



Mechanical Contractors Association

MCAA

of America



WebLEM[®]

A Web-based Labor Estimating Manual

Increase your profitability with a systematic approach to labor estimating

Are estimates taking too long and cutting into your company's productivity and profitability?

MCAA's *WebLEM* can save you time by giving your estimators immediate 24/7 access to a systematic approach to labor estimating that's proven successful for hundreds of mechanical contractors in generating hundreds of millions of dollars in annual construction.



What is *WebLEM*?

WebLEM is the next generation of the popular *Labor Estimating Manual (LEM)*, considered the industry's most reliable, authoritative source for comprehensive labor units for typical project tasks. This web-based product contains the detailed labor data contractors have come to depend on. With the *WebLEM*, you can quickly search for and retrieve information. The *WebLEM* also offers you the capability to export data into Microsoft Excel or CSV format for added flexibility. Data in the *WebLEM* is reviewed and updated periodically to reflect the latest products and joining methods.



What Labor Units are Covered?

The *WebLEM* is a reference document on labor hours for assembly of the following products:

- Cleanroom Procedures
- Excavation & Backfill
- Hangers, Sleeves & Inserts
- HVAC Equipment
- HVAC Hook-Ups
- Instrumentation
- Miscellaneous Labor Operations
- Piping Systems
- Plumbing Equipment
- Plumbing Fixtures
- Plumbing Hook-Ups
- Refrigeration Equipment
- Treatment Plant Equipment

Piping systems can be estimated using two different methods—the traditional Component Method and the newly added Work Activity Method. With the Component Method, contractors can choose to labor items such as branch connections, flanges, pipe, valves, and fittings. In this method, the labor for the item includes joint labor, material handling, testing, and installation. In the Work Activity Method, labor units are associated with each specific activity. Contractors can choose items such as joint labor, cut and bevel, handling and installation, and more. This method assists the contractor in easily estimating shop labor hours versus field labor hours.

The *WebLEM* also includes basic assumptions that were used to develop the labor hours, correction factors to help you adjust to your individual job situation, and a glossary of abbreviations and terms used throughout the *WebLEM*. Copies of the *Management Methods Manual* bulletins referenced in the *WebLEM* are also included, providing additional information on calculation of delay claims, cost of overtime, impact of shift work, and factors affecting productivity. A section on computerized estimating lists contact information for firms that have license agreements to include the labor units in the *WebLEM* in their estimating software.

Are the *WebLEM* Labor Units Available for My Estimating Software?

Several estimating software providers are licensed to include MCAA labor units in their software packages. To find out if your vendor is included on this list, visit www.weblem.org.

How Can I Subscribe to the *WebLEM*?

If you are a member of MCAA/MSCA, you will be provided with a password and username to access the *WebLEM* free of charge, and there's no need to sign a subscription agreement. Non-members must complete and sign a subscription agreement before they can access the *WebLEM*. If you need a subscription agreement form, please visit www.weblem.org, e-mail publications@mcaa.org or call 301-990-2200. For non-members an annual maintenance fee is also required for uninterrupted access to the *WebLEM*. Invoices are sent directly to each subscriber each year.

	Members	Non-Members
Access Fee	Free	\$5,500.00
Maintenance Fee (billed every January)	Free	\$750.00

How Often is the *WebLEM* Updated?

Data in the *WebLEM* is reviewed and updated periodically to reflect the latest products and joining methods.

My *WebLEM* Subscription Expired. Can I Reactivate It?

In order to reactivate your subscription, you must pay any overdue maintenance fees. Please contact us at publications@mcaa.org or 301-990-2200 if you need a replacement invoice.

What if I Have a Question or Suggestion About the *WebLEM*?

MCAA is committed to producing a high-quality product that helps you excel in your business. If at any time you have questions or suggestions for future editions, we want to hear from you. Please e-mail publications@mcaa.org or call 301-990-2200 with general questions/suggestions. If your questions/suggestions involve the content and functionality of the *WebLEM*, please e-mail nnikpourfard@mcaa.org or call 301-990-2211.

Have You Seen the Latest Enhancements?

Visit www.weblem.org to take advantage of the most recent enhancements to the *WebLEM*:

- A **Recent Updates** area provides quick access to the latest updates, as well as a Read More section with all revisions since the *WebLEM* was introduced.
- With **My Bookmarks**, you can easily bookmark the tables you visit most frequently for quick access. And, you can manage your bookmarks, changing them to suit the nature of your current projects.
- The **Recently Viewed** area supplies a listing of the tables you visited most recently, making it easy to get back to what you were doing.



Visit www.weblem.org for the latest information, including more answers to frequently asked questions.



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About MCAA's Labor Units

How is a Labor Unit Expressed?

A *WebLEM* labor unit is expressed in terms of manhours to install a unit of material (such as a foot of pipe), an individual item (such as a fitting or valve), or perform a specific task (such as welding a joint).

What is Included in a Unit of Labor?

In the Component Method, a labor unit includes labor hours for receiving, unloading, stockpiling, distributing, handling and erecting, fitting and joining, and normal pressure testing. In the new Work Activity Method, the labor units are for specific tasks alone, such as the labor to make a joint, to cut and bevel pipe, install a fitting or perform a hydro test.

Do the Labor Units Include X-ray Quality Welds?

Labor to perform X-ray quality welding is not included in the labor units and must be taken into consideration separately when estimating.

Do the Labor Units Include Purge?

The labor units do not include purge, which must be taken into consideration separately.

Can the Labor Units be Applied to Pre-fabrication?

Labor units are developed based on field assembly. Any savings resulting from shop fabrication would have to be reflected by adding a productivity multiplier to the labor units.

Do I Have to Add Labor Units for Cutting, Beveling, and Threading or Welding a Standard Length Pipe?

In the Component Method, the labor unit for installing pipe includes one joint, which includes the cutting, beveling, and threading or welding. Therefore, no additional labor per standard length of pipe is required. In the Work Activity Method, each activity, such as cut and bevel, is a separate labor unit.

Do the Labor Units Include the Installation of the Coupling?

The Component Method labor units include the installation of the coupling. In the Work Activity Method, installation of the coupling is part of the joint labor unit.

Do the Labor Units Include the Installation of the Hanger?

The pipe installation labor units do not include the installation of hangers. The labor unit to install the hangers must be taken into consideration separately.