

**CEILING** 

**SYSTEMS** 

[ Between us, ideas become reality.™]

# **SOUNDSCAPES™** Acoustical Canopies-Installation Instructions

DO NOT REMOVE CANOPIES FROM THE CARTON UNTIL YOU HAVE READ THESE INSTRUCTIONS IN THEIR ENTIRETY.

#### 1.0 GENERAL

#### 1.1 Product Description

SoundScapes are pre-formed acoustical canopies available in either Hill or Valley configurations and suspended with cables.

#### 1.2 Materials and Finishes

SoundScapes panels consist of pre-formed and pre-curved layers of mineral fiber with DuraBrite acoustically transparent membrane on all exposed surfaces.

#### 1.3 Storage and Handling

The ceiling components shall be stored in a dry interior location and shall remain in original cartons prior to installation to avoid damage. The cartons shall be stored in a flat, horizontal position. Proper care should be taken to locate the hardware packet immediately upon opening the carton and to save the top carton lid for use during installation as a guide for hanging the canopies. The panels should not be removed from their carton and the plastic film and protectors around the panels should not be removed until installation is complete. Proper care should be taken when handling to avoid damage and soiling.

### 1.3.1. Working With Fiberglass & Mineral Fiber Products FIBERGLASS CEILINGS

MAN-MADE VITREOUS FIBER CEILING PANELS

⚠ W A R N I N G THIS PRODUCT CONTAINS MAN-MADE
VITREOUS FIBERS. POSSIBLE CANCER AND RESPIRATORY
TRACT HAZARDS CAN CAUSE TEMPORARY RESPIRATORY,
SKIN AND EYE IRRITATION.

**1.3.2. Precautionary Measures:** During the installation be certain that the work site is well ventilated and avoid breathing dust. If high dust levels are anticipated during installation such as with the use of power tools, use appropriate NIOSH designated dust respirator. All power cutting tools must be equipped with dust collectors. Avoid contact with skin or eyes. Wear long-sleeve, loose fitting clothes, gloves and eye protection.

**1.3.3. First Aid Measures:** If contact occurs flush eyes and skin irritation with plenty of water for at least 15 minutes and remove contaminated clothing. After installing material, wash with warm water and mild soap. Wash work clothes separately from other clothing. Rinse washer thoroughly. Refer to Armstrong MSDS (which includes information on established occupational exposure limits) which are available from Armstrong or your employer.

#### 1.4 Jobsite Conditions

Before SoundScapes canopies are installed, they should be permitted to reach room temperature and have stabilized moisture content for minimum of 24 hours before installation. Panels must be protected against damage from moisture, direct sunlight, surface contamination, and other causes. Building areas to receive canopies shall be free of construction dust and debris.

#### 1.5 Temperature and Humidity during Installation

The product can be installed up to 100°F (38°C). It cannot be used in exterior applications, where standing water is present, or where moisture will come in direct contact with the canopy.

Installation must not be carried out in areas in excess of 90% RH. Following practical completion, conditions must be maintained below 70% RH.

#### 1.6 Fire Performance

SoundScapes canopies, as with other architectural features located in the ceiling plane, may obstruct or skew the existing or planned fire sprinkler water distribution pattern, or possibly delay the activation of the fire sprinkler or fire detection system. Designers and installers are advised to consult a fire protection engineer, NFPA 13, and their local codes for guidance on the proper installation techniques where fire detection or suppression systems are present.

Contact Techline at 1-877-276-7876, option 1, then 2, then 3 for specific US and Canadian fire performance data.



#### 2.0 COMPONENTS

#### 2.1 Canopies

SoundScapes canopies are 46-1/2 inches x 75 inches x 1-1/4 inches thick. Canopies are available in either Hill or Valley configurations with a fixed arc radius of 10' 9".

#### 2.2 Suspension System

SoundScapes canopies are suspended with cables. Complete suspension cable kits are supplied with each canopy. They consist of four 16' cables per canopy and hardware that attaches the cables to the canopy and structure with an adjustable gripper to easily set the proper elevation. Extended 30' cables are available as a separate accessory (BP625530).

#### 3.0 INSTALLATION

#### 3.1 General

After opening the product carton, and before installation, be sure to locate, remove, and set aside the hardware kit before proceeding.

SoundScapes canopies require two people to handle each panel safely, minimize damage and provide panel support during installation. DO NOT REMOVE THE CANOPIES FROM THE CARTON until **step 3.3.2** of the installation process. Since the canopies are pre-assembled, locate the suspension hardware and make all the connections while the product is still in the carton. Do not remove the plastic film or canopy edge protectors until the panel is installed.

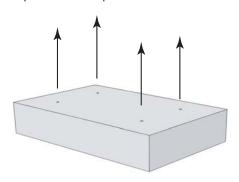
SoundScapes panels cannot be cut, drilled or altered in any way. The canopy must not be used to support any other material. The cable suspension system must be fastened to the structure and cannot be hung from any commercial ceiling system. SoundScapes panels are not approved for exterior application.

#### 3.2 Suspension Cables

Canopies must be installed with four suspension cables.

#### 3.2.1 Cable attachment to structure

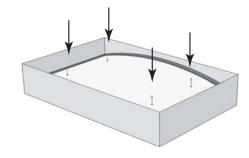
 Use the suspension cable targets on the top of the package to locate cable anchor points at the structure. Additional structural support may be required if cable anchor points are obstructed by HVAC, piping or other components in the plenum.



- Attach the gripper structure anchor to the structure with a fastener that will carry the full weight of the 50 lb canopy. The top of the gripper anchor has a 1/4"-20 threaded hole for use with a 1/4"-20 bolt, or you can use a standard wood or sheet metal screw through this hole for proper attachment to structure.
- 3. Insert the end of the cable into the gripper anchor cap.
- Screw the gripper anchor cap completely into the gripper structure anchor.

## **3.2.2 Cable attachment to canopy** All cable attachments should be made while the product is in the carton.

- 1. Remove cardboard packaging from top of canopy.
- Pull back the plastic film to expose the four anchor points. This will ease final removal after the panel is installed.
- 3. Locate the four embedded anchor points on the canopy.
- Insert the end of the cable into the internal barrel cap and completely screw this into the embedded canopy plate.
- Screw the bottom end cable adjuster into the gripper bottom end assembly.
- Repeat until all four bottom end assemblies are attached to the canopy



#### 3.3 Install the Canopy 3.3.1 Insert Suspension Cables

- Move the carton to the approximate location of the installation.
- 2. Keep the boxed canopy on a flat surface to support the carton.
- Insert a suspension cable into the top of the cable adjuster at all four corners (see right).
- Gently pull the cable through the cable adjuster until all the slack is removed.
- 5. Do not remove the canopy corner protectors.





16' cable





bottom end cable adjuster



gripper bottom end assembly



internal barrel cap

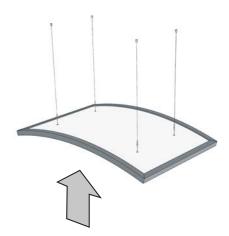




#### 3.3.2 Suspend the Canopy

Canopies must be installed so the lowest point is a minimum of 7' 6" above the finished floor.

- 1. Suspending the canopy requires two people.
- Make sure your hands are clean or wear white cotton gloves.
- Raise the panel and gently pull the cable(s) to take up the slack.

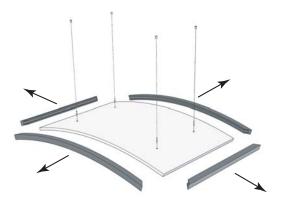


Do not pull the cables to raise the canopy under full panel weight. Cable damage will occur.

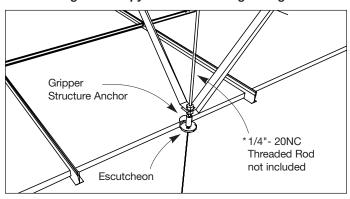
- 4. Continue to raise the canopy until at the required height.
- 5. Canopies can be installed up to a 45 degree angle in either direction.
- To lower the canopy, take the weight off the cable(s), depress the plunger on top of the cable adjuster and lower the canopy. Release the plunger to lock the cable into the adjuster. Adjust panel height as desired.

**IMPORTANT SAFETY AND QUALITY NOTE:** Do not allow any portion of enclosed 16' cable to drop below the canopy while adjusting the final panel height. To do so could cause injury to the installer or damage to the edge of the panel.

- 7. After the panel height is correct, cutoff excess cable leaving about 1" remaining out the cable adjuster.
- 8. It is recommended to keep the edge protection and plastic film on the canopy until all canopies are installed and other trades have finished in the area. This will keep the panel clean and minimize edge damage.



#### 3.4 Installing the canopy below an existing ceiling



Canopy suspension cables should not impose any lateral force on an existing ceiling.

- The structure gripper anchor must be mounted to a support at or above the existing ceiling.
- Use 1/4" 20 threaded rod attached to structure to secure the structure gripper anchor at the correct height.
- 3. Use diagonal bracing to structure to provide support.
- Use the optional escutcheon kit accessory to conceal the structure gripper anchor when installed above the ceiling level.

0

Escutcheon Kit BP7006

- (2) Collars with set screws
- (2) Escutcheons (2")

Note: Two kits are required for each canopy.

#### 3.5 Seismic Restraint\* and Installation

The International Building Code allows architectural components to swing freely as long as they will not be damaged or cause damage. Canopies suspended will swing no more than 18" in any direction for each panel. Restraint of canopies is not recommended.\*

\*Pendulum reaction information is based on full scale testing and computer modeling conducted at the Structural Engineering Earthquake Simulation Lab located at the State University of New York at Buffalo.

#### 4.0 Cleaning

Use a clean, dry, soft white cloth to wipe off any dirt or fingerprints. Regular light dusting of the back side of the canopy is recommended.

#### MORE INFORMATION

For more information, or for an Armstrong representative, call 1 877 ARMSTRONG.

For complete technical information, detail drawings, CAD design assistance, installation information and many other technical services, call TechLine™ services at 1 877 ARMSTRONG or FAX 1 800 572 TECH.

For the latest product selection and specification data, visit armstrong.com/ceilings. U.S. Patents Pending.

