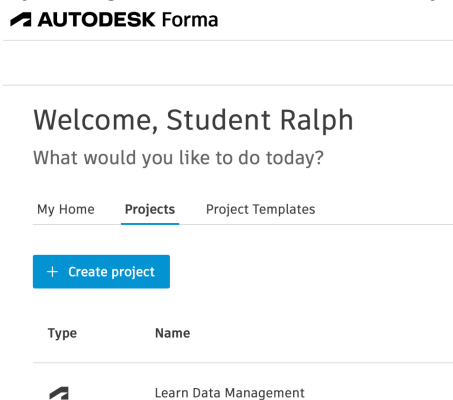


Practice exercise – Answer Key

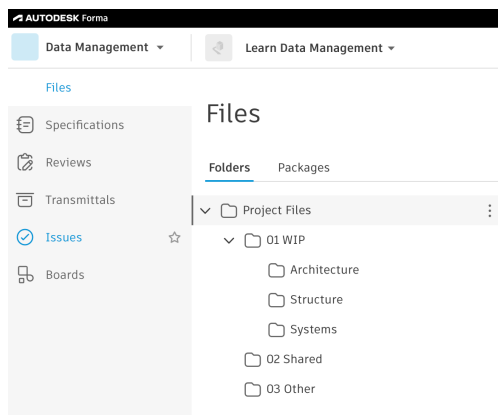
Explore drawings and models in Forma Data Management

The following steps were completed in the videos for **Module 2: Navigate sheets and models in Forma Data Management**. If you followed along in the videos, you are ready to start the exercise that follows these steps. If you have *not* already performed these steps, make sure to complete them first:

1. You gained access to the Learn Build Project on Autodesk Forma for Construction by using the invitation sent to you by your instructor.



2. You created a folder structure in Data Management to include 01 WIP, 02 Shared, and 03 Other.



3. You uploaded the files from the dataset folder you downloaded for this course into the corresponding folder on Data Management.
 - a. You uploaded the **Architectural Model.rvt** file from the Version 1 folder in the dataset folder to the Architecture folder on Data Management.
 - b. You uploaded the **Structural Model.rvt** and **Structural Sheets.pdf** files from the Version 1 folder in the dataset folder to the Structure folder on Data Management.
 - c. You uploaded the **Systems Model.rvt** file from the Version 1 folder in the dataset folder to the Architecture folder on Data Management.
 - d. You uploaded the other files on the dataset folder into the 03 Other folder on Data Management.

Once these steps are completed, you will be ready to start the exercise. You will use the viewing, markup, measurement, and model navigation tools to explore project information and answer the questions provided.

Learning objectives:

By the end of this exercise, you should be able to:

- Navigate 2D drawings and 3D models in Data Management.
- Use markup and measure tools to review project information.
- Explore model information using sheets, views, and the model browser.
- Create and save viewpoints for model review.

Success criteria:

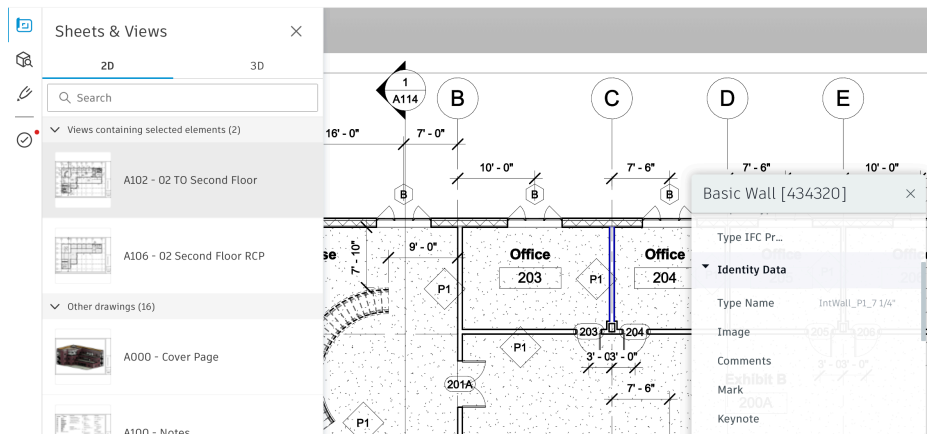
- 2D drawings are successfully opened and navigated in Data Management.
- Markup and measure tools are used to review and annotate project information.
- Sheets, views, and model elements are explored using the available navigation tools.
- Model browser filters are applied to locate project information.
- Viewpoints are saved to capture specific model locations.
- Exercise questions are completed and answers are submitted for review.

Answer the following questions based on the 2D sheets from the architectural model. Make sure you are working with Version 1.

1. What is the type name of the wall located between Office 203 and Office 204?

Answer Key

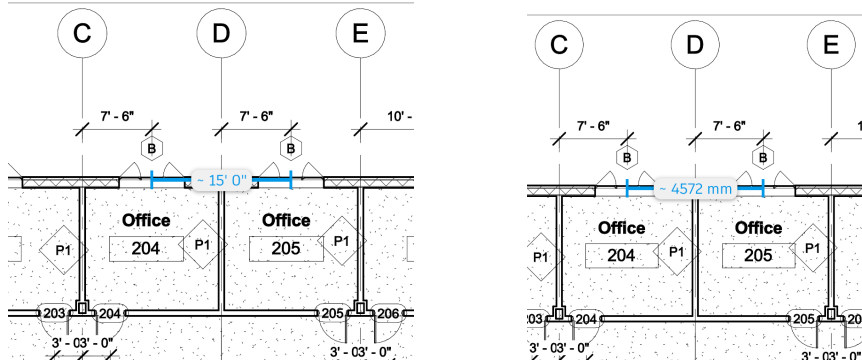
The type name is IntWall_P1_7 1/4".



2. What is the distance between the center of window B in Office 204 and the center of window B in Office 205?

Answer Key

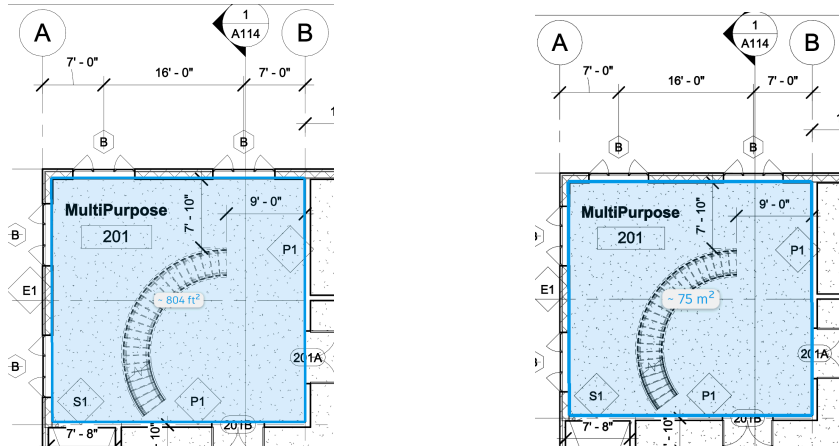
The distance is 15 feet (4572 mm).



- What is the area in square feet (or square meters) of the multipurpose room 201 on sheet A102?

Answer Key

The area is 804 SF (75 m²).

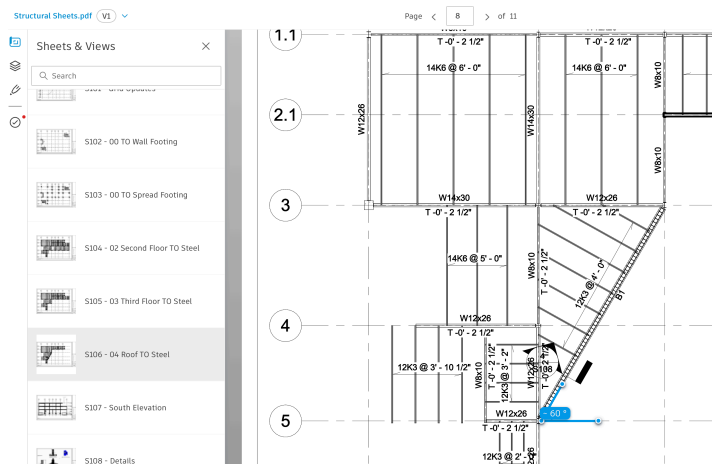


Answer the following questions based on the structural sheets.

- On Sheet S106, what is the angle between beam B1 and Grid 5?

Answer Key

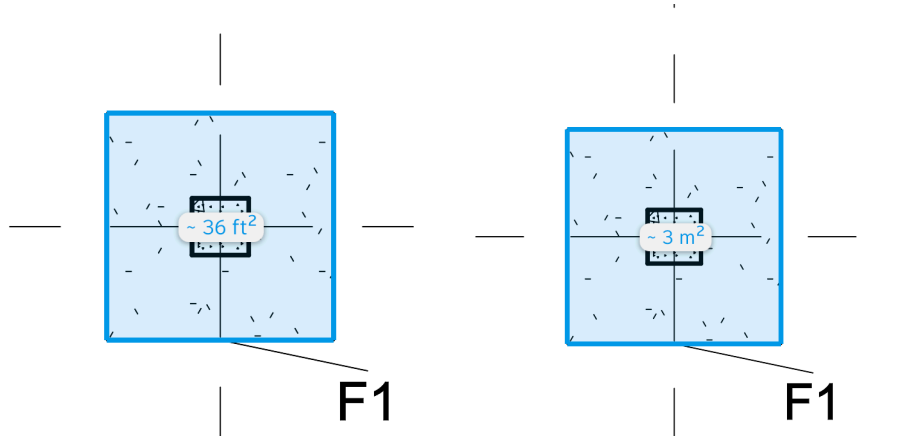
The angle is 60 degrees.



5. What is the cross-sectional area in square feet (square meters) of footing F1 from sheet S103?

Answer Key

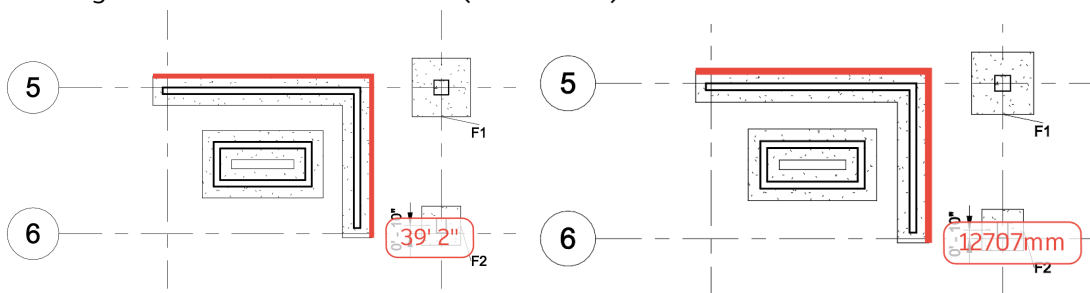
The area is 36 SF (3 m²).



6. On sheet S103, what is the total length in feet (millimeters) of the wall footing highlighted in red?

Answer Key

The length is 39 feet and 2 inches (12707 mm).

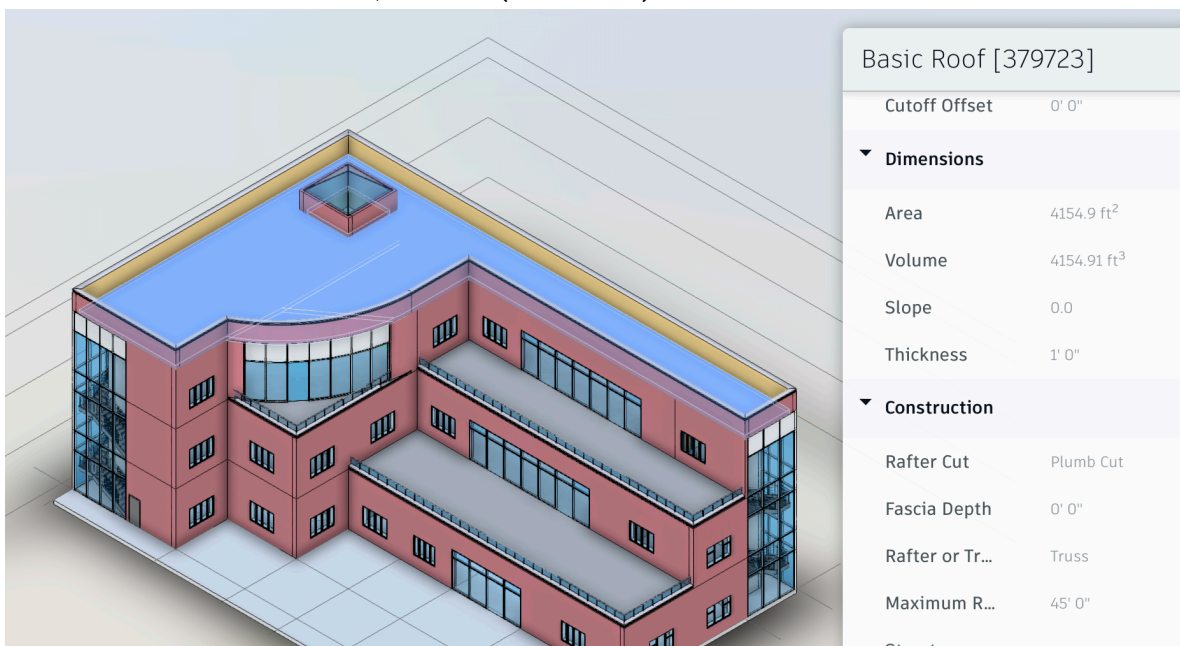


Answer the following questions based on the architectural model, make sure you are using version 1.

7. What is the volume of the roof in cubic feet (cubic meters)?

Answer Key

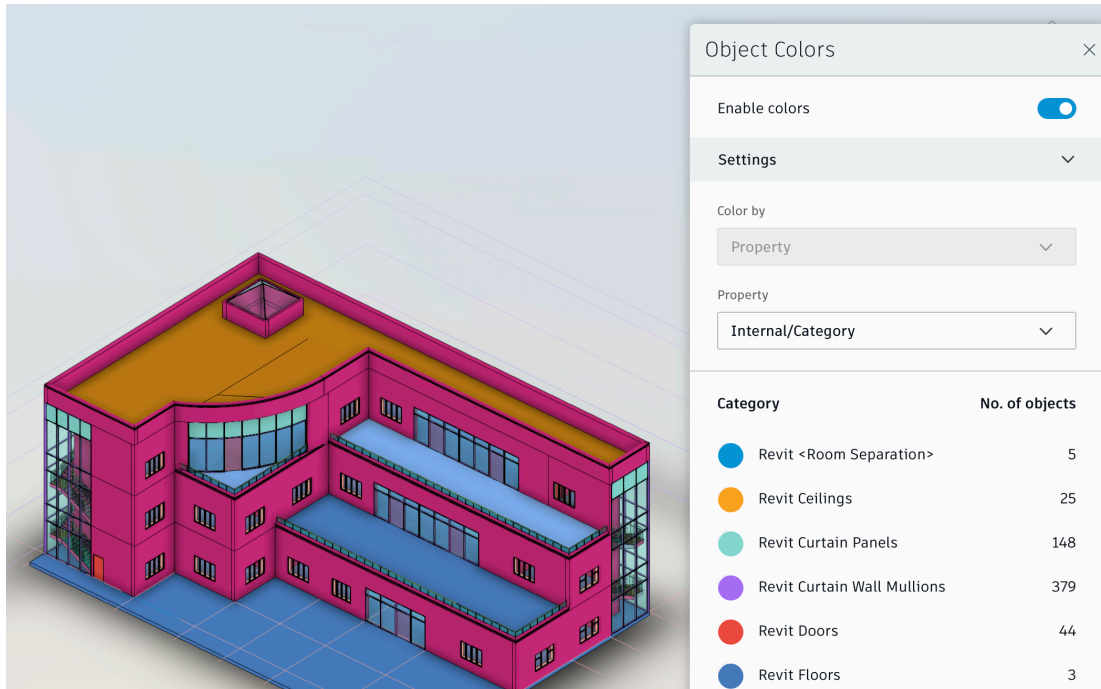
The volume of the roof is 4,154.9 ft³ (117.65 m³).



8. Color code the model based on Internal/Category. How many curtain panels are there in the model?

Answer Key

There are 148 curtain wall panels.



9. What are the X, Y, and Z coordinates of the skylight top in decimal feet (decimal meters)?

Answer Key

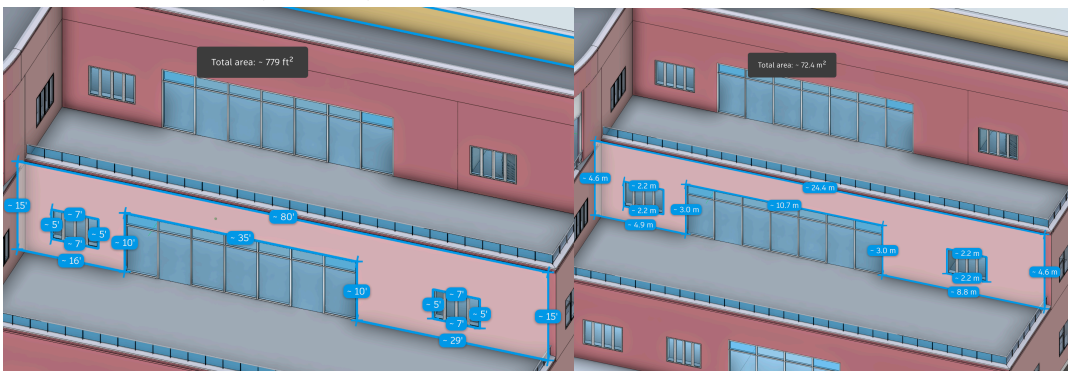
The coordinates are X: - 49.0' (14.9m); Y: 15.2' (4.7m); Z: 54.9' (16.7m).



10. What is the area of the brick wall on the balcony of the second floor in square feet (square meters)?

Answer Key

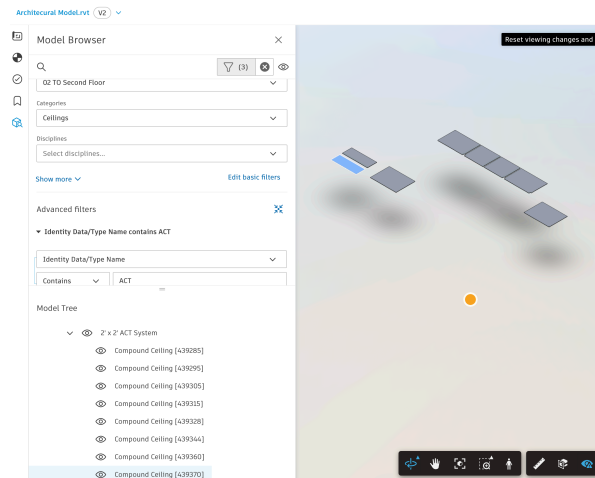
The area is 779 SF (72.4 m²).



11. Use the model browser to create filter and keep only ACT ceilings on the second-floor level. How many ceilings are included in the results of this search?

Answer Key

There are eight ceilings.



12. Based on the model tree, how many double glass doors are there in the model?

Answer Key

There are five double glass doors.

Model Tree

- Doors
 - Door-Passage-Single-Vision_Lite
 - Door-Passage-Single-Flush
 - Door-Double-Glass
 - Door Double Glass_72" x 84"
 - Door-Double-Glass [446114]
 - Door-Double-Glass [448693]
 - Door-Double-Glass [448755]
 - Door-Double-Glass [448846]
 - Door-Double-Glass [448856]