

TEXAS TECH UNIVERSITY

Wind Science & Engineering Research Center

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December 3, 2002

Mr. Steve Frates
Mesker Door Corporation
3440 Stanwood Blvd.
Huntsville, Alabama

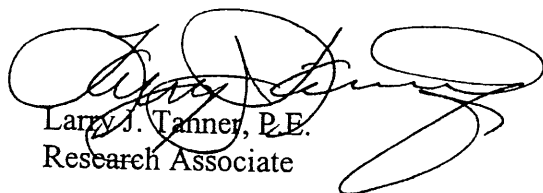
Re: FEMA 361 - Shelter Door Testing

Dear Mr. Frates:

On November 19, 2002, tests were conducted on your company's FEMA 361 Door Assembly. This assembly includes a hollow metal steel door, 3-ft. x 7-ft. x 1 3/4-in., constructed of 16-gage skins and a single 14 gage inner skin on the impact face. The door edges were reinforced with 14-gage channels welded to the skins at 2-in. on center. The door hollow core was filled with 1-in. polystyrene sheet. The door was swung on continuous hinge Model HG 305 7s manufactured by Marker Architectural Products, Inc. and locked with Securitech Model 8444SBO three point locking system. The tests were consistent with FEMA 361 (Design & Construction Guidance for Community Shelters) guidelines requiring the above-ground shelter door to resist a 15-lb. 2x4 missile propelled at 100 mph and to withstand pressures of 1.75 psi for 5 seconds. The missile speed and pressures correlate to a 250 mph tornado.

Congratulations on your shelter door passing the FEMA 361 tests. The Wind Engineering Research Center at Texas Tech University applauds your company's efforts in providing a safe product for the consumer.

Sincerely,

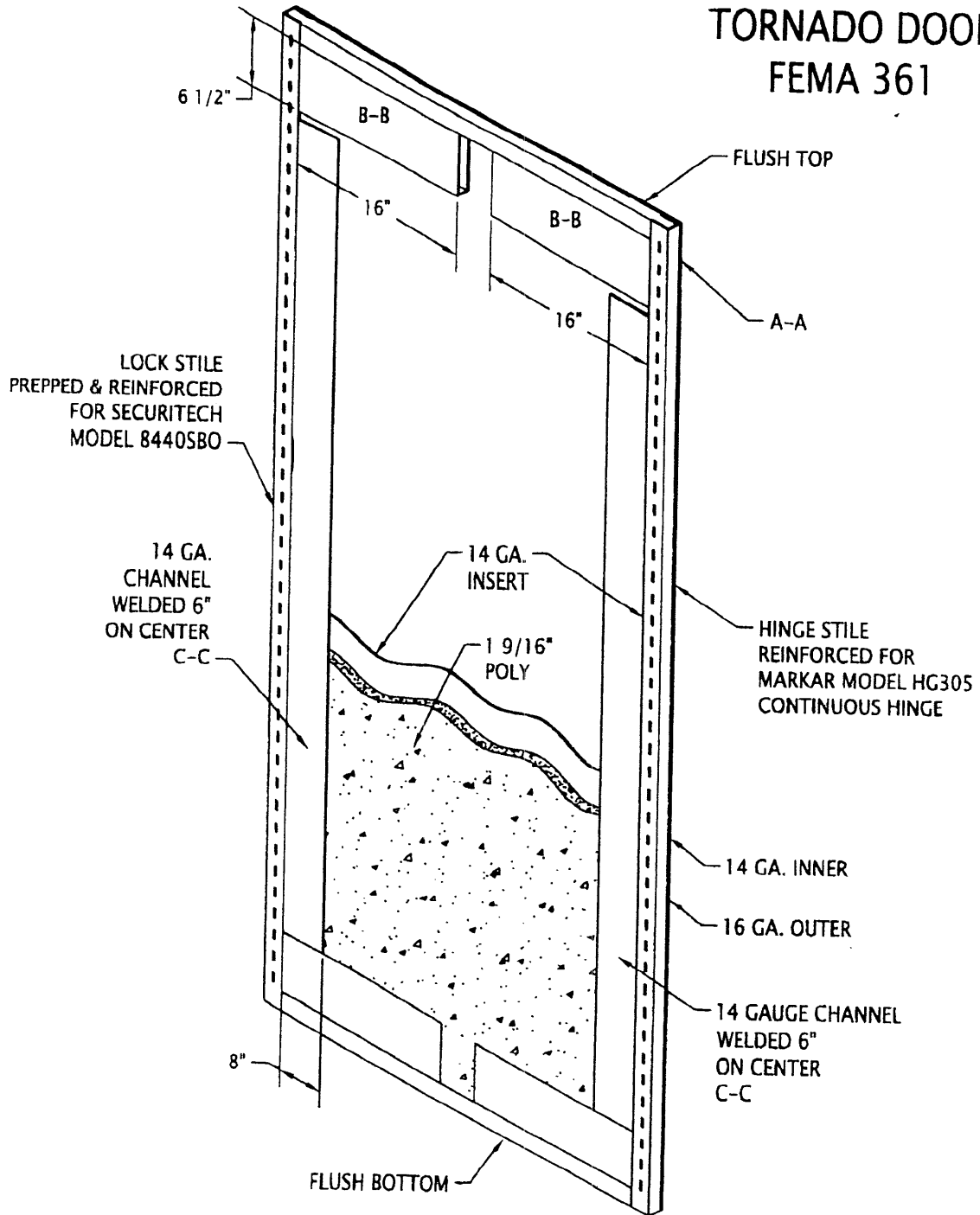


Larry J. Tanner, P.E.
Research Associate

TECHNICAL DATA SHEET

DS-114-1

TORNADO DOOR FEMA 361



ISSUE DATE: DATE

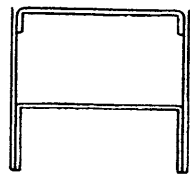
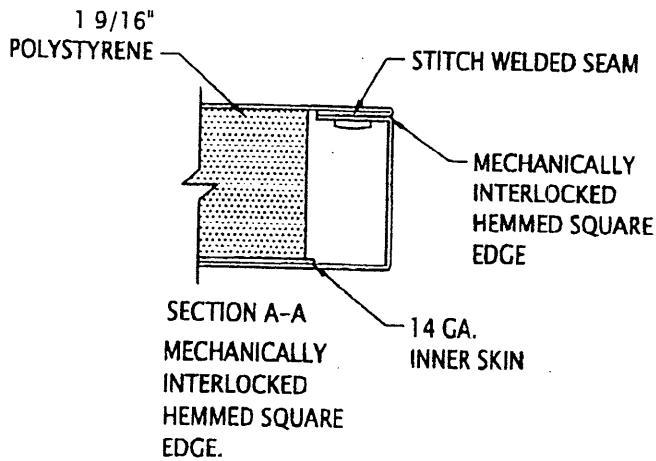


MESKER

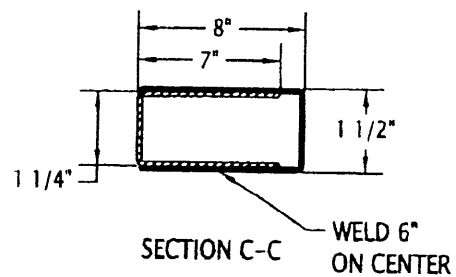
TECHNICAL DATA SHEET

DS-114-2

TORNADO DOOR FEMA 361



SECTION B-B
16 GAUGE TOP
AND BOTTOM
CHANNEL WITH
FULL WIDTH
14 GAUGE BOX
TYPE CLOSER
REINF.



ISSUE DATE: DATE

 **MESKER**