

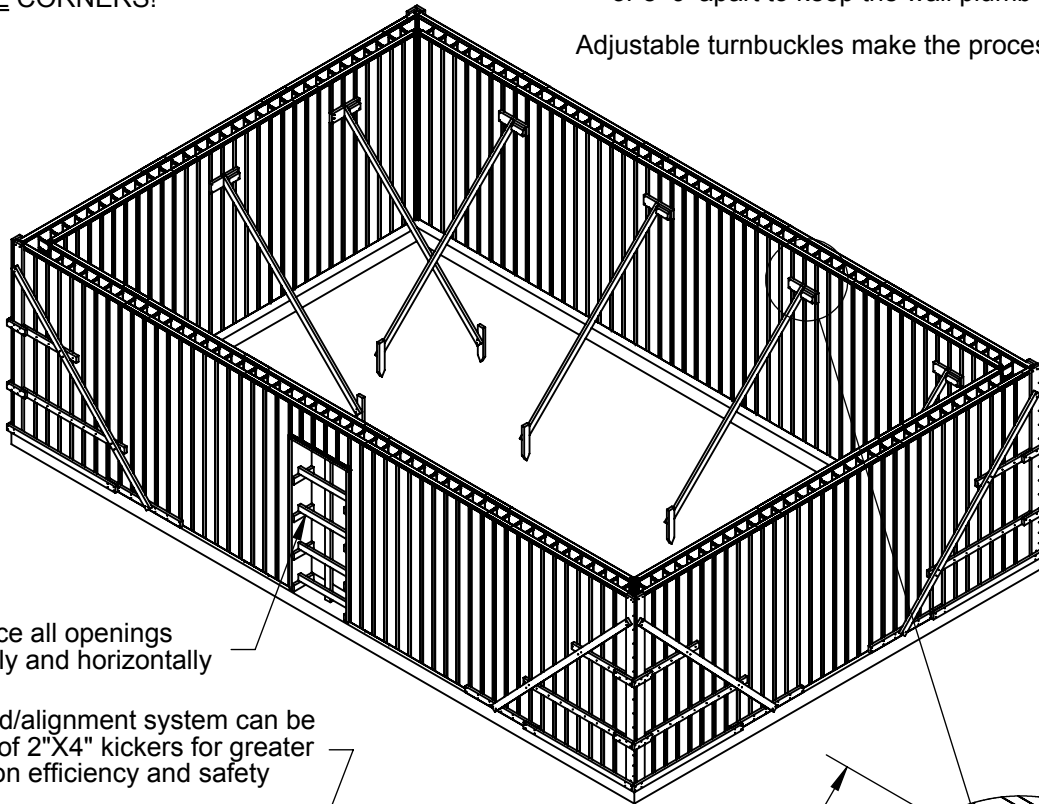
Section 6

Bracing Overview

BRACE ALL CORNERS!

Use a kicker to brace wall on one side as needed or 8'-9' apart to keep the wall plumb and straight

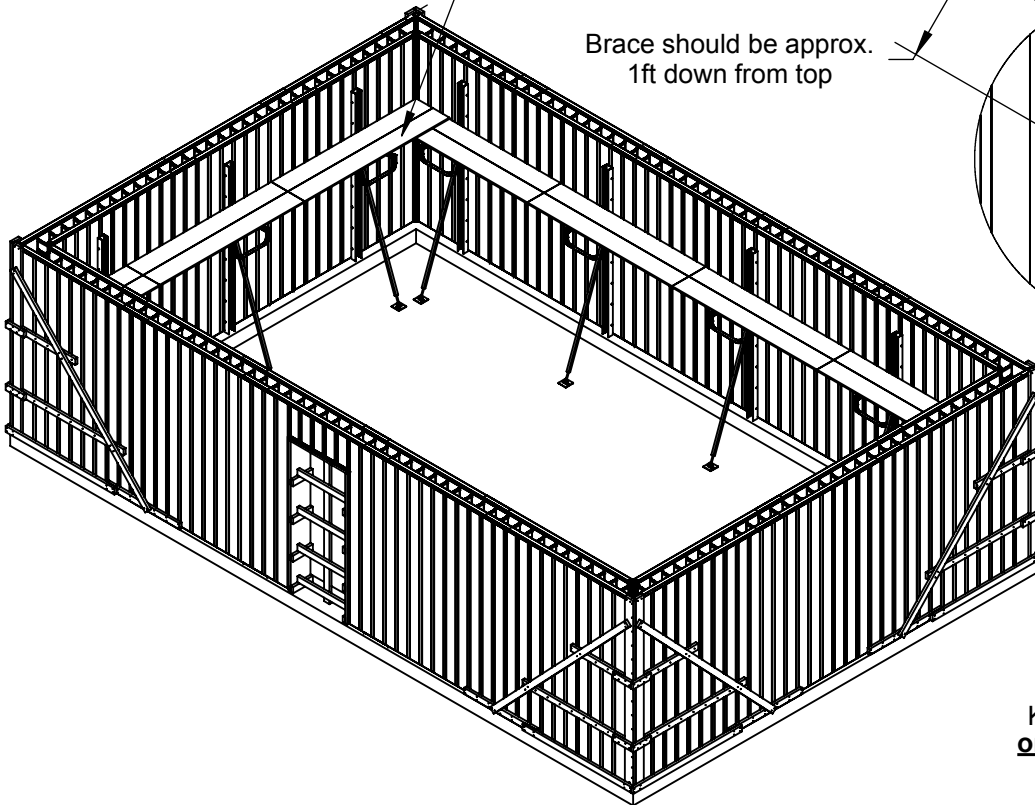
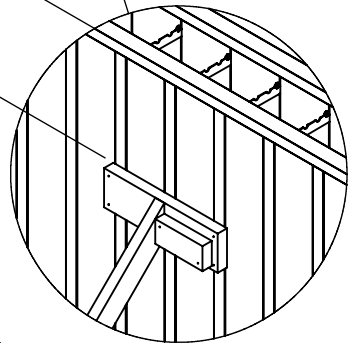
Adjustable turnbuckles make the process much easier



Brace all openings vertically and horizontally

An ICF scaffold/alignment system can be used in place of 2"X4" kickers for greater construction efficiency and safety

Brace should be approx. 1ft down from top



Kickers are needed on one side of the wall only (Interior or Exterior)



Interior Bracing Overview

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www.TFSystem.com

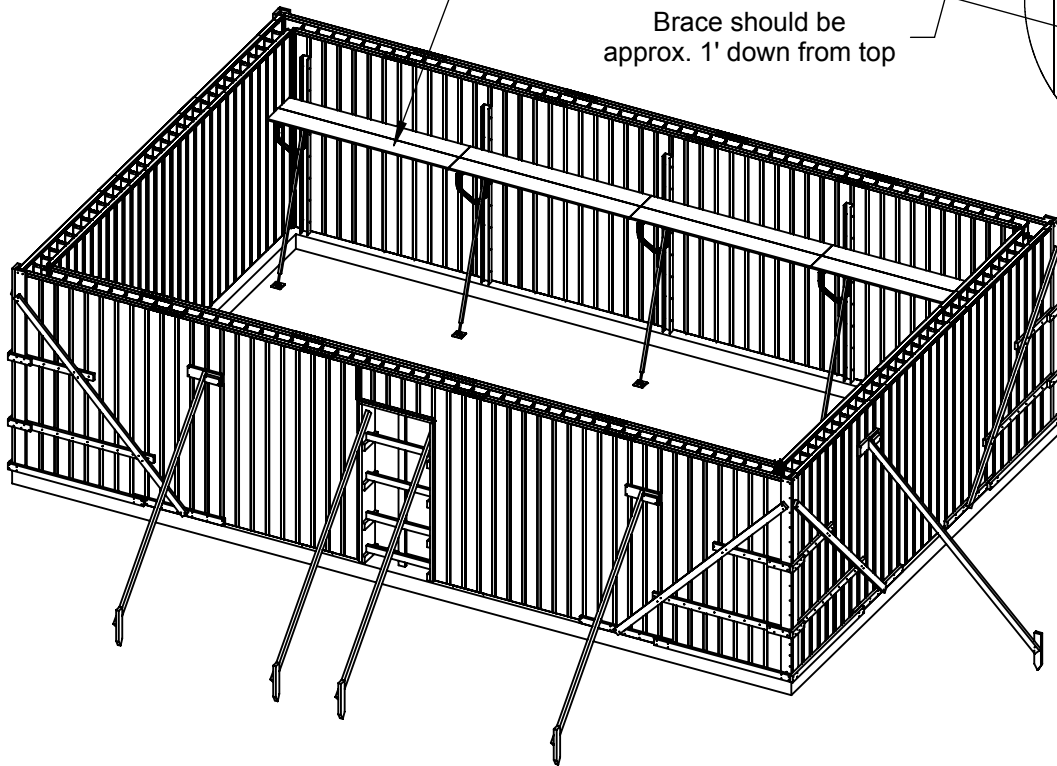
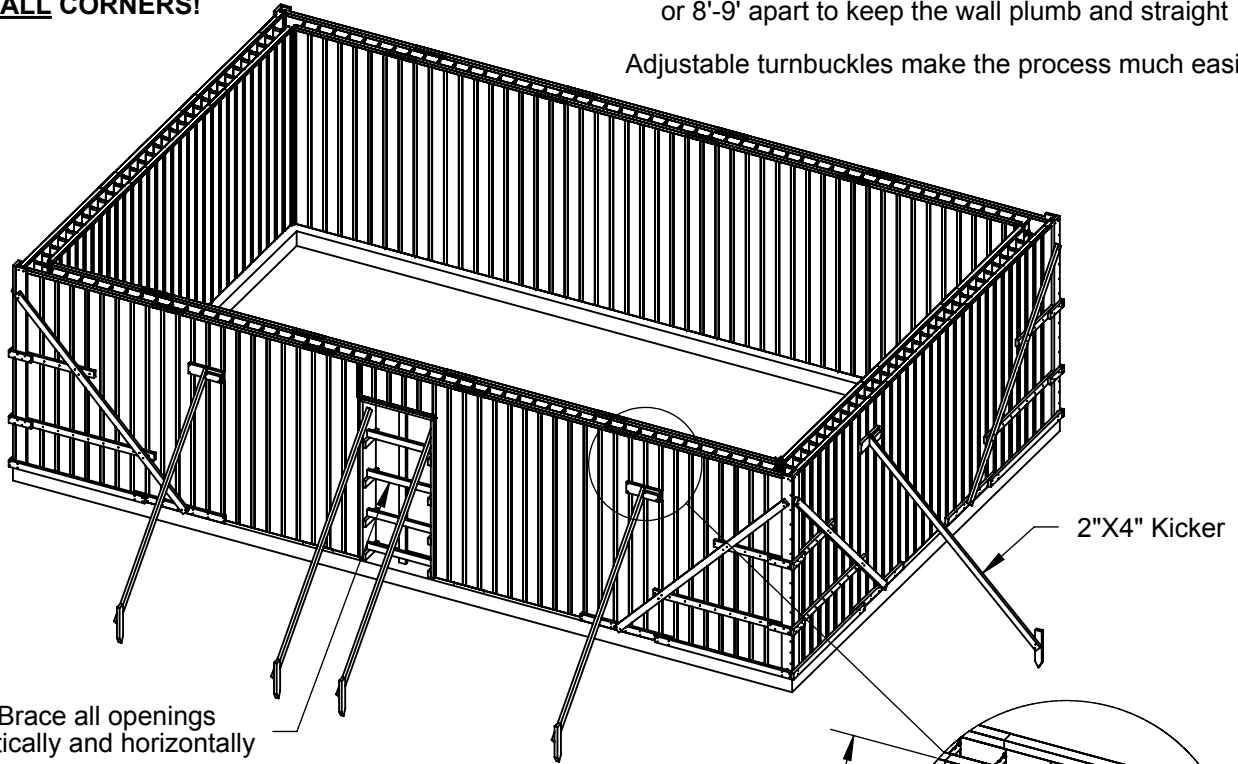
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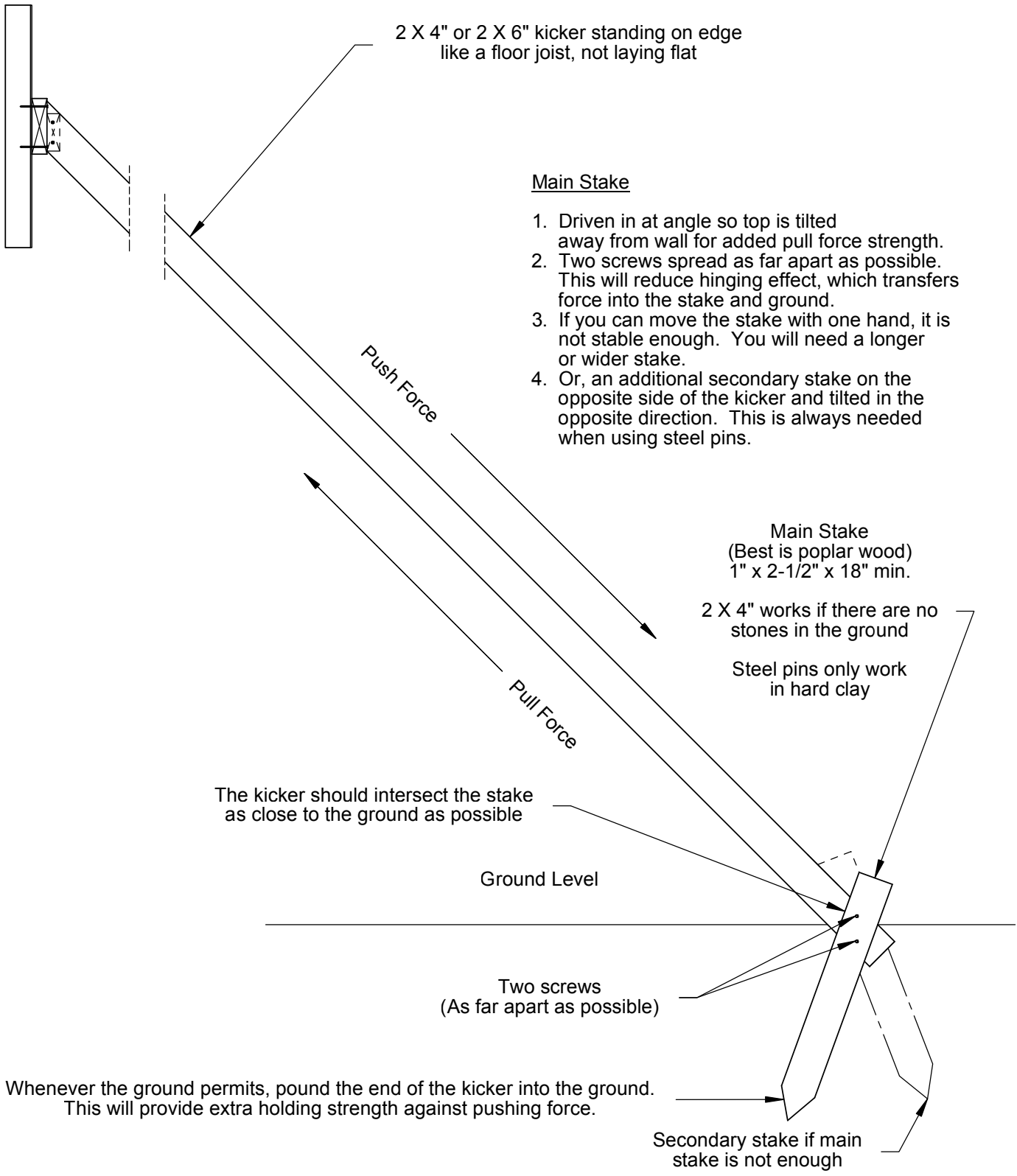
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2 X 4" or 2 X 6" kicker standing on edge like a floor joist, not laying flat

Main Stake

1. Driven in at angle so top is tilted away from wall for added pull force strength.
2. Two screws spread as far apart as possible. This will reduce hinging effect, which transfers force into the stake and ground.
3. If you can move the stake with one hand, it is not stable enough. You will need a longer or wider stake.
4. Or, an additional secondary stake on the opposite side of the kicker and tilted in the opposite direction. This is always needed when using steel pins.

Main Stake
(Best is poplar wood)
1" x 2-1/2" x 18" min.

2 X 4" works if there are no stones in the ground

Steel pins only work in hard clay

Push Force

Pull Force

The kicker should intersect the stake as close to the ground as possible

Ground Level

Two screws
(As far apart as possible)

Whenever the ground permits, pound the end of the kicker into the ground. This will provide extra holding strength against pushing force.

Secondary stake if main stake is not enough

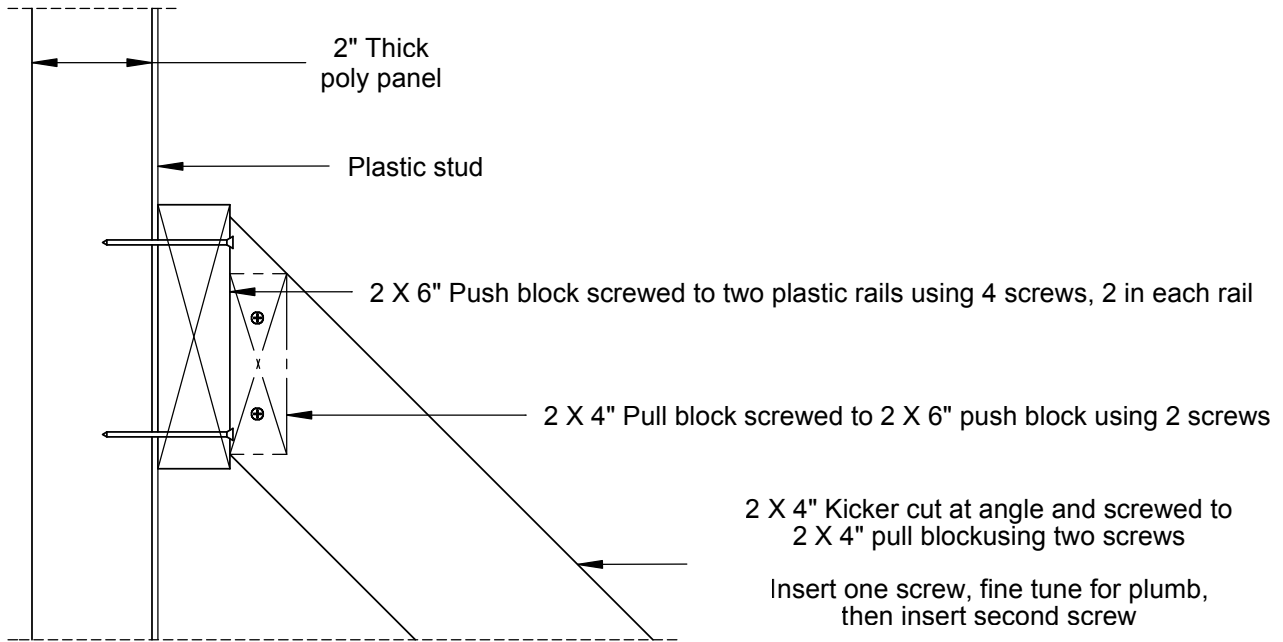


Standard Kicker

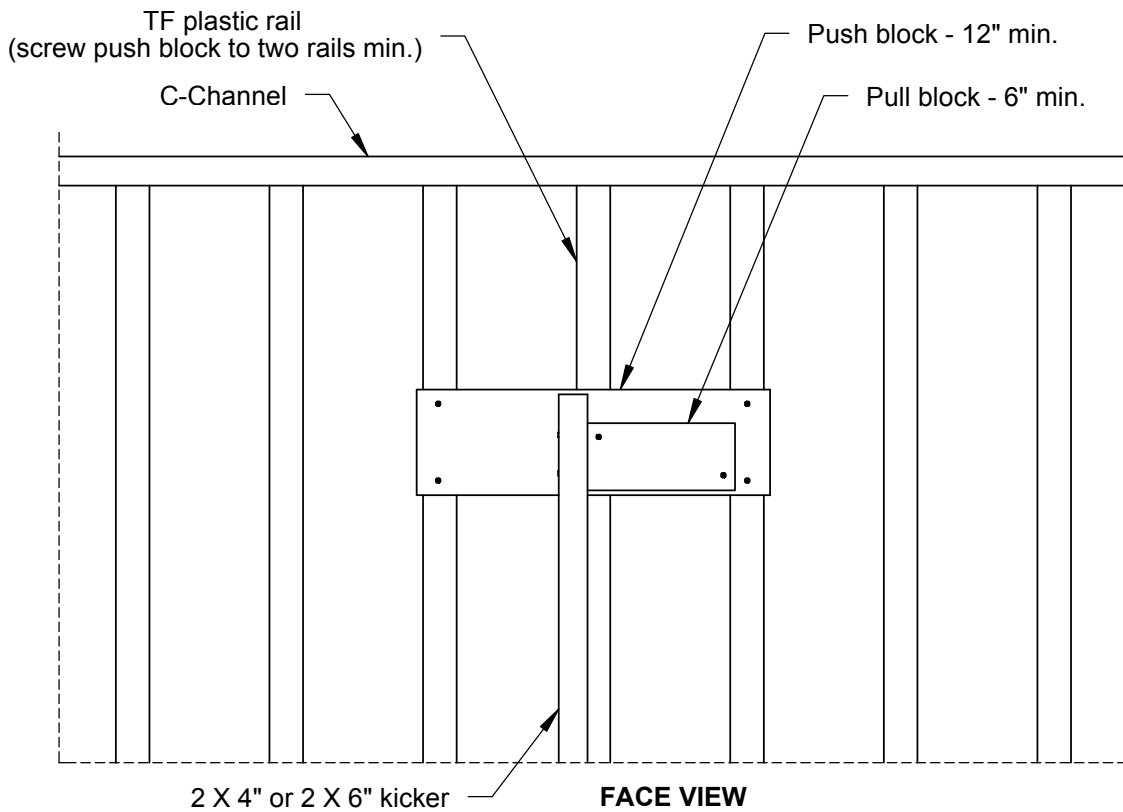
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SIDE VIEW



FACE VIEW



Standard Kicker Installation

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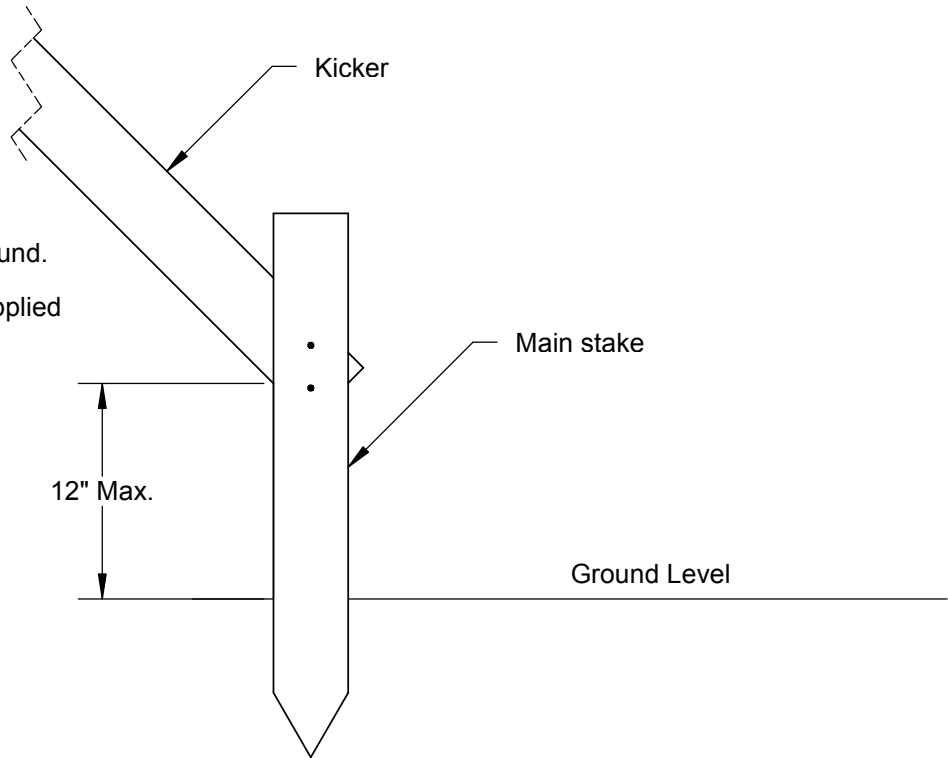
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WRONG!
DO NOT DO THIS

1. KICKER TOO HIGH

Kicker should be touching ground.

There is too much leverage applied to stake when attached high.



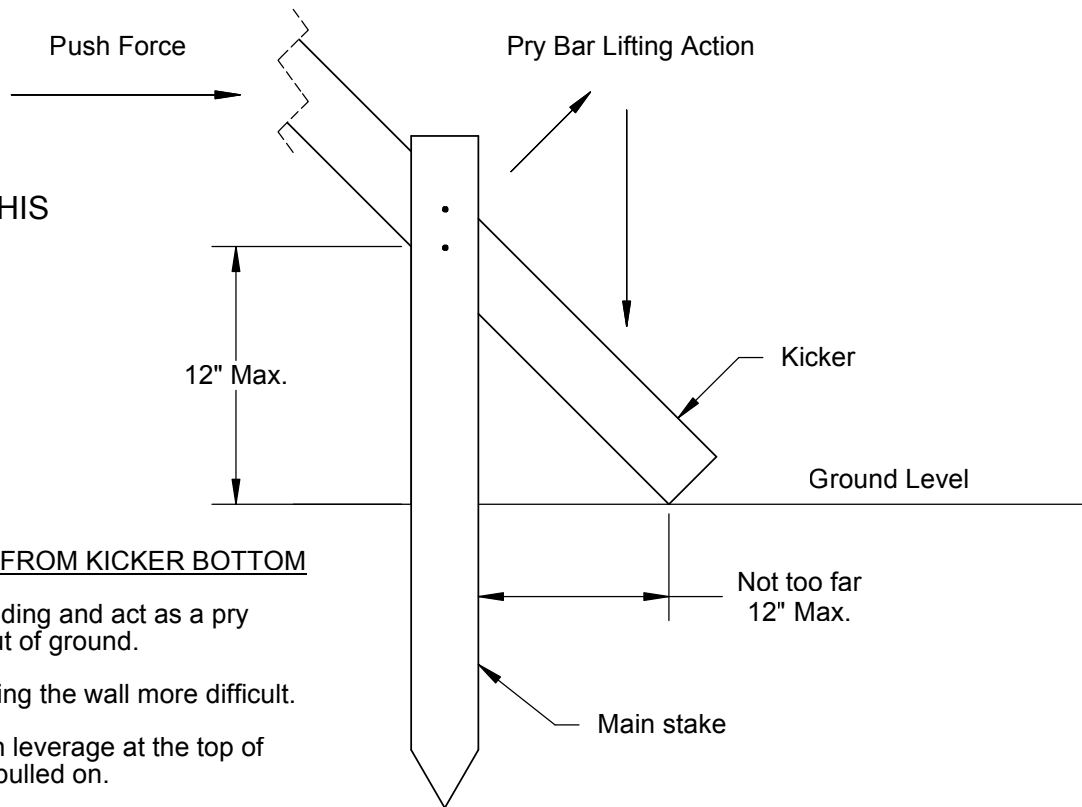
WRONG!
DO NOT DO THIS

2. STAKE TOO FAR FROM KICKER BOTTOM

This can cause binding and act as a pry bar to pull stake out of ground.

Also makes plumbing the wall more difficult.

Also puts too much leverage at the top of stake when being pulled on.



Common Mistakes

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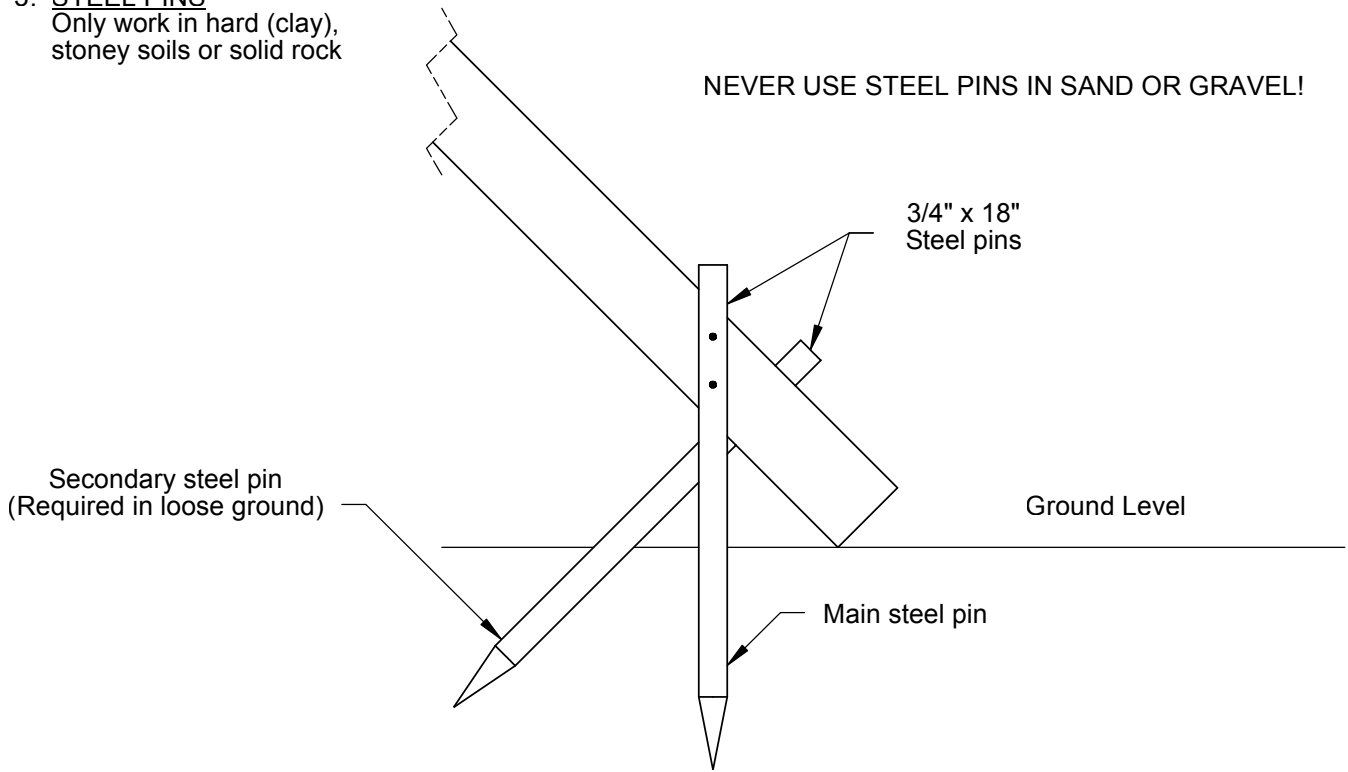
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3. **STEEL PINS**

Only work in hard (clay), stoney soils or solid rock

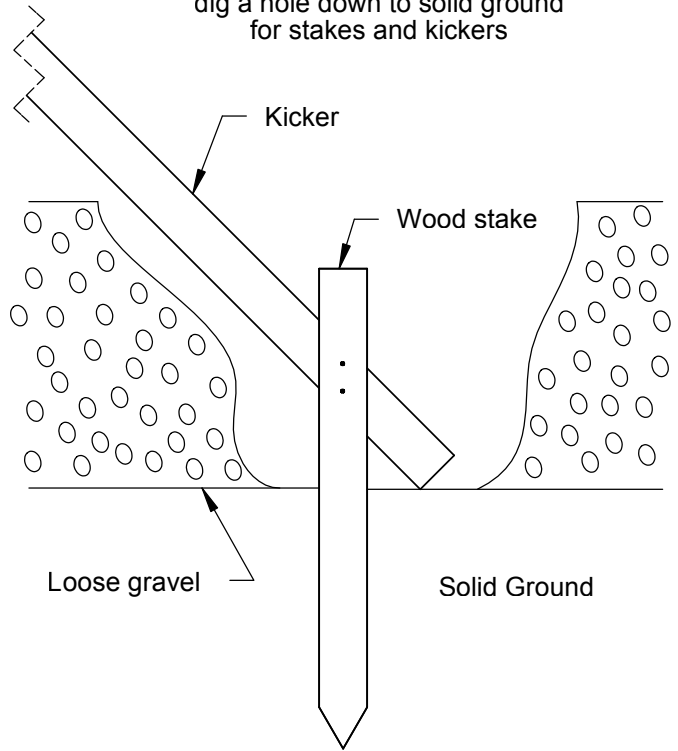
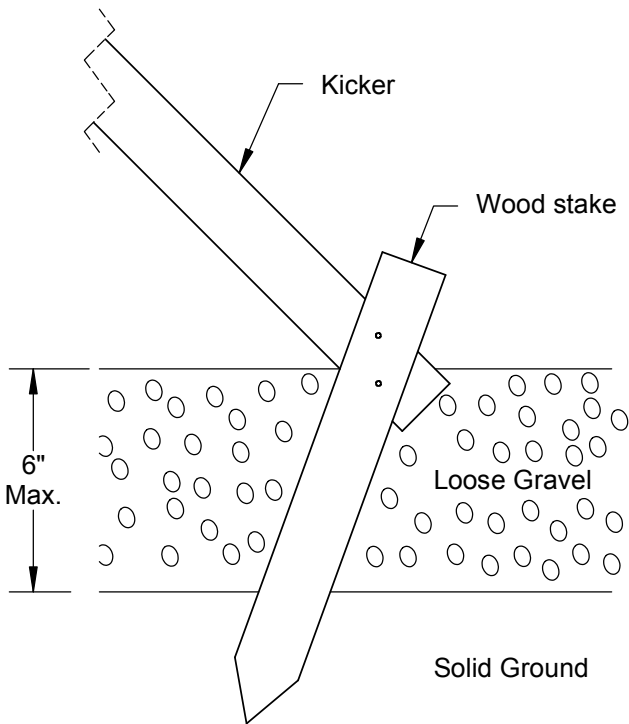
NEVER USE STEEL PINS IN SAND OR GRAVEL!



4. **LOOSE GRAVEL**

Doesn't hold wood stakes firmly enough

If gravel is deeper than 6\"/>

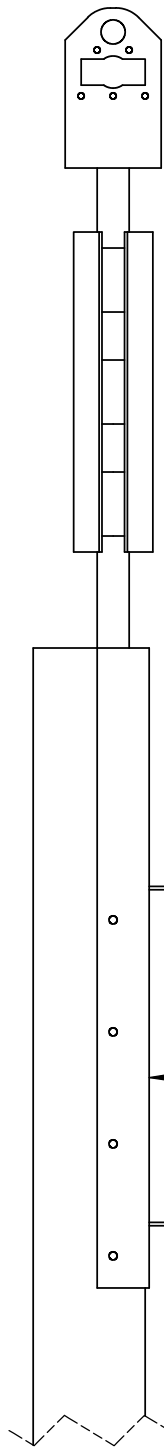


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A turnbuckle attached to one end of a wood kicker greatly enhances the ease, speed, and accuracy of wood kickers. These turnbuckles can be rented or purchased at a reasonable price through a concrete contractors supply store. Typically they can be purchased for around \$15.00 each.

Turnbuckle nailed or screwed to wood kicker
(Minimum of two fasteners on each side)

Turnbuckle end of kicker can be
attached to the wall or the stakes

It is preferable to attach the turnbuckle to
the stakes for easier access of adjusting walls



Turnbuckle

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