



Code Compliance Research Report CCRR-0175

Issue Date: 10-31-2016
Renewal Date: 11-28-2017

Valued Quality. Delivered.

DIVISION: 06 00 00 – WOOD, PLASTICS, AND COMPOSITES

Section: 06 50 00 – Structural Plastics

Section: 06 63 00 – Plastic Railings

Tapco International Corporation

3939 Timbro Drive

Metamora, MI 48455

800-971-4148

www.tapcoint.com

REPORT SUBJECT:

Clubhouse Decking

1.0 SCOPE OF EVALUATION

This research report addresses compliance with the following Codes:

- 2015 International Building Code (IBC)
- 2015 International Residential Code (IRC)
- 2012 International Building Code (IBC)
- 2012 International Residential Code (IRC)
- 2009 International Building Code (IBC)
- 2009 International Residential Code (IRC)

Clubhouse Decking has been evaluated for the following properties:

- Structural Performance
- Durability
- Surface Burning

2.0 USES

2.1. Clubhouse Decking is intended for use as a walking surface on exterior decks, balconies, porches, and walkways, including stairs as further defined herein.

3.0 DESCRIPTION

3.1. Materials and Processes - Clubhouse Decking is co-extruded with a cellular PVC core and an acrylic capstock.

3.2. The deck boards have either a solid or grooved cross-section with nominal dimensions of 1 inch thick by 5-1/2 inches wide. See Figure 1.

3.3. Walking Surface - Clubhouse Decking uses an embossed simulated wood-grain pattern surface.

4.0 PERFORMANCE CHARACTERISTICS

4.1. Clubhouse Decking is rated for a uniform live load of 100 lb/ft² when installed on support framing spaced at 16 inches.

4.2. Deck boards used as stair treads are rated for the code-prescribed concentrated load equal to 300 lb when installed with a maximum span of 11 inches. Deck boards used as stair treads shall be installed in a minimum two-span condition. Grooved deck boards shall not be used as stair treads.

4.3. Clubhouse Decking has wind uplift resistance ratings, as determined by the fastening method. See Table 1.

4.4. Clubhouse Decking has a flame spread index of 40 when tested in accordance with ASTM E 84. The referenced criteria, AC174, requires a flame spread index not exceeding 200.

4.5. Clubhouse Decking is deemed equivalent to preservative treated or naturally durable wood for resistance to weathering effects, attack from termites and fungus decay.

4.6. Structural performance has been demonstrated for a temperature range from -20°F to 125°F.

5.0 INSTALLATION

Installation shall be in accordance with the manufacturer's installation instructions and this report. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.



130 Derry Court • York, PA 17406

www.intertek.com/building/



Product
Certification Agency
PCA-125

5.1. Solid deck boards are face-fastened with two fasteners at each joist or the HIDfast™ Hidden Deck Fastener at each joist. See Table 1 for solid deck board fasteners.

5.2. Grooved deck boards may be fastened using Tigerclaw® TC-G or EB-TY® (EBEOA) hidden deck fasteners at each joist. Alternatively, they may be face-fastened and require two fasteners at every joist. Fasteners used for face-fastening shall be as one of the identified in Table 1 for the solid deck boards.

6.0 SUPPORTING EVIDENCE

6.1. Manufacturer's drawings and installation instructions.

6.2. Reports of testing demonstrating compliance with ICC-ES AC174, Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), revised February 2014.

6.3. Reports of testing demonstrating compliance with ASTM D 7032-08 and ASTM D 7032-10a, Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards and Handrails).

6.4. Quality control manual in accordance with ICC-ES AC10, Acceptance Criteria for Quality Documentation, approved June 2014.

7.0 CONDITION OF USE

Clubhouse Decking applications identified in this report are deemed to comply with the intent of the provisions of the referenced building codes subject to the following conditions.

7.1. Deck boards identified in this report are limited to use in Type V-B (5B) construction.

7.2. Deck boards placed at an angle other than 90 degrees to the supporting joist will require spacing such that the span of the deck boards does not exceed 16 inches.

7.3. The wind uplift resistance rating recognized in this report is based on attachment to treated Southern Pine framing (specific gravity, $G=0.55$). Installation on wood framing with a lesser specific gravity may result in a lower wind uplift rating.

7.4. Where required by the building official, engineering calculations and details shall be provided. The calculations shall verify that the anchorage complies with the building code for the type of framing and condition of the supporting construction.

7.5. Deck boards used as stair treads shall be a continuous deck board installed over a minimum two span support with a maximum span of 11 inches on center. Grooved deck boards shall not be used for stair treads.

7.6. Only those types of fasteners and fastening methods described in this report have been evaluated for the installation of the *Clubhouse Decking*; other methods of attachment are outside the scope of this report.

7.7. Compatibility of metal fasteners with the supporting structure including chemically treated wood is not within the scope of this report.

7.8. All products recognized in this report are manufactured in Metamora, Michigan by Tapco International, in accordance with the manufacturer's approved quality control system with inspections by Intertek.

8.0 IDENTIFICATION

8.1. Clubhouse Decking produced in accordance with this report shall be identified with labeling on the individual deck boards that includes the following information:

8.2. Name and/or trademark of manufacturer;

8.3. The following statement "See CCRR-0175 at <https://whdirectory.intertek.com> for uses and performance levels."

8.4. The Intertek Code Compliance Research Report identification and number (CCRR-0175).



9.0 CODE COMPLIANCE RESEARCH REPORT

9.1. Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

9.2. Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

9.3. Reference to the Intertek website address: whdirectory.intertek.com is recommended to ascertain the current version and status of this report.

This Code Compliance Research Report ("Report") is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Report. Only the Client is authorized to permit copying or distribution of this Report and then only in its entirety, and the Client shall not use the Report in a misleading manner. Client further agrees and understands that reliance upon the Report is limited to the representations made therein. The Report is not an endorsement or recommendation for use of the subject and/or product described herein. This Report is not the Intertek Listing Report covering the subject product and utilized for Intertek Certification and this Report does not represent authorization for the use of any Intertek certification marks. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

Table 1 – Wind Uplift Resistance Ratings ⁽¹⁾

Clubhouse Decking	Fastener	Wind Uplift Resistance Rating
Solid Deck Boards	Two #10 x 2-1/2" <i>SplitStop™ Titan III</i> composite screws	600 psf
	Two #10 x 2-3/4" <i>OMG FastenMaster® Cortex</i> composite deck screws	546 psf
	<i>HidFast™ HF 2.5</i> hidden fastener with #10 x 2-1/2" deck screw	94 psf
Grooved Deck Boards	<i>EB-TY®</i> Hidden Deck Fastener (EBEOA) with 1.95" long trim head screw (10 TPI, 0.173" major dia., 0.105" minor dia., 0.121" shank dia., 0.236" head dia.)	102 psf
	<i>TigerClaw® TC-G</i> hidden deck fastener system with 1.52" long pneumatic screw (16 TPI, 0.128" major dia., 0.108" minor dia., 0.115" shank dia., 0.280" head dia.)	108 psf
	<i>TigerClaw® TC-G</i> hidden fastener system with 1.62" long trim head screw (10 TPI, 0.173" major dia., 0.105" minor dia., 0.121" shank dia., 0.236" head dia.)	152 psf

(1) Deck boards are installed on support framing spaced at 16 inches on center.

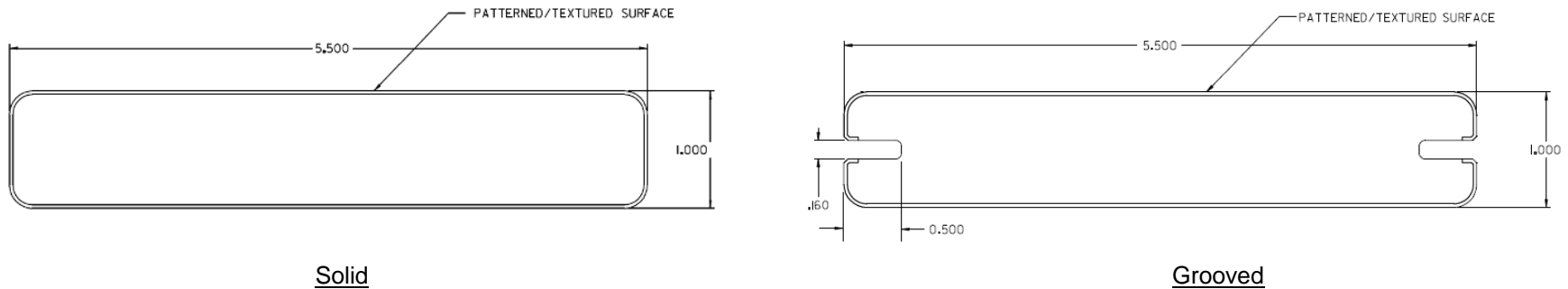
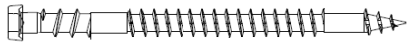


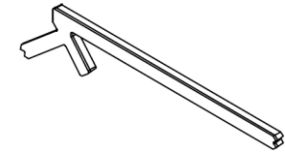
Figure 1 – Clubhouse Decking



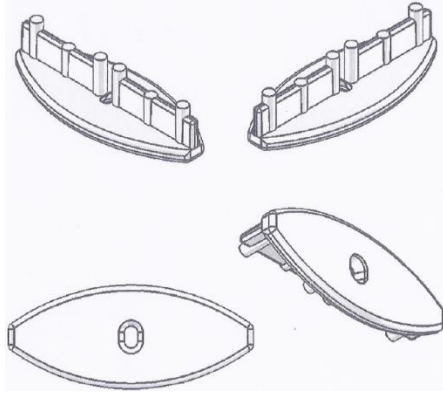
OMG FastenMaster® Cortex®



SplitStop™ Titan III



HIDfast™ HF 2.5



EB-TY® Hidden Deck Fastener (EBEOA)



TigerClaw® TC-G

Figure 2 – Fasteners