



California Real Estate Inspection Association (CREIA) Press / Media Information

CREIA Cautions That Chimneys Need Professional Inspecting to Avoid Fires

Courtesy of the California Real Estate Inspection Association (CREIA)

January 2006 (Palm Springs, Calif) — The California Real Estate Inspection Association (CREIA) cautions homeowners and potential home buyers to make sure their chimneys and fireplaces are in safe working order by retaining the services of a professional home inspector. A proper evaluation could save your home from a catastrophic structure fire and possibly save someone's life. The chimney condition in your attic, as reported by a qualified home inspector, is not a matter to be dismissed. While there are numerous types of fireplace/chimney systems which all should be routinely inspected, a couple of the more problematic systems/conditions are:

- **Metal Chimney.** Most metal chimneys consist of two sheet metal shafts, one contained within the other. The purpose of a double-wall chimney is to prevent the outer surface from becoming hot enough to start a fire in your attic. The air between the two chimney walls can be extremely hot and therefore must vent into the open air above your roof. When the top of the outer chimney wall terminates inside the attic, heated air can scorch the wood framing to the point of combustion. When a hot metal chimney touches a wood surface, the ignition temperature of the wood is lowered (known as pyrolysis). Gradually, over a period of time, the temperature at which the wood will ignite is reduced. Eventually, the heat of the chimney itself can ignite the wood, causing a fire. Metal chimneys should never be in direct contact with combustible materials. In most cases, the clearance requirements are listed plainly on the chimney itself. Standard clearances are usually one or two inches. These specifications may be stamped into the sheet metal chimney or printed on an attached label.
- **Pre-Cast Fireplace.** Another common chimney is the pre-cast fireplace made of a single pour of concrete. They are factory-made and delivered to a construction site in one piece. The insulation plate is the Achilles heel of this type of fixture because it is only two inches thick, and a crack in this plate can allow the passage of heat and smoke into the wall area, causing a potential fire hazard. Even when there are no signs of other damage to the fireplace, the insulation plate may have failed. There is another concern with this system: calcium chloride was added to the concrete at the time of assembly; this additive reacts with the steel reinforcement and causes vertical and horizontal cracks in the structure. This reaction may also result in failure of the fireplace system. Unfortunately, the repair cost is high because the fixture cannot be repaired but must be replaced.

Serious safety concerns arise whenever there is an improperly installed or damaged fireplace or chimney system. Charred wood and other indications of heat exposure can be easily detected within the attic space. To ensure adequate clearance and proper installation within your attic, have the chimney evaluated by professional home inspector with the expertise in this area, or by a certified fireplace & chimney inspector to make sure your system complies with all pertinent fire safety requirements. These professionals are familiar with problems, specifications and code requirements pertaining to all types of fireplaces, inserts, and wood-burning stoves. The most important part of fire safety is to consult the appropriate expert. When chimney conditions are suspect, the services of a professional are imperative.

Make sure you retain the services of a qualified inspector who is trained and experienced in home inspection and is a member of a professional association such as CREIA. Since 1976, CREIA, a non-profit voluntary membership organization has been providing education, training, and support services to the real estate inspection industry and to the public. Inspectors must adhere to CREIA's Code of Ethics and follow the Standards of Practice developed by the association. These Standards of Practice have been recognized by the State of California, and are considered the source for Home Inspector Standard of Care by the real estate and legal communities.

CREIA requires its members to successfully pass a comprehensive written examination of property systems and complete a minimum of 30 hours of continuing education each year. Members can accumulate credits through various sources of education including monthly chapter meetings, conferences, and other approved activities. CREIA keeps records to ensure that members are complying with the requirements. Educational topics cover a variety of technical subjects including updates and advances affecting the profession of real estate inspection. CREIA is dedicated to consumer protection and education.

Martin Grant, owner and operator of Noteworthy Property Inspections, is a Certified CREIA Inspector member of the California Real Estate Inspection Association (CREIA).

This information is brought to you by Noteworthy Property Inspections, your local Professional Home Inspector.

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