

Snap Ties

Ties and brackets, with 3/4" plywood and 2x4 lumber, create a simple and effective forming system

Job-built forming with 3/4" plywood, 2x4 lumber, Snap Ties and Jahn-style Brackets is popular on many construction sites. Though only a few components are required, time and labor is necessary to plan, mark, cut and drill the plywood.

Short-end (SE) Snap Ties are available for conditions with single walers on both sides. Long-end (LE) Snap Ties are available for conditions with waler/strongbacks on both sides. Odd-end (OE) Snap Ties are available for conditions with a single waler on one side and waler/strongback on the other.

Short-end (SE) Snap Ties measure 4-3/4" at each end, plus the wall thickness. Long-end (LE) Snap Ties measure 8-1/4" at each end, plus the wall thickness. Odd-end (OE) Snap Ties measure 4-3/4" at one end and 8-1/4" at the other end, plus the wall thickness.

Every Snap Tie includes two 1" plastic cones. The plastic cones set the wall dimension and cover the plywood hole. After the plywood is stripped, the plastic cone and exposed tie end are removed with a twist.

Snap Tie		
Type	Wire Size	SWL *
Standard Snap Tie	.225	2,250 lbs
Heavy Duty Snap Tie	.225	3,350 lbs

* Safe Working Load based on 2:1 safety factor.



- Fractional tie sizes available on request.
- Non-standard end(s) available on request.
- Optional metal washer available on request.
- Optional hex head available on request.



- Water-resistant washer available on request.

Snap Tie Spacing Recommendation

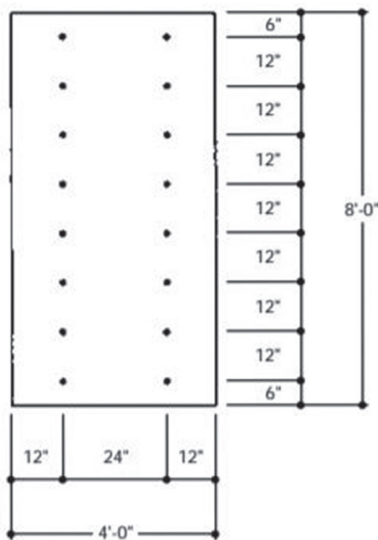


Suggested Spacing Diagrams For Snap Tie System

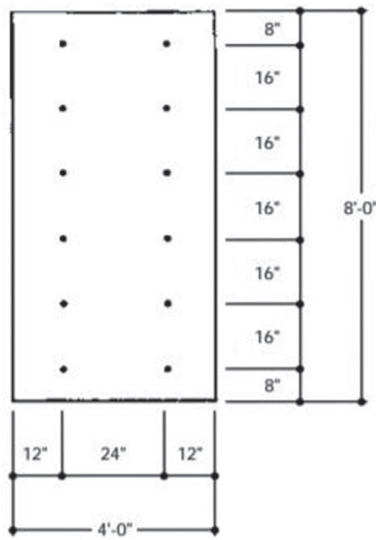
- A 9/16" drill bit is used for drilling the Snap Tie holes

This diagram is based on:

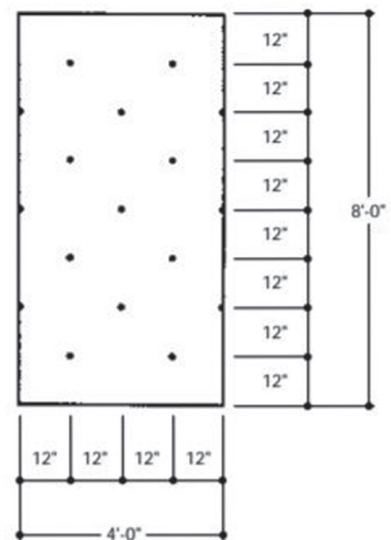
- 3/4" plywood thickness, face grain perpendicular to walers
- Standard 16" waler spacing with 2x4 lumber
- Pour pressure of 450 psf with L/360 deflection
- Pour pressure of 750 psf with L/360 deflection with 12" spacing



Recommended Snap Tie spacing for **rate of pour at 4-1/2 feet per hour at 70°**



Recommended Snap Tie spacing for **rate of pour at 2 feet per hour at 70°**



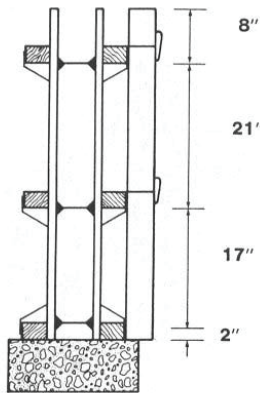
Recommended Snap Tie spacing for **rate of pour at 2 feet per hour at 70°**

Plywood deflection is the limiting factor in the diagrams above. When it is desired to have reduced deflection or a higher pour rate is required, the waler spacing should be decreased for the added pressure.

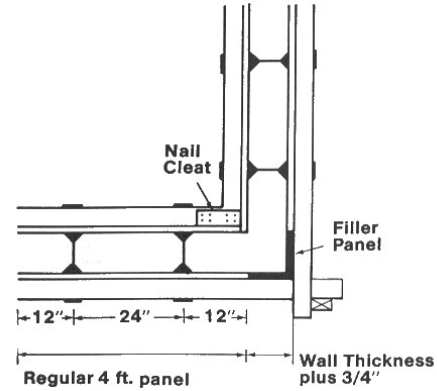
Snap Tie Spacing Recommendation

Horizontal tie spacing: 2 ft., Outside Corner (O.C.), Strongback spacing: 6 ft., Outside Corner (O.C.)

4 Ft. Wall Form



Corners

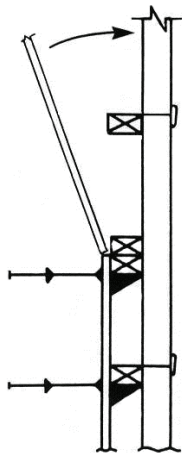


*Based on horizontal plywood. (i.e. the face grain parallel to the walers resulting in the plywood losing roughly 30% of deflection strength).

Form pressure = 450 PSF

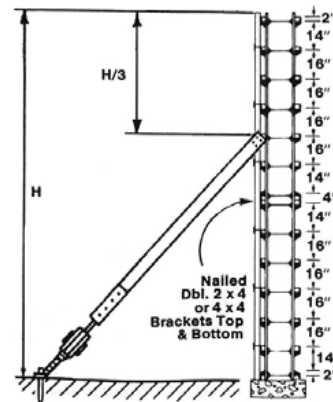
- Filler panels at corners allow gang drilling of all panels.
- Log cabin walers with vertical studs are the most commonly used method for outside corners.

For Walls Over 8 Ft. High



- Install the vertical strongback to full height.
- Nail the 2 x 4 to top waler of lower panel.
- Attach one waler to vertical strongback with line clamps at the proper level to engage a row of ties.
- Plywood can then be set in place and easily secured with a few snap ties and brackets

For Walls Over 10 Ft. High



- For walls over 10 ft. high, consider using double 2 x 4 strongbacks with waler brackets fastened to every other waler. These provide more secure alignment and stability.
- Place form turnbuckle brace spacing-6 ft. o.c.
- Nail to vertical strongback at H/3 from top. Use on one side only.