

Laboratory No. M05-1100 Rev. 1.0

Mr. Richard Bergman

Topic: Testing of Post Anchor Assemblies

November 3, 2005

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Introduction and Summary of Analysis

Two prototype anchor post assemblies were submitted for testing to determine maximum horizontal loading strength. The anchor post assemblies were tested with a horizontal load application at a post height of 1070mm.

See Figures 1 to 6 for visual documentation.

Results of Evaluation

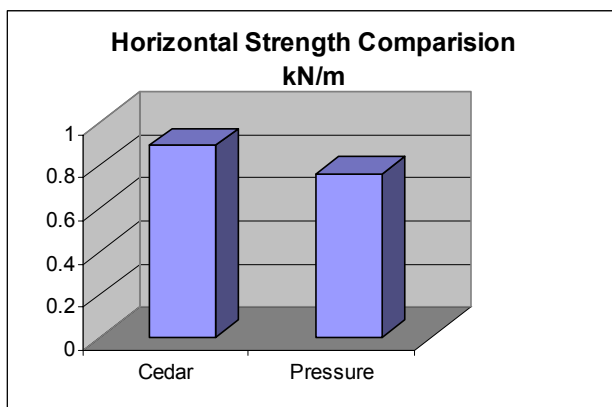
Cedar Post

The cedar post was subjected to horizontal static loading at a post height of 1070mm. The maximum recorded strength prior to failure was 0.89 kN/m. Failure occurred when the post split adjacent to the anchor, and the anchor fastening screws stripped from the post. Table 1 contains a comparative summary.

Pressure Treated Post

The pressure treated post was subjected to horizontal static loading at a post height of 1070mm. The maximum recorded strength prior to failure was 0.76 kN/m. Failure occurred when the post split adjacent to the anchor, and the anchor fastening screws stripped from the post. Table 1 contains a comparative summary.

Table 1 – Results of Load Testing



	Max Strength	Nature of Failure
Pressure Treated Post	0.76 kN/m	Post split adjacent to base, screws pulled from base
Cedar Post	0.89 kN/m	Post split adjacent to base, screws pulled from base

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Figure 1

Photograph showing the failure location of the cedar post.

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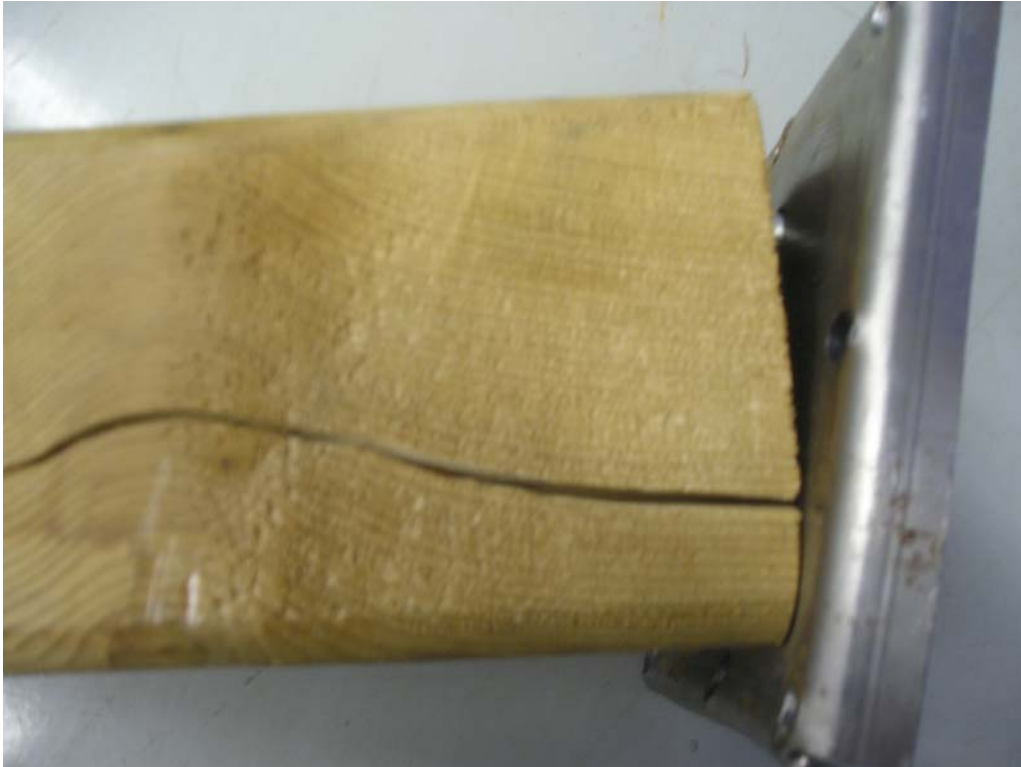


Figure 2

A closer view of the cedar post fracture.

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Figure 3

Another view of the failure location on the cedar post

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Figure 4

Photograph showing the failure location of the pressure treated post.

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Figure 5

A detailed view of the pressure treated post fracture

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Figure 6

Another view of the failure location on the pressure treated post