

# ENERGY CODE DATA SHEET

**Table 6-1  
PRESCRIPTIVE REQUIREMENTS FOR GROUP R OCCUPANCY  
CLIMATE ZONE 1  
(SIMPLE FORM – UNLIMITED GLAZING OPTION ONLY)**

Option	Glazing Area % of Floor	Vertical U-Factor	Overhead U-Factor	Door U-Factor	Ceiling	Vaulted Ceiling	Wall Above Grade	Wall Int. Below Grade	Wall Ext. Below Grade	Floor	Slab on Grade
III	Unlimited Group R-3 & 4 Occupancies Only	0.40	0.58	0.20	R-38	R-30	R-21	R-21	R-10	R-30	R-10

**Heat system sizing calculation:**

$$\begin{array}{r}
 \underline{\hspace{10em}} \text{ btu's} \\
 \text{heated floor area}
 \end{array}
 \times
 \begin{array}{r}
 \underline{\hspace{10em}} \text{ 20} \\
 \text{btu psf}
 \end{array}
 =
 \begin{array}{r}
 \underline{\hspace{10em}} \\
 \text{total system output}
 \end{array}$$

**This project complies with the following:**

- The project is a single family residence or duplex
- The project is wood frame OR all of the insulation is interior or exterior of the framing.
- All building components meet the requirements listed in Table 6-1, Option III.
- The project will meet all other provisions of the WSEC and VIAQ.

**The project will take advantage of the following exceptions to the prescriptive option:**

602.6 Exception 1, One door, that is 24 sq. ft. or less, that does not meet the standards is allowed

Location of the door taking this exception \_\_\_\_\_

602.6 Exception 2, Doors with a U-Factor of 0.40 allowed without calculations, Option III only.

Location of the door(s) taking this exception \_\_\_\_\_

**Ventilation and Indoor Air Quality (VIAQ) Compliance** (check one)

Ventilation Option\*: [ ] **1**    [ ] **2**    [ ] **3**    [ ] **4** Heat Recovery Ventilation System

System Size: \_\_\_\_\_cfm    [ ] Intermittently operation    [ ] Continuously operation

\*Ventilation options are in the corresponding VIAQ Sections: 303.4.1, 303.4.2, 303.4.3 and 3.3.4.4. Descriptions of these options are on the following page.

## VIAQ Compliance Options:

### Option 1 (Section 3.3.4.1)

#### Intermittent Whole House Ventilation Using Exhaust Fans:

A common whole house ventilation strategy is to combine a source specific and whole house ventilation fan. If possible, choose a bathroom or laundry room with a central location spot fan for the double duty system. To prescriptively size the fan, use VIAQ Table 3-2. Don't add both spot CFM rates and whole house rates together to determine the fan size. Use the larger of the two rates. A dedicated whole house fan may be used, or a remote, central whole house fan. See code text for specific requirements.

This type of ventilation system includes:

- $\leq 1.5$  sone rated fan
- Automatic and manual controls.
- $\frac{1}{2}$ " undercut doors (or other means) for air distribution.
- Proper duct sizing, length and insulation (when outside the conditioned space).
- Outdoor Air Inlets to supply fresh air to habitable spaces. **Exception: Exhaust only ventilation systems do not require outdoor air inlets if the home has a ducted forced air heating system that communicates with all habitable rooms and the interior doors are undercut to a minimum of  $\frac{1}{2}$ ".**

### Option 2 (Section 303.4.2)

#### Intermittent Whole House Ventilation With a Forced Air System:

Where a forced air system is installed, fresh air may be ducted into the system to meet ventilation requirements. An integrated system consists of:

- A fresh air duct, connected to the furnace return plenum, sized per VIAQ Table 3-5.
- A damper (calibrated manual volume, manual volume or automatic flow-regulating device, see code text for additional requirements) allowing the proper amount of outside air to the system.
- A clock timer set to appropriate ventilation periods.

### Option 3 (Section 303.4.3)

#### Intermittent Whole House Ventilation Using a Supply Fan:

This option supplies fresh air to all habitable spaces through the use of a dedicated supply fan. This system can be installed in conjunction with a forced air heating system, or as a stand-alone supply air system. In both cases, duct runs are required to each habitable room.

A ventilation system using a Supply Fan includes:

- A dedicated supply fan.
- A fresh air duct, connected to the furnace supply plenum or a dedicated whole house ventilation duct. Duct shall be sized as per VIAQ Table 3-6. The supply duct must also be equipped with a damper (calibrated manual volume, manual volume or automatic flow-regulating device). See code text for additional requirements.
- A clock timer set to operate only the dedicated supply fan for appropriate ventilation periods.
- A filter located in the fresh air supply duct, fan housing or in the case of connection to the return duct, in the furnace.

### Option 4 (Section 303.4.4)

#### Intermittent Whole House Ventilation Using a Heat Recovery Ventilation System:

Heat recovery systems are exempt from maximum flow rates and sound rating requirements. Either air-to-air heat exchangers or exhaust air heat pumps may be used.

Air-to-air heat exchangers must meet the following requirements:

- Minimum 6" ducts
- Balancing dampers on the inlet and exhaust ducts
- Flow grids installed on both supply and return ducts (for balancing)