REDEFINING AIR DISPERSION
Our Products, Our Innovation

DuctSox Products are Fabric Ductwork and Diffuser Systems used for heating, cooling, or ventilating. They are a cost effective, aesthetically attractive alternative to metal ductwork and diffusers. Each DuctSox System is 100% custom made, starting from the engineering design to the manufactured product. DuctSox designs can be simple, straight systems or have very intricate layouts.

DuctSox offers the best products, design, and sales support in our industry. We strive to lead through a commitment to quality, service, and innovation. DuctSox products have also been accepted within key industry organizations such as ASHRAE, Underwriters Laboratories (U.S. & Canada), International Code Council, and many building authorities throughout the world.
**Innovations**

1980
- Air Permeable Fabrics

1994
- USDA Approval
  - Microbe-X
  - High-Throw (Orifices) Fittings

1996
- Stainless Steel V-Track
  - Stat-X
  - First Patent
  - H-Track
  - Mesh Vents

1998
- Screen Printing
- Flow Straightener
- Sedona

**UL-Classification**

2000
- TuffTex
- ICC-AC-167 (UL-2518)

2002
- Sonic Venting
- DuraTex
- Verona
- Gripple Drop Supports

**Adjustable Flow Device**

2004
- Sedona-Xm
- FinalFilter
- 10 Year Warranty
- Coronado (patterns)

**3X1 Suspension**

2006
- Laser Cut Vents

**Cleaningroom Class Fabrics (RX)**

- Displacement Ventilation
- UnderFloorSox

- ChemSox
- 4-Color Personalization

- SimpleSox
- U-Track
- Glider for Cable or Track
- SkeleCore
- Energy Study

- Fixed Nozzles

**Skelecore FTS**

- Hoops (IHS)
- KitchenSox

**Adjustable Nozzles**

- OvalSox

**Skelecore Pull-Tight**

**Applications**

- Food Processing
- Industrial
- Warehousing

**POOLS**

- Gymanusums

**Retail**

- Classrooms
- Convention Centers
- Stadiums/Arenas
- Waterparks

**Fitness Centers**

- Data Centers
- Churches/Auditoriums

**Laboratories**

- Pharmaceuticals
- Office Settings
- Acidic Production
- Recording Studios

**Large Office Buildings**

- Kitchens
- Medical
- Aerospace
- Crop Science

www.ductsox.com
Considering the many benefits of engineered textile systems over conventional metal duct and diffusers, more and more are considering a DuctSox Air Dispersion System for their open ceiling applications.

**FABRIC VS. METAL**

<table>
<thead>
<tr>
<th>FABRIC</th>
<th>METAL SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom engineered air dispersion system</td>
<td>Localized diffusers, duct, and dampers</td>
</tr>
</tbody>
</table>

**FABRIC IS MORE EFFICIENT THAN METAL**

Extensive energy study by Iowa State University confirmed DuctSox with linear vents brought the temperature of the space up 24.5% faster than equivalent metal. For more information, scan:
**Product Families**

**Open Ceiling DuctSox**

Custom engineered air dispersion systems for open or finished ceiling applications.

**Critical Environments**

Custom engineered air dispersion systems for critical environments.

**Underfloor Air Distribution**

Custom engineered air distribution and dispersion systems for underfloor applications.
Configuring a DuctSox System

There are **FIVE KEY ELEMENTS** to consider when configuring a DuctSox System.

1. **SHAPE/SUSPENSION/FABRIC RETENTION**
2. **LAYOUT/FITTINGS**
3. **AIR DISPERSION**
4. **FABRIC**
5. **OPTIONS**

Further detail on each is explained in the pages that follow.

Engineering, Design, and Layout Criteria

Besides the Key Elements of configuring a DuctSox System, there is additional criteria/information needed to ensure that it is engineered and designed correctly to provide the best performance possible. Typical information required includes the following:

- **VOLUME OF AIR AT THE INLET OF THE DUCTSOX**
- **STATIC PRESSURE AT THE INLET OF THE DUCTSOX**
- **AIR THROW MODELS**
- **AIR DISPERSION REQUIREMENTS BASED ON APPLICATION NEEDS**
  - Heating, cooling, and ventilation
  - Supply-side air, air makeup, air destratification, and air displacement
  - Uniform air dispersion
  - Spot heating and cooling
  - Versatile and multiple airflow designs
  - Terminal velocity
- **CONDENSATION**
- **HANGING HEIGHT**
- **DESIGN LAYOUT**
- **NOISE**
- **INSTALLATION REQUIREMENTS AND LIMITATIONS**
- **COST**

To ensure proper system design, DuctSox Inside Sales and Engineering staff are available for assistance. Or, review the DuctSox Design Manual at [www.ductsox.com](http://www.ductsox.com).
### Suspension/Fabric Retention Systems

#### SkeleCore

<table>
<thead>
<tr>
<th>Internal Framework System</th>
<th>Vertical drops every 6' (1,829mm)</th>
<th>100% of fabric is in tension full circumference and length Maximum tensioned section is 42' (12,802mm)</th>
</tr>
</thead>
</table>

#### FTS
Fabric Tensioning System
- **Standard:**
  - 8” - 48” diameter
  - (203mm - 1,219mm)
- **Jumbo Series:**
  - 50” - 84” diameter
  - (1,270mm - 2,134mm)

#### Pull-Tight
Tensioning System
- **Track or Cable**
  - 8” - 60” diameter
  - (203mm - 1,524mm)
- Fabric attached to 1 Row Track or Cable at 12 o’clock every 12” (305mm)

#### NO CHANGE IN FORM
- Fabric supported radially with Tensioning Baskets and internal rings every 5’ (1,524mm)

#### Suspension/Fabric Retention Systems
- No sagging / No wrinkles
- Longest product life
- Higher design velocities
- Ideal for VAV applications

#### Start-up
- 0% Deflation
  - No inflation noise
  - No fabric motion
- <1% Deflation
  - No inflation noise
  - No fabric motion

#### Install Time*

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Metal</th>
<th>FABRIC</th>
<th>12.5 hours</th>
<th>67% Less</th>
<th>38 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable</td>
<td>Metal</td>
<td>TRACK</td>
<td>9 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Metal</td>
<td>38 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Warranty**
- Up to 20 years
- Up to 15 years
Fabric attached to 1 Row Track or Cable at 12 o'clock every 12" (305mm)

Fabric supported radially with internal rings every 5' (1,524mm)

Fabric tensioned at 12 o'clock to Track or Cable

3x1 fabric connection points at 10, 12 & 2 o'clock

3x1 fabric tensioned at 12 o'clock to Track or Cable

IHS
Internal Hoop System
Track or Cable
8" - 48" diameter
(203mm - 1,219mm)
Larger sizes available.

3x1
Track or Cable
8" - 48" diameter
(203mm - 1,219mm)

1 Row
Track or Cable
8" - 30" diameter
(203mm - 762mm)

2 Row
Up to 60" (1,524mm) dia.

3 Row
60" (1,524mm) or larger dia.

No sagging / No wrinkles
Longest product life
Higher design velocities
Ideal for VAV applications

Minimal fabric sagging and wrinkling
Easy installation with Track or Cable
Longer life expectancy
VAV applications

Reduced deflation
Simple installation with Track or Cable
External hanger supports easily detached for maintenance

Easy installation & maintenance
Lowest initial cost

1 Row
2 Row
3 Row

1-5% Deflation
No inflation noise
Minimal fabric motion

17% Deflation
Minor inflation noise
Noticeable fabric motion

100% Deflation
Disruptive noise & fabric motion

45% Deflation
Noticeable noise & fabric motion

17% Deflation
Minor noise & fabric motion

* Installation time (hours of labor) based on a single length of 100' (30,480mm) of 24" (610mm) diameter DuctSox compared to an uninsulated spiral metal duct and diffusers. 3 Row systems are evaluated with 50" (1,270mm) diameter. Consult DuctSox Factory for Jumbo FTS installation times.

For more information on installation, please review the DuctSox installation estimator at www.ductsox.com.

** Warranty varies based on fabric selection, suspension/retention, and design criteria.
**Surface Mount**

- D-Shape
- 2 Row C-Track at 3 & 9 o’clock
- Quarter-Round
- 2 Row C-Track at 3 & 6 o’clock

**Suspension Hardware**

- **Track**
  - U-Track Suspended
  - Adjustable Track Support
  - 5’ - 8’ (1,524mm - 2,438mm)
  - Glider
  - Spring Clip

- **U-Track, Surface Mount**
- **C-Track, Surface Mount**

**Tension Cable**

- 25’ - 30’ (7,620mm - 9,144mm)
- Glider

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**For applications with finished ceilings or specialty airflow requirements**

- 1-5% Deflation
- Minimum noise & fabric motion

<table>
<thead>
<tr>
<th>FABRIC</th>
<th>10 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>METAL</td>
<td>38 hours</td>
</tr>
</tbody>
</table>

- Up to 10 years

- 1-5% Deflation
- Minimum noise & fabric motion

- 1-5% Deflation
- Minimum noise & fabric motion

- 100% Deflation
- Disruptive noise & fabric motion

- 45% Deflation
- Noticeable noise & fabric motion

- 17% Deflation
- Noticeable fabric motion

- 17% Deflation
- Minor inflation noise

- No inflation noise
- Minimal fabric motion

- 1-5% Deflation
- Minimum noise & fabric motion

- 10 years 10 years Up to 10 years

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- 10 hours
- 38 hours

- 100% Deflation
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- 17% Deflation
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- For applications with finished ceilings or specialty airflow requirements

- 10 hours
- 38 hours

- 1-5% Deflation
- Minimum noise & fabric motion

- 10 years 10 years Up to 10 years

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- www.ductsox.com
Where Form Meets Function

For many years, Textile Air Dispersion Systems excelled at providing superior “Function” features and benefits, but fell short in terms of “Form.” SkeleCore technology changes that, providing the ultimate in both Function and Form.

SkeleCore technology has changed the way fabric systems are designed. In the past, designing a fabric duct system began with selecting fabric, color, and ventilation layout. The suspension system was just an afterthought since it offered little aesthetic contribution to the total design. Today, however, it is typically chosen early on and it dictates most of the other design decisions.

With DuctSox, there are a variety of Suspension/Fabric Retention Systems to choose from. You decide what’s important: Function, Form, or both.

Shape

Before selecting how the DuctSox System will be suspended, the Shape must first be decided. This is based on your application needs. DuctSox are available in Cylindrical, Oval, D-Shape, or Quarter-Round.

What’s Important?

- What is the appearance at start-up and inflate/deflate modes?
- How visible will the air dispersion system be in the space?
- Will the AHU (fan) cycle during times of use?
- Are fabric wrinkles, bunching, and sagging visible in the deflate mode?
- Will the supply airflow be controlled by variable air volume (VAV) equipment?
- Is this a temporary-use application?
- Is fabric noise and movement during start-up tolerable?

Whether horizontal, vertical, or angled, Cylindrical DuctSox are available in a variety of suspension and retention systems. 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).
SkeleCore is the next generation of Textile Air Dispersion Systems! SkeleCore utilizes an Internal Framework System to provide aesthetic enhancement and improved performance characteristics. There are two SkeleCore models to choose from, including FTS (Fabric Tensioning System) and Pull-Tight. A significant benefit of both is that the fabric system is tensioned the full circumference—360 degrees of tensioning!

**SKELECORE™**  
**Fabric Tensioning System FTS**

SkeleCore FTS stands alone as the only fabric duct/diffuser system that provides “internal” cylindrical tensioning to keep the fabric round and taut at all times. It maintains the same appearance with or without any air pressure in the duct and improves aesthetics by eliminating fabric sag and wrinkling. SkeleCore FTS is ideal when higher aesthetic value is desired, when cycling is frequent, or when systems are designed with variable air volume (VAV). It eliminates disruptive tendencies such as motion and noise upon AHU start-up, especially in hard start applications. SkeleCore FTS also features a unique metal-to-metal Direct Hang Cable method which is the SAFEST suspension in textile ducting. Fabric longevity is extended by minimizing system movement. Available from 8” - 48” (203mm - 1,219mm) diameters.

**Cylindrical Tensioning Rings (CTR):**
Provides easy adjustment (up to 5” or 127mm of fabric take-up per tensioned section), attachment points for textile duct and Direct Hang Cable, and connecting hubs for Spacer Tubing. (Tensioned sections can be as long as 42’ or 12,802mm.)

**Intermediate Rings (IR):**
Provides support for fabric every 6’ (1,829mm), attachment points for Direct Hang Cable and connecting hubs for Spacer Tubing.

**Spacer Tubing:**
6’ (1,829mm) long standard aluminum.

**Sewn-in clips anchor fabric to CTRs.**

**Adjustment points at all CTRs.**

**Internal framework produces minimal pressure loss as determined by an independent third-party testing laboratory.**

**Turning adjustment on CTR clockwise extends Spacer Tubing drawing fabric round and taut.**

**Will friction loss be an issue?**
Adding SkeleCore FTS structure in the air stream improves system performance as the minor friction loss (measured at 0.04 in w.g. per 100 foot) offsets static regain experience in a constant diameter system. The pressure balance is taken into account during design to ensure an optimum performing system and does not increase required fan pressure.
Jumbo Series

The SkeleCore FTS Jumbo Series is a larger-scale version of the patented FTS suspension/retention system. With sizes available from 50” to 84” (1,270mm to 2,134mm), Jumbo FTS is ideal for applications with high bay areas where airflow must be distributed to an extremely large area. Application types include Aircraft Hangars/Maintenance, Convention Centers, Sporting Venues, and Industrial.

Direct Hang Cable: Standard 5’ (1,524mm) galvanized wire drops spaced every 6’ (1,829mm) with Gripple™ Hanger System for easy vertical adjustment. Cable drop ends come with clips for easy install.

12” (305mm) Zipper Access: Direct Hang Cable penetrates fabric through zipper attaching to internal rings (CTRs or IRs). Opening is closed with dual-pull locking zippers.

Patented with Other Patents Pending
SkeleCore Pull-Tight utilizes a combination of Internal Hoops and Tensioning Baskets to help maintain fabric shape and retention. Different from FTS, Pull-Tight is suspended from a 1 Row Tension Cable or Track Suspension System and is tensioned “externally” utilizing a Tension Cable (or Track) Lock. Pull-Tight improves start-up performance and aesthetics when compared to multiple row, horizontal suspension systems. Available from 8” - 60” (203mm - 1,524mm) diameters. NOTE: Only one row of Cable or Track is required for ALL sizes.

**Tension Cable (or Track) Lock:** Connects the Tensioning Basket to the Cable (or Track) Suspension allowing extension of each fabric section. Lock attaches to Cable (or Track) through a 12” (305mm) Zipper Access point. The opening is closed with dual-pull locking zippers.

**Tensioning Basket:** Made up of two Universal Rings (UR) and a 29” (737mm) Tube. Tension Cable (or Track) Lock attaches to the top of both URs allowing the section of DuctSox to be extended/tensioned to smooth wrinkling and improve appearance when the AHU is off. Sewn-in clips anchor fabric to the Basket.
**SUSPENSION/RETENTION**

**Internal Hoops:** Support the fabric from the inside, spaced every 5’ (1,524mm), and are removable.

**Tension Cable (or Track) Suspension**

**Giders:** Spaced 12” (305mm) apart along Cable or Track.

**Patent Pending**

**VIDEO LIBRARY**

For additional product information on FTS or Pull-Tight, go to our Video Library on www.ductsox.com or visit our YouTube channel. Check out these videos to quickly learn more about SkeleCore products.

- **FTS Product Video**
- **FTS Installation**
- **Pull-Tight Product Video**
- **Pull-Tight Installation**
**Layout**

Because the entire DuctSox System is a diffuser, air dispersion and distribution are combined allowing simple and efficient layouts compared to metal duct systems.

**Fittings**

Not every application is a straight line of DuctSox. To accommodate this, we offer a variety of standard fittings (as shown below). We also offer custom fitting configurations.
**Air-Porous Fabric**
Supply air is delivered exclusively through porous fabric.

Flow rate through fabric controlled by weave and pressure from 1 - 200 FPM (.005 - 1.016 m/s).

Ideal for cooling only; food processing, displacement, or critical environments.

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**Linear Vents**
- Delivers airflow through precision cut orifice patterns
- Vent size referenced by airflow per linear foot

Unlimited flexibility in designing vent size and location for optimum airflow control.

Most common method for heating and cooling; high entrainment from outlets provide uniform temperature and less drafts, creating a comfortable environment.

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**Nozzles**
Provides jet-type airflow. Type, location, and quantity based on airflow requirements. Available in a variety of colors.

- **Fixed**
  - Straight flow or closed
  - Airflow throw up to 90 ft. (27,432mm)

- **Adjustable**
  - Directional flow or closed
  - Airflow throw up to 60 ft. (18,288mm)

Common choice for spot cooling, heating, or ventilating. Directional Nozzle helpful for airflow control to create a more comfortable environment.

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**Orifices**
- Orifice sizes: ½" - 5" (12.7mm - 127mm) diameter/SG outlets
- 2" or 3" (51mm or 76mm) diameter
- Orifice size and orientation based on required air throw distance

For heating and cooling, Orifices are ideal for areas requiring extended and precise throw such as recreation, arenas, convention centers, retail, industrial, warehouses, or spot cooling.
## Fabric: Standard Features/Options

<table>
<thead>
<tr>
<th>Fabric Type</th>
<th>Specifications</th>
<th>Colors</th>
<th>Other</th>
</tr>
</thead>
</table>
| **Sedona-Xm™** | Weave: Fire Retardant Polyester, Filament/Filament Twill  
55% Recycled Content (available upon request)  
Weight: 6.8 oz/yd² (231g/m²)  
Porosity: 2 CFM/ft² @ 0.5” w.g. (10.2L/s/m² @ 125Pa)  
Classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and UL 2518 | • Air Porous  
• Premium Fabric  
• Active Antimicrobial (up to 30 washes)  
• Linear Vents, Nozzles, or Orifices |        |
| **TufTex™** | Weave: Fire Retardant Polyester, Plain Weave, Coated  
Weight: 8.2 oz/yd² (278g/m²)  
Porosity: None  
Classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and UL 2518 | • Non-Porous  
• Premium Fabric  
• Linear Vents or Orifices |        |
| **Verona™** | Weave: Fire Retardant Polyester, Filament/Filament Twill  
Weight: 6.8 oz/yd² (231g/m²)  
Porosity: 2 CFM/ft² @ 0.5” w.g. (10.2L/s/m² @ 125Pa)  
Classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and UL 2518; UL-C (Canada); BS 5867 Part 2, 1980; GB8624-2006; DIN 4102-1 | • Air Porous  
• Commercial Fabric  
• Linear Vents, Nozzles, or Orifices |        |
| **DuraTex™** | Weave: Fire Retardant Polyester, Plain Weave, Coated  
Weight: 5.5 oz/yd² (186g/m²)  
Porosity: None  
Classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and UL 2518; also available (by request only) to meet BS 5867 Part 2, 1980 | • Non-Porous  
• Commercial Fabric  
• Linear Vents, Nozzles, or Orifices |        |
| **Microbe-XTM** | Weave: Fire Retardant Polyester, Filament/Filament Twill  
Weight: 6 & 13: 6.9 oz/yd² (234g/m²)  
29: 6.2 oz/yd² (210g/m²)  
Porosity: 6, 13, 29 CFM/ft² @ 0.5” w.g. (30.5, 66, 147L/s/m² @ 125Pa)  
Classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and UL 2518 | • Air Porous  
• Specialty Fabric  
• Active Antimicrobial (up to 30 washes)  
• Linear Vents |        |
| **Stat-XTM** | Weave: Filament Polyester with Interwoven ESD Yarns  
Weight: 2.9 oz/yd² (98g/m²)  
Porosity: 2.5 CFM/ft² @ 0.5” w.g. (12.7L/s/m² @ 125Pa)  
Classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and UL 2518; UL-C (Canada) | • Air Porous  
• Static Dissipative  
• Specialty Fabric  
• Linear Vents or Nozzles |        |
| **Rx™** | Fabric: Rx2™, Rx6™, Rx15™, Rx25™, Rx50™, Rx100™, Rx200™  
Weave: Fire Retardant Polyester, Filament, Non-Linting  
Up to 50% Recycled Content  
Weight: Varies by Air Permeability: 5.4-7.1 oz/yd² (183-241 g/m²)  
Classified by Underwriters Laboratories in accordance with the requirements of NFPA 90A and UL 2518 | • Air Porous  
• Specialty Fabric  
• LabSox: D-Fuser or Traditional Models  
• Active Antimicrobial  
• Surround Flow or Select Flow  
• Linear Vents |        |
**Standard Fabric Colors**

DuctSox offers seven standard colors for Sedona-Xm, TufTex, and Verona. DuraTex is also available in these colors except green and red. Custom Colors and Patterns are available on some fabrics, but may require a premium charge and additional lead time.

- Black
- Silver
- White
- Tan
- Blue
- Green
- Red
- Custom Colors
- Patterns

**Specialty Fabric Colors**

These fabrics are only available in specific color types and patterns.

- Microbe-X, White
  (Custom colors available)
- Stat-X, White
- Stat-X, Light Blue
- Rx, White

*NOTE: Colors may vary based on texture of fabric or dye lot.*
**Adjustable Flow Device (AFD)**

Airflow control is critical in HVAC air dispersion. The patented zip-in Adjustable Flow Device (AFD) offers variable resistance to balance static regain, balance airflow to branches, reduce turbulence, and reduce abrupt start-ups.

AFD devices come standard with Sedona-Xm and TufTex Systems. The AFD is an option with other fabrics. Except at the inlet, all AFD’s are pre-set from the factory and should not require field balancing. The inlet AFD can be adjusted for airflow turbulence.

**Plenum**
Direct airflow into branch take-offs where velocity is over 1,200 FPM (6.01m/s).

**Inlet**
Cinch to use as flow straightener or balance airflow. All systems with >1,200 FPM (6.01m/s) inlet velocity.

**Middle**
Balances static regain. All systems with an intermediate zipper over 40’ (12.192mm) and >1,200 FPM (6.01m/s) inlet velocity.

**No Pop**
Reduces inflation pop. Single AFD located in last 30% of long run, included for all systems over 100’ (30,480mm) and over 5,000 CFM (2,360L/s).

*(Typically, systems should not include more than two AFDs in sequence to an endcap.)*

**Personalize It!**
Personalize your DuctSox System with a logo, school name, company name, or slogan. For more information go to [www.ductsox.com](http://www.ductsox.com).

**Tensioned Endcap**
To improve the aesthetics of a simple 1 row system, a Tensioned Endcap upgrade is available for 8”-30” (203-762mm) diameter and systems less than 50 feet. Note: Availability is limited to standard cable or track applications.
Noise Control Using DuctSox Technology

DuctSox continues to be the leader and innovator in the fabric ductwork/diffuser industry. The dBSilencer™ is a Fabric Sound Attenuator that was developed to address one factor for fabric duct—noise from the air handling unit. Textile air dispersion systems can be designed to be quiet, but noise entering the system from air handling units, volume control dampers, or fan-powered boxes can create an uncomfortably noisy environment.

DuctSox’s latest innovation is the first of its kind silencer made out of fabric! The concept utilizes several other innovations, such as our patented SkeleCore Technology for structure. The dBSilencer can be used in place of a metal silencer or acoustically-lined ducting to absorb or prevent incoming noise from reaching the occupied space.

Many applications leave little, or no, mechanical space to place sound attenuators. The dBSilencer is installed in the occupied space, offering an aesthetically pleasing appearance that can be customized to match your DuctSox System’s fabric type and color.

Depending on noise absorption required, the dBSilencer is available with or without an internal bullet and available in diameters 12” to 30”.

For more information, see the dBSilencer brochure on www.ductsox.com.
**LabSOX™**
Air Dispersion for Critical Environments

Designed specifically for critical environments, LabSox products combine airflow design with specialized permeable fabrics and precisely shaped panels.

- Uniform, low velocity, radially diverging air patterns with minimum turbulence
- Can be easily retrofitted to resolve airflow issues in existing facilities
- Fabric faced products offer noise levels at least 10 NC quieter than metal
- Highly permeable, antimicrobial treated fabrics
- Modular D-Fuser available in MetalPan or All-Fabric models
- Also available in Round, D-Shape, or Quarter-Round

### APPLICATIONS INCLUDE

- Chemistry Labs
- Pharmaceutical Education
- Cleanrooms Laser Research
- Microscopy (TEM, SEM, FIB)
- Paint Facilities Displacement Ventilation
- Vivariums

**KitchenSOX™**

KitchenSox offer better air dispersion alternatives for food preparation environments.

- Airflow through textile eliminates drafts and condensation
- Introduce more supply airflow near hood while maintaining capture
- Reduces dirt deposits on diffuser and adjacent ceiling tiles
- Antimicrobial treated, highly porous textile offers secondary filtration
- Fabric face can be easily removed for laundering
- Modular D-Fuser available in MetalPan or All-Fabric models
- Also available in Round, D-Shape, or Quarter-Round

**ChemSOX™**

ChemSox was developed for chemically harsh environments such as metal plating, chemical processing, battery manufacturing, and other highly corrosive and caustic industries.

- Recyclable and inert, high density polyethylene (HDPE) fabric to combat brittleness/cracking
- Up to 50% less expensive (materials/installation) than typical ductwork used (metal, aluminum, or stainless)
Growing Facilities

Plants require water, nutrients, light, and proper air movement to grow and thrive. The quantity and quality of each may vary by stage of growth and type of plant. In nature, weather patterns drive air movement and can be highly unpredictable. DuctSox engineers work closely with designers and growers to ensure the air dispersion is matched to the space and requirements of the plants.

These types include:
- Critical Growth: Lower velocity for young or sensitive plants
- Overhead: Controlled drafts for more durable plants
- Under Table: Displacement for efficient cooling to plant height
- Growth Chambers: Precise air dispersion for confined spaces

Data Centers

With the demand for data storage and retrieval increasing, the need to provide energy efficient cooling solutions is following the same path. DuctSox has developed a product for mission critical facilities with a focus on properly managing airflow in the cold aisles of data centers.

- Provides targeted, uniform velocities along entire length of aisles to allow for maximum efficiency of equipment within the aisles
- Ability to field adjust airflow to accommodate differences in equipment from rack to rack
- Use of anti-static and highly porous materials
- Great for retrofit applications due to its light weight and ease of install

UnderFloorSox (UFSox) have been developed specifically to distribute and disperse air within the plenum for Underfloor Air Distribution (UFAD) Systems, easily fitting into standard raised access floor systems.

- Lightweight, easy to ship, handle, and install
- Modular, zip-together sections and fittings
- Easily reconfigured for future changes
- Placed on the floor, secured with retention cables

Air dispersion through engineered venting and variable endcaps improve thermal distribution of supply air within the plenum.

- Deliver cool air to perimeter zones reducing effects of unintended temperature rise
- Low noise. Venting in fabric reduces noise generation within the plenum
Check out our PHOTO GALLERY on www.ductsox.com
Check out our PHOTO GALLERY on www.ductsox.com
GALLERY

Education/Library Environments

Municipal

Laboratories

Kitchens
**Product Warranty**

Our Product Warranty is for replacement or repair credit based on the amount of the warranty period remaining. The warranty is not available in the form of a cash payment, only as credit towards repair or replacement. The DuctSox Warranty covers materials, fabrication, and performance of the fabric portion of the DuctSox System only. Warranty coverage begins at the time of shipment.

Both the Design & Performance Warranty and the Product Warranty exclude damage to the fabric from improper installation, poor maintenance, abuse, abrasion, caustic chemicals, exposure to high temperature (over 180 degrees Fahrenheit, 82 degrees Celsius), fabric discoloration and shrinkage, or any unauthorized modifications to the DuctSox System. It also does not cover labor, equipment rental, or freight charges incurred as a result of executing the warranty.

**Design & Performance Warranty**

DuctSox Systems that are designed within our performance criteria, based on DuctSox submittal documents, are covered by a 1 year Design & Performance Warranty. We want to ensure the product performs consistently through the entire heating and cooling cycle for the first year of operation. To ensure a DuctSox System is designed correctly, our Inside Sales and Engineering group are available to provide design assistance. Our Design Manual is also available on [www.ductsox.com/media-library](http://www.ductsox.com/media-library).

<table>
<thead>
<tr>
<th>DuctSox Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading manufacturer of textile air dispersion products</td>
</tr>
<tr>
<td>Global manufacturing and distribution</td>
</tr>
<tr>
<td>Design and installation support</td>
</tr>
<tr>
<td>U.S.A. owned and operated</td>
</tr>
</tbody>
</table>

**Warranty Period (in Years)**

<table>
<thead>
<tr>
<th>SkeleCore FTS</th>
<th>SkeleCore Pull-Tight</th>
<th>Hoops (IDS)</th>
<th>Hangers</th>
<th>1, 2, or 3 Row</th>
<th>Surface Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedona-Xm, TuffTex</td>
<td>20 (pro-rated 11-20)</td>
<td>15 (pro-rated 11-15)</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Verona, DuraTex</td>
<td>15 (pro-rated 11-15)</td>
<td>10</td>
<td>10</td>
<td>10 (pro-rated 8-10)</td>
<td>10 (pro-rated 8-10)</td>
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<tr>
<td>UFSox, Stat-X</td>
<td></td>
<td></td>
<td></td>
<td>5 (pro-rated 2.5-5)</td>
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</tr>
<tr>
<td>Rx, Microbe-X, LabSox, KitchenSox, ChemSox</td>
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<tr>
<td>OvalSox</td>
<td></td>
<td></td>
<td></td>
<td>5 (1 year for Food Processing)</td>
<td></td>
</tr>
</tbody>
</table>

*Application Requirements: Airflow and static pressure per original DuctSox design in accordance with published requirements. Warranty is based on inlet velocities up to 1800 FPM (8.12m/s). For SkeleCore FTS, a 10 year warranty is available for inlet velocities up to 2000 FPM (10.16m/s). Some exceptions may apply.*

**ADDITIONAL INFORMATION**

Underwriters Laboratories (UL) 2518 is the most comprehensive compliance requirement assembled for the fabric duct industry. They ensure that our products meet a higher level of safety, quality, and performance.

Additional information is available at [www.ductsox.com](http://www.ductsox.com).