

## SQUARELINE® Metal Ceiling Tiles

Product Information



SQUARELINE® expanded metal ceiling panels produce a chic, high-tech, modish interior look at an affordable cost. Available in three standard diamond-mesh patterns with or without an acoustic backer, the panels are manufactured using up to 55 percent recycled metal and fitting within standard suspended grid systems. Dramatic back lighting and shadow effects are possible. SQUARELINE metal finishes are offered in power-coated chrome, white, black or custom. Optional 9/16-inch (14 mm)-thick WHITELINE® acoustic backer panels in smooth white fleece on one panel face and black fleece on the other side. Custom water-based acoustic coatings and printing are available to complement or contrast with expanded metal mesh.



### Advantages

- High-quality 3D expanded metal mesh surface patterns
- Available with or without acoustic backers
- 70-percent open area mesh panels without any acoustic backer meet IBC code allowing fire sprinklers to be concealed above the ceiling elevation

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# SQUARELINE® Metal Ceiling Tiles

## Product Information

### Material

- Highest-quality galvanized, powder-coated finish directional expanded metal mesh panels
- Up to 55 percent recycled metal content
- 70 percent open area, diamond mesh standard
- Optional WHITELINE® acoustic backer panels have a WILLTEC™ core and are available in standard white and black fleece finishes; custom water-based acoustic coatings and printing options are also available

### SQUARELINE® Standard Sizes

- Panel sizes: 2' x 2', 2' x 4' (610 x 610, 610 x 1219 mm)
- Flat lay-in panels standard
- Suited for either 15/16" or 9/16" (24 or 14 mm) grid work
- Custom options available

### SQUARELINE Medium and SQUARELINE Ultra Sizes

- Panel sizes: 2' x 2', 2' x 4' and 4' x 4' (610 x 610, 610 x 1219 and 1219 x 1219 mm)
- Flat lay-in panels standard
- All panel sizes suited for either 15/16" or 9/16" (24 or 14 mm) grid except 4' x 4' 15/16" (1219 x 1219 24 mm) grid only
- Custom options available

### Applications

- Modern interiors and retail spaces
- Lobbies, lecture halls and education facilities
- Art centers, museums and showrooms
- Night clubs and music venues
- Restaurants, theaters and cinemas
- Convention centers and sports stadiums

### Installation

- Handle with clean, white, cotton gloves
- Expanded metal is directional; install panels oriented in the same direction
- Depending upon actual metal gauge thickness, cut-to-fit panels can be made using sharp aviator snips, reciprocating sawzall, orbital jig saw or oscillating multi-tool fitted with metal-cutting blades
- Optional WHITELINE acoustic backer panels are simply intended to be placed atop SQUARELINE panels on-site
- Please consult pinta acoustic with any questions prior to your specific project application



### WHITELINE® 9/16" (14 mm)-Thick Panel Sound Absorption

Test ASTM C423-90a; Mounting Type E

Frequency (Hz)	Thickness 0.6" (15 mm)
125	0.27
250	0.60
500	0.64
1000	0.80
2000	0.91
4000	1.02
NRC	0.75

### Physical Data—WILLTEC Foam

Tensile Strength	8 PSI (ASTM D3574-77)
Density	0.7 lbs./cu. ft. (0.3 Kg/cu. m)
Elongation	8% (ASTM D3574-77)
Heat Conductivity	K factor = 0.24 at 50°F (10°C)
Long-Term Service Temperature	302°F (150°C)
Flame Spread and Smoke Density	Passes Class A per ASTM E 84 Passes CAN ULCS-102
Color	White/Black

## >> Other Products

- Direct-Apply, Glue-up Wall and Ceiling Panels
- Suspended Grid Lay-in Panels
- Suspended Baffles and Clouds
- Barriers, Foam and Composites

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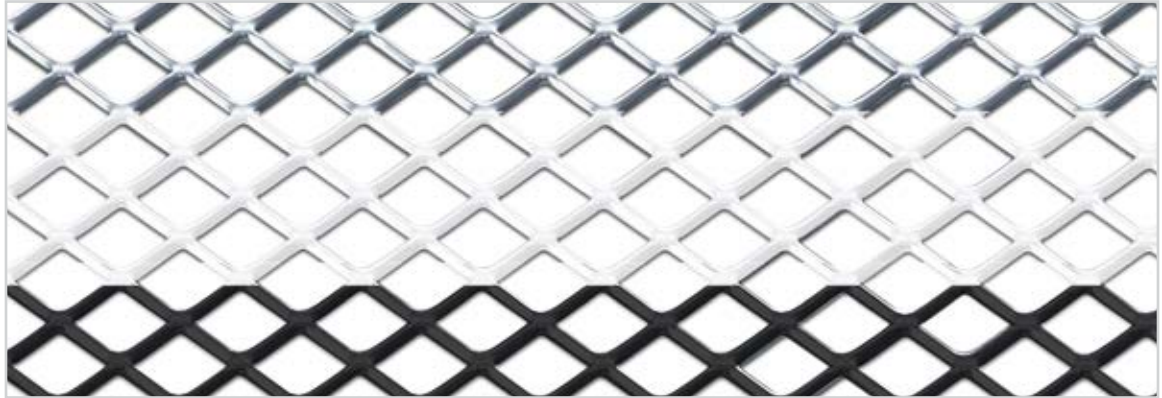
SQUARELINE® Metal Ceiling Tiles  
Pattern Information

**SQUARELINE® Standard**

Chrome Metal

White Metal

Black Metal



**SQUARELINE Medium**

Chrome Metal

White Metal

Black Metal



**SQUARELINE Ultra**

Chrome Metal

White Metal

Black Metal



All expanded metal mesh panels are produced having 70 percent open areas. Optional, WHITELINE acoustic backer panels have smooth white fleece on one panel face and black fleece on the other side. Custom water-based acoustic coatings and printing are available to complement or contrast with expanded metal mesh.

*Colors do not necessarily reflect the actual color of the product. Contact pinta acoustic for product samples.*



## Contractor Guidelines for Melamine Foam General Overview



### Tolerances and Dimensions

Due to the nature of WILLTEC™ foam, temperature and humidity may cause dimensional changes of +/-1.5 percent by volume.

Relative to these environmental tolerances and changes, pinta acoustic's factory tolerances are negligible.

### Convolutd Products

SONEX® One, Valueline, Classic, Mini and Junior panels:

- Pattern alignment to edge of panel: tolerances of +/-1" (25 mm)

As a result of pattern alignment to edge, pinta recommends spacing SONEX panels 1" (25 mm) apart.

Alignment tolerances also apply to other convoluted foam products outside of the SONEX product line.

### WILLTEC™ Melamine Foam Specifications

pinta acoustic's WILLTEC is an open-celled melamine based foam developed to provide noise control over a wide audible spectrum range. WILLTEC foam may be uncoated or coated in pinta's water-based acoustic coating, which have been specifically formulated for acoustical applications.

WILLTEC products are LEED certified 4.0 and 4.1. For additional details, including details regarding specific product lines, please visit the products page of our website.

WILLTEC foam is suitable for use at temperatures up to 302°F (150°C) in long-term applications. It also passes class A flame spread and smoke density per ASTM E 84, and ULC S-102 (Canada). It has a fungal resistance rating of 0 (ASTM G21), and is rated UL 181 Section 11 regarding microbial growth. Density is 0.05-0.07 pounds per cubic foot.

### For Installers

WILLTEC foam should always be handled carefully during installation. Wearing clean, white glove during installation is recommended. Melamine foam can be vacuumed or lightly brushed to clean off dust and debris whenever necessary. In general, heavy compression of foam should be avoided, particularly when localized. Avoid handling panels by their edges and corners as much as possible.

WILLTEC should be stored flat and allowed to acclimate to the site of installation for at least 72 hours. Once panels have been effectively attached to a surface with adhesive, shrinkage and expansion are minimal and non-problematic.

For technical assistance, do not hesitate to contact Pinta's engineering department during business hours Monday-Friday 8:00am-5:00pm Central Standard. For all other issues, including warranty issues, please contact the project's Pinta sales representative.

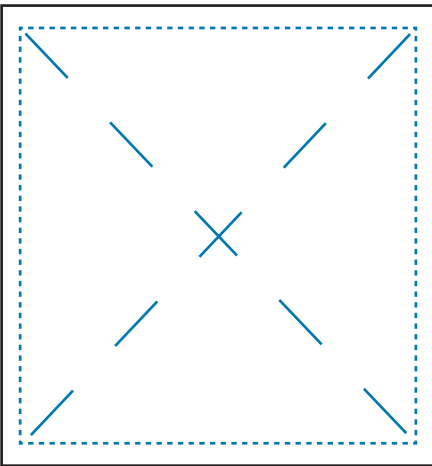
## Contractor Guidelines for Melamine Foam Using acouSTIC™ Adhesives

### Application Methods

For application of acouSTIC™ PA-02 to wall or ceiling panels from a pail, a 1/8" notched trowel is recommended. Adhesive should be applied to both the backside of the WILLTEC panel and the surface it is going to be applied to.



For application from a caulk tube of acouSTIC PA-02 and PA04 adhesives, a continuous 1/4" (6mm) bead should be applied approximately 1.5" (38 mm) inset from the panel's perimeter. Then apply intermittent beads from corner to corner in an X pattern (see below diagram).



Once adhesive is applied, firmly, but carefully, press the panel to the surface with the palms of your hands.

PA-02 adhesive can be easily be cleaned up with soap and water if needed.



### acouSTIC Adhesives

pinta acoustic's acouSTIC PA-02 and PA-04 adhesives are formulated for use with melamine foam.

PA-04 is a polyurethane based adhesive and is the recommended adhesive for most circumstances, especially in high humidity environments with little temperature control. PA-04 is available in 10.6 ounce caulk tubes.

For installations on unfinished gypsum, concrete decks, or in controlled environments with low humidity, use acouSTIC PA-02 water based adhesive. In humid applications, PA-02 will take extra time to set up. In these applications, pinta recommends PA-04 or other adhesives. In LEED credit applications when water based adhesive is preferred, ventilate and dehumidify the area, cooling the surface where the panel is to be applied. PA-02 adhesive is available in both five-gallon pails and 10.5-ounce caulk tubes.

acouSTIC adhesives are not suitable for epoxy painted surfaces. Alternative glues containing epoxy are recommended.

PA-04 and PA-02 adhesive tubes contain enough adhesive for installations covering approximately 16 to 24 square feet (1.49 to 2.23 square meters). Each five-gallon pail of PA-02 contains the approximately 175 square feet (16.26 square meters).

PA-02 and PA-04 adhesives should always be stored in a dry, room temperature environment. In all applications using pinta's acouSTIC™ PA-04 or PA-02 adhesive, test with the intended substrate and foam to ensure a good bond is made. Before gluing, make sure that the intended surface is clean, dry and dust free. A mock up prior to installation in a stable environment to test adhesion is critical. The end user is solely responsible for proper glue up.

## Contractor Guidelines for Melamine Foam Cutting and Trimming

### Special Cuts

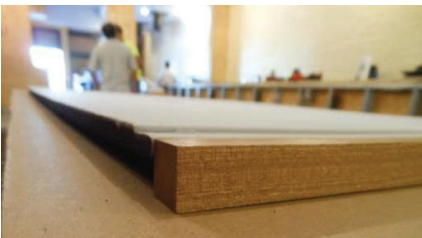
In addition to straight through cuts, curved cuts, holes, slots and grooves may be required in order to accurately fit panels to the site conditions.



A clean holes saw is recommended when holes are needed for features such as fire sprinklers. Carefully drill in reverse at the desired location. If possible, always practice on scrap material first.



Sometimes an improvised jig may be the best solution. Below, a simple wood strip has been used to assist to flush cut a rabbeted edge or lip on a panel that fits around an projecting HVAC feature.



### Cutting Foam On Site

Due to environmental tolerances of WILLTEC™ melamine foam, installation often requires cutting the foam to its final dimensions at the site. Before doing so, always make sure to allow the foam to acclimate to the site as long as possible.

The four most important tools needed when cutting foam panels are a flat clean surface, a good straight edge, a sharp, clean, and stiff blade such as the Milwaukee job site knife shown below, and a tape measure. Standard and snap-off utility knives are great for detailed cuts, but are often too short or flimsy to make accurate material cutoffs.



When making cuts in foam, do not slice in multiple passes to avoid steps or jagged cuts along the cut edges. A smooth single stroke is ideal when fitting flush to adjacent panels or architectural features. Hold the blade as straight possible.

A clean and level surface such as cutting mat or plastic sheet is recommended for making through cuts. Corrugated cardboard may cause blades to jump and leave a jagged and unsightly edge.

Cutting errors or other mistakes that occur during installation are beyond pinta acoustic's control. The end user is solely responsible for any damage caused during install.



## Contractor Guidelines for Melamine Foam Hanging Baffles and Clouds

### T-Slot and T-Grid

SONEX® Plano Baffles include a custom cut T-shaped slot in which a standard 15/16" (24 mm) ceiling grid may be inserted. This provides extra rigidity to the baffle and the means to attach cable, wire or similar to in order to hang it from the ceiling.

T-Slots may also be provided in clouds in order to reduce the number of hanging points or to provide additional structural support.



T-Grid should always be slid in from the side of the piece and never forced in through the top.

### C-Channel

Baffles may also be flush mounted to a ceiling or structure using C-Channel. A generous 1/4" (6 mm) bead of acouSTIC™ adhesive should be ran along the inside of the channel before inserting foam. When viable, PA-04 is recommended.



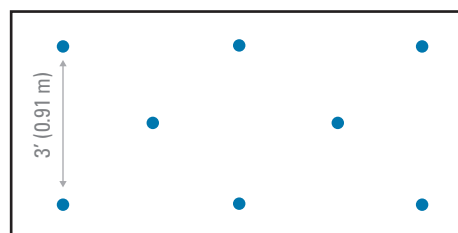
### Corkscrew Hangers

The most common method of hanging pinta acoustic products is pinta's standard corkscrew fastener. Corkscrews come in several different types and sizes. The correct size, quantity and type will have been determined by a pinta engineering team member by the time the material has been delivered to the site.

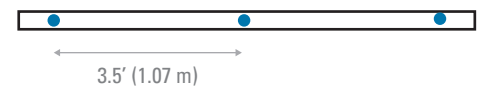
When installing corkscrews into WILLTEC foam, be careful not to apply too much force as the hanger nears full insertion. This may cause foam to tear out and possibly damage it beyond repair.

The diagrams below show placement of corkscrews in a standard 3" x 48" x 96" (76 mm X 1219 x 2438 mm) cloud and a 2" x 96" (51 x 2438 mm) baffle. Similar spacing can generally be followed with all sizes. Under most circumstances a good guideline would be no more than 3' (0.91 m) apart for clouds and no more than 3' (0.91 m) apart for clouds.

3" x 48" x 96" (76 x 1218 x 2438 mm) Cloud



2" x 96" (51 x 2438 mm) Baffle



Once corkscrews have been installed, the panels can be hung and leveled off as per the intended design. This should be done using either the provided cable hanger kits, 50 lb. test fishing line or equivalent, or other suitable methods.

## Maintenance of Products

All pinta acoustic's foam products are made with open-cell foam. This porous cell structure allows the foam to absorb sound waves. Unless there is a surface coating or covering, it will also absorb water, dust, dirt, oil and other liquids. Normally, very little needs to be done with the products once installed. However, here are some basic instructions for maintaining your pinta acoustic products:

### Universal Maintenance Information

- Always wear white cotton gloves when handling the products.
- Proper supply-and-return air filtration and regular HVAC filter maintenance minimize soiling.

### SONEX® Wall Panels and Baffles

- Do not pressure-wash or soak with water or other liquid.
- Surface dust and dirt can be delicately vacuumed or dusted with air.
- If wall panels and baffles are HPC-coated, lightly wipe clean with damp cloth. Do not soak with water or liquid.

### FABRITEC Wall Panels

- Do not pressure-wash or soak with water or any other liquid.
- Surface dust and dirt can be delicately vacuumed or dusted with air.
- Fabric surface can be spot-cleaned with mild detergent and damp cloth.
- If wall panels are covered with micro-perforated vinyl, gently wipe with a moistened cloth, sponge or brush using a mild soap, detergent or nonabrasive cleaner. It is important to use clean water throughout the process. Dry the material with a soft towel.

### CONTOUR® or HARMONI Ceiling Tiles

- Do not pressure-wash or soak with water or any other liquid.
- Surface dust and dirt can be delicately vacuumed or dusted with air.
- If ceiling tiles are HPC-coated, lightly wipe clean with damp cloth. Do not soak with water or liquid.

### WHITELINE® Ceiling Tiles

- Do not pressure-wash or soak with water or any other liquid.
- Surface dust and dirt can be delicately vacuumed or dusted with air.

### SQUARELINE® Metal Ceiling Tiles

- Do not pressure-wash or soak with water or any other liquid.
- Surface dust and dirt can be delicately vacuumed or dusted with air.
- Metal surface can be spot-cleaned with damp cloth.

### SONEX Curtain Enclosures or Materials

- Do not pressure-wash or soak with water or any other liquid.
- Surface can be wiped with cloth and mild cleaning solution.

### PROSPEC® Barriers, Foams and Composites

- Barrier products are extremely dust and dirt resistant and do not require cleaning.
- If barriers are HPC-coated, lightly wipe clean with damp cloth. Do not soak with water or liquid.

For other surface coatings, contact customer service for instructions.

## >> | Products

- Wall Panels
- Ceiling Tiles
- Ceiling Clouds
- Baffles
- Barriers, Foam and Composites

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## LEED® Credit Statement

LEED BD+C and LEED ID+C for pinta acoustic Products



As an industry leader in the architectural market, pinta acoustic, inc. is committed to sustainability and safeguarding our planet and natural resources for generations to come. We are proud to do our part by manufacturing acoustical wall and ceiling products that directly support LEED® v4.0 and v4.1 Building Design and Construction (LEED BD+C) and LEED v4.0 and v4.1 Interior Design and Construction (LEED ID+C) projects.

pinta acoustic strives to minimize environmental impacts by offering sustainable, innovative and high-performance solutions for today's buildings and facilities. For this reason, we selected the Minneapolis Business Center, an urban green-development site, as the location of our Minneapolis manufacturing plant, offices and showroom. This building is a brownfield redevelopment site in an urban setting. It offers excellent infrastructure, such as public transportation and was designed with green-building principles in mind.

## LEED® v4.0 and v4.1 Credit Statement

LEED BD+C and LEED ID+C

pinta acoustic Products	Product Type	MATERIALS AND RESOURCES			INDOOR ENVIRONMENTAL QUALITY				
		Construction and Demolition Waste Management	Interior-Life Cycle Impact Reduction	Building Product Disclosure and Optimization – Sourcing of Raw Materials	Low-Emitting Materials	Minimum Acoustic Performance	Acoustic Performance	Interior Lighting (Option 2)	Daylight
		•	•	Recycled Content	•	•	•	Light Reflectance	Light Reflectance
acouSTIC™ (PA-02)	Water-Based Foam Adhesive				•				
BALANCE and BALANCE PLUS Ceiling Cloud	WHITELINE Panel with Aluminum Frame					•	•	0.89	0.89
CONTOUR® Ceiling and Wall Tiles	Expanded Melamine WILLTEC™ Foam		•		•	•	•	0.87	0.87
Ceiling Tile Noise Barrier	PROSPEC Barrier with Expanded Melamine WILLTEC Foam		•			•	•		
HARMONI Ceiling Tiles	Expanded Melamine WILLTEC Foam		•		•	•	•	0.87	0.87
PHONSTOP™ Ceiling and Wall Tiles	100% Recycled Glass	•	•	100% (post)		•	•		
PROSPEC® Barriers, Foam and Composites			•			•	•		
SONEX® AFS Acoustic Plaster Systems	SONEX with Fiberglass Mesh		•						
SONEX Classic, Junior, Mini and Pyramid Panels	Expanded Melamine WILLTEC Foam		•		•	•	•	0.87	0.87
SONEX Clean Baffles, Panels and Ceiling Tiles	Expanded Melamine WILLTEC Foam Encapsulated in FR Taffeta Vinyl		•			•	•		
SONEX GEOMETRIC Clouds	Expanded Melamine WILLTEC Foam		•		•	•	•	0.89	0.89
SONEX Linear and PLANO Absorbers	Expanded Melamine WILLTEC Foam		•		•	•	•	0.87	0.87
SONEX Mini Panels	Expanded Melamine WILLTEC Foam		•		•	•	•	0.89	0.89
SONEX One and Valueline Panels and Baffles	Expanded Melamine WILLTEC Foam		•		•	•	•	0.87	0.87
SONEX Pyramid Panels	Expanded Melamine WILLTEC Foam		•		•			0.89	0.89
SONEX Rondo Baffles	Expanded Melamine WILLTEC Foam		•		•	•	•	0.87	0.87
SQUARELINE Metal Ceiling Tiles	Galvanized, Powder-Coated Finish Expanded Metal Mesh	•	•	35–55% (pre)		•	•		
WHISPERWAVE™ Clouds, Baffles and Panels	Expanded Melamine WILLTEC Foam		•		•	•	•	0.87	0.87
WHITELINE® Ceiling Tiles	Expanded Melamine WILLTEC Foam		•		•	•	•	0.89	0.89

A detailed description of how pinta acoustic’s products contribute to LEED® BD+C and LEED ID+C projects can be found on the following pages.

## Material and Resources (MR) Credits

### LEED® Credit: Construction and Demolition Waste Management

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☒	☒	☒

#### LEED Projects:

All project types

#### pinta acoustic Products:

Select pinta acoustic products are recyclable and can be diverted from landfill.

### LEED Credit: Interior-Life Cycle Impact Reduction

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☐	☐	☒	☒

#### LEED Projects:

All project types – interior design, retail and hospitality

#### pinta acoustic Products:

pinta acoustic’s modular design supports the credit requirements to install accessible ceiling systems. Further, select products are recyclable at end of life.

### LEED Credit: Building Product Disclosure and Optimization – Sourcing of Raw Materials

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☒	☒	☒

#### LEED Projects:

All project types – interior design, retail and hospitality

#### pinta acoustic Products:

Select pinta acoustic products contain recycled content.

## Indoor Environmental Quality (IEQ) Credits

### LEED Credit: Low-Emitting Materials (Ceiling and Wall Tiles)

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☒	☒	☒

#### LEED Projects:

All project types

#### pinta acoustic Products:

Select pinta acoustic ceiling and wall tile products (in natural light grey or white) have been tested according to California Department of Public Health (CDPH) Standard Method v1.2–2017 and comply with the VOC limits in Table 4-1 of the method.

### LEED Credit: Low-Emitting Materials (Adhesive)

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☐	☒	☐

#### LEED Projects:

All project types

#### pinta acoustic Products:

The acouSTIC™ water-based foam adhesive (PA-02) is compliant with the ASTM 6886 content and California Department of Public Health (CDPH) Standard Method v1.1–2010 emissions requirements.

### LEED Credit: Minimum Acoustic Performance

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☒	☐	☐

#### LEED Projects:

LEED BD+C: schools only

#### pinta acoustic Products:

pinta acoustic’s products can help project teams achieve the acoustical performance requirements of ANSI S12.60-2002.



## Indoor Environmental Quality (IEQ) Credits

### LEED® Credit: Acoustic Performance

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☒	☒	☒

#### LEED Projects:

LEED BD+C: all project types except core and shell

LEED ID+C: all project types except retail

#### pinta acoustic Products:

pinta acoustic's products can help project teams achieve the acoustic performance (e.g. sound transmission and reverberation time) requirements for their project.

### LEED Credit: Daylight

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☒	☒	☒

#### LEED Projects:

All project types

#### pinta acoustic Products:

pinta acoustic's products have high light reflectance ratings, allowing project teams to utilize them in their daylight illuminance strategy and calculations.

### LEED Credit: Interior Lighting (Option 2)

LEED Rating System			
LEED v4.0 BD+C	LEED v4.1 BD+C	LEED v4.0 ID+C	LEED v4.1 ID+C
☒	☒	☒	☒

#### LEED Projects:

LEED BD+C: all project types except core and shell

LEED ID+C: all project types

#### pinta acoustic Products:

pinta acoustic's products can support project teams pursuing strategy E under option 2.