

# X02.1 Manage Asbestos Hazards - 1: Asbestos risk assessment and remediation

## Technical Document

WELL Building Standard™ version 2 (WELL v2™)

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### WHAT IS THIS DOCUMENT:

This document is intended to serve as a guide on how to create a project **technical document to manage risks of human exposure to hazardous materials ubiquitously used in past construction practices.**

This document is meant to demonstrate an acceptable degree of detail for

- precertification documentation submission
- documentation submission

### *For precertification documentation submission:*

To achieve WELL Precertification, project teams may submit intent-stage or implementation-stage documents for pursued features, or any combination of the two. An intent-stage document is typically a draft document that has not yet been implemented in the actual project, while implementation-stage documents describe final and implemented strategies. Intent and implementation-stage documents should be similar in terms of level of detail. For final WELL Certification documentation approval, all documents are required to be implementation -stage. To learn more about intent-stage vs. implementation-stage documentation, review the precertification guide in our knowledge base.

Intent-stage language is indicated in this sample document with **green text and in parentheses**. For an intent-stage technical document, the investigation of the project space can be planned, i.e. the action plan does not yet have to be completed. The documentation should include adequate detail such that a WELL Reviewer will be able to confirm the document complies with all of the WELL feature part requirements.








### *For documentation submission:*

The level of detail is up to the discretion of the project team, but the documents must include specific details demonstrating that the actual requirements have been enacted in the project boundary. The Feature cannot be demonstrated solely through a confirmation that the requirements have been or will be implemented.

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, certification, or other designation, and no representation or warranty is made regarding the likelihood of achieving any rating, certification or other designation, and IWBI shall have no liability resulting from the use or content of this document or similar tools or resources or from any action taken or inaction occurring in reliance on this document or similar tools or resources.

**Note:** The below document is based on the Q1-Q2 2024 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.

## HOW TO USE THIS DOCUMENT:

- ☐  Read the [below feature requirements](#) (or the feature requirements from the [addenda version assigned to your project](#), as relevant) and determine how your project addresses each requirement.
  - a. If your project is a WELL Core project, read through and ensure that your project follows the “WELL Core Guidance.”
  - b. Make sure to apply the feature requirements appropriate to your project’s space types. For example, if your project has both dwelling units and other space types, ensure your project is applying the requirements under “For Dwelling Units” to the dwelling unit spaces and applying the requirements under “For All Spaces except Dwelling Units” to the other space types. Check out the [WELL v2™ digital standard](#) for the exact language on your project’s space types.
- ☐  Refer to the [below example document](#) to get an idea of how to set up your documentation.
- ☐  Collaborate with your stakeholders to gather the [relevant documentation](#) that demonstrates the project’s compliance with the feature. Some examples of relevant documentation include:
  - a. a letter from a hired professional outlining services provided
  - b. the project’s floor plans
  - c. a modeling report
- ☐  Create a technical document using existing documentation where relevant, annotating it to clarify where feature requirements are met. Some examples of annotating include:
  - a. highlight the sections relevant to WELL requirements
  - b. circle or add boxes around particular data
  - c. add notes to confirm WELL requirements
  - d. add labels to draw attention to particular sections
  - e. provide an explanation of the connection to WELL requirements using a different colored font
  - f. check out the [WELL Documentation Annotation Guide](#) for more
- ☐  Name the document so that it is easily identifiable. Some examples for naming include:
  - a. name the document using the WELL feature code
  - b. name the document using the WELL feature name
  - c. name the document using the WELL document type
- ☐  Review the document you’ve created and ensure that all the necessary WELL requirements are fully and clearly addressed.
  - a. Note: the level of detail is up to the discretion of the project team, but the document must include specific details demonstrating that the actual requirements have been enacted in the project boundary. Features cannot be demonstrated solely through a written confirmation that the WELL requirements have been or will be implemented.
- ☐  Upload the document to the scorecard in the WELL digital platform, after you’ve confirmed that the document fully and clearly addresses all the necessary WELL requirements.

## **FEATURE PART REQUIREMENTS**

### **For All Spaces**

The following requirements are met:

- a. The building was constructed or last renovated before the enactment of laws banning the installation of asbestos-containing materials, or is located where there is no local asbestos phase-out regulation.
- b. An inspector certified under local regulation or a qualified professional with demonstrable experience where no local regulations apply conducts an investigation of the project space and reports the following:
  1. A list of locations where presumed asbestos containing materials (PACM) were found.
  2. Confirmation of the presence of asbestos is performed through Polarized Light Microscopy (PLM), Scanning Electron Microscopy (SEM) or Transmission Electron Microscopy (TEM) testing. The sample number and location follow applicable laws or recommendations of the inspector conducting the assessment. Materials having over 1% of asbestos are considered ACM. If analytical confirmation is not available or possible, all PACM are considered asbestos-containing materials (ACM).
- c. If asbestos-containing materials (ACM) were found per the above, an action plan that contains the following is implemented:
  1. Notification of any works to relevant authorities and persons living, working or transiting in the vicinity of the building or space.
  2. Preventative measures against the formation and spread of asbestos fibers in the air during remedial work.
  3. Measures taken for workers' protection during remediation activities, including but not limited to skin and respiratory protection.
  4. If ACM are being removed, activities are carried out for proper handling of ACM waste, including: wetting of all removed ACM, care in transportation to prevent crumbling, sealing and leak-tight transportation, proper labeling and final disposal in locations allowed by applicable laws and permits.
  5. Post-remediation clearance for occupancy confirmation by testing of fibers in air using phase contrast microscopy (PCM) or transmission electron microscopy (TEM) following standards referenced in applicable local laws or, if not available, NIOSH Manual of Analytical Methods (MNAM) Methods 7400 or 7402, GBZ/T192.5-2007, ISO 8672:2014, ISO 10312:2019 or ISO 13794:2019. The number of samples and sampling conditions must meet local regulations and/or conform to ISO 16000-7.
  6. If any of the asbestos is managed by methods other than removal, the month and year of follow-up inspection to evaluate the structural integrity of the ACM must be stated and cannot exceed three years from the date of the last inspection.

#### WELL Core Guidance:

Meet these requirements for the extent of developer buildout.



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 X02.1, 1: Asbestos risk assessment and remediation

*The following example is for an existing building project in a location where asbestos can still be installed in buildings and English is a second language.*

### X02.1 Option 1 - Technical Document for [PROJECT NAME]

There are no local laws preventing asbestos use in buildings, so an asbestos inspection was conducted. Asbestos was found and remediated. Below is a summary of the inspection report, and the report is also attached in full *[intent-stage: investigation of the project space can be planned – information regarding when the investigation will occur and who will be conducting it should be provided]*

- a. The certificate of occupancy issued by the local municipality after the asbestos remediation was completed is attached. *[ATTACH CERTIFICATE OF OCCUPANCY]*.
- b. Investigation summary:
  - a. Professional inspector: *[NAME, CREDENTIALS, CONTACT]*
  - b. A list of locations where presumed asbestos containing materials (PACM) were found:
    - i. *Ex: Walls along corridors and 4th floor breakroom*
    - ii. *Ex: Ceiling tiles throughout the project*
    - iii. *Ex: Floors in the back of house areas*
    - iv. *Ex: Insulation on the boilers and steam pipes*
- c. Method used for confirming the existence of asbestos:
  - v. *Ex: Polarized Light Microscopy (PLM) – sample number and location of samples were determined by local law [INSERT LOCAL LAW]*
  - vi. *Ex: Transmission Electron Microscopy (TEM) testing – sample number and location of samples were determined by recommendations from [NAME OF QUALIFIED PROFESSIONAL INSPECTOR]*
  - vii. *Ex: No analytical method of testing asbestos was available so all presumed asbestos containing materials (PACM) are considered asbestos-containing materials (ACM)*
- d. The Investigation Report provided to the local municipality is attached. Sections of the report that indicate the information above have been annotated with English translations. *[ATTACH REPORT – INCLUDE ENGLISH TRANSLATIONS OF RELEVANT SECTIONS.]*

### Asbestos Action Plan Summary:

Because the investigation report determined that there were asbestos in the building, we have implemented *[intent-stage: will implement]* an Asbestos Action Plan. The Asbestos Action Plan is attached and it is in Spanish. Below is a summary of the sections of the plan that address *[intent-stage: will address]* X02.1 c. and page numbers where they can be located within the larger plan. The Asbestos Action Plan sections that relate to these parts have been translated into English and included in boxes in the margins of the report pdf.

### Asbestos Action Plan Summary:

#### 1. Notification of any works to relevant authorities and persons living, working or transiting in the vicinity of the building or space.

*Ex: After the asbestos inspection was completed, the local authorities [INSERT LOCAL AUTHORITIES' NAME] were notified of the presence of asbestos. Immediately afterwards, the building occupants were notified by email and*

by signage in the main lobby regarding the presence of asbestos as well as the plan to remediate it while the building was largely empty due to COVID-19 quarantine practices. The email included dates that certain areas of the building would be closed for remediation. For more details, see page [INSERT PAGE NUMBER] of the Asbestos Action Plan.

**2. Preventative measures against the formation and spread of asbestos fibers in the air during upcoming remedial work (for more details, see page [INSERT PAGE NUMBER] of the Asbestos Action Plan):**

- *Ex: Areas of the building where work will occur will be sealed off from the remainder of the building by plastic sheeting and doors where the jambs are taped to create a complete seal.*
- *Ex: Building occupants have been notified that certain areas of the building will be closed while remedial work takes place. This will prevent possible occupant exposure to asbestos fibers that may become airborne during remedial activities..*
- *Ex: When necessary, negative pressure enclosure systems will be used to capture particles potentially released into the air by removal techniques. The systems will use HEPA filters.*
- *Ex: HVAC ducts in areas where remedial work is happening will be sealed.*
- *Ex: Standalone air filtration systems with HEPA filters will be installed in areas where remediation work is happening to filter out particles introduced into the air.*

**3. Measures taken for workers' protection during remediation activities, including but not limited to skin and respiratory protection (for more details, see page [INSERT PAGE NUMBER] of the Asbestos Action Plan):**

- μ *Ex: Workers will be required to wear protective clothing including: full-body coveralls, rubber boots, disposable gloves and protective eyewear.*
- μ *Ex: Workers will each be required to wear half-face dual cartridge HEPA filter respirators during all remedial work. Filters will be replaced in accordance with manufacturer requirements.*
- μ *Ex: Equipment and tools will be washed before leaving the contaminated area.*
- μ *Ex: Any workers identified to have exposed skin (e.g., hands or face) during remedial work will be required to wash exposed areas promptly.*

**4. If ACM are being removed, activities are carried out for proper handling of ACM waste, including: wetting of all removed ACM, care in transportation to prevent crumbling, sealing and leak-tight transportation, proper labeling and final disposal in locations allowed by applicable laws and permits.**

- *Ex: [PROJECT] has hired [ASBESTOS REMOVAL COMPANY] who specializes in asbestos waste disposal. Here are the protocols that they follow on each of their jobs:*
  - a. Asbestos waste is wetted before it is removed.*
  - b. Once it is removed it is immediately placed in plastic bags to prevent the opportunity for the waste to further deteriorate or crumble.*
  - c. Plastic bags containing asbestos are then double-bagged and placed in sealed air-tight and leak-tight plastic waste containers with appropriate labeling.*
  - d. The company carts them to the closest location that accepts asbestos waste, [INSERT NAME OF DISPOSAL FACILITY, LOCATION].*

**5. Post-remediation clearance for occupancy confirmation by testing of fibers in air using phase contrast microscopy (PCM) or transmission electron microscopy (TEM) following standards referenced in applicable local laws or, if not available, NIOSH Manual of Analytical Methods (MNAM) Methods 7400 or 7402, GBZ/T192.5-2007, ISO 8672:2014, ISO 10312:2019 or ISO 13794:2019. The number of samples and sampling conditions must meet local regulations and/or conform to ISO 16000-7.**

- *Ex: Once remediation has concluded, the original asbestos inspector [INSERT NAME] will return and re-inspect the space using phase contrast microscopy (PCM) following NIOSH Manual of Analytical Methods (MNAM) Methods 7400. If no asbestos is detected, the inspector will sign-off that the space has been remediated. If the inspector detects asbestos, a new contractor will be hired to complete the remaining asbestos remediation.*

**6. If any of the asbestos is managed by methods other than removal, the month and year of follow-up inspection to evaluate the structural integrity of the ACM must be stated and cannot exceed three years from the date of the last inspection.**

- *Ex: Asbestos was fully removed, please see confirmation on page [INSERT PAGE] of the remediation report. No follow-up inspection is needed.*

- *Ex: Asbestos in the floors on the 5<sup>th</sup> floor was encapsulated instead of removed. The asbestos inspector [INSERT NAME] who conducted the original inspection will return on [DATE – \_MONTH AND YEAR], three years after the original inspection to re-evaluate the structural integrity of the encapsulation.*

#### **TIPS FOR MULTIPLE LOCATIONS**

- Organizations participating in WELL at scale should indicate which locations are pursuing this feature, and then submit the specific details for the locations selected for an audit.