



### **RADON RESISTANT BUILDINGS**

Radon is a radioactive gas that is both colorless and odorless and occurs naturally in soils depending on a specific location's geology. It enters buildings through cracks or openings in the foundation, slab or basement walls when the air pressure in the building is less than that of the soil. Because radon gas has been linked to the development of lung cancer, it is prudent to take measures during construction to make buildings as radon resistant as possible. Solid concrete is an excellent material for this task.

#### **What to Do About It**

- Eliminate all entry routes through which gasses can get into a building. Design the foundation and basement to minimize utility openings.
- Use control and isolation joints in walls and floors to minimize random cracking. When done properly, cracks that occur will most likely appear at the joints and can be easily sealed.
- Construct joints to facilitate caulking, and caulk and seal all joints and openings in walls and floors.
- Monolithic slab foundations can help minimize the entry of radon gas. Pour foundation and slab as a single unit.
- Use larger aggregate sizes and the proper water-to-cement ratio to minimize concrete shrinkage and cracking.