

L01.1 - Option 3: Building design (All Spaces except Dwelling Units)

L01.1 - Option 2: Facade design (Dwelling Units)

Technical Document

WELL Building Standard™ version 2 (WELL v2™), Q1 2021 addenda



HOW TO USE THIS DOCUMENT:

This document is intended to serve as a guide on how to create a project **technical document** to **provide indoor light exposure through daylight and electric light strategies**.

This document is meant to demonstrate an acceptable degree of detail for a documentation submission. The Feature cannot be demonstrated solely through a confirmation that the requirements have been or will be implemented. The level of detail is up to the discretion of the project team, but the documents must include specific details demonstrating that the actual policies/protocols have been enacted in the project boundary.

This document and similar tools are intended to assist projects in their pursuit of WELL v2 but use of this document and/or similar tools are in no way a guarantee of achievement of any rating or designation, and no representation or warranty is made regarding the likelihood of achieving any rating or designation.

Note: The below document is based on the Q1 2021 addenda of the WELL Building Standard™ version 2 (WELL v2™). Project teams are required to implement the feature requirements from the addenda version assigned to their project or any more recent addenda version.

FEATURE PART REQUIREMENTS:

For All Spaces except Dwelling Units

One of the following requirements is met:

- a. *The envelope glazing area is no less than 7% of the regularly occupied floor area for each floor level or individual unit.*
- b. *The floor plate is no more than 65 ft between opposite walls that each have transparent envelope glazing, and there are no opaque obstructions higher than 3.2 ft within a 20 ft horizontal distance of the transparent envelope glazing.*

For Dwelling Units

The following requirement is met:

- a. *The envelope glazing area is no less than 7% of the regularly occupied floor area for each dwelling unit.*

WELL Core Guidance:

Meet these requirements in the whole building.

The below sample documentation is intended to provide guidance in creating a technical document. It is not a template. You may note included components that are not required to demonstrate compliance with this Feature.

Example document for Feature Part 1 – Option 3.a for spaces except dwelling units / Option 2.a for dwelling units

CALCULATION INSTRUCTIONS

1. Locate either architectural drawings or photographs of the façade/exterior of the project.
 - a. If the project is using architectural drawings, they should ideally be from the final set of drawings for the project (e.g. as-built drawings, 100% construction drawings, etc.), or at minimum a set of drawings that indicates final glazing sizing and locations.
 - b. If the project is using photographs, ensure that they clearly depict all exterior project glazing.
2. Measure the total square footage of exterior glazing:
 - a. For all spaces except dwelling units, determine the project area of glazing for each floor.
 - b. For spaces that are dwelling units, determine the glazing area per unit.
 - c. Methods of measuring can include:
 - i. Using a CAD based program to calculate total area of exterior glazing based off project drawings.
 - ii. Manual measurements of glazing and windows from interior rooms
 - iii. Annotate the photographs of façade with the manually measured area of exterior glazing, for example:



3. Determine floor area:
 - a. For all spaces except dwelling units, determine the total floor area of project for each floor in the project boundary.
 - b. For dwelling units, determine the floor area of each unit in the project boundary.
4. Determine the ratio of glazing to floor area:
 - a. For all spaces except dwelling units, divide the glazing area by the floor area for each floor.
 - b. For dwelling units, divide the glazing area by the floor area for each individual unit.
5. Indicate if all ratios are $\geq 7\%$ (compliant with feature requirements).

EXAMPLE SUMMARY OF CALCULATIONS 1

Example project is a single-story existing school where areas of glazing were measured manually and annotated on the building photographs.

Calculations such as these can be provided on annotated plan or in an attached narrative:

Glazing Location*	Area (ft ²)
West façade glazing	780
South façade glazing	1,030
East façade glazing	890
North façade glazing	520
Total glazing area	3,220
Project floor area	24,500
Percentage of glazing	13%
Greater than or equal to 7%?	Yes

*Note to reviewer, the project is a single floor project, all glazing is on the first floor.

EXAMPLE SUMMARY OF CALCULATIONS 2

Example project is a mixed-use building with 8 residential units and 2 floors of retail.

Calculations such as these can be provided on annotated plan or in an attached narrative:

Location	Glazing Area (m ²)	Floor Area (m ²)	% of Glazing	≥7%?
Floors 1-2 Retail	52	550	9.5%	Yes
Unit 3A	11	125	8.8%	Yes
Unit 3B	13	140	9.3%	Yes
Unit 4A	11	125	8.8%	Yes
Unit 4B	13	140	9.3%	Yes
Unit 5A	11	125	8.8%	Yes
Unit 5B	13	130	10%	Yes
Unit 6A	11	125	8.8%	Yes
Unit 6B	13	130	10%	Yes

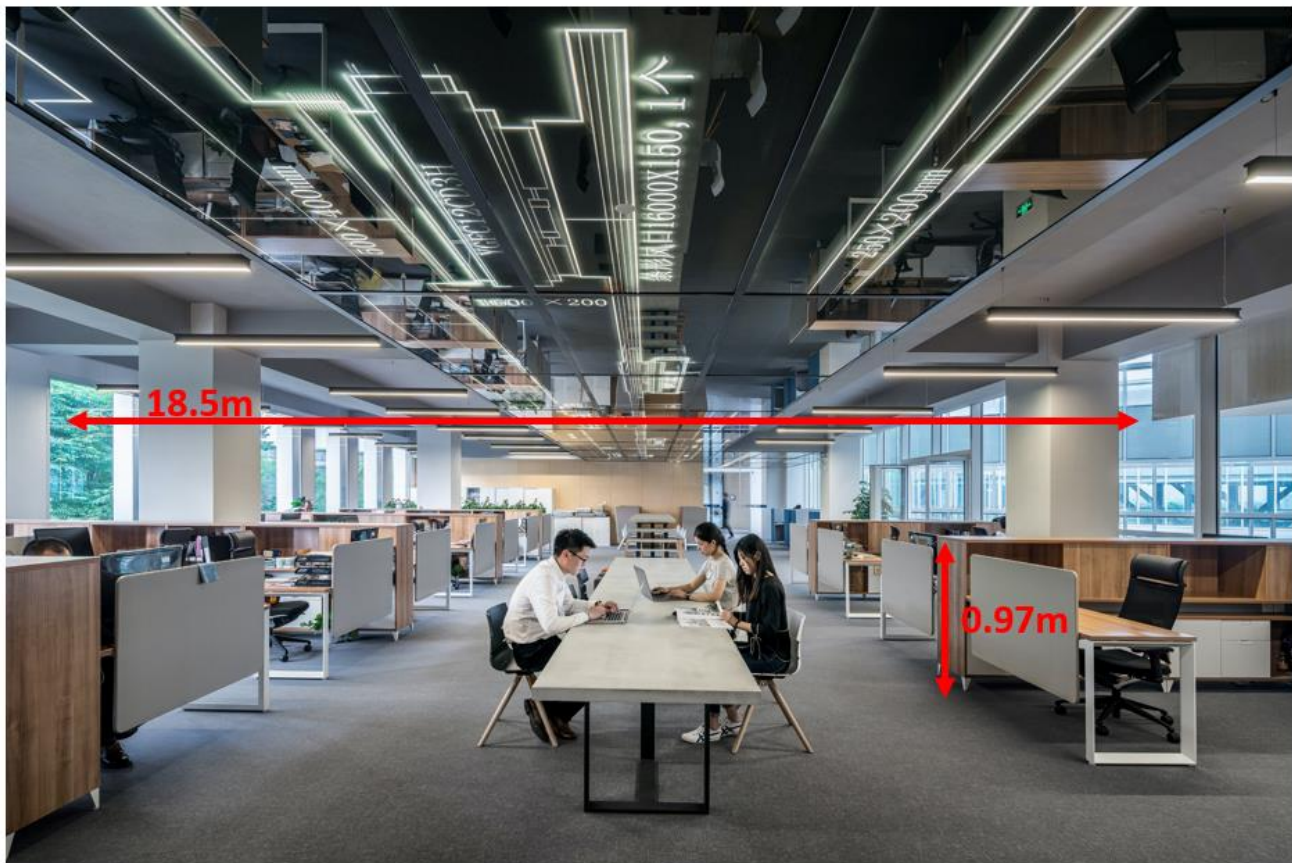
ARCHITECTURAL DRAWINGS INSTRUCTIONS:

1. Locate a floor plan of the project that indicates the floorplate (the edge of the interior space within the WELL project boundary).
 - a. If project is a multi-story project, provide floor plates for each floor that has a different floor plate layout.
 - i. For example, an 11-story project with the design below would need to provide three (3) separate floorplates:

Floors with Identical Floorplates	Floorplate Areas
Ground – 4 th floor	1,100 m ²
5 – 10 th floors	650 m ²
11 th floor penthouse	300 m ²

2. Indicate that each floor plate has transparent exterior glazing on each side.
3. Indicate on the floorplates the distance between the facades with transparent exterior glazing.
 - a. Indicate if the distance meets the requirement of $\leq 20\text{m}$ (65ft).
4. Confirm that there are no opaque obstructions higher than 1 m within a 6 m horizontal distance of the transparent envelope glazing. Here are options on how to demonstrate this requirement is met:
 - a. Provide a section of the floor indicating any opaque obstructions such as interior walls or furniture.
 - b. Provide annotated photographs of the interior space indicating any opaque obstructions.

See example below.



TIPS FOR MULTIPLE LOCATIONS

- Organizations participating in WELL Portfolio or the multiple projects pathway can submit a Guideline for this feature part, as well as a technical document for each audited project. This Guideline must outline the feature requirements, at minimum, and it can be shared across multiple projects as a means to provide guidance for compliance. A subset of audited projects must also each submit their own technical document that demonstrates compliance with the feature requirements.