

### **Terreal North America**

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www.terrealna.com



# **NEXCLAD**

SMALL FORMAT TERRACOTTA WALL CLADDING





Terreal North America is a leading manufacturer of architectural terracotta facade systems. A subsidiary of Ludowici Roof Tile, Terreal North America takes an engineered systems and solutions approach to designing and manufacturing terracotta cladding

companies, Terreal North America's cladding and sunscreen products are engineered and manufactured in  $facilities\,with\,over\,300\,years\,of\,terracotta$ production experience. Terreal North America is based in New Lexington, Ohio and is the sole U.S. manufacturer's

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## MANUFACTURING

NeXclad tiles are made from some of the finest clay in the world. Our clay is harvested just 5 miles from NeXclad's manufacturing facility, which is produced in the historic Ludowici tile factory in Southeast Ohio. Southeast Ohio boasts some of the highest-quality clay deposits available, allowing us to provide premium terracotta products through our proximity, and use, of these locally sourced raw materials.

# **QUALITY ASSURANCE**

Available in (2) formats, a variety of surface textures, and boundless color possibilities, NeXclad is the go-to solution for exterior and interior design realizations. A variety of terracotta corner tiles are available with exact field tile color matching for a harmonious building envelope.

The first of the two formats, our overlapping shingle, can be installed directly to wall sheathing or in a rainscreen framing application. Our second format, NeXclad True, is designed to be installed as a sleek, streamlined flush tile.



#### **FEATURES**

- LEED SS Credit\* Heat Island Reduction; 1-2 points for LEED approved colors that meet an initial SRI > 39 or a 3 year aged SRI > 32
- LEED MR Credit Building Product Disclosure and Optimization; sourcing of raw materials
- LEED MR Credit Material Ingredients; Cradle to Cradle certified for material health, material reutilization, renewable energy and carbon management, water stewardship and social fairness.

#### **CERTIFICATIONS**

- 75-year material warranty, including color
- ◆ ASTM C67 Rated
- ◆ Florida Building Code approval\*
- Miami-Dade approval for wind uplift resistance\*
- Class A fire rated

## **ASTM TESTING**

- ASTM C67-07A Breaking Load Test (passed)
- ASTM C67-07A Efflorescence Test (passed)
- ASTM C67-07A Freeze-Thaw Test (passed)
- ASTM C67-07A Water Absorption Test (passed)

#### TERRACOTTA ATTRIBUTES

- Warm, all-natural material provides superior aesthetics and unlimited design options
- Variety of colors, textures, and sizes
- Color permanent facade
- Sustainable material, to last 100 years
- Low maintenance—does not require painting, caulking or repointing

<sup>\*</sup> For roofing applications

## **SURFACE TEXTURES & PROFILES**

NeXclad tiles are available in a variety of surface textures to enhance your facade's aesthetic. Textures range from our gentile smooth Classic, to lightly sand surfaced Lanai, to the bark textured Americana. NeXclad tiles are available in shake and slate textures allowing for low maintenance facade alternatives that mimmick the appearance of real wood shakes and natural slates.

### SHINGLE APPLICATION



#### CLASSIC

A smooth surface and flat butt give the Classic interlocking tile a clean look. Available in 14" and 16" profiles.



#### LANAI (weathered)

Lanai surface has a square butt with a sandblasted weathering. Its clean, uniform shape is enhanced by the textured surface. Available in 14" and 16" profiles.



#### **LEXINGTON SLATE**

An interlocking tile with a natural quarried slate texture featuring all the beauty of natural slate with the enhanced durability and longevity of terracotta. Available in a 7-1/2" vertical exposure.



#### **LEXINGTON SLATE PREMIER**

Lexington Slate Premier consists of three widths of Lexington Slate surface texture tiles made to offer a more authentic slate appearance.



#### LUDOSLATE

LudoSlate is a lightweight interlocking terracotta tile featuring the chiseled edges and texture of natural slate. LudoSlate can be installed in straight rows or staggered.



#### **LUDOSLATE PREMIER**

LudoSlate Premier consists of three widths of LudoSlate surface texture tiles made to offer a more authentic appearance.

## SHINGLE APPLICATION (continued)



#### **AMERICANA**

Featuring a pressed bark texture and gently rounded butt. Provides a refined yet formal-rustic look to complement a variety of architectural styles. Available in 14" and 16" profiles.



#### **CENTURY SHAKE PREMIER**

Century Shake Premier is our Century Shake surface texture offered in three tile widths—creating a random appearance for a more authentic shake look.



#### **WILLIAMSBURG**

Williamsburg interlocking tile has a scored sawn wood shake texture and a square butt giving it the same texture and character of wood shakes. Available in 14" and 16" profiles.



#### **CENTURY SHAKE**

A thick profile interlocking tile with rugged texture and uneven surface. This tile has pressed grooves with a lightly scratched hand-split texture and rugged butt to mirror the appearance of real wood shakes with 11.5" vertical exposure.



#### LUDOSHAKE

LudoShake is a lightweight interlocking terracotta tile featuring the texture and varied thickness of a wood shake that can be installed in straight rows or staggered for appearance for a more authentic shake a more rustic look.



#### **LUDOSHAKE PREMIER**

LudoShake Premier is our LudoShake surface texture offered in three tile widths—creating a random width

## **FLUSH APPLICATION**



#### **NEXCLAD TRUE**

One size designed to install as a flush panel. Comes standard with a smooth surface



#### **NEXCLAD TRUE WEATHERED**

NeXclad True's weathered surface includes sandblasted weathering. Its clean, uniform shape is enhanced by the textured surface.



NeXclad comes with an industry leading 75-year material warranty, which includes color performance, backed by a US based company in continuous operation since 1888.



## PHYSICAL CHARACTERISTICS

PROFILE	WEIGHT PER SF (LBS)	NOMINAL SIZE (H x V x T)	NOMINAL EXPO- SURE (H x V x T)	BASE TEXTURE
		SHINGLE APPLIC	CATION	
Americana 14"	8.00	9" x 14" x 7/8"	8-1/4" x 11" x 7/8"	Pressed Bark
Americana 16"	7.50	10-1/4" x 16" x 7/8"	10-1/8" x 13" x 7/8"	Pressed Bark
Century Shake	6.63	10-1/2" x 14-1/2" x 1"	10" x 11-1/2" x 1"	Hand Split Shake
Century Shake Premier	6.79	5-1/2" × 14-1/2" × 1" 7-3/16" × 14-1/2" × 1" 10-1/2" × 14-1/2" × 1"	5" × 11-1/2" × 1" 6-11/16" × 11-1/2" × 1" 10" × 11-1/2" × 1"	Hand Split Shake
Classic 14"	8.00	9" x 14" x 7/8"	8-1/4" x 11" x 7/8"	Smooth
Classic 16"	7.50	10-3/4" x 16" x 7/8"	10-1/8" x 13" x 7/8"	Smooth
Lanai 14"	8.00	9" x 14" x 7/8"	8-1/4" x 11" x 7/8"	Weathered
Lanai 16"	7.50	10-3/4" x 16" x 7/8"	10-1/8" x 13" x 7/8"	Weathered
Lexington Slate	8.23	14-3/4" x 10-1/2" x 1"	14" x 7-1/2" x 1"	Quarried Slate
Lexington Slate Premier	7.83	7-5/8" x 10-1/2" x 1" 11-3/8" x 10-1/2" x 1" 14-3/4" x 10-1/2" x 1"	7" × 7-1/2" × 1" 10-1/2" × 7-1/2" × 1" 14" × 7-1/2" × 1"	Quarried Slate
LudoShake	5.98	10-3/4" × 16" × 3/4"	10-1/8" x 13" x 3/4"	Shake
LudoShake Premier	6.76	5-3/4" x 16" x 3/4" 7-3/4" x 16" x 3/4" 10-3/4" x 16" x 3/4"	5" x 13" x 3/4" 7" x 13" x 3/4" 10-1/8" x 13" x 3/4"	Shake
LudoSlate	5.98	10-3/4" x 16" x 3/4"	10-1/8" x 13" x 3/4"	Natural Slate
LudoSlate Premier	6.76	5-3/4" x 16" x 3/4" 7-3/4" x 16" x 3/4" 10-3/4" x 16" x 3/4"	5" x 13" x 3/4" 7" x 13" x 3/4" 10-1/8" x 13" x 3/4"	Natural Slate
Williamsburg 14"	8.00	9" x 14" x 7/8"	8-1/4" x 11" x 7/8"	Sawn Wood Shake
Williamsburg 16"	7.50	10-3/4" x 16" x 7/8"	10-1/8" x 13" x 7/8"	Sawn Wood Shake
		FLUSH APPLICA	ATION	
NeXclad True	8.15	11-3/4" x 7-7/8"	11-7/8" x 8"	Smooth or Weathered





## THE ART & SCIENCE OF NEXCLAD COLOR

Terracotta by its very nature is warm, earthy and inviting. Enhancing the natural qualities of terracotta by applying a glaze mixture prior to firing can create spectacular colors unable to be replicated on other building materials.

Creating the color of a terracotta tile is part science, and part art. A natural range of tones is a feature within any given color. The range of tones that arise from the manufacturing process is a normal and very desirable feature of natural clay tile-imparting richness, character and a dimensional appearance to the installed product

The high temperature firing process used at our manufacturing facility produces vibrant colors that do not fade, spall, effloresce, or significantly change over time. Our color glazes are kiln-fired at extreme temperatures during production, fusing the color into the tile and ensuring that the original tones and hues are retained for generations. This is why we include color in our industry leading 75-year material warranty.

We pride ourselves on our long history of color mastery and being recognized as an industry expert in glazed terracotta tile. With over 50 designer color blends and the ability to custom-match nearly any hue, the color possibilities are endless.

#### STANDARD COLOR BLENDS



SUNSET RED\*\* (S4) AGED SRI VALUE=32

(SL5) AGED SRI VALUE=28

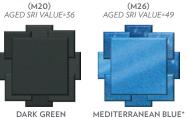


SLATE RED

BEACH BROWN\*

AGED COPPER (CR/M9 SPOT)





SUMMER ROSE



SANTIAGO ROSE



LAVA BLACK\*\*

(S1/M13) AGED SRI VALUE=12

(SL3/SL1 MIST)

HISTORIC RED





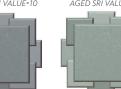
DESERT SAND

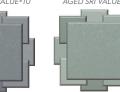
(M12) AGED SRI VALUE=51



BARCELONA BUFF

(M7) AGED SRI VALUE=64





MONTPELIER GREEN (SL2)
AGED SRI VALUE=33

SLATE GRAY (SL3) AGED SRI VALUE=23





GOLDEN RED CEDAR (CR/094-11M SPOT)



SLATE GRAY



EMPIRE GREEN (M14) AGED SRI VALUE=47







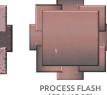




(M17) AGED SRI VALUE=90







EBONY

AGED SRI VALUE=6

EARTH GRAY

(M4/M13 SPOT)



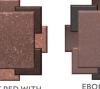
(\$4/M13 MIST)

ANTIQUED

MONTPELIER GREEN (M12/SL2 M-H MIST)

BRUNSWICK BLACK

(SL1) AGED SRI VALUE=6





MIDNIGHT BLACK\*

(G6) AGED SRI VALUE=0







(M12/SL1 M-H MIST)



(M12/SL3 MIST M>H)



ASH GRAY

(M8) AGED SRI VALUE=13





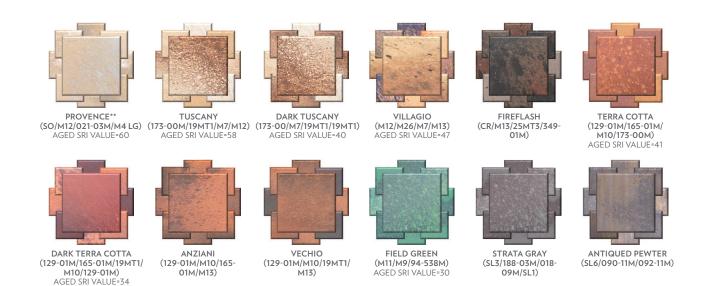


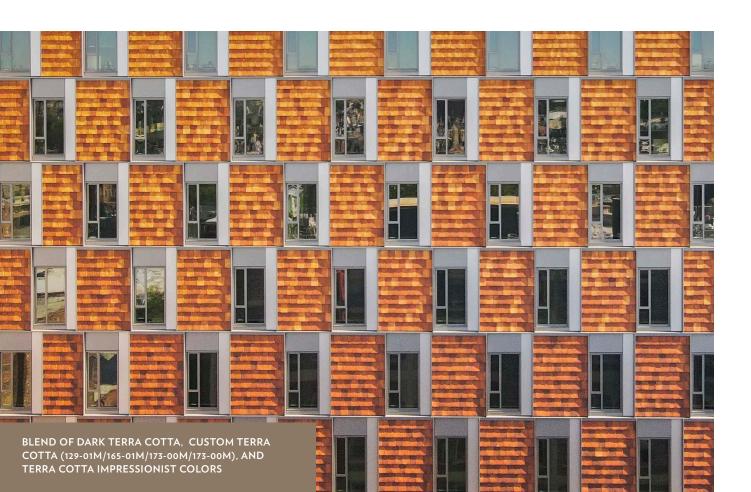
\*Gloss \*\*Weathered

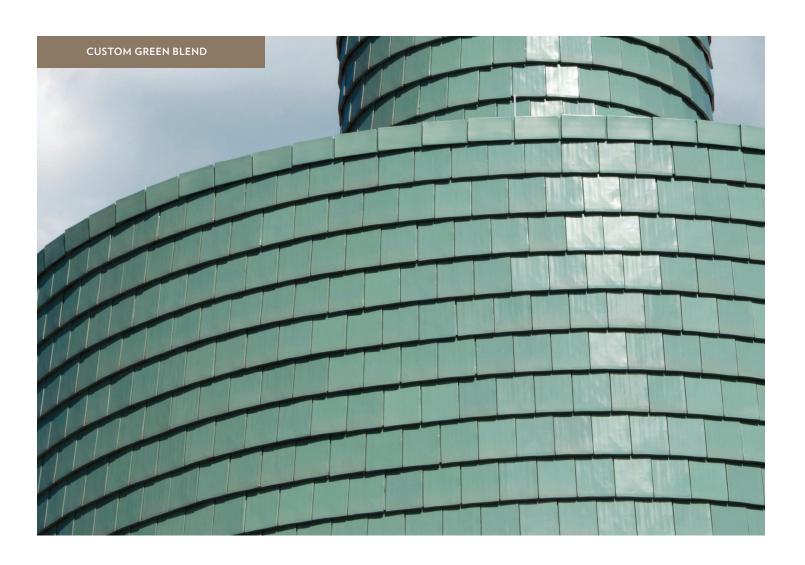
WESTERN CEDAR

#### **IMPRESSIONIST SERIES**

The Impressionist Series utilizes two to three complementary shades applied randomly over a base color to create a unique patina for a designer color palette. Standard blends can be selected, or custom blends can be created using varying percentages of Impressionist Series colors.







### **CUSTOM COLOR DEVELOPMENT**

Our expert ceramic engineers have developed an impressive array of standard design colors over the years, and even more impressive, hundreds of custom colors—all to meet the needs of design professionals around the world. They work hand in hand with architects, designers and building owners to not only create beautiful custom colors, but also color blends and designs, mixing hues to create a subtle, or dramatic, one-of-a-kind statement.

Mixing a custom glaze color is unlike mixing a paint color—there are different techniques and skill sets that must be applied. Our ceramic engineers build off of a basic formula, then mix, adjust, and fire multiple trials to test each formulation's outcome. Those fired colors (glazes) are analyzed, adjusted, and mixed time and time again until the desired color is developed.

In addition to our standard texture offerings, our ceramic engineers can work with you to create a custom surface texture suitable for your tile. When factoring in texture, be sure to note the surface of your tile can affect the final color appearance. Whether you are trying to match a historic tile, want to combine a number of standard textures or create your own surface texture, our craftsmen will work with you to make your design vision a reality.

## **CUSTOM TEXTURES**

Our skilled craftsmen can recreate a number of textures that authentically replicate the surface of age-old terracotta tiles. Custom textures can be applied to match historic applications or to meet your specific design aesthetic. Surface textures can create unique effects with colors by varying light reflectances from the tile and reduce glare. Many tile textures are applied by hand which allows each clay tile to have a unique, handmade look. Textures can be combined to create a unique appearance or we can work with you to create a new custom surface texture. *Note: Not all textures are available on each tile profile.* 



3-Directional Scoring



Brushed and Battered Butts



**Battered Butts** 



Fine Machine Scoring



Medium Machine Scoring



Hand Slushed



Hand Roughed



Weathered







## **PRINCETON UNIVERSITY**

PRINCETON, NEW JERSEY

In 2005, our first NeXclad project began when Princeton University set out to develop a 10-year plan to revitalize student housing on their campus. Completed in 2015, Princeton University's newest graduate student community, Lakeside Apartments and Townhomes, provides housing for over 715 graduate students and their families in a collection of townhomes and mid-rise apartments on 14 acres located on the main campus.

The decision to creatively use traditional roof tile by Ludowici, our parent company who has been in the architectural terracotta business since 1888, as a wall cladding material resulted in the birth of our small-format NeXclad product line, first used in the LudoSlate surface texture for both roof and wall components on this project.

One of the Lakeside project's main goals was to improve the condition and sustainability of their buildings while limiting the impact on the surrounding woodlands-a goal in part achieved by choosing our terracotta wall cladding.

The Lakeside community is highlighted by an extensive student common area featuring a multi-purpose event space, staff offices, community living room, full kitchen, outdoor deck and barbecue, computer facilities, exercise room, and wrapped 550 car parking structure. Winding through the complex are pathways and vistas carefully located to connect Princeton's campus to adjacent Lake Carnegie.

This large-scale project on such a prestigious campus faced a number of challenges throughout the design and construction phases. The design team conducted thorough testing of two existing 1960's era concrete structures on the site and found that building new structures, with better orientation and an improved thermal envelope, would reduce carbon greenhouse gas emissions by 42% over a 10-year period, all while adding an additional 300 beds.

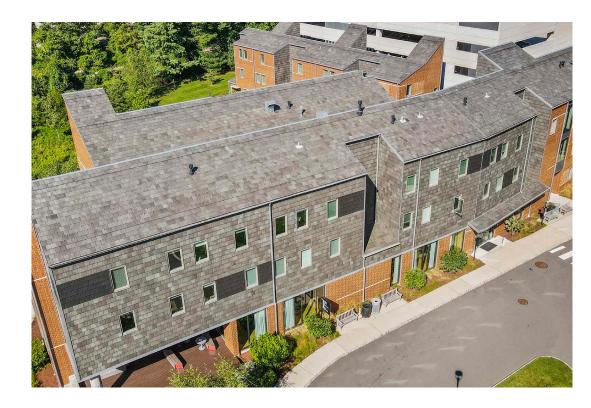
Once the direction was set to replace the existing structures, the design team was tasked with creating a complex that would look and feel like a community, all while maintaining the richness and scale of the existing university buildings. As part of Princeton's sustainability efforts, the complex would also need to blend with the surrounding woodlands and meet LEED Silver Certification.

Awards: LEED Silver Certification; USGBC NJ Residential Project of the Year

**Princeton University** | LudoSlate NeXclad Color(s): Custom Impressionist SL2/SL3/018-09M SM with Custom 130-11M SM accent tiles

Architect: Studio Ma











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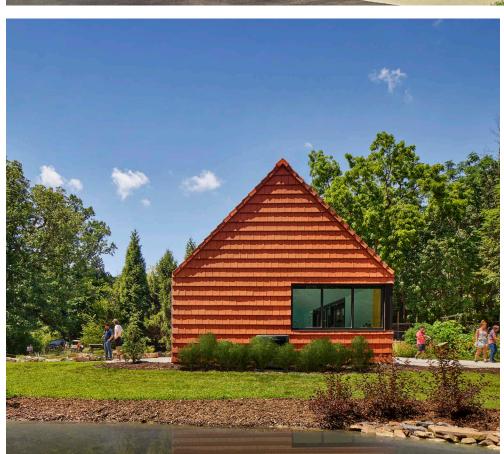
















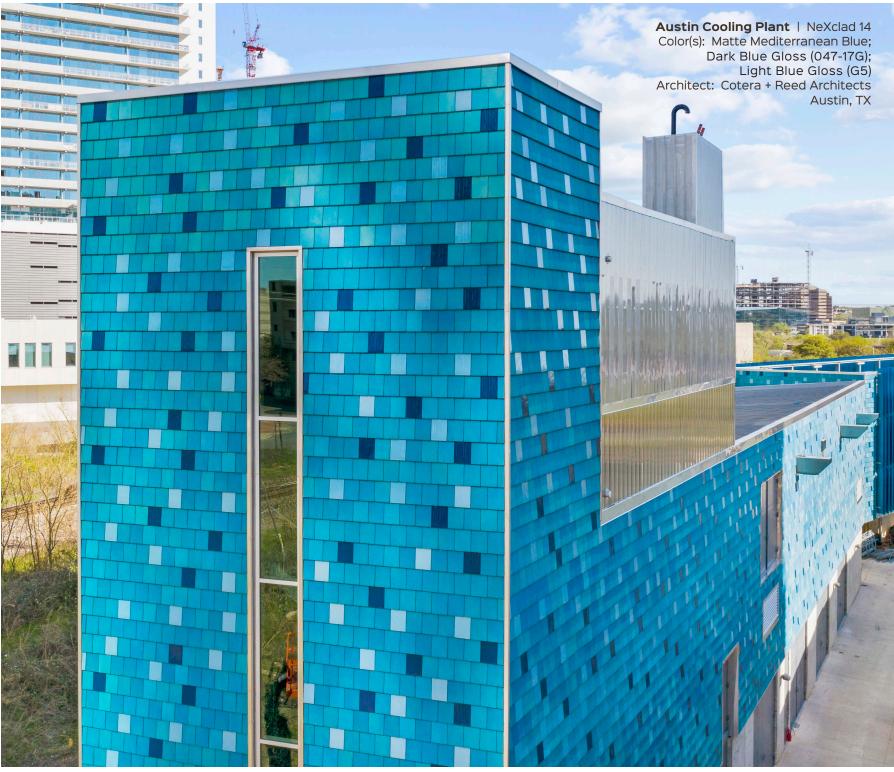












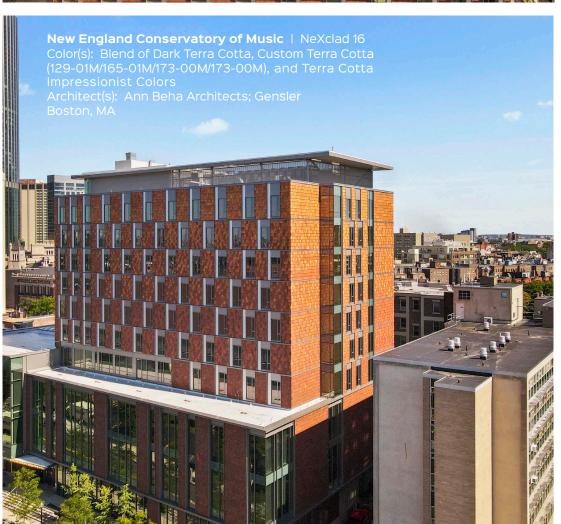


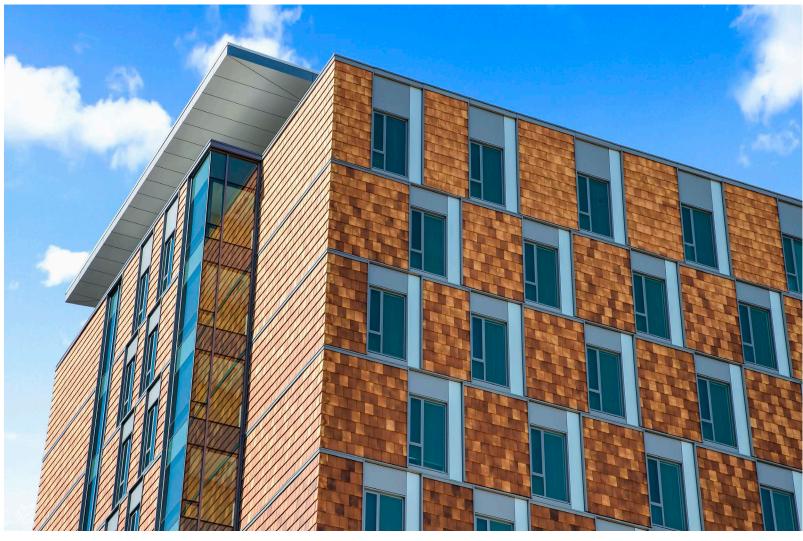


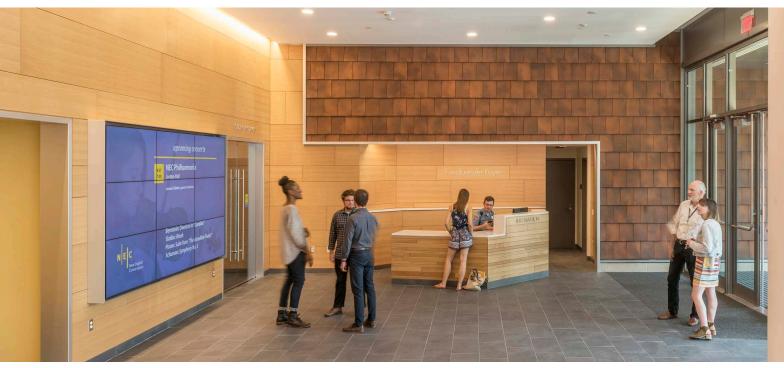


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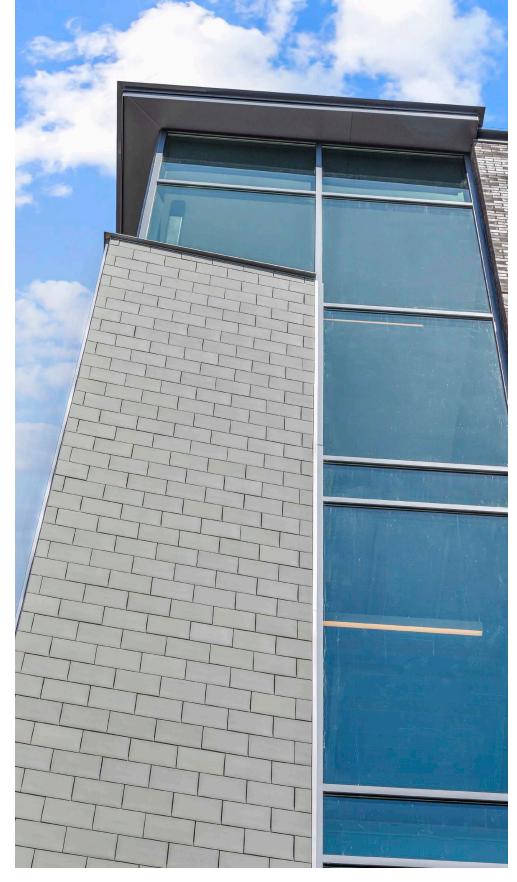




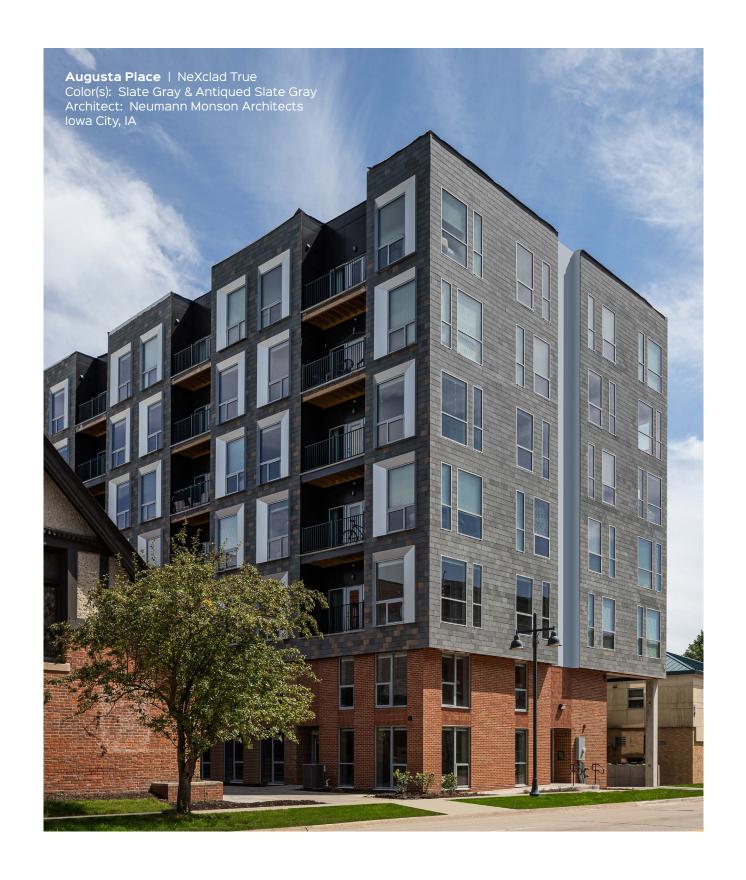
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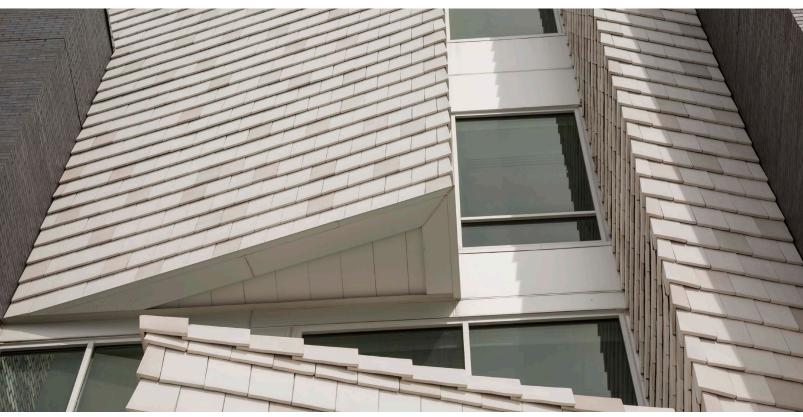
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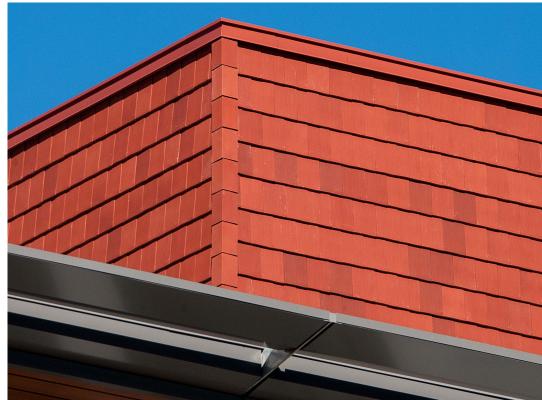
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University of Texas Austin | NeXclad 16 Color: Clay Red Architect: Cotera+Reed Architects Austin, TX





Emory University | NeXclad 16 Color: Summer Rose Architect: ZGF Architects Atlanta, GA





Educare Winnebago | NeXclad 16 Color: Ebony Mist Architect: RDG Planning & Design Winnebago, NE



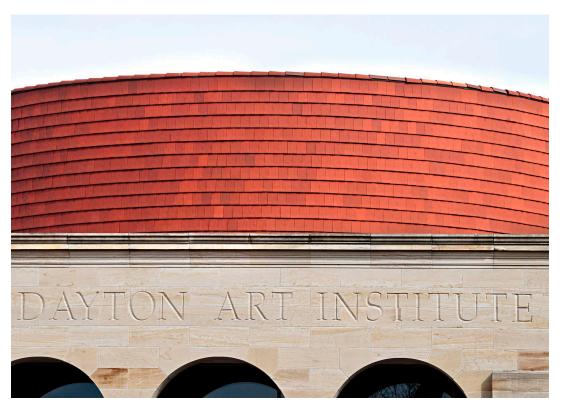


**Buffalo State University** | NeXclad 16 Color: Plumstone in Americana surface texture Architect: Holt Architects, P.C. Buffalo, NY





Coppin State University | NeXclad 16 Color: Vermont Gray Black and Slate Gray in LudoSlate surface texture Architect: CannonDesign Baltimore, MD





**Dayton Art Institute** | NeXclad 14 Color: Clay Red Dayton, OH





National Institutes of Health | NeXclad 14 Color: Ebony Mist (L>M) Bethesda, MD





University of Wisconsin | NeXclad 14 Color: Slate Red Architect: Dorschner Associates Madison, WI



Federal Reserve Bank | NeXclad 16 Color: Custom High Gloss Green Houston, TX



St. Francis Medical Center | NeXclad 16 Color: Montpelier Green Monroe, LA

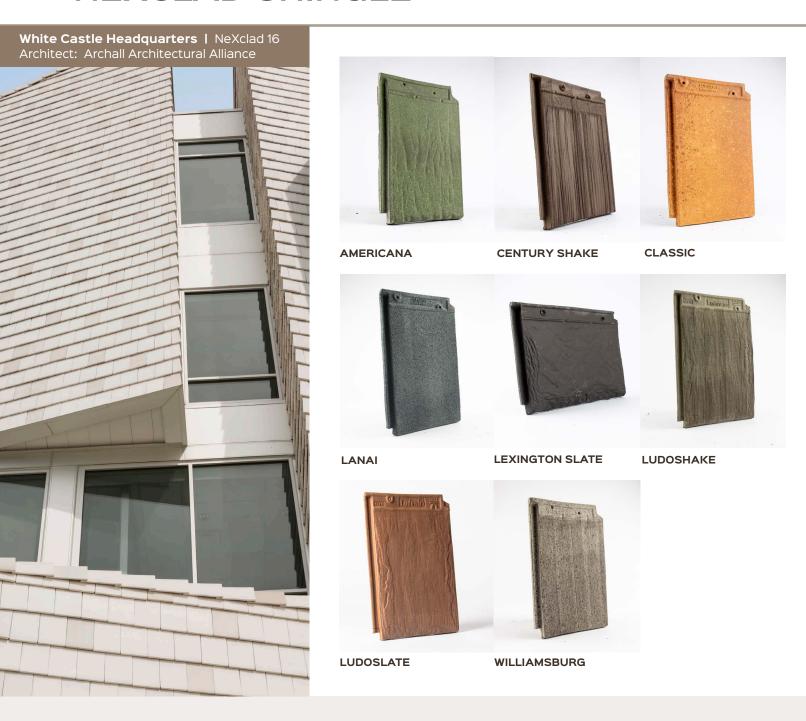


**Private Residence** | NeXclad 16 Color: Vermont Gray Black Minneapolis, MN



**Private Residence** | NeXclad 16 Color: Matte White and Matte White w/ Ash Gray Mist La Jolla, CA

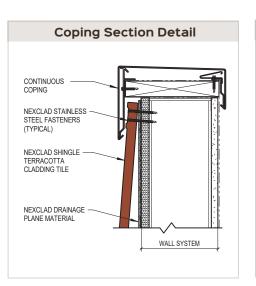
## **NEXCLAD SHINGLE**

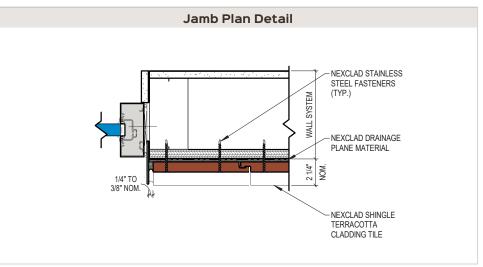


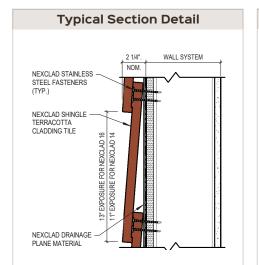
#### **DESIGN TRAITS**

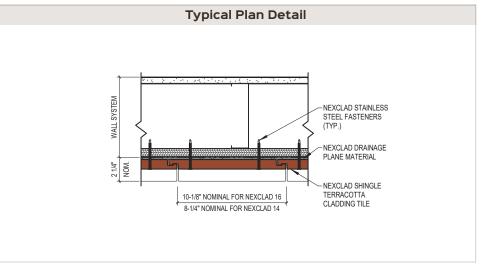
- Sidelock Weather Channel: Allows the tiles to nest together and acts a drainage channel for surface moisture on the tiles. The sidelock weather channel also allows for attachment of a stainless steel, concealed wind clip for added wind resistance and performance
- Two (2) pre-punched fastener holes for attachment anchors
- Engineered stiffening ribs on the back of the tile allow an increase tile strength while removing unnecessary weight
- Various sizes allow for flexibility in the scale and appearance of the wall area.

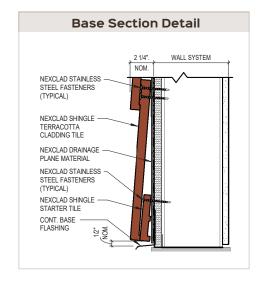
  NOTE: The 11" (14) and 13" (16) exposures cannot be intermixed in a wall, but may be "banded" on an elevation

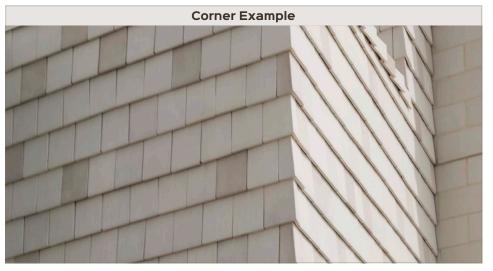












## **NEXCLAD TRUE**



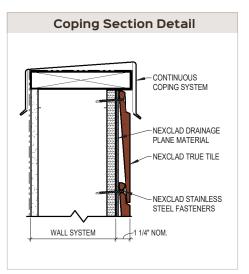


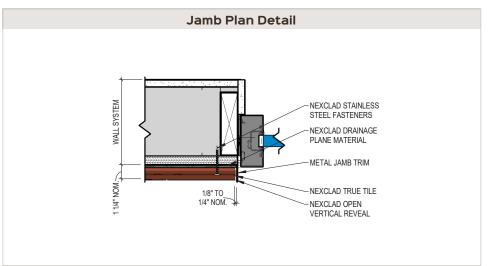


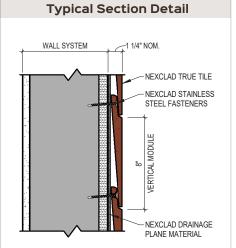
**NEXCLAD TRUE** 

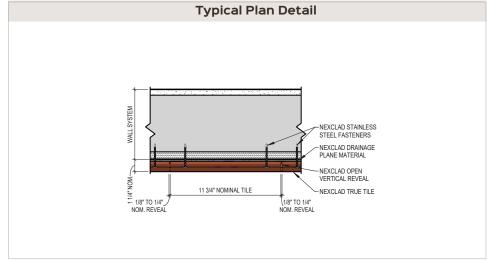


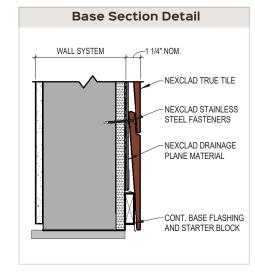
**NEXCLAD TRUE WEATHERED** 

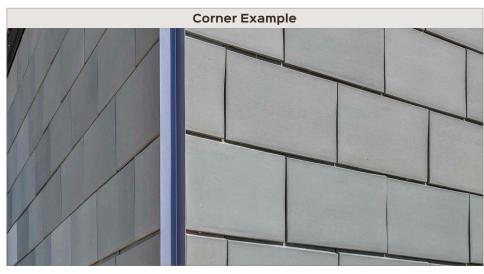










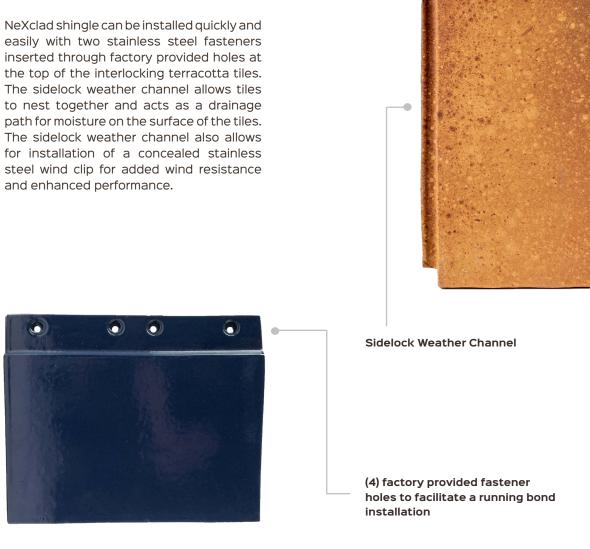


## **INSTALLATION**

NeXclad tiles can be installed directly to a structural wall sheathing board or over a framing system for a rainscreen application.

NeXclad True tiles provide a flush surface from tile-to-tile, whereas all other NeXclad products install in a shingle style to provide a shingle texture and shadow lines.

easily with two stainless steel fasteners inserted through factory provided holes at the top of the interlocking terracotta tiles. The sidelock weather channel allows tiles to nest together and acts as a drainage path for moisture on the surface of the tiles. The sidelock weather channel also allows for installation of a concealed stainless steel wind clip for added wind resistance and enhanced performance.



(2) factory provided

fastener holes

## RAINSCREEN APPLICATION

Terreal North America's terracotta rainscreen systems consist of an outer terracotta panel, a ventilated and drained cavity, and a protected inner skin. The rainscreen system serves as a moisture management facade assembly where the outer terracotta panel deflects airborne moisture while the cavity drains moisture away from the building's structure.

### THE TERRACOTTA RAINSCREEN **ADVANTAGE**

#### **IMPROVES A STRUCTURE'S** LIFE EXPECTANCY

Terracotta rainscreen systems improve upon failures often seen in a conventional barrier wall - degradation due to moisture. A key aspect of a building enclosure's durability is moisture management. The utilization of a terracotta rainscreen provides a multi-layered approach to moisture management. The terracotta tile finish surface limits the quantity of water that may enter the overall exterior wall and contact the primary weather barrier. The ventilated cavity behind the terracotta tile finish resists the six forces – kinetic energy, gravity, capillary action, surface tension, pressure gradients, and solar drive - that may drive moisture into a building. This cavity not only provides resistance to these six forces, it also provides an avenue to enhance drying of the exterior wall through providing continual air flow between the terracotta tile and the building's primary exterior wall surfaces. The terracotta rainscreen also eliminates the typical sealants and exposed flashings intended to resist bulk water utilized in barrier wall construction. Through the management of moisture and the elimination of exposed sealants, a building's envelope will require less maintenance and provide a longer service life.

#### **ENERGY EFFICIENCY**

The use of a terracotta rainscreen system may result in an immediate realization of increased energy efficiency. The terracotta tile finish provides protection from the atmospheric effects of humidity and temperature variation. The air cavity behind the terracotta tile creates a more stable temperature for the building enclosure and the thermal isolation may reduce the building's energy consumption by 30 to 40 percent. The ventilation behind the terracotta tile provides the temperature buffer during hot weather by promoting air circulation as the warm air rises in the cavity; during cold weather the ventilation provides a similar temperature buffer in a reverse fashion.



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# YOUR CREATIVE PARTNER, FROM START TO FINISH

From highly technical pre-constructed elements, to the most innovative bespoke solutions, Terreal North America envelopes architectural projects from design through construction. Our cladding systems and decoration products provide a wide range of harmonized cladding solutions for buildings.

### **ORDERING MADE EASY**

At Terreal North America we are committed to providing assistance every step of the way. From the early design stages, through a quick and simple approval and ordering process—our NeXclad tiles can get on site faster with reduced lead times in comparison to other terracotta cladding materials. We even accept small quantity orders, accommodating projects of any size.

## **TEAM OF EXPERTS**

Our team of experts are available to assist with technical, logistical, and customer service questions through each stage of your project. Orders are managed and manufactured in our Ohio facilities. Additionally, Continuing Education and learning opportunities are available for scheduling with a Terreal North America team member.

## **TECHNICAL SERVICES**

Comprised of engineers and architects with vast design, construction, and product knowledge with industry leading experience, our team makes getting technical help a breeze! Whether it's providing project specific detail assistance, system modeling, performing material take-offs, or project estimates, everyone at Terreal North America works to provide the correct materials and technical support necessary to ensure your project is a success.

