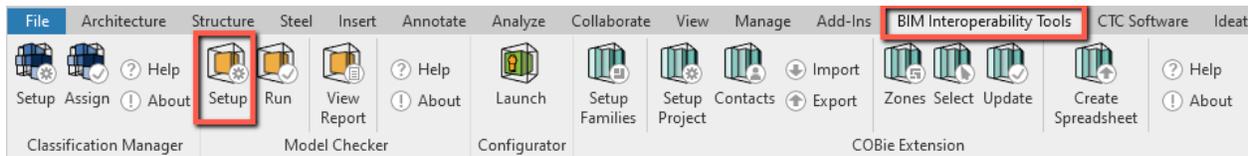


## Install Revit Model Checker Tool

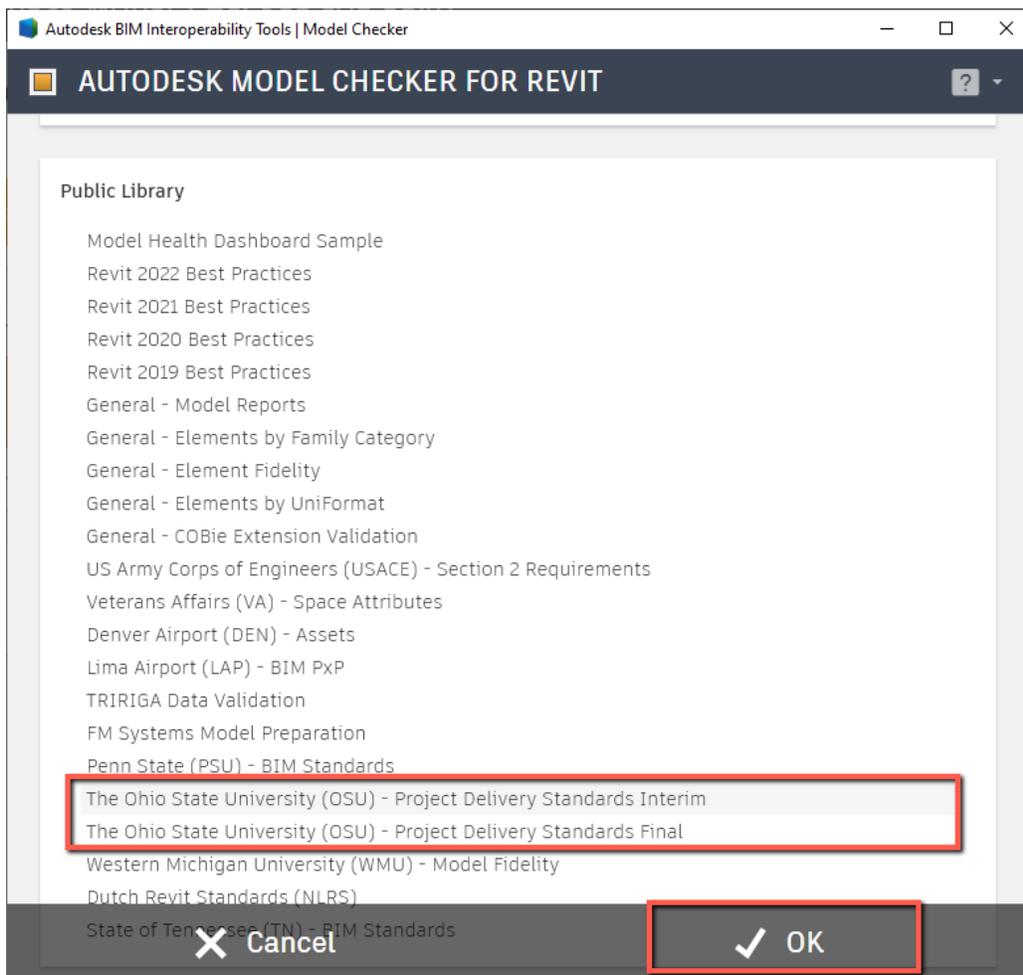
Open a detached copy of the model you want to check and save it. If you do not already have a tab in Revit for BIM Interoperability Tools, you can add it for your current version of Revit directly from the Autodesk Desktop App.

## Open Configuration File

Go to BIM Interoperability Tools tab > Model Checker tile> Setup

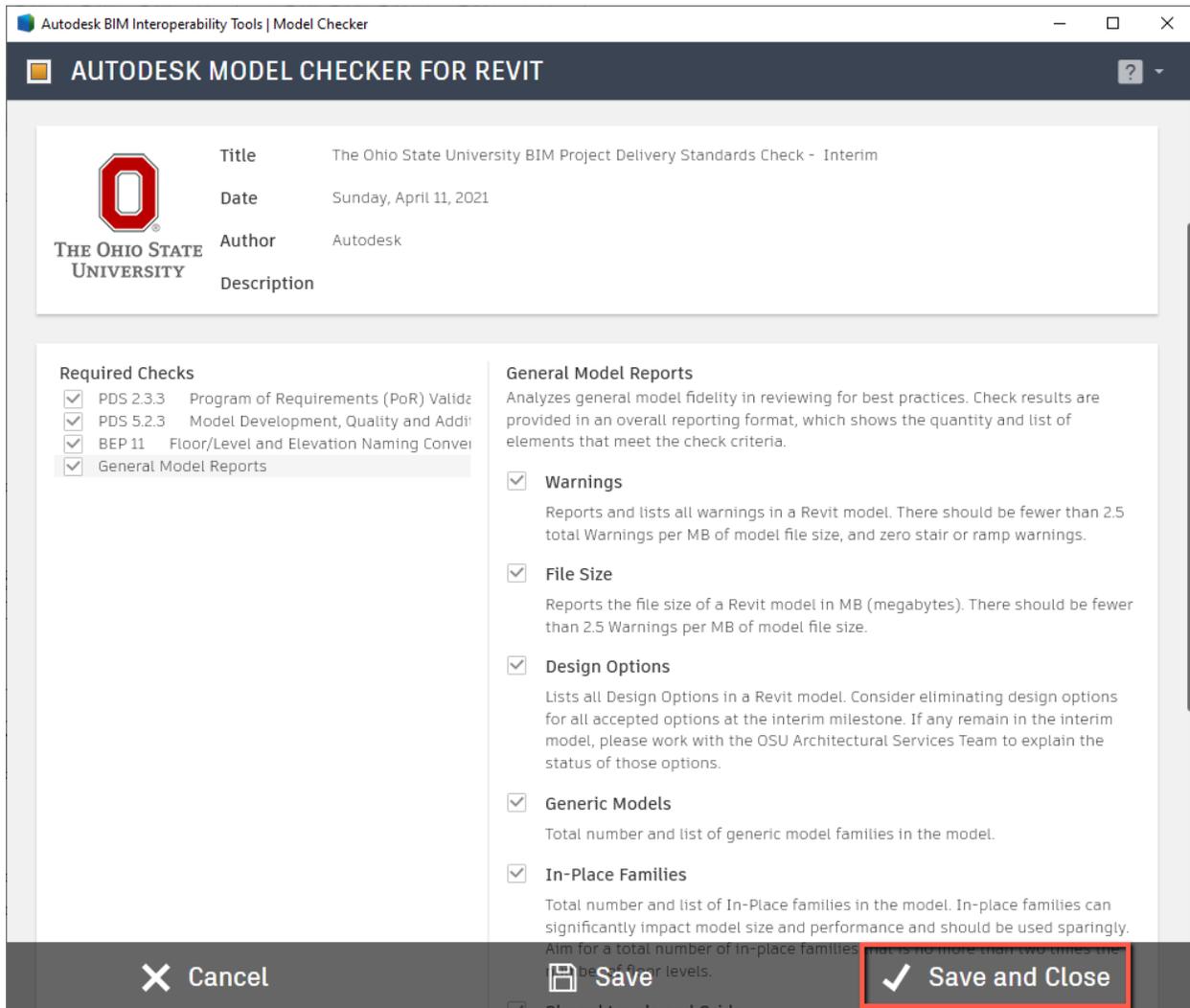


Scroll down in the pop-up window to the “Public Library” section and choose the appropriate file for the stage of the project, either “The Ohio State University BIM Project Delivery Standards Check\_ **Interim**” for DD or Interim CDIB submissions, or “The Ohio State University BIM Project Delivery Standards Check\_ **Final**” for the Final CDIB at project closeout. Then hit “OK.”



## Descriptions of Checks

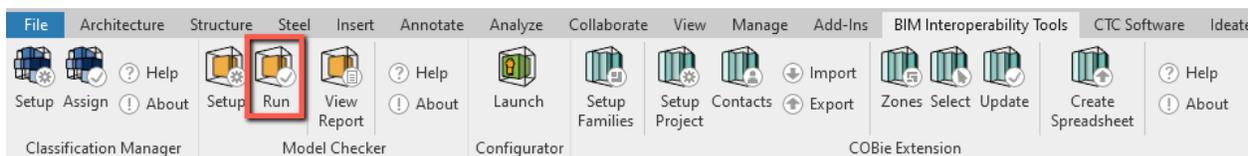
All checks are required. Selecting any rule group under the Required Checks category will give you a detailed description of what the Model Checker is checking in each group, as shown below.



Select “Save and Close”

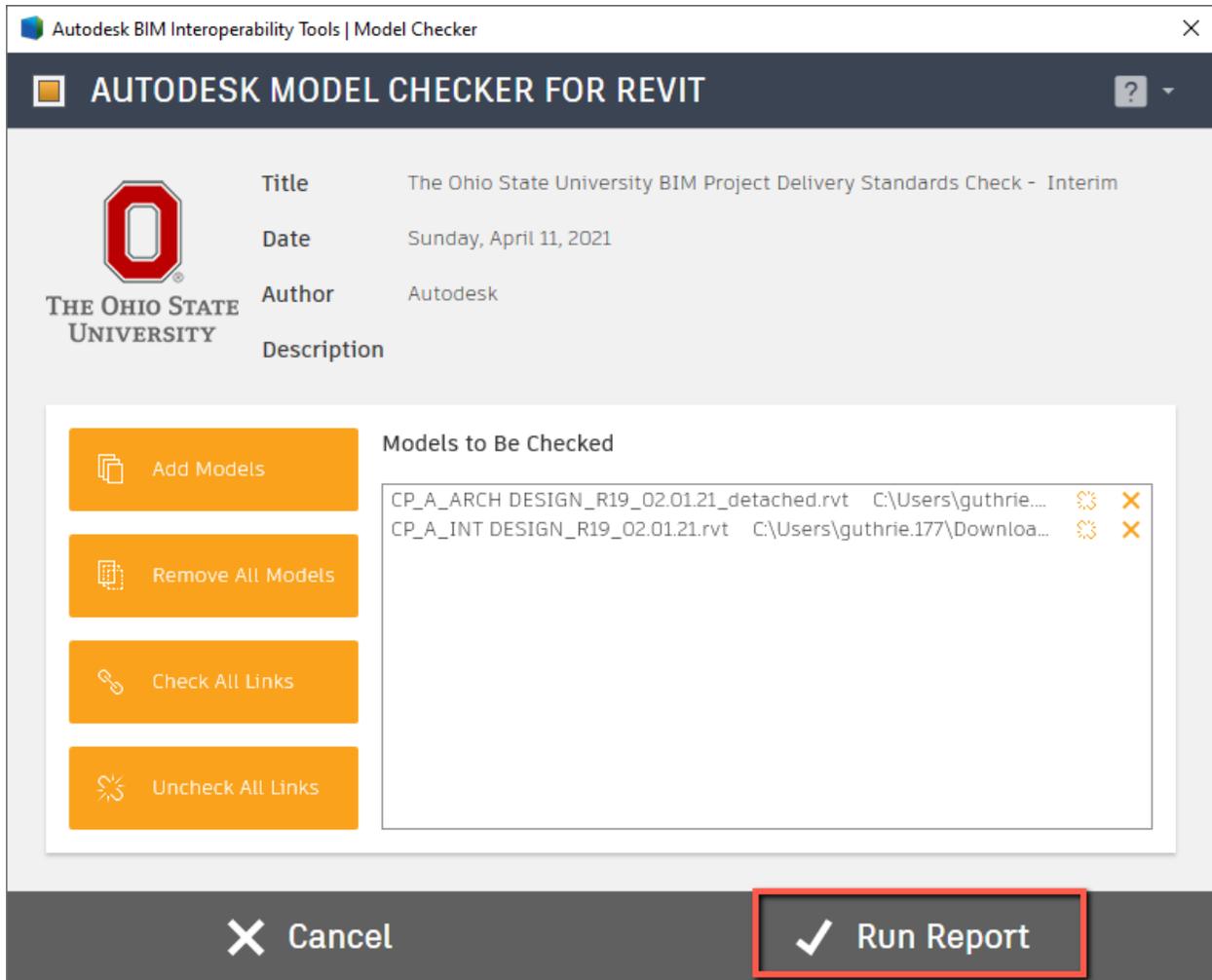
## Run Model Checker

Go to BIM Interoperability Tools tab > Model Checker tile > Select “Run”



At this point, a dialog box will display giving you options as to which models you want to check. You will only need to check the architectural model(s). If there is only one, click Uncheck All Links. If there are multiple architectural models, such as a core and shell and a separate interior fitout model, click Uncheck All Links and then Add Models to add the remaining architectural models to the list. Each model will appear in its own tab in the HTML report.

Check your current model(s) > Select "Run Report"



## Review Report and Address Issues

Some of the rules are not simple pass/fail checks, but report model information that is important to OSU's standards. Read the description for more information.

For some checks, the error report will show a Pass or Fail button next to the rule that was checked. It will also tell you the number of errors in each category. To expand the error, select the drop-down arrow to reveal errors or the expand all button, to locate and fix. (Shown Below)

Some errors will give you the option to select the “Magnifying Glass” button and the program may take you directly to the error, if it can find a good view.

The screenshot shows the Autodesk Model Checker for Revit interface. The title bar reads "Autodesk BIM Interoperability Tools | Model Checker". The main header is "AUTODESK MODEL CHECKER FOR REVIT". On the left is the logo for The Ohio State University. The main content area displays the following information:

- Title:** The Ohio State University BIM Project Delivery Standards Check - Interim
- Date:** Sunday, April 11, 2021
- Author:** Autodesk
- Description:** CP\_A\_ARCH DESIGN\_R19\_02.01.21\_detached.rvt and CP\_A\_INT DESIGN\_R19\_02.01.21.rvt

A large red "0%" is displayed on the left side of the summary box. The **Check Summary** indicates 11 Checks, 0 (0%) Pass, 2 Fail, 9 Count/List. The **Report Date** is Thursday, May 27, 2021 - 1:06:35 PM. The **Revit Filepath** is C:\Users\guthrie.177\Downloads\temp\Bldg A\CP\_A\_ARCH DESIGN\_R19\_02.01.21\_detached.rvt. The **Checkset File** is K:\AP\FITS\Architectural\Architectural Services\Model Checker process\Revised checksets\2021.05.20 FINAL UPDATES\The Ohio State University BIM Project Delivery Standards Check\_Interim.xml.

The **Required Checks** section shows 11 Checks, 0 (0%) Pass, 2 Fail, 9 Count/List. The following checks are listed:

- PDS 2.3.3 - Program of Requirements (PoR) Validation: 1 Checks, 0 (0%) Pass, 1 Fail
- PDS 5.2.3 - Model Development, Quality and Additional Modeling Requirements: 1 Checks, 0 (0%) Pass, 1 Fail

The expanded check "Rooms with No Defined Area" is highlighted with a red 'X' icon. It includes the following text:

Any Rooms with area "not placed", "not enclosed", or "redundant" in the model will cause this check to fail and be listed.

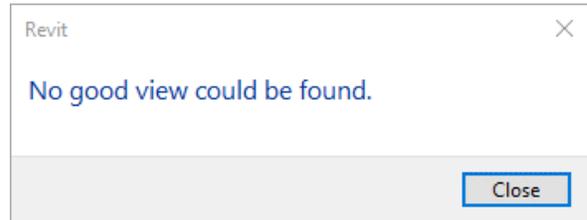
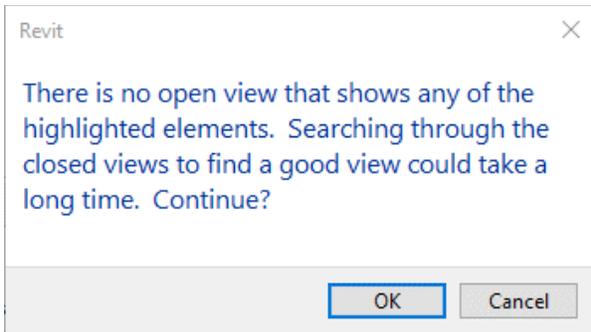
There are Rooms with area "not placed", "not enclosed", or "redundant" in the model.

Count: 12

Category	Name	Element ID
Rooms	Rooms : CORRIDOR BX407C	16093889
Rooms	Rooms : FAMILY A2133T	15025190
Rooms	Rooms : IDF A2022M	6144587
Rooms	Rooms : JANITOR BX307C	16093878
Rooms	Rooms : RESTAURANT B3027N	16093860
Rooms	Rooms : RESTAURANT BX307C	16093899

At the bottom of the interface, there are buttons for "Copy", "HTML", "Excel", and "Close". A magnifying glass icon is visible next to the first row of the table.

In some cases, such as “not placed” rooms, no view will be found, and you can expect to see the errors shown below.



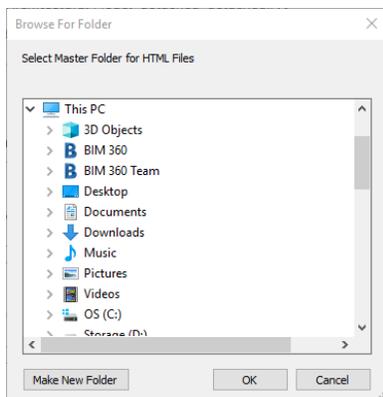
After fixing errors, re-run the check until the results all indicate “Pass.” For the more nuanced checks that are not pass/fail, read the description and make sure your model complies. This may require updates like renaming floor levels per OSU’s standard, addressing warnings, accepting design options, or replacing non-unique model-in-place families with loadable families.

## **Save Results File**

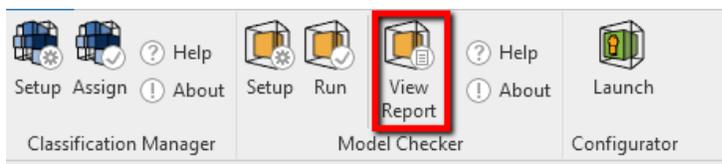
Select “HTML” at the bottom of the report box.



Select where you would like the report saved.



You can also select “View Report” on the Model Checker tile, on the BIM Interoperability Tools tab to view the latest report.



# Revit Model Checker Tutorial

For further assistance visit the “Help” button, where you can gain access to the Online User Manual, links to YouTube videos, and Helpdesk Information

