

Estimating Labor

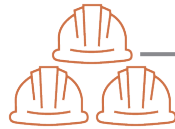
A Guide for Subcontractors

First time building with SIPs? This guide is for you. Curious about what kind of time you should allow for building with ZS2? Great! This guide is for you too.

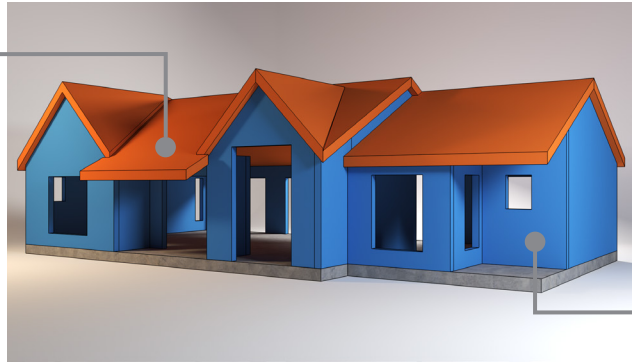
Designing and building with SIPs can be an adjustment if you've never done it before. We have created this document as a general guide to help you estimate and account for the cost of labor when building with ZS2 TechPanels (SIP's). It is exactly the same as what you're used to, but also totally different.

Keep in mind, these are only guidelines and will vary for each project.

ZS2 Estimated Labor Guideline:



* 30 min install for each roof panel with 3 person crew + 1 equipment operator



* 15 min install for 4 person crew = 1 person hour

* 15 min install for each wall panel with 3 person crew + 1 equipment operator



Exceptions to the Rule:

- Panels more than 10' h (Jumbo Panels) = 30 min per panel
- Build time will vary depending on desired occupancy, weath, competency of crew, lot size and clearnace of crane
- For first time build, add 20 - 30% to account for training of crew

Building Your Crew:

TYPICAL	WANNA GO FASTER?
Crew Size: 3 people Crane/Zoom Boom: 1 person	Crew Size: 2-3 people Additional Crew: 2-3 people Crane/Zoom Boom: 1 person

* 15 min panel can be achieved with a typical crew size of 4

MADE IN NORTH AMERICA

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CONTACT US FOR A QUOTE

Through prefabricated construction technologies, combined with advances in material science, it's time to improve safety, close the productivity gap, increase building performance, and build for the future.

Need to speed up the build time? Just increase the crew size!

Before you start...

Before you start calculating the labor for your project, consider the following:

- What type of project do you have:
Single family? Mixed use? Major development?
- Determine your crew size
- Determine equipment needs
- Section that summarizes the stats: wall panel, roof panels, party walls, above 10'
- What is your labor rate?
- Estimated # of panels?

Labor Case Study

Community Build



Using the guidelines from above, let's take a look at the labor cost for a community build consisting of **48 single family homes**.

Considerations:

- ✓ Wall Panel Count = 2640
- ✓ Roof Panels = 4560
- ✓ First Time Build (add 20%)
- ✗ Walls over 10'

Crew Required:

- Crane Operator = 1
- Crew (3 person) = 2

Let's do the math:

Wall Panels

15 min (0.25 hr.) x 4 person crew = 1 person hr. per wall panel

2,640 panels x 1 person hour = **2,640 person hrs.**

Roof Panels

30 min (0.5 hr.) x 4 person crew = 2 person hours per roof panel

4,560 panels count x 2 person hours = **9,120 person hrs.**

Total Labor Cost

Person Hours x Local Labor Rate = \$ Labor Cost

11,760 total project hrs @ \$60/hr* = \$705,600 + 20% = **\$846,720**

- This guideline is for SIP install only and **does not include** base plate layout and install, top plate install, floor system install, beam and roof structures
- Equipment costs not included, labor rates will vary
- Use your local labor rates

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