

Issue DS 2021-006: The petitioner Michael J. Kasten, P.E. is seeking a declaratory statement with regard to whether the products in question “Steel Roll Up Doors” are required to meet the material thickness requirement of Section 2222.4.3 of the 7th Edition (2023) Florida Building Code, Building.

Petitioner seeks clarification of the following question:

Question:

If our doors, made with the 26-gauge material, pass the requirements of TAS 201-94, TAS 202-94 and TAS 203-94, would we still be required to meet the 24 gauge material thickness requirement as stated in 2222.4.3?

Background:

For over 50 years, Trachte Building Systems "Manufacturer" has been a designer and manufacturer of roll up doors and public storage buildings. These roll up doors are used in public storage buildings, but the doors are not exclusive to the buildings or to the public storage marketplace. Since 2005, the Manufacturer has maintained product approval for a number of door models with the Florida Product Approval Program. The Manufacturer's product approval FL8055 is presently compliant with the 2017 Florida Building Code and limited for use outside the HVHZ. The doors as approved are presently being made using 26-gauge material.

The doors in question have been tested to ASTM E330 and they can sustain a wind load of 175mph. The Manufacturer is presently considering expanding into the Miami-Dade market / HVHZ and has scheduled the door impact testing to TAS 201-94, TAS 202-94 and TAS 203-94. .

7th Edition (2020) Florida Building Code, Building Chapter 22

SECTION 2217 HIGH-VELOCITY HURRICANE ZONES— MINIMUM THICKNESS OF MATERIAL

2217.1 The minimum thickness of material shall not be less than as set forth in the applicable standards listed in Section 2214.3 except as otherwise set forth herein.

2222.4.3 Metal siding and roof panels shall be not less than 24 gauge.

Exception: Roof panels having an approved fill material designed to act as a diaphragm may use a lighter deck gauge provided that the product approval for the fill material allows its use over the same deck gauge, but in no case shall the deck be less than 26 gauge. The permit applicant shall provide the building official with signed and sealed structural calculations for the diaphragm design prepared by a licensed architect or engineer proficient in structural design. The diaphragm design shall comply with the applicable requirements of Chapter 16 and Chapter 22 (High-Velocity Hurricane Zones).

Staff Analysis

Question:

If our doors, made with the 26-gauge material, pass the requirements of TAS 201-94, TAS 202-94 and TAS 203-94, would we still be required to meet the 24 gauge material thickness requirement as stated in 2222.4.3?

Answer:

The answer to the Petitioner's question is yes. As per section 2217.1 of the 7th Edition (2020) Florida Building Code, Building and in addition to passing the requirements of TAS 201-94, TAS 202-94 and TAS 303-94, the product in question must also comply with the 24 gauge material thickness requirement of section 2222.4.3 of the 7th Edition (2023) Florida Building Code, Building.