ICC-ES Evaluation Report

ESR-1361

Reissued August 2025

Revised October 2025

Subject to renewal August 2026

This report also contains:

- CA Supplement
- FL Supplement

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DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES **Section: 06 50 00—Structural Plastics**	**REPORT HOLDER:** **HB&G BUILDING PRODUCTS, INC.**	**EVALUATION SUBJECT:** **STRUCTURAL FIBERGLASS FIRE RATED COLUMNS: (HB&G PermaCast® Fire Rated, Dixie Pacific DuraCast™ Fire Rated, Crown Column™ Fire Rated, SpunCast Structural Fiberglass Column™ Fire Rated and Hartmann Sanders® Fire Rated)** **STRUCTURAL FIBERGLASS COLUMNS:(HB&G PermaCast®, Dixie Pacific DuraCast™, Crown Column™, SpunCast Structural Fiberglass Column™ and Hartmann Sanders®)**	

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021, 2018, 2015, 2012 and 2009 *International Building Code®* (IBC)
- 2024, 2021, 2018, 2015, 2012 and 2009 *International Residential Code®* (IRC)

Properties evaluated:

- Structural
- Surface Burning Characteristics
- Weather Resistance

2.0 USES

Structural Fiberglass Fire Rated Columns are used as interior load-bearing and nonload-bearing (decorative) columns in buildings of Type III, IV and V construction, nonfire-resistance rated and any construction under the IRC. Interior load-bearing columns are used to resist gravity axial loads.

Structural Fiberglass Columns are used as exterior load-bearing and nonload-bearing (decorative) columns on buildings of Type V-B construction under the IBC and any construction under the IRC. Exterior load-bearing columns are used to resist gravity axial loads.

3.0 DESCRIPTION

3.1 General:

Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns are spuncast hollow Fiber-Reinforced Polymer FRP composite columns produced in two formulations, one for interior use and one for exterior use respectively. The columns are produced in both round and square cross sections. The round columns are available in plain and fluted styles. The round columns are tapered toward the top of the column and the wall thickness varies. The round columns are produced in nominal sizes of 8, 10, and 12-inch (203, 254, and 305 mm) diameter. The square columns are produced in a plain style and plain with optional molding. The square columns are not tapered. The square columns are produced in nominal sizes of 6, 8, 10, and 12-inch (152, 203, 254, and 305 mm) dimensions. Structural load bearing columns are limited to the sizes and lengths shown in Table 1. Decorative nonload-bearing columns may be any size and length produced and are also supplied as factory split columns. Column caps and bases are available in various styles. Dimensions of decorative columns are shown in the manufacturer's literature.

Structural Fiberglass Columns were subjected to accelerated weathering, salt spray exposure, freeze-thaw, and resistance to deicing chemicals.

3.2 Surface Burning Characteristics:

3.2.1 Structural Fiberglass Fire Rated Columns at a minimum $^{1}/_{4}$ inch (6.35 mm) and maximum $^{9}/_{16}$ inch (14.3 mm) thickness have an flame spread index (FSI) of 75 or less and an smoke-development index (SDI) of 450 or less, Class B Interior Finish classification, when tested in accordance with ASTM E84.

3.2.2 Structural Fiberglass Columns have a flame spread index (FSI) of less than 200, qualifying for exterior use, when tested in accordance with ASTM E84.

4.0 DESIGN AND INSTALLATION

4.1 General:

Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns are installed in accordance with the manufacturer's published installation instructions and this report.

The manufacturers published installation instructions and this report must be strictly adhered to and a copy of these instructions must be available at all times on the job site during installation.

The instructions within this report govern if there are any conflicts between the manufacturer's instructions and this report.

4.2 Design:

Structural Fiberglass Columns used as load-bearing columns are limited to the sizes and lengths shown in Table 1. The columns are designed to resist gravity loads.

Design loads shall be determined using Chapter 16 of the IBC and must not exceed the loads shown in Table 1. The design values are applicable for temperatures not exceeding 125°F (52°C). Structural design calculations must be submitted to the code official when applying for a permit. The calculations must be signed, sealed and dated by a registered professional engineer when required by the statutes of the jurisdiction in which the project is being constructed.

4.3 Installation:

The columns must not be installed where the maximum eccentricity (0.167 times the column width or diameter measured from the center line of the top of the column), maximum length and maximum allowable loads in accordance with Table 1 are exceeded.

Columns are attached either by use of a flashing cap at the top and two (2) aluminum brackets on opposite sides of the bottom; or two (2) aluminum brackets on opposite sides at the top and bottom of the column; or a column installation plate system.

The brackets, flashing cap and plates are attached to concrete or wood substrates using corrosion-resistant concrete anchors or wood screws as applicable.

5.0 CONDITIONS OF USE:

The Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns described in this report comply with, or are a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Structural Fiberglass Fire Rated Columns (Interior Use):

5.1.1 The columns are used for load-bearing and nonload-bearing applications. Interior load-bearing columns are used to resist gravity axial loads.

5.1.2 The use of the columns to resist uplift or lateral loads resulting from seismic or wind applications is outside the scope of this evaluation report.

5.1.3 The columns must only be used on the interior of buildings.

5.1.4 The columns must only be used in the interior of buildings of Type III, IV and V construction, nonfire-resistance-rated or any construction under the IRC.

5.2 Structural Fiberglass Columns (Exterior Use):

5.3 The columns are used for load-bearing and nonload-bearing applications. Exterior load-bearing columns are used to resist gravity axial loads.

5.2.1 The use of the columns to resist uplift or lateral loads resulting from seismic or wind applications is outside the scope of this evaluation report.

5.2.2 The columns must only be used on the exterior of buildings.

5.2.3 The columns must only be used on the exterior of buildings of Type V-B construction or any construction under the IRC.

5.4 The columns are manufactured at facilities in Troy, Alabama, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Fiber-reinforced Polymer (FRP) Composite Columns Used as Axial Load-Bearing and Nonload-Bearing Architectural and Decorative Columns AC265 (24), Published October 2025.

7.0 IDENTIFICATION

7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-1361) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.

7.2 Structural Fiberglass Fire Rated Columns:

In addition, Structural Fiberglass Fire Rated Columns must be labeled with the manufacturer's name (HB&G Building Products, Inc.) and/or the product trademarks as shown in Figure 1, HB&G PermaCast® Fire Rated, Dixie Pacific DuraCast™ Fire Rated, Crown Column™ Fire Rated, SpunCast Structural Fiberglass Column™ Fire Rated, or Hartmann Sanders® Fire Rated. All Fire Rated Columns must also be labeled with the words "FIRE RETARDANT" and "Class B Interior Finish".

7.3 Structural Fiberglass Columns:

In addition, Structural Fiberglass Columns must be labeled with the manufacturer's name (HB&G Building Products, Inc.) and/or the product trademarks as shown in Figure 1, HB&G PermaCast®, Dixie Pacific DuraCast™, Crown Column™, SpunCast Structural Fiberglass Column™ or Hartmann Sanders®.

7.4 The report holder's contact information is the following:

HB&G BUILDING PRODUCTS, INC.
1015 BRUNDIDGE BOULEVARD
POST OFFICE BOX 589
TROY, ALABAMA 36081
(334) 566-5000
800-264-4HBG
www.hbgbuildingproducts.com
marketing@hbgcompanies.com

TABLE 1—ALLOWABLE AXIAL LOADS (lbs)[1,2,3]
STRUCTURAL FIBERGLASS COLUMNS AND STRUCTURAL FIBERGLASS FIRE RATED COLUMNS

COLUMN TYPE AND NOMINAL SIZE (in)	WALL THICKNESS (in)		MAXIMUM LENGTH (ft-in)	MAXIMUM ALLOWABLE LOAD (lbs)[4]
	Bottom	Top		
6 - Square	0.377	0.341	8-0	8700
6 - Square	0.338	0.317	9-0	8925
6 - Square	0.299	0.292	10.0	6100
8 - Square	0.357	0.342	8-0	6725
8 - Square	0.347	0.353	10-0	4275
8 - Square	0.344	0.358	12-0	4500
10 - Square	0.508	0.512	8-0	5300
10 - Square	0.511	0.498	10-0	4325
10 - Square	0.549	0.505	12-0	7300
12 - Square	0.513	0.502	8-0	5875
12 - Square	0.507	0.490	10-0	5525
12 - Square	0.512	0.470	12-0	6325
8 - Round Tapered	0.335	0.310	8-0	3660
8 - Round Tapered	0.351	0.364	9-0	5300
8 - Round Tapered	0.298	0.365	10-0	4850
10 - Round Tapered	0.309	0.278	8-0	3650
10 - Round Tapered	0.294	0.427	10-0	4325
10 - Round Tapered	0.464	0.205	12-0	6100
12 - Round Tapered	0.352	0.363	8-0	5375
12 - Round Tapered	0.291	0.386	10-0	3890
12 - Round Tapered	0.410	0.422	12-0	5175

Table 1 Notes:

[1]**SI** Units conversion: 1 in. = 25.4 mm, 1 ft = 0.3 m, 1 lbf = 4.5 N.
[2]Round columns include plain and fluted.
[3]Square columns include plain, fluted and recessed panels.
[4]Maximum Allowable Loads are based on a worst-case eccentricity of 0.167 times the column width or diameter measured from the center line of the top of the column.

HB&G BUILDING PRODUCTS

CROWN COLUMN

DIXIE PACIFIC

HARTMANN SANDERS AUTHENTIC ARCHITECTURAL COLUMNS

SPUNCAST STRUCTURAL FIBERGLASS COLUMN™
SPUNCAST STRUCTURAL FIBERGLASS COLUMN™ FIRE RATED

FIGURE 1—PRODUCT TRADEMARKS

DIVISION: 06 00 00—WOOD, PLASTIC AND COMPOSITES
Section: 06 50 00—Structural Plastics

REPORT HOLDER:

HB&G BUILDING PRODUCTS, INC.

EVALUATION SUBJECT:

STRUCTURAL FIBERGLASS FIRE RATED COLUMNS
(HB&G PermaCast® Fire Rated, Dixie Pacific DuraCast™ Fire Rated, Crown Column™ Fire Rated, SpunCast Structural Fiberglass Column™ Fire Rated and Hartmann Sanders® Fire Rated)

STRUCTURAL FIBERGLASS COLUMNS
(HB&G PermaCast®, Dixie Pacific DuraCast™, Crown Column™ and SpunCast Structural Fiberglass Column™ and Hartmann Sanders®)

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns, described in ICC-ES evaluation report ESR-1361, have also been evaluated for compliance with the code*(s)* noted below.

Applicable code edition*(s)*:

- 2025 and 2022 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2025 and 2022 *California Residential Code* (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns, described in Sections 2.0 through 7.0 of the evaluation report ESR-1361, comply with CBC Chapters 6 and 8, provided the design and installation are in accordance with the 2024 and 2021 *International Building Code®* (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 6, 8, 16 and 17, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns, described in Sections 2.0 through 7.0 of the evaluation report ESR-1361, comply with CRC Section R301 and R302, provided the design and installation are in accordance with the 2024 and 2021 *International Residential Code®* (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued August 2025 and revised October 2025.

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Section: 06 50 00—Structural Plastics

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HB&G BUILDING PRODUCTS, INC.

EVALUATION SUBJECT:

STRUCTURAL FIBERGLASS FIRE RATED COLUMNS
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STRUCTURAL FIBERGLASS COLUMNS
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Applicable code editions:

- 2023 and 2020 *Florida Building Code—Building*
- 2023 and 2020 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns, described in Sections 2.0 through 7.0 of the evaluation report ESR-1361, comply with the *Florida Building Code—Building* and *Florida Building Code—Residential*, provided the design and installation are in accordance with the 2021 and 2018 *International Building Code®* (IBC) provisions noted in the evaluation report.

Use of the Structural Fiberglass Fire Rated Columns and Structural Fiberglass Columns for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and *Florida Building Code—Residential* has not been evaluated, and is outside the scope of this supplemental report.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission). Florida Rule 61G20-3 is applicable to products and/or systems which comprise the building envelope and structural frame for compliance with the structural requirements of the Florida Building Code.

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