From the Trainer's Corner: Bid Templates

One powerful new feature of IntelliBid v4.0 is the new Bid Templates. IntelliBid ships with four Template formats that provide greater flexibility while maintaining accuracy. The Template you use depends on your situation. You may find the simpler Templates adequate for small jobs, but want to use the more detailed Templates for more complex jobs. The basic information needed to make these Templates work is essentially the same for each of them; the amount of detail you enter in each Template will vary. This article will define the four Templates and show you the fields you need to pay attention to for successful Bids.

Why does IntelliBid use Templates?

Templates provide a consistent format for your Bids. Templates allow you to enter common information one time, in one central location. IntelliBid will then apply this information automatically to each new Bid you create. You do not have to re-enter labor rates, overhead costs, taxes, profit, etc.; you have already set up these entries ahead of time.

IntelliBid Templates

The ***Quick*** Template is the simplest, most condensed Template. Both *Quick* and the *Basic and Change Order* Template combine hours from different Labor Classes into one lump sum, and do not differentiate between Regular, Overtime or Shift Differential hours. Both the *Quick* and the *Basic* Template apply Overhead and Profit as a markup while the *Short* and *Standard* calculate Overhead as a margin.

The ***Basic and Change Order*** Template has a greater assortment of entries in the Indirect Labor and Direct Job Costs sections. With both the *Quick* and the *Basic* Templates, you can combine the burden and fringe costs with hourly labor rate. The fields are available to breakout the burden and fringe values, but it is not required.

The ***Short*** Template and the ***Standard*** Template add more components to Indirect Labor and Direct Job Costs, include a Labor Adjustment section to calculate costs associated with working conditions, a Labor Escalation section to account for increasing costs on jobs lasting more than a year, and a Job Information section for job statistics. Labor hours are assigned by Labor Class and type (Regular, Overtime or Shift Differential hours) in Bid Recap. Overhead and Profit for these Templates is calculated using margin (rather than markup) for a more accurate result. The only difference between the *Short* Template and the *Standard* Template is the *Standard* Template uses all ten Labor Classes while the *Short* Template uses only the first three – Electrician, Low Voltage Systems and Equipment Operator. Most contractors will find the *Short* Template more than adequate, plus it provides the added advantage of faster bid calculations than the *Standard* Template.

Bid Template Maintenance

Open Bid Template Maintenance in IntelliBid (select **Maintenance > Bid Templates** in the Access bar**).** The Default Template is the *Basic and Change Order,* so we will use this for illustration. Select the *Basic* Template in the upper left corner of your screen if it is not already displayed.

1. ***Always*** make a copy of any Bid Template if you are making any significant changes to it. This way you always have the original to go back to, just in case. Click on the **Copy** button just below the Bid Template Selection box, select the Template you want to copy, enter a new Template name and click **OK.**

2. Assuming you want to use this Template in all your new Bids, select this new Template as the Default Bid Preference in the upper right corner. Once you have done this and updated the Template as outlined below, the next job you create will

have a great deal of the Bid already completed; you will only have to enter a few job-specific items.

The Templates are made up of sections identified by the yellow lines. These sections become individual tabs (screens) in Bid Recap. These sections are simply a way of organizing the bid information. You do not need to enter information in all cells, only the ones you use in your Bids. Cells where you can enter data are typically colored red.

Quick and Basic Bid Templates

Direct Labor:

In the Direct Labor section, enter the normal crew mix you use in column C. This determines how labor hours will be distributed; you can edit this later in Bid Recap for the actual crew size if necessary. Enter labor rates for the job skills you use in column E. The rate can be the combined value of hourly base pay, burden and fringe benefits, or you can break the values out into columns G (burden percentage) and I (fringe dollars). The *Quick* and *Basic* Templates allow you to keep the burden and fringe separate, but it's not required. If you use one average labor rate for all of your field people, set your crew mix to 1 for a journeyman and 0 for everyone else; and put that one rate in the cell for journeyman.

This illustration shows our normal crew mix of one Journeyman at a combined rate of $35.00 and one Apprentice with a combined rate of $21.00. The labor hours will be split equally between them.

	A	B	C	D	E	F	G	H	I	J
1	DIR LABOR		CREW	HOURS	RATE		BURDEN %	BURDEN $	FRINGE $	FULL RATE
2	HOURS	+F2+G2+H2								
3	ELECTRICAL									
4	FOREMEN (WORKING)		0	C4+C5+C6))	0.00		0.00	G4%E4	0.00	E4+H4+I4
5	JOURNEYMEN		1	C4+C5+C6))	35.00		G4	G5%E5	0.00	E5+H5+I5
6	APPRENTICE		1	C4+C5+C6))	21.00		G4	G6%E6	0.00	E6+H6+I6

Indirect Labor

The only difference between the *Quick* and the *Basic* Templates is that the *Basic* includes more indirect labor components. You can assign the number of hours for each type of labor in column B. Normally, you will enter this information in Bid Recap for each job, so you don't need to set it up in the Template. In column D, enter the pay rate for each description. Again, this can be one all-inclusive rate, or you can break out the burden and fringe same as you did for the direct labor.

	A	B	C	D	E	F	G	H	I
16	INDIR LBR	HOURS		RATE $		BURDEN %	BURDEN $	FRINGE $	FULL RATE
17	MISC INDIRECT LABOR	0.00		0.00		0.00	F17%D17	0.00	7+H17+G17
18	PROJECT MANAGER	0.00		40.00		F17	F18%D18	0.00	3+H18+G18
19	SUPERINTENDENT	0.00		37.50		F17	F19%D19	0.00	3+H19+G19
▸	GENERAL FOREMAN	0.00		0.00		F17	F20%D20	0.00	0+H20+G20
21	FOREMAN	0.00		0.00		F17	F21%D21	0.00	1+H21+G21
22	DRAFTSMAN	0.00		0.00		F17	F22%D22	0.00	2+H22+G22
23	STOCKMAN / PURCHASING	0.00		0.00		F17	F23%D23	0.00	3+H33+G23
24	TRUCK DRIVER	0.00		15.00		F17	F24%D24	0.00	4+H24+G24
25	TRAVEL TIME	0.00		0.00		F17	F25%D25	0.00	5+H25+G25
26	MOBILIZATION LABOR	0.00		0.00		F17	F26%D26	0.00	6+H26+G26
27	AS BUILT DRAWINGS	0.00		0.00		F17	F27%D27	0.00	7+H27+G27
28	SAFETY	0.00		17.50		F17	F28%D28	0.00	8+H28+G28
29	ESTIMATING	0.00		0.00		F17	F29%D29	0.00	9+H29+G29
30	GUARANTEE	0.00		0.00		F17	F30%D30	0.00	0+H30+G30
31									
32	SUBTOTAL	M(B17:B30)							

Direct Job Costs (DJC)

In the DJC section, the *Quick* Template uses column B to fill in quantities (number of miles or drawings) and column D to enter the percentage of labor hours to assign for costs like safety issues. Column C is used to enter the cost per unit. Some of these

items will use a straight value in column C, such as a Permit Fee. Other items multiply the cost per unit in column C by the quantity in column B, such as travel expense (number of miles times the rate per mile).

	A	B	C	D	E
34	DJC	QTY	COST/UNIT	OF DIR LBI	TAX %
35	MISC DIRECT JOB COSTS		0.00		
36	SPECIFIED ALLOWANCES		0.00		
37	SPECIAL INSURANCE CHG		0.00		
38	EQUIPMENT DEPRECIATION			2.00	
39	TOOLS EXPENDABLE			1.00	
40					
41	FIELD STORAGE (MONTH)		0.00		
42	OFFICE TRAILER (MONTH)	6	250.00		
43	FIELD OFFICE UTIL (MONTH)		0.00		
44	FIELD TELEPHONE (MONTH)		0.00		
45	FIELD TOILET (MONTH)		0.00		
46	TEMP FENCING (FEET)		0.00		
47					
48	TEMP POWER (AMPS)		0.00		
49	TEMP LIGHT (SQ FT)		0.00		
50	UTILITY CONNECT CHARGE		0.00		
51	LIVING ALLOWANCE (DAY)		0.00		
52	TRAVEL EXPENSE (MILE)		0.00		
53	FREIGHT		0.00		
54	PERMIT FEE		0.00		
55	MISC FEES		0.00		
56	DJC TAX				0.00
58	DIR JOB COST TOTAL				

In the Basic and Change Order Template, a simple rule-of-thumb is this: If the cell in column B is gray, then the value in column C is a straight value, such as a Permit Fee. If the cell in column B is white, then enter the cost per unit. For example, if you require an office trailer that costs $250 per month, enter 250.00 in column C and the number of months in column B. The total is calculated in column L (not shown in this illustration) and added to the Bid total. The percentages in column D are percentages of labor. If you want to treat these items as part of overhead, IntelliBid will allow it; but to be accurate, these are direct job costs, not overhead. Overhead is defined as an ongoing cost, such as office space, heat, lights, administrative payroll and other expenses needed to run your business…costs that you maintain whether you get the job or not.

Finally, column E has a place to add a Direct Job Cost tax. However, tax rates should not be entered directly into the Templates unless you frequently perform work in locations that require different rates. You should enter your tax rates in the Job Register and let the Templates bring them in – we'll discuss this more later.

Final Price

This section summarizes the sections above, giving you the totals for material, labor, equipment, subcontracts, etc. The *Basic* Template lets you make adjustments in this section by adding or subtracting dollars from each of these descriptions (the *Quick* Template does not offer this functionality). Be extremely careful if you decide to do this, because changes made here generally have no concrete basis in job costs, but rather are made to make the bid price 'feel' right.

Enter your overhead percentage in column C. As we've said, overhead is a cost of doing business and should cover all costs that are not assigned to a job. On the *Quick* and *Basic* Templates, this percentage is a simple markup, meaning this percentage is applied to the total job cost. Finish by entering a profit markup. There are also cells that show tax rates, but again, tax rates should be entered in the Job Register and let the Templates bring them in – we'll discuss this more later.

Short and Standard Templates:

Labor Adjustment:

This section is not included in the first two Templates. You can apply percentages against the total cost when you need to adjust labor hours to account for circumstances affecting the job, such as difficult weather conditions or hazardous working environments. These adjustments will need to be made on a job-by-job basis, so there is little point in setting up this section in your Template.

Direct Labor:

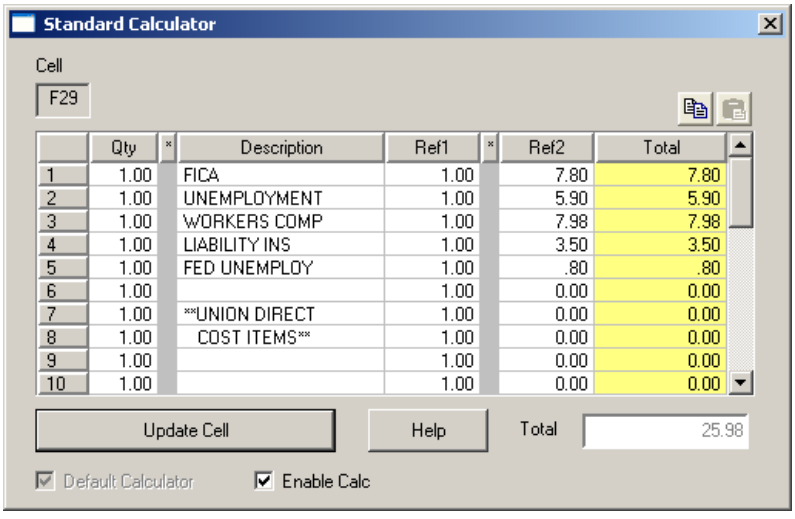
The crew makeup is now made up of *five* skill levels instead of three; and there are separate subsections for Regular, Overtime and Shift Differential hours and rates. Any labor hours taken off in a phase assigned either to Overtime or Shift Differential will display those hours in the appropriate cells. Labor hours are also broken out by Labor Class.

Enter the labor rates for the skill levels that you employ, i.e., Foreman, Journeyman, etc. A Working Foreman is actually engaged in the installation of the equipment, but is receiving Foreman's wages. A Non-working Foreman will be calculated in Indirect Labor. It is very important that the rate be only the **base pay** (what the average person at that level gets in his or her paycheck based on regular time). IntelliBid will automatically calculate overtime at time-and-a-half and the shift differential at ten percent higher than regular time. So, if you were to enter a labor rate that included burden and fringe benefits, the Overtime and Shift Differential would be inaccurate.

Right-click in column F for the Burden % and select **Standard Calc**.

	A	B	C	D	E	F	G	H	I	J
27	DIR LBR	CREW	OPT CREW	HOURS	RATE $	BURDEN %	BURDEN $	FRINGE $	LBR DJE $	FULL RATE
28	ELECTRICAL									
	FOREMEN (WORKING)	1		1+B32+B33))	24.50	0.0				E29+I29
30	JOURNEYMEN	1		1+B32+B33))	22.50	F2				E30+I30
31	APPRENTICE	0		1+B32+B33))	12.00	F2				E31+I31
32	JOB DESC 4	0		1+B32+B33))	0.00	F2				E32+I32
33	JOB DESC 5	0		1+B32+B33))	0.00	F2				E33+I33
34	SUBTOTAL	M(B29:B33)	M(C29:C33)	JM(D29:D33)	)*B33))/B34	F2				E34+I34
35	OVERTIME									
36	FOREMEN (WORKING)	1		8+B39+B40))	E29*1.5	F2				E36+I36
37	JOURNEYMEN	1		8+B39+B40))	E30*1.5	F2				E37+I37
38	APPRENTICE	0		8+B39+B40))	E31*1.5	F2				E38+I38
39	JOB DESC 4	0		8+B39+B40))	E32*1.5	F2				E39+I39
40	JOB DESC 5	0		8+B39+B40))	E33*1.5	F2				E40+I40
41	SUBTOTAL	M(B36:B40)	M(C36:C40)	JM(D36:D40)	)*B40))/B41	F2				E41+I41
42	SHIFT DIFFERENTIAL									
43	FOREMEN (WORKING)	1		5+B46+B47))	3+(10%E29)	F2				E43+I43
44	JOURNEYMEN	1		5+B46+B47))	)+(10%E30)	F29	F44%E44	0.00	G44+H44	E44+I44
45	APPRENTICE	0		5+B46+B47))	1+(10%E31)	F29	F45%E45	0.00	G45+H45	E45+I45

Add Component
Delete Component
Copy Cell Address
Restore Default Column Widths
Standard Calc *
Labor Calc
Bid Bond Calc
Bid Profit Calc
Bid Overhead Calc
Bid Weather Calc
Clear Calc



This cell uses a calculator to help determine burden. The calculator has been set up with the normal burden items. Enter the percentages for each item you use by double-clicking in the Ref2 column. You can add any

descriptions that you need if they are not already listed in the calculator. You also have the option of entering a total labor burden percentage in any cell in the Ref2 column, rather than breaking it out on to several lines; IntelliBid is only concerned with the total at the bottom of the calculator.

Click on **Update Cell**. Notice this updates all the entire column of cells for this Labor Class with the same percentage. Labor classes for Low Voltage Systems and Equipment Operator have their own percentage because of possible differences in the Workers Comp premiums, etc.

Fringe $ is a dollars-per-hour value rather than a percentage. Right-click in cell H29 and select **Standard Calc** again. This time fringe items are shown in the calculator. Enter the dollar values in the Ref2 column for each item you use, or put in one value for the combined fringe.

Here's a hint to make updating these cells easier. Before you click **Update Cell**, click on the **Copy**  button in the upper right corner of the calculator. Fringe benefits typically remain the same for each hour worked and do not change with the hourly pay. That means these same values apply to Overtime and Shift Differential. Go to the same skill level in the Overtime block, select the **Standard Calc** and then click on the Paste  button. Repeat for Shift Differential and each skill level you will use. You now have an accurate direct labor cost.

Be aware that you can open either of these calculators in your Bid Recap by double-clicking these cells. (You only need to right-click in Template Maintenance.) This will allow you to change your values on the fly if you need to.

Indirect Labor:

Indirect Labor calculates its costs as a percentage of the total job hours. Enter the percentage in Column B for each of the costs you normally use; the number of hours is calculated for you in Column C. Enter your burden percentage in the first line in Column E. You don't need to fill in all the cells; only those that apply for you. Notice that one of the descriptions is for a Foreman. In this case, this is a Non-Working Foreman, someone who is not directly involved with the installation but is in a supervisory role.

	A	B	C	D	E	F	G	H	I
94	INDIR LBR	% OF JOB	HOURS	RATE $	BURDEN %	BURDEN $	FRINGE $	LBR DJE	FULL RATE
95	MISC INDIRECT LABOR	0.00	B95%M25	E34	25.98	E95%D95	H34	F95+G95	D95+H95
96	PROJECT MANAGER	10.00	B96%M25	27.00	E95	E96%D96	0.00	F96+G96	D96+H96
97	SUPERINTENDENT	0.00	B97%M25	0.00	E95	E97%D97	0.00	F97+G97	D97+H97
98	GENERAL FOREMAN	0.00	B98%M25	0.00	E95	E98%D98	0.00	F98+G98	D98+H98
99	FOREMAN	0.00	B99%M25	0.00	E95	E99%D99	0.00	F99+G99	D99+H99
100	DESIGN ENGINEER	0.00	B100%M25	0.00	E95	E100%D100	0.00	F100+G100	D100+H100
101	COST CONTROL ENGINEER	0.00	B101%M25	0.00	E95	E101%D101	0.00	F101+G101	D101+H101
102	DRAFTSMAN		0	0.00	E95	E102%D102	0.00	F102+G102	D102+H102
103	TIME KEEPER	0.00	B103%M25	0.00	E95	E103%D103	0.00	F103+G103	D103+H103
104	STOCKMAN / PURCHASING	0.00	B104%M25	0.00	E95	E104%D104	0.00	F104+G104	D104+H104
105	TRUCK DRIVER	5	B105%M25	9.00	E95	E105%D105	0.00	F105+G105	D105+H105
106	FLAGMAN	0.00	B106%M25	0.00	E95	E106%D106	0.00	F106+G106	D106+H106
107	WATCHMAN	0.00	B107%M25	0.00	E95	E107%D107	0.00	F107+G107	D107+H107
108	TRAVEL TIME	0.00	B108%M25	E34	E95	E108%D108	H34	F108+G108	D108+H108
109	MOBILIZATION LABOR	0.00	B109%M25	E34	E95	E109%D109	H34	F109+G109	D109+H109
110	AS BUILT DRAWINGS	0.00	B110%M25	0.00	E95	E110%D110	0.00	F110+G110	D110+H110
111	SAFETY	0.00	B111%M25	E34	E95	E111%D111	H34	F111+G111	D111+H111
112	ESTIMATING	0.00	B112%M25	0.00	E95	E112%D112	0.00	F112+G112	D112+H112
113	GUARANTEE	0.00	B113%M25	E34	E95	E113%D113	H34	F113+G113	D113+H113
114									
▸	SUBTOTAL		(C95:C113)						

Labor Escalation:

If the job is going to span more than one pay period (year), you can include the estimated increase in labor costs. In column B, enter the percentage of the job scheduled for each pay period (these should total 100%). In column D, enter the

anticipated percentage of increased labor costs for that pay period. Column G is available if you need to finance the labor increase.

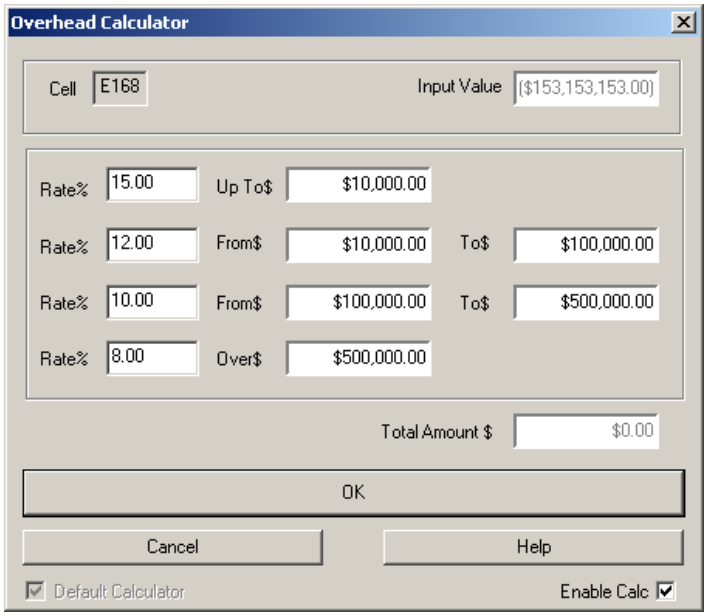
Direct Job Costs (DJC):

Direct Job Costs for the *Short* and the *Standard* are the same as for the *Basic & Change Order* Template discussed earlier.

Final Price:

The first item to consider is **Overhead**. Some contractors use one overhead percentage, and don't change it at all. The program will work that way; but to be more accurate, your overhead should be adjusted depending upon what the job involves. If a job has a large proportion of quoted items, your overhead would probably be lower than a job with a higher proportion of labor.

While this adjustment can be made manually, it's better to automate it to keep things consistent. This is why there are six different descriptions used for overhead. You can enter the same percentage for each one, but to be more accurate they should be different based on two variables – **Risk** and **Involvement**. For example, quotes carry a very low risk. Once a quote has been accepted from a supplier, it's generally not changed. Quotes also have very low involvement. Your purchasing agent puts a PO number on the quote, and faxes it back to the vendor. Subcontracts also have low risk with only a little more involvement for supervision. Labor on the other hand has a very high risk and very high involvement, and the overhead percentage should reflect both of those factors.



The second difference: in the *Quick* and *Basic* Templates there is one percentage for all jobs regardless of size; the *Short* and the *Standard* Templates allow a variation based on the size of the job. Right-click on any of the percentages in Column E and select the Overhead Calculator. This calculator allows four steps in setting the percentages for overhead. For example, you can set your Material Overhead rate to 15% for the first $10,000, 12% for job costs from $10,000 to $100,000, 10% from $100,000 to $500,000 and 8% for over $500,000. When you look at the finished product, the first $10,000 will be at 15%; the next $90,000 will be at 12% and so on. The final percentage for Materials will show in Column C. Instead of adjusting the overhead percentage for every job based on the size of the job, you are automating the process. If you don't want to go to this level of accuracy, simply put one percentage in the last Rate% field on the left hand side in the calculator and leave everything else at 0.00. This will apply the same overhead percentage to all jobs over $0.00 -- in other words, all jobs. **CAUTION!** Don't put that one percentage in the top cell; that would apply the percentage only to jobs under $0.00, which means the Template would never calculate any overhead.

The final difference for the *Short* and *Standard* Templates is that overhead is calculated as a ***margin*** and not a ***markup***. While markup is perhaps easier to understand, it's not considered proper accounting practice, and it can cost you money. For example, consider a job where the raw cost is $90,000 and, to keep it simple, you use an overhead ***markup*** of 10%. This means you add $9,000 to the raw cost and come up with a selling price of $99,000. This is inaccurate because, in reality, only 9% of your job is overhead. Your job should sell for $100,000 -- 10% of $100,000 is $10,000. Remove that from the selling price, and you're left with your $90,000 raw cost. If you have a job where the specifications allow you a certain overhead margin for change orders and you apply the percentage as a markup, you are losing money each time!

Taxes

The last topic we will discuss is how to handle tax rates. As we saw previously, each Template has a place for tax rates. It is possible to enter your tax rates directly into the Template or the Bid, but it's not advised. What if the tax rates change? You would have to go through every Bid you're currently working on and manually change every rate. It's time-consuming, and you're bound to miss something. Instead, enter your tax rates in the Job Register screen. Click Tax Rates and type in the rates for the currently selected job. Click "Save Current Tax Rates As Default" and the rates you've entered will be applied to all your new jobs. Now, when you create a Bid, the Template will look to the Job Register and will bring in whatever tax rates it finds automatically.

Detailed information on working with Bids and Bid Templates is available in the IntelliBid Online Help system (from the menu bar, select **Help > Contents** or refer to the online manual by selecting **Help > User's Manual)** or call to schedule a training session. You might consider attending one of our training classes where we cover this topic and all other areas of IntelliBid in detail. Check our website <http://www.conest.com> for class schedules or call Deb in our Training Department at 1-800-662-7687 x319.