**SECTION 502 INSTALLATION   
  
502.1 General.**   
Water heaters shall be installed in accordance with the manufacturer’s installation instructions. Oil-fired water heaters shall conform to the requirements of this code and the *International Mechanical Code.* Electric water heaters shall conform to the requirements of this code and provisions of NFPA 70. Gas-fired water heaters shall conform to the requirements of the *International Fuel Gas Code.*

**502.1.1 Elevation and protection.**   
Elevation of water heater ignition sources and mechanical damage protection requirements for water heaters shall be in accordance with the *International Mechanical Code* and the *International Fuel Gas Code.*

**502.2 Rooms used as a plenum.**   
Water heaters using solid, liquid or gas fuel shall not be installed in a room containing air-handling machinery where such room is used as a plenum.  **502.3 Water heaters installed in attics.**   
Attics containing a water heater shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater. The passageway shall be not less than 30 inches (762 mm) in height and 22 inches (559 mm) in width and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) in width. A level service space not less than 30 inches (762 mm) in length and 30 inches (762 mm) in width shall be present at the front or service side of the water heater. The clear *access* opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large enough to allow removal of the water heater.  **502.4 Seismic supports.**   
Where earthquake loads are applicable in accordance with the *International Building Code,* water heater supports shall be designed and installed for the seismic forces in accordance with the *International Building Code.*  **502.5 Clearances for maintenance and replacement.**   
Appliances shall be provided with *access* for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances or any other piping or ducts not connected to the appliance being inspected, serviced, repaired or replaced. A level working space not less than 30 inches in length and 30 inches in width (762 mm by 762 mm) shall be provided in front of the control side to service an appliance.