Converting a Basement to Living Space

THINGS TO CONSIDER WHEN CONVERTING AN UNFINISHED BASEMENT:

- **Minimum ceiling height** for habitable space in a basement is 84” (7 feet). Headroom is measured from finished ceiling to finished floor. Beams or similar projections can protrude below the required 7 feet to 6’ 4”.

- **Foundation walls** must be sealed from the outside to prevent moisture from migrating into the basement. The seal is required from the footing to ground level.

- **Internal stairs** are required from the main floor to the basement. If the stairs are existing, the risers cannot exceed 8” and the treads cannot be less than 9”. The tread depth and the riser heights must be consistent to within a 3/8” tolerance. The minimum headroom must be 6’8” measured from the nose of each tread. The width of the stairway may not be less than 32”. The stairs must have at least one handrail. Light switches and landings are required at the top and bottom of the stairs. Any new stairs must meet higher standards not addressed here (36” wide, tread having maximum rise of 7” rise, minimum run of 10”, etc.).

- **Insulation** required for the exterior walls. The typical method is to furr out the walls using 2” x 4” studs at 16” on center with a top plate nailed to the floor joists above, and a pressure treated bottom plate fastened to the slab. The stud wall is separated from the concrete foundation wall by 2” with the space between studs filled with R-21 fiberglass insulation with the vapor barrier to the inside. The assembly is typically covered with ¼” gypsum wallboard.

- **Egress** - The basement must have at least one emergency egress window or a door directly to the exterior. If you are creating a bedroom, the egress window or door must be within the bedroom itself. Egress windows shall provide 5.7 square feet of openable area, with a minimum openable width of 20” and a minimum openable height to 24”. The sill height may be a maximum of 44” above the finished floor. If the egress window sill height is below adjacent grade, a min 36” window well is required, at least the the width of the openable portion of the window.

- **Smoke Detectors** - There must be at least one smoke detector and one co detector in the basement. If you are adding a bedroom, provide interconnected detectors, one in each bedroom and one outside the bedroom(s) in a common location.

- **Plans** - Your plans must show in detail that the work will comply with code. Plans must be indelible, reproducible, to scale, complete with floor plans and sections showing the stairs, the furred out walls, headroom, and window wells.