Domestic Hot Water Assessment Guidelines

General Hot Water Assessment Tasks

1. Identify domestic hot water (DHW) tanks and write down the following:
   - Fuel source
   - Tank size (gallons)
   - Heat input (Btu/hr or kW)
   - Efficiency (%)
   - Estimated usage (gallons/day)

2. Determine size, capacity, and fuel source of proposed on demand/heat pump DHW tank.

3. Natural gas DHW water heaters typically cost less to operate than electric water heaters.
   - Cost depends on electric and natural gas rates

4. Typical equipment costs are as follows:
   - On demand water heaters = $120 to $1,300
   - Heat pump water heaters = $800 to $2,000

5. Federal gas water heater performance requirements:
   - Energy factor of 0.67 or higher
   - Annual energy use of 242 therms/year or less for a 50-gallon tank
   - Tankless energy factor of 0.82 or higher

6. Federal electric water heater performance requirements:
   - Energy factor of 0.93 or higher
   - Annual energy use of 4,721 kWh/yr or less for a 60+-gallon tank

Table 1. Hot Water Use By Building Type

Building Type	Estimated Hot Water Use Gallon/Person/Day
House	15.8
Hotel/Motel	20.0
Hospital	52.0
Office	1.1
Restaurant	2.4
School	0.5
School with Showers	1.9

Source: NREL