

Section 6

Pouring

Concrete

-Always follow project specific engineering and applicable codes when determining the concrete mix design.

-A standard 3/4" aggregate wall mix is suitable in most cases.

-A 3/8" aggregate is easier to work with.

-TransForm System® recommends a 5" slump and professional consolidation.

-Add super plasticizer to increase workability (up to 8" slump)

Methods of placing concrete

-Front discharge concrete truck (recommended)

-Concrete pump truck (recommended)

*Use a 5" to 3" reducing flexible hose, or

*Reduce to a 3" hose with a double 90° bend on the end and shut off if available.

-Rear discharge concrete truck (NOT RECOMMENDED)

-Trailer or "pony" pump (Can be used)

-Conveyor Truck (Can be used)

-Crane and bucket (Can be used)

Pouring tips

-Pour in approximately 4' lifts.

-Break the fall of the concrete by forcing the concrete to fall over the stud rails, rebar intersection, or a square shovel.

-Consolidate each lift separately without over consolidating the previous lift.

-Use personnel who have experience pouring concrete walls.

Post Pour

-Smooth the top of the wall.

-Be sure to install all anchor bolts or rebar for the next level.

-Clean the L-channel after the pour. (A small piece of polystyrene works well.)

Consolidation

Mechanical vibration

Concrete should be a 5" min. slump, add super plasticizer to increase up to 8" slump.

Stay at least six feet behind where the forms are being filled.

On the first lift, run the vibrator down to the footing and pull it back up once in every cell between the I-beams. You should see some water trickle out the bottom of the forms between the footing and the L-channel. If no water trickles out, your concrete slump needs to be checked; the concrete may not be flowing freely enough. For the second and succeeding lifts, drop the vibrator head one foot into the preceding lift to help knit the lifts together.

Vibrating Walls: Do's and Don'ts

Do understand that any form system can be blown out by over vibrating. Common sense is a must!

Do vibrate concrete walls whenever possible. A stiffer mixed concrete that is vibrated has much less head pressure than a wetter mixed concrete that is not vibrated.

Don't allow vibrator to sit in one spot. Always keep it moving.

Don't try to move or flow the concrete in the wall forms with a vibrator.

Don't pour a stiff mix in any wall that will not be vibrated. The chances of getting a void or honeycomb in the wall are significantly increased.

Common sense must be used. Vibrating walls takes skill and knowledge. You can blow out any form system if consolidation is done incorrectly.

