## HURRICANE ENGINEERING & TESTING INC.

Computer Controlled Product Testing & Design, ......Wind Load Analysis

# Forced Entry Test

DATE: December 6, 1995

REPORT NUMBER:

HETI-95-427F

MANUFACTURER:

Alutech Corporation

8548 N.W. 64 Street Miami, FL 33166

TEST LOCATION:

Hurricane Engineering & Testing Inc.

8532 N.W. 64 Street Miami, FL 33166

LAB. CERTIFICATION NUMBER:

95-0118.02

PRODUCT:

Entry Door

PRODUCT DESCRIPTION: Aluminum w/rigid foam core (Ref. Tensile Test Report # HETI-95-T112)

PRODUCT SIZE:

36"w x 84"h

MODEL:

Series 200

DESIGN LOADS (psf):

+95, -95

NOTE: HETI stamped drawing is an integral part of this report.

DRAWING NUMBER: A95214, Alutech Corp. 12/13/95

TEST WITNESSED BY: (Full or Partial)

Dr. Wakar Ali (HETI)

Mr. Leonardo Savini E.I.T. (HETI) Mr. Terry C. Agee E.I.T. (HETI)

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WITNESSING ENGINEER:

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#### INSTALLATION DETAIL:

The aluminum frame (0.112" thick, 5-13/16"w) was anchored to the wood jamb on each side with five 1/4"x 4" Tapcons at 18" o.c.. The out-swinging door was reinforced with a rigid foam core. Three 4-1/2"x4-1/2" full template steel hinges (spaced at 32" o.c.) were used to attach the door to the frame. The hinges were bolted to the door and frame with four 12-24 F.H. machine screws. A cylindrical lever lock was installed at the midspan of the door and a bulb threshold with a bumper was also installed.

### TEST RESULTS

### **PROCEDURE**

The sample was subjected to 300 pounds of horizontal upward force. The force was applied separately at three locations on the door with a winch and force gage apparatus. The force was held for 30 seconds. Forces were applied successively 6" from the lower left corner, 3" above the lock, and 6" from the upper left corner; each force was applied 2" from the opening side.

### OBSERVATIONS

One sample, as described above, was tested for compliance with Dade County Forced Entry Test as per section 3603.2 of the South Florida Building Code. At the peak of the 300 lb load the door remained flush with the bottom of the chamber. At the conclusion of the test, the sample was structurally intact.

Dr. Wakar Ali President

(HETI)

Hector M. Medina, P.E. Resident Engineer

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