

# SOUTHWEST RESEARCH INSTITUTE®

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## **FIRE PERFORMANCE EVALUATION OF *DRAGONBOARD* SHEATHING TESTED IN ACCORDANCE WITH ASTM E 136, STANDARD TEST METHOD FOR BEHAVIOR OF MATERIALS IN A VERTICAL TUBE FURNACE AT 750 °C**


**FINAL REPORT**  
Consisting of 6 Pages

**SwRI® Project No. 01.13544.01.313**  
**Test Date(s): December 5 and 6, 2007**  
**Report Date: January 3, 2008**

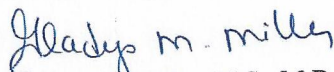
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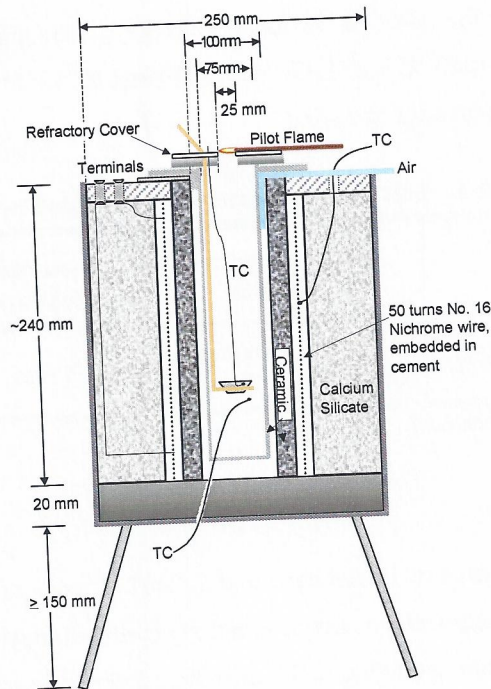
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**Figure 1. Schematic of SwRI's Hot-Air Furnace.**

A material passes if at least three of the four specimens tested meet the following criteria:

1. When the weight loss is 50% or less:
  - a. The surface and interior thermocouples cannot have a temperature rise of more than 30 °C from the stabilized temperature measured by the interior thermocouple before testing.
  - b. No sustained flaming during the first 30 s of the test.
2. When the weight loss is 50% or more:
  - a. The surface and interior thermocouples cannot exhibit any temperature rise from the stabilized temperature measured by the interior thermocouple before testing.
  - b. No flaming at any time during the test.

The three specimens do not need to meet the same condition.

### 3.0 DESCRIPTION OF TEST SPECIMENS

DragonBoard provided four pieces of the material, identified as *DragonBoard Sheathing*. One sample measured 29 × 34 × 180 mm from which three samples 38 mm long were cut. Three additional pieces measuring 38 × 33 × 13mm were also received and layered together to form the fourth test sample. All sections were received by SwRI on December 4, 2007. A description of

**APPENDIX A**  
**TABULAR AND GRAPHICAL DATA**  
**(Consisting of 1 Page)**

