

W W W . T S T U D . C O M



FIELD GUIDE

How to Construct a Structure
Using 5.5" Deep Tstuds™

QUICK TIPS

- Most nail guns that shoot 4" and longer nails require 120 psi (min.) at the gun.
- Use 3/8" diameter hose and fittings
- 3 nails are required to fasten the plates to the Tstuds™, 2 into one wood member and 1 into the other.
- Nails must be 4", and provide 1-1/2" of penetration.
- Screws can be (2) #12 x 4 1/2" screws, one into each wood flange of the Tstud™ or (because of their high withdrawal values) 2 - 4" FastenMaster HeadLok screws or 4" SFS intec ConnexTite Countersunk Head screws.
- In order to fasten the bottom plate to the floor truss or floor joist, you will need to use 4-1/2" long nails or screws that have the required withdrawal value, similar to how you nail down a 2x6 or 2x4 bottom plate. The reason for the 4-1/2" length is that you have to have 1" of penetration into the floor joist system, and only nailing into the plywood is unacceptable.

Note: This is only a quick field guide, the TER for the Tstud™ will govern in all instances for design loads and values.

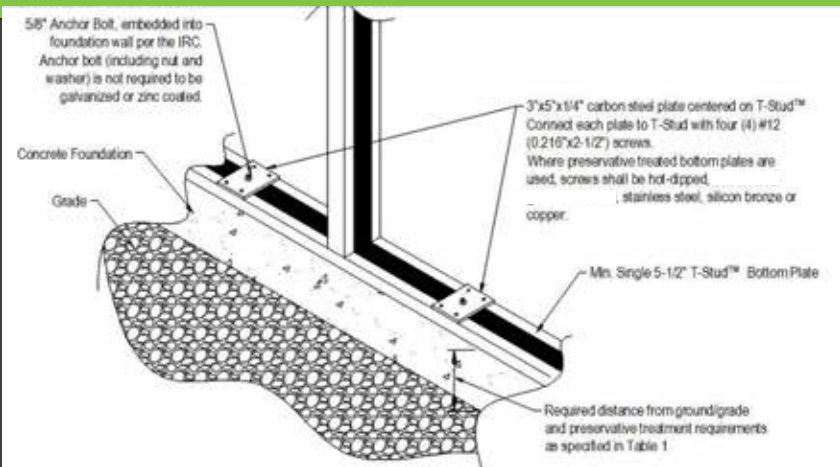
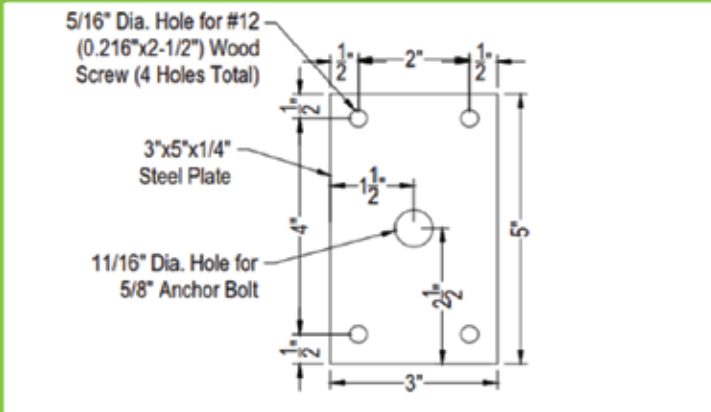
The required 4-1/2" nail gun will require a larger gulp of air, so use 3/8" diameter hose and fittings. 120 psi is required at the gun.



You may need 2 regulators - one for the larger 4-1/2" nail guns set at 120+ psi, and the other set to a lesser amount for your 3-1/2" guns. In the winter, the cold ground sucks the life out of the hose, so you may need to up the pressure at the tank to 135 psi to get 120 psi at the gun.



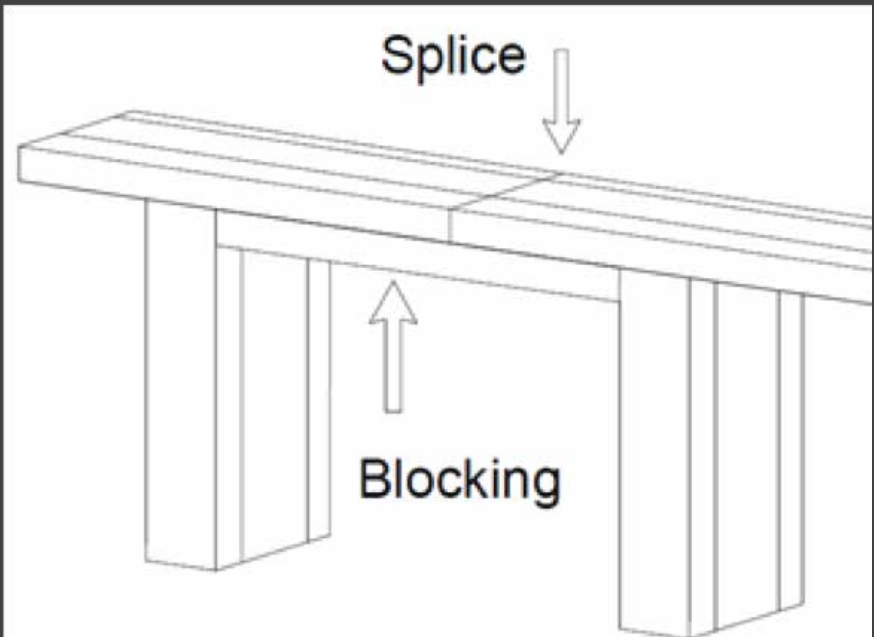
Fastening to Concrete: These plates are available from your lumber supplier or you can make your own using this diagram.



Permanent and Temporary Splices: All permanent splices require 1.5"x18" steel banding strips on the inside and outside of a wall including all exterior wall connections where one wall adjoins the adjoining wall. Or you can use a Tstud™ block as shown below.



Temporary blocking used as a stiffener when standing up the wall.



If you are using the design values of the top plate as part of the overall header design, you ***cannot*** put a splice above the header in the top plate. No splices are allowed in any header design. This splice (below) is not allowed if the top plate is designed as part of the header structural capacity. The splice also needs to be strapped.



Shown for example of how tight the header should be.



Strapping: All outside corners are required to be strapped according to the building code, 1.5”x18” strap, for advanced framing that is in effect in your area. *Please consult your building officials.*



Nails:

3 nails are required to fasten the plates to the Tstuds™. 2 into one wood member and 1 into the other. Nails must be 4", and provide 1-1/2" of penetration.

Screws:

Plate to Tstud™ connection can be (2) #12 x 4-1/2" screws, one into each wood flange of the Tstud™ or (because of their high withdrawal values) 2 - 4" FastenMaster HeadLok screws or 4" SFS intec ConnexTite Countersunk Head screws.



Use a 2x block of wood under the header and on top of the Tstud™ jack studs or cripples to support the weight of the of the header over the foam core of the Tstud™ .



temporary stiffener

NEEDS TO BE STRAPPED!



Shown for example:



Shown for example:



Shown for example:



Shown for example:



Shown for example:



Shown for example:



Don't forget a 2x4 drywall nailer in the corner!

Shown for example:



Don't forget a 2x4 drywall nailer or drywall clips!

Top plate is designed as part of the overall header and is constructed correctly without a splice.



Needs 1.5"x18" steel splice on inside and outside of corner.



Shown for example:



NO dowels can be cut for placing pipes in walls or for any reason. See Tstud.com for how to make repairs in the field.



**Interior wall attaching to Tstud™
exterior wall.**



All corners need to be strapped on the inside and the outside.

Consult your engineer or designer on how to fasten an interior corner in your area of the country. Wind and Seismic conditions vary the fastening required.



Inside corner:

Product # - RTA2Z

Use and warnings at strongtie.com/info



Splicing above the headers is not allowed unless the header is *not* part of the overall load capacity of the design.



Make sure to order the correct electrical boxes. The box fasteners should be located so as to avoid needing to attach a 2x nailer on the Tstud™ before nailing on the box.



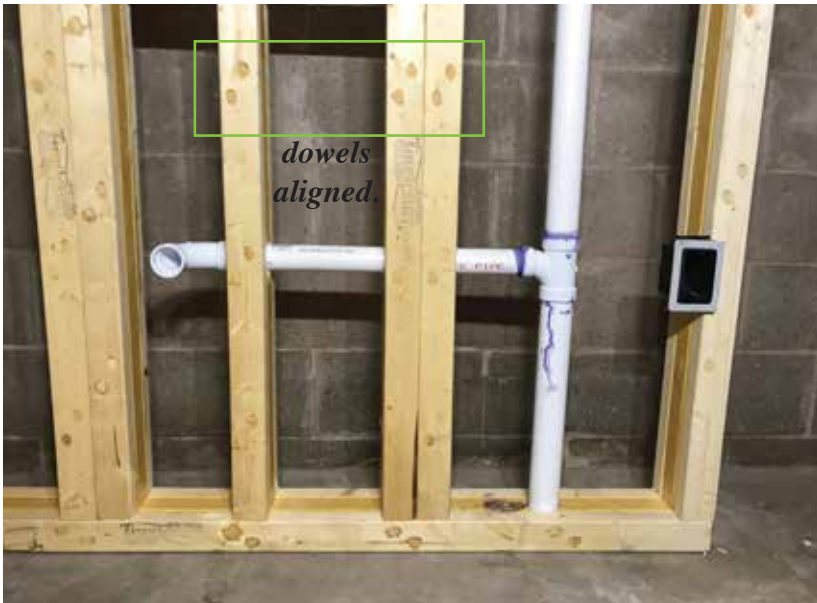
Please verify with the code in your area: It is usually required that you hold electrical wires 1.5” back from the front edge of the drywall.



Plumbers and Carpenters:

Be sure to line up dowels in the Tstuds™ for outside wall plumbing runs so the plumber doesn't have to cut into a dowel. There is a field repair for a single dowel cut, but you cannot cut more than one dowel.

See www.Tstud.com for the field repair.





If you have any other questions,
contact us at
sales@tstud.com
or visit Tstud.com