

How Smart Are Your Tables?

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AC2251-L

Are you using tables in AutoCAD® software to their fullest potential? Do you still manually collect data from your AutoCAD file, manipulate it in some other application, and import it back into AutoCAD as plain text and linework objects? If so, you must attend this hands-on lab and discover all the possibilities available with tables. Take advantage of their linking and calculation functionality to streamline your data needs.

- Learn to use AutoCAD to create intelligent tables of data
- Learn to use the calculation and linking capabilities found in table objects.
- Learn to import data from other applications into intelligent AutoCAD tables.
- Learn to link tables to each other for more table data manipulation.

About the Speaker:

Jeanne is known for keeping her training sessions fast-moving and fun. She is a nationally-known speaker and expert in CAD and presents seminars and workshops on CAD productivity for managers and users in both corporations and colleges. She has more than 25 years of experience in production drafting, user support, standards coordination, programming, and training in various CAD applications. Jeanne is an independent consultant offering training and implementation services and is certified in several Autodesk and Bentley products. She has been a popular speaker at Autodesk University for several years and recently received a “Top Ten Class” award for her presentations at Autodesk University for the past 6 years.

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What is a Table?

A table is an object that contains information formatted into rows and columns. A table can be created as an empty table, or using a table style. The information in a table can be input manually, generated from objects in a drawing, extracted from block attributes, or linked to external data stored in a spreadsheet application such as Microsoft Excel®.

The Parts of a Table

First, let's look at the components of a simple table object.

- Title
- Header
- Data
- Row
- Column
- Cell
- Gridline
- Grips

Schedule									
Count	CAPPN	Name - (External)	CAPDH	CAPGC	CAPMC	CAPMG	CAPQT	CAPTG	COST
3	2006	P_2006	0.000000		BEC	STC	1	MIGRATIONS	\$100.00
1	2036-WLAM	P_2036-WLAM	0.000000		BEC	STC	1	36	\$101.00
2	287	P_287	0.000000		BEC	STC	1	CLUB	\$102.00
137	421482N	P_421482N	0.000000		SCT	STC	1	TRILOGY	\$103.00
72	462LEAP9L	P_462LEAP9L	0.000000		SCS	STC	1	LEAP	\$104.00
5	50622625	P_50622625	0.000000		VCT	STC	1	48/30	\$105.00
19	730581	P_730581	0.000000		SCF	STC	1	18/64/4	\$106.00
2	851204838	P_851204838	0.000000		SCA	STC	1	120/48	\$107.00
1	853525	P_853525	0.000000		SCA	STC	1	35/25	\$108.00
1	854800	P_854800	0.000000		SCA	STC	1	48	\$109.00

Title

TITLE				
HEADER	HEADER	HEADER	HEADER	HEADER
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA

Header

TITLE				
HEADER	HEADER	HEADER	HEADER	HEADER
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA

Data

TITLE				
HEADER	HEADER	HEADER	HEADER	HEADER
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA

Row

TITLE				
HEADER	HEADER	HEADER	HEADER	HEADER
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA

Column

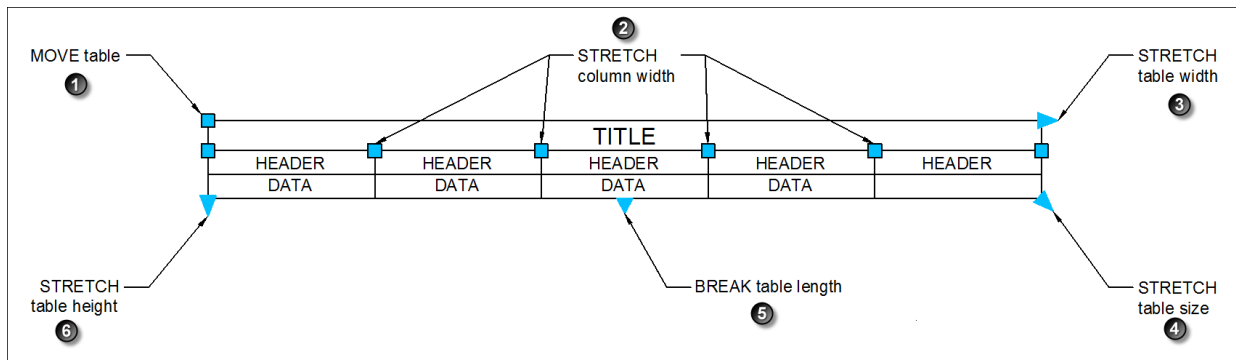
TITLE				
HEADER	HEADER	HEADER	HEADER	HEADER
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA

Gridline

TITLE				
HEADER	HEADER	HEADER	HEADER	HEADER
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA
DATA	DATA	DATA	DATA	DATA

Grips

There are several grips provided for quick editing of the table graphics. Use the grips shown in the following image to modify the table linework as needed.



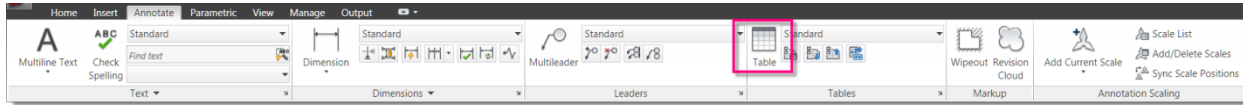
- 1 MOVE table – use this grip to move the entire table to a new location.
- 2 STRETCH column width – use this grip to widen each individual column.
- 3 STRETCH table width – use this grip to widen the entire table.
- 4 STRETCH table size – use this grip to lengthen the height and width of the entire table simultaneously.
- 5 BREAK table length – use this grip to break the table into multiple parts (pagination).
- 6 STRETCH table height – use this grip to increase the table height.

Creating a Table

Let's begin by creating a simple table with user defined data.

Where is it?

Ribbon: Use the ANNOTATE ribbon tab to access these commands.



Menu: Draw → Table

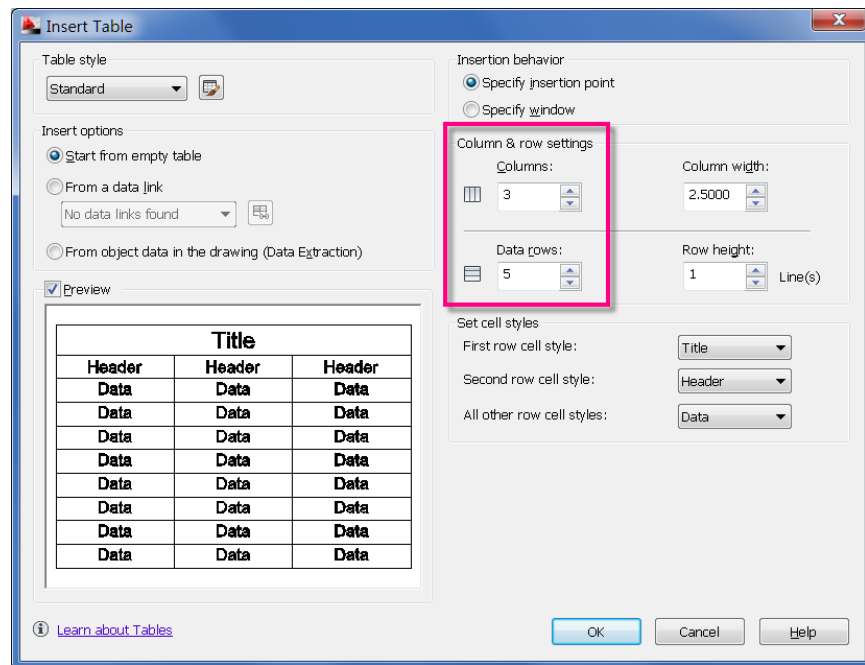
Toolbar: Draw



Command: TABLE

- STEP 1: Select File → Open...0-BLANK.DWG
- STEP 2: Using the ribbon interface, select the ANNOTATE tab → TABLES → TABLE tool.
- STEP 3: Modify the following table settings for COLUMN AND ROW SETTINGS as shown below.

Columns: 3
Data Rows: 5



- STEP 4: Pick OK to close the INSERT TABLE dialog.
- STEP 5: <Left-Click> anywhere in the drawing to place a blank table in the drawing. The TITLE cell is automatically selected enabling you to enter data.

STEP 6: Key-in the value SCHEDULE for the TITLE cell and press <ENTER> to move to the next cell. The second row in the table can be used as either a HEADER row or a DATA ROW, depending on your needs.

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5

STEP 7: Key-in the remaining fields as shown in the image.



Use the <ALT+ENTER> to input a hard line break inside a cell.

Modify a Table

Next, we want to modify the size of a simple table using “grips”

Modify the Table Size

STEP 1: Continue in the file...0-BLANK.DWG

STEP 2: Select the table by picking an “outside” edge. If you selected it as shown below, you will see a “spreadsheet like” appearance with column and row identifiers.

Row and Column Identifiers

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7			

STEP 3: Using the STRETCH TABLE grip, stretch the width of the table as needed.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7			

STEP 4: Using the STRETCH COLUMN grip, modify the width of the middle column.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7			

Modify a Table Cell

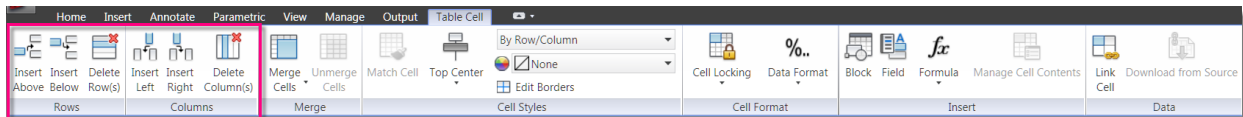
When you select a single cell you can make several modifications to the cell properties, cell values, linework, and other options listed below:

- Modify rows and columns
- Modify data formatting and alignment
- Modify the appearance of cell borders
- Merge and unmerge cells
- Lock and unlock cells
- Insert blocks, fields, and formulas
- Link the table to external data
- Create and modify cell styles

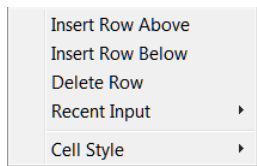
Modify Rows and Columns

Where is It?

Ribbon: The following ribbon only appears when a table is selected. It is a Context Sensitive ribbon.



<Right-Click> Menu:



Insert Rows and Columns

- STEP 1:** Continue in the file...0-BLANK.DWG
- STEP 2:** Select the table by picking on an "outside" edge.
- STEP 3:** Select the ROW 3 identifier.
- STEP 4:** Using the ribbon, select the ROWS → INSERT ABOVE command.
- STEP 5:** Select the COLUMN B identifier.
- STEP 6:** Using the ribbon, select the COLUMNS → INSERT RIGHT command.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 76"	5
7			

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3			
4	D101	3' x 7'	2
5	D102	3'6 x 7'	3
6	D103	4' x 7'	1
7	D104	4' x 76"	5
8			

SCHEDULE			
NAME	SIZE		QUANTITY
D101	3' x 7'		2
D102	3'6 x 7'		3
D103	4' x 7'		1
D104	4' x 76"		5

Delete Rows and Columns

STEP 1: Continue in the file...0-BLANK.DWG

STEP 2: Select the table by picking on an "outside" line

	A	B	C	D
1	SCHEDULE			
2	NAME	SIZE		QUANTITY
3				
4	D101	3' x 7'		2
5	D102	3'6 x 7'		3
6	D103	4' x 7'		1
7	D104	4' x 7'6"		5
8				

STEP 3: Select the ROW 3 identifier.

STEP 4: Using the ribbon, select the ROWS → DELETE ROW command.

STEP 5: Select the COLUMN C identifier.

	A	B	C	D
1	SCHEDULE			
2	NAME	SIZE		QUANTITY
3	D101	3' x 7'		2
4	D102	3'6 x 7'		3
5	D103	4' x 7'		1
6	D104	4' x 7'6"		5
7				

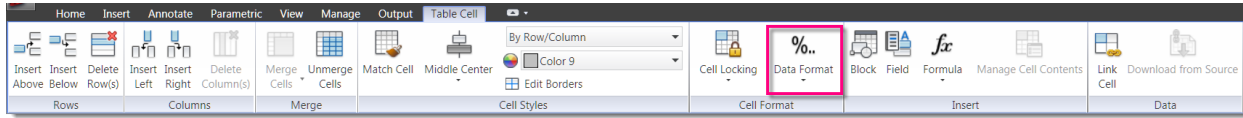
STEP 6: Using the ribbon, select the COLUMNS → DELETE COLUMN command.

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5

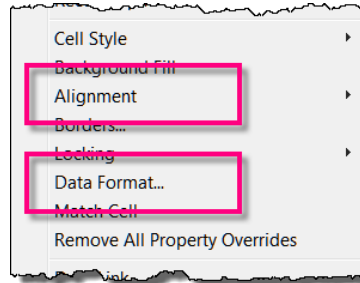
Modify Data Format and Alignment

Where is it?

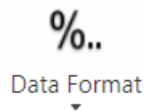
Ribbon: The following ribbon only appears when a table is selected. It is a Context Sensitive ribbon.



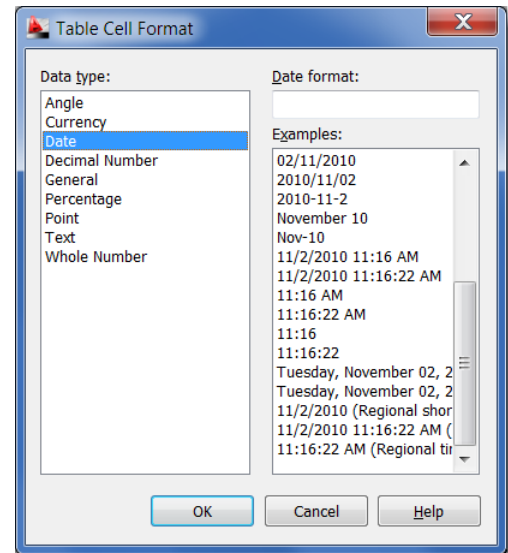
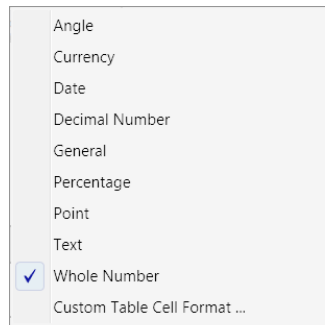
<Right-Click> Menu:



Modify Data Format



Use the DATA FORMAT command to modify the cell content to any of the formats listed below.



- STEP 1:** Continue in the file....0-BLANK.DWG
- STEP 2:** Select the table by picking on an "outside" edge.
- STEP 3:** Select the A COLUMN identifier to select the entire A COLUMN.
- STEP 4:** Using the ribbon, select the CELL FORMAT → DATA FORMAT → TEXT command.

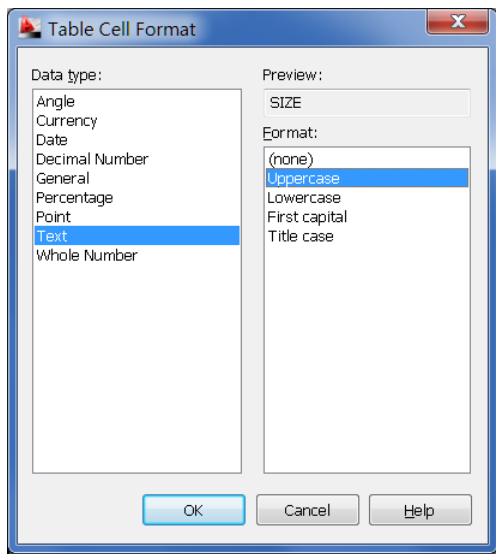
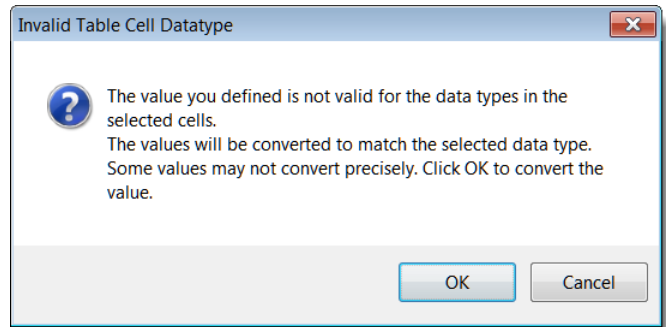
	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 76"	5
7			

- STEP 5:** Repeat these steps to define the following data formats for columns B and C.

Column B: General
 Column C: Whole Number

An error will occur during the COLUMN C data format change. This error occurs because the HEADER portion of the column cannot be defined as a WHOLE NUMBER with the existing text QUANTITY. If you pick OK the text value QUANTITY will be removed. If you pick CANCEL you can change the format or selected cells.

- STEP 6:** Pick CANCEL to close the INVALID TABLE CELL DATATYPE dialog.
- STEP 7:** Re-select the table by picking “inside” the C3 cell.
- STEP 8:** Hold down the <SHIFT> key and pick “inside” the C6 cell.
- STEP 9:** Using the ribbon, select the CELL FORMAT → DATA FORMAT → WHOLE NUMBER command.



TIP:

You can define both the data format and the character format if you use the <Right-Click> menu option to select the DATA FORMAT command.

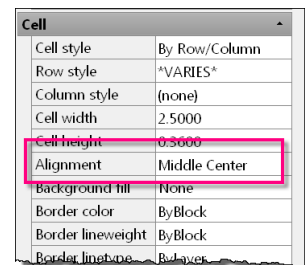
Modify Data Alignment

STEP 1: continue in the file...0-BLANK.DWG

STEP 2: Select column C by selecting on the COLUMN C identifier.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7			

STEP 3: Using the PROPERTIES palette, modify the CELL → ALIGNMENT to MIDDLE CENTER to change the justification of the entire column.



SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5

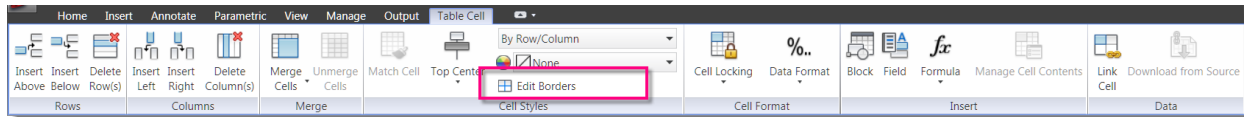


TIP: You can also use the <Right-Click> menu to access the ALIGNMENT command.

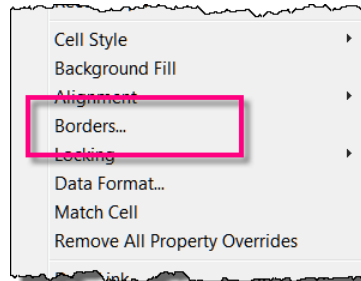
Modify the Table Linework

Where is it?

Ribbon: The following ribbon only appears when a table cell is selected. It is a Context Sensitive ribbon.



<Right-Click> Menu:



Edit Cell Borders

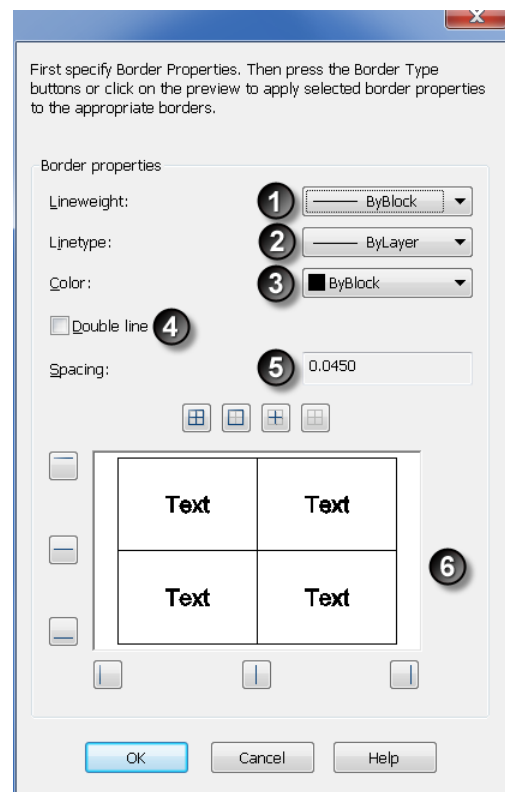


Use the EDIT BORDERS command to modify any cell border properties.

- 1 Define LINEWEIGHT for border linework
- 2 Define LINETYPE for border linework
- 3 Define COLOR for border linework
- 4 Define a DOUBLE-LINE for border linework
- 5 Define line spacing for Double-Line linework
- 6 Use the table preview to assign individual border properties. The buttons around the table preview provide quick shortcuts for linework assignments.



TIP: You can remove all cell property modifications using the command REMOVE ALL CELL PROPERTY OVERRIDES available on the <Right-Click> menu.



Outside Border

First, let's change the linework around the entire table object.

STEP 1: Continue in the file....0-BLANK.DWG

STEP 2: Select the table by picking on an "outside" edge.

STEP 3: Select the "UPPER LEFT CORNER" of the identifiers to select the entire table.

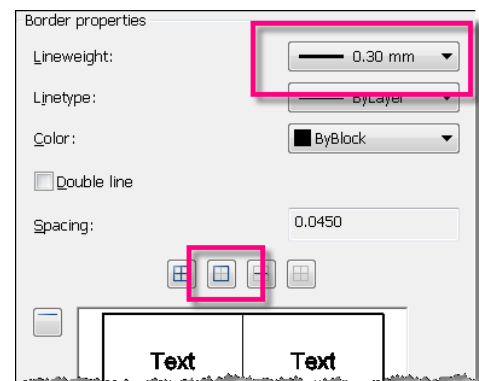
STEP 4: Using the ribbon, select the CELL STYLES → EDIT BORDERS command.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7			

STEP 5: Modify the LINEWEIGHT setting to .30mm and select the OUTSIDE BORDERS button.

STEP 6: Pick OK to save these changes.

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5



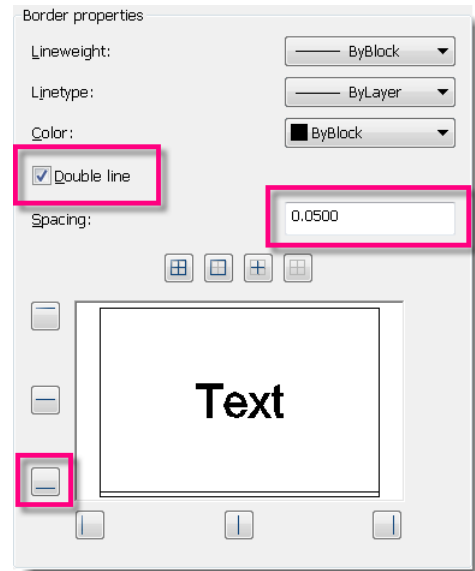
Title Border

Next, let's change the linework between the title cell and the data cells.

- STEP 1:** Continue in the file...0-BLANK.DWG
- STEP 2:** Select the table by picking "inside" the TITLE cell "SCHEDULE".
- STEP 3:** Using the ribbon, select the CELL STYLES → EDIT BORDERS command.
- STEP 4:** TURN ON the DOUBLE LINE setting and define the spacing as 0.0500 and pick the BOTTOM BORDER button
- STEP 5:** Pick OK to save these changes.

	A	B	C	
1	SCHEDULE			
2	NAME	SIZE	QUANTITY	
3	D101	3' x 7'	2	
4	D102	3'6 x 7'	3	
5	D103	4' x 7'	1	
6	D104	4' x 7'6"	5	
7				

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5



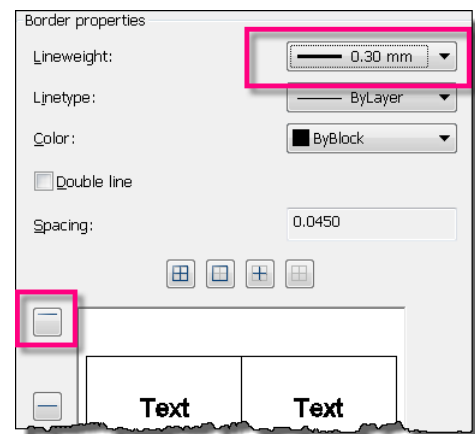
Totals Border

Now, let's change the linework between the data cells and the last row of cells.

- STEP 1:** Continue in the file...0-BLANK.DWG
- STEP 2:** Select the table by picking "inside" the A7 cell.
- STEP 3:** Hold down the <SHIFT> key and select INSIDE cells B7 and C7. This will select all three cells simultaneously.
- STEP 4:** Using the ribbon, select the CELL STYLES → EDIT BORDERS command.
- STEP 5:** Modify the LINEWEIGHT setting to .30mm and pick the TOP BORDER button.
- STEP 6:** Pick OK to save these changes.

	A	B	C	
1	SCHEDULE			
2	NAME	SIZE	QUANTITY	
3	D101	3' x 7'	2	
4	D102	3'6 x 7'	3	
5	D103	4' x 7'	1	
6	D104	4' x 7'6"	5	
7				

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5

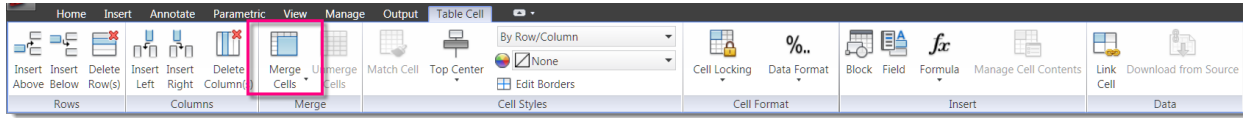


TIP: You can access the EDIT BORDERS command using the <Right-Click> menu.

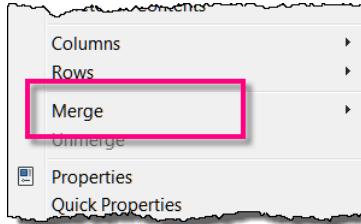
Merge Cells for Totals

Where is it?

The following ribbon only appears when more than one table cell is selected. It is a Context Sensitive ribbon.



<Right-Click> Menu:

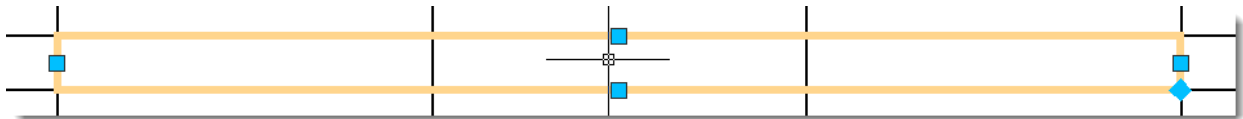
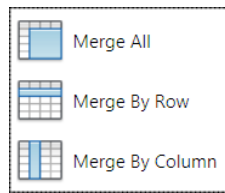


Merge Cells



Select more than one cell to activate the MERGE CELLS command. Use the following command options to control the merge type.

Merge Cells ▾



Cell Selection Methods

CROSSING – use a CROSSING window to easily select multiple cells.

SHIFT - use the <SHIFT> key to select the first and last cell and all cells in between.



TIP: Use the UNMERGE CELLS command to remove all cell merge overrides.



Unmerge Cells

- STEP 1:** Continue in the file...0-BLANK.DWG
- STEP 2:** Select the table by picking "inside" the A7 cell.
- STEP 3:** Hold down the <SHIFT> key and pick "inside" the B7 cell. This will select both cells simultaneously.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7			

- STEP 4:** Using the ribbon, select the MERGE → MERGE CELLS → MERGE ALL command.
- STEP 5:** Key-in the value TOTALS in the newly merged cell A7:B7.

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5
TOTALS		



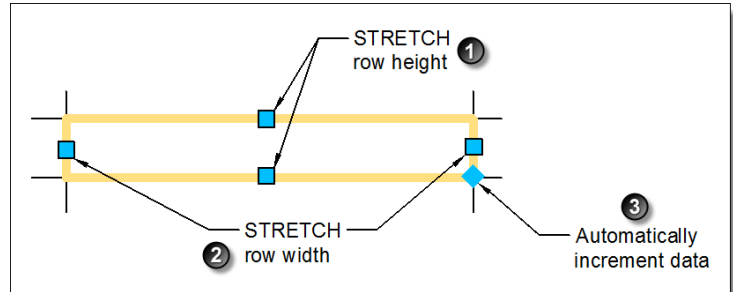
TIP: You can use the <Right-Click> menu to access the MERGE → ALL command.

Edit Cell Size for Title

Use the following grips to modify the size of the cell row or column.

Modify and Populate Cell Values

- 1 Use this grip to modify the height of a single row.
- 2 Use this grip to modify the width of a single cell
- 3 Use this grip to increment the value of a cell automatically using the following options:



- Fill Series
- Fill Series Without Formatting
- Copy Cells
- Copy Cells Without Formatting
- Fill Formatting Only

STEP 1: Continue in the file...0-BLANK.DWG

STEP 2: Select the table by picking "inside" the TITLE cell.

STEP 3: Select the STRETCH grip at the top of the TITLE cell and drag it up to increase the height of the cell.

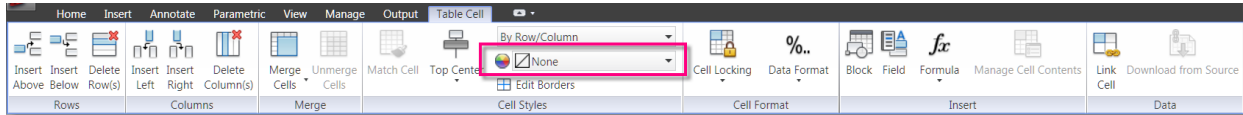
	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7	TOTALS		

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5
TOTALS		

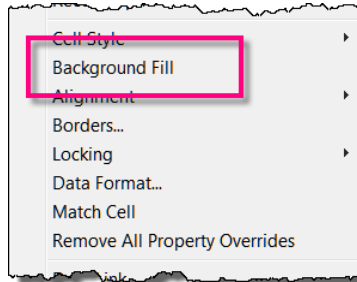
Cell Background Fills

Where is it?

The following ribbon only appears when more than one table cell is selected. It is a Context Sensitive ribbon.



<Right-Click> Menu:



Add Background Fill

STEP 1: Continue in the file....0-BLANK.DWG

STEP 2: Select the table by picking "inside" the TITLE cell.

STEP 3: Use the ribbon to access the CELL STYLES → TABLE CELL BACKGROUND COLOR command.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7	TOTALS		

STEP 4: Select the table by picking "inside" the cell A7:B7.

STEP 5: Use the ribbon to access the CELL STYLES → TABLE CELL BACKGROUND COLOR command.

	A	B	C
1	SCHEDULE		
2	NAME	SIZE	QUANTITY
3	D101	3' x 7'	2
4	D102	3'6 x 7'	3
5	D103	4' x 7'	1
6	D104	4' x 7'6"	5
7	TOTALS		

SCHEDULE		
NAME	SIZE	QUANTITY
D101	3' x 7'	2
D102	3'6 x 7'	3
D103	4' x 7'	1
D104	4' x 7'6"	5
TOTALS		



TIP:
Use the <Right-Click> menu to access the BACKGROUND FILL command.

Copy and Increment Cell Data

STEP 1: Select File → Open.....1-SIMPLE TABLE.DWG

STEP 2: Select the table by picking “inside” the A3 cell.

STEP 3: Select the AUTO-INCREMENT grip and drag it to the bottom of the A COLUMN.

This will COPY the value of the A3 cell to all cells in the A COLUMN.

	A	B	C
1	SCHEDULE		
2	NAME	NUMBER	QUANTITY
3	D101	100	1000
4	D101		
5	D101		
6	D101		
7	TOTALS		

STEP 4: Select the table by picking “inside” the B3 cell.

STEP 5: Select the AUTO-INCREMENT grip and drag it to the bottom of the B COLUMN.

This will COPY AND INCREMENT the value of the B3 cell to all cells in the B COLUMN.

	A	B	C
1	SCHEDULE		
2	NAME	NUMBER	QUANTITY
3	D101	100	1000
4	D101	101	
5	D101	102	
6	D101	103	
7	TOTALS		

Why are they different?

The INCREMENT AND COPY command only increments the value if the data format is defined as DECIMAL NUMBER, ANGLE, PERCENTAGE, and CURRENCY. All other data formats perform the COPY command.

You can avoid the increment of number fields using the following steps:

STEP 1: Select the table by selecting INSIDE the C3 cell.

STEP 2: Select the AUTO-INCREMENT grip and <Right-Click> to access the command options

STEP 3: Select COPY CELLS and drag the grip to the bottom of the C COLUMN.

This will COPY the value of the B3 cell (no increment) to all cells in the C COLUMN.

	A	B	C
1	SCHEDULE		
2	NAME	NUMBER	QUANTITY
3	D101	100	1000
4	D101	101	
5	D101	102	
6	D101	103	
7	TOTALS		

Fill Series
 Fill Series Without Formatting
 Copy Cells
 Copy Cells Without Formatting
 Fill Formatting Only

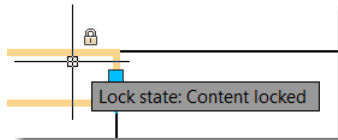
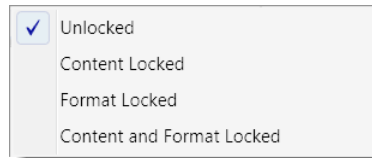
SCHEDULE		
NAME	NUMBER	QUANTITY
D101	100	1000
D101	101	1000
D101	102	1000
D101	103	1000
TOTALS		

Lock and Unlock Cells



Cell Locking

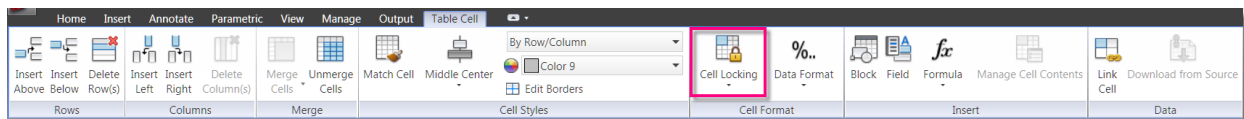
Use the LOCK CELL command option to prevent cell modifications. You can lock any of the following cell properties.



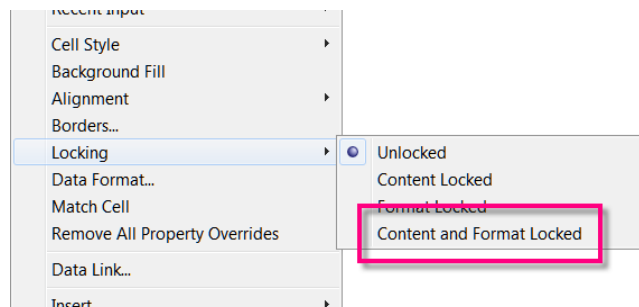
A lock icon and tooltip will appear on the cursor when you hover over a selected and “locked” cell in a table.

Where is It?

Ribbon: The following ribbon only appears when a table cell is selected. It is a Context Sensitive ribbon.



<Right-Click> Menu:



Locking a Cell

- STEP 1: Continue in the file...1-SIMPLE TABLE.DWG
- STEP 2: Select the table by picking “inside” the A3 cell.
- STEP 3: Using the ribbon, select the CELL FORMAT → CELL LOCKING → CONTENT AND FORMAT LOCKED command.

	A	B	C
1	SCHEDULE		
2	NAME	NUMBER	QUANTITY
3	D101	100	1000
4	D101	102	1000
5	D101	102	1000
6	D101	103	1000
7	TOTALS		

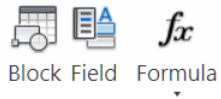
Unlocking a Cell

- STEP 1: Continue in the file...1-SIMPLE TABLE.DWG
- STEP 2: Select the table by selecting INSIDE the A3 cell.
- STEP 3: Using the ribbon, select the CELL FORMAT → CELL LOCKING → UNLOCKED command.


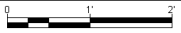







TIP: When a cell

Insert Blocks, Fields and Formulas



You can insert a block into a table cell to create a Legend or Symbol table for your project. The size and appearance of the block can be set automatically or defined manually. Multiple blocks can be inserted using the Manage Cell Content dialog which can be accessed using the <Right-Click> menu with a cell selected.

SYMBOLS LEGEND	
	TRUE NORTH / NORTH ARROW TAG
	GRAPHIC SCALE TAG
	REVISION CLOUD TAG
	ELEVATION TAG
	SECTION TAG
	NOTE TAG
	TITLE TAG
BUILDING ACRONYM FLOOR DESIGNATION SHEET TITLE	
SCALE: #####	

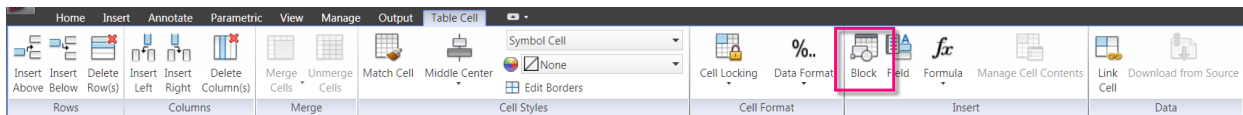


TIP: The *MANAGE CELL* command is only available when there are two or more items inserted in a single cell.

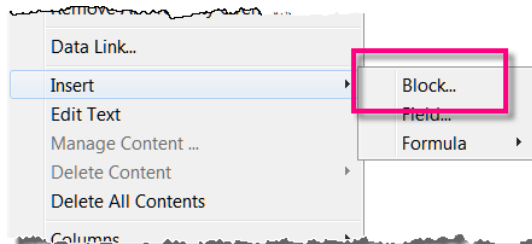
Insert Blocks

Where is It?

Ribbon: The following ribbon only appears when a table cell is selected. It is a Context Sensitive ribbon.

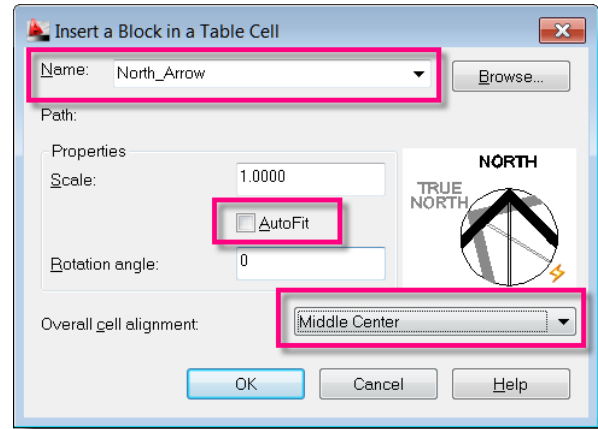



<Right-Click> Menu:



Insert a Block

- STEP 1:** Open the file....2-LEGEND TABLE.DWG
- STEP 2:** Select the table by picking "inside" the A2 cell.
- STEP 3:** Using the ribbon, select the INSERT BLOCK command.
- STEP 4:** Using the INSERT...BLOCK...TABLE CELL dialog select the NORTH_ARROW block.
- STEP 5:** TURN OFF the setting for AUTOFIT.
- STEP 6:** Modify the OVERALL CELL ALIGNMENT to MIDDLE CENTER.
- STEP 7:** Pick OK to save the changes and close the dialog.

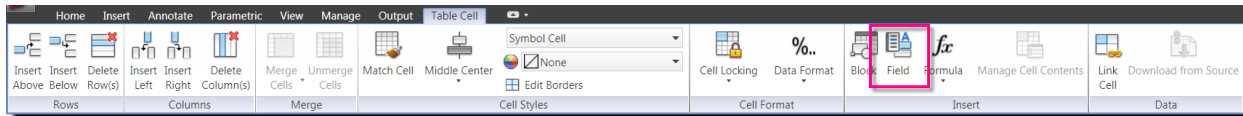


	A	B
1	SYMBOLS LEGEND	
2		TRUE NORTH / NORTH ARROW TAG
3		GRAPHIC SCALE TAG
4		REVISION CLOUD TAG
5		ELEVATION TAG
6		SECTION TAG
7		NOTE TAG
8		TITLE TAG

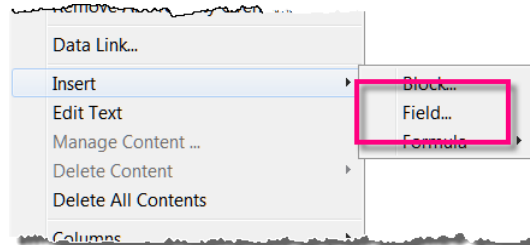
Insert Fields

Where is It?

Ribbon: The following ribbon only appears when a table cell is selected. It is a Context Sensitive ribbon.



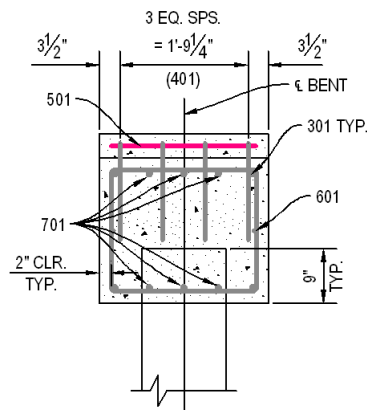
<Right-Click> Menu:



Insert a Field

For this exercise we will populate a table cell with a field that retrieves its value from the length of a piece of rebar.

STEP 1: Open the file....3-TABLE FIELDS-FORMULAS.DWG



STEP 2: Select the table by selecting INSIDE the C5 cell.

STEP 3: Using the ribbon, select the INSERT → FIELD command.

	A	B	C	D
1	Estimated Quantities			
2	BAR	NO.	LENGTH	TOTAL LENGTH
3	301	4	44'-8"	
4	401	8	1'-4"	
5	501	20		
6	601	2	14'-7"	
7	701	6	44'-8"	
8	TOTAL			

STEP 4: Using the FIELD dialog define the following settings:

Field Category: Objects
Field Names: Object

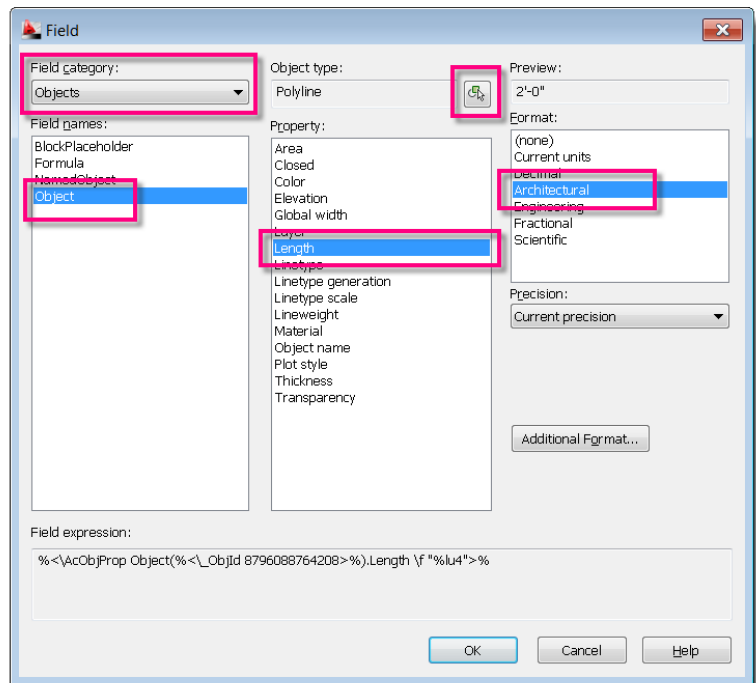
STEP 5: Select the PICK OBJECT button for the OBJECT TYPE and select the RED REBAR (501)

STEP 6: Using the FIELD dialog define the remaining settings:

Property: Length
Format: Architectural

STEP 7: Pick OK to save these changes and close the dialog.

STEP 8: Press <ENTER> to complete the command

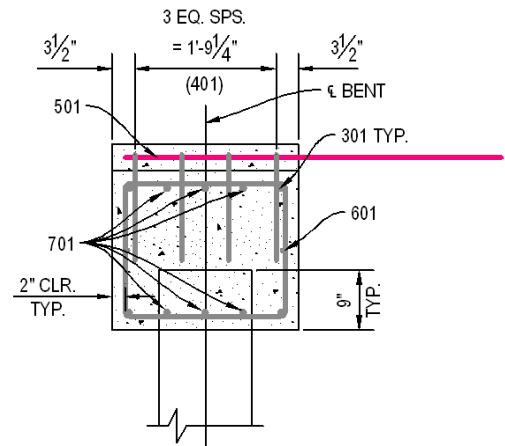


The table cell is populated with the 2'-0" length from the selected rebar in the drawing.

Estimated Quantities			
BAR	NO.	LENGTH	TOTAL LENGTH
301	4	44'-8"	
401	8	1'-4"	
501	20	2'-0"	
601	2	14'-7"	
701	6	44'-8"	

STEP 9: Modify the length of the 501 REBAR.

STEP 10: Key-in REGEN to force the FIELD objects in the table to update.



You can control the update methods for fields using the following system variable.

FIELDEVAL

Controls how fields are updated.

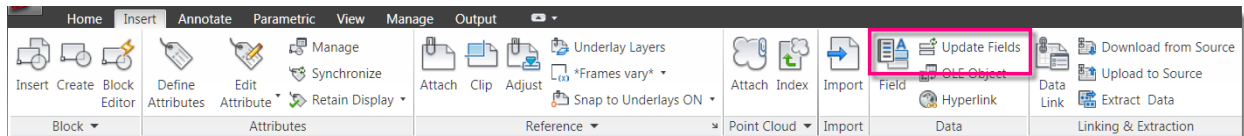
	0	Not updated
	1	Updated on open
	2	Updated on save
	4	Updated on plot
	8	Updated on use of ETRANSMIT
	16	Updated on regeneration.
<i>Default</i>	31	All of the above



TIP: You can update any individual FIELD object(s) using the UPDATEFIELD command and selecting objects.

Where is It?

Ribbon: The following ribbon only appears when a table cell is selected. It is a Context Sensitive ribbon.



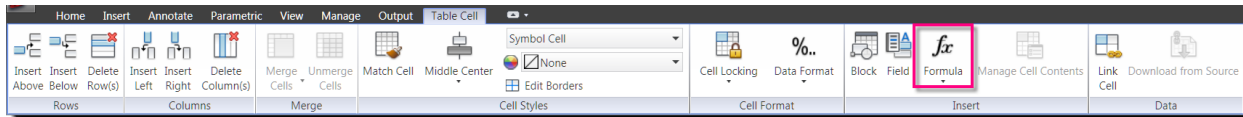
Menu: Tools → Update Fields

Command: UPDATEFIELD

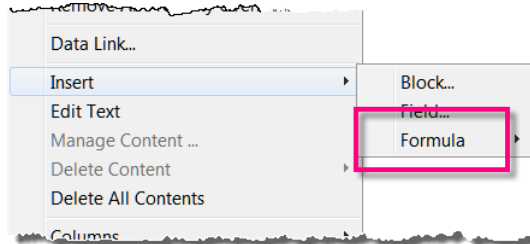
Insert Formulas

Where is It?

Ribbon: The following ribbon only appears when a table cell is selected. It is a Context Sensitive ribbon.



<Right-Click> Menu:



Insert a Formula

For this exercise we will populate a table cell with a formula that uses other table cells to determine its value. We want the value of cell B3 * C3 placed in the table cell D3.

STEP 1: Continue in the file...3-TABLE FIELDS-FORMULAS.DWG

STEP 2: Select the table by picking "inside" the D3 cell.

STEP 3: Using the ribbon, select the INSERT → FORMULA → EQUATION command.

STEP 4: Key-in the following formula =B3*C3.

STEP 5: Press <ENTER> to complete the command.

STEP 6: The resulting value should read 178'8"

STEP 7: Use the INCREMENT AND COPY grip to copy the formula to cells D4, D5, D6, and D7.

	A	B	C	D
1	Estimated Quantities			
2	BAR	NO.	LENGTH	TOTAL LENGTH
3	301	4	44'-8"	
4	401	8	1'-4"	
5	501	20	4'-8 1/2"	
6	601	2	14'-7"	
7	701	6	44'-8"	
8				

Use the commands you have learned so far to add another row to the bottom of the existing table. Merge the cells A8, B8, and C8 and key-in the value TOTAL in the newly merged cells.

Estimated Quantities			
BAR	NO.	LENGTH	TOTAL LENGTH
301	4	44'-8"	178'-8"
401	8	1'-4"	10'-8"
501	20	4'-8 1/2"	94'-2"
601	2	14'-7"	29'-2"
701	6	44'-8"	268'-0"
TOTAL			

Next, we want to add another formula to calculate the sum total of all rebar lengths.

STEP 1: Select the table INSIDE the cell D8.

STEP 2: Using the ribbon, select the INSERT → FORMULA → SUM command.

STEP 3: Drag a crossing window across the table cells D3, D4, D5, D6, and D7.

	A	B	C	D
1	Estimated Quantities			
2	BAR	NO.	LENGTH	TOTAL LENGTH
3	301	4	44'-8"	178'-8"
4	401	8	1'-4"	10'-8"
5	501	20	4'-8 1/2"	94'-2"
6	601	2	14'-7"	29'-2"
7	701	6	44'-8"	268'-0"
8	TOTAL			

STEP 4: The formula =SUM(D3:D7) is placed in the table cell.

STEP 5: Press <ENTER> to complete the command

The resulting value of 580'-8" is displayed in table cell D8.

Estimated Quantities			
BAR	NO.	LENGTH	TOTAL LENGTH
301	4	44'-8"	178'-8"
401	8	1'-4"	10'-8"
501	20	4'-8 1/2"	94'-2"
601	2	14'-7"	29'-2"
701	6	44'-8"	268'-0"
TOTAL			580'-8"

Using a Table Link

A table can be linked to data outside of AutoCAD if it is stored in a Microsoft Excel (XLS, .XLSX, or CSV) file. The table can be linked to an entire spreadsheet, individual row, column, cell, or cell range in Excel.

Linked data can be linked to an AutoCAD table using the following three methods:

1. As formulas with data formats attached
2. As calculations from formulas calculated in Excel (with data formats not attached)
3. As calculations from formulas calculated in Excel (with data formats attached)

A table that contains linked data displays “link indicators” around linked cells. Information about the linked data can be viewed by “hovering” the cursor over the data link “indicators”.

	A	B	C	D	
1	Rebar Total Costs				
2	SIZE	DIAMETER	LBS/FT	COST/FT	TOTAL
3	3	0.375	0.376	0.15	
4	4	0.5	0.668	0.15	
5	5	0.625	1.043	0.15	
6	6	0.75	1.502	0.20	
7	7	0.875	2.044	0.20	
8	8	1	2.67	0.20	
9	9	1.128	3.4	0.25	
10	10	1.27	4.303	0.25	
11	11	1.41	5.313	0.25	
12	14	1.693	7.65	0.25	
13	18	2.257	13.6	0.25	

Link Indicator

Link a Table to Excel

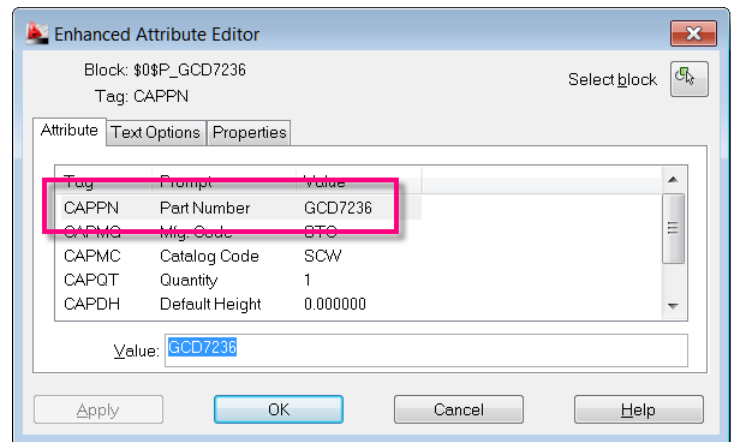
For this section we will create a new table that reads block attributes from the active and referenced drawings, and links an attribute value to an external Excel spreadsheet.

STEP 1: Open the file...4-TABLE TO EXCEL LINKING.DWG

STEP 2: Select the desk in the conference room and <Right-Click> to access the EDIT XREF IN PLACE command.

STEP 3: <Double-Click> on the conference room desk to review the associated attributes.

We will use the attribute CAPPN to link the attributes to an identical column in the spreadsheet.



STEP 4: Using the ribbon, select EDIT REFERENCE → DISCARD CHANGES to return to the original file 4-TABLE TO EXCEL LINKING.DWG

Next, we want to use the PART NUMBER (CAPPN) attribute on the furniture blocks to link to the identical column in the Excel spreadsheet. We will also include additional information from the spreadsheet in our table object.

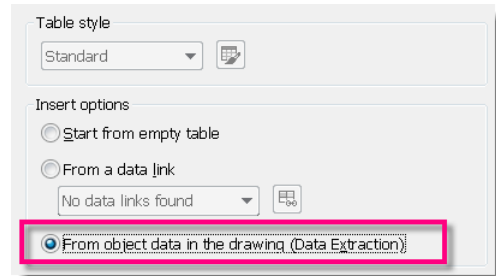
We want to place this table in paperspace, so first we need to toggle to the paperspace environment.

STEP 1: Select the MY LAYOUT tab in the file 4-TABLE TO EXCEL LINKING.DWG

STEP 2: Using the ANNOTATE ribbon, select TABLES TABLE command.

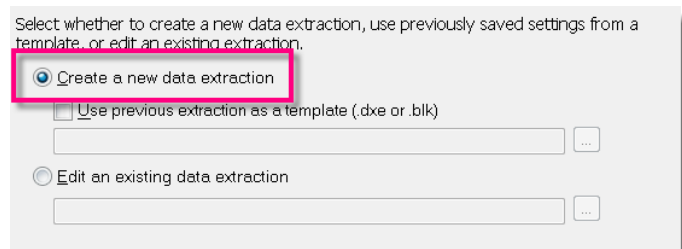
STEP 3: Using the INSERT TABLE dialog, select the setting to create a table FROM OBJECT DATA IN THE DRAWING (DATA EXTRACTION)

STEP 4: Pick the OK button to continue.



STEP 5: Select the option to CREATE A NEW DATA EXTRACTION

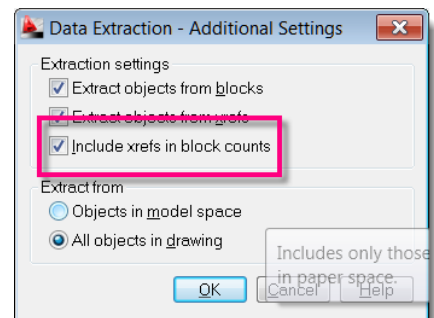
STEP 6: Pick NEXT and create the DATA EXTRACTION file (DXE) in the following folder



C:\Training\AC2251-L\dwg\FURNITURE.DXE

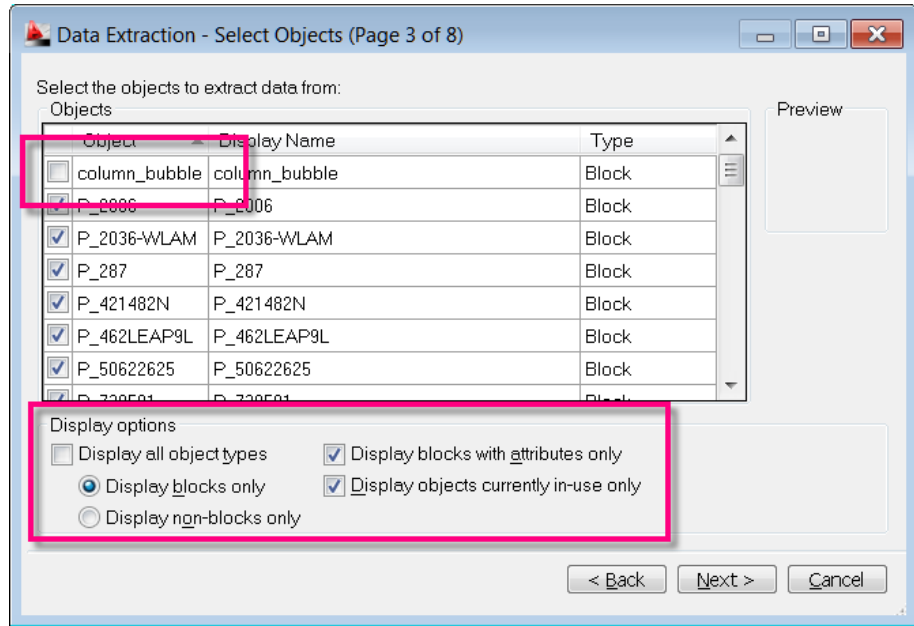
STEP 7: Pick the SETTINGS button and TURN ON the option for INCLUDE XREFS IN BLOCK COUNTS.

STEP 8: Pick OK to close the ADDITIONAL SETTINGS dialog and to continue.

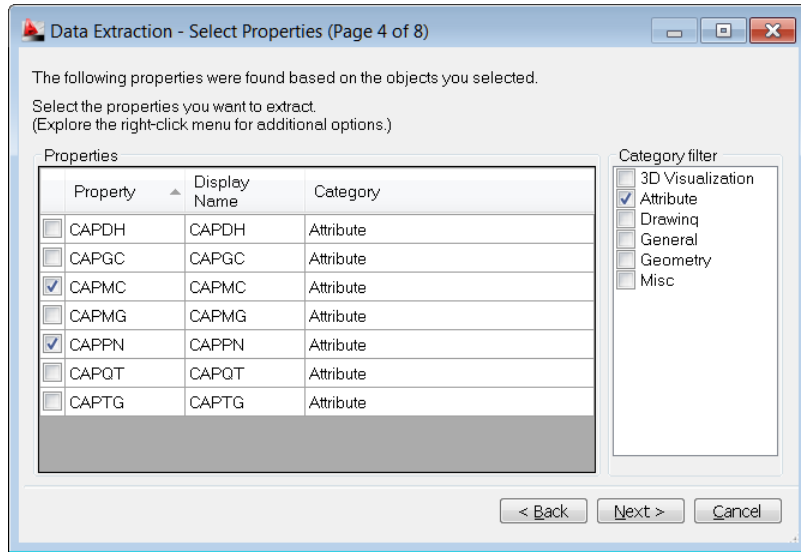


At this stage you can add additional drawings and folders to be included in the table object.

- STEP 9:** Pick the NEXT button to read all objects from the selected files.
- STEP 10:** TURN OFF the setting for DISPLAY ALL OBJECT TYPES.
- STEP 11:** TURN ON the setting for DISPLAY BLOCKS WITH ATTRIBUTES ONLY
- STEP 12:** Clear the “checkmark” for all blocks not named “P_ *”. It may be necessary to re-sort the OBJECT column to enable the ability to “uncheck” the block COLUMN BUBBLE.

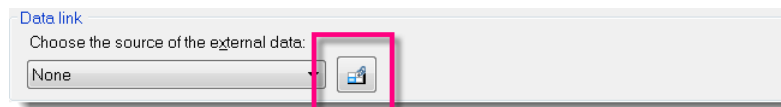


- STEP 13:** Pick the NEXT button to continue.
- STEP 14:** TURN OFF ALL PROPERTIES except CAPPN, and CAPMC.
- STEP 15:** Clear all CATEGORY FILTERS except ATTRIBUTE.

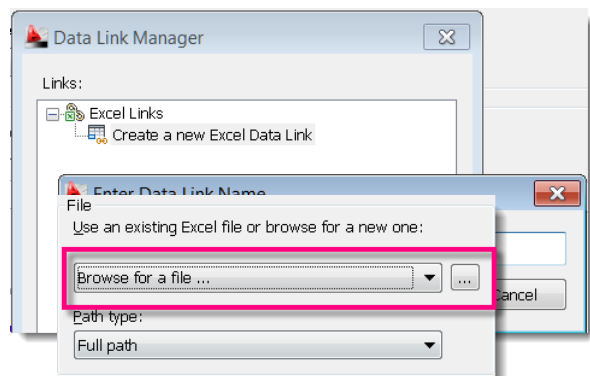


TIP: You can use a <Right-Click> menu in the dialog to access the UNCHECK ALL and CHECK ALL commands.

- STEP 16:** Pick the NEXT button to continue.
- STEP 17:** TURN OFF the setting for SHOW NAME COLUMN (it is duplicated in the spreadsheet data)
- STEP 18:** Pick the LINK EXTERNAL DATA button.
- STEP 19:** Pick the LAUNCH DATA LINK MANAGER button.



- STEP 20:** Select CREATE A NEW EXCEL DATA LINK
- STEP 21:** Key-in the name FURNITURE and pick OK to create the data link.



STEP 22: Select the BROWSE FOR A FILE button and navigate to the following spreadsheet location.

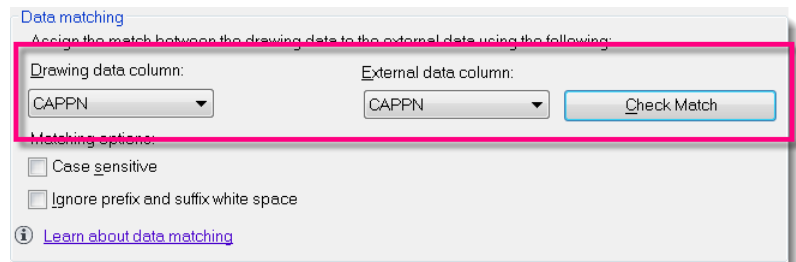
C:\Training\AC2251-L\dwg\FURNITURE.XLS

STEP 23: Pick OK to close the dialog.

STEP 24: Pick OK again, to close the DATA LINK MANAGER dialog.

We need to identify CAPPN as the “link key” between the drawing file and the Excel spreadsheet.

STEP 1: Select CAPPN for the DRAWING DATA COLUMN, and CAPPN for the EXTERNAL DATA COLUMN.

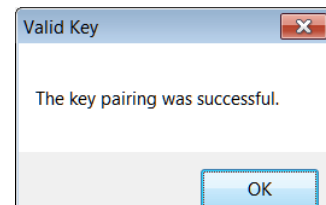


STEP 2: Pick the CHECK MATCH button to verify that each file has the associated data name.

If successful you will see a VALID KEY dialog stating THE KEY PAIRING WAS SUCCESSFUL.

STEP 3: Pick OK to close the VALID KEY dialog.

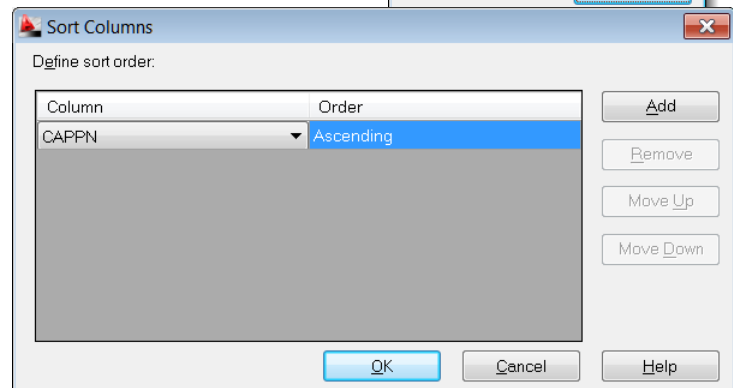
STEP 4: Pick OK to close the LINK EXTERNAL DATA dialog.



STEP 5: Pick the SORT COLUMNS OPTIONS button.

STEP 6: Select CAPPN to sort in ASCENDING order.

STEP 7: Pick OK to close the SORT COLUMNS dialog.



You can add additional sort methods as needed.

STEP 8: Re-arrange the columns as shown below. Just <Drag-n-Drop> the column headers to the required order.

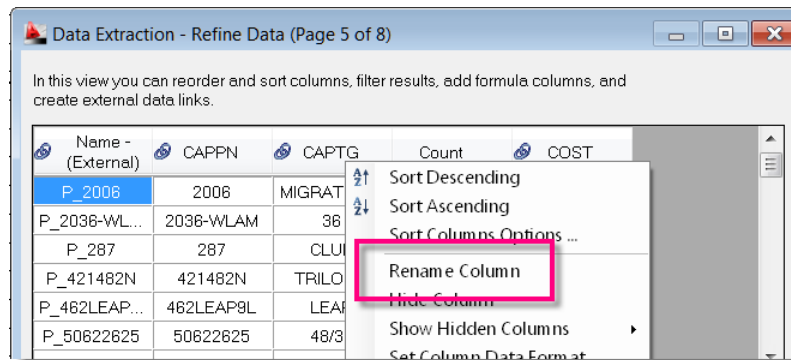
The LINK ICON displays what data is coming from the spreadsheet.

Name - (External)	CAPPN	CAPTG	CAPMC	Count	COST
P_2006	2006	MIGRATIONS	BEC	3	\$100.00
P_2036-WL...	2036-WLAM	36	BEC	1	\$101.00
P_287	287	CLUB	BEC	2	\$102.00
P_421482N	421482N	TRILOGY	SCT	137	\$103.00
P_462LEAP...	462LEAP9L	LEAP	SCS	72	\$104.00
P_50622625	50622625	48/30	VCT	5	\$105.00
P_730581	730581	18/64/4	SCE	18	\$106.00

STEP 9: Pick the NEXT button to continue.

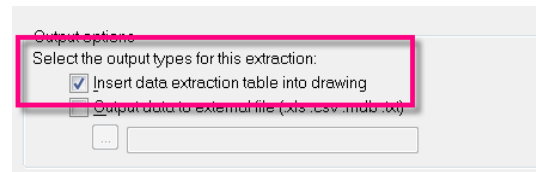


TIP: You can rename the “(EXTERNAL)” columns during the extraction process.



STEP 10: TURN ON the setting for INSERT DATA EXTRACTION TABLE INTO DRAWING.

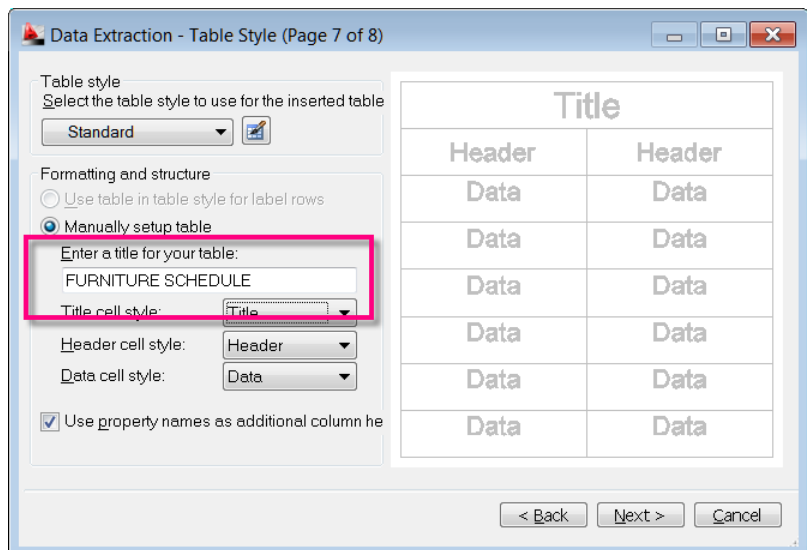
STEP 11: Pick the NEXT button to continue.



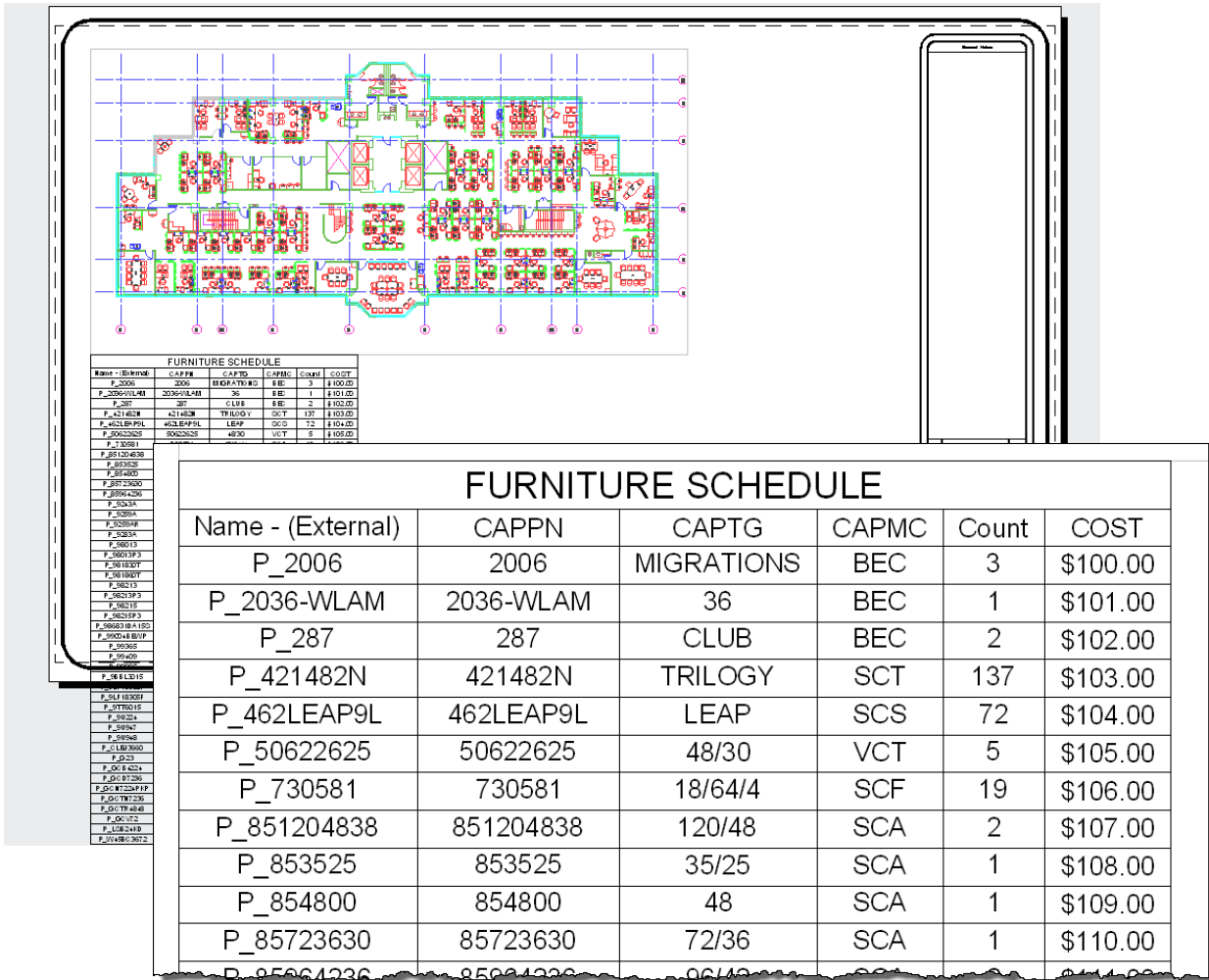
STEP 12: Key-in the value FURNITURE SCHEDULE for the title of the new table.

STEP 13: Pick the NEXT button to continue.

STEP 14: Pick the FINISH button to close the dialog and place the table object.



STEP 15: Snap the table object to the location show below:

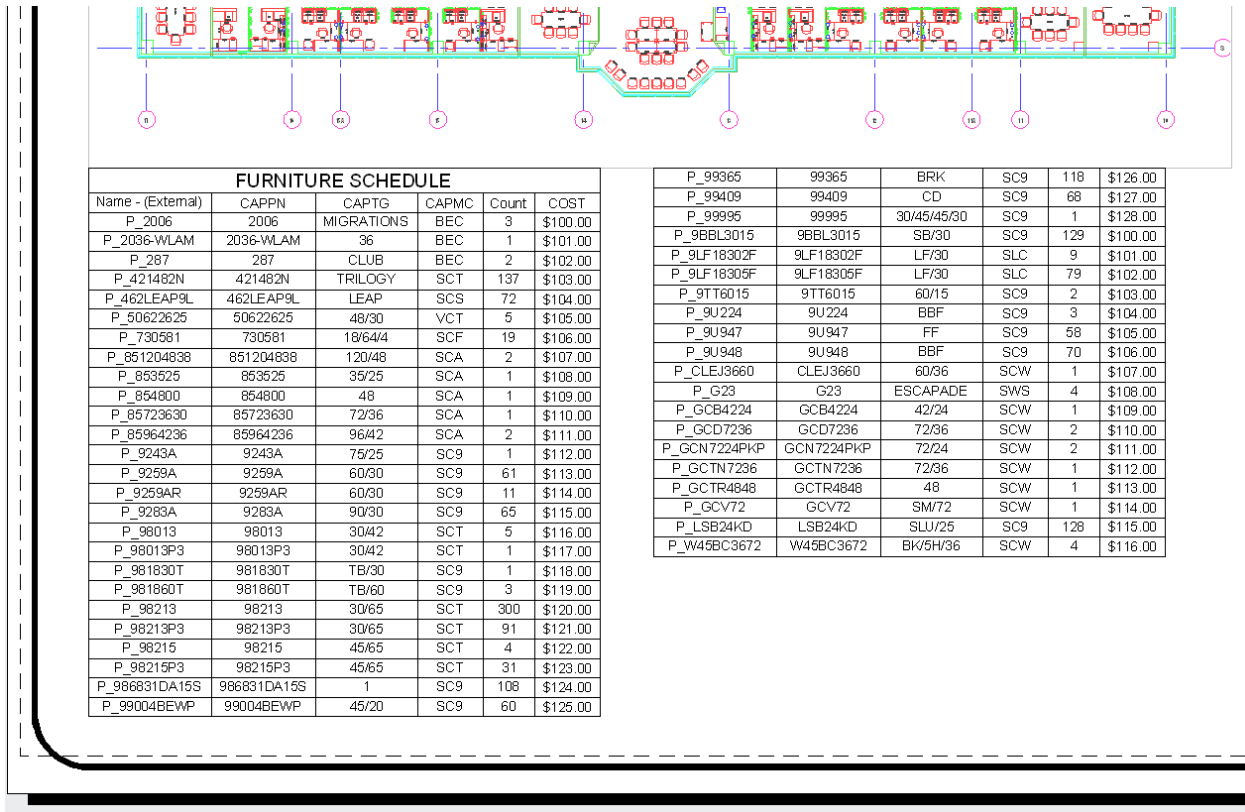


Fit Table on Page

STEP 1: Continue in the file....4-TABLE TO EXCEL LINKING.DWG

STEP 2: Select the table by picking an "outside" edge.

STEP 3: Select the BREAK TABLE grip and move it up into the table until the table fits on the layout page.



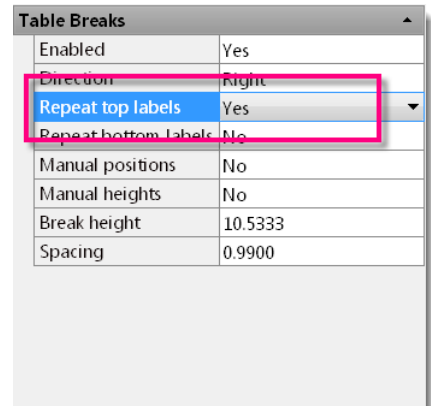
FURNITURE SCHEDULE					
Name - (External)	CAPPN	CAPTG	CAPMC	Count	COST
P_2006	2006	MIGRATIONS	BEC	3	\$100.00
P_2036-WLAM	2036-WLAM	36	BEC	1	\$101.00
P_287	287	CLUB	BEC	2	\$102.00
P_421482N	421482N	TRIOLOGY	SCT	137	\$103.00
P_462LEAP9L	462LEAP9L	LEAP	SCS	72	\$104.00
P_50622625	50622625	48/30	VCT	5	\$105.00
P_730581	730581	18/644	SCF	19	\$106.00
P_851204838	851204838	120/48	SCA	2	\$107.00
P_853525	853525	35/25	SCA	1	\$108.00
P_854800	854800	48	SCA	1	\$109.00
P_85723630	85723630	72/36	SCA	1	\$110.00
P_85964236	85964236	96/42	SCA	2	\$111.00
P_9243A	9243A	75/25	SC9	1	\$112.00
P_9259A	9259A	60/30	SC9	61	\$113.00
P_9259AR	9259AR	60/30	SC9	11	\$114.00
P_9283A	9283A	90/30	SC9	65	\$115.00
P_98013	98013	30/42	SCT	5	\$116.00
P_98013P3	98013P3	30/42	SCT	1	\$117.00
P_981830T	981830T	TB/30	SC9	1	\$118.00
P_981860T	981860T	TB/60	SC9	3	\$119.00
P_98213	98213	30/65	SCT	300	\$120.00
P_98213P3	98213P3	30/65	SCT	91	\$121.00
P_98215	98215	45/65	SCT	4	\$122.00
P_98215P3	98215P3	45/65	SCT	31	\$123.00
P_986831DA15S	986831DA15S	1	SC9	108	\$124.00
P_99004BEWP	99004BEWP	45/20	SC9	60	\$125.00
P_99365	99365	BRK	SC9	118	\$126.00
P_99409	99409	CD	SC9	68	\$127.00
P_99995	99995	30/45/45/30	SC9	1	\$128.00
P_9BBL3015	9BBL3015	SB/30	SC9	129	\$100.00
P_9LF18302F	9LF18302F	LF/30	SLC	9	\$101.00
P_9LF18305F	9LF18305F	LF/30	SLC	79	\$102.00
P_9TT6015	9TT6015	60/15	SC9	2	\$103.00
P_9U224	9U224	BBF	SC9	3	\$104.00
P_9U947	9U947	FF	SC9	58	\$105.00
P_9U948	9U948	BBF	SC9	70	\$106.00
P_CLEJ3660	CLEJ3660	60/36	SCW	1	\$107.00
P_G23	G23	ESCAPADE	SWS	4	\$108.00
P_GCB4224	GCB4224	42/24	SCW	1	\$109.00
P_GCD7236	GCD7236	72/36	SCW	2	\$110.00
P_GCN7224PKP	GCN7224PKP	72/24	SCW	2	\$111.00
P_GCTN7236	GCTN7236	72/36	SCW	1	\$112.00
P_GCTR4848	GCTR4848	48	SCW	1	\$113.00
P_GCV72	GCV72	SM/72	SCW	1	\$114.00
P_LSB24KD	LSB24KD	SLU/25	SC9	128	\$115.00
P_W45BC3672	W45BC3672	BK/5H/36	SCW	4	\$116.00

Repeat Title Labels

STEP 1: Continue in the file...4-TABLE TO EXCEL LINKING.DWG

STEP 2: Select the table by picking an “outside” edge.

STEP 3: Using the PROPERTIES palette, modify the TABLE BREAKS → REPEAT TOP LABELS to YES.

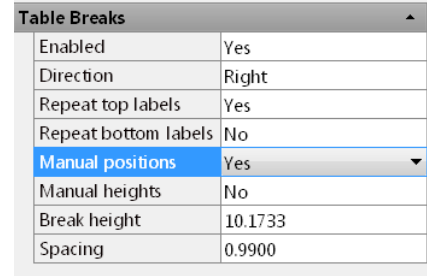


FURNITURE SCHEDULE					
Name - (External)	CAPPN	CAPTG	CAPMC	Count	COST
P_2006	2006	MIGRATIONS	BEC	3	\$100.00
P_2036-WLAM	2036-WLAM	36	BEC	1	\$101.00
P_287	287	CLUB	BEC	2	\$102.00
P_421482N	421482N	TRIOLOGY	SCT	137	\$103.00
P_462LEAP9L	462LEAP9L	LEAP	SCS	72	\$104.00
P_50622625	50622625	48/30	VCT	5	\$105.00
P_730581	730581	18/64/4	SCF	19	\$106.00
P_851204838	851204838	120/48	SCA	2	\$107.00
P_853525	853525	35/25	SCA	1	\$108.00
P_854800	854800	48	SCA	1	\$109.00
P_85723630	85723630	72/36	SCA	1	\$110.00
P_85964236	85964236	96/42	SCA	2	\$111.00
P_9243A	9243A	75/25	SC9	1	\$112.00
P_9259A	9259A	60/30	SC9	61	\$113.00
P_9259AR	9259AR	60/30	SC9	11	\$114.00
P_9283A	9283A	90/30	SC9	65	\$115.00
P_98013	98013	30/42	SCT	5	\$116.00
P_98013P3	98013P3	30/42	SCT	1	\$117.00
P_981830T	981830T	TB/30	SC9	1	\$118.00
P_981860T	981860T	TB/60	SC9	3	\$119.00
P_98213	98213	30/65	SCT	300	\$120.00
P_98213P3	98213P3	30/65	SCT	91	\$121.00
P_98215	98215	45/65	SCT	4	\$122.00
P_98215P3	98215P3	45/65	SCT	31	\$123.00
P_986831DA15S	986831DA15S	1	SC9	108	\$124.00
P_99004BEWP	99004BEWP	45/20	SC9	60	\$125.00

FURNITURE SCHEDULE					
Name - (External)	CAPPN	CAPTG	CAPMC	Count	COST
P_99365	99365	BRK	SC9	118	\$126.00
P_99409	99409	CD	SC9	68	\$127.00
P_99995	99995	30/45/45/30	SC9	1	\$128.00
P_9BBL3015	9BBL3015	SB/30	SC9	129	\$100.00
P_9LF18302F	9LF18302F	LF/30	SLC	9	\$101.00
P_9LF18305F	9LF18305F	LF/30	SLC	79	\$102.00
P_9TT6015	9TT6015	60/15	SC9	2	\$103.00
P_9U224	9U224	BBF	SC9	3	\$104.00
P_9U947	9U947	FF	SC9	58	\$105.00
P_9U948	9U948	BBF	SC9	70	\$106.00
P_CLEJ3660	CLEJ3660	60/36	SCW	1	\$107.00
P_G23	G23	ESCAPADE	SWS	4	\$108.00
P_GCB4224	GCB4224	42/24	SCW	1	\$109.00
P_GCD7236	GCD7236	72/36	SCW	2	\$110.00
P_GCN7224PKP	GCN7224PKP	72/24	SCW	2	\$111.00
P_GCTN7236	GCTN7236	72/36	SCW	1	\$112.00
P_GCTR4848	GCTR4848	48	SCW	1	\$113.00
P_GCV72	GCV72	SM/72	SCW	1	\$114.00
P_LSB24KD	LSB24KD	SLU/25	SC9	128	\$115.00
P_W45BC3672	W45BC3672	BK/5H/36	SCW	4	\$116.00

Break a Table into Parts

- STEP 1:** Continue in the file...4-TABLE TO EXCEL LINKING.DWG
- STEP 2:** Select the table by picking an “outside” edge.
- STEP 3:** Using the PROPERTIES palette, modify the TABLE BREAKS → MANUAL POSITIONS to YES.



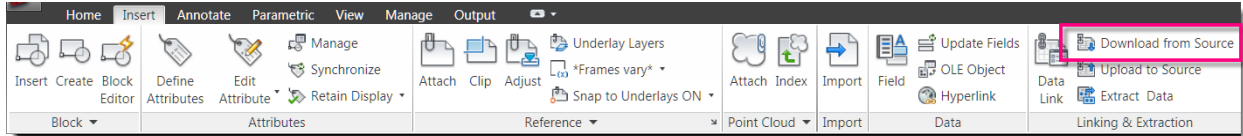
FURNITURE SCHEDULE					
Name - (External)	CAPPN	CAPTG	CAPMC	Count	COST
P_2006	2006	MIGRATIONS	BEC	3	\$100.00
P_2036-WLAM	2036-WLAM	36	BEC	1	\$101.00
P_287	287	CLUB	BEC	2	\$102.00
P_421482N	421482N	TRIOLOGY	SCT	137	\$103.00
P_462LEAP9L	462LEAP9L	LEAP	SCS	72	\$104.00
P_50622625	50622625	48/30	VCT	5	\$105.00
P_730581	730581	18/64/4	SCF	19	\$106.00
P_851204838	851204838	120/48			
P_853525	853525	35/25			
P_854800	854800	48			
P_85723630	85723630	72/36			
P_85964236	85964236	96/42			
P_9243A	9243A	75/25			
P_9259A	9259A	60/30			
P_9259AR	9259AR	60/30			
P_9283A	9283A	90/30			
P_98013	98013	30/42			
P_98013P3	98013P3	30/42			
P_981830T	981830T	TB/30			
P_981860T	981860T	TB/60			
P_98213	98213	30/65			
P_98213P3	98213P3	30/65			
P_98215	98215	45/65			
P_98215P3	98215P3	45/65			
P_986831DA15S	986831DA15S	1			
P_99004BEWP	99004BEWP	45/20			

FURNITURE SCHEDULE					
Name - (External)	CAPPN	CAPTG	CAPMC	Count	COST
P_99365	99365	BRK	SC9	118	\$126.00
P_99409	99409	CD	SC9	68	\$127.00
P_99995	99995	30/45/45/30	SC9	1	\$128.00
P_9BBL3015	9BBL3015	SB/30	SC9	129	\$100.00
P_9LF18302F	9LF18302F	LF/30	SLC	9	\$101.00
P_9LF18305F	9LF18305F	LF/30	SLC	79	\$102.00
P_9TT6015	9TT6015	60/15	SC9	2	\$103.00
P_9U224	9U224	BBF	SC9	3	\$104.00
P_9U947	9U947	FF	SC9	58	\$105.00
P_9U948	9U948	BBF	SC9	70	\$106.00
P_CLEJ3660	CLEJ3660	60/36	SCW	1	\$107.00
P_G23	G23	ESCAPADE	SWS	4	\$108.00
P_GCB4224	GCB4224	42/24	SCW	1	\$109.00
P_GCD7236	GCD7236	72/36	SCW	2	\$110.00
P_GCNT7224PKP	GCNT7224PKP	72/24	SCW	2	\$111.00
P_GCTN7236	GCTN7236	72/36	SCW	1	\$112.00
P_GCTR4848	GCTR4848	48	SCW	1	\$113.00
P_GCV72	GCV72	SM/72	SCW	1	\$114.00
P_LSB24KD	LSB24KD	SLU/25	SC9	128	\$115.00
P_W45BC3672	W45BC3672	BK/5H/36	SCW	4	\$116.00

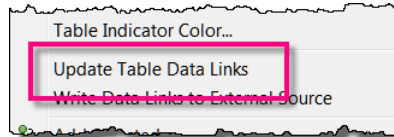
Update a Table Link

Where is It?

Ribbon: Select the INSERT TAB.



<Right-Click> Menu:



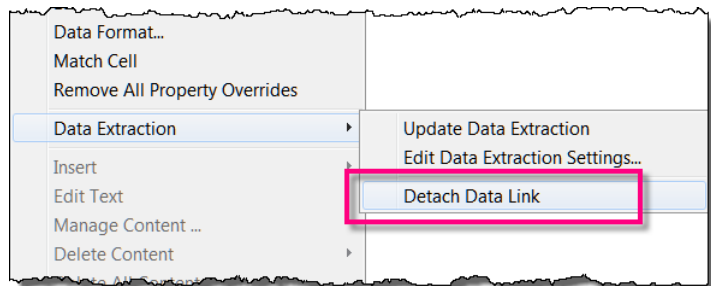
- STEP 1:** Continue in the file 4-TABLE TO EXCEL LINKING.DWG
- STEP 2:** Select the table by picking an “outside” edge.
- STEP 3:** Using the INSERT ribbon to select the LINKING & EXTRACTION à DOWNLOAD FROM SOURCE command.



NOTE: A linked table cell is locked to prevent inadvertent changes from taking place. You can unlock a data link using the UNLOCK command.

Remove a Link to an External Spreadsheet

- STEP 1:** Continue if file...4-TABLE TO EXCEL LINKING.DWG
- STEP 2:** Select the table and <Right-Click> to access the DETACH DATA LINK command.



TIP: If the table for the data link no longer exists you can try to detach it using the External References palette. If this is unsuccessful, I recommend downloading a LISP routine called DICTEDIT.LSP and using that to detach the “stuck” data links.

Use this LISP routine at your own risk! I have used it with no problems, however, I am not responsible for any issues that arise from your use!

Link a Table to Another Table

You can also link a cell in one table to a cell in another table using the following technique.

STEP 1: Select File → Open...5-TABLE TO TABLE LINKING.DWG

STEP 2: Select the table REBAR TOTAL COSTS by picking “inside” the E3 cell.

BAR	NO.	LENGTH	TOTAL LENGTH
301	4	44'-8"	
401	8	41'-4"	
501	20	4'-8 1/2"	
601	2	14'-7"	
701	6	44'-8"	
TOTAL			

	A	B	C	D	E	F
1	Rebar Total Costs					
2	SIZE	DIAMETER	LBS/FT	COST/FT	TOTAL LENGTH	TOTAL COST
3	3	0.375	0.376	0.15		
4	4	0.5	0.688	0.15		
5	5	0.625	1.043	0.15		
6	6	0.75	1.502	0.20		
7	7	0.875	2.044	0.20		
8	8	1	2.67	0.20		
9	9	1.128	3.4	0.25		
10	10	1.27	4.303	0.25		
11	11	1.41	5.313	0.25		
12	14	1.693	7.65	0.25		
13	16	2.257	13.6	0.25		

STEP 3: <Right-Click> to access the INSERT FIELD command.

STEP 4: Using the FIELD dialog, select FIELD NAME → FORMULA

STEP 5: Pick the CELL button.

STEP 6: Pick “inside” the C5 cell in the ESTIMATED QUANTITIES table.

STEP 7: Modify the format and select FORMAT → DECIMAL for the cell in the table REBAR TOTAL COSTS.

BAR	NO.	LENGTH	TOTAL LENGTH
301	4	44'-8"	
401	8	41'-4"	
501	20	4'-8 1/2"	
601	2	14'-7"	
701	6	44'-8"	
TOTAL			

	A	B	C	D	E	F
Rebar Total Costs						
	SIZE	DIAMETER	LBS/FT	COST/FT	TOTAL LENGTH	T
	3	0.375	0.376	0.15	56.50	
	4	0.5	0.688	0.15		
	5	0.625	1.043	0.15		
	6	0.75	1.502	0.20		

Using Table Styles

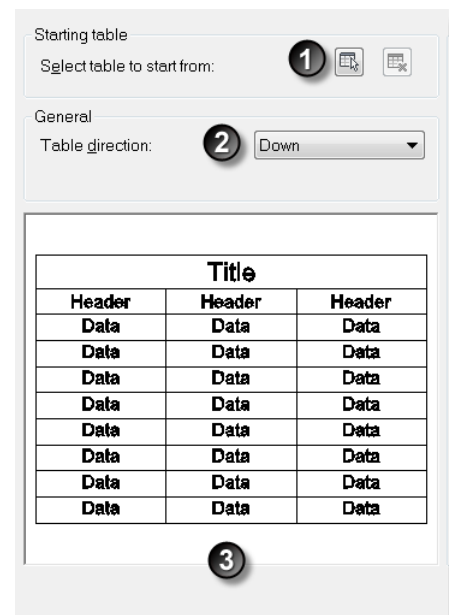
Table Styles allow you to define parameters to control the format and appearance of commonly used drawing tables. Because tables are not yet annotative, you may also want to define text sizes for the appropriate scales for your drawings.



TIP: I recommend placing all tables in paperspace; then you don't have to worry about drawing scale and the table styles are always defined at 1:1.

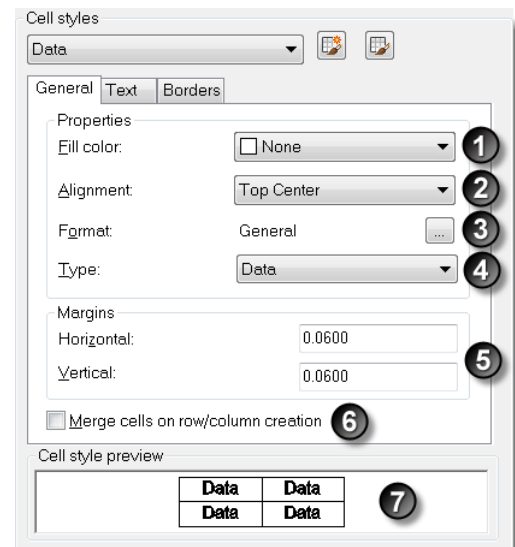
Table Settings

- Used to specify an existing table in a drawing to use as a “template” for a new table style.
- Select the direction of the table either DOWN or UP. This determines if the Title is on top or bottom of table layout.
- Displays a preview of the table using the current table style settings.



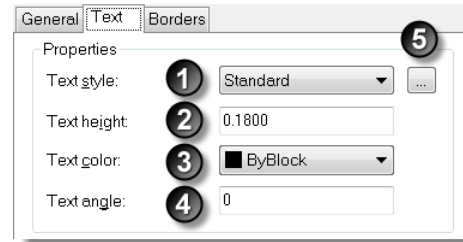
General Tab

- Define the background color of a cell. The default is NONE.
- Define the cell justification of the table cell. The default is TOP CENTER.
- Define the data type format of the table cell.
- Define the usage type of a cell; either DATA or LABEL
- Define the interior margins between the cell data and borders.
- Control if cell will automatically merge during creation of new rows and columns.
- Preview of cell style settings.



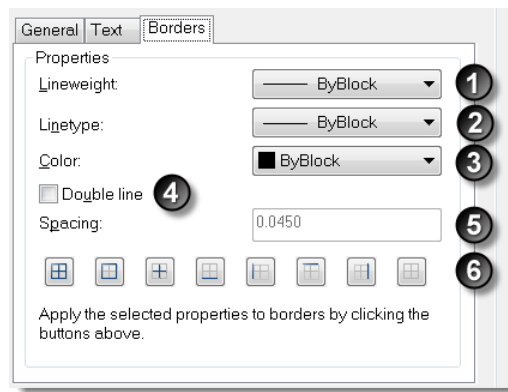
Text Tab

- 1 Define the text style used in the cell style.
- 2 Define the text height used in the cell style.
- 3 Define the text color used in the cell style.
- 4 Define the text angle used in the cell style.
- 5 Open the Text Style dialog to define or modify a text style.



Borders Tab

- 1 Define the lineweight for border linework.
- 2 Define the linetype for border linework.
- 3 Define the color for border linework.
- 4 Define a Double-Line appearance for border linework.
- 5 Define the spacing applied to the Double-Line linework.
- 6 Apply defined linework to selected border linework.



Using Table Styles

From Scratch

STEP 1: Select File → Open...6-TABLE STYLES.DWG

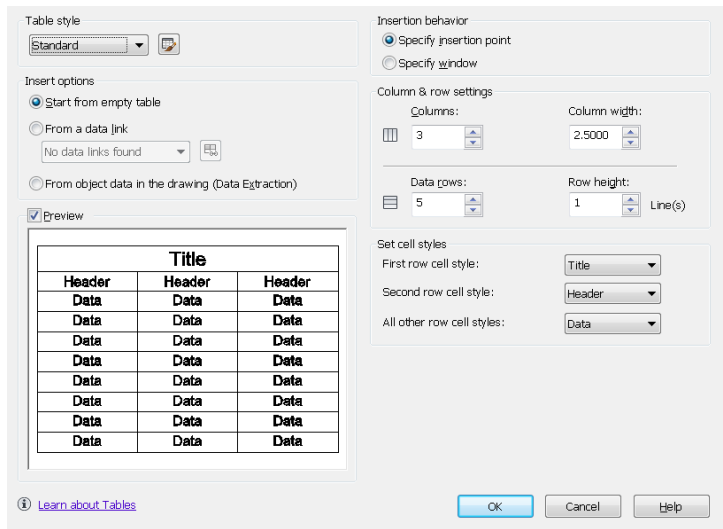
STEP 2: Using the ribbon, select the ANNOTATE TAB

STEP 3: Select the TABLE STYLE... command from the TABLES PANEL.

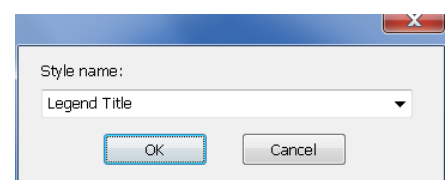
You can use the PANEL DIALOG BOX LAUNCHER to access the TABLE STYLE... command

STEP 4: Select the table style and pick the MODIFY button.

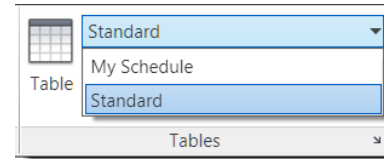
STEP 5: Use the INSERT TABLE dialog to define the specifics for a table style.



From an Existing Table



- STEP 1:** Continue in file....6-TABLE STYLES.DWG
- STEP 2:** Select the SCHEDULE table and <Right-Click> to access the TABLE STYLE → SAVE AS NEW TABLE STYLE command.
- STEP 3:** Key-in MY SCHEDULE for the style name.
- STEP 4:** Pick the OK button to save and close the dialog.
- STEP 5:** Use the ANNOTATE ribbon to select the new table style.



Using Cell Styles

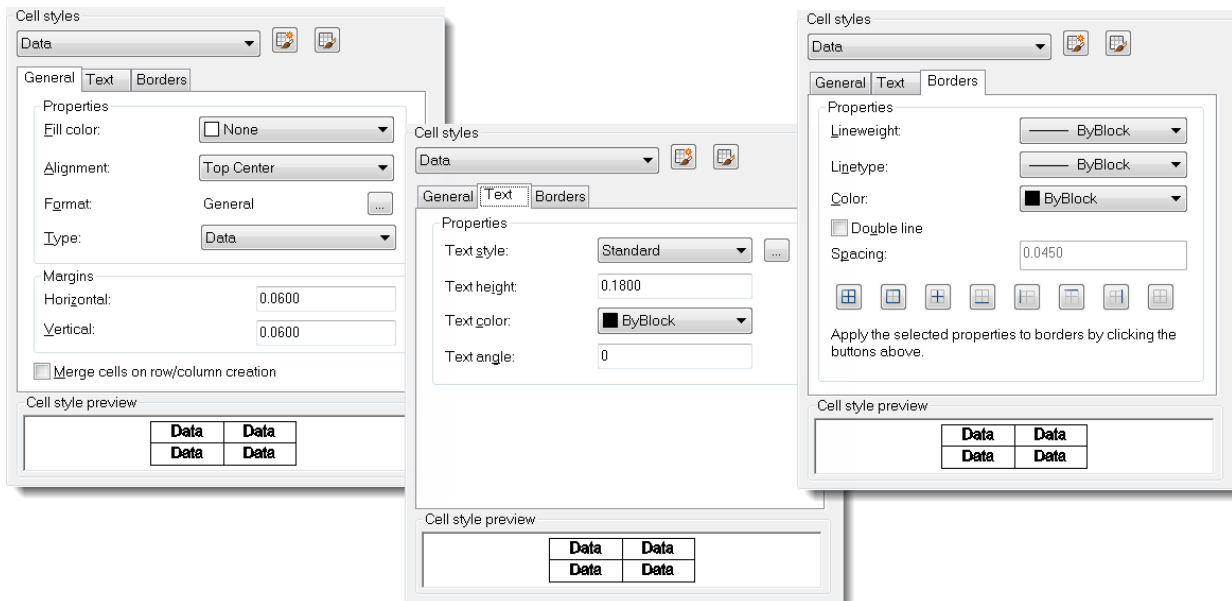
Create Cell Styles

Cell Styles can be created from scratch or from existing table cells for commonly used cell formats and appearances.

From Scratch

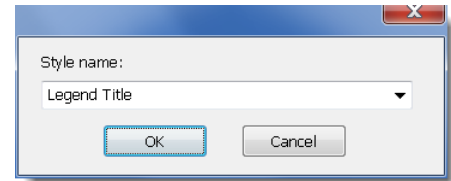
- STEP 1:** Continue in the file....6-TABLE STYLES.DWG
- STEP 2:** Using the ribbon, select the ANNOTATE TAB
- STEP 3:** Select the TABLE STYLE... command from the TABLES PANEL.

You can use the PANEL DIALOG BOXLAUNCHER to access the TABLE STYLE... command
- STEP 4:** Select the table style and pick the MODIFY button.
- STEP 5:** Use the CELL STYLES section of the dialog to define the cell style settings.



From an Existing Cell

- STEP 6:** Continue in file...6-TABLE STYLES.DWG
- STEP 7:** Select a cell and *<Right-Click>* to access the Cell Style → Save as New Cell Style... command.
- STEP 8:** Key-in LEGEND TITLE for the style name.
- STEP 9:** Pick the OK button to save and close the dialog.



Placing Tables on a Tool Palette

Once you have standard tables created, you will want to place them on your tool palettes. By default, you cannot add a table to a tool palette in the “normal” way. However, if you use this tip you can add tables to tool palettes.



Use the <SHIFT> key to place a table on a tool palette.



If you want to pre-define tables with headers and data, make the table into a block and place the block on the tool palette. When you define the properties of the tool on the tool palette; set the EXPLODE option to YES.

That's probably more than I have time for...but hopefully
not more that you wanted to know!



Thank you for your time

Hope you enjoyed the session!

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(402) 408-9696

jeanne@aarhusassociates.com