

Code Compliance Research Report CCRR-0331

Issue Date: 08-05-2020 Revision Date: 08-18-2025 Renewal Date: 08-31-2026

DIVISION: 05 00 00 - METALS

Section: 05 14 00 - Structural Aluminum

REPORT HOLDER:

Nexan Building Products, Inc. 1213 26th Street SW Cullman, AL 35055 256-739-6172

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REPORT SUBJECT:

Nextdeck® Aluminum Decking

LockDry® Aluminum Decking

1.0 SCOPE OF EVALUATION

- **1.1** This Research Report addresses compliance with the following Codes:
- 2024, 2021 and 2018 International Building Code® (IBC)
- 2024, 2021 and 2018 International Residential Code® (IRC)
- **1.2** Nextdeck® and LockDry® aluminum decking has been evaluated for the following properties (see Table 1):
- Structural Performance
- **1.3** Nextdeck® and LockDry® aluminum decking has been evaluated for the following uses:
- Aluminum decking is intended for use as a walkway surface on exterior decks, balconies, porches and walkways, including stairs as further defined herein.

2.0 STATEMENT OF COMPLIANCE

Nextdeck® and LockDry® aluminum decking complies 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.

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 IBC.

3.0 DESCRIPTION

- **3.1** Nextdeck® Aluminum Decking is a decking product used on outdoor decks, extruded from 6005-T5 aluminum with a powder coated finish on all sides. There is one profile board, installed with hidden clips for attachment to the deck frame. See Figures 1 and 2.
- **3.2** LockDry® Aluminum Decking is a decking product used on outdoor decks, extruded from 6005-T5 aluminum with a powder coated finish on all sides. There are three profiles; Starter, Main, and Finisher Board. The Starter and Finisher boards are used for the stair treads. See Figures 3 and 4.

4.0 PERFORMANCE CHARACTERISTICS

- **4.1** Nextdeck® and LockDry® aluminum decking structural capacity for live loads have been established in accordance with AA ADM1 as specified in IBC Section 2002.1 and IBC Table 1607.1 #5.
- **4.2** Nextdeck® and LockDry® aluminum decking is rated for a uniform live load of 100 psf and the code-prescribed concentrated load equal to 300 lb when installed in accordance with Table 2.
- **4.3** Nextdeck® and LockDry® aluminum decking is rated for wind uplift resistance with the fastening systems as described in Table 2.
- **4.4** Stair treads shall be installed in a minimum two-span condition.



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5.0 INSTALLATION

- **5.1 General:** Nextdeck® and LockDry® aluminum decking 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** Nextdeck® and LockDry® aluminum decking is fastened with the fastening systems described in Table 2.

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** Nextdeck® and LockDry® aluminum decking is intended for use as a walkway surface on exterior decks, balconies, porches and walkways, including stairs as further defined herein.
- **6.3** Aluminum decking placed at an angle other than 90 degrees to the supporting joist will require support framing at a reduced spacing such that the span of the decking longitudinal to its length does not exceed the span listed in Table 2.
- **6.4** 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.
- **6.5** Compatibility of the supporting construction materials with all metal fasteners are subject to approval by the code official.
- **6.6** The *Nextdeck*® and *LockDry*® aluminum decking is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc. (AA-647).

7.0 SUPPORTING EVIDENCE

- **7.1** Manufacturer's drawings and installation instructions.
- **7.2** Reports of testing and engineering in accordance with the AA ADM, Aluminum Association Aluminum Design Manual: Part 1-A Specification for Aluminum Structures.
- **7.3** Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

8.0 IDENTIFICATION

The Nextdeck® and LockDry® aluminum decking is identified with the manufacturer's name (Nexan Building Products), the product name, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0331).



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 https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.



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TABLE 1 - PROPERTIES EVALUATED

PROPERTY	2024, 2021, 2018 IBC SECTION	2024, 2021, 2018 IRC SECTION	
Structural Performance	mance Section 1607		
Aluminum	Chapter 20	Section R301.1.1	

TABLE 2 – PERFORMANCE RATINGS

Product	Fastening Description	Span/Load Ratings ⁽¹⁾	Stair Tread Span		
			Span	Deflection	Wind Uplift Resistance ^(4,5)
Nextdeck® Aluminum Decking	Nylon clip fastened with #8 x 2-1/4 inch stainless steel screw (8 TPI, 0.164 inch major dia., 0.122 inch shank dia., 0.225 inch head dia., type 17 point) at every joist. At the edges, a #8 x 2-1/4 inch stainless steel screw (8 TPI, 0.164 inch major dia., 0.122 inch shank dia., 0.225 inch head dia., type 17 point) on a 45-degree angle at every joist. See Figure 2.	24 inches / 100 psf	24 inches	0.1939 inches ⁽²⁾ at 300 lbs	189 psf
LockDry® Aluminum Decking	One #10 x 1-1/2 inch stainless steel , panhead screw (12 TPI, 0.189 inch major dia., 0.128 inch minor dia., type A point). See Figure 4.	24 inches / 100 psf	24 inches	0.1747 inches ⁽³⁾ at 300 lbs	85 psf

⁽¹⁾ Span/load rating is the maximum span in inches and the maximum allowable load in pounds per square feet (psf).

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⁽²⁾ Stair tread deflection for the *Nextdeck*® is for a single-span condition.

⁽³⁾ Stair tread deflection for the *LockDry*® is for a two-span condition.

⁽⁴⁾ Wind uplift resistance is based on installation described in Section 5. The wind uplift resistance rating recognized in this report is based on attachment to 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.

⁽⁵⁾ Allowable wind loads are applicable to wind design pressure derived from allowable stress design wind speeds (V_{asd}) per Section 1609.3.1 of the IBC.



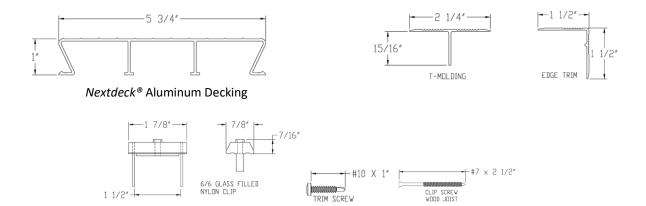


Figure 1 - Nextdeck® Aluminum Decking Components

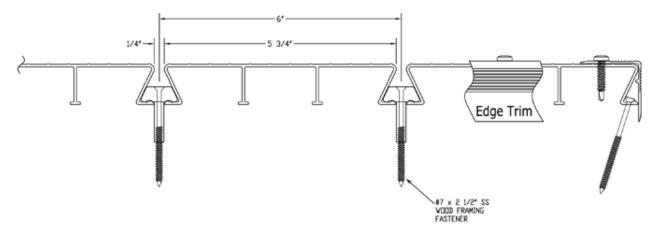


Figure 2 - Nextdeck® Aluminum Decking Assembly





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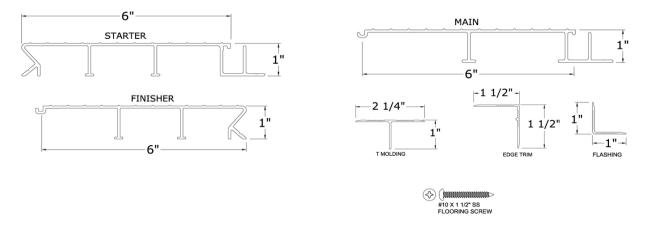


Figure 3 – LockDry® Aluminum Decking Components

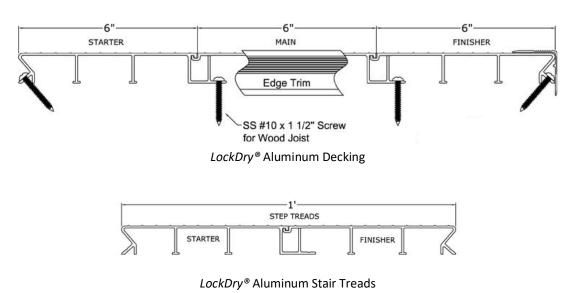


Figure 4 – LockDry® Aluminum Decking Assemblies





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