



FOR IMMEDIATE RELEASE

For more information, contact: Linda King, SPRI Managing Director
SPRI
411 Waverly Oaks Road, Suite 331B
Waltham, MA 02452
Tel: 781-647-7026 Fax: 781-647-7222
E-mail: info@spri.org

SPRI/ORNL begin phase-two of metal fastener corrosion study

Waltham, MA, June 2008—SPRI, the association representing sheet membrane and component suppliers to the commercial roofing industry, has advanced to the second phase of a test program to determine the potential for various types of wood preservatives to cause corrosion of metal components in low-slope roofing systems.

The research team, led by André Desjarlais of the Oak Ridge National Laboratory (ORNL), has already conducted laboratory tests to identify the critical parameters necessary to initiate corrosion.

“We have positively identified the critical temperature and humidity conditions necessary to initiate corrosion with various wood treatment compounds,” says Desjarlais. “We are simulating conditions in three different roof areas of the U.S. to determine the temperature and relative humidity levels that field-installed wood nailers would actually see.”

Phase-two of the program will monitor pre-conditioned wood nailers saturated with water to determine if they will dry out over time.

SPRI initiated its study last year after wood producers changed the preservatives used in treated lumber due to environmental concerns. The intent of the program is to see the affect that the new preservatives have on the roofing fastener. The anecdotal evidence, as experienced by SPRI members, shows no corrosion issues related to the change in wood preservative.

“The change in preservative initially raised a concern about potential fastener corrosion problems in low-slope roofing applications,” says Ennis. “Corrosion issues here could affect the integrity of the membrane perimeter attachment, which is essential in providing wind uplift resistance. SPRI initiated this study to determine whether or not there is a corrosion problem in low-slope roofing.”

According to SPRI Technical Director Mike Ennis, “ORNL has developed a methodology to obtain stable moisture readings. ORNL will install moisture content probe equipment at various locations donated by SPRI members. The equipment will be installed at the Jackson, MS site and the Agawam, MA site this month. The final monitoring location in Grants Pass, OR will be installed in the next 60 days.”

One challenge for researchers is that while American Society for Testing & Materials (ASTM) test procedures are comparative, they do not simulate realistic conditions on low-slope roofs.

“SPRI’s current testing will better model rooftop conditions without relying on a contrived accelerated test,” says Desjarlais.

For more information about the study, visit SPRI’s Web site at www.spri.org, or contact the association at info@spri.org.

##