

Quality

COMPONENT GOALS

01

UBC buildings and landscapes will be durable, reliable and resilient.

CONTEXT

Quality is defined as that which makes a building reliable, durable, resilient, comfortable, dependable, and a contributor to the UBC brand.

UBC requirements for building quality are communicated through the UBC Technical Guidelines. UBC prioritizes durability for buildings and products that maximize life cycle and the total cost of ownership while meeting the functional requirements of building users.

Durable materials are preferred that minimize the need for new resources and their cost of operation and maintenance in the building’s lifetime. Components, finishes, equipment and systems that require minimal maintenance and exhibit a high level of maintainability and long-term reliability are preferred.

Key Directions

To improve quality, UBC will analyze and strengthen existing processes. Increased compliance with project goals, UBC Technical Guidelines and UBC Sustainability Submission Requirements will be pursued.

To improve clarity particularly for renovations and retrofits, the green building requirements have been identified for each tier and are as follows:

TIER	DESCRIPTION	AREA/BUDGET	GREEN BUILDING REQUIREMENTS
TIER 1	New Buildings - Large	>1,000 m ² , >\$5M	<ul style="list-style-type: none"> ▪ Green building certification ▪ Energy target ▪ UBC Technical Guidelines ▪ Life Cycle costing focus ▪ Sustainability Process
TIER 2	New Buildings - Small	<1,000 m ² , >\$5M	<ul style="list-style-type: none"> ▪ Energy target ▪ UBC Technical Guidelines ▪ Life cycle costing focus ▪ Sustainability Process
TIER 3	Major Project Renovations	>\$5M	<ul style="list-style-type: none"> ▪ Green Building Certification ▪ Energy target ▪ UBC Technical Guidelines ▪ Life cycle costing focus ▪ Sustainability Process
	<ul style="list-style-type: none"> a. Renewal (includes envelope and mechanical system upgrade) b. Other (extensive interior upgrades) 		<ul style="list-style-type: none"> ▪ UBC Technical Guidelines ▪ Life cycle costing focus ▪ Meeting with Sustainability & Engineering
TIER 4	Partial Fit-outs	\$1M - \$5M	<ul style="list-style-type: none"> ▪ UBC Technical Guidelines ▪ Life cycle costing focus ▪ Meeting with Sustainability & Engineering
TIER 5	System Upgrades (e.g., chiller replacement, controls)	n/a	<ul style="list-style-type: none"> ▪ UBC Technical Guidelines ▪ Life cycle costing focus

Table 5. Tier system with green building requirements for institutional building projects.

In collaboration with UBC Project Services, Properties Trust, and Infrastructure Development, the GBAP clarifies performance targets and expectations for the renovation and retrofits of existing buildings. UBC prioritizes full renewal of aging buildings (tier 3a) rather than demolition and replacement, which can result in significant savings in construction costs, new materials, and environmental impact, and reduces UBC's deferred maintenance debt. Renewal can also preserve significant buildings while creating state-of-the-art facilities, helping to foster a sense of place and UBC's identity. Other major renovations (tier 3b) may involve only partial building renovation and upgrade, or renovations in support of significant changes to academic activities. Smaller renovations (tier 4) that support asset management or academic need have reduced requirements. System upgrades (tier 5) occur as needed during the service life or to specifically improve building performance and are typically geared to reduce UBC's deferred maintenance debt.

FIVE-YEAR IMPLEMENTATION PLAN — SHORT-TERM PRIORITY ACTIONS

- Review and investigate opportunities to apply international climate resilience standards, such as the RELi resilience standard, to projects.
- Undertake a Greenest City Scholars study of the RELi resilience standard to identify the credits and best practices that align with UBC priorities.
- Develop review process for Owners Project Requirements.
- Require LEED documentation to be submitted to UBC at design, construction, and final review stages.
- Develop a strategy to conduct a full review of the UBC Technical Guidelines to ensure clarity and eliminate redundancies.

The new building tier structure will provide guidance for renovation projects such as the Biosciences Building

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TARGETS AND INDICATORS

Target: Major projects track and achieve their design brief sustainability goals by 2020 (subject to approved changes during design process).

Target: Achieve 100% compliance with UBC Technical Guidelines by 2025 (compliance allows for approved variances).

Target: Achieve 100% compliance with UBC sustainability submission requirements by 2025 (compliance allows for approved variances).

