Code Compliance Research Report
CCRR-1096

Issue Date: 09-28-2017
Revision Date: 09-18-2025
Renewal Due: 10-31-2025

DIVISION: 06 00 00 – WOOD, PLASTICS, AND COMPOSITES
Section: 06 50 00 – Structural Plastics
Section: 06 53 00 – Plastic Decking

REPORT HOLDER:
Eva-Last Americas, LLC
8560 Belleview Drive,
Suite 225,
Plano, TX 75024 USA
www.eva-last.com

REPORT SUBJECT:
Infinity Deck Boards (STGJ04XX, STGJ30X, STGJ20X, STGJ02AE, STGJ03AE, STGJ04AE, STGJ02AEN)
Apex Deck Boards (STTHM 102, STTHM 103)
Pioneer Deck Boards (STFM101A, STFM104A, STFM105A, STFM107A)

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, 2018 *International Building Code®* (IBC)
- 2024, 2021, 2018 *International Residential Code®* (IRC)

NOTE: This report references the most recent Code editions cited. Section numbers in earlier editions may differ.

1.2 The Deck Boards have been evaluated for the following properties (see Table 1):

- Structural Performance
- Durability
- Surface Burning
- Decay Resistance
- Termite Resistance

1.3 The Deck Boards have been evaluated for the following uses (see Table 1):

- The deck boards are intended for use as a walking surface on exterior decks, balconies, porches, and walkways of Type V-B construction and in dwellings regulated by the IRC. The deckboards may be used in buildings of Type III, IV, or V construction as described in Section 6.3 of this report.

2.0 STATEMENT OF COMPLIANCE

The deck and stair boards comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2, and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.0.

2.1 2024 IBC and IRC Evaluation Reports: The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 All deck boards are co-extruded composite core with fully capped or semi-capped on surfaces. Details see Table 2 and Figures 1, 2, and 3. All deck boards are embossed with a plowed finish.

3.2 The deck boards are produced with either grooved or non-grooved edges to use two fasteners (hidden clips or top fixings) at every joist. For details see Table 4 and Figures 4 and 5.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Uniform Live Load Rating: The deck boards are rated for a uniform live load of 100 lbs/ft^2 (4.79 kN/m^2) when installed with a maximum span indicated in Table 3.

4.2 Stair Treads: Deck boards used as stair boards are rated for the Code-prescribed concentrated load equal to 300 lb. (1335 N) when installed with a maximum span indicated in Table 3. Deck boards used as stair treads must be installed in a minimum two-span condition.

4.3 Wind Uplift Resistance Ratings: See Table 4 for the corresponding deck boards and fasteners indicated.

4.4 Surface Burning Characteristics: The deck boards have a flame spread index of less than 200 when tested according to ASTM E84.

4.5 Termite and Decay Resistance: The deck board materials are deemed equivalent to preservative treated or naturally durable wood for resistance to weather effects, attack from termites, and fungus decay.

4.6 Structural Performance: Structural performance has been demonstrated for a temperature range from -20°F to 125°F (-29°C to 52°C).

5.0 INSTALLATION

5.1 General: The Deck Boards must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

5.2 Application:

5.2.1 The deck boards shall be fastened as described in Table 4. See Figures 4 and 5 for illustrations of the fastening.

5.2.2 Face-fastening of the deck boards shall be top fixing with two M5.0 x 63 mm or M5.0 x 58 mm composite deck screws for timber supports, or two M4.8 x 50 mm composite deck screws for metal supports at each joist.

5.2.3 The grooved deck boards shall be secured with Hidden Fastening Clips (specified in Table 4 and Table 5) at each joist.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 Compatibility of the supporting construction materials with all metal fasteners are subject to approval by the building official.

6.3 Installation is permitted in buildings of Type III, IV or V construction in accordance with IBC Section 705.2.2. Where installation extends to within 5 feet of the line used to determine the fire separation distance, sprinkler protection shall be provided in accordance with IBC Section 706.2.3.1, Exception 3.

6.4 The deck boards are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Manufacturer's drawings and installation instructions.

7.2 Reports of testing in accordance with ICC-ES AC174, *Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails)*, dated January 2025.

7.3 Data in accordance with relevant sections of ASTM D7032-21, *Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrails Systems (Guards or Handrails).*

7.4 Intertek Listing Report "Eva-Last Americas - Deck Board", on the Intertek Directory of Building Products.

8.0 IDENTIFICATION

The Deck Boards are identified with the manufacturer's name (Eva-Last Americas, LLC), address and telephone number, the product name, the Intertek Mark as shown below, the Intertek Control Number, and the Code Compliance Research Report number (CCRR-1096).

9.0 OTHER CODES

This section is not applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 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.

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

10.3 Reference to the bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION	2024 IRC SECTION
Physical properties	2612	R507.2.2
Surface burning characteristics	2612.3	R507.2.2.2

TABLE 2 – PRODUCT DESCRIPTION

SERIES	MODEL	PROFILE	SIZE (W x T), MM	COLOR
Infinity[1]	STGJ04XX	Grooved, solid, fully capped	140 x 23	Tiger Cove, Spanish Saffron, Kona Sunset, Cape Town Grey, Espresso Roast, Sapphire Silver, Sahara Sand
	STGJ30X	Non-Grooved, solid, fully capped	140 x 23	
	STGJ20X	Square edge, solid, fully capped	325 x 30	
	STGJ02AE	Grooved, grid, semi-capped	136 x 25.4	Tiger Cove, Cape Town Grey, Oasis Palm, Caribbean Coral
	STGJ03AE	Double sided square edge, grid, semi-capped	136 x 25.4	
	STGJ04AE	One sided square edge, grid, semi-capped	136 x 25.4	
	STGJ02AEN	Square edge, solid, semi-capped	140 x 25.4	
Apex	STTHM 102	Square edge, solid, semi-capped	140 x 24	Brazilian Teak, Alaskan Driftwood, Himalayan Cedar, Arctic Birch.
	STTHM 103	Grooved, solid, semi-capped	140 x 24	
Pioneer	STFM101A	Grooved, solid, semi-capped	145 x 21	Brazilian Teak, Alaskan Driftwood, Himalayan Cedar, Arctic Birch.
	STFM104A	Starter, solid, semi-capped	145 x 21	
	STFM105A	Wide grooved, solid, semi-capped	190 x 21	
	STFM107A	Wide starter, solid, semi-capped	190 x 21	

[1]Model STGJ04XX, STGJ30X and STGJ20X were previously named DSG02, DSN02 and SST01 respectively.

TABLE 3 – DECK BOARD SPAN RATINGS

SERIES	DECK BOARD	SPAN/LOAD RATINGS [1] (in./psf)	MAXIMUM STAIR TREAD SPAN [2] (in./psf)
Infinity	STGJ04XX	16/100	NA
	STGJ30X	16/100	NA
	STGJ20X	16/100	16/100
	STGJ02AE	16/100	NA
	STGJ03AE	16/100	NA
	STGJ04AE	16/100	NA
	STGJ02AEN	16/100	16/100
Apex	STTHM 102	12/100	12/100
	STTHM 103	12/100	NA
Pioneer	STFM101A	22.5/100	12/100
	STFM104A	22.5/100	12/100
	STFM105A	22.5/100	12/100
	STFM107A	22.5/100	12/100

[1]Span/Load rating is the maximum span in inches and the maximum allowable load in pounds per square. The maximum allowable loads indicated include appliable end use factors. No additional adjustments should be taken.
[2]Stair tread span is based on a continuous deck board over two or more equal spans (3 supports).
[3]See Table 4 for fastening requirements.

TABLE 4 – FASTENERS

FASTENERS	SIZE
Hulk Fasteners™ Composite deck screw for timber applications	M5.0 x 63 mm, M5.0 x 58 mm
Hulk Fasteners™ Composite deck screw for metal applications	M4.8 x 45 mm
Hulk Fasteners™ Timber clip screw	M4.2 x 40 mm, M4.2 x 42 mm
Hulk Fasteners™ Metal clip screw	M4.2 x 40 mm, M4.2 x 31 mm
Hulk Fasteners™ S9 clip	Suitable for 9 mm groove foot heights
Chain™ Collated clip	19mm x 17 mm

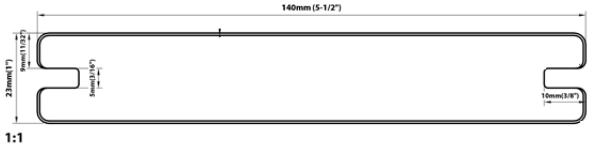
TABLE 5 – ALLOWABLE WIND UPLIFT CAPACITY

DECK BOARD	FASTENERS[4]	MAX. SPAN[1] (IN.)	SUPPORT[3]	WIND UPLIFT RESISTANCE [2] (PSF)
STGJ04XX	Two top fixing M5.0 x 63 mm Composite deck screw per support	16	Timber	150
STGJ30X	Hidden Fastener System: One S9 clip with one M4.2x40 mm Timber Clip Screw per support. Edge use one top fixing M5.0 x 63 mm Composite deck screw	16	Timber	150
STGJ20X	Two top fixing M5.0 x 63 mm Composite deck screw per support	16	Timber	150
STGJ02AE & STGJ04AE (edge)	Hidden Fastener System: One S9 clip with one M4.2x40 mm Timber Clip Screw per support. Edge use one top fixing M5.0 x 63 mm Composite deck screw	16	Timber	103
	Hidden Fastener System: One S9 Clip fastened with one M4.2 x 40 mm Metal Clip Screw per support. Edge use one top fixing M4.8 x 45 mm Composite deck screw	16	Metal	86
STGJ03AE	Two top fixing M5.0 x 63 mm Composite deck screw per support	16	Timber	150
	Two top fixing M4.8 x 45 mm Composite deck screw per support	16	Metal	145
STGJ02AEN	Two top fixing M5.0 x 63 mm Composite deck screw per support	16	Timber	150
	Two top fixing M4.8 x 45 mm Composite deck screw per support	16	Metal	150
STTHM 102	Two top fixing M5.0 x 63 mm Composite deck screw per support	12	Timber	150
	Two top fixing M4.8 x 45 mm Composite deck screw per support	12	Metal	150
STTHM 103	Hidden Fastener System: One S9 clip with one M4.2x40 mm Timber Clip Screw per support. Edge use one top fixing M5.0 x 63 mm Composite deck screw	12	Timber	150
	Hidden Fastener System: One S9 Clip fastened with one M4.2 x 40 mm Metal Clip Screw per support. Edge use one top fixing M4.8 x 45 mm Composite deck screw	12	Metal	150

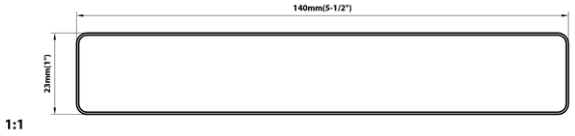
TABLE 5 – ALLOWABLE WIND UPLIFT CAPACITY (cont.)

DECK BOARD	FASTENERS[4]	MAX. SPAN[1] (IN.)	SUPPORT[3]	WIND UPLIFT RESISTANCE [2] (PSF)
STFM101A & STFM104A (edge)	Hidden Fastener System: One Chain collated clip fastened with one M4.2 x 42 mm Timber Clip Screw per support. Edge use one top fixing M5.0 x 58 mm Composite deck screw	24.5	Timber	150
	Hidden Fastener System: One Chain collated clip fastened with one M4.2 x 31 mm Metal Clip Screw per support. Edge use one top fixing M4.8 x 45 mm Composite deck screw	24.5	Metal	150
STFM105A & STFM107A (edge)	Hidden Fastener System: One Chain collated clip fastened with one M4.2 x 42 mm Timber Clip Screw per support. Edge use one top fixing M5.0 x 58 mm Composite deck screw	24.5	Timber	117
	Hidden Fastener System: One Chain collated clip fastened with one M4.2 x 31 mm Metal Clip Screw per support. Edge use one top fixing M4.8 x 45 mm Composite deck screw	24.5	Metal	150

[1]Maximum span is measured center-to-center of the supporting construction.
[2]Wind uplift resistance is based on installation described in Section 5. Values have been adjusted for end use. No further adjustment shall be made.
[3]Allowable wind uplift capacities have been determined based on attachment to the supports. The timber supports shall be Southern Yellow Pine (min. s.g. = 0.46). Metal supports shall be 150mm x 50mm x 2mm (width x height x thickness) Q235 steel tube (min. yield strength 235 MPa). Alternative supports must be approved by the building official.
[4]Fasteners must be installed in accordance with the applicable requirements in Section 5.0 of this report.



STGJ04XX



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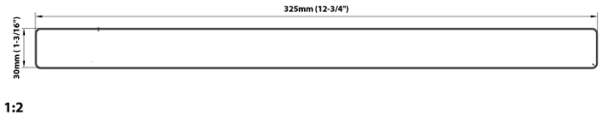

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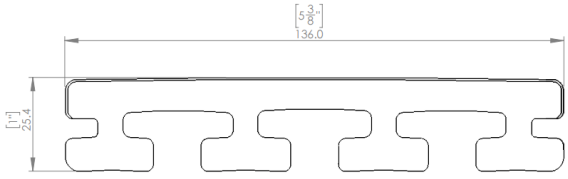

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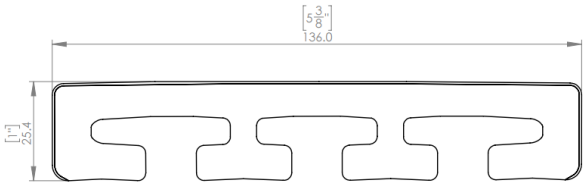

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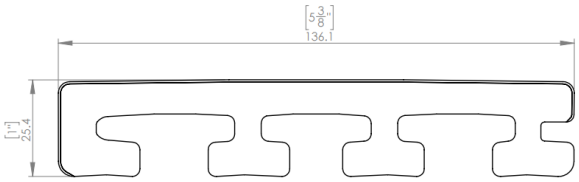

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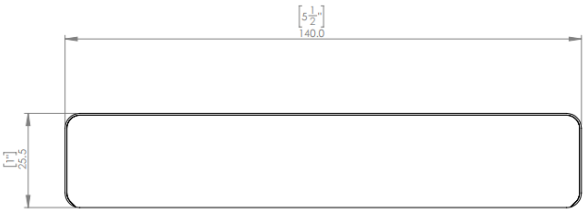
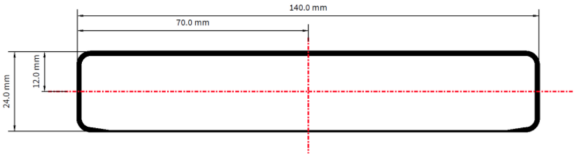
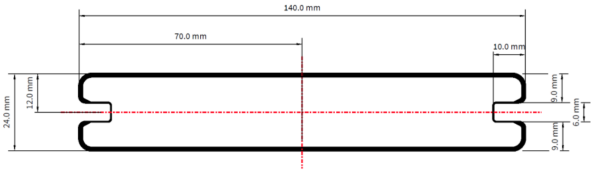


STGJ02AEN

Figure 1: Infinity Series Deck Board

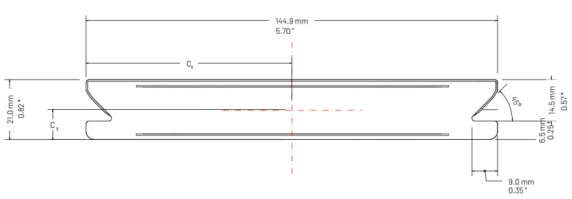


STTHM 102

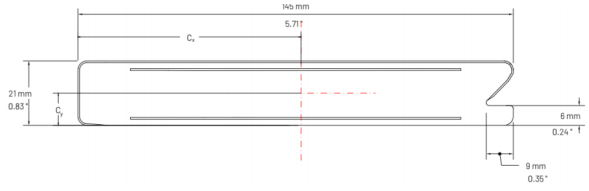


STTHM 103

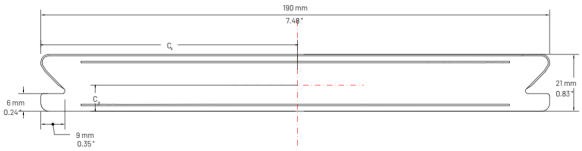
Figure 2: Apex Series Deck Board



STFM101A



STFM104A



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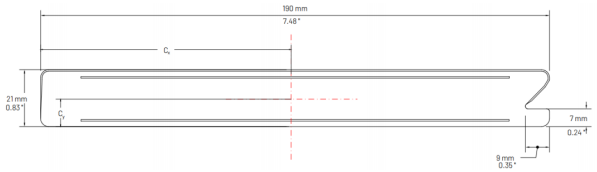
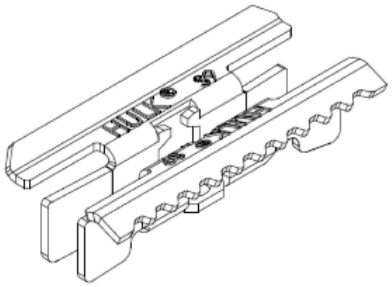
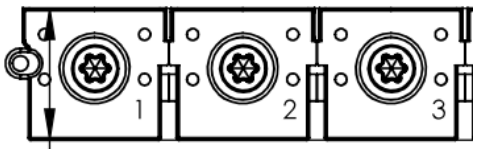


STFM107A

Figure 3: Pioneer Series Deck Board

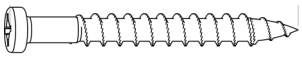


Hulk Fasteners™ Hulk S9 Clip

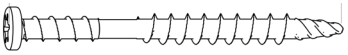


Chain ™ Collated clip

Figure 4: Clips for Hidden Fastener Systems

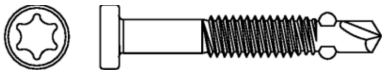


M4.2 x 40 mm/42 mm Timber Clip screw



M5.0 x 63 mm/58 mm Composite deck screw

M4.2 x 40 mm/31 mm Metal Clip Screw



M4.8 x 45 mm Composite deck screw

Figure 5: Screws