



MacIntyre Estimating Software, Inc. 'The Spreadsheet Tool'

Welcome

	M	N	O	P	Q	R	S	T	
851			Total Labor				34,379.86		
852		XYZ Electric							
853		75 Some Street							
854		Newtown, PA 18940							
855		Estimate for							
856		Bid Due 1-10-12							
857		Estimated By							
858		BASE BID							
859			Cost	MU%	Mark-Up	Total			
860		Material	2,907.41	15%	436.11	3,343.53			
861		Quotes Plug	1,500.00	15%	225.00	1,725.00			
862		Quotes	5,000.00	15%	750.00	5,750.00			
863		General Conditions	2,200.00	15%	330.00	2,530.00			
864		Labor	34,379.86	20%	6,875.97	41,255.84			
865				5%					
866				5%					
867				5%					
868		Bond	Sub Total		8,617.09	54,604.37			
869		55,168.81	Sales Tax 6% of Material & Quotes		6.0%	564.44			
870		1379.22	Total			55,168.81			
871						Bond	1,379.22		
872		1379.22				Bid	56,548.03		

Summary Screen

The Spreadsheet Tool has been developed for the estimator who is looking for a better way.

Our objective has been to provide a fast and easy Estimating System. The premise behind the design was not just some pretty interface screens, but to provide real utility.

We feel that the main functions of any estimating system are, one, ease in finding items in the Database, and two, the ability to update pricing electronically. Both of these functions are handled with The Spreadsheet Tool, along with the underlying potential of Microsoft Excel.

Please take the time to read this instruction book. Since the system is easy to use, you will probably be putting together estimates in no time.



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Setup

To set-up your computer:

1. The system should autostart the install program. If not, start setup from Windows Explorer
2. You should install the software in the C:\TST_Elec directory
3. Install the security key on the USB port.



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In A Nutshell

Overview

The Spreadsheet Tool includes Estimate and Database(DB) worksheets along with other related worksheets, all to work as a coordinated unit. Estimates can be quickly built by selecting the items (or assemblies) from the Database and transferring them back to the estimate worksheet. Additionally you may find item names in the Keyword Label worksheet and then search for the item the Database. After you have found and selected the item(s) in the database, click and return the item(s) to the estimate worksheet.

If you subscribe to Trade Service® Data Select electrical material price updating service, you can use their update disks to update the system pricing.

The Trade Service Data Select disk information can be imported directly to the Overflow worksheet. If you want to transfer the imported items to the Database worksheet from the Overflow worksheet, copy and paste the items from one worksheet to the other.

The estimating system is meant to be an aid to the electrical estimator. It is not intended to be a replacement for well informed judgment. The labor hours and material cost are representative of the electrical construction industry but may differ from your actual performance and cost. The author makes no warranty to their correctness. Also note that pricing is based on Trade Service pricing and will be different (in some cases significantly different) depending on your area. See; initial Trade Service updating Page 21



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Estimating System Start-up

After starting Excel, use File Open from the Excel menu to open TST_ver4.xlsm in the C:\TST_elec directory.



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Building an Estimate

The Spreadsheet Tool is extremely easy to learn and use. The following step by step outline should familiarize you with building an estimate.

Before you start building your estimate there are a few preliminary things to do.

- 1 Start Microsoft Excel
- 2 Open the TST_ver4.XLSM file. This file can be found in the main estimate directory (C:\TST_ELEC).
- 3 Select an estimate. From the Estimate ribbon select 'Select Estimate'

Select Estimate 3. Use this job to build your practice estimate.
- 4 Click on the Estimate 3 worksheet tab (at the bottom of the Estimate 3 worksheet) and drag Estimate 3 to the left of the 'DB' worksheet. This will group Estimate 3 (the current estimate) along with the Database and Keyword Label worksheets. It will now be easy to switch between these three frequently used worksheets using the Ctrl page up or page down keys.
- 5 Next, let's make some room to work by inserting some rows in the Estimate detail area. At about row 20, use the Excel 'Insert Blank Rows' tool to insert about 20 or more rows. It is not important how many rows you insert, we're only trying to make some room to work

Now that the preliminaries are done we can start building our estimate.

Finding and returning Items from the Database

- 1 We'll start with something simple like EMT. Short Keywords work best for things you use all the time, such as "eee" for EMT. To find EMT in the Database (DB), type eee at an open cell on a blank row in your estimate (Estimate 3) where you wish the EMT returned to.
- 2 To initiate the search of the Database, hold the control key and press the g key, or click the Find Item(s) button on the Estimate ribbon.
- 2 Using the last step, we should have found the EMT in the database. While still in the Database worksheet, select the items you wish to return by highlighting them with the mouse (you can select by any column). For now, select all of the EMT.
- 3 Now it's time to return the EMT items to your Estimate. While in the Database, hold the control key and press the b key, or click the Return Item(s) button on the Estimate ribbon.



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- 4 At this point you should be back in your estimate with all of the EMT items returned that you selected in the Database. Enter quantities for each of the EMT Items. Note that if you do not need all of the EMT items, you can easily delete some of them by deleting the unwanted rows.

Now let's add a small twist to what was learned above by using the Keyword Label worksheet.

- 1 Make sure that you are in a blank row in the current estimate worksheet (Estimate 3), and then go to the Keyword Label worksheet. Use either the mouse to select the Keyword Label tab or Ctrl Page Down (twice).
- 2 When in the Keyword Label worksheet select a Keyword. For our purposes it makes no difference which one.

Keywords can be anything you wish. The layout of this worksheet is not important. The only requirement is that Keywords in the Keyword Label worksheet be exactly the same as the corresponding Keyword in column A of the database (DB) worksheet.

- 4 As above, to initiate the search of the Database, hold the control key and press the g key, or click the Find Item in DB button on the Estimate ribbon with the mouse. This will locate the item associated with the Keyword in the Database.
- 5 Now, as before, select the items you want in the Estimate and proceed to take them back to the estimate worksheet as above using the Ctrl b key, or Return Item(s) button.

Finding Items by description

Finding Items by description is similar to what you have learned above except that the search is done in the description column of the database.

- 1 Make sure that you are in a blank row in the current estimate worksheet (Estimate 3), and then enter the description or part of description or catalog number etc. Enter raco 189 which is part of RACO 189 4SQ 1-1/2D BOX COMBO KO. (Capitals have no effect on the search)
- 2 To initiate the search of the Database, hold the control key and press the d key, or click the Find By Descript button on the Estimate ribbon.
- 3 Now, as before, select the items you want in the Estimate and take them back using the Ctrl b key, or Return Item(s) button.



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Assemblies

Assemblies are groups of items under a common assembly name, which may have formulas in the quantity cell of the assembly sub-items that refer to the quantity cell of the assembly name.

We will find and return the 112.5 KVA 3Phase Dry Transformer Assembly from the Database.

- 1 Make sure that you are in a blank row in Estimate 3, and then go to the Keyword Label worksheet.
- 2 Find the Assemblies section in the Keyword Label worksheet. (it's on the right) Select the 112.5 KVA 3Phase Dry Transformer Assembly.
- 3 Find the assembly using the same method as used to find an item. To initiate the search of the Database, hold the control key and press the g key, or click the Find Item in DB button.
- 4 At this point you should be in the Database at the 112.5 KVA 3Phase Dry Transformer Assembly. While still in the Database, select the complete assembly including the assembly name and its associated sub-items (select by any column).
- 5 Next, hold the control key and press the "a" key to return the assembly to the Estimate or click the Return Assembly button on the Estimate ribbon.
- 6 This will return the complete assembly to your Estimate. Then, simply enter the quantity in the first quantity cell of the assembly (in the quantity cell of the assembly name row). The formulas in the quantity cells of each of the assembly's sub-items will then calculate their proper quantities. Change the formulas as appropriate.

Completing your Estimate

At this point it is time to run the Check Estimate function. **It is important to run this function to check for formatting errors before completing your estimate.**

- 1 Since we are just playing here, let's see how Check Estimate works. Before actually running the function, delete some of the Quantity, Unit, Discount and Extensions. Also change some of the Extensions and Summations (totals) references so that they are wrong.
- 2 Next, select Check Estimate from the Estimate Menu. When the Check Estimate dialog box comes up unselect the 3 option buttons. This will turn off the automatic correct capability for the option items. Click the OK button and the check estimate function should flag (color) any mistakes.



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- 3 Rerun the Check Estimate function leaving the automatic correct options checked to see what corrections are made by the system.
- 4 Make any other necessary corrections to the estimate and rerun the Check Estimate until no items come up flagged.

We can't over emphasize the importance using the Check Estimate function to review the Estimate for formatting errors.

We are now ready to finish the Estimate.

Enter some random pricing in the Quotes area. Many estimators use Plug (guess) amounts until they receive the actual Quote from vendors. Entering Plug amounts will give a clear indication of which actual quotes are still missing.

Enter some pricing in the General Conditions and Labor areas.

Let's now review the Summary area.

The Summary area (along with the Quotes, General Conditions and Labor areas) can be modified to any configuration you wish. As we ship the system, generally all you will need to do is change the markup percents and change the formulas in the bond calculation area. Take a few moments to review the interrelationships of the cells in the cost categories.

Also, it is important to understand how the data comes into the summary area. All the items such as material cost, labor hours, etc., come from another cell in the Estimate worksheet by reference. That is, the cost cell in the Summary area contains the location address of a total cell somewhere else on the worksheet. While this is very basic spreadsheet usage, those of you new to spreadsheets should take the time to understand this reference usage.

The last thing to go over is the Cross Check of Totals Area

As mentioned in the item above, it is important to understand the use of cell references. The Cross Check of Totals Area helps keep track of these references and provides a way to verify if cell references are correct. Although it is not foolproof it will be effective in most situations.

Basically, it works by looking at both of the cell where the reference comes from and also at the cell where the reference goes to, and then compares these cells, by subtracting one from the other. If there is a different amount in the 'From' or 'To' cells (the subtraction delta is not zero), then there must be an error, and you should correct your cell references.



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Printing your Estimate.

To print, choose Print Estimate from the Estimate ribbon. When the dialog appears select the areas you wish to print. Only the current estimate worksheet will be printed.

You can have up to eight print areas for each of the fifteen estimate worksheets.

The rules are as follows:

The name of the print area must be the same on Print Info worksheet and the worksheet names list (use F5 or the Name Manager for the Formulas tab to verify).

In general the system will continue to function properly so long as you insert rows in the middle of the print areas. Inserting rows allows the named areas to expand with the inserted row(s).

If you find that you have lost the names or they no longer correspond to areas you wish to print, do the following:

First select (highlight) the new print area.


Then from the Excel Formula tab click Define.

Then type in a new name (no spaces) (I use underscore) such as "estimate6_detail"

Then copy this new name to the corresponding row for the relative job on the Print Info worksheet.

Also, make the corresponding name change to the worksheet in the "Clean" workbook.

Manual Printing Steps

- 1 Press the F5 key.
- 2 Select one of the Named areas (Detail, Quotes, General Conditions and Summary), and click the OK button with the mouse.
- 3 At this point the selected area should be highlighted.
- 4 Click on the Select Print Area tool button (Page Setup tab). 
- 5 Print

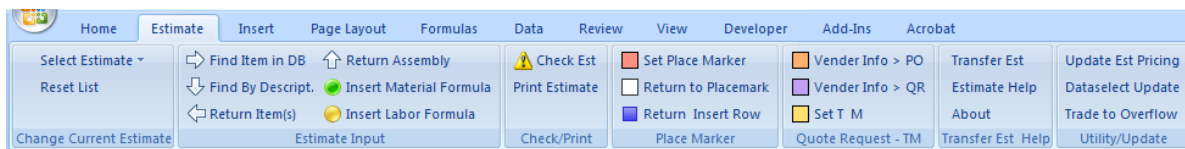


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General Information

The Estimate Ribbon

The Estimate ribbon has been added in Version 4. The ribbon functions are generally the same as the original Estimate Menu items from earlier versions.



- Select an Estimate button. - Use to change current estimate. Note that if you change the estimate names on the information worksheet you will need to reset the list on the Estimate ribbon. Page 12
- Find Item(s) button - Use to find items in the Database (DB) worksheet using a keyword. Page 13
- Find By Descript button - Use to find items in the Database (DB) worksheet on the Estimate ribbon using a description. Page 13
- Return Item(s) button - Use to return selected items from the Database worksheet to the current estimate. Page 14
- Return Assembly button - Use to return selected assembly from the Database worksheet to the current estimate. Brings back formulas when returned to the current estimate. Page 14
- Insert Material Formula - Inserts a material formula at the current line of the current estimate.
- Insert Labor Formula - Inserts a labor formula at the current line of the current estimate.
- Check Estimate - Checks current estimate for formatting problems. Page 25
- Print Estimate - Use to print your estimate using predefined named areas. Page 9
- Set Place Marker - Sets a return point (same as Ctrl s) Page 19
- Return to Placemark - Returns to the preset point (same as Ctrl r) Page 19
- Return Insert Row (to Placemark) - Returns to the preset point and inserts selected rows (same as Ctrl Shift R) Page 19
- Vender Info > PO (Purchase Order) - Use to set the Vender information on the Purchase Order Worksheet. Page 30
- Vender Info > QR (Quote Request) - Use to set the Vender information on the Quote Request Worksheet. Page 30
- Set T M - Use to set the Customer information on the T & M Worksheet. Page 29
- Transfer Estimate - Transfers out a completed estimate. Transfers in a new job worksheet from clean.xlsm file to replace the outgoing worksheet. Page 24
- Estimate Help - Opens Estimate help
- About - About



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- Update Estimate Pricing - Update the current estimate to the current database pricing Page 21
- Dataselct Update - Update from Trade Service Data Select Trade.dat file. Page 22
- Trade to Overflow - Import from Trade Service Data Select Trade.dat file to the Overflow worksheet. Page 23

The Estimate Menu

Although the Estimate ribbon is easier, the old drop down "Estimate" Menu can be found in the Excel Add-Ins tab and gives access to estimating system functions.

- Changing Job/Estimate from the Estimate Menu
- Check Estimate
- Formulas
 - Insert Material Formula
 - Insert Labor Formula
- Print Estimate
- Transfer Job/Estimates (and related worksheets)
- Set Customer in T and M Billing
 - T & M Billing
- Vendor to PO or Quote (includes)
 - Set Vendor to Purchase Order
 - Set Vendor to Quote Request
- Trade Service (includes)
 - Update DB from Data Select Disk
 - Import Data Select to Overflow
- Utility (includes)
 - Update Job to Current Pricing
- About Estimate
- Estimate Help
- Initial Trade Service Update (not on Estimate ribbon)

Additional information for these items can be found in the online help system.

System Information Worksheet

The System Information Worksheet contains the information needed to maintain the Estimating System.

The worksheet is protected except for the user interface areas. Do not modify other areas or delete the System Information Worksheet or the Estimating System will not work.

Systems information includes:



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The Job/Estimate Worksheet list (15 available spaces for estimates). These names can be modified here. They must be exactly the same as the worksheet names both in `tst_ver4.xlsm` and `clean.xlsm`.

The current setting of the "Put excess items into Overflow - Y/N?" option. If this cell is set to Y, items not in the Database will be listed in the Overflow Worksheet during Trade Service Data Select updating.

Selecting the Current Job/Estimate from the Estimate Ribbon

To select the current job/estimate, choose Select Estimate from the Estimate ribbon, and click the new estimate from the drop down menu list. Note that after you modify the list in the System Information Worksheet, you will need to update the Estimate ribbon Select Estimate drop down list by choosing "Reset List" from the Estimate ribbon. The drop down list will automatically update the next time you start the estimating system.

You can have up to 15 different estimates (including the T & M billing, Purchase Order and Quote Request) Worksheets in the Estimating System.

To manage this feature, add names of new Estimate worksheets to the list in the System Information worksheet. These names must be exactly the same as their corresponding estimate worksheet and the template in the `clean.xlsm` workbook.

Database Worksheet (DB)

The Database (DB) is a collection of items and assemblies that can be transferred to the estimate automatically. The Database can be updated manually or for items with a Trade Service® number, by using Trade Service Data Select price updating disks. Items can be added or deleted to suit your needs.

You may move or sort the items in the Database to any order you desire.

You may have as many instances of an item as you want. All are updated if they have a Trade Service number.



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Keyword Label Worksheet

This worksheet can be used to track Keywords used in the Database worksheet (column A). Use the existing Keyword Labels and/or add your own. Be sure that the Keywords are exactly the same in both Column A of the Database and Keyword Label worksheets.

By using the Keyword Label worksheet you can have longer (more descriptive) Keywords. To find items in the Database worksheet using the Keyword Label worksheet, move to the Keyword Label worksheet using the Ctrl Page Up or Down keys or the mouse. Select the name in the Keyword Label worksheet of the item you wish to find. Search the Database from the Keyword Label worksheet the same way as you do from the Estimate worksheet, using Ctrl.G or the Find Item(s) on the Estimate ribbon.

Find/Get item from DB

From an active cell in a blank row of the current Estimate worksheet, type any Keyword or part of a Keyword (i.e. EMT) then click Find Item in DB button on the Estimate ribbon or press Ctrl G (Get). You will find that a very simple code for often used items works best (i.e. eee for EMT). Additionally you can move to the Keyword Label worksheet, and use the find function (Ctrl G) from the Keyword Label worksheet.

The program will then search for the first instance of the Keyword in the Keyword column of the Database. To continue to search for more instances of the same Keyword, press Ctrl down arrow.

Before you search for the item in the Database, check to see which cell is active in the current Estimate worksheet. The returned data is placed in the current Estimate worksheet at the active cell(row).

Find item in DB by description

From any active cell in the Estimate worksheet, type in a description (or part of description) and select the Findind by Descript button on the Estimate ribbon or press Ctrl D (Description).

If found, the item(s) can be returned to the active cell of the Current Estimate worksheet (see Return item to Estimate.) To continue to search for more instances of the same Description, press Ctrl down arrow.



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Return item to Estimate

Highlight (select) an item or group of items in the Database worksheet. You can select a group of items by any column (example: the description column) and click on the Return Item(s) button from the Estimate ribbon or press Ctrl. b (for Back). The selected items including price, labor, discounts, etc., are returned and inserted at the active row of the current Estimate worksheet. Extension formulas are added automatically.

Assemblies

Assemblies can be built in the Database. The name of the assembly should be in the description cell of the first row of the assembly. Add formulas in the quantity column of the items associated with the assembly, referencing the quantity cell of the first row (name) of the assembly.

Assembly example:

Cell C5000 contains 3/4" EMT with 3#12 (the assembly name)

Row 5001 could be 3/4" EMT, with cell A5001 = +A5000

Row 5002 could be 3/4" EMT coupling, with cell A5002 =+A5000/10

Row 5003 could be #12 THHN, with cell A5003 =+A5000*3 (3 wires in the conduit)

When assemblies are returned to the current Estimate worksheet they bring with them the formulas in the quantity cells of each sub-item below the first assembly line (the assembly name). You then need only to put in one quantity in the quantity cell of the assembly first row, and the formulas in the succeeding cells will show the correct amounts.

Return assembly to Estimate worksheet

This function works similar to returning items. With the exception that formulas in the quantity cell for the associated sub-items are also returned to the Estimate worksheet.

Highlight (select) the assembly (including the name row and all associated sub-items) in the Database worksheet. You can select by any column (example: the description column) and click on the Return Assembly button on the Estimate ribbon or press Ctrl a (Assembly). The selected items including price, labor, discounts, etc., (along with the associated formulas in the quantity cell) are returned and inserted at the active row of the current Estimate worksheet.



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Overflow Worksheet

The overflow worksheet can be used as a temporary holding area for items you may want to add to the Database.

To input from Trade Service® update disks click the "Trade to Overflow" button on the Estimate ribbon. The Trade.dat file information is written in the Overflow worksheet.

When updating the Database from the Trade Service Data Select update disk, if you have entered "Y" in the "Update Overflow Y/N" option on the System Information Worksheet, items that are not in the Database are entered in Overflow Worksheet and marked "Not In DB".

In both cases the items can be added to the Database by copying the items in the Overflow worksheet and then pasting them into the Database.

It is important that before you start to input, or update from the Trade Service update disk, that you select a cell below any items already in the Overflow worksheet that you want to save. The new data is added starting at the active row in the Overflow worksheet.

Accelerator Keys

- | | |
|-----------------|--|
| Ctrl G | Search for a Keyword in the Database. |
| Ctrl D | Search for an item by description, in the Database Description column. |
| Ctrl B | Return a selected items from the Database to the Estimate. |
| Ctrl A | Return a selected assembly from Database to the Estimate. |
| Ctrl down-arrow | Continue searching for the next instance. |

Placemark and Placemark Return accelerator keys

- | | |
|--------------|---|
| Ctrl Shift S | Set the return location. |
| Ctrl R | Return to the preset location (no insert). |
| Ctrl Shift R | Return to the preset location and insert any rows you have selected before returning. |

See; Placemark and Placemark Return for more information.



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Back-up/Saving your work

While you are working on an estimate you should save your work periodically. Save frequently. How often is a personal decision, but remember if you work too long between saves and your computer crashes, you will have to start over from the point of your last save.

Also: Don't forget to Backup your work.

Copy Protection/Security Key

The system comes with a security key which must be installed on the USB port.

The system disks are not copy protected. However, the system checks periodically for the security key and if it is not found, close all open Excel worksheets (after saving them) along with the estimate system.

Date

The date in the Database is the date of the last Trade Service update for each item. You can also add a date to any item you are manually updating.

Discount

Both material and labor discount are the actual discount percentage, not a multiplier. If you are receiving a 35% discount on wire then enter .35 not .65. The discount column should be formatted to percent.

Should you want to increase material or labor over the Endbook price or normal labor hours, you can do so by entering a negative discount in the discount cell. Entering **-1** will add 10% to the price (or labor hours).

The discounts in the Database are representative of discounts prevailing in the electrical industry. Actual discounts vary from contractor to contractor depending on location, credit rating etc. For this reason your actual cost may differ from the extended amount in the Estimate. You should check with your suppliers for actual discounts.



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End Book

Trade Service® "End Book" ("Best Column") (Third column) is the column usually used for pricing after applying appropriate discounts. This is the Trade Service data that is used to update the estimating system. Actual discounts vary from contractor to contractor depending on location, credit rating, etc. For this reason your actual cost may differ from the extended amount in the estimate. You should check with your suppliers for actual discounts.

IMPORTANT

As shipped Trade Service pricing is not set to any particular area of the country. There are substantial price differences between this pricing and that of other areas.

We have no association with Trade Service, but suggest you contact them. They provide complete updating and pricing service. This includes an initial update to set The Spreadsheet Tool database pricing to the most current pricing for your area.

Excel®

Microsoft Excel 2007 or greater is required by the Estimating System. When using the Estimating System all Excel functions work as usual except for several Ctrl keys which are used by the Estimating System.

The estimating system will not work with earlier versions of Excel.

It is suggested that if you are not proficient with Excel, you study the Excel manuals in order to achieve full use of the estimating system.

Excel Information

Below are most of the useful Toolbar Buttons for doing estimates.



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We suggest the above tool buttons be added to the quick button area of Excel. If you are not familiar with the buttons, try them to see how they work. Of particular use are the Print Area and Insert Rows buttons.

Formulas

Formulas for both material and labor are included for the respective columns. Should you delete them they can be regenerated from the Estimate menu or by using the Check Estimate function.

The formulas factor quantity, unit (E, C, M and Q for material) (E, C and M for labor) and discount.

IMPORTANT

It is important to realize that no extension is done when you use Q as the material unit, only the number (or text) in the material cost cell is copied into the materials extension column.

Summary/General Conditions/Quotes/Labor

This information is provided as a guide. You may edit these items to suite your needs.

Keyword

Any Keyword can be used in column A of the Database. This is the word or abbreviation you use to find the items in the Database. Since you will be frequently typing these keywords, keep them short. Also you might use your own keyword, one that is easy for you to remember (such as eee for EMT). Using a special keyword will help avoid duplicates. If you want to find the next instance of a keyword, when searching the Database after using the G or D buttons, press Ctrl down-arrow.

Labor Productivity



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The labor productivity units included with the system are representative of labor units used in the electrical industry. Your actual labor efficiency may differ. No warranty is made to their correctness. Review labor productivity to verify that it matches your actual labor productivity.

Modifying the Worksheets

You cannot change the name of the "DB" or "Overflow" Worksheets. You should always keep one worksheet named "Estimate", since this is the system default estimate name.

While changes and additions can be made to the worksheets, you should realize that certain columns must remain where they are because of the built-in search and updating functions of the system. Generally you can only add columns to the right of the required columns in the Estimate, Database and Overflow worksheets.

If you wish to hide certain columns or rows use Excel's group function. 

After you move your Estimate out of the system, you can edit it in any way you wish.

The name of the Estimating System Workbook, TST_ver4.XLSM can't be changed.

Place mark and Place mark Return

These control key combinations allow you to move back to a preset location in any workbook/worksheet as follows:

Ctrl Shift S	Sets the return location. (Row)
Ctrl R	Returns to the preset location (no insert).
Ctrl Shift R	Returns to the preset location and insert any rows you have selected before returning.

The placemark feature is handy when you are building assemblies, allowing you to return directly to the assembly location and insert rows as necessary.

The returned rows are inserted above the placemark (set) location. No rows are copied over.

You can select rows to return (insert) by selecting cells in any column. Rows will be inserted, not just the selected cells.



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This feature also works between worksheets.

You may get an error if you try to return before setting.

Task Code

This field can be any group of numbers or characters you wish. It can be used in sorting by type of work. (Use Excel's Pivot Table)

Example:

By adding the word "Cond" for all conduit installation items then sorting with Excel, the total conduit installation can be grouped and totaled.

Totals

It is important that you double check your totals/formulas to be sure that they include all items.

It is a good policy to leave a row or two at the top or bottom of the insertion point when inserting rows into an existing summation group. In this way you will avoid problems with totals not including all associated rows.

Trade Number

This number is the UPC code for updating from the Trade Service® Data Select disk.

Units

The material and labor Units are similar in that they both can be either E, C, or M. These designations are used by the formula to extend to the proper dollar/hour amount. They are not case sensitive (do not have to be capitalized). Additionally you can type Q (for Quote) into the material Unit.

IMPORTANT



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It is important to realize that no extension is done when you use Q, only the number (or text) in the material price column is copied into the materials extension column. Make sure you are using the correct unit.

Updating Estimates to Current Database Pricing

Use this feature to update an existing Estimate to current Database pricing.

To use:

Select Updat Est Pricing from the Estimate ribbon. The specified estimate can be the current estimate or any other estimate in the Main Estimate workbook. Click OK on the Update Pricing Dialog Box.

What it does:

For each item in the specified estimate, the material price is updated only if the item is found in the Database (by description) **and** the item has a Trade Service number. When items in the estimate are updated, their material price and unit cells are flagged with light blue.

Future Versions of Excel and Windows

This version of The Spreadsheet Tool was designed to run on Microsoft Excel 2007/2010. While it is likely that the Estimating System will work on future versions of Windows and Excel, we have no way of knowing if in fact the system will continue to work. Caution is advised before upgrading to future versions of Excel.

Trade Service

Initial Trade Service Update

While we have no connection to Trade Service, we feel that much of the reason for using any electronic estimating system is to have the ability to update your database electronically. We therefore recommend that you use Trade Service Data Select updating service. Please note that The Spreadsheet Tool will not update from other Trade Service products.



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Setting the Database to the most current Trade Service Pricing - Data Select Load using Trade Service initial update disks.

Although the Initial Data Select update will be least used of the update functions, we include information about it first, since you will need to run it when you receive your initial update set of disks from Trade Service.

Warning; DO NOT USE THIS FUNCTION FOR NORMAL BY-WEEKLY UPDATES

The initial update function should be run when first receiving the Data-Select Load disks from Trade Service and never again.

To Run:

Start the estimating system.

The initial update function can be found at the Estimate Menu located on the Excel Addins ribbon tab. (Not on the Estimate ribbon) Click on the Initial Update item from the menu.

Find the Trade.dat file in the appropriate drive and click to open and start the update.

The update may take some time. The status in percent should be shown at the bottom of the window.

Note that there will most likely only be one disk (the original functions was written for multiple disks) so select no when the additional disk dialog appears.

After the update is finished save the changes.

We have not included this function on the Estimating ribbon because we don't want it used, by mistake, instead of the normal Trade Service Data Select update program. The result of using the initial update program instead of the normal updating program could be devastating to your database, since no date checking is applied.

Updating from Trade Service® Data Select pricing service (Normal Updating)

Price updating of the Database from Trade Service® Data Select price update disks.

To Use:

Select an active cell below any information you wish to save in the Overflow worksheet.

Depending on if you have typed a "Y" as the answer to "Put excess items into Overflow - Y/N?" on the System Information Worksheet, items that are not in your Database are placed into Overflow starting at the active cell (row).

Insert the Trade Service Data Select update disk into the appropriate drive and select Update from Trade Service disk from the Estimate ribbon.



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Although there is always only one CD involved with an update, you will be asked if there are additional disks in the update. If there are additional disks enter yes, if not (most usual) enter no. Because the system reads the date from the header of the first disk, you must enter yes only for additional disks of the same update date. Entering disks of another update date will not work. Additional updates must be started separately for each update disk set.

You should do updates in proper order.

Trade.dat to the Overflow worksheet

You can copy the information from the Trade Service® Data Select price update disks to the Overflow worksheet.

To Use:

Select an active cell below any information you wish to save in the Overflow worksheet. Insert the Trade Service Data Select update disk into the appropriate drive and select Trade to Overflow from the Estimate ribbon.

When the import is complete you can cut and paste the items from Overflow worksheet to Database worksheet.

TRA-SER Updates

The Spreadsheet Tool will not update from TRA-SER

Trade Service®

To obtain updates from Trade Service®, contact them at:

Trade Service Company, LLC
15092 Avenue of Science
San Diego, CA 92128

Phone: 800-854-1527
Fax: 800-418-4363

<http://www.tradeservice.com/>

You will need to tell them that you are using The Spreadsheet Tool so they can send you the proper update disks.



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Transferring Completed Estimates

Transfer Job/Estimates (and related worksheets)

After completing an estimate, you will need to move your estimate out of the Estimate workbook.

The automatic Transfer Estimate feature transfers out estimates (and related) workbooks to a new workbook. Then, transfers in new clean (template) estimate worksheets of the same name.

To use the automatic estimate worksheet transfer feature, do the following:

1. Verify the Estimate/Job name in the System Information Worksheet. **The name must be exactly the same on the System Information worksheet list, as the worksheet in the estimating system main workbook, and as the worksheet in the clean.xlsm (template) workbook.** (The system will verify that the Jobs exist in all three locations, and if they don't, it will let you know.)
2. Choose Transfer Estimate from Estimate ribbon.
3. Select (check the box) of the Estimate/Job(s) you wish to transfer. Select up to 4 at the same time.

IMPORTANT: IF YOU ARE USING MORE THAN ONE WORKSHEET FOR AN ESTIMATE, ALL RELATED ESTIMATE WORKSHEETS SHOULD BE TRANSFERRED AT THE SAME TIME. THIS WILL AVOID REFERENCE PROBLEMS BETWEEN ESTIMATE WORKSHEETS.

4. Use Save As to rename the new Workbook.

Note: Related worksheets are any worksheets where a formula in any cell references a cell or named range in another worksheet.

Copying (Moving) Estimates Manually

IMPORTANT

It is generally not necessary to move a worksheet manually (using the Transfer Estimate function is the easiest way to transfer Estimates), but if you do, please understand the following.

Before going through the procedure for moving an estimate manually, you should be warned of potential problems related to the way Excel® handles copies of worksheets.

If you have several related worksheets in an estimate that make reference in a cell of one worksheet to a cell in a different worksheet, or if you make a reference to a named cell(s), and then copy these related worksheets into a new workbook, Excel will refer back to the original worksheet for cell information. If you use cell references or named cell references, you will have



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to check references between sheets each time you move (copy) a worksheet. To mitigate this problem, use the following procedure.

Always move worksheets with references between them at same time.

To move an estimate do the following:

- 1 Start in the "TST_ver4.XLSM" workbook.
- 2 Select all of the related worksheets you wish to move. Use the ctrl or shift keys along with the left mouse button to select all the worksheets you want to move.
- 3 Select 'move or copy sheet' from the Edit Menu.
- 4 **Move** the selected worksheets to a new workbook. **Move all sheets at the same time.** If you are asked about using existing names, answer Yes, but then check all references between worksheets. Use Excel Formula tab Name Manager to delete any unnecessary or bad reference names.
- 5 Save the new workbook using Save As (F12) from the Excel menu. Give it any name you wish.
- 6 Open the Clean.XLSM workbook.
- 7 Select the worksheets you wish to copy back to the "TST_ver4.XLSM" workbook.
- 8 Use 'move or copy sheet' from the edit menu to **copy** the selected worksheets to the 'TST_ver4.XLSM' workbook. **(Use copy not move) Copy all sheets at the same time.** If you are asked about using existing names, answer yes, but then check all references between worksheets. Use Excel Formula tab us Name Manager to delete any unnecessary reference names..
- 9 Save the 'TST_Ver4.XLSM' workbook including the new clean template worksheets.

IMPORTANT

We feel it is best to not make references between worksheets, but if you do, it is important that you check all of these references. Even using the above procedure you may find that a cell in one worksheet may look at an entirely different workbook then you might anticipate.

Check Estimate Function



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Although the Estimating system is fast, you should remember that it is still a spreadsheet which you control. The speed and ease of work may lull you into sloppy work habits. Be as careful as you would be if you were doing an estimate by hand. Before completing an estimate you must check the following:

Check that references between cells are all referencing to the correct cell in the correct worksheet/workbook.

Check that all totals include all required cells in their summation.

Check that all cells that need formulas have them.

Check for proper Units in all unit cells.

These functions, except for proper Units, can be verified with the Check Estimate function.

The function can be used to check the accuracy of the formatting of the current estimate. To activate, choose Check Estimate from the Estimate ribbon.

It is a good idea to run this function just before completing an estimate, and then rerunning it until no problems are found.

A summary of the capabilities are as follows:

Verifying that Quantity, Price, Material Unit, Labor Unit, Discounts and Extensions are present if needed.

Verifying that the Material and Labor Extensions are correct (and optionally correct them if the are not).

Verifying that Sums (Totals) are correct (and to optionally correct them if the are not).

Note that only the main detail part of the Estimate is checked. No checking is done to Quotes, General conditions, Labor or Summary portion of the Estimate.

Verifying that Quantity, Price, Material Unit, Labor Unit and extensions are present if needed.



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The following rules apply to this function.

- Quantity is flagged (Red) if Quantity is empty and either of the following are active (Material Price and Material Unit) or (Labor Hours and Labor Unit).
- Material Price is flagged (Red) if Material Price is empty and Quantity and Material Unit are active.
- Material Unit is flagged (Red) if Material Unit is empty and Quantity and Material Price are active.
- Material Discount is flagged (Yellow) if Material Discount is empty and Material Price is active.
- Material Extension is flagged (Yellow) (or corrected) if Material Extension is empty.
- Material Extension is flagged (Red) if Material Extension is Text and Material Price and Material Unit are active.
- Material Unit is flagged (Red) if Material Unit is any text other than Unit, UNIT, e, c, m, q, E, C, M or Q.
- Labor Hours is flagged (Red) if Labor Hours is empty and Quantity and Labor Unit are active.
- Labor Unit is flagged (Red) if Labor Unit is empty and Quantity and Labor Hours are active.
- Labor Discount is flagged (Yellow) if Labor Discount is empty and Labor Hours is active.
- Labor Extension is flagged (Yellow) (or corrected) if Labor Extension is empty.
- Labor Extension is flagged (Red) if Labor Extension is Text and Labor Hours and Labor Unit are active.
- Labor Unit is flagged (Red) if Labor Unit is any text other than Unit, UNIT, e, c, m, E, C, or M.
- Units are only checked for the presence of E, C, M, etc. Units are not checked as to if the unit is actually correct for the material or labor listed. Don't forget to check for the correct unit character.

Verifying that the Material and Labor Extensions are correct and correct them if they are not.

This will verify the correctness of the row references in the extension formulas.
You also have the option of automatically adding any missing formulas

Verifying that Sum (Totals) are correct and correct them if they are not.

Use this feature to verify Sums and optionally to automatically correct them.
The following rules apply to this function.

- This feature will only check Sums of the form "=SUM(Fx..x:Fy..y). (Where x..x is the top cell reference and y..y is the bottom cell reference)
- A Sum is flagged (or corrected) if its top reference is below the first formula or for additional sums, if their top reference is below the row after the previous Sum.
- A Sum is flagged (or corrected) if its bottom reference is higher than the row immediately above the sum.



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Tips:

- If you choose the add formulas option, formulas will be added at any blank cell in the extension column. If you wish to not have formulas added, you can add a space in the empty cell.
- If you use the auto SUM correct feature, be careful not to inadvertently include a date in a summation. Dates are held in Excel as numbers and will add to your total.
- The estimate is checked to only the last SUM in either the Material Extension or the Labor Extension Column. There must be at least one Sum in either the Material Extension or the Labor Extension column for this function to work.

Cross Check of Totals Area

The Cross Check of Totals Area helps keep track of these references and provides a way to verify if cell references are correct. Although it is not foolproof it will be effective in most situations.

Basically, it works by looking at both of the cell where the reference comes from and also at the cell where the reference goes to, and then compares these cells, by subtracting one from the other. If there is a different amount in the 'From' or 'To' cells (the subtraction delta is **not** zero), then there must be an error, and you should correct your cell references.



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T & M Billing

T & M Billing Worksheet

The T & M billing sub-system is comprised of the T & M Billing Worksheet and the T & M Billing - Customer Data (T & M Billing-Cust Data) Worksheets.

To use, first make the T & M Billing your active Job by choosing T & M Billing from the Change Job/Estimate option of the Estimate Menu. See Change Job/Estimate.

T & M Billings can be generated by using the Database (DB) Worksheet to put together a billing in the same way you would put together an estimate.

If you want to have a single column for all cost items, use Excel's group function to group the unused columns and hide them.

To Set the Customer information in the T & M Billing Worksheet, select a cell in the row of the Customer you want to set from the Customer Information worksheet, and then use the "Set Cust in T & M Billings" option from the Estimate Ribbon.

Note that the active cell must be in a Customer row of the T & M Billing-Cust Data Worksheet before using the "Set Cust in T & M Billings" option from the Estimate ribbon.

T & M Billing Customer Data Worksheet

T & M Billing Customer Data Worksheet provides the customer information for the T & M Billing Worksheet. This can be customer name, address and any other information you desire. Up to 16 user defined fields are provided. The order of the individual fields, customer's name, address, etc. can be changed to suit your needs.

The layout of the T & M Billing Worksheet can be modified. The references (column and row reference numbers) in the T & M Billing Customer Data Worksheet should then be changed to reflect the T & M Billing Worksheet layout. Note that the column letters must be entered as their numeric equivalents A = 1, B = 2, etc.



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Quote Request and Purchase Order

Purchase Order Worksheet

The Purchase Order sub-system is comprised of the Purchase Order Worksheet and the Vendor Information Worksheets.

To use, first make the Purchase Order your active Job by choosing Purchase Order from the Change Job/Estimate option of the Estimate Menu.

Purchase Orders can be generated by using the Database (DB) Worksheet to put together a Purchase Order in the same way you would put together an estimate.

If you want to have a single column for all cost items, use Excel's group function to group the unused columns and hide them.

To Set the Vendor information in the Purchase Order Worksheet, select a cell in the row of the Vendor you want to set from the Vendor Information worksheet, and then use the "Set Vendor in Purchase Order" option from the Estimate ribbon.

Note that the active cell must be in a Vendor row of the Vendor Information Worksheet before using the Set Vendor to Quote Request option from the Estimate ribbon.

Quote Request Worksheet

The Quote Request sub-system is comprised of the Quote Request Worksheet and the Vendor Information Worksheets.

First make the Quote Request your active Job by choosing Quote Request from the Change Job/Estimate option of the Estimate Menu. See Change Job/Estimate.

Quote Requests can be generated by using the Database (DB) Worksheet to put together a Quote Request in the same way you would put together an estimate.

If you want to have a single column for all cost items, use Excel's group function to group the unused columns and hide them.

To Set the Vendor information in the Quote Request Worksheet, select a cell in the row of the Vendor you want to set from the Vendor Information worksheet, and then use the "Set Vendor in Quote Request" option from the Estimate Ribbon.

Note that the active cell must be in a Vendor row of the Vendor Information Worksheet before using the Set Vendor to Quote Request option from the Estimate/Ribbon.



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Vendor Information Worksheet

Vendor Information Worksheet provides the Vendor information for the Purchase Order or Quote Request Worksheets. This can be Vendor name, address and any other information you desire. Up to 16 user defined fields are provided. The order of the individual fields, Vendor's name, address, etc. can be changed to suit your needs.

The layout of the Purchase Order or Quote Request Worksheets can be modified. The references (column and row reference numbers) in the Vendor Information Worksheet should then be changed to reflect the Purchase Order or Quote Request Worksheet layout. Note that the column letters must be entered as their numeric equivalents A = 1, B = 2, etc.



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