' 2V Dome:	35 Blue Struts – 3' 4" length
	30 Red Struts – 2' 11 3/8" length
Total pieces of 10' Pipe needed:	22

25' 3V 3/8 Dome:	50 Blue Struts – 5' length
	40 Yellow Struts – 4' 10 3/4" length
	30 Red Struts – 4' 2 3/4" length
Total pieces of 10' Pipe needed:	60

25' 3V 5/8 Dome:	80 Blue Struts – 5' length
	55 Yellow Struts – 4' 10 3/4" length
	30 Red Struts – 4' 2 3/4" length
Total pieces of 10' Pipe needed:	83

Zip Tie Domes – How to Cut Your Own Struts

16' 3V 3/8 Dome: 50 Blue Struts – 3' 4" length
 40 Yellow Struts – 3' 3-1/8" length
 30 Red Struts - 2' 9-7/8" length
Total pieces of 10' Pipe needed: 56

16' 3V 5/8 Dome: 80 Blue Struts – 3' 4" length
 55 Yellow Struts – 3' 3-1/8" length
 30 Red Struts - 2' 9-7/8" length
Total pieces of 10' Pipe needed: 41

Common sizes for **20'** pipe material are:

13' 2V Dome: 35 Blue Struts – 4' length
 30 Red Struts - 3' 6-1/2" length
Total pieces of 20' Pipe needed: 13

19' 3V 3/8 Dome: 50 Blue Struts – 4' length
 40 Yellow Struts – 3' 11" length
 30 Red Struts - 3' 4-5/8" length
Total pieces of 20' Pipe needed: 24

19' 3V 5/8 Dome: 80 Blue Struts – 4' length
 55 Yellow Struts – 3' 11" length
 30 Red Struts - 3' 4-5/8" length
Total pieces of 20' Pipe needed: 33

Zip Tie Domes – How to Cut Your Own Struts

How to Cut and Drill the Struts:

Mark the pipe with a marker, using a tape measure or a jig for the length.

Cut the pipe to length using a pipe cutter or chop saw.

Drill a 5/16” or 3/8” hole across each of the ends of the pipe, about 3/8” to 1/2” from the pipe ends. Use a drill press if possible.

Drill slowly so you won't crack the pipe.

The holes on each end of the pipe have to be drilled parallel to each other. If they are 90 degrees off, you won't be able to attach the end of the strut to the center ring. Try to drill through the lettering on the outside of the pipe, that will help you line up the holes on each end of the strut so they are parallel to each other.

Mark the pipe with Blue, Red, or Yellow colored tape to help you distinguish them during setup.