

Notes Tested: February 21, 2002 and March 13, 2002

Test No. 6794 - Concentrated Load Tests on Railing and on Newel Post

Client: General Stair Corp. (GSC)

Description of Test Specimen

The railing assembly was installed on a nominal 24" deep by 12" high wood platform.

Railing Test: 13'-0 1/2" long, overall.

Newel Post Test: 9'-10" long, overall.

The newel posts were 3 1/2" x 3 1/2" red oak and were 37 1/2" long overall with the top of the post 48" above the floor.

The hand rail was 6010 red oak.

The posts were anchored to the 2 x 12 yellow pine fascia on the platform with a 1/2" x 10 3/4" steel hanger bolt (Sure-Tite Newel Fastening System) which penetrated a special steel plate fastened to the platform.

The bottom of each post was further fastened through the bottom leg of the post with #12 wood screws.

The general details of the installation confirm with the client's drawings titled "Top Mount Rail Test Sample for Construction Research Lab Test Report No. 6794" Sheets 1, 2, 3 and 4 dated 3/14/02.

Test Results:

The hand rail must resist a load of 200 pounds applied in any direction and at any point on the rail according to Section 2305.7 of the South Florida Building Code.

The building officials require a load of 400 pounds maintained for 24 hours with a recovery of at least 80% after removal of the load.

The building officials further require that the Newel post be subjected to a 400 pound load applied 42" above the floor acting outward.

NOTES: THESE TESTS WERE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING STANDARDS: