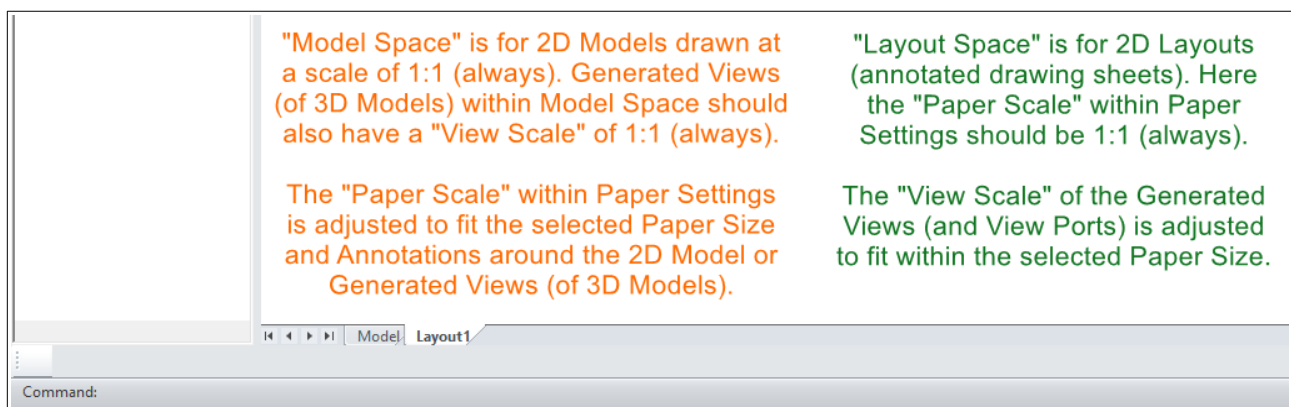


IRONCAD (CAXA) DRAFT – MODEL SPACE and LAYOUT SPACE

Unlike IRONCAD, SOLIDWORKS, etc... 2D/3D DWG Editors (incl. AUTOCAD) combine both the **2D/3D Models** and the **2D Layouts** (annotated drawings) within a single DWG file.

Within these single DWG files, "**Model Space**" is where the 2D/3D Models are created at a scale of 1:1. For 2D DWG Editors like CAXA, "**Model Space**" is where 2D Models are created at a scale of 1:1. This can be considered as a 2D equivalent of IRONCAD's 3D Scene.

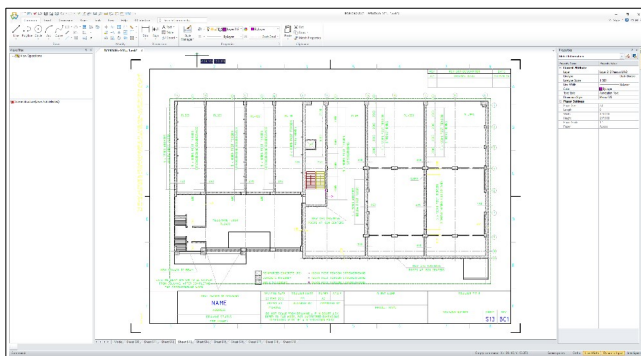
"**Layout Space**" is where the 2D Layouts (annotated drawings) are created. This includes, Drawing Frames, Title Blocks, Generated Views and Viewports, BOM, Dimensions and other Annotations. Generated Views and Viewports are inserted within "**Layout Space**" to create Views of the Models that were created in "**Model Space**". These Views are sized and scaled (using "View Scale") to create the desired 2D Layout, ready for Annotations.



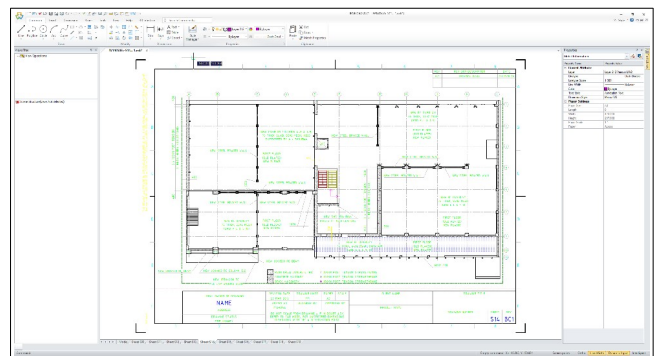
Within CAXA, 2D Models should always be created within "**Model Space**" at a scale of 1:1. Whereas, 2D Layouts (annotated drawings) should be created within "**Layout Space**", with the "View Scale" of any Generated Views and Viewports adjusted as required to fit. Note that it's important that the "Paper Scale" (within Paper Settings) of "**Layout Space**" is always 1:1.

Generated Views: Views of the Models located within IRONCAD's **3D Scene**

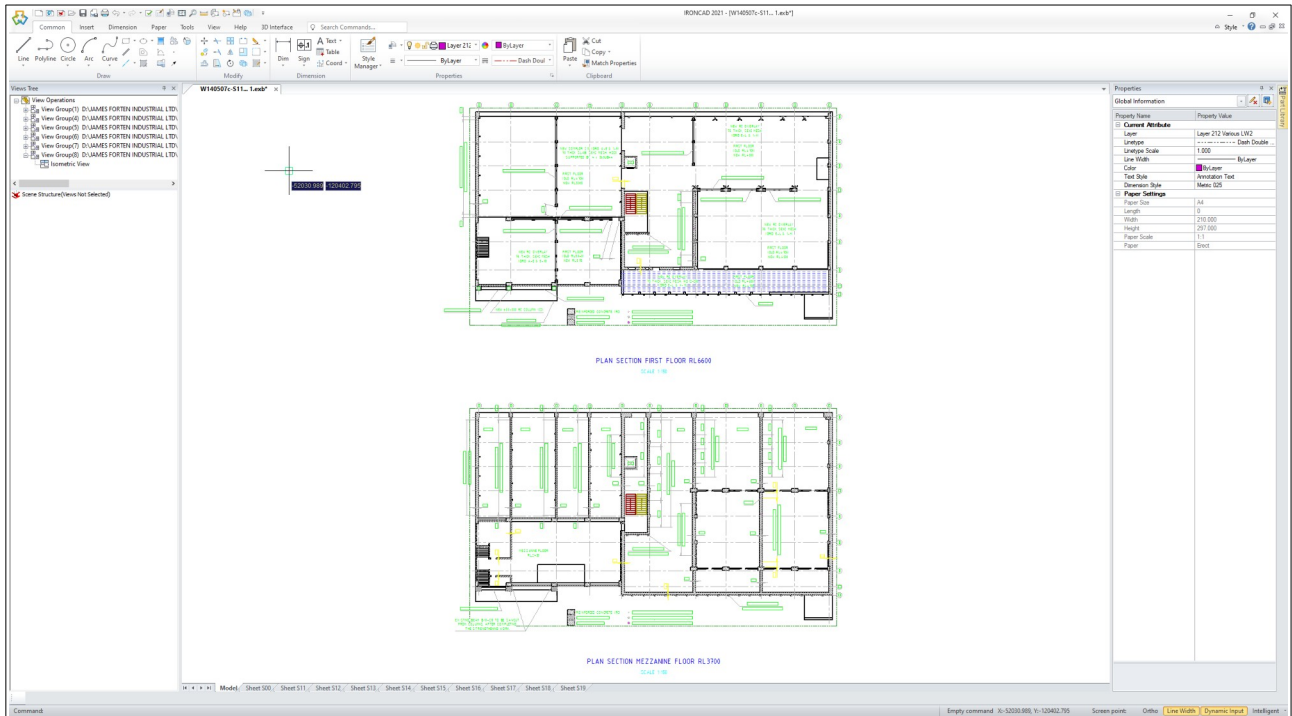
Viewports: Views of the Models located within CAXA's **Model Space**



Viewport in Layout Space
(referencing only part of Model Space)



Viewport in Layout Space
(referencing only part of Model Space)



2D Models in Model Space

(only a small part of the 2D Models in Model Space are shown above)

Generated Views: Inserted within “Layout Space” (general rule)

Viewports: Inserted within “Layout Space”

GENERATED VIEWS IN MODEL SPACE (EXCEPTIONS TO GENERAL RULE)

While the above is the general rule, there are instances where generating a View in “Model Space” can be advantageous. One example being when single Sectioned Views are required on the 2D Layouts within “Layout Space”. In this instance a Generated View of the 3D Model can be inserted within "Model Space", and the various associated Sectioned Views created there also. Then "Viewports" can be added to the 2D Layouts within “Layout Space”, to view the individual Sectioned Views that are located in "Model Space".

Another example is when Generated Views must have a View Scale of 1:1, as is the case with Sheet Metal DXFs (for profile cutting). For viewing purposes, Annotations (such as bend line annotations, drawing frames, BOM, notes, etc...) might then need to be scaled. This is when “Paper Scale” within Paper Settings is used to scale the Annotations within “Model Space”.

This is the only time when “Paper Scale” within Paper Settings is changed from 1:1.