

**OPTIMA®**  
**OPTIMA®**  
 with Plant-based Binder  
 Square Lay-in  
 fine texture



**DESIGNFlex™**  
 CEILING SYSTEMS

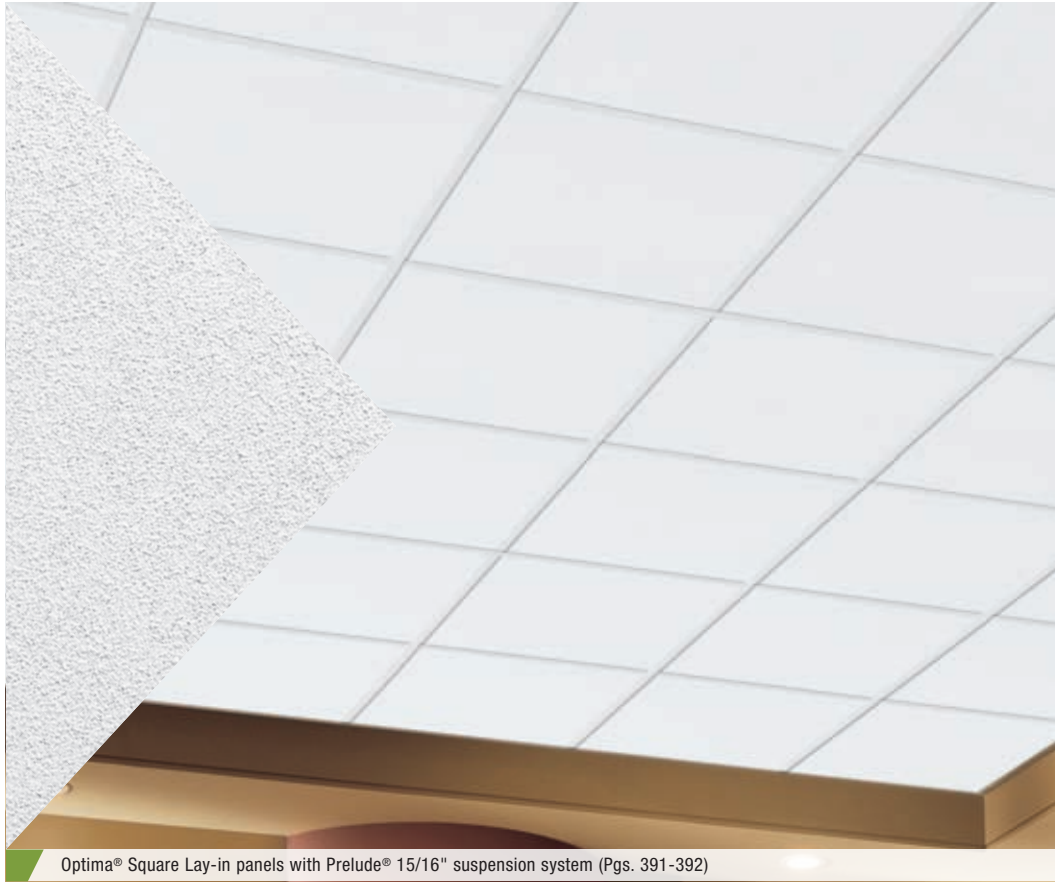


See Optima® Shapes

**Personalize Your Design!**

Mix and match different sizes, shapes, and materials to reinvent your ceiling. More at:

[armstrongceilings.com/designflex](http://armstrongceilings.com/designflex)



plus capabilities  
 to do more



See more photos at:  
[armstrongceilings.com/photogallery](http://armstrongceilings.com/photogallery)  
 SEARCH: optima

Smooth-textured Optima® panels provide excellent acoustical absorption and more standard-size options than any other texture in the line.

**KEY SELECTION ATTRIBUTES**

- DesignFlex™ options include shapes and tailor-made sizes available to ship in 3 weeks
- Optima® PB panels are part of the Sustain® portfolio and meet the most stringent sustainability compliance standards today
- Smooth, clean, durable finish – Washable, Impact-resistant, Scratch-resistant, Soil-resistant
- Items with PB suffix are manufactured with a plant-based binder
- Outstanding acoustical performance for open plan areas, both Articulation Class (180-200) and NRC (0.90-1.00)
- Energy-saving high light-reflective finish
- Non-directional visual reduces scrap and installation time
- Sag-resistant large-size panels
- Compatible with TechZone® Ceiling Systems
- Item 3352 available with Create!™ printed images and patterns
- 30-Year Limited System Warranty against visible sag, mold, and mildew
- 10-Year replacement panel available for items 3152, 3253



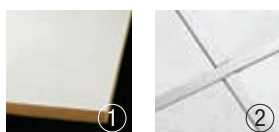
**TYPICAL APPLICATIONS**

- Open plan offices
- Computer rooms
- Corridors (walls-to-deck)
- Auditoriums
- Waiting rooms/nurses' stations
- Areas with indirect lighting systems

**COLOR**



**DETAILS**



1. Optima® Square Lay-in
2. Optima® Square Lay-in with Prelude® 15/16" suspension system

**VISUAL SELECTION**

Edge Profile	Susp. Dwg. Pgs. 407-411	Item No.	Dimensions (Inches)	
<b>OPTIMA® Square Lay-in</b>				
15/16" Square Lay-in	1	<b>1462</b>	4 x 48 x 1"	
	1	<b>1463</b>	4 x 60 x 1"	
	1	<b>1400</b>	6 x 48 x 1"	
	1	<b>1404</b>	6 x 60 x 1"	
	1	<b>3156</b>	20 x 60 x 1"	
	1	<b>3150</b> <b>3150PB</b>	24 x 24 x 3/4"	
	1	<b>3152</b> <b>3152PB</b>	24 x 24 x 1"	
	1	<b>3352</b>	24 x 24 x 1"	
	1	<b>3159</b>	24 x 24 x 1-1/2"	

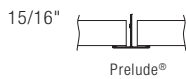
**PERFORMANCE SELECTION**

Dots represent high level of performance.

UL Classified Acoustics	NRC	+	CAC	=	Total Acoustics <sup>1</sup>	Articulation Class	Fire Performance	Light Reflect	Mold & Mildew Protection	Sag Resist	Certified Low VOC Emissions	Wash	Impact	Scratch	Soil	Recycled Content	Recycle Program	30-Yr Warranty
N/A	N/A	-	N/A	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
N/A	N/A	-	N/A	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
N/A	N/A	-	N/A	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
N/A	N/A	-	N/A	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
0.95	N/A	-	190	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
0.90	N/A	-	180	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
0.95	N/A	-	190	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
0.90	26	-	200	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•
1.00	N/A	-	200	Class A	0.90	•	•	•	•	•	•	•	•	•	•	•	•	•

<sup>1</sup> Total Acoustics® ceiling panels have an ideal combination of noise reduction and sound-blocking performance in one product. Optima items with the PB suffix are included in the Sustain™ portfolio and carry Declare™ certification.

**SUSPENSION SYSTEMS**



**Blizzard White – Suspension System Finish**

A color and texture coordinated suspension system to complement Optima® ceiling panels for a monolithic look and feel.

**PHYSICAL DATA**

**Material**  
 3150, 3156, 3159, 1462, 1463, 1400, 1404, 3152 – Fiberglass with DuraBrite® acoustically transparent membrane 3352 – Fiberglass with DuraBrite acoustically transparent membrane; CAC backing

**Surface Finish**  
 DuraBrite with factory-applied latex paint

**Fire Performance**  
 ASTM E84 and CAN/ULC S102 surface burning characteristics. Flame Spread Index 25 or less. Smoke Developed Index 50 or less (UL labeled).

**ASTM E1264 Classification**  
 Type XII, Form 2, Pattern E  
 Fire Class A

**Humidity/Sag Resistance**  
 HumiGuard® Plus ceiling panels are recommended for areas subject to high humidity, up to, but not including, standing water and outdoor applications.

**Mold/Mildew Protection**  
 Ceiling panels with BioBlock® resist the growth of mold and mildew.

**VOC Emissions**  
 (PB suffix items only)  
 Third-party certified compliant with California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010. This standard is the

guideline for low emissions in LEED, CalGreen Title 24, ANSI/ASHRAE/USGBC/IES Standard 189; ANSI/GBI Green Building Assessment Protocol.

**Primary (Embodied) Energy**  
 See all LCA information on our EPDs.

**High Recycled Content**  
 Contains greater than 50% total recycled content. Total recycled content based on product composition of post-consumer and pre-consumer (post-industrial) recycled content per FTC guidelines.

**Acoustical Details**  
 Some items have CAC backing. CAC backing may be available as a special order. A CAC value of 37 can be achieved by backloading fiberglass products with item 769 or 770.

**Insulation Value**  
 1400, 1404, 1462, 1463, 3152, 3156, 3352, –  
 R Factor – 4.0 (BTU units)  
 R Factor – 0.70 (Watts units)  
 3150 – R Factor – 3.0 (BTU units)  
 R Factor – 0.53 (Watts units)  
 3159 – R Factor – 6.0 (BTU units)  
 R Factor – 1.05 (Watts units)

**Application Consideration**  
 Do not mix Optima panels and Optima® Health Zone™ panels in the same room.

**30-Year Performance Guarantee & Warranty**  
 When installed with Armstrong® Suspension System. Details at [armstrongceilings.com](http://armstrongceilings.com)

**Weight; Square Feet/Carton**  
 1400 – 0.13 lbs/SF; 24 SF/ctn  
 1404 – 0.16 lbs/SF; 30 SF/ctn  
 1462 – 0.44 lbs/SF; 16 SF/ctn  
 1463 – 0.44 lbs/SF; 20 SF/ctn  
 3150, 3150PB – 0.44 lbs/SF; 128 SF/ctn  
 3152, 3152PB – 0.45 lbs/SF; 96 SF/ctn  
 3159 – 0.61 lbs/SF; 64 SF/ctn  
 3156 – 0.47 lbs/SF; 100 SF/ctn  
 3352 – 0.46 lbs/SF; 96 SF/ctn

**Minimum Order Quantity**  
 1 carton

**Metric Items Available**  
 3150M, 3152M, 3156M, 3159M –  
 Metric items are subject to extended lead times and minimum quantities. Contact your representative for more details.



FIBERGLASS



Declare<sup>SM</sup>  
Living Building  
Challenge Compliant  
PB Suffix Only

SUSTAIN<sup>SM</sup>  
High Performance  
Sustainable  
Ceiling Systems

UP TO 71% RECYCLED CONTENT

LEED<sup>®</sup>

- 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

LOCATION DEPENDENT PB ONLY PB ONLY PB ONLY

Calculate LEED contribution at  
armstrongceilings.com/greengenie

VISUAL SELECTION

Edge Profile	Susp. Dwg. Pgs. 407-411 armstrongceilings.com/catdwgs	Item No.	Dimensions (Inches)	
<b>OPTIMA® Square Lay-in</b>				
15/16" Square Lay-in	1	<b>3151</b> <b>3151PB</b>	24 x 48 x 3/4"	
	1	<b>3153</b> <b>3153PB</b>	24 x 48 x 1"	
	1	<b>3353</b>	24 x 48 x 1"	
	1	<b>3155</b>	24 x 48 x 1-1/2"	
	1	<b>3356</b>	24 x 48 x 1-1/2"	
	1	<b>3164</b>	24 x 60 x 3/4"	
	1	<b>3161</b>	24 x 72 x 3/4"	
	1	<b>3162</b>	24 x 96 x 3/4"	
	1	<b>3158</b>	30 x 30 x 1"	
	1	<b>3157</b>	30 x 60 x 1"	
	1	<b>3160</b> <b>3160PB</b>	48 x 48 x 1"	
	1	<b>3154</b>	48 x 96 x 1"	

PERFORMANCE SELECTION Dots represent high level of performance.

UL Classified Acoustics		Total Acoustics <sup>1</sup>		Articulation Class	Fire Performance	Light Reflect	Mold & Mildew Protection	Sag Resist	Certified Low VOC Emissions	Wash	Impact	Scratch	Soil	Recycled Content	Recycle Program	30-Yr Warranty
NRC	+ CAC	=	AC	Class	Light Reflect	Bi-Block	Humi-Guard+			Durability						
0.90	N/A	-	180	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.95	N/A	-	190	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.90	26	-	200	Class A	0.90	•	•	-	•	•	•	•	•	•	-	•
1.00	N/A	-	200	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.95	26	-	200	Class A	0.90	•	•	-	•	•	•	•	•	•	-	•
0.90	N/A	-	180	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.90	N/A	-	180	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.90	N/A	-	180	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.95	N/A	-	190	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.95	N/A	-	190	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•
0.95	N/A	-	190	Class A	0.90	•	•	-	•	•	•	•	•	•	•	•

<sup>1</sup> Total Acoustics® ceiling panels have an ideal combination of noise reduction and sound-blocking performance in one product. Optima items with the PB suffix are included in the Sustain™ portfolio and carry Declare™ certification.



FIBERGLASS



**UP TO 71% 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

LOCATION DEPENDENT      PB ONLY      PB ONLY      PB ONLY

Calculate LEED contribution at [armstrongceilings.com/greengenie](http://armstrongceilings.com/greengenie)

**VISUAL SELECTION**

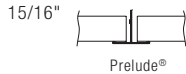
Edge Profile	Dimensions (Inches)
<b>OPTIMA® Size Capabilities</b>	<b>Width      Length</b>
15/16" Square Lay-in  <b>1 CTN MIN Made-to-Order Sizes (3 Wks)</b>	<b>Non-PB 3/4" Thick</b>
	4" – 5-1/2"      9" – 60"
	6" – 11-1/2"      6" – 60"
	12" – 30-1/2"      4" – 96"
	31" – 48"      4" – 30"
	<b>Non-PB 1" Thick</b>
	4" – 5-1/2"      9" – 72"
	6" – 11-1/2"      6" – 72"
	12" – 48"      4" – 120"
	<b>Non-PB 1-1/2" Thick</b>
	4" – 5-1/2"      9" – 77"
	6" – 11-1/2"      6" – 77"
	12" – 42-1/2"      4" – 114"
	43" – 48"      4" – 120"
	<b>PB 1" Thick</b>
4" – 5-1/2"      9" – 72"	
6" – 11-1/2"      6" – 72"	
12" – 24-1/2"      4" – 96"	
25" – 30-1/2"      4" – 60"	
31" – 48"      4" – 48"	

**PERFORMANCE SELECTION** Dots represent high level of performance.

UL Classified Acoustics			Total Acoustics <sup>1</sup>	Articulation Class	Fire Performance	Light Reflect	Mold & Mildew Protection	Sag Resist	Certified Low VOC Emissions	Wash	Impact	Scratch	Soil	Recycled Content	Recycle Program	30-Yr Warranty
NRC	+ CAC =	AC														
N/A	N/A	-	N/A	Class A	0.90	•	•	•	-	•	•	•	•	•	•	•
N/A	N/A	-	N/A	Class A	0.90	•	•	•	-	•	•	•	•	•	•	•
N/A	N/A	-	N/A	Class A	0.90	•	•	•	-	•	•	•	•	•	•	•
N/A	N/A	-	N/A	Class A	0.90	•	•	•	-	•	•	•	•	•	•	•

<sup>1</sup> Total Acoustics® ceiling panels have an ideal combination of noise reduction and sound-blocking performance in one product. Optima items with the PB suffix are included in the Sustain™ portfolio and carry Declare™ certification.

**SUSPENSION SYSTEMS**



**Blizzard White – Suspension System Finish**

A color and texture coordinated suspension system to complement Optima® ceiling panels for a monolithic look and feel.

**PHYSICAL DATA**

**Material**  
 3153, 3155, 3158 – Fiberglass with DuraBrite® acoustically transparent membrane 3353, 3356 – Fiberglass with DuraBrite acoustically transparent membrane; CAC backing

**Surface Finish**  
 DuraBrite scrim with factory-applied latex paint

**Fire Performance**  
 ASTM E84 and CAN/ULC S102 surface burning characteristics. Flame Spread Index 25 or less. Smoke Developed Index 50 or less (UL labeled).

**ASTM E1264 Classification**  
 Type XII, Form 2, Pattern E  
 Fire Class A

**Humidity/Sag Resistance**  
 HumiGuard® Plus ceiling panels are recommended for areas subject to high humidity, up to, but not including, standing water and outdoor applications.

**Mold/Mildew Protection**  
 Ceiling panels with BioBlock® resist the growth of mold and mildew.

**VOC Emissions (PB suffix items only)**  
 Third-party certified compliant with California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010. This standard is the guideline for low emissions in LEED, CalGreen Title

24, ANSI/ASHRAE/USGBC/IES Standard 189; ANSI/GBI Green Building Assessment Protocol.

**Primary (Embodied) Energy**  
 See all LCA information on our EPDs.

**High Recycled Content**  
 Contains greater than 50% total recycled content. Total recycled content based on product composition of post-consumer and pre-consumer (post-industrial) recycled content per FTC guidelines.

**Acoustical Details**  
 Some items have CAC backing. CAC backing may be available as a special order. A CAC value of 37 can be achieved by backloading fiberglass products with item 769 or 770.

**Insulation Value**  
 3153, 3158, 3353, 3154, 3160, 3157 – R Factor – 4.0 (BTU units)  
 R Factor – 0.70 (Watts units)  
 3151, 3161, 3162, 3164 – R Factor – 3.0 (BTU units)  
 R Factor – 0.53 (Watts units)  
 3155, 3356 – R Factor – 6.0 (BTU units)  
 R Factor – 1.05 (Watts units)

**Application Consideration**  
 Do not mix Optima panels and Optima® Health Zone™ panels in the same room.

**30-Year Performance Guarantee & Warranty**  
 When installed with Armstrong® Suspension System. Details at [armstrongceilings.com](http://armstrongceilings.com)

**Weight; Square Feet/Carton**  
 3151, 3151PB – 0.44 lbs/SF; 128 SF/ctn  
 3153, 3153PB, 3160, 3160PB – 0.45 lbs/SF; 96 SF/ctn  
 3155, 3356 – 0.61 lbs/SF; 64 SF/ctn  
 3158 – 0.47 lbs/SF; 75 SF/ctn  
 3353 – 0.46 lbs/SF; 96 SF/ctn  
 3154 – 0.45 lbs/SF; 128 SF/ctn  
 3157 – 0.56 lbs/SF; 100 SF/ctn  
 3161 – 0.43 lbs/SF; 96 SF/ctn  
 3164 – 0.43 lbs/SF; 100 SF/ctn  
 3162 – 0.42 lbs/SF; 128 SF/ctn

**Minimum Order Quantity**  
 1 carton

**Metric Items Available**  
 3151M, 3153M, 3154M, 3155M, 3158M, 3160M, 3353M, 3356M – Metric items are subject to extended lead times and minimum quantities. Contact your representative for more details.



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