



**SKELLECORE™**  
INTERNAL FRAMEWORK SYSTEM

**DUCTSOX®**  
*Textile Air Dispersion Products*

# SKLECORE™

INTERNAL FRAMEWORK SYSTEM

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 and Pull-Tight. A significant benefit of both is that the fabric system is tensioned the full circumference—**360 degrees of tensioning!**

## SKLECORE FTS

SkeleCore FTS (Fabric Tensioning System) stands alone as the only fabric ducting/diffuser system that provides “internal” cylindrical tensioning to keep the fabric round and taut at all times. SkeleCore FTS maintains the same appearance with or without any air pressure in the duct. SkeleCore FTS is ideal when higher aesthetic value is desired, when cycling is frequent, or when systems are designed with variable air volume. SkeleCore FTS eliminates disruptive tendencies such as motion and noise upon AHU start-up, especially in hard start applications. SkeleCore FTS features a unique metal-to-metal Direct Hang Cable method which is the SAFEST suspension in fabric ducting. Fabric longevity is extended by minimizing system movement at fabric seams, attachment points, and fittings.

## SKLECORE PULL-TIGHT

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 either a 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.

# SKLECORE FTS

## FEATURES, ADVANTAGES, AND BENEFITS

- Keeps fabric duct round and taut at all times, with or without air pressure.
- Eliminates fabric sagging, drooping, and wrinkles.
- Prevents inflation pop (noise) and disruptive fabric motion at start-up.
- Ideal for applications requiring VAV and/or frequent cycling.
- Vertical Hanging Suspension System eliminates need for horizontal suspension (Tension Cable or Track) and stress on fabric attachment points and seams.
- Cylindrical Tensioning Ring allows for up to 5” (127mm) of fabric take-up per tensioned section.
- Available in diameters from 8” to 60” (2” increments) or 203mm to 1,524mm (51mm increments), porous and non-porous fabrics in a variety of colors, and air outlet options including Linear Vents, Orifices, SG Grommets, and Fixed or Adjustable Nozzles.
- All fittings are tensioned, including Elbows, Tees, Crosses, and Reducers.
- All the benefits of fabric ducting including uniform air dispersion, versatile airflow designs, lightweight, reduced installation times, and fabrics that are non-condensating, non-corrosive, and launderable.
- Independent studies show that friction loss is minimal.
- Higher inlet velocity designs.
- Up to a 20 year warranty (see back page for details).

**Cylindrical Tensioning Rings (CTR):** Provides easy adjustment (up to 5” or 127mm of fabric take-up per tensioned section), attachment points for fabric duct and Direct Hang Cable, and connecting hubs for Spacer Tubing.

### Fabric Tensioning System

SkeleCore FTS includes the innovative CTR to create the desired level of fabric tautness and shape. The CTR is located at the inlet and end of every tensioned section. A tensioned section can be as long as 42’ (12,802mm) and can be connected to another tensioned section extending the overall length. The CTR is easily adjusted with the wrench provided. As it is adjusted, it expands the Internal Framework System up to 5” (127mm), pulling the fabric taut and round. See photo at right.

## SkeleCore Framework

The Internal Framework System of SkeleCore FTS is a fabric support system constructed of lightweight metallic rings (CTRs and IRs) and aluminum Spacer Tubing.

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

**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.

Patents Pending



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

Sewn-in clips anchor fabric to CTRs.

Adjustment points at all CTRs.

able: Standard 5' galvanized wire drops with a locking system for easy installation. Cable drop ends are designed for easy install.

Closed zipper at 12 o'clock.



Cable drop attachment point.



**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.



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### Vertical Hanging Suspension System

SkeleCore FTS uses Direct Hang Cable mounting, the SAFEST of all suspension systems for fabric ducting. Direct Hang Cable drops spaced every 6' (1,829mm) transfer the weight of the Internal Framework System directly to the ceiling structure. This eliminates the need to support any weight through attachment points and seams. SkeleCore FTS can be designed with higher inlet velocities.

For additional product information, including installation videos, go to our VIDEO LIBRARY [www.ductsox.com](http://www.ductsox.com)



# SKELECORE PULL-TIGHT

## FEATURES, ADVANTAGES, AND BENEFITS

- Tensioning Baskets are located in multiple positions throughout the system. The number of baskets is dependent on section length.
- Each Tensioning Basket features two Cable Tension Locks (or Track Tension Locks) to pull the sections of the system tight, improving aesthetics and decreasing wrinkling.
- Metallic Internal Hoops spaced 5' (1,524mm) apart are attached to the interior of the fabric duct at five connection points.
- Metallic Internal Hoops are factory installed allowing simple field installation and can be easily removed and re-installed during maintenance.
- Requires one-row horizontal suspension (Tension Cable or Track) for all diameters.
- Eliminates inflation pop (noise) and movement at start-up.
- Eliminates fabric sag and droop.
- Available to accommodate diameters from 8" to 60" (203mm to 1,524mm), porous and non-porous fabrics in a variety of colors, and air outlet options including Linear Vents, Orifices, SG Grommets, and Fixed or Adjustable Nozzles.
- All fittings including Elbows, Tees, Crosses, and Reducers are available. Fittings are not typically tensioned. For tensioned fittings, SkeleCore FTS may be a better fit for your project.
- All the benefits of fabric ducting including uniform air dispersion, versatile airflow designs, lightweight, reduced installation times, and fabrics that are non-condensating, non-corrosive, and launderable.
- Up to a 15 year warranty (see back page for details).

**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.



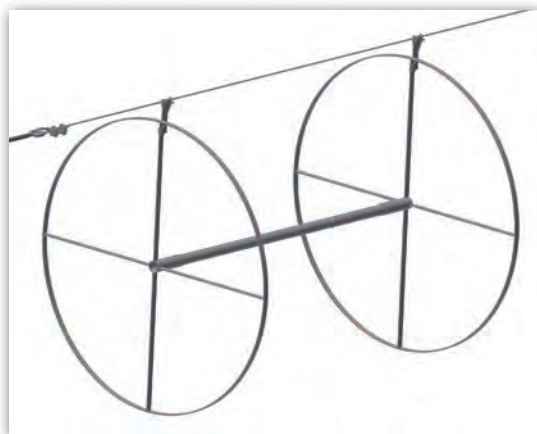
**Gliders:** Spaced 12" (305mm) apart along Cable or Track.


**Tension Cable (or Track) Suspension**

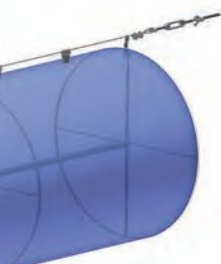
Patent Pending

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

**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.



	SKELECORE FTS	SKELECORE PULL-TIGHT																																													
<b>Warranty</b>  <i>NOTE: Warranty applicable to the fabric only.</i>  <i>* All high velocity designs need to be approved by the DuctSox Inside Sales Technical Department 1-866-DuctSox</i>	20 year (pro-rated 11-20): Sedona-Xm and TufTex Up to 1600 FPM inlet velocity  10 year (pro-rated years 6-10): Sedona-Xm and TufTex Up to 2000 FPM* inlet velocity  15 year (pro-rated 11-15): Verona and DuraTex Up to 1600 FPM inlet velocity	15 year (pro-rated 11-15): Sedona-Xm and TufTex Up to 1600 FPM inlet velocity       10 year: Verona and DuraTex Up to 1600 FPM inlet velocity																																													
<b>Fabrics</b>	Porous (Sedona-Xm and Verona) and Non-Porous (TufTex and DuraTex)  Sedona-Xm, TufTex, and Verona are available in black, silver, white, tan, green, blue, and red. DuraTex is also available in these colors EXCEPT green and red. Custom colors are available, but require a premium charge and additional lead time.   All of our fabrics are classified by Underwriters Laboratories. For additional information on codes, weights, porosities, colors, and more, go to <a href="http://www.ductsox.com">www.ductsox.com</a> .																																														
<b>Installation Estimate</b>	<b>Example:</b> Estimated man hours to install 100' (30,480mm) of straight fabric duct vs. single-wall metal duct system.  <table border="1"> <thead> <tr> <th>Suspension</th> <th>24" (610mm) Diameter</th> <th>50" (1,270mm) Diameter</th> </tr> </thead> <tbody> <tr> <td><i>Single-Wall Metal</i></td> <td>38 hrs.</td> <td>44 hrs.</td> </tr> <tr> <td>SkeleCore FTS</td> <td>12.5</td> <td>15</td> </tr> <tr> <td>SkeleCore Pull-Tight Track</td> <td>9</td> <td>10.8</td> </tr> <tr> <td>Hoops (IHS) Track</td> <td>8</td> <td>9.6</td> </tr> <tr> <td>3x1 Track</td> <td>9</td> <td>na</td> </tr> <tr> <td>4x2 Track</td> <td>na</td> <td>21.6</td> </tr> <tr> <td>2-Row Track</td> <td>16</td> <td>19.2</td> </tr> <tr> <td>1-Row Track</td> <td>8</td> <td>na</td> </tr> <tr> <td>SkeleCore Pull-Tight Cable</td> <td>5</td> <td>6</td> </tr> <tr> <td>Hoops (IHS) Cable</td> <td>4</td> <td>4.8</td> </tr> <tr> <td>3x1 Cable</td> <td>5</td> <td>na</td> </tr> <tr> <td>4x2 Cable</td> <td>na</td> <td>10.6</td> </tr> <tr> <td>2-Row Cable</td> <td>8</td> <td>9.6</td> </tr> <tr> <td>1-Row Cable</td> <td>4</td> <td>na</td> </tr> </tbody> </table> <p><i>Estimated installation time per DuctSox "Installation Estimator" (see <a href="http://www.ductsox.com">www.ductsox.com</a>)</i></p>		Suspension	24" (610mm) Diameter	50" (1,270mm) Diameter	<i>Single-Wall Metal</i>	38 hrs.	44 hrs.	SkeleCore FTS	12.5	15	SkeleCore Pull-Tight Track	9	10.8	Hoops (IHS) Track	8	9.6	3x1 Track	9	na	4x2 Track	na	21.6	2-Row Track	16	19.2	1-Row Track	8	na	SkeleCore Pull-Tight Cable	5	6	Hoops (IHS) Cable	4	4.8	3x1 Cable	5	na	4x2 Cable	na	10.6	2-Row Cable	8	9.6	1-Row Cable	4	na
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Products may be covered by one or more of the following patents: 6565430, 6558250, 5769708, 6425417, 6626754, 6280320, 6960130, 6958011, 6953396, and 8434526. Other patents pending.

**DUCTSOX**<sup>®</sup>  
Textile Air Dispersion Products

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