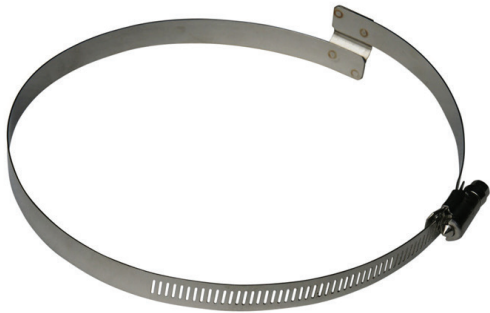


## Connecting Duct to Outlet/Fitting

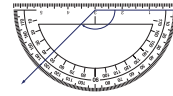


1. Determine length of duct needed. Allow extra length for bends and joints.
2. Stretch duct fully from end to end, measure, and mark desired length.
3. If any cutting is needed, determine the required length and then cut completely around and through duct with knife or scissors. Cut wire with wire cutters
4. Slide one end of the duct over fitting and past the bead.
5. Seal duct to fitting with hose clamp placed over the ducting.

## Connecting Two or More Ducts



1. Determine length of duct needed. Allow extra length for bends and joints.
2. Stretch duct fully from end to end, measure, and mark desired length.
3. If any cutting is needed, determine the required length and then cut completely around and through duct with knife or scissors. Cut wire with wire cutters
4. Slide one end of the duct over fitting and past the bead.
5. Seal duct to fitting with hose clamp placed over the ducting.



<p><b>What is diameter?</b> Diameter is defined as the distance of a straight line passing from one edge of a circle or sphere to the other end. In other words, it goes straight across the circle.</p>	<p><b>How is the inside diameter of a flex duct measured?</b> It is easy to find the inside diameter for flexible duct sizing. One simply needs a ruler or measuring tape along with the edge of the hose or outlet. Keep in mind that you have to begin the measurements from the interior wall of the circle. The distance to the opposing point of the circle is the measure of the flex duct sizing for the inner diameter.</p>
<p><b>Do not mistake circumference for diameter!</b> Circumference is the distance around the circle. Circumference is not normally asked for in relation to flex duct sizing as diameter is more widely used for measuring flexible ducting.</p>	<p><b>What should I know when measuring the length of flexible duct hoses?</b> Solid body and non-compressible hoses are easier to measure from one end to the other. Hoses are measured when they are stretched out from one end all the way to the other. Length measurements for flexible duct sizing tell you the greatest possible distance your hose can stretch.</p>
<p><b>What is OD?</b> OD stands for outside (or outer) diameter. It is the measurement of the diameter of the circle from one outside section to the other outside section of a circle. In relation to flexible duct sizing, the total OD measurement will account for the hose's wall thickness. OD is important when measuring the outside of the pipe on which your duct will be installed upon, as the flex duct is pulled over the pipe for installation.</p>	<p><b>What does a compression ratio refer to?</b> In the context of flex duct sizing, compression ratio refers to the actual length that a flexible hose can compress. It is the measurement of exactly how long the hose will be in its smallest possible form. For example, if a flex hose is listed as having a 6:1 compression ratio, that hose can be compressed from a full 6ft down to 1ft.</p>

## Other Frequently Asked Questions:

### **What is flex fatigue?**

Flex fatigue is a flex duct's ability to withstand repeated flexing before failing or breaking. Hoses that have smaller ID sizes and exhibit a good degree of compressibility tend to have a higher flex fatigue compared to those of larger ID sizes and solid non-compressible bodies.

### **What should I consider for Materials applications?**

Material handling applications generally consist of moving physical debris that is more than just dust. This involves the transfer of dirt, pollen, animal dander, and even liquid materials. Hoses that have thicker walls are highly suitable for transferring these materials. It is also a good idea to consider whether a flexible duct will have a smooth interior in order to prevent this material build up in the flex duct. We highly suggest Urethane hoses for any material movement due to their durability and flexibility.

### **Which material to choose for your application?**

The material composition of a flexible duct is one of the most important factors to consider for your intended application. A flex duct's material can determine the difference between the success of your application or its failure. Certain materials are better suited for specific applications compared to others. For example, if you have a high temperature application involving temperatures beyond 400° F, it is best to use a flex duct made of silicone or stainless steel because those materials can survive contact with extreme temperatures much better than PVC or a neoprene-coated fabric.

### **What should I consider for Air Movement applications?**

To put it simply, an air movement application is any application that involves the transfer of air. This typically involves the transfer of cold or hot air for HVAC (heating, ventilation, and air conditioning) purposes, but it also applies to other gases such as smoke and light fumes. When looking for a flexible duct for your air movement applications, you want to consider what specific type of air being transferred. It is best to know the temperature and whether the situation calls for positive pressure (blowing) or negative pressure (suction). Temperature ranges in HVAC applications typically do not go beyond 180° F, so a flex duct made with PVC is a good option to consider.

### **What should I consider for Light Dust applications?**

Flex ducts are regularly used to transfer light dust particulate away from a specific area. This is often done for safety reasons in many occupational fields because dust can be harmful to health. The type of dust involved in these applications can vary from very fine wood dust to fertilizer particulate. You want a hose with a firm but flexible body. The right mix of durability and flexibility makes PVC a great material for a flexible duct. For the more heavy duty dust applications, such as in debris-related dust collection, flex ducts made of neoprene coated fabrics, thermoplastics, and urethane in that order come highly recommend in the industry.