



FELTWORKS[®]
Open Cell
Design
Guide

EMPHASIZE

with Kitted
Dimensional Looks

With FeltWorks® Open Cell, you redefine the visual plane while adding acoustics to interiors. Available in ready-to-install kits that provide custom looks and depth to your space.

- ▶ Reduce noise and define spaces
- ▶ High sound absorption – 0.80 NRC (E-400 Mounting)
- ▶ Install kits individually or interlink for wall-to-wall visual
- ▶ Part of the Sustain® portfolio; meets the most stringent industry sustainability standards today
- ▶ 15 standard colors
- ▶ No need to field-finish cut edges with color throughout panels

FeltWorks® ▶
Open Cell Peaks &
Valleys panels in Cotton

Reach the Summit





▲ FeltWorks® Open Cell Ebbs & Flows panels in Smoke and Tangerine

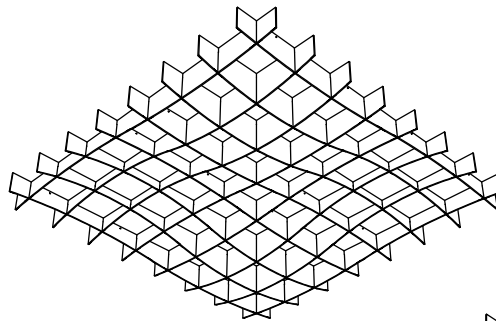


Drama With DIMENSION

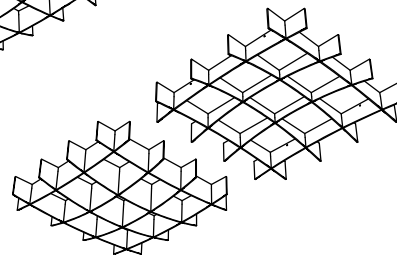
FeltWorks® Open Cell kits are available in 3 designs: Ebbs & Flows, Peaks & Valleys, and Rectangular panels (6" or 12" depths).

Multiple kits layout sizes are available for each design; 96" x 96", 48 x 96", 96" x 48" and 48" x 48". The kits can be installed as individual square or rectangular clouds or interlinked to create a wall-to-wall installation.

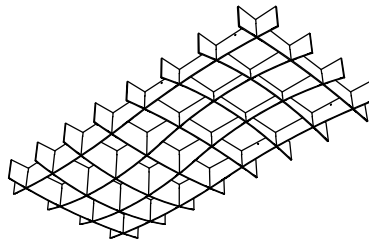
FeltWorks® ▶
S8 Ebbs & Flows
Open Cell Kit



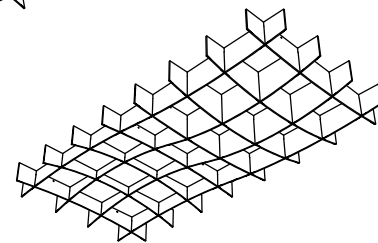
FeltWorks® ▶
S4 Ebbs & Flows
Open Cell Kit



FeltWorks® ▶
R8 Ebbs & Flows
Open Cell Kit



FeltWorks® ▶
R4 Ebbs & Flows
Open Cell Kit

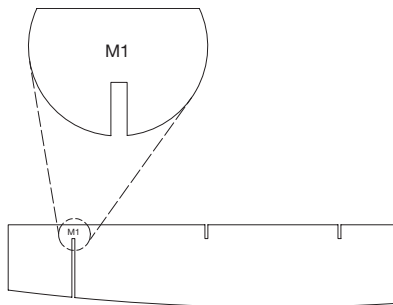


FELTWORKS® Open Cell

Panel Identification Numbers

FeltWorks Open Cell kits are made up of 3 different types of panels: Bottoms, Mids, and Tops. The difference between these panels is the direction their slots go in and the order they get installed – Bottoms get installed first, then your Mids, and lastly the Tops.

Each panel will have a 2digit ID Number which includes a letter (B, M, or T) to designate between panel type, along with a number printed in line with the furthest most left factory-cut slot of the panel. Use this numbering system in conjunction with your layout plan to determine the correct orientation of panels in your overall design.



Panel ID numbers located on the left-most slot

Bottoms:



96" Bottom : B1



48" Bottom-Down : B2



48" Bottom-Up : B3

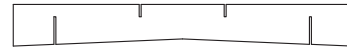
Mids – Depth 1:



96" Mid-Depth 1 : M1

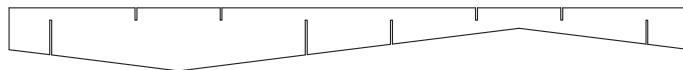


48" Mid-Depth 1-Down : M3

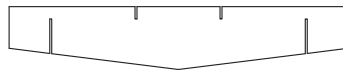


48" Mid-Depth 1-Up : M5

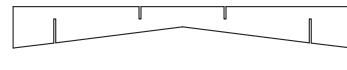
Mids – Depth 2:



96" Mid-Depth 2 : M2

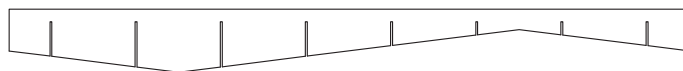


48" Mid-Depth 2-Down : M4

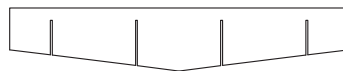


48" Mid-Depth 2-Up : M6

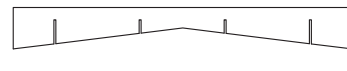
Tops:



96" Top : T1



96" Top-Down : T2

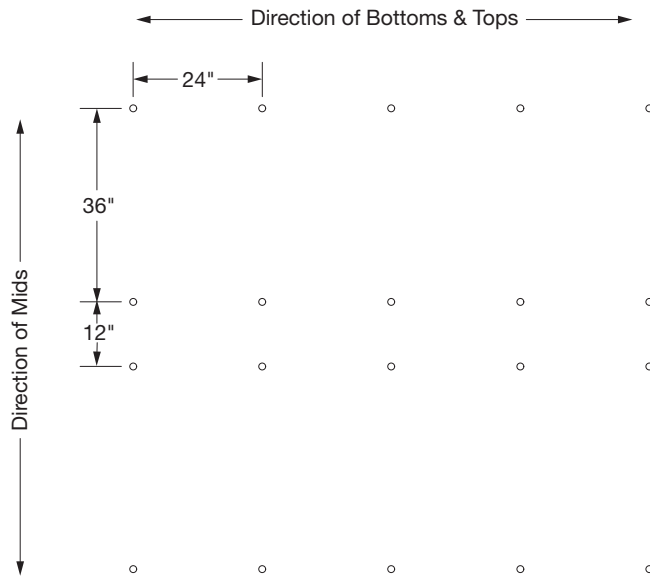


96" Top-Up : T3

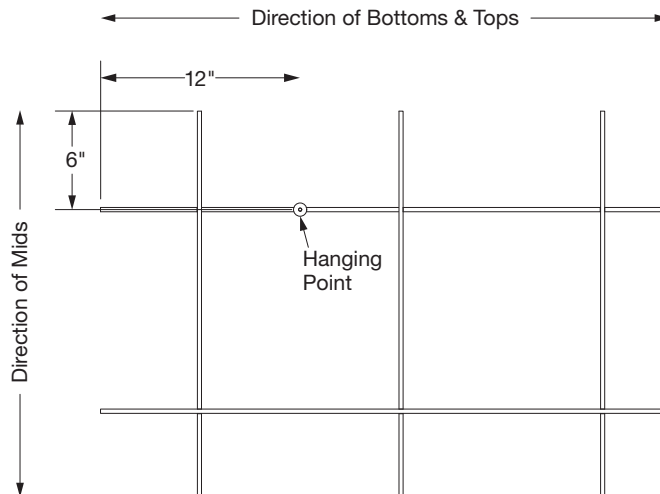
FELTWORKS® Open Cell

Hanging Points

Your Hanging points will always be 24" O.C. in the direction of your Bottom & Top panels. They will be a pattern of 36" and 12" in the other direction - parallel to your Mids.



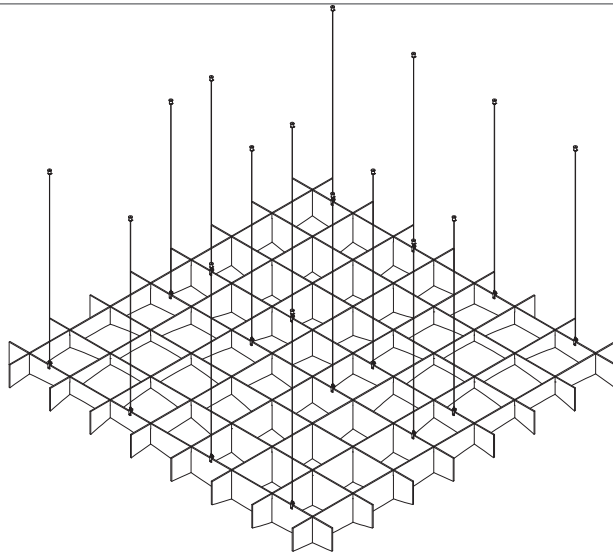
Make sure your hanging point starts 12" or more from the wall in the direction of the Bottoms and Tops and 6" or more away from the wall in the direction of your Mids. Open Cell Panels, once installed, will hang past those hanging points.



FELTWORKS® Open Cell

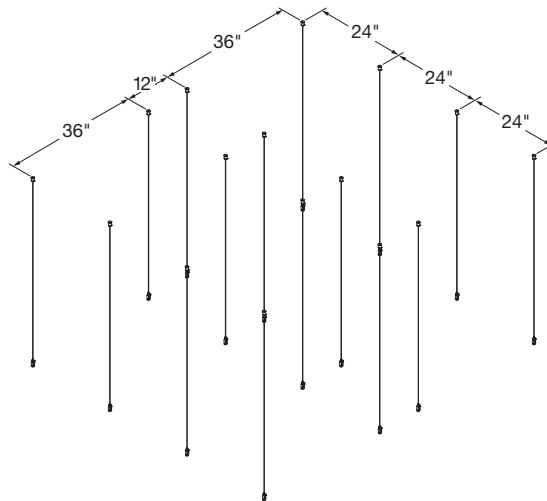
Cloud Installation

Open Cell installations are made up of three different types of panels: Bottoms, Mids, and Tops. The difference between these panels is the directions their slots go in and the order in which they get installed.



Four Key Steps to Install Open Cell Kits:

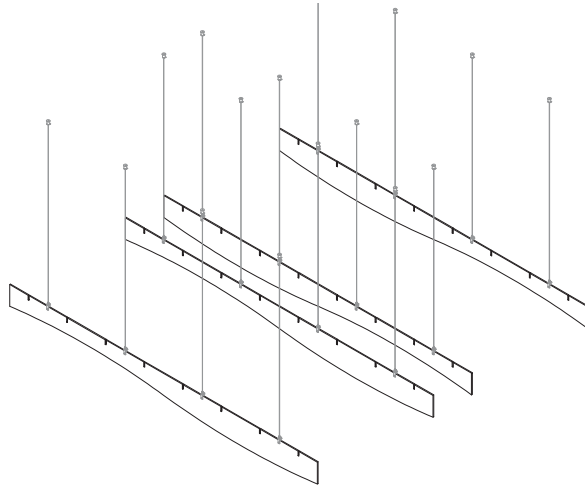
Step 1: Attach Hanging Kits to Deck



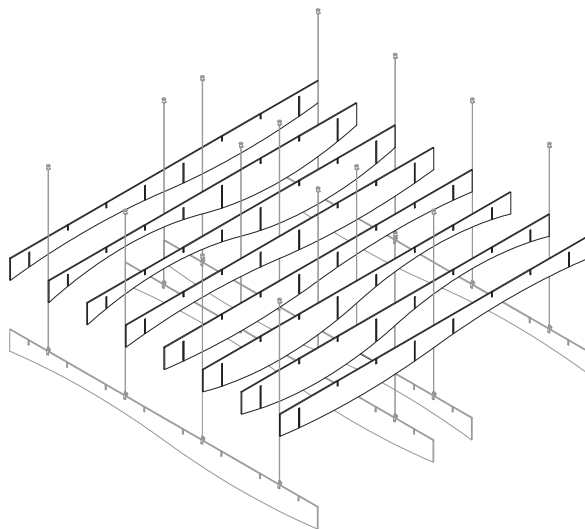
FELTWORKS® Open Cell

Cloud Installation

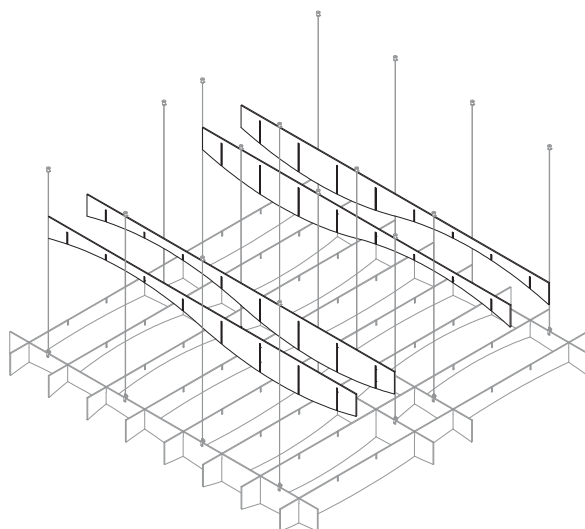
Step 2: Attach Bottom Panels
to Hanging Kits



Step 3: Insert Mids
Perpendicular to
Bottom Panels



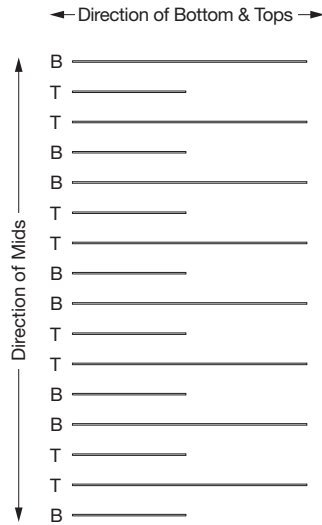
Step 4: Insert Top Panels
Parallel to Bottoms



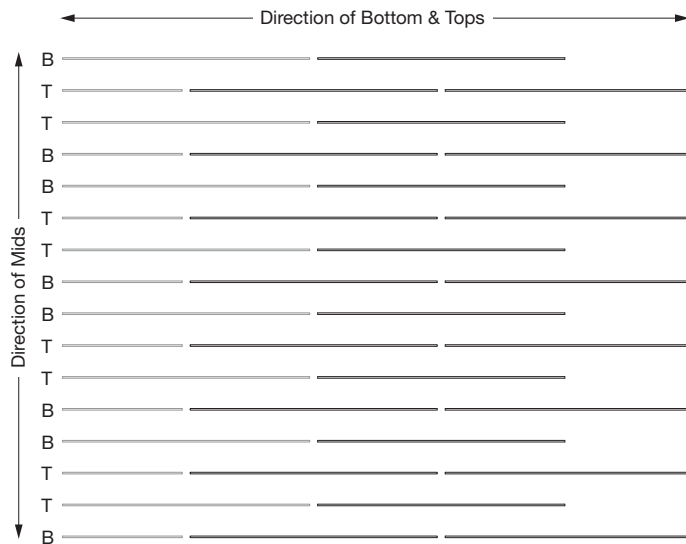
FELTWORKS® Open Cell

Wall-to-Wall Installation

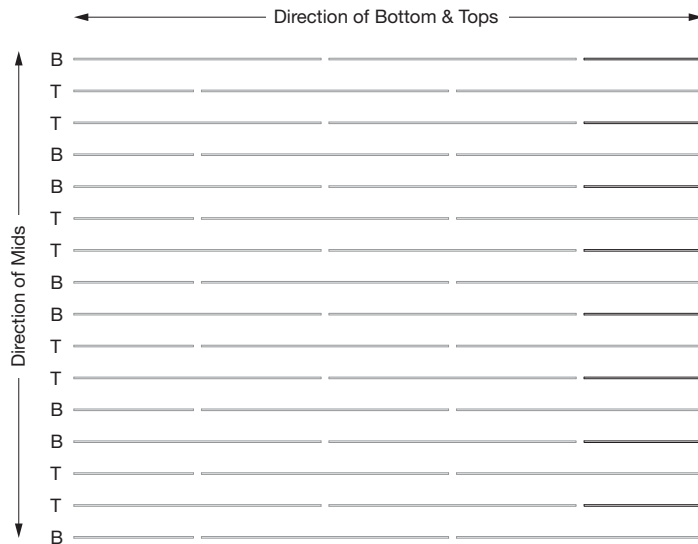
Start at one end of your installation area and alternate between 8ft and 4ft panels every other row. The pattern of panels in this direction is Bottom, Top, Top, Bottom.



Next, fill in the rest of your field with 8ft panels, still following the pattern of Bottom, Top, Top, Bottom.



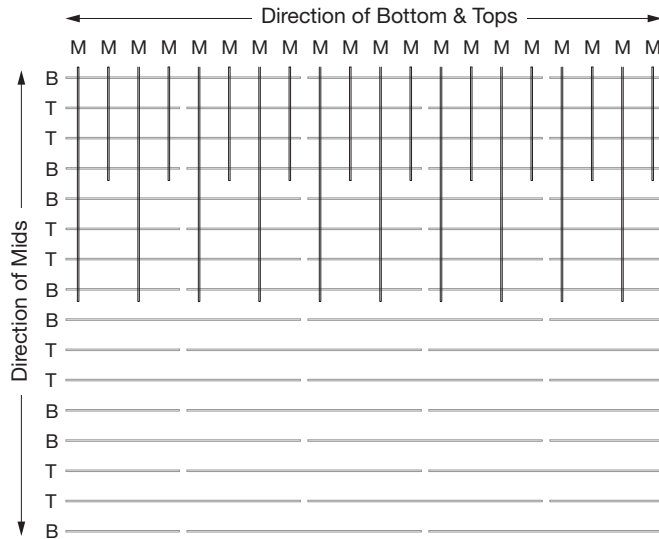
Fill in 4ft panels at the other end of the installation. Still keep in mind your pattern of Bottom, Top, Top, Bottom.



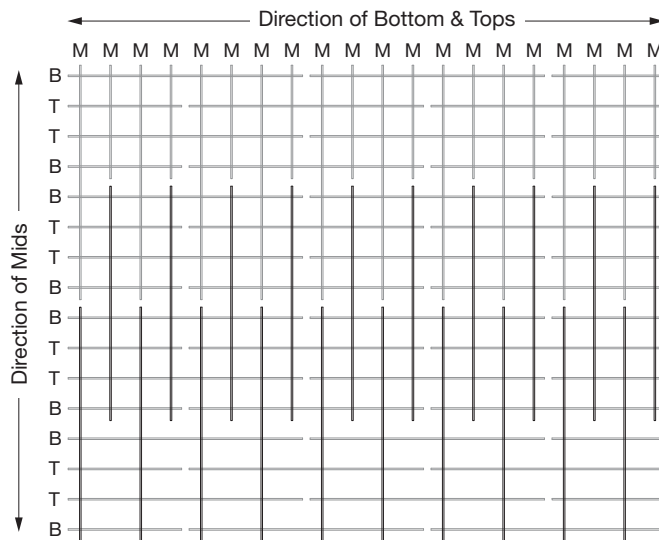
FELTWORKS® Open Cell

Wall-to-Wall Installation

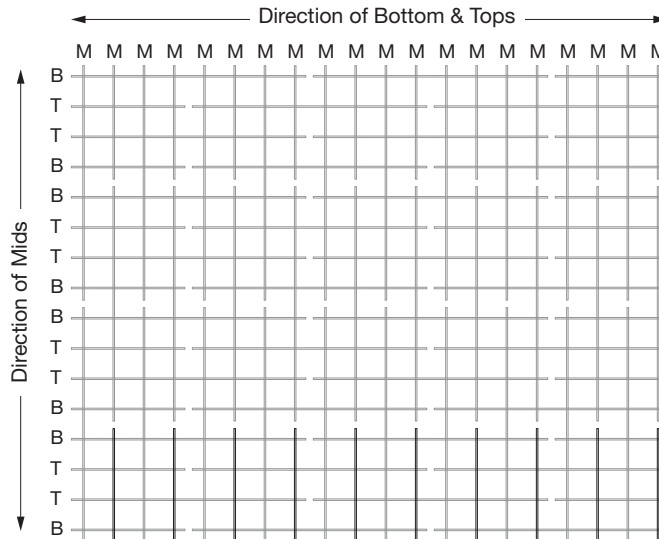
Next, start at the top of your installation and lay out your Mids perpendicular to your Tops and Bottoms alternating 8ft and 4ft panels every other row. It should be only Mids in this direction.



Fill in the rest of your field with 8ft Mids.



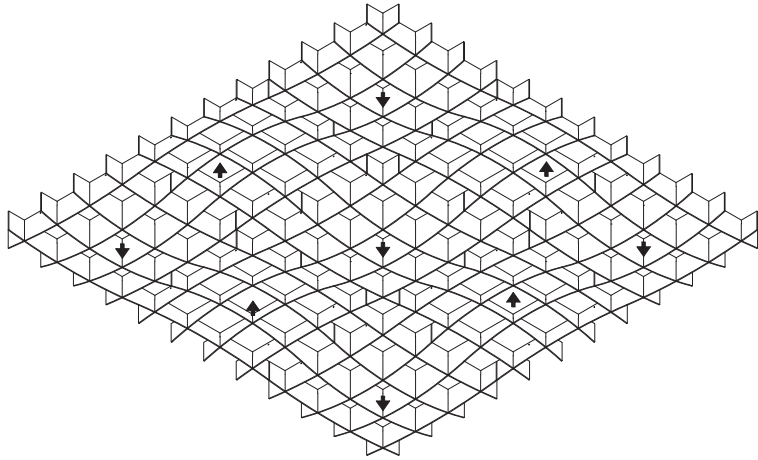
Lastly, place 4ft Mid panels to fill in the end of your installation.



FELTWORKS® Open Cell

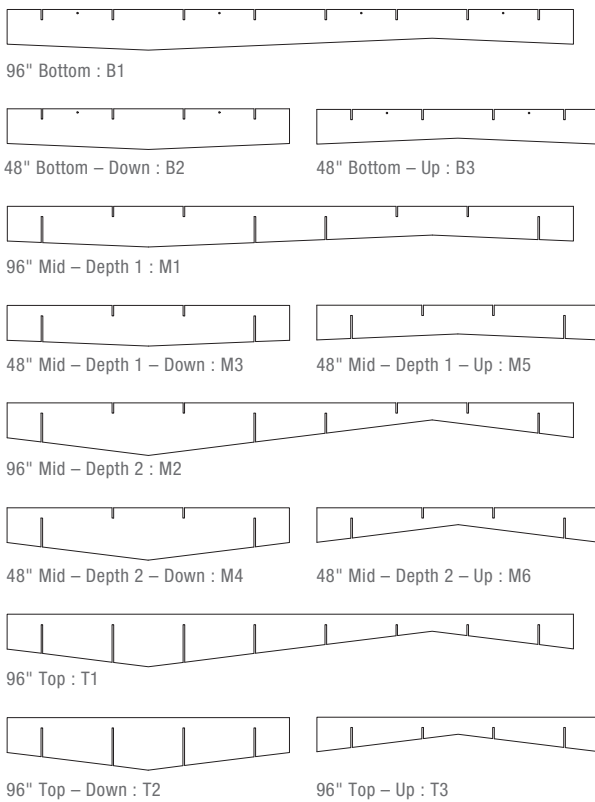
Panel Orientation:

In both Peaks & Valleys and Ebbs & Flows installations, it's important to keep the correct depth panels in line with one another so the pattern design looks correct. For example B1, B2, and B3 panels will always be installed in the same row as one another. They will never be in the same row as a different type of panel. Similarly M1, M3, and M5 panels will always be in the same row, M2, M4, and M6 panels will always be in the same row, and T1, T2, and T3 panels will be in the same row.

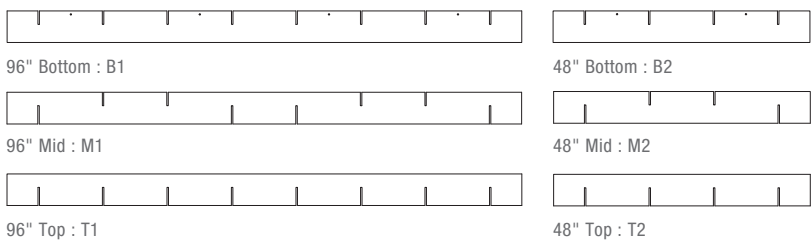


Refer to the key below – which shows the different types of panels that should go in the same row as one another.

8ft	4ft ↑	4ft ↓
B1	B2	B3
M1	M3	M5
M2	M4	M6
T1	T2	T3



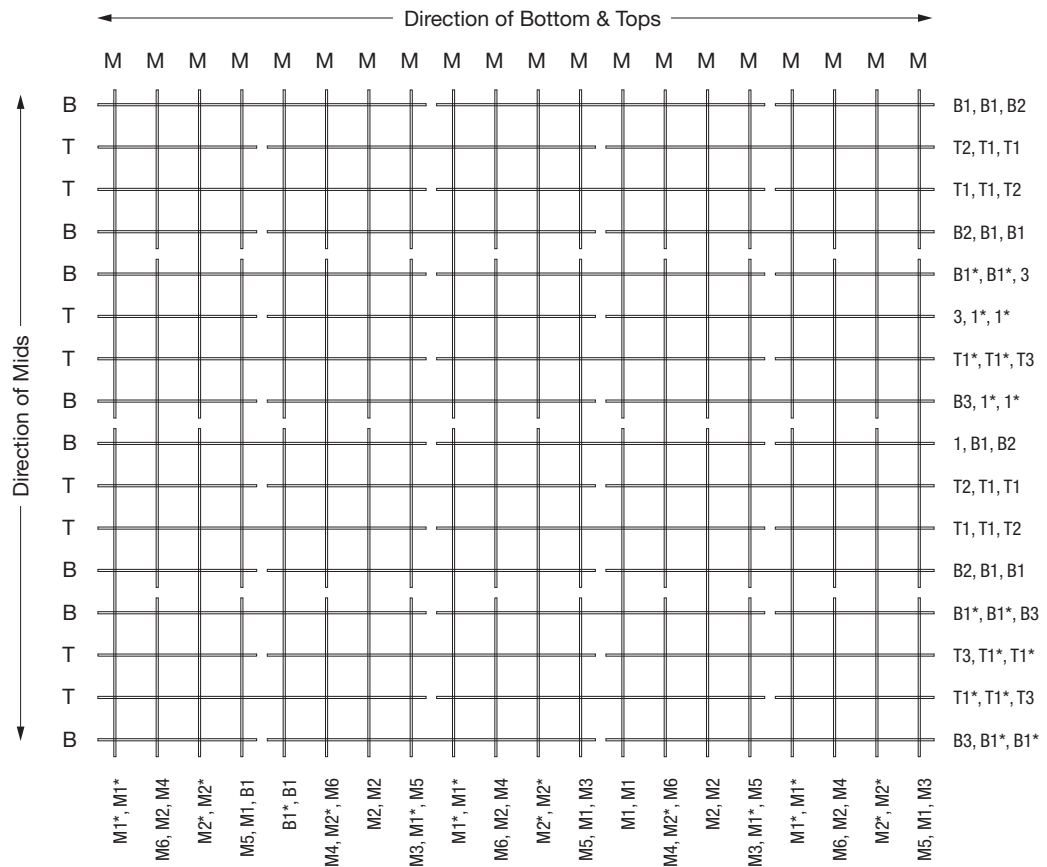
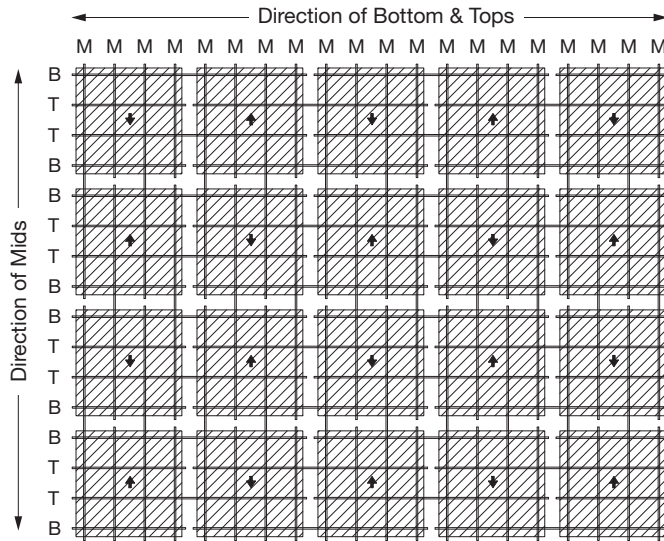
In Rectangular installations, B1 & B2 panels will always be installed in the same row, M1 & M2 panels will always be in the same row, and T1 & T2 panels will be in the same row.



FELTWORKS® Open Cell

Panel Orientation: Ebbs & Flows and Peaks & Valleys

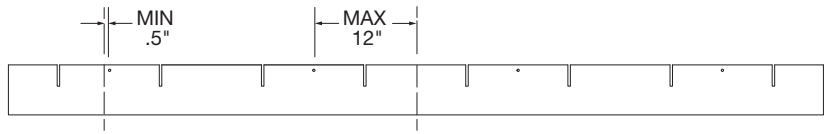
With Ebbs & Flows and Peaks & Valleys kit installations, you need to keep in mind the up and down pattern when laying out your panels. Panels with an asterisk next to them need to be flipped 180 degrees during installation to make sure the up and down part of the panel are in the correct orientation.



FELTWORKS® Open Cell

Field Cutting

Panels have color throughout and may be field cut to install around obstructions, etc. in the plenum, however panels should not have an unsupported overhang over 12". Cuts should be no closer than 1/2" to the nearest supporting slot or hole. Panels must have at least 2 supports. Both a downward facing slot and a hole for a hanging point count as a support.



Bottoms: Yes No
 ✓ 2 supports ✗ 1 hanging point
 ✓ cuts are less than 12" from supports ✗ cuts more that 12" from support



Yes No
 ✓ 2 hanging points ✓ 2 hanging points
 ✓ cut is more than .5" from nearest slot ✗ left cuts is over 12" from the nearest support



Yes
 ✓ 3 hanging points
 ✓ cut are less than 12" from nearest support



Mids: No
 ✓ 3 slots in bottom edge of panel
 ✗ right cut edge closer than .5" from nearest slot



Yes No
 ✓ 2 slots in bottom edge of panel ✗ 1 slot in bottom edge of panel
 ✓ cut edges are more than .5" away from slot ✗ cut is more that 12" from nearest support



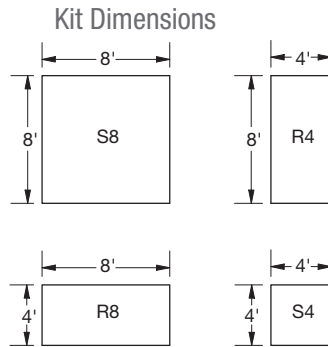
Top: Yes Yes
 ✓ 2 slots in bottom edge of panel ✓ 3 slots in bottom edge of panel
 ✗ right cut edges is less than .5" away from slot ✓ right cut is more than .5" from nearest slot



FELTWORKS® Open Cell

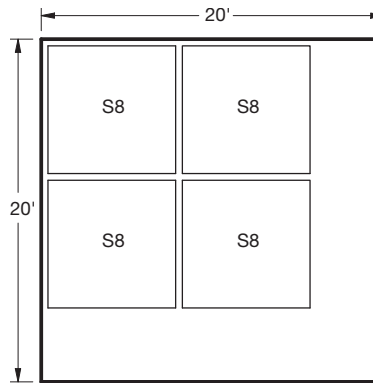
Estimating Kit Quantities

In places where half or more of the S8 kit would be cut off, replace with R4, R8, or S4 kits as shown.

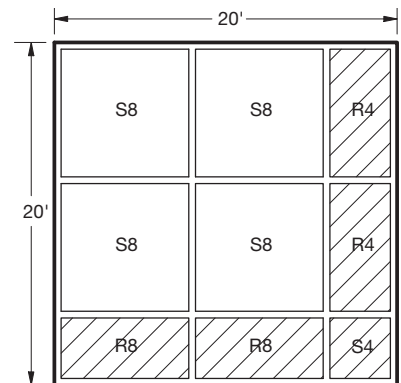


20' x 20' Room Example

Step 1: Start by filling in the room with S8 kits.



Step 2: Place two R4 kits, one S4 kit, and two R8 along the edges to fill in the space.



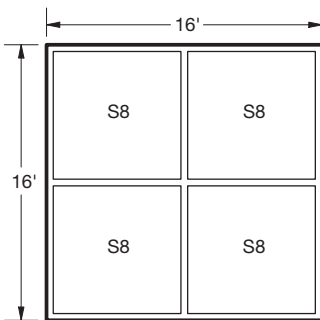
Full room kit quantities:

- 4 S8 kits
- 2 R4 kits
- 2 R8 kits
- 1/2 S4 kit (1 of 2 used)

16' x 16' Room Example

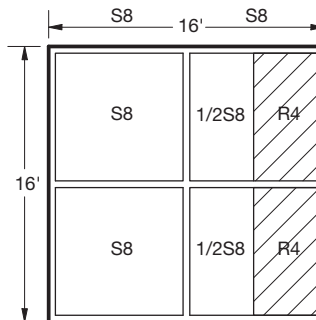
Step 1: Fill in the room with S8s

In this example, filling a room with just S8 kits would not be correct, since we need 4ft kits to stagger panels properly.



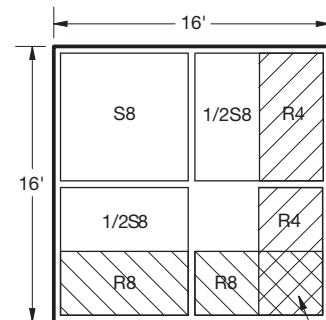
Step 2: Place R4 kits along one edge of room.

To fix this we should start by replacing the S8 kits with R4 kits along one edge of the room.



Step 3: Place R8 kits along the bottom edge of room.

Next, replace S8 kits with R8 kits along the bottom edge.



Full room kit quantities:

- 2 S8 kits
- 2 R4 kits
- 2 R8 kits

*Note: since the R4 & R8 overlap here, they make up for the empty space showing.

FELTWORKS® Open Cell

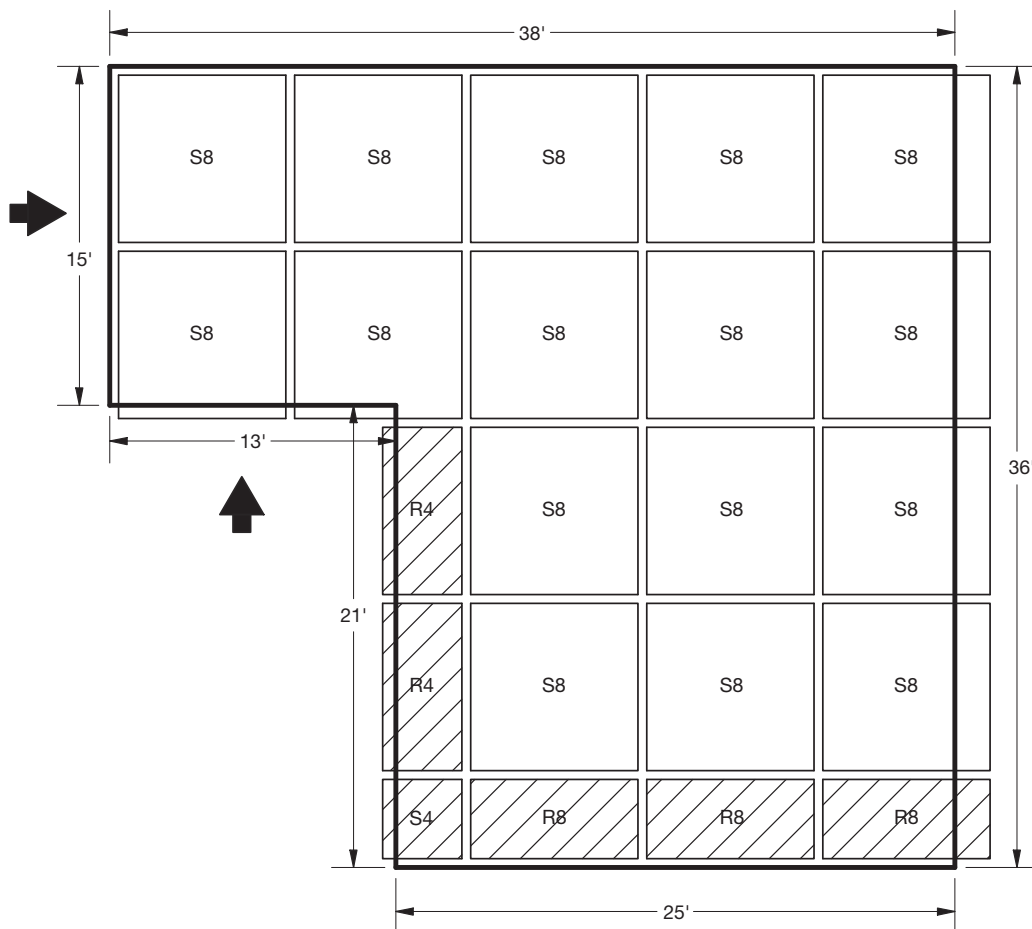
Estimating Kit Quantities

Non-Square Room Example

Step 1: Start by filling in the room with S8 kits.

In places where half or more of the S8 kit would be cut off, replace with R4, R8 or S4 kits as shown.

... but this isn't finished yet. We still need 4ft kits added where the arrows are indicating to stagger panels properly.



FELTWORKS® Open Cell

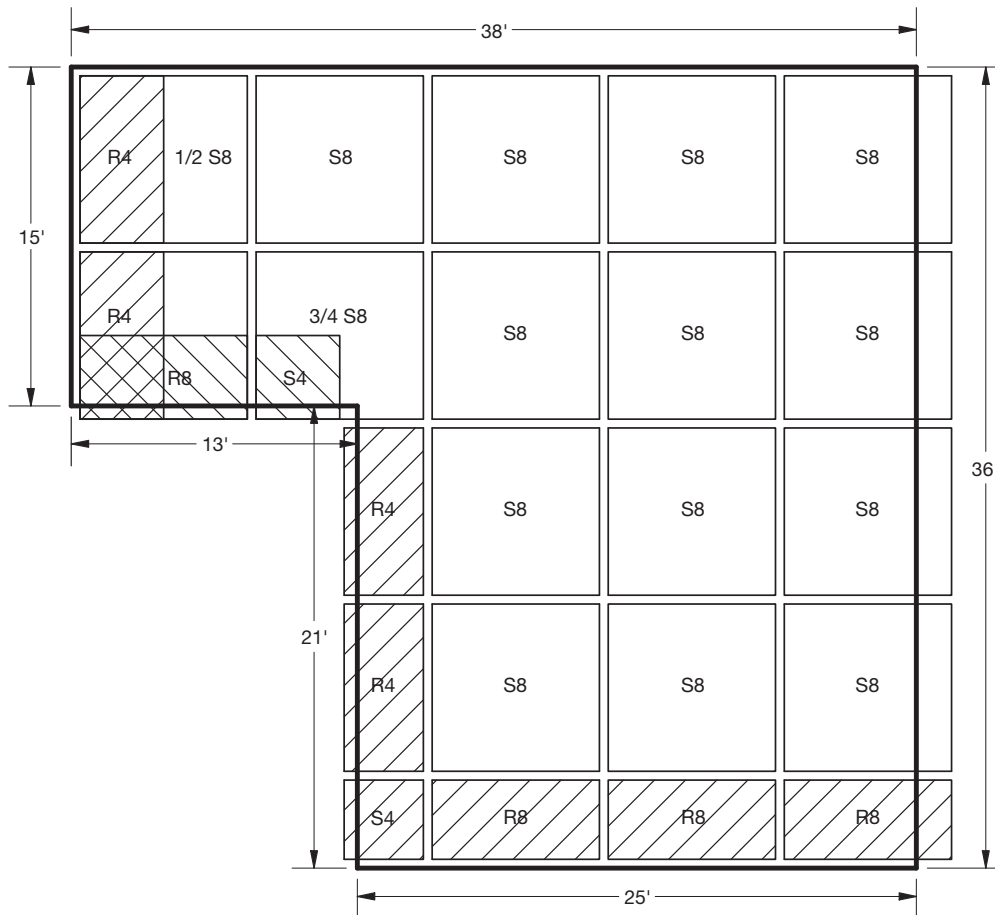
Estimating Kit Quantities

Non-Square Room Example

Step 2: Replace S8 kits with R4s, R8s, and S4s as shown.

Full room kit quantities:

- 14.5 S8 kits
- 4 R4 kits
- 4 R8 kits
- 1 S4 kit (2 total)





FELTWORKS® Open Cell Acoustical Panels



SUSTAIN®
High Performance
Sustainable
Ceiling Systems



FeltWorks® Open Cell Peaks & Valleys panels in Cotton

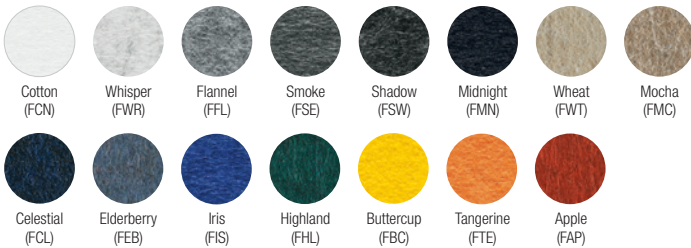
FeltWorks® Open Cell panel kits add acoustics and custom looks to any interior space using Bottom, Mid, and Top 1/4" thick panels that fit together.

KEY SELECTION ATTRIBUTES

- Kits available in 3 designs: Ebbs & Flows, Peaks & Valleys, and Rectangular panels (6" or 12" depths)
- Kits can be installed as individual square or rectangular clouds, or interlinked to create a wall-to-wall installation
- FeltWorks® Open Cell panels are part of the Sustain® portfolio and meet the most stringent industry sustainability standards today
- High sound absorption – 0.80 NRC (E-400 Mounting)
- Made from up to 60% post-consumer recycled PET fibers
- Get custom looks from standard products using easy-to-specify-and-order kits with short lead times
- No need to field-finish cut edges with color throughout panels
- Installation on the Hanging Kit (Item 6655) allows for panel removal to create a 24" x 36" opening for access into the plenum

COLORS

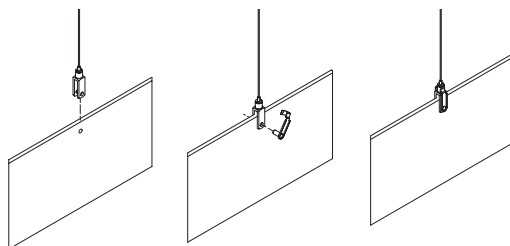
Due to printing limitations, shade may vary from actual product.



DETAILS



Hanging Kit (Item 6655) assembly detail



*Explore the
FeltWorks® Open Cell
Design Guide*



FELTWORKS® Open Cell Acoustical Panels

GREENGUARD
Gold Certified



SUSTAIN®
High Performance
Sustainable
Ceiling Systems

Declare.

UP TO 60% RECYCLED CONTENT

LEED®

- energy management
- construction waste mgmt
- regional materials
- design for flexibility
- EPD
- recyclable/extended producer resp.
- biobased materials
- recycled content
- sourcing of raw materials
- material ingredient reporting
- low emitting materials
- lighting quality
- acoustics

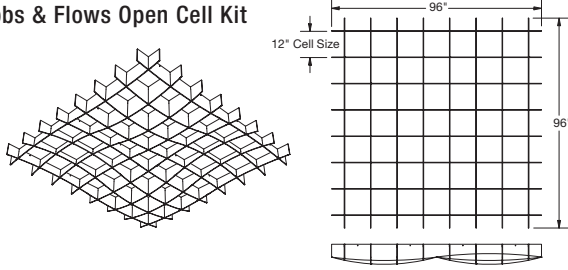
Calculate LEED contribution at
armstrongceilings.com/greengene

LOCATION DEPENDENT

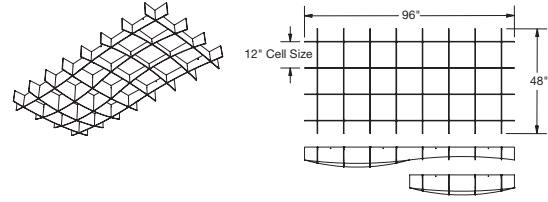
COTTON ONLY

STANDARD KITTED MODULE OPTIONS

S8 Ebbs & Flows Open Cell Kit



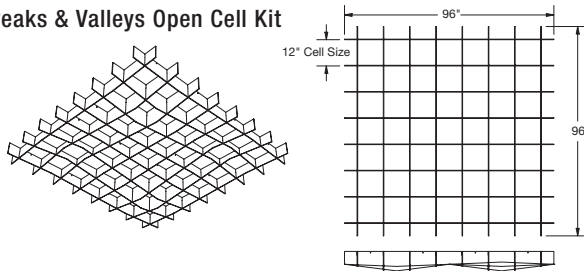
R4 or R8 Ebbs & Flows Open Cell Kit



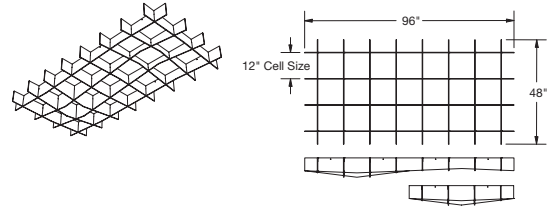
VISUAL SELECTION

Edge Profile	Item No. ♦	Description	Kit Nominal Dimensions (W x L x D)	Top & Bottom Panel Length	Mid Panel Length	Panels per Kit	SF of Installed Space
Ebbs & Flows Open Cell Kits							
	6532K0E09S4	S4 Ebbs & Flows Open Cell Kit (Kit includes two 48" x 48" assemblies)	48 x 48 x 9"	48"	48"	8	16
	6532K0E09R4	R4 Ebbs & Flows Open Cell Kit	48 x 96 x 9"	48"	96"	12	32
	6532K0E09R8	R8 Ebbs & Flows Open Cell Kit	96 x 48 x 9"	96"	48"	12	32
	6532K0E09S8	S8 Ebbs & Flows Open Cell Kit	96 x 96 x 9"	96"	96"	16	64

S8 Peaks & Valleys Open Cell Kit



R4 or R8 Ebbs & Flows Open Cell Kit



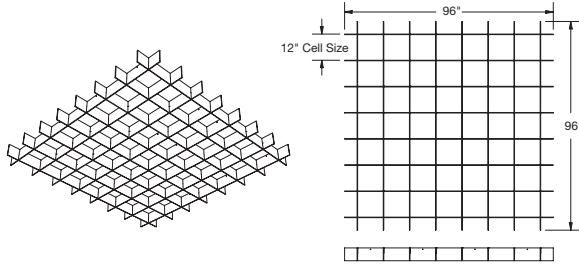
VISUAL SELECTION

Edge Profile	Item No. ♦	Description	Kit Nominal Dimensions (W x L x D)	Top & Bottom Panel Length	Mid Panel Length	Panels per Kit	SF of Installed Space
Peaks & Valleys Open Cell Kits							
	6532K0P09S4	S4 Peaks & Valleys Open Cell Kit (Kit includes two 48" x 48" assemblies)	48 x 48 x 9"	48"	48"	8	16
	6532K0P09R4	R4 Peaks & Valleys Open Cell Kit	48 x 96 x 9"	48"	96"	12	32
	6532K0P09R8	R8 Peaks & Valleys Open Cell Kit	96 x 48 x 9"	96"	48"	12	32
	6532K0P09S8	S8 Peaks & Valleys Open Cell Kit	96 x 96 x 9"	96"	96"	16	64

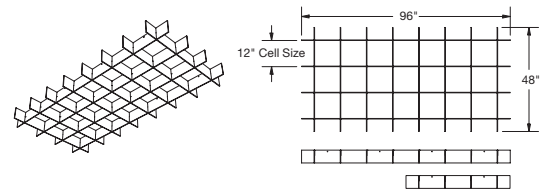
♦ When specifying or ordering, add 3-letter color suffix to item number.
NOTE: All panels in a kitted module must be the same color. A 1/4" gap exists between the ends of panels for best visual.
For custom shapes, sizes, and layouts, contact ASQuote@armstrongceilings.com
See the FeltWorks® Open Cell Design Guide for easy ways to create custom looks using standard products.

STANDARD KITTED MODULE OPTIONS

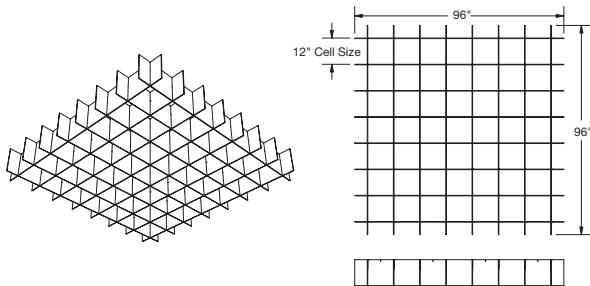
S8 Rectangles 6" Depth Open Cell Kit



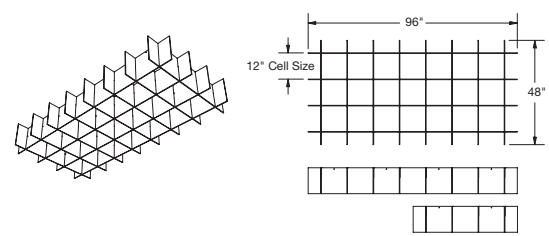
R4 or R8 Rectangles 6" Depth Open Cell Kit



S8 Rectangles 12" Depth Open Cell Kit



R4 or R8 Rectangles 12" Depth Open Cell Kit

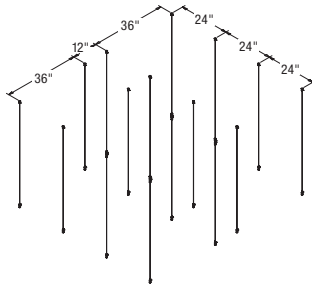


VISUAL SELECTION

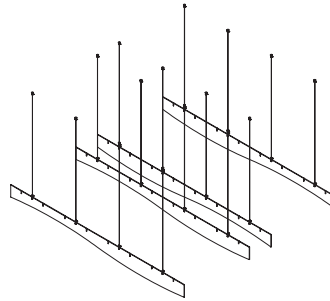
Edge Profile	Item No. ♦	Description	Kit Nominal Dimension (W x L x D)	Top & Bottom Panel Length	Mid Panel Length	Panels per Kit	SF of Installed Space
	6532KOR06S4 ___	S4 Rectangles 6" Depth Open Cell Kit (Kit includes two 48" x 48" assemblies)	48 x 48 x 6"	48"	48"	8	16
	6532KOR06R4 ___	R4 Rectangles 6" Depth Open Cell Kit	48 x 96 x 6"	48"	96"	12	32
	6532KOR06R8 ___	R8 Rectangles 6" Depth Open Cell Kit	96 x 48 x 6"	96"	48"	12	32
	6532KOR06S8 ___	S8 Rectangles 6" Depth Open Cell Kit	96 x 96 x 6"	96"	96"	16	64
	6532KOR12S4 ___	S4 Rectangles 12" Depth Open Cell Kit (Kit includes two 48" x 48" assemblies)	48 x 48 x 12"	48"	48"	8	16
	6532KOR12R4 ___	R4 Rectangles 12" Depth Open Cell Kit	48 x 96 x 12"	48"	96"	12	32
	6532KOR12R8 ___	R8 Rectangles 12" Depth Open Cell Kit	96 x 48 x 12"	96"	48"	12	32
	6532KOR12S8 ___	S8 Rectangles 12" Depth Open Cell Kit	96 x 96 x 12"	96"	96"	16	64

♦ When specifying or ordering, add 3-letter color suffix to item number.
NOTE: All panels in a kitted module must be the same color. A 1/4" gap exists between the ends of panels for best visual.
For custom shapes, sizes, and layouts, contact ASQuote@armstrongceilings.com
See the FeltWorks® Open Cell Design Guide for easy ways to create custom looks using standard products.

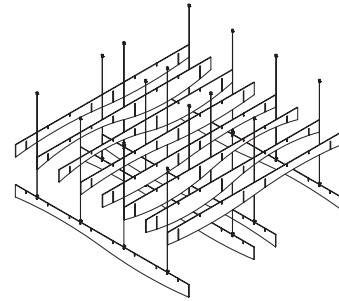
LAYOUT DETAILS/INSTALLATION DETAILS



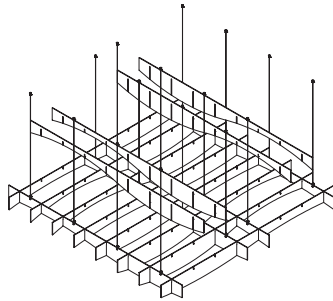
Step 1: Attach Hanging Kits to Deck



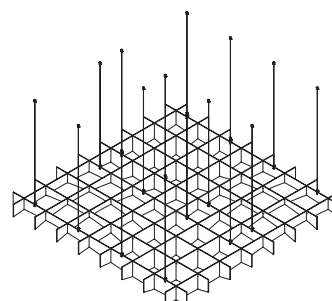
Step 2: Attach Bottom Panels to Hanging Kits



Step 3: Insert Mids Perpendicular to Bottom Panels



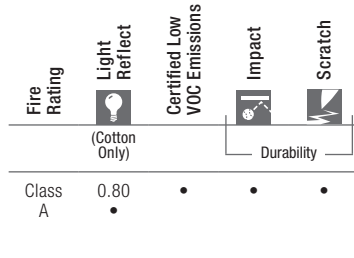
Step 4: Insert Top Panels Parallel to Bottoms



Complete Installation

PERFORMANCE

Dots represent high level of performance.



SUSPENSION SYSTEMS

Item No. ♦	Description	Color	Pcs/Ctn
Aluminum Suspension System			
6655	Hanging Kit	N/A	1 Kit/4 Hanging Assemblies

Use one kit for each Suspension Bar.

ACOUSTICAL INFORMATION

Panel Thickness	NRC (E-400 Mounting)	Average Cell Depth/Height	NRC (E-400 Mounting)	Sound Absorption Sabins/SF (material)	Sound Absorption Sabins/SF (installed)
1/4"	0.80	6"	0.80	0.56	0.56
		Ebbs & Flows, Peaks & Valleys	0.80	0.56	0.56
		12"	0.80	0.52	1.04

PHYSICAL DATA

Material

1/4" thick non-woven layered and formed polyester felt (PET) fiber panels with color throughout.

Fire Performance

Flame Spread Index 25 or less. Smoke Developed Index 450 or less. Class A per ASTM E84.

CAN/ULC S102 surface burning characteristics.

Flame Spread Rating of 75 or less. Smoke Developed Classification of 105.

FeltWorks® Open Cell panels, 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. Consult a fire protection engineer, NFPA 13, and local codes for guidance on the proper installation techniques where fire detection or suppression systems are present.

Application Considerations

Color and texture may vary from panel to panel and from order to order. Adequate attic stock should be ordered. Due to the nature of recycled materials, small dark fibers may be visible on light panels.

FeltWorks Open Cell panels are not approved for exterior application.

FeltWorks Open Cell panels should not be installed near sources of heat greater than 158 degrees F.

Design Support

Contact the You Inspire™ Solutions Center for custom layouts at solutionscenter@armstrongceilings.com. Contact Techline for layout assistance for standard products and kits.

Acoustical Performance

Tested per ASTM C423 and mounted in accordance with ASTM E795. NRC of 0.80 based on E-400 mounting.

Contact TechLine for details at techline@armstrongceilings.com

VOC Emissions

GREENGUARD Gold Certified

Third-party certified compliant with California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017. This standard is the guideline for low emissions in LEED®, WELL Building Standard™, Living Building Challenge® (LBC), CalGreen Title 24, ANSI/ASHRAE/USGBC/IES Standard 189; ANSI/GBI Green Building Assessment Protocol.

PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818



Installation Considerations

Any fixtures adjacent to FeltWorks Open Cell panels must be independently supported.

Seismic Restraint

FeltWorks Open Cell panels have been engineered, tested, and approved for use in all seismic areas. See installation instructions for details.

Warranty

Details at armstrongceilings.com

Weight; Pieces/Carton
0.33 lbs/SF

Custom quantities available, contact ASQuote@armstrongceilings.com

TAKE THE NEXT STEP

1 877 276 7876

Customer Service Representatives
7:45 a.m. to 5:00 p.m. EST
Monday through Friday

TechLine – Technical information, detail drawings,
CAD design assistance, installation information,
other technical services – 8:00 a.m. to 5:30 p.m. EST,
Monday through Friday. FAX 1 800 572 8324
or email: techline@armstrongceilings.com

armstrongceilings.com/commercial

Latest product news
Standard and custom product information
Online catalog
CAD, Revit®, SketchUp® files
A Ceiling for Every Space® Visual Selection Tool
Product literature and samples – express service
or regular delivery
Contacts – reps, where to buy, who will install

YOU INSPIRE™ SOLUTIONS CENTER

email: solutionscenter@armstrongceilings.com
armstrongceilings.com/youinspire

Design Assistance

Collaborative design
Detail drawings
Specifications
Planning and budgeting

Pre-construction Assistance

Layout drawings for standard
and premium products
Project installation recommendations
Contractor installation assistance

you inspire™
solutions center

helping to bring your one-of-a-kind ideas to life

Revit® is a trademark of Autodesk, Inc.; SketchUp® is a trademark of Trimble, Inc.
LEED® is a trademark of the U.S. Green Building Council
Declare® is a trademark of The International Living Future® Institute; UL® is a trademark of UL LLC
All other trademarks used herein are the property of AWI Licensing LLC and/or its affiliates
© 2020 AWI Licensing LLC Printed in the United States of America

armstrongceilings.com/feltworks

On the cover: ►
FeltWorks® Open Cell

Armstrong®
CEILING SOLUTIONS