

# OPAL COLLECTION

<b>PRODUCT SPECIFICATIONS</b>			
Product Dimensions	Overall Thickness	5mm (Including Pad)	
	Width and Length	7" W x 48.6" L	
Packaging (Per Carton)		9 Planks	21.29 Sq.Ft. 36.86 Lbs.
Construction	Top Layers	High Definition Decor Film	
		Quartz-Enhanced Acrylic Coating	
		20 Mil Wear Layer	
	Core	4mm Stone Composite Flooring (SCF) - over 70% stone 100% Virgin Material	
	Density	≥ 1900 kg/m <sup>3</sup>	
	Pad	1 mm Anti-microbial EVA Foam	
Bevel	Painted bevel		
Installation	Floating Glueless Tap-Down or Glue-Down		
Under Floor Heating	Approved - See installation manual for details.		
Warranty	Lifetime Residential/15 Years Light Commercial/5 Years Commercial		
<b>Test Data</b>			
Static Load	NALFA ANSILF-01-2011	<b>2000 psi</b> Class 4, Heavy Commercial	
Heat Exposure Resistance F1700	ASTM F2199 EN16511	0.03% Class 34, Heavy Commercial	
Swelling after submersion	NALFA LF 01-2011	0% Class 4, Heavy Commercial	
Impact Insulation Class	ASTM E492-09	IIC Rating = 66	
Sound Transmission Class	ASTM E413-16	STC Rating = 68	
Fire Rating	ASTM E648/ 662	Class I	
Wear Resistance	NALFA LF 01-2011	Class 4, Heavy Commercial	
Residual Indentation F1700	ASTM F1914 EN 16511	Pass Class 34, Heavy Commercial	
Impact Resistance (Big Ball)	NALFA LF01-2011 EN 16511	Class 4, Heavy Commercial IC3, Class 34, Heavy Commercial	
Impact Resistance (Small Ball)	NALFA LF01-2011 EN 16511	Class 4, Heavy Commercial IC3, Class 34, Heavy Commercial	
Slip Resistance	ASTM C1028	Dry: 0.8, Wet: 0.76 Pass, Meets ADA	
Resistance to staining F1700	ASTM F925 NALFA LF01-2011	Pass Class 4, Heavy Commercial	
Chemical Composition			
VOC	FloorScore™	Pass California 01350	

Ortho-phthalates	Prop 65	Not Detected / In Compliance
Lead	CPSIA	None Detected
Substances of Very High Concern (SVHC) (Mercury, Chromium VI, Cadmium, SCCp, Benzene, Xylene, Tributyltin, etc.)		Not Detected / REACH Compliant

<b>LEED SCORECARD</b>					
<b>LEED PROGRAM CERTIFICATION</b>	<b>CATEGORY</b>	<b>CREDIT TITLE</b>	<b>LEED POINTS ATTAINABLE</b>	<b>CREDIT DESCRIPTION</b>	<b>HOW OUR PRODUCTS CONTRIBUTE TO OBTAIN LEED POINTS</b>
<b>BD + C</b> Building Design and Construction  Applies to buildings that are being newly constructed or going through a major renovation; includes New Construction, Core & Shell, Schools, Retail, Hospitality, Data Centers, Warehouses & Distribution Centers, and Healthcare	Indoor Environmental Quality	Credit 1: Enhanced Indoor Air Quality Strategies - Option 2 Additional Enhanced IAQ Strategy - Option D	1 Point ID&C 2 Points Retail CI	To reduce concentrations of chemicals that can damage air quality, human health, productivity, and the environment.	1. Formaldehyde emissions are less than 0.05mg/m3, TVOCs are less than 0.5mg/m3. 2. The product is FloorScore™ certified.
		Credit 2: Low-Emitting Materials - Option 1 Flooring	1 Point		1. VOC emissions are less than 0.5mg/m3. 2. The product is FloorScore™ certified.
		Credit 4: Indoor Air Quality Assessment - Option 2 Air Testing	2 Points	To establish better quality indoor air in the building	1. Formaldehyde emissions and TVOCs are less than 0.05mg/m3. 2. The product is FloorScore™ certified.
		Credit 9: Acoustic Performance	2 Points	To provide effective acoustic design	The product has a high acoustic performance. IIC and STC test reports are available on request.
	Material & Resource	Credit 4: Material ingredient - Option 2	1 Point	Minimize the use and generation of harmful substances	The product is 100% REACH compliant
		Credit 6 - PBT source reduction: Lead, Cadmium and Copper	1 Point	To reduce the release of persistent, bioaccumulative, and toxic chemicals	The product is free of lead, cadmium and copper
<b>O + M</b> Building Operations and Maintenance	Material & Resource	Credit 3: Purchasing - Facility maintenance and renovation	1 Point	To reduce the environmental harm from materials used in building renovations	1. The product is 100% REACH compliant. 2. Formaldehyde emissions and TVOCs are less than 0.05mg/m3. 3. The product is FloorScore™ certified.
<b>HOMES</b> Applies to single family homes, low-rise multi-family (one to three stories), or mid-rise multi-family (four to six stories).	Indoor Environmental Quality	Credit 2: Containment Control - Option 4 Air Testing	1 Point	Demonstrate that contaminants do not exceed concentration levels listed	The product is FloorScore™ certified.
	Material & Resource	Credit 7: Low-Emitting Materials	0.5 Point	To reduce occupant's exposure to airborne chemical contaminants	The product is FloorScore™ certified and meets the requirements of CA Section 01350. The product is made with ULEF or non-added formaldehyde material
<b>ID &amp; C</b> Interior Design and Construction  Applies to projects that are a complete interior fit-out; includes Commercial Interiors, Retail and Hospitality.	Indoor Environmental Quality	Credit 1: Enhanced Indoor Air Quality Strategies - Option 2 Additional Enhanced IAQ Strategies - Option D	1 Point ID&C 2 Points Retail CI	To reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.	1. Formaldehyde emissions and TVOCs are less than 0.05mg/m3. 2. The product is FloorScore™ certified.
		Credit 2: Low-Emitting Materials - Option 1 Flooring	1 Point		1. VOC emissions are less than 0.5mg/m3. 2. The product is FloorScore™ certified.
		Credit 4: Indoor Air Quality Assessment - Option 2 Air Testing	2 Points	To establish better quality indoor air in the building	1. Formaldehyde emissions and TVOCs are less than 0.05mg/m3. 2. The product is FloorScore™ certified.
		Credit 9: Acoustic Performance	2 Points	To provide workspaces and classrooms effective acoustic design	The product has a high acoustic performance. IIC and STC test reports are available on request.
	Material & Resource	Credit 4: Material ingredient - Option 2	1 Point	Minimize the use and generation of harmful substances	The product is FloorScore™ certified.

## WELL SCORECARD

The WELL Building Standard is founded on the understanding that facets of our environment interact with personal, genetic and behavioral factors to shape our overall health and well-being. By compiling leading practices in building design and management and referencing existing standards and best practice guidelines set by governmental and professional organizations, WELL works to harmonize and clarify existing thresholds and requirements.

### AIR

#### Feature 01. Air Quality Standards

REQUIREMENT	CONCEPT SCORE	HOW OUR PRODUCTS CONTRIBUTE TO OBTAIN LEED POINTS
Part 1. Standards for Volatile Substances	PRECONDITION	a. Formaldehyde emissions are less than 0.05mg/m <sup>3</sup> b. Total volatile organic compounds less than 500ug/m <sup>3</sup> (0.5mg/m <sup>3</sup> )

#### Feature 04. VOC Reduction

REQUIREMENT	CONCEPT SCORE	HOW OUR PRODUCTS CONTRIBUTE TO OBTAIN LEED POINTS
Part 1. Interior Paints and Coatings	PRECONDITION	a. The VOC limits for California Air Resources Board (CARB) are less than 0.11 ppm.  b. Measured Concentration of Total Volatile Organic Compounds (TVOC): Less than/equal to 0.5 mg/m <sup>3</sup> (in compliance with CDPH/EHLB Standard Method v1. 1-2010).  The product is FloorScore™ certified.
Part 3. Flooring	PRECONDITION	Conforms to the CDPH/EHLB Standard Method v1. 1-2010 (California Section 01350), effective January 1, 2012, for the school classroom and private office parameters when modeled as Flooring.  The product is FloorScore™ certified.

#### Feature 11. Fundamental Material Safety

REQUIREMENT	CONCEPT SCORE	HOW OUR PRODUCTS CONTRIBUTE TO OBTAIN LEED POINTS
Part 1. Asbestos and Lead Restriction	PRECONDITION	a. No asbestos. b. The product contains less than 100 ppm.
Part 2. Lead Abatement	PRECONDITION	The product contains less than 90 ppm.
Part 3. Asbestos Abatement	PRECONDITION	The product contains less than 90 ppm.

#### Feature 25. Toxic Material Reduction

REQUIREMENT	CONCEPT SCORE	HOW OUR PRODUCTS CONTRIBUTE TO OBTAIN LEED POINTS
Part 2. Flame Retardant Limitation	OPTIMIZATION	The product does not contain halogenated flame retardants

Part 3. Phthalate (Plasticizers) Limitation	DEHP, DBP, BBP, DINP, DIDP or DNOP (often found in polyvinyl chloride [PVC]) are limited in the following components to 0.01% (100 ppm): a. Flooring, including resilient and hard surface flooring and carpet. b. Wall coverings, window blinds and shades, shower curtains, furniture and upholstery. c. Plumbing pipes and moisture barriers.	OPTIMIZATION	In accordance with US Consumer Product Safety Improvement Act 2008 (CPSIA) (H.R.4040) Title I, Section 108 & California Proposition 65 & Annex XV II item 51 & 52 of the REACH Regulation (EC) No. 1907/2006 and amendment No. 552/2009, the product contains less than 100ppm.
Part 5. Urea-Formaldehyde Restriction	Urea-formaldehyde presence is limited in the following components to 100 ppm: a. Furniture or any composite wood products. b. Laminating adhesives and resins. c. Thermal insulation.	OPTIMIZATION	The product contains urea-formaldehyde less than 100ppm.

**COMFORT**

Feature 74. Exterior Noise Intrusion

REQUIREMENT		CONCEPT SCORE	HOW OUR PRODUCTS CONTRIBUTE TO OBTAIN LEED POINTS
Part 1. Sound Pressure Level	Each regularly occupied space meets the following sound pressure level as measured when the space and adjacent spaces are unoccupied, but within 1 hour of normal business hours: a. Average sound pressure level from outside noise intrusion does not exceed 50 dBA.	PRECONDITION	1. The product has IIC = 66 according to the standard ASTM E492-09

Feature 79. Internally Generated Noise

REQUIREMENT		CONCEPT SCORE	HOW OUR PRODUCTS CONTRIBUTE TO OBTAIN LEED POINTS
Part 1. Sound Masking Limits	If sound masking systems are used, sound levels fall within the following range, when measured from the nearest work space: a. Open workspaces: 45 - 48 dBA. b. Enclosed offices: 40 - 42 dBA	OPTIMIZATION	1. The product has IIC = 66 according to the standard ASTM E492-09