HIP Home Installation PROFESSIONALS

Slab for all Kit Sheds only
Not for stick-built

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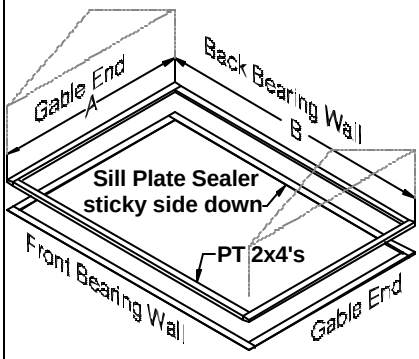
Toll-free: 866-616-2689 ~ Fax: 603-501-3510

Customers are responsible for providing a correctly built slab –*We recommend professional installation of any base or foundation.*

1. We are not responsible for the slab. We offer this information only to help our customers understand the process. Any problems or water seepage associated with a slab, new or existing, is solely the responsibility of the customer.
2. **WE WILL NOT BUILD USING A SILLPLATE on an EXISTING OR OVERSIZED slab! YOU MUST USE A FLOOR.**
3. ***All shed sizes are nominal***; so refer to the **Exact Outside Slab Dimensions A** & **B** below for accurate slab measurements.
4. **DO NOT EMBED ANCHOR BOLTS.** If you want a sill plate, please use Simpson StrongTie® mudsill anchors type **MAS**, so the slab can be built to exact dimensions, and we can use the straps to anchor the sillplate, instead of shooting nails into the slab. You can order the Simpson straps thru the Home Depot Pro Desk, or www.whitecapdirect.com.
5. **You are responsible for providing anchor straps.** If you don't, we need to shoot nails through the sill plate to hold it in place. WE DO NOT INSTALL EXPANSION BOLTS. To reduce the possibility of cracking the edge of the slab when shooting the nails through the sillplate into the slab, use a high strength concrete and do not weaken the mix by adding more water than specified.
6. The slab **cannot** be oversized, as water will leak under the sill and splash on the shed bottom, causing deterioration and/or discoloration to the shed. Please use the actual dimensions on the chart. **If you decide to build on an oversized slab anyway, the shed must be built with a floor**, and raised up on 4x4's or blocks, to protect the structure and allow the floor to breathe & stay dry.

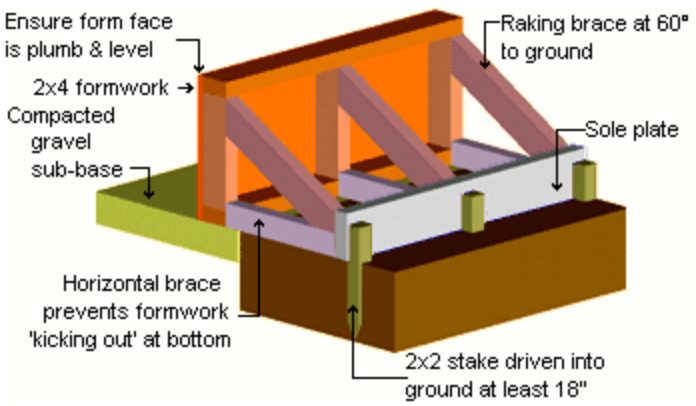
Exact Outside Slab Dimensions for our sheds



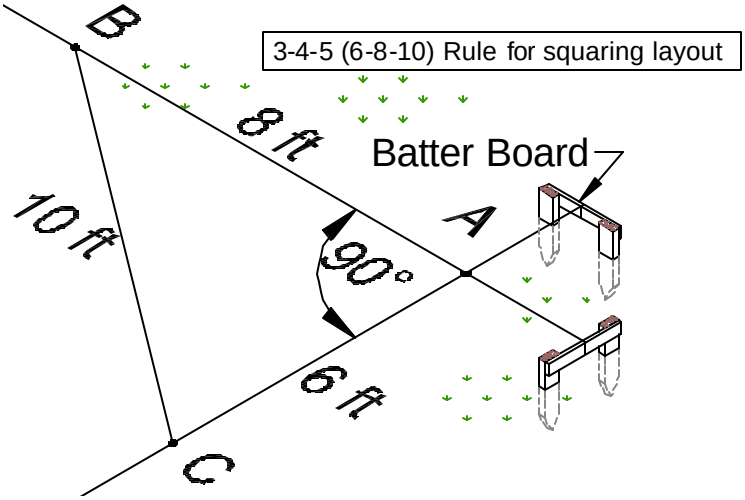
Brochure Size	A (end walls)	B (front/back walls)	Brochure Size	A (end walls)	B (front/back walls)
4 x 8 Hutch	47½"	90½" (7'-6½")	8 x 16	95½"	186½" (15'-6½")
4 x 10 Hutch	47½"	114½" (9'-6½")	8 x 16 Val-U/Max	95½"	188" (15'-8")
4 x 12 Hutch	47½"	138½" (11'-6½")	10 x 10	119½"	114½" (9'-6½")
6 x 6	71½"	67½" (5'-6½")	10 x 12	119½"	138½" (11'-6½")
6 x 8	71½"	90½" (7'-6½")	10 x 14	119½"	162½" (13'-6½")
8 x 6 Val-U/Max	95½"	68" (5'-8")	10 x 16	119½"	186½ (15'-6½")"
8 x 8	95½"	90½" (7'-6½")	10 x 18	119½"	210½" (17'-6½")
8 x 8 Val-U/Max	95½"	92" (7'-8")	10 x 20	119½"	234½" (19'-6½")
8 x 10	95½"	114½" (9'-6½")	12 x 12	143½"	138½" (11'-6½")
8 x 10 Val-U/Max	95½"	116" (9'-8")	12 x 14	143½"	162½" (13'-6½")
8 x 12	95½"	138½" (11'-6½")	12 x 16	143½"	186½" (15'-6½")
8 x 12 Val-U/Max	95½"	140" (11'-8")	12 x 18	143½"	210½" (17'-6½")
8 x 14	95½"	162½" (13'-6½")	12 x 20	143½"	234½" (19'-6½")
8 x 14 Val-U/Max	95½"	164" (13'-8")	*These dimensions are sized for our shed footprints!*		

7. Choose a site with good drainage. An area with a slope of 1/8" per foot downward away from the slab is sufficient. Clear the area of any debris, rocks, roots, sod, etc. There should be 3 feet of clearance around the intended site, and any over-hanging branches should be cleared to 12 feet high. Using a line level or a long carpenter's level on a straight length of wood for a guide, level the area, taking down any high spots and filling in any low areas. Use a rented vibratory compactor to compact the soil of any filled-in area, or it will settle and crack your concrete. The actual perimeter footing area for your slab should be dug down about 16" below grade, to allow for 4" of gravel or crushed rock to be compacted level under it. Once side forms are set & leveled, dig the middle portion down about 8" lower than the forms, to allow for 4" of compacted gravel with 4" of slab on top of it. Finished slab should be 8" above grade.
8. To accurately lay out your slab area, start with a stake at one corner of the site, then set up "batter boards" as shown in the figures below. To make certain your area is squared, use the right-triangle rule of 3-4-5 (6-8-10) to check it before securing the lines. Measure along the line 4 feet from corner stake A, and mark the string at point B. Measure along the perpendicular line 3 feet from corner stake A, and mark the string at point C. If the two lines are exactly at a right angle, the diagonal measurement between B and C will be exactly 5 feet. Move point C left or right until the diagonal measurement is exactly 5 feet, then set the other end. Repeat this exercise for each end, and your slab will be properly squared. Build and lay out your forms as shown in the suggested detail, bracing as shown.

Suggested Concrete Formwork to prevent blowouts

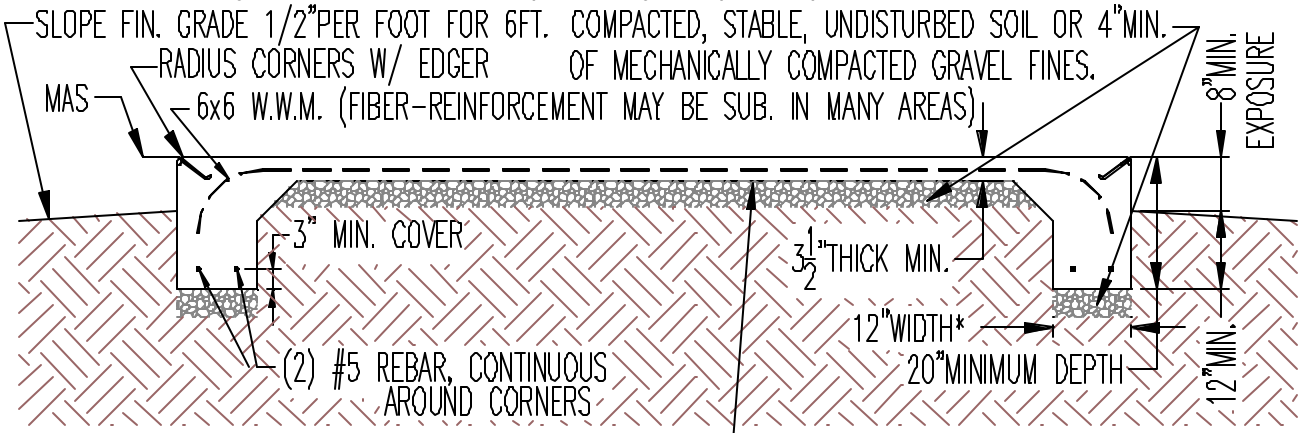


3-4-5 (6-8-10) Rule for squaring layout



Slab design: Keep in mind while preparing for your slab: *(Slabs for Kit Sheds, page 2)*

9. DO NOT use plain plywood without a frame to form your slab, it will blow out. Use 2x construction with frequent, strong braces.
10. ***The slab*** *must be* ***exactly*** *level and have a smooth, steel-trowel finish, with no ridges, dips or pitch.* Broom finish & wood-float finish are **not** suitable for a sill plate. If you desire a non-clip surface, a 6"perimeter must be left smooth & level. **Our recommended slab dimensions help prevent water runoff from the siding from getting onto the slab.**
11. **DO NOT USE ANCHOR BOLTS or we will need to remove them.** We do not bore holes thru the sill plates & bottom plates, and the bolts invariably interfere with the wall studs. You may be charged a fee, if the installers encounter bolts in the slab.
12. **The slab detail below** is taken directly from the International Residential Code book 2006. The figure and code sections are referenced below. The sidewall, (footing or haunch) depth for buildings under 600sf is not required to be below frost depth, per code. **Always verify this with your building official,** since many town or county codes have revised this exception to be more stringent due to local conditions. Ask for clarification before you dig. **Reference IRC 2006 Figure R403.1(1)** for source of slab detail, **Table R403.1** and **Section R403.1.1** for minimum footing size for 1-story conventional light-frame construction (12"wide), **Table R402.2** for concrete strength requirement (3500psi), **Section R403.1.4** for minimum depth below undisturbed grade (12") and **Section R403.1.4.1 Frost Protection, Exceptions:** 1. Freestanding accessory structures with an area of 600sf or less and an eave height of 10ft or less shall not be required to be protected, (unless required by your municipality).
13. **Concrete must be cured** for 7 days to reach its minimum strength & reduce cracking before building. Cover with sheet of plastic, weighted at corners and keep it moist & cool. In hot weather, cover with wet burlap and re-wet as req'd. In freezing weather, insulation may be needed, such as old quilts or hay on top of the plastic.



SECTION THRU MONOLITHIC SLAB

6MIL PLASTIC BARRIER RECOMMENDED BENEATH CONCRETE

*DESIGNED FOR 1-STORY STRUCTURES ON 2000 PSI SOIL O.B.

REF: 780CMR-54:00, IRC R403, VUSBC 2006

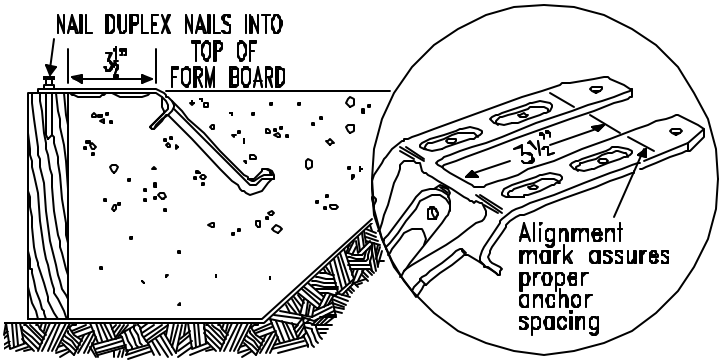
CONCRETE MIX SHOULD BE 3500LB MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS

LOCATIONS EXPOSED TO FREEZING & THAWING MUST USE AIR-ENTRAINED MIX, 5%min, 7%max

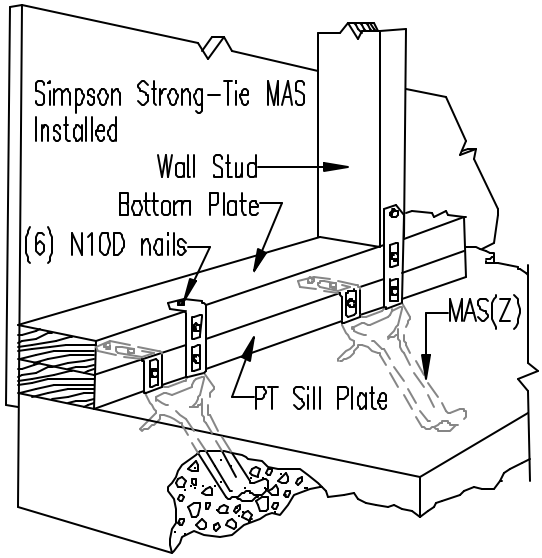
Preferred Anchor type: ***(Consider lead times and order your parts well before the concrete pour!)***

Simpson Strongtie **MAS** anchors are the easiest to install and can be ordered thru Home Depot and other lumber yards. The anchor is held in place on your formwork with a nail, making it easy to place the concrete without disturbing its location. See local code for required spacing along your walls. Details of two anchor types are shown below.

Simpson Strongtie MAS(Z) Mudsill Anchor straps
(the 'Z' stands for Z-max galvanizing coating)
Place within 6"-12" of each corner and every 5ft.
Fasten to sills using (6) 10D x 1-1/2" galv nails.
See layout on next page.



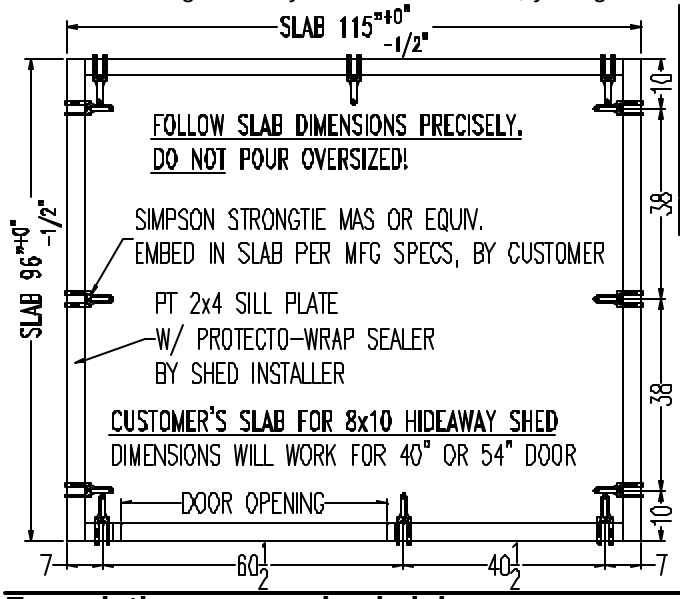
Section view thru slab showing MAS anchor attachment to forms during pour.



Detail showing how the MAS anchor straps are attached to the shed after the forms are removed.

Locating the mudsill anchors on your slab: Below is a sample layout. Anchor straps must be located within 6"-12" of each corner. Straps should be kept 3" away from each side of major door openings. Since shed door layouts vary, you will have your anchors spaced accordingly. If you have a Classic, your door is centered on the front bearing wall. If you have a Horizon, your gable end door will be centered on that wall.

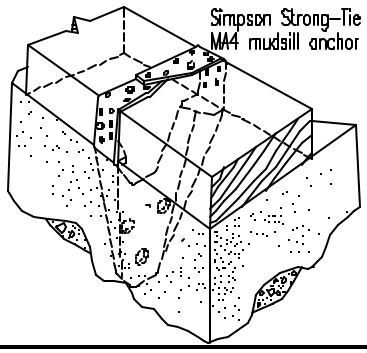
(Slabs for Kit Sheds, page 3)

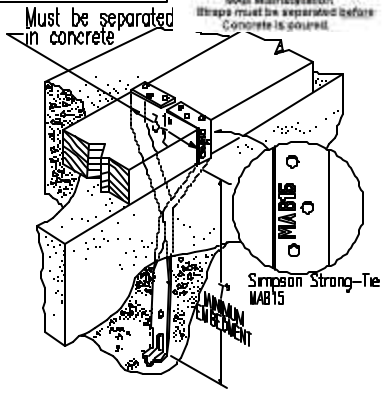


Recommended Spacing of Simpson anchors equivalent to 1/2" bolts spaced at 6ft o.c.

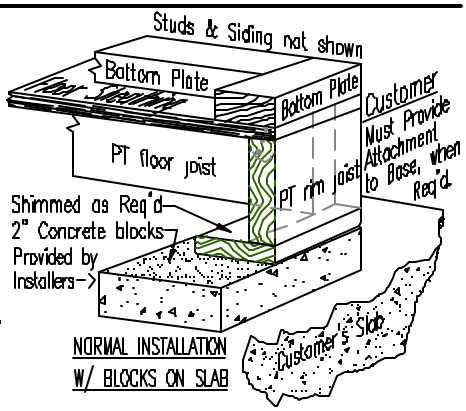
Anchor	Sill	Spaced	Fasteners per Anchor
MAS	2x4	5ft	six 10d x 1½ galv. nails
MA4	2x4	3ft 6in	six 10d x 1½ galv. nails
MAB	2x4	3ft 6in	six 10d x 1½ galv. nails

Other mudsill anchors

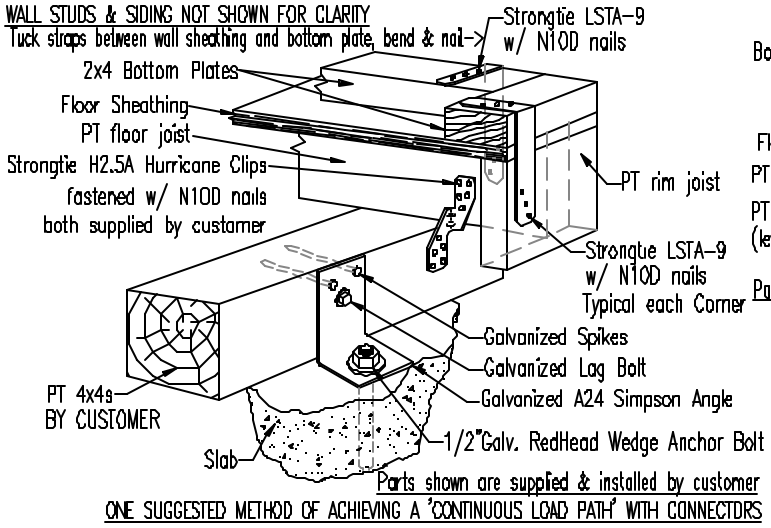




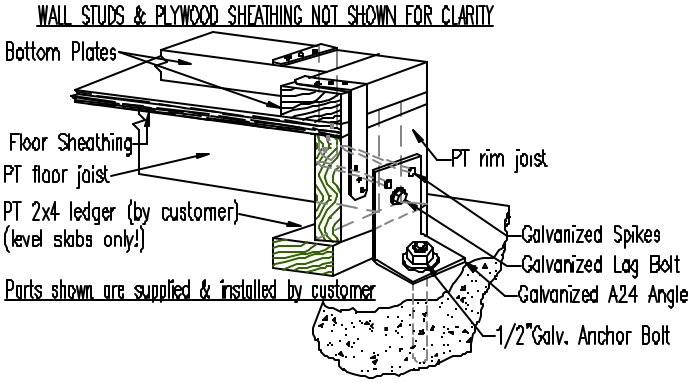
For existing or oversized slabs: you must have a floor supported above concrete to allow air flow under joists. Air flow is required to prevent moisture build-up and fungus growth. The supports, whether they are blocks, or 4x4s, also allow us to level the structure on the slab by shimming. **If** you have checked your slab with a laser, a carpenter's level, or line level, ***and it is absolutely level***, you may choose to have three rows of PT 2x4s, running the length of the shed to provide the air gap and keep the shed lower. If we arrive to build, and find the slab is not level, we will either need to reschedule and charge a fee to get the correct materials, or if we have enough spare materials, build it on blocks, *so please be very sure* before you decide to go this way. *"Flat" is not level.*



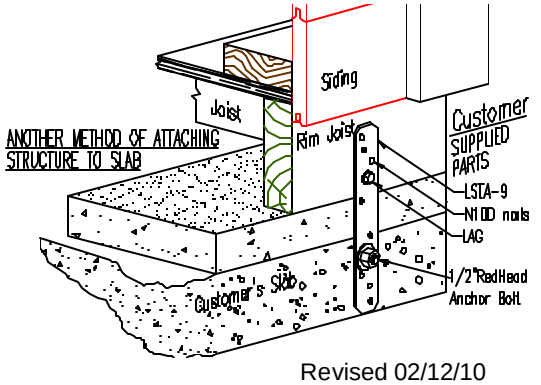
Some suggested methods that a customer can use to mount and anchor their shed on oversized or existing slabs. This is just some of many possible ways you can anchor your structure.



ONE SUGGESTED METHOD OF ACHIEVING A 'CONTINUOUS LOAD PATH' WITH CONNECTORS



ANOTHER SUGGESTED METHOD OF ANCHORING ON AN OVERSIZED SLAB



Please remember that you, the customer, are responsible for providing attachment to your slab.

We do not offer this type of service at this time.
These are just some suggestions on how to accomplish anchoring.
Consult a concrete professional if you do not know how to do this.