

PROJECT		REFERENCE TYPE		DATE	
SPECIFIED BY		QUANTITY		NOTE	

## Graphic Images

Velaria Systems acoustic membrane systems are available in a wide range of colors, patterns, and textures. But what if you want something a little different, something that truly meets your design intent?

Velaria Systems Design Studio will work with you to implement the graphic images you need to truly express your vision.



There are virtually no limits to the effect you can achieve by incorporating printed images.

For the same amount of work as installing a regular membrane – and less than typical alternative drywall options - you can create an environment that connects with people on a visual, emotional, and even physical level – especially when illumination and/or enhanced acoustic performance is included.

## Getting Started

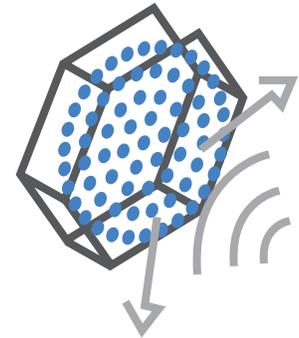
As there is an almost infinite number of possibilities, the best way to get started is to contact the Velaria Systems Design Studio: [designstudio@velariasystems.com](mailto:designstudio@velariasystems.com)

If you have a specific image in mind we can get right to work to figure out the image resolution that will work and how the image will need to be positioned to ensure that your concept is properly implemented.

If you have an idea but not a specific image, the Design Studio will work with you to select an appropriate image and ensure the technical requirements for implementation are correct.

## Acoustic Performance

Graphic membrane systems are available in both non-illuminated and backlit configurations. Velaria Systems offer a full range of acoustic options including Standard, Enhanced, Ultra, and Basic.



### Non-Illuminated

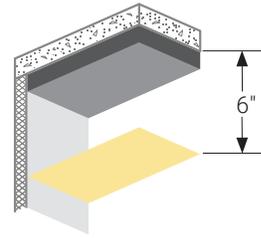
Performance Level	Description	Noise Reduction Coefficient (NRC)
Standard	Single Layer of Acoustic Membrane	0.55
Enhanced	Single Layer of Acoustic Membrane + Acoustic Absorber (1")	0.70
Ultra	Single Layer of Acoustic Membrane + Thick Acoustic Absorber (2")	0.90
Basic	Single Layer of Non-acoustic Membrane	0.20

### Illuminated

Performance Level	Description	Noise Reduction Coefficient (NRC)
Standard	Outer Layer Acoustic Membrane + Inner Layer of Acoustic Membrane + Acoustic Light Panel + Acoustic Absorber (1")	0.70
Enhanced	Outer Layer Acoustic Membrane + Inner Layer of Acoustic Membrane + Acoustic Panel + Acoustic Absorber (2")	0.85
Basic	Outer Layer Non-acoustic Membrane + Inner Layer of Non-acoustic Membrane + Acoustic Light Panel	N/A

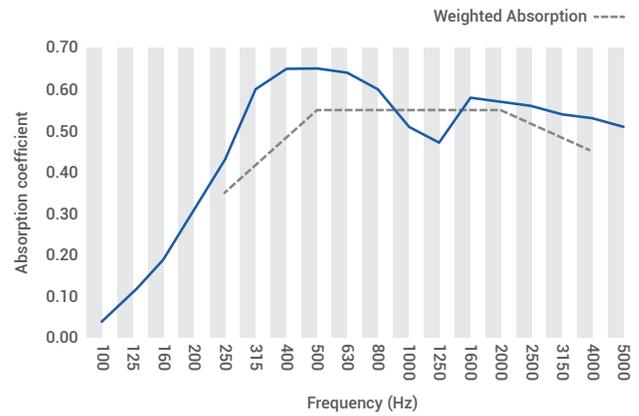
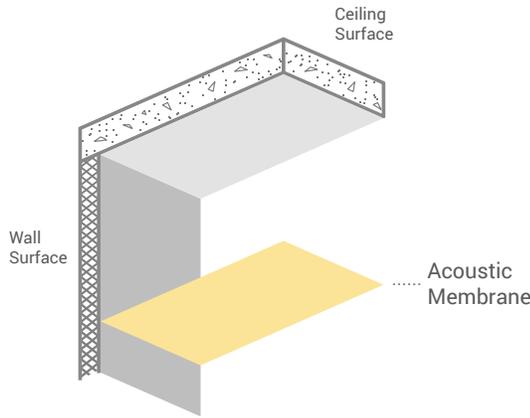
## Non-Illuminated Configurations

(based on typical 6" space between surface and outer membrane)



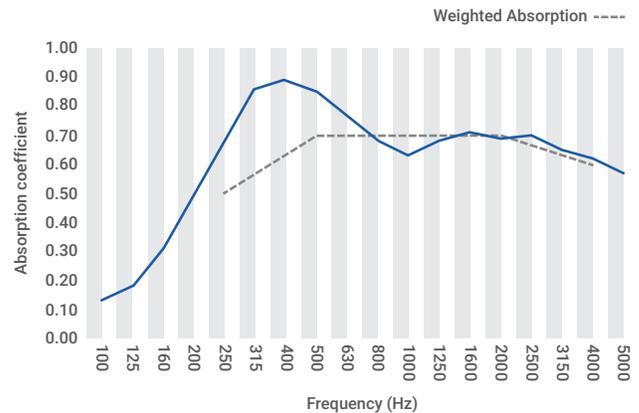
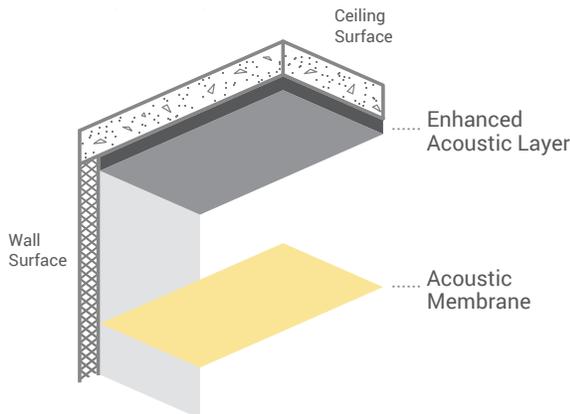
### Standard

Frequency (Hz)							Noise Reduction Coefficient	Weighted Sound Absorption Coefficient (ISO EN 11654)	Sound Absorption Class (ISO EN 11654)
	125	250	500	1000	2000	4000	NRC	$\alpha_w$	Class
$\alpha_s$	0.11	0.43	0.65	0.51	0.57	0.53	0.55	0.55	D



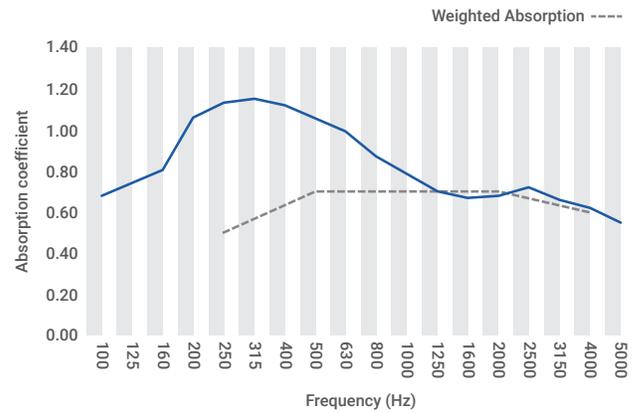
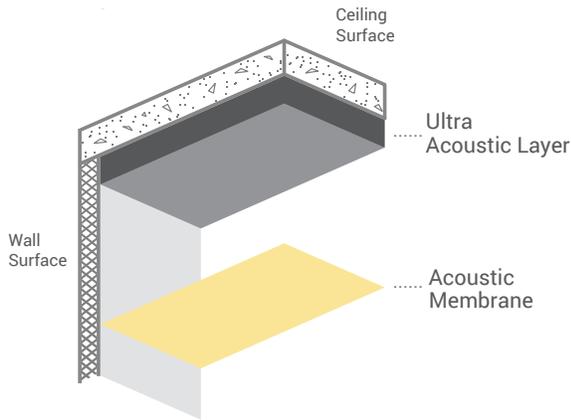
### Enhanced

Frequency (Hz)							Noise Reduction Coefficient	Weighted Sound Absorption Coefficient (ISO EN 11654)	Sound Absorption Class (ISO EN 11654)
	125	250	500	1000	2000	4000	NRC	$\alpha_w$	Class
$\alpha_s$	0.18	0.67	0.85	0.63	0.69	0.62	0.70	0.70	C



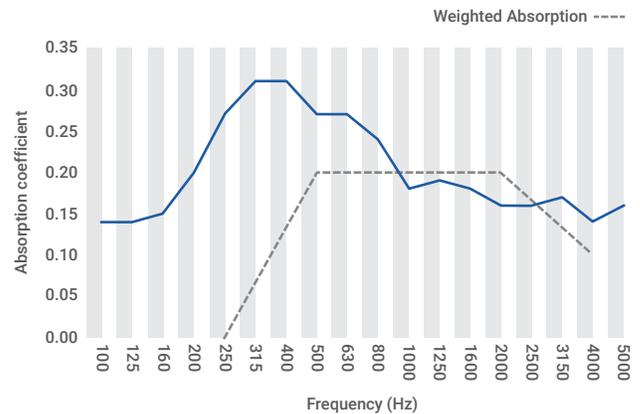
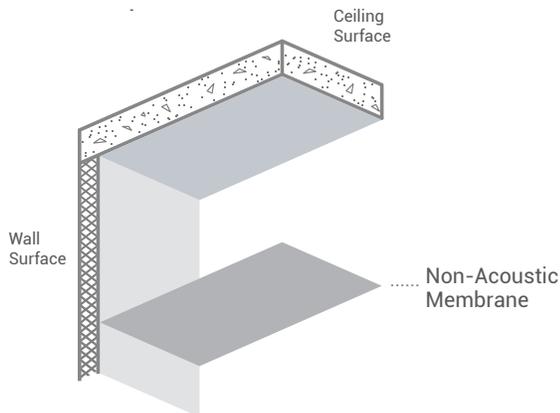
## Ultra

	Frequency (Hz)						Noise Reduction Coefficient	Weighted Sound Absorption Coefficient (ISO EN 11654)	Sound Absorption Class (ISO EN 11654)
	125	250	500	1000	2000	4000			
$\alpha_s$	0.74	1.13	1.05	0.79	0.68	0.62	0.90	0.75 (L, M)	C

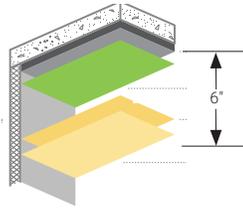


## Basic

	Frequency (Hz)						Noise Reduction Coefficient	Weighted Sound Absorption Coefficient (ISO EN 11654)	Sound Absorption Class (ISO EN 11654)
	125	250	500	1000	2000	4000			
$\alpha_s$	0.14	0.27	0.27	0.18	0.16	0.14	0.20	0.20 (L)	E

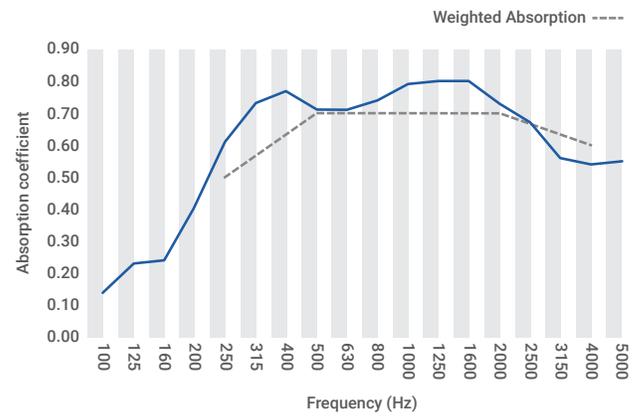
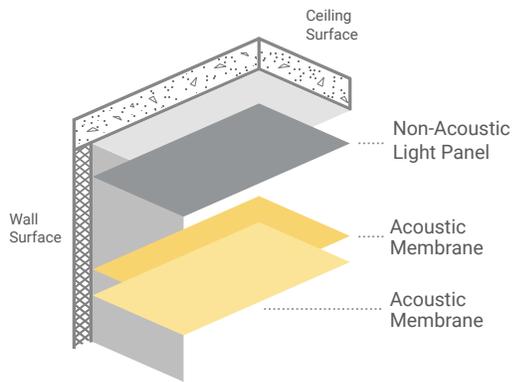


## Backlighting Configurations



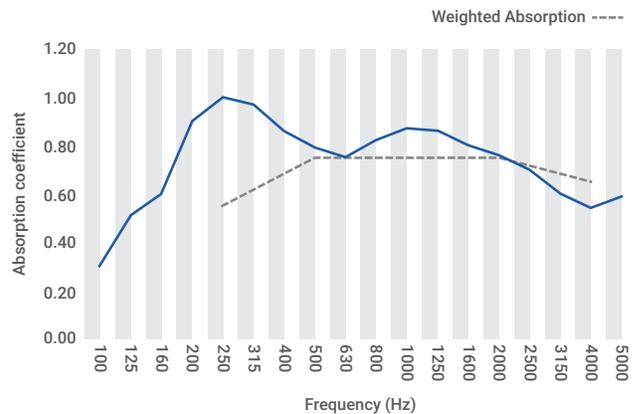
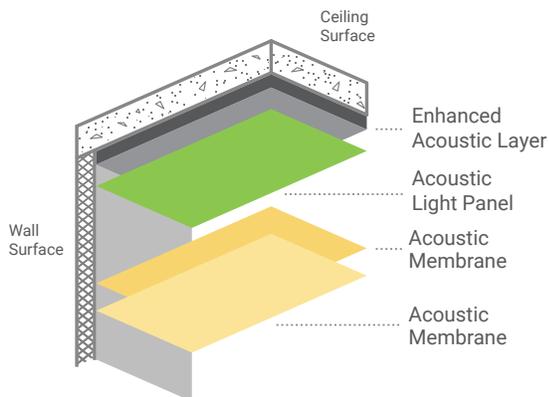
### Standard

Frequency (Hz)							Noise Reduction Coefficient	Weighted Sound Absorption Coefficient (ISO EN 11654)	Sound Absorption Class (ISO EN 11654)
	125	250	500	1000	2000	4000			
$\alpha_s$	0.23	0.61	0.71	0.79	0.73	0.54	0.70	$\alpha_w$ 0.70	Class C

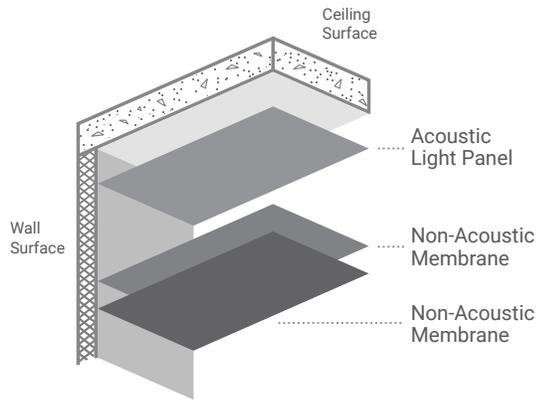


### Enhanced

Frequency (Hz)							Noise Reduction Coefficient	Weighted Sound Absorption Coefficient (ISO EN 11654)	Sound Absorption Class (ISO EN 11654)
	125	250	500	1000	2000	4000			
$\alpha_s$	0.51	1	0.79	0.87	0.76	0.54	0.85	$\alpha_w$ 0.75 (L)	Class C



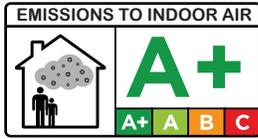
## Basic



## Fire Ratings

The fire rating for the membranes used to create a graphic image carry an ASTM E84 Class A fire rating.

## Environmental



A+ rating for Volatile Organic Compounds (VOC) emissions



100% Recyclable

## Additional Design Options Available

### Backlighting

Accentuates your graphic with even illumination in a variety of color temperatures or even dynamic options

## Certifications



CE certificate of conformity  
EN 14716 1488-CPD-0106/W

CE CERTIFICATE OF CONFORMITY CE: 1488-CPD-0106/W COMPLIANCE WITH STANDARD:  
EN 14716:2008 (system of assessment and verification of performance constancy 1)

## How to Specify

Using our simple process, specifying a graphic membrane system is easy.

1. Select your image for the membrane
2. Enhance the acoustic performance (or not)
3. Add backlighting (or not)
4. Contact the Velaria Design Studio for guidance on image resolution, positioning, and other technical details
5. In addition to your selections, we will need to know
  - Size
  - Mounting Requirements (so we can select the correct profile to meet your requirement)\*

\*A wide selection of profiles is available to suit your specific requirements. Velaria Systems experts will recommend the best option to meet those requirements. No need for you to sort through a huge catalogue.

## Specification Codes

NOTE: Specification Codes are provided for use as simple references to Velaria Systems Membrane System products in specifications and/or construction documents and may not include all details required to define the system. Specification Codes are NOT ordering codes. In order to receive quotations or purchase these products from Velaria Systems additional information may be required before issuing a quotation or accepting a purchase order.

<b>VS</b>	-	<b>C</b>	-	<b>MEM</b>	-	<b>GRPH</b>	-		-	
Velaria Systems		C = Ceiling		<b>MEM =</b> Membrane Systems		<b>COL = Color</b> <b>PATT = Pattern</b> <b>GRPH =</b> Graphic <b>ILLUM =</b> Illumination		<b>Acoustic</b> <b>Performance</b> <b>STD = Standard</b> <b>ENH =</b> Enhanced <b>ULT = Ultra</b> <b>BAS = Basic</b>		<b>STD = No lighting</b> <b>BACKL = Backlit</b>