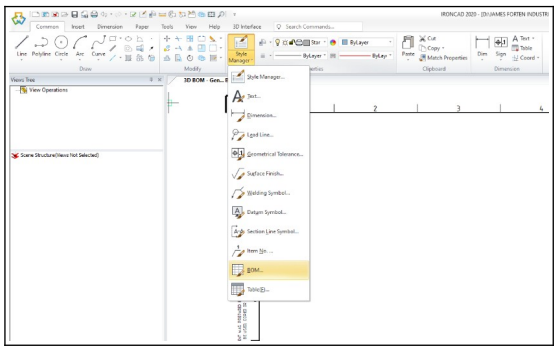
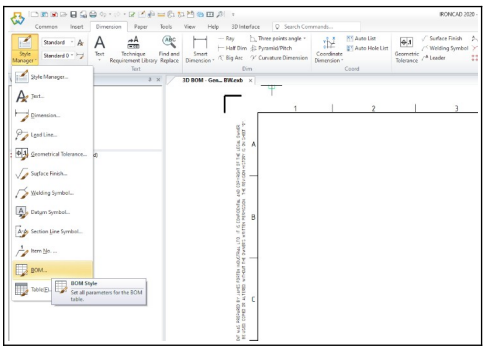
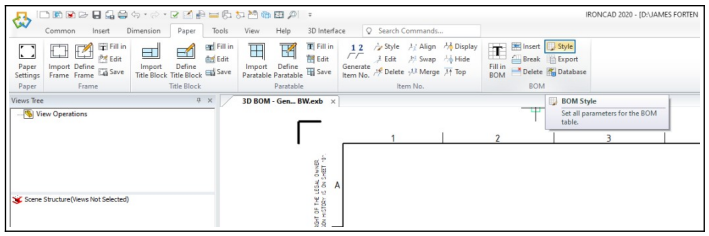
IRONCAD DRAFT – BOM STYLES - SETTINGS

To begin with, it's important to understand that all "Styles" (including "BOM Styles") are saved within the drawing. So any "Style" changes made within one drawing will not be applied "Globally" among other drawings (as is the case with System Settings).

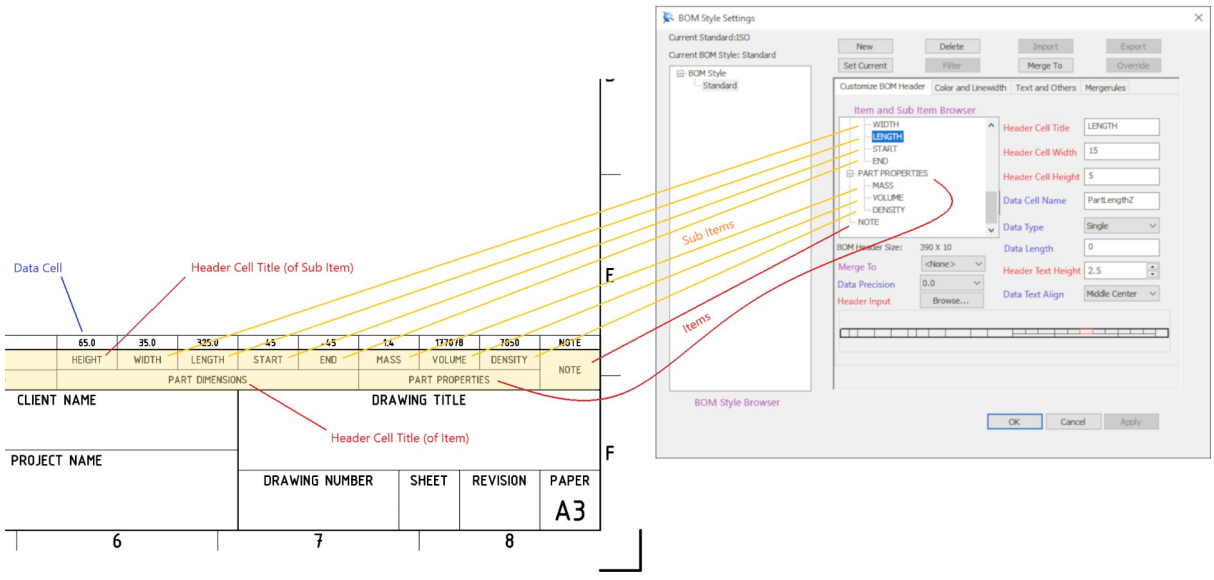
However, all "Styles" included within a "Template" will be automatically included within any drawings created from that "Template". "Styles" can also be imported from other drawings.







Within the "BOM Style Settings" Dialog Box, there is a "BOM Style Browser" on the left, and four Tabs on the right (for entering settings for the BOM Style selected on the left). While the names (and descriptions) used for many of the settings in this document have been changed, the software's original naming has also shown below in grey.



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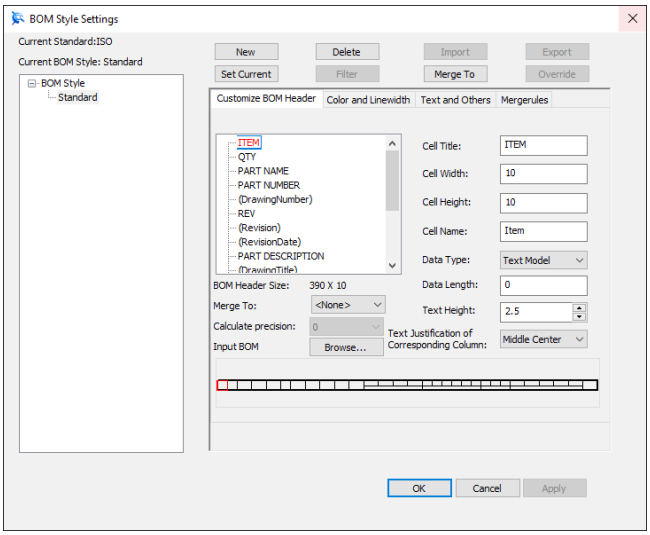
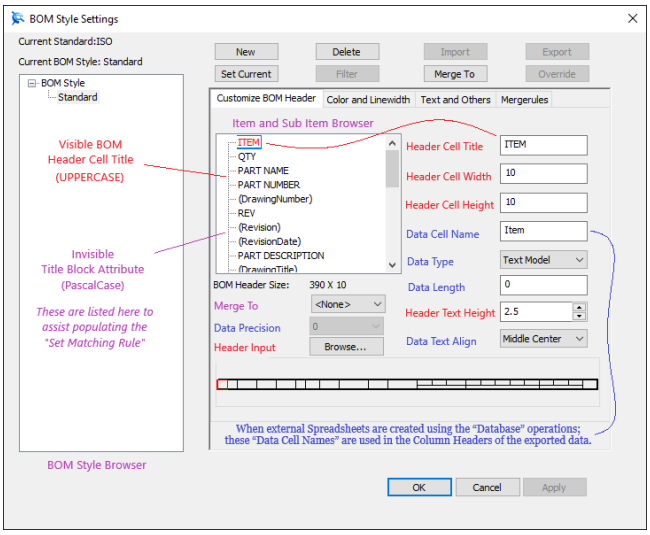
Customize BOM Header:	This Tab includes an "Item and Sub Item Browser", for adding and deleting "Items" and "Sub Items" (that is, the columns of the BOM). This also allows arranging of the "Items" and "Sub Items" in the desired order. The remaining fields in this Tab display the values for the selected "Item" or "Sub Item" within the Browser.
Color and Linewidth:	The fields in this Tab display values for the selected BOM Style.
Text and Others:	The fields in this Tab display values for the selected BOM Style.
Merge Rules:	The fields in this Tab display values for the selected BOM Style.

Within these four Tabs there are two types of "Cells" within the BOM; for which there are different settings. Only three settings (such as Text Colour) are applicable to both Cell types.

Header Cell:	This is the Cell that is displayed in the Header of the BOM.
Data Cells:	These are the Cells that contain the Data of each Item in the BOM.



Original Naming



Naming Used In This Document

Cell Settings (Header and Data) (For Selected Item or Sub Item)	Customize BOM Header Tab
Data Cell Name (Cell Name)	DataCellName (PascalCase) Whereas the "Header Cell Title" is used in the displayed BOM of the Drawing. The underlying name of the Data Cell is determined by the "Data Cell Name. When external Spreadsheets are created using the "Database" operations; these "Data Cell Names" are used in the Column Headers of the exported data.
Data Length (Characters) (Data Length)	0 to .... Setting the minimum value of "0" appears to work fine.

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Data Precision (Calculate Precision)	Applicable for Single and Double data types
Data Text Align (Text Justification)	Middle Center
Data Type (Data Type)	Boolean (Yes or No) Byte (Integers from -128 to 127) Integer (Whole Numbers, Zero, Negatives) Long Integer (Whole Numbers, Zero, Negatives) Coin Type (?) Single (Floating Point Numbers, Decimals) Double (Floating Point Numbers, Decimals) Date (no control over the format) Text Model (Characters)
Header Cell Height (mm) (Cell Height)	This controls the height of the Header Cell only. When set to zero (0), that Header Cell isn't visible in the BOM. Note however, that the Data Cell remains visible. The following values should be used for each Row. When a combination of Single Rows and Double Rows (Sub Items) is used, the Single Rows will need to use doubled values to match the Double Rows. 3.5 (Non-Standard for A4, A3 and A2) 5.0 (Standard for A4, A3 and A2) 7.0 (Standard for A1 and A0) Note that these Cell Heights are double the height of the Text that will be populating these Cells. Shown below.
Header Cell Title (Cell Title)	This is the "Title" (in UPPER CASE) displayed in the Header Cell of the BOM in the Drawing. This is also what is displayed in the Item and Sub Item Browser. "Title Block Attributes" (in PascalCase) can also be listed in BOM to assist populating the "Set Matching Rule". However, their Header Cell Width needs to be set to zero (0) so that they aren't displayed in the BOM.
Header Cell Width (mm) (Cell Width)	This controls the width of both the Header Cell and Data Cells. When set to zero (0), that Header Cell and the associated Data Cells aren't visible in the BOM.
Header Input (Input BOM)	Imports the Header Style from an external BOM
Header Text Height (Text Height)	1.8 (Non-Standard for A4, A3 and A2) 2.5 (Standard for A4, A3 and A2) 3.5 (Standard for A1 and A0)
Merge To (Merge To)	This merges (stacks below) the Header and Data of the selected Cell into another Cell, automatically reducing the Text Heights to fit. Manually increase Cell Heights.

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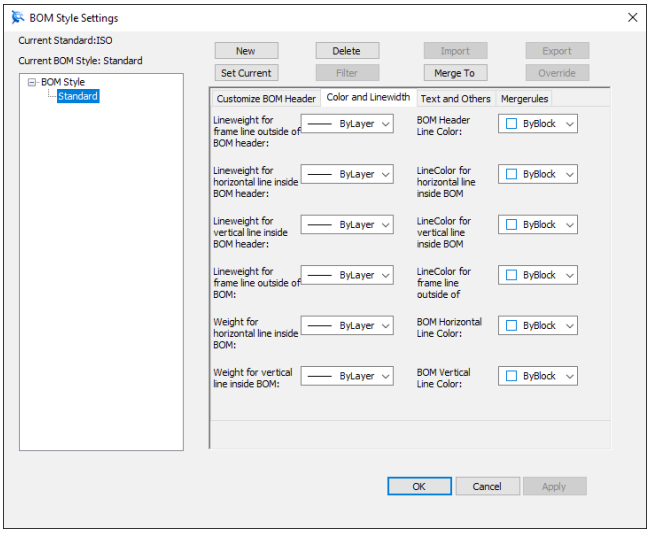
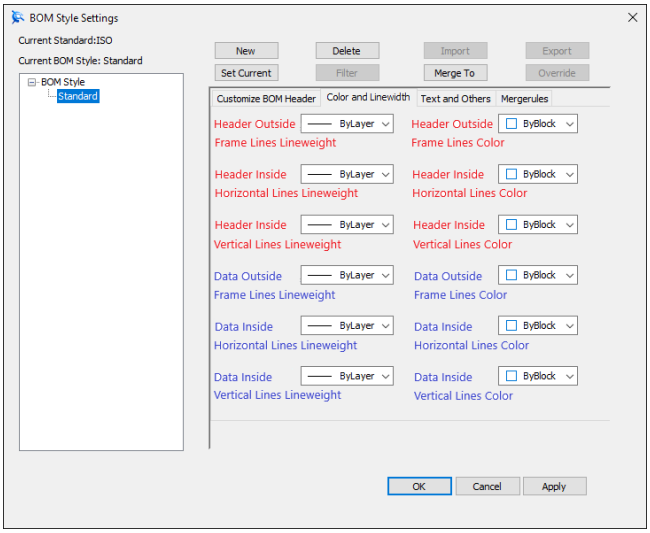
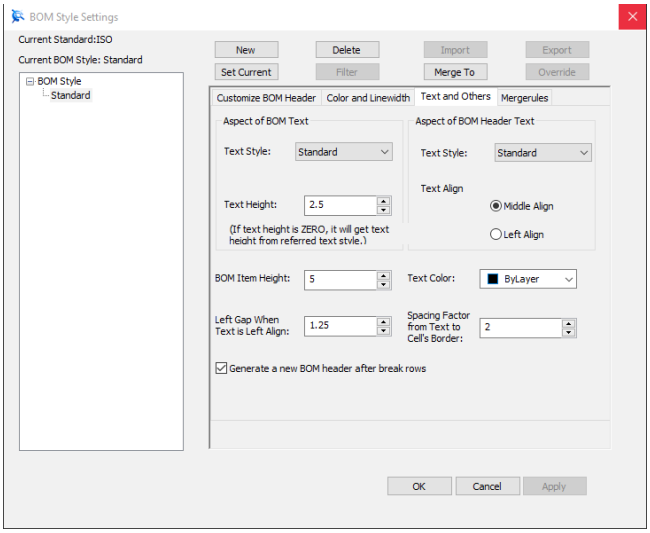


Original Naming

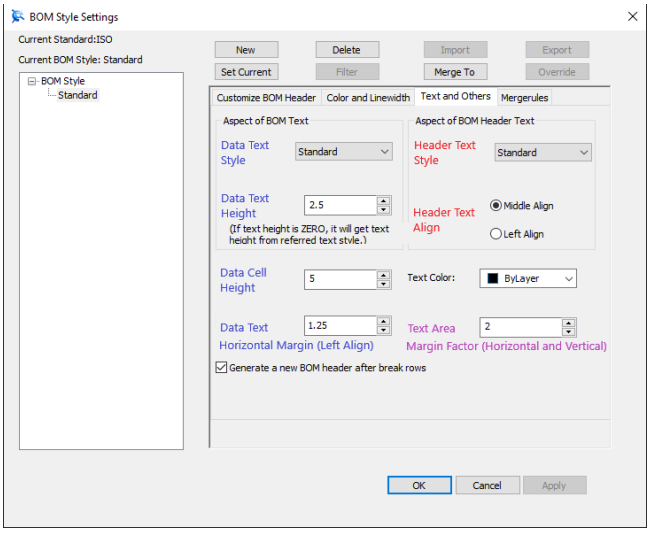


Naming Used In This Document

Line Settings (Header and Data) (For Selected BOM Style)	Color and Linewidth Tab	
	Lineweight	Line Colour
Data Inside Horizontal Lines	ByLayer	ByBlock
Data Inside Vertical Lines	ByLayer	ByBlock
Data Outside Frame Lines	ByLayer	ByBlock
Header Inside Horizontal Lines	ByLayer	ByBlock
Header Inside Vertical Lines	ByLayer	ByBlock
Header Outside Frame Lines	ByLayer	ByBlock



Original Naming



Naming Used In This Document

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Text Settings (Header and Data) (For Selected BOM Style)	Text and Others Tab
Data Cell Height (BOM Item Height)	This controls the height of the Data Cells only. When set to zero (0), that Data Cells aren't visible in the BOM. The following values should be used for each Row. 3.5 (Non-Standard for A4, A3 and A2) 5.0 (Standard for A4, A3 and A2) 7.0 (Standard for A1 and A0) Note that these Cell Heights are double the height of the Text that will be populating these Cells. Shown below.
Data Text Align	*See Data Text Align (Customize BOM Header)*
Data Text Height (Text Height)	1.8 (Non-Standard for A4, A3 and A2) 2.5 (Standard for A4, A3 and A2) 3.5 (Standard for A1 and A0)
Data Text Horizontal Margin (Left Gap ..... Left Align)	0.9 (Non-Standard for A4, A3 and A2) 1.25 (Standard for A4, A3 and A2) 1.75 (Standard for A1 and A0)
Data Text Style (BOM Text Style)	Standard (used for Standard BOM Style only) Tables (used for all other BOM Styles)
Header After Break Rows	Yes
Header Text Align (Text Align)	Middle
Header Text Height	*See Header Text Height (Customize BOM Header)*
Header Text Horizontal Margin	*This is controlled by the Text Area Margin Factor*
Header Text Style (BOM Header Text Style)	Standard (used for Standard BOM Style only) Tables (used for all other BOM Styles)
Text Area Margin Factor (Spacing Factor from Text .....)	This scales the "Height of Area" property of the Text rather than the "Text Height". The "Height of Area" is initially defined by the "Cell Height". However, for each Factor of 0.5, this "Height of Area" is reduced by 10% of the original "Cell Height" (for a vertical margin top and bottom of 5%). The minimum value of this Factor is 0.5 and the maximum is 4.0. Take note that this Factor is applied differently for Header and Data Text Areas. 0.5 = 80% of Header Cell and 90% of Data Cell 1.0 = 70% of Header Cell and 80% of Data Cell 1.5 = 60% of Header Cell and 70% of Data Cell 2.0 = 50% of Header Cell and 60% of Data Cell 2.5 = 40% of Header Cell and 50% of Data Cell 3.0 = 30% of Header Cell and 40% of Data Cell 3.5 = 20% of Header Cell and 30% of Data Cell 4.0 = 10% of Header Cell and 20% of Data Cell

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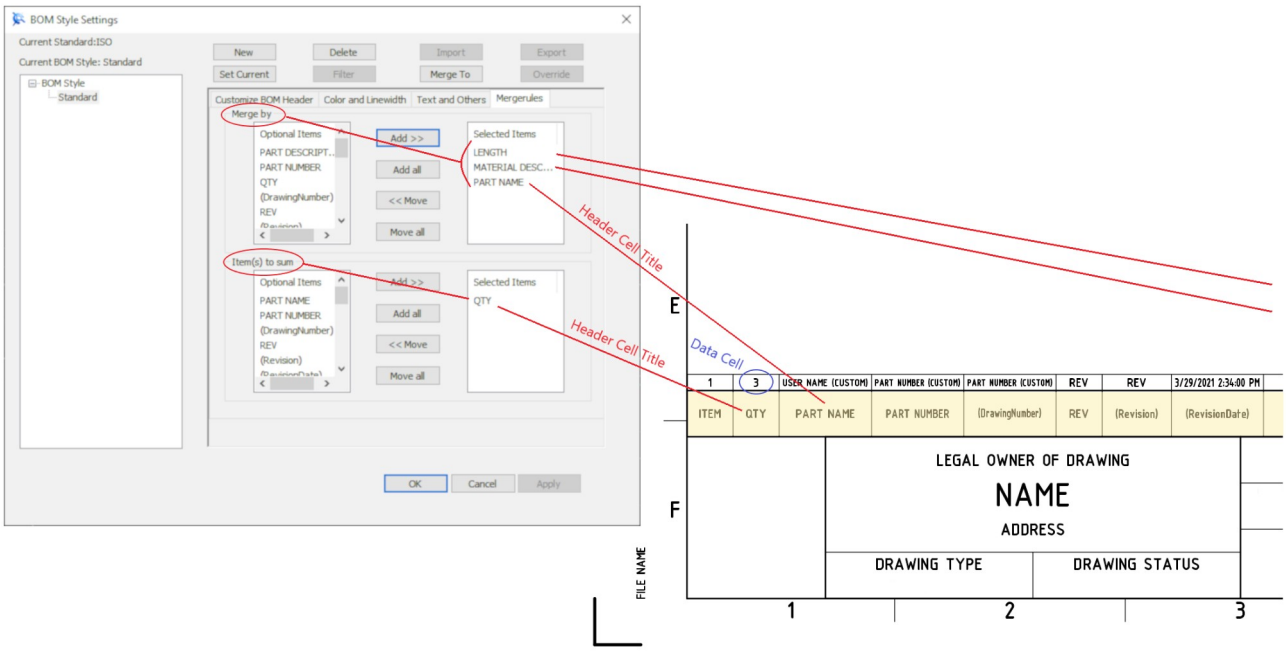
	If the “Height of Area” within the Cells is less than the “Height of Area” needed for the selected “Text Height”, the displayed “Text Height” will reduce to fit within the available Text Area. With that in mind, use the smaller Header Text Area when selecting the Margin Factor. We use Text Heights that are 50% of the Cell Heights. For single line text, the “Height of Area” is the same as the Text Height. So in this instance the “Height of Area” needs to be at least 50% of the height of the Cell. For Header Cells this is a maximum Factor of 2.0. For double line text (as when using “Merge To”), the “Height of Area” of the first line equals the Text Height. But, the second line is 1.3333 times the Text Height. So in this instance the “Height of Area” needs to be at least 58.33% of the height of the Cell. For Header Cells (with double line text) this is a max. Factor of 1.5 (use 1.0). For Data Cells, the “Width of Area” is reduced by the same amount (not percentage) as the “Height of Area”. If the original “Height of Area” is 7.0 and the factor is set to 2.0. Then both the “Height and Width of Area” of the Data Cells will reduce by 2.8mm (40% Cell Height). For Header Cells, the “Width of Area” is reduced by a far greater amount, with a more complex formula.
Text Colour (Text Color)	ByLayer



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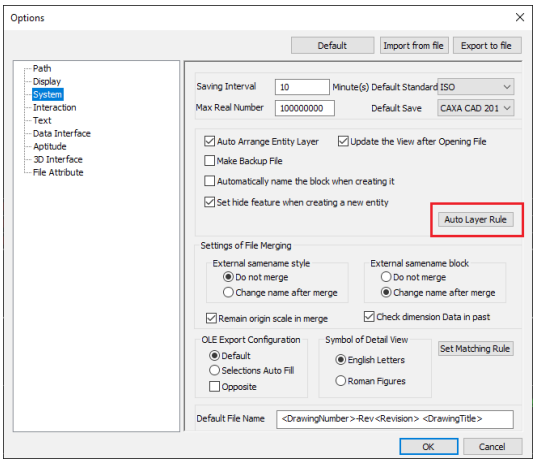
Data Merge Rules (For Selected BOM Style)	Merge Rules Tab
Data Merge By (Merge By)	PART NAME MATERIAL DESCRIPTION LENGTH
Item(s) to Sum	QTY

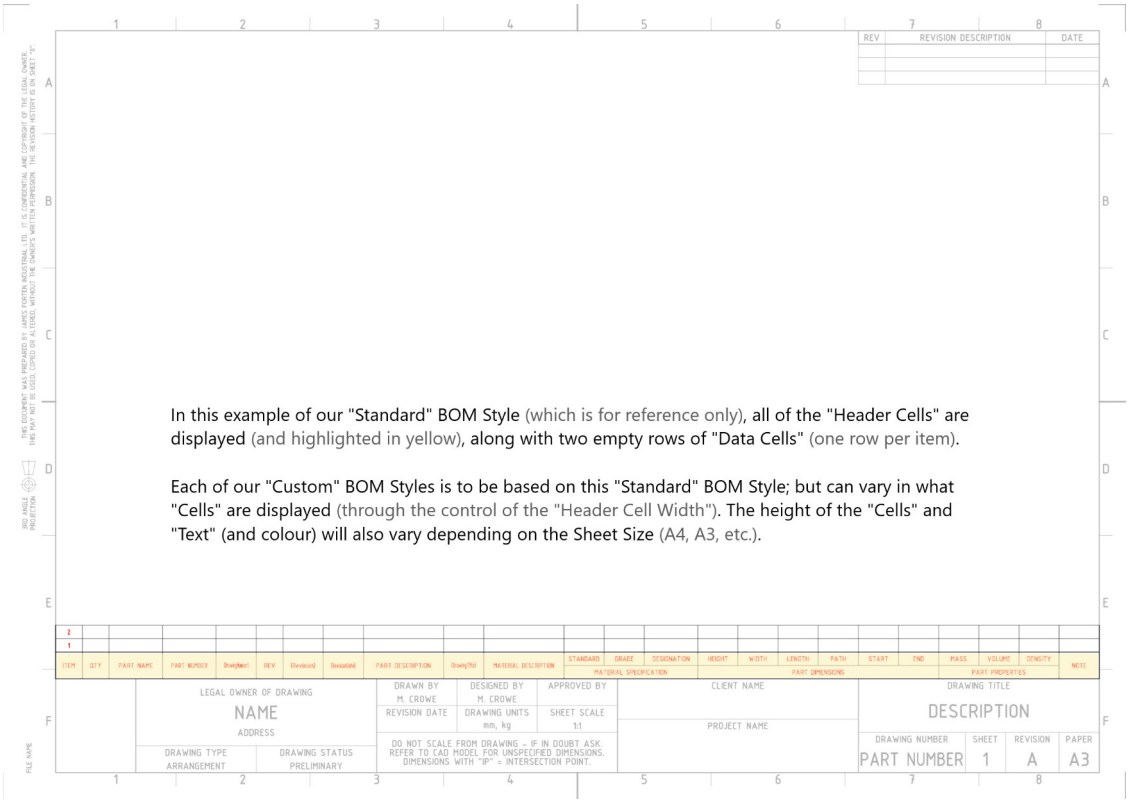


Options / System / Auto Layer Tool

CAXA creates the BOM as a “Block”, and places the “Block” and its line elements (and text) onto the same “Layer”.

Using the “Auto Layer Rule” settings within “Options”, set the BOM to be automatically placed onto the desired “Layer”. Such as:

Standard Annotations
Standard Annotation 025
Standard Annotations 035



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