

requirements described in Chapter 4 (Building HVAC Requirements) of this manual.

Compliance with these measures requires verification by a HERS rater. However, there are three alternative compliance options as shown in Table 8-3 that take the place of duct sealing and possibly refrigerant charge measurement.

The table provides three options as alternatives to duct sealing in the indicated climate zones as described below:

The first option requires an efficiency upgrade of the furnace only. It requires installation of a furnace with an AFUE of 0.92.

The second option is an efficiency upgrade on the cooling side only. It requires the installation of high SEER & EER equipment, plus TXV (or refrigerant charge measurement instead of TXV), and Increased Duct Insulation.

The third option requires an efficiency upgrade in both heating and cooling equipment. It requires installation of a high SEER & EER unit with TXV (or refrigerant charge measurement instead of TXV), plus 0.92 AFUE (or 0.82 AFUE plus Increased duct Insulation instead of 0.92 AFUE).

In climate zone 8, to avoid TXV or refrigerant charge measurement requirements, a SEER 14 air conditioner or a 0.82 AFUE furnace may be used.

Table 8-3 – Alternatives to Duct Sealing



	Option 1	Option 2	Option 3
Climate Zone	0.92 AFUE	SEER-14 & EER-12, with either TXV or refrigerant charge measurement, plus Increased Duct Insulation	SEER-14 & EER-12 with either TXV or refrigerant charge measurement, plus either 0.92 AFUE or 0.82 AFUE with Increased Duct Insulation
CZ2	Yes	No	Yes
CZ9	No	No	Yes
CZ10	No	Yes	Yes
CZ11	No	No	Yes
CZ12	Yes	No	Yes
CZ13	No	Yes	Yes
CZ14	No	No	Yes
CZ15	No	Yes	Yes
CZ16	Yes	No	Yes

1. Increased duct insulation refers to an additional R-4 insulation wrap on existing ducts and R-8 duct insulation for all new ducts. 2. Package systems may use Option 2 or 3 without meeting the requirement for a TXV (or refrigerant charge measurement)
 Note - There are no duct sealing requirements in climate zones 1 and 3-8.

Setback Thermostat

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If the thermostat is to be replaced as part of the alteration, then a setback thermostat is required as described in Chapter 4.