between the duct and the insulation, heat loss/gain need not be calculated if the cavity in which the duct is located is assumed to be at living space temperature. The average temperature inside the supply duct, including ducts installed outside the manufactured home, shall be assumed to be 130 F for purposes of calculation of heat loss and 60 F for heat gain.

(g) *Return air cavities.* Cavities used as return air plenums shall be considered to be at living space temperature.

[40 FR 58752, Dec. 18, 1975. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 78 FR 73984, Dec. 9, 2013]

§ 3280.510 Heat loss certificate.

The manufactured home manufacturer shall permanently affix the following ''Certificate'' to an interior surface of the home that is readily visible to the homeowner. The ''Certificate'' shall specify the following:

(a) *Heating zone certification.* The design zone at which the manufactured home heat loss complies with § 3280.506(a).

(b) *Outdoor certification temperature.* The lowest outdoor temperature at which the installed heating equipment will maintain a 70 °F temperature inside the home without storm sash or insulating glass for Zones 1 and 2, and with storm sash or insulating glass for Zone 3 and complying with § 3280.508 and § 3280.509.

(c) *Operating economy certification temperature.* The temperature to be specified for operating economy and energy conservation shall be 20 °F or 30% of the design temperature difference, whichever is greater, added to the temperature specified as the heating system capacity certification temperature without storm windows or insulating glass in Zones 1 and 2 and with storm windows or insulating glass in Zone 3. Design temperature difference is 70° minus the heating system capacity certification temperature in degrees Fahrenheit.

HEATING CERTIFICATE

Home Manufacturer _____
Plant Location _____
Home Model _____

(Include Uo Value Zone Map)

This manufactured home has been thermally insulated to conform with the requirements of the Federal Manufactured Home Construction and Safety Standards for all locations within Uo Value Zone ____.

Heating Equipment Manufacturer _____
Heating Equipment Model _____

The above heating equipment has the capacity to maintain an average 70F temperature in this home at outdoor temperatures of [see paragraph (b) of this section] F. To maximize furnace operating economy and to conserve energy, it is recommended that this home be installed where the outdoor winter design temperature (97 1/2%) is not higher than [see paragraph (c) of this section] F degrees Fahrenheit.

The above information has been calculated assuming a maximum wind velocity of 15 MPH at standard atmospheric pressure.

(d) The following additional statement must be provided on the heating certificate and data plate required by § 3280.5 when the home is built with a vapor retarder of not greater than one perm (dry cup method) on the exterior side of the insulation: ''This home is designed and constructed to be sited only in humid or fringe climate regions as shown on the Humid and Fringe Climate Map.'' A reproduction of the Humid and Fringe Climate Map in § 3280.504 is to be provided on the heating certificate and data plate. The map must be not less than 3½ inch × 2¼ inch in size and may be combined with the U_o Value Zone Map for Manufactured Housing in § 3280.506.

[40 FR 58752, Dec. 18, 1975. Redesignated at 44 FR 20679, Apr. 6, 1979, as amended at 58 FR 55011, Oct. 25, 1993; 70 FR 72048, Nov. 30, 2005]

§ 3280.511 Comfort cooling certificate and information.

(a) The manufactured home manufacturer shall permanently affix a ''Comfort Cooling Certificate'' to an interior surface of the home that is readily visible to the home owner. This certificate may be combined with the heating certificate required in § 3280.510. The manufacturer shall comply with one of the following three alternatives in providing the certificate and additional information concerning the cooling of the manufactured home:

(1) *Alternative I.* If a central air conditioning system is provided by the home