

Floor & Wall, Proposed Details

This detail is based on the suggestion by Martin Holladay (link 1 / GBA) in this thread to create a 'site built SIP' to address thermal bridging issues inherent in a steel-foundation mobile tinyhouse. I also consulted this GBA thread (link 2), but questions remain.

1. <https://www.greenbuildingadvisor.com/question/moisture-management-for-tiny-house-subfloor>
2. <https://www.greenbuildingadvisor.com/question/site-made-sip-floor-detail>

Material specs (from outside to inside):

OSB Tape: seams taped with Tyvek Housewrap tape, Huber ZIP tape, Pro Clima tape, or Siga tape.

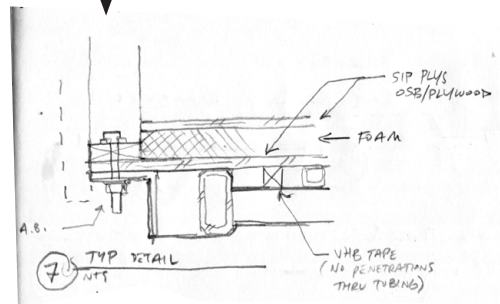
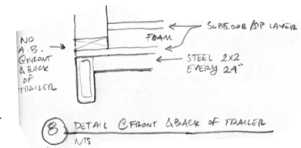
OSB Paint: Bottom is painted with exterior paint and primer prior to taping.

19/32" OSB Sheathing, type TBD

2" XPS: Owens Corning Foamular 250

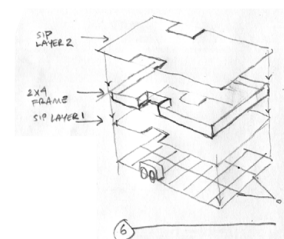
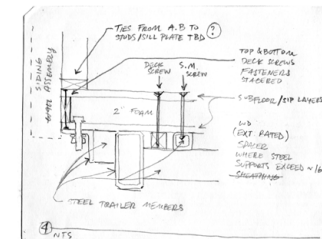
Advantech Subfloor, 4'x8'x19/32"

Adhesive for between OSB/ Advantech and foam: TBD



My hope is that this detail will surround the SIP foam and top ply and prevent shear between the top and bottom plies. It also provides a more direct load path from the roof thru the walls and into the trailer. Hurricane ties not shown.

Alternative Details



I believe these are more typical platform framing details, but I'm concerned that the structural integrity between the bottom SIP ply and the top SIP ply is questionable in my application, especially when considering shear forces that would slide the top SIP ply in relation to the bottom (anchored) SIP ply.

