

1. PRODUCT DESCRIPTION

Prihoda fabrics are developed specifically for quiet air distribution and offer the perfect balance of fabric weight, strength, flexibility, and longevity for safe and consistent quality and performance to serve virtually any indoor air application.

Using a unique flame retardant polyester material, Prihoda fabrics safely distributes air into a variety of shapes, usually Round, Half Round, Quarter Round, Ellipse, and Rectangular ducts. Air is released into interior spaces through perforations and specialty nozzles, creating the ideal level of comfort.

Prihoda offers a complete solution – factory designed, detailed animated installation instructions and technical support throughout the entire process requiring minimal design and technical challenges.

2. APPLICATION

Prihoda fabrics are used specifically to circulate air, and improve building occupant comfort and HVAC unit performance on new construction and renovation projects serving the following:

- Commercial and Industrial Ventilation
- Theatre and Cinema Ventilation
- Indoor Aquatic Parks and Pools
- Athletic and Concert Hall Facilities
- Gymnasium and Weight Rooms
- Temporary Installations, Trade Shows, Medical Clinics
- Laboratory, Cleanrooms and Healthcare
- Restaurant and Kitchen Ventilation
- Retail, Warehouse and Distribution facilities
- Food Industry Ventilation
- Displacement and Specialty Air distribution

3. ADVANTAGES

- Exceptional air control and direction
- Lightweight, minimal ceiling support
- Excellent high/low volume air flow
- Connects seamlessly to existing metal ductwork
- Flame retardant, anti-static and perfect for clean rooms
- Optional 100% Post-Consumer Recycled Plastic Bottle fabric
- Machine Washable and Cleanable, as desired
- Available in 9 standard colors (custom color options available)
- Custom images, phrases, words and logos printing available
- Moisture, humidity tolerant, resistant to mold growth
- Removable and easily replaced during facility renovations
- Quiet Operation and no hard surface noise
- Installs 5x faster than traditional metal ductwork
- Life expectancy of more than 30 years

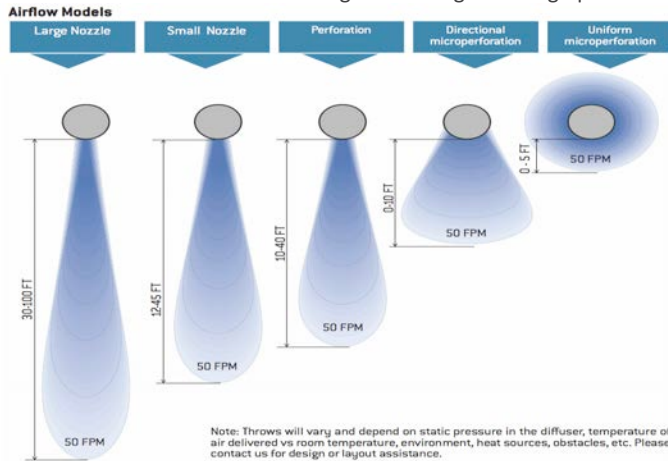


4. SOFTWARE BASED DESIGN

Pihoda designs each duct, using the industries most sophisticated factory software to document, calculate and provide: pressure loss, inlet velocity, turbulent condition warnings, throw capability, entrainment, deflection, flow models, sizing, installation methods, sound generated and temperature corrections.

Animated instructions are provided with each design to eliminate typical guesswork during the installation process.

Common airflow models configured during the design process:



5. MATERIAL COMPOSITION

Pihoda fabrics have been evaluated and declared compliant for use in cleanrooms and associated controlled environments in accordance with EN ISO 14644-1 (table No. 1, cleanliness class No. 4)

Materials are designed and selected specifically for long-term air circulation and provide the following properties:

- Weight: 2oz – 2.5 lbs/liner ft max
- Strength: warp1880/ weft1090N (ISO13934)
- Shrinkage: Max. 0,5% (ISO 6330-2000)
- Duct Length: 16' zippered sections (300' system lengths)
- Temp Range: -75°F to +230°F
- Diameter Range: 4" – 80" +
- Permeability: 2 cfm (condensation prevention method)

Standard Duct fabric includes:

- Static Properties: Anti-static/ dissipates static electricity
- Antibacterial Agent: Factory applied antimicrobial (ISO 20645)
- UL/ULC Certified meeting NFPA 90a 25/50 and UL 2518.

Recycled Fabric

The industries only 100% -post-consumer recycled material made entirely from recycled PET water bottles. Every square yard of fabric diverts 11 PET bottles from landfills, converting them into engineered, sustainable air distribution systems. Environmental Product Declaration and Life Cycle Analysis are available for this product.

Product Labeling

Personalized factory labeled for each project; including Pihoda logo, classification marking of Underwriter's Laboratories, order number and manufacturing date to ensure quality and authenticity.

6. WARRANTY

Fabrics are warranted for 10-years (non-prorated) and extended 20-year warranty is available. Consult manufacturers warranty information for additional information.

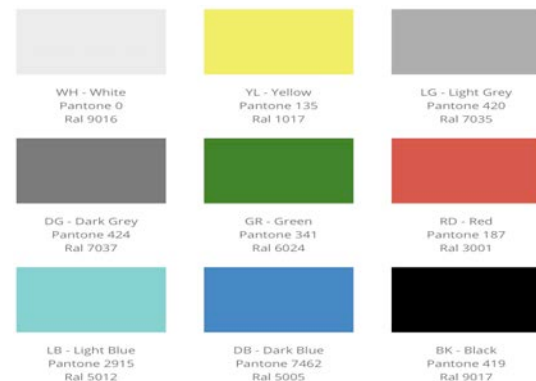
7. CUSTOM PRINTING

Pihoda fabrics may be customization with logos, artwork, and print work directly on the ducting fabrics.

- School and Educational Logos
- Business and Organization logos
- Healthcare Department and facility logos
- Improves variable air volume and distribution
- Custom print and design printing



7. STANDARD COLOR OPTIONS



8. FIRE RATINGS

UL 723 Standard test method for Surface Burning Characteristics of Building material: **25 / 50** flame spread/smoke

UL 2518 Standard for Air Dispersion Systems – Compliant

9. INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

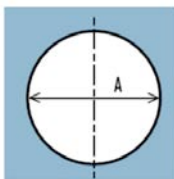
Pihoda offers the following third party ISO certification standards worldwide:

- 9001** Quality Management System
- 6330:2000** Textiles, Domestic Washing and Drying Procedures for Textile Testing
- 13934-1** Textiles, Tensile Properties of Fabrics – Determination of Maximum Force and Elongation at Maximum Force using the Strip Method
- 14001** Environmental Impact Management System
- 14644-1** Cleanroom & Associated Controlled Environments
- 20645** Textile fabrics - Determination of Antibacterial Activity Agar diffusion plate test

10. AVAILABLE DUCT SHAPES

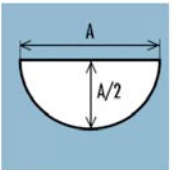
Pihoda offers the freedom of custom ductwork without the weight. Select size and shape that fits your design concept.

Positive Pressure Only



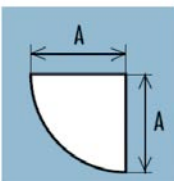
Round

Round is the default shape for a Fabric Duct it is the most natural & efficient shape for the duct to form and it's also the easiest to install. We have several different circular duct options for round ducts as they can reduce in diameter and even change shape part way along if required. We also have different suspension options depending upon how the duct should look if/when deflated.



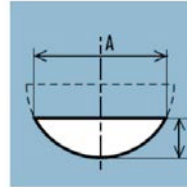
Half Round

Half Round is an extremely popular shape and offers a very aesthetic option for offices or areas requiring a considered finish. Also ideal where there are low ceiling heights or often used where Variable Air Volume (VAV) systems are supplying the air as the duct can cope with a big reduction in pressure without it affecting the shape (a round duct would require internal rings).



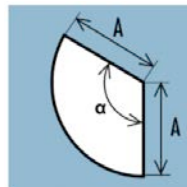
Quarter Round

Quarter Round Fabric Duct requires a wall / ceiling junction (or a bulkhead). This duct is most often specified in offices and areas struggling for space. We can place the inlet spigot in the top or back of the duct so that there is no visible inlet connection making the whole installation very neat and aesthetic.



Ellipse (Segment)

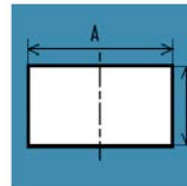
An Ellipse duct is made when ceiling height is at a premium. The air volume and the available height will determine the width of the ellipse. Usually the inlet spigot will be in the top of the duct so that it's not visible once installed.



Sector

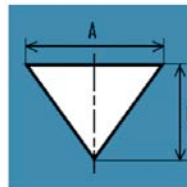
Sector Fabric Ducting tends to be used in special situations where the angles of the supporting surfaces are not 90o - In all other ways this duct is in principle a Quarter Round.

Over Pressure and Negative Pressure



Square

It is possible to have either square ducting or rectangular ducting. We use square ducting exclusively when we specify Extract (or negative pressure) ducting. In both overpressure and negative pressure the square duct is held in shape by a rail at each corner and a system of braces and threaded bar.



Triangular

Triangular duct is used for extract (negative pressure) ducting and consists of two rails at the top of the duct and an internal heavy rail at the bottom point to maintain tension. This is much simpler to install than the rectangular alternative but will show bowing sides walls (inwards) with the negative pressure effect.

Factory Designed Tensioning & Track Systems

Pihoda proprietary tensioning system maintains the life of the fabric duct and extends factory warranties to twenty (20) years. Improving performance enhancements to include:

- Superior life expectancy
- Maintains duct shape without air movement
- Installs 5x faster than traditional metal ductwork
- Improves variable air volume and distribution
- Excellent logo and custom printing identification

11. INSTALLATION

Materials are directly shipped from the Prihoda factory to the installer or project, including animated installation instructions images, hardware, mounting layout drawings, indicating size, placement and air distribution.

Verify air supply meets MERV5 filtering requirements and maintains design pressure/ flow.

Do not proceed with installation in the absence of manufacturers instructions and documentation.

12. STORAGE & PROTECTION

Store materials above ground level and under weatherproof cover. Protect from weather, damage and contamination prior to installation process.

13. AVAILABILITY

Air distribution system, design software and automated installation instruction are available worldwide, exclusively from Prihoda.

14. SUSTAINABILITY FILING



Collaborative for High Performance Schools – 2014

Materials & Waste Management

- **MW 3.1** Recycled Content
- **MW 7.0** Low-Emitting Material, CDPH 01350 Compliant
- **MW 7.1** Environmental Product Declaration



Well Building Institute

Comfort

- **01:** Air Quality Standards (assists compliance)
- **75:** Internally Generated Noise
- **76:** Thermal Comfort



California CALGreen Building Code

2017 Non-Residential Voluntary Measures

- **A5.405.4** Recycled Content
- **A5.409.3** Materials and System Assemblies



U.S. Green Building Council

Materials and Resources

- **MRc2** Building Product Disclosure and Optimization – Environmental Product Declaration
- **MRc3** Building Product Disclosure and Optimization – Sourcing of Raw Materials, **Option 2. Recycled.**

Indoor Environmental Quality

- **EQc5** Thermal Comfort - To promote occupants' productivity, comfort, and well-being by providing quality thermal comfort.

Environmental Product Declaration Prihoda®



EMISSIONS COMPLIANCE TEST

California Dept. of Public Health Standard Method Version 1.2



ZeroDocs
Product & Specification Resource