

# Guide NEXT-BIM Explorer 2023.1.1

[Release 2023.1.1](#) · [NEXT-BIM/next-bim-releases](#) · [GitHub](#)



---

<https://www.next-bim.com/>

<https://www.next-bim.com/espace-client>

# Table of content

|  |    |
|--|----|
| Guide NEXT-BIM Explorer 2023.1.1 .....   | 1  |
| Table of content.....  | 2  |
| <b>I.</b> Introduction.....  | 4  |
| 1. Presentation of NEXT-BIM Explorer .....   | 4  |
| 2. Prerequisites and Required Hardware .....   | 4  |
| <b>II.</b> Getting Started .....   | 4  |
| 1. Installation and Configuration.....   | 4  |
| 2. Interface and Basic Usage of HoloLens 2 Configured with an Active NEXT-BIM License..... | 4  |
| 3. First Steps in NEXT-BIM .....   | 5  |
| <b>III.</b> Tabletop Mode Controls.....  | 8  |
| 1. Navigation and Interaction in Tabletop Mode .....                                       | 8  |
| <b>IV.</b> Immersive Mode .....  | 13 |
| 1. Opening Immersive Mode:.....  | 13 |
| 2. Positioning in Immersive Mode:.....   | 13 |
| 3. Returning to Tabletop Mode:.....  | 14 |
| 4. Moving in Immersive Mode: .....   | 15 |
| <b>V.</b> Model Alignment in the Real Environment.....                                     | 18 |
| 1. Automatic Alignment .....   | 18 |
| 2. Continuous Realignment and Advanced Alignment Options:.....                             | 21 |
| 3. Quick Realignment of Targets .....  | 21 |
| <b>VI.</b> Viewing Technical Data .....  | 22 |
| 1. Accessing Technical Information:.....   | 22 |
| 2. Exploring Information:.....   | 22 |
| <b>VII.</b> Measurement Tool .....   | 23 |
| 1. Using the Measurement Tool.....   | 23 |
| 2. Object Offset: .....  | 24 |
| 3. Two-Point Measurement: .....  | 26 |
| <b>VIII.</b> Visibility Management.....  | 30 |
| 1. Load/Unload a File: .....   | 31 |
| 2. Hide/Show a File:.....  | 32 |
| 3. Hide/Show by IFC Class: .....   | 34 |
| 4. Hide/Show by Object:.....   | 36 |
| 5. Reveal a Hidden Object: .....   | 38 |
| 6. Custom Visibility Lists:.....   | 38 |
| 7. Combine Custom Visibility Lists:.....   | 40 |

|              |  |           |
|--------------|--|-----------|
| 8.           | Mark Visibility Lists as Favorites:.....                     | 42        |
| <b>IX.</b>   | <b>Annotations .....</b>                                     | <b>44</b> |
| 1.           | Managing Annotation Groups:.....                             | 44        |
| 2.           | Creating Annotations - Two Advanced and Quick Types: .....   | 46        |
| 3.           | Viewing Annotations in Tabletop Mode:.....                   | 56        |
| 4.           | Editing/Deleting Annotations:.....                           | 58        |
| 5.           | Exporting Annotations:.....                                  | 59        |
| <b>X.</b>    | <b>Checklist: Using the Checklist Tool.....</b>              | <b>61</b> |
| 2.           | Using the Checklist: .....                                   | 61        |
| 3.           | Checklist Export:.....                                       | 64        |
| 4.           | Viewing in Tabletop Mode: .....                              | 66        |
| <b>XI.</b>   | <b>Settings and Customization .....</b>                      | <b>67</b> |
| 1.           | Configuring Settings .....                                   | 67        |
| <b>XII.</b>  | <b>Additional Resources.....</b>                             | <b>68</b> |
| 1.           | Allowing Camera/Microphone Access in NEXT-BIM Explorer ..... | 68        |
| <b>XIII.</b> | <b>Support, Updates, and New Features .....</b>              | <b>71</b> |

# I. Introduction

## 1. Presentation of NEXT-BIM Explorer

NEXT-BIM Explorer is a mixed reality software designed for the visualization and management of Building Information Modeling (BIM) models. This revolutionary application enables construction, architecture, and real estate management professionals to explore complex BIM models using Microsoft HoloLens mixed reality headsets. Whether it's project coordination, site inspection, communication with stakeholders, or compliance verification, NEXT-BIM Explorer offers advanced tools to enhance efficiency and understanding of construction and development projects.

## 2. Prerequisites and Required Hardware

Before diving into the exciting world of NEXT-BIM Explorer, make sure you have the following elements:

- **Mixed Reality Headset HoloLens:** NEXT-BIM Explorer is designed to work with Microsoft HoloLens mixed reality headsets. Ensure you have access to a HoloLens to fully enjoy this application.
- **Router:** To operate in collaborative mode, NEXT-BIM Explorer requires access to a local network. Make sure you have a router (TP Link type) to operate collaboratively.
- **BIM Models:** To use NEXT-BIM Explorer, you will need BIM models in IFC (Industry Foundation Classes) format or formats supported by Navisworks. Ensure you have access to the models you want to explore and configure the IFC or Navisworks files in NEXT-BIM Configurator.
- **Visor:** In bright environments, tinted visors can accentuate the display of holograms.
- **Lamp:** In dark environments, clip-on lamps or LED headbands should be installed to enable the HoloLens 2 to scan the environment.

# II. Getting Started

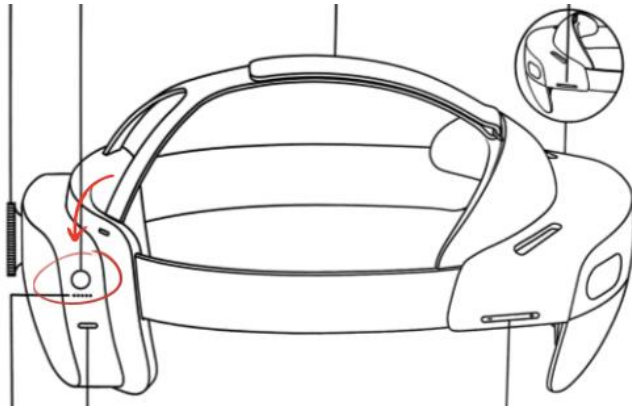
## 1. Installation and Configuration

Refer to the Installation Instructions document for installing NEXT-BIM modules.

## 2. Interface and Basic Usage of HoloLens 2 Configured with an Active NEXT-BIM License

### *a. Power On the HoloLens 2*

To start, power on your HoloLens 2 headset using the circular button located at the back right of the device.



For additional information on operating HoloLens 2, refer to the following link: [HoloLens 2 Basic User Guide](#)

***b. Open the Windows Menu:***

You have two options to access the Windows menu:

1. Look at your wrist and click on the inside of your wrist.
2. Look at your wrist and bring your thumb and index finger together.

We recommend following Microsoft's tutorial under the "Tips" application.

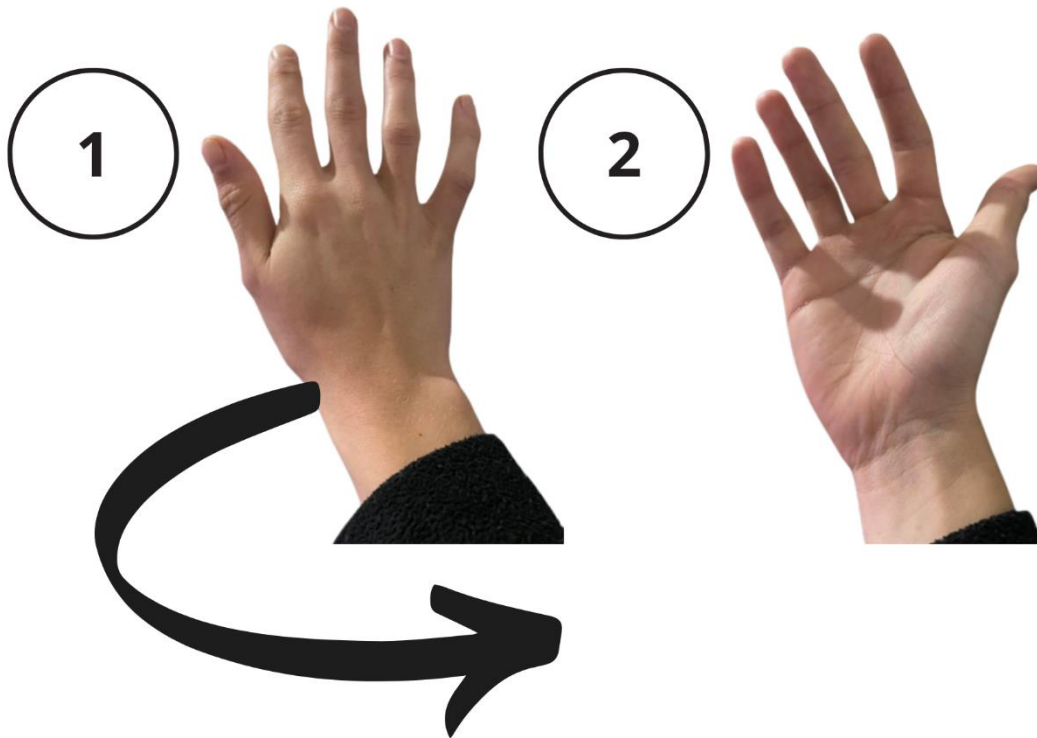


**3. First Steps in NEXT-BIM**

***a. Essential Gestures***

We recommend watching the video tutorial "Basic Gestures in NEXT-BIM."

- **Open the NEXT-BIM menu** : by holding your hand in front of you and opening your hand, with your palm facing you: .



- **Click in the circular menu and/or in the menu of a tool**: Perform a click in the circular menu, point the button with your finger, and perform a click as if you were touching the hologram (similar to a smartphone screen). A circular cursor appears. The smaller and closer the cursor becomes, the closer the click is taken into account.

We will call this gesture: "Push Click."

- **Click in the menu of a tool and/or to use a tool**: A ray extends from your hand. The ray functions like a mouse on a PC. Point the button of a menu or an object.

Perform a pinch with two fingers. Open your thumb and index finger and bring them together to make a click (see photo).



When your index finger lifts, the click is registered. We will call this gesture: "Pinch Click."

When the white ray appears at the end of your hand, you can perform a "pinch click." When the cursor appears at the end of your finger, you can perform a "push click."

**b. Open NEXT-BIM**

To open a NBIM file, follow these steps:

1. Orient your hand towards yourself to open the main menu.
2. Use one of the two techniques below to open the main menu (by clicking on your wrist or by bringing your pointer and thumb together - you should see a blue home page with multiple widgets).



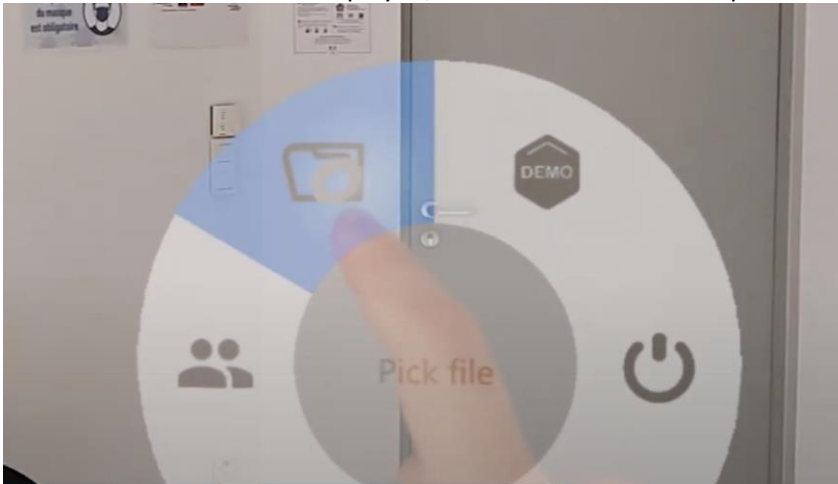
3. If the application is not pinned, click on "All Apps" using your finger as a pointer (represented by a round circle).



4. Open the NEXT-BIM Explorer application by clicking on it with your finger. The application opens and displays a circular menu. You can pin the application to the Windows start menu by performing a long press.

**c. Open a .NBIM File**

1. Once the circular menu is displayed, click on the file icon to open a file.



2. Select the file you want to open.



3. The tabletop model appears once you have selected the file.



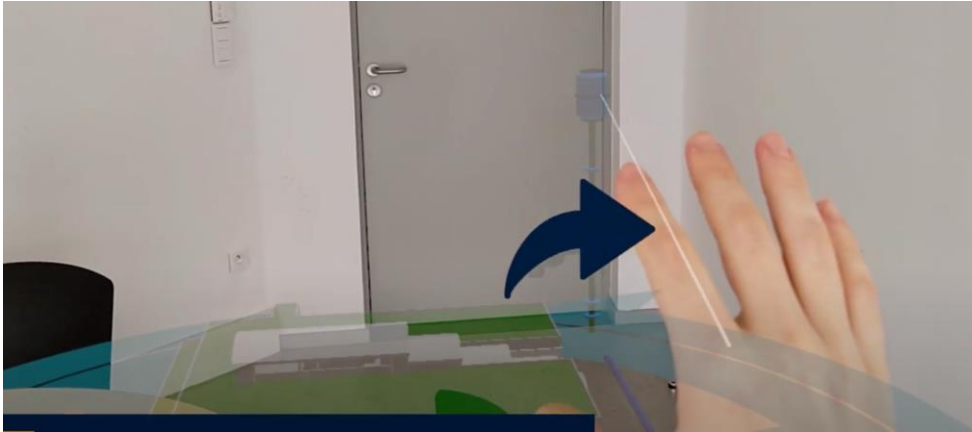
### III. Tabletop Mode Controls

#### 1. Navigation and Interaction in Tabletop Mode

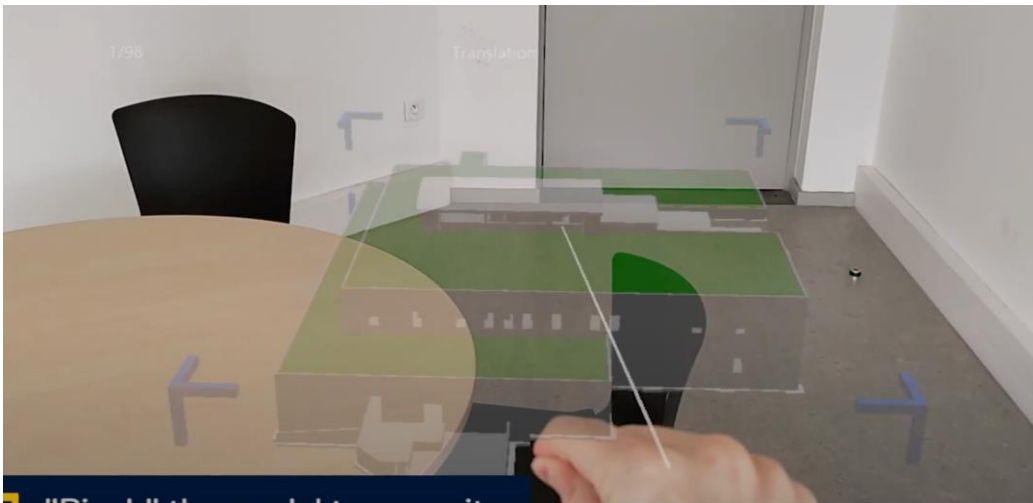
To control the model in Tabletop mode, follow these instructions:

1. A ray (represented by a white line) extends from your palm, allowing you to control the model.

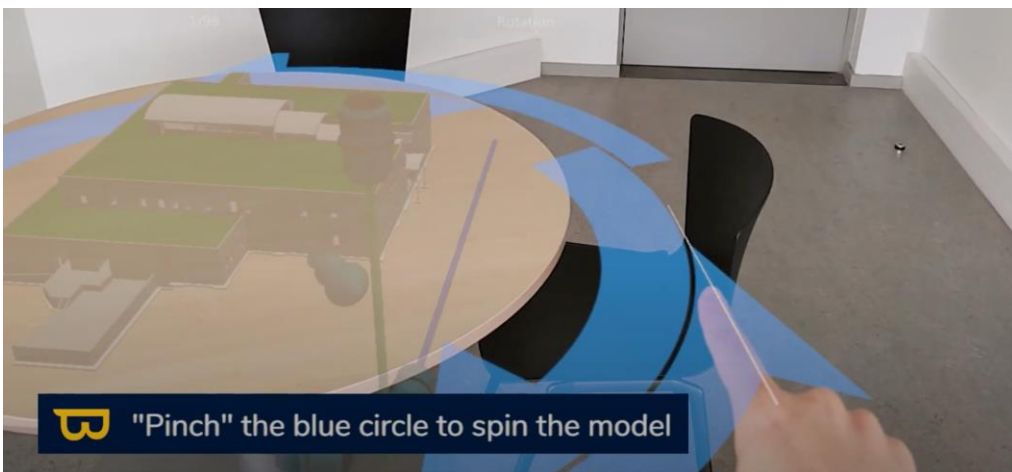




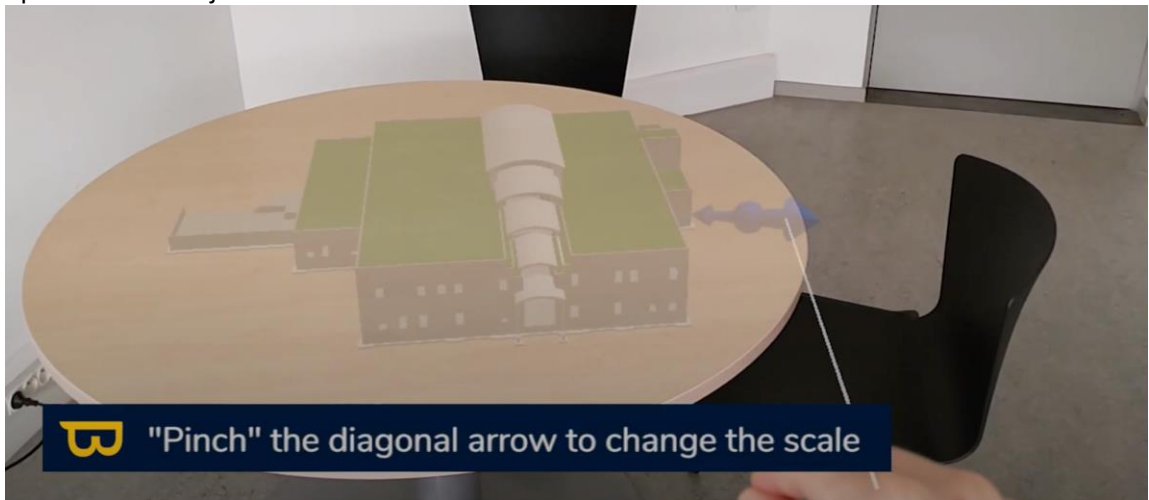
2. To move the model, pinch your thumb and index finger together to grasp the model. (Pinch click)



3. Then place the model on a surface (e.g., a table) by releasing your pinched fingers.
4. The large arrows on the blue circle allow you to rotate the model. Point and direct your ray towards the blue circle, then pinch the arrows to rotate the model clockwise or counterclockwise.



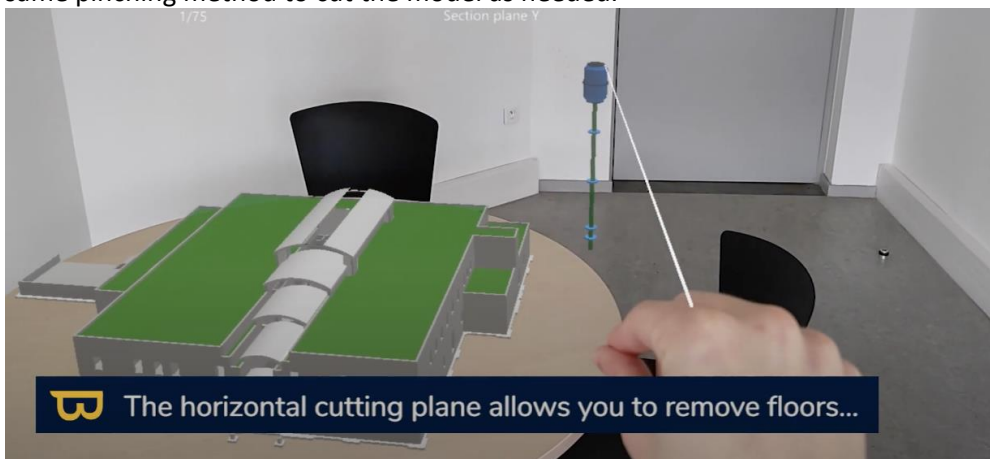
5. The diagonal blue pin allows you to adjust the scale of your model. Simply pinch and drag it up or down to adjust the scale.

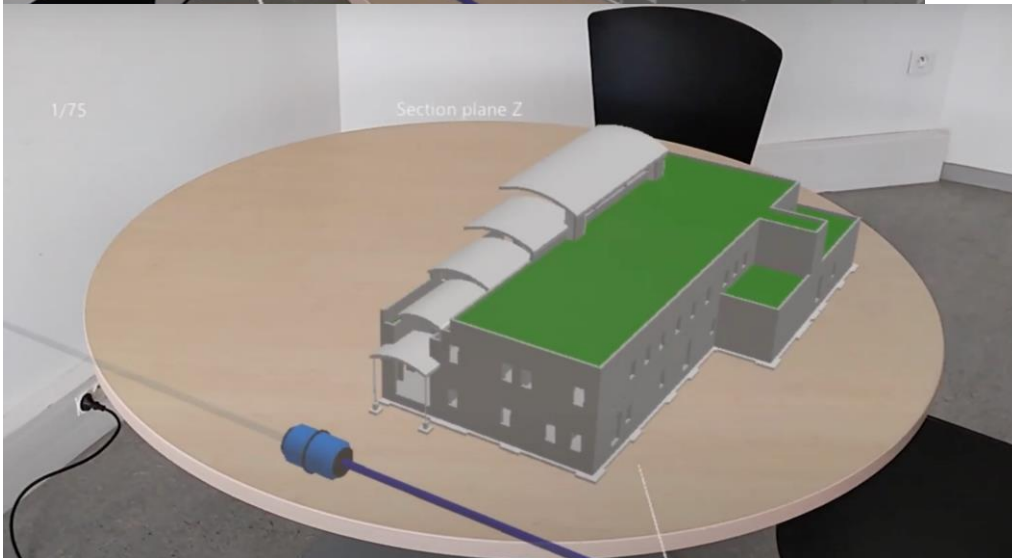
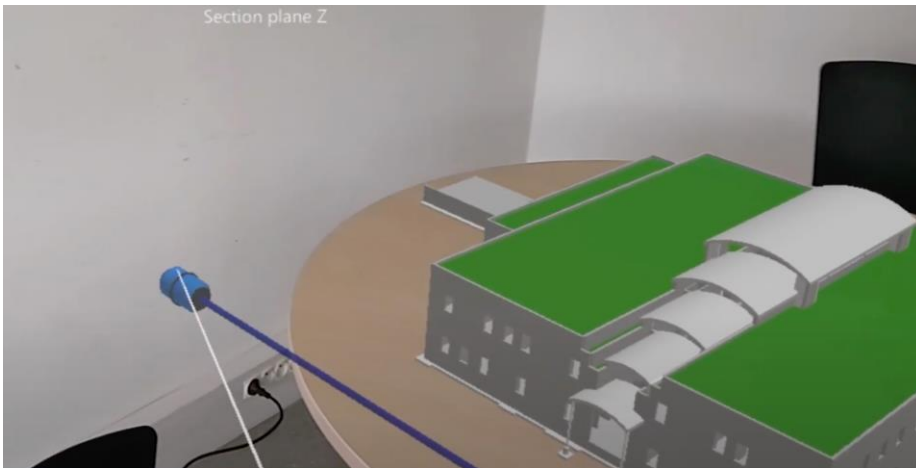
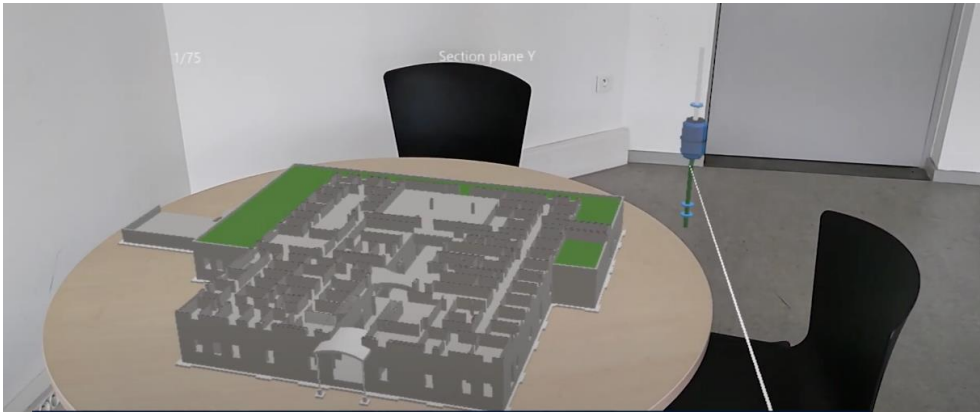


6. You can also physically move around the model by walking around it while keeping the headset facing the model.

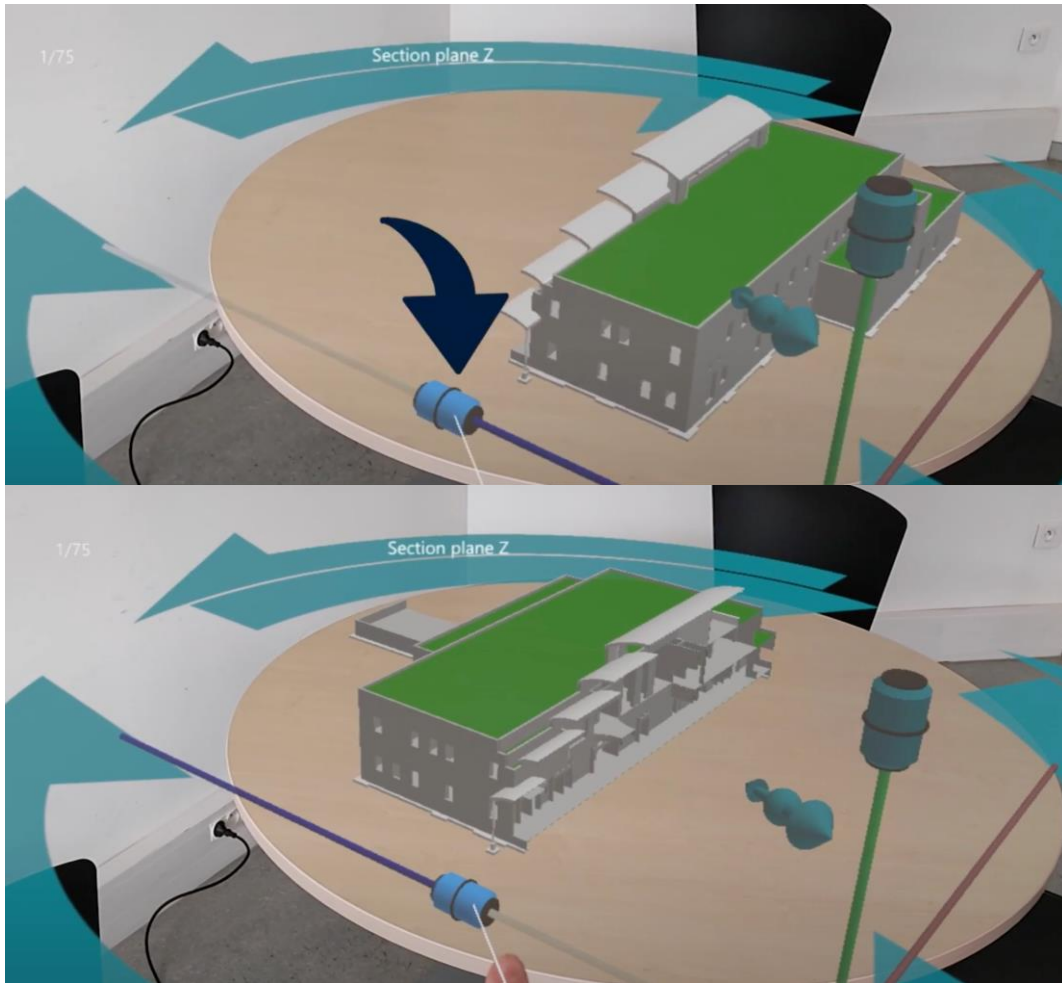


7. Horizontal and vertical sliders (on a blue or red line) allow you to cut the model. Use the same pinching method to cut the model as needed.

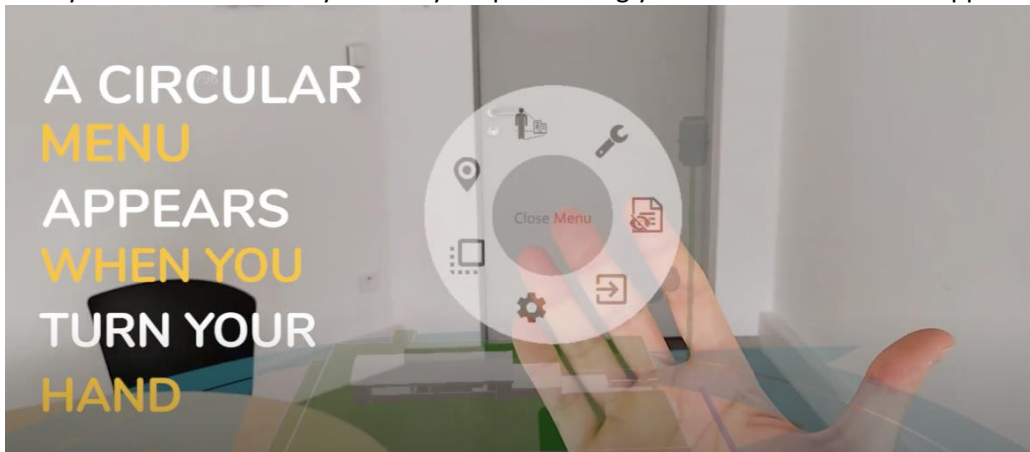




8. To reverse the cutting plane, simply click on the slider itself with your pointer finger (only available on horizontal axes).



9. Turn your hand in front of you with your palm facing you. A circular menu will appear.

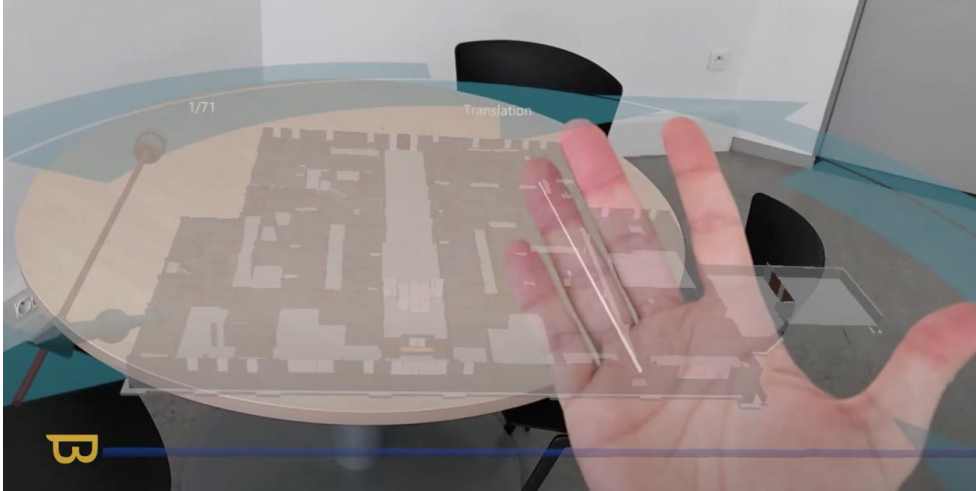


## IV. Immersive Mode

The immersive mode of NEXT-BIM Explorer offers an immersive augmented reality experience. Here is a detailed guide for its use:

### 1. Opening Immersive Mode:

1. To switch to immersive mode, turn your hand palm up to bring up the menu.



2. In the menu, select the icon depicting a person in a circle, labeled "Immersive mode."



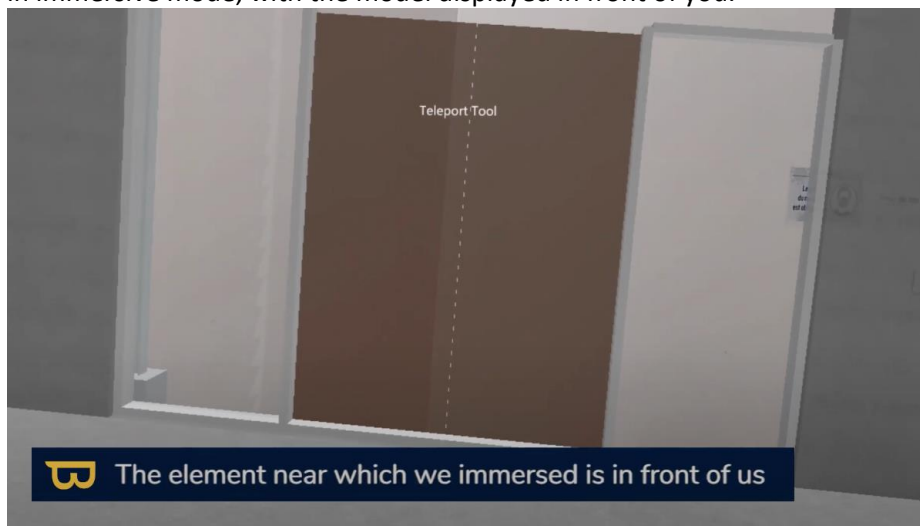
### 2. Positioning in Immersive Mode:

1. Use your ray, which is a virtual extension of your arm, to position the blue circle where you want it in the virtual environment. It is essential to note that the model will retain the orientation you gave it in Tabletop mode. Therefore, the orientation of the model in Tabletop mode corresponds to the orientation in immersive mode.





2. To enter immersive mode at that location, perform a quick click by pinching your pointer (index) finger and thumb, similar to a pinch. You will be instantly teleported to that location in immersive mode, with the model displayed in front of you.



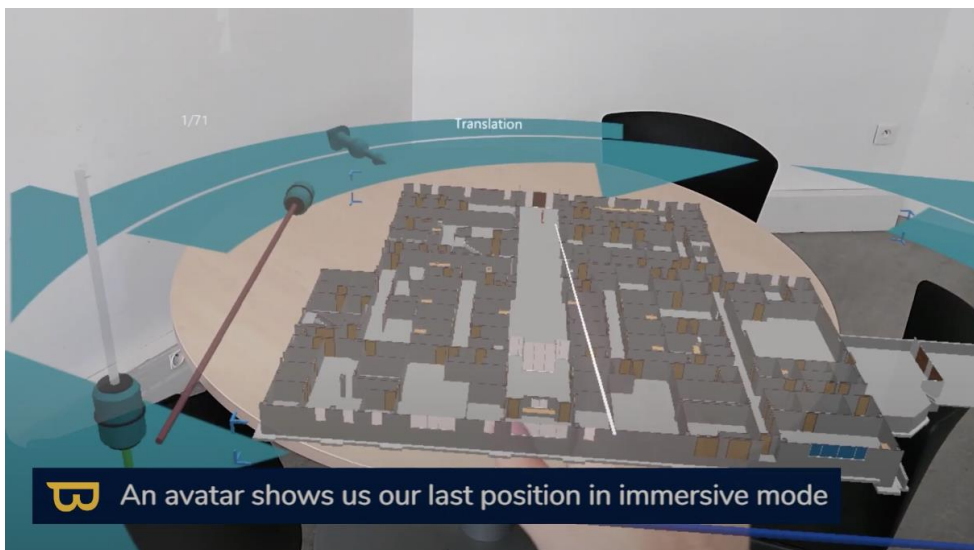
### 3. Returning to Tabletop Mode:

To return to Tabletop mode from immersive mode:

1. Open the menu again by turning your hand palm up.
2. In the menu, select "Tabletop Mode", the icon that looks like a model, which will take you back to Tabletop mode.



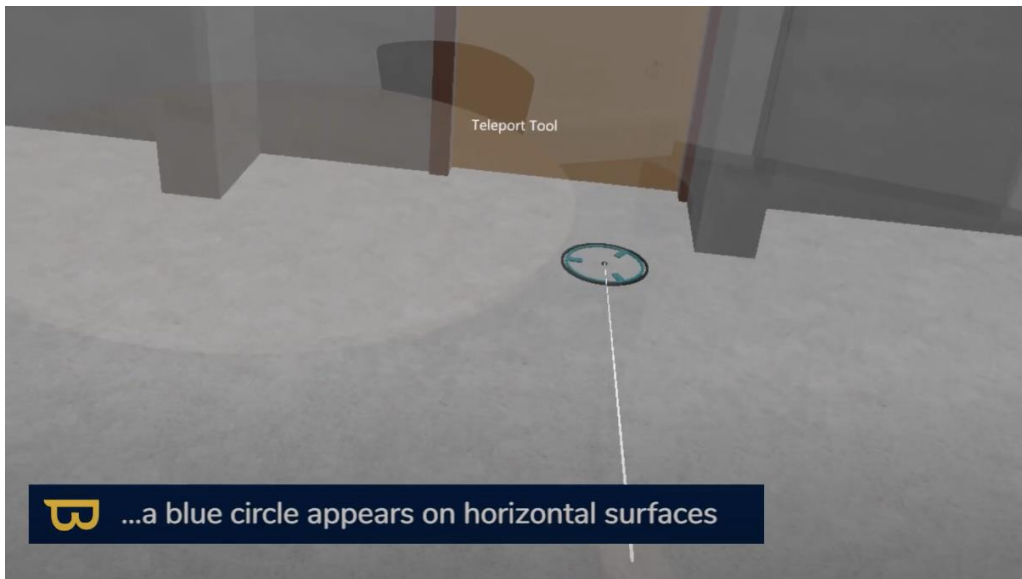
3. An avatar will indicate your last position in immersive mode.



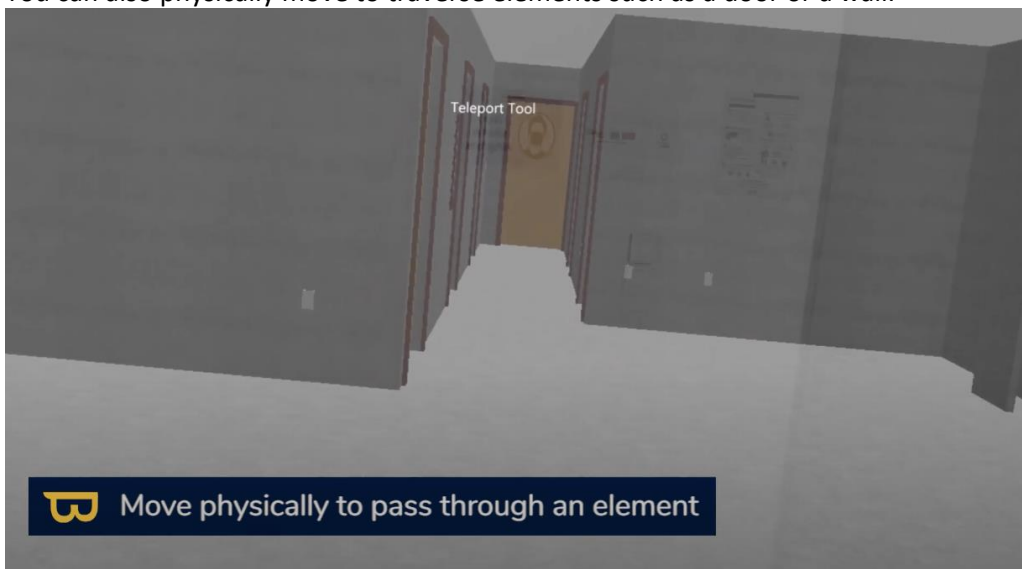
#### 4. Moving in Immersive Mode:

Follow the previous steps to return to immersive mode.

1. Once in immersive mode, look at the end of your ray. You will see a blue circle appear on horizontal surfaces. To instantly teleport to that location, simply click on it (Pinch Click).

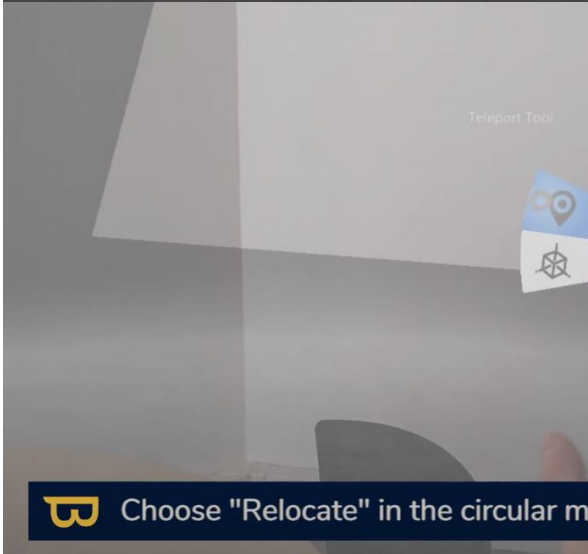
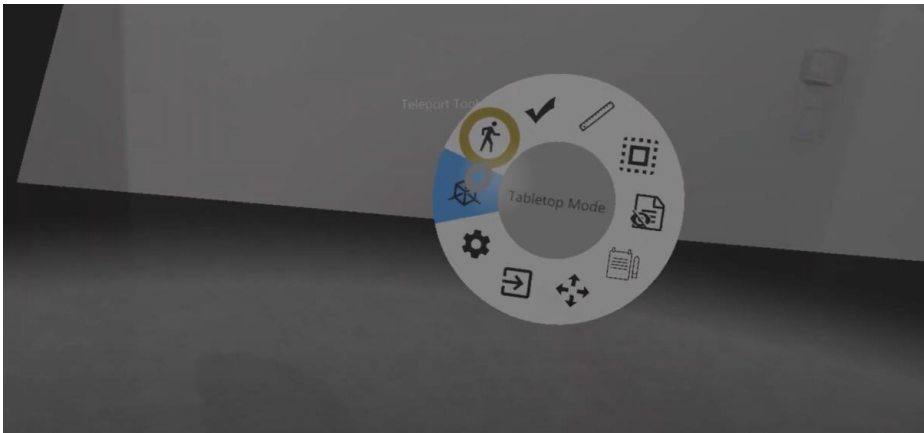


2. You can also physically move to traverse elements such as a door or a wall.

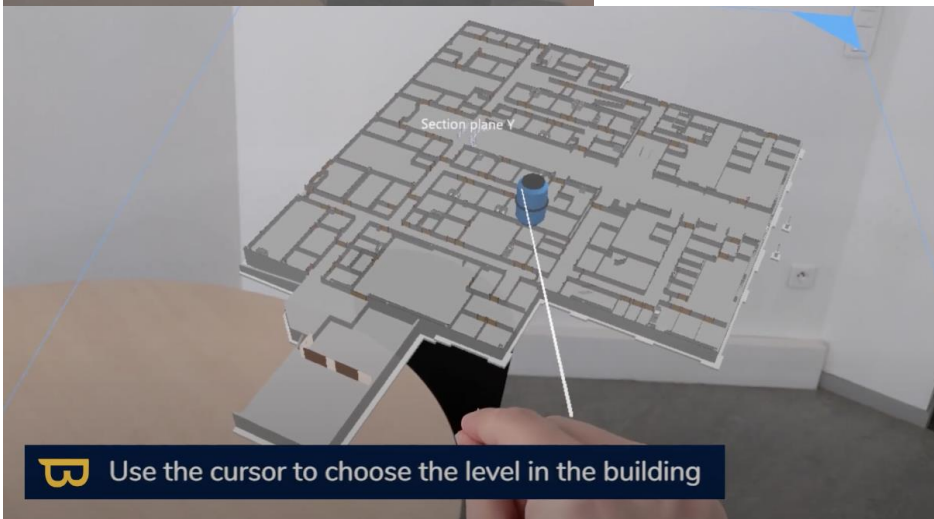


3. If you want to change your location in immersive mode, open the menu again by turning your hand palm up.
4. In the menu, hover over the "movement" icon (standing person).
5. Select "Movement" (Stand up man icon) >"relocate" (Pin icon). A miniature version of your model will appear, allowing you to choose a new location.

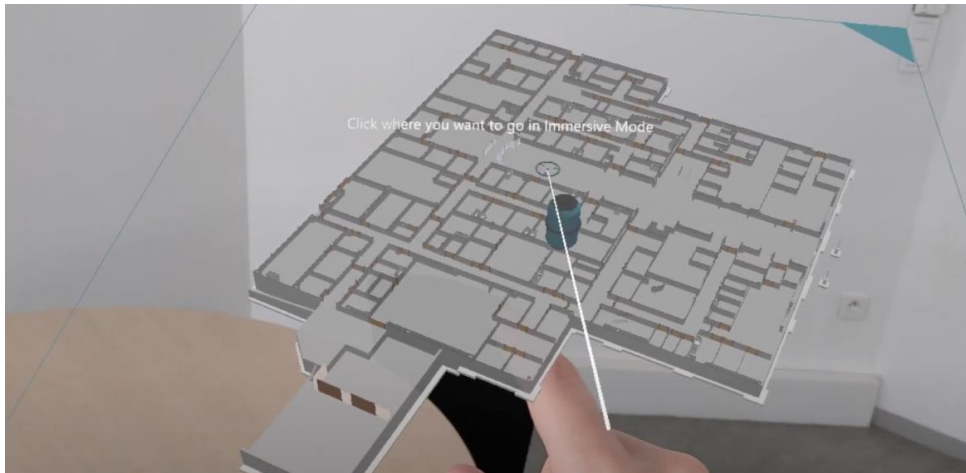




**B** Choose "Relocate" in the circular menu



**B** Use the cursor to choose the level in the building



**The teleportation tool can only be used when the model alignment has not been performed (e.g., in a meeting room). Once the model alignment is done, you can only move physically.**

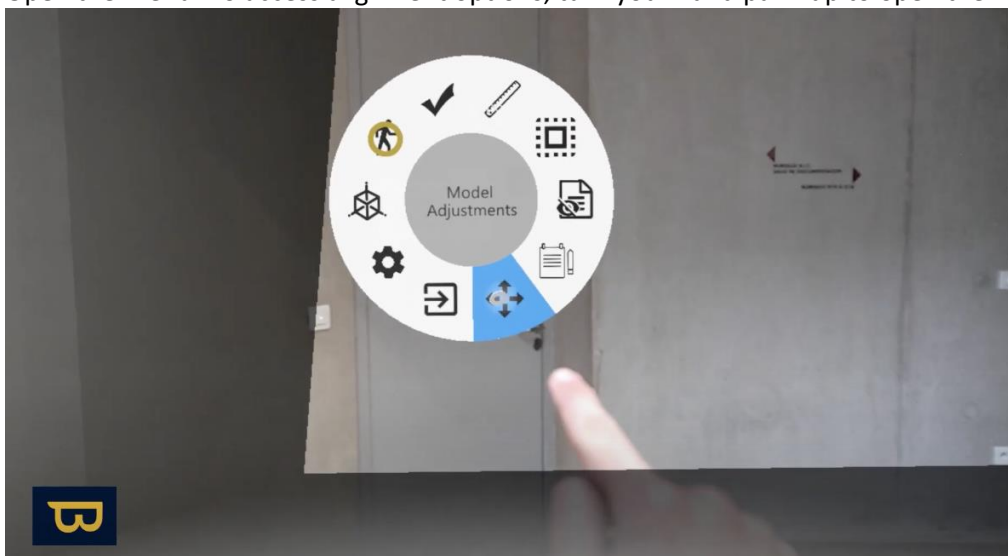
You have the option to customize your immersive mode experience settings, including display distance, current floor selection, or displaying the minimap. These settings are explained in detail in the "Immersive Mode Settings" section (add a link).

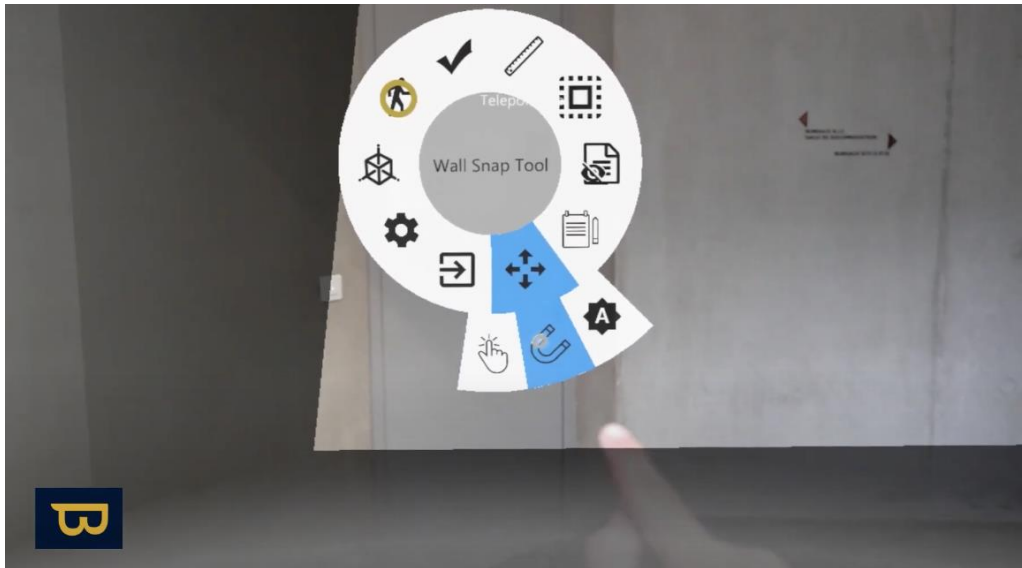
## V. Model Alignment in the Real Environment

### 1. Automatic Alignment

Precise alignment of the virtual model with the real environment is crucial for an optimal immersive experience. Follow these steps for accurate alignment:

1. Rotate Your Tabletop Model: Adjust the position of your virtual model on the table to match the orientation of the real building.
2. Immerse yourself in the approximate physical location where you are (as seen in the "immersive mode" chapter). "Immersive mode" > Teleport to approximate physical location
3. Open the Menu: To access alignment options, turn your hand palm up to open the menu.

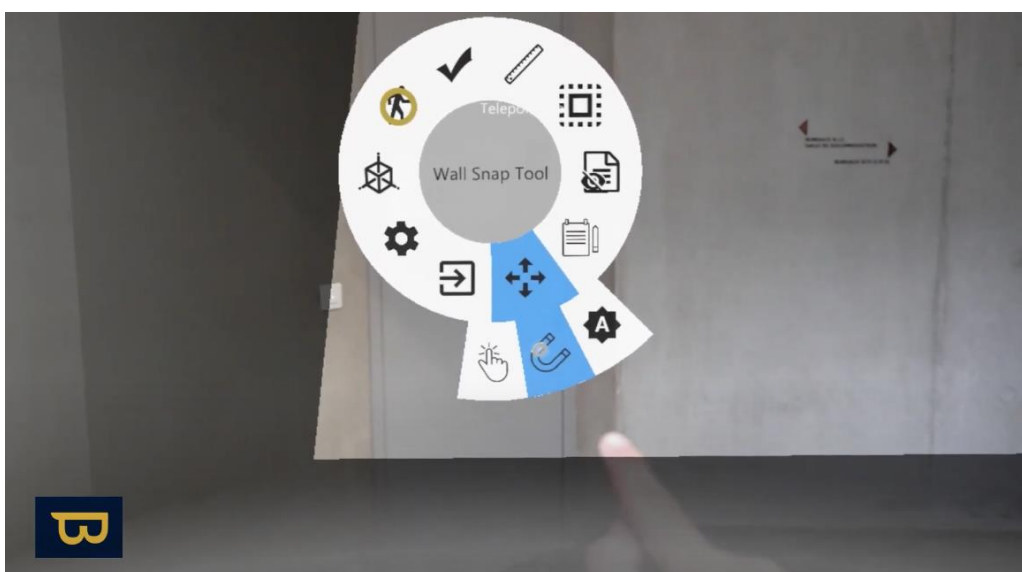




4. Immerse Yourself in the Approximate Physical Location: As explained earlier in the "Using Immersive Mode" section, position yourself in the approximate physical location where you are.
5. Use the "Alignment with Two Walls" Function: This function ensures precise alignment. Here's how to proceed:

**a. a. Alignment with Two Walls:**

1. Open the menu again by turning your hand palm up.
2. Select the "model alignment" option.
3. Choose the surface alignment tool, represented by a magnet icon, which will appear in front of you.

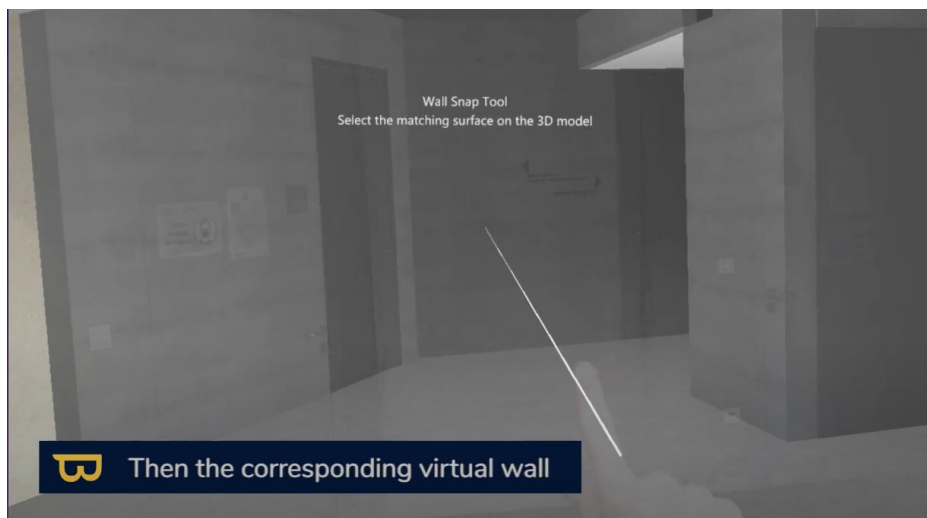


4. Select "alignment with two walls" to align the model using two perpendicular walls.

5. Click on the first real wall: Use a quick pinching motion to click on the first real wall in the scanned mesh, which is the wall in your real environment.



6. Click on the corresponding virtual wall: Next, click on the virtual wall in the model that corresponds to the real wall you just selected.



7. Repeat these steps for the second wall: Perform the same procedure for the second real wall and its corresponding virtual counterpart. Once this step is completed, the alignment is finished.

If you notice a drift as you move, stand still and give the tool time to realign, move closer to structural elements.

#### **b. Automatic Floor Realignment**

If you notice a floor misalignment in your virtual model, you can perform automatic floor realignment.

1. Access "Model Alignment."
2. Select "Floor Alignment."

3. Then click on the virtual floor followed by the corresponding real floor to correct the misalignment.

## 2. Continuous Realignment and Advanced Alignment Options:

### a. *Continuous Realignment Settings:*

- The use of continuous realignment can be enabled or disabled based on the reliability of your structural elements. You can disable continuous realignment by accessing the magnet icon and choosing "Continuous Realignment: Disabled/Enabled."
- Additionally, you can choose the realignment mode: Only on the structure / On all flat vertical surfaces / In case of a specific configuration in NEXT-BIM Configurator, the continuous realignment system based on the structure will be replaced by the created configuration.
- Custom Floor Offset: If your virtual model and real floor are not at the same level (e.g., the model includes all the floor finishes while the real floor lacks the last one), you can add a custom floor offset. In the continuous realignment settings (magnet icon), you can add a positive or negative floor offset as needed.

## 3. Quick Realignment of Targets

The quick realignment of target tool is designed to address any translation drift issues in areas where continuous realignment lacks reference points, such as long corridors or large open spaces without walls. This method involves placing virtual targets at regular intervals, typically every 5 to 10 meters, on the floor or walls to maintain accuracy in these areas.

### **Recommended Procedure:**

1. **Modeling Virtual Targets:** Use CAD software such as Revit or Archicad to model virtual targets. Ensure that the 3D object's origin position corresponds to the real-world geometry location. The geometry of the object does not matter.
2. **Placement of Real Targets on Site:** Place real targets on-site in the form of georeferenced stickers/crosses (there is no automatic scanning of real targets, so the type of targets does not matter) with an accuracy of 1 to 2 cm. It is recommended to involve a surveyor to ensure this accuracy.

### **In NEXT-BIM Configurator:**

1. **Open Your Model:** Open your model in NEXT-BIM Configurator.
2. **Access the "Configuration" Menu > "Explorer":** Click on the "Configuration" menu and then select "Explorer."
3. **Open the "Alignment" Tab:** Navigate to the "Alignment" tab.
4. **Create and Add a New Filter:** Create a new filter to sort your targets. For example, you can use a naming rule if you included "Targets" in the object's name or a file rule if you created a new .ifc file for the targets. Also, rename your filter.

5. **Generate Your .nbim File:** Once your filter is created, generate your .nbim file. This functionality will then be available in NEXT-BIM Explorer.

#### In NEXT-BIM Explorer:

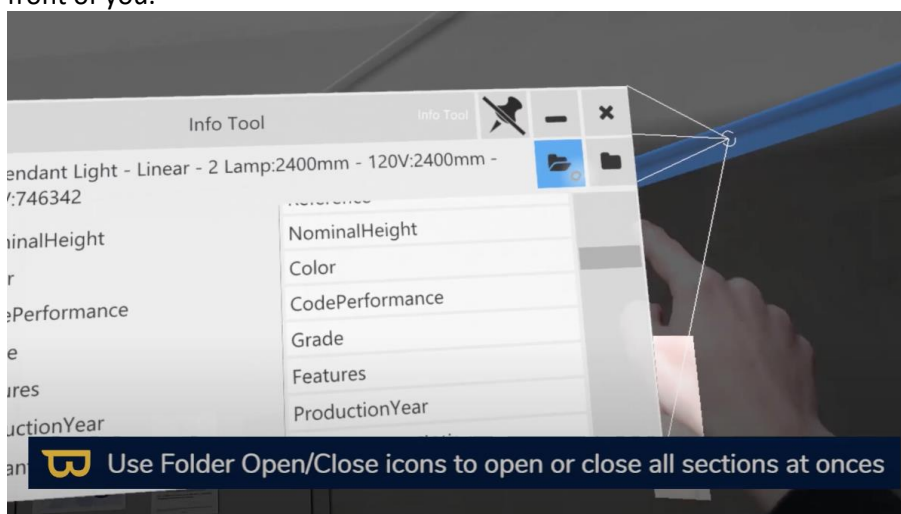
1. **Detecting Drift:** When you notice drift in an area, after using the usual alignment functions, visually locate your virtual target.
2. **Activate "Quick Target-Based Realignment" Mode:** Click on the virtual target to activate "Quick Target-Based Realignment" mode using a pinch click (pinch your thumb and pointer finger).
3. **Align with the Real Target:** Aim at the center of the corresponding real target and click with a pinch click (pinch) or use the voice command "select" for greater precision. The virtual model should now be aligned with the real model.

## VI. Viewing Technical Data

In this section, you will learn how to access and view technical information in NEXT-BIM Explorer. This information comes from your models. In NEXT-BIM Configurator, you have the option to choose the properties (Pset) to import for each element of your model. Follow the steps below to view your technical information.

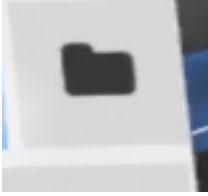
### 1. Accessing Technical Information:

1. Open the menu by turning your hand palm up.
2. Select the "information tool" icon (resembling an "i").
3. Once you have opened the information tool, point and click on the desired element using your thumb and pointer finger (index). You will see an "information tool" menu appear in front of you.

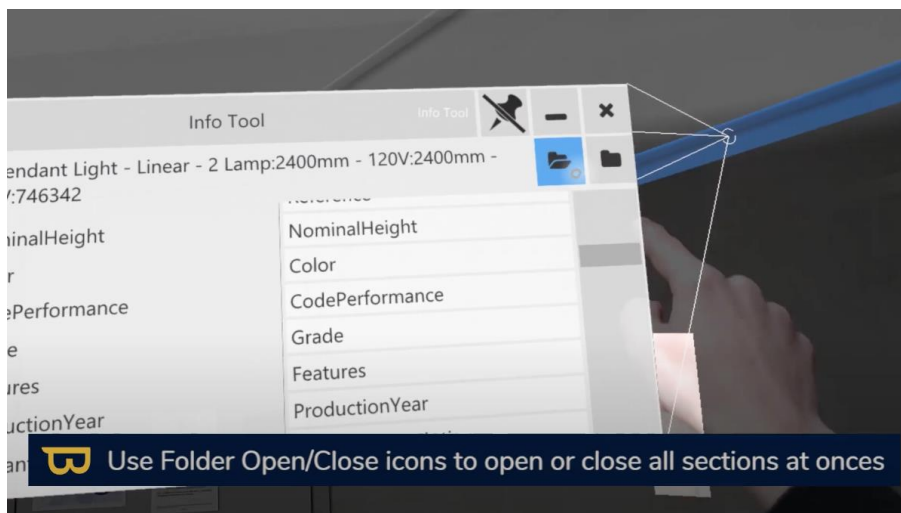


### 2. Exploring Information:

1. In the "information tool" menu, you can access different sections to get more detailed information about the selected element.
2. Click on the folder icon (closed) located in the upper right corner. This will allow you to see all the types of properties (Pset) associated with the element and their information by clicking on them.



3. Click on the name of a property group (Property Set Name) to view the property names (Property Name) and their values.
4. If you prefer to view all sections at once, use the open folder icon to open all sections at once.

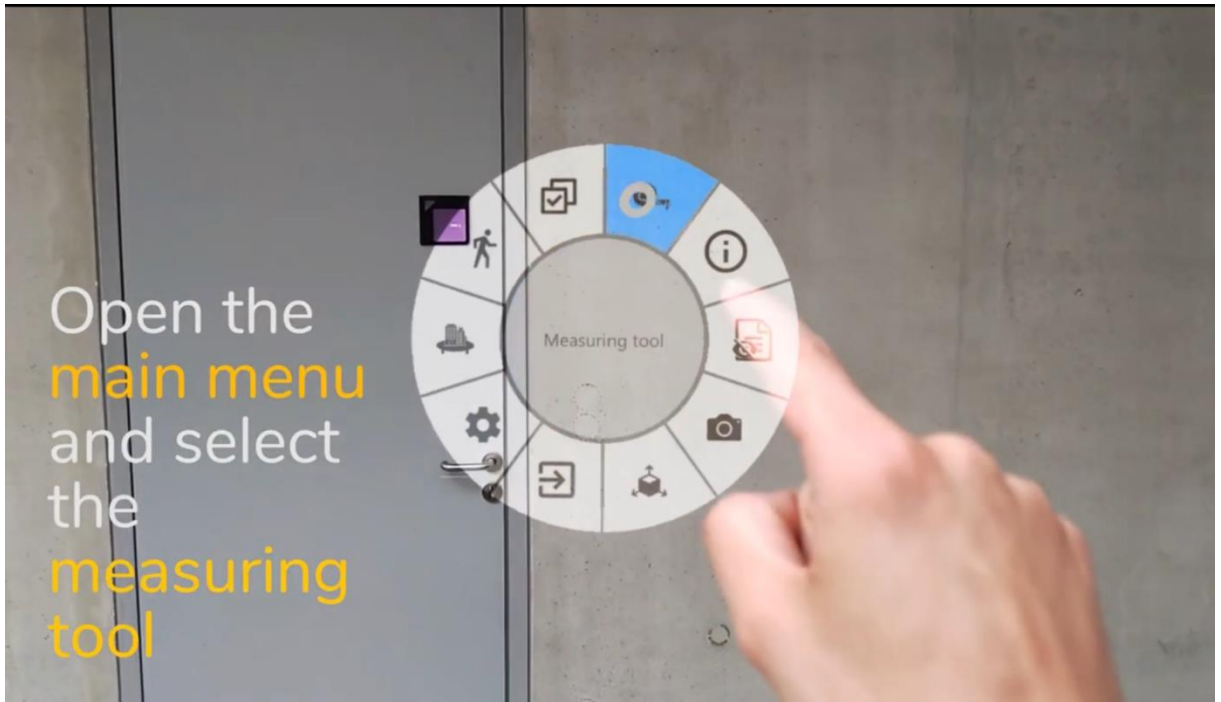


## VII. Measurement Tool

### 1. Using the Measurement Tool

The measurement tool in NEXT-BIM Explorer offers a range of features for making precise measurements on your BIM model, including object adjustment. To perform a measurement, follow these steps:

1. Open the menu by turning your hand palm up.

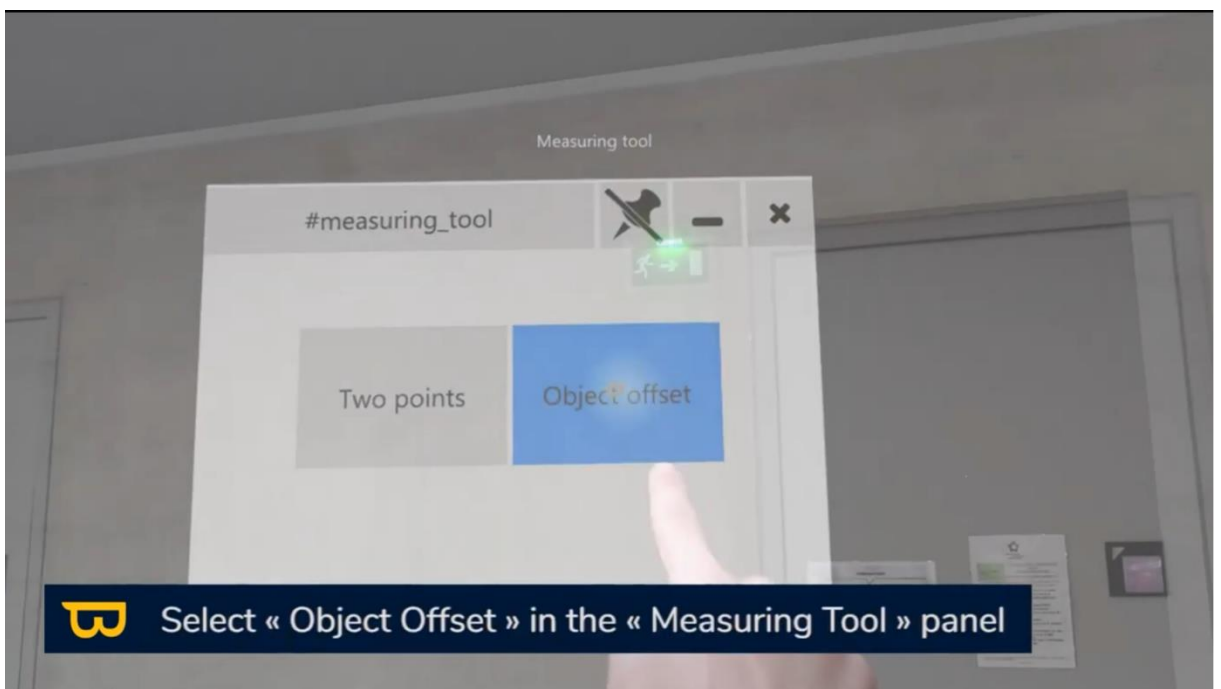


2. Select the measurement tool (an icon resembling a ruler).

## 2. Object Offset:

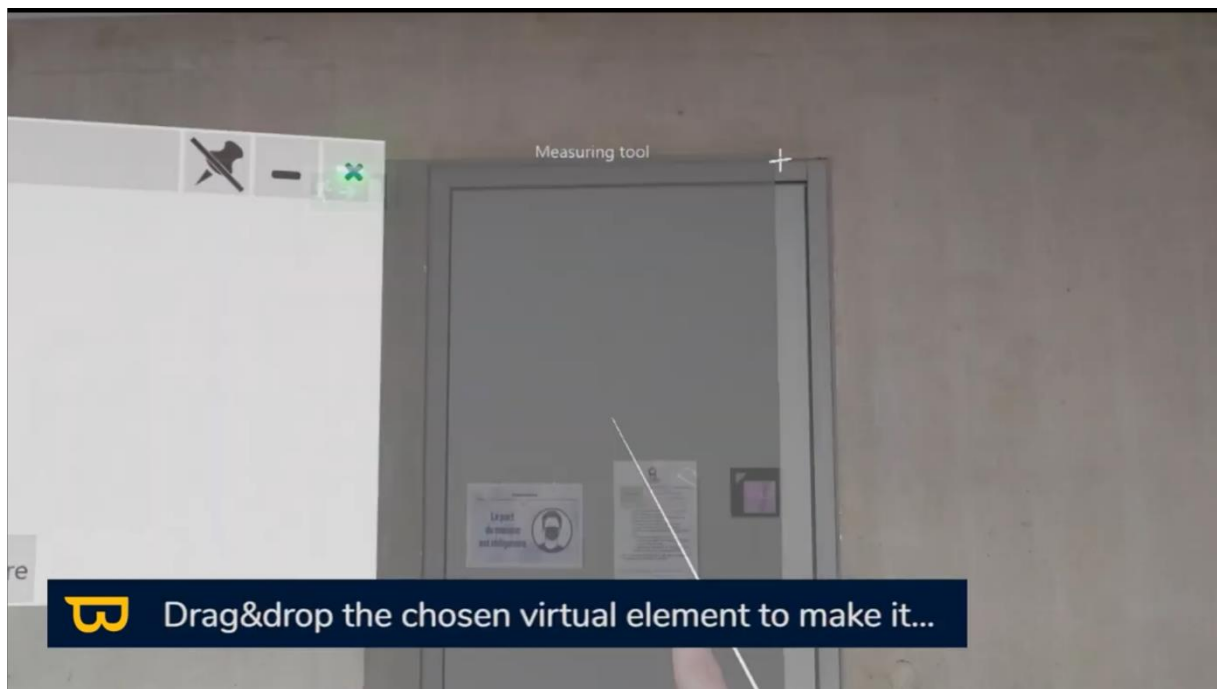
Object offset allows you to visually move a 3D object to match its real-world location.

1. Open the measurement tool (an icon resembling a ruler).
2. Choose "Object Offset."

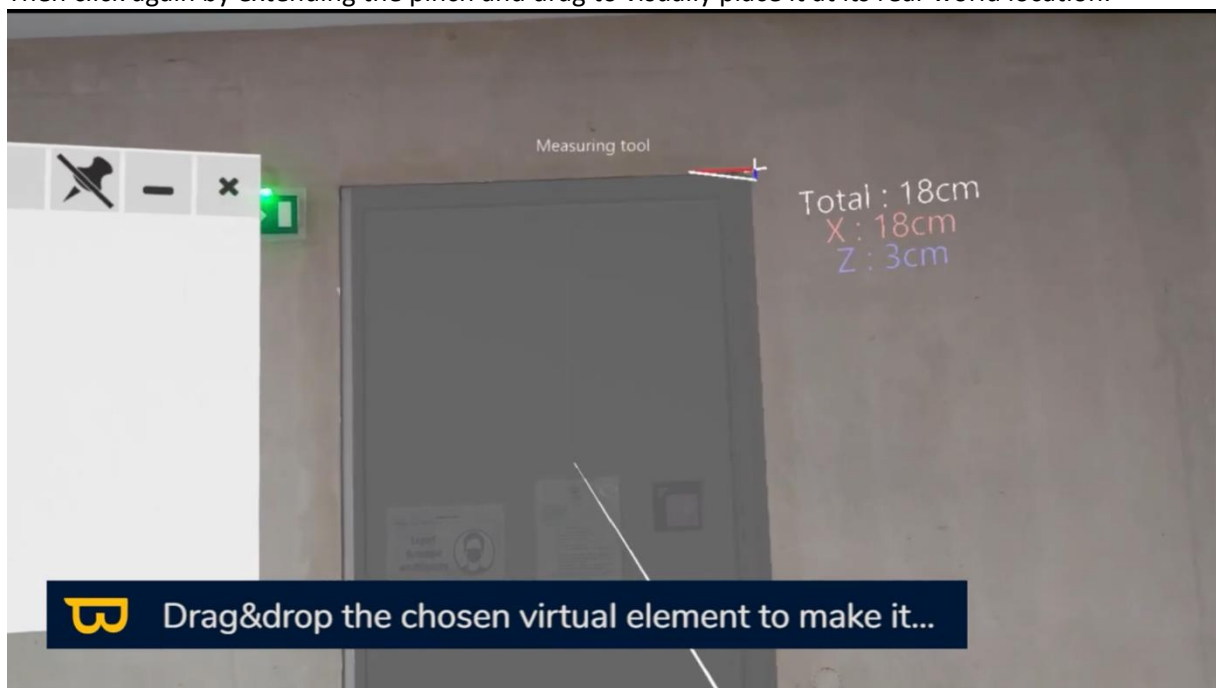




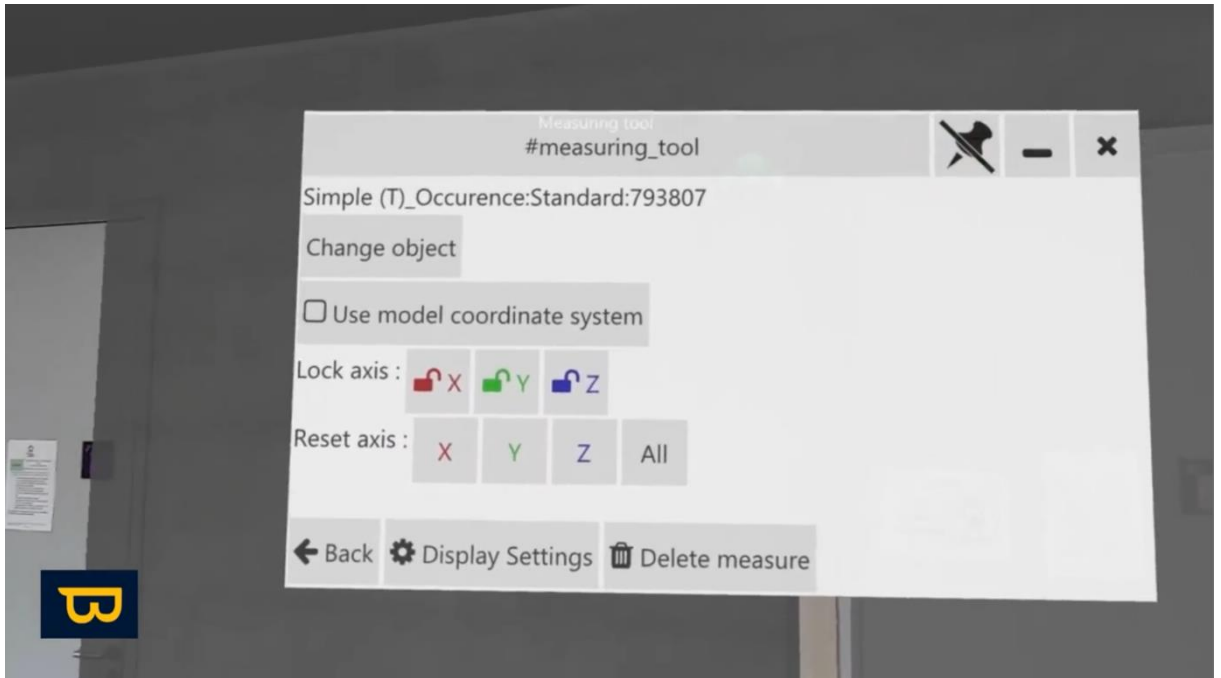
3. Select the object you want to offset.



4. Then click again by extending the pinch and drag to visually place it at its real-world location.



5. To facilitate control of the element, you can lock its movement using the axis lock icons (red, blue, and green) in the tool menu.

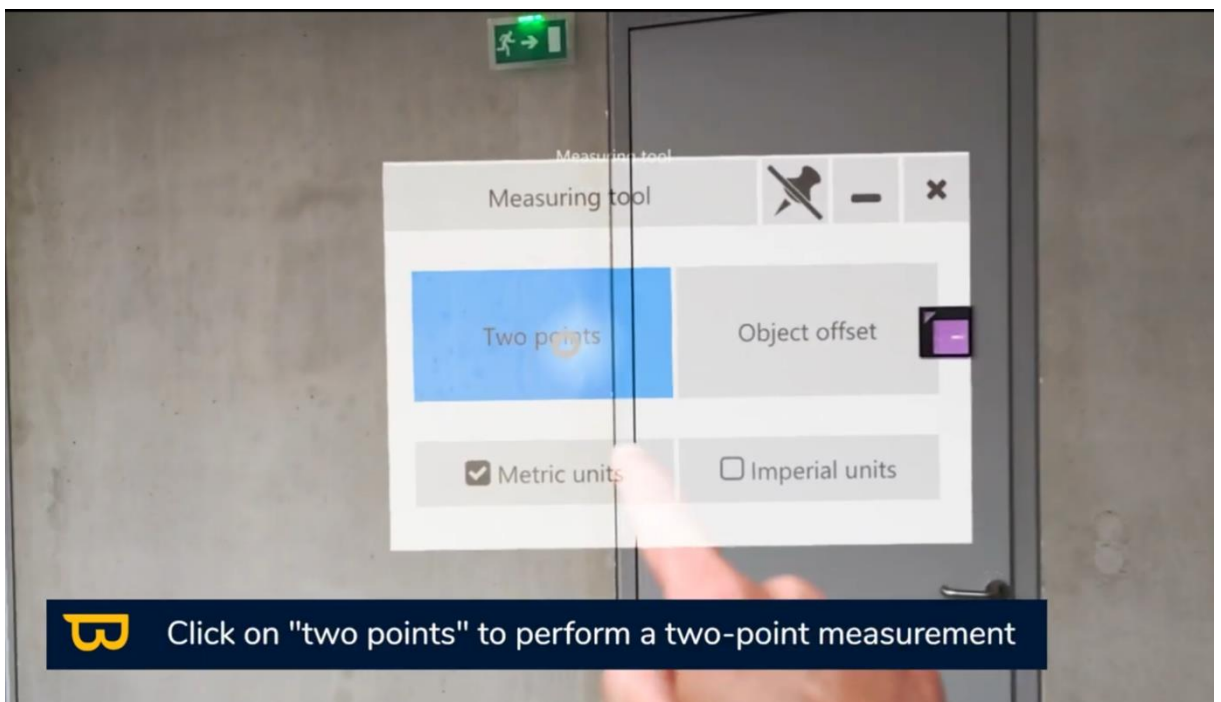


6. Also, in the tool settings, you can hide the model while performing the measurement, display the starting and ending bounding box, and/or enable auto-object selection.

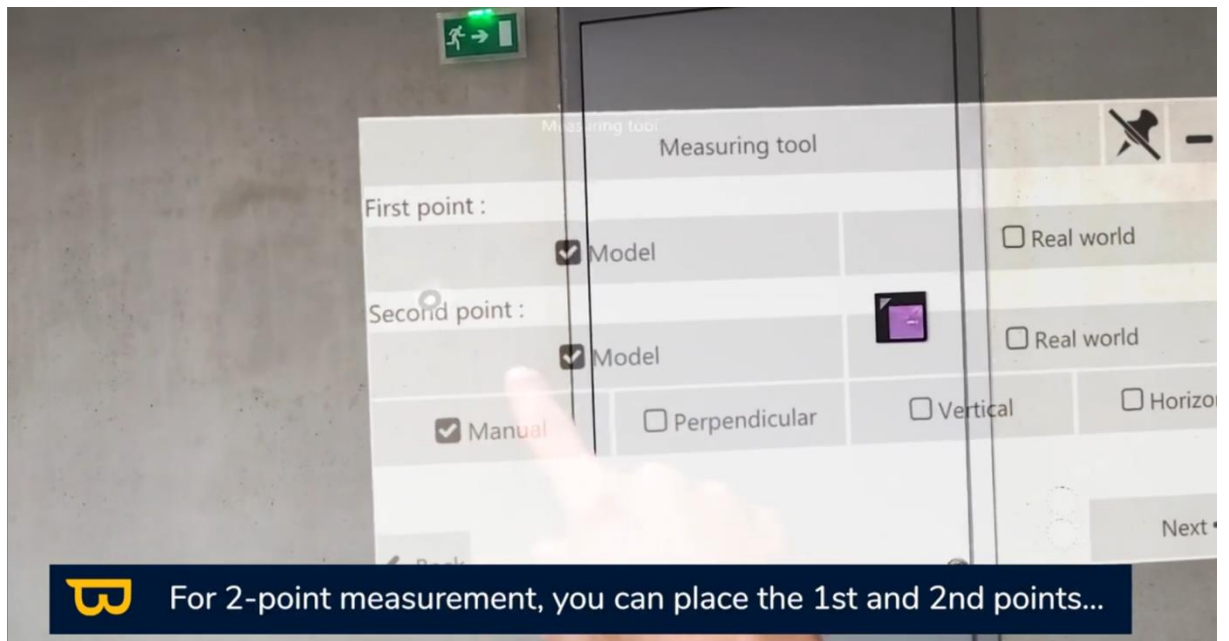
### 3. Two-Point Measurement:

The two-point measurement tool allows you to measure the distance between a starting point and an ending point. To measure the distance between two points, follow these steps:

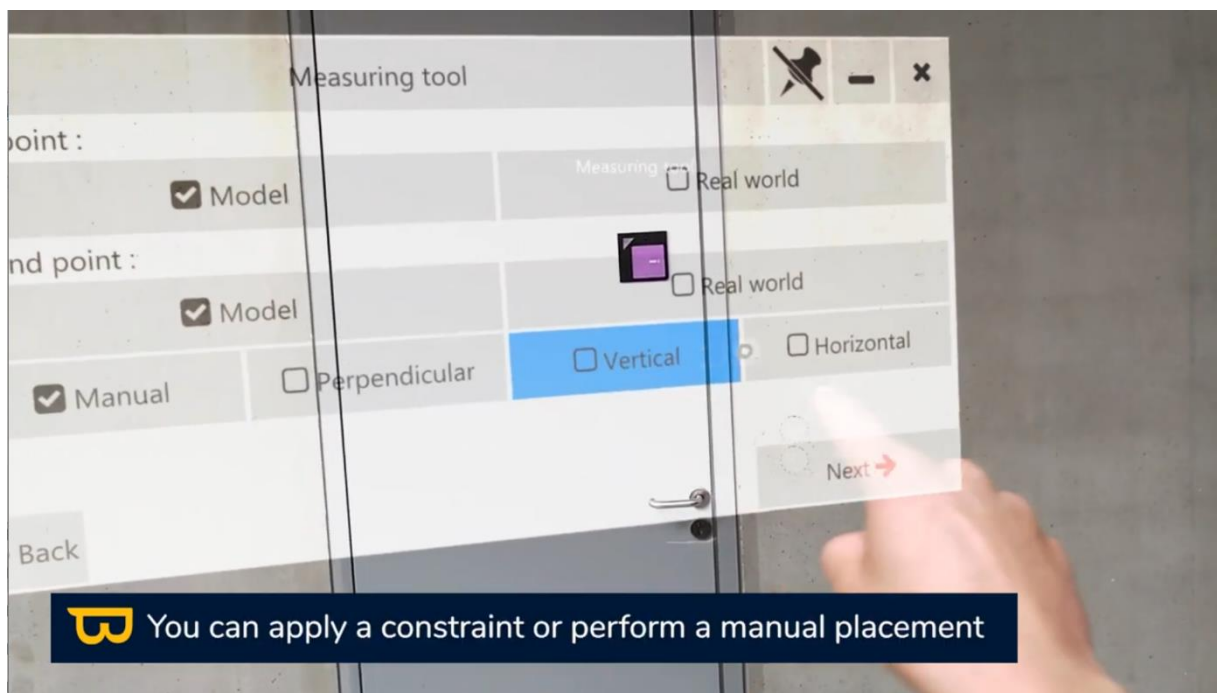
1. In the measurement tool, choose the "Two points" function.

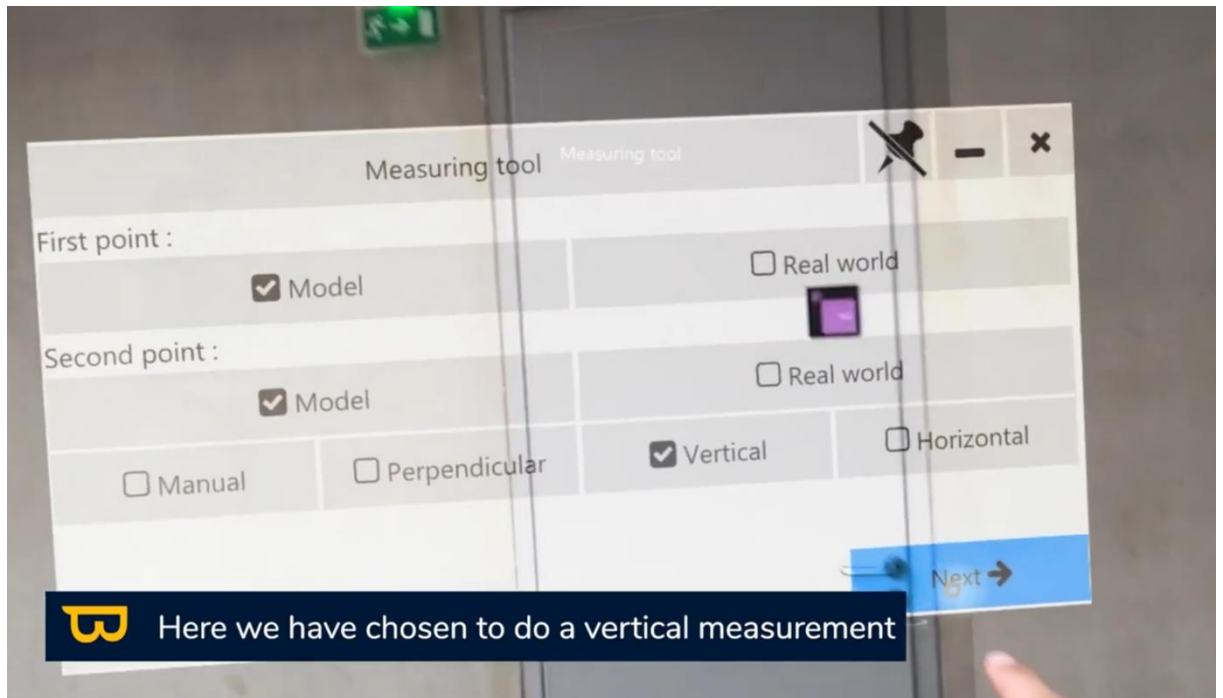


2. You can place the starting point on the virtual or real model, as well as the ending point.

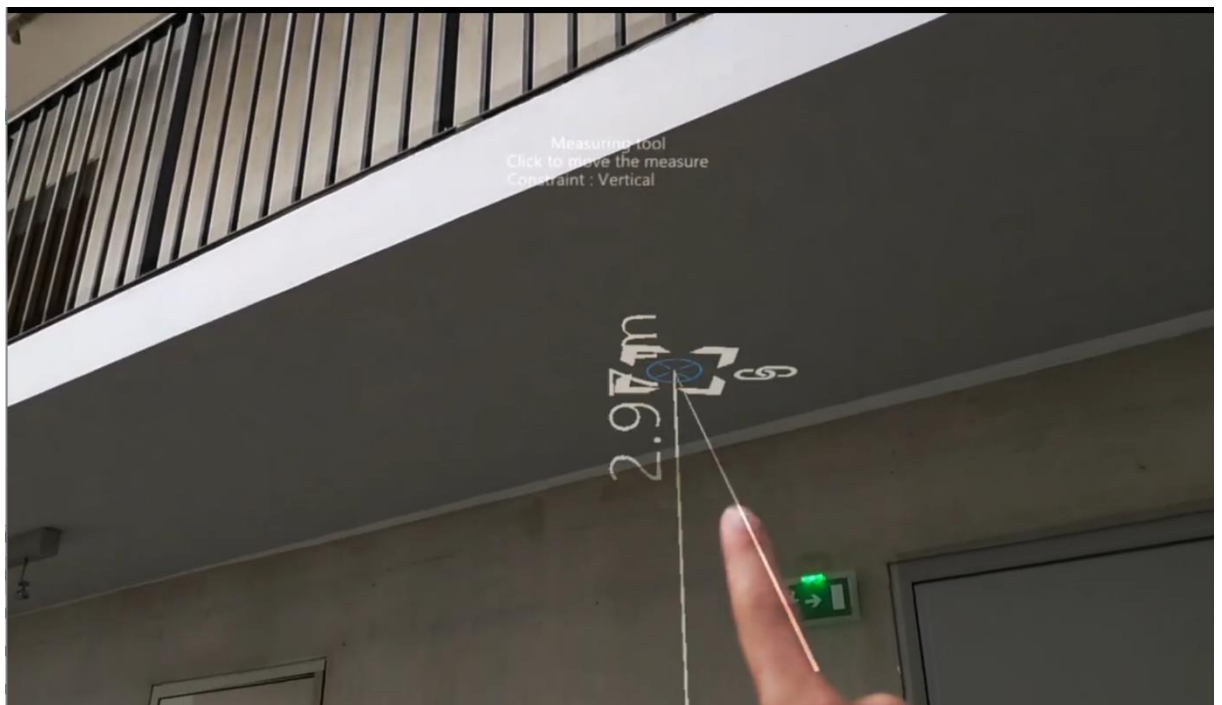


3. Constraints can be applied (vertical, horizontal, perpendicular) or the two points can be placed manually.



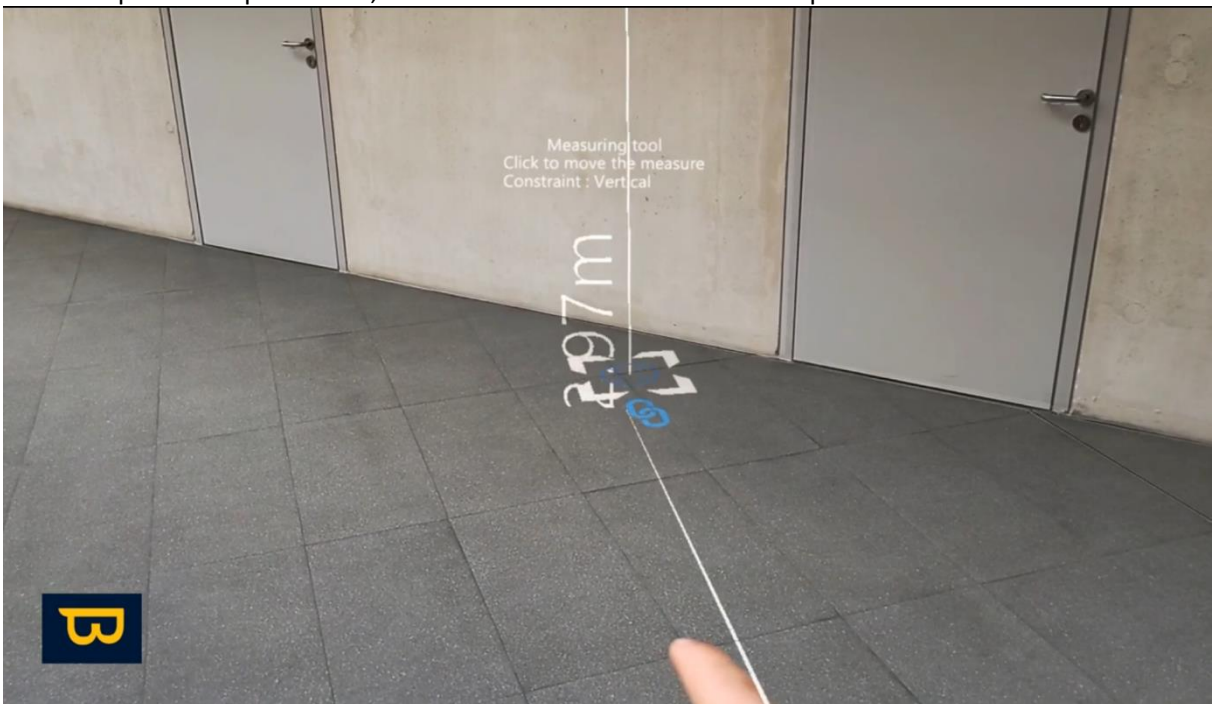


4. Position your two points (in the example photo, we chose a vertical constraint, so the second point will be positioned automatically when selecting the position of the first point).

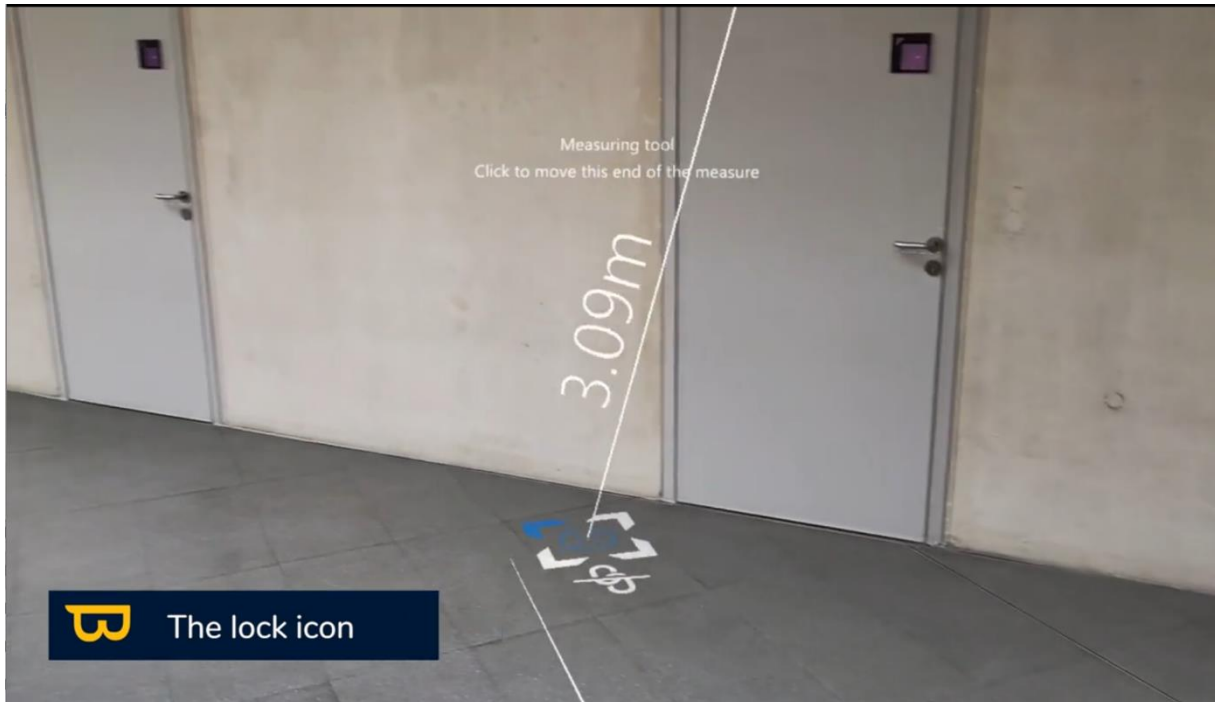




5. Once the points are positioned, the lock icon indicates whether the points are linked or not.



6. If the lock icon is closed, you can move both points along an axis using the arrows.



7. If it's open, you can move one point while locking the second.

With these features, you can make precise measurements and adjust objects for a better understanding of your BIM model.

## VIII. Visibility Management

The new version of visibility management offers improved features for more precise handling of your BIM models. Here's how you can take advantage of these features:

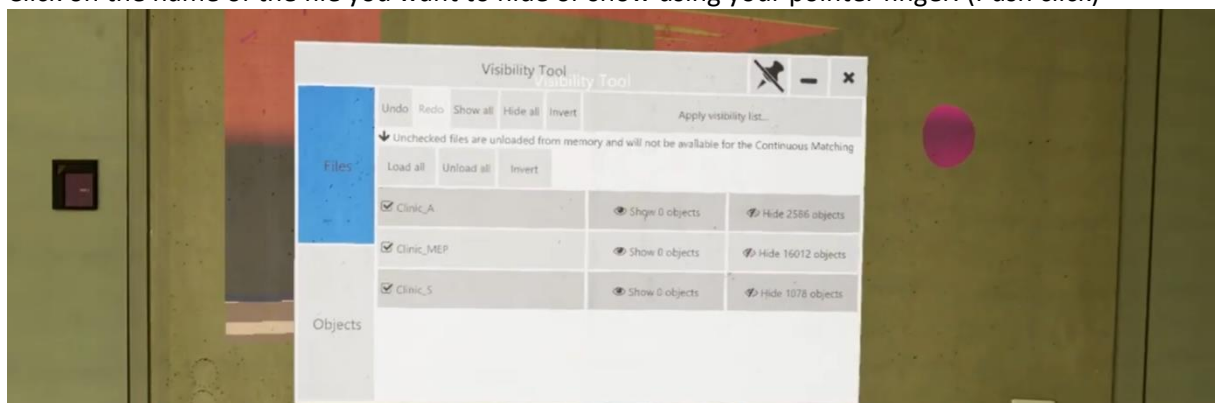


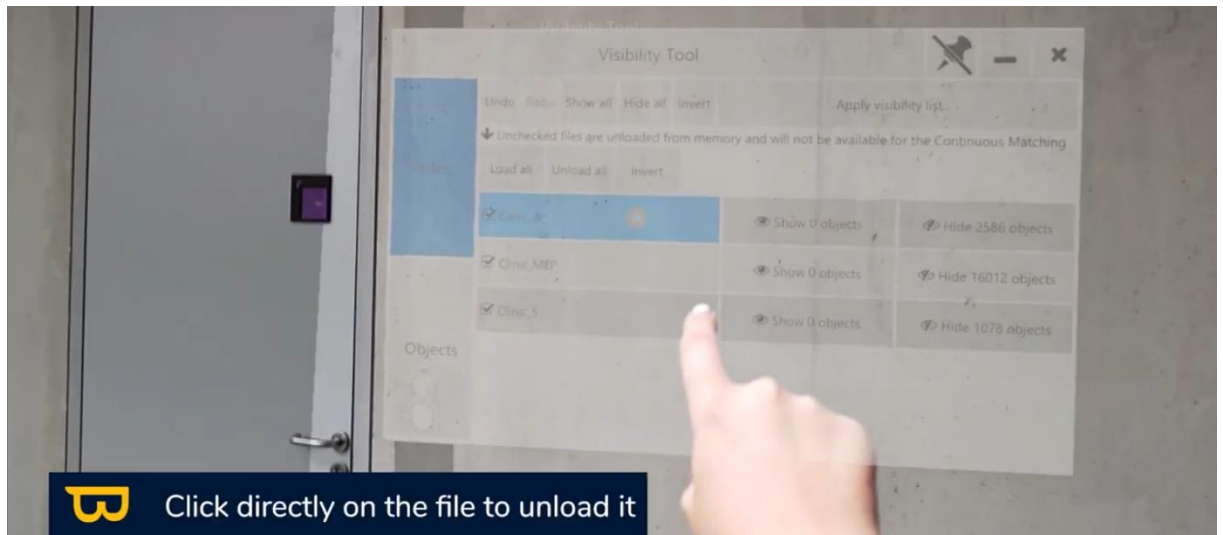


### 1. Load/Unload a File:

Loading a file means the model is loaded into memory on the HoloLens, enabling visualization and alignment. Unloading a file means it's removed from the HoloLens memory, disabling visualization and alignment for that file. To load or unload specific files, follow these steps:

1. Click on the name of the file you want to hide or show using your pointer finger. (Push click)





2. Click it again to reload it.

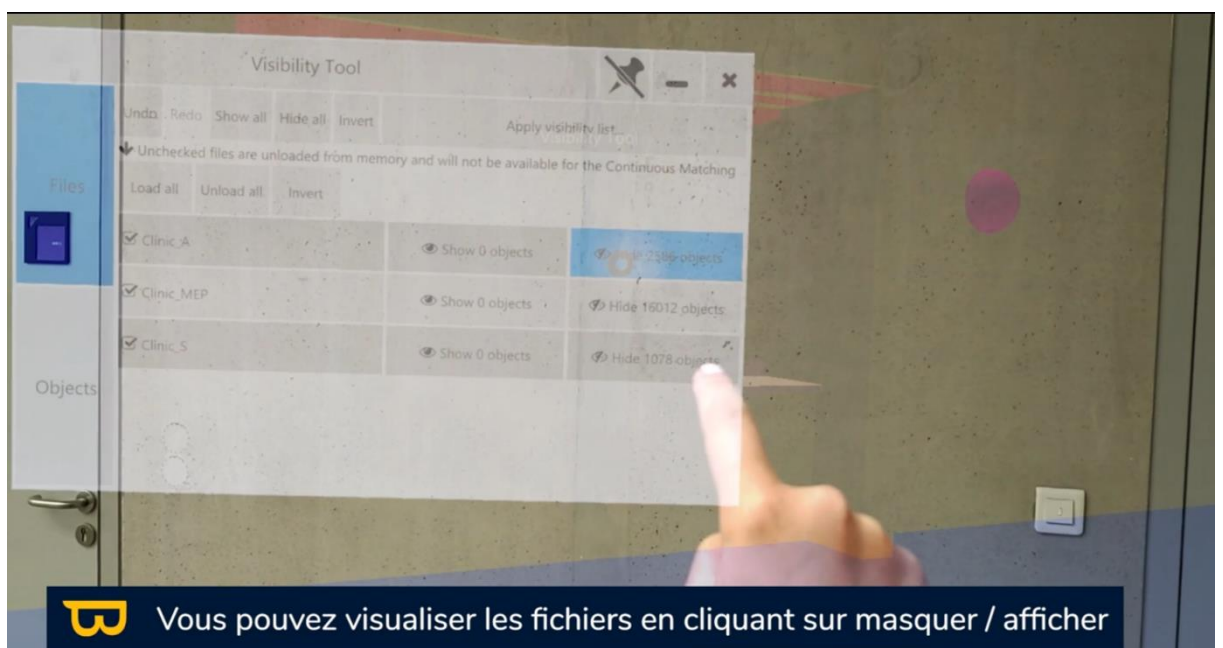
## 2. Hide/Show a File:

You can visually hide a file without unloading it from memory. This means the file is still loaded, but you don't see its elements in your view.

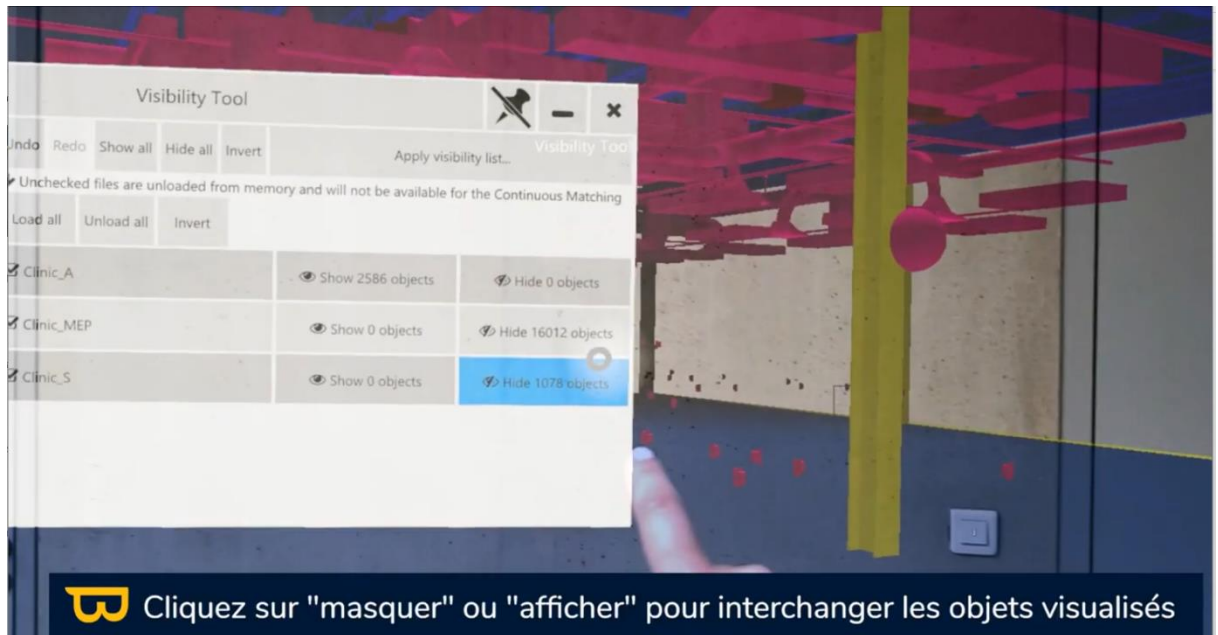
### First Method:

To hide or show specific files, follow these steps:

1. Go to the "visibility tool" menu > "Files."
2. Click "Hide objects" of the file you want to hide using your pointer finger.



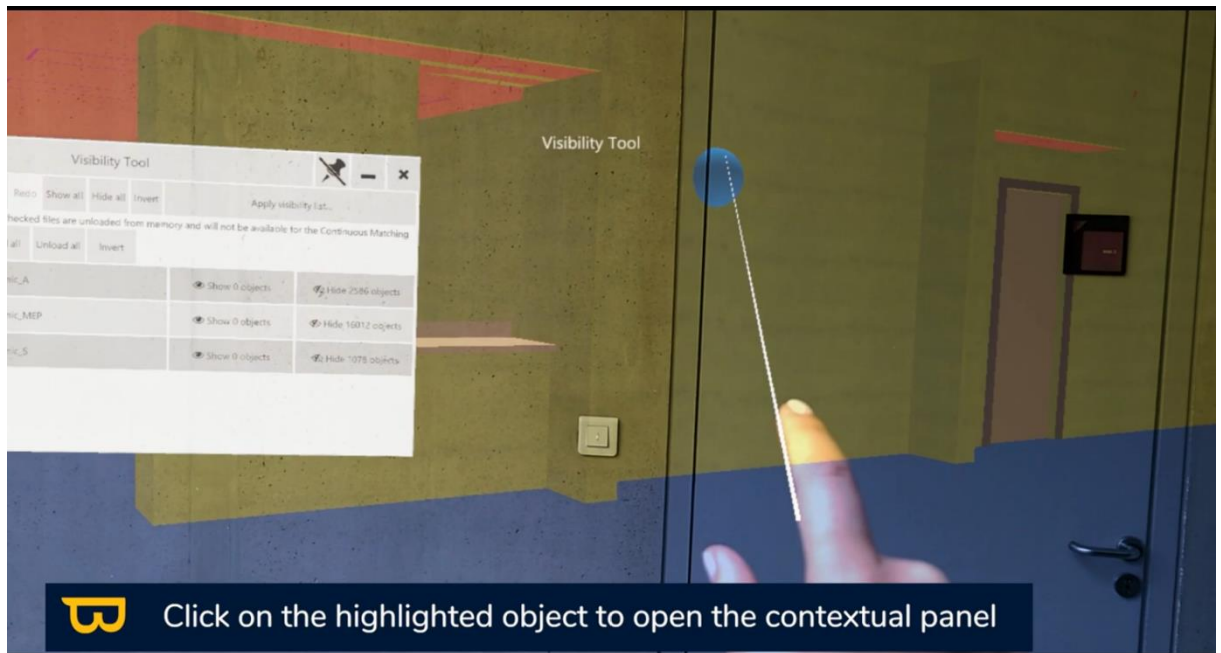




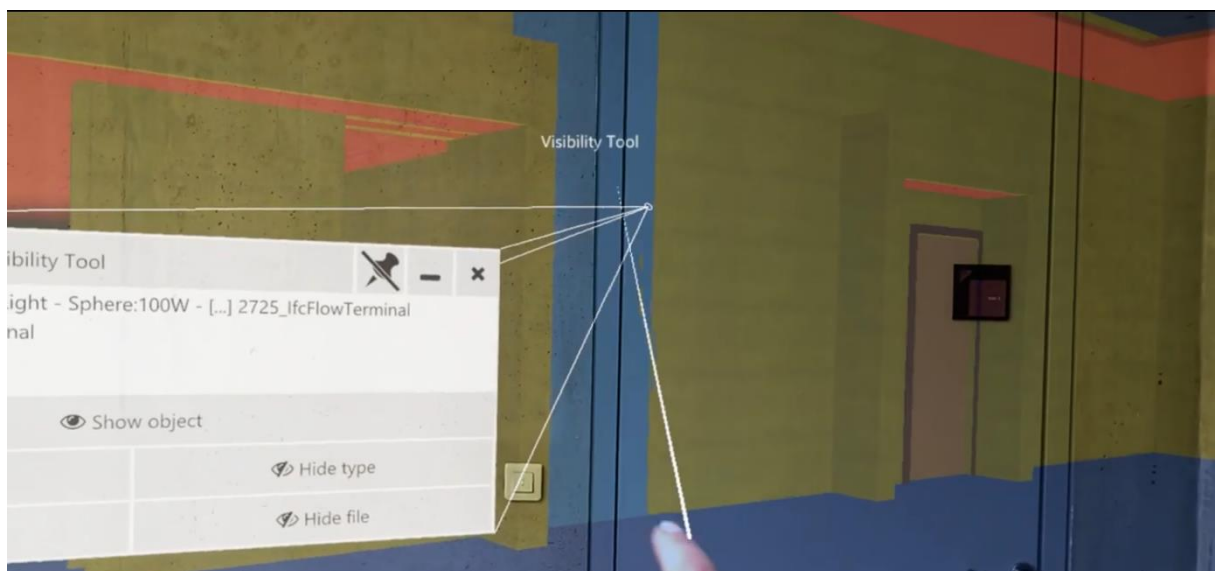
3. To exit the visibility tool, simply click the cross (X) in the upper right corner.
4. To hide all files at once, click the "Hide all" button in the upper left corner.
5. To reveal a hidden file, click "Show objects" of the file.
6. To show all hidden files, click the "Show all" button in the upper left corner.

**Second Method:**

1. Open the menu by turning your hand palm up.
2. Select the visibility tool (an icon resembling a sheet of paper with an eye).
3. Hover over an object and click to display its content in the visibility tool.



4. Select "Hide File" to hide the file in which this object is categorized.



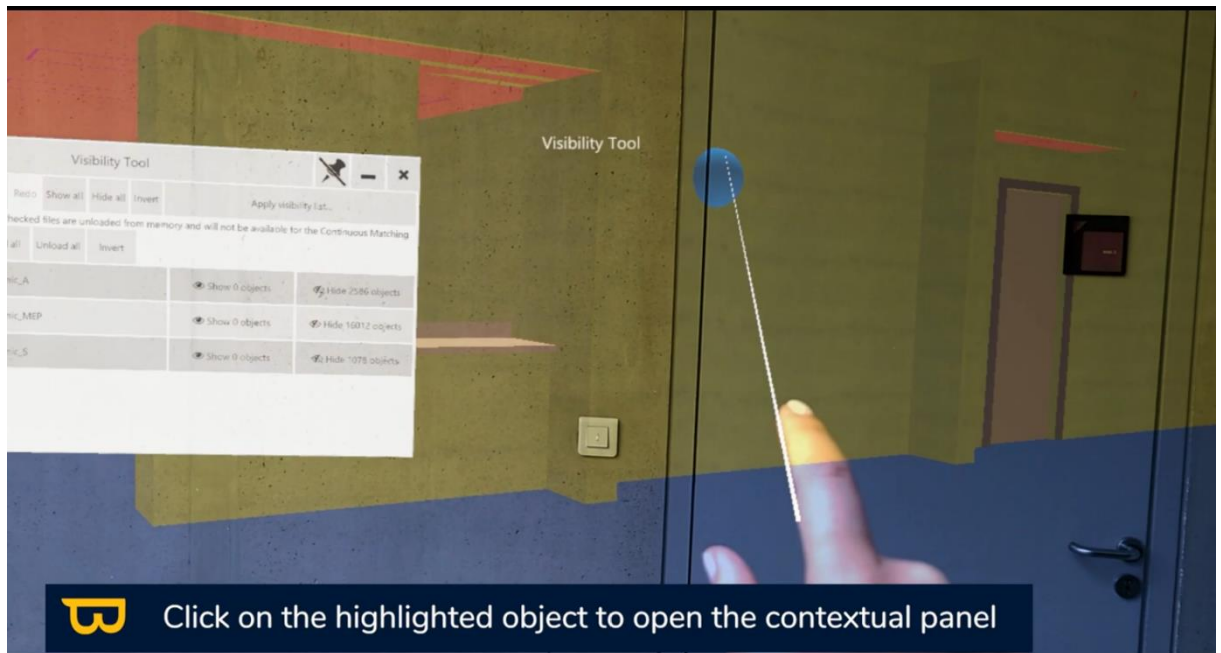
### 3. Hide/Show by IFC Class:

#### First Method:

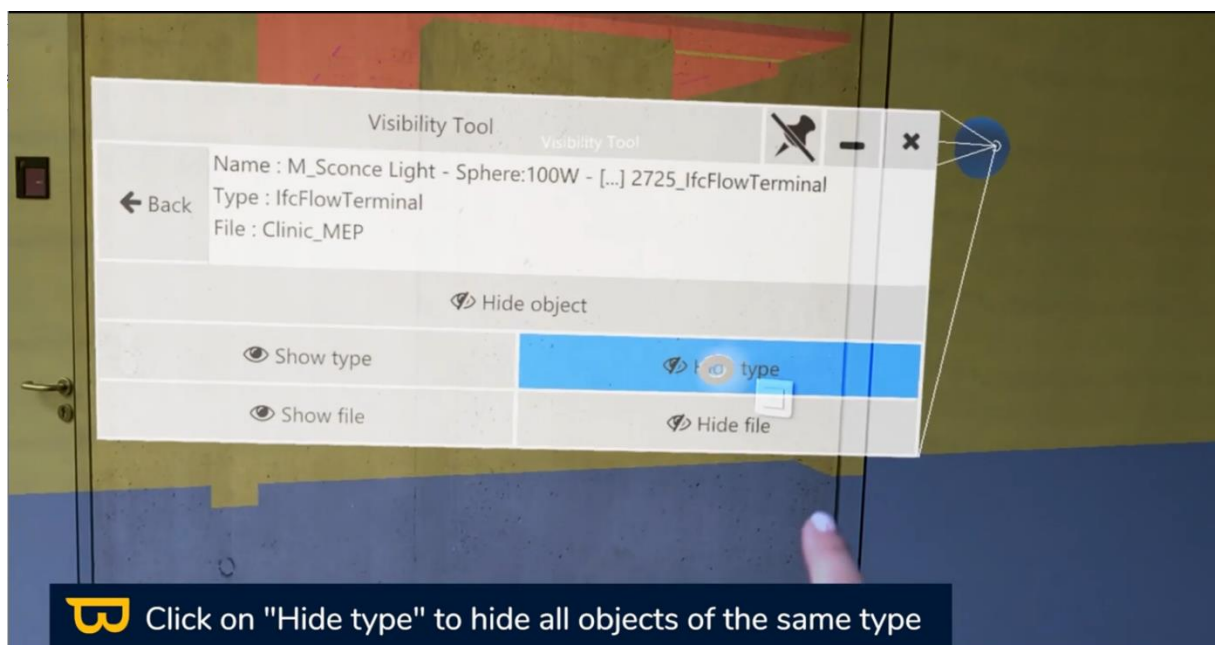
1. To see a list of all IFC class (type) objects, open the menu and select the visibility tool. Click "Objects" in the lower-left corner.
2. To hide a category, click the "eye" icon. A crossed-out eye means that all objects in that category are hidden. To reveal the category, click the "eye" icon again.
3. Click the three dots (...) next to the hidden IFC classes to display the list of hidden objects in that category.

## Second Method:

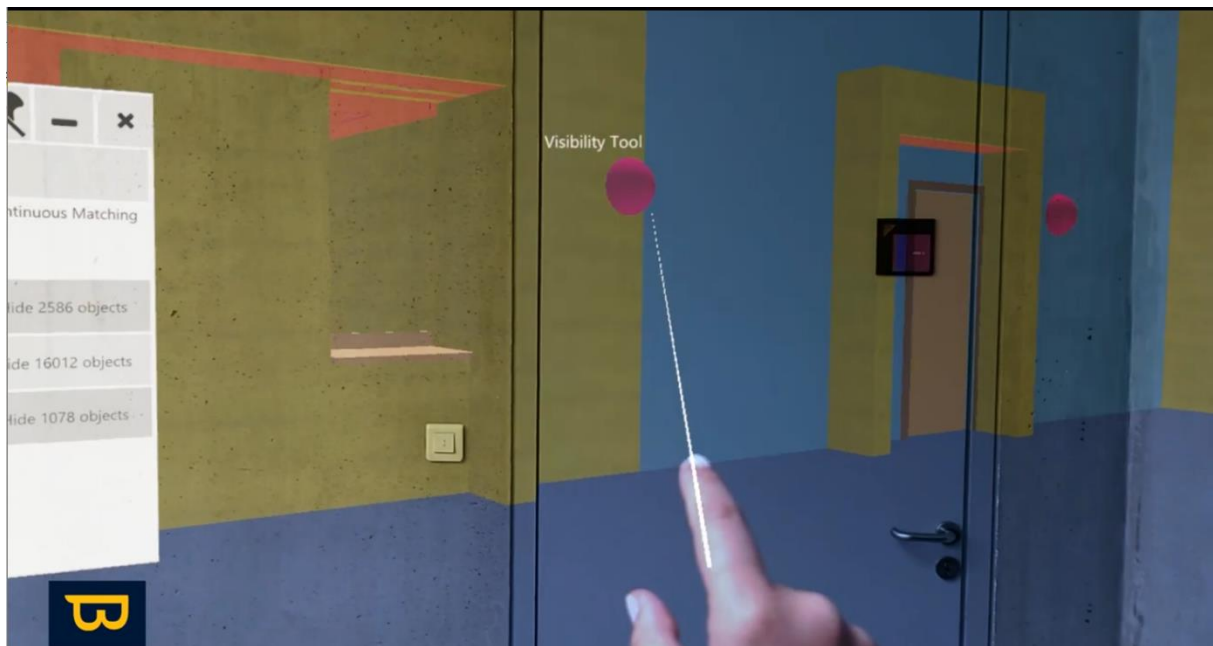
1. Open the menu by turning your hand palm up.
2. Select the visibility tool (an icon resembling a sheet of paper with an eye).
3. Hover over an object and click to display its content in the visibility tool.



4. Select "Hide type" to hide the IFC category in which this object is classified.



BEFORE :



AFTER :



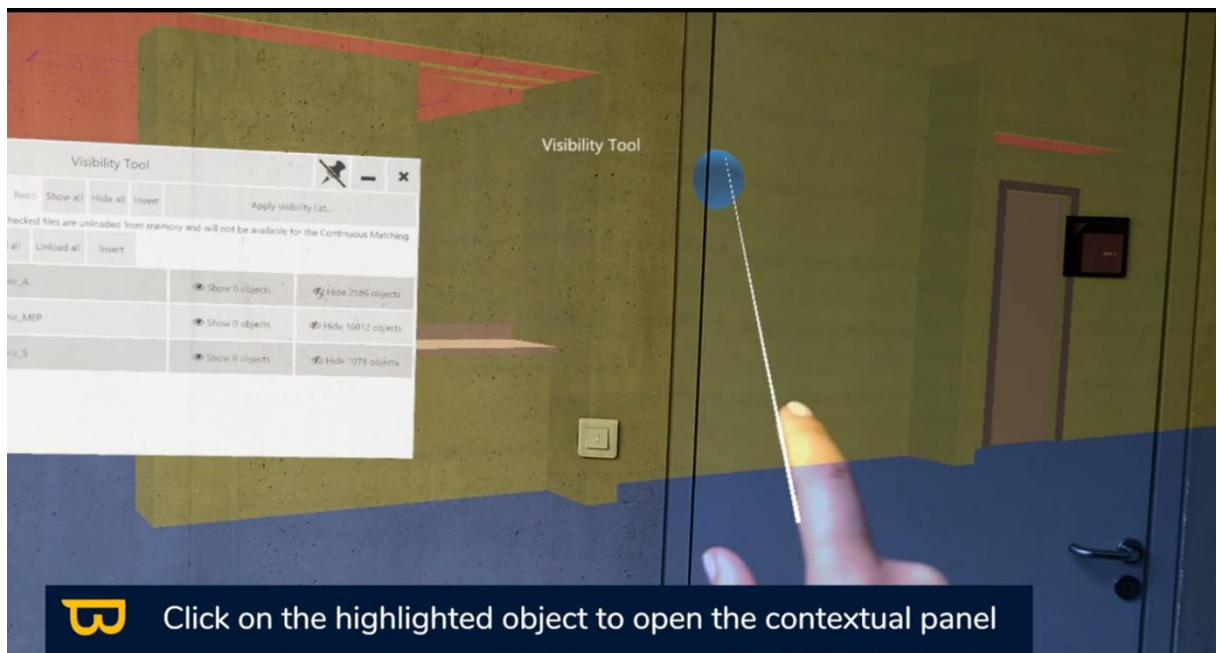
#### 4. Hide/Show by Object:

You can also hide or show individual objects within a file. To do this:

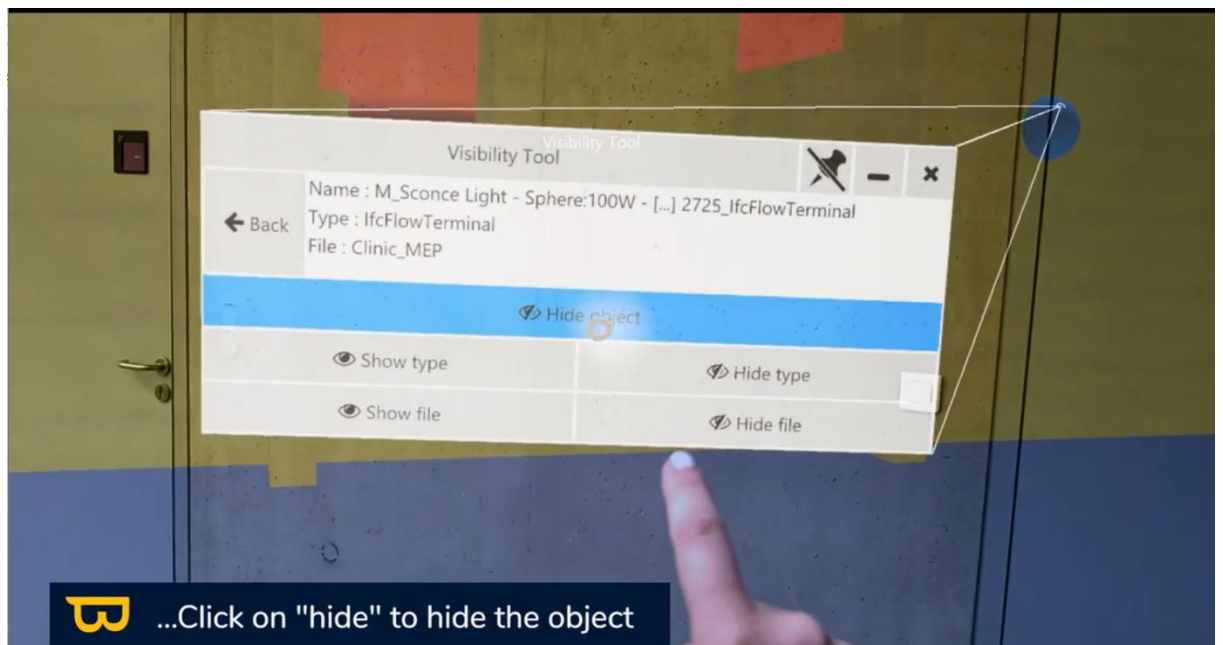
1. Open the menu by turning your hand palm up.
2. Select the visibility tool (an icon resembling a sheet of paper with an eye).



3. Hover over an object and click to display its content in the visibility tool.



4. Select "Hide object" to hide only that object.





## 5. Reveal a Hidden Object:

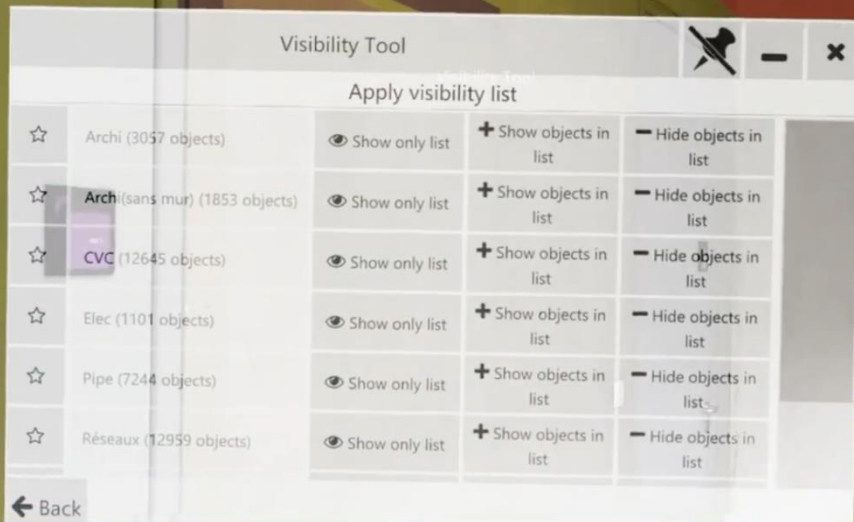
1. Go to the "Objects" tab where you can find the list of IFC categories.
2. Click the three dots (...) next to the IFC categories in which you have hidden objects to display the list of hidden objects in that category.

## 6. Custom Visibility Lists:

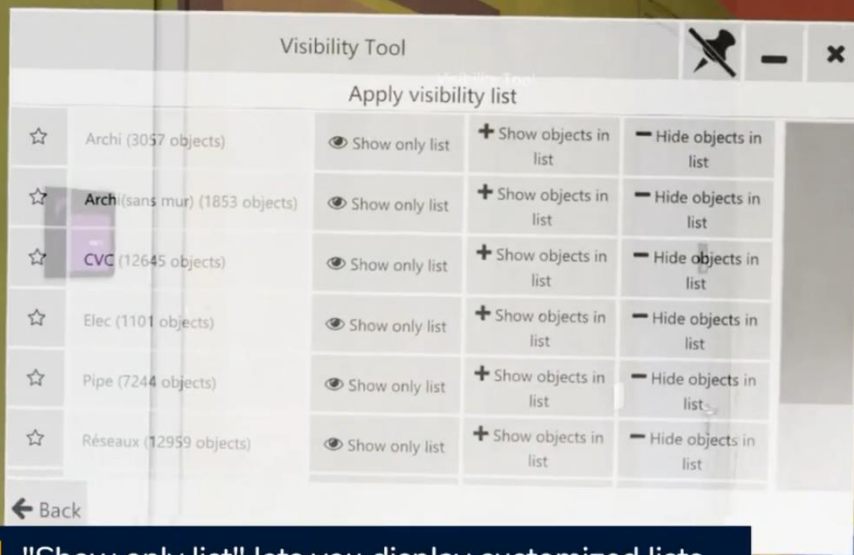
You can create custom visibility lists in NEXT-BIM Configurator. These lists allow you to customize object visibility according to your needs.

### ***a. Show only objects from custom lists:***

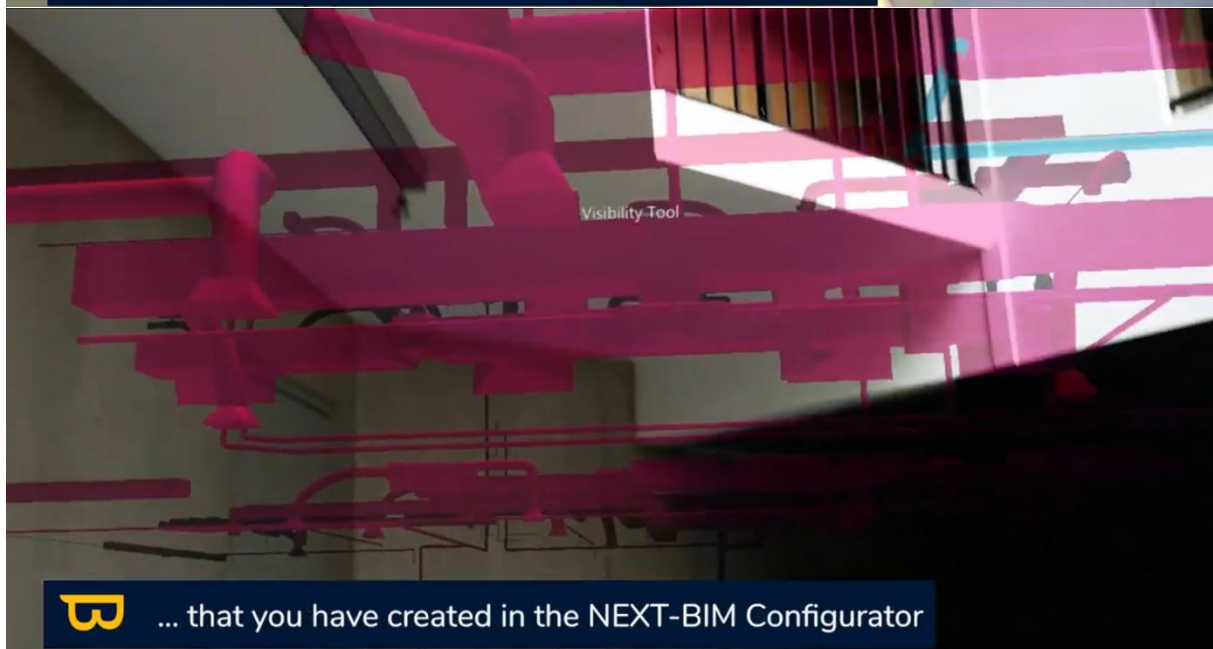
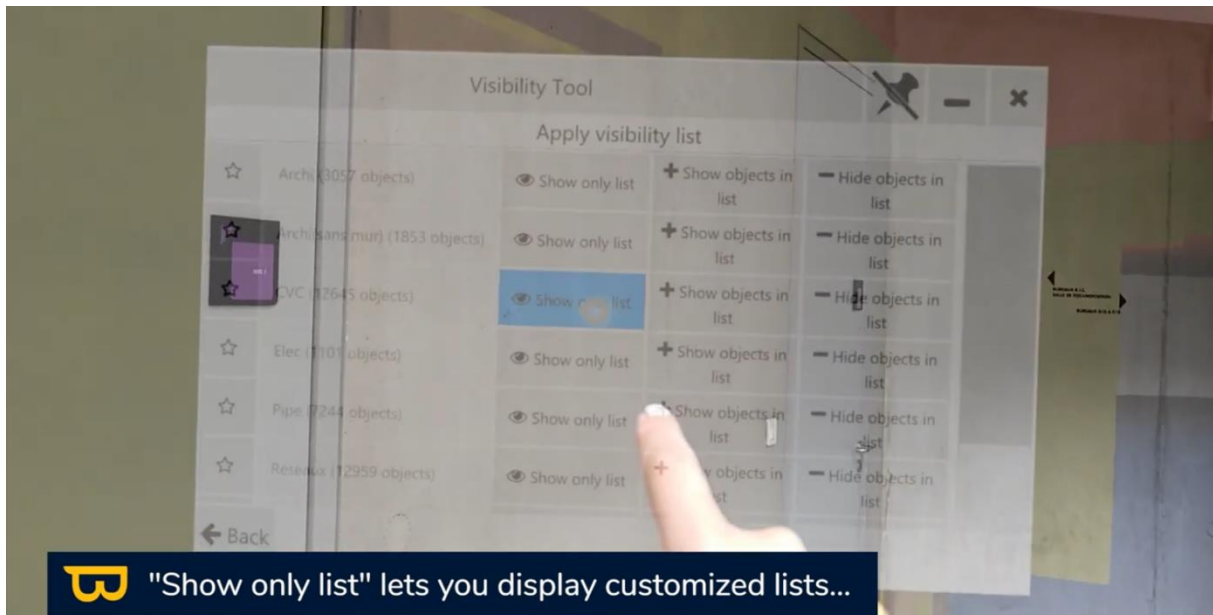
1. Apply a visibility list by opening the visibility tool.
2. Click "Apply visibility list" in the upper right corner.
3. Display only the list by clicking "Show list only."



**B** "Show only list" lets you display customized lists...



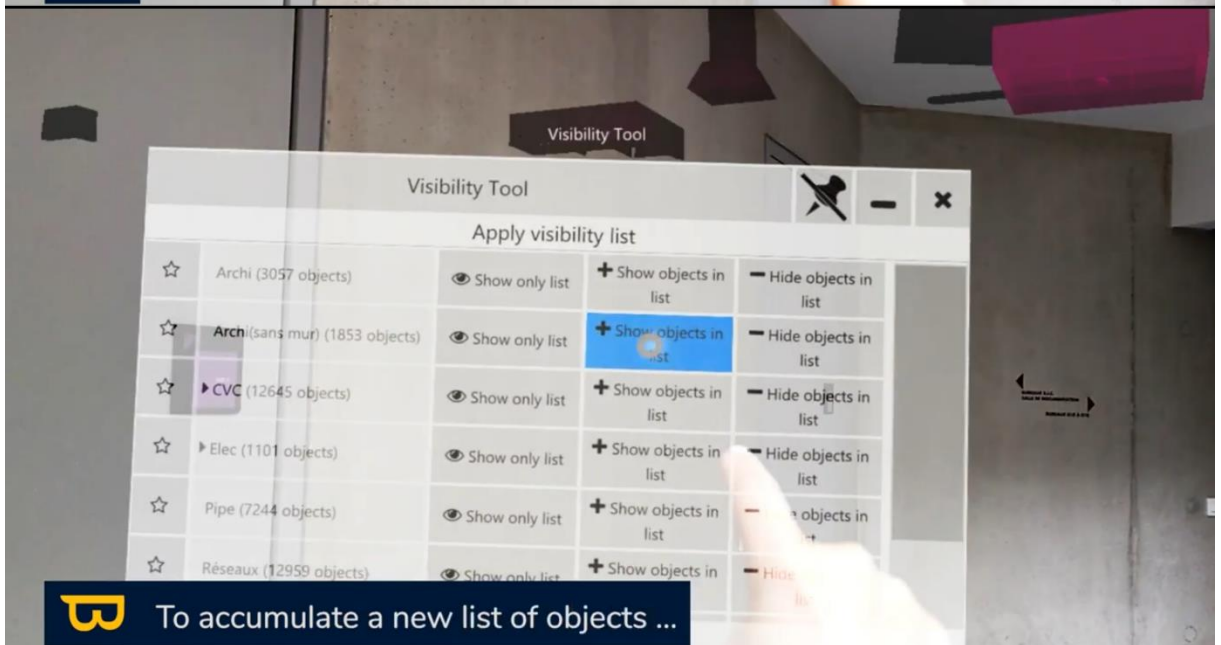
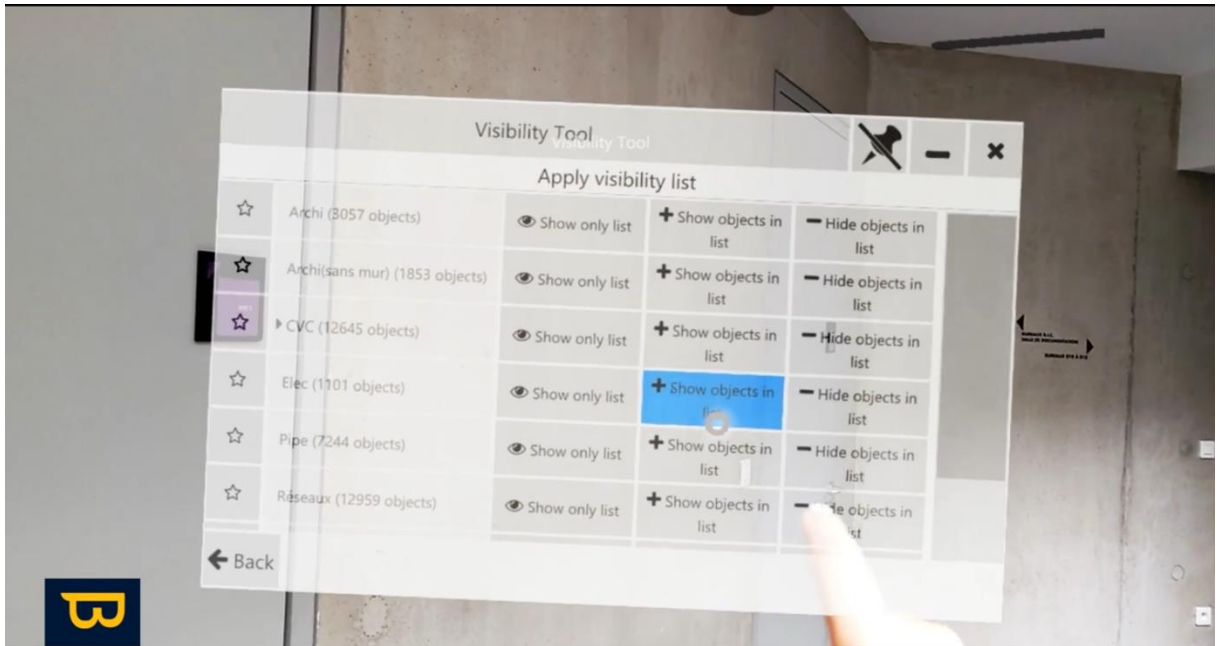
**B** "Show only list" lets you display customized lists...

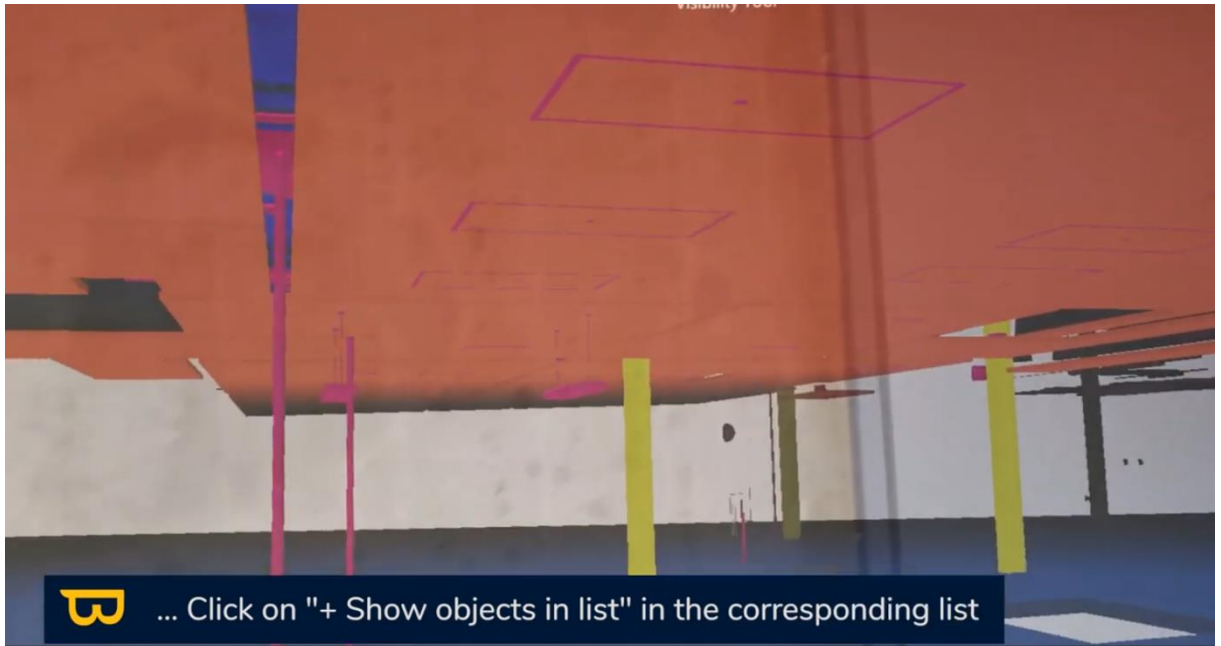


## 7. Combine Custom Visibility Lists:

1. Click "Show objects from list" to add the desired visibility list to your view.



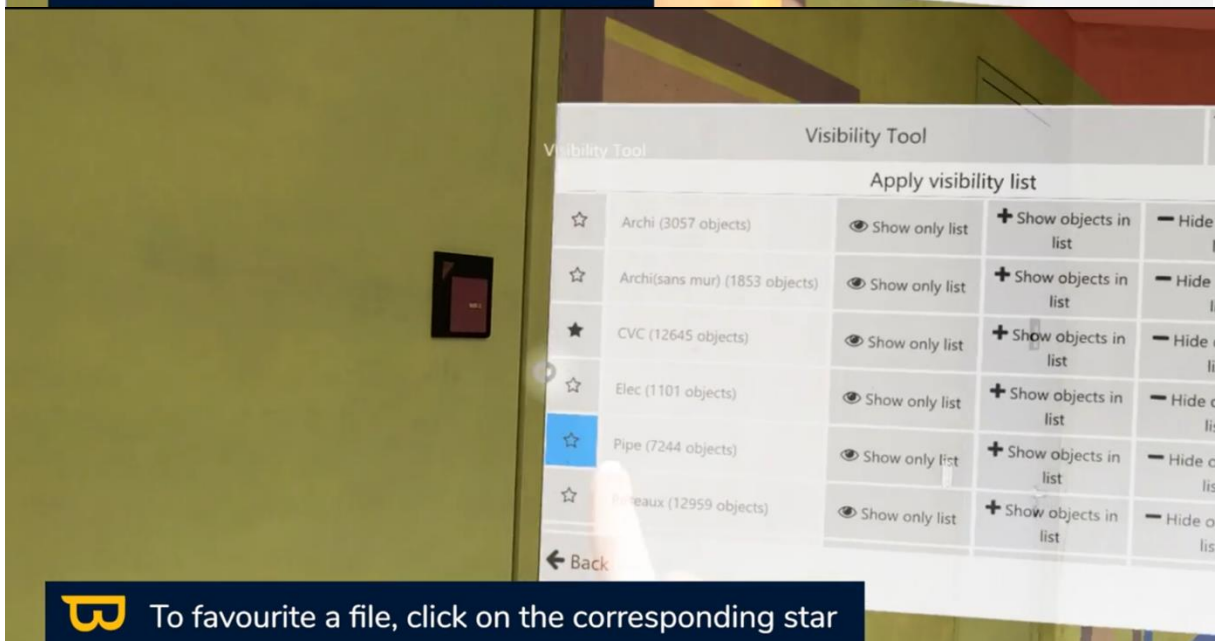
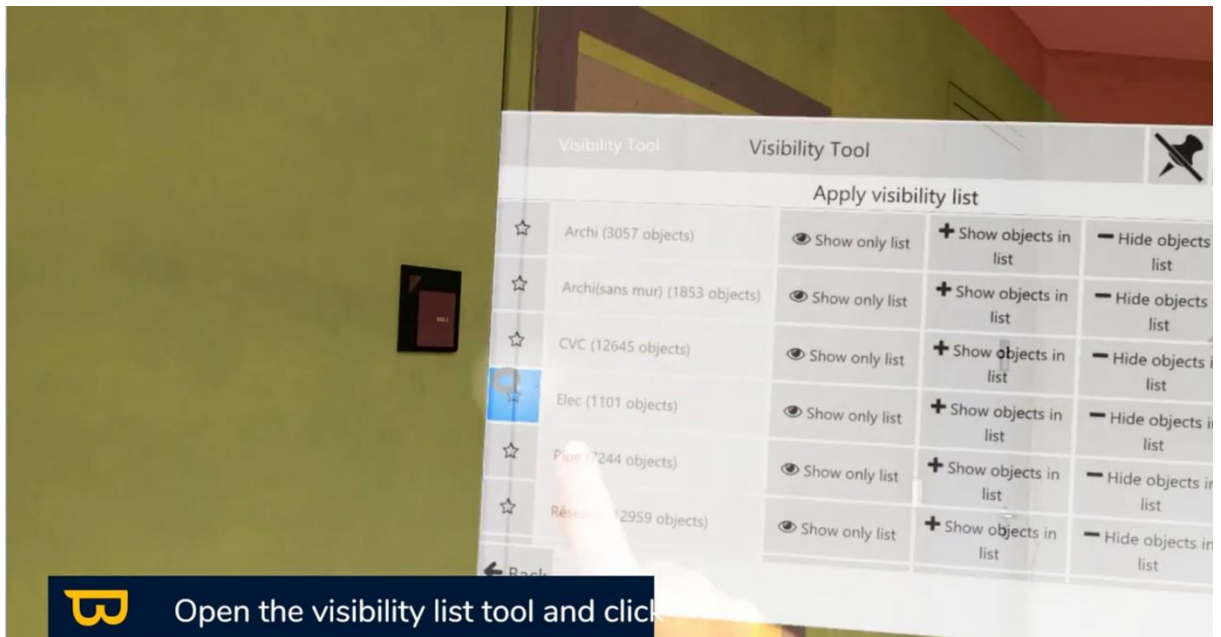




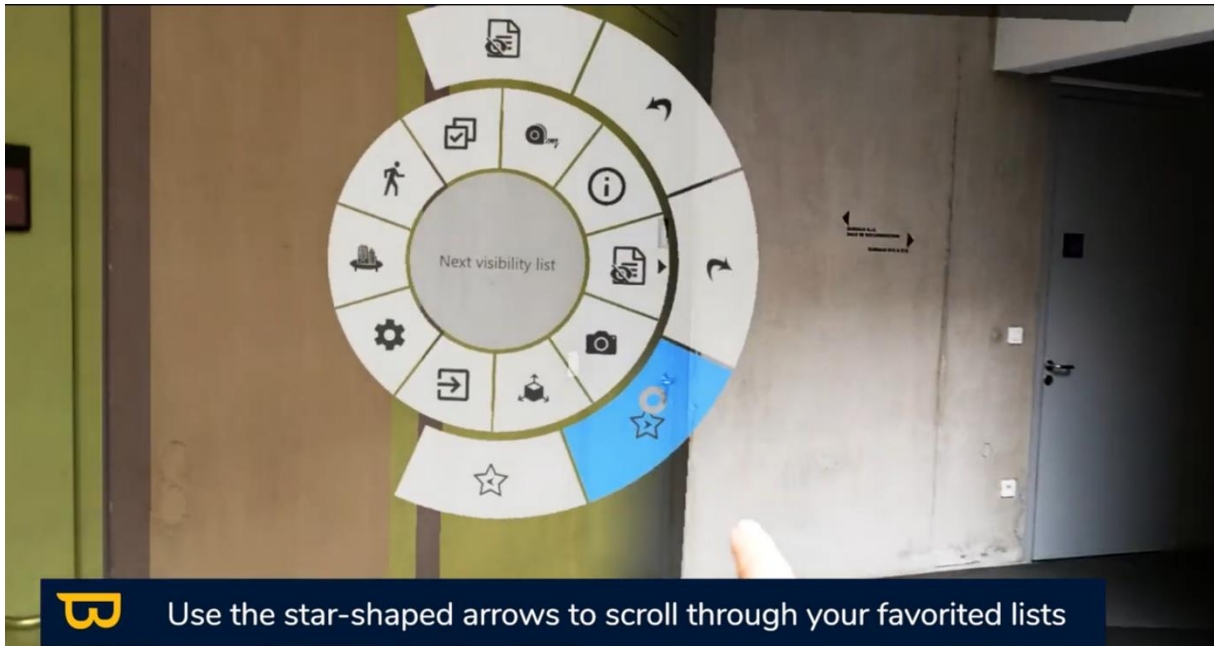
## 8. Mark Visibility Lists as Favorites:

You can favorite multiple visibility lists for quick navigation using voice commands ("Next/previous visibility list") or by using the "Visibility List" menu to switch between favorite lists without accessing the custom visibility lists menu.

1. Go to "Apply visibility list" in the "visibility tool" menu.
2. Click the "star" icon of the list you want to mark as a favorite.



3. Navigate from one list to another using the arrows in the "visibility tool" menu or the voice commands "NEXT VISIBILITY LIST" or "PREVIOUS VISIBILITY LIST."



## IX. Annotations

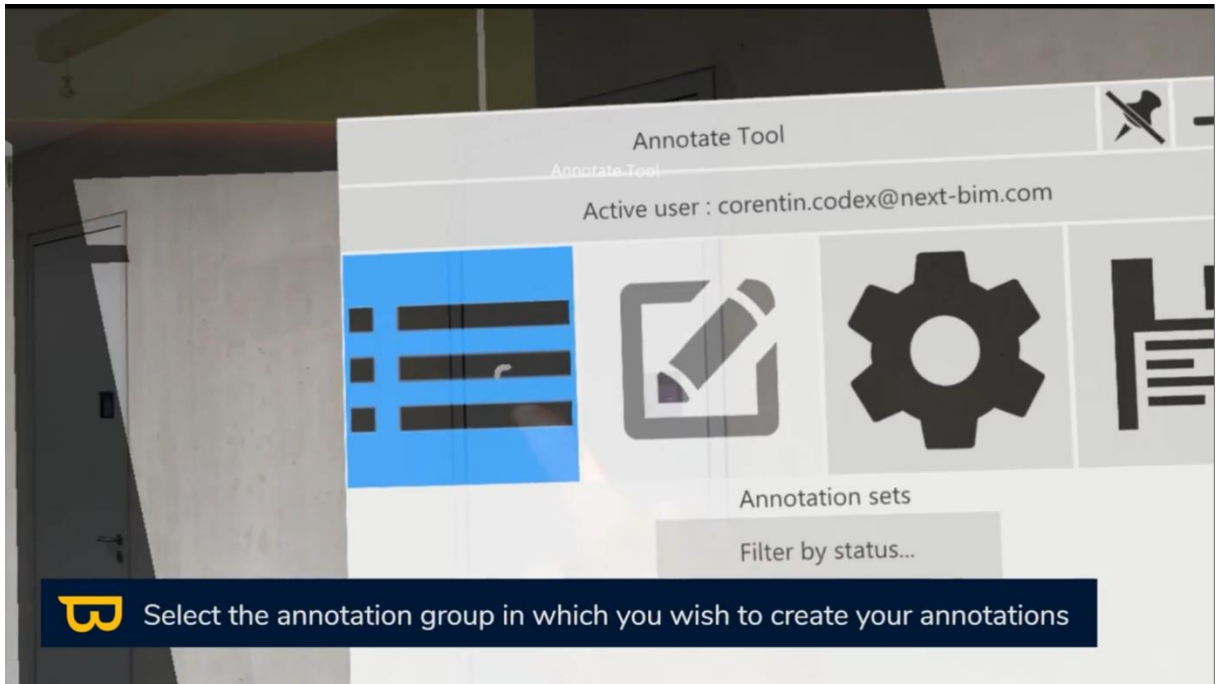
In this section, we will explore how to use the annotation tool in NEXT-BIM Explorer to create notes on your BIM model.



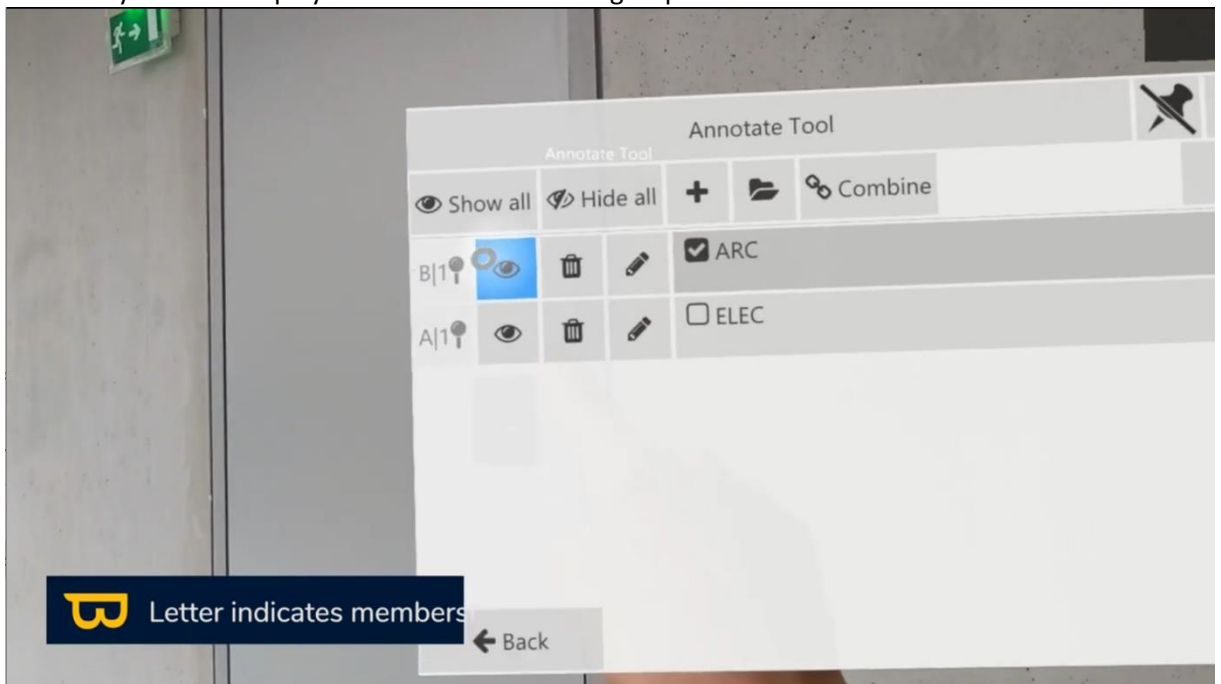
### 1. Managing Annotation Groups:

To organize your annotations by technical batches, control types, or dates, you can create annotation groups.

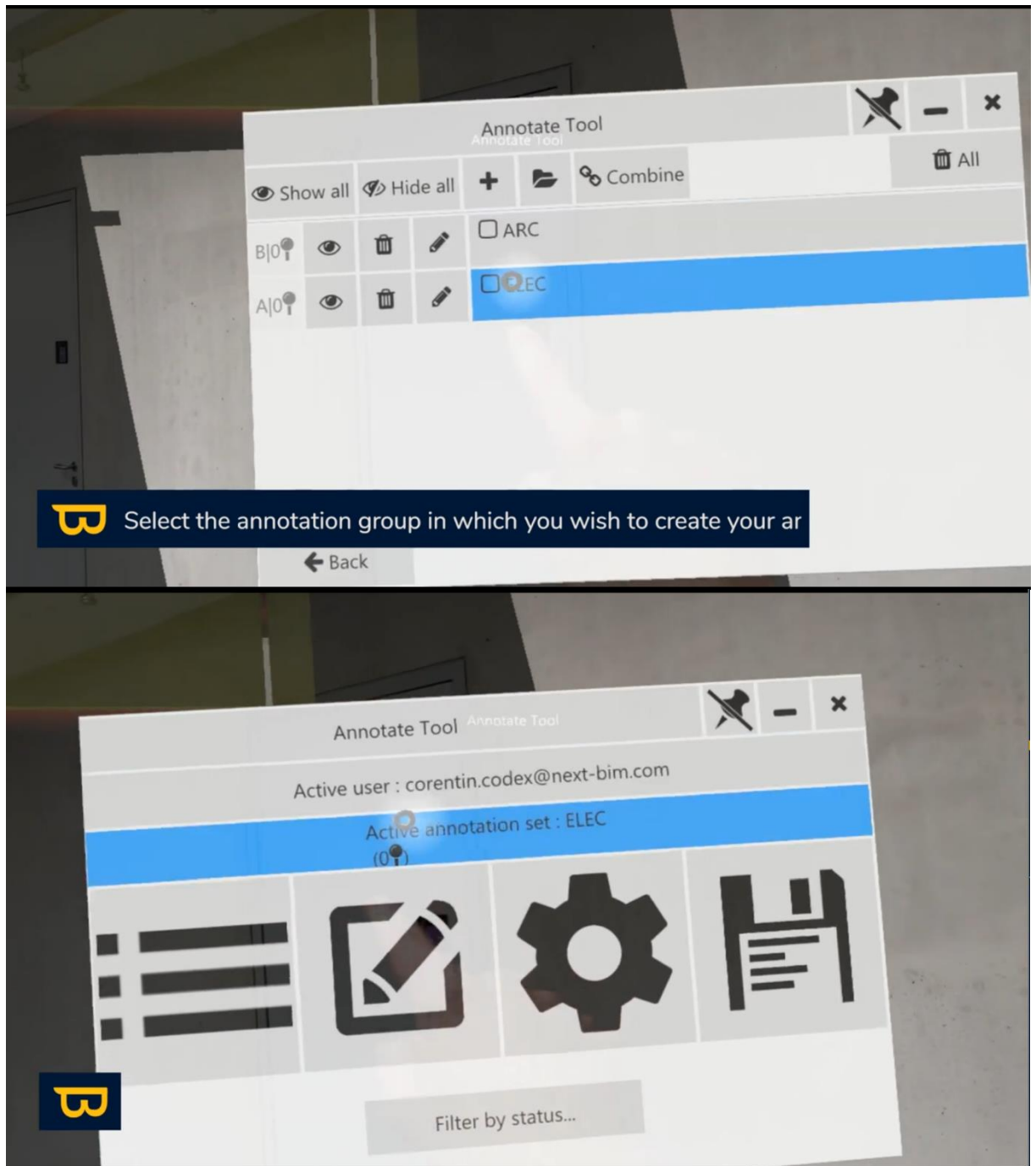
1. To configure your annotation lists, click on the three-line icon.
2. Add new groups and rename them as needed.



3. Use the eye icon to display the desired annotation groups.



4. The checked annotation group means that future annotations will be categorized under that group.



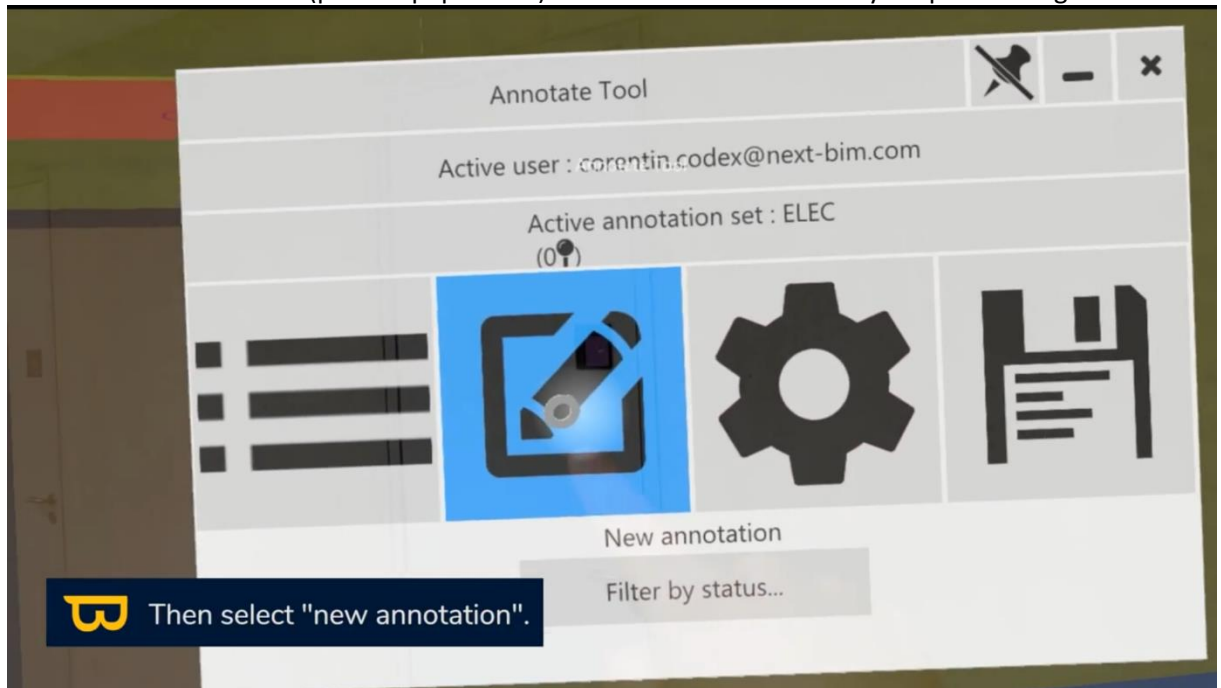
## 2. Creating Annotations - Two Advanced and Quick Types:

To place an annotation, follow these steps:

1. Open the menu by turning the palm of your hand upwards.
2. Select the annotation tool (Photo icon). The annotation tool will appear in front of you.

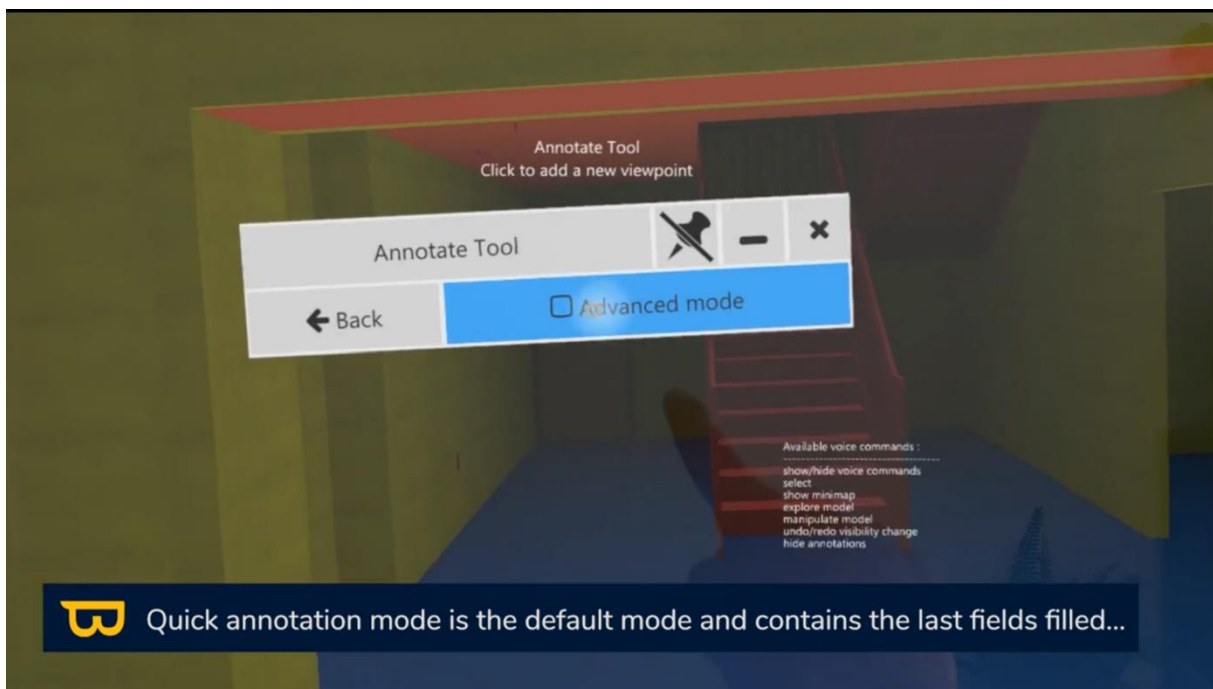


3. Select "New annotation" (pen-on-paper icon) on the left-hand side with your pointer finger.



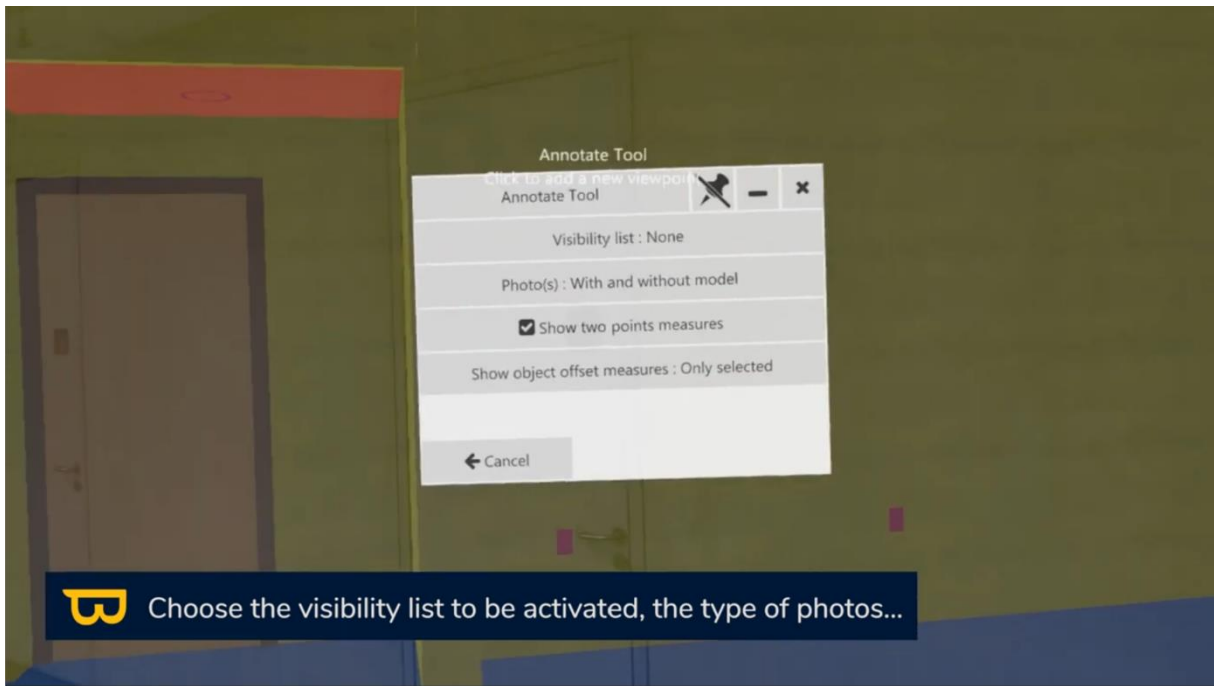
**a. a. Advanced Annotations:**

To activate advanced annotations, check "advanced mode".

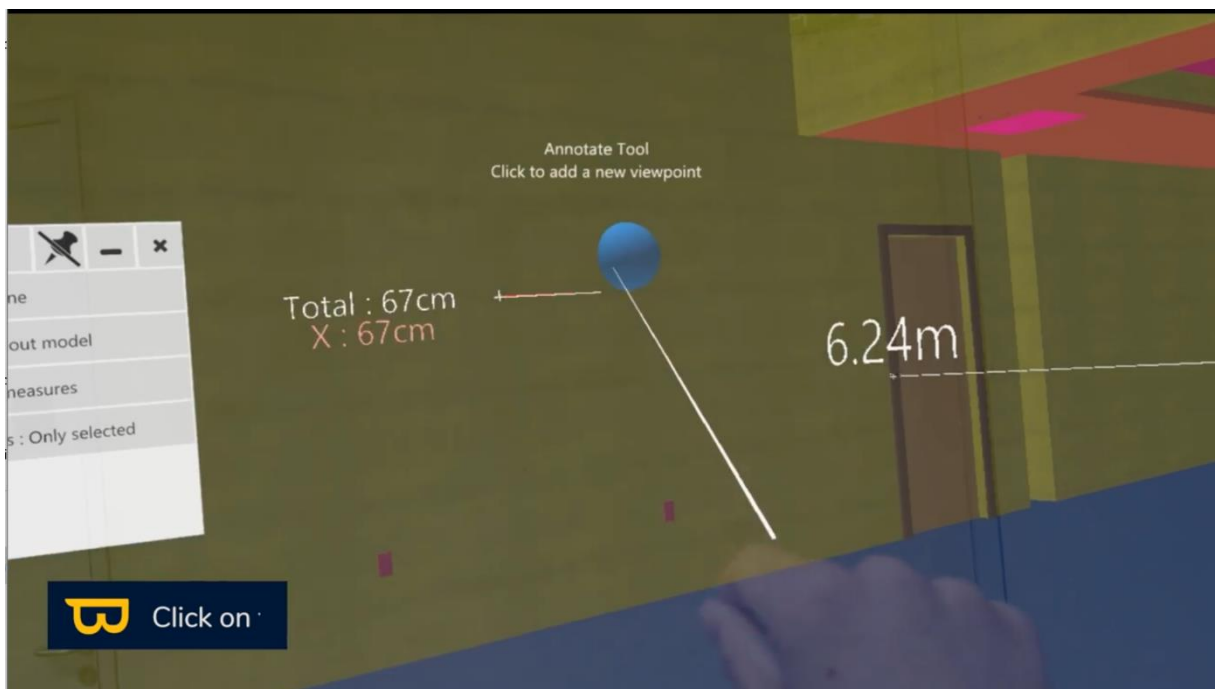


1. Select annotation settings (desired photo type, measurement display, applied visibility list, etc.).

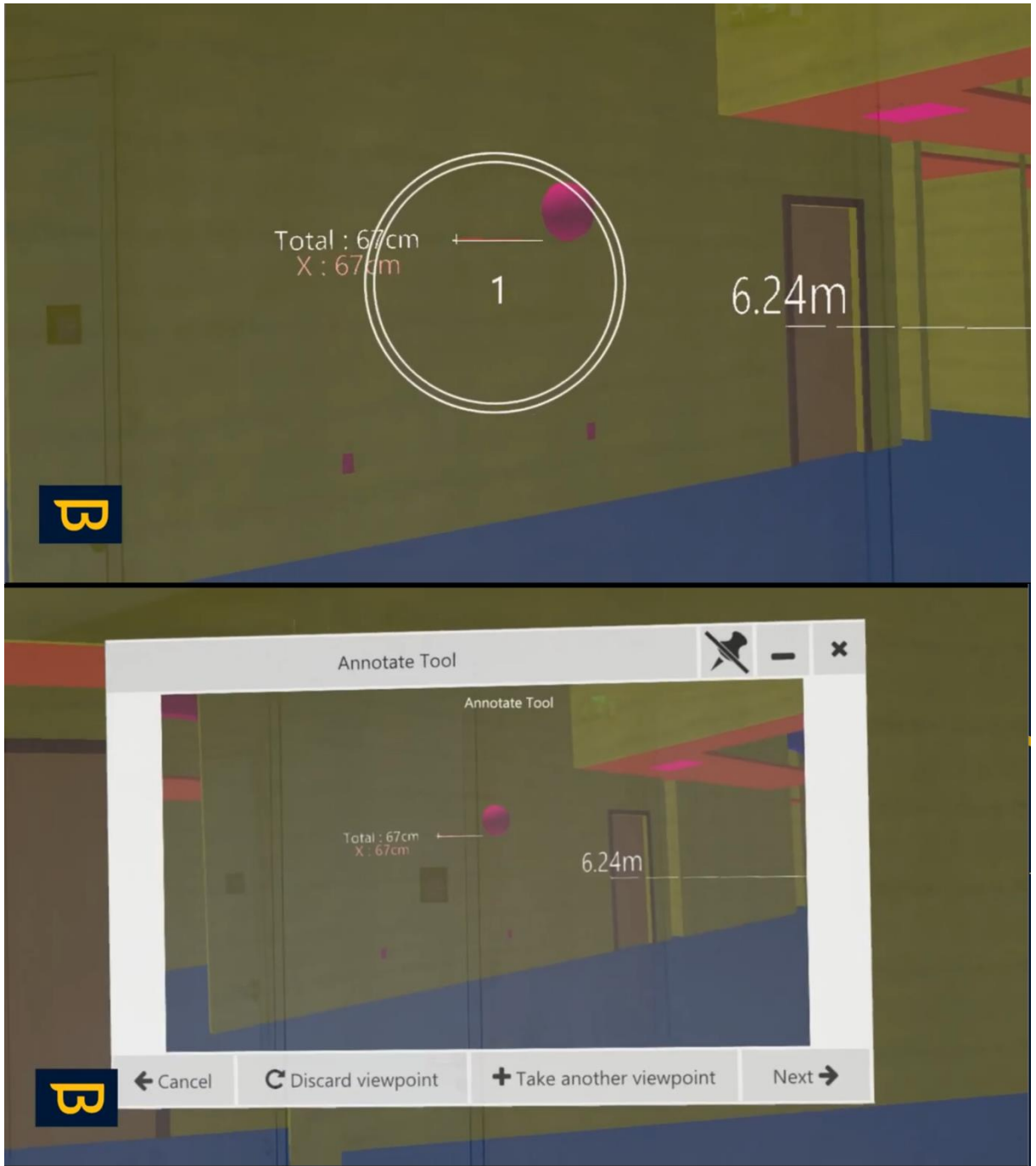




2. Choose the element you want to annotate by pointing at it with your ray and clicking (use your thumb and pointer finger).

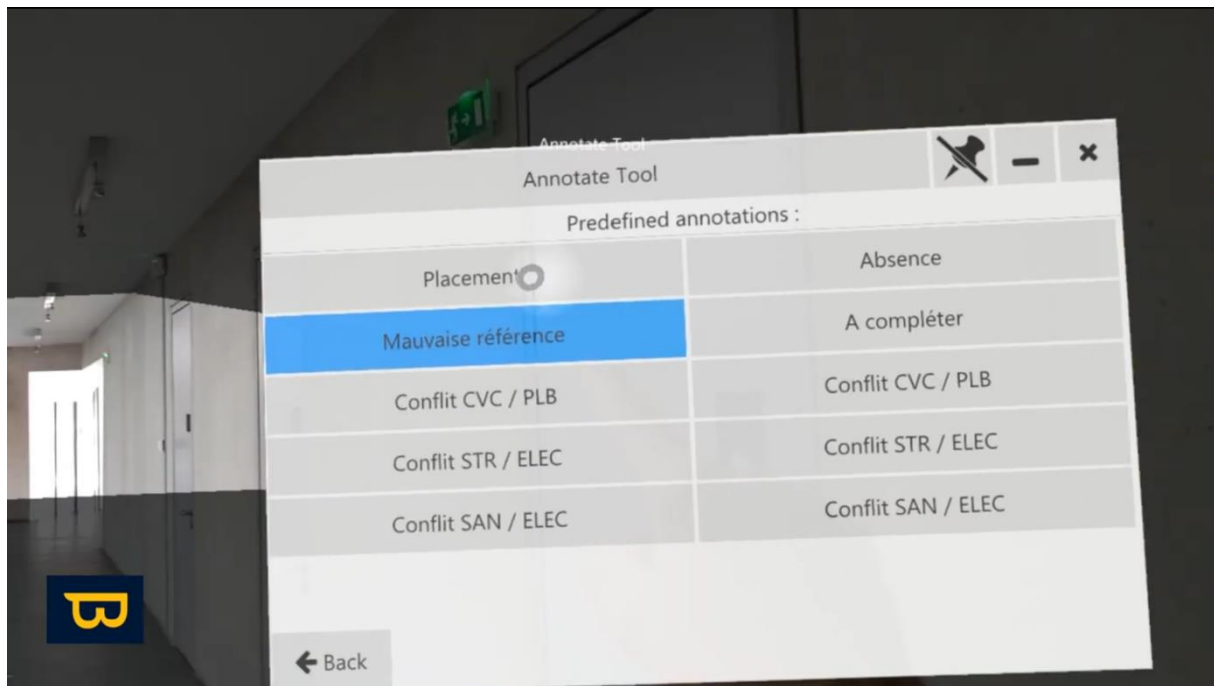
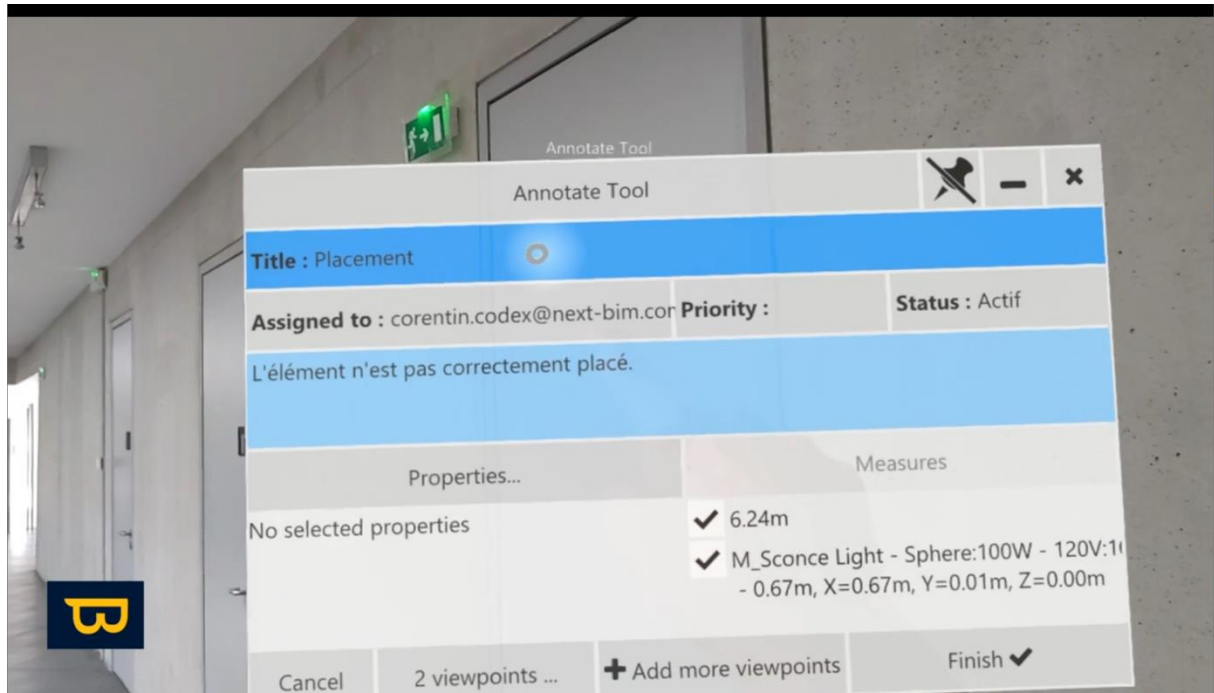


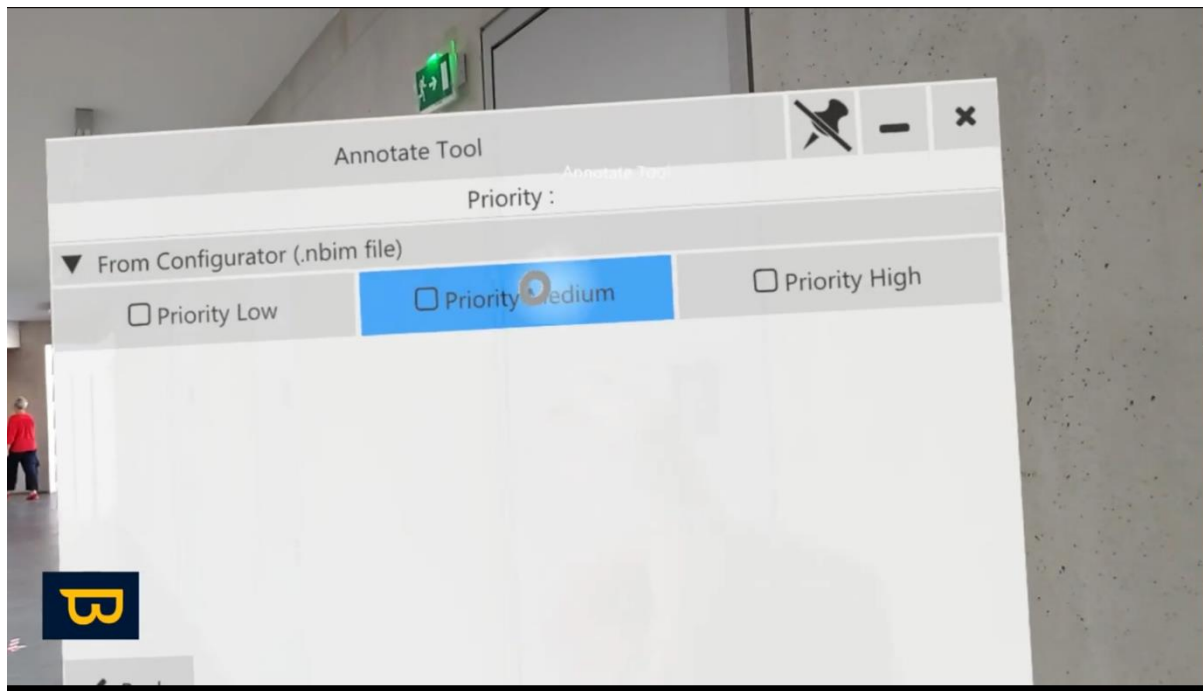
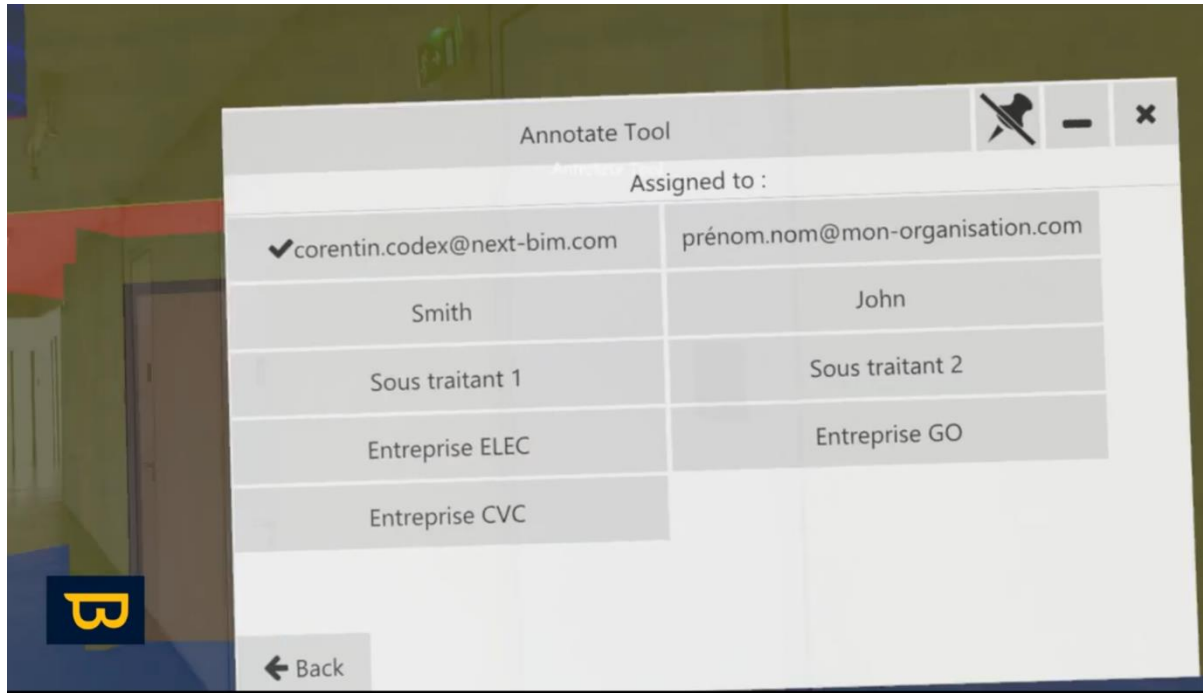
3. Wait while the device takes the photo.

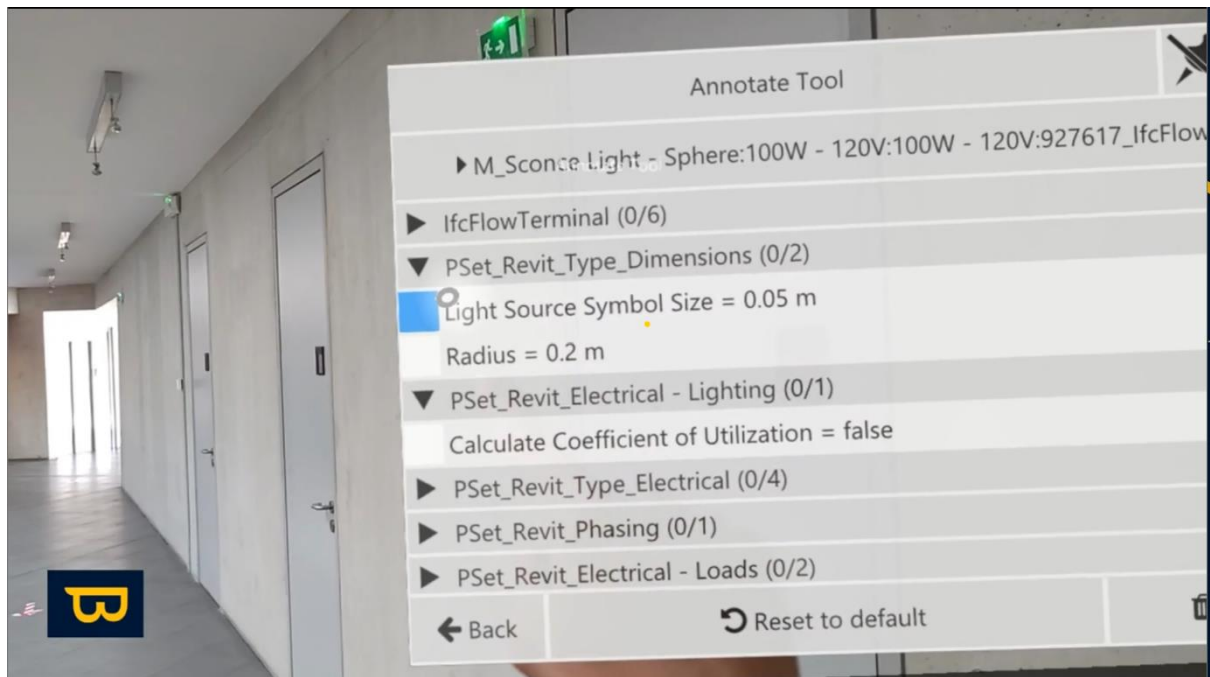
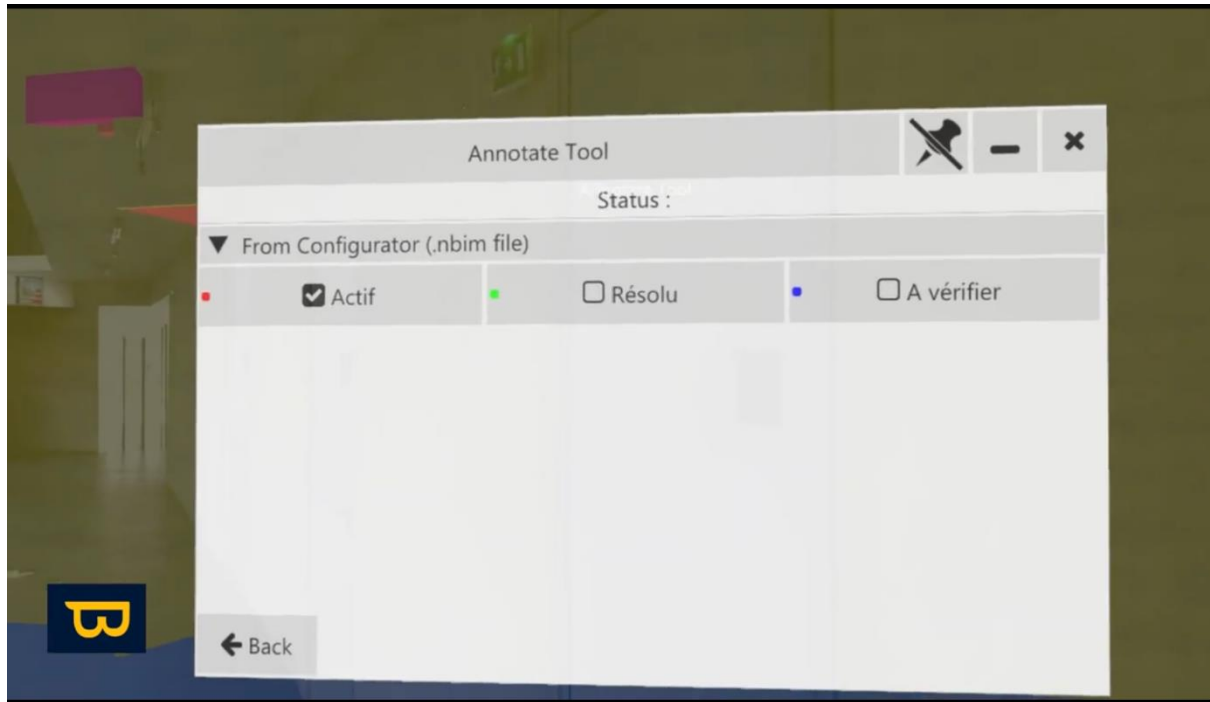


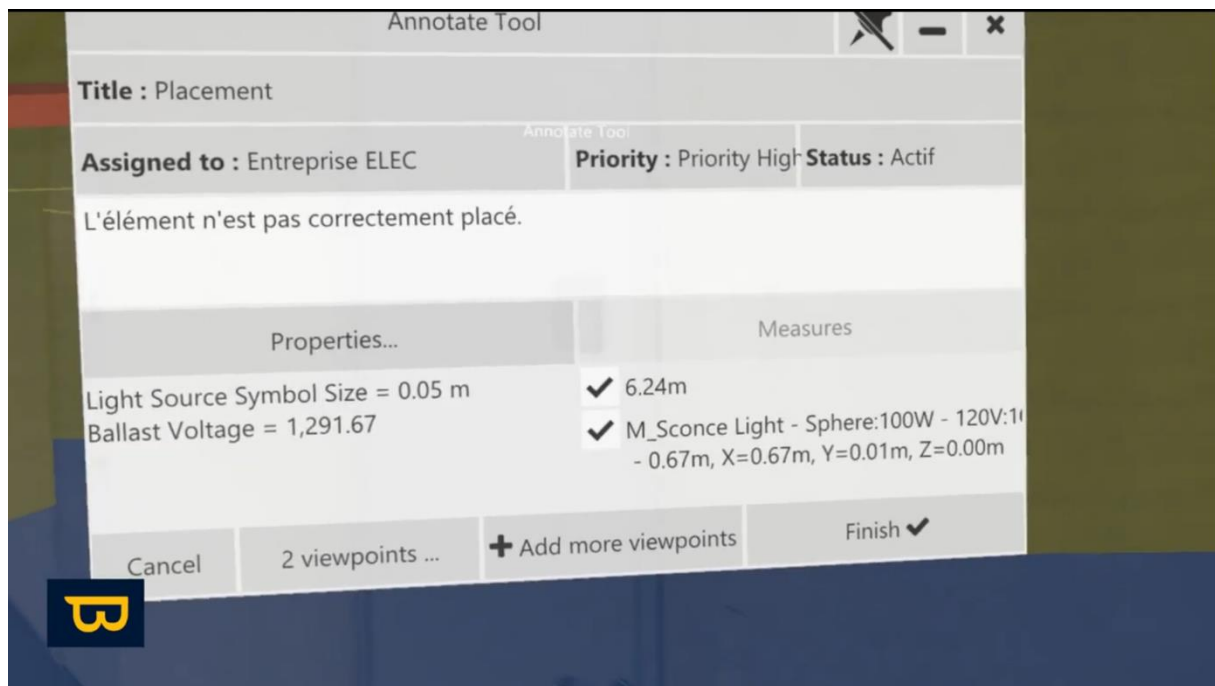
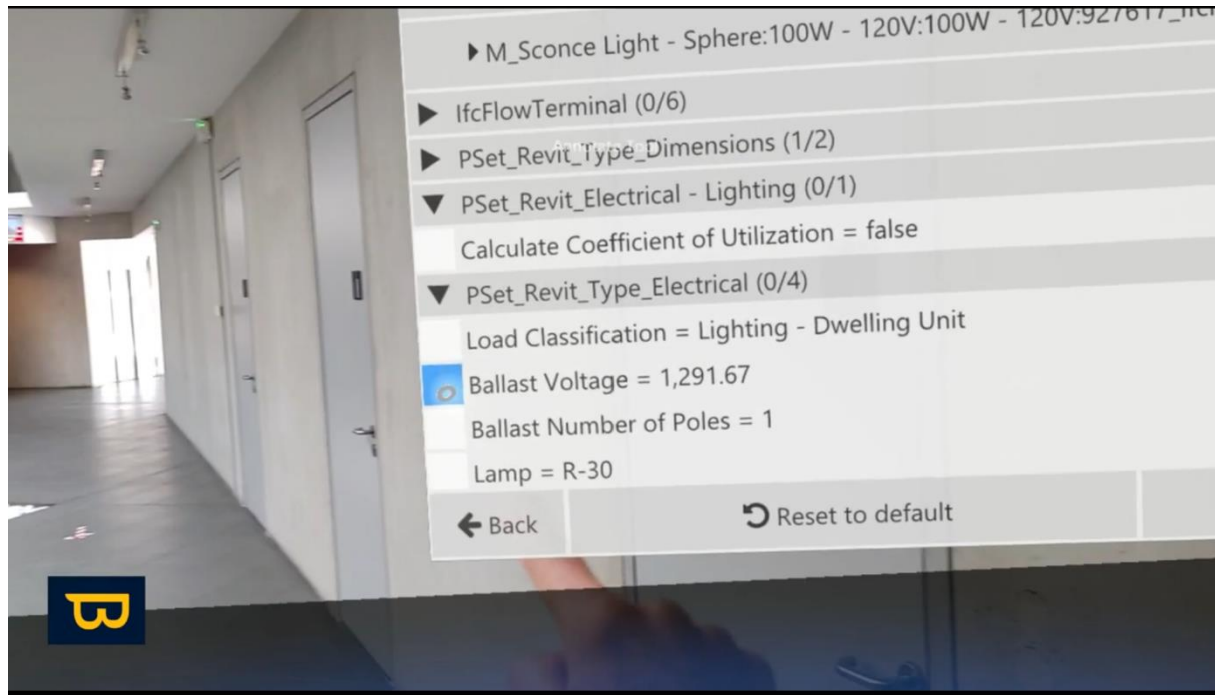
4. Customize the title, recipient, status, and other annotation settings.

1. l'annotation.



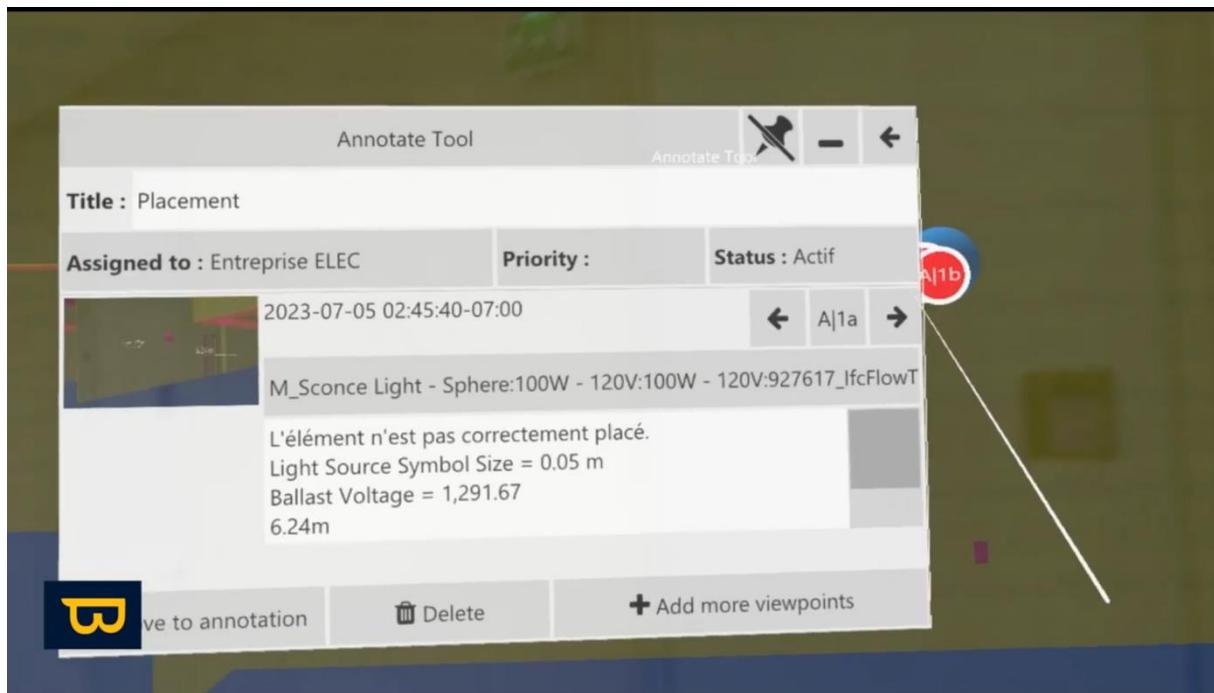
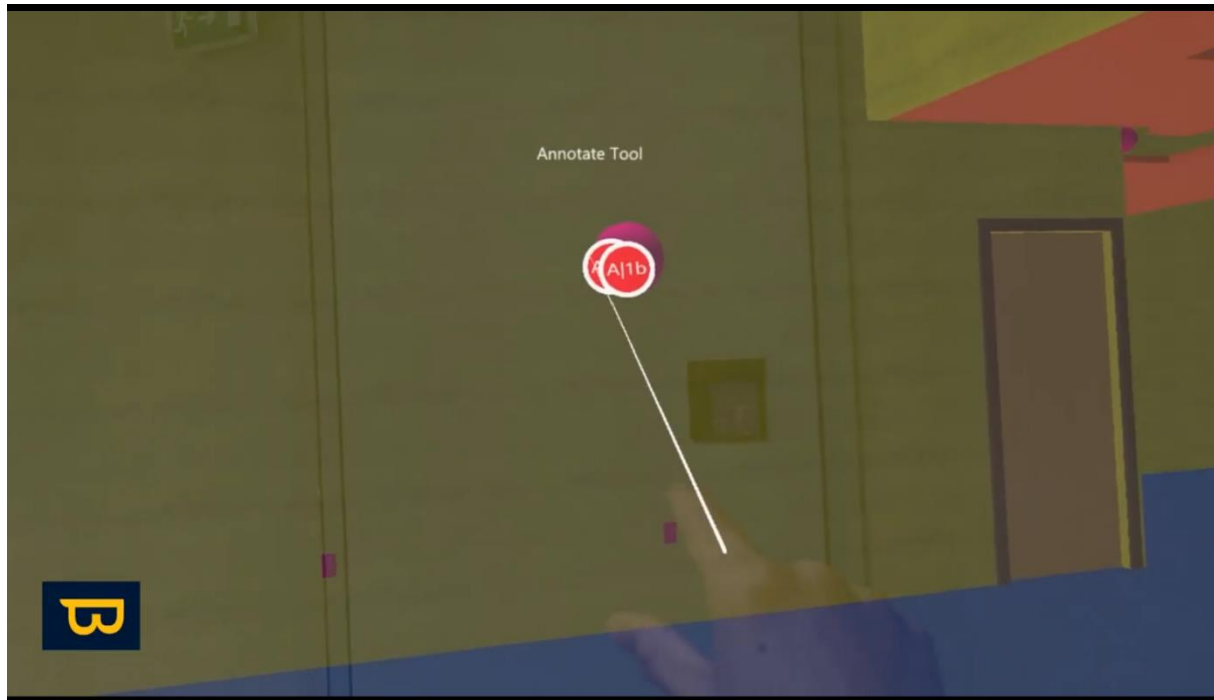






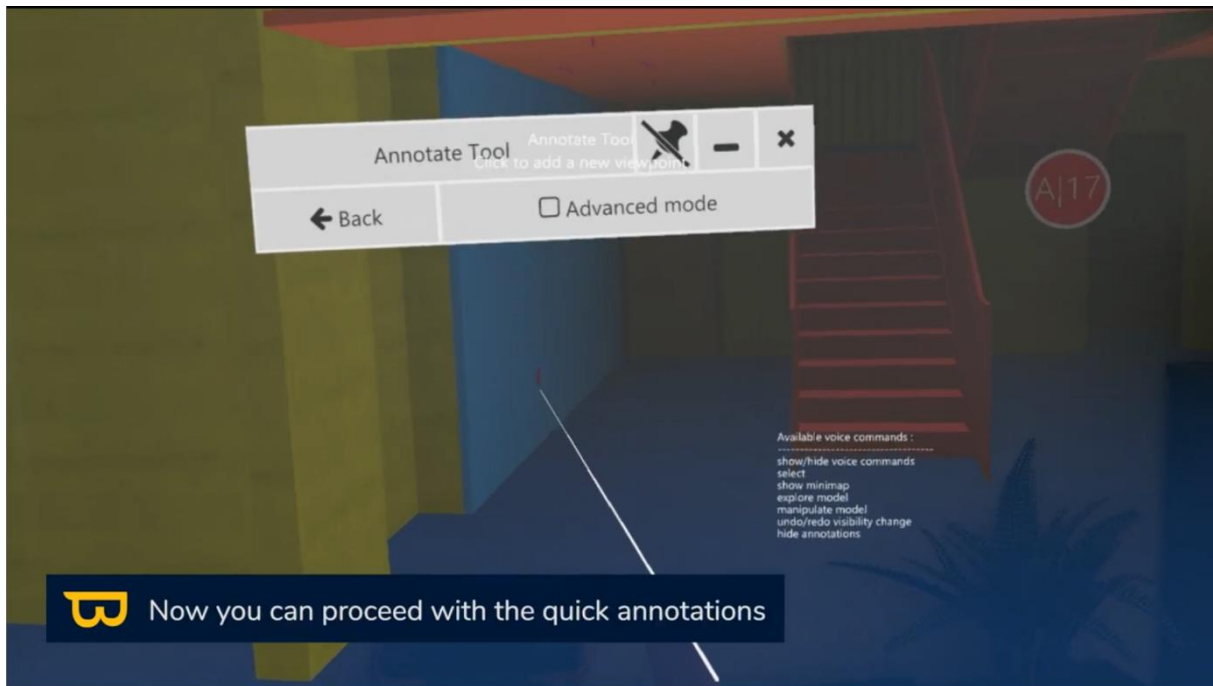
5. Add additional viewpoints if necessary.
6. Click the "Finish" button in the lower right to finalize the annotation.



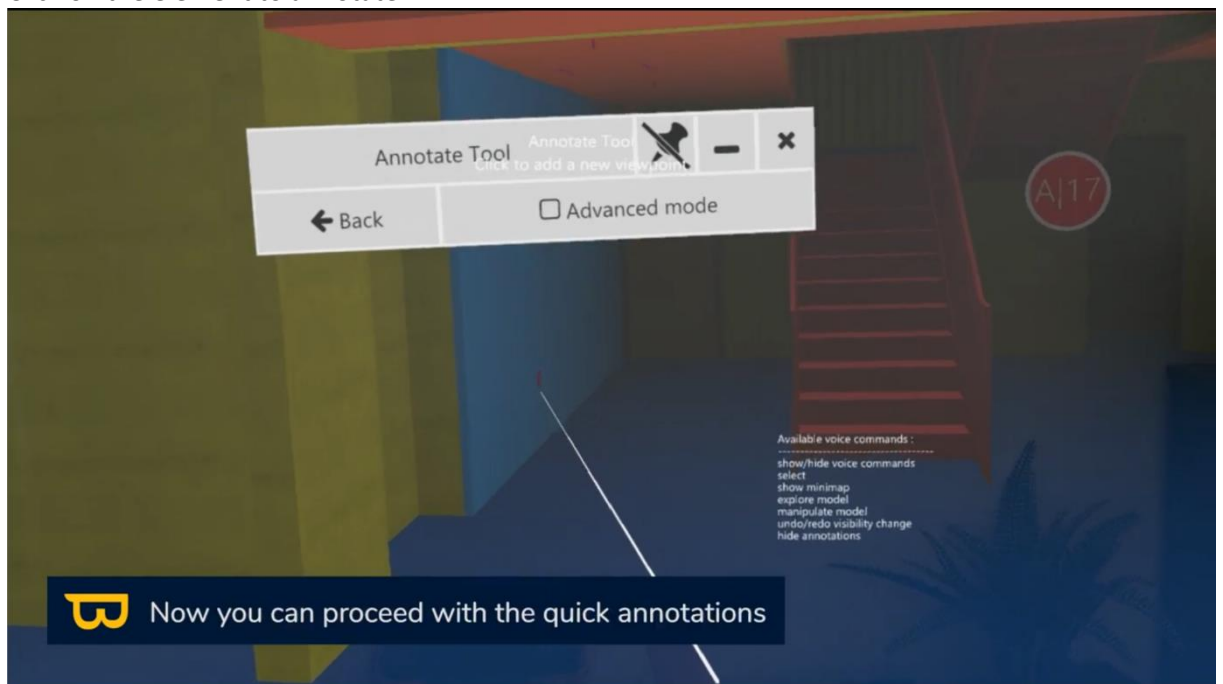


**b. b. Quick Annotations:**

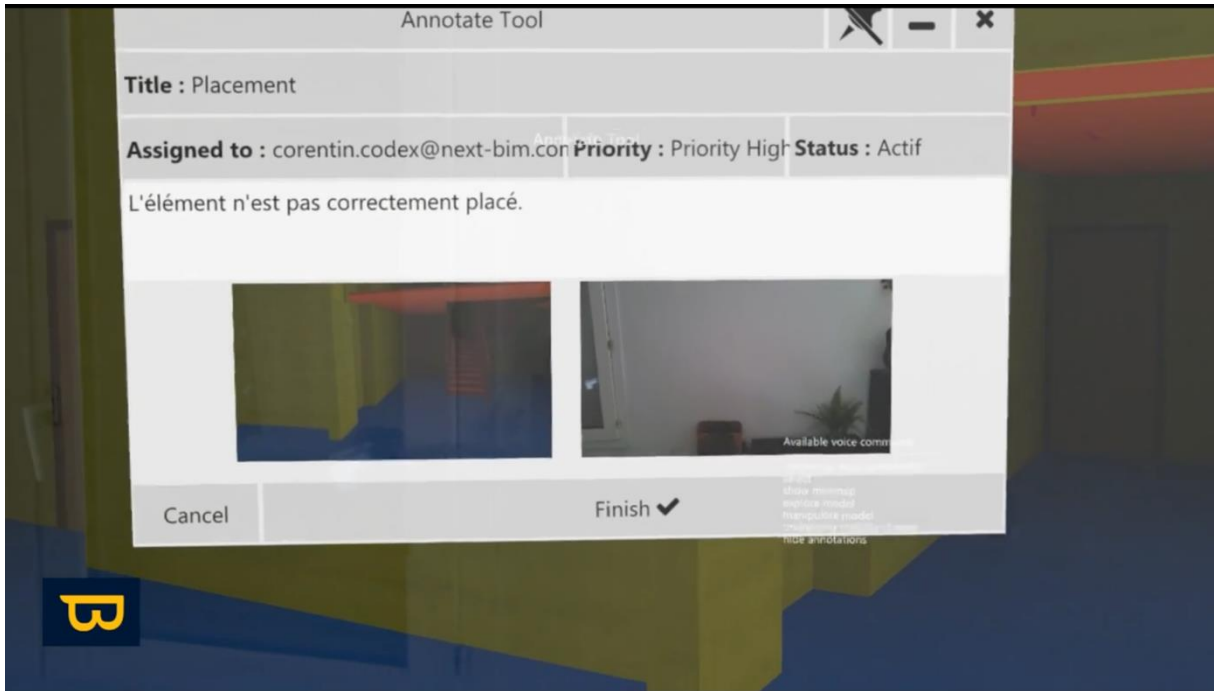
To use quick annotation mode, uncheck "Advanced mode".



1. Use the settings from the last advanced annotation.
2. Click on the element to annotate.



3. Wait for the device to capture the photo.
4. Confirm the photo by clicking "Finish."



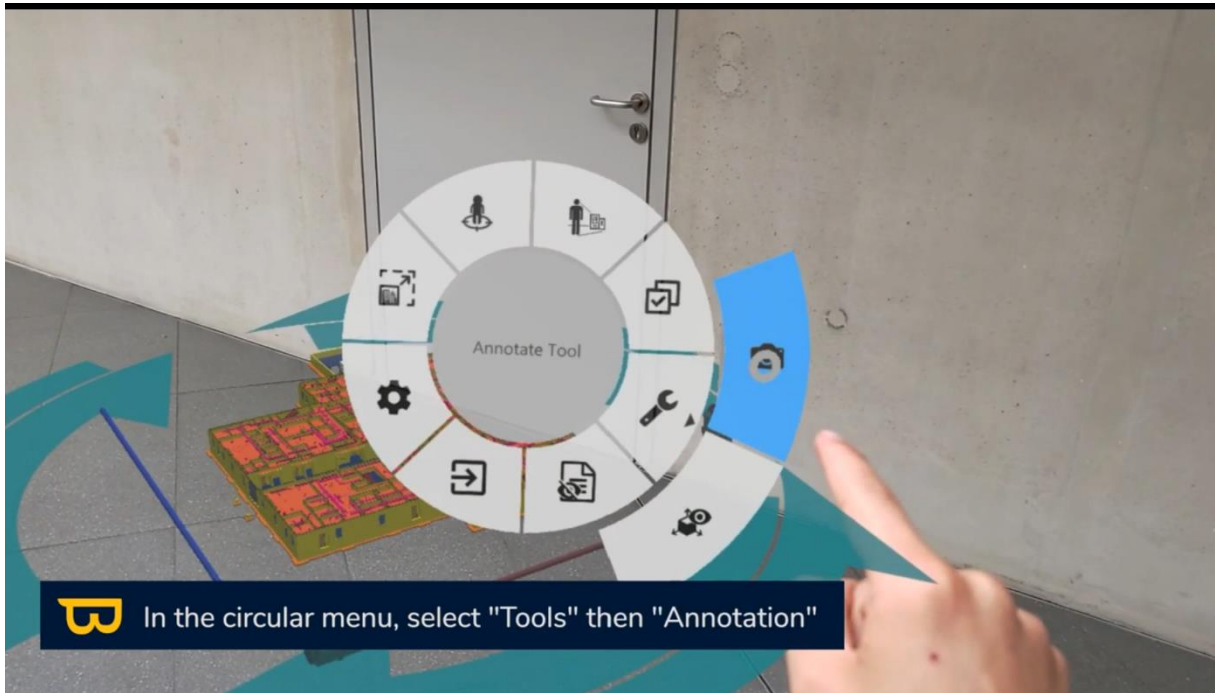
5. The annotation is created with the same settings as the last advanced annotation.

### 3. Viewing Annotations in Tabletop Mode:

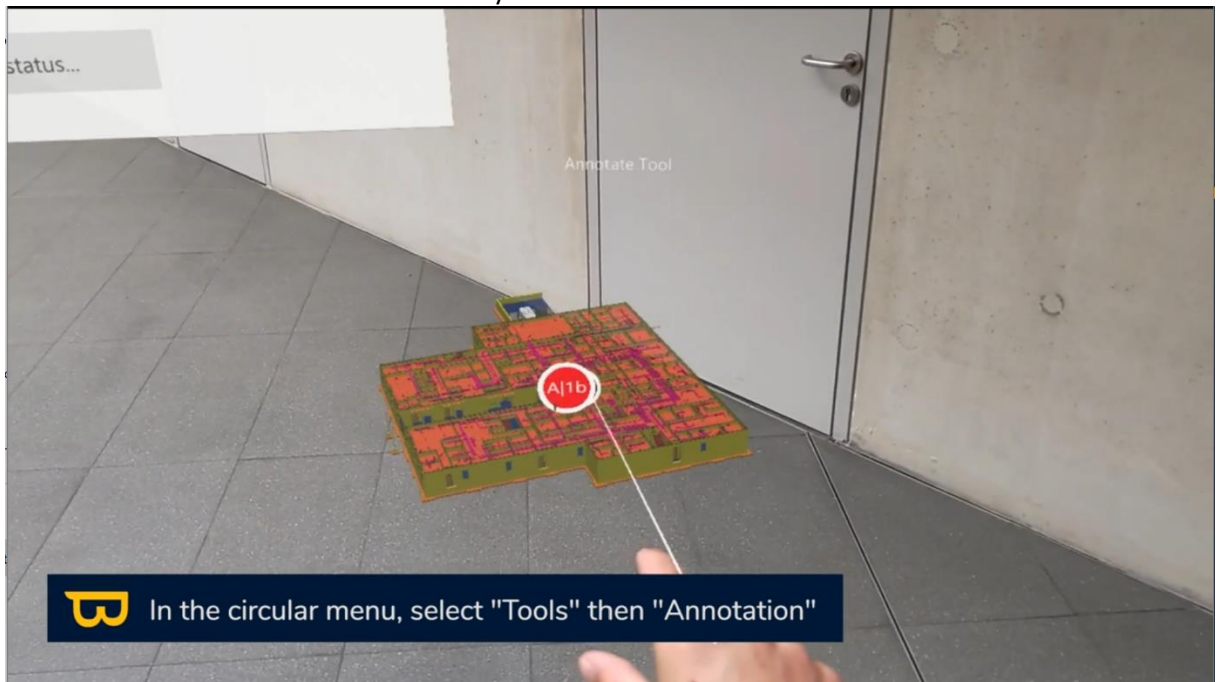
1. In tabletop mode, open the menu.



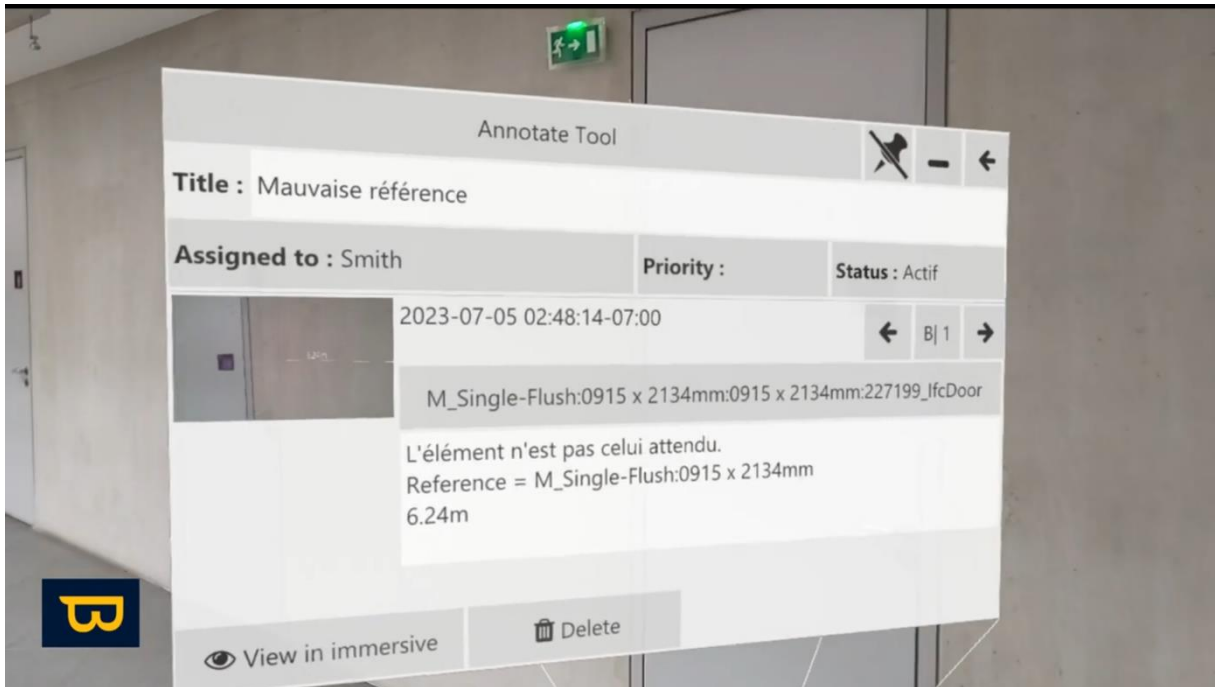
2. Select "Tools" (an icon resembling a wrench).



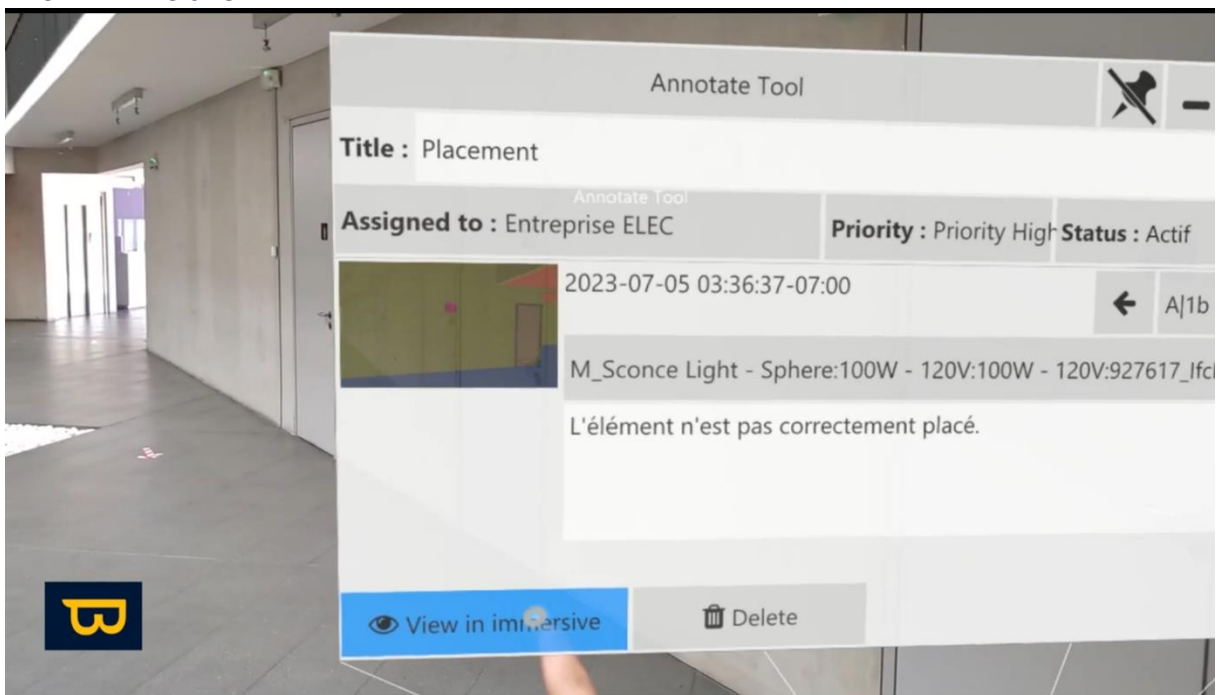
3. Then, choose "Annotation" (a photo icon).
4. All created annotations will be visible on your model.



5. To open an annotation, simply point and click using your ray (click with your thumb and pointer finger). The annotation will appear in front of you.



6. Teleport into the 1:1 scale model to view the annotation in immersive mode by clicking "View in immersive."



#### 4. Editing/Deleting Annotations:

You can edit annotation information (e.g., annotation status).

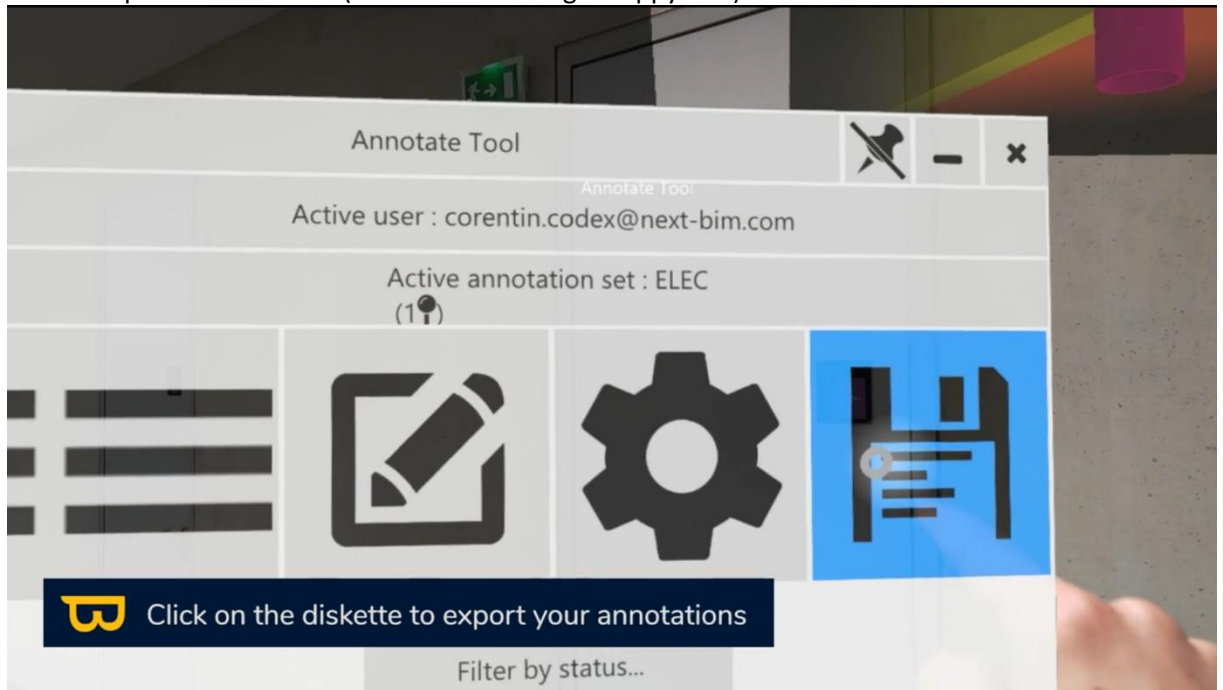
1. In the annotation tool, click on a pin (in Tabletop or 1:1 scale).
2. Click on the information to modify and make the changes.
3. To delete an annotation, simply open the annotation and click "Delete" at the bottom of your view.



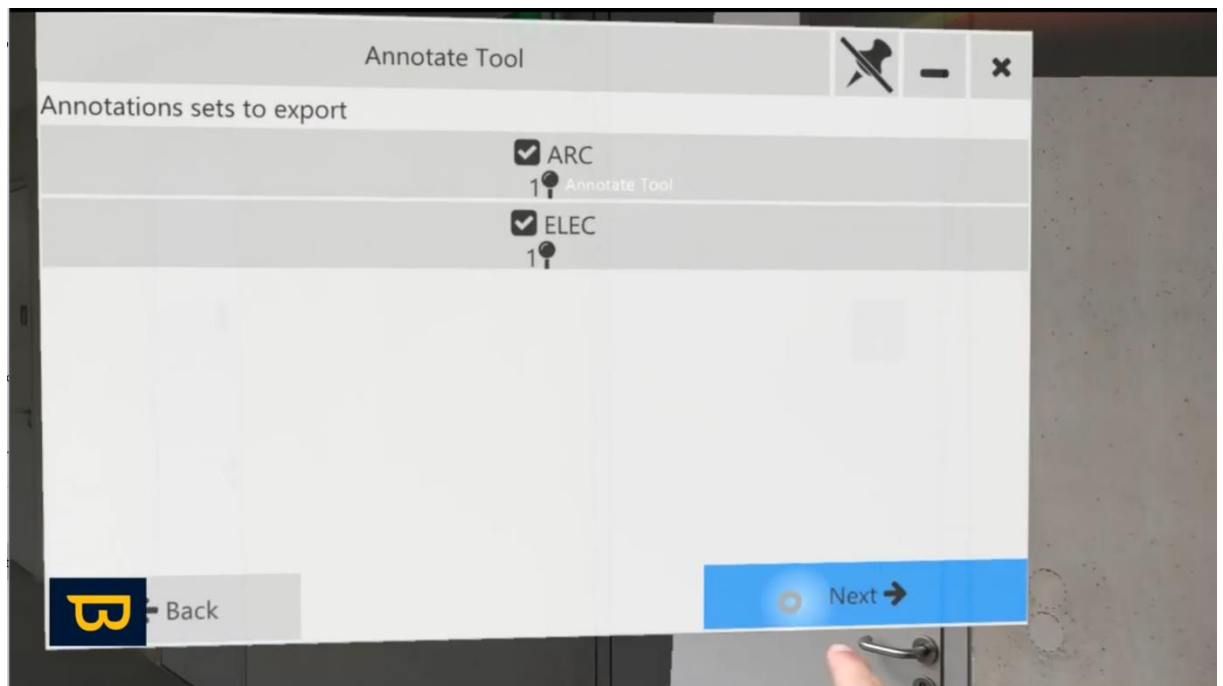
## 5. Exporting Annotations:

To export your annotations, follow these steps:

1. Go to the annotation tool.
2. Select "Export annotations" (an icon resembling a floppy disk).

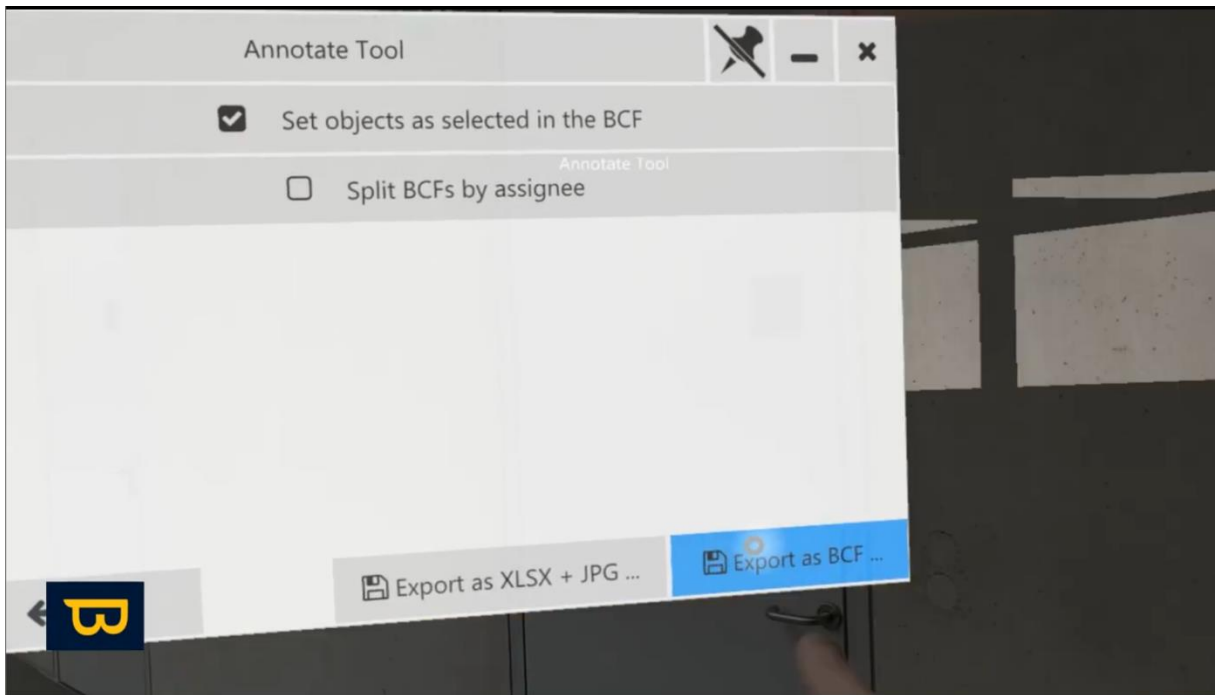


3. Select the annotation groups to export.

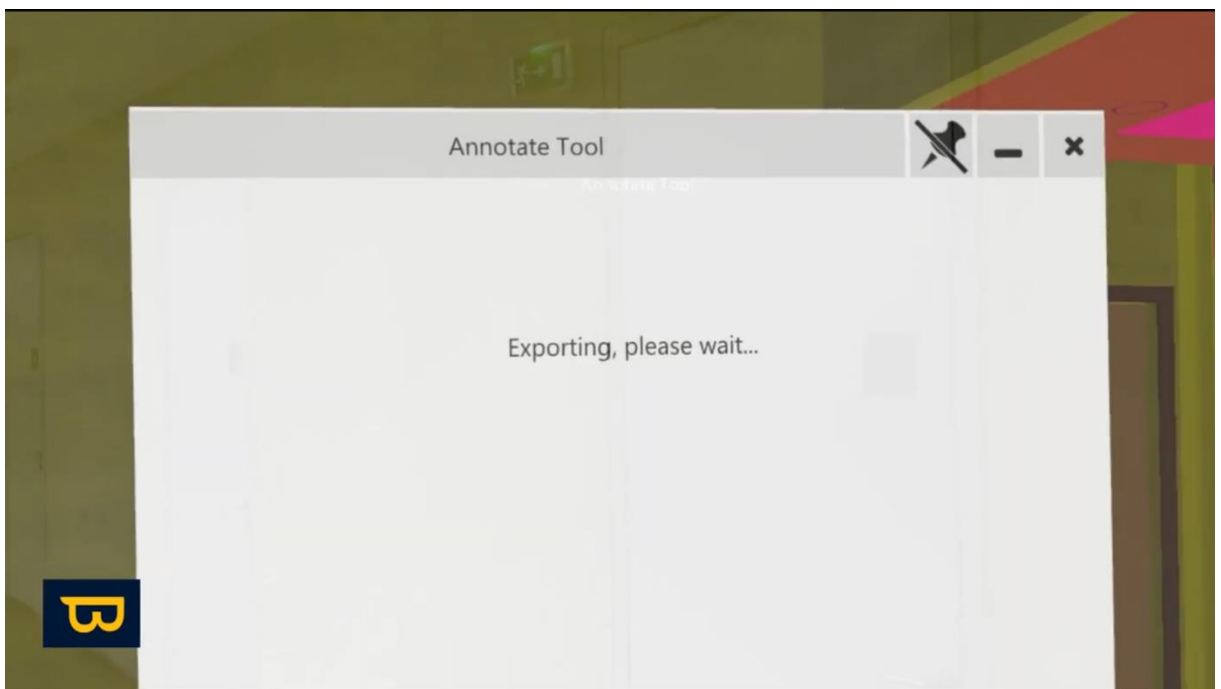


4. Choose to export in Excel (.XLSX), JPG, or BCF format (recommended for collaborative BIM management platforms) based on your preferences.





5. The option "Set objects as selected in BCF" allows you to hide the rest of the model when importing your BCFs into your collaborative BIM platform.
6. Once the export is complete, the annotation tool will reappear automatically in front of you. BCF files are available in the "Images" folder on your HoloLens.



By mastering the annotation tool, you can add valuable information to your BIM model and collaborate more effectively with your team on your project.

## X. Checklist: Using the Checklist Tool

The checklist tool in NEXT-BIM Explorer is essential for tracking and managing the status of objects in your model. Before you begin, make sure to prepare your object list in one of two ways:

### a. Option 1: Preparation via NEXT-BIM Configurator

1. Create your checklists from the available filter options in NEXT-BIM Configurator (File, ClassIFC, Name, Properties, etc.).
2. Checklists can be created before converting the .NBIM file to be directly integrated into it.

OR

Checklists can be created after creating an .NBIM file. In this case, export the "NBIM.CHECKLIST" file from NEXT-BIM Configurator and import it into your HoloLens files to upload it from the checklist tool.

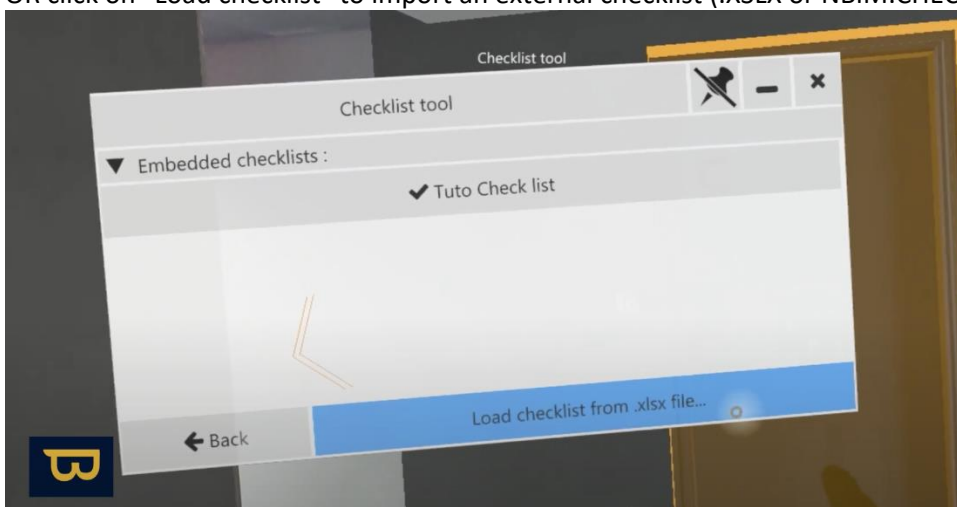
3. Click "Select checklist" in the lower right corner in the "checklist" menu.

### b. Option 2: Import from an Excel File

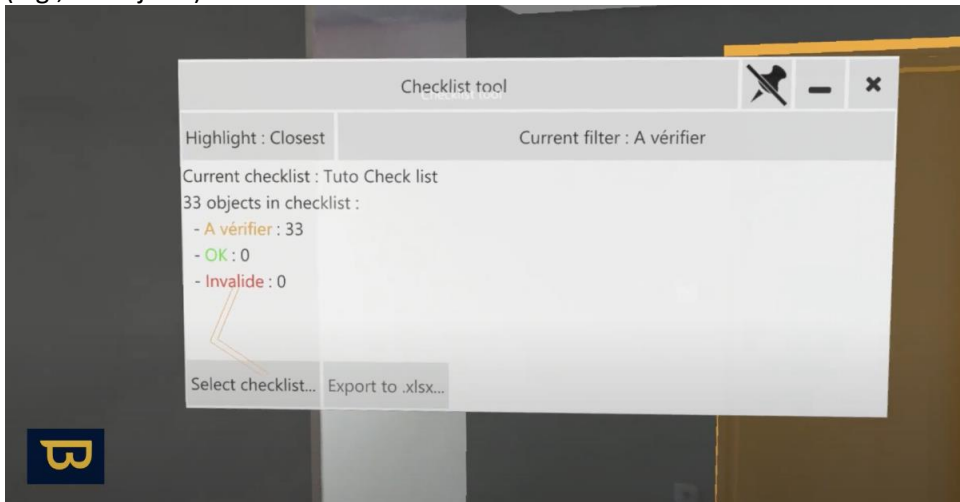
You can also import your object lists from an Excel file. Make sure your Excel file has two mandatory columns: the first column should be titled "GUID" and contain the GUIDs of your objects. The second column should be titled "next-bim," "nextbim," "checklist," "next-bim checklist," or "nextbim checklist" to import the state of your objects. You can create this Excel file from Revit using export plugins like BIMLink or BIM One.

## 2. Using the Checklist:

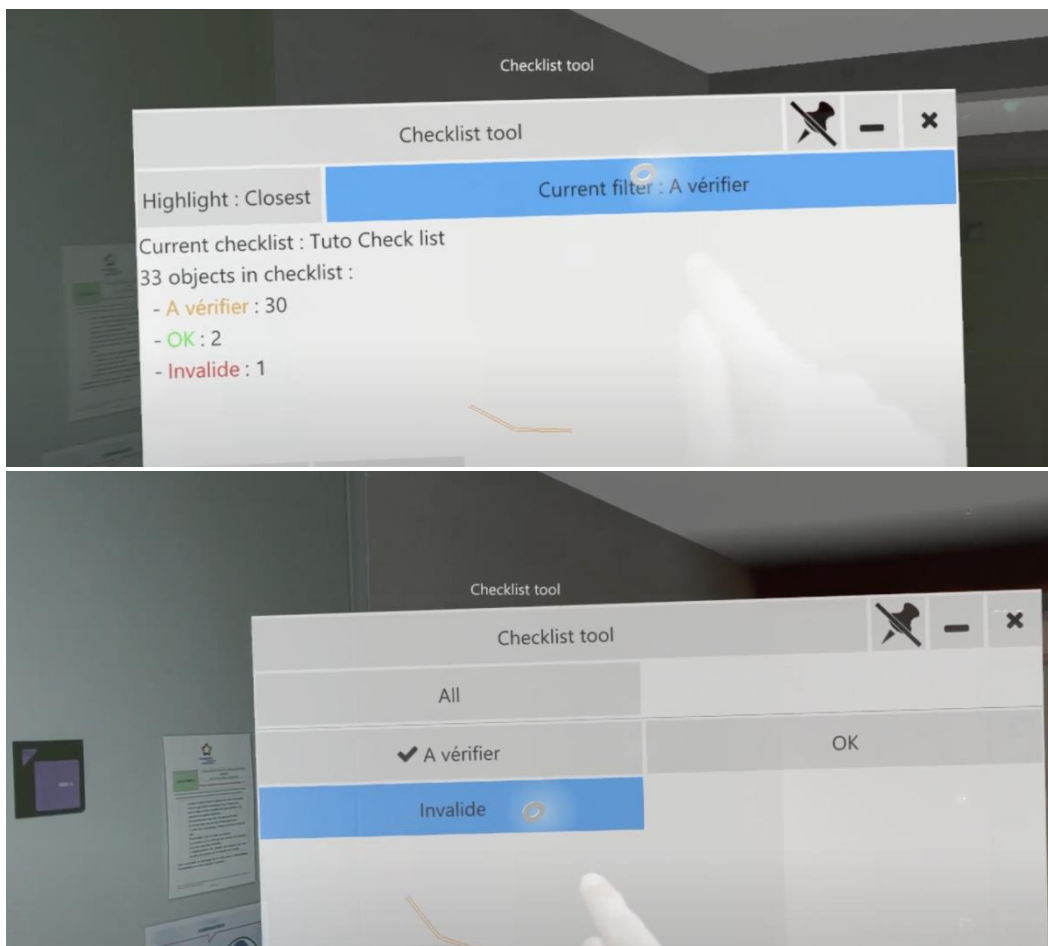
1. Open the circular menu and select the checklist tool.
2. Click on "Select checklist" to choose an existing active checklist.
3. OR click on "Load checklist" to import an external checklist (.XSLX or NBIM.CHECKLIST file).



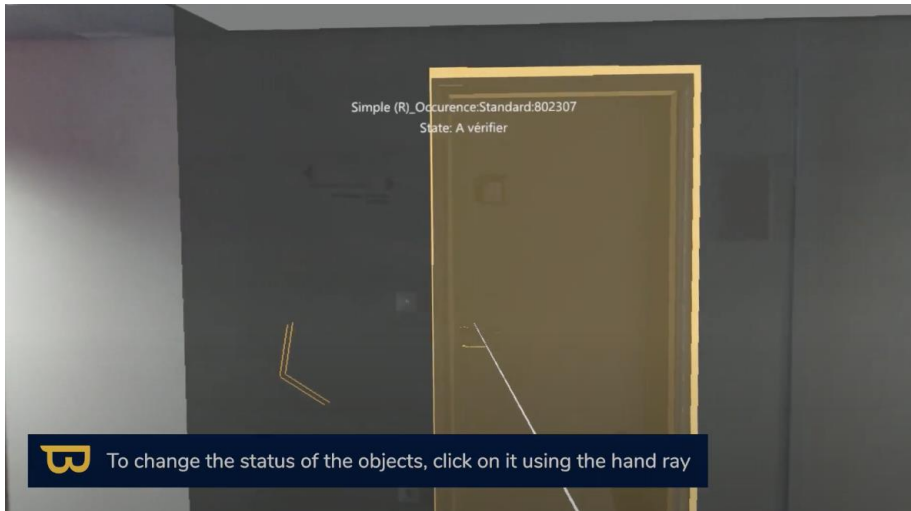
- In the checklist tool panel, you'll find the control process created in NEXT-BIM Configurator (e.g., To Check (orange), OK (green), Invalid (red)) with the total number of objects in the list (e.g., 33 objects).



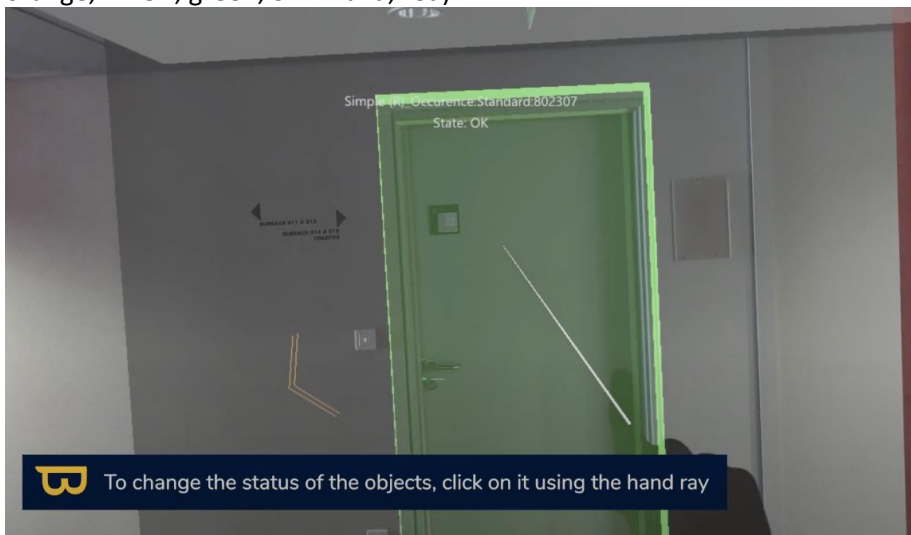
- You can choose to display only objects with a specific status by clicking on the "Current filter" and selecting the desired object status ("To Check"/"OK"/"Invalid").



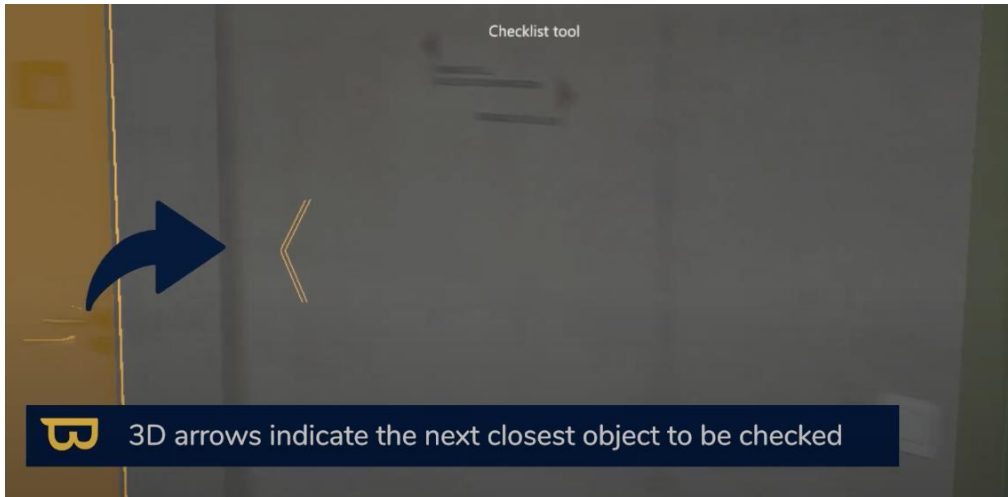
- You can change an object's status by pointing at it and clicking using your hand ray (a quick pinch with your thumb and index finger).



7. The object will then change to the associated successive status color (e.g., 1 - To Check, orange; 2 - OK, green; 3 - Invalid, red).

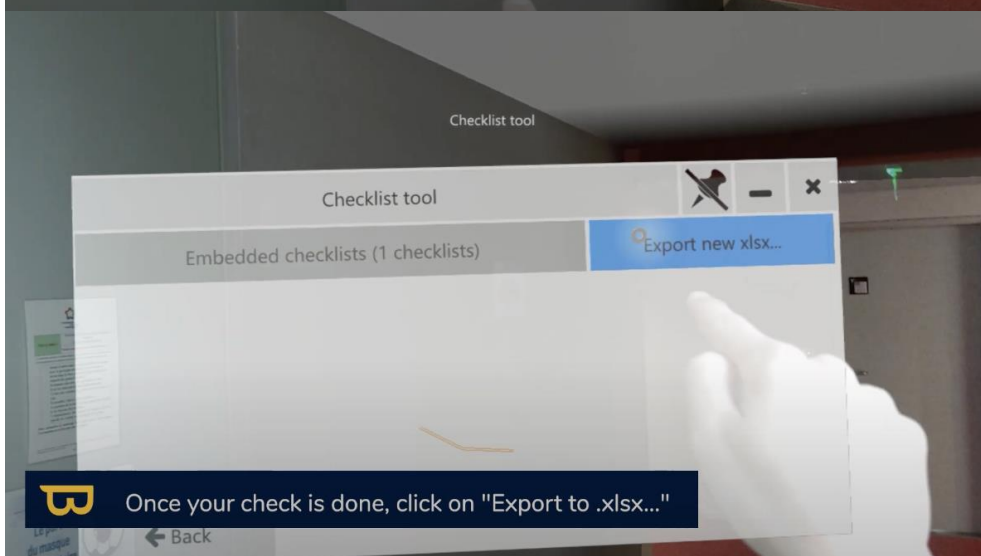
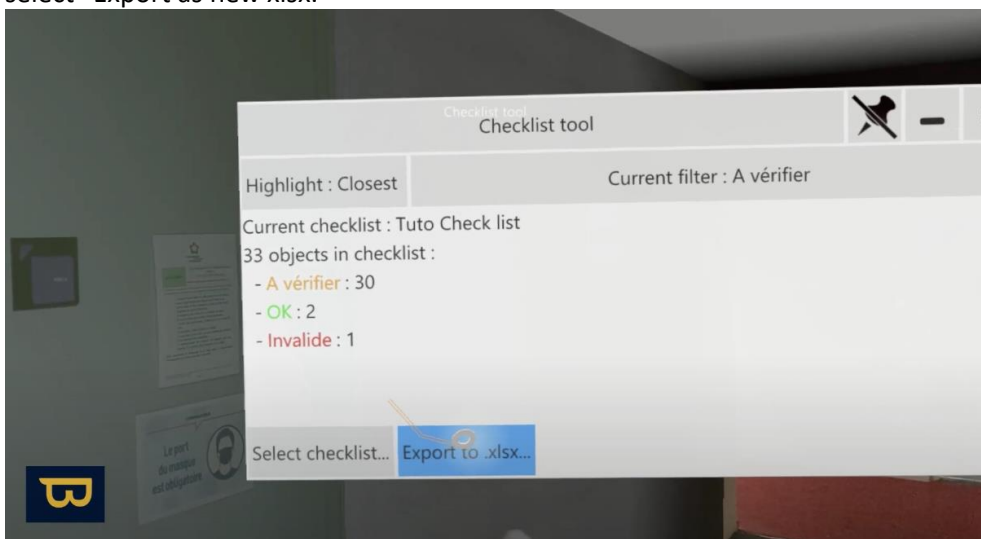


8. Colored 3D arrows will guide you to the next object to be checked. Follow them with your gaze to navigate.

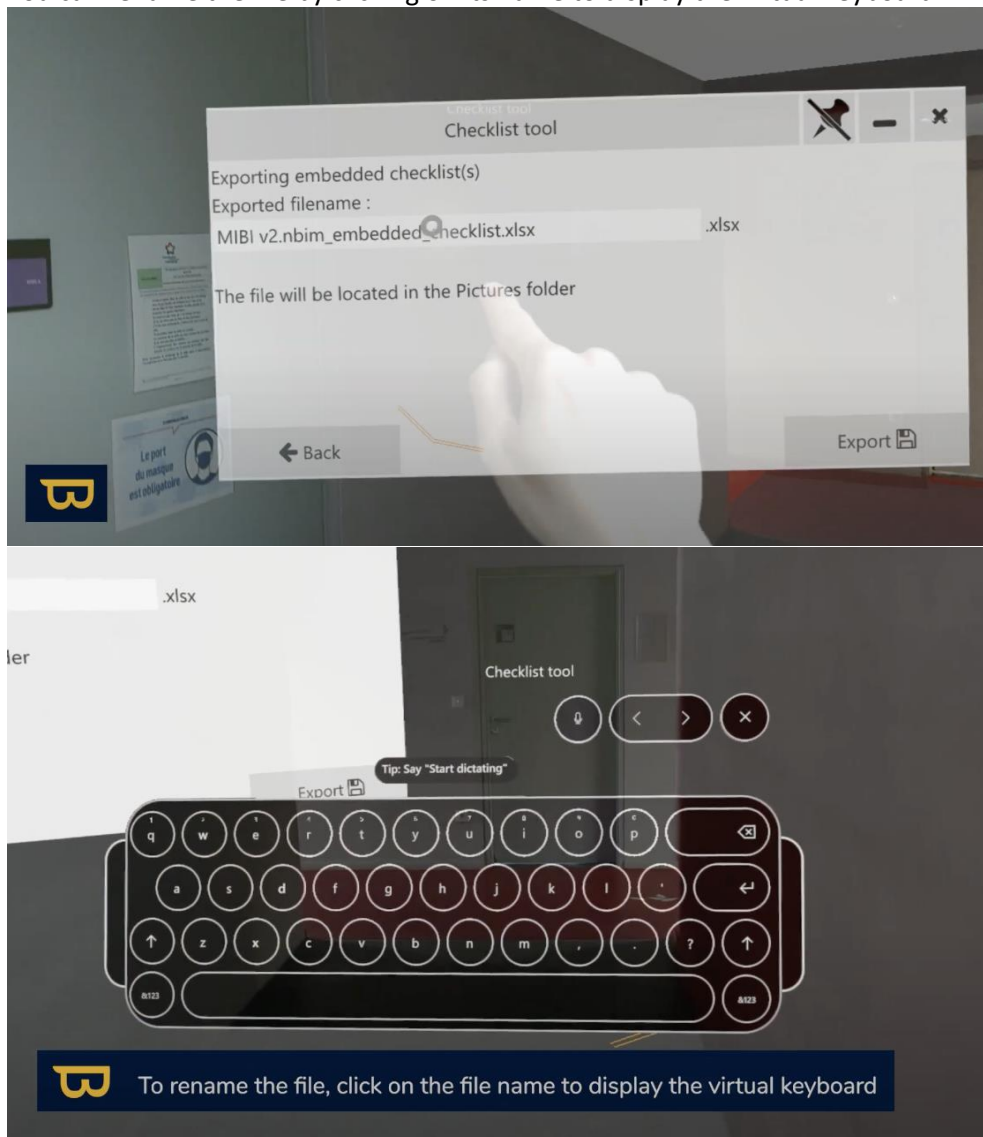


### 3. Checklist Export:

1. When you have finished your checks, click "Export to .xlsx" in the lower left corner, then select "Export as new xlsx."

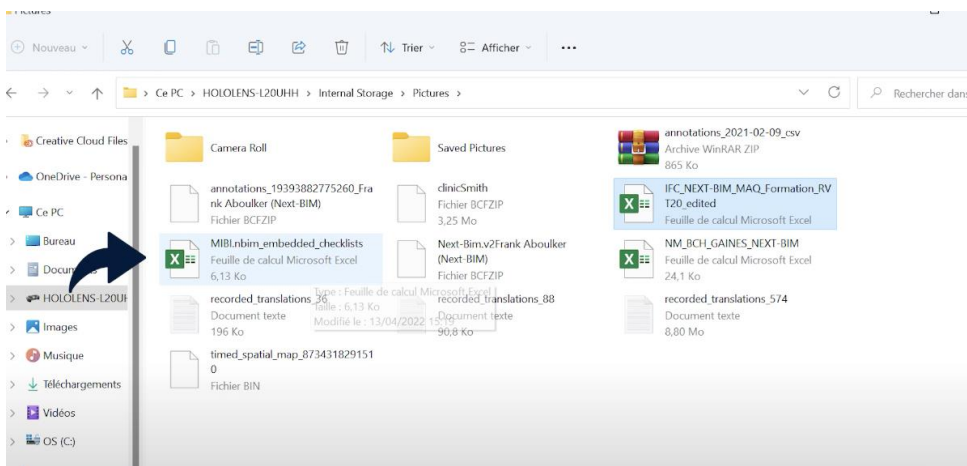
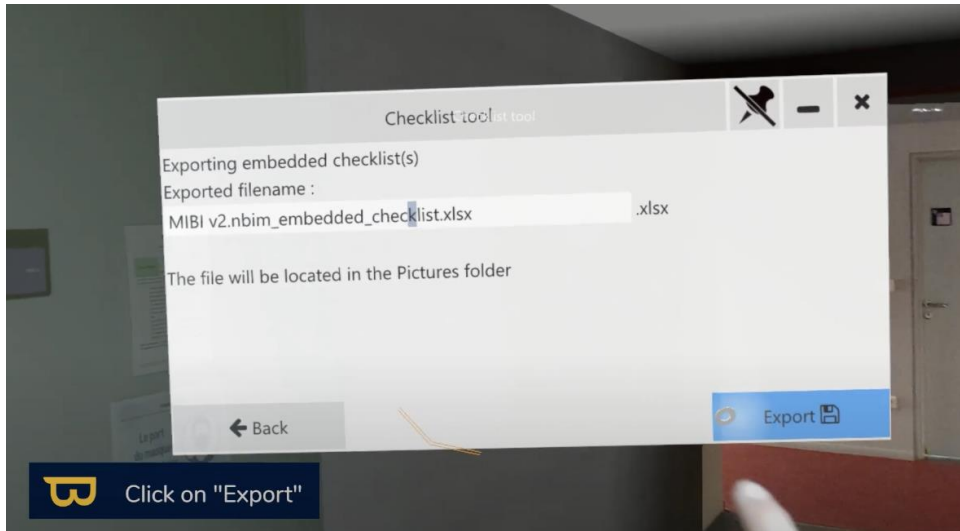


2. You can rename the file by clicking on its name to display the virtual keyboard.



3. Click "Export." Your file will be saved in the "Images" folder of the HoloLens.





| ID | IFC GUID                | Object Name                          | Next-BIM Checklist |
|----|-------------------------|--------------------------------------|--------------------|
| 1  | IFC GUID                |                                      |                    |
| 2  | 0MJfrPQEH8aRFVG6G5UY0Z  | Simple (R)_Occurence:Standard:802211 | A vérifier         |
| 3  | 0MJfrPQEH8aRFVG6G5UY1K  | Simple (R)_Occurence:Standard:802260 | A vérifier         |
| 4  | 0MJfrPQEH8aRFVG6G5UY2E  | Simple (R)_Occurence:Standard:802062 | A vérifier         |
| 5  | 0MJfrPQEH8aRFVG6G5UY2Q  | Simple (R)_Occurence:Standard:802074 | A vérifier         |
| 6  | 0MJfrPQEH8aRFVG6G5UY2_  | Simple (R)_Occurence:Standard:802110 | A vérifier         |
| 7  | 0MJfrPQEH8aRFVG6G5UYCK  | Simple (R)_Occurence:Standard:802452 | A vérifier         |
| 8  | 0MJfrPQEH8aRFVG6G5UYCg  | Simple (R)_Occurence:Standard:802474 | A vérifier         |
| 9  | 0MJfrPQEH8aRFVG6G5UYDH  | Simple (R)_Occurence:Standard:802513 | A vérifier         |
| 10 | 0MJfrPQEH8aRFVG6G5UYDk  | Simple (R)_Occurence:Standard:802544 | A vérifier         |
| 11 | 0MJfrPQEH8aRFVG6G5UYE3  | Simple (R)_Occurence:Standard:802307 | OK                 |
| 12 | 0MJfrPQEH8aRFVG6G5UYEt  | Simple (R)_Occurence:Standard:802359 | A vérifier         |
| 13 | 0MJfrPQEH8aRFVG6G5UYFM  | Simple (R)_Occurence:Standard:802390 | A vérifier         |
| 14 | 0MJfrPQEH8aRFVG6G5UYFp  | Simple (R)_Occurence:Standard:802419 | A vérifier         |
| 15 | 1HerENAdXADwDGCwqIR9K4  | Simple (R)_Occurence:Standard:804423 | A vérifier         |
| 16 | 3AZasND4b4FVr4jG3p9dL   | Simple (T)_Occurence:Standard:795215 | Invalide           |
| 17 | 1Nn_4SjA54Uxnzy8OsUJY7  | Simple (R)_Occurence:Standard:795252 | A vérifier         |
| 18 | 1Nn_4SjA54Uxnzy8OsUJZV  | Simple (R)_Occurence:Standard:795180 | A vérifier         |
| 19 | 1Nn_4SjA54Uxnzy8OsUJa7  | Simple (R)_Occurence:Standard:795636 | A vérifier         |
| 20 | 1Nn_4SjA54Uxnzy8OsUJb6  | Simple (R)_Occurence:Standard:795573 | A vérifier         |
| 21 | 1Nn_4SjA54Uxnzy8OsUJd4  | Simple (R)_Occurence:Standard:795447 | A vérifier         |
| 22 | 1Nn_4SjA54Uxnzy8OsUJi9  | Simple (R)_Occurence:Standard:795130 | A vérifier         |
| 23 | 1Nn_4SjA54Uxnzy8OsUJku  | Simple (R)_Occurence:Standard:794955 | A vérifier         |
| 24 | 1Nn_4SjA54Uxnzy8OsUJxN  | Simple (R)_Occurence:Standard:795684 | A vérifier         |
| 25 | 27\$GVBDLT7WwhdSSWL6W1G | Simple (T)_Occurence:Standard:793722 | A vérifier         |
| 26 | 27\$GVBDLT7WwhdSSWL6W3b | Simple (T)_Occurence:Standard:793807 | A vérifier         |
| 27 | 27\$GVBDLT7WwhdSSWL6W5Y | Simple (T)_Occurence:Standard:795928 | OK                 |
| 28 | 2MdfG9Y9P9DOcowqZEJY4   | Simple (T)_Occurence:Standard:803574 | A vérifier         |
| 29 | 37MHhz6wrDe8e9Nv6skap8  | Simple (R)_Occurence:Standard:799319 | A vérifier         |

If you want to track the progress of the object, re-import your updated checklist into the documents folder of your HoloLens and load the checklist from the Checklist tool.

**Note:** In case of an issue detection, it is advisable to use the quick annotation tool available in the checklist to create an annotation that will be exported in BCF format and integrated into a BIM management platform. Importing .BCF files into NEXT-BIM is possible.

#### 4. Viewing in Tabletop Mode:

You can also view your checklist in tabletop mode.

1. Open the menu, select "Tabletop Mode" > "Checklist Tool."
2. Objects from the checklist will appear as colored circles on the model (the circle color corresponds to the object's status).
3. You can filter the display of objects based on their status in the same way as in immersive mode.

## **XI. Settings and Customization**

### **1. Configuring Settings**

In this section, you will learn how to customize your experience in NEXT-BIM Explorer by adjusting settings in both Tabletop and Immersive modes. Here's how to proceed:

#### ***a. Global Settings:***

- **Voice Commands Activation:** You can enable voice commands in the settings by clicking once on the "Voice Commands" icon (represented as a list of lines). A list of available voice commands will appear at the bottom right of your screen. Click the icon again to disable voice commands.
- **Voice Control:** The "Voice Control" icon (resembling a microphone) allows you to control voice commands. If voice control is disabled, voice commands will be ignored. By enabling it, they will be executed.
- **Passenger Synchronization:** In collaborative mode, if synchronization issues occur, you can use the "Reset passenger synchronization" icon to reset passenger synchronization.
- **Menu Screen Size Adjustment:** You have the option to enlarge or reduce the size of any menu screen by clicking on the "45, 60, 75cm" icon to change its size according to your preferences.
- **Hologram Brightness Adjustment:**

#### ***b. Tabletop Mode Settings:***

- **Opening the Menu and Selecting Settings:** To access settings in Tabletop mode, open the menu by turning your hand palm up, then select the gear-shaped icon ("Settings").
- **Adjusting View Distance:** In the settings, you can adjust your view distance to 15, 25, or 50 meters. However, please note that increasing the view distance can sometimes affect headset performance.
- **Ground Limit Management:** You have the option to limit or remove the ground limit. However, keep in mind that allowing viewing of all levels simultaneously can also impact headset performance.

#### ***c. Immersive Mode Settings:***

- **Opening the Menu and Selecting Settings:** To access settings in Immersive mode, open the menu by turning your hand palm up, then select the gear-shaped icon ("Settings").
- **Minimap Activation:** You can enable or disable the minimap in the settings. By activating the minimap (by clicking once on the icon with your pointer finger), a small minimap will appear at the bottom left of your screen, indicating your current position in the building. To disable the minimap, click the minimap icon again.
- **Minimap Placement Customization:** You have the option to change the placement of the minimap on the screen using the "Interface" icon. Select your desired minimap position by clicking on the interface icon (top or bottom of the screen).

These settings allow you to tailor your NEXT-BIM Explorer experience to your needs and preferences. Feel free to adjust these settings to optimize your use of the software.

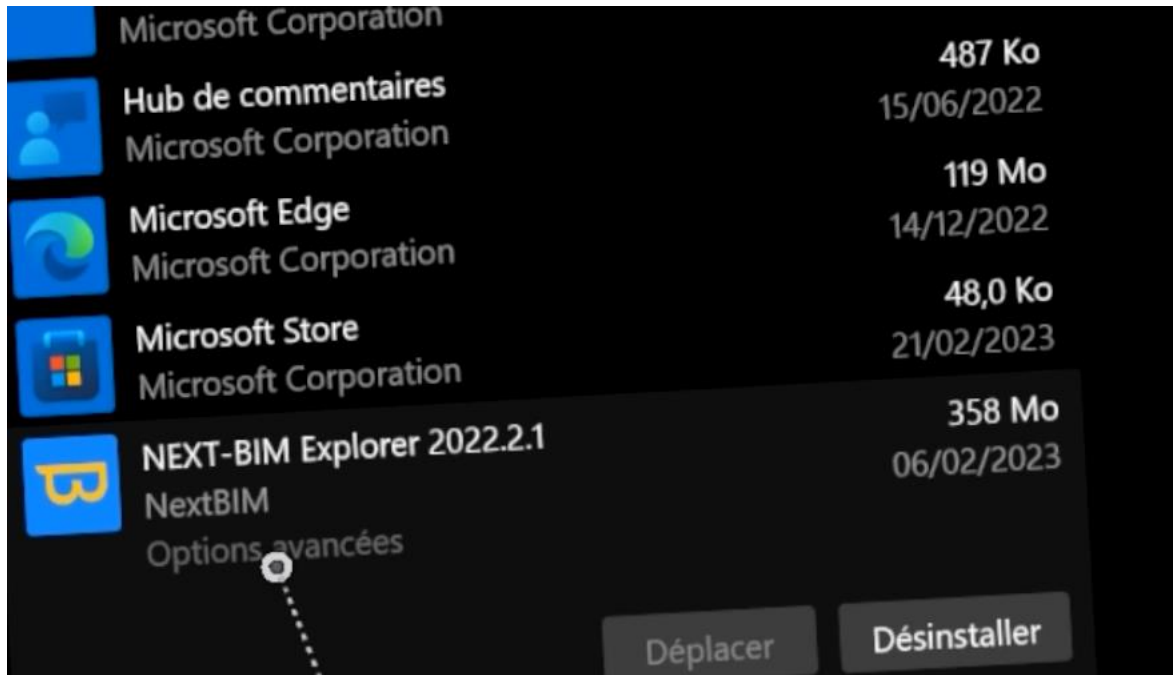
## XII. Additional Resources

### 1. Allowing Camera/Microphone Access in NEXT-BIM Explorer

1. Go to settings in the Windows menu.
2. Navigate to "Apps."



3. Scroll through the list of apps until you find NEXT-BIM Explorer.
4. Click on NEXT-BIM Explorer.
5. Click on "Advanced options."



6. Check the "camera" and "microphone" boxes to allow the application to use the camera and/or microphone.

## Specifications

|                    |            |
|--------------------|------------|
| Éditeur            | NextBIM    |
| Version            | 2022.2.1.0 |
| Application        | 41,4 Mo    |
| Données            | 317 Mo     |
| Utilisation totale | 358 Mo     |

## Autorisations pour les applications

Caméra

Activé

Micro

Activé

Images

Activé

Système de fichiers

Désactivé

Applications en arrière-plan

Activé

## XIII. Support, Updates, and New Features

All support documents are available on your client portal through the following link:

<https://www.next-bim.com/client-portal>

Find our **video tutorials** for NEXT-BIM Explorer here: <https://www.next-bim.com/tutorials>

**Access PDF documentation** for each software version and additional resources at: <https://next-bim.com/help-docs/>

**Submit a ticket** (development request, usage question, etc.): Contact your sales consultant or create an issue on Github [Release 2023.1.1 · NEXT-BIM/next-bim-releases · GitHub](#) (enhancement in progress)

**Schedule an appointment** with our support team : Contact your sales consultant (enhancement in progress)

**Vote for future developments:** in progress