

BRACING 1 & 2 FAMILY DWELLING FOUNDATION WALLS DURING CONSTRUCTION

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Section 3604.4.1.3.1 requires that residential foundation walls be anchored to the floor or sufficiently braced to prevent damage by the backfill during construction.

Soil (backfill) exerts a horizontal force when placed against a foundation wall. Properly compacted backfill typically exerts less force than non-compacted backfill and it is important when backfilling to remember this fact. Backfill should always be placed in small (12- 1n or less) lifts and each lift should be adequately compacted.

Remember the quality, placement and compaction of backfill materials is equally as important as adequate bracing. Unsuitable backfill includes boulders; non-compacted material or other unstable material and organic materials such as tree stumps or brush.

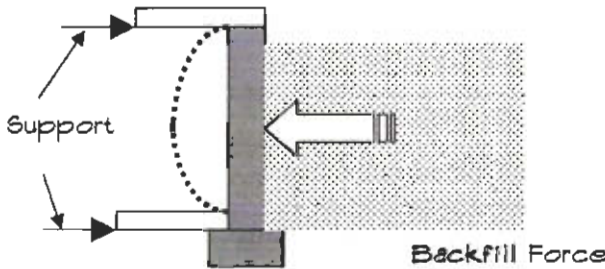


Figure 1

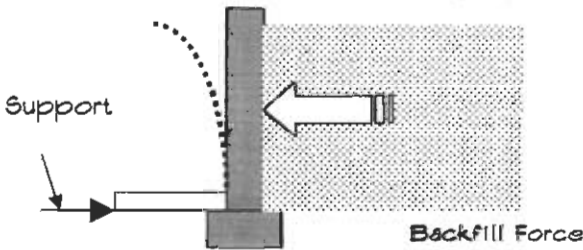



Figure 2

When foundation walls are supported by floor systems (or properly braced) the foundation walls span vertically between the floors (figure 1), which act as supports for the top and bottom of the foundation wall. If not braced at the top (figure 2), the foundation wall behaves as a cantilever retaining wall, a structural system for which it is not normally designed. Proper bracing of the foundation wall includes bracing both the top and bottom of the wall.



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