

## TIE CHARTS FOR 4', 6', 8', 9' WALLS

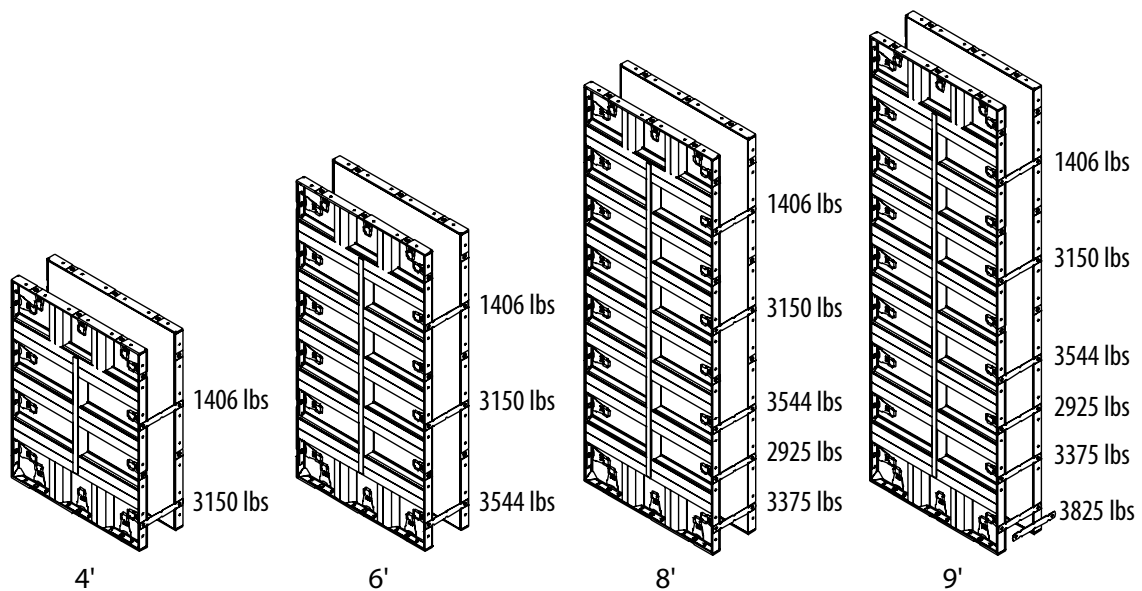
### PREVENTING TIE FAILURE

Using your ties correctly promotes safety on the job and optimal performance from your equipment. Follow these guidelines to use your ties effectively.

Form tie spacing detailed in charts provides a 2:1 safety factor when using standard Western Forms ties with safe working load of 3,750 lb each. These charts are based on the assumptions described below:

Don't let avoidable delays and accidents interrupt your job. Following proper tie placement and hole pattern usage can help:

- Reduce blowouts and costly concrete waste
- Reduce the risk of equipment damage
- Increase employee safety



\* Pressures listed are based on the recommended tie placement

- **Maximum rate of fill is 8 ft. per hour** (allow partial set of fluid concrete). Cold weather requires decreased fill rate
- Density of concrete not to exceed 150 lbs. per cubic ft
- Concrete contains no pozzolans or admixtures and has a **slump of 4" or less**
- Maximum form width is 36"
- All forms must have a form tie in the bottom 6" hole, and at least two form ties per form
- 18" form cantilever is allowed only at the top of the wall



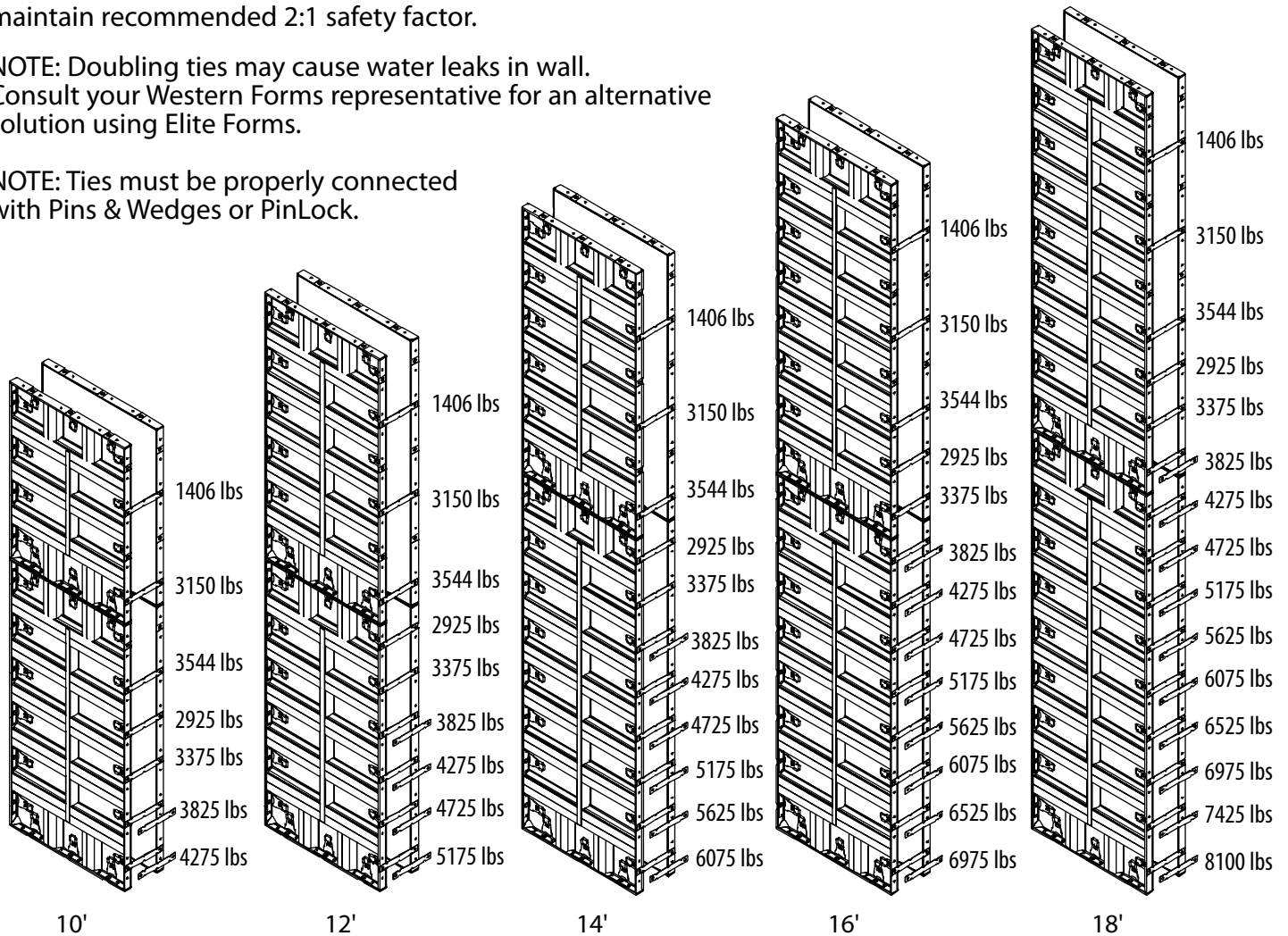
**9 ft and taller 6 • 12 hole pattern requires decreased fill rate to 7 ft per hour, allowing partial set of concrete. For questions regarding 8 • 8 hole pattern, contact a Western Forms representative.**

## 10', 12', 14', 16', 18' WALLS

NOTE: Locations where 2 standard ties are shown below to maintain recommended 2:1 safety factor.

NOTE: Doubling ties may cause water leaks in wall. Consult your Western Forms representative for an alternative solution using Elite Forms.

NOTE: Ties must be properly connected with Pins & Wedges or PinLock.



\* Pressures listed are based on the recommended tie placement

### TIE CHECKLIST

#### DO NOT USE:

- Ties that are broken or bent
- Ties that are heavily rusted
- Ties that have been bent and straightened
- Ties that have been hit by a hammer
- Ties that have been used in bulkhead applications
- Ties that are the incorrect length for the specified wall thickness
- Do not mix ties from multiple suppliers

**IMPORTANT:** Use as a reference for tie placement only. Consult P.S.F. safe working load for your particular forms.

Failure to follow these instructions may invalidate otherwise applicable warranties and may subject the user and others to serious bodily injury or property damage. Please contact Western Forms with any questions concerning the safe use of Western Forms products or to obtain training for your employees.