



# Understanding the applicability of the WELL Building standard to UBC's academic context

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## Executive summary

This project is a Sustainability Scholar project required by UBC Sustainability Initiative (USI) to study the applicability of the WELL Building standard to UBC's academic context. This project will contribute to UBC's growing body of information on building design principles that support health and wellbeing, as well as greater understanding of the feasibility of utilizing a health focused building standard tool, like the WELL Building Standard, in the UBC context. The results will be used to inform the development of UBC's Green Building Plan and further academic research, and support strategies such as the Okanagan Charter and the 20-year Sustainability Strategy. This project is divided to three sections in which the WELL Building standard, three buildings on Vancouver campus as case studies, and UBC guidelines are analyzed.

The first part the study focused on the International WELL Building Institute (IWBI), WELL Building standard, WELL v2, and its checklist. IWBI is a leading organization in the global movement to transform buildings and communities in ways that help people thrive. The WELL Building standard is a tool and rating system developed by IWBI focused exclusively on the ways that buildings and everything in them, can improve occupant's comfort, drive better choices, and generally enhance, not compromise, health and wellness of the occupants. The WELL v2 pilot is the most recently launched version of its WELL Building Standard consisting of 112 features organized into ten large concepts: air, water, nourishment, light, movement, thermal comfort, sound, materials, mind, and community.

Then, in the second part of the project the focus is on three different academic buildings at UBC: Center for Interactive Research on Sustainability (CIRS), Life Sciences Centre (LSC) and Forestry Sciences Centre (FSC). Each one of these buildings were best practices at the time they were built. The main reason of this selection is to test the WELL Building standard in different institutional buildings and see how it's working within a variety of buildings with different design and programming. CIRS, completed in 2011, has become a hub for sustainability at UBC and has achieved CaGBC's LEED Platinum certification and obtained

a number of sustainability and high-performance awards. Life Sciences Centre, built in 2004, is a LEED Gold certified building incorporating dry and wet labs focusing on research including anatomy, biochemistry, molecular biology, cell biology, medical genetics, and bio-informatics. Last, the oldest amongst all three buildings, is Forestry Sciences Centre, built in 1998 designed to showcase construction using Canadian forest products.

The WELL Building standard provides checklists requiring different type of documents. WELL requires projects to provide documentation as evidence that certain WELL features are met such as annotated documents, letters of assurance, photographs, and general documents. For existing buildings such as the selected ones at UBC Vancouver campus, all documents provided by the architect, mechanical, electrical, and plumbing engineers, and contractor are on UBC's infrastructure development website, in the records section. 40% or 80 parts of all the features are related to decisions and policies made at different stages of building design such as design and operation phases. Five out of these 88 parts are policies affecting the physical building design. 29% of 112 features are related to how the building is designed and the rest are both policy and design oriented.

All available documentation for each building was studied and analyzed in order to assess the performance of each building according to the WELL checklist; however, this assessment is not necessarily aligned with their success in being WELL certified but their success in addressing the Standard's features and providing the required documentation. The CIRS building demonstrates a better performance by providing documentation for 72 features related to both policy and design. LSC and FSC show a similar performance by providing documentation for 47 and 41 features.

The majority of features not found in all three buildings are in the materials and community concepts. However, CIRS building is showing a far better documentation in air, light, and materials concepts that might lead to successfully obtaining points for those features. All buildings are showing a similar performance in keeping track of documentation addressing mind concept since most of these features are

addressed by UBC policies. All three buildings are showing a similar performance in addressing community features such as “health and wellness awareness”, “occupant survey”, “family support”, and so on due to being part of UBC as the context.

The last part of the study concentrates on providing recommendations for UBC and how it can develop its guidelines and policies to demonstrate a better performance within WELL Building Standard. Having an integrated design process, adding policies regarding mind and community concept, modifying technical guidelines to reach the level of interior quality required by WELL are part of these recommendations.

### **Summary List of recommendations**

- Follow Integrated design process for new constructions on campus for a better collaboration among all parties and having a more efficient WELL certification process.
- Add WELL features especially in movement, mind, and community concepts to different UBC design and policy guidelines such as “Vancouver Campus Plan” and “UBC’s action framework to increase physical activity and reduce sedentary behavior” since UBC is already addressing some of them.
- Consider publishing a UBC WELL implementation guide aligned with UBC LEED implementation guideline or incorporate WELL features into the LEED implementation guideline to be used in the planning and design of new projects on campus.
- Add WELL features focusing on materials concept such as “fundamental Material Precautions”, “Volatile Compound Reduction”, and the like to the Green Building Plan since it already includes the materials and resources category.
- Modify UBC technical guidelines since they are addressing many WELL features but not to the same level required by WELL Building Standard.
- Generate one researchable plenary database to better keep track of all documentation required by WELL

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## Introduction

The goal of this study is to better support the health and wellbeing of UBC faculty, staff and students, through improved design and operation of campus academic buildings. In this project the applicability of WELL Building standard to three different UBC faculty buildings is studied. Three different buildings - Center for Interactive Research on Sustainability, Life Sciences Centre and Forestry Sciences Centre- were chosen due to their different characteristics and programs. Each one of these buildings were best practices at the time they were built. The main reason of this selection is to test the WELL Building standard in different institutional buildings and see how it's working within a variety of buildings with different design and programming. These academic buildings are being used as theoretical case studies to test the feasibility and applicability of the standard to a university context in general, and UBC in particular.

This project will contribute to UBC's growing body of information on building design principles that support health and wellbeing, as well as greater understanding of the feasibility of utilizing a health focused building standard tool, like the WELL Building Standard, in the UBC context. The results will be used to inform the development of UBC's Green Building Plan and further academic research, and support strategies such as the Okanagan Charter and the 20-year Sustainability Strategy. The results will also help inform decisions on ways to engage with the WELL Building standard and its supporting organization, the international WELL Building institute, and will provide the groundwork for further academic research and partnerships around the topic of human health and the build environment.

The WELL Building Standard is a new building certification tool that seeks to optimize building design and occupational practices to advance human health and wellbeing outcomes, by assessing performance in ten categories: air, water, nourishment, light, movement, thermal comfort, sound, materials, mind, and community. The scope of this research study is not to assess the performance of the chosen buildings in these categories but to first understand the WELL Building Standard's feasibility of UBC's institutional context, the accessibility of different data collections that the standard requires and then to investigate if

this is the most effective approach to achieve a healthy environment for the wellbeing of UBC's faculty, staff, and students.



## IWBI – International WELL Building Institute

The International WELL Building Institute (IWBI) is a leading organization in the global movement to transform buildings and communities in ways that help people thrive. The WELL v2 pilot is the most recently launched version of its popular WELL Building Standard, which will continue to enhance building design and especially interior environment, and the WELL Community Standard pilot, a district scale rating system that sets a new global benchmark for healthy communities. WELL is focused exclusively on the ways that buildings and communities, and everything in them, can improve occupants' comfort, drive better choices, and generally enhance, not compromise, health and wellness of the community. IWBI convenes and mobilizes the wellness community through management of the WELL AP credential for practitioners, the pursuit of applicable research, the development of educational resources, and advocacy for policies that promote health and wellness everywhere.<sup>1</sup>

### WELL v2: Equitable, Local, Dynamic<sup>2</sup>

WELL v2 builds upon WELL v1, drawing from the community of users and practitioners, and from health and building researchers and experts around the world. One of the main goals in developing WELL v2 is to drive equity into the very architecture of the standard. WELL v2 seems to be more approachable by reducing barriers to entry, while maintaining WELL as a mark of true leadership. This version offers more choice while retaining rigor and this is done by re-affirming and building upon the scientific evidence base for effective health intervention through built spaces and organizational practices, homing in on the essential elements of what a healthy building must be and introducing new options for what a healthy building could be.

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<sup>1</sup> <https://www.wellcertified.com/en/articles/iwbi-launches-well-v2>

<sup>2</sup> <https://v2.wellcertified.com/v2.1/en/overview>



“WELL is already a global tool being utilized in more than 30 countries. In order to make WELL v2 a better fit for people and spaces around the world, IWBI approached the goal of globalization through a strategy of localization; taking into consideration regional health concerns, cultural norms and market realities. This new version of WELL will be regularly and proactively adapted to varying contexts and constructs, making it even more relevant and readily applicable to spaces and places across the globe.”

IWBI built a system that can continuously learn, evolve and improve and that’s why WELL v2 is dynamic. Moving away from a fixed scorecard gives the opportunity to focus on the outcomes that matter most for the project and community, and it gives the opportunity to regularly introduce new pathways and parts to make WELL a better fit for all buildings everywhere.

## **The Architecture of the Standard**

WELL v2 consolidates previous iterations and pilots into one WELL standard applicable to any types of building or community development project. “The system is designed to grow in specificity and specialty over time, adapting to accommodate diverse project types and geographies and in response to new evidence and ever-evolving public health imperatives.” In order to maintain status as a WELL Certified project, projects must adhere to reporting requirements such as results of occupancy surveys, proof of maintenance, and ongoing monitoring of environmental parameters like air and water quality. These features generally require report submission on annual basis and this might take to documentation over 3 years of operations.

## **Ten Concepts**

There are ten concepts in WELL v2: Air, Water, Nourishment, Light, Movement, Thermal Comfort, Sound, Materials, Mind and Community. Each concept is comprised of features with distinct health intents. Features are either preconditions or optimizations.

## **Universal Preconditions**

Preconditions define the fundamental components of WELL certification and serve as the foundation of a healthy building. WELL v2 offers a single set of preconditions for all projects. All the preconditions are mandatory for project certification and all parts of the preconditions are mandatory.

### **Flexible Optimizations**

Optimizations are optional pathways for projects to demonstrate achievement in WELL. Project teams choose the optimizations they want to pursue. Further, projects may choose which parts to pursue within optimizations up to the point maximum established for the optimization.

### **Meaningful Weightings**

WELL v2 operates on a points-based system, with a total of 110 points available to each project. All optimizations have maximum point-values. The point-value of a feature is determined by its potential for impact. This is defined as the extent to which a feature addresses a specific health and wellness concern or opportunity for health promotion, and the potential impact of effective intervention.

### **Accommodating All Space Types**

All parts of WELL v2 are designated for specific space types. Space types in WELL refer to spaces within a project such as office spaces, common areas, and so on. These space types do not refer to the project as a whole. Many parts in WELL are denoted for “all spaces”, which indicates that the part must be applied to all spaces within the project, for all project types such as features in air, water, light concepts, and so on. Some features list distinct parts for specific space types such as eating spaces, restrooms, and so on; depending on the part, these additional requirements may be required on top of the requirements for all spaces or used in place of the requirements listed for all other spaces.

### **Scoring and Certification Levels**

Projects must achieve all preconditions as well as a certain number of optimizations to earn different levels of certification:

- WELL Silver Certification: 50 points.

- WELL Gold Certification: 60 points.
- WELL Platinum Certification: 80 points.

To be certified projects must earn a minimum of two points per concept and no concept can be disregarded. Projects may earn no more than 12 points per concept through both preconditions and optimizations. At the point of submitting for Documentation Review, projects may submit a scorecard that contains up to 100 points worth of features. Projects can also add on an additional ten points for Innovation to their scorecard.

## Concepts and Features<sup>3</sup>

10 Concepts   23 Preconditions required   94 Optimizations available

### Concepts in the WELL v2 Building Standard:

#### 1. Air - 4 Preconditions / 10 Optimizations

The WELL Air concept aims to ensure high levels of indoor air quality across a building's lifetime through diverse strategies that include source elimination or reduction, active and passive building design and operation strategies and human behavior interventions.

#### 2. Water - 3 Preconditions / 5 Optimizations

The WELL Water concept covers aspects of the quality, distribution and control of liquid water in a building. It includes features that address the availability and contaminant thresholds of drinking water, as well as features targeting the management of water to avoid damage to building materials and environmental conditions.

#### 3. Nourishment - 2 Preconditions / 11 Optimizations

The WELL Nourishment concept requires the availability of fruits and vegetables and nutritional transparency and encourages the creation of food environments where the healthiest choice is the easiest choice.

#### 4. Light - 2 Preconditions / 6 Optimizations

The WELL Light concept promotes exposure to light and aims to create lighting environments that are optimal for visual, mental and biological health.

#### 5. Movement - 2 Preconditions / 10 Optimizations

The WELL Movement concept promotes movement, physical activity and active living and discourages sedentary behaviors through environmental design strategies, programs and policies.

#### 6. Thermal comfort - 1 Preconditions / 6 Optimizations

The WELL Thermal Comfort concept aims to promote human productivity and ensure a maximum level of thermal comfort among all building users through improved HVAC system design and control and by meeting individual thermal preferences.

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<sup>3</sup> <https://v2.wellcertified.com/v2.1/en/concepts>

## **7. Sound - 1 Preconditions / 4 Optimizations**

The WELL Sound concept aims to bolster occupant health and well-being through the identification and mitigation of acoustical comfort parameters that shape occupant experiences in the built environment.

## **8. Materials - 3 Preconditions / 11 Optimizations**

The WELL Materials concept aims to reduce human exposure to hazardous building material ingredients through the restriction or elimination of compounds or products known to be toxic and the promotion of safer replacements. Compounds known to be hazardous to the health of occupational workers and/or known to bioaccumulate or aggregate in the environment are also restricted and, in some instances, not permitted.

## **9. Mind - 2 Preconditions / 13 Optimizations**

The WELL Mind concept promotes mental health through policy, program and design strategies that seek to address the diverse factors that influence cognitive and emotional well-being.

## **10. Community - 3 Preconditions / 13 Optimizations**

The WELL Community concept aims to support access to essential healthcare, workplace health promotion and accommodations for new parents while establishing an inclusive, integrated community through social equity, civic engagement and accessible design.

## **11. Innovation - 0 Preconditions / 5 Optimizations**

Innovation features pave the way for projects to develop unique strategies for creating healthy environments.

## Crosswalks & Alignments<sup>4</sup>

The International WELL Building Institute (IWBI) recognizes and values the complementary nature of green building and building for occupant health and wellness. To support projects pursuing both the WELL Building Standard (WELL) and leading green building standards from around the world, the IWBI is putting forth WELL Crosswalks.

Crosswalks are intended to identify alignments between WELL and other green building standards, such as LEED, Living Building Challenge, and so on. Crosswalks identify WELL features and requirements in sync with other standards for projects seeking a dual certification by acknowledging where WELL Building Standard requirements are deemed equivalent and aligned with aspects of the alternate building rating tool.

### LEED<sup>5</sup>

LEED and WELL Building Standard can be used together to ensure buildings and its operation value energy and resources to have a brighter and more equitable future while addressing occupant's health and well-being for them to thrive and demonstrate a better performance. Both WELL and LEED are administered by Green Business Certification Inc. (GBCI). Both complement each other in the optimization of healthy and high-performance environments. IWBI welcomes projects to pursue LEED alongside WELL in order to promote both environmental sustainability and human health. LEED certification is important for achieving the best possible outcomes for environmental sustainability, and WELL maximizes the potential for supporting human health and wellness.

The International WELL Building Institute, US Green Building Council and Green Business Certification Inc. have developed the following charts to show the compatibility of WELL Building Standard with LEED

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<sup>4</sup> [http://standard.wellcertified.com/well-crosswalks?\\_ga=2.21359163.1806589131.1531080716-1388703945.1526418228](http://standard.wellcertified.com/well-crosswalks?_ga=2.21359163.1806589131.1531080716-1388703945.1526418228)

<sup>5</sup> <https://www.wellcertified.com/en/resources/leed-well-crosswalk-2017>

v2/v3 and v4. These charts identify features and measures required by WELL that are completely or to some extent addressed by LEED features. The following crosswalk documents outline where achievement of LEED credits and WELL features will provide achievement of a credit or feature in the corresponding program.



## Canada and the WELL Building Standard<sup>6</sup>

As mentioned, WELL building Standard is an international leading standard addressing interior environment and how it would affect the health and well-being of the occupants. In Canada, the Canada Green Building Council has been collaborating with Green Business Certification Inc. (GBCI) to promote and advance WELL in Canada. The first Canadian organization pursuing WELL certification in form of a New and Existing Interiors project was TD Bank Group in 2015. Canada stands among leading countries addressing the health and well-being of building occupants through WELL certification. There are 38 projects in Canada already certified or pursuing WELL certification.

### WELL projects in other countries and Canada's ranking

1. USA: 327
2. China: 203
3. Australia: 61
4. France: 61
5. Netherlands: 45
6. Canada: 38
  - 4 Gold Level certifications
  - 4 Silver Level certifications
  - 27 Pursuing Projects

List of Buildings available on WELL website:

- Bay Park Centre - 81 Bay Street, Toronto, Ontario, On-going, Pre-certification
- CBRE Vancouver, Vancouver, British Columbia, Gold
- Oxford's MNP Tower, Vancouver, British Columbia, Gold
- 1 York Street - Floors 11 & 12, Toronto, Ontario, Silver
- CBRE Canadian Head Office, Toronto, Ontario, Silver
- 2 Private projects, Toronto, Ontario, Silver

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<sup>6</sup> <https://wellonline.wellcertified.com/community/projects>

- Teknion Toronto Showroom, Toronto, Ontario, Silver
- TD Centre - 222 Bay Street, Toronto, Ontario, Gold
- TD23, Toronto, Ontario, Gold
- Cascades, Candiac, Quebec, Pursuing
- 1090 West Pender, Vancouver, British Columbia, Pursuing
- 2169 Pandosy (Core & Shell), Kelowna, British Columbia, Pursuing
- Fabrik8 Waverly, Montreal, Quebec, Pursuing
- Aedifica - Siege social, Montreal, Quebec, Pursuing
- 6 Private Projects, Toronto, Ontario, Pursuing
- Carlington Community Health Hub, Ottawa, Ontario, Pursuing
- 2 Private projects, Calgary, Alberta, Pursuing
- CaGBC Ottawa Office Relocation, Ottawa, Ontario, Pursuing
- TRCA Headquarters, Toronto, Ontario, Pursuing
- Private Project, Winnipeg, Manitoba, Pursuing
- HUMANITI, Montreal, Quebec, Pursuing
- Colliers International Downtown Toronto Office, Toronto, Ontario, Pursuing
- TD Canary District, Toronto, Ontario, Pursuing
- Private Project, Laval, Quebec, Pursuing
- Private Project, Kelowna, British Columbia, Pursuing
- EY Toronto, Toronto, Ontario, Pursuing
- Private Project, Edmonton, Alberta, Pursuing
- UNB Kinesiology, Fredericton, New Brunswick, Pursuing
- Vancouver Centre II, Vancouver, British Columbia
- TD Wesbrook, Vancouver, British Columbia, Pursuing

## Case Studies

### UBC Academic Buildings

Three different buildings - Centre for Interactive Research on Sustainability, Life Sciences Centre and Forestry Sciences Centre- were chosen due to their different characteristics and programs. Each one of these buildings were utilized best practices in design and construction at the time they were built. The main reason of this selection is to test the WELL Building standard in different institutional buildings and see how it's working within a variety of buildings with different designs and programming. These academic buildings are being used as theoretical case studies to test the feasibility and applicability of the standard to a university context in general, and UBC in particular.

#### 1. The CIRS Building<sup>7</sup>

CIRS was first conceived in 1999 by Dr. John Robinson, a professor at UBC, as an opportunity to create a sustainability showcase in the province of British Columbia: a building in which to push the envelope of sustainable design by integrating passive design strategies with the most advanced sustainable technologies of the time to achieve a high-performance building.

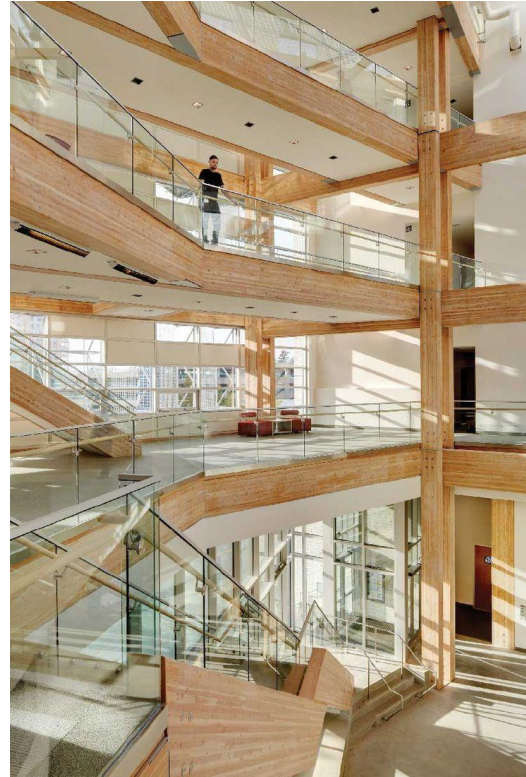
Completed in 2011, CIRS has become a hub for sustainability at UBC. The 4-storey building has a gross area of 5,675 m<sup>2</sup> (61,085 ft<sup>2</sup>), which includes offices and labs, a 425-seat auditorium, meeting rooms, The Loop Café and open spaces for studying and social interaction. It has achieved CaGBC's LEED Platinum certification and obtained a number of sustainability and high-performance awards.

CIRS was the first demonstration project of UBC's Campus as a Living Laboratory Initiative. The building systems and infrastructure, as well as the process of planning, designing, building and operating the facility are part of an ongoing research program. CIRS is equipped with a robust network of sensors and controls

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<sup>7</sup> <http://cirs.ubc.ca/building/building-overview/>

to ensure that all systems are properly monitored to facilitate performance tracking and reporting, to enable the implementation of continuous optimization protocols, and to collect data for a variety of research projects.



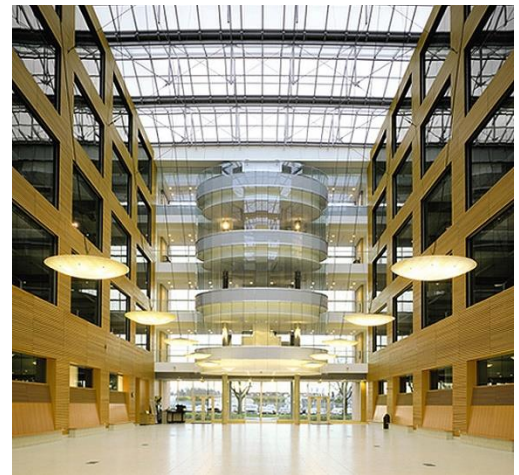
## 2. Life Sciences Centre

The UBC Life Sciences Centre (LSC) has been awarded the prestigious Leadership in Energy and Environmental Design (LEED) Gold certification by the United States Green Building Council for its innovative sustainability features.<sup>8</sup> The UBC Life Sciences Centre provides a variety of teaching and research facilities for the study of life sciences as well as medical student training at the university. Also, there are plenty of open spaces for studying and social interactions.

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<sup>8</sup> <http://news.ubc.ca/2006/01/09/archive-media-releases-2006-mr-06-004/>

The facility focuses on research including anatomy, biochemistry, molecular biology, cell biology, medical genetics, and bio-informatics. Flexible wet and dry research lab modules and associated support spaces are distributed along three wings each five storeys high and connected by two full height atria. Large auditoria, classrooms and specialized teaching spaces front the main east-west colonnade at grade. The east atrium is defined by a café and food services area and provides an informal assembly hall. The west atrium has study tables and modulated lighting to create a quiet reading room.<sup>9</sup>



### 3. Forestry Sciences Centre

The Forest Sciences Centre was completed in 1998 for UBC's Faculty of Forestry and was designed to showcase construction using Canadian forest products. The 17,505-square-metre Forest Sciences Centre has 11 classrooms, 2 lecture theatres, teaching laboratories, office space, computer labs, study areas, and a cafeteria and houses the Faculty's three departments.<sup>10</sup> The Forest Sciences Centre was designed as three distinct blocks to meet the B.C. Building Code regulations at the time of construction. These consist of a four-story laboratory block, a four-story office block, and a two-story wood processing center, all of which

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<sup>9</sup> <https://dsai.ca/projects/life-sciences-centre-university-of-british-columbia/>

<sup>10</sup> <http://www.forestry.ubc.ca/general-information/forest-sciences-centre/>

surround a large central sky-lit atrium. Each of the three blocks are separated by seismic joints and fire barriers, and have a distinct structure and design that was driven by their specific functional needs.<sup>11</sup>



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<sup>11</sup> <http://www.forestry.ubc.ca/general-information/forest-sciences-centre/uses-of-wood-in-the-forest-science-centre/>

## Case study analysis

The WELL Building standard provides checklists requiring different type of documents. For existing buildings such as the selected ones at UBC Vancouver campus, all documents provided by the architect, mechanical, electrical, and plumbing engineers, and contractor are on UBC's infrastructure development website, in the records section. For new constructions applying for WELL certification however, there are additional responsible parties such as project administrator, owner, WELL Accredited Professional, and WELL Coaching Contacts.

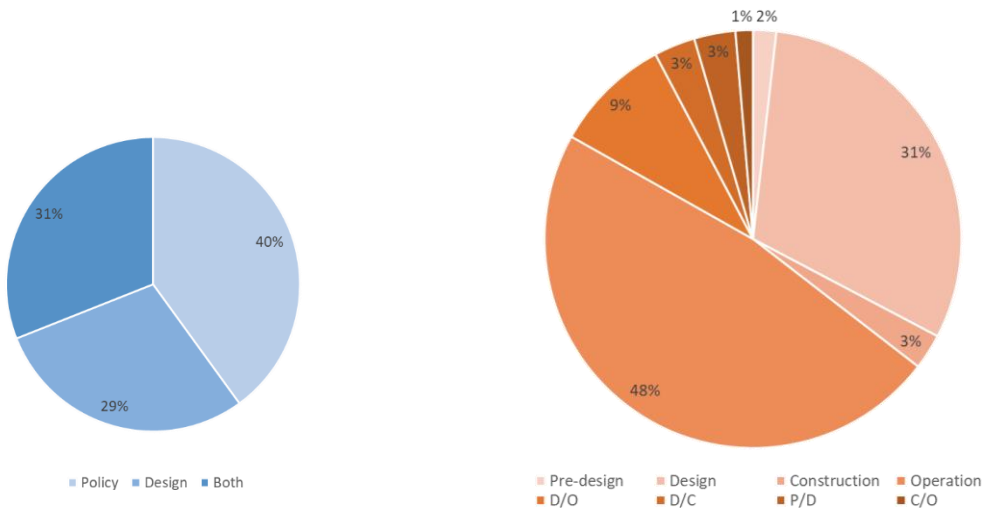
WELL requires projects to provide documentation as evidence that certain WELL features are met such as annotated documents, letters of assurance, photographs, and general documents.<sup>12</sup> 40% or 80 parts of all the features are related to decisions and policies made at different stages of building design such as design and operation phases. Five out of these 88 parts are policies affecting the physical building design. 29% of 112 features are related to how the building is designed and the rest are both policy and design oriented.

For every document required in WELL checklist, there is a preferred time to obtain the specific document. If building design is divided to four categories – pre-design, design, construction, and operation – 2% during pre-design, 31% during design, 3% during construction, and 48% of all features are assessed during operation phase of building design. However, there are features in need of documentation during two phases and are overlapping. 9% of 112 features are in need of documentation at both design and operation, 3% at both design and construction, 3% at both pre-design and design, and finally 1% at both construction and operation.

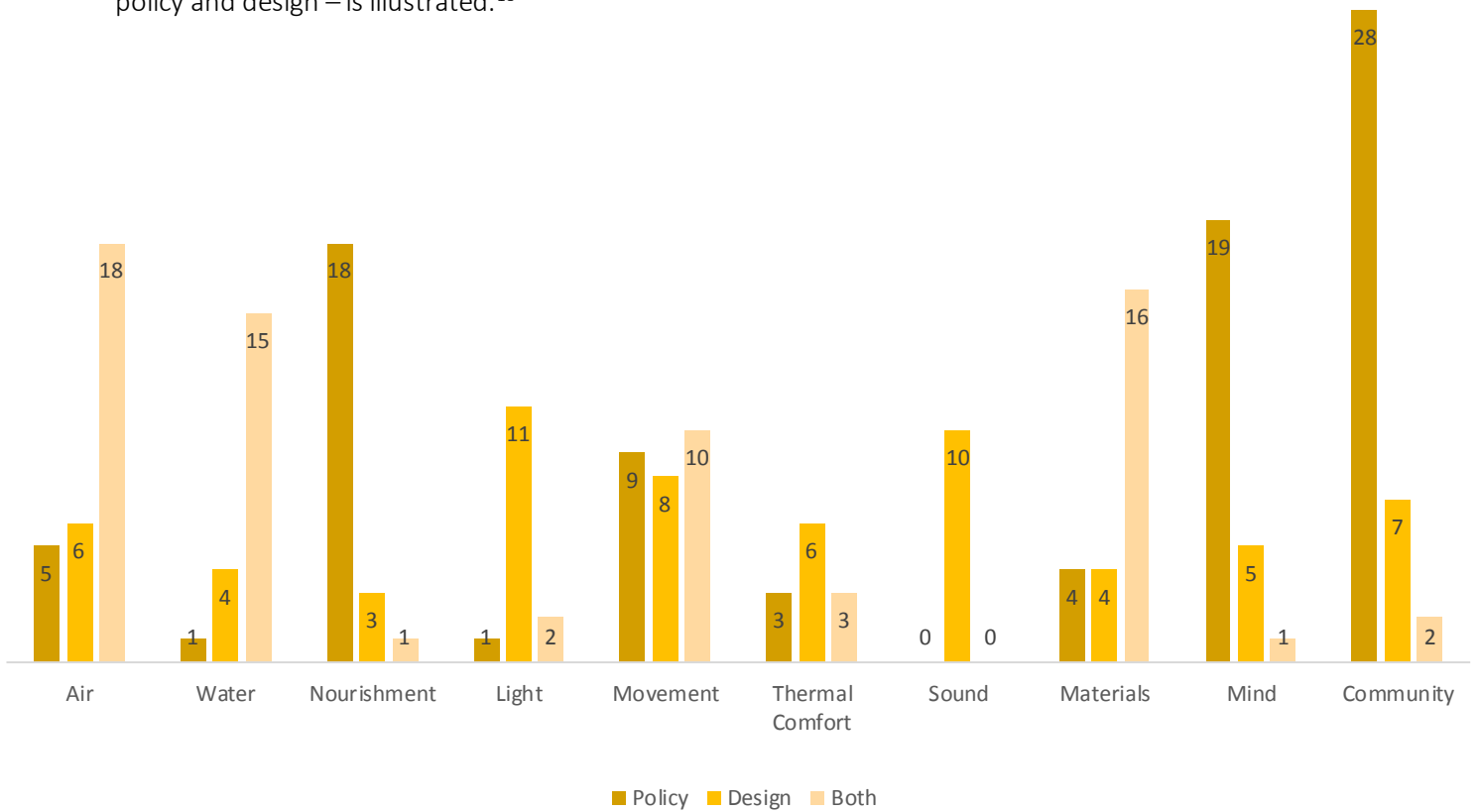
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<sup>12</sup> WELL certification guidebook





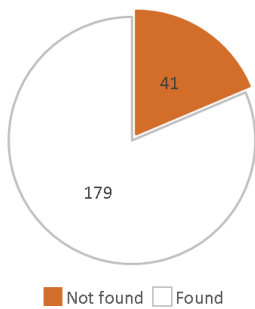
As mentioned before, WELL has 10 concepts – air, water, nourishment, light, movement, thermal comfort, sound, materials, mind, and community – and in each concept there are features consisting several parts to account for. In the chart provided below the detailed study of the nature of these parts – policy and design – is illustrated.<sup>13</sup>



<sup>13</sup> Appendix X

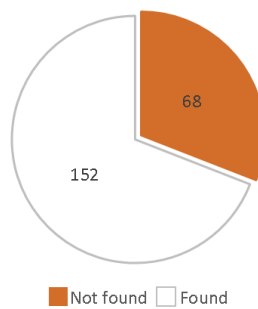
The selected buildings – CIRS building (2011), Life Sciences Centre (2002), and Forestry Sciences Centre (1998) – were best practices at the time they were built. Some documents in records available at UBC’s infrastructure development website were missing for all three buildings, however; CIRS building by far showed a better performance at keeping track of its documentation records. Life Sciences Centre comes in second by having documentation records of 6 more features than Forestry Sciences Centre. Forestry Sciences Centre built in 1998 has the most missing documents due to the age of the building and change of contractor at the end of the project.

CIRS Building 2011



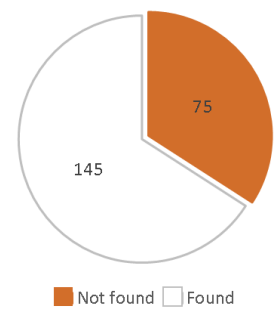
30% of “Not founds” are in **Materials**  
30% of “Not founds” are in **Community**

Life Sciences Center 2002



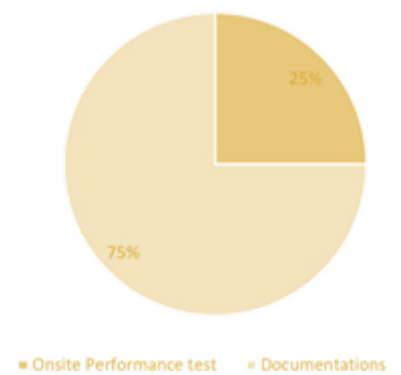
29% of “Not founds” are in **Materials**  
18.5% of “Not founds” are in **Community**  
15.5% of “Not founds” are in **Air**

Forestry Sciences Center 1998

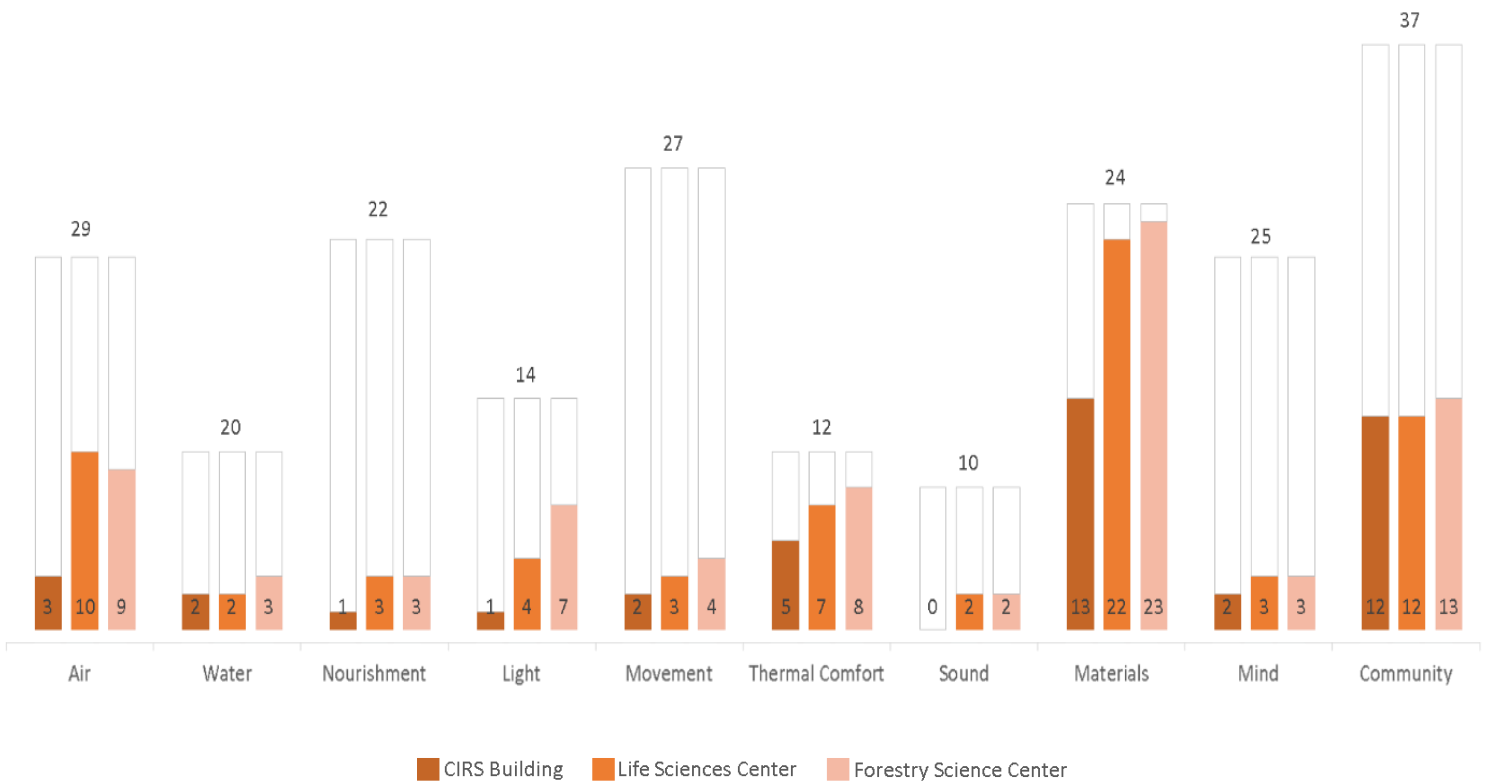


27% of “Not founds” are in **Materials**  
18.5% of “Not founds” are in **Community**  
12.5% of “Not founds” are in **Air**

Only 75% of all parts are assessed through documentation and information found/not found in each case study does not necessarily mean that the building is meeting/not meeting the requirements of one specific feature. Also, 25% of all parts – parts mostly in air, water, and sound concepts – are assessed through onsite performance tests and are not in need of documentation.

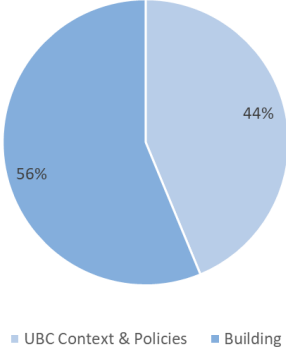


The majority of features not found in all three buildings are in the materials and community concepts. However, CIRS building is showing a far better documentation in air, light, and materials concepts that might lead to successfully obtaining points for those features. All buildings are showing a similar performance in keeping track of documentation addressing mind concept since most of these features are addressed by UBC policies. All three buildings are showing a similar performance in addressing community features such as “health and wellness awareness”, “occupant survey”, “family support”, and so on due to being part of UBC as the context.



Features in movement, mind, and community concepts are mostly addressed by UBC policies and UBC campus as the context. 44% of all features in WELL checklist are addressed by UBC policies and campus design such as site planning and selection, physical activity opportunities, physical activity spaces and

equipment, stress support, restorative opportunities, restorative programming, health services and benefits, community immunity, civil engagement, and so on. 56% of all features are addressed by the building design and how it's operated.



In all ten concepts, the required documentation for each feature may vary, some are part of UBC's policies regarding health and wellbeing and some are defined by design, construction, and operational methods of the building. To illustrate, there are few requirements in nourishment and movement categories that are either established or in need of being established by UBC stakeholders and policy makers such as nutritional transparency, refined ingredients, nutrition education, physical activity opportunities, enhanced ergonomics, and so on. In contrast, there are requirements that are identified through project design documents and reports specially in air, water, light, thermal comfort, sound, and materials concepts such as ventilation effectiveness, handwashing, enhanced daylight access, thermal performance, sound mapping, and outdoor structures. Many of features are addressed by both policies and design documents in all concepts except sound which all features are design related ones.

In addition, UBC is already covering many of WELL requirements through other policies, tools, and design processes. For instance, UBC Wellbeing has already taken measurements regarding nourishment and movement through the "UBC action framework to increase physical activity and reduce sedentary behavior" and the "UBC action framework for a nutritionally sound campus". UBC Wellbeing is also taking

measurements of matters such as built and natural environments through publications and policies such as campus plan, UBC Green Building Plan, etc..., inclusion and connection through "Equity and Inclusion Policies and Guidelines", "Access and Diversity: Academic Accommodation for Students with Disabilities", etc..., and mental health and resilience through publication and policies such as "Student Mental Health Strategy", "Focus on People", and so on.

## Summary

To summarize, this project is focusing on the applicability of WELL Building standard to UBC's academic context. By analyzing WELL Standard application to three different buildings on UBC Vancouver campus, including going through their documentation, and site visits, it is evident that UBC is addressing many of WELL features through its own guidelines and policies. However, UBC needs to modify many of these requirements to meet the level of interior environment quality that WELL certification is looking for. And, despite addressing many of the features – both policies and design related ones – there are still some features in nourishment, movement, materials, mind, and community concepts that are not mentioned in any guidelines such as “Refined Ingredients”, “Self Monitoring”, “Enhanced Material Precaution”, “Sleep Support”, “Occupant Survey”, and so on.

## Integrated Design Process

For a successful WELL building certification process, the building design process plays an important role. In this study of UBC buildings – CIRS, Life Sciences Centre, and Forestry Sciences Centre – and assessing their documentation availability, CIRS building shows a far better performance than the two other buildings and this is due to its approach towards an integrated design process. Besides demonstrating a better documentation, CIRS building design addresses more WELL features than the others and it seems to be due to the involvement of all parties in an integrated design process from the start of the project.

An integrated design process (IDP) will directly affect the successful performance of a building pursuing WELL certification since many of WELL concepts and features are addressed before the project starts its operation phase of building design. In an Integrated design process since all parties collaborate from the start, many concepts and features can be addressed from early stages of building design. Concepts such as air, water, light, thermal comfort, sound, and materials are all in need of effective collaboration of architectural design team, mechanical, electrical, and plumbing engineering teams, and contractor. Besides,

the owner and stakeholders play an important role in defining the project's vision and goals. Also, for every new construction, the stakeholders - if targeting WELL certification - need to collaborate with IWBI from the beginning. WELL Coaching Contacts and WELL Accredited Professional (WELL AP) will help to address all necessary aspects of WELL, guide projects through the certification process, and to further support project administrators.

### **UBC guidelines**

UBC is already addressing many of WELL features through different policies, tools, and design processes. For instance, UBC Wellbeing has already taken measures relating to some of the nourishment and movement concepts through "UBC's action framework to increase physical activity and reduce sedentary behavior" and "UBC's action framework for a nutritionally sound campus". UBC Campus Planning and Wellbeing are also addressing the built and natural environments through publications and policies such as Vancouver Campus Plan, UBC Green Building Plan, etc..., inclusion and connection through "Equity and Inclusion Policies and Guidelines", "Access and Diversity: Academic Accommodation for Students with Disabilities", etc..., and mental health and resilience through publication and policies such as "Student Mental Health Strategy", "Focus on People", and so on. However, UBC needs to take more progressive steps towards educational programs such as nutrition education, light exposure and education, ergonomics education, and so on. Also, UBC will benefit from doing occupant surveys since there are WELL features such as personal thermal comfort that can be easily pursued by having better understanding of what occupants feel about the interior environment.

### **UBC LEED Implementation Guide**

As mentioned before, LEED and WELL work together in sync and there are WELL features aligned with LEED credits. UBC already has its own LEED implementation guideline. One suggestion for UBC would be to either incorporate WELL features into the LEED implementation or create a parallel guideline. By borrowing



concepts from WELL focusing on health and well-being and addressing the quality of interior environment, UBC can make an immense difference in how faculty, staff, and students spend their time indoors.

### **Green Building Plan**

As a leading university focusing on sustainability in Canada and North America, UBC is also launching its own Green Building Plan. In the Green Building Plan, UBC is taking steps towards a net-positive campus addressing ecological and human health through eight concepts. It seems that some of these concepts such as health and well-being, materials and resources, place and experience, biodiversity, and quality can benefit from WELL Building concepts and features to fully move toward a net-positive campus. Currently, for example, there are no requirements in UBC Technical Guidelines for material transparency and features in this concept.

### **Modifications**

The CIRS building is showing a better performance in documenting and addressing material concept due to the idea of the building as a living laboratory on campus which led to incorporating the Living Building Challenge Red List. However, there are no mandatory features required by UBC. UBC can benefit from adding WELL features to its technical guidelines since many of them already exist although many of them are in need of modifications to reach the level of interior environment quality that WELL certification is looking for.

### **UBC's database**

In the end, the WELL certification process to a great extent relies on perfect documentation of the building design from the first day. UBC currently is keeping track of architectural, mechanical, structural, and electrical drawings of every building on campus. However, there is a large amount of information missing from UBC's infrastructure database. It might be due to the fact that there are multiple databases responsible of organizing all this information and they are not directly connected. The current recording system includes many building documents; however, each document is not based on key words so is not

searchable. One last recommendation to UBC would be to enhance its recording database through establishing one single searchable database including every data existing at UBC.

### **Summary List of recommendations**

- Follow Integrated design process for new constructions on campus for a better collaboration among all parties and having a more efficient WELL certification process.
- Add WELL features especially in movement, mind, and community concepts to different UBC design and policy guidelines such as “Vancouver Campus Plan” and “UBC’s action framework to increase physical activity and reduce sedentary behavior” since UBC is already addressing some of them.
- Consider publishing a UBC WELL implementation guide aligned with UBC LEED implementation guideline or incorporate WELL features into the LEED implementation guideline to be used in the planning and design of new projects on campus.
- Add WELL features focusing on materials concept such as “fundamental Material Precautions”, “Volatile Compound Reduction”, and the like to the Green Building Plan since it already includes the materials and resources category.
- Modify UBC technical guidelines since they are addressing many WELL features but not to the same level required by WELL Building Standard.
- Generate one researchable plenary database to better keep track of all documentation required by WELL

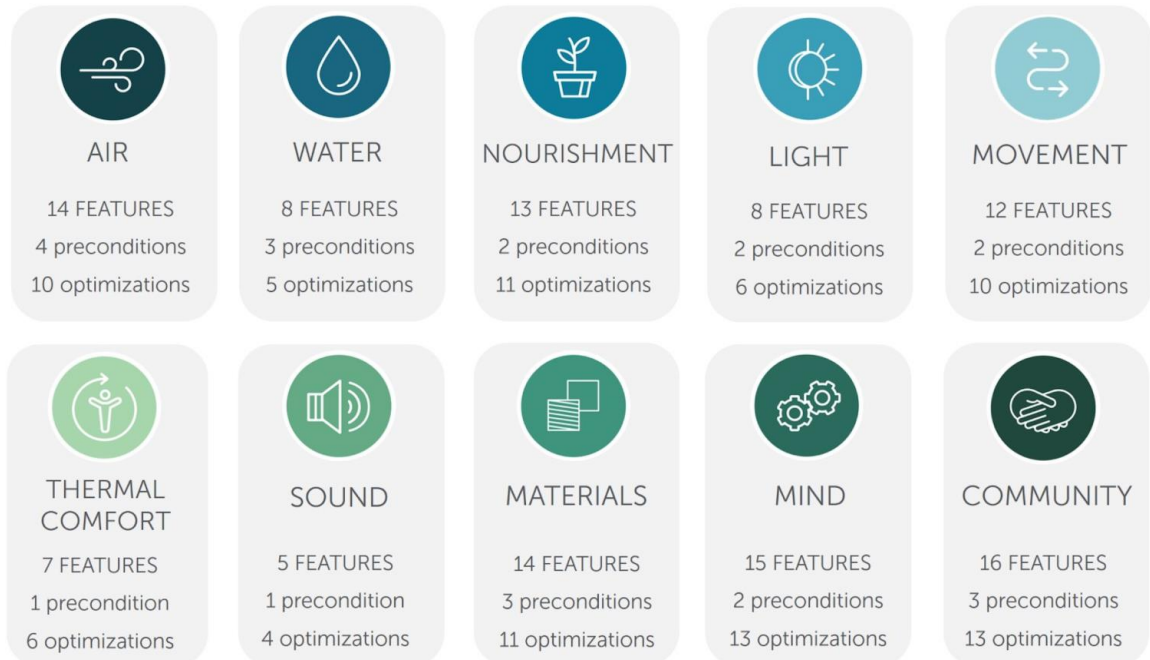
## Appendix A

### Understanding the comparison between WELL v1 and WELL v2 pilot <sup>14</sup>

#### Concepts Comparison

##### How do the concepts compare between WELL v1 and WELL v2?

The WELL Building Standard version 2 pilot: (WELL v2) has expanded upon the foundation created by WELL v1. WELL v2 is comprised of 112 features within 10 concepts: Air, Water, Nourishment, Light, Movement, Thermal Comfort, Sound, Materials, Mind and Community.



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<sup>14</sup> <https://www.wellcertified.com/en/articles/tip-comparison-v1-well-v2-pilot>

## Air

Air is the concept that contained the most features in WELL v1. The creation of new concepts in v2, Thermal Comfort and Materials, allowed the remaining Air features to focus more on holistic design strategies to promote clean air and minimize human exposure to harmful contaminants.

Air	v1	v2
Preconditions	12	4
Optimizations	17	10

- Preconditions that are retained in v2 relate to Air Quality Requirements (A01), Smoke-Free Environment (A02), Ventilation Effectiveness (A03) and Construction Pollution Management (A04). Feature 04 is an optimization in v2 with multiple compliance options!
- A new precondition requirement introduced in v2 is to monitor fundamental air parameters (A01).
- Features in v1 (Features 04, 09, 10, 11, 25 and 26) that focus on materials requirements have been moved to the Materials concept in v2.
- A portion of Feature 16 - Humidity Control has moved from Air to Thermal Comfort T07.
- Portions of Feature 12 - Moisture Management have moved to Water concept - W07.

## Water

Water is one of the concepts that saw the fewest changes in v2. There have been some consolidations and new requirement additions that help make this concept more robust.

Water	v1	v2
Preconditions	5	3
Optimizations	3	5

- The precondition requirements in v1 are still preconditions in WELL v2, but are merged into two features (W01 and W02).
- Similar to the monitoring requirement in the Air concept, Water also has a new requirement to monitor Fundamental Water Properties (W01).
- New precondition requirements in v2 are thresholds for Cadmium and Chromium (W02).
- Legionella Control (Feature 36) from v1 has been updated to a precondition and a separate feature (W03) in v2.

- v2 also changes the specific threshold requirements for a number of water contaminants: Styrene, Benzene, Toluene, Atrazine and Chlorine.

## Nourishment

Nourishment saw a large reduction in the number of preconditions required, providing more flexibility for various types of food service to implement WELL.

Nourishment	v1	v2
Preconditions	7	2
Optimizations	7	11

- Portions of v1 precondition Features 38, 40, and 44 that have been retained in v2 relate to availability of Fruits and Vegetables (N01) and Nutritional Transparency (N02.)
- Precondition Feature 39- Processed Foods, Feature 43- Artificial Ingredients, and Feature 45 - Food Advertising have become optimization features in v2.
- Feature 41 - Hand Washing, which is a precondition in v1, has been moved to the Water concept as an optimization in v2 (W08.)
- Features 42, 46, 50, P1 and P7 have been eliminated in v2.
- Additional guidance is provided in v2 for those providing daily snacks and beverages, meals and dining, or no food program.

## Light

Light has seen refinements focusing on providing a lighting environment that reduces circadian phase disruption, improves sleep quality and positively impacts mood and productivity. While circadian lighting is no longer a precondition in its v1 form, there is still an emphasis on indoor access to circadian-effective light, either from daylight or electric sources.

Light	v1	v2
Preconditions	4	2
Optimizations	7	6

- Precondition features in v2 relate to visual lighting design and fundamental light exposure. (Feature 54 Circadian Lighting Design is now an optimization in v2.)
- A new requirement as part of L01 - Light Exposure and Education precondition in v2 is to promote lighting education for all projects. We hope this strategy will serve as an important step

to educate building occupants on circadian rhythm, sleep hygiene, age-related increase in light requirements and the importance of daylight exposure on circadian and mental health.

- Other new requirements added as optimizations in the Light concept relate to electric light flicker management (L07) and enhanced occupant controllability of ambient lighting systems (L08).
- Features in v1 that are removed in v2 relate to Low-Glare Workstation Design (Feature 57), Surface Design (Feature 59), Daylight Fenestration (Feature 63), Light at Night (Feature P2) and Circadian Emulation (Feature P3).

## Movement

The Fitness concept title has been retired in v2, and replaced with Movement. Movement incorporates features from v1's Fitness concept along with some ergonomic requirements that were previously in the v1 Comfort concept.

<b>Movement</b>	<b>v1</b>	<b>v2</b>
<b>Preconditions</b>	2	2
<b>Optimizations</b>	6	10

- A noteworthy update in v2 is the new precondition, V01 - Active Buildings and Communities. This precondition can be met by achieving one point from a select list of features in the movement concept (V03, V04, V05, V07, V09). This unique feature structure was established to allow project teams flexibility when selecting what type of strategy promoting movement, physical activity, and/or active living best fits the project's goals.

- Feature 73 - Ergonomics: Visual and Physical was found in the Comfort concept in v1, and has now been moved as the other precondition V02 - Visual and Physical Ergonomics in the Movement concept in v2. The feature now also requires an educational component to increase occupant awareness about ergonomic comfort and workplace safety.

- New features in the Movement concept relate to Site Planning and Selection (V05) and Enhanced Ergonomics (V10).

## Thermal Comfort

Thermal Comfort is now a separate concept in v2, while in v1 the thermal comfort requirements are in the Comfort concept.

Thermal Comfort	v1	v2
Preconditions	n/a	1
Optimization	n/a	6

- The precondition T01 - Thermal Performance in v2 is similar to v1 Feature 76 - Thermal Comfort. However, in v2, this new feature has additional compliance options and clarifies what design specifications should be submitted for documentation review.
- An added requirement of T01 is to conduct ongoing monitoring of dry-bulb temperature, relative humidity, air speed (for projects using the elevated air speed method) and mean radiant temperature.
- Portion of Feature 16 - Humidity Control and Feature 20 - Outdoor Air Systems both in the air concept in v1 have been moved to the Thermal Comfort concept in v2.
- A new optimization feature T02 - Enhanced Thermal Performance has been introduced in v2.

## Sound

Similar to the Thermal Comfort concept, Sound is also a separate concept in v2, while in v1 the acoustic requirements are in the Comfort concept. The Sound concept requirements in v2 has seen refinements while maintaining the v1 feature intents.

Sound	v1	v2
Preconditions	n/a	1
Optimization	n/a	4

- The precondition S01 - Sound Mapping in v2 focuses on strategic planning and mitigating acoustical disturbance from both externally and internally generated noise.
- The performance-based features for maximum noise levels in v1 (Feature 74 and 75) have been merged into one optimization in v2 (S02). S02 addresses externally and internally generated noise as background noise and requires that projects meet particular noise level thresholds.

## Materials

Materials is a separate concept in v2; while in v1, the materials requirements are included within particular Air and Mind features.



Materials	v1	v2
Preconditions	n/a	3
Optimization	n/a	11

- Preconditions in v2 focus on asbestos, lead, mercury and polychlorinated biphenyl (PCB) restriction and abatement (X01, X02), which all fell under Feature 11 in the Air concept in v1.
- A new precondition requirement has been introduced in v2 (X03) which states that projects must mitigate environmental contamination that results from treated outdoor structures and wood-plastic materials.
- Feature 04 - VOC Reduction, a precondition in v1, has now been moved to the Materials concept as two optimization features (X11, X12) and includes multiple compliance options.
- Other new features added as optimizations in v2 in the materials concept are:
  - Waste Management (X04)
  - In-Place Management (X05)
  - Site Remediation (X06)

## Mind

Mind is more narrowly focused on design, policy and programmatic strategies that support cognitive and emotional health in v2, where in v1 it also contained many components of social well-being that are now contained in the Community concept.

Mind	v1	v2
Preconditions	5	2
Optimization	12	13

- The preconditions relate to mental health promotion (M01) and support occupant well-being by incorporating the natural environment through interior and exterior design (M02).
- New requirements introduced as optimizations in v2 are:
  - Mental Health Support and Education (M03, M04)
  - Restorative Spaces, Support and Programs (M06, M07, M08)
  - Tobacco Prevention and Cessation (M13)
  - Substance Use Education and Opioid Emergency Response Plan (M14, M15)

## Community

Community is a new concept in v2 that covers requirements for equity and social cohesion. Some features in v2's community concept are pulled from the Mind concept in v1, however, the majority of the features in the community concept are new. Community has the most features of any concept in v2.

Community	v1	v2
Preconditions	n/a	3
Optimization	n/a	13

- Features 84, 85 and 86 in the mind concept in v1 are now preconditions in the v2 Community concept.
- Other new optimizations added in v2 are:
  - Enhanced Occupant Survey (C04)
  - New Mother Support (C09)
  - Bathroom Accommodations (C14)
  - Emergency preparedness (C15)
  - Community Access and Engagement (C16)

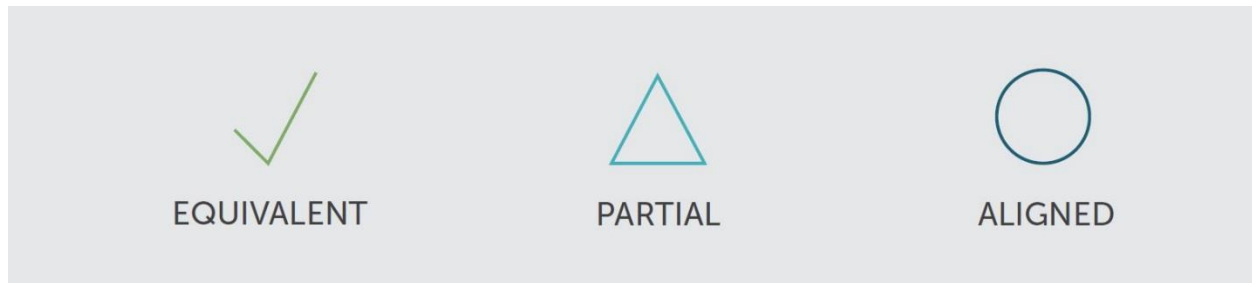
## Innovations

Innovation features pave way for projects to develop unique strategies for creating healthy environment. Innovations although are existing features in v1, have seen some new additions in v2.

- Projects can pursue up to 10 innovation points (I01) when registered under v2.
- WELL Accredited Professional (WELL AP) and Educate WELL are now listed as Innovation Features I02 and I03.
- New Innovation features added in v2 are Gateways to Wellness (I04) and Green Building Rating Systems (I05).

## Appendix B

### 📁 Crosswalks & Alignments



The document outlines a level of fulfilment for each credit and feature in LEED and WELL. A level of fulfilment is assigned as:

When the level of fulfilment is considered **equivalent**, it indicates that a feature or credit has been evaluated and deemed satisfactory to achieve the complete WELL feature or LEED credit indicated. The awarded feature or credit can be used as verification to achieve the equivalent feature or credit.

When the level of fulfilment is considered **partial**, it indicates the credit or feature is partly met or may contribute toward the achievement of the associated feature or credit. For example, a WELL part requirement may be met, but the additional parts not satisfied by LEED will need to follow WELL requirements. The awarded LEED credit can be used as verification for the part(s) that have been satisfied. This may also occur in the reverse.

When the level of fulfilment is considered **aligned**, it indicates that the intent of the credit or feature is aligned, but the requirements do not fully overlap. This may mean that the credit or feature is a good stepping stone for meeting the requirements, but more work may be needed to confirm achievement.

## LEED BD+C V4 TO WELL V1

ACHIEVEMENT OF THE FOLLOWING LEED CREDIT(S) OR OPTION WILL...		... ALLOW FULL OR PARTIAL ACHIEVEMENT OF THE FOLLOWING WELL FEATURE(S).		
LEED BD+C CREDIT	POINTS REQUIRED OR OPTION REQUIRED	WELL FEATURE	PART	KEY
LTc Surrounding Density and Diverse Uses	3 points (any adaptation)	WELL Feature 67: Exterior Active Design	Part 3: Neighborhood Connectivity	△
LTc Bicycle Facilities	1 point (all adaptations)	WELL Feature 69: Active Transportation Support	Full feature	✓
SSc Open Space	1 point (all adaptations)	WELL Feature 100: Biophilia II – Quantitative	Part 1: Outdoor Biophilia	△
SSc Open Space	1 point (all adaptations)	WELL Feature 67: Exterior Active Design	Part 1: Pedestrian Amenities Part 2: Pedestrian Promotion	△
EAc Enhanced Commissioning	2 points exactly or achieve 5 or more points	WELL Feature 14: Air Infiltration Management	Full feature	✓
MRp PBT Source Reduction - Mercury	Full prerequisite	WELL Feature 11: Fundamental Material Safety	Part 5: Mercury Limitation	△
MRC Building Product Disclosure and Optimization – Material Ingredients	Option 2 only	WELL Feature 26: Enhanced Material Safety	Full feature	✓
MRC Building Product Disclosure and Optimization – Material Ingredients	Option 1 only	WELL Feature 97: Material Transparency	Full feature	✓
EQp Minimum Indoor Air Quality Performance AND EA Fundamental Commissioning and Verification	Full prerequisites	WELL Feature 03: Ventilation Effectiveness	Full feature	✓
EQp Environmental Tobacco Smoke Control	Full prerequisites	WELL Feature 02: Smoking Ban	Full feature	✓
EQc Enhanced Indoor Air Quality Strategies	Option 1 only	WELL Feature 05: Air Filtration, Part 2 WELL Feature 08: Healthy Entrance, Part 1 WELL Feature 17: Direct Source Ventilation	Feature 5 Part 2: Particle Filtration Feature 8 Part 1: Permanent Entryway Walk-off System Feature 17: Full feature	△
EQc Enhanced Indoor Air Quality Strategies	Option 2 only	WELL Feature 15: Increased Ventilation	Full feature	✓
EQc Enhanced Indoor Air Quality Strategies	2 points (all adaptations)	WELL Feature 05: Air Filtration, Part 2 WELL Feature 08: Healthy Entrance, Part 1 WELL Feature 17: Direct Source Ventilation	Feature 5 Part 2: Particle Filtration Feature 8 Part 1: Permanent Entryway Walk-off System Feature 17: Full feature	△
EQc Low Emitting Materials	3 points (all adaptations)	WELL Feature 04: VOC Reduction	Full feature	✓

ACHIEVEMENT OF THE FOLLOWING LEED CREDIT(S) OR OPTION WILL...		... ALLOW FULL OR PARTIAL ACHIEVEMENT OF THE FOLLOWING WELL FEATURE(S).		
LEED BD+C CREDIT	POINTS REQUIRED OR OPTION REQUIRED	WELL FEATURE	PART	KEY
EQc Construction Indoor Air Quality Management Plan	1 point (all adaptations)	WELL Feature 07: Construction Pollution Management	Full feature	✓
EQc Indoor Air Quality	1 point (all adaptations)	WELL Feature 13: Air Flush	Full feature	✓
EQc Thermal Comfort	1 point (all adaptations)	WELL Feature 76: Thermal Comfort WELL Feature 82: Individual Thermal Comfort	Full feature	✓
EQc Interior Lighting	Option 2E + 2F only	WELL Feature 59: Surface Design	Full feature	✓
EQc Interior Lighting	Option 2A only	Feature 55: Electric Light Glare Control	Full feature	✓
EQc Daylight	At least 1 point (all adaptations)	WELL Feature 56: Solar Glare Control	Full feature	✓
EQc Daylight	At least 2 points (all adaptations) except healthcare (1 point)	WELL Feature 62: Daylight Modeling	Full feature	✓
EQc Quality Views	1 point (all adaptations)	WELL Feature 61: Right to Light	Full feature	✓
EQc Acoustic Performance	1 point (all adaptations)	WELL Feature 78: Reverberation Time WELL Feature 81: Sound Barriers	Full feature	✓

THE FOLLOWING LEED CREDIT(S) ARE ALIGNED WITH ...	...THE FOLLOWING WELL FEATURE(S), HOWEVER, THE REQUIREMENTS DO NOT OVERLAP.	KEY
LEED BD+C CREDIT	WELL FEATURE	KEY
SSc Open Space	WELL Feature 68: Physical Activity Spaces	○
MRC Building Product Disclosure and Optimization – Material Ingredients	WELL Feature 25 : Toxic Material Reduction	○
EQc Indoor Air Quality Assessment	WELL Feature 01 : Air Quality Standards	○
EQc Interior Lighting	WELL Feature 53: Visual Lighting Design WELL Feature 58: Color Quality	○
EQc Acoustic Performance	WELL Feature 75: Internally Generated Noise WELL Feature 79: Sound Masking WELL Feature 80: Sound Reducing Surfaces	○

## LEED ID+C V4 TO WELL V1

ACHIEVEMENT OF THE FOLLOWING LEED CREDIT(S) OR OPTION WILL...		...ALLOW FULL OR PARTIAL ACHIEVEMENT OF THE FOLLOWING WELL FEATURE(S).		
LEED ID+C CREDIT	POINTS REQUIRED OR OPTION REQUIRED	WELL FEATURE	PART	KEY
LTC Surrounding Density and Diverse Uses	6 points (all adaptation)	WELL Feature 67: Exterior Active Design	Part 3: Neighborhood Connectivity	△
LTC Bicycle Facilities	1 point (all adaptations)	WELL Feature 69: Active Transportation Support	Full feature	✓
MRC Building Product Disclosure and Optimization – Material Ingredients	Option 2 only	WELL Feature 26: Enhanced Material Safety	Full feature	✓
MRC Building Product Disclosure and Optimization – Material Ingredients	Option 1 only	WELL Feature 97: Material Transparency	Full feature	✓
EQp Minimum Indoor Air Quality Performance AND EA Fundamental Commissioning and Verification	Full prerequisite	WELL Feature 03: Ventilation Effectiveness	Full feature	✓
EQp Environmental Tobacco Smoke Control	Full prerequisite	WELL Feature 02: Smoking Ban	Full feature	✓
EQc Enhanced Indoor Air Quality Strategies	Option 1 only	WELL Feature 05: Air Filtration, Part 2 WELL Feature 08: Healthy Entrance, Part 1 WELL Feature 17: Direct Source Ventilation	Feature 5 Part 2: Particle Filtration Feature 8 Part 1: Permanent Entryway Walk-off System Feature 17: Full feature	△
EQc Enhanced Indoor Air Quality Strategies	Option 2 only	WELL Feature 15: Increased Ventilation	Full feature	✓
EQc Enhanced Indoor Air Quality Strategies	2 points (all adaptations)	WELL Feature 05: Air Filtration, Part 2 WELL Feature 08: Healthy Entrance, Part 1 WELL Feature 17: Direct Source Ventilation WELL Feature 15: Increased Ventilation	Feature 5 Part 2: Particle Filtration Feature 8 Part 1: Permanent Entryway Walk-off System Feature 17: Full feature	△
EQc Low Emitting Materials	3 points (all adaptations)	WELL Feature 04: VOC Reduction	Full feature	✓
EQc Construction Indoor Air Quality Management Plan	1 point (all adaptations)	WELL Feature 07: Construction Pollution Management	Full feature	✓
EQc Indoor Air Quality Assessment	1 point (all adaptations)	WELL Feature 13: Air Flush	Full feature	✓
EQc Thermal Comfort	1 point (all adaptations)	WELL Feature 76: Thermal Comfort WELL Feature 82: Individual Thermal Comfort	Full feature	✓

ACHIEVEMENT OF THE FOLLOWING LEED CREDIT(S) OR OPTION WILL...		...ALLOW FULL OR PARTIAL ACHIEVEMENT OF THE FOLLOWING WELL FEATURE(S).		
LEED ID+C CREDIT	POINTS REQUIRED OR OPTION REQUIRED	WELL FEATURE	PART	KEY
EQc Interior Lighting	Option 2E + 2F only	WELL Feature 59: Surface Design	Full feature	✓
EQc Interior Lighting	Option 2A only	Feature 55: Electric Light Glare Control	Full feature	✓
EQc Daylight	At least 1 point (all adaptations)	WELL Feature 56: Solar Glare Control	Full feature	✓
EQc Daylight	At least 2 points (all adaptations)	WELL Feature 62: Daylight Modeling	Full feature	✓
EQc Quality Views	1 point (all adaptations)	WELL Feature 61: Right to Light	Full feature	✓
EQc Acoustic Performance	2 points (all adaptations)	WELL Feature 78: Reverberation Time WELL Feature 81: Sound Barriers	Full feature	✓

THE FOLLOWING LEED CREDIT(S) ARE ALIGNED WITH ...	...THE FOLLOWING WELL FEATURE(S), HOWEVER, THE REQUIREMENTS DO NOT OVERLAP.	
LEED ID+C CREDIT	WELL FEATURE	KEY
EAc Enhanced Commissioning	WELL Feature 14: Air Infiltration Management	○
MRc Building Product Disclosure and Optimization – Material Ingredients	WELL Feature 25: Toxic Material Reduction	○
EQc Indoor Air Quality Assessment	WELL Feature 01: Air Quality Standards	○
EQc Interior Lighting	WELL Feature 53: Visual Lighting Design WELL Feature 58: Color Quality	○
EQc Acoustic Performance	WELL Feature 75: Internally Generated Noise WELL Feature 79: Sound Masking WELL Feature 80: Sound Reducing Surfaces	○



## LEED O+M V4 TO WELL V1

ACHIEVEMENT OF THE FOLLOWING LEED CREDIT(S) OR OPTION WILL...		...ALLOW FULL OR PARTIAL ACHIEVEMENT OF THE FOLLOWING WELL FEATURE(S).		
LEED O+M CREDIT	POINTS REQUIRED OR OPTION REQUIRED	WELL FEATURE	PART	KEY
EQp Minimum Indoor Air Quality Performance	Full prerequisite	WELL Feature 03: Ventilation Effectiveness	Full feature	✓
EQp Environmental Tobacco Smoke Control	Full prerequisite	WELL Feature 02: Smoking Ban	Full feature	✓
EQp Green Cleaning Policy	Full prerequisite	WELL Feature 09: Cleaning Protocol	Full feature	✓
EQc Enhanced Indoor Air Quality Strategies	2 points (all adaptations)	WELL Feature 08: Healthy Entrance WELL Feature 05: Filtration	Full feature	✓
EQc Thermal Comfort	1 point (all adaptations)	WELL Feature 76: Thermal Comfort	Full feature	✓
EQc Green Cleaning – Equipment	1 point (all adaptations)	WELL Feature 29: Cleaning Equipment	Full feature	✓
EQc Integrated Pest Management	1 point (all adaptations)	WELL Feature 10: Pesticide Management WELL Feature 22: Pest Control	Full feature	✓
EQc Occupant Comfort Survey	1 point (all adaptations)	WELL Feature 86: Post-occupancy surveys	Full feature	✓
EQc Daylight and Quality Views	Option 1 only	WELL Feature 62: Daylight Modeling	Full feature	✓
EQc Daylight and Quality Views	Option 2 only	WELL Feature 61: Right to Light	Full feature	✓
EQc Daylight and Quality Views	4 points (all adaptations)	WELL Feature 61: Right to Light WELL Feature 62: Daylight Modeling	Full feature	✓

THE FOLLOWING LEED CREDIT(S) ARE ALIGNED WITH ...	...THE FOLLOWING WELL FEATURE(S), HOWEVER, THE REQUIREMENTS DO NOT OVERLAP.	KEY
LEED O+M CREDIT	WELL FEATURE	KEY
EQc Interior Lighting	WELL Feature 53: Visual Lighting Design WELL Feature 58: Color Quality WELL Feature 59: Surface Design	○
EQc Green Cleaning – Custodial Effectiveness Assessment	WELL Feature 28: Cleanable Environment	○



## WELL V1 TO LEED V4 (BD+C, ID+C, AND O+M)

ACHIEVEMENT OF THE FOLLOWING WELL FEATURE(S) OR OPTION WILL...		...ALLOW FULL OR PARTIAL ACHIEVEMENT OF THE FOLLOWING LEED CREDIT(S).		
WELL FEATURE	PART	LEED CREDIT (AS APPLICABLE TO BD+C, ID+C, AND/OR O+M V4)	POINTS REQUIRED OR OPTION REQUIRED	KEY
WELL Feature 02: Smoking Ban	Full feature	EQp Environmental Tobacco Smoke Control (applicable to BD+C and O+M)	Full prerequisite	✓
WELL Feature 03: Ventilation Effectiveness	Full feature	EQc Enhanced Indoor Air Quality Strategies (applicable to BD+C, O+M, and ID+C)	1 point (option 2 for mechanically ventilated projects)	△
WELL Feature 08: Healthy Entrance WELL Feature 05: Air Filtration WELL Feature 17: Direct Source Ventilation	Full feature	EQc Enhanced Indoor Air Quality Strategies (applicable to BD+C, O+M, and ID+C)	1 point (option 1 for mechanically ventilated projects only)	△
WELL Feature 18: Air Quality Monitoring and Feedback	Full feature	EQc Enhanced Indoor Air Quality Strategies (applicable to BD+C, O+M, and ID+C)	1 point (option 2 for naturally ventilated projects)	△
WELL Feature 56: Solar Glare Control WELL Feature 57: Low-Glare Workstation Design WELL Feature 60: Automated Shading and Dimming Controls WELL Feature 62: Daylight Modeling	Full feature	EQc Daylight (applicable to BD+C and ID+C)	3 points (for all adaptations except BD+C: Healthcare, which receives 2 points)	✓
WELL Feature 86: Post-occupancy Surveys	Full feature	EQc Occupant Comfort Survey (applicable to O+M)	1 point (all adaptations)	✓

THE FOLLOWING WELL FEATURE(S) ARE ALIGNED WITH...	...THE FOLLOWING LEED CREDIT(S), HOWEVER, THE REQUIREMENTS DO NOT OVERLAP.	KEY
WELL FEATURE	LEED CREDIT (AS APPLICABLE TO BD+C, ID+C, AND/OR O+M V4)	KEY
WELL Feature 01: Air Quality Testing WELL Feature 03: Ventilation Effectiveness WELL Feature 18: Air Quality Monitoring and Feedback	EQp Minimum Indoor Air Quality Performance	○
WELL Feature 04: VOC Reduction	EQc Low Emitting Materials	○
WELL Feature 13: Air Flush	EQc Indoor Air Quality Assessment	○
WELL Feature 76: Thermal Comfort WELL Feature 82: Individual Thermal Comfort	EQc Thermal Comfort	○
WELL Feature 55: Electric Glare Light Control WELL Feature 53: Visual Lighting Design WELL Feature 58: Color Quality WELL Feature 59: Surface Design	EQc Interior Lighting	○
WELL Feature 75: Internally Generated Noise WELL Feature 78: Reverberation Time WELL Feature 79: Sound Masking WELL Feature 80: Sound Reducing Surfaces WELL Feature 81: Sound Barrier	EQc Acoustic Performance	○
WELL Feature 09: Cleaning Protocol	EQp Green Cleaning Policy	○
WELL Feature 10: Pesticide Management WELL Feature 22: Pest Control	EQc Integrated Pest Management	○

## Appendix C

### 📁 WELL v2 Checklist

The order is following the list below:

1. CIRS Building
2. Life Sciences Centre
3. Forestry Sciences Centre

Concept	P/O	Feature	Part	Points	LOA	(AND) LOA	(OR) LOA	Annotated Document 1	Annotated Document 2	Photograph	Performance Test	Project Phase	Policy	Design	Notes		
Air	P	01. Fundamental Air Quality	1. Meet Thresholds for Particulate Matter	-	Owner	MEP						Yes	Operation			Onsite performance test	
			2. Meet Thresholds for Organic Gases	-	Owner	MEP							Yes	Operation			Onsite performance test
			3. Meet Thresholds for Inorganic Gases	-	Owner	MEP							Yes	Operation			Onsite performance test
			4. Meet Radon Threshold	-	Owner	MEP								Operation			Tested by a professional
			5. Monitor Fundamental Air Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report				Operation			2.03 - AIR-300 Air Quality Controller Installation & Operating Instructions (UBC Serial number: V.2940633-08)
	P	02. Smoke-Free Environment	1. Prohibit Indoor Smoking	-	Owner				Policy Document				Operation	Yes		The University of British Columbia, Board of Governors, Policy No. 15	
			2. Prohibit Outdoor Smoking	-	Owner						Yes		Operation	Yes		Figure 1	
	P	03. Ventilation Effectiveness	1. Ensure Adequate Ventilation	-		MEP							Design/Construction		Yes	04 - Functional Performance Check Sheets, Commissioning Report - Updated February 27, 2013 (UBC Serial Number: R2015.035.01) / 2.03 - AIR-300 Air Quality Controller Installation & Operating Instructions (UBC Serial number: V.2940633-08) / ASHRAE 55, 2004 / UBC Technical Guidelines Division 15 / Mechanical systems specifications for CIRS / iiSBE Canada, Report of Building Performance Evaluation for the CIRS	
			2. Conduct System Balancing	-	MEP	Contractor							Construction/Operation	Yes		Commissioning Report - Updated February 27, 2013 (UBC Serial Number: R2015.035.01)	
	P	04. Construction Pollution Management	1. Mitigate Construction Pollution	-	Contractor								Construction			Construction Process / Not found in database, Construction contractor / Mechanical systems specifications for CIRS	
	O	05. Enhanced Air Quality	1. Meet Enhanced Thresholds for Particulate Matter	2	Owner	MEP						Yes	Operation			Onsite performance test	
			2. Meet Enhanced Thresholds for Organic Gases	1	Owner	MEP						Yes	Operation			Onsite performance test	
			3. Meet Enhanced Thresholds for Inorganic Gases	1	Owner	MEP						Yes	Operation			Onsite performance test	
	O	06. Enhanced Ventilation	1. Increase Outdoor Air Supply	3	MEP								Design/Construction			633 - Mechanical Specifications, Mechanical Systems Specifications, UBC Serial Number: V.2717 633-08	
2. Implement Demand-Controlled Ventilation			3	MEP								Design/Construction			633 - Mechanical Specifications, Mechanical Systems Specifications, UBC Serial Number: V.2717 633-08		
3. Implement Displacement Ventilation			1	MEP								Design/Construction			M102 / M200-M205		
4. Implement Advanced Air Distribution			3	MEP								Design/Construction			Not found in database		
O	07. Operable Windows	1. Provide Operable Windows	1	Architect				Professional Narrative		Yes		Design		Yes	Figure 2, iiSBE Canada, Report of Building Performance Evaluation for the CIRS		
		2. Manage Window Use	1	MEP						Yes		Design		Yes	A100-A106		
		3. Apply Universal Design to Windows	1	Architect								Design		Yes	A320-A321		
O	08. Air Quality Monitoring and Awareness	1. Implement Indoor Air Monitors	1	MEP				On-going Data Report	Operations Schedule	Yes		Design/Operation	Yes		Figure 4, Controls system, Honeywell Version		
		2. Promote Air Quality Awareness	1					Policy Document		Yes		Operation	Yes		Figure 5		
O	09. Pollution Infiltration Management	1. Design Healthy Envelope and Entryways	1	MEP			Owner	Commissioning Report		Yes		Design		Yes	Figure 6, Documentation requirement varies based on the option chosen by project team.		
O	10. Combustion Minimization	1. Manage Combustion	1	Owner	MEP					Yes		Design		Yes	Figure 7, Signage / UBC CIRS System Description		
O	11. Source Separation	1. Manage Pollution and Exhaust	1	MEP				Mechanical Drawing	Architectural Drawing	Yes		Design	Yes	Yes	Figure 7		
O	12. Air Filtration	1. Implement Particle Filtration	1	MEP				Operations Schedule		Yes		Construction			UBC CIRS System Descriptions, page 3-4 / 3.02 - Make-Up Air Unit, Operating & Maintenance Manual for Mechanical Systems, Volum 1 of 2 (UBC Serial Number: V.3000633-08) / 1.4 - Maintenance & Lubrication Division, Operating & Maintenance Manual for Mechanical Systems, Volum 1 of 2 (UBC Serial Number: V.3000633-08)		
O	13. Active VOC Control	1. Implement Carbon Filtration	1	MEP				Operations Schedule		Yes		Construction/Operation			Not found in database		
O	14. Microbe and Mold Control	1. Implement Ultraviolet Air Treatment	1	MEP				Operations Schedule		Yes		Construction/Operation			Not found in database		
		2. Manage Condensation and Mold	1	Owner				Professional Narrative	Operations Schedule	Yes		Operation			Figure 8, 1.4 - Maintenance & Lubrication Division, Operating & Maintenance Manual for Mechanical Systems, Volum 1 of 2, Page 5 (UBC Serial Number: V.3000633-08)		
Water	P	01. Fundamental Water Quality	1. Meet Sediment Thresholds	-	MEP						Yes	Operation			Onsite performance test		
			2. Meet Microorganisms Thresholds	-	MEP						Yes	Operation			Onsite performance test		
			3. Monitor Fundamental Water Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report			Operation			Onsite performance test	
	P	02. Water Contaminants	1. Meet Dissolved Metal Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			2. Meet Organic Pollutant Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			3. Meet Disinfectant Byproducts Thresholds	-	MEP								Yes	Operation			Onsite performance test
			4. Meet Herbicide and Pesticide Thresholds	-	Owner								Yes	Operation			Onsite performance test
			5. Meet Fertilizer Thresholds	-	Owner							Yes	Operation			Onsite performance test	
			6. Meet Public Water Additive Thresholds	-	Owner	MEP						Yes	Operation			Onsite performance test	
			7. Monitor Water Contaminant Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report			Operation				Not found in database
	P	03. Legionella Control	1. Implement Legionella Management Plan	-	Owner				Professional Narrative				Operation			Not found in database	
	O	04. Enhanced Water Quality	1. Meet Drinking Water Taste Properties	1	Owner	MEP						Yes	Operation			Onsite performance test	
	O	05. Water Quality Consistency	1. Test and Display Water Quality	1	Owner				Operations Schedule	On-going Data Report	Yes		Operation			Figure 9, Controls system, Honeywell Version	
			2. Filter Drinking Water	1	MEP						Yes		Operation			Figure 10, CIRS O&M Manual	
O	06. Drinking Water Promotion	1. Ensure Drinking Water Access	1	Owner	Architect			Architectural Drawing				Design	Yes	Yes	Architectural Drawings and Visual Inspections / Figure 12		
O	07. Moisture Management	1. Manage Exterior Liquid Water	1	Architect								Design		Yes	Landscape drawings		
		2. Isolate Moisture-sensitive Materials	1	Contractor	Architect			Professional Narrative				Design/Construction	Yes		C1/4 - C4/4		
		3. Manage Interior Liquid Water	1	MEP						Yes		Design		Yes	Figure 11, Mechanical reports		
O	08. Handwashing	1. Provide Adequate Sink	1	Architect						Yes		Design		Yes	Figure 12, Architectural drawing		
		2. Provide Handwashing Support	1	Architect				Operations Schedule	Spot check			Design		Yes	Figure 13		
Nourishment	P	01. Fruits and Vegetables	1. Ensure Fruit and Vegetable Availability	-	Owner			Operations Schedule				Operation	Yes		The Loop Café		
			2. Promote Fruit and Vegetable Visibility	-	Owner					Yes		Operation	Yes		Figure 14, The Loop Café		
	P	02. Nutritional Transparency	1. Provide Nutritional Information	-	Owner					Yes		Operation	Yes		Figure 15, The Loop café		
			2. Implement Ingredient Labeling	-	Owner			Operations Schedule		Yes		Operation	Yes		Figure 16, The Loop Café		
			3. Implement Refined Ingredient Labeling	-	Owner					Yes		Operation	Yes		Figure 17, The Loop Café		
	O	03. Refined Ingredients	1. Limit Total Sugars	1	Owner				Operations Schedule				Operation	Yes		The Loop Café	
			2. Promote Whole Grains	1	Owner				Operations Schedule				Operation	Yes		The Loop Café	
			3. Manage Oils	1	Owner				Operations Schedule				Operation	Yes		The Loop Café	
	O	04. Food Advertising	1. Promote Healthy Nutritional Messaging	1	Owner				Policy Document		Yes		Operation	Yes		Figure 18, The Loop Café	
			2. Implement Healthy Menu Design	1	Owner				Professional Narrative		Yes		Operation	Yes		Figure 19, The Loop Café	
	O	05. Artificial Ingredients	1. Restrict Artificial Ingredients	1	Owner				Operations Schedule		Yes		Operation	Yes		Figure 20, The Loop Café	
	O	06. Portion Sizes	1. Promote Healthy Portions	1	Owner				Operations Schedule				Operation	Yes		The Loop Café	
	O	07. Nutrition Education	1. Provide Nutrition Education	1	Owner				Operations Schedule	Educational Materials			Operation	Yes		Not Found in database	
	O	08. Mindful Eating	1. Include Designated Eating Space	1	Architect				Architectural Drawing				Design		Yes	A100-A106	
2. Provide Daily Meal Breaks			1	Owner				Policy Document				Operation	Yes		UBC Policy / Ask Matt /		



O	09. Special Diets	1. Manage Allergies and Alternatives	1	Owner			Operations Schedule			Operation	Yes		The Loop Café	
		2. Implement Enhanced Ingredient Labeling	1	Owner			Operations Schedule			Operation	Yes		The Loop Café	
	10. Food Preparation	1. Provide Meal Support	1	Owner				Yes		Operation	Yes		Figure 21, The Loop Café	
	11. Responsible Food Sourcing	1. Implement Responsible Sourcing	1	Owner			Operations Schedule		Yes	Operation	Yes		Figure 22, The Loop Café	
O	12. Food Production	1. Provide Gardening Space	1	Owner				Yes		Design		Yes	Figure 23, A100-A106	
		2. Provide Planting Support	1	Owner				Yes		Design/Operation	Yes		Figure 24, CIRS Technical Manual Ch 14-15	
O	13. Local Food Environment	1. Ensure Food Access	1	Owner	Architect		Annotated Map			Pre-design/Design		Yes	Site analysis / UBC Farm, Horticulture Building, Open kitchen, Starbucks, ...	
			14											
P	01. Light Exposure and Education	1. Ensure Indoor Light Exposure	-	Architect			Architectural Drawing	Modeling Report			Design		Yes	A100-A106
		2. Promote Lighting Education	-	Owner			Educational Materials			Operation	Yes		Not Found in database	
	02. Visual Lighting Design	1. Light Levels for Visual Acuity	-	Architect			Design Specifications		Yes	Design		Yes	iiSBE Canada, Report of Building Performance Evaluation for the CIRS / CIRS Lighting Controls Report April 11th 2013	
	03. Circadian Lighting Design	1. Lighting for the Circadian System	3	Architect	Owner				Yes	Design		Yes	Onsite performance test	
	O	04. Glare Control	1. Control Solar Glare	2	Architect			Policy Document	Modeling Report	Yes	Design	Yes	Yes	Figure 25
			2. Manage Glare from Electric Lighting	2	Architect					Yes	Design		Yes	Figure 26
	O	05. Enhanced Daylight Access	1. Implement Enhanced Daylight Plan	1	Owner	Architect		Architectural Drawing			Design		Yes	A100-A106
			2. Implement Enhanced Daylight Simulation	2	Architect			Modeling Report			Design		Yes	CIRS Lighting Controls Report April 11th 2013
	O	06. Visual Balance	3. Ensure Views	1	Architect			Architectural Drawing			Design		Yes	A100-A106
			1. Manage Brightness	1	Architect						Design		Yes	05 - Lighting, CIRS Electrical Manual Volume 1 of 2, UBC Serial Number: V.2937 633-10
O	07. Electric Light Quality	1. Ensure Color Rendering Quality	1	Architect						Design		Yes	CIRS Lighting Controls Report April 11th 2013, page 21 / 05 - Lighting, CIRS Electrical Manual Volume 1 of 2, UBC Serial Number: V.2937 633-10	
		2. Manage Flicker	1	Architect						Design		Yes	CIRS Lighting Controls Report April 11th 2013, page 21 / 05 - Lighting, CIRS Electrical Manual Volume 1 of 2, UBC Serial Number: V.2937 633-11	
O	08. Occupant Control of Lighting Environments	1. Enhance Occupant Controllability	1	Owner	Architect		Professional Narrative		Yes	Design		Yes	Figure 27, CIRS Lighting Controls Report April 11th 2013	
		2. Provide Supplemental Lighting	1	Owner	Architect		Policy Document		Yes	Design	Yes	Yes	Figure 28	
			20											
P	01. Active Buildings and Communities	1. Design Active Buildings and Communities	-							Design				
P	02. Visual and Physical Ergonomics	1. Support Visual Ergonomics	-	Owner			Policy Document		Yes	Design/Operatiopn	Yes		Figure 29, Documentation requirements vary based on the option chosen by project team.	
		2. Ensure Desk Height Flexibility	-	Owner			Policy Document		Yes	Design/Operatiopn	Yes	Yes	Figure 30, Documentation requirements vary based on the option chosen by project team.	
		3. Ensure Seat Flexibility	-	Owner			Policy Document		Yes	Design/Operatiopn	Yes	Yes	Figure 31, Documentation requirements vary based on the option chosen by project team.	
		4. Provide Standing Support	-	Owner					Yes	Design/Operatiopn	Yes	Yes	Figure 32	
		5. Provide Ergonomics Education	-	Owner				Educational Materials			Operation	Yes		UBC Provides this feature / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/ergonomics/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/ergonomics/</a>
O	03. Movement Network and Circulation	1. Design Aesthetic Circulation Networks	1	Architect			Architectural Drawing		Yes	Design		Yes	Figure 33, A100-A106	
		2. Integrate Point-of-Decision Signage	1	Architect			Signage & Communications Materials			Design		Yes	Figure 34	
		3. Promote Visible Stairs	1	Architect			Architectural Drawing			Design		Yes	A100-A106	
O	04. Active Commuter and Occupant Support	1. Provide Bicycle Storage	2	Architect			Policy Document		Yes	Design	Yes	Yes	Figure 35, A100-A106	
		2. Provide Facilities for Active Occupants	2	Architect					Yes	Design	Yes	Yes	Figure 36	
O	05. Site Planning and Selection	1. Select Sites with Diverse Uses	2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / Not Applicable	
		2. Select Sites with Access to Mass Transit	2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / UBC Bus loops	
		3. Select Sites with Pedestrian Friendly Streets	2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / Vancouver campus planning	
		4. Select Sites with Bike Friendly Streets	2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / Vancouver campus planning	
O	06. Physical Activity Opportunities	1. Implement Activity Programs for Employees	2	Owner			Policy Document			Operation	Yes		UBC Recreation	
		2. Implement Activity Programs for Students	2	Owner			Policy Document	Educational Materials			Operation	Yes		UBC Recreation
O	07. Active Furnishings	1. Provide Active Workstations	2	Owner	Architect			Yes	Design		Yes	Figure 37		
O	08. Physical Activity Spaces and Equipment	1. Provide Dedicated Activity Spaces	1	Owner			Architectural Drawing	Annotated Map		Design		Yes	Ask Matt / UBC Recreation	
		2. Provide Physical Activity Equipment	1	Owner					Yes	Design/Operatiopn		Yes	Figure 38	
		3. Provide Off-Site Activity Spaces	1	Owner			Architectural Drawing	Annotated Map			Operation	Yes	UBC Recreation, Site analysis	
O	09. Exterior Active Design	1. Integrate Active Façades	1	Architect			Architectural Drawing			Design		Yes	A300-A304	
		2. Provide On-Site Pedestrian Destinations	1	Architect			Architectural Drawing			Design		Yes	A100-A106	
O	10. Enhanced Ergonomics	1. Utilize Ergonomic Consultation	1	Owner			Policy Document			Operation	Yes		Ask Matt / Not found in database	
O	11. Physical Activity Promotion	1. Promote Physical Activity	1	Owner			Policy Document			Operation	Yes		N/A - UBC Recreation / UBC Action framework to increase physical activity and reduce sedentary behaviour / Ask Matt / Not found in database	
		2. Promote Participation Awareness	1	Owner			On-going Data Report			Operation	Yes		N/A - UBC Recreation / UBC Action framework to increase physical activity and reduce sedentary behaviour / Ask Matt / Not found in database	
O	12. Self-Monitoring	1. Provide Self-Monitoring Tools	1	Owner			Policy Document			Operation	Yes		Ask Matt / Not met	
			12											
P	01. Thermal Performance	1. Support Thermal Environment	-	MEP			Professional Narrative	Educational Materials	Yes	Design/Operatiopn		Yes	Onsite performance test	
		2. Monitor Thermal Parameters	-	Owner			Policy Document			Operation	Yes		iiSBE Canada, Report of Building Performance Evaluation for the CIRS, pages 34-35 / CIRS Technical manual Ch 17,	
	O	02. Enhanced Thermal Performance	1. Enhance Thermal Environment	1	MEP			Professional Narrative		Yes	Operation		Yes	Survey, iiSBE Canada, Report of Building Performance Evaluation for the CIRS, pages 34-35 / CIRS Technical manual Ch 17, Ventilation
			2. Achieve Thermal Comfort	3	MEP	Owner		Policy Document	Survey Materials			Operation	Yes	
	O	03. Thermal Zoning	1. Ensure Thermostat Control	2	MEP	Owner					Design	Yes	Yes	Not found in database
			2. Promote Free Address	1	MEP	Owner		Policy Document			Design/Operatiopn	Yes	Yes	Not found in database
	O	04. Individual Thermal Control	1. Ensure Personal Thermal Comfort	3	Owner				Yes	Design/Operatiopn	Yes			Figure 39,
2. Facilitate Thermal Adaptation			1	Owner			Policy Document		Yes	Operation	Yes		Not found in database	
O	05. Radiant Thermal Comfort	1. Implement Radiant Systems	1	MEP	Owner					Design		Yes	Not found in database	
		2. Implement Dedicated Outdoor Air Systems	1	MEP	Owner					Design		Yes	Page 24 , 23 - Rooftop Air Handling Units. Demolition of Plant Operation Building Mechanical Operating & Maintenance Manual, UBC Serial Number: V.2768 633-08	
O	06. Thermal Comfort Monitoring	1. Monitor Thermal Environment	1	MEP	Owner		On-going Data Report	Operations Schedule	Yes	Operation		Yes	10 - Moisture Detection System, CIRS Electrical Manual Volume 2 of 2, UBC Serial Number: V.2938 633-10 / E118 /	
O	07. Humidity Control	1. Manage Relative Humidity	1	MEP	Owner				Yes	Design/Operatiopn		Yes	Onsite performance test / Mechanical systems specifications for CIRS, Humidity sensors	
			11											
P	01. Sound Mapping	1. Manage Background Noise Level	-	Architect			Professional Narrative	Architectural Drawing	Yes	Design		Yes	Performance testing is not required for compliance but is an option. Projects not pursuing performance testing as the route of compliance must submit documentation. Projects pursuing performance testing as the route of compliance need not provide any additional documentation.	
		2. Manage Acoustical Privacy	-	Architect			Professional Narrative	Architectural Drawing	Yes	Design		Yes	Performance testing is not required for compliance but is an option. Projects not pursuing performance testing as the route of compliance must submit documentation. Projects pursuing performance testing as the route of compliance need not provide any additional documentation.	
		3. Label Acoustic Zones	-	Architect			Architectural Drawing			Design		Yes	iiSBE Canada, Report of Building Performance Evaluation for the CIRS, page 35	
	O	02. Maximum Noise Levels	1. Limit Background Noise Levels	3	Architect				Yes	Design		Yes	Onsite performance test / iiSBE Canada, Report of Building Performance Evaluation for the CIRS, page 35	
O	03. Sound Barriers	1. Ensure Adequate Wall Construction	2	Architect			Design Specifications		Yes	Design		Yes	Onsite performance test / Verification requirements vary by project type. / A011	
		2. Ensure Proper Door Specifications	1	Architect			Design Specifications			Design		Yes	A020 / hollow doors	



O	04. Sound Absorption	1. Meet Thresholds for Reverberation Time	1	Architect					Yes	Design	Yes	Onsite performance test	
		2. Implement Sound Reducing Ceilings	1	Architect		Design Specifications				Design	Yes	A010 / Not found in database / Section 09510 Acoustical Ceiling	
O	05. Sound Masking	3. Implement Sound Reducing Vertical Surfaces	1	Architect					Yes	Design	Yes	Onsite performance test	
		1. Implement Sound Masking	2	Architect	Owner				Yes	Design/Operatiopn	Yes	Onsite performance test / iiSBE Canada, Report of Building Performance Evaluation for the CIRS, page 35	
			24										
P	01. Fundamental Material Precautions	1. Restrict Asbestos	-	Architect	Owner					Pre-design/Design	Yes	Yes	Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List
		2. Limit Mercury	-	MEP	Owner					Pre-design/Design	Yes	Yes	633 - Mechanical Specifications, Mechanical Systems Specifications, UBC Serial Number: V.2717 633-08 / Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List
		3. Restrict Lead	-	Architect	Owner					Pre-design/Design	Yes	Yes	Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List
P	02. Hazardous Material Abatement	1. Manage Asbestos Hazards	-	Contractor		Remediation Report				Construction	Yes	Yes	Not found in database
		2. Manage Lead Hazards	-	Contractor		Remediation Report				Construction	Yes	Yes	Not found in database
		3. Manage Polychlorinated Biphenyl (PCB) Hazards	-	Contractor		Remediation Report				Construction	Yes	Yes	Not found in database
P	03. Outdoor Structures	1. Ensure Acceptable Structures	-	Architect		Annotated Map				Design/Construction		Yes	Not found in database
		2. Manage Exterior Paint and Soil	-	Architect		Remediation Report				Design		Yes	Not found in database
O	04. Waste Management	1. Manage Hazardous Waste	1	Owner		Professional Narrative		Yes		Operation	Yes	Yes	Figure 39 /
O	05. In-Place Management	1. Manage Hazardous Materials	2	Owner	Architect	Remediation Report				Design/Operatiopn	Yes	Yes	Not found in database
O	06. Site Remediation	1. Implement Site Assessment and Cleanup	2	Architect	Owner	Remediation Report				Construction	Yes	Yes	Not found in database / 5-6-7 are met
O	07. Pesticide Use	1. Manage Pesticides	1	Architect		Operations Schedule				Operation	Yes		Not found in database
O	08. Hazardous Material Reduction	1. Limit Hazardous Materials	1	Architect	Owner					Design	Yes	Yes	a and c / 633 - Mechanical Specifications, Mechanical Systems Specifications, UBC Serial Number: V.2717 633-08 / Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List
O	09. Cleaning Products and Protocol	1. Ensure Acceptable Cleaning Ingredients	1	Owner	Owner	Operations Schedule				Operation	Yes		Not found in database
		2. Implement Acceptable Cleaning Practices	1	Owner	Owner	Operations Schedule				Operation	Yes		Not found in database
O	10. Volatile Compound Reduction	1. Manage Volatile Organic Compounds	2	Architect	Owner					Design		Yes	633 - Mechanical Specifications, Mechanical Systems Specifications, UBC Serial Number: V.2717 633-08 / Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List
		2. Manage Semi-Volatile Organic Compounds (SVOCs)	1	Architect	Owner					Design		Yes	634 - Mechanical Specifications, Mechanical Systems Specifications, UBC Serial Number: V.2717 633-08 / Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List
		3. Purchase Compliant Products	1	Owner	Owner	Operations Schedule					Operation	Yes	Yes
O	11. Long-Term Emission Control	1. Manage Furniture and Furnishings Emissions	2	Architect	Owner					Design/Operatiopn	Yes	Yes	Division 12 Furnishings, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06
		2. Manage Flooring and Insulation Emissions	1	Architect	Owner					Design/Operatiopn	Yes	Yes	Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List / 08 07 14 materials charette funding, Living Building Challenge Red list / Athena Sustainable Materials Institute
O	12. Short-Term Emission Control	1. Manage Product Emissions: Adhesives, Sealants, Paints and Coatings	3	Architect	Owner					Design	Yes	Yes	Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List / 08 07 14 materials charette funding, Living Building Challenge Red list / Athena Sustainable Materials Institute
		2. Manage Product Content: Adhesives, Sealants, Paints and Coatings	2	Architect	Owner					Design	Yes	Yes	Division 09 Finishes, CIRS Project Manual Volume 1 - Divisions 0-14, UBC Serial Number: V.2615 633-06 / Living Building Challenge Red List / 08 07 14 materials charette funding, Living Building Challenge Red list / Athena Sustainable Materials Institute
O	13. Enhanced Material Precaution	1. Select Optimized Materials	2	Architect	Owner					Design	Yes	Yes	Not found in database
O	14. Material Transparency	1. Promote Ingredient Disclosure	2	Architect	Owner			Yes		Design	Yes		Not found in database
			26										
P	01. Mental Health Promotion	1. Commit to Mental Health Promotion	-	Owner		Professional Narrative	Policy Document			Design/Operatiopn	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/">https://students.ubc.ca/health-wellness/</a> / <a href="http://www.hr.ubc.ca/">http://www.hr.ubc.ca/</a>
		2. Promote Mental Health Literacy	-	Owner		Educational Materials				Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/">https://students.ubc.ca/health-wellness/</a> / <a href="http://www.hr.ubc.ca/">http://www.hr.ubc.ca/</a>
P	02. Access to Nature	1. Provide Access to Nature	-	Owner	Architect	Professional Narrative				Design		Yes	CIRS Technical Manual Ch 14,15,16 and 17 / L1.01 / L1.02 / L1-201 / L1-401
O	03. Mental Health Support	1. Provide Mental Health Screening	1	Owner		Policy Document				Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/">https://students.ubc.ca/health-wellness/</a> / <a href="http://www.hr.ubc.ca/">http://www.hr.ubc.ca/</a>
		2. Provide Mental Health Coverage	1	Owner		Policy Document				Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>
		3. Provide Workplace Support	1	Owner		Policy Document				Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>
O	04. Mental Health Education	1. Offer Mental Health Education	1	Owner		Policy Document				Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/</a>
		2. Offer Mental Health Education for Managers	1	Owner		Policy Document				Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/managers-heads-">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/managers-heads-</a>
O	05. Stress Support	1. Develop Stress Management Plan	1	Owner		Professional Narrative				Operation	Yes		Ask Matt
		2. Support Stress Management Programs	1	Owner		Professional Narrative	Policy Document			Operation	Yes		UBC policies / <a href="http://thrive.ubc.ca/help-support/wellbeing-resources/">http://thrive.ubc.ca/help-support/wellbeing-resources/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/</a>
O	06. Restorative Opportunities	1. Provide Micro- and Macro-Breaks	1	Owner		Professional Narrative	Policy Document			Operation	Yes		Ask matt / b not met ? / UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/vacation/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/vacation/</a> / <a href="http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/">http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/</a>
O	07. Restorative Spaces	1. Provide Restorative Indoor Spaces	1	Owner	Architect	Architectural Drawing	Professional Narrative			Design		Yes	A100-A105 / Except for B1
		2. Provide Restorative Outdoor Spaces	1	Owner	Architect	Architectural Drawing	Professional Narrative			Design		Yes	A100-A105 / Except for B1
O	08. Restorative Programming	1. Provide Restorative Programming	1	Owner		Architectural Drawing				Operation	Yes		Ask Matt / UBC Recreation / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/physical-wellbeing/discounts/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/physical-wellbeing/discounts/</a> / <a href="http://www.recreation.ubc.ca/get-moving/everyone-is-welcome/staff-faculty/">http://www.recreation.ubc.ca/get-moving/everyone-is-welcome/staff-faculty/</a>
O	09. Enhanced Access to Nature	1. Provide Enhanced Access to Nature	1	Owner	Architect	Architectural Drawing	Professional Narrative			Design		Yes	UBC campus/ L1.01 / L1.02 / L1-201 / L1-401 /
O	10. Focus Support	1. Assess Work Environment	1	Owner		Professional Narrative	Policy Document			Operation	Yes		Ask Matt
		2. Integrate Space Management	1	Owner	Architect	Architectural Drawing	Design Specifications			Design		Yes	A100-A105
O	11. Sleep Support	1. Provide Workplace Sleep Support	1	Owner	Architect	Policy Document	Educational Materials	Yes		Design/Operatiopn	Yes	Yes	Not happening
		2. Provide Non-Workplace Sleep Support	1	Owner		Policy Document	Educational Materials			Operation	Yes		b is easily doable with free applications / a, <a href="http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/">http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/</a>
O	12. Business Travel	1. Provide Business Travel Support	1	Owner		Policy Document	Educational Materials			Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/travel/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/travel/</a>
		2. Support Tobacco Cessation	2	Owner		Policy Document				Operation	Yes		Policy No. 15 / Smoking and Smoking Product Promotion on Campus
O	13. Tobacco Prevention and Cessation	1. Promote Tobacco Prevention	1	Owner		Policy Document	Educational Materials			Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/healthy-ubc-newsletter/2017/08/03/live-smoke-free-smoking-cessation-benefits-2/">http://www.hr.ubc.ca/healthy-ubc-newsletter/2017/08/03/live-smoke-free-smoking-cessation-benefits-2/</a> / <a href="http://learningcircle.ubc.ca/2012/11/bc-smoking-cessation-program/">http://learningcircle.ubc.ca/2012/11/bc-smoking-cessation-program/</a>
		2. Support Tobacco Cessation	2	Owner		Policy Document				Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/self-help/drugs-alcohol/">https://students.ubc.ca/health-wellness/self-help/drugs-alcohol/</a> / staff? Ask Matt
O	14. Substance Use Education and Services	1. Promote Substance Abuse Prevention and Education	1	Owner		Policy Document	Educational Materials			Operation	Yes		Staff & faculty? / Ask Matt
		2. Provide Access to Substance Use Services	2	Owner		Policy Document				Operation	Yes		Staff & faculty? / Ask Matt
O	15. Opioid Emergency Response Plan	1. Provide Opioid Emergency Response Kits and Training	3	Owner		Policy Document				Operation	Yes		UBC policies / <a href="http://rms.ubc.ca/emergency/">http://rms.ubc.ca/emergency/</a>
			31										



Community	P	01. Health and Wellness Awareness	1. Provide WELL Feature Guide (Protocol)	0	Owner			Professional Narrative	Signage & Communications Materials			Operation	Yes		Future steps
			2. Promote Health and Wellness Education	0	Owner			Educational Materials	Professional Narrative			Operation	Yes		UBC websites such as : <a href="https://wellbeing.ubc.ca/">https://wellbeing.ubc.ca/</a>
	P	02. Integrative Design	1. Facilitate Stakeholder Charrette	0	Owner			Professional Narrative			Pre-design/Design	Yes		CIRS Technical Manual Ch 8, Design process	
			2. Integrate Beauty and Design	0	Owner	Architect		Professional Narrative			Pre-design/Design	Yes	Yes	A100-A105	
			3. Promote Health-Oriented Mission	0	Owner			Professional Narrative			Pre-design/Design	Yes		CIRS Technical Manual Ch 8, Design process / Ask Penny	
			4. Facilitate Stakeholder Orientation	0	Owner			Professional Narrative			Design/Operatiopn	Yes		Not found in database / Ask Penny	
	P	03. Occupant Survey	1. Select Project Survey	0	Owner			Survey Materials			Operation	Yes		Ask Matt and Penny	
			2. Administer Survey and Report Results	0	Owner			On-going Data Report			Operation	Yes		Ask Matt and Penny	
	O	04. Enhanced Occupant Survey	1. Select Enhanced Survey	1	Owner			Survey Materials	On-going Data Report		Operation	Yes		Ask Matt and Penny	
			2. Administer Pre-Occupancy Survey and Report Results	1	Owner			Survey Materials	On-going Data Report		Operation	Yes		Ask Matt and Penny	
			3. Monitor Survey Responses	1	Owner			Policy Document			Operation	Yes		Ask Matt and Penny	
			4. Facilitate Interviews and Focus Groups	1	Owner			Survey Materials	On-going Data Report		Operation	Yes		Ask Matt and Penny	
	O	05. Health Services and Benefits	1. Promote Health Benefits	2	Owner			Policy Document			Operation	Yes		UBC policies / UBC policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>	
			2. Offer On-Demand Health Services	1	Owner			Policy Document			Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>	
	O	06. Health Promotion	1. Promote Culture of Health	2	Owner			Policy Document	Professional Narrative		Operation	Yes		Ask Matt / future steps	
			2. Offer Health Risk Assessments	1	Owner			Policy Document			Operation	Yes		UBC Policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>	
O	07. Community Immunity	1. Promote Seasonal Flu Prevention	1	Owner			Policy Document	Signage & Communications Materials		Operation	Yes		UBC Policies / <a href="http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/">http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/</a>		
		2. Implement Immunization Schedule	1	Owner			Policy Document			Operation	Yes		b is met / <a href="http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/">http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/</a>		
O	08. New Parent Support	1. Offer New Parent Leave	3	Owner			Policy Document			Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/</a>		
		2. Promote Workplace Support	1	Owner			Policy Document			Operation	Yes		UBC Policies ?		
O	09. New Mother Support	1. Offer Workplace Breastfeeding Support	1	Owner			Policy Document			Design/Operatiopn	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/</a>		
		2. Design Lactation Room	2	Owner	Architect		Design Specifications	Professional Narrative	Yes	Design		Yes	Not found in the building / UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/</a>		
		3. Promote Breastfeeding Education and Support	1	Owner			Policy Document	Educational Materials		Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/</a>		
O	10. Family Support	1. Offer Childcare Support	1	Owner	Architect		Policy Document			Design/Operatiopn	Yes	Yes	UBC Policies / <a href="http://www.hr.ubc.ca/housing-relocation/family-care/">http://www.hr.ubc.ca/housing-relocation/family-care/</a>		
		2. Offer Eldercare Support	1	Owner			Policy Document			Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/housing-relocation/elder-care/">http://www.hr.ubc.ca/housing-relocation/elder-care/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/campaigns/elder-care-resources/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/campaigns/elder-care-resources/</a>		
		3. Offer Family Leave	1	Owner			Policy Document			Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/</a>		
		4. Offer Bereavement Support (Protocol)	1	Owner			Policy Document			Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/compassionate-care/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/compassionate-care-</a>		
O	11. Civic Engagement	1. Promote Civic Engagement	1	Owner			Policy Document			Operation	Yes		UBC Policies?		
O	12. Organizational Transparency	1. Promote Equity Program Participation	2	Owner			Policy Document			Operation	Yes		Ask Matt / future steps		
O	13. Accessibility and Universal Design	1. Ensure Essential Accessibility	1	Architect						Design		Yes	A100-A105		
		2. Integrate Universal Design	2	Architect			Professional Narrative			Design		Yes	A100-A105		
O	14. Bathroom Accommodations	1. Provide Essential Accommodations	1	Owner	Architect				Yes	Design		Yes	Figure 40 / A100-A105		
		2. Provide Single-User Bathrooms	1	Owner	Architect				Yes	Design		Yes	Figure 41 / A100-A105		
		3. Provide Family Bathrooms	1	Owner	Architect				Yes	Design		Yes	Not happening		
O	15. Emergency Preparedness	1. Develop Emergency Preparedness Plan	1	Owner			Professional Narrative	Policy Document		Operation	Yes		Ask Matt or Penny		
		2. Promote Emergency Resources	2	Owner			Policy Document		Yes	Operation	Yes		Figure 42		
O	16. Community Access and Engagement	1. Provide Community Space (Protocol)	1	Owner	Architect		Policy Document	Architectural Drawing	Yes	Design	Yes	Yes	A100-A105		

Concept	P/O	Feature	Part	Points	LOA	(AND) LOA	(OR) LOA	Annotated Document 1	Annotated Document 2	Photograph	Performance Test	Project Phase	Policy	Design	Notes		
Air	P	01. Fundamental Air Quality	1. Meet Thresholds for Particulate Matter	-	Owner	MEP						Yes	Operation			Onsite Performance test	
			2. Meet Thresholds for Organic Gases	-	Owner	MEP							Yes	Operation			Onsite Performance test
			3. Meet Thresholds for Inorganic Gases	-	Owner	MEP							Yes	Operation			Onsite Performance test
			4. Meet Radon Threshold	-	Owner	MEP								Operation			Tested by a professional
			5. Monitor Fundamental Air Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report				Operation			Monitored in regularly occupied spaces, No
	P	02. Smoke-Free Environment	1. Prohibit Indoor Smoking	-	Owner					Policy Document			Operation	Yes		The University of British Columbia, Board of Governors, Policy No. 15	
			2. Prohibit Outdoor Smoking	-	Owner							Yes	Operation	Yes		Figure 1	
	P	03. Ventilation Effectiveness	1. Ensure Adequate Ventilation	-		MEP							Design/Construction		Yes	Not found in database / verified by MEP	
			2. Conduct System Balancing	-	MEP	Contractor								Construction/Operation	Yes		Air Handling Units reports / 529-25-01
	P	04. Construction Pollution Management	1. Mitigate Construction Pollution	-	Contractor								Construction			Not found in database	
	O	05. Enhanced Air Quality	1. Meet Enhanced Thresholds for Particulate Matter	2	Owner	MEP						Yes	Operation			Onsite Performance test	
			2. Meet Enhanced Thresholds for Organic Gases	1	Owner	MEP						Yes	Operation			Onsite Performance test	
			3. Meet Enhanced Thresholds for Inorganic Gases	1	Owner	MEP						Yes	Operation			Onsite Performance test	
	O	06. Enhanced Ventilation	1. Increase Outdoor Air Supply	3	MEP								Design/Construction			Not found in database / no recirculated air, all outdoor air supply with HRV	
2. Implement Demand-Controlled Ventilation			3	MEP								Design/Construction			Not found in database / one CO2 detector at AHU		
3. Implement Displacement Ventilation			1	MEP									Design/Construction			Not found in database / AHU, FCU	
4. Implement Advanced Air Distribution			3	MEP									Design/Construction			Not found in database / AHU, FCU	
O	07. Operable Windows	1. Provide Operable Windows	1	Architect				Professional Narrative				Design		Yes	Figure 2 / Just in office spaces		
		2. Manage Window Use	1	MEP							Yes	Design		Yes	No monitoring anywhere in the building except in the AHUs		
		3. Apply Universal Design to Windows	1	Architect									Design		Yes	Figure 3	
O	08. Air Quality Monitoring and Awareness	1. Implement Indoor Air Monitors	1	MEP				On-going Data Report	Operations Schedule		Yes	Design/Operation	Yes		Figure 4, Just in some specialized laboratories		
		2. Promote Air Quality Awareness	1					Policy Document			Yes	Operation	Yes		Not found in database / No		
O	09. Pollution Infiltration Management	1. Design Healthy Envelope and Entryways	1	MEP		Owner		Commissioning Report			Yes	Design		Yes	Figure 6, Only b is met / Documentation requirement varies based on the option chosen by project team.		
O	10. Combustion Minimization	1. Manage Combustion	1	Owner	MEP						Yes	Design		Yes	Figure 7 / Mechanical room		
O	11. Source Separation	1. Manage Pollution and Exhaust	1	MEP				Mechanical Drawing	Architectural Drawing		Yes	Design	Yes	Yes	no recirculated air, all outdoor air supply with HRV / A104-A111		
O	12. Air Filtration	1. Implement Particle Filtration	1	MEP				Operations Schedule			Yes	Construction			For each space is different / In AHUs / example: CL3 Laboratory (Finder Lab) Mechanical Systems Manual Vol. II of III / UBC Serial Number: V.2653 529-08 / page 3 / Life Science Centre, Volume IV of IV, Air Handling Systems , UBC Serial Number: V.1971 529-08		
O	13. Active VOC Control	1. Implement Carbon Filtration	1	MEP				Operations Schedule			Yes	Construction/Operation			Not found in database / no		
O	14. Microbe and Mold Control	1. Implement Ultraviolet Air Treatment	1	MEP				Operations Schedule			Yes	Construction/Operation			Not found in database / no		
		2. Manage Condensation and Mold	1	Owner				Professional Narrative	Operations Schedule		Yes	Operation			Figure 8		
Water	P	01. Fundamental Water Quality	1. Meet Sediment Thresholds	-	MEP						Yes	Operation			Onsite performance test		
			2. Meet Microorganisms Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			3. Monitor Fundamental Water Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report				Operation			Onsite performance test
	P	02. Water Contaminants	1. Meet Dissolved Metal Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			2. Meet Organic Pollutant Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			3. Meet Disinfectant Byproducts Thresholds	-	MEP								Yes	Operation			Onsite performance test
			4. Meet Herbicide and Pesticide Thresholds	-	Owner								Yes	Operation			Onsite performance test
			5. Meet Fertilizer Thresholds	-	Owner								Yes	Operation			Onsite performance test
			6. Meet Public Water Additive Thresholds	-	Owner	MEP							Yes	Operation			Onsite performance test
			7. Monitor Water Contaminant Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report				Operation			Not found in database
	P	03. Legionella Control	1. Implement Legionella Management Plan	-	Owner				Professional Narrative				Operation			Ask Jeff	
	O	04. Enhanced Water Quality	1. Meet Drinking Water Taste Properties	1	Owner	MEP						Yes	Operation			Onsite performance test	
	O	05. Water Quality Consistency	1. Test and Display Water Quality	1	Owner				Operations Schedule	On-going Data Report		Yes	Operation			Not found in database / No visual display	
			2. Filter Drinking Water	1	MEP							Yes	Operation			Life Sciences Bldg. O&M Manual for Filtered & RO Water Systems / UBC Serial Number: V.1964 529-08	
O	06. Drinking Water Promotion	1. Ensure Drinking Water Access	1	Owner	Architect			Architectural Drawing				Design	Yes	Yes	Figure 9 / A107		
		1. Manage Exterior Liquid Water	1	Architect									Design		Yes	C012	
O	07. Moisture Management	2. Isolate Moisture-sensitive Materials	1	Contractor	Architect			Professional Narrative				Design/Construction	Yes		Life Sciences Building Warranty Manual / UBC Serial Number: V.0083 529-06		
		3. Manage Interior Liquid Water	1	MEP							Yes	Design		Yes	Campus Wide Chiller Leak Detection - Henry Angus Building, Life Sciences Ctr, Biological Science Building South & West Wing, Allard Hall - Electrical Maintenance Manual / UBC Serial Number: R2016.093.01		
O	08. Handwashing	1. Provide Adequate Sink	1	Architect							Yes	Design		Yes	A821-A831		
		2. Provide Handwashing Support	1	Architect				Operations Schedule					Design		Yes	Figure 10 / Phoenix skin care products, LEED certified	
Nourishment	P	01. Fruits and Vegetables	1. Ensure Fruit and Vegetable Availability	-	Owner			Operations Schedule				Operation	Yes		Perugia Italian Caffe		
			2. Promote Fruit and Vegetable Visibility	-	Owner							Yes	Operation	Yes		Figure 11, Perugia Italian Caffe	
	P	02. Nutritional Transparency	1. Provide Nutritional Information	-	Owner							Yes	Operation	Yes		Figure 12, Perugia Italian Caffe	
			2. Implement Ingredient Labeling	-	Owner			Operations Schedule				Yes	Operation	Yes		Figure 13, Perugia Italian Caffe	
			3. Implement Refined Ingredient Labeling	-	Owner							Yes	Operation	Yes		Figure 14, Perugia Italian Caffe	
	O	03. Refined Ingredients	1. Limit Total Sugars	1	Owner			Operations Schedule					Operation	Yes		Perugia Italian Caffe	
			2. Promote Whole Grains	1	Owner			Operations Schedule					Operation	Yes		Perugia Italian Caffe	
			3. Manage Oils	1	Owner			Operations Schedule					Operation	Yes		Perugia Italian Caffe	
	O	04. Food Advertising	1. Promote Healthy Nutritional Messaging	1	Owner			Policy Document			Yes		Operation	Yes		Figure 15, Perugia Italian Caffe	
			2. Implement Healthy Menu Design	1	Owner			Professional Narrative			Yes		Operation	Yes		Figure 16, Perugia Italian Caffe	
	O	05. Artificial Ingredients	1. Restrict Artificial Ingredients	1	Owner			Operations Schedule			Yes		Operation	Yes		Figure 17, Perugia Italian Caffe	
	O	06. Portion Sizes	1. Promote Healthy Portions	1	Owner			Operations Schedule					Operation	Yes		Figure 18, Perugia Italian Caffe	
	O	07. Nutrition Education	1. Provide Nutrition Education	1	Owner			Operations Schedule	Educational Materials				Operation	Yes		Not found on database / Not happening	
	O	08. Mindful Eating	1. Include Designated Eating Space	1	Architect			Architectural Drawing					Design		Yes	A107-A111 / A201	



Light	O 09. Special Diets	2. Provide Daily Meal Breaks	1	Owner			Policy Document			Operation	Yes		UBC Policy / Food services	
	O 10. Food Preparation	1. Manage Allergies and Alternatives	1	Owner			Operations Schedule			Operation	Yes		Figure 19, Perugia Italian Caffe	
		2. Implement Enhanced Ingredient Labeling	1	Owner			Operations Schedule			Operation	Yes		Figure 20, Perugia Italian Caffe	
	O 11. Responsible Food Sourcing	1. Provide Meal Support	1	Owner					Yes	Operation	Yes		Figure 21, Perugia Italian Caffe	
		1. Implement Responsible Sourcing	1	Owner			Operations Schedule		Yes	Operation	Yes		Figure 22, Perugia Italian Caffe	
	O 12. Food Production	1. Provide Gardening Space	1	Owner					Yes	Design		Yes	Not found on the site / UBC Farm	
		2. Provide Planting Support	1	Owner					Yes	Design/Operation	Yes		Not found on the site / UBC Farm	
	O 13. Local Food Environment	1. Ensure Food Access	1	Owner	Architect		Annotated Map			Pre-design/Design		Yes	Site analysis / UBC farm, Horticulture Building / Starbucks	
	Movement	P 01. Light Exposure and Education	1. Ensure Indoor Light Exposure	-	Architect			Architectural Drawing	Modeling Report		Design		Yes	For above ground spaces : Approach 1 / A810-A814 / For B2-B3: Labs don't have access to natural light or any views A104-A105 / For B1 please refer to A206-A209 / Partially lited
			2. Promote Lighting Education	-	Owner			Educational Materials			Operation	Yes		Not found
		P 02. Visual Lighting Design	1. Light Levels for Visual Acuity	-	Architect			Design Specifications		Yes	Design		Yes	529-06-328 Perugia Italian Caffe / Drawings such as : E2.B3.1L, E2.B31.1L and so on / E10.01-E10.06
		O 03. Circadian Lighting Design	1. Lighting for the Circadian System	3	Architect	Owner				Yes	Design		Yes	Onsite performance test
			1. Control Solar Glare	2	Architect			Policy Document	Modeling Report	Yes	Design	Yes	Yes	Figure 23 - Approach 1
O 04. Glare Control		2. Manage Glare from Electric Lighting	2	Architect					Yes	Design		Yes	Figure 24 / E10.01-E10.06	
		1. Implement Enhanced Daylight Plan	1	Owner	Architect		Architectural Drawing			Design		Yes	For above ground spaces : Approach 1 / A810-A814 / For B2-B3: Labs don't have access to natural light or any views A104-A105 / For B1 please refer to A206-A209 / Partially lited / Not Applicable in lab space	
O 05. Enhanced Daylight Access		2. Implement Enhanced Daylight Simulation	2	Architect			Modeling Report			Design		Yes	Not found	
		3. Ensure Views	1	Architect			Architectural Drawing			Design		Yes	For above ground spaces : Approach 1 / A810-A814 / For B2-B3: Labs don't have access to natural light or any views A104-A105 / For B1 please refer to A206-A209 / Partially lited / Not Applicable in lab space	
		1. Manage Brightness	1	Architect						Design		Yes	529-06-328 Perugia Italian Caffe / Drawings such as : E2.B3.1L, E2.B31.1L and so on / E10.01-E10.06	
O 07. Electric Light Quality		1. Ensure Color Rendering Quality	1	Architect						Design		Yes	E10.01-E10.06	
		2. Manage Flicker	1	Architect						Design		Yes	E10.01-E10.06	
O 08. Occupant Control of Lighting Environments		1. Enhance Occupant Controllability	1	Owner	Architect		Professional Narrative		Yes	Design		Yes	Figure 25 / Not met	
	2. Provide Supplemental Lighting	1	Owner	Architect		Policy Document		Yes	Design	Yes	Yes	Figure 26/ Not met		
Thermal Comfort	P 01. Active Buildings and Communities	1. Design Active Buildings and Communities	-						Design					
	P 02. Visual and Physical Ergonomics	1. Support Visual Ergonomics	-	Owner			Policy Document		Yes	Design/Operatiopn	Yes		Figure 27 / Documentation requirements vary based on the option chosen by project team.	
		2. Ensure Desk Height Flexibility	-	Owner			Policy Document		Yes	Design/Operatiopn	Yes	Yes	Figure 28 / Documentation requirements vary based on the option chosen by project team.	
		3. Ensure Seat Flexibility	-	Owner			Policy Document		Yes	Design/Operatiopn	Yes	Yes	Figure 29 / Documentation requirements vary based on the option chosen by project team.	
		4. Provide Standing Support	-	Owner					Yes	Design/Operatiopn	Yes	Yes	Figure 30 / Not found	
		5. Provide Ergonomics Education	-	Owner			Educational Materials			Operation	Yes		UBC Provides this feature / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/ergonomics/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/ergonomics/</a>	
	O 03. Movement Network and Circulation	1. Design Aesthetic Circulation Networks	1	Architect			Architectural Drawing		Yes	Design		Yes	Figure 31 / A104-A111 / b,c,d,e are met / not met in staircases	
		2. Integrate Point-of-Decision Signage	1	Architect			Signage & Communications Materials			Design		Yes	Figure 32	
		3. Promote Visible Stairs	1	Architect			Architectural Drawing			Design		Yes	A104-A111 / Not met	
	O 04. Active Commuter and Occupant Support	1. Provide Bicycle Storage	2	Architect			Policy Document		Yes	Design	Yes	Yes	Figure 33 / A103	
		2. Provide Facilities for Active Occupants	2	Architect					Yes	Design	Yes	Yes	Figure 34 / A104-A111	
	O 05. Site Planning and Selection	1. Select Sites with Diverse Uses	2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / Not Applicable	
		2. Select Sites with Access to Mass Transit	2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / UBC Bus loops	
3. Select Sites with Pedestrian Friendly Streets		2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / Vancouver campus planning		
4. Select Sites with Bike Friendly Streets		2	Owner			Annotated Map			Pre-design	Yes	Yes	Site analysis / Vancouver campus planning		
O 06. Physical Activity Opportunities	1. Implement Activity Programs for Employees	2	Owner			Policy Document			Operation	Yes		UBC Recreation		
	2. Implement Activity Programs for Students	2	Owner			Policy Document	Educational Materials		Operation	Yes		UBC Recreation		
O 07. Active Furnishings	1. Provide Active Workstations	2	Owner	Architect				Yes	Design		Yes	Labs / A1350-A1380		
	1. Provide Dedicated Activity Spaces	1	Owner			Architectural Drawing	Annotated Map		Design		Yes	UBC Recreation		
O 08. Physical Activity Spaces and Equipment	2. Provide Physical Activity Equipment	1	Owner					Yes	Design/Operatiopn		Yes	UBC Recreation / foosball table		
	3. Provide Off-Site Activity Spaces	1	Owner			Architectural Drawing	Annotated Map		Operation	Yes		UBC Recreation		
	1. Integrate Active Façades	1	Architect			Architectural Drawing			Design		Yes	A401-A409 / A103 / A107		
O 09. Exterior Active Design	2. Provide On-Site Pedestrian Destinations	1	Architect			Architectural Drawing			Design		Yes	c, e are met / A103 /A107		
	1. Utilize Ergonomic Consultation	1	Owner			Policy Document			Operation	Yes		Not met		
O 11. Physical Activity Promotion	1. Promote Physical Activity	1	Owner			Policy Document			Operation	Yes		N/A - UBC Recreation / UBC Action framework to increase physical activity and reduce sedentary behaviour		
	2. Promote Participation Awareness	1	Owner			On-going Data Report			Operation	Yes		N/A - UBC Recreation / UBC Action framework to increase physical activity and reduce sedentary behaviour		
O 12. Self-Monitoring	1. Provide Self-Monitoring Tools	1	Owner			Policy Document			Operation	Yes		Not met		
Sound	P 01. Sound Mapping	1. Support Thermal Environment	-	MEP			Professional Narrative	Educational Materials	Yes	Design/Operatiopn		Yes	Onsite performance test / no surveys were done / Dwelling units must also provide educational materials.	
		2. Monitor Thermal Parameters	-	Owner			Policy Document			Operation	Yes		Not done except for specialized labs	
		1. Enhance Thermal Environment	1	MEP			Professional Narrative		Yes	Operation		Yes	Onsite performance test / no surveys were done	
	O 02. Maximum Noise Levels	2. Achieve Thermal Comfort	3	MEP	Owner		Policy Document	Survey Materials		Operation	Yes		no surveys were done	
		1. Ensure Thermostat Control	2	MEP	Owner					Design	Yes	Yes	Not met a yes, b and c no	
	O 03. Thermal Zoning	2. Promote Free Address	1	MEP	Owner		Policy Document			Design/Operatiopn	Yes	Yes	Not met	
		1. Ensure Personal Thermal Comfort	3	Owner					Yes	Design/Operatiopn	Yes		Figure 35 / a yes, b no	
O 04. Individual Thermal Control	2. Facilitate Thermal Adaptation	1	Owner			Policy Document		Yes	Operation	Yes		Not met		
	1. Implement Radiant Systems	1	MEP	Owner					Design		Yes	Not met / AHU + FCU		
O 05. Radiant Thermal Comfort	2. Implement Dedicated Outdoor Air Systems	1	MEP	Owner					Design		Yes	Ask Jeff		
	1. Monitor Thermal Environment	1	MEP	Owner		On-going Data Report	Operations Schedule	Yes	Operation		Yes	Not done except for specialized labs / Measured at AHU		
O 06. Thermal Comfort Monitoring	1. Manage Relative Humidity	1	MEP	Owner				Yes	Design/Operatiopn		Yes	Onsite performance test / Ask jeff		
Sound	P 01. Sound Mapping	1. Manage Background Noise Level	-	Architect			Professional Narrative	Architectural Drawing	Yes	Design		Yes	Performance testing is not required for compliance but is an option. Projects not pursuing performance testing as the route of compliance must submit documentation. Projects pursuing performance testing as the route of compliance need not provide any additional documentation.	
		2. Manage Acoustical Privacy	-	Architect			Professional Narrative	Architectural Drawing	Yes	Design		Yes	Performance testing is not required for compliance but is an option. Projects not pursuing performance testing as the route of compliance must submit documentation. Projects pursuing performance testing as the route of compliance need not provide any additional documentation.	
		3. Label Acoustic Zones	-	Architect			Architectural Drawing			Design		Yes	Not found in database / Life Sciences Door & Material Schedules, page 10-11 / UBC Serial Number: V.2532 529-06	
	O 02. Maximum Noise Levels	1. Limit Background Noise Levels	3	Architect					Yes	Design		Yes	Onsite performance test	
	O 03. Sound Barriers	1. Ensure Adequate Wall Construction	2	Architect			Design Specifications		Yes	Design		Yes	A151 / Onsite performance test / Verification requirements vary by project type.	
2. Ensure Proper Door Specifications		1	Architect			Design Specifications			Design		Yes	Life Sciences Door & Material Schedules/ UBC Serial Number: V.2532 529-06 / CL-3 Door Schedule / UBC Serial Number: V.2722 529-06		
		1. Meet Thresholds for Reverberation Time	1	Architect				Yes	Design		Yes	Onsite performance test		



Materials	O	04. Sound Absorption	2. Implement Sound Reducing Ceilings	1	Architect			Design Specifications			Design	Yes	A151
			3. Implement Sound Reducing Vertical Surfaces	1	Architect				Yes	Design	Yes	Onsite performance test	
	O	05. Sound Masking	1. Implement Sound Masking	2	Architect	Owner			Yes	Design/Operatiopn	Yes	Onsite performance test	
				24									
	P	01. Fundamental Material Precautions	1. Restrict Asbestos	-	Architect	Owner				Pre-design/Design	Yes	Yes	Not found
			2. Limit Mercury	-	MEP	Owner				Pre-design/Design	Yes	Yes	Not found
			3. Restrict Lead	-	Architect	Owner				Pre-design/Design	Yes	Yes	Not found
	P	02. Hazardous Material Abatement	1. Manage Asbestos Hazards	-	Contractor			Remediation Report		Construction	Yes	Yes	Not found
			2. Manage Lead Hazards	-	Contractor			Remediation Report		Construction	Yes	Yes	Not found
			3. Manage Polychlorinated Biphenyl (PCB) Hazards	-	Contractor			Remediation Report		Construction	Yes	Yes	Not found
	P	03. Outdoor Structures	1. Ensure Acceptable Structures	-	Architect			Annotated Map		Design/Construction		Yes	N/A / S101-S104 Concrete and steel structure
			2. Manage Exterior Paint and Soil	-	Architect			Remediation Report		Design		Yes	Not found
	O	04. Waste Management	1. Manage Hazardous Waste	1	Owner			Professional Narrative	Yes	Operation	Yes	Yes	Figure 36 / Jeff
	O	05. In-Place Management	1. Manage Hazardous Materials	2	Owner	Architect		Remediation Report		Design/Operatiopn	Yes	Yes	Not found
O	06. Site Remediation	1. Implement Site Assessment and Cleanup	2	Architect	Owner		Remediation Report		Construction	Yes	Yes	Not found	
O	07. Pesticide Use	1. Manage Pesticides	1	Architect			Operations Schedule		Operation	Yes		Not found	
O	08. Hazardous Material Reduction	1. Limit Hazardous Materials	1	Architect	Owner				Design	Yes	Yes	Not found	
O	09. Cleaning Products and Protocol	1. Ensure Acceptable Cleaning Ingredients	1	Owner	Owner		Operations Schedule		Operation	Yes		Not found	
		2. Implement Acceptable Cleaning Practices	1	Owner	Owner		Operations Schedule		Operation	Yes		Not found / figure 37	
O	10. Volatile Compound Reduction	1. Manage Volatile Organic Compounds	2	Architect	Owner				Design		Yes	Limited information / Life Sciences Building, Warranty Manual Volume 1 / UBC Serial Number: V.1975 529-08	
		2. Manage Semi-Volatile Organic Compounds (SVOCs)	1	Architect	Owner				Design		Yes	Not found	
		3. Purchase Compliant Products	1		Owner		Operations Schedule		Operation	Yes	Yes	Not found	
O	11. Long-Term Emission Control	1. Manage Furniture and Furnishings Emissions	2	Architect	Owner				Design/Operatiopn	Yes	Yes	Not found	
		2. Manage Flooring and Insulation Emissions	1	Architect	Owner				Design/Operatiopn	Yes	Yes	Not found	
O	12. Short-Term Emission Control	1. Manage Product Emissions: Adhesives, Sealants, Paints and Coatings	3	Architect	Owner				Design	Yes	Yes	Not found	
		2. Manage Product Content: Adhesives, Sealants, Paints and Coatings	2	Architect	Owner				Design	Yes	Yes	Not found	
O	13. Enhanced Material Precaution	1. Select Optimized Materials	2	Architect	Owner				Design	Yes	Yes	Not found	
O	14. Material Transparency	1. Promote Ingredient Disclosure	2	Architect	Owner			Yes	Design	Yes		Not found	
Mind			26										
	P	01. Mental Health Promotion	1. Commit to Mental Health Promotion	-	Owner			Professional Narrative	Policy Document		Design/Operatiopn	Yes	UBC policies / <a href="https://students.ubc.ca/health-wellness/">https://students.ubc.ca/health-wellness/</a> / <a href="http://www.hr.ubc.ca/">http://www.hr.ubc.ca/</a>
			2. Promote Mental Health Literacy	-	Owner			Educational Materials		Operation	Yes	UBC policies / <a href="https://students.ubc.ca/health-wellness/">https://students.ubc.ca/health-wellness/</a> / <a href="http://www.hr.ubc.ca/">http://www.hr.ubc.ca/</a>	
	P	02. Access to Nature	1. Provide Access to Nature	-	Owner	Architect		Professional Narrative		Design		Yes	A104-A111 / Except for B1-B3 / a is met for 1, 3 & 4 maybe (not mentioned to what extend is acceptable)
	O	03. Mental Health Support	1. Provide Mental Health Screening	1	Owner			Policy Document		Operation	Yes	UBC policies / <a href="https://students.ubc.ca/health-wellness/">https://students.ubc.ca/health-wellness/</a> / <a href="http://www.hr.ubc.ca/">http://www.hr.ubc.ca/</a>	
			2. Provide Mental Health Coverage	1	Owner			Policy Document		Operation	Yes	UBC policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>	
			3. Provide Workplace Support	1	Owner			Policy Document		Operation	Yes	UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>	
	O	04. Mental Health Education	1. Offer Mental Health Education	1	Owner			Policy Document		Operation	Yes	UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/</a>	
			2. Offer Mental Health Education for Managers	1	Owner			Policy Document		Operation	Yes	UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/managers-heads-deans/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/managers-heads-deans/</a>	
	O	05. Stress Support	1. Develop Stress Management Plan	1	Owner			Professional Narrative		Operation	Yes	Not happening /	
			2. Support Stress Management Programs	1	Owner			Professional Narrative	Policy Document	Operation	Yes	UBC policies / <a href="http://thrive.ubc.ca/help-support/wellbeing-resources/">http://thrive.ubc.ca/help-support/wellbeing-resources/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/</a>	
	O	06. Restorative Opportunities	1. Provide Micro- and Macro-Breaks	1	Owner			Professional Narrative	Policy Document	Operation	Yes	b not met ? / UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/vacation/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/vacation/</a> / <a href="http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/">http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/</a>	
	O	07. Restorative Spaces	1. Provide Restorative Indoor Spaces	1	Owner	Architect		Architectural Drawing	Professional Narrative	Design		Yes	A104-A111 / Except for B1-B3
			2. Provide Restorative Outdoor Spaces	1	Owner	Architect		Architectural Drawing	Professional Narrative	Design		Yes	A104-A111 / Except for B1-B3
	O	08. Restorative Programming	1. Provide Restorative Programming	1	Owner			Architectural Drawing		Operation	Yes	UBC Recreation / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/physical-wellbeing/discounts/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/physical-wellbeing/discounts/</a> / <a href="http://www.recreation.ubc.ca/get-moving/everyone-is-welcome/staff-faculty/">http://www.recreation.ubc.ca/get-moving/everyone-is-welcome/staff-faculty/</a>	
O	09. Enhanced Access to Nature	1. Provide Enhanced Access to Nature	1	Owner	Architect		Architectural Drawing	Professional Narrative	Design		Yes	UBC campus / A107 / b, c & d ?	
O	10. Focus Support	1. Assess Work Environment	1	Owner			Professional Narrative	Policy Document	Operation	Yes	No surveys		
		2. Integrate Space Management	1	Owner	Architect		Architectural Drawing	Design Specifications	Design		Yes	A104-A111	
O	11. Sleep Support	1. Provide Workplace Sleep Support	1	Owner	Architect		Policy Document	Educational Materials	Design/Operatiopn	Yes	Yes	Not happening	
		2. Provide Non-Workplace Sleep Support	1	Owner			Policy Document	Educational Materials	Operation	Yes		b is easily doable with free applications / a, <a href="http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/">http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/</a>	
O	12. Business Travel	1. Provide Business Travel Support	1	Owner			Policy Document	Educational Materials	Operation	Yes	UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/travel/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/travel/</a>		
O	13. Tobacco Prevention and Cessation	1. Promote Tobacco Prevention	1	Owner			Policy Document	Educational Materials	Operation	Yes	Policy No. 15 / Smoking and Smoking Product Promotion on Campus		
		2. Support Tobacco Cessation	2	Owner			Policy Document		Operation	Yes	UBC policies / <a href="http://www.hr.ubc.ca/healthy-ubc-newsletter/2017/08/03/live-smoke-free-smoking-cessation-benefits-2/">http://www.hr.ubc.ca/healthy-ubc-newsletter/2017/08/03/live-smoke-free-smoking-cessation-benefits-2/</a> / <a href="http://learningcircle.ubc.ca/2012/11/bc-smoking-cessation-program/">http://learningcircle.ubc.ca/2012/11/bc-smoking-cessation-program/</a>		
O	14. Substance Use Education and Services	1. Promote Substance Abuse Prevention and Education	1	Owner			Policy Document	Educational Materials	Operation	Yes	UBC policies / <a href="https://students.ubc.ca/health-wellness/self-help/drugs-alcohol">https://students.ubc.ca/health-wellness/self-help/drugs-alcohol</a>		
		2. Provide Access to Substance Use Services	2	Owner			Policy Document		Operation	Yes	Staff & faculty?		
O	15. Opioid Emergency Response Plan	1. Provide Opioid Emergency Response Kits and Training	3	Owner			Policy Document		Operation	Yes	UBC policies / <a href="http://rms.ubc.ca/emergency/">http://rms.ubc.ca/emergency/</a> / LSC : <a href="http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/safety/">http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/safety/</a>		
			31										
P	01. Health and Wellness Awareness	1. Provide WELL Feature Guide (Protocol)	0	Owner			Professional Narrative	Signage & Communications Materials	Operation	Yes		Future steps	
		2. Promote Health and Wellness Education	0	Owner			Educational Materials	Professional Narrative	Operation	Yes		UBC websites such as : <a href="https://wellbeing.ubc.ca/">https://wellbeing.ubc.ca/</a>	
P	02. Integrative Design	1. Facilitate Stakeholder Charrette	0	Owner			Professional Narrative		Pre-design/Design	Yes		Not happening / future steps	
		2. Integrate Beauty and Design	0	Owner	Architect		Professional Narrative		Pre-design/Design	Yes	Yes	Not happening / future steps	
		3. Promote Health-Oriented Mission	0	Owner			Professional Narrative		Pre-design/Design	Yes		Not happening / future steps	
		4. Facilitate Stakeholder Orientation	0	Owner			Professional Narrative		Design/Operatiopn	Yes		Not happening / future steps	
P	03. Occupant Survey	1. Select Project Survey	0	Owner			Survey Materials		Operation	Yes		No surveys / future steps	
		2. Administer Survey and Report Results	0	Owner			On-going Data Report		Operation	Yes		No surveys / future steps	
		1. Select Enhanced Survey	1	Owner			Survey Materials	On-going Data Report	Operation	Yes		No surveys / future steps	

Community	O 04. Enhanced Occupant Survey	2. Administer Pre-Occupancy Survey and Report Results	1	Owner			Survey Materials	On-going Data Report			Operation	Yes		No surveys / future steps
		3. Monitor Survey Responses	1	Owner			Policy Document				Operation	Yes		No surveys / future steps
		4. Facilitate Interviews and Focus Groups	1	Owner			Survey Materials	On-going Data Report			Operation	Yes		No surveys / future steps
	O 05. Health Services and Benefits	1. Promote Health Benefits	2	Owner			Policy Document				Operation	Yes		UBC policies / UBC policies / https://students.ubc.ca/health-wellness/health-insurance / http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/
		2. Offer On-Demand Health Services	1	Owner			Policy Document				Operation	Yes		UBC policies / https://students.ubc.ca/health-wellness/health-insurance / http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/
	O 06. Health Promotion	1. Promote Culture of Health	2	Owner			Policy Document	Professional Narrative			Operation	Yes		Not happening / future steps
		2. Offer Health Risk Assessments	1	Owner			Policy Document				Operation	Yes		UBC Policies / https://students.ubc.ca/health-wellness/health-insurance / http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/
	O 07. Community Immunity	1. Promote Seasonal Flu Prevention	1	Owner			Policy Document	Signage & Communications Materials			Operation	Yes		UBC Policies / http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/
		2. Implement Immunization Schedule	1	Owner			Policy Document				Operation	Yes		b is met / http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/
	O 08. New Parent Support	1. Offer New Parent Leave	3	Owner			Policy Document				Operation	Yes		UBC Policies / http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/
		2. Promote Workplace Support	1	Owner			Policy Document				Operation	Yes		UBC Policies ?
	O 09. New Mother Support	1. Offer Workplace Breastfeeding Support	1	Owner			Policy Document				Design/Operatiopn	Yes		LSC building? / UBC Policies / http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/
		2. Design Lactation Room	2	Owner	Architect		Design Specifications	Professional Narrative	Yes		Design		Yes	Not found in the building / UBC Policies / http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/
		3. Promote Breastfeeding Education and Support	1	Owner			Policy Document	Educational Materials			Operation	Yes		UBC Policies / http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/
	O 10. Family Support	1. Offer Childcare Support	1	Owner	Architect		Policy Document				Design/Operatiopn	Yes	Yes	UBC Policies / http://www.hr.ubc.ca/housing-relocation/family-care/
		2. Offer Eldercare Support	1	Owner			Policy Document				Operation	Yes		UBC Policies / http://www.hr.ubc.ca/housing-relocation/elder-care/ http://www.hr.ubc.ca/wellbeing-benefits/living-well/campaigns/elder-care-resources/
3. Offer Family Leave		1	Owner			Policy Document				Operation	Yes		UBC Policies / http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/	
4. Offer Bereavement Support (Protocol)		1	Owner			Policy Document				Operation	Yes		UBC Policies / http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/compassionate-care-leave/	
O 11. Civic Engagement	1. Promote Civic Engagement	1	Owner			Policy Document				Operation	Yes		UBC Policies?	
O 12. Organizational Transparency	1. Promote Equity Program Participation	2	Owner			Policy Document				Operation	Yes		Not happening / future steps	
O 13. Accessibility and Universal Design	1. Ensure Essential Accessibility	1	Architect							Design		Yes	A104-A111	
	2. Integrate Universal Design	2	Architect			Professional Narrative				Design		Yes	A104-A111	
O 14. Bathroom Accommodations	1. Provide Essential Accommodations	1	Owner	Architect				Yes		Design		Yes	Figure 38 / A104-A111	
	2. Provide Single-User Bathrooms	1	Owner	Architect				Yes		Design		Yes	Figure 39 / A104-A111	
	3. Provide Family Bathrooms	1	Owner	Architect				Yes		Design		Yes	Not happening ?	
O 15. Emergency Preparedness	1. Develop Emergency Preparedness Plan	1	Owner			Professional Narrative	Policy Document			Operation	Yes		http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/safety/	
	2. Promote Emergency Resources	2	Owner			Policy Document		Yes		Operation	Yes		Figure 40 / http://facilities.med.ubc.ca/lsc/lsc-health-and-safety/safety/	
O 16. Community Access and Engagement	1. Provide Community Space (Protocol)	1	Owner	Architect		Policy Document	Architectural Drawing	Yes		Design	Yes	Yes	A104-A111	



Concept	P/O	Feature	Part	Points	LOA	(AND) LOA	(OR) LOA	Annotated Document 1	Annotated Document 2	Photograph	Performance Test	Project Phase	Policy	Design	Notes		
Air	P	01. Fundamental Air Quality	1. Meet Thresholds for Particulate Matter	-	Owner	MEP						Yes	Operation			Onsite Performance test	
			2. Meet Thresholds for Organic Gases	-	Owner	MEP							Yes	Operation			Onsite Performance test
			3. Meet Thresholds for Inorganic Gases	-	Owner	MEP							Yes	Operation			Onsite Performance test
			4. Meet Radon Threshold	-	Owner	MEP								Operation			Tested by a professional
			5. Monitor Fundamental Air Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report				Operation			Monitored in regularly occupied spaces, No
	P	02. Smoke-Free Environment	1. Prohibit Indoor Smoking	-	Owner				Policy Document				Operation	Yes		The University of British Columbia, Board of Governors, Policy No. 15	
			2. Prohibit Outdoor Smoking	-	Owner						Yes		Operation	Yes		Figure 1	
	P	03. Ventilation Effectiveness	1. Ensure Adequate Ventilation	-		MEP							Design/Construction		Yes	Not found in database / verified by MEP	
			2. Conduct System Balancing	-		MEP	Contractor						Construction/Operation	Yes		01.3 - Balancing Report/ not submitted / Contractor changed	
	P	04. Construction Pollution Management	1. Mitigate Construction Pollution	-		Contractor							Construction			Not found in database / verified by Contractor	
	O	05. Enhanced Air Quality	1. Meet Enhanced Thresholds for Particulate Matter	2	Owner	MEP						Yes	Operation			Onsite Performance test	
			2. Meet Enhanced Thresholds for Organic Gases	1	Owner	MEP						Yes	Operation			Onsite Performance test	
			3. Meet Enhanced Thresholds for Inorganic Gases	1	Owner	MEP						Yes	Operation			Onsite Performance test	
	O	06. Enhanced Ventilation	1. Increase Outdoor Air Supply	3		MEP							Design/Construction			Not found in database / Forest Sciences Centre, Mechanical Systems Operating and Maintenance Manual Volume 1 of 3, Page 15, 02 - Manufacturers' Equipment Data - Air Conditioning Units and Heat Pumps, UBC Serial Number: V.0987 353-08 (1059 cfm)	
2. Implement Demand-Controlled Ventilation			3		MEP							Design/Construction			UBC Forest Science, Ecotrek, Measure: F1, Automated Building Controls, UBC Serial Number: V.1854 353-08		
3. Implement Displacement Ventilation			1		MEP								Design/Construction			M306 / Through ductwork in ceiling	
4. Implement Advanced Air Distribution			3		MEP								Design/Construction			Forest Sciences Centre, Mechanical Systems Operating and Maintenance Manual Volume 1 of 3, 02 - Manufacturers' Equipment Data - Air Conditioning Units and Heat Pumps, UBC Serial Number: V.0987 353-08 / split units	
O	07. Operable Windows	1. Provide Operable Windows	1		Architect			Professional Narrative		Yes		Design		Yes	Figure 2 / A400-A401 / not for every office or classroom / Addendum #1 - Book A, Phase 1, 07 Addendum A1 Window Types, UBC Serial Number: V.3350 353-06		
		2. Manage Window Use	1		MEP					Yes		Design		Yes	Figure 3 / Not found in database / a data-gathering station located within 4 km [2.5 mi] of the building, data collected are made available to building occupants		
		3. Apply Universal Design to Windows	1		Architect							Design		Yes	Figure 4 / A200-A205		
O	08. Air Quality Monitoring and Awareness	1. Implement Indoor Air Monitors	1		MEP			On-going Data Report	Operations Schedule	Yes		Design/Operation	Yes		Not found		
		2. Promote Air Quality Awareness	1					Policy Document		Yes		Operation	Yes		Not found		
O	09. Pollution Infiltration Management	1. Design Healthy Envelope and Entryways	1		MEP		Owner	Commissioning Report		Yes		Design		Yes	Figure 5 / b is met / N/A built in 1997		
O	10. Combustion Minimization	1. Manage Combustion	1		Owner	MEP				Yes		Design		Yes	Figure 6 / M2049-M2051		
O	11. Source Separation	1. Manage Pollution and Exhaust	1		MEP			Mechanical Drawing	Architectural Drawing	Yes		Design	Yes	Yes	Figure 7 / A200-A205		
O	12. Air Filtration	1. Implement Particle Filtration	1		MEP			Operations Schedule		Yes		Construction			Figure 8 / 02.01 - Air Handling Units , Forest Sciences Centre, Mechanical Systems Operating and Maintenance Manual Volume 1 of 3 , UBC Serial Number: V.0987 353-08 / Filter and sensors / David?		
O	13. Active VOC Control	1. Implement Carbon Filtration	1		MEP			Operations Schedule		Yes		Construction/Operation			Not found		
O	14. Microbe and Mold Control	1. Implement Ultraviolet Air Treatment	1		MEP			Operations Schedule		Yes		Construction/Operation			Not found		
		2. Manage Condensation and Mold	1		Owner			Professional Narrative	Operations Schedule	Yes		Operation			Figure 9 / Annual inspections / Cooling coils		
				9													
Water	P	01. Fundamental Water Quality	1. Meet Sediment Thresholds	-	MEP						Yes	Operation			Onsite performance test		
			2. Meet Microorganisms Thresholds	-	MEP						Yes	Operation			Onsite performance test		
			3. Monitor Fundamental Water Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report			Operation			Onsite performance test	
	P	02. Water Contaminants	1. Meet Dissolved Metal Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			2. Meet Organic Pollutant Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			3. Meet Disinfectant Byproducts Thresholds	-	MEP							Yes	Operation			Onsite performance test	
			4. Meet Herbicide and Pesticide Thresholds	-	Owner							Yes	Operation			Onsite performance test	
			5. Meet Fertilizer Thresholds	-	Owner							Yes	Operation			Onsite performance test	
			6. Meet Public Water Additive Thresholds	-	Owner	MEP						Yes	Operation			Onsite performance test	
			7. Monitor Water Contaminant Parameters	-	Owner	MEP			Operations Schedule	On-going Data Report			Operation			Not found	
	P	03. Legionella Control	1. Implement Legionella Management Plan	-	Owner				Professional Narrative				Operation			Ask David	
	O	04. Enhanced Water Quality	1. Meet Drinking Water Taste Properties	1	Owner	MEP					Yes		Operation			Onsite performance test	
	O	05. Water Quality Consistency	1. Test and Display Water Quality	1	Owner				Operations Schedule	On-going Data Report	Yes		Operation			Not found / No visual display	
			2. Filter Drinking Water	1		MEP					Yes		Operation			Section 15451, page 3 / 353 - Forest Sci - Mech Specifications Construction Issue Phase 1 & 2 , Volume 4, Construction Issue Phase 1 & 2 - Mechanical Systems , UBC Serial Number: V.0991 353-08	
O	06. Drinking Water Promotion	1. Ensure Drinking Water Access	1	Owner	Architect			Architectural Drawing			Design	Yes	Yes	Figure 10 / A200-A205			
O	07. Moisture Management	1. Manage Exterior Liquid Water	1	Architect								Design		Yes	C4		
		2. Isolate Moisture-sensitive Materials	1	Contractor	Architect			Professional Narrative				Design/Construction	Yes		Not found in database		
		3. Manage Interior Liquid Water	1		MEP					Yes		Design		Yes	Section 15400, page 9 / 353 - Forest Sci - Mech Specifications Construction Issue Phase 1 & 2 , Volume 4, Construction Issue Phase 1 & 2 - Mechanical Systems , UBC Serial Number: V.0991 353-08		
O	08. Handwashing	1. Provide Adequate Sink	1	Architect						Yes		Design		Yes	A618-A619		
		2. Provide Handwashing Support	1	Architect				Operations Schedule				Design		Yes	Figure 11 / Phoenix skin care products, LEED certified		
				17													
P	01. Fruits and Vegetables	1. Ensure Fruit and Vegetable Availability	-	Owner				Operations Schedule				Operation	Yes		Tim Hortons		
		2. Promote Fruit and Vegetable Visibility	-	Owner						Yes		Operation	Yes		Figure 12, Tim Hortons		
P	02. Nutritional Transparency	1. Provide Nutritional Information	-	Owner						Yes		Operation	Yes		Figure 13, Tim Hortons		
		2. Implement Ingredient Labeling	-	Owner				Operations Schedule		Yes		Operation	Yes		Figure 14, Tim Hortons		
		3. Implement Refined Ingredient Labeling	-	Owner						Yes		Operation	Yes		Figure 15, Tim Hortons		
O	03. Refined Ingredients	1. Limit Total Sugars	1	Owner				Operations Schedule				Operation	Yes		Tim Hortons at FSC		
		2. Promote Whole Grains	1	Owner				Operations Schedule				Operation	Yes		Tim Hortons at FSC		



Nourishment		3. Manage Oils	1	Owner			Operations Schedule				Operation	Yes		Tim Hortons at FSC
	O 04. Food Advertising	1. Promote Healthy Nutritional Messaging	1	Owner			Policy Document		Yes		Operation	Yes		Figure 16, Tim Hortons
		2. Implement Healthy Menu Design	1	Owner			Professional Narrative		Yes		Operation	Yes		Figure 17, Tim Hortons
	O 05. Artificial Ingredients	1. Restrict Artificial Ingredients	1	Owner			Operations Schedule		Yes		Operation	Yes		Figure 18, Tim Hortons
	O 06. Portion Sizes	1. Promote Healthy Portions	1	Owner			Operations Schedule				Operation	Yes		Figure 19, Tim Hortons
	O 07. Nutrition Education	1. Provide Nutrition Education	1	Owner			Operations Schedule	Educational Materials			Operation	Yes		Not found on database / Not happening
	O 08. Mindful Eating	1. Include Designated Eating Space	1	Architect			Architectural Drawing				Design		Yes	A202 / A1/3
		2. Provide Daily Meal Breaks	1	Owner			Policy Document				Operation	Yes		UBC Policy / Food services
	O 09. Special Diets	1. Manage Allergies and Alternatives	1	Owner			Operations Schedule				Operation	Yes		Figure 20, Tim Hortons
		2. Implement Enhanced Ingredient Labeling	1	Owner			Operations Schedule				Operation	Yes		Figure 21, Tim Hortons
	O 10. Food Preparation	1. Provide Meal Support	1	Owner					Yes		Operation	Yes		Figure 22, Tim Hortons
	O 11. Responsible Food Sourcing	1. Implement Responsible Sourcing	1	Owner			Operations Schedule		Yes		Operation	Yes		Figure 23, Tim Hortons
	O 12. Food Production	1. Provide Gardening Space	1	Owner					Yes		Design		Yes	Not found on the site / UBC Farm
	2. Provide Planting Support	1	Owner					Yes		Design/Operation	Yes		Not found on the site / UBC Farm	
O 13. Local Food Environment	1. Ensure Food Access	1	Owner	Architect		Annotated Map				Pre-design/Design		Yes	Site analysis / UBC farm, Horticulture Building / Starbucks, Open Kitchen	
Light			14											
	P 01. Light Exposure and Education	1. Ensure Indoor Light Exposure	-	Architect			Architectural Drawing	Modeling Report			Design		Yes	A201-A205 / A501-A505 / E305, 308, 311, 314, 317, 320, 323
		2. Promote Lighting Education	-	Owner			Educational Materials				Operation	Yes		Not found
	P 02. Visual Lighting Design	1. Light Levels for Visual Acuity	-	Architect			Design Specifications		Yes		Design		Yes	Onsite performance test
	O 03. Circadian Lighting Design	1. Lighting for the Circadian System	3	Architect	Owner				Yes	Yes	Design		Yes	Onsite performance test
	O 04. Glare Control	1. Control Solar Glare	2	Architect			Policy Document	Modeling Report	Yes		Design	Yes	Yes	Figure 24 / Approach 1
		2. Manage Glare from Electric Lighting	2	Architect					Yes		Design		Yes	Figure 25
	O 05. Enhanced Daylight Access	1. Implement Enhanced Daylight Plan	1	Owner	Architect		Architectural Drawing				Design		Yes	Figure 26 / A201-A205 / A400-A401 / Addendum #1 - Book A, Phase 1, 07 Addendum A1 Window Types, UBC Serial Number: V.3350 353-06
		2. Implement Enhanced Daylight Simulation	2	Architect			Modeling Report				Design		Yes	Not found
	3. Ensure Views	1	Architect			Architectural Drawing				Design		Yes	Figure 27 / A201-A205 / A400-A401	
O 06. Visual Balance	1. Manage Brightness	1	Architect							Design		Yes	Not found	
O 07. Electric Light Quality	1. Ensure Color Rendering Quality	1	Architect							Design		Yes	Not found	
	2. Manage Flicker	1	Architect							Design		Yes	Not found	
O 08. Occupant Control of Lighting Environments	1. Enhance Occupant Controllability	1	Owner	Architect		Professional Narrative		Yes		Design		Yes	Figure 28/ Not met	
	2. Provide Supplemental Lighting	1	Owner	Architect		Policy Document		Yes		Design	Yes	Yes	Figure 29/ Not met	
Movement			20											
	P 01. Active Buildings and Communities	1. Design Active Buildings and Communities	-								Design			
	P 02. Visual and Physical Ergonomics	1. Support Visual Ergonomics	-	Owner			Policy Document		Yes		Design/Operatiopn	Yes		Figure 29 / Documentation requirements vary based on the option chosen by project team.
		2. Ensure Desk Height Flexibility	-	Owner			Policy Document		Yes		Design/Operatiopn	Yes	Yes	Figure 30 / Documentation requirements vary based on the option chosen by project team.
		3. Ensure Seat Flexibility	-	Owner			Policy Document		Yes		Design/Operatiopn	Yes	Yes	Figure 31 / Documentation requirements vary based on the option chosen by project team.
		4. Provide Standing Support	-	Owner					Yes		Design/Operatiopn	Yes	Yes	Figure 32 / Not found
		5. Provide Ergonomics Education	-	Owner			Educational Materials				Operation	Yes		UBC Provides this feature / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/ergonomics/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/ergonomics/</a>
	O 03. Movement Network and Circulation	1. Design Aesthetic Circulation Networks	1	Architect			Architectural Drawing		Yes		Design		Yes	Figure 33 / A200-A205 / a,b,c,d,e are met
		2. Integrate Point-of-Decision Signage	1	Architect			Signage & Communications Materials				Design		Yes	Figure 34
		3. Promote Visible Stairs	1	Architect			Architectural Drawing				Design		Yes	A200-A205
	O 04. Active Commuter and Occupant Support	1. Provide Bicycle Storage	2	Architect			Policy Document		Yes		Design	Yes	Yes	Figure 35 / L1
		2. Provide Facilities for Active Occupants	2	Architect					Yes		Design	Yes	Yes	Figure 36 / A200-A205
O 05. Site Planning and Selection	1. Select Sites with Diverse Uses	2	Owner			Annotated Map				Pre-design	Yes	Yes	Site analysis / Not Applicable	
	2. Select Sites with Access to Mass Transit	2	Owner			Annotated Map				Pre-design	Yes	Yes	Site analysis / UBC Bus loops	
	3. Select Sites with Pedestrian Friendly Streets	2	Owner			Annotated Map				Pre-design	Yes	Yes	Site analysis / Vancouver campus planning	
	4. Select Sites with Bike Friendly Streets	2	Owner			Annotated Map				Pre-design	Yes	Yes	Site analysis / Vancouver campus planning	
O 06. Physical Activity Opportunities	1. Implement Activity Programs for Employees	2	Owner			Policy Document				Operation	Yes		UBC Recreation	
	2. Implement Activity Programs for Students	2	Owner			Policy Document	Educational Materials			Operation	Yes		UBC Recreation	
O 07. Active Furnishings	1. Provide Active Workstations	2	Owner	Architect				Yes		Design		Yes	Not found in office, classroom spaces / wood workshops and labs?	
	1. Provide Dedicated Activity Spaces	1	Owner			Architectural Drawing	Annotated Map			Design		Yes	UBC Recreation	
	2. Provide Physical Activity Equipment	1	Owner					Yes		Design/Operatiopn		Yes	UBC Recreation	
O 08. Physical Activity Spaces and Equipment	3. Provide Off-Site Activity Spaces	1	Owner			Architectural Drawing	Annotated Map			Operation	Yes		UBC Recreation	
	1. Integrate Active Façades	1	Architect			Architectural Drawing				Design		Yes	A400-A401 / L1-L2	
O 09. Exterior Active Design	2. Provide On-Site Pedestrian Destinations	1	Architect			Architectural Drawing				Design		Yes	L1-L2 / A202	
	1. Utilize Ergonomic Consultation	1	Owner			Policy Document				Operation	Yes		Not met	
O 11. Physical Activity Promotion	1. Promote Physical Activity	1	Owner			Policy Document				Operation	Yes		N/A - UBC Recreation / UBC Action framework to increase physical activity and reduce sedentary behaviour	
	2. Promote Participation Awareness	1	Owner			On-going Data Report				Operation	Yes		N/A - UBC Recreation / UBC Action framework to increase physical activity and reduce sedentary behaviour	
O 12. Self-Monitoring	1. Provide Self-Monitoring Tools	1	Owner			Policy Document				Operation	Yes		Not met	
Thermal Comfort			12											
	P 01. Thermal Performance	1. Support Thermal Environment	-	MEP			Professional Narrative	Educational Materials	Yes		Design/Operatiopn		Yes	Onsite performance test / no surveys were done / Dwelling units must also provide educational materials.
		2. Monitor Thermal Parameters	-	Owner			Policy Document				Operation	Yes		Not found
	O 02. Enhanced Thermal Performance	1. Enhance Thermal Environment	1	MEP			Professional Narrative			Yes	Operation		Yes	Onsite performance test / no surveys were done
		2. Achieve Thermal Comfort	3	MEP	Owner		Policy Document	Survey Materials			Operation	Yes		no surveys were done
	O 03. Thermal Zoning	1. Ensure Thermostat Control	2	MEP	Owner						Design	Yes	Yes	Not met a yes, b and c no
		2. Promote Free Address	1	MEP	Owner		Policy Document				Design/Operatiopn	Yes	Yes	Not met
O 04. Individual Thermal Control	1. Ensure Personal Thermal Comfort	3	Owner					Yes		Design/Operatiopn	Yes		Figure 37 / a yes, b no	
	2. Facilitate Thermal Adaptation	1	Owner			Policy Document		Yes		Operation	Yes		Not met	
O 05. Radiant Thermal Comfort	1. Implement Radiant Systems	1	MEP	Owner						Design		Yes	Not met	
	2. Implement Dedicated Outdoor Air Systems	1	MEP	Owner						Design		Yes	Ask David	
O 06. Thermal Comfort Monitoring	1. Monitor Thermal Environment	1	MEP	Owner		On-going Data Report	Operations Schedule	Yes		Operation		Yes	Not found / Complaints	
O 07. Humidity Control	1. Manage Relative Humidity	1	MEP	Owner					Yes	Design/Operatiopn		Yes	Onsite performance test / Ask David	
Sound			11											
	P 01. Sound Mapping	1. Manage Background Noise Level	-	Architect			Professional Narrative	Architectural Drawing	Yes		Design		Yes	Performance testing is not required for compliance but is an option. Projects not pursuing performance testing as the route of compliance must submit documentation. Projects pursuing performance testing as the route of compliance need not provide any additional documentation.
		2. Manage Acoustical Privacy	-	Architect			Professional Narrative	Architectural Drawing	Yes		Design		Yes	Performance testing is not required for compliance but is an option. Projects not pursuing performance testing as the route of compliance must submit documentation. Projects pursuing performance testing as the route of compliance need not provide any additional documentation.
3. Label Acoustic Zones		-	Architect			Architectural Drawing				Design		Yes	Not found in database	



Sound	O 02. Maximum Noise Levels	1. Limit Background Noise Levels	3	Architect					Yes	Design	Yes	Onsite performance test		
	O 03. Sound Barriers	1. Ensure Adequate Wall Construction	2	Architect			Design Specifications		Yes	Design	Yes	10 Addendum A1 Wall Type Schedule, Addendum #1 - Book A, Phase 1, UBC Serial Number: V.3350 353-06 / Onsite performance test / Verification requirements vary by project type.		
		2. Ensure Proper Door Specifications	1	Architect			Design Specifications			Design	Yes	04 Addendum A4 Section 08990: Door Schedule, Addendum #4 Phase 2, UBC Serial Number: V.3354 353-06		
	O 04. Sound Absorption	1. Meet Thresholds for Reverberation Time	1	Architect					Yes	Design	Yes	Onsite performance test		
		2. Implement Sound Reducing Ceilings	1	Architect			Design Specifications			Design	Yes	Not found in database		
O 05. Sound Masking	1. Implement Sound Masking	2	Architect	Owner				Yes	Design/Operatiopn	Yes	Onsite performance test			
Materials	P 01. Fundamental Material Precautions	1. Restrict Asbestos	-	Architect	Owner					Pre-design/Design	Yes	Yes	02 Addendum A1 Section 07215: Sprayed Thermal Insulation, Addendum #1 - Book A, Phase 1, UBC Serial Number: V.3350 353-06	
		2. Limit Mercury	-	MEP	Owner					Pre-design/Design	Yes	Yes	Not found in database	
		3. Restrict Lead	-	Architect	Owner					Pre-design/Design	Yes	Yes	Not found in database	
	P 02. Hazardous Material Abatement	1. Manage Asbestos Hazards	-	Contractor				Remediation Report			Construction	Yes	Yes	Not found in database
		2. Manage Lead Hazards	-	Contractor				Remediation Report			Construction	Yes	Yes	Not found in database
		3. Manage Polychlorinated Biphenyl (PCB) Hazards	-	Contractor				Remediation Report			Construction	Yes	Yes	Not found in database
	P 03. Outdoor Structures	1. Ensure Acceptable Structures	-	Architect				Annotated Map			Design/Construction		Yes	Not found in database
		2. Manage Exterior Paint and Soil	-	Architect				Remediation Report			Design		Yes	Not found in database
	O 04. Waste Management	1. Manage Hazardous Waste	1	Owner				Professional Narrative	Yes		Operation	Yes	Yes	David
	O 05. In-Place Management	1. Manage Hazardous Materials	2	Owner	Architect						Design/Operatiopn	Yes	Yes	Not found in database
	O 06. Site Remediation	1. Implement Site Assessment and Cleanup	2	Architect	Owner						Construction	Yes	Yes	Not found in database
	O 07. Pesticide Use	1. Manage Pesticides	1	Architect	Owner						Operations Schedule			David
	O 08. Hazardous Material Reduction	1. Limit Hazardous Materials	1	Architect	Owner						Design	Yes	Yes	Not found in database
		1. Ensure Acceptable Cleaning Ingredients	1	Owner	Owner						Operations Schedule			David
O 09. Cleaning Products and Protocol	2. Implement Acceptable Cleaning Practices	1	Owner	Owner						Operations Schedule			David	
	1. Manage Volatile Organic Compounds	2	Architect	Owner								Yes	Not found in database	
O 10. Volatile Compound Reduction	2. Manage Semi-Volatile Organic Compounds (SVOCs)	1	Architect	Owner						Design		Yes	Not found in database	
	3. Purchase Compliant Products	1		Owner						Operations Schedule			Not found in database / could be done	
O 11. Long-Term Emission Control	1. Manage Furniture and Furnishings Emissions	2	Architect	Owner						Design/Operatiopn	Yes	Yes	Not found in database	
	2. Manage Flooring and Insulation Emissions	1	Architect	Owner						Design/Operatiopn	Yes	Yes	Not found in database	
O 12. Short-Term Emission Control	1. Manage Product Emissions: Adhesives, Sealants, Paints and Coatings	3	Architect	Owner						Design	Yes	Yes	Not found in database	
	2. Manage Product Content: Adhesives, Sealants, Paints and Coatings	2	Architect	Owner						Design	Yes	Yes	Not found in database	
O 13. Enhanced Material Precaution	1. Select Optimized Materials	2	Architect	Owner						Design	Yes	Yes	Not found in database	
O 14. Material Transparency	1. Promote Ingredient Disclosure	2	Architect	Owner				Yes		Design	Yes		Not found in database / David	
Mind	P 01. Mental Health Promotion	1. Commit to Mental Health Promotion	-	Owner			Professional Narrative	Policy Document			Design/Operatiopn	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/http://www.hr.ubc.ca/">https://students.ubc.ca/health-wellness / http://www.hr.ubc.ca/</a>
		2. Promote Mental Health Literacy	-	Owner			Educational Materials				Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/http://www.hr.ubc.ca/">https://students.ubc.ca/health-wellness / http://www.hr.ubc.ca/</a>
	P 02. Access to Nature	1. Provide Access to Nature	-	Owner	Architect			Professional Narrative			Design		Yes	Figure 38 / L1-L2 / A200-A205
	O 03. Mental Health Support	1. Provide Mental Health Screening	1	Owner				Policy Document			Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/http://www.hr.ubc.ca/">https://students.ubc.ca/health-wellness / http://www.hr.ubc.ca/</a>
		2. Provide Mental Health Coverage	1	Owner				Policy Document			Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/http://www.hr.ubc.ca/">https://students.ubc.ca/health-wellness/health-insurance / http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>
		3. Provide Workplace Support	1	Owner				Policy Document			Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>
	O 04. Mental Health Education	1. Offer Mental Health Education	1	Owner				Policy Document			Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/</a>
		2. Offer Mental Health Education for Managers	1	Owner				Policy Document			Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/managers-heads-deans/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/managers-heads-deans/</a>
	O 05. Stress Support	1. Develop Stress Management Plan	1	Owner				Professional Narrative			Operation	Yes		UBC policies / David?
		2. Support Stress Management Programs	1	Owner				Professional Narrative	Policy Document		Operation	Yes		UBC policies / <a href="http://thrive.ubc.ca/help-support/wellbeing-resources/http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/">http://thrive.ubc.ca/help-support/wellbeing-resources/ http://www.hr.ubc.ca/wellbeing-benefits/living-well/mental-health/mental-health-resources/</a>
	O 06. Restorative Opportunities	1. Provide Micro- and Macro-Breaks	1	Owner				Professional Narrative	Policy Document		Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/vacation/http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/vacation/ http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/</a>
	O 07. Restorative Spaces	1. Provide Restorative Indoor Spaces	1	Owner	Architect			Architectural Drawing	Professional Narrative		Design		Yes	A200-A205
		2. Provide Restorative Outdoor Spaces	1	Owner	Architect			Architectural Drawing	Professional Narrative		Design		Yes	L1-L2 / L1/2 - L2/2
	O 08. Restorative Programming	1. Provide Restorative Programming	1	Owner				Architectural Drawing			Operation	Yes		UBC Recreation / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/physical-wellbeing/discounts/http://www.recreation.ubc.ca/get-moving/everyone-is-welcome/staff-faculty/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/physical-wellbeing/discounts/ http://www.recreation.ubc.ca/get-moving/everyone-is-welcome/staff-faculty/</a>
	O 09. Enhanced Access to Nature	1. Provide Enhanced Access to Nature	1	Owner	Architect			Architectural Drawing	Professional Narrative		Design		Yes	UBC campus / L1-L2 / L1/2 - L2/2 / b,c & d ?
O 10. Focus Support	1. Assess Work Environment	1	Owner				Professional Narrative	Policy Document		Operation	Yes		Not found	
	2. Integrate Space Management	1	Owner	Architect			Architectural Drawing	Design Specifications		Design		Yes	A200-A205 / L1-L2 / L1/2-L2/2	
O 11. Sleep Support	1. Provide Workplace Sleep Support	1	Owner	Architect			Policy Document	Educational Materials	Yes	Design/Operatiopn	Yes	Yes	Not happening	
	2. Provide Non-Workplace Sleep Support	1	Owner				Policy Document	Educational Materials		Operation	Yes		b is easily doable with free applications / a, <a href="http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/">http://www.hr.ubc.ca/administrators/managing-staff/hours-of-work/</a>	
O 12. Business Travel	1. Provide Business Travel Support	1	Owner				Policy Document	Educational Materials		Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/travel/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/travel/</a>	
O 13. Tobacco Prevention and Cessation	1. Promote Tobacco Prevention	1	Owner				Policy Document	Educational Materials		Operation	Yes		Policy No. 15 / Smoking and Smoking Product Promotion on Campus	
	2. Support Tobacco Cessation	2	Owner				Policy Document			Operation	Yes		UBC policies / <a href="http://www.hr.ubc.ca/healthy-ubc-newsletter/2017/08/03/live-smoke-free-smoking-cessation-benefits-2/http://learningcircle.ubc.ca/2012/11/bc-smoking-cessation-program/">http://www.hr.ubc.ca/healthy-ubc-newsletter/2017/08/03/live-smoke-free-smoking-cessation-benefits-2/ http://learningcircle.ubc.ca/2012/11/bc-smoking-cessation-program/</a>	
O 14. Substance Use Education and Services	1. Promote Substance Abuse Prevention and Education	1	Owner				Policy Document	Educational Materials		Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/self-help/drugs-alcohol/">https://students.ubc.ca/health-wellness/self-help/drugs-alcohol</a>	
	2. Provide Access to Substance Use Services	2	Owner				Policy Document			Operation	Yes		Staff & faculty?	
O 15. Opioid Emergency Response Plan	1. Provide Opioid Emergency Response Kits and Training	3	Owner				Policy Document			Operation	Yes		UBC policies / <a href="http://rms.ubc.ca/emergency/">http://rms.ubc.ca/emergency/</a>	
P 01. Health and Wellness Awareness	1. Provide WELL Feature Guide (Protocol)		0	Owner			Professional Narrative	Signage & Communications Materials			Operation	Yes		Future steps
			0	Owner			Educational Materials	Professional Narrative			Operation	Yes		UBC websites such as : <a href="https://wellbeing.ubc.ca/">https://wellbeing.ubc.ca/</a>
	2. Promote Health and Wellness Education	0	Owner				Professional Narrative			Pre-design/Design	Yes		Not happening / future steps	
P 02. Integrative Design	2. Integrate Beauty and Design	0	Owner	Architect			Professional Narrative			Pre-design/Design		Yes	A200-A205	



Community	P	02. Integrative Design	3. Promote Health-Oriented Mission	0	Owner			Professional Narrative				Pre-design/Design	Yes		Not happening / future steps	
			4. Facilitate Stakeholder Orientation	0	Owner			Professional Narrative					Design/Operatiopn	Yes		Not happening / future steps
	P	03. Occupant Survey	1. Select Project Survey	0	Owner			Survey Materials					Operation	Yes		No surveys / future steps
			2. Administer Survey and Report Results	0	Owner			On-going Data Report					Operation	Yes		No surveys / future steps
	O	04. Enhanced Occupant Survey	1. Select Enhanced Survey	1	Owner			Survey Materials	On-going Data Report				Operation	Yes		No surveys / future steps
			2. Administer Pre-Occupancy Survey and Report Results	1	Owner			Survey Materials	On-going Data Report				Operation	Yes		No surveys / future steps
			3. Monitor Survey Responses	1	Owner			Policy Document					Operation	Yes		No surveys / future steps
			4. Facilitate Interviews and Focus Groups	1	Owner			Survey Materials	On-going Data Report				Operation	Yes		No surveys / future steps
	O	05. Health Services and Benefits	1. Promote Health Benefits	2	Owner			Policy Document					Operation	Yes		UBC policies / UBC policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>
			2. Offer On-Demand Health Services	1	Owner			Policy Document					Operation	Yes		UBC policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>
	O	06. Health Promotion	1. Promote Culture of Health	2	Owner			Policy Document	Professional Narrative				Operation	Yes		Not happening / future steps
			2. Offer Health Risk Assessments	1	Owner			Policy Document					Operation	Yes		UBC Policies / <a href="https://students.ubc.ca/health-wellness/health-insurance/">https://students.ubc.ca/health-wellness/health-insurance/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/</a>
	O	07. Community Immunity	1. Promote Seasonal Flu Prevention	1	Owner			Policy Document	Signage & Communications Materials				Operation	Yes		UBC Policies / <a href="http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/">http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/</a>
			2. Implement Immunization Schedule	1	Owner			Policy Document					Operation	Yes		b is met / <a href="http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/">http://rms.ubc.ca/health-safety/occupational-hygiene/occupational-hazards/flu/</a>
	O	08. New Parent Support	1. Offer New Parent Leave	3	Owner			Policy Document					Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/</a>
			2. Promote Workplace Support	1	Owner			Policy Document					Operation	Yes		UBC Policies ?
O	09. New Mother Support	1. Offer Workplace Breastfeeding Support	1	Owner			Policy Document					Design/Operatiopn	Yes		LSC building? / UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/</a>	
		2. Design Lactation Room	2	Owner	Architect		Design Specifications	Professional Narrative	Yes			Design		Yes	Not found in the building / UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/</a>	
		3. Promote Breastfeeding Education and Support	1	Owner			Policy Document	Educational Materials				Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/">http://www.hr.ubc.ca/wellbeing-benefits/workplace-health/breastfeeding-friendly-spaces/</a>	
O	10. Family Support	1. Offer Childcare Support	1	Owner	Architect		Policy Document					Design/Operatiopn	Yes	Yes	UBC Policies / <a href="http://www.hr.ubc.ca/housing-relocation/family-care/">http://www.hr.ubc.ca/housing-relocation/family-care/</a>	
		2. Offer Eldercare Support	1	Owner			Policy Document					Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/housing-relocation/elder-care/">http://www.hr.ubc.ca/housing-relocation/elder-care/</a> / <a href="http://www.hr.ubc.ca/wellbeing-benefits/living-well/campaigns/elder-care-resources/">http://www.hr.ubc.ca/wellbeing-benefits/living-well/campaigns/elder-care-resources/</a>	
		3. Offer Family Leave	1	Owner			Policy Document					Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/</a>	
		4. Offer Bereavement Support (Protocol)	1	Owner			Policy Document					Operation	Yes		UBC Policies / <a href="http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/compassionate-care-leave/">http://www.hr.ubc.ca/wellbeing-benefits/benefits/details/vacation-leaves/compassionate-care-leave/</a>	
O	11. Civic Engagement	1. Promote Civic Engagement	1	Owner			Policy Document					Operation	Yes		UBC Policies?	
O	12. Organizational Transparency	1. Promote Equity Program Participation	2	Owner			Policy Document					Operation	Yes		Not happening / future steps	
O	13. Accessibility and Universal Design	1. Ensure Essential Accessibility	1	Architect								Design		Yes	A200-A205	
		2. Integrate Universal Design	2	Architect			Professional Narrative					Design		Yes	A200-A205	
O	14. Bathroom Accommodations	1. Provide Essential Accommodations	1	Owner	Architect				Yes			Design		Yes	Figure 39 / A200-A205	
		2. Provide Single-User Bathrooms	1	Owner	Architect				Yes			Design		Yes	Figure 40 / A200-A205	
		3. Provide Family Bathrooms	1	Owner	Architect				Yes			Design		Yes	Not happening	
O	15. Emergency Preparedness	1. Develop Emergency Preparedness Plan	1	Owner			Professional Narrative	Policy Document				Operation	Yes		<a href="http://safety.forestry.ubc.ca/">http://safety.forestry.ubc.ca/</a>	
		2. Promote Emergency Resources	2	Owner			Policy Document		Yes			Operation	Yes		Figure 41	
O	16. Community Access and Engagement	1. Provide Community Space (Protocol)	1	Owner	Architect		Policy Document	Architectural Drawing	Yes			Design	Yes	Yes	A200-A205	