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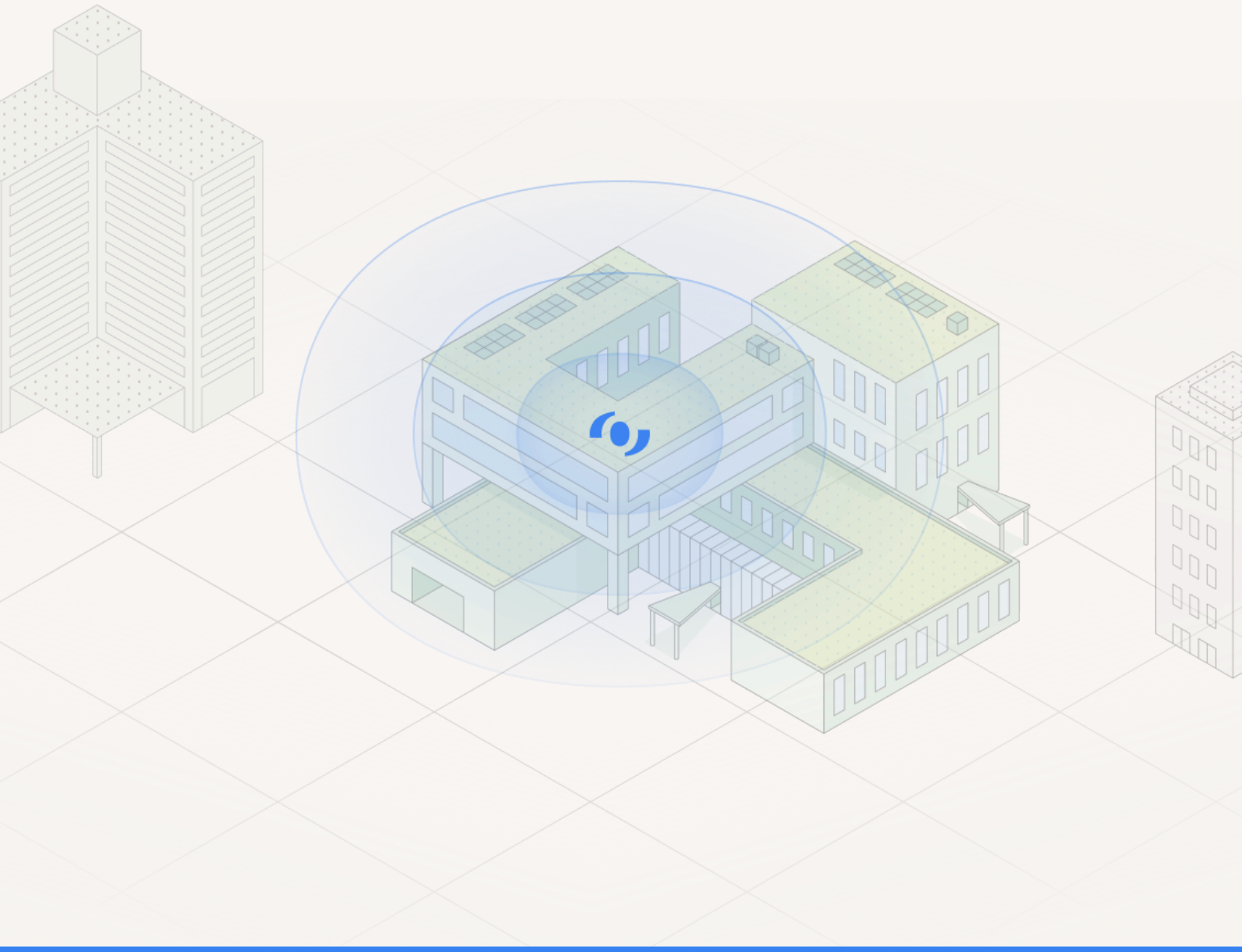
Setup Guide

A comprehensive guide to installing and using Tector sensors, gateways, and application.



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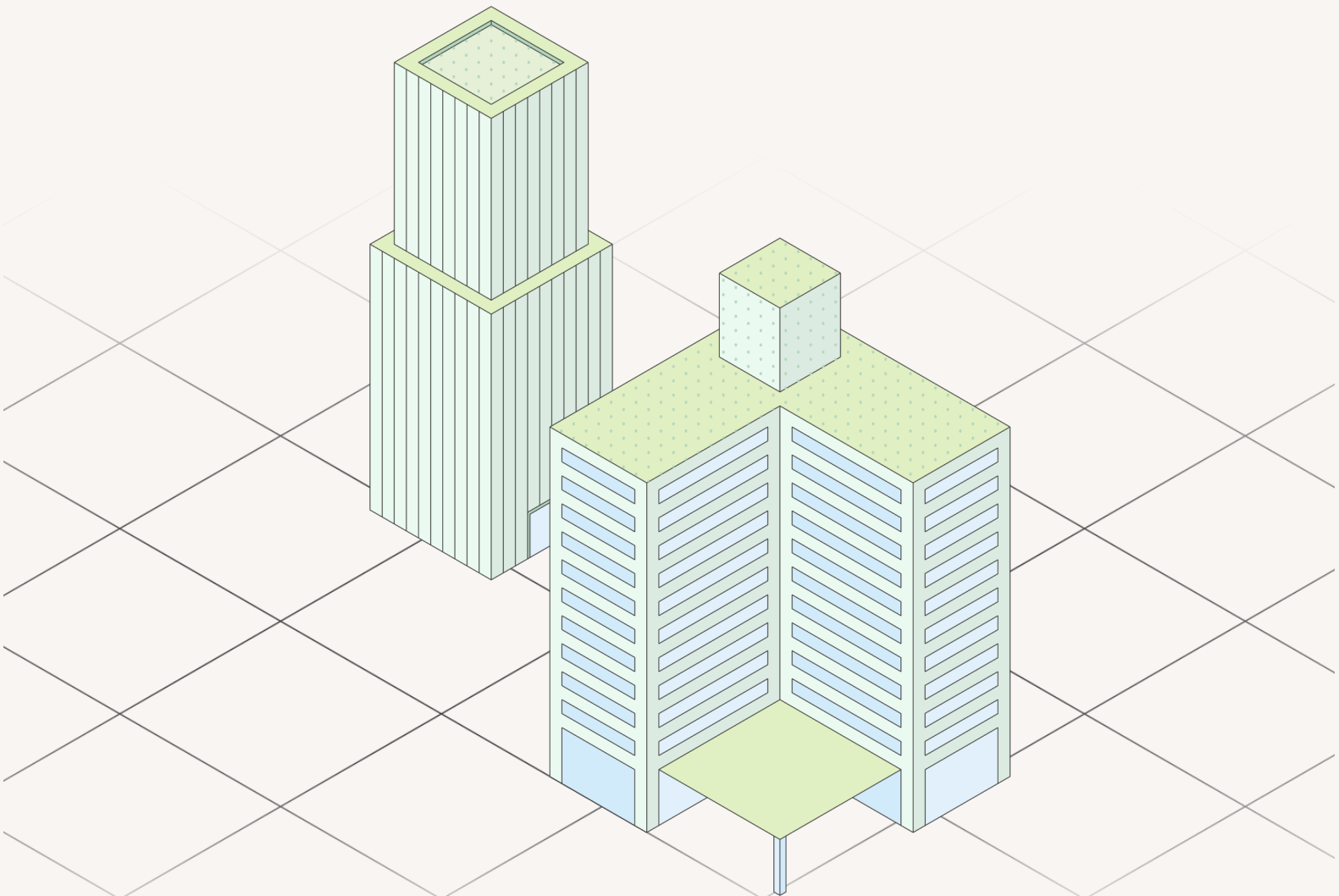
Prepare

Before going on site



Prepare

Login on computer and phone

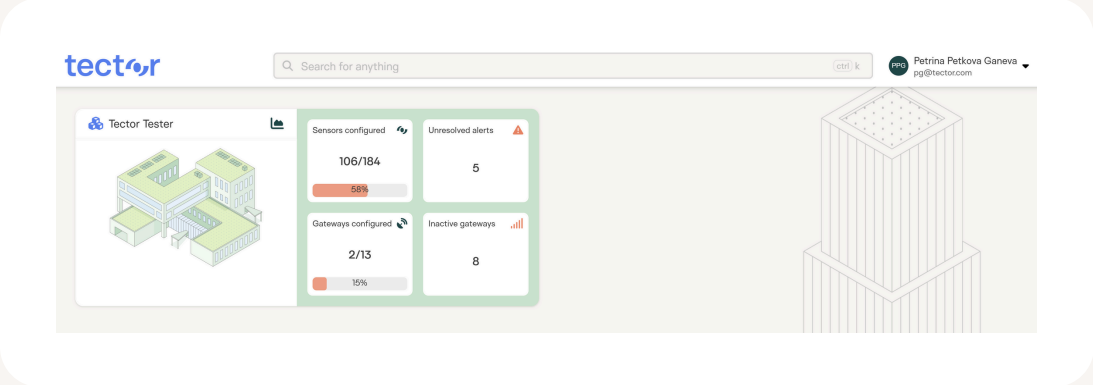
It’s important to login on both devices for easy registration on site with phone and managing the devices on the platform.

Login to the platform on this link: https://app.tector.com/

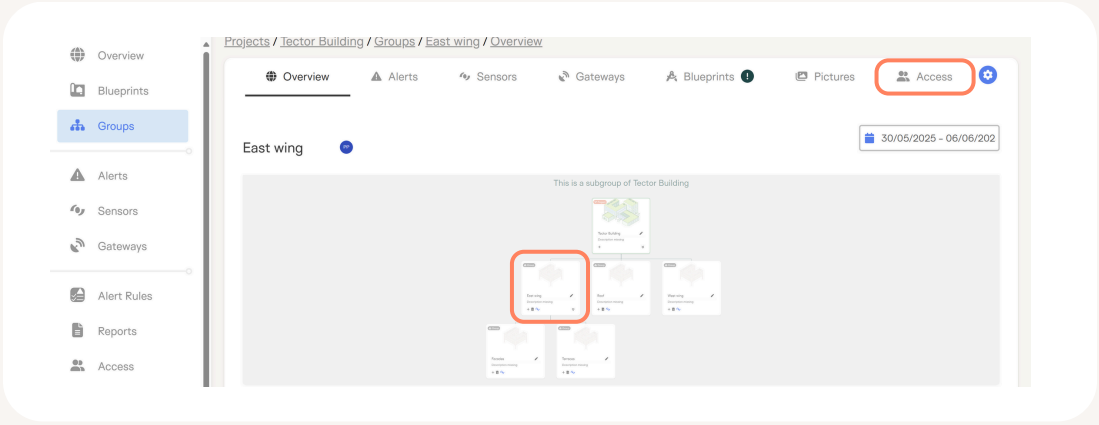
The buyer has received an email to create an account. If not, reach out to support@tector.com

The buyer will invite users to the platform - see next step. If you haven’t received login information, reach out to the buyer.

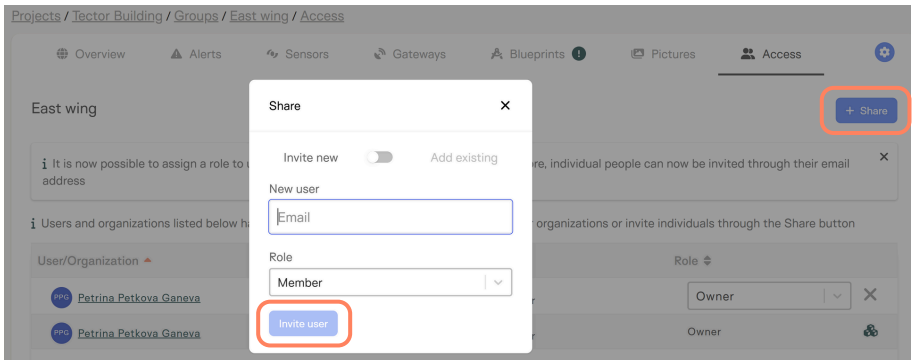
Add users to a project group



- Navigate to **Tector Dashboard** and press on your project group



- Select the group/subgroup you want to share from the **Group hierarchy**
- At the top right of the page, click **Access**



- Press **Share**, then type in the email and select the role for the person

User roles
Owner: Full access (can add and remove users and devices)
Member: Can contribute to projects (edit, upload blueprint, setup sensors. etc.)
Guest: Read-only access

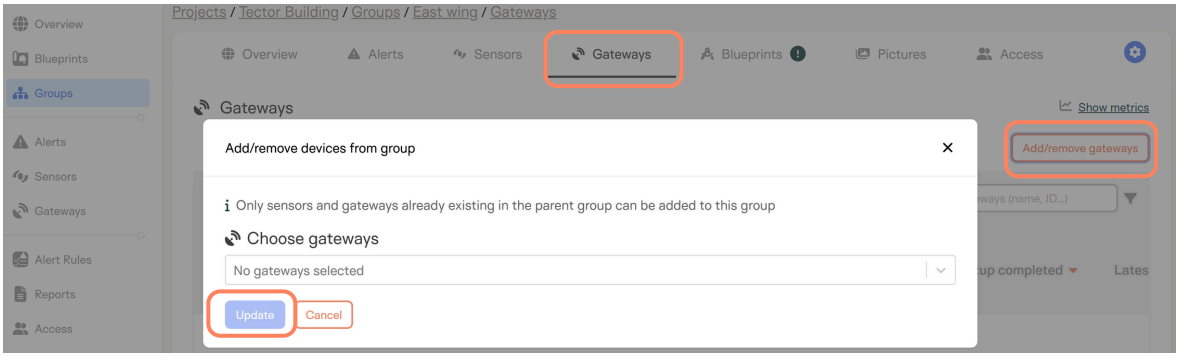
- The invited person should now get an email to create an account

Plug gateway into power and ethernet

Plug the gateway into power and find a location where the signal is not deflected and where the gateway will not be unplugged in the future.

Remember to install the antenna of the gateway that comes along in the box. The gateway can function just with the pre-installed SIM card, but if possible, plug ethernet cable into the gateway for a reliable backup connection.

Add gateways to a subgroup



If you want to add a gateway to a subgroup, simply go to the **Gateways** tab, press **Add/remove gateways** and type in the ID of the gateway and press **Update**.

Scan QR code for setup guide

In order to set up the gateway, scan the QR code with your phone and follow the setup steps:

- Describe the location of the gateway
- Upload a photo of the gateway and its surroundings for future reference

If your gateway isn't set up using the steps after reading the QR code, then you won't be receiving alerts if it goes offline.

Prepare plan for sensor locations

Note down the desired sensor placements on blueprints, physically or digitally. Have the blueprints ready for later, so that you can note down the ID (eg. woody9372) onto the blueprint as you go around the construction site to install the sensors.

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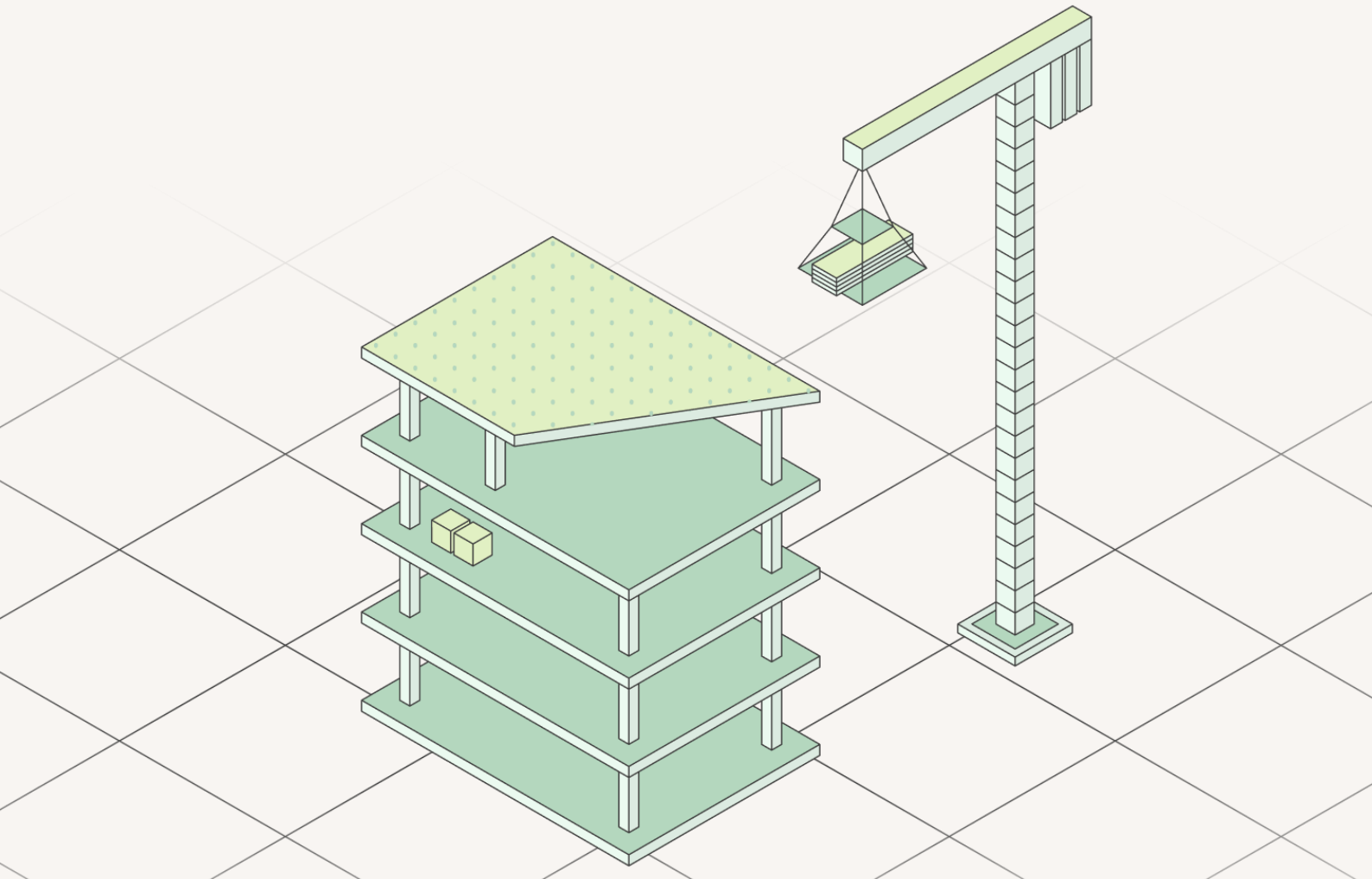
Installation

While on site



Installation

Sensor Types

There are two types of sensors

- Flatty – Sensor for flat roof monitoring. For installation instructions, go to page 9.
- Woody – Sensor for monitoring directly on Timber. For installation instructions, go to page 10.

Sensor for flat roof monitoring

Sensor for timber monitoring

Installation

Sensor for flat roof monitoring

To install the sensor, follow the steps below:

- Sensors are turned on by default unless otherwise agreed.
- Identify the desired installation area on the flat roof.
- Cut a round hole in the insulation with a diameter of 11cm, which is slightly larger than the sensor. This allows you to easily place the sensor.
- Register the sensor as described on page 17.
- Put insulation above the sensor.

Please note:

- The sensor should never be exposed directly to rain and shall be covered immediately upon installation

Sensor for monitoring directly on timber

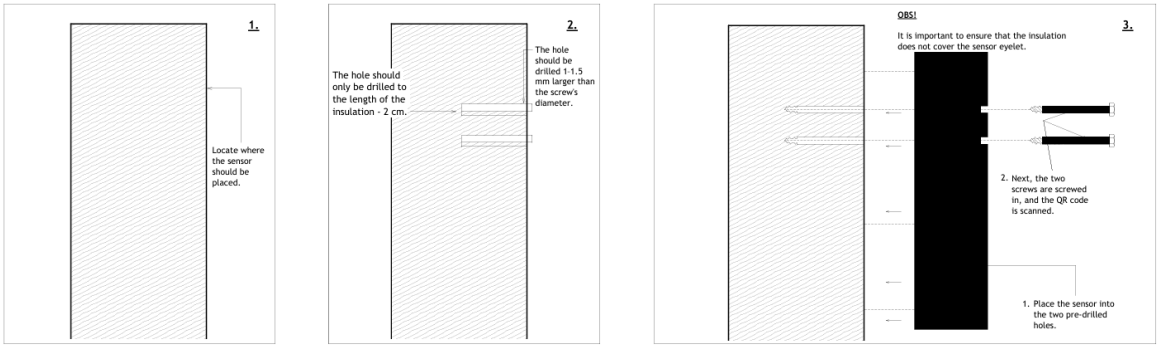
To install the sensor, follow the steps below:

- Ensure the sensor is turned on.
- Identify the desired installation area on the timber.
- Orient the sensor such that the “eyes” of the sensor are directly on where you wish to monitor.
- Place 2 of the accompanying screws into the “eyes” of the sensor
- Using a drill, fasten the sensor onto the timber surface via the screws.
- **Optional**: Secure the sensor using the top cover.
- Register the sensor as described on page 17

Sensors with only insulated pins

When you are installing a sensor with only insulated pins, then always **predrill holes** for the screws with the following specifications:

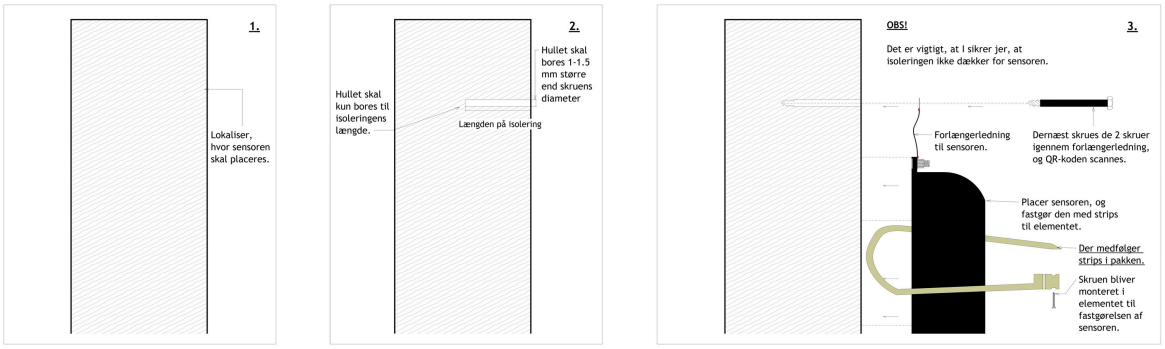
- the length of the insulation **minus 20 mm** (e.g. if the insulation on the screw is 45 mm then predrill a hole that is 35 mm)
- 1mm - 1.5mm thicker than the diameter of the screw



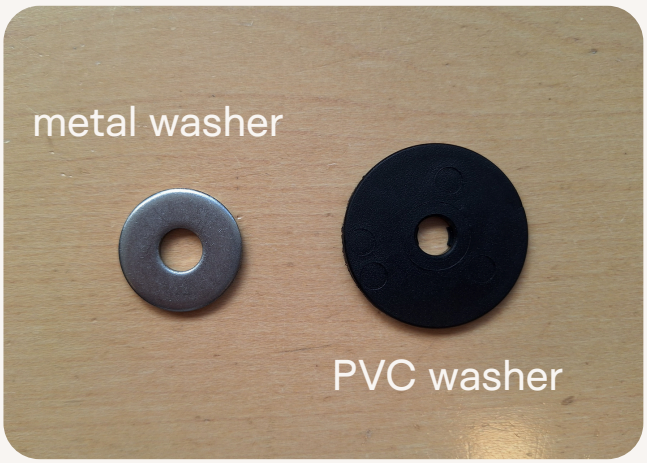
Sensors with extensions and insulated pins

When installing sensors with extensions and insulated pins, select the place where the pins will be located and predrill holes with the following specifications:

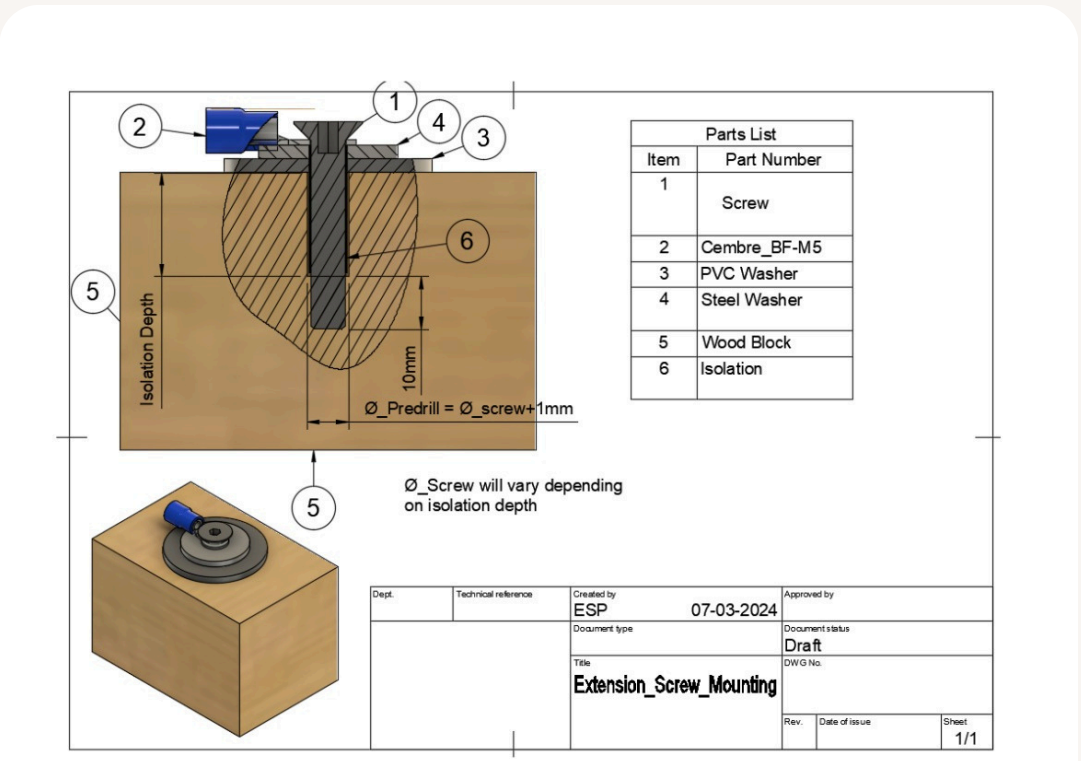
- the **same length** as the insulation (e.g. if the insulation on the screw is 45 mm then predrill a hole with that length)
- 1mm - 1.5mm thicker diameter than the diameter of the screw



When installing a sensor with an extension, it's important to remember the accompanying metal and PVC washers in between the extension and the timber to prevent surface readings.



The correct order of installation, as shown in the illustration below, is to place the PVC washer closest to the wood, then the metal washer, then the eye of the extension and finally the screw at the very top. Make sure you are not installing the pins at an angle- they should be perpendicular to the surface, so the insulation doesn't tear.



When installing the pins, remember to ensure that:

- The head of the screw has contact with the metal plate in the eyes of the sensor or with the metal washers
- The pins are not measuring across panels of timber in, for example, LVL

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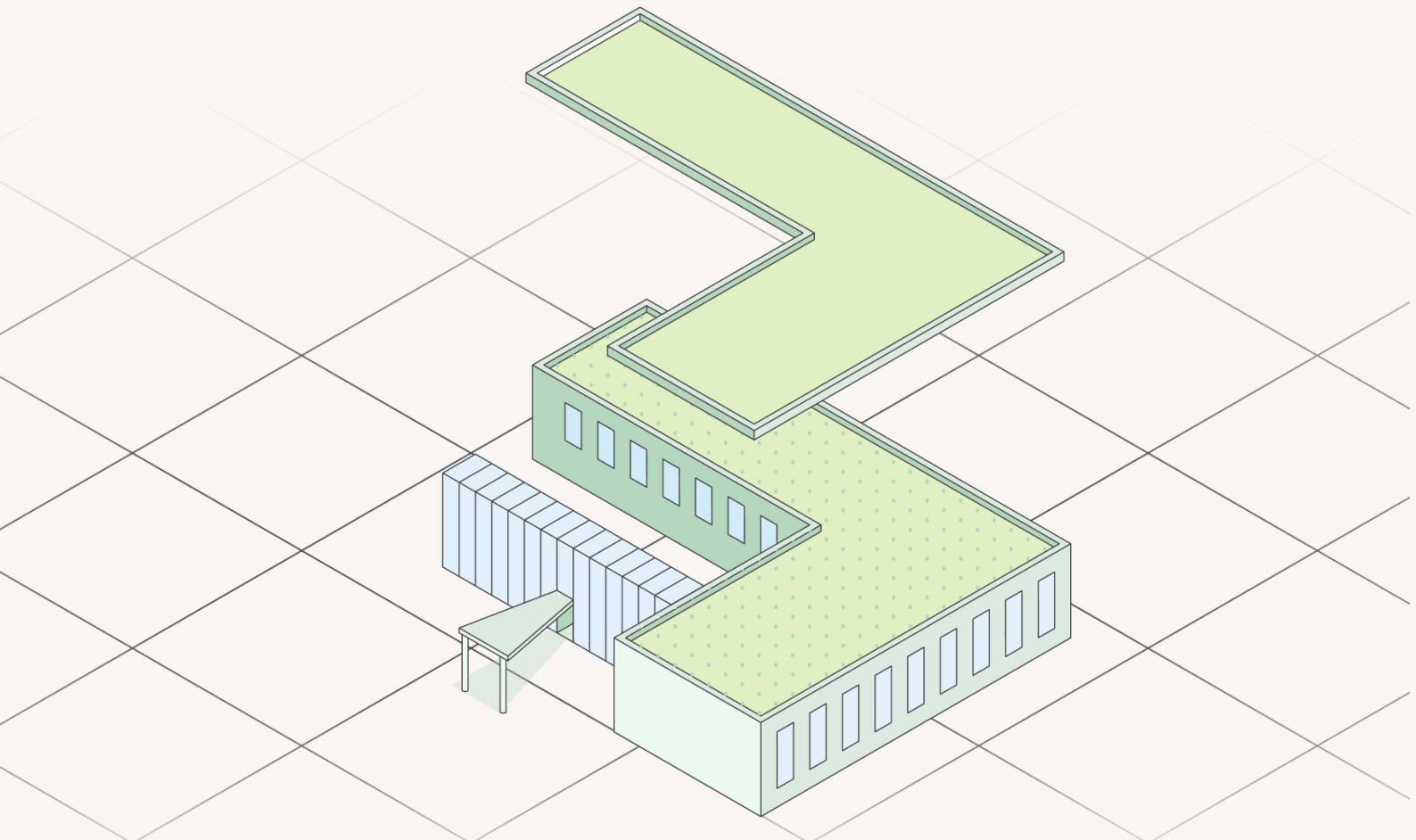
Register

While on site



Register

Same steps for all kinds of sensors

Scan the QR code with the phone's camera and follow setup instructions:

- Fill out location details
- Upload 2 photos. One from a distance and one from +2 m away
- Fill out **Placement** and **Climate** tags or copy from previously installed sensors
- Add additional notes if necessary.

Note down the sensor's placement and ID on a physical blueprint, so that you can attach the right sensors to the right place on the digital blueprint in the platform on your computer afterwards.

Repeat until all sensors are registered.

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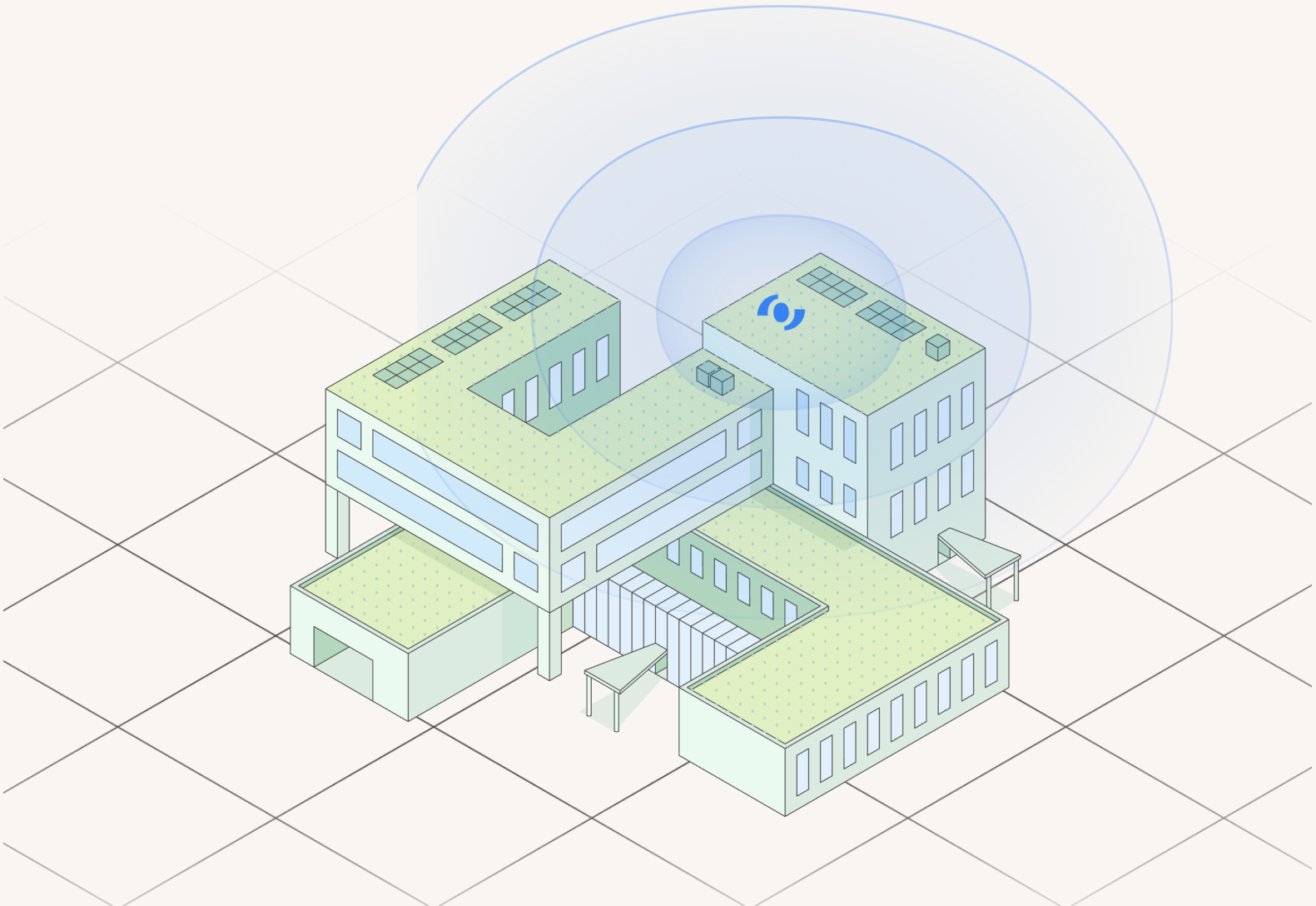
Finalise

Post-installation



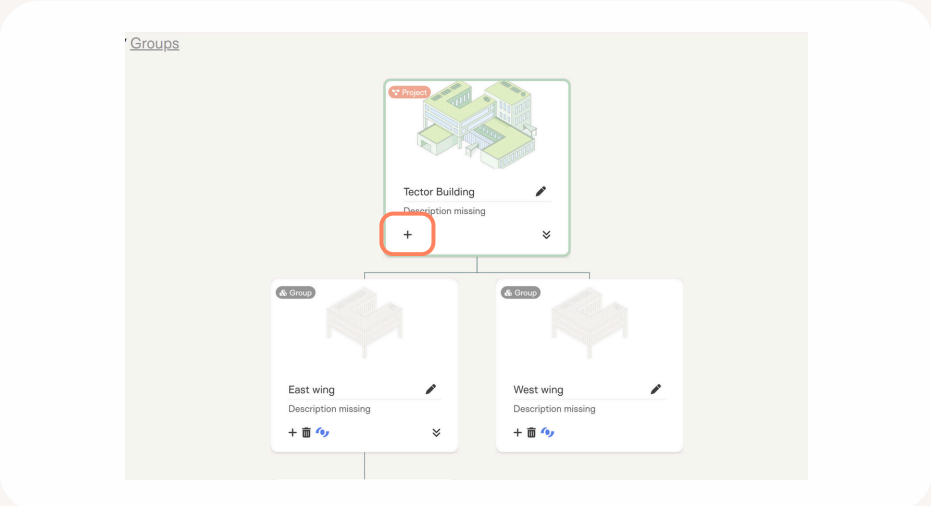
Finalise

Create groups

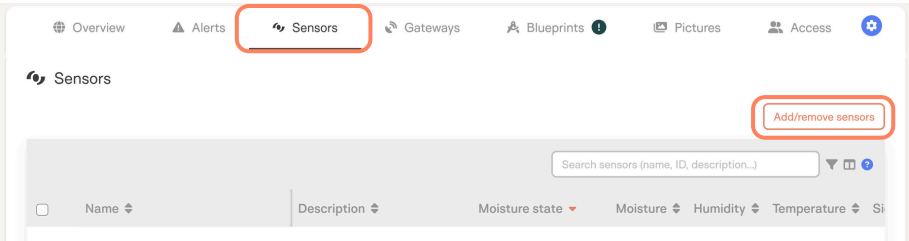
When your order is finalised and sent, all sensors will be placed in one project group. For better overview and in order to compare sensor readings more efficiently, we recommend you divide the sensors into different subgroups. You can choose your own structure. For example, you can divide groups into different buildings, or different floors or areas such as Facades, Roof, Basement, Wet Rooms. It can be beneficial to divide the subgroups based on the blueprints you want to upload.

To create a subgroup use one of the following methods.

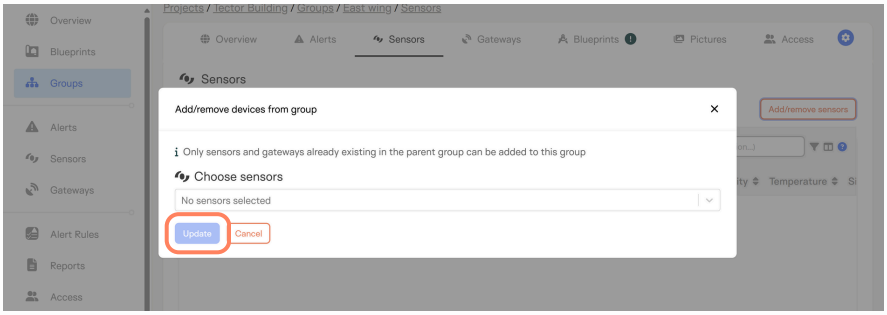
Option 1:



- Go to the **Group Hierarchy** in the group overview
- Press the + icon to create a subgroup
- Fill out subgroup name

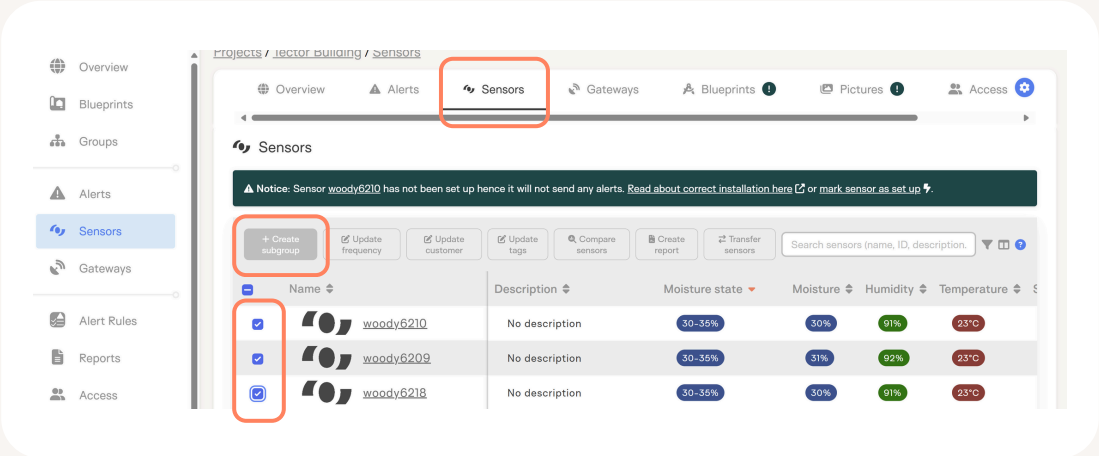


- Click on the newly created subgroup and go to **Sensors** tab
- Press the **Add/remove sensors** button in the top right corner



- Fill out the IDs of the sensors you want to add and press **Update**

Option 2:

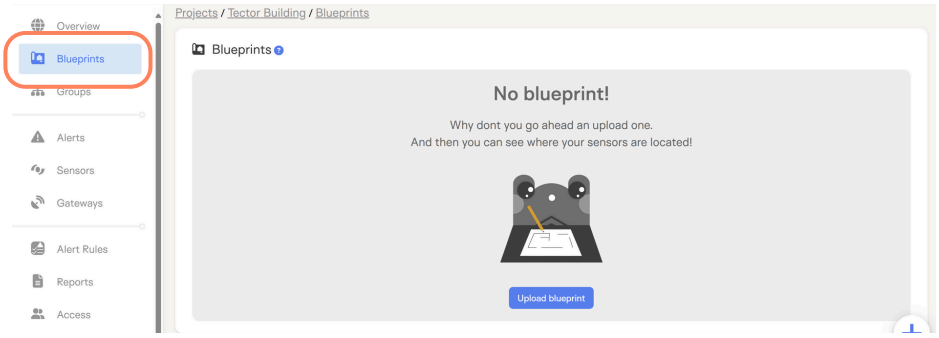


- Navigate to your main project group
- Go to **Sensors** tab
- Check the checkboxes of the desired sensors in the list view
- Press the **+Create subgroup** button

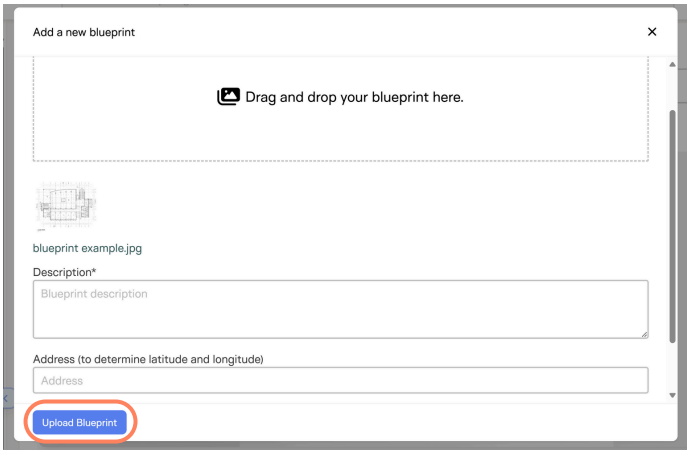
Upload blueprint and attach sensors

The blueprint itself must consist of a single image file that can be selected from the user's computer/mobile and must be of the jpg, png, bmp, or heic file format. If the blueprint is uploaded as a pdf, the blueprint must appear on the first page of the file.

Steps to upload the blueprint:

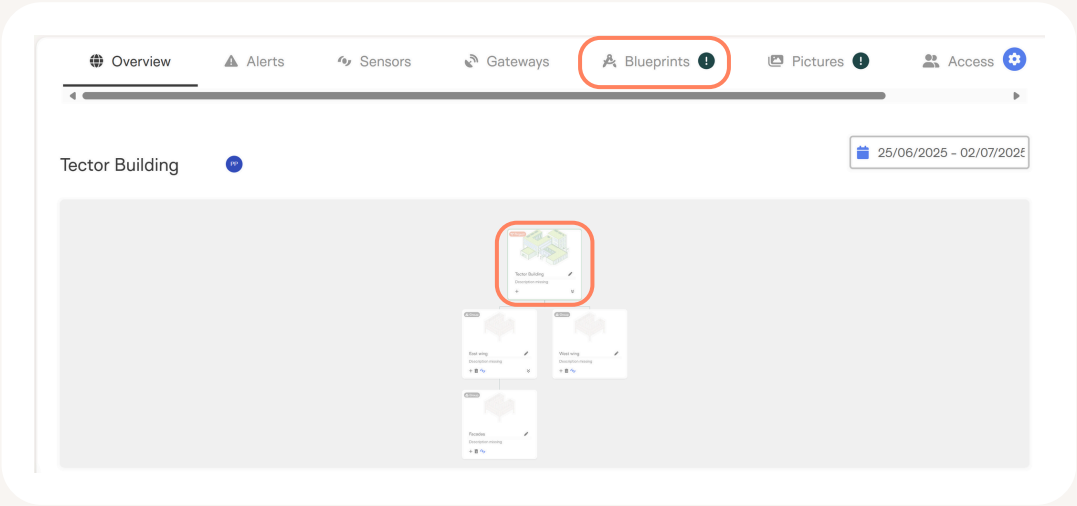


- Once in the main project group, go to **Blueprints** in the sidebar

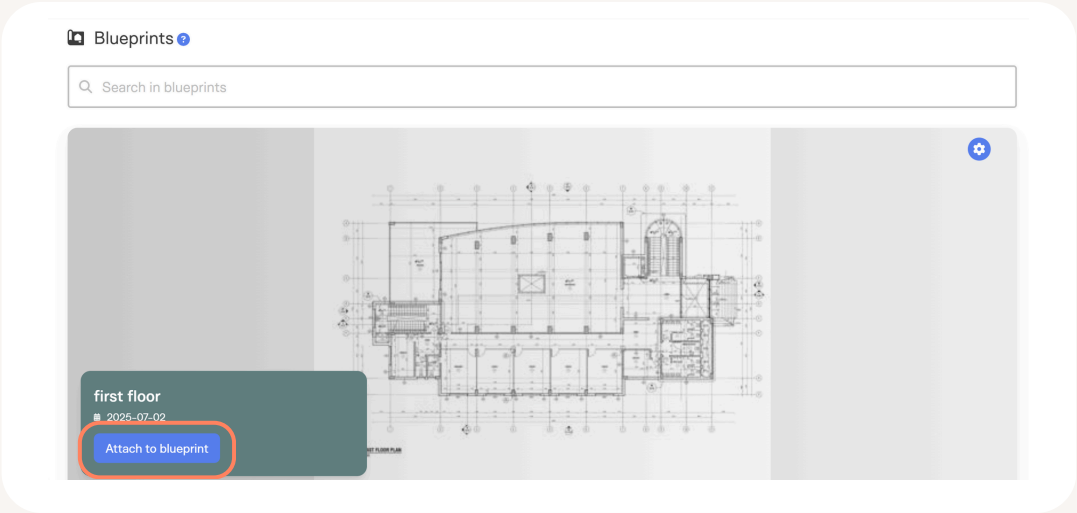


- Fill out name, description and address and press **Upload blueprint**

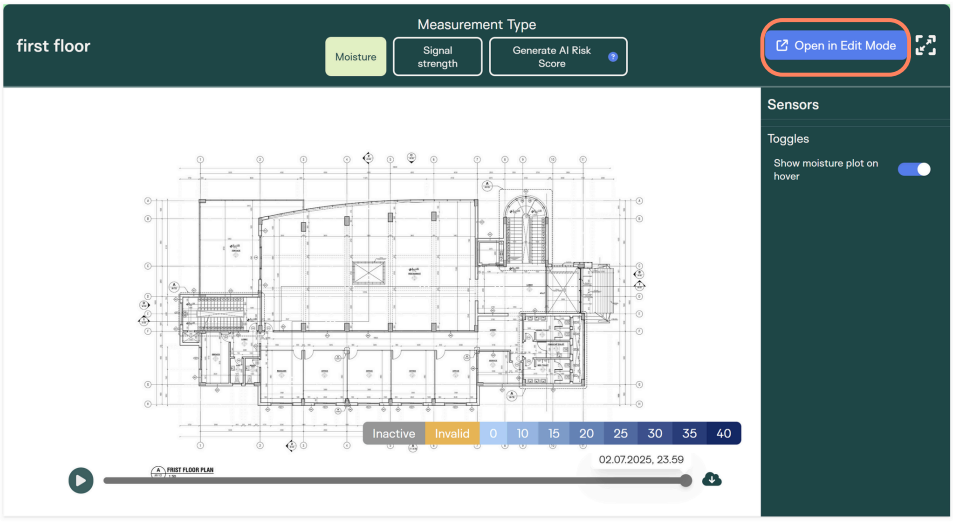
Steps to attach blueprint and add sensors:



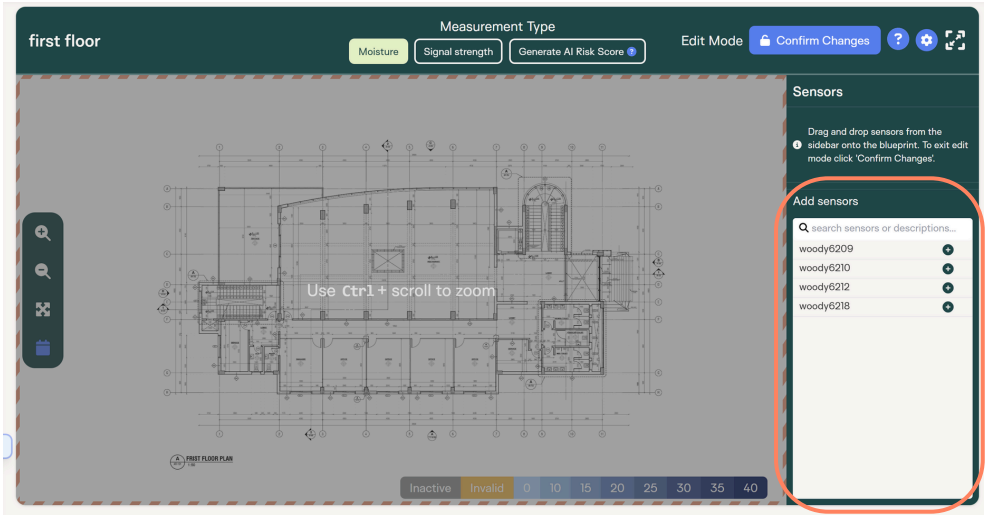
1. Go to the **Group Hierarchy**
2. Click the desired group
3. Go to the **Blueprints** tab



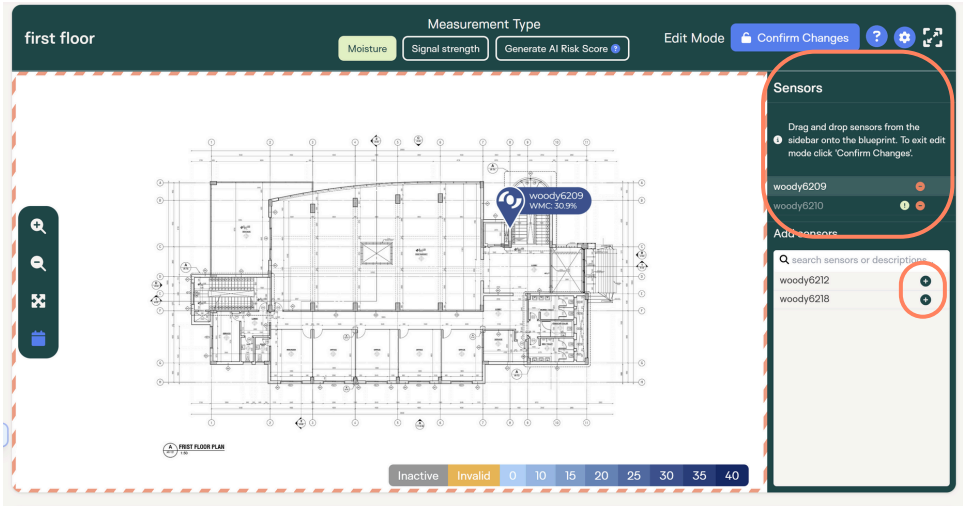
4. Find the uploaded blueprint and press **Attach to blueprint.** Multiple blueprints can be attached to the same group.



5. Once you have attached a blueprint, press on the **Open in Edit Mode** button.



6. Now that you have attached the blueprint to a group, all the sensors in that group will appear in the **Add sensors** field. You can also search for specific sensors by entering their ID in the search bar.



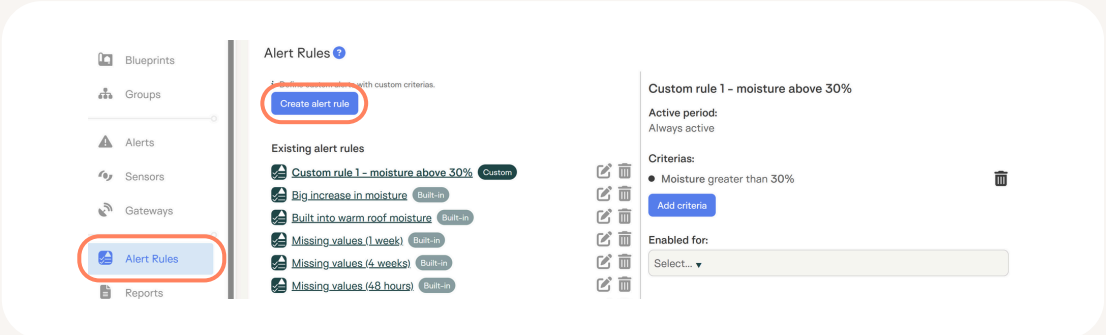
7. Press on the + icon next to the sensors to attach them to the blueprint. Once they appear in the **Sensors** field, then drag and drop them to the desired location.

8. Press **Confirm changes** to save your edits.

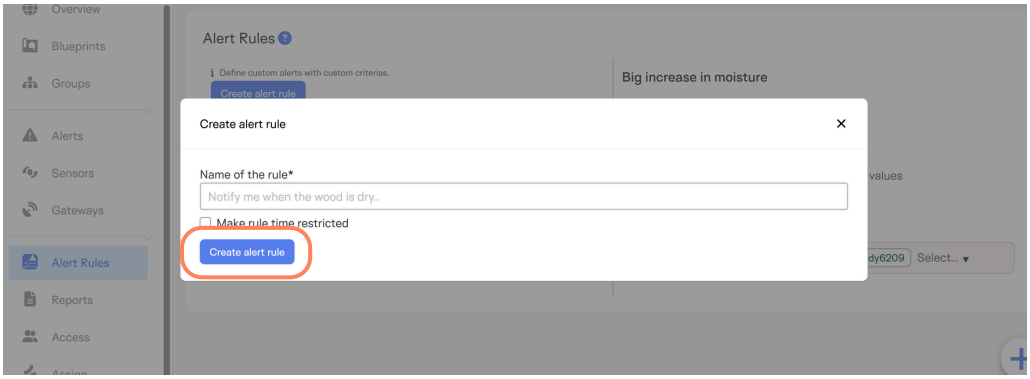
Set up custom alerts

Tector alert rules are enabled by default, **but the alerts are disabled until the sensors are set up correctly**. Therefore, make sure you have completed the registration process described on p. 22 to get the most out of the alert system.

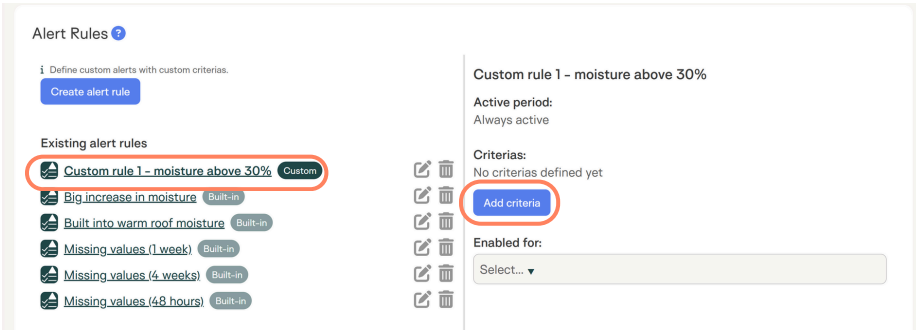
To set up additional custom alerts:



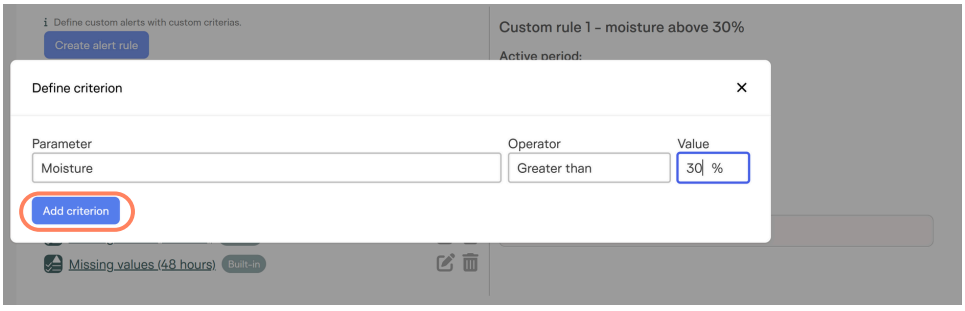
- Go to **Alert rules** in the sidebar
- Press **Create alert rule**



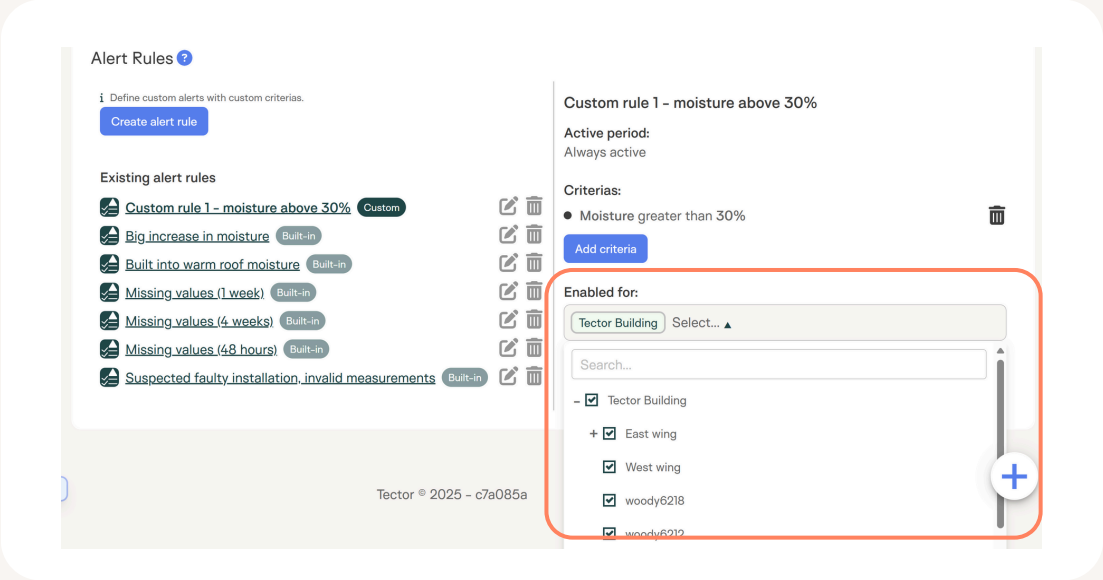
- Fill out the name and press **Create alert rule**



- Click on the newly created alert rule and press on the **Add criteria** button on the right



- Fill out details of the criterion (example: moisture greater than 30%) and press **Add criterion**



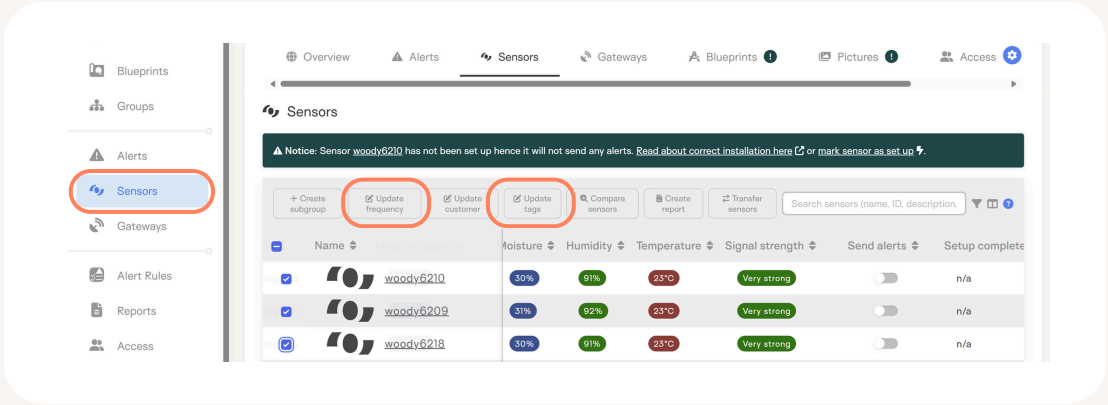
In order to add the newly created rule to a group or individual sensors then:

- While you are still on the **Alert rules** page, press the rule you want to add

- Press **Enabled for** and from the dropdown menu select either the whole group, a subgroup, or individual sensors

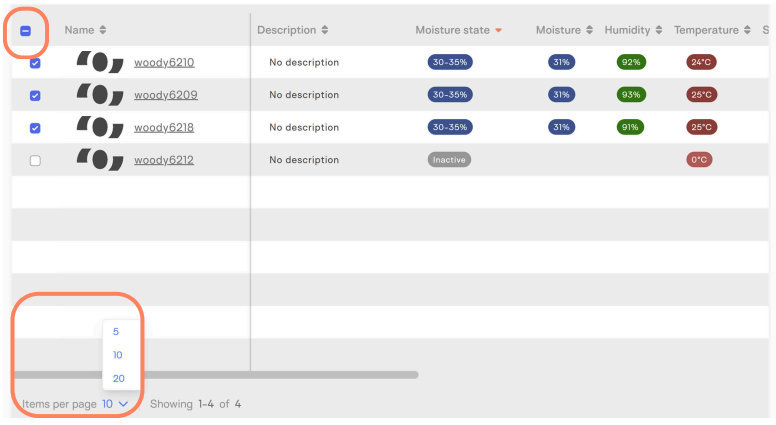
Refine

Bulk update tags or transmission frequency.



- Go to **Sensors** in the sidebar of a given group
- Check the checkboxes of the desired sensors
- Press the **Update frequency/Update tags** button that appears
- Fill out details and confirm

Tip:



Press the **Items per page** dropdown field underneath the list to choose the number of sensors shown on the page (5, 10, or 20). Or press the checkbox in the top-left corner to select all rows in the table including the ones on the other pages in order to make bulk edits.

Other tips

- Go to **Groups** in the sidebar and select your project group
- Press the **Column** icon in the right of the header of the table
- Check the **All** checkbox

From there you can quickly see how your sensors are registered and get a good overview.