

# Drawing Formatting

## Objective:

Know how to:

1. Enter and exit the title block editing mode.
2. View which properties are dynamically linked in the title block and know where they come from.
3. Create your own dynamically linked variable in a drawing sheet.
4. Edit properties of a drawing sheet (e.g., sheet name, scale, size, and format used).
5. Save a new sheet template after you've customized it.
6. Add, delete, or rename a sheet

Properties are linked to the title block using the Property Names from the part's Custom tab.

## Part and Drawing File Nomenclature

File Properties → **Custom Tab**

**Part File**

**Property Name menu**

Property Name	Type	Value / Text Expression	Evaluated Value
1 Description	Text	LEFT BOX HALF	LEFT BOX HALF
2 Material	Text	6061 ALUMINUM	6061 ALUMINUM
3 CheckedBy	Text	RN	RN
4 DrawnBy	Text	TWS	TWS
5 Date	Text	6/1/20	6/1/20
6 Revision	Text	A	A
7 <Type a new propert			

The part **filename** is shown at the top of the Feature Tree and will be used later as the **Part Number**.

**Drawing File**

**BOM Table**

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	VENDOR	VENDORNO.
1	01-01_BT	LEFT BOX HALF	6061 ALUMINUM		

**Revision Table**

Rev	Description	DrawnBy	CheckedBy	Date
A	Initial Release	TWS	RN	6/1/20

**Drawing Views**

**Drawing file Sheet**

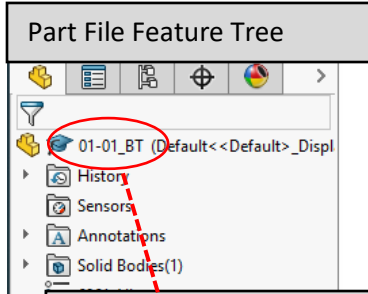
**Title Block**

WORKPIECE AND COMMENTS		DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		Block Table	
DESCRIPTION	LEFT BOX HALF	UNIVERSITY OF IDAHO	ME DEPARTMENT	1 OF 1	A
DATE	6/1/20	01-01_BT			
SCALE	1:1				
DRAWN BY	TWS				
CHECKED BY	RN				

Note: The title block and the borders are considered part of the **Sheet Format**.

# Dynamically Linked Properties

The ME drawing template that is used in the class has several properties dynamically linked from the part's file properties **Custom** tab by default. The images below show several of these dynamic links.



Drawing File BOM and Revision Tables

ITEM NO	PAR. NUMBER	DESCRIPTION	MATERIAL	VENDOR	VENDORN0
1	01-01_BT	LEFT BOX HALF	6061 ALUMINUM		

Rev	Description	DrawnBy	CheckedBy	Date
A	Initial Release	TWS	RN	6/1/20

Part Properties → Custom Tab

Property Name	Type	Value / Text Expression	Evaluated Value
1 Description	Text	LEFT BOX HALF	LEFT BOX HALF
2 Material	Text	6061 ALUMINUM	6061 ALUMINUM
3 CheckedBy	Text	RN	RN
4 DrawnBy	Text	TWS	TWS
5 Date	Text	6/1/20	6/1/20
6 Revision	Text	A	A

Properties are linked to the title block using the **Property Names** from the part's **Custom** tab.

The default text will prompt for a project title. To edit this, **double-click** on the text and enter the desired text.

Drawing File Title Block

<p><b>PROPRIETARY AND CONFIDENTIAL</b></p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF UNIVERSITY OF IDAHO ME DEPARTMENT. ANY REPRODUCTION OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF UNIVERSITY OF IDAHO, ME DEPARTMENT IS PROHIBITED.</p>	<p>DIMENSIONS ARE IN INCHES</p> <p>THIRD ANGLE PROJECTION</p>	<p>PROJECT TITLE:</p> <p><b>Block Table</b></p>
<p>DEFAULT TOLERANCES:</p> <p>LINEAR: X.±.25 X.X±.1 X.XX±.01 X.XXX±.002</p>	<p>ANGULAR: X.± 2 X.X± 1 X.XX± 0.30'</p>	<p>UNIVERSITY OF IDAHO ME DEPARTMENT</p> <p>SHEET: 1 OF 1 SCALE: 1:2</p>
<p>DESCRIPTION: LEFT BOX HALF</p> <p>FILE NAME/PART NUMBER: 01-01_BT</p>		<p>REVISION: A</p>

The default tolerances are shown here. To change these values double click on the text and enter the desired text.

*Note: The sheet template will always say that the document is in third angle projection regardless of what is selected in the sheet*

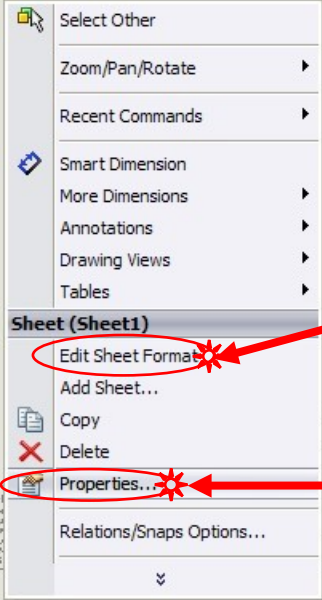
Displays the current sheet number and how many sheets are in the drawing package.

The scale is set in sheet properties and will update here when it is changed.

The revision number of the drawing is shown here.

## Editing the Sheet

*Description:* The title block includes the border around the drawing document, and information regarding the quality, any administrative information, and technical information regarding the drawing. The information stored in the title block helps the drawing to be interpreted and identified using minimal, but necessary information.



To edit the title block, the sheet properties, or add or delete a sheet, **right click** anywhere on the sheet in the design space and select the desired option.

To edit the sheet's title block select **Edit Sheet Format**. This will allow the user to input text into non-linked properties. For details on how to create and edit linked properties, see **Editing The Title Block** section.

To set the sheet scale, the type of projection, sheet size, drawing template, datum starting letter select **properties**. (See **Sheet Properties** section)

## Editing The Title Block

To edit the title block, right-click on a blank area of the sheet and select **Edit Sheet Format**. To edit any of the text, simply double-click the text and make the desired changes.



To add a link, or any text to your drawing, select the Note button in the Annotation tab of your drawing. Next, click where you would like to add the text.

The screenshot shows the 'Formatting' toolbar at the top, which includes options for font (Century Gothic), size (13), and units (0.14in). Below the toolbar, a text box is selected, containing the text `$PRPSHEET:"Description"`. A red arrow points from a text box on the right to this text.

You can link any of the properties from the **Property Name** menu in the Custom tab of your part file. To do so, type `$PRPSHEET:"PropertyName"` (inserting the corresponding property name in place of *PropertyName*). Once you place the second quotation mark ("), if the link is created, your property will appear between curly brackets, { }.

The screenshot shows a title block with several fields. The fields contain the following text: 'PROJECT TITLE: Project Title', 'UNIVERSITY OF IDAHO ME DEPARTMENT', '1 OF 1 SHEETS', 'DATE: 1/2', 'DESCRIPTION: \$PRPSHEET:{Description}', 'FILE NAME: \$PRPSHEET:{SW-File Name}', and 'REVISION: \$PRPSHEET:{Revision}'. Red arrows point from a text box on the right to the 'DESCRIPTION', 'FILE NAME', and 'REVISION' fields.

Note: You will not be able to see these links if you have a part view already inserted into your drawing. Be sure the drawing is empty before entering **Edit Sheet Format** if you want to view these.

Once you have the format you want, you can save the sheet format (see **Creating a New Sheet Template** later in this document). Be sure to save the template before adding your part. You don't want to have to format the sheet every time! Save your template somewhere that you can access it for the remainder of your drawings in the class. **DO NOT save over the file on the shared drive.**

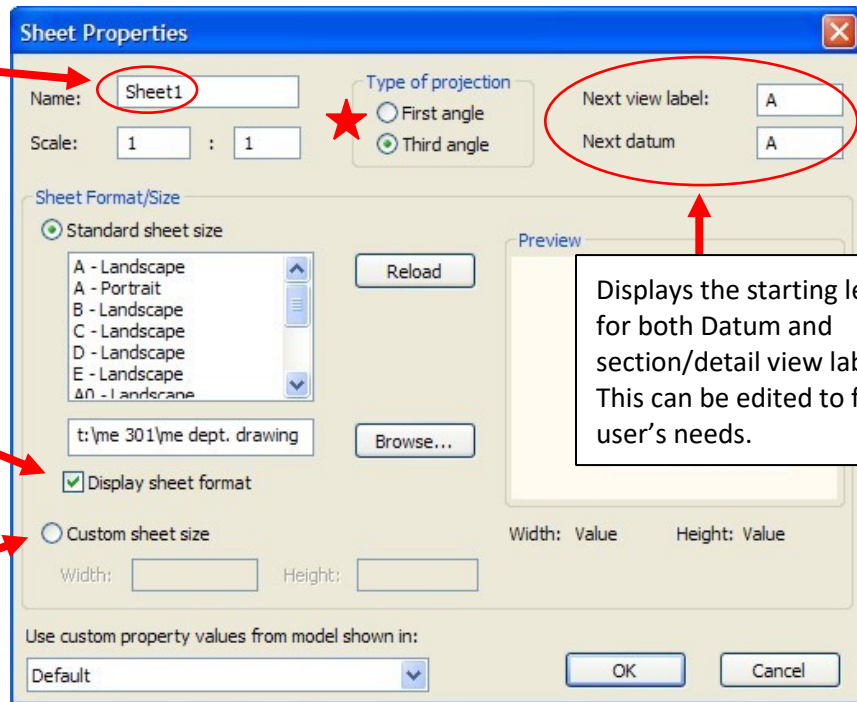
# Sheet Properties

To edit sheet properties like sheet name, scale, size, and format, select the **Properties** option after right-clicking the sheet.

Change the name of the sheet to aid in finding parts, collapsed views, exploded views, etc. more quickly in large drawing packages.

Displays the sheet template being used. Use browse to select another template.

Create a custom sheet size if the default is not desired.



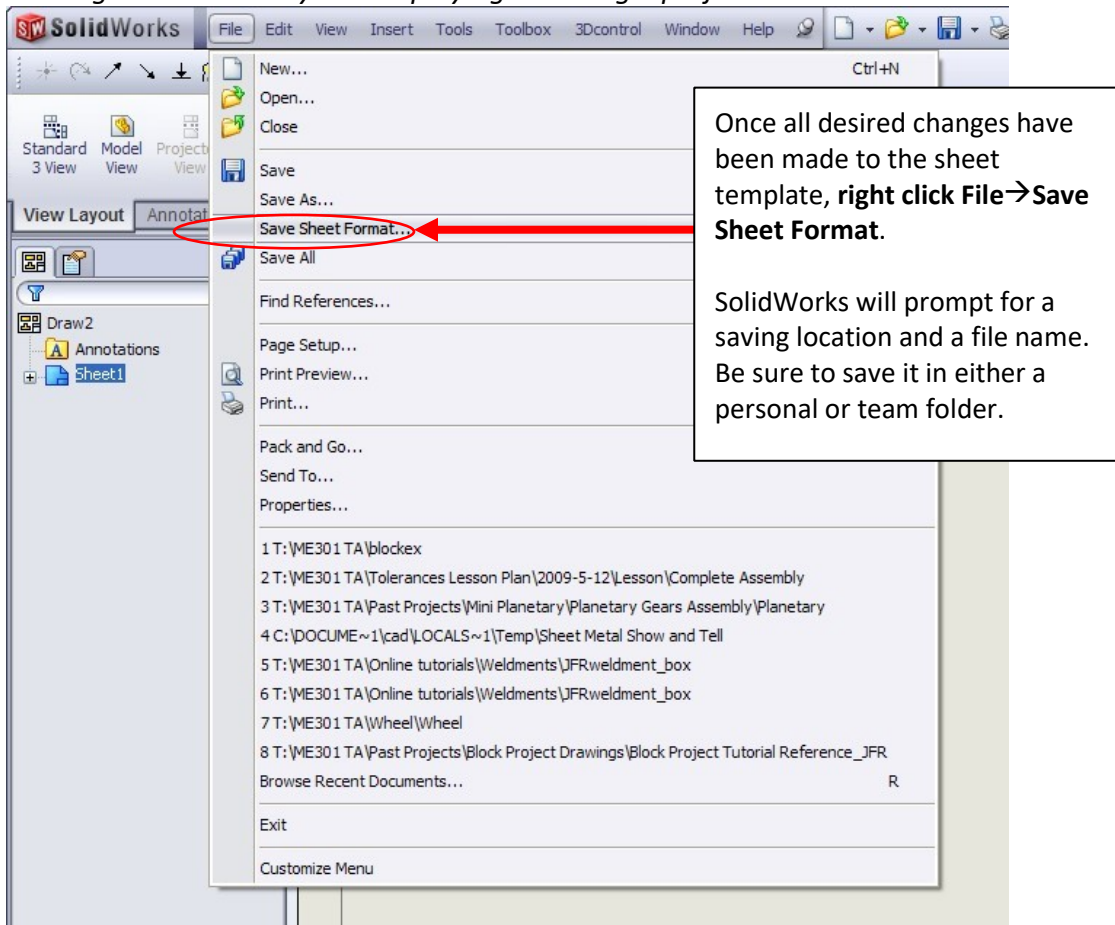
Displays the starting letters for both Datum and section/detail view labels. This can be edited to fit the user's needs.

★ See Third Angle VS First Angle for additional information.  
*Note: Third angle must always be used for this course.*

## Creating a New Sheet Template

*Description:* It is often useful to create a standard template for team projects to ensure a standard drawing package format and to eliminate the need to re-enter standard information, such as the project name.

*Note:* SolidWorks will not save the type of projection with the sheet format. Always check drawings to ensure they are employing third angle projection.



## Adding/Renaming/Deleting Sheets

*Description:* You can add, delete, and rename sheets in your drawing. Use this to create multiple sheets to better describe a part.

