

UNIVERSITY of WASHINGTON



Department of Civil and Environmental Engineering

Introduction.

Foam compression test was carried out on one 12 ½ X 15 Inches. The foam panel is made of two inches square cell with plywood sidewall filled with Styrofoam core. The load is applied on 6X6 steel block on to the top of specimen. Compression test was performed by the University of Washington Structural Engineering Laboratory for Sing Log Home Inc.. The specimen is measured prior to the test.

Test Set-up and Preparation.

The specimen was placed on the load platen of the 120 kips Baldwin test frame. The 6 by 6 Inches square block with ¾" thick was then placed on top at the center of the specimen. An LDT (Linear Displacement Transducer) was used to detect the crosshead movement as the specimen is deformed. Load was then applied at the rate of approximately 30-50 lbf per second.

The extension was measured using an LDT with a 1" potentiometer. The resolution of the LDT was 0.00012 inches. It was attached to the extension end of magnetic base.

Test Results.

The test results for the yield and ultimate strengths for both specimens are shown as followed.

Test Date: 08/08/2002
Performed By: Vince Chaijaroen

Specimen ID n/a
Specimen Dimensions:

Panel size: 12X15 Inch, 0.425" thick
Test Area: 35.36 sq.in (Cross sectional area is provided by the customer)

Results:

Peak Load: 21.1 kips Peak Stress: 0.598 ksi
Stress @ 0.2% offset : n/a Elastic Modulus: 32 ksi

Vince Chaijaroen Date
Structures Lab Technician 8/20/2002

UNIVERSITY of WASHINGTON



Department of Civil and Environmental Engineering

Client Info:

Peter Sing
Sing Log Home Inc.
PO Box 1691 McCleary, WA 98557

Foam Core Compression

