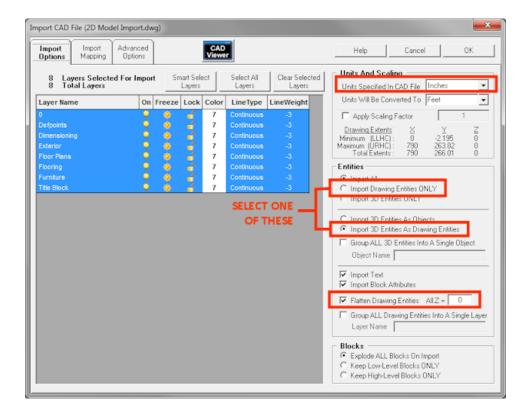
IMPORTING INTO AGI32

IMPORTING 2D BACKGROUNDS:

- 1. Confirm that the "Units Specified In CAD File" are correctly set. If there are question marks around the current selection, AGi32 was unable to determine the Units in the CAD file and has selected either "Feet" or "Meters," depending on the current Units set in AGi32. Note that AGi32 will read the CAD Units setting from the DWG or DXF file and will recognize either the "Engineering" or "Architectural" Units settings (both are in inches). All other CAD units settings (Decimal, Scientific, etc.) are assumed to be the same as the current AGi32 units (i.e., if the current AGi32 units are Feet, the imported CAD file is also assumed to be in Feet; if the current AGi32 units are Meters, the imported CAD file is also assumed to be in Meters). In this case, it is up to the user to select the correct units, if this assumption is incorrect.
- 2. Select one of the following options:
 - a. "Import Drawing Entities ONLY," or
 - b. "Import 3D Entities As Drawing Entities"
- 3. Select the option to "Flatten Drawing Entities" and make sure the "All Z =" value is set to "0".



- 4. If the file has long, gradual curves and it is necessary to import these with a higher resolution to the curves than 15-degree segments, consider clicking on the "Advanced Options" tab and changing the "Curve Increment" from "15" to "10" or, if necessary, "5" degrees. It is important, however to keep the drawing as simple as possible. Therefore, if a finer curve resolution is not necessary, the Curve Increment should be left alone.
- 5. If there are Layers that do not need to be imported, hold down the CTRL key and deselect the highlighted Layers that do not need to be imported.
- 6. If you want to know more about what is on the Layers, click the "CAD Viewer" button. The Viewer will appear and show what is on the selected Layers. If you need to get back to the default set of selected Layers, click the "Smart Select Layers" button.
- 7. Click the "Ok" button to initiate the import.

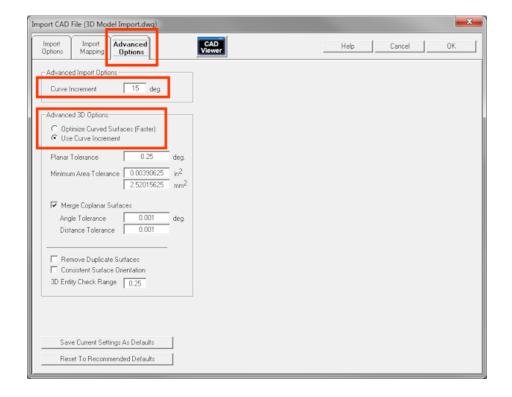
8. The next dialog, the Import Summary shows what was and was not imported. Click "Ok" again to finish the import process.

[For a list of supported entity types that will and will not import into AGi32, please visit this AGi32 Help page: http://docs.agi32.com/AGi32/Content/importing and exporting files/Importing CAD Files-Concepts.htm.

If issues are encountered when importing into AGi32, please take a look at the "Preparing A DWG File For Import Into AGi32" document.]

IMPORTING 3D MODELS:

- 1. Confirm that the "Units Specified In CAD File" are correctly set. If there are question marks around the current selection, AGi32 was unable to determine the Units in the CAD file and has selected either "Feet" or "Meters", depending on the current Units set in AGi32.
- 2. If there are Layers that do not need to be imported, hold down the CTRL key and deselect the highlighted Layers that do not need to be imported.
- 3. If you want to know more about what is on the Layers, click the "CAD Viewer" button. The Viewer will appear and show what is on the selected Layers. If you need to get back to the default set of selected Layers, click the "Smart Select Layers" button.
- 4. If a 3D model with curved surfaces is being imported, it may be necessary to lower the Curve Increment and apply it to the 3D geometry. Recommended: Leave everything as is initially, but if the curving 3D entities didn't import correctly or with enough resolution the first time around, try the following:
 - a. Click the "Advanced Options" tab.
 - b. In the "Advanced 3D Options" section, choose the "Use Curve Increment" option.
 - c. If attempts have already been made to import 3D entities with the Curve Increment set to "15" and this wasn't enough resolution, try changing the Curve Increment to "10". Setting the Curve Increment lower than "10" is not recommended unless absolutely necessary. It should not be set lower than "5" unless the model being imported isn't too complicated. (Decreasing the Curve Increment increases the number of surfaces in the model, which can have a dramatic impact on calculation time.)

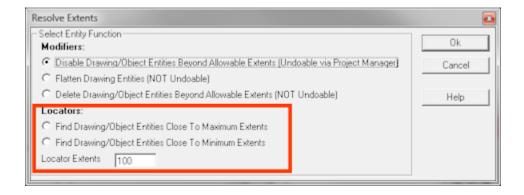


- 5. <u>IMPORT MAPPING</u> (optional) If the CAD file is set up with meaningful Layers, you can automatically assign surface properties to every surface during the import process based on the CAD Layers (i.e. windows layer, doors layer, etc.). For more on Import Mapping, please see the help topic "Importing CAD Files Concepts."
- 6. Click the "Ok" button to initiate the import.
- 7. The next dialog, the Import Summary shows what was and was not imported. In the case of 3D entities, knowing what did not import can be as important as knowing what did. Click "Ok" again to finish the import process.

[For a list of entity types that will and will not import into AGi32, please visit this AGi32 Help page: http://docs.agi32.com/AGi32/Content/importing and exporting files/Importing CAD Files-Concepts.htm. If issues are encountered while importing into AGi32, please take a look at the "Preparing A DWG File For Import Into AGi32" document.]

AFTER COMPLETING THE IMPORT PROCESS AND **BEFORE** ADDING ANYTHING TO THE MODEL

- 1. Check Drawing Extents: If nothing appears on the screen, look at the coordinates in the lower left corner of the AGi32 Model Mode screen while moving the cursor around the extents of Model Mode. If the coordinates vary wildly and are large positive and/or negative values, then something was imported that is a long distance from the model/site itself. To locate and delete extraneous entities:
 - a. On the main menu bar, click on [Tools > Resolve Extents].
 - b. Select "Find Drawing/Object Entities Close to Minimum Extents" and then click "Ok."
 - c. If what appears on the screen is something that does not need to be in the model, delete it and then press the "Plan/Top View" button at the top of the AGi32 dialog.
 - d. If nothing is visible, repeat Steps 1a-1c, above until the lower-left corner of the model/site appears. If the model/site appears but clicking the Plan/Top View button still results in nothing being visible, repeat Steps 1a-1c but this time choose the "Find Drawing/Object Entities Close to Maximum Extents" button to locate extraneous entities.
 - e. Repeat the process described above until clicking the Plan/Top View button shows the model/site.



2. Check Scaling: Use the Measure Distance Tool at the top of the AGi32 dialog to measure the distance across an entity with a known dimension (e.g., door, parking space, etc.) and evaluate whether it is the correct size. If it is the correct size, skip to the next step; if not, scrap the import and go back and

- determine whether the "Units Specified In CAD File" need to be changed or a Scaling Factor needs to be applied when importing the file.
- 3. Check Drawing Coordinates: Look at the coordinates in the lower-left corner of the AGi32 Model Mode screen while moving the mouse around the extents of the imported model/site. If any portion of the model/site is located at coordinates outside of approximately +/- 10000 Feet or Meters, it is strongly recommended that the model's Origin be moved to avoid future problems. To move the Origin:
 - a. On the main menu bar, click on [Tools > Translate Origin] to initiate the moving of the Origin.
 - b. If the model/site is extremely large, consider moving the Origin to a point in the approximate center of the model/site. If the model is not really large, move the Origin to wherever it makes sense, perhaps somewhere at the southwest corner of what is being evaluated. The goal here is to have everything in the model fall within the +/- 10000-Feet or -Meters coordinate range.

IMPORTANT NOTES: When exporting a model back to DWG, the default behavior is for AGi32 to move everything back to the original coordinates in the exported DWG File. Also, if it is ever necessary to import a revised background to the original coordinates, make sure to reset the Origin by clicking on the main menu bar [Tools > Reset Translated Origin] before importing the revised background, and then make sure to move (Translate) the Origin again after the revised background has been imported. There is no reason to avoid Translating the Origin when large coordinates are present in a model.

4. Save the AGI file and move forward with the modeling process.