

Original Date: June 30, 2009
Revised Date: December 9, 2009

Evaluation Report for Clipay Building Products Company Sectional Residential Garage Doors, W3 through W6 – Classic PUR and Canyon Ridge

I have evaluated the wind load door designs as shown on the drawings listed below. I have reviewed the test reports, which were generated by accredited independent laboratories as required by 9B-72.070(4), the engineering rational analysis, and the product drawings. The test reports are listed below.

For the doors in Tables 1 through 6, the tests were conducted in accordance with ASTM-E330-2002 and ANSI/DASMA 108-2002. The pressures listed on the drawings are either direct results of these tests or results obtained through engineering rational analysis based on actual tests. I have concluded that the door designs listed below in Tables 1 through 6 are in compliance with the test requirements of the 2007 Florida Building Code Section 1714.5.3.1.

TABLE 1: Drawings for doors with Manufacturing Product Code (MPC) DSIU-1A171:

104175-Rev00, max. door size 9'0" x 16'0", ±20 PSF (design load)
104168-Rev00, max. door size 16'0" x 16'0", +20/-21 PSF (design load)
104191-Rev00, max. door size 16'0" x 16'0", ±32 PSF (design load)
104180-Rev00, max. door size 9'0" x 16'0", ±37 PSF (design load)

TABLE 2: Drawings for doors with Manufacturing Product Code (MPC) DSIU-1F171:

104183-Rev00, max. door size 9'0" x 16'0", +28/-29 PSF (design load)
104169-Rev00, max. door size 16'0" x 16'0", ±25.5 PSF (design load)
104260-Rev00, max. door size 18'0" x 16'0", ±25 PSF (design load)
104188-Rev00, max. door size 9'0" x 16'0", +30/-32 PSF (design load)
104184-B-Rev00, max. door size 9'0" x 16'0", +37/-40 PSF (design load)
104234-B-Rev00, max. door size 16'2" x 16'0", +37/-41 PSF (design load)

TABLE 3: Drawings for doors with Manufacturing Product Code (MPC) DSIEO-1E479:

104262-Rev01, max. door size 16'0" x 16'0", ±25 PSF (design load)
104263-Rev01, max. door size 9'0" x 16'0", +33/-37 PSF (design load)

TABLE 4: Drawings for doors with Manufacturing Product Code (MPC) DSIUO-1K479:

104264-Rev01, max. door size 16'0" x 16'0", +32/-37 PSF (design load)
104265-B-Rev01, max. door size 9'0" x 16'0", +38/-42 PSF (design load)

TABLE 5: Drawings for doors with Manufacturing Product Code (MPC) DSIE-1A171:

101654-Rev11, max. door size 9'0" x 16'0", ±37 PSF (design load)

TABLE 6: Drawings for doors with Manufacturing Product Code (MPC) PAN-2F153:

101539-B-Rev11, max. door size 16'2" x 16'0", +37/-41 PSF (design load)

For the doors listed in Tables 7 through 10, Static Pressure Tests were conducted in accordance with TAS 202, ASTM-E330-2002 and ANSI/DASMA 108-2002. Missile Impact and Cyclic Pressure Tests were conducted in accordance with TAS 201 and TAS



203. The pressures listed on the drawings are either direct results of these tests or results obtained through engineering rational analysis based on actual tests. I have concluded that the door designs listed below in Tables 7 through 10 are in compliance with the High Velocity Hurricane Zone test requirements of the 2007 Florida Building Code Sections 1714.5.3.1, 1625 and 1626 and therefore are qualified as impact-resistant assemblies.

TABLE 7: Drawings for doors with Manufacturing Product Code (MPC) DSIU-1F171:
104184-A-Rev00, max. door size 9'0" x 16'0", +37/-40 PSF (design load)
104234-A-Rev00, max. door size 16'2" x 16'0", +37/-41 PSF (design load)
104261-A-Rev00, max. door size 18'2" x 16'0", ±37 PSF (design load)

TABLE 8: Drawings for doors with Manufacturing Product Code (MPC) DSIUO-1K479:
104265-A-Rev01, max. door size 9'0" x 16'0", +38/-42 PSF (design load)
104266-Rev01, max. door size 16'2" x 16'0", +37/-40 PSF (design load)
104267-Rev01, max. door size 18'2" x 16'0", ±37 PSF (design load)

TABLE 9: Drawings for doors with Manufacturing Product Code (MPC) PAN-2F151:
101539-A-Rev11, max. door size 16'2" x 16'0", +37/-41 PSF (design load)

TABLE 10: Drawings for doors with Manufacturing Product Code (MPC) PAN-2F153:
101539-A-Rev11, max. door size 16'2" x 16'0", +37/-41 PSF (design load)

Test Reports:

ITR-426, 423, 433C, 427, 428, 424D, 384B, 429, 436B, 365, 315B, 306, 312, 238B, 358D, 333, 309, 269C, 441, 442B, ATL-0924.01-07, 0128.01-08, 0512.01-08, 0606.01-05, 1106.01-07, 0808.01-06.

Product Description for doors with MPC DSIU-1A171:

These doors consist of 1-3/8" double-skin insulated sections with polyurethane insulation foamed in place between both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 DDS per ASTM A653. The maximum section height is 21". The following models are at least structurally equivalent to the tested door: HDP13, HDPF13, HDPL13, 7130, 7131, 7133, 8130, 8131, 8133, 9130, 9131, 9133.

Product Description for doors with MPC DSIU-1F171:

These doors consist of 2" double-skin insulated sections with polyurethane insulation foamed in place between both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 DDS per ASTM A653. The maximum section height is 21". These doors may have optional Impact-Resistant Glazing in either the top section or the next-to-the-top section. Optional Impact-Resistant Glazing is a one-piece injection-molded front frame and glazing. The following models are at least structurally equivalent to the tested door: HDP20, HDPF20, HDPL20, 7200, 7201, 7203, 8200, 8201, 8203, 9200, 9201, 9203.

Product Description for doors with MPC DSIEO-1E479:

These doors consist of a base 1-3/8" double-skin insulated section with an EPS core laminated to both skins. Decorative overlays and optional cladding are attached to the exterior skin, adding not more than 1" to the total thickness. Both inner and outer skins are min. 27 ga. (0.016") G40 CS Type B per ASTM A653. The maximum section

height is 24". The following models are at least structurally equivalent to the tested door: CAN1nn-XX, BRK1nn-XX. Note that 'nn' represents the arrangement of the decorative overlays. The first digit will have a value from 1 to 3 and the second digit will have a value from 1 to 8. 'XX' represent the type of cladding.

Product Description for doors with MPC DSIUO-1K479:

These doors consist of a base 2" double-skin insulated section with polyurethane insulation foamed in place between both skins. Decorative overlays and optional cladding are attached to the exterior skin, adding not more than 1" to the total thickness. Both inner and outer skins are min. 27 ga. (0.016") G40 CS Type B per ASTM A653. The maximum section height is 24". The following models are at least structurally equivalent to the tested door: CAN1nn-XX, BRK1nn-XX. Note that 'nn' represents the arrangement of the decorative overlays. The first digit will have a value from 1 to 3 and the second digit will have a value from 1 to 8. 'XX' represent the type of cladding.

Product Description for doors with MPC DSIE-1A171:

These doors consist of 1-3/8" double-skin insulated sections with an EPS core laminated to both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 DDS per ASTM A653. The maximum section height is 21". The following models are at least structurally equivalent to the tested door: 2050, 2051, 2053, 4050, 4051, 4053, 62, 64, 65, 62G, 64G, 65G, DP38, FL38, RP38, 134, 135, 136.

Product Description for doors with MPC PAN-2F153:

These doors consist of 2" thick steel pan sections with min. 25 ga. (0.019") skins. The steel skin is at least G40 DDS per ASTM A653. The maximum section height is 21". These doors may have optional Impact-Resistant Glazing in either the top section or the next-to-the-top section. Optional Impact-Resistant Glazing is a one-piece injection-molded front frame and glazing. The following models are at least structurally equivalent to the tested door: 73, 75, 6RST, 42, 42B, 84A, 94, 98, 4RST, 4F, 48, 48B, 1500, 190, 55, 55S, GD5S, GD5SV, GR5S, GR5SV, AR5S, AR5SV, ED5S, ED5SV.

Product Description for doors with MPC PAN-2F151:

These doors consist of 2" thick steel pan doors with min. 25 ga. (0.019") outer skins. The steel skin is at least G40 DDS per ASTM A653. The maximum section height is 21". The following models are at least structurally equivalent to the tested door: 76, 2RST, GD5L, GR5L, AR5L, ED5L.

Limitations:

The drawing(s) cited above are an explicit part of this evaluation report. The text of this report does not attempt to address all design details and relies on the illustrations and text of these drawings as well.

Jams, lintels, sills or other structural elements required to prepare openings are not covered. The design of the supporting structural elements shall be the responsibility of the professional of record for the building or structure and in accordance with current building codes for the loads listed on the drawing(s) referenced above.



EVALUATION REPORT FOR CLOPAY BUILDING PRODUCTS COMPANY SECTIONAL RESIDENTIAL GARAGE DOORS, W3 — W6
CLASSIC PUR AND CANYON RIDGE

Installation requirements per 9B72-070 (4)(e), including attachments, are detailed on the drawing(s) listed above. Installation must be in accordance with manufacturer's installation instructions and must be as shown on the drawing(s) listed above. The manufacturer's licensed design professional listed on the drawing(s) has reviewed the attachment details and installation requirements.

Signature:

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Date: 12/11/07