UNIVERSITY OF BRITISH COLUMBIA Credit Guidance | Materials and Resources





Credit Guidance

Materials and Resources

Skeena Residence, UBC Okanagan Campus

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Prerequisite:

Storage and Collection of Recyclables

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver			Danimad
Okanagan			Required

REQUIREMENTS

All projects must comply as per the requirements of the LEED BD+C v4.1 Reference Guide.

VANCOUVER RESOURCES

Recycling Infrastructure Guidelines for UBC Buildings

UBC Recycling Programs including batteries, e-waste and light bulbs

Zero Waste Action Plan (2014)

UBC Technical Guidelines: Section 11 82 00 Waste Handling Equipment

VANCOUVER GUIDANCE

Teams are required to consult the Recycling Infrastructure Guidelines for UBC Buildings to ensure waste stream receptacles are sized and placed as required. Campus collection strategies are in place for mercury containing lamps, batteries, and electronic waste through UBC Risk Management and UBC Building Operations. Refer to the UBC Technical Guidelines – Vancouver Campus Section 11 82 00 Waste Handling Equipment for waste storage and enclosure details.

OKANAGAN RESOURCES

Recycling Infrastructure Guidelines for UBC Buildings

UBC Okanagan Waste & Recycling Programs (all)

E- Waste and Battery Recycling

UBC Technical Guidelines: Section 11 82 00 Waste Handling Equipment

OKANAGAN GUIDANCE

Teams are required to follow the Recycling Infrastructure Guidelines for UBC Buildings to ensure waste storage and space provisions are met. Campus collection for small and large e-waste are provided by Health, Safety and Environment and Facilities Management. Note that academic projects on the Okanagan campus are required to include pink e-waste collection tubes for removal of battery e-waste. Refer to the UBC Technical Guidelines: Section 11 82 00 Waste Handling Equipment for waste storage and enclosure details. Project teams are encouraged to confirm the design strategy early and liaise with the Campus Planning and Facilities Management office for campus specific direction.

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MR Credit:

Building Life Cycle Impact Reduction

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	3	2	Г
Okanagan	3	2	5

MR Credit:

Building Product Disclosure and **Optimization (BPDO)** - Environmental

Product Declarations

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	1	1	2
Okanagan	1	1	

REQUIREMENTS

All projects must comply as per the requirements of the LEED BD+C v4.1 Reference Guide, by applying Option 2 - Path 3: Whole-Building Life-Cycle Assessment to earn at least three points. Where applicable projects are encouraged to pursue Path 4. Projects should follow the UBC Whole Building Life Cycle Assessment Guidelines included in Appendix I.

Major renovations may comply by applying Option 1 - Building and Material Reuse to earn up to 5 points. If materials forming part of the building envelope are proposed to be reused, project teams should contact UBC Building Operations to understand any maintenance implications.

GUIDANCE

Project teams are encouraged to identify a specialist within the existing project team or a specialist consultant, to facilitate the LCA early in the design process and align this effort with the Integrative Process credit as applicable.

Projects should follow the UBC Whole Building Life Cycle Assessment Guidelines and the UBC LCA Step by Step guidance document included in Appendix I. An early LCA study is required before the Development Permit application, to help inform low carbon design, and a final LCA is required prior to occupancy to evaluate the final design.

REQUIREMENTS

All projects must comply as per the requirements of the LEED BD+C v4.1 Reference Guide, to earn at least one point. Teams are encouraged to pursue an additional point.

RESOURCES

USGBC BPDO Calculator

International Standard Organization

UBC Green Building Action Plan, Materials & Resources

GUIDANCE

UBC has prioritized materials that are third party certified for optimized life cycle impact as part of the Green Building Action Plan.

Project teams should carefully consider material attributes early in the design process and are encouraged to contact manufacturers and suppliers to request information and verification documentation for both attributes required by Option 1 and Option 2 where it is not already available, to help advocate for transparent and verified material attribute reporting.

RESOURCES

Appendix A - UBC Integrated Sustainability Process

Appendix I - UBC Whole Building Life Cycle Assessment Guidelines

UBC Embodied Carbon Pilot - Study of whole building life cycle assessment process at UBC (June 2021)

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MR Credit:

Building Product Disclosure and Optimization (BPDO) Sourcing of Raw Materials

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	1	1	2
Okanagan	1	1	

REQUIREMENTS

All projects must comply as per the requirements of the LEED BD+C v4.1 Reference Guide, to earn at least one point. Teams are encouraged to pursue an additional point.

RESOURCES

FSC Canada

Sustainable Agriculture Network

The Rainforest Alliance

<u>UBC Technical Guidelines: Section 09</u> 00 10 Finishes - General Requirements

USGBC BPDO Calculator

UBC Green Building Action Plan, Materials & Resources

GUIDANCE

UBC has prioritized the following material qualities as part of the Technical Guidelines for Sustainability:

- Reused or salvaged materials or equipment
- Materials that are certified as having an optimized life cycle impact by a third party
- Materials with recycled and recyclable content
- Materials that are appropriately and responsibly sourced
- Bio-based materials
- Wood

Project teams should carefully consider material attributes early in the design process and are encouraged to contact manufacturers and suppliers to request information and verification documentation where it is not already available, to help advocate for transparent and verified material attribute reporting.



Earth Sciences Building, UBC Vancouver Campus

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MR Credit:

Building Product Disclosure and Optimization (BPDO) Material Ingredients

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	1	1	2
Okanagan	1	1	Z

MR Credit:

Construction and Demolition Waste Management

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	1	1	2
Okanagan	1	1	

REQUIREMENTS

All projects must comply as per the requirements of the LEED BD+C v4.1 Reference Guide, to earn at least one point. Teams are encouraged to pursue an additional point.

RESOURCES

USGBC BPDO Calculator

International Standards Organization

UBC Green Building Action Plan, Materials & Resources

GUIDANCE

Supporting and advocating for healthy building materials and transparency is high priority for UBC. Project teams are encouraged to contact suppliers and manufacturers of products to request required documentation where it is not already available, to help advocate for verified material ingredient and attribute reporting.

REQUIREMENTS

All projects must comply as per the requirements of the LEED BD+C v4.1 Reference Guide, Option 1: Diversion to earn one point. While the credit will be earned by demonstrating 50% of waste diversion, the UBC Technical Requirements require a minimum of 75% waste diversion, and the UBC Green Building Action Plan sets a goal of 100% construction waste diversion by 2035.

Projects are encouraged to pursue compliance via Option 2: Waste Prevention for an additional point.

GUIDANCE

Refer to the UBC Technical Guidelines and the UBC Waste Requirements for Green Buildings for direction on preparing a Construction Waste Management Plan. Project teams are advised to ensure the management plan includes a robust and regular ongoing reporting protocol during construction to support the most successful process and highest diversion rates.

RESOURCES

UBC Technical Guidelines: Section
01 74 19 Construction Waste
Management and Disposal
(Vancouver and Okanagan)

UBC Vancouver Waste Requirements for Green Buildings

UBC Okanagan Waste Requirements for Green Buildings

Zero Waste Action Plan (2014)

UBC Green Building Action Plan Materials & Resources

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