

## **SOUNDSCAPES®**

## **Acoustical Canopies**



SoundScapes Canopies 4' x 6' Hill panels in White United Way of Rhode Island, Providence, RI

#### Color Selection Due to printing limitations, shades may vary from actual product.



NOTE: Special care in installation and handling must be taken with color canopies to avoid surface damage to the paint finish. Custom colors are available. Contact Architectural Specialties with a Sherwin-Williams 4-digit color code from the Durations or Harmony flat interior paint families (Code SW \_ \_ \_ \_ \_)

#### Key Selection Attributes

- Enhance acoustics with spot absorption
- · Aesthetically define spaces
- · Hill and valley shapes available in multiple sizes
- Fourteen standard colors; custom colors available
- · Adjustable to special heights
- Energy-efficient, high light-reflectant surface
- Embedded flush-mounted hardware system for clean look

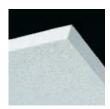


Coordinate with SoundScapes Shapes, Metaphors®
Coffers infill panels, or Infusions® Canopies,
Lay-in panels, Partitions, Walls, and Wings;
visit armstrong.com/shapes, armstrong.com/metaphors,
or armstrong.com/infusions



SoundScapes Canopies 4'  $\times$  6' Hill and Valley panels in White Steelcase University Learning Center, Grand Rapids, MI

#### Detail







Embedded hardware in back of panel

### **Acoustical Performance**

#### Sound Absorption in Sabin

The Sabin is the unit of total sound absorption provided by an object. This is the preferred metric for "space absorbers" such as clouds, canopies or baffles installed within an architectural space. Total acoustical absorption for a suspended ceiling is calculated by multiplying the exposed surface area by the material NRC while "space absorbers" are directly measured. SoundScapes Acoustical Canopies provide greater sound absorption than a continuous ceiling of the same surface area because the sound is absorbed from both the front and back surfaces. The

installation of canopies in a reverberant space can significantly reduce the background noise and reverberation time, enhancing speech intelligibility.

Factors that may affect the installed acoustical performance relative to the published results are:

- Size and shape of canopy
- Number of canopies and their layout/location
- Suspension distance below exposed deck or finished ceiling

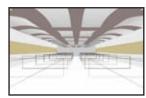
Ceiling	No Ceiling Exposed Structure	SoundScapes (25% of ceiling)		SoundScapes (50% of ceiling)		Full Ultima
		52 SoundScapes 4' x 6' Canopies*	105 SoundScapes Shapes - Circles	100 SoundScapes 4' x 6' Canopies*	217 SoundScapes Shapes - Circles	Ceiling
Reverberation Time (RT)	3.4s	1.6s	1.4s	1.0s	0.9s	0.5s
RT Improvement	ref	+53%	+58%	+70%	+74%	+85%
Background Noise Reduction	ref	-1.6 dB	-2.0 dB	-2.6 dB	-3.0 dB	-5.0 dB
Total Sabin for Coverage Area	none	1248 sf x 1.25 = 1560	1216 sf x 1.49 = 1812	2400 sf x 1.25 = 3000	2515 sf x 1.49 = 3747	5000 sf x 0.70 = 3500

<sup>\*</sup> For product information on SoundScapes Shapes Acoustical Clouds, see CS-3867 or visit armstrong.com/shapes. You can calculate the acoustical difference that SoundScapes make in your space by using our online Reverb Calculator Tool at armstrong.com/reverbtool

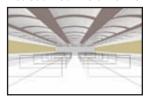
#### **EXPOSED STRUCTURE**



**52 SOUNDSCAPES CANOPIES** 



100 SOUNDSCAPES CANOPIES



5,000 SF Exposed Structure (50' x 100'), 15' to deck, drywall with windows two sides, commercial carpet

## Case Study

Project: Carmen & David's Creamery

Location: Lancaster, PA

Product: SoundScapes Custom Acoustical Canopies

The Challenge: Before they could open their new establishment, the owners of Carmen & David's Creamery had to transform a former coffee shop with its dark purple and deep red interior into a whimsical ice cream parlor with bright, cheerful colors. As co-owner Carmen Garcia-Hommel explains, "We were able to add color to just about every surface in the shop but the ceiling because we thought we couldn't do anything with it."

The Solution: To complete the transformation, co-owner David Hommel partnered with Armstrong Ceilings to install a variety of SoundScapes Custom Canopies in custom colors throughout the shop.

Seven 3' x 3' convex and concave SoundScapes Canopies are suspended over tables in the serving and seating areas. All of the canopies are in custom colors that coordinate with the sherbet-like colors of the shop's interior.

According to Garcia-Hommel, "The installation of the canopies has added wonderful depth and visual appeal to the ceiling. Everyone who comes in looks up and can't help but notice them."



## SOUNDSCAPES®

## Canopies



### Kit Components

- · Pre-curved SoundScapes Canopies
- · Hardware and 16' cables included

#### Panel Selection

Item No.*	Description	Dimensions*	Light Reflectance (White only)
			•
6258	Hill Canopy	46-1/2" x 75" x 1-1/4"	0.90
6259	Valley Canopy	46-1/2" x 75" x 1-1/4"	0.90
6260	Hill Canopy	36" x 36" x 1-1/4"	0.90
6261	Valley Canopy	36" x 36" x 1-1/4"	0.90

Add 2-letter color suffix to item number when specifying or ordering (ex: 6258 L M)

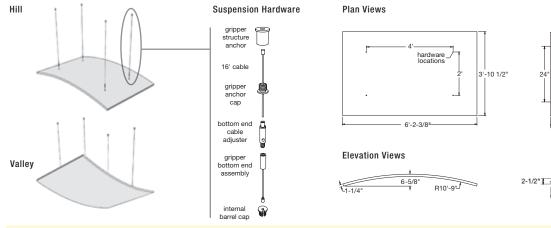
Exact dimensions for each canopy are shown on page 3 inside

Item No.	Description
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625530 Extended Hanging Cables - (4) 30' Cables

7006 Escutcheon Kit – Used when hanging canopy below an existing ceiling; 2 kits needed per SoundScapes panel.

### Installation Options and Details



#### Physical Data

#### **Panel Size**

Nominal 46-1/2" x 75" x 1-1/4" and 36" x 36" x 1-1/4"

Panel Arc Fixed 10'-9" radius

#### Material

Mineral fiber pre-formed in canopy shape

Surface Finish and Edge Detail DuraBrite™ scrim on all sides, finished square edges

### Suspension System

Embedded, flush-mounted hardware system and aircraft cables provided in panel kits

#### **Installation Considerations**

Installation Considerations
SoundScapes Canopies must remain in their cartons
until ready to hang. They require two people to handle
and install a panel safely. Do not remove the canopy
edge protectors until the panel is installed. Canopies
in colors other than white require additional care to
reduce scuffing. See installation instructions on website for details

#### **Design Considerations**

SoundScapes Canopies cannot be cut, drilled, or altered in any way. The panels can be damaged by exposure

to moisture, to high temperatures and to high humidity. SoundScapes Canopies are not approved for exterior application.

# Canopies are designed to be installed a minimum of 18" apart. Lipping may be visible in installations closer

Field painting may affect the acoustical and/or fire performance, is not recommended and would void the product warranty.

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The SoundScapes cable hanging system must not hang from any commercial ceiling suspension system. The canopy must not be used to support any other material.

Acoustical Performance (based on 4' x 6' canopy) 30 Sabin per panel using ASTM C423, or 78% more sound absorption than the same square footage of NRC 0.70 continuous ceilings.

#### **Fire Performance**

ASTM E84 Class A per IBC; SoundScapes Canopies, as with other architectural features located at the ceiling, may obstruct or skew the planned fire sprinkler water distribution pattern, or possibly delay or accelerate the activation of the sprinkler or fire detection systems by channeling heat from a fire either toward or away from the device. Designers and installers are advised to consult a fire protection engineer, NFPA 13, and local codes for guidance where automatic fire detection and suppression systems are present.

36.35

R10'-9'

#### Seismic Restraint\*

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.

\* 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

Warranty
One (1) year limited warranty. Details: armstrong.com/warranty

#### Weight/Carton

Bulk packaged per order 6258, 6259 – 50 lbs per panel 6260, 6261 – 19.4 lbs per panel

