



MCAA WebLEM Tip Sheet

Overview

MCAA WebLEM has (2) Labor Methods – Component & Work Activity Method (WAM).

- Component labor method is the traditional labor method. Labor units are applied to each item that you are installing.
- Work Activity Method was released in 2013. Individual tasks associated with installing items are labored.

What's Included

Component labor hours include:

- Receiving
- Unloading
- Stockpiling
- Distributing
- Handling and erection
- Fitting and joining
- Normal pressure testing to 1-1/2 times the operating pressure.

Pipe labor units are **per foot**. Most other items are per each item. Hanger labor is for the hanger assembly (upper attachment, vertical component, and support). Labor is assumed to be field installation.

Additional Labor

You need to add labor for activities not covered in the WebLEM units. Make sure to add time for the following activities:

- Detailing / BIM / Virtual Design Time
- Hangers
- Purging
- X-Ray Quality Welds
- Clean-Up or Supervision
- Start-Up, Balancing & Adjusting
- Valve Charts & System Tagging
- Excavation & Backfill
- Clean-Up
- Equipment Support (i.e. Roof Curbs)

For a complete list, read the FAQs and table footnotes.

Basic Assumptions

- All work installed within 2 levels of the main level (Sub-Basement – 3rd Level)
- Material stockpile is within 200' of install.
- Working off level & hard surface.
- Installing material at 10' Above Finish Floor (AFF) - 13' for hanger upper attachment
- Average working conditions exist (manpower stacking, jobsite access, weather)
- Working hours are for productive labor only – add for non-productive labor.

Working outside of these conditions means the need to apply **Correction Factors** to your labor units. MCAA has a complete list of correction factors for working elevation, temperature, overtime, jobsite conditions, and more.

Considerations

Consideration should be given to layout of piping systems. Full joints of pipe cut for material handling may require an extra joint; back-to-back fittings result in fewer than estimated joints.

Hanger labor is a significant portion of a labor estimate. How do you count hangers - hanger counts vary significantly based on piping layout. Are you going to use trapeze hangers? Do you have to oversize hangers for insulation?

Company-Wide Labor Factors

Most companies factor the MCAA Labor Units based on the unique skillset of their workforce. Do you factor your labor based on the system or the material / joining method of the pipe?

Periodically, MCAA will update their labor units and update the published MCAA tables. If you are using a computerized estimating system, who updates the units in the software? If MCAA updates their units, does that change your factored number? Or do you have to change your company's labor factor?

Questions?

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