

## Basements

**General Subject Information:** A basement is that portion of the house that extends below the surrounding grade. Basements can be partial (usually found in houses built on hillsides) or full (completely under the first floor). Full basements often built in homes in the East and Midwest are not common in homes built in the western United States. Crawl spaces do not qualify as basements. Additionally, basements are usually constructed for two distinct uses: utility or habitability. Examples of utility are storage, workshop, laundry, and location of mechanical equipment. Examples of habitability are au pair setup, bonus room, bedroom, home theater, and arts and crafts room.

Typically, basements consist of poured concrete walls or concrete block walls and a concrete slab floor. Because the basement is below grade, care must be taken during construction (and thereafter by the homeowner) to limit moisture intrusion. A basement that is built and marketed as habitable space (or future habitable space) is likely to have finished wall and floor coverings placed over their concrete surfaces. In other words, the slab of a habitable basement floor is considered the same as a slab-on-grade floor; habitable basement walls are considered the same as upstairs walls. Basements often have sump pumps to collect and pump out water that seeps in from the higher surrounding ground.

**Comments:** Because basements are built below grade, they will be damp in winter months. Basements built for utility purposes do not have the same requirements for heating, cooling and ventilation as habitable basements. Condensation on basement walls should not be confused with an actual leak from the outside.

### Recommended Use and Maintenance:

- ✓ Avoid making any changes to the surrounding grades that would cause rain or irrigation water to flow down the outside of the basement walls. This includes over-watering, constructing planter beds without independent drainage, building “dams” between foundations and raised walkways and failure to keep **swales** and yard drains cleaned out.
- ✓ If basement dampness is an issue, installation of a dehumidifier may help.
- ✓ In no event should the moisture barrier on the outside of the basement wall be damaged when planting or irrigation is installed.
- ✓ If your basement has a sump pump, during the drier months pour water into the sump and verify that the float switches turn the pump on and that the discharge line remains clean and free flowing.

