

# Install Planning and Surveys

Surveying and planning installs

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# Taking Panorama Photos

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A direct line of sight to a Supernode or hub node is required to connect to NYC Mesh. To help the install team determine whether a line of sight is possible, we ask new members to provide a panoramic photo of the view from their rooftop. We use these photos to identify an existing hub/node to which your building can connect.

## Where to find the panorama photo function on your phone

Most cell phone cameras have panoramic photo capability in camera mode.

### **iPhone**

On iPhones, this feature will be a scrollable option on the bottom of the camera screen.

 alt="Placeholder for iPhone camera interface showing panoramic mode option" data-bbox="53 475 287 490"/>

### **Android**

On Android phones, this feature may be listed under “more” or “...”.

 alt="Placeholder for Android camera interface showing panoramic mode option" data-bbox="53 581 287 596"/>

## Taking a good panorama image

Rooftop panorama images should show as much of the surrounding skyline and other buildings as possible. We are looking to see if any of our existing hubs or supernodes are visible from your rooftop. For this reason please take your panorama photos from the highest point on the roof if possible (and safe!).

If you are also willing and able, please feel free to annotate cardinal directions (North, South, East, West) and other nearby landmarks (nearby streets, lower Manhattan, midtown, prospect park, etc) This helps our volunteers get their bearings and figure out which direction your photos are looking.

## Best practices for roof panoramas





## Examples of unusable panorama photos



Photo taken in the evening, too dark. Can't see anything.



Too much glare from the sun. Need to re-take photo closer to midday.

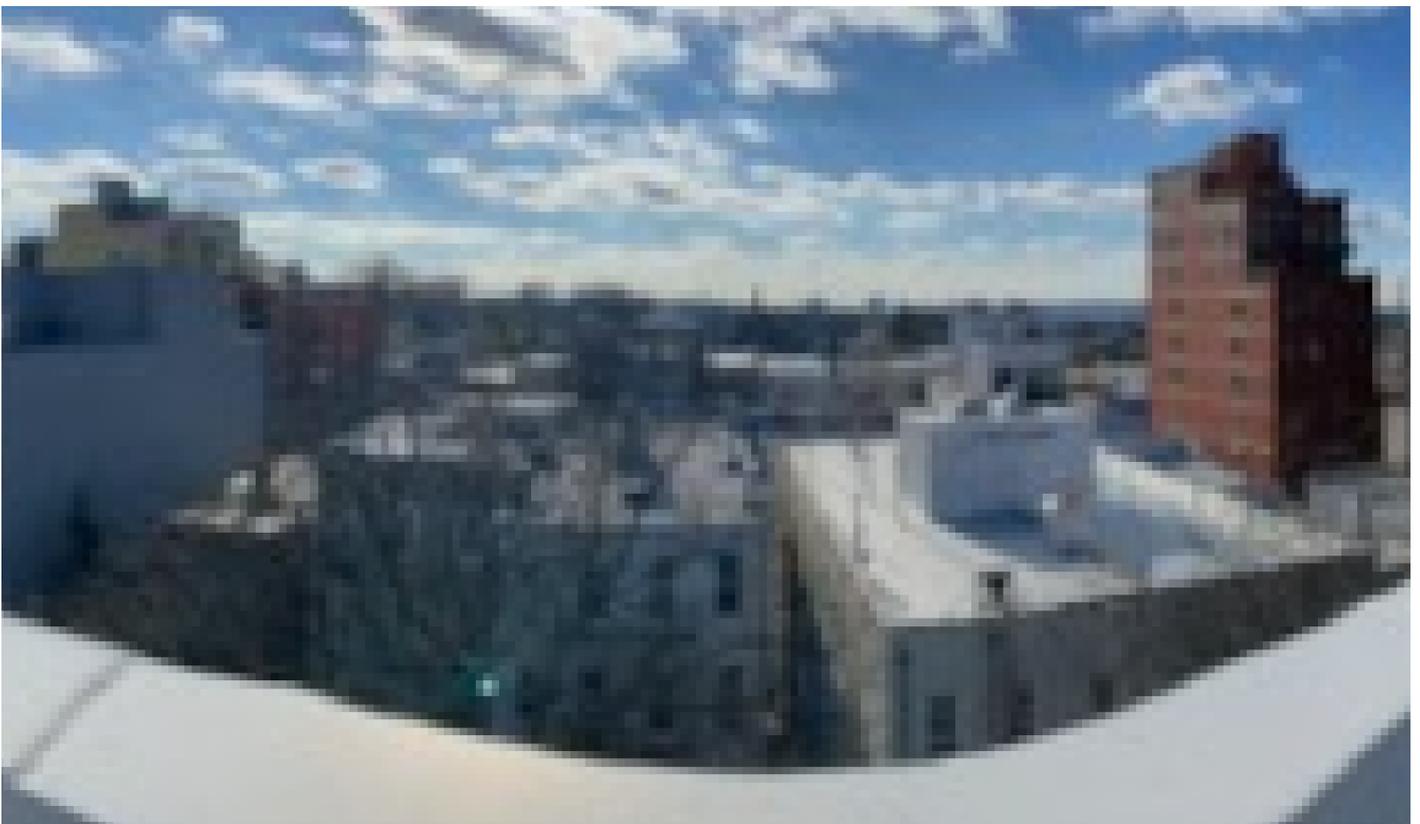


Photo is too low quality, can't see any details. (May need to re-take photo with a better camera or try re-sending as an attachment instead of inserting into the email.)

# Surveys

## Site surveys

Site surveys for large buildings help us determine if wireless connection is possible and how we will run cable to apartments. Take photos at each step as you go through the building.

## Mounting points on roof

Identify the best mounting points on the roof.

## Bandwidth test

Take a battery and do a bandwidth test to the hub or hubs that they are planning to connect to

(This might not be possible if the mounting point is in the water tower)

## Conduit or drop point for cable from roof to basement

For large buildings we need to run cable from the roof to the basement. Try to identify existing conduits we can use. We can't use ISP's conduits, unless the building owns them.

## Telecom closet access

All large buildings have a telecom closet in the basement. This is one place we might put a panel and run our cables from there.

## Raceways into apartments

Hallways often have conduits running where the wall meets the ceiling. This is called a raceway. See if this is owned by the building and we can use that.

# Unused wiring that we could use.

Often there is unused or abandoned wiring that we can use. This might be ethernet, coax or even fiber. This will save a huge amount of time and money if we can identify that.

## Documentation

When finished, write up a google doc of the survey with embedded photos. We often share these as pdf's with the interested building managers.