## STATE BUILDING CODE INTERPRETATION NO. 00-13

**CODE:** 1997 Washington State Energy Code (WSEC)

**SECTIONS:** Table 14-5, Duct Insulation

**QUESTIONS:** 1. Is it the intent of the code to require duct insulation on supply ducts

only within the conditioned space with supply air temperature <55° or

>105° degrees Fahrenheit?

2. The note below Table 14-5 states that the requirements apply to both supply and return ducts. Would return ducts need to be insulated also if

the supply ducts meet the above requirements?

**ANSWERS:** 1. Yes.

2. No, return ducts within conditioned space are not addressed in

Table 14-5 and do not have insulation requirements.

Each duct should be evaluated and insulated on the air temperature passing through it specifically. The insulation level of a return duct

should not be contingent on the supply air temperature.

**DISCUSSION:** The Table 14-5 Note is residual from a previous version of this table.

> When the Duct Type column specifying supply and return in two of the four categories was added to the table in 1997, the portion of the note

clarifying "supply and return ducts" could have been removed.

However, if the note is applied for return ducts within conditioned space,

the Duct Type category applied should read "Return with return air temperature <55°F or >105°F." Therefore, if the return air temperature measured at the return air grille within the conditioned space is in the

range of 55°F to 105°F, the return air duct (similar to the supply air duct)

would not require insulation.

**SUPERSEDES:** None

**REQUESTED BY:** City of Renton