



DINOFLEX Group Limited Partnership



LEED®



Canada

**GREEN BUILDING
RATING SYSTEMS**

**A guide to how *Dinoflex* products
can help you achieve your LEED
project goals**



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LEED Canada – Green Building Rating Systems

What is LEED?

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a third party certification program. Through its use as a design guideline, LEED aims to improve human and environmental health, environmental performance and economic returns of buildings using the established and innovative practices, standards and technologies.

By utilizing a process of development that includes and engages various sectors' stakeholders and experts, LEED Canada is tailored specifically for the Canadian market. Recognizing regional climate differences, construction practices and regulations the Canadian rating system is based on an adaptation of the US Green Building Council's (USGBC) LEED Green Building Rating System.

With a focus on a whole-building approach to sustainability each category consists of an explicit set of environmental performance criteria, organized within five 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 audit.

There are four possible levels of LEED Certification:

- Certified
- Silver
- Gold
- Platinum

Dinoflex and Your LEED Project

With over 20 years of experience Dinoflex takes great pride in offering surfacing solutions that are manufactured with a focus on environmental responsibility, offering not only high quality, but safe materials in their products.

The following chart summarizes the potential performance categories Dinoflex recycled rubber products may contribute to help your project attain LEED points.

Performance Category	Sub-Category	Credit	Rating System
Sustainable Sites	Surface Water Management	SS 4.1	Homes
	Storm-water Design	SS 6.1	NC; CS
Materials & Resources	Building Re-use	MR 1.2	NC; CI
	Building Re-use	MR 1.3	CI
	Construction Waste Management	MR 2	NC; CS
	Construction Waste Management	MR 2.1 & 2.2	CI
	Environmentally Preferable Products	MR 2.2	Homes
	Sustainable Purchasing	MR 3	EB
	Recycled Content	MR 4	NC; CS
	Recycled Content	MR 4.1 & 4.2	CI
	Regional Materials	MR 5	NC; CS
	Regional Materials	MR 5.1 & 5.2	CI
	Solid Waste Management	MR 8	EB
Indoor Environmental Quality	Low-Emitting: Adhesives/Sealants	IEQ 4.1	NC; CS; CI
	Low-Emitting: Flooring Systems	IEQ 4.3	NC; CS
Innovation in Design	Innovation	ID 1	NC; CS; CI; Homes

NC = New Construction and Major Renovations
 CS = Core and Shell
 CI = Commercial Interiors
 EB = Existing Buildings
 Homes

Sustainable Sites

➤ Homes

SS 4 – Surface Water Management

SS 4.1 Permeable Lot

With the assistance of an experienced professional, install permeable paving with proper base drainage that will direct the flow of water away from the home.

Credits achieved are dependant upon the percentage of Buildable Land that is permeable, or designed to capture runoff for infiltration on-site.

Breakdown of available points:

70 – 79% of Buildable Land = 1 point

80 – 89% of Buildable Land = 2 points

90 – 99% of Buildable Land = 3 points

100% of Buildable Land = 4 points

Recommendation: Use Dinoflex Pavers or Exterior Tiles for a porous landscaping product

➤ New Construction & Major Renovations / Core and Shell

SS 6.1 – Stormwater Design: Quantity Control

Utilize permeable landscaping products, such as pervious pavers, into the landscaping design in order to maintain natural stormwater flows.

Recommendation: Use Dinoflex Pavers or Exterior Tiles for a porous landscaping product

Materials & Resources

➤ New Construction & Major Renovations / Commercial Interiors

MR 1.2 – Building Re-use: Maintain Interior Non-Structural Elements

Re-use existing non-structural interior elements for *minimum required percentage of surface area to extend the life cycle of existing elements, reduce waste and reduce environmental impacts of new buildings. *50% for NC, 40% for CI

Recommendation: Loose lay Interlocking mats can be removed during construction/renovations, and then re-installed without the need or use of adhesive.

➤ Commercial Interiors

MR 1.3 – Building Re-use: Maintain Interior Non-Structural Elements

***In addition to MR 1.2**

Re-use existing non-structural interior elements for minimally 60% of surface area to extend the life cycle of existing elements, reduce waste and reduce environmental impacts of new buildings.

Recommendation: Loose lay Interlocking mats can be removed during construction/renovations, and then re-installed without the need or use of adhesive.

➤ New Construction / Core and Shell

MR 2 – Construction Waste Management

Redirect recyclable, or salvaged materials back to the manufacturing process and redirect reusable materials for re-installation within new projects or alternate locations.

Breakdown of available points:

50% Recycled or Salvaged = 1 Point

75% Recycled or Salvaged = 2 Points

Recommendation: Edgings and trimmings from flooring products can be shipped back to the manufacturing plant for regrinding and use in alternate products. Loose lay interlocking mats from buildings being demolished or fully remodeled can be donated to local junior sports or not-for-profit organizations.

Materials & Resources (cont.)

➤ Commercial Interiors

MR 2.1 & MR 2.2– Construction Waste Management, Divert 50% from Landfill

Redirect recyclable, or salvaged materials back to the manufacturing process and redirect reusable materials for re-installation within new projects or alternate locations.

MR 2.1 = 50% Diverted from the landfill

MR 2.2 = 75% Diverted from the landfill

Recommendation: Edgings and trimmings from flooring products can be shipped back to the manufacturing plant for regrinding and use in alternate products. Loose lay interlocking mats from buildings being demolished or fully remodeled can be donated to local junior sports or not-for-profit organizations.

➤ Homes

MR 2.2 – Environmentally Preferable Products

Use environmentally preferred products, and products or building components that are extracted, processed and manufactured within the region. Products manufactured with recycled content, low VOC or regionally can add 0.5 credits per contributing component.

Recommendation: Use of our Interior and exterior surfacing, plus adhesive can add up to 2.5 credits towards the LEED project; including 0.5 for FloorScore certification. An additional .5 credit is available for regional projects (per component).

➤ Existing Buildings

MR 3 – Sustainable Purchasing: Facility Alterations and Additions

The intent of this credit is to reduce the environmental and air quality impacts of the materials acquired for use in the upgrade of buildings. One point is awarded to projects that achieve sustainable purchases of 50% of the total purchases (by cost) during the performance period (5 year re-certification mandate).

Recommendation: Use our interior surfacing for recycled content; as well, regional, direct shipment within the region (did not go to Vancouver, then ship to Calgary), VOC compliant adhesive and FloorScore certification will also add additional dollar contributions.

➤ New Construction / Core and Shell

MR 4 – Recycled Content

The intent of this credit is to increase the demand for building products that incorporate recycled content materials.

Calculation of the credits available:

The sum of the post-consumer recycled contents plus ½ of the pre-consumer content constitutes at least 10% or 20%, based on cost, of the total value of the materials in the project.

Recycled Content: 10% = 1 Point 20% = 2 Points

Recommendation: Dinoflex products, both Interior and Exterior contain varying percentages of recycled tire crumb. Please refer to the following list or contact your Dinoflex Representative for specific color or product requests.

➤ Commercial Interiors

MR 4.1 & 4.2 – Recycled Content

The intent of this credit is to increase the demand for building products that incorporate recycled content materials.

Calculated as noted above

MR 4.1 = 1 point for 10% Recycled Content MR 4.2 = 1 additional point for 20% Recycled Content

Recommendation: Dinoflex products, both Interior and Exterior contain varying percentages of recycled tire crumb. Please refer to the following list or contact your Dinoflex Representative for specific color or product requests.

MATERIAL & RESOURCES: RECYCLED CONTENT CHART

INTERIOR SURFACING – Sport Mat & Evolution					
Sport Mat			Total %	Post-Consumer	Pre-Consumer
100% Recycled Black			88%	88%	
Metro Line			78%	75%	3%
Standard Colors - 10% Speckle & 2 Color Combination			82%	80%	2%
Granite Flex			81%	74%	7%
Granite Flex Plus			79%	71%	8%
Décor Collection			73%	69%	4%
Standard Colors - 30% Speckle			73%	69%	4%
Standard Colors - 50% Speckle			64%	58%	6%
Stone Line			33%	19%	14%
Elite Line			22%	5%	17%
Evolution (Foundation & Imagination)			Total %	Post-Consumer	Pre-Consumer
Banana Pepper E23 Oatmeal E57	Calypso Yellow E24	Hot Salsa E69	18%	0%	18%
Fireworks E87 Snow Drift E75	Iceberg E84 Wind Chill E90	Nordic Fog E25	29%	14%	15%
Adobe E51 Bell Pepper E15 Calypso Green E13 Firestorm E95 Glade Moss E61 Harbor Mist E98 Jalapeno Pepper E86 Red Pepper E94 Sweet Pepper E16 Winter Green E26	Arctic Night E88 Blueberry Twist E99 Calypso Red E93 Fireweed E19 Grape Twist E27 Hot Pepper E92 Niagara Mist E77 Sandlewood E80 Tidal Pool E85	Baked Clay E53 Calypso Blue E97 Clear Waters E11 Glacier Ice E48 Green Pepper E14 Icicles E78 Plum Twist E12 Sunflower E56 Wheat E55	30.4%	15.7%	14.7%
Corkwood E79 Spun Silver E65	Lemon Pepper E22 Twilight Mist E91	Muddy Water E52	37.6%	24.6%	12.9%
Brush Fire E66 Mesquite E50	Irish Moss E59 Molten Lava E67	Liquid Metal E64 Pixie Moss E60	50.1%	40.5%	9.6%
Black Ice E74 Flamenco E82	Dogwood E70 Mardi Gras E83	Driftwood E73 Rio Grande E81	51.5%	42.2%	9.3%
Burning Embers E68 Rosewood E96	Muskwood E72 Stone Ground E54	Rip Tide E89	53.4%	44.6%	8.8%
Cracked Pepper E10			55.4%	47.1%	8.3%
Fire Fly E41	Moon Beam E42		57.5%	49.7%	7.8%
Casino Royale E44 Rain Forest E43, Spanish Moss E58	Dream Catcher E46 Sapphire Haze E62	Purple Rain E45 Smoky Azure E63	64.2%	58.2%	6%
EXTERIOR SURFACING – Tiles & Pavers (*Varies slightly with tile size)					
		Total %	Post-Consumer	Pre-Consumer	
Playground Tiles					
100% Recycled Black		90%*	90%*		
Pigment Colors: Red, Green, Beige, Brown		90%*	90%*		
EPDM Speckled Colors: 25%		86%*	85.5%*	.5%*	
50%		84%*	83%*	1%*	
75%		79%*	77%*	2%*	
90%		75%*	73%*	3%*	
CushionWalk® Pavers					
100% Recycled Black		90%*	90%*		
Pigment Colors: Red, Green, Beige, Brown		87%*	87%*		
EPDM Speckled Colors: 25%		69%*	65%*	4%*	
50%		62%*	56%*	6%*	
75%		56%*	49%*	7%*	
NuVista Tiles					
100% Recycled Black		90%*	14%*	72%*	
Pigment Colors: Red, Green, Beige, Brown		90%*	14%*	71%*	
EPDM Speckled Colors: 25%		84%*	11%*	73%*	
50%		81%*	9%*	72%*	
75%		78%*	8%*	70%*	

Materials & Resources (cont.)

➤ New Construction / Core and Shell

MR 5 – Regional Materials

The intent of this credit is to reduce the environmental impact resulting from transportation through the inclusion and use of indigenous resources, as well as materials extracted, processed and manufactured regionally.

Requirements:

Raw materials must be extracted, harvested, recovered and processed within 800km (2400km if shipped by rail or water) of the final manufacturing site.

PLUS: Final manufacturing site must be within 800km (2400km if shipped by rail or water) of the project site

Only the percentage of regional materials contained within the product can contribute to the credit (eg. \$1,000 cost x 70% regional materials = \$700 contribution).

Regional Content:

20% = 1 point

30% = 2 points

Recommendation: All Dinoflex products incorporate SBR (recycled tire crumb) processed within 800km radius of the final manufacturing plant. See map insert below for project areas reached within the compliant radius.

➤ Commercial Interiors

MR 5.1 & MR 5.2 – Regional Materials

The intent of this credit is to reduce the environmental impact resulting from transportation through the inclusion and use of indigenous resources, as well as materials extracted, processed and manufactured regionally.

Calculated as noted above

MR 5.1 = 1 point for 20% Regional Content MR 5.2 = 1 additional point for 30% Regional Content

Recommendation: All Dinoflex products incorporate SBR (recycled tire crumb) processed within 800km radius of the final manufacturing plant. See map insert below for project areas reached within the compliant radius.



Shaded areas indicate 500 miles from extraction and manufacturing location.

Materials & Resources (cont.)

➤ **Existing Building**

MR 8 – Solid Waste Management: Durable Goods

The intent of this credit is to reduce waste and toxins from the use of durable goods by building occupants and building operations that are hauled to and disposed of in landfills or incineration facilities.

Requirement:

Reuse or recycle 75% of the durable goods waste stream (by weight, volume or replacement value) during the performance period.

Recommendation: Lease office buildings, or buildings with reusable goods kept on hand for future requirements can benefit from using our loose lay interlocking mats. Flooring can be installed and removed without damage or the need for adhesive. At the end of the floor's life it can then be returned to the plant for regrinding and use in alternate products.

Indoor Environmental Quality

➤ **New Construction / Core and Shell / Commercial Interiors**

IEQ 4.1 – Low-Emitting Materials: Adhesive and Sealants

The intent of this credit is to improve the comfort and well-being of installers and occupants through the reduction of harmful, irritating and odorous indoor air contaminants.

Requirements: All adhesives and sealants must comply with SCAQMD Rule #1168

Recommendation: Dinoflex recommended adhesives and sealer are proven to provide superior performance with their recycled rubber flooring. These recommended products are also safe and VOC compliant – contact your Dinoflex representative to learn more about these product options.

➤ **New Construction / Core and Shell**

IEQ 4.3 – Low-Emitting Materials: Flooring Systems

The intent of this credit is to improve the comfort and well-being of installers and occupants through the reduction of harmful, irritating and odorous indoor air contaminants.

Recommendation: Dinoflex recycled rubber flooring is both FloorScore Certified and CHPS compliant.

Innovation & Design Process

The intent of this credit is to provide design teams and projects the opportunity to achieve exceptional performance above the requirements set by the LEED rating system and/or innovative performance in Green Building categories not specifically addressed by the rating system.

Recommendations: Following are suggested innovative features of our products.

- Loose lay, Interlocking floor mats:
 - Eliminates the need for adhesives
 - Can be removed and relocated as required/needed (ideal for leased spaces)
 - Life of floor can be extended by rotating from high traffic to low traffic areas
 - Life of floor can be doubled by flipping floor; reverse side will have “like new” appearance
- Product edgings and trimmings can be returned to the plant for regrinding into alternate products that can then be utilized in other areas of the project.
 - Example: Flooring scraps can be returned to the plant where they will be reground and used to manufacture some of our exterior landscaping products. These products can then be used for the same project as previous landscaping, thereby contributing further LEED points in addressing Storm and/or Surface Water related categories.

Naturally Dinoflex

As a sustainable product manufactured from recycled materials, Dinoflex Rubber Surfacing is the right choice for high performance green building design.

Our products not only help customers qualify for LEED credits, but they also, in themselves, pass stringent indoor air quality testing for low emissions of total volatile organic compounds.

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



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