



DINO FLEX Group Limited Partnership



LEED



GREEN BUILDING RATING SYSTEMS

LEED Canada - Green Building Rating Systems

Through its use as a design guideline and third-party certification tool, LEED aims to improve occupants well being, environmental performance and economic returns of buildings using established and innovative practices, standards and technologies. It provides one definition, widely accepted by industry, for what currently constitutes a “green building”.

Within LEED Canada there are currently **5 different rating systems** used for various types of building projects:

- 1. New Construction (NC) 1.0:** addresses the performance of commercial and institutional buildings, i.e., buildings regulated by Part 3 of the National Building Code (NBC). It also applies to retail, mid- and high-rise Multi-Unit residential buildings, public assembly buildings, etc.
- 2. Commercial Interiors (CI):** tenant improvements of new or existing office space.
- 3. Core & Shell (CS):** is a derivative of LEED Canada NC and applies to buildings where less than 50% of the building area will be fit-up to LEED Canada NC requirements prior to certification.
- 4. Existing Buildings: Operations and Maintenance (EBOM):** Operations and Maintenance represents an ongoing commitment by building operators to continuously assess the environmental performance of their buildings.
- 5. Homes:** is a rating system that promotes the design and construction of high-performance green homes. A green home uses less energy, water and natural resources; creates less waste. and is healthier and more comfortable for the occupants.

Coming soon: Neighborhood Developments: sustainable community development. The CaGBC has been approached by industry leaders and local governments across the country to introduce LEED ND in Canada as soon as possible.

LEED Canada - Green Building Performance Criteria

Within the LEED Canada rating systems each consists of an explicit set of environmental performance criteria, organized within 5 key performance categories;

- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality

A sixth category, **Innovation and Design Process**, rewards exceptional environmental performance or innovation over and above that explicitly covered in the basic LEED credits.

Project ratings are certified by the CaGBC based on the total point score, following an independent review and audits CaGBC awards LEED credits in several categories and the number of credits and points possible differ per performance category and rating system.

With four possible levels of certification:

- Certified
- Silver
- Gold
- Platinum

LEED is flexible enough to accommodate a wide range of green building strategies that best fit the constraints and goals of particular projects.

This chart summarizes the potential performance categories Dinoflex recycled rubber products may contribute to help your project attain the one (1) LEED point for each category.

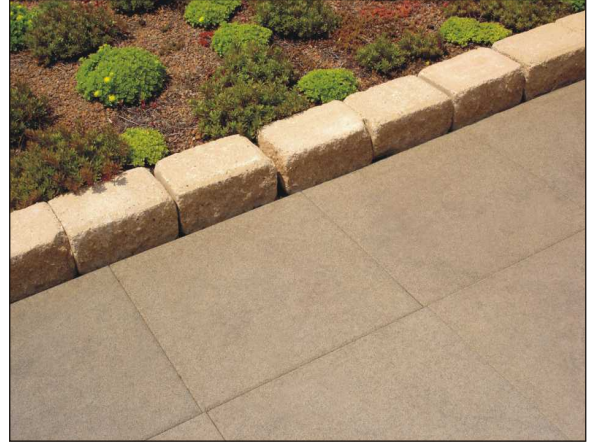
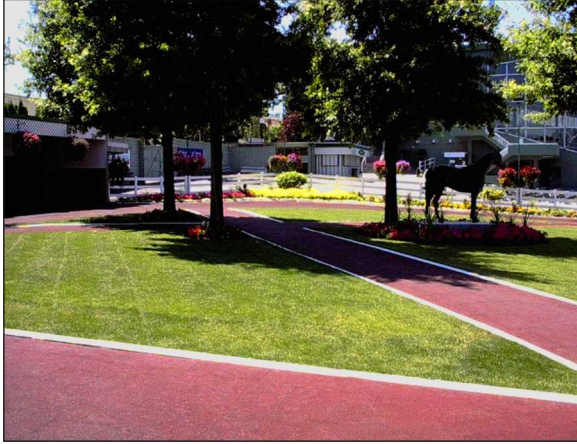
Performance Category	Sub-Category	Credit	Rating System	
Sustainable Site	Storm-water Management	SS 6.1	NC 1.0 only	
Materials & Resources	Construction Waste Management	MR 2.1	NC; CI; CS; EB	
	Recycled Content	MR 4.1	NC; CI; CS; EB	
	Recycled Content	MR 4.2	NC; CI; CS; EB	
	Regional Materials	MR 5.1	NC; CI; CS; EB	<i>*check with product rep on transportation mode available</i>
	Regional Materials	MR 5.2	NC; CI; CSI; EB	<i>*check with product rep on transportation mode available</i>
Indoor Environmental Quality	Low Emitting Adhesives / Sealers	EQ 4.1	NC; CI; CS; EB	
SCS-1350	Low Emitting Flooring Systems		Anticipated inception into LEED Canada	CA 01350 Compliant; FloorScore certification pending.
Innovation & Design	Innovation	ID 1.1	NC; CI; CS; EB	<i>*using interlocking products removes adhesive requirements</i>

LEED Canada for Homes is newly released and is assessed using 8 Performance Categories and can earn up to 136 points. **This rating category is utilized by specific Residential Home Builders. See CaGBC website for list of builders. Dinoflex is currently performing further testing on its products to help qualify in this rating program. *(Surface Water Management; Environmentally Preferable Products; & Waste Management).*

Sustainable Sites: Credit 6.1 - Stormwater Management

Potential Strategies and Technologies: Specify garden roofs and pervious paving to minimize impervious surfaces.

Strategy: Dinoflex Exterior Recycled Rubber Surfacing - CushionWalk Pavers or NuVista Tiles



Porosity of:

CushionWalk Pavers = 2.3 fluid ounces per square inch of area per minute

NuVista Tiles = drained 4 litres of water in 306.71 seconds

Playground Tiles = 2.25" all black tile drained 4 litres of water in 319.56 seconds

Environmental Choice

Material & Resources: Credit 2.1 Construction Waste Management

Potential Strategies and Technologies: Establish goals for landfill diversion - note that salvage may include donation of materials to charitable organizations.

Strategy: Dinoflex will take returns of any unused Dinoflex products including scrap pieces and re-use in its manufacturing of other products.



Top View

NUVISTA Tiles



Back View

The NuVista Tile backing is made from re-ground scrap rubber.

Extracted and Manufactured in Canada

Material & Resources: Credit 4.1

Recycled Content: 7.5% (Post-Consumer + ½ Pre-Consumer)

Potential Strategies and Technologies: Establish goals for recycled content materials - during construction ensure specified recycled content materials are installed and quantify percentage.

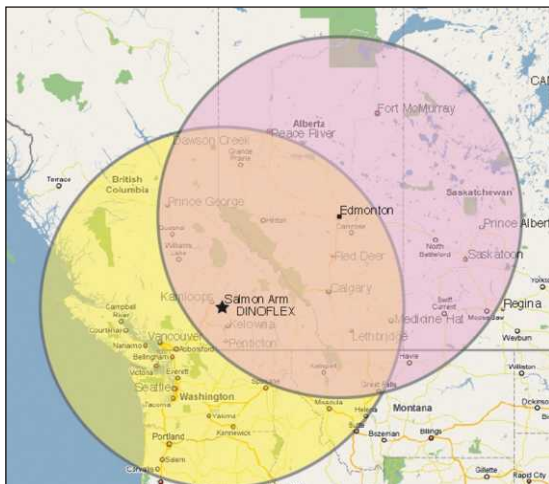
Strategy: Dinoflex interior and exterior surfacing materials vary with amounts of recycled content - reference recycled content chart 1.1.

Material & Resources: Credit 4.2

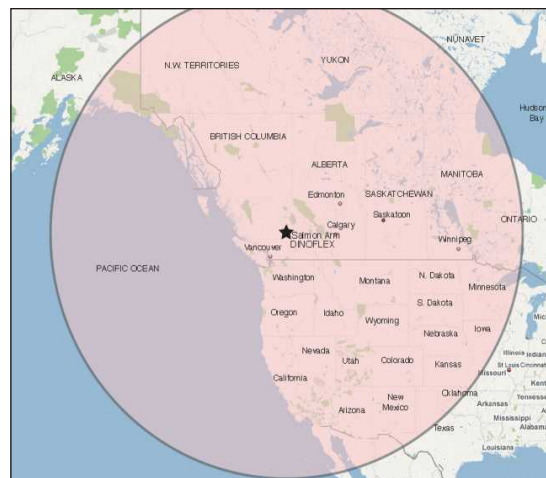
Recycled Content: 15% (Post-Consumer + ½ Pre-Consumer)

Potential Strategies and Technologies: Establish goals for recycled content materials - during construction ensure specified recycled content materials are installed and quantify percentage.

Strategy: Dinoflex interior and exterior surfacing materials vary with amounts of recycled content - reference recycled content chart 1.1.



800 kms (500 miles)



2400 kms (1500 miles)

Material & Resources: Credit 5.1

Regional Materials: 10% Extracted and Manufactured Regionally

Potential Strategies and Technologies: Establish 10% of building materials are regionally sourced materials, specific requirements - determine if project is outside of radius of 800 km (500 miles) limit, check with rep if materials can be shipped by rail-then increased radius limit up to 2400 km (1500 miles).

Strategy: Dinoflex post-consumer materials are extracted within 300 km of manufacturing location - check recycled content chart 1.1 to ensure 80% of the mass is extracted, processed and manufactured within required radius.

Material & Resources: Credit 5.2

Regional Materials: 20% Extracted and Manufactured Regionally

Potential Strategies and Technologies: Establish 20% of building materials are regionally sourced materials, specific requirements - determine if project is outside of radius of 800 km (500 miles) limit, check with rep if materials can be shipped by rail-then increased radius limit up to 2400 km (1500 miles).

Strategy: Dinoflex post-consumer materials are extracted within 300 km of manufacturing location - check recycled content chart 1.1 to ensure 80% of the mass is extracted, processed and manufactured within required radius.

Recycled Content Chart (chart 1.1)

RECYCLED CONTENT CHART			
EVOLUTION RUBBER TILE	Total % RECYCLED	Post-Consumer CONTENT	Post-Industrial CONTENT
Rain Forest #514E43 Casino Royale #514E44 Purple Rain #514E45 Dream Catcher #514E46	64.14%	58.08%	6.06%
Spanish Moss #514E58 Sapphire Haze #514E62 Smoky Azure #514E63	63.67%	57.56%	6.11%
Fire Fly #014E41 Moon Beam #014E42	61.14%	54.40%	6.74%
Stone Ground #014E54 Burning Embers #014E68	53.00%	44.17%	8.83%
Rio Grande #004E81 Flamenco #014E82 Mardi Gras #014E83	52.25%	43.00%	9.25%
Irish Moss #014E59 Pixie Moss #014E60 Liquid Metal #014E64 Brush Fire #004E66 Molten Lava #014E67 Mesquite #004E50	50.50%	41.00%	9.50%
Muddy Water #014E52 Spun Silver #014E65	36.52%	23.32%	13.20%
Adobe #004E51 Wheat #004E55 Baked Clay #001E53 Sunflower #014E56 Glade Moss #004E61	30.18%	15.40%	14.78%
Oatmeal #014E57 Hot Salsa #014E69	17.86%	0%	17.86%

RECYCLED CONTENT CHART			
SPORT MAT FLOORING PRODUCTS	Total % RECYCLED	Post-Consumer CONTENT	Post Industrial CONTENT
100% Recycled Black	88%	88%	
Standard Colors • 10% Speckle & Two Color	82%	80%	2%
Granite Flex	86%	79%	7%
Granite Flex Plus	78%	70%	8%
Decor Collection	73%	69%	4%
Standard Colors • 30% Speckle	73%	69%	4%
Stone Line	64%	17%	47%
Standard Colors • 50% Speckle	64%	58%	6%
Elite Line	22.10%	5.04%	17.06%

RECYCLED CONTENT CHART			
DINOFLEX EXTERIOR SURFACING PRODUCTS	Total % RECYCLED	Post-Consumer CONTENT	Post-Industrial CONTENT
Playground Tiles			
100% Recycled Black	91%*	91%*	
Pigment Colors: Red, Green, Beige, Brown	91%*	91%*	
EPDM Speckled Colors: 25%	86%*	85%*	1%*
50%	83%*	81%*	2%*
75%	79%*	76%*	3%*
CushionWalk® Pavers			
100% Recycled Black	90%*	90%*	
Pigment Colors: Red, Green, Beige, Brown	90%*	90%*	
EPDM Speckled Colors: 25%	73%*	68%*	5%*
50%	63%*	56%*	7%*
75%	43%*	31%*	12%*
NuVISTA Tiles			
100% Recycled Black	90%*	25%*	65%*
Pigment Colors: Red, Green, Beige, Brown	90%*	25%*	65%*
EPDM Speckled Colors: 25%			
50%			
75%			

*Varies slightly with tile size.



One passenger tire provides enough recycled crumb rubber for 11.5 sq.ft. of black rubber flooring 5/16" (8 mm) thick.



Any unused Dinoflex recycled rubber materials can be sent back to our manufacturing facility for recycling. The materials are reclaimed and used in the manufacturing of our other environmentally friendly Dinoflex products!

Environmental Quality: Credit 4.1

Low Emitting Adhesives & Sealants

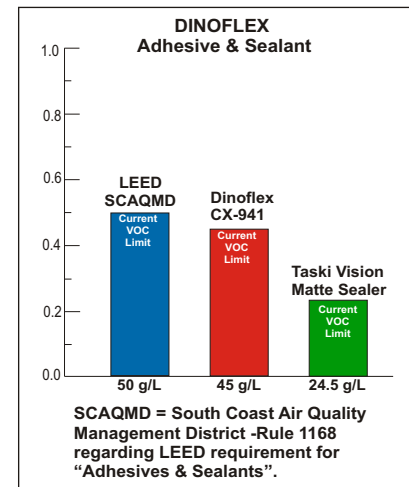
Potential Strategies and Technologies: Specify low-VOC materials that meet emission limits.

Strategy: Dinoflex recommended Adhesive - CX941 or Sealer - Taski Vision.

DINOFLEX CX-941 adhesive is a single component polyurethane based trowel-grade, structural adhesive. The patented formula is VOC compliant and it does not contain any solvents or water.

CX-941 provides excellent grab and outstanding bond strength. It is formulated for indoor and outdoor applications. The VOC content is 45 grams per liter, which falls below the current SCAQMD VOC limit of 50 grams per liter.

Taski Vision Matte Sealer is a very uniquely formulated floor finish that provides a durable protective coating, while providing a low gloss silky shine. VOC content is 24.5 grams per liter.



Low Emitting Materials Chart

Low Emitting Flooring Systems

SCS-1350 Compliant - Floorscore Certification Pending

Floorscore, a voluntary independent program which was developed by the resilient floor covering institute (RFCI) and is managed by SCS - Hard surface flooring and flooring adhesives that earn this certification meet the indoor air emission criteria of California 01350 and LEED EQ 4.1 and 4.3.

Innovation & Design Process: Credit 4.1

Potential Strategies and Technologies: Substantially exceed a LEED performance credit.

Strategies:

- 1) Dinoflex interlocking recycled rubber indoor flooring requires no adhesive in certain applications. This product extends life as it can be managed and turned over and re-used or removed and used in another application. (See chart 3.1)
- 2) Dinoflex Underlay and Rubber Tiles contribute to Acoustic Performance and can be applied in demonstrating that the acoustical performance improvements of a building clearly enhance the indoor environment in ways consistent with the preservation of human health and maximization of occupant productivity.

SUSTAINABLE

Under normal type of foot traffic and wear, rubber flooring typically outlasts carpet and linoleum. The interlocking pieces can be moved from high traffic to low traffic zones, thus extending their performance period.

In addition, the tiles are fully reversible and easy to re-install. When combined with the above mentioned floor management, the useful life-span may be doubled or even tripled.



For Further Information:
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