

PREPARING A DWG FILE FOR IMPORT INTO AGi32

1. Eliminate XREFs. The goal of steps 1a-1c is to end up with a single DWG file free of any references to other files.
 - a. Unload and Detach all image XREFs from the parent file.
 - b. Unload and Detach any XREFs to other DWG files that are not present.
 - c. BIND any XREF DWG files that are present so the data in those referenced DWG files is now part of the current DWG file.
2. Block References (“Blocks”): Sometimes it is necessary to explode Blocks, including Blocks nested in top-level blocks, to eliminate XREFs. It may also be necessary to explode the Blocks to get everything in the model to appear as it will when imported into AGi32 and to delete or disable portions of the model that are not wanted for the import. Keep this in mind and, as necessary, explode Blocks and nested Blocks.
3. Simplify the model. Remove or turn off any entities and Layers that are not essential to the lighting layout.
4. Ceiling grid Hatch: These entities will not import into AGi32 unless they are exploded into drawing entities. If this is necessary, be very careful to only explode the Hatch entities making up the ceiling tiles.
5. Run the PURGE command on the DWG file. After initiating this command, select the option to “Purge All” and click that button over and over until it is grayed-out and no longer selectable.
6. Run the AUDIT command on the DWG file and, when asked, tell AutoCAD to fix any problems it finds (select the “Y” option to fix any problems found).
7. Save the file (recommended: save as a new file if significant changes were made).
8. If the model is overly complex and contains areas non-essential to the lighting layout, it may be beneficial to “clip” the drawing to only include the necessary area(s) and create a new file with only a group of selected entities:
 - a. Open the modified DWG file in AutoCAD again.
 - b. Draw a “window” around the entities that need to be imported. This “window” should be exclusive, not inclusive, which is to say the “window” should be specified from the upper left to the lower right when selecting the entities that need to be imported and will only select entities that are entirely contained within it.
 - c. Type COPYCLIP into the Command Line.
 - d. Open a new DWG file.
 - e. Use the PASTEURIG command to paste the copied entities into the new file at the same coordinates as in the original file.
 - f. Check scaling again by dimensioning something with an [approximate] known width or length.
 - g. Save the file as a new file with a different name.
9. If problems importing into AGi32 persist, there are two more items that can assist with a successful import, particularly where 3D entities are concerned. Entities can be scaled in AGi32 and the Model location altered by moving entities or moving the Origin using the Translate Origin command, but sometimes it helps to perform these actions before importing.
 - a. Scaling: If the model is not currently scaled to the Units that will be used in AGi32 (Feet or Meters):
 - i. Initiate the SCALE command.
 - ii. Type “0,0,0” (the model’s Origin) as the point from which to scale.
 - iii. Type a scaling factor that will cause the entities in the file to scale up or down to the Units that will be used in AGi32. For instance, if scaling Inches to Feet, the scaling factor is “0.08333,” while for Millimeters to Meters it would be “0.001”.
 - b. Model location: Check the current coordinates of the extents where the entities to be imported are located. If the coordinates are in excess of approximately a 10000-Foot or -Meter range,

MOVE the entities so they are adjacent to or surrounding the model's Origin (the 0,0,0 coordinate). When moving the entities, it is often helpful to add a new Layer to the model then add a reference line noting the points from which the entities were moved and to which they were moved. If this reference line is on its own layer, it can easily be enabled or disabled and then copied and pasted into any future modified file that needs to be imported so that its entities can also be moved to the same relative location before importing into AGi32. The same line can also be used to move entities exported out of AGi32 back to their original coordinates, should the data need to be merged with an existing DWG file.

NOTES: if either or both of these are done in AutoCAD, the exact same scaling and/or move points will need to be applied to any revised model that might need to be imported into the same AGI file. If there is any chance that a revised model will need to be imported, take note of and save the scaling factor applied and/or the coordinates from and to which the model was moved.

*[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]*