

## Job Spec: Automatic Labor Factoring

Presetting labor factors in IntelliBid

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One of the newest and most dynamic features in ConEst IntelliBid is *Job Spec*, which allows you to preset specific variables to automate your takeoff. One of these variables, Labor Factor, gives you the ability to account for greater or lesser degrees of difficulty in any given installation. When taking off assemblies, your labor factors will be preset for you.

For example, using a bar joist Feeder assembly by amps; take off a 200 amp 3P4W+G feeder in EMT. After choosing your fittings you'll be asked four questions: 1-Pipe Length, 2-Number of Ells per Run, 3-added Feet Each Wire, and 4-Number of Connectors. After entering these values into the Quantity dialog screen and returning to the Takeoff screen, you'll notice some of the labor factors are in blue, indicating the program has set them. Look at the wire in the Audit Trail and see that the labor factor is set at 0.65. This is because you're pulling all five wires at the same time, which takes less time than pulling one wire five separate times. IntelliBid has already taken care of that adjustment for you.

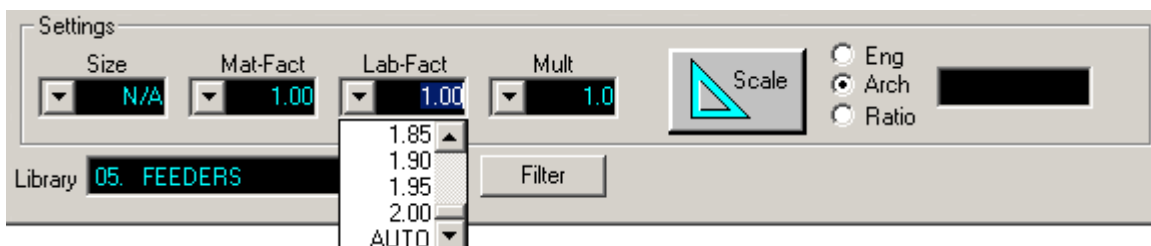
Let's assume that you're going to take off the same feeder again, but this time it's going to be on the fifth floor of the building. It takes time to get your crew, materials and equipment up to that floor, so you need more labor. The question is, how much more? Most people don't have that information memorized, so they need to look it up. That labor factor is available in several different industry-related publications as well as on your IntelliBid mouse pad.

By default, this feeder is ten feet or less above the floor. Suppose you need to run it eighteen feet above the floor. Obviously you would need more labor, but again the question is how much more? Once again, you could look it up. Now suppose the location calls for both – the feeder is going to be run on the fifth floor *and* it's going to be eighteen feet above the floor. You have to look up both factors and you need to do some arithmetic *and* you need to combine the results to come up with a final labor factor. Whew! That's a lot of looking up and factoring, isn't it?

What usually happens now is one of three things. 1) You could just ignore the factors ... it's all going to average out and the figures will be close enough. The danger here is you could be estimating less labor than you actually need. 2) You could add hours at the end of the bid to account for the additional labor. This is better, but is both inaccurate and inconsistent. It's inaccurate because there's no indication as to where the extra hours are to be used and these hours might even get used up on slab work. It's inconsistent because the same number of hours won't be added for two similar jobs. 3) You can look up the correct labor factors and combine them for the actual rate.

While the third option is by far the most accurate, most of us just don't have that kind of time. The best solution is to let the computer do the work.

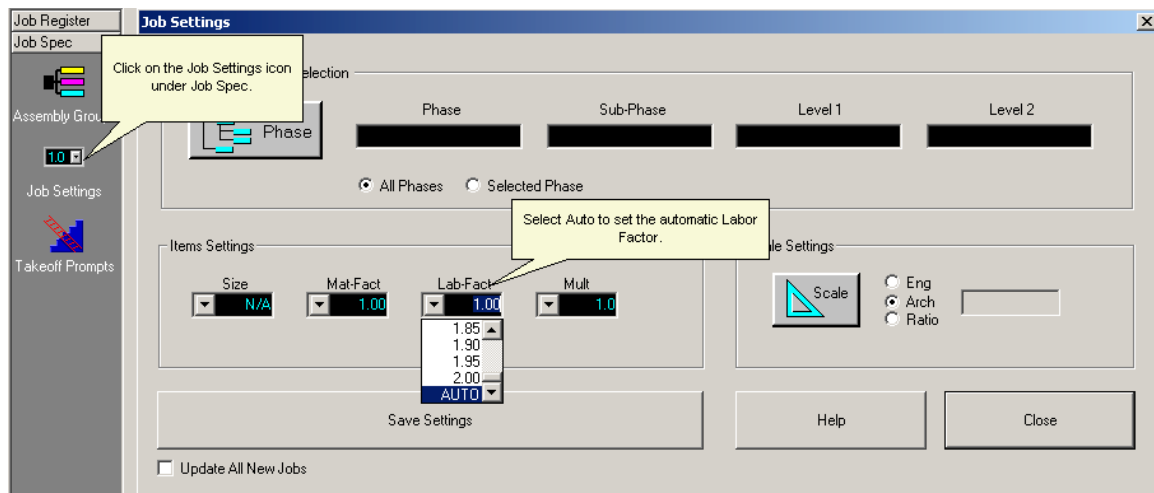
To let IntelliBid work for you, you need to change a setting on your Takeoff screen. In the middle of your screen, you should see a *Settings* section as illustrated below. (If your screen does not appear as in the illustration below, from the Menu Bar, select **Preferences > Takeoff Level > Display All**, then click on **OK**). This is where you can preset your labor factor.



Click on the dropdown arrow for **Lab-Fact**, scroll all the way down to the bottom and click on **AUTO**. Now repeat that same takeoff again as above and notice this time you will be asked for two additional values - 'Floors Above Grade' and 'Conduit Mtg Height'. Answer '5' and '18' and answer the other questions the same as you did the first time.

When you finish you'll see that *all* of the labor factors are now preset. The factor for the wire is 0.683. It went up slightly to account for the installation on the fifth floor, but most likely, you will be standing on the floor when you pull the wire into the panel. Now look at the labor factor for the EMT and fittings. In the first takeoff, this factor was set at 0.93 because installing EMT on bar joist takes less time than most other installations. It has been increased here, once because it's going to be installed on the fifth floor and again because it's eighteen feet up. The program combined all these things and came up with a final labor factor of 1.074. If this run had involved parallel conduits, the labor factor would have been lowered to take that into account.

Most estimators will probably want to leave the labor factor on *Auto* for the entire bid. Selecting the Auto Labor factor on the Takeoff screen applies only as long as you have that Takeoff screen open. What happens when you click on the **Phase** button, then click on **Takeoff** again without even changing phases, is the Labor Factor returns to 1.00, the default. To set the Labor Factor on automatic for the entire job, go to the **Access Bar** on the left of your screen and click on **Job Spec** and click on the icon for **Job Settings**. In the Job Settings dialog, change the *Labor Factor* to **Auto**. Notice the selection is for *All Phases*; the auto labor factor will apply in all phases of the job. You could select to apply it to specific phases. Also notice you can click in the **Update All New Jobs** check box and the *Auto* Labor Factor setting will be applied to any new job you create. Click on **Save Settings**, and then click on the **Close** button. The labor factor will remain on automatic for the entire job. We will discuss the ability to preset other values in IntelliBid in subsequent articles.



The use of Automatic Labor Factoring brings a greater level of accuracy and consistency to your estimating that you can't get any other way.

For more information and instructions for presetting your labor factors, refer to the IntelliBid Online Help Index under *Labor Factors* or contact our Training Department at 1-800-662-7687 x319.