

2.15 – CONCRETE PLACEMENT

PRE-PLACEMENT CHECKLIST

DATE:

FOREMAN:

JOB:

Prior to placing concrete in Logix insulated concrete forms, be certain to mark off each item on the checklist provided in this section.

- 1. String line in place around the top of entire perimeter?
- 2. Walls straight and plumb (not leaning out)?
- 3. Top course foamed or tied down with zip ties or Logix Hooks end to end to maintain dimensions?
- 4. Additional form support on all corners?
- 5. Have Tee-walls been foamed and supported?
- 6. Alignment - screw in every course?
- 7. Scaffold planking properly secured?
- 8. All handrails and toe boards installed?
- 9. All bucks cross braced?
- 10. All bucks secured to wall?
- 11. All buck concrete anchors installed?
- 12. All horizontal and vertical rebar in place?
- 13. All lintel reinforcing in place?
- 14. All penetrations installed?
- 15. All beam pockets in place?
- 16. All floor embedments installed?
- 17. Are anchor bolts and hold-downs on site?
- 18. Has cavity of wall been checked, and foreign material removed?
- 19. Plywood, screw gun, and saw on site?
- 20. Interlock protected by tape, or other covering?
- 21. Proper concrete mix and slump ordered?
- 22. Concrete vibrator on site?
- 23. Pump equipped with reducer or 2 1/2" trimmer hose available?

2.15 – CONCRETE PLACEMENT CONTINUED

The most important stage of a successful Logix project is the concrete placement. Extra workers at this stage are important - be certain to have enough on hand during the pour to safely handle placement, consolidation, alignment, embedments, and cleanup.

Ensure straight walls by placing a string line at the top course set off from the wall using 3/4 inch (19 mm) pieces of wood placed in the corners. Check for straightness by running another 3/4" inch (19 mm) piece of wood between the string and wall. Adjust the turnbuckles as necessary to keep the wall straight during concrete placement. Walls must be perfectly straight or leaning in slightly.

During concrete placement, watch the string lines to monitor the wall for straight and plumb.

Suggested minimum compressive concrete strength of 2,900 psi (20MPa) at 28 days. For seismic areas mix design should be confirmed with local codes or by an engineer.

The following maximum aggregate sizes are recommended for use in Logix walls:

	Form Cavity Size, in. (mm)				
	4 (102)	6.25 (159)	8 (203)	10 (254)	12* (305)
Max. Aggregate Size, in. (mm)	3/8 (9.5)	3/8 (9.5) to 1/2 (13)	3/4 (19)	3/4 (19)	3/4 (19)

2.15 – CONCRETE PLACEMENT CONTINUED



Concrete slump should be 5 inch (127 mm) to 6 inches (152mm) for best results.

When placing concrete in 4 inch (102 mm) forms, it is recommended that the pump truck be fitted with a 2.5 inch (76 mm) flexible hose end.

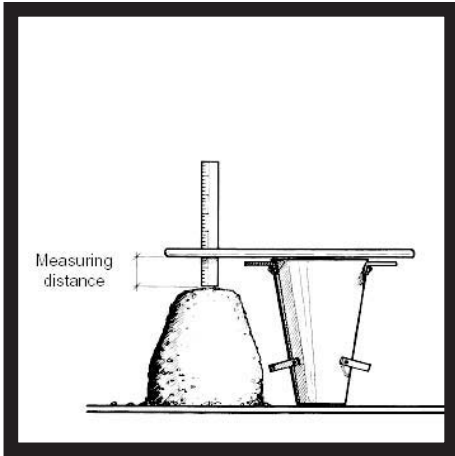
Other methods of placement include conveyor truck, crane and bucket, and directly off the ready mix truck.

Lift height is determined by many factors, such as air temperature, concrete temperature, slump, etc. In general, lift heights should not exceed 4ft (1.220 m) per hour.

Consult local ready mix companies for appropriate concrete mix design.

When placing concrete below freezing or at temperatures above 100° F (38° C), it's important to protect all exposed concrete with insulation.

2.15 – CONCRETE PLACEMENT CONTINUED



Proper concrete consolidation is critical in obtaining a structurally solid wall.

Use an internal vibrator with a head size of 3/4 inch (19 mm) to 1 inch (25mm) and maximum 1 hp motor. Do not use a vibrator with a head larger than 1 inch (25 mm).

Appropriate internal vibration assures the strongest walls possible and is especially important for below grade application where the greatest loads occur.

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The rule of thumb for internal vibration is fast in and slow out, always moving, with a withdrawal rate of approximately 3 inch (76 mm) per second.

2.15 – CONCRETE PLACEMENT CONTINUED

STEP 1: Complete the pre-placement checklist.

STEP 2: Begin concrete placement under openings, filling those areas and consolidating.

STEP 3: Beginning no closer than 3 feet (0.914 m) from a corner, start filling the wall from the top, allowing the concrete to flow gently toward the corner. Then fill in that corner from the opposite side using the same technique.

STEP 4: Continue placing concrete around entire wall in appropriately sized lifts, using the same technique at each corner to minimize fluid pressure.

STEP 5: As the concrete is being placed, consolidation is taking place to remove air and voids to ensure structural integrity.

STEP 6: As the concrete is being placed, continually check wall alignment using string line. Adjust the wall accordingly to maintain straight and plumb using the adjustable turnbuckle.

STEP 7: Return to starting location and begin the next lift. Follow all the techniques established above.

2.15 – CONCRETE PLACEMENT CONTINUED

POST-PLACEMENT CHECKLIST

DATE:

FOREMAN:

JOB:

After placing concrete in Logix insulated concrete forms, be certain to mark off each item on the checklist provided in this section.

- ___ 1. Has consolidation been completed?
- ___ 2. Are walls straightened to string line?
- ___ 3. In extreme temperatures, has exposed concrete been protected?
- ___ 4. Have all anchors and embeds been installed?
- ___ 5. Has spilled concrete been disposed of?
- ___ 6. Has final check for straight and plumb been done?