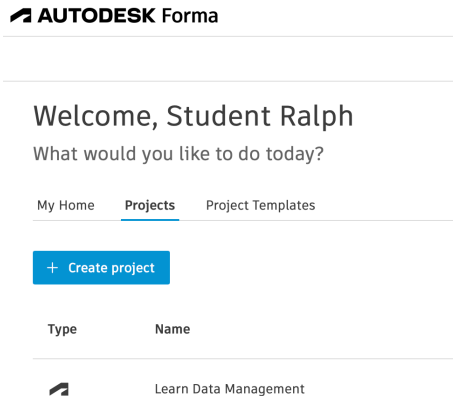


Practice exercise – Answer Key

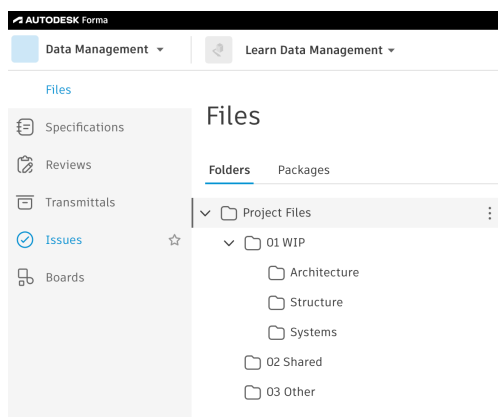
Explore drawings and models in Forma Data Management

The following steps were completed in the videos for **Module 1: Set up 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.

You will apply the skills learned in this module to navigate and review sheets and models in Data Management. 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:

- Review project drawings and 3D models in Forma Data Management.
- Use markup and measurement tools to analyze project information.
- Navigate model data using sheets, views, and the model browser.
- Create and save viewpoints for project review and coordination.

Success criteria:

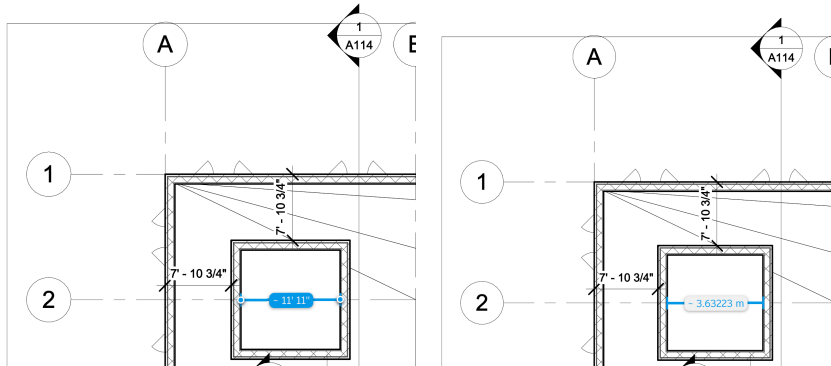
- Project drawings and models are successfully reviewed using the available navigation tools.
- Markup and measurement tools are correctly used to evaluate project information.
- Model elements are located and examined using sheets, views, and the model browser.
- Viewpoints are saved to capture and revisit specific project views.
- 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. On sheet A104, what is the width of the skylight opening in feet (meters).

Answer Key

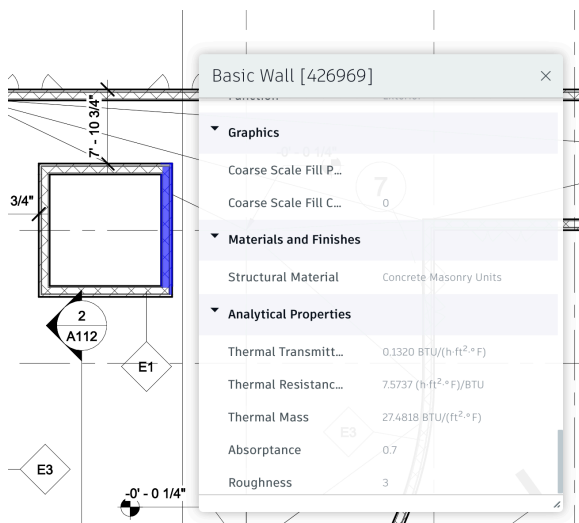
The width of the skylight is 11'11" (3.63 m).



2. On sheet A104, what is the structural material of the skylight walls?

Answer Key

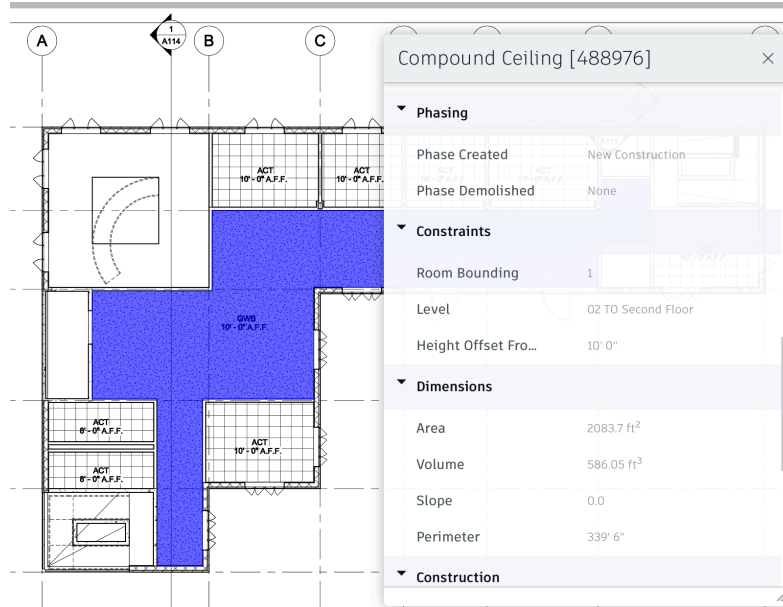
The structural material is Concrete Masonry Units.



3. Select the GWB ceiling on the 02 2nd Floor RCP view. What is the area of this ceiling in square feet (square meters)?

Answer Key

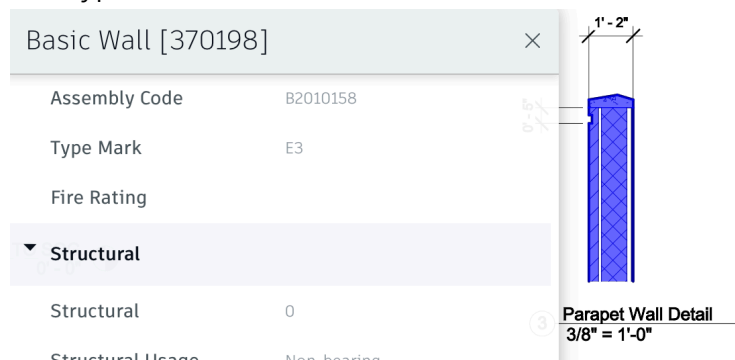
The area is 2,083.7 square feet (~193 square meters).



4. What is the type mark of the wall on detail 3 on sheet A113?

Answer Key

The type mark is E3.

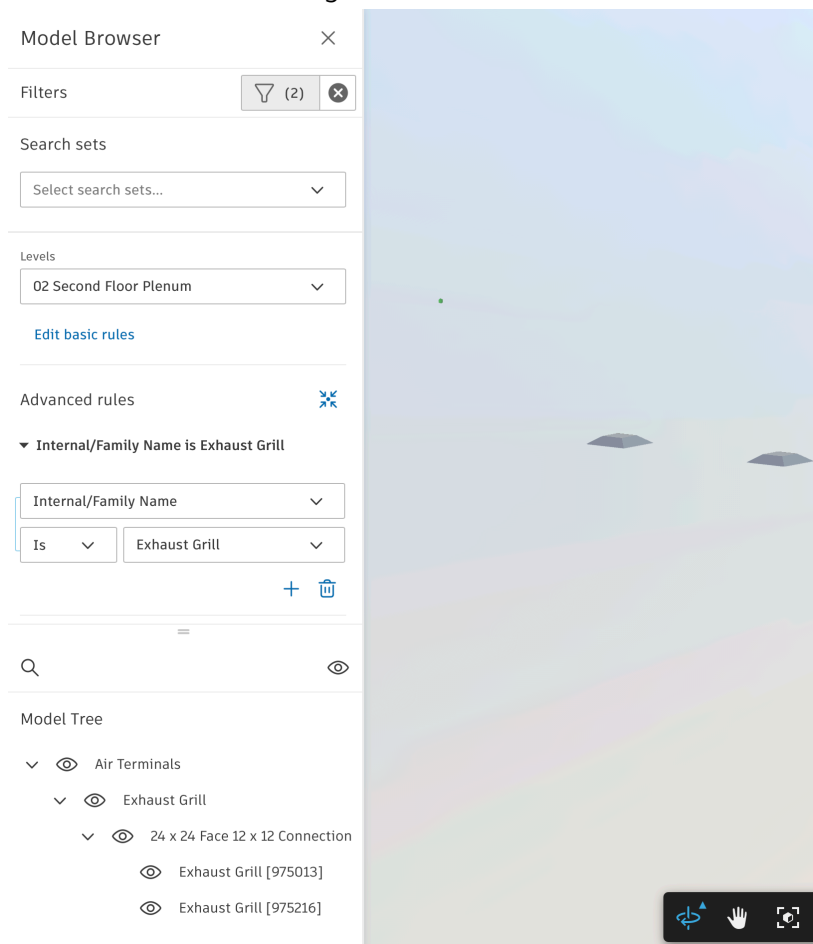


Answer the following questions based on the systems model.

- Using the model browser, create the necessary filters to find the air terminals on the 02 Second Floor Plenum with Exhaust Grill as family name. How many of these terminals are there.

Answer Key

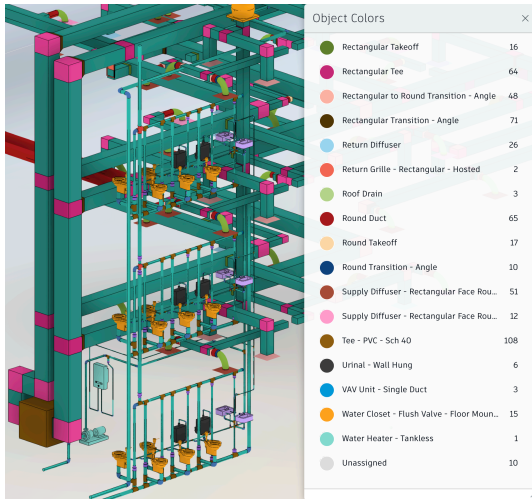
There are two exhaust grills on the 02 Second Floor Plenum.



6. Color code the model based on family name. How many urinals are there in the model?

Answer Key

There are six urinals.

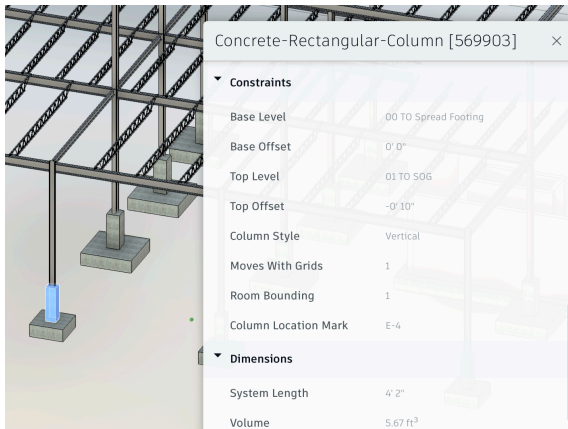


Answer the following questions based on the structural model.

7. What is the volume of a typical column C3 in cubic feet (cubic meters)?

Answer Key

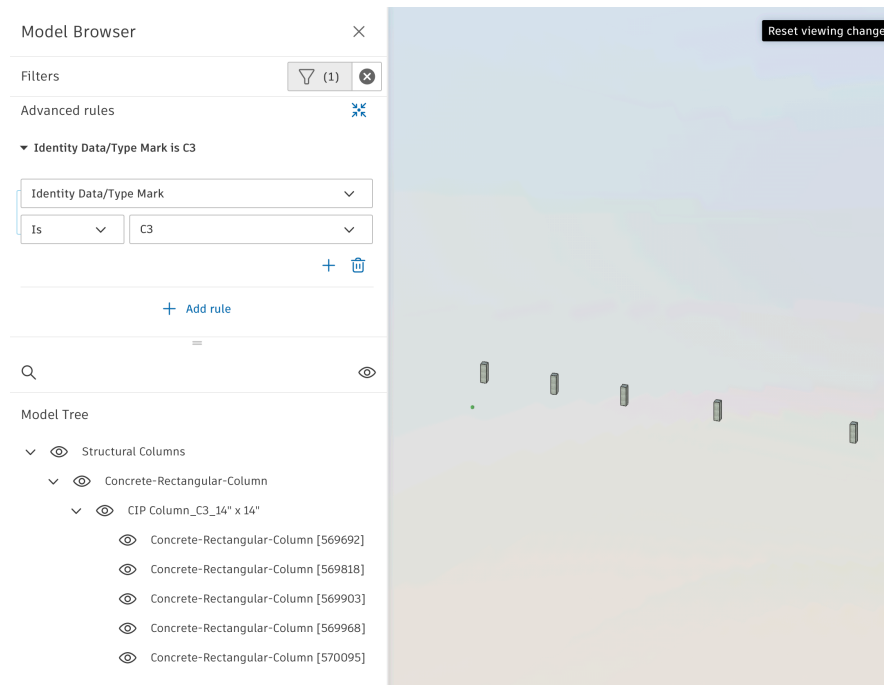
The volume of a typical column C3 is 5.67 CF (~0.16 cubic meters).



8. Using the model browser, how many columns C3 are there in the model.

Answer Key

There are five C3 columns in the model.



9. What is the total volume of concrete in columns C3?

Answer Key

There are five columns and each has a volume of 5.67 CF, so the total volume is 28.35 CF (0.8 cubic meters).