

Top down construction combines [soil nailing](#) and the construction of the retaining wall or exterior wall. The concrete wall is constructed in lifts as the excavation progresses and becomes the retaining system for the excavation. Up to 22 inch thick walls and multiple layers of reinforcement have been constructed using this technique.

The top down construction offers many advantages over traditional systems. Significant cost savings have been realized by constructing the retaining system and the final wall in a single pass. Wall finish can be a low cost "gun" finish or wood float finish, like the inside of a swimming pool. The wood float finish is better than a normal formed wall. If the lift lines are objectionable, a thin coat of shotcrete can be applied over the entire surface or the wall painted.

Construction schedules can be compressed by eliminating the time to construct the retaining wall. The finished wall is completed while excavation is taking place. On some projects the exterior walls above grade were started before the below grade walls were completed.

A checker board pattern of drainage fabric eliminates leakage through the wall. The system drains out the bottom through vent pipes or a collection system is constructed along the bottom to carry water out and away.