STATE BUILDING CODE INTERPRETATION NO. I-1-05

January 24, 2005

The following is offered in response to your January 8, 2005 letter in which you seek a formal interpretation of the provisions of various sections of the 1995 CABO One and Two Family Dwelling Code portion of the 1999 State Building Code.

Question 1: Is it the intent of Section 322.1 to regulate the proximity of sill plates as well as other components of wall framing, such as studs, with respect to exposed ground, or is the intent of the code met simply by installing a pressure treated sill regardless of the location of the studs?

Answer 1: Item 2 of Section 322.1 requires that all sills or plates that rest on concrete or masonry exterior walls that are less than 8 inches from exposed earth be of approved preservative-treated or naturally decay-resistant lumber. Item 5 of the same section requires that all wood siding, sheathing and wall framing within 6 inches of the ground be of the same materials. Thus, the locations of all components must be evaluated. If a sill plate that is 3 inches from grade is treated, but the siding, sheathing and studs that rest on it are less than 6 inches from grade, all those additional elements must also be treated or naturally decay-resistant.

Question 2: Is it code-compliant to terminate a bathroom exhaust fan inside a vented soffit?

Answer 2: No. The exception to Section 303.3 clearly states that bathroom exhausts shall be vented directly to the outside. Vented soffits are designed to allow air into an attic or rafter space for the purpose of providing ventilation. Terminating the bathroom exhaust inside a vented soffit will result in the exhaust products being brought back into the attic or rafter space. Special soffit boots are available to bring exhaust through the soffit directly to the exterior. When utilizing such products, one must eliminate or block the adjacent soffit vents to ensure that the exhaust products will not be drawn back into the house via adjacent soffit vents.

Question 3a: Are fire separation assemblies required for condominium units in a townhouse configuration?

Answer 3a: Yes. The code's requirements are based on occupancy and building configuration rather than on form of ownership, so the requirements apply to condominiums as well as to buildings owned fee-simple. Section 320.2 requires by reference to Section 302 that townhouses be separated by individual one-hour fire-resistive rated walls on each townhouse, rated for exposure from each side; or allows, by exception to 320.2, a common two-hour fire-resistive rated wall between townhouses. The individual one-hour walls or common two-hour wall must meet the listing requirements of the assembly chosen. Such walls are further required to meet the provisions of the subsections to 320.2 regarding continuity, termination at or above the roof and structural independence, as well as the requirements of 302.2 regarding openings.

Question 3b: If the answer to 3a is yes, are the rated walls between units permitted to be penetrated by unprotected wood members and to have gaps in the drywall covering?

Answer 3b: No. By virtue of the requirement for fire-resistive rated construction, such penetrations and gaps are not permitted. Section 320.2.1 requires the common wall to be continuous from foundation to termination (in accordance with 320.2.2) and for the full length of the common wall. All gaps must be sealed and all penetrations must be treated in a manner that is in accordance with the requirements of the listed assembly.

Question 4: For a building utilizing vinyl siding, is it code compliant to omit a water resistant membrane behind the siding and to allow buckling and loose siding as well as unprotected penetrations?

Answer 4: No. Section 703.1 requires that all exterior walls be covered with approved materials designed and installed to provide a barrier against the weather and insects. Footnote 14 to Table 703.4 requires vinyl siding to comply with ASTM D3679. Section 1.5 of ASTM D3679 requires that vinyl siding be installed in accordance with ASTM D4756 as well as the siding manufacturer's installation instructions. The ASTM D4756 standard contains general instructions for producing weather-tight seals around penetrations. Individual manufacturer's installation instructions will contain similar details that are specific to the product used. All manufacturer's installation instructions that I have referred to as well as the Vinyl Siding Institute's publication, "Vinyl Siding Installation Manual" , require that vinyl siding be installed over a weather resistant barrier system. The manual describes a weather resistant barrier system as a combination of a continuous weather resistant material as well as properly integrated flashing around all penetrations. Thus, the language of the code through the referenced documents clearly does not permit the conditions you describe.