ACOUSTIMAC

ALWAYS SOUND YOUR BEST

ACOUSTIC PANELS AND BASS TRAPS
PRODUCT GUIDE AND TECHNICAL DATA

2020 EDITION

Introduction:

We started Acoustimac because as musicians, audiophiles, and dedicated music lovers, we know the importance of acoustical treatment in making the room sound just right. Like you, we were astonished at how expensive treating a room is, that is why we made it our mission to design the most effective sound panels and bass traps, made out of the industry's most highly rated and effective acoustic treatment materials available. We offer the lowest prices around, without sacrificing performance.

Acoustimac offers among the widest varieties of noise control and acoustic treatment products on the web such as acoustic panels, which are ideal for wall and ceiling treatment for mid-to-high frequency reflections, and bass traps, which offer high levels of absorption all across the frequency spectrum, including bass.

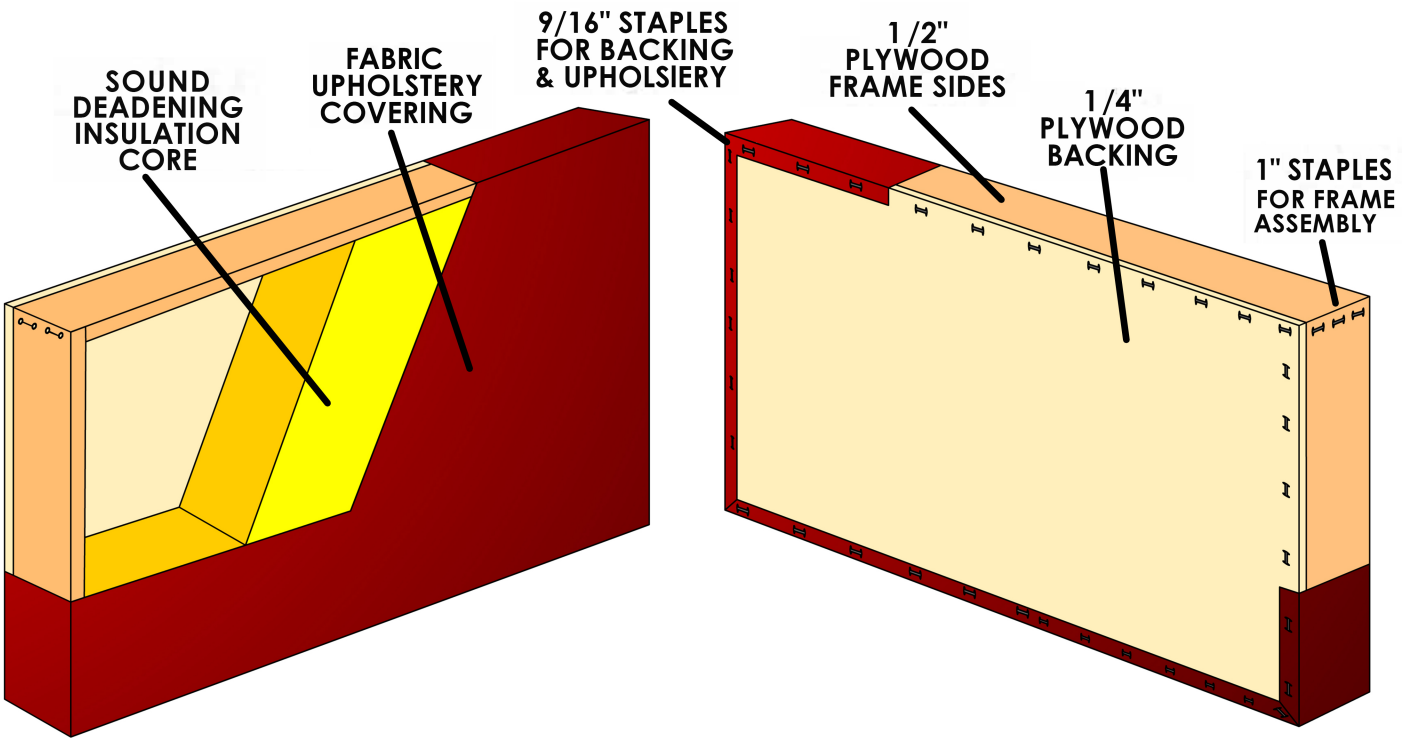
In this document you'll find the most vital information on our products, such as our Panel construction diagram, our sound absorption test results and our fabric color guide.

We highly recommend you visit our website and use our Acoustical Room Coverage Calculator to determine your acoustical surface coverage needs here: https://www.acoustimac.com/room-calculator

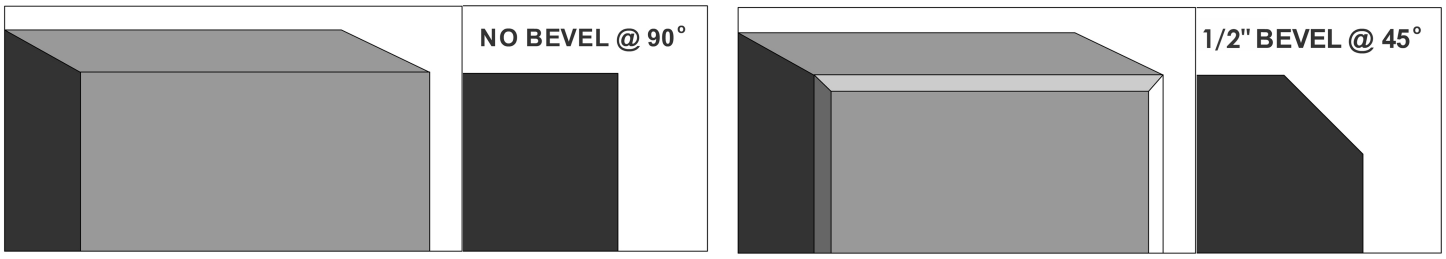
Contents:

ACOUSTIMAC

ACOUSTIC PANEL DESIGN DIAGRAM



EDGE BEVELING OPTIONS



FRAMES

Panels are built using plywood frames. Frames are made from 1/2" plywood for the sides, and 1/4" for the backing. Frames are intended to protect and provide stability for the sound deadening insulation cores embedded within.

SOUND DEADENING CORE

Acoustimac offers three choices of Insulation core:

- Owens Corning 703: Fiberglass material, NRC 90+
- Owens Corning Mineral Wool Material. NRC 95+
- Acoustimac Eco-Core: Cellulose Material, NRC 90+

FABRIC

Acoustimac Panels can be upholstered with our in-house selection of fabrics available in over 50 colors, as well as AcousticART printed graphics. We can also upholster using any acoustically transparent fabric, as long as the bolt is wide enough for proper coverage.

NRC & STC Data

Industrial Board Mineral Wool

+ TESTING PER ASTM C 423 (NRC DATA)
+ NRC- ABSORPTION COEFFICIENTS 1/3 OCT. BAND CENTER FREQ. Hz
+ TESTING PER ASTM E 336 (STC DATA)

NRC Data							
Mounting Method: A SAMPLE	125*	250	500	1000	2000	4000*	NRC
4.0 pcf density							
2 in.	0.33	0.71	1.13	1.15	1.08	1.09	1.00
4 in.	1.01	1.26	1.23	1.13	1.11	1.09	1.20
6 in.	1.35	1.17	1.20	1.13	1.06	1.10	1.15

	STC Data**	
	Thickness	
	1 in.	2 in.
Nominal Density – pcf	STC	STC
4.0	—	8

Made in the USA

Type 703 and Type 705 Series Fiberglas™ Insulation

+ TESTING PER ASTM C 423 (NRC DATA)
+ NRC- ABSORPTION COEFFICIENTS 1/3 OCT. BAND CENTER FREQ. Hz

Sound Absorption Coefficients

ASTM C423; Mounting: Type A—Material placed against a solid backing.

Product Type	Thickness		Octave Band Center Frequencies, Hz						
	in.	(mm)	125	250	500	1000	2000	4000	NRC
703 Unfaced	1	25	0.03	0.25	0.65	0.93	0.99	0.89	0.70
	2	50	0.10	0.71	1.14	1.14	1.03	0.95	1.00
705 Unfaced	2	50	0.19	0.78	1.06	1.13	1.06	1.12	1.05
703 FRK	2	51	0.63	0.56	0.95	0.79	0.60	0.35	0.75

ACOUSTIMAC™

ECO CORE

RAL™-A09-140

TEST RESULTS @ 2" Thickness

1/3 Octave Center Frequency (Hz)	Absorption Coefficient
125	0.39
250	0.63
500	1.18
1000	1.11
2000	1.06
4000	1.09

SAA = 1.00
NRC = 1.00

VI. TEST RESULTS & OBSERVATIONS

The test results, computed on the basis of observed flame front advance and electronic smoke density measurements are presented in the following table.

Test Specimen	Flame Spread Index	Smoke Developed Index
"Acoustimac acoustic panels/bass traps"	0	10

The data sheets are included in Appendix A. These sheets are actual print-outs of the computerized data system which monitors the tunnel furnace, and contain all calibration and specimen data needed to calculate the test results.

VII. OBSERVATIONS

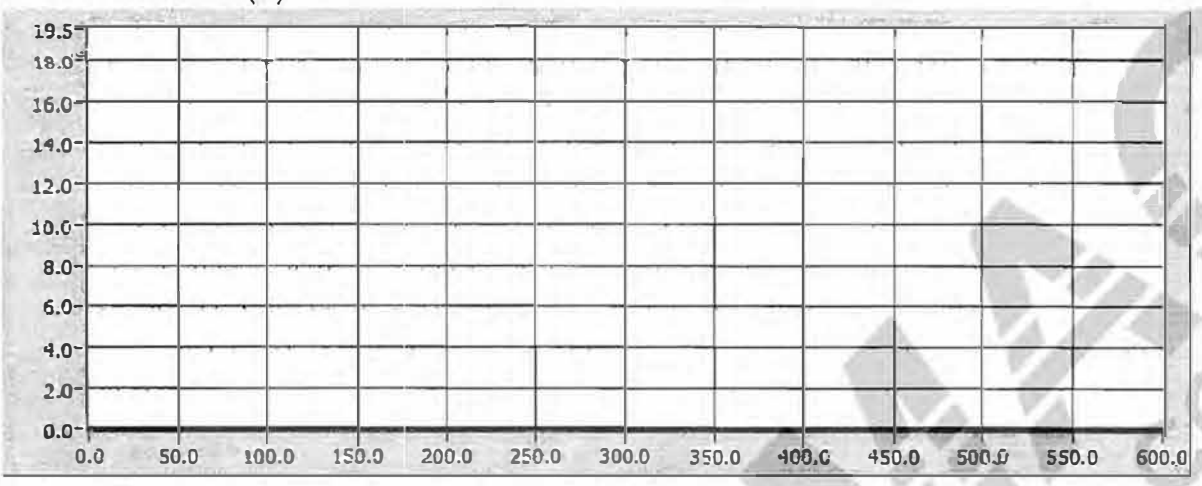
During the test, the specimen was observed to behave in the following manner.

Time (min:sec)	Observations
0:02	A steady ignition of the fabric was observed
0:09	Melting of the fabric was observed
0:11	The fabric began to produce flaming drops
0:28	The melted fabric on the tunnel floor ignited

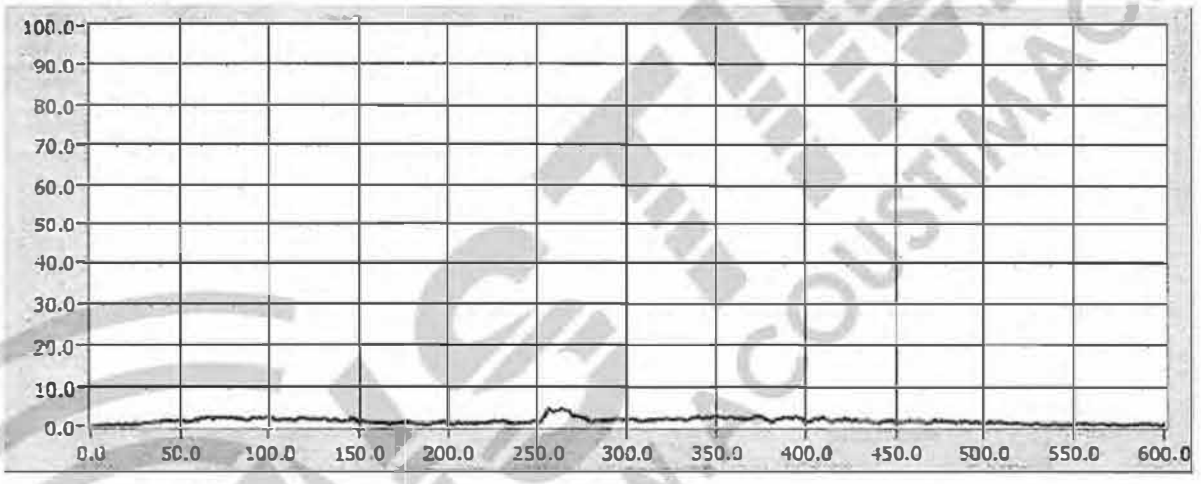
After the test, the specimen was observed to be damaged as follows:

Distance (FEET)	Damage Descriptions
0 – 22.6	The fabric was melted and on the tunnel floor
22.6 - 24	The fabric was undamaged
0 – 6	The insulation was observed to be bleached
6 - 16	The insulation was observed to be discolored
16 - 24	The insulation was undamaged

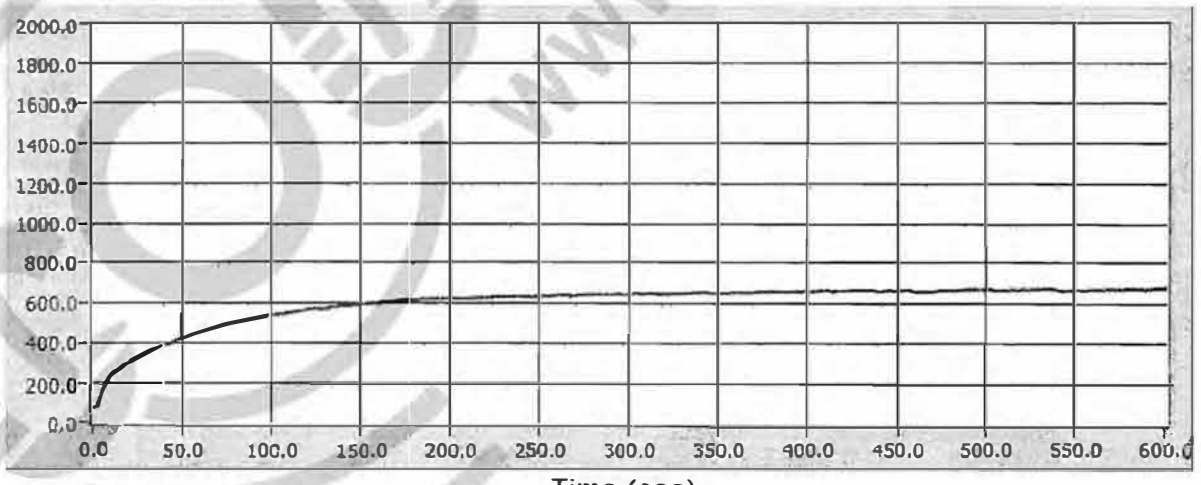
FLAME SPREAD (ft)



Smoke (%A)



Temperature (°F)



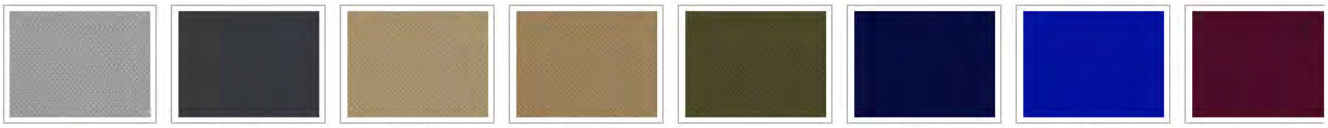
Time (sec)

600

FABRIC COLOR GUIDE

COLOR AVAILABILITY AND APPEARANCE MAY VARY
BE SURE TO ORDER RECENT SAMPLES BEFORE PURCHAING

DMD



SUEDE Castielle

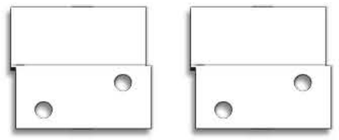
EXECUTIVE

ACOUSTIMAC.COM
Tel: 888-827-1266

ACOUSTIMAC™
ALWAYS SOUND YOUR BEST

Z- CLIP WALL INSTALLATION INSTRUCTIONS

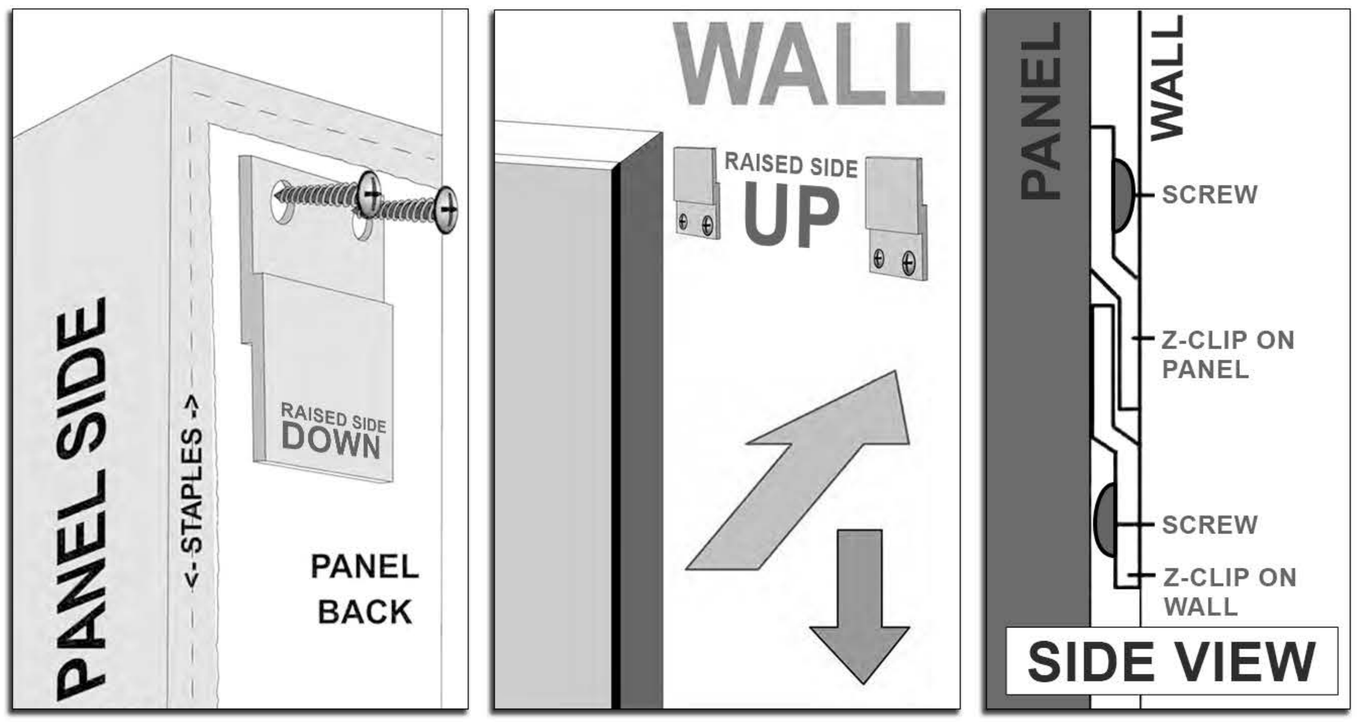
FOR SMALLER PANELS - 1'x1' to 4'x2'



Z-Clips and Z-Bars are Inter-Compatible
Either can be used on most products.

Attach Clips to Rear of Panel with the raised side facing DOWN, and the side with the holes on top.

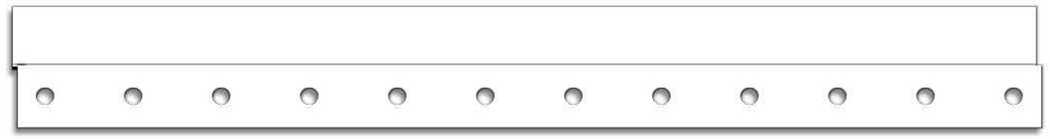
Attach Clips to the wall using the same spacing as on the panel, but with the raised sides facing UP. Then clip the panel onto the wall by sliding the raised sides into each other as shown below.



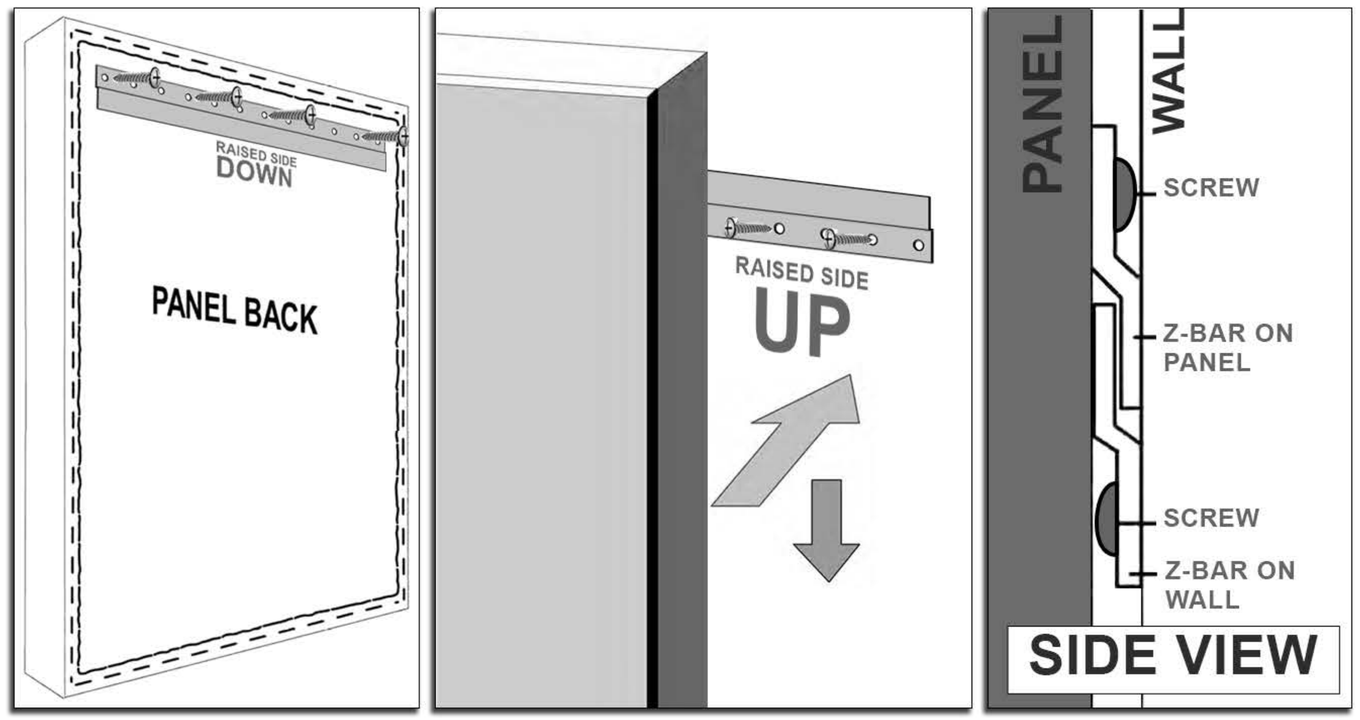
Z-BAR WALL INSTALLATION INSTUCTIONS

FOR LARGER PANELS - 4'x3' to 8'x4'

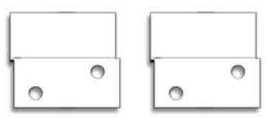
IMPROVED DESIGN: MORE HOLES FOR EASIER ALIGNMENT



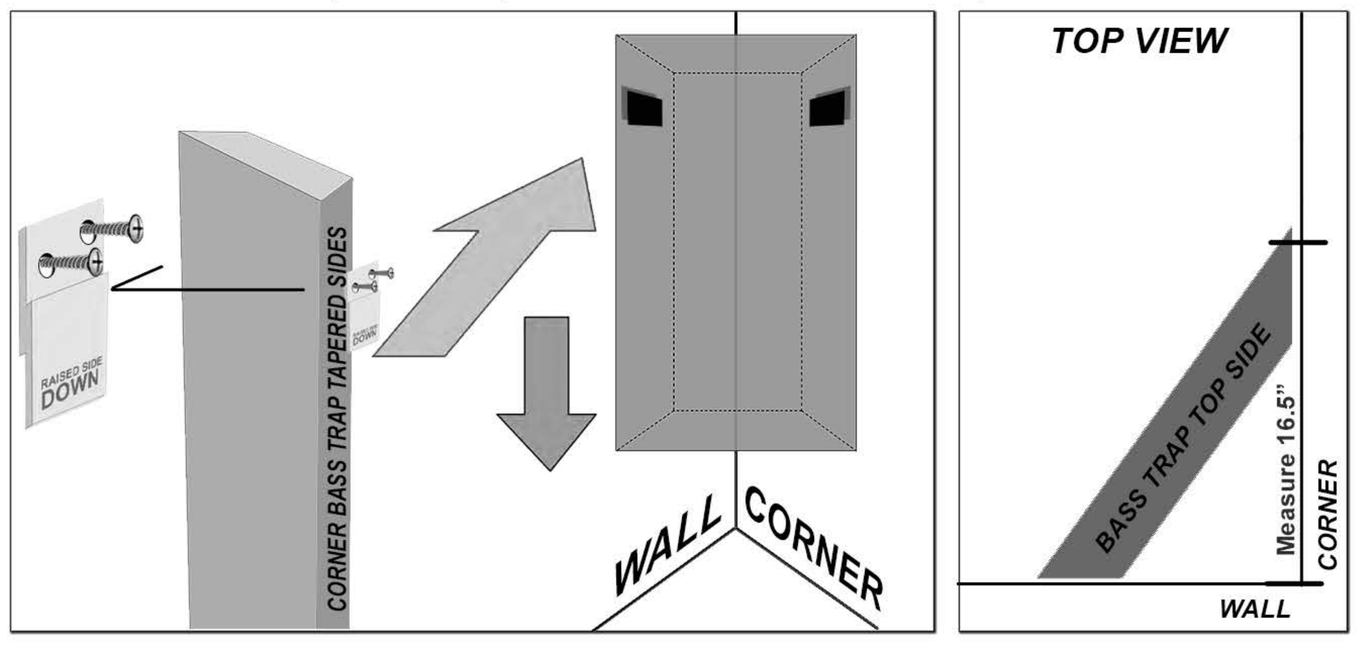
Attach Z-Bar to Rear of Panel with the raised side facing DOWN and the side with the holes on top. Install Bar to the wall with the raised side facing UP, then Clip the panel to the wall using the bars as shown below. Use 3-4 screws per bar.



Z-CLIP CORNER BASS TRAP INSTALLATION INSTRUCTIONS

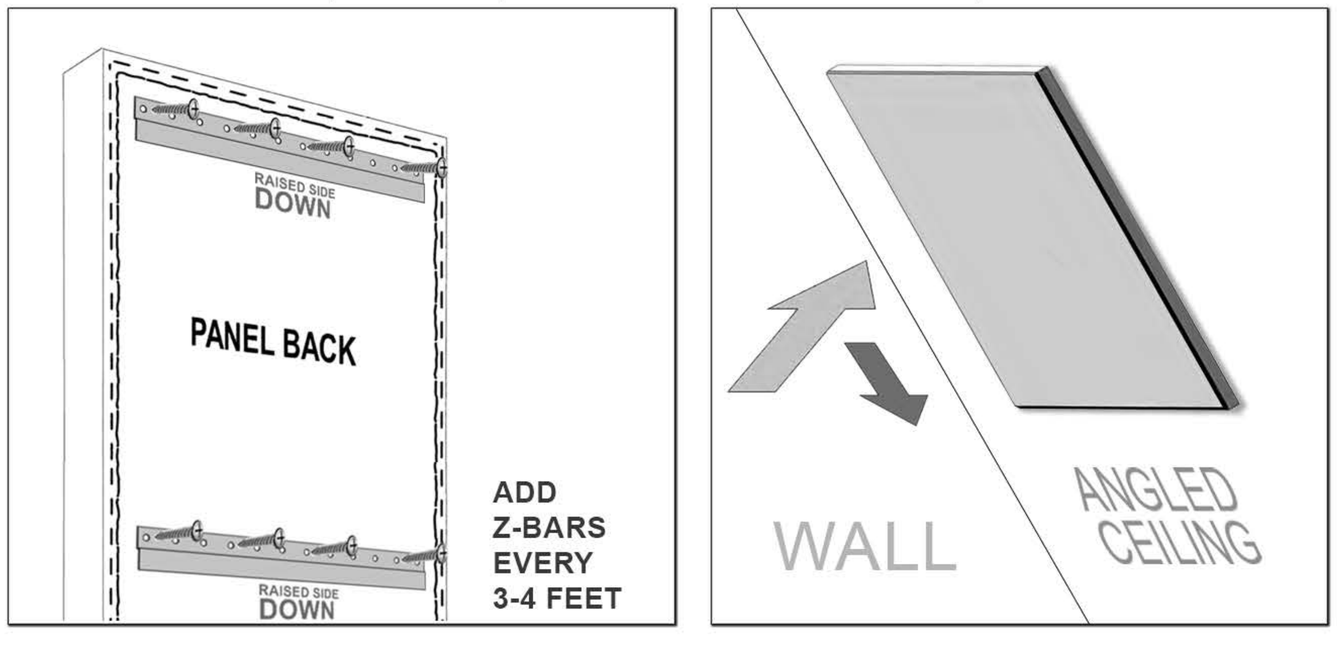


Attach Clips to the **TAPERED SIDES** of the corner bas trap. Measure 16.5" from the corner for the wall clips. For Traps taller than 48", additional clips will be needed.



Z-BARS FOR ANGLED CEILING OR ANGLED WALL INSTALLATION

Attach Clips to the **TAPERED SIDES** of the corner bas trap. Measure 16.5" from the corner for the wall clips. For Traps taller than 48", additional clips will be needed.



Z-CLIP + CORNER BRACKET

BASS TRAP AND PANEL INSTALLATION INSTRUCTIONS

Attach **Z-CLIPS** to rear backing on panel. Be sure both clips are installed at the same height. **Measure** from the corner to the front of the corner bracket. and mark the holes on the wall and attach brackets to the wall as shown. **For 24" inch wide traps, measure 17" from corner. For 12" wide traps, measure 8".** Once both brackets are in place, use Z-Clips to hang the trap from the brackets. For heavier traps larger than 48" x 24", we recommend using two sets of brackets and Clips.