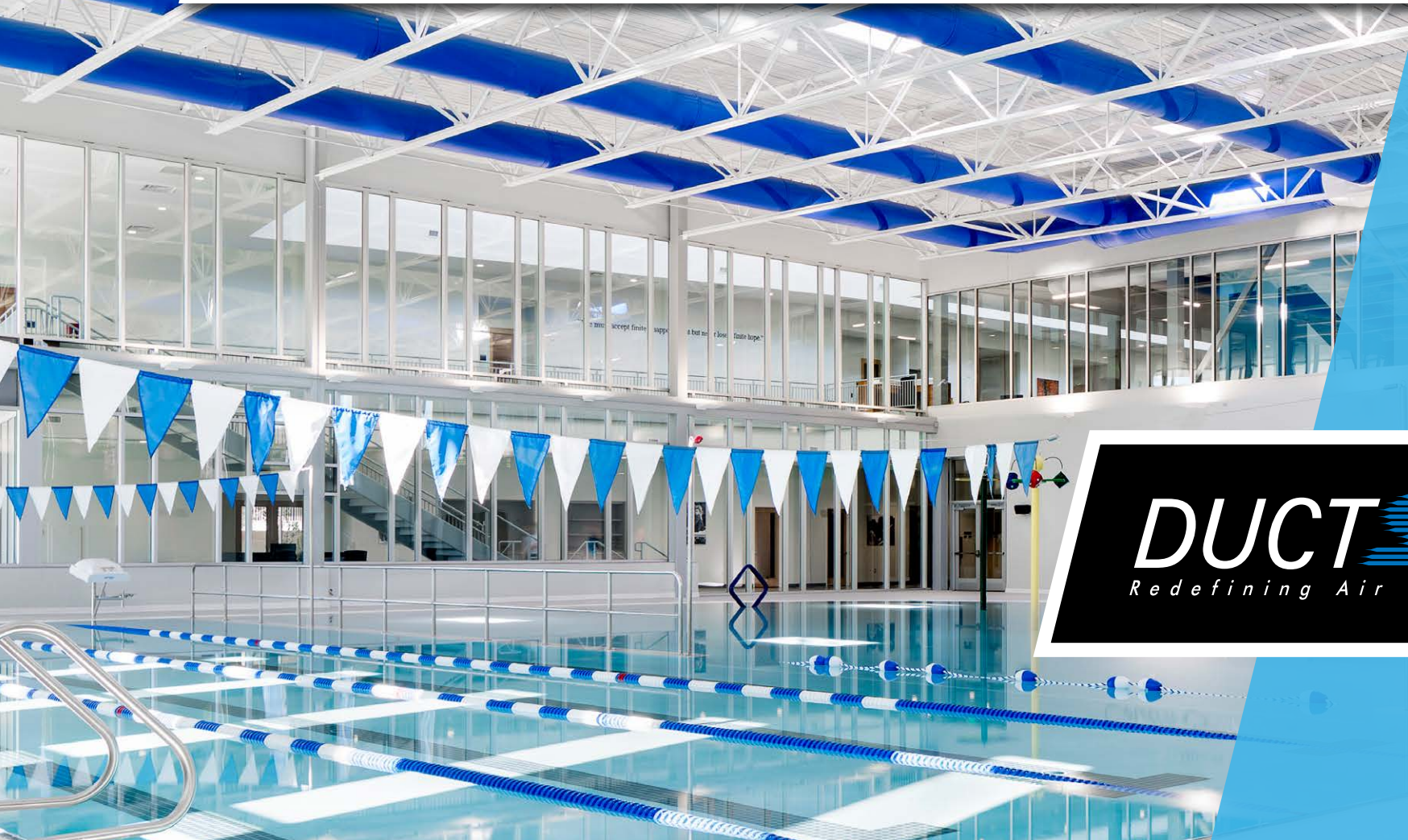




# *Customizable Airflow Solutions*

*An industry leader through innovation, quality and service since 1980.*



**DUCTSOX<sup>®</sup>**  
*Redefining Air Dispersion*

[ductsox.com](http://ductsox.com)

*DuctSox<sup>®</sup> air dispersion products are an innovative and cost effective fabric alternative to traditional metal ductwork providing precise and efficient heating, cooling, or ventilating for virtually any building application.*

---

From coffee shops to airplane hangers our full range of products are custom designed and configured to fit ANY space and are ideal for a variety of environments...

- Cleanrooms
- Convention Centers
- Data Centers
- Fitness Centers
- Food Processing
- Grow/Agriculture
- Gymnasiums
- Healthcare Facilities
- Industrial/Manufacturing
- Kitchens/Restaurants
- Laboratories
- Office Buildings
- Pools/Water Parks
- Retail
- School/Universities
- Stadiums/Arenas
- Warehousing



# Why Fabric?

## ECONOMICS

- Highly efficient
- Lower cost
- Precise airflow control
- Lightweight for easy shipping and installation

## PERFORMANCE

- Eliminate drafts with uniform, comfortable air dispersion
- Condensation free
- Quiet
- Hygienic and ideal for clean environments
- Performance guarantee

## AESTHETICS

- Attractive standard color selection
- Clean, minimal design
- Personalized and custom graphic options
- Flexible and contours to any space

Fabric systems are lightweight, flexible and breathable which allows for uniform and precise air dispersion making it comfortable, quiet and more efficient than metal ductwork.



Traditional metal ductwork is heavy, rigid and can only disperse air through spaced out diffusers restricting airflow to localized areas.



# Our Family of Product Solutions

Innovative and custom engineered air dispersion products for many environments.



## Traditional Round

- Custom airflow solutions to match the needs of each environment
- Variety of fabrics for appearance and function
- Range of shapes and diameters available to meet your application specifications
- Flexible, customizable and cost-effective



## Diffuser Series

- 360° airflow coverage
- Specialized low velocity designs for airflow critical spaces
- Solves challenges like caustic environment and airborne pollutants
- Easy retrofit to solve current airflow issues
- Maintenance elements accessible below the ceiling



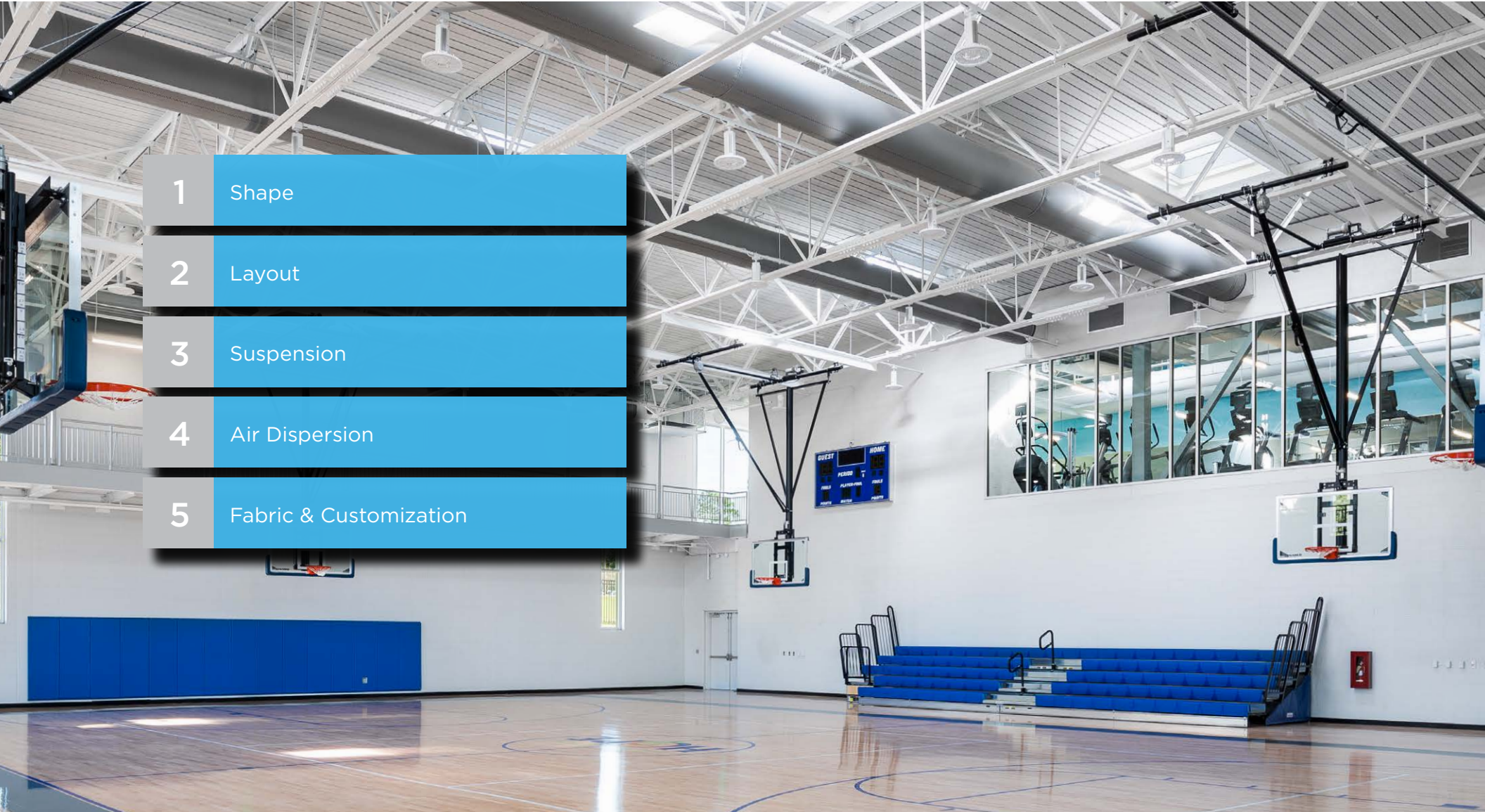
## Underfloor Air Distribution

- Reduced floor-to-floor building height
- Improved indoor air quality
- Improved temperature diffusion and comfort

DuctSox products have been accepted within key industry organizations such as ASHRAE, Underwriters Laboratories (U.S. & Canada), International Code Council, and many building authorities throughout the world. More information can be found at [www.ductsox.com](http://www.ductsox.com)

# DuctSox Advantages

Each DuctSox system includes five key elements that can be customized to meet the exact needs of each application improving air quality and efficiency over comparable metal systems.

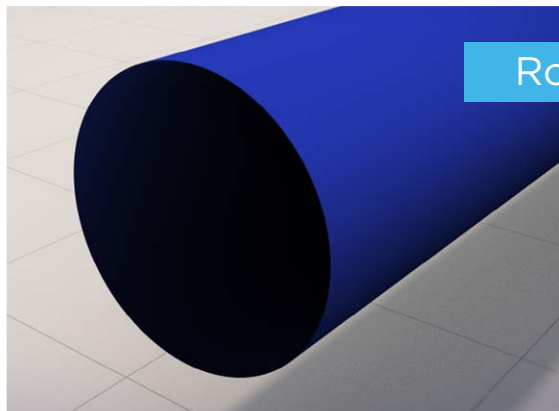


- 1 Shape
- 2 Layout
- 3 Suspension
- 4 Air Dispersion
- 5 Fabric & Customization

## Shape

Metal ductwork systems don't lend themselves to much creativity. If you're planning to construct a new building with a modern aesthetic or retrofitting an existing building with architectural limitations, using metal ductwork can become quite challenging and costly. DuctSox fabrics can conform to any space and for added customization are available in multiply shape configurations: round, half-round, quarter-round, oval and diffusers.

### Round Configurations



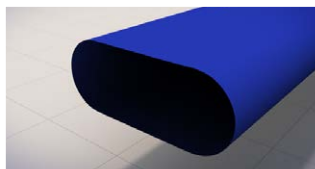
#### Round

Traditional option perfect for both open and finished architecture with a wide variety of customizable options



#### Half-Round & Quarter-Round

Surface mount option for applications with finished ceilings or specialty airflow requirements



#### Oval

Ideal for applications with low head room or when obstructions are in the path of the ductwork

### Diffusers



#### C-Series

Drop plenum diffuser providing 360° of even air dispersion. Typically used in spaces that can't use ductwork for physical or financial reasons.



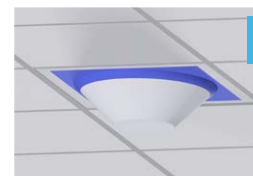
#### D-Series

Designed specifically for applications commonly associated with a fume hood or other airflow sensitive environments.



#### F-Series

Developed for freezers, the F-Series can be fitted to existing or new equipment operating with frosted coils.

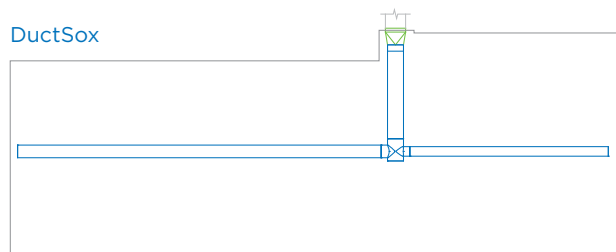


#### V-Series

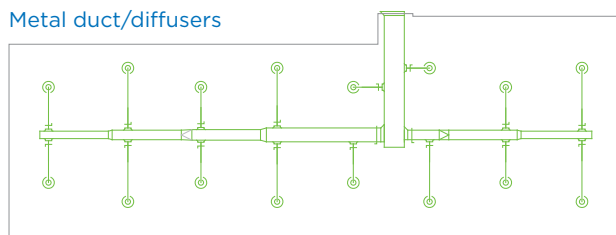
Directional displacement diffuser engineered to create optimum airflow patterns favorable for labs and healthcare facilities.

## Layout

With the entire DuctSox system acting as a diffuser, air dispersion and distribution is combined allowing simple and efficient layouts that typically cost 20-80% less and outperform comparable metal duct systems.



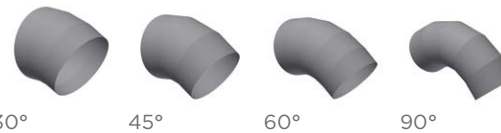
Simple and efficient layouts  
compared to metal



## Fittings

Not every application is a straight line of DuctSox. To accommodate this, we offer a variety of standard fittings. We also offer custom fitting configurations.

### Radius Elbows



\*Other angle degrees can be fabricated to meet each application's needs

### Transitions



### T's

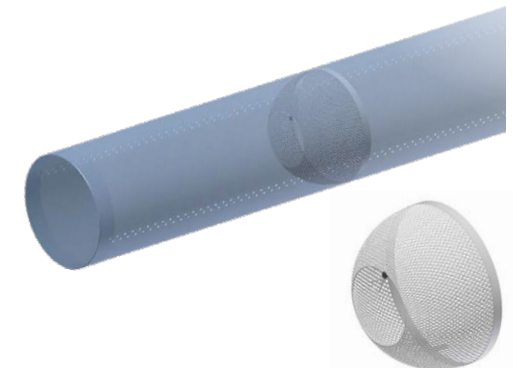


### Crosses



## Adjustable Flow Device (AFD)

DuctSox's patented zip-in Adjustable Flow Device (AFD) is an added option that offers variable resistance to balance static regain, balance airflow to branches, reduce turbulence, and reduce abrupt start-ups.



# Suspension

## SkeleCore™ Internal Framework Systems

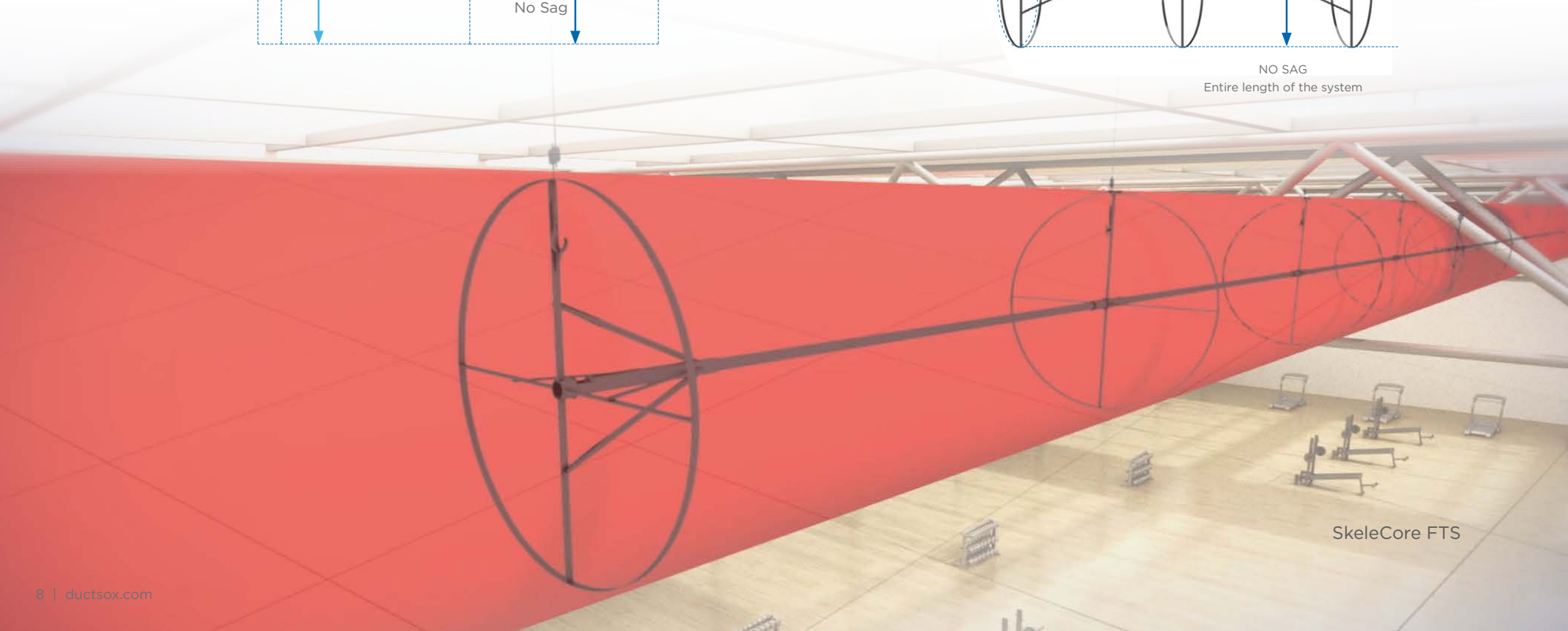
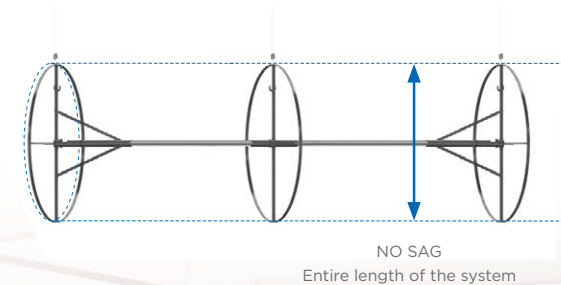
DuctSox's patented SkeleCore system utilizes an Internal Framework System to provide aesthetic enhancement and improved performance characteristics. There are two SkeleCore models to choose from, FTS (Fabric Tensioning System) and Pull-Tight.

*The significant benefit of a SkeleCore System is that the fabric system is tensioned BOTH the entire length and circumference of the fabric system.*

SkeleCore FTS  
Top View



SkeleCore FTS  
Side View



SkeleCore FTS



## SkeleCore™ FTS & Pull-Tight

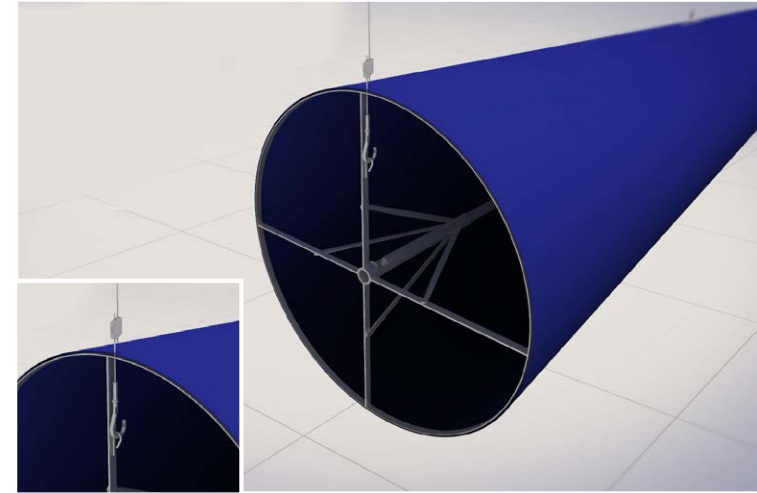
*SkeleCore FTS features a unique metal-to-metal direct hang cable method which is the SAFEST suspension in textile ducting*

### SkeleCore™ FTS

#### 0% Deflation

- 8in (203mm) diameter and greater
- Keeps fabric duct round and taut at all times, with or without air
- Eliminates fabric sagging, drooping, and wrinkles
- Prevents inflation pop (noise) and disruptive fabric motion at start-up
- Vertical hanging suspension system eliminates need for horizontal suspension and stress on fabric attachment points
- All fittings are tensioned, including Elbows, Tees, Crosses, and Reducers
- Up to a 20 year warranty

### SkeleCore™ FTS

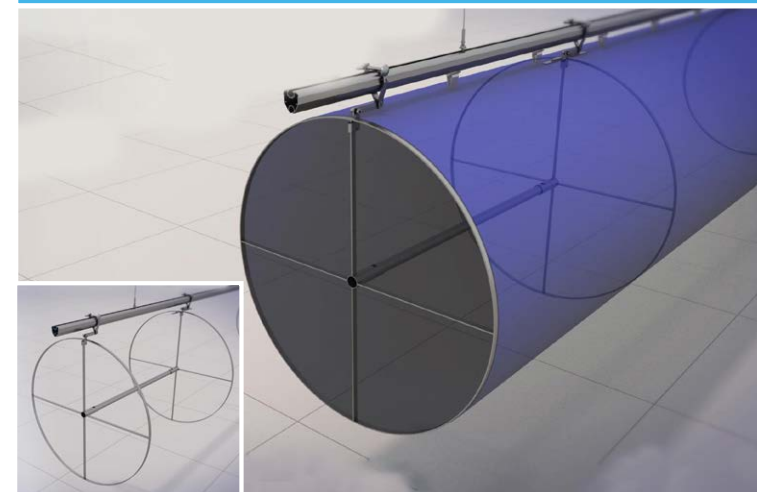


### SkeleCore™ Pull-Tight

#### < 1% Deflation

- Up to 60in diameter (1524mm)
- Fabric attached to 1 row Track or Cable at 12 o'clock every 12in (305mm)
- Prevents inflation pop (noise) and disruptive fabric motion at start-up
- Tensioning Baskets are located in multiple positions throughout the system to pull the sections of the system tight, improving aesthetics and decreasing wrinkling, sagging and drooping
- Up to a 15 year warranty


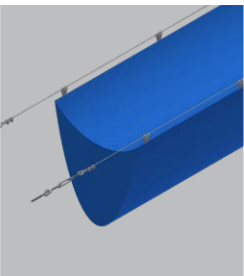
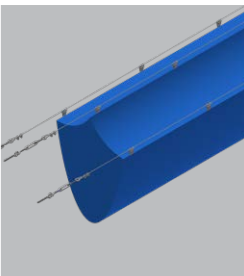
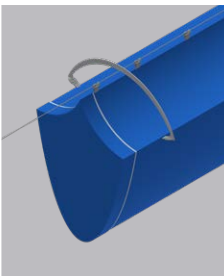
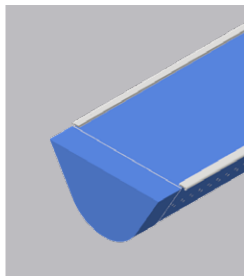
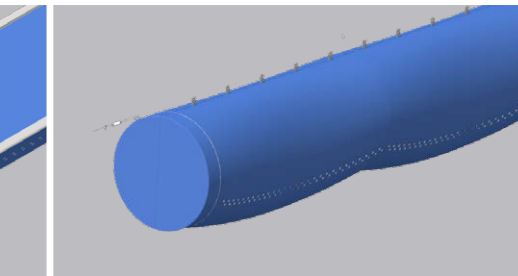

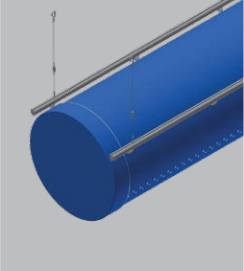
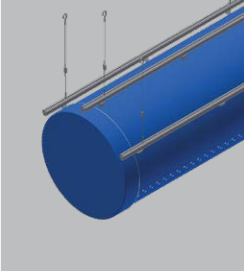
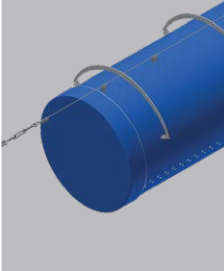
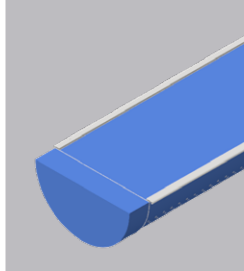
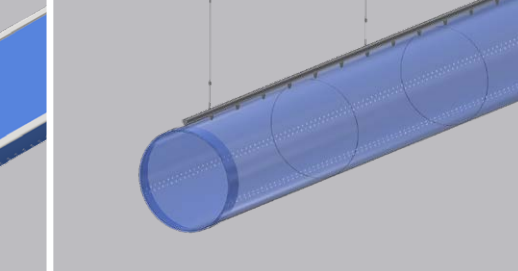
### SkeleCore™ Pull-Tight



# Suspension: Traditional

Whether horizontal, vertical, or angled, round DuctSox are available in a variety of traditional suspensions with patented SkeleCore retention system options. For applications where the DuctSox will be mounted against a flat surface (wall, ceiling, or both), the surface mount products feature flexibility for shape, configuration, and inlet position (end, top, back).

DuctSox systems are lightweight and easy to install lowering overall installation costs.

	1 Row	2 Row	3 Row	Hangers	Surface Mount	Internal Hoop System
Deflated						
Inflated						

# Hardware

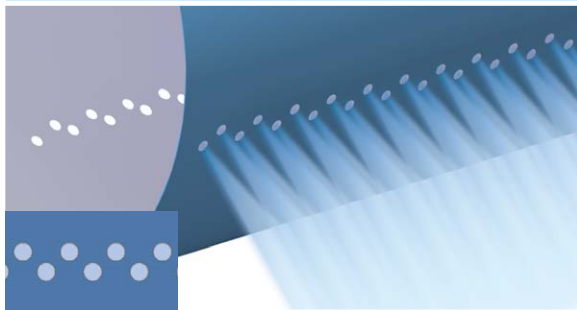


# Air Dispersion

## Air Dispersion Options

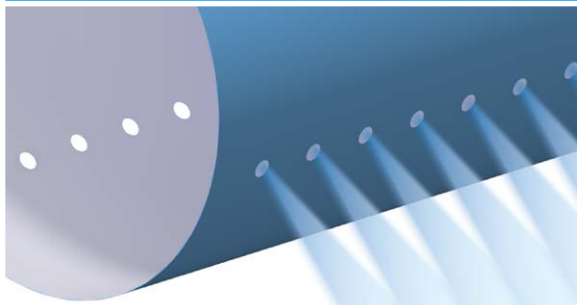
In open ceiling architecture, traditional metal duct systems discharge air through side-mounted metal diffusers. The air is directed to specific zones resulting in less efficient mixing of air in the occupied space and often causes drafting and hot or cold spots. With a DuctSox system, the air is efficiently discharged along the entire length, providing consistent and uniform air dispersion in the occupied space.

### Linear Vents



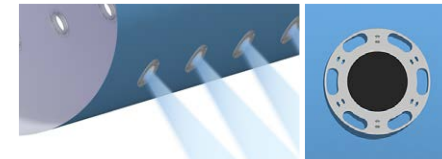
- Linear vents are the standard dispersion option for porous fabrics and provides a gentle airflow through precision cut vent patterns
- Typically used in high occupancy spaces where air diffusion and mixing are of high importance

### Orifices



- Orifices are the standard dispersion option for non-porous fabrics
- Orifice size and orientation based on required air throw distance

### Grommets



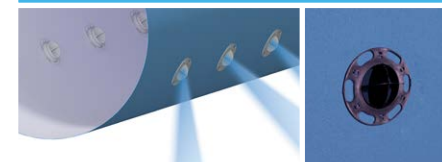
- Grommets are used in porous fabrics when greater throw than linear vents will typically allow, due to air released via porosity

### Fixed Nozzles



- Provides jet-type airflow
- Constant flow or closed off option with aftermarket plugs

### Adjustable Nozzles



- Adjustability of throw with 360 degree rotation and 10 different angle settings, including a closed setting

## Fabric Options

### Air Porous Fabric

COMMONLY USED ALTERNATIVE TO EXPOSED DOUBLE WALL DUCT

This option allows air to pass through the fabric with the airflow rate controlled by the fabric weave and the internal static pressure. Air can be delivered exclusively through the porous fabric or can be combined with various venting options to achieve desired airflow.

#### Features

- No condensation
- Reduced dust on top
- Minimal heat gain/loss
- Optional reduced air throw



Air Porous Fabric without Venting



Air Porous Fabric with Linear Vents

### Non-Porous Fabric

COMMONLY USED ALTERNATIVE TO EXPOSED SINGLE WALL DUCT/DIFFUSERS

No air is able to pass through the fabric weave. Airflow is delivered through orifices and various venting options to achieve desired airflow.

#### Features

- Common choice for spot cooling, heating or ventilating
- Ideal for areas requiring extended and precise throw



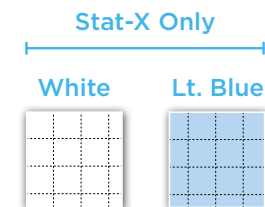
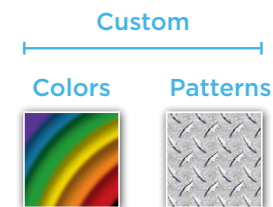
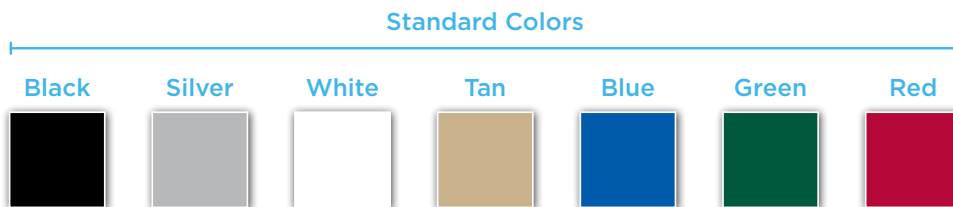
Non-Porous Fabric without Venting



Non-Porous Fabric with Orifices

## Fabric Types

DuctSox offers a variety of premium and commercial porous, non-porous and specialty fabrics available in 7 standard colors with custom color and pattern options available. *\*Color choices shown below are representative only, please contact the factory for sample color swatches.*



## Maintenance

DuctSox systems have been designed to reduce or eliminate required maintenance. Cleaning metal ductwork systems can be expensive and these costs are often overlooked. Neglected interior air systems can be a leading contributor to sick building syndrome, human health problems, and possible contamination. DuctSox fabrics come with the following distinct maintenance advantages over metal systems:

- Some of our fabrics feature an active antimicrobial agent that inhibits bacteria growth
- No Condensation / No Rust
- Zippered sections for ease of handling and removing fabric
- Lightweight, simple and easy installation and removal
- Can be easily removed and laundered in a commercial washing machine



DuctSox shown on left requires minimal exterior maintenance vs metal system shown on right that will require high maintenance costs to repaint and repairs dents.

## Customization

Metal systems will scratch, dent and over time their paint will peel requiring maintenance to repaint. DuctSox fabrics are forgiving meaning they will not scratch or dent and are available in a variety of standard colors, patterns, and custom colors. DuctSox can also be personalized with company logos, mascots, taglines and patterns.

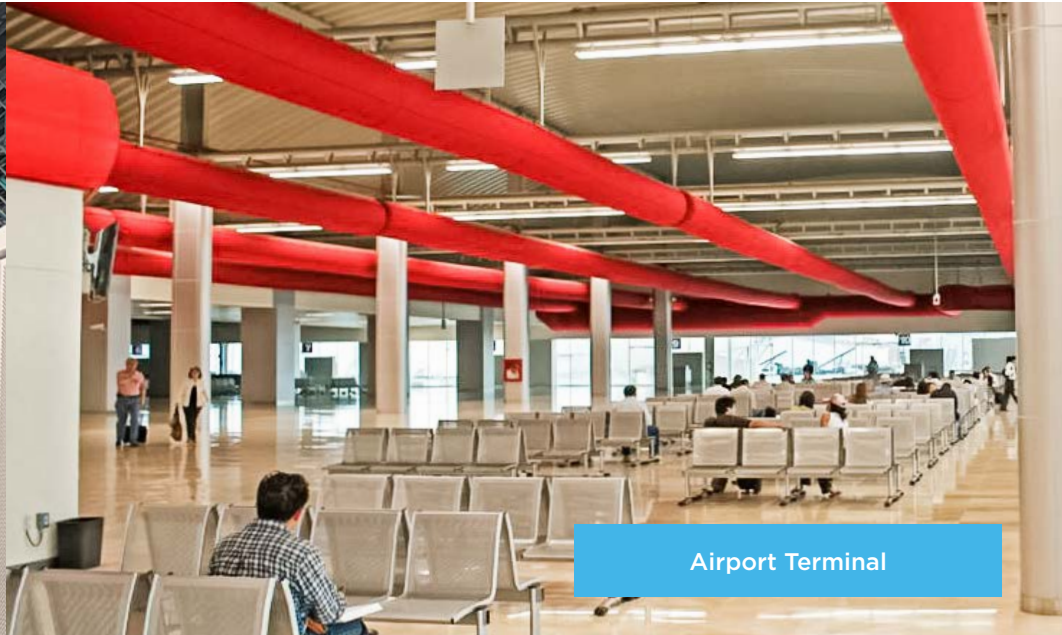


DuctSox fabric shown with custom pattern and logos

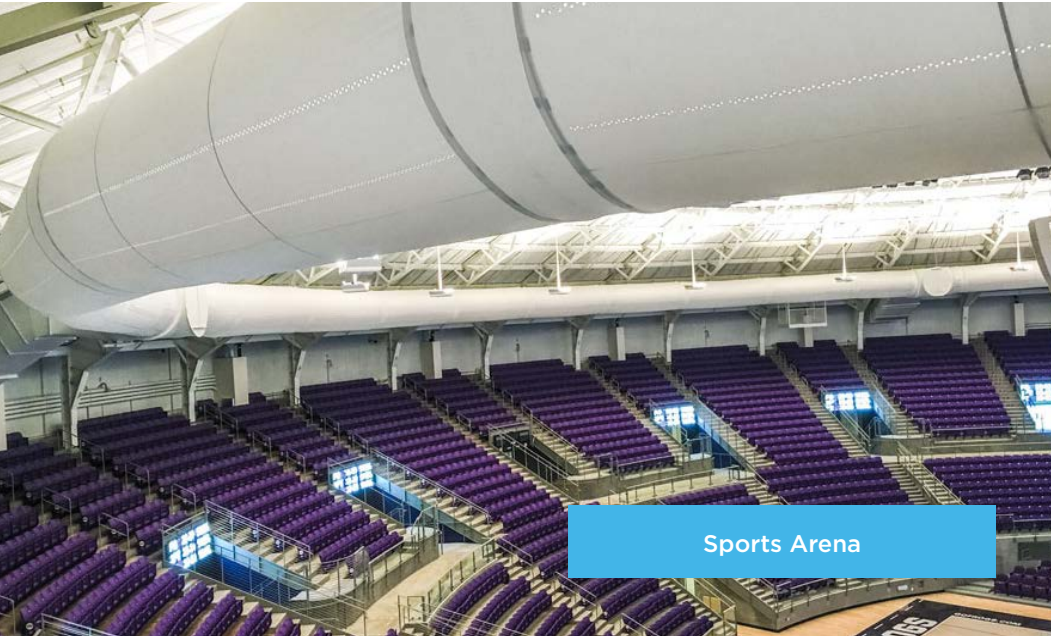
# Project Gallery



Data Center



Airport Terminal



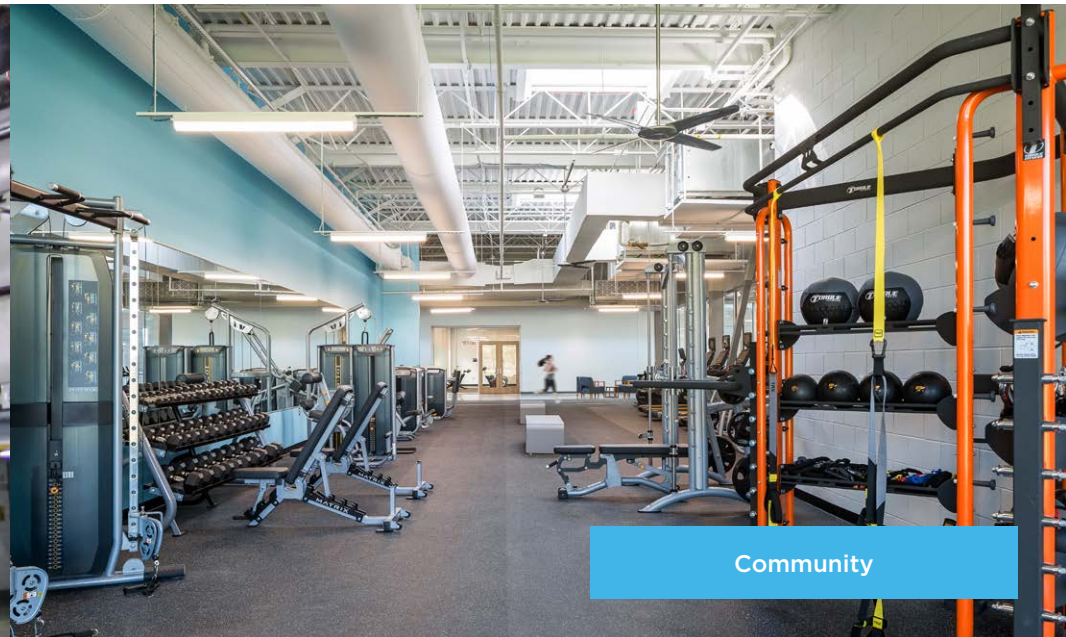
Sports Arena



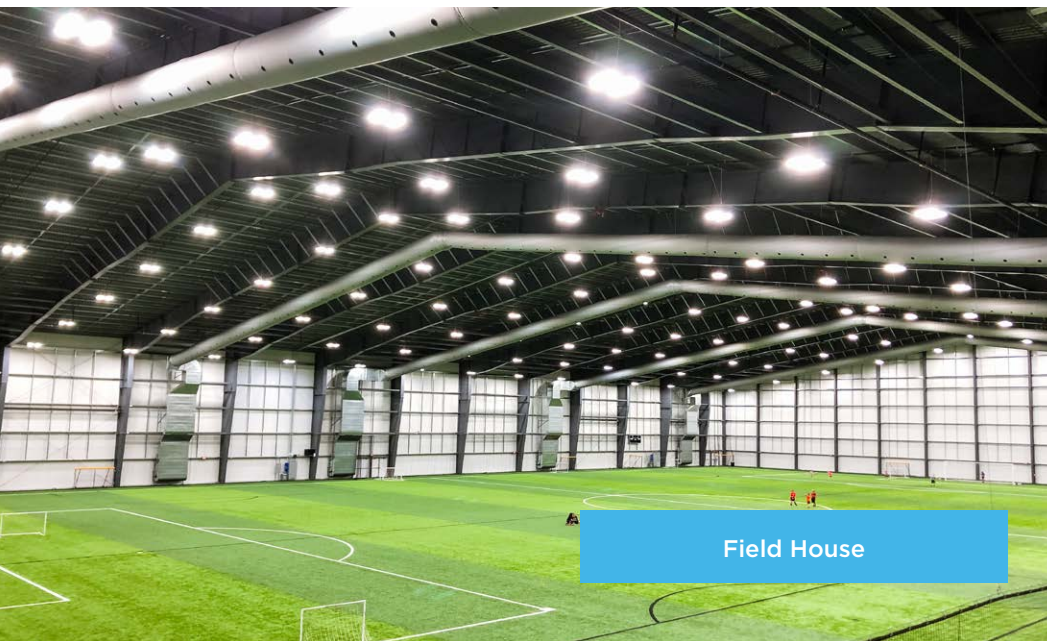
Growing Facility



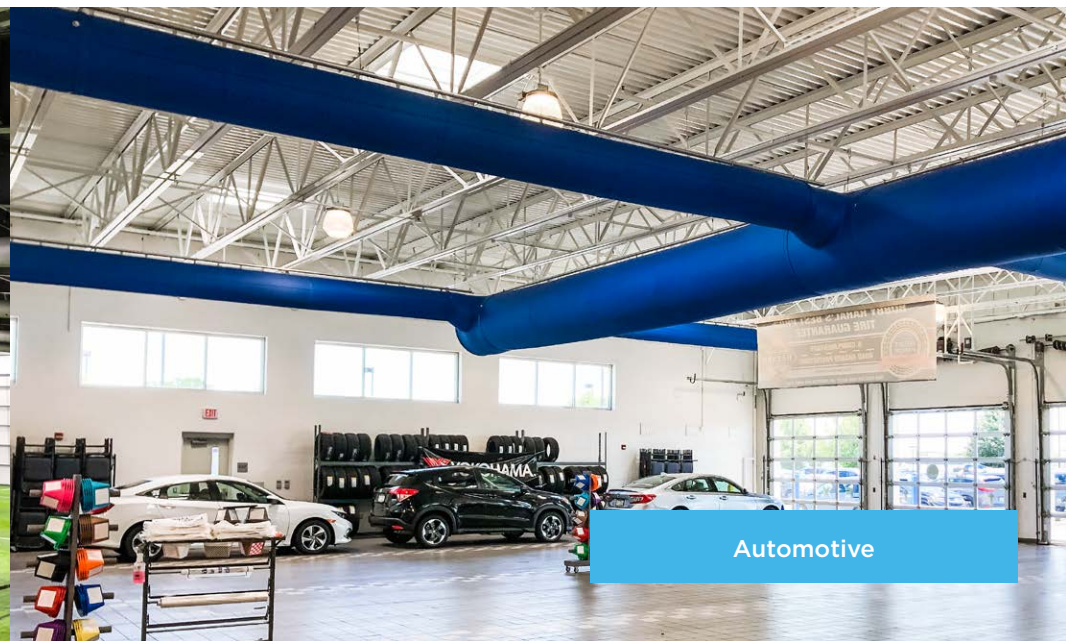
Industrial



Community



Field House



Automotive

# The DuctSox Approach

DuctSox provides unique cost-effective ventilation solutions through a process that is:  
[Responsive](#) > [Consultative](#) > [Adaptable](#)

To find a DuctSox representative in your area go to **[www.ductsox.com/rep](http://www.ductsox.com/rep)**

## DuctSox Corporation

4343 Chavenelle Road

Dubuque, IA 52002

Phone: 563-588-5300

Toll-free: 866-382-8769

Fax: 563-588-5330

**DUCTSOX**<sup>®</sup>  
*Redefining Air Dispersion*

[ductsox.com](http://ductsox.com)

DSFLB0520

© 2020 DuctSox Corp.