



Welcome to SBC 2026 - Abbotsford, B.C.



VANCOUVER

Competition Total of 100 Marks

Competition Time:

6 hours + 30 Min. Lunch

BIM Software required

2 Screens Maximum (Including Laptop)

Any use of AI will disqualify from
competition

Welcome to Skills 2026!

The City of Vancouver recently held a design competition for a new public pavilion, and the winning concept has been selected. Now, competitors are tasked with preparing a full set of permit-ready working drawings that meet all **British Columbia Building Code (BCBC) 2024**. You are permitted and allowed to use "Building Accessibility Handbook 2020 Illustrated Commentary on Accessibility"

The pavilion will have a **footprint of 4.6m (15') x 6.1m (20')** and a **maximum height of 4.8m (16')** (measured to the roof peak).

As part of the competition, participants must propose appropriate construction materials for the walls, roof, and foundation while ensuring structural integrity and sustainability. Additionally, an **insulated, universal washroom must be incorporated at the rear of the pavilion** with *adult change table* and direct exterior access. Competitors will be evaluated on the clarity, accuracy, and completeness of their working drawings, as well as their ability to apply sound construction solutions.

This provides an opportunity to demonstrate expertise in architectural technology and design by producing professional documentation suitable for a building permit application.

Building Description:

Foundation & Footings:

1. The building shall be supported by cast-in-place (CIP) concrete foundations, with the width matching the proposed wall design.
2. CIP concrete footings shall be assumed at a maximum thickness of 200mm and a width of 600mm. Pad Footings to be a minimum of 800mm x 800mm x 200mm

Exterior Walls:

3. Walls shall feature wood cladding as the exterior finish.
4. The exterior wall assembly must provide a minimum insulation value of R22, with an additional continuous insulation layer of R10.
5. The structural framework shall consist of wood stud framing with exterior-grade plywood sheathing.

Roof System:

1. The roof shall be constructed using pre-engineered wood trusses, sheathing & shingles
2. Roof insulation to achieve R40 nominal insulation.

Additional Notes:

1. Competitors are **not** required to design or include landscaping, site elements, or any exterior features beyond the building envelope.
2. Submissions should focus on architectural drafting/design, detailing, and adherence to the specified structural and thermal performance criteria.

Submission Requirements:

Format: All submission materials must be compiled into a **single PDF file**.

Sheet Size: Each sheet must be ARCH D format.

Title Block: The provided title block (available on the Skills-provided USB) must be used on all sheets.

Revit Families: Required Universal Washroom families provide on Skills USB.

Submission Location:

All submission files must be saved on the **Skills-provided USB**.

Judges will only review documents saved on the USB

Submissions through other means will not be accepted.

Submission Deadline:

All entries must be submitted within the official competition time.

Late submissions will not be accepted.

USB Submission Requirement:

The USB must be **given to the Technical Committee before leaving the competition floor**.

Failure to submit the USB on time will result in disqualification.

Submissions & Scoring (Total: 91 of 100 Total Points)

Foundation Plan – 5 Points

- Must include footing layout, foundation walls, and key dimensions.
- Show all structural elements and any required notes.

Floor Plan – 16 Points

To be distributed to competitors on Skills Competition Day.

Building Sections (2 Required – One in Each Direction Through Pavilion) – 20 Points

Show vertical relationships, ceiling heights, and construction details. Clearly depict structural elements and material transitions.

- East to west section to be cut through washroom door showing lintel framing details
- North to south section to be cut through open air pavilion
- refer to attached appendix for section locations

Elevations (East & South only) – 5 Points

Provide complete East and South elevations. Indicate materials, door placement, roof slopes, etc.

Building Assemblies (Walls, Floors, and Roof) – 10 Points

Clearly list and label all major assemblies.

Include materials, layers, and any key specifications.

Interior Elevations of Universal Washroom (2 Required) – 15 Points

To be distributed to competitors on Skills Competition Day.

Structural Wood Lintel & Beam Sizing – 15 Points

As part of your competition submission, you are required to correctly size a wood lintel for the exterior door of the universal washroom and size the wood beams required in this project. The lintel and beam must be designed to meet the requirements outlined in the BC Building Code (BCBC). The lintel and beam will support the roof load above, and it must be properly sized from the BCBC to ensure safety and integrity.

Ensure Lintel & Beam are accurately shown in your building sections - Note BCBC table

Code Reference number on your drawings

Failure to include the correct BCBC reference number will result in loss of marks.

Requirements:

Beam Span: As per your design / Lintel Span: As per your design

Wood Species and Grade:

Specified snow load 2.0 kPa

Assume the use of SPF (Spruce-Pine-Fir) lumber, No. 2 grade.

Material Quantity Take-Off (C.I.P. Concrete) – 9 Points

As part of your competition submission, you are required to correctly produce a cast-in-place (C.I.P.) Material take-off indicating the total concrete volume for all concrete components AND the total volume per building component (e.g. slabs, footings, foundation walls, etc.) from your BIM Model

REFERENCE PLAN & SECTION LOCATIONS

