

This is a Cross Section detail of the Pressure Treated Wood Foundation wall. You can copy and paste these details onto a plan sheet with your customized basement floor plan.

This detail and the chart on the following page can be used to build a basement wall that can be constructed without concrete. Because a wood wall does not have the physical mass of the more typical basement foundation, the connections between the top of the wall and the floor system, as well as the basement slab poured against the screed board, are critical to its proper function.

These connections serve to transfer the pushing forces of the backfill into the slab and main floor systems. You will notice that connections at the top of the wall get progressively stronger as the backfill height increases.

(see next page)



## PRESERVED WOOD BASEMENT FOUNDATION

Height of backfill above slab (Max.)	<b>Plywood</b> Face grain across studs, block joints.	Nailing PT top plate to PT stud	Connection Joist to top plate (TP)	Header (rim joist) to TP	Connection @ End Joist Toenail to TP	<b>Blocking</b> 24" o/c Btwn. end joist and next joist
86" = 7'-2"	19/32" thick w/ 2x6 studs @ 12" o/c	3 - 20d	LU26 fram- ing anchor w/ 6 - 8d nails	8d @ 8* o/c	8d @ 4" o/c	LU26 framing anchor w/ 6 - 8d nails
72" = 6'	23/32" thick w/ 2x6 studs @ 16" o/c	3 - 16d	2 @ 10d toenail	10d @ 8" o/c	10d @ 4" o/c	10d 2 per block
60" = 5'	19/32" thick w/ 2x6 studs @ 16" o/c	3 - 16d	2 @ 10d toenail	10d @ 8" o/c	10d @ 4" o/c	10d 2 per block
36" = 3'	15/32" thick w/ 2x6 studs @ 16" o/c	2 - 16d	2 @ 10d toenail	10d @ 16" o/c	8d @ 4" o/c	Blocking not needed
			Joists perpendicular to wall		Joists parallel to wall	

Framing and nailing schedule for wall adjustments based on backfill height

· All wood foundation materials to be foundation grade pressure treated except as noted.

· Fasteners to be corrosion resistant such as hot-dip galvanized or stainless steel.

· Use Simpson "Zmax" or equal framing anchors or joist hangers.

Confirm with local codes and standard practice.

· More information and a "Design and Construction Guide" available at www.southernpine.com

(continued from previous page) The protection strip shown at the top of the backfill is a minimal protection for the 6 mil poly moisture barrier. Better would be a full covering of 1/4" concrete Mill Board from the top of the basement wall down perhaps 12" to 18" into the soil. This will finish off the wall so it looks like a concrete basement as well as protect the moisture barrier against the occasional planting spade.

It is important that the gravel footings and under-slab gravel be well drained and either flow to daylight or have a sump pump installed in the basement floor to discharge this water. In some clay soils you will need to protect the gravel backfill from silting up with a protective barrier cloth.

You can find additional information and a free booklet at the www.southernpine.com web site.

Direct link:

http://www.southernpine.com/pwf.shtml

We have also stored a copy of this manual on our web site. You can download the PDF file here: <u>http://www.countryplans.com/Downloads/PT-</u> wood-foundation.pdf

wood-foundation.pdf

These details can be combined with the standard crawlspace foundation plan. Add a note pointing to this detail and delete the reference to the crawlspace and rename it Basement. You will also need to have an appropriate stairway to the basement. This can usually be stacked below a main floor stair (in a house with a stair). Check the Plan Detail downloads for scaled stair plans.

