

STATE BUILDING CODE INTERPRETATION NO. I-23-06

November 13, 2006

Since both of you have asked for similar official interpretations regarding outdoor wood furnaces (OWF) I have incorporated both your questions into this response. The information contained herein is based on the 2003 International Residential Code (IRC) portion of the 2005 State Building Code.

Question 1: Is a building permit required for the installation of an outdoor wood burning furnace?

Answer 1: Yes. Since the appliance comes in a structure with weather-resistant walls and a roof, the OWF shall be regulated as an accessory structure under the IRC and thus requires a permit. During the permit issuing process the local building official must insure that the appropriate town agencies have approved its location with respect to zoning and wetlands as well as any other local regulations (historic, etc.). Please note that the Connecticut Department of Environmental Protection (DEP) has developed additional requirements for OWFs above and beyond the requirements of the State Building Code effective for OWFs installed on or after July 8, 2005 (see section 22a-174k of the Connecticut General Statutes for such requirements). The local building official is only authorized to enforce the DEP requirements if the municipality in which he/she is employed has specifically empowered him/her to do so by local ordinance, charter revision or some similar official act. In any case, it is prudent for the local building official to make all permit applicants for OWFs aware of the existence of the additional DEP requirements.

Question 2: Is a building permit required for installation of the chimney (possibly as tall as 55 feet) for the outdoor wood burning furnace?

Answer 2: Yes, but since the chimney is integral to the OWF, the permit required in Answer 1 will also cover the chimney. Keep in mind that the DEP requires that the chimney be at a height that is more than the roof peaks of residences not served by the OWF that are within 500 feet of the OWF (but not required to exceed 55 feet). Since it is unlikely that a 55 foot high chimney can be adequately supported by the OWF itself, it is possible that the chimney support system will have to be designed by a registered engineer. In addition, I do not believe that it is the intent of the code to allow a 55 foot high chimney to be installed without frost protection. The local building official will have to determine the need for engineering and/or frost protection for the chimney on a case-by-case basis. It is also possible that the permit applicant for the OWF will have to supply data prepared by a licensed surveyor to ascertain the heights of roof peaks on adjacent properties within the 500 foot regulated zone in order to determine the required height of the OWF chimney.

Question 3: Are plumbing, electrical and/or mechanical permits required for the connection to the existing heating system?

Answer 3: Yes, the code requires a permit for all work regulated by the code. The code does not, however, require that they be individual permits, so if the municipality chooses, it may issue a single permit to the owner or owner's agent for all work involved in installing the OWF. Per the Department of Consumer Protection, if the property is an owner-occupied single-family residence, the owner is exempt from trades licensing requirements for the electrical, plumbing and mechanical work if the owner intends to perform the work him/herself.