



Chinese Drywall Testing Guidance For Residential And Commercial Buildings

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Tampa, FL -- Today people spend 90% of their time indoors. Indoor environments must be free from potentially unsafe materials, which may influence the health of the occupants and the hygiene of the environments. Recently homeowners, especially from the Southeast United States, started complaining of odors and physical irritation or ailments. Several complaints have been filed by the consumer in this regard to various regulatory authorities such as the U.S. Consumer Product Safety Commission (CPSC), United States Environmental Protection Agency (USEPA), Center for Disease Control (CDC) and other organizations. It has been suggested that the presence of Chinese made drywall in homes may be responsible for health related symptoms.

During the housing boom and housing repair work associated with the active hurricane seasons between the years of 2003 and 2007, the demand for building materials such as drywall had been augmented. As a result, an estimated 600 million pounds of Chinese drywall were used in USA homes according to a report. Indoor Environment Connections, a newspaper of the indoor air quality industry, reported that about 100,000 homes nationwide contain Chinese drywall. Testing for the presence of Chinese drywall and determining its effect on the indoor environment is not a simple task.

The U.S. Department of Housing and Urban Development (HUD) and CPSC recently issued an advisory to help property owners and contractors to determine whether their home has Chinese drywall. These agencies suggested a two-fold approach, visual inspection and chemical analysis, to confirm the presence of Chinese drywall in the home.

As part of a visual inspection it is recommended that the homeowner look for corrosion or blackening of metals; copper, aluminum, and silver. Some examples of these are copper wiring in light switches and electrical outlets; air conditioning cooling coils and silver objects including jewelry. The installation time of the drywall, between the years 2001 and 2008, is another helpful piece of information to note.

The chemical analysis of the drywall is suggested to determine and compare the elemental composition and physiochemical nature of the subject drywall to that of domestic drywall. The USEPA published a report based on the chemical analysis of the



drywall made in China with that of the local/domestic US manufactured drywall. Following is a summary of the test results from that report:

- Sulfur was detected at 83 parts per millions (ppm) and 119 ppm in the Chinese drywall samples. Sulfur was not detected in the four US-manufactured drywall samples.
- Strontium was detected at 2,570 ppm and 2,670 ppm in the Chinese drywall samples. Strontium was detected in the US-manufactured drywall at 244 ppm to 1,130 ppm. Total acid soluble sulfides were not detected in any samples.
- Iron concentrations of 1,390 ppm and 1,630 ppm were detected in the Chinese drywall samples and in the range of 841 ppm to 3,210 ppm for the US-manufactured drywall samples. Additional drywall samples will be tested to determine whether the iron is present as oxide, sulfide or sulfate.

For additional information on Chinese Drywall lab analysis or Chinese Drywall testing services provided by EDLab please call 1-800-422-7873 ext 804.

About [Environmental Diagnostics Laboratory](#) (EDLab):

The **Environmental Diagnostics Laboratory (EDLab)** (established in 1992) at Pure Air Control Services (PACS) is an AIHA accredited environmental lab # EMLAP 102795 offering complete and comprehensive indoor environmental microbiology laboratory services. They include: microbiology, aerobiology, allergen assays, microscopy and chemistry (partner lab) designed to meet all your indoor air needs. EDLab supports IAQ investigations by assisting with strategic sampling plan development and supplying media collection equipment while performing a wide range of environmental analyses.

The company's expanding client roster includes the General Services Administration (GSA); US Army Corps of Engineers (USACE), Allstate Insurance; Carrier Air Conditioning; US Naval Air Warfare Center, Orlando; and Naval Air Station - King's Bay, Georgia, and many other Fortune 500 companies, school boards, and city, state, and county governments, making Pure Air Control Services/EDLab the reliable industry leader in IAQ.

For more information on EDLab at Pure Air Services, Inc. please contact Ed Ziegler, VP, at 1-800-422-7873 1-800-422-7873 x 804, or visit <http://www.edlab.org/>.

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