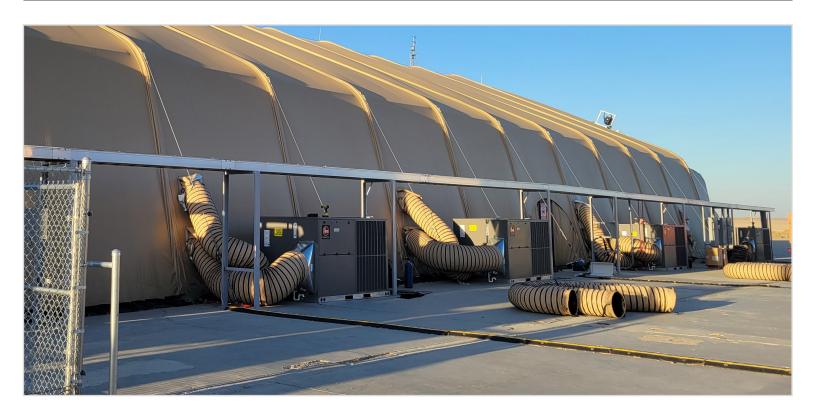
# SERIES OVERVIEW DUCTING





Spiral and lay-flat ducting from CELINA is crafted to meet customer needs; each piece can be modified to incorporate various types of materials and end connections in addition to choosing the manufactured width and length.

### Stock sizes and options

- 16" Diameter
- 0.135" Diameter wire
- 6" Pitch
- · Screw clamp cuff
- 1" Wear strip

Standard Mil-Spec ducts available

#### **Materials**

Optional materials for duct fabrication.

- MILPRF-20696
- MILPRF-44103
- MSHA Yellow (2 weights)
- CBRNE-approved fabrics

Materials used to create ducting are held to the same flame resistance specifications that are required of fabric structures used by or around individuals.

Insulated ducting is also available. We offer industry-standard batting insulation to provide the ducts with advanced environmental control abilities. Insulated ducting is ideal for ECU systems, as it resists external environmental interference.

Most materials are block-out fabrics, which don't allow errant light to escape the ducts or structures. The degree of light suppression is high enough to prevent detection even when night vision goggles are used.



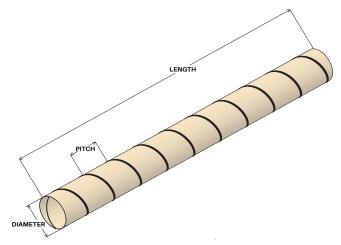






## SERIES OVERVIEW DUCTING





#### Diameter

Having chosen the base materials to create the duct, ducting diameter is then chosen. To aid in customization of all spiral ducting, we offer ducting from 4" to 48" in diameter, with intermediate diameters available in 2" increments.

#### Length

Ducting can be produced to any workable length. Due to the spiral reinforcement, each duct has built-in support to keep any distance stable during use. Common measurements span anywhere from 5' to 20', but can be extended or shortened depending on need.

#### **Pitch**

Further customization of the ducting can include the pitch of the internal reinforcement wire; the pitch of the wire refers to the distance between corresponding areas on two loops in the wire, with 2", 4", and 6" standard lengths. Larger pitch allows the tubing to move more freely, with less reinforcement per distance of tubing.

Wire-reinforced spiral ducting is also well suited for use in negative air pressure applications. Depending on the requirements, the pitch (and wire size) can be altered to accommodate rooms, structures, or areas that require cycling air. Ducting combined with high/low pressure areas can create efficient heating and cooling systems.



#### **Finishing**

Each end of the manufactured duct can be finished with any of our connectors/finishing methods:

- Belt cuff a high-strength webbing belt is incorporated into the cuff, equipped with an alligator clip fastener
- Plain cuff a fabric extension is added to the end without support wire
- Velcro cuff loop is sewn around the cuff of one duct end, with a hook flap attached to the connecting end of the next duct; the hook flap wraps around the loop end
- Screw clamp cuff a built in steel band with a screw clamp for easy tightening
- Wire rope coupling ends of the ducting have a wire ring incorporated into the fabric, which is inserted into a ducting end with the same finish - coupling assemblies are used to secure the two rings together
- Rigid coupling a solid internal metal hoop is attached to the end, allowing the attachment of belt or screw cuffs, which required a solid base for connection
- T-Bolt cuff constructed of stainless steel and are corrosion resistant providing high tensile strength, durability, and are ideal for medium and heavy-duty applications.



In order to combat everyday wear and tear associated with the most common failure points, wear strips, also known as scuff strips, can be added to the ducting to protect the areas where the internal wire may cause additional duct wall damage. One inch wear strips are attached to the outside of the ducts during the manufacturing process.