3 PLEASANT STREET AT BRICK MARKET

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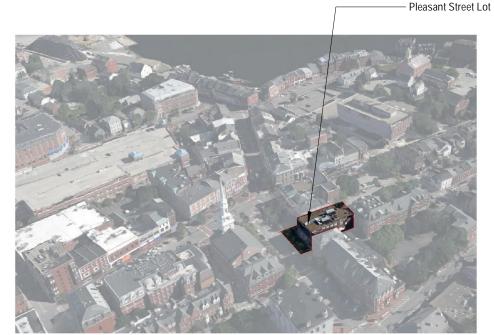


DRAWING LIST

- P1.1 Cover
- P1.2 Locus Map & Objectives
- P1.3 Site Plans
- P1.4 Floor Plans
- P1.5 Exterior Elevations West
- P1.6 Exterior Elevations East
- P1.7 Exterior Elevations North
- P1.8 Exterior Elevations South
- P1.9 Partial Exterior Elevation
- P1.10 Partial Exterior Elevation
- P1.11 Partial Exterior Elevation
- P1.12 Perspective views
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- P1.14 Street Sections
- P1.15 Street Sections
- P1.16 Street Sections
- P1.17 Street Sections
- P1.18 Renderings
- P1.19 Window & Door Types







Project Area - Aerial Perspective Image

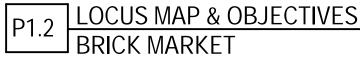


OBJECTIVES

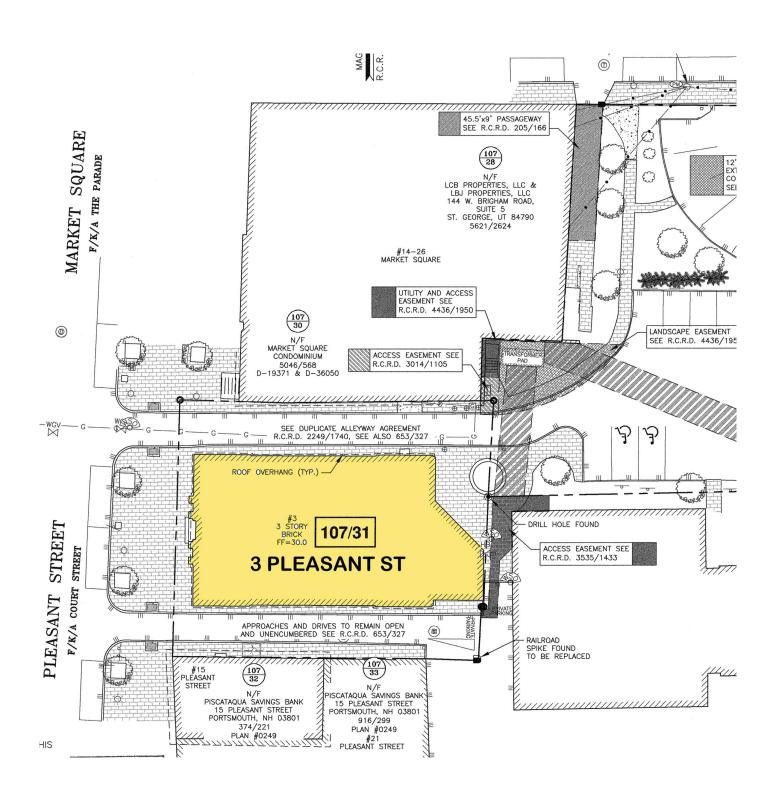
- Enliven and enhance pedestrian vibrancy.
- Widened sidewalk plazas, outdoor dining, artist and musician spaces.
- Street level restaurant, with office space above.
- Public courtyard pocket plaza, gardens and landscaped accessways.
- Public art at street level outdoor spaces.





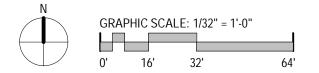






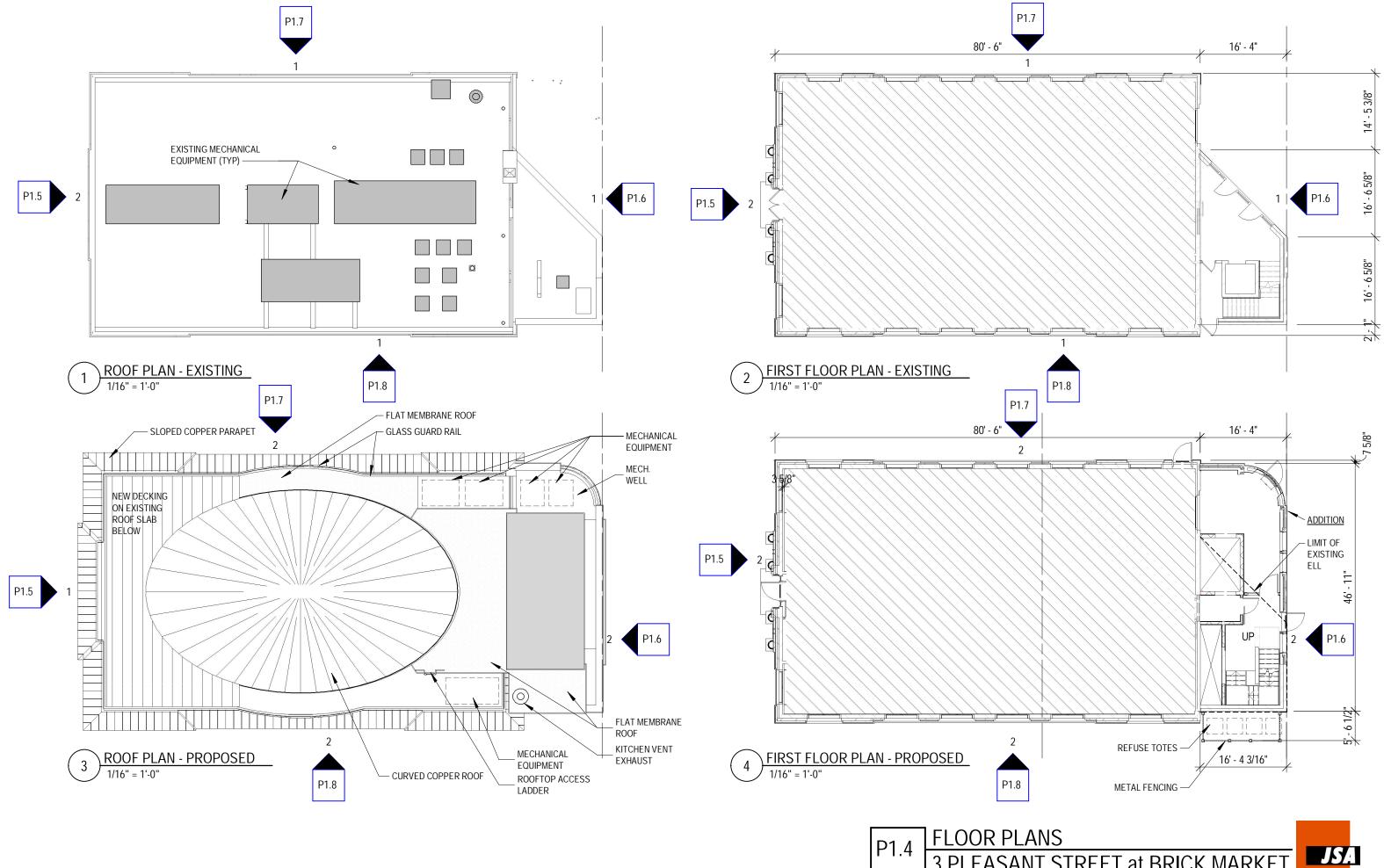


EXISTING

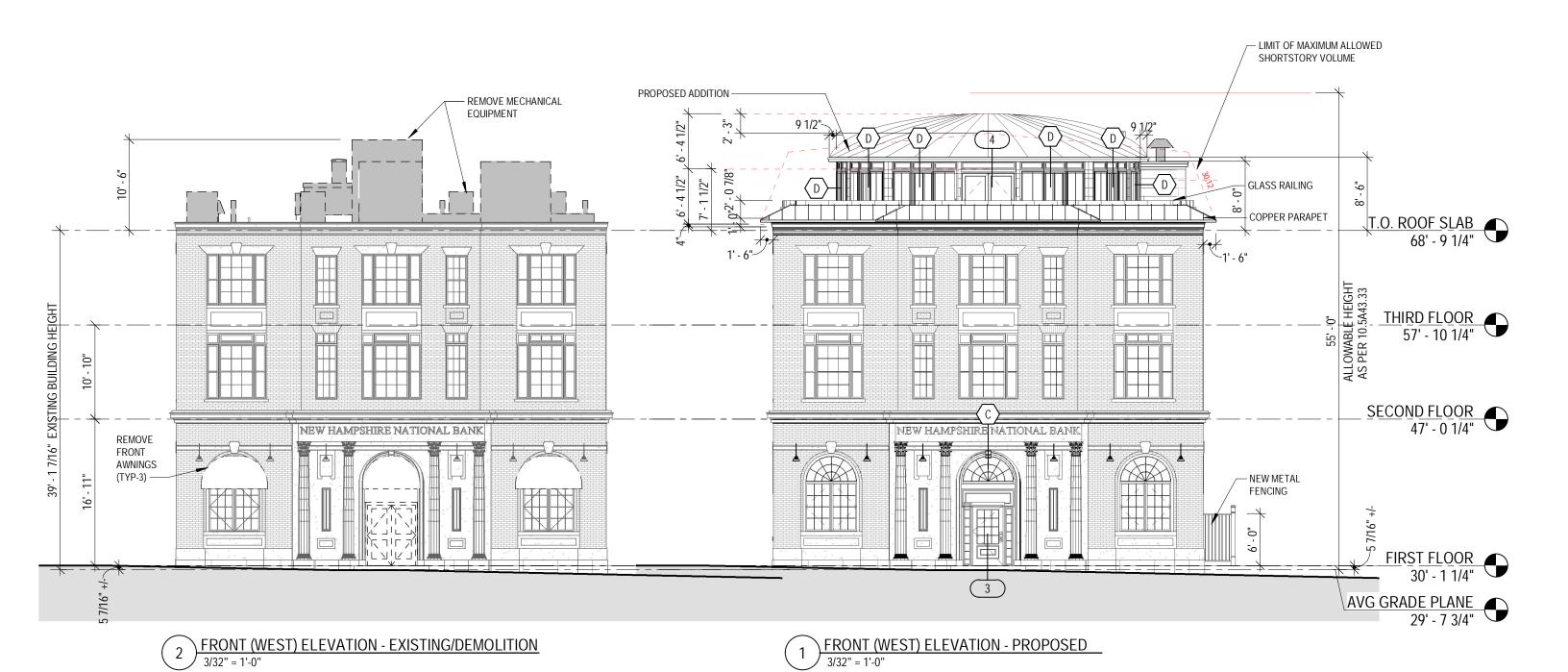


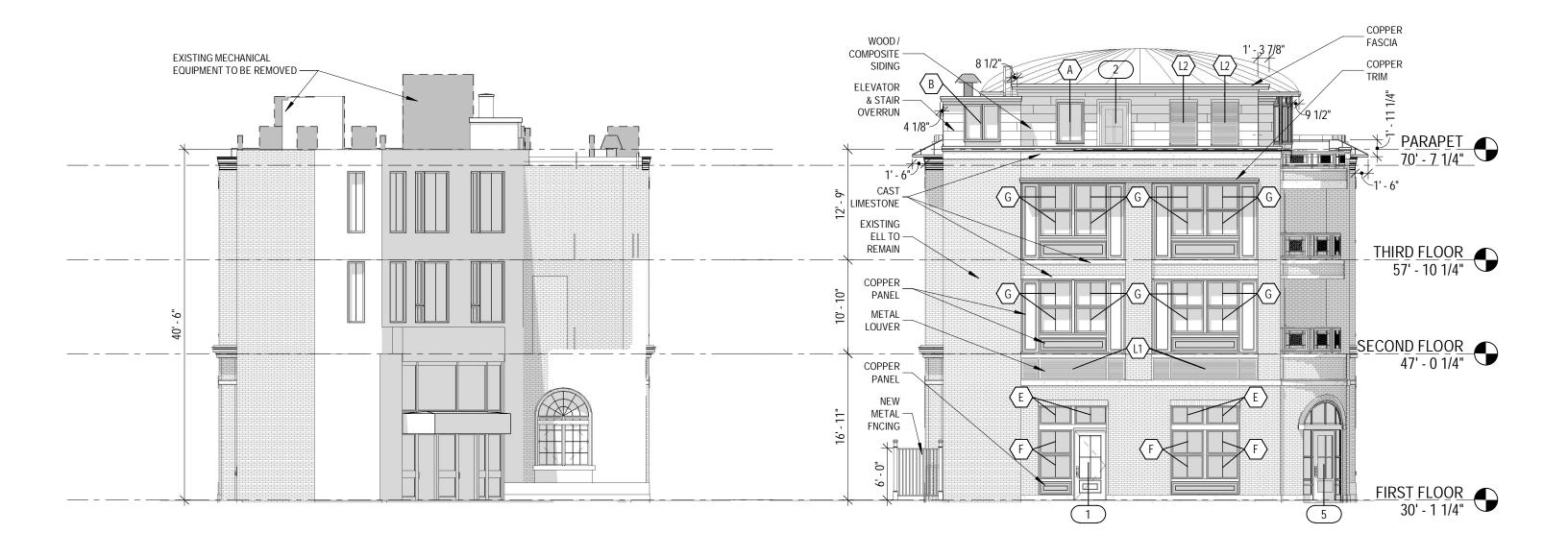
PROPOSED





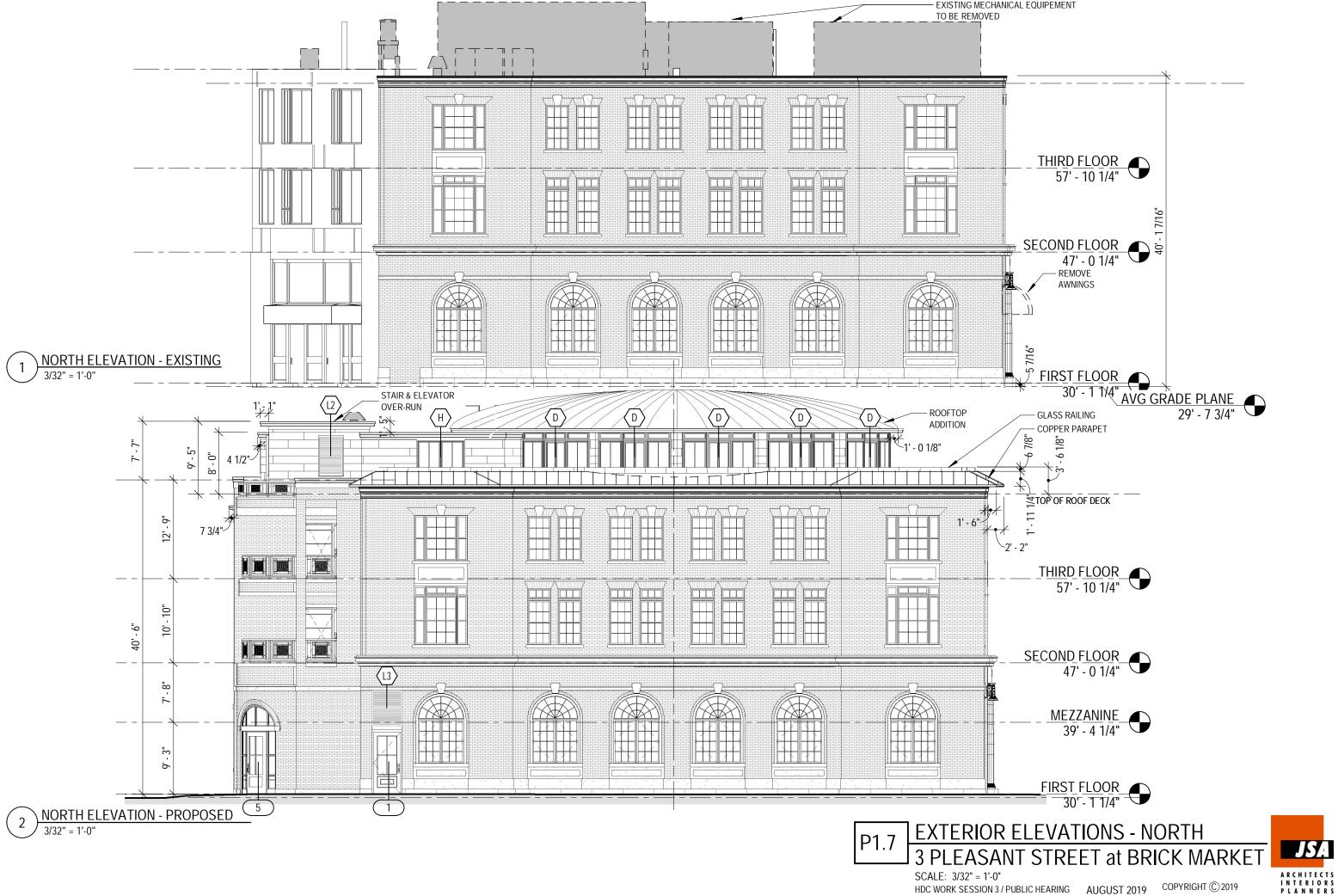
ARCHITECTS INTERIORS PLANNERS





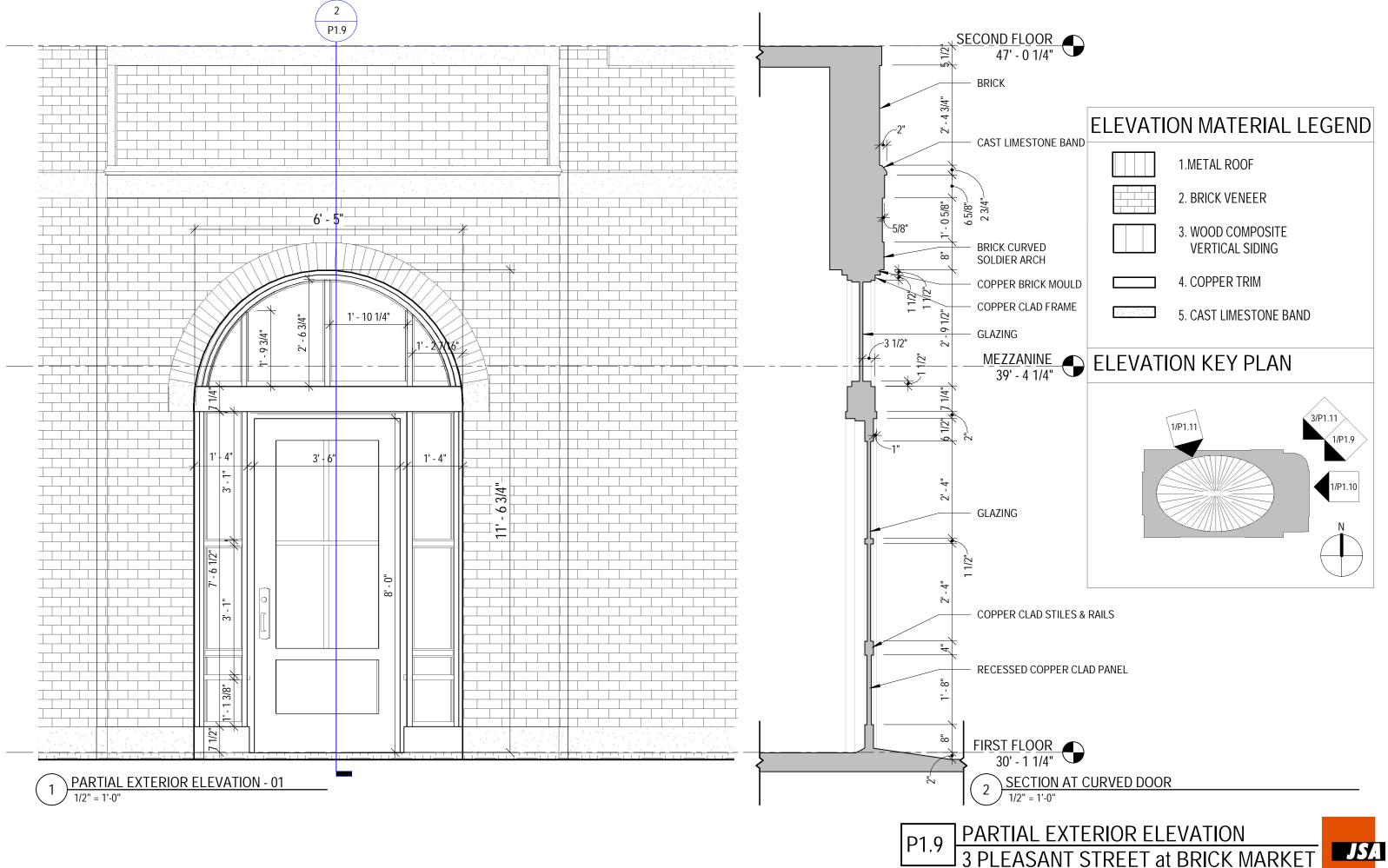
1 EAST ELEVATION - EXISTING
3/32" = 1'-0"

2 EAST ELEVATION - PROPOSED
3/32" = 1'-0"



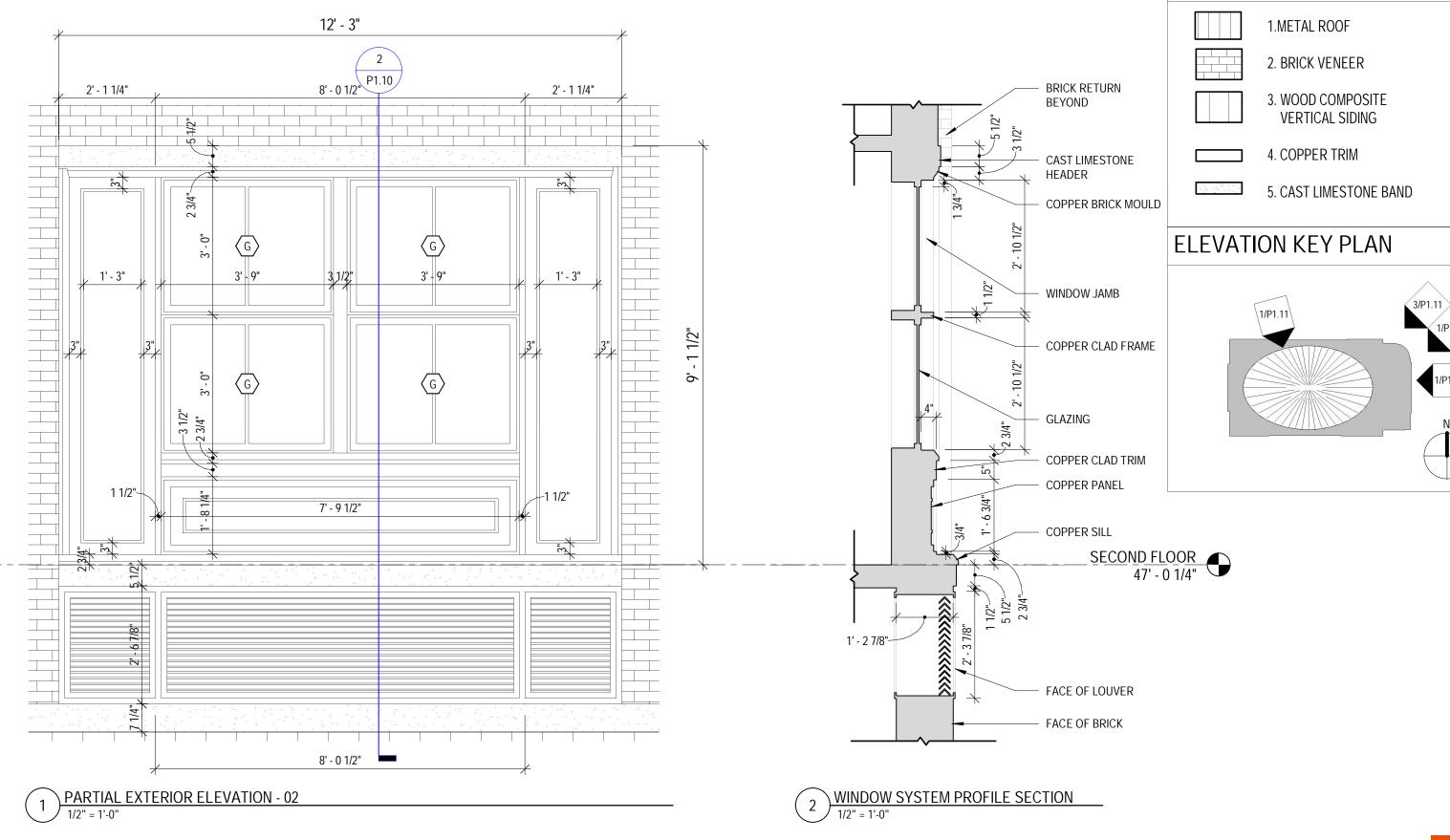
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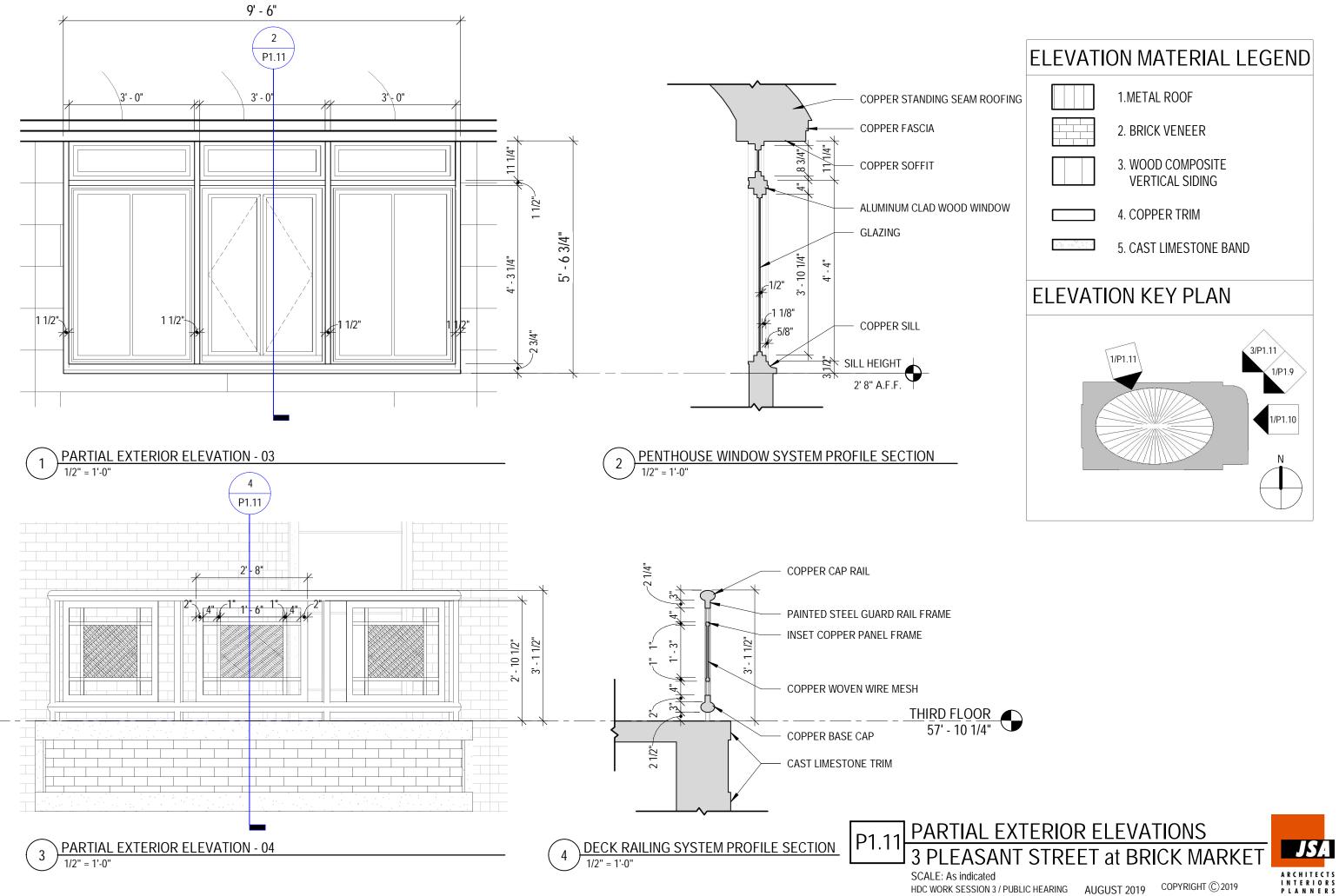


SCALE: As indicated HDC WORK SESSION 3 / PUBLIC HEARING AUGUST 2019 COPYRIGHT © 2019

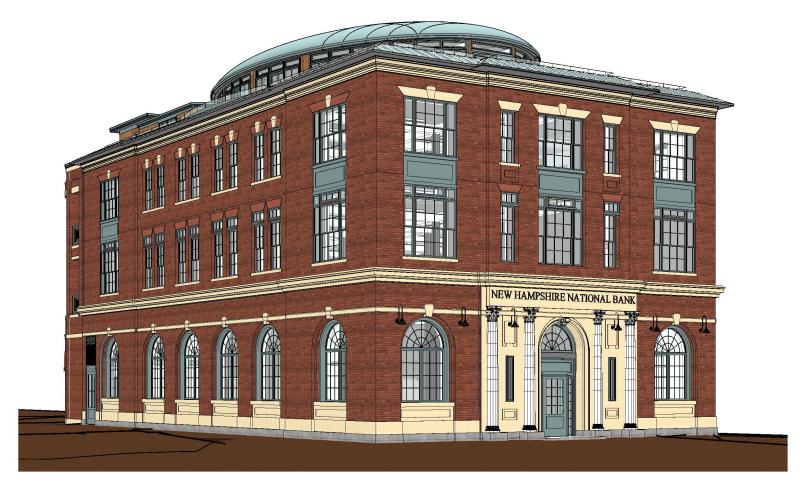
ARCHITECTS INTERIORS PLANNERS



ELEVATION MATERIAL LEGEND



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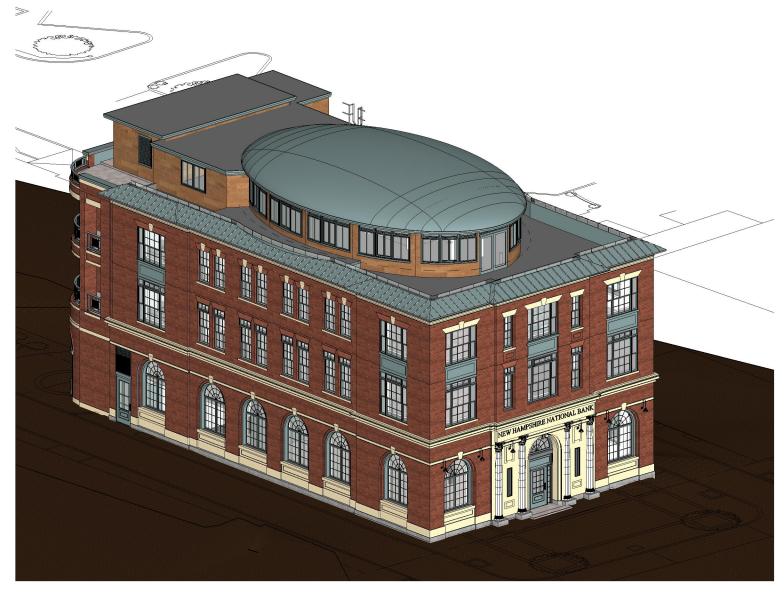


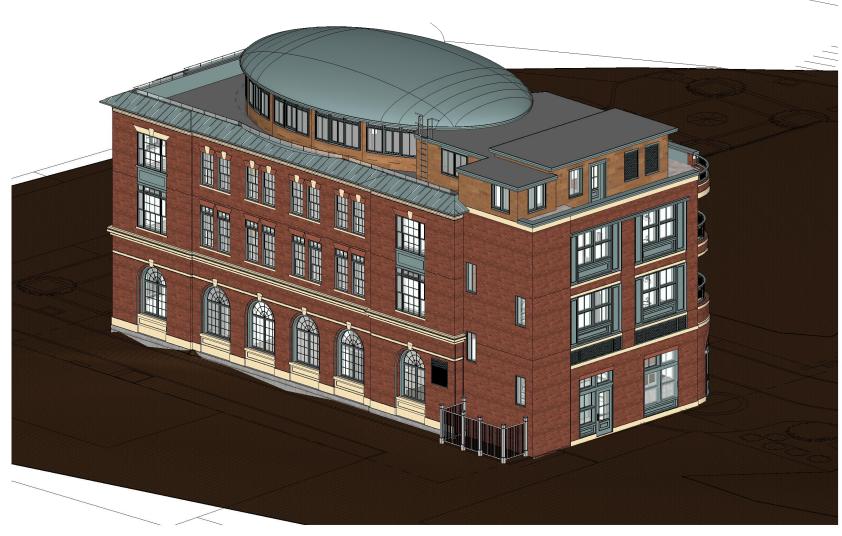


1 FRONT NW PERSPECTIVE - FROM NORTH CHURCH

REAR NE PERSPECTIVE - FROM PROPOSED REAR COURTYARD



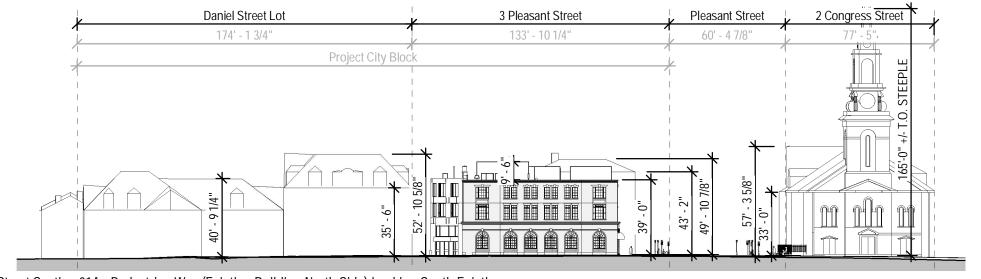




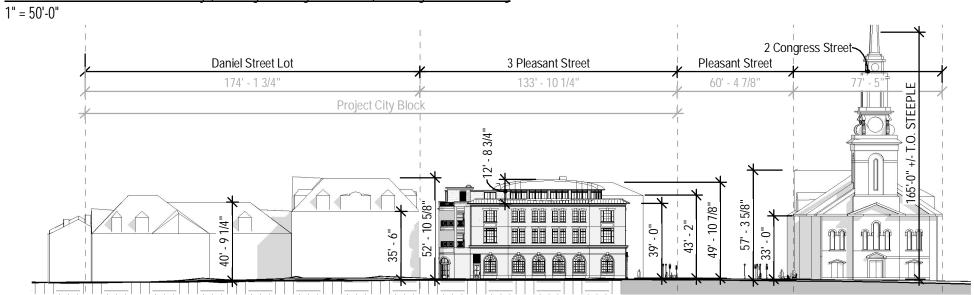
1 FRONT NW AXONOMETRIC

REAR SE AXONOMETRIC

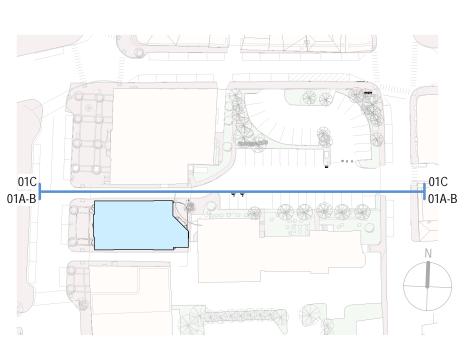




Street Section 01A - Pedestrian Way (Existing Building North Side) Looking South Existing



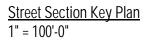
Street Section 01B - Pedestrian Way (Existing Building North Side) Looking South Proposed



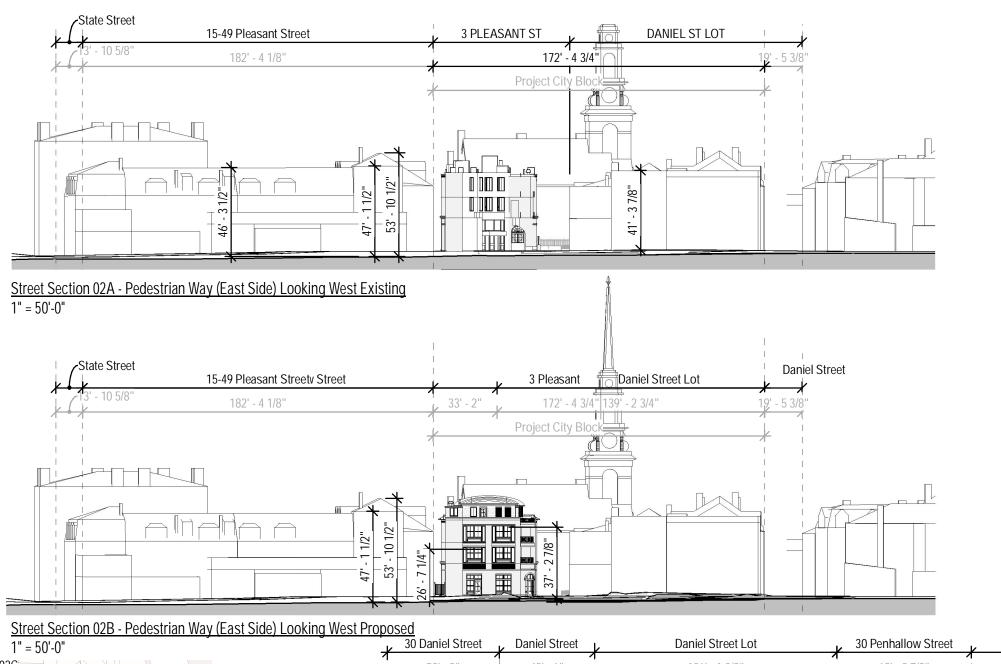
1" = 50'-0"

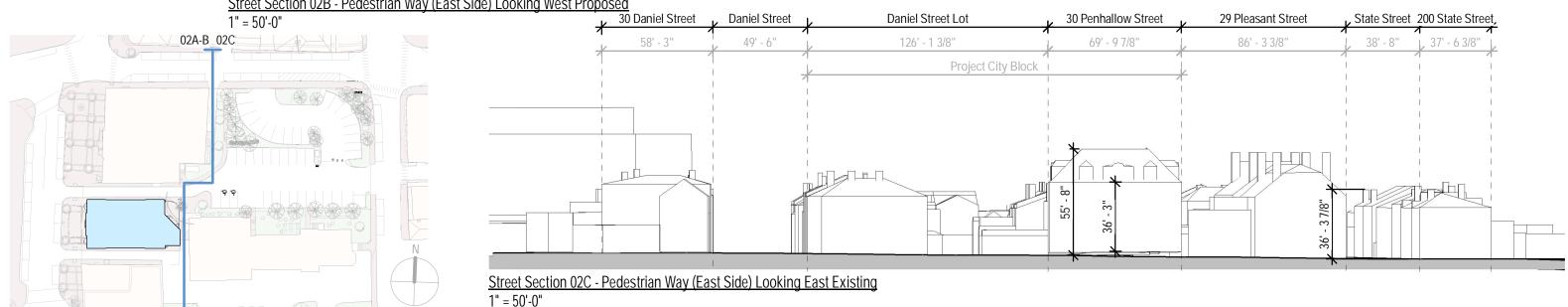
9 Market Square 10 Market Square Penhallow Street 22 Market Square 21 Daniel Street Daniel Street Lot Market Square 76' - 8 3/4" 89' - 1 5/8" 95' - 8 3/4" 28' - 8" 164' - 2 1/4" 13' - 5 1/4" Project City Block - 0 1/2" _42' - 5 1/4"

Street Section 01C - Pedestrian Way (Existing Building North Side) Looking North Existing 1" = 50'-0"









Street Section Key Plan 1" = 100'-0"

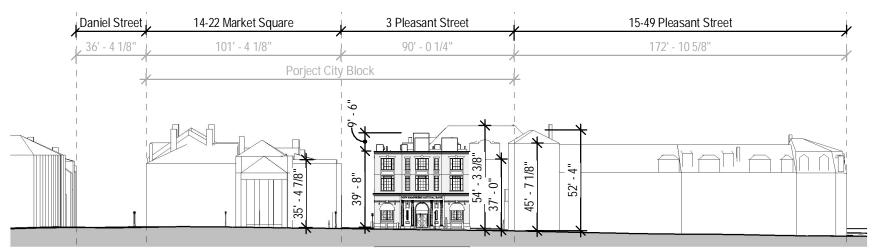
02A-B 02C

STREET SECTIONS **BRICK MARKET**

SCALE: As indicated

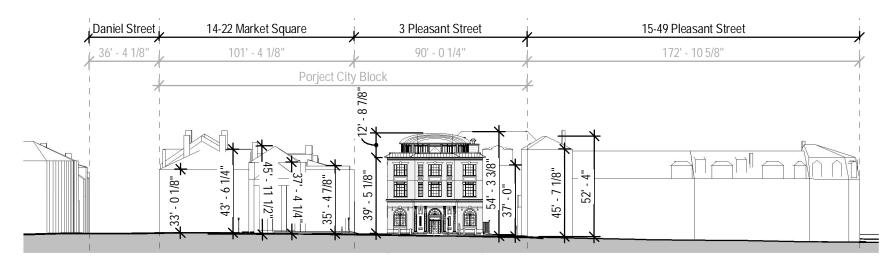
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Street Section 03A - Pleasant Street Looking East Existing

1" = 50'-0"



40 Pleasant Street

119' - 0 3/8"

Street Section 03B - Pleasant Street Looking East Proposed 1" = 50'-0"

State Street

40' - 2 3/8'

03C 03A-B 03C 03A-B

Street Section 03C - Pleasant Street Looking West Existing 1" = 50'-0"



Pedestrian Way

Porter Street 10 Pleasant Street

49' - 5 1/8"

36' - 6 5/8'

2 Congress Street

85' - 5 1/4"



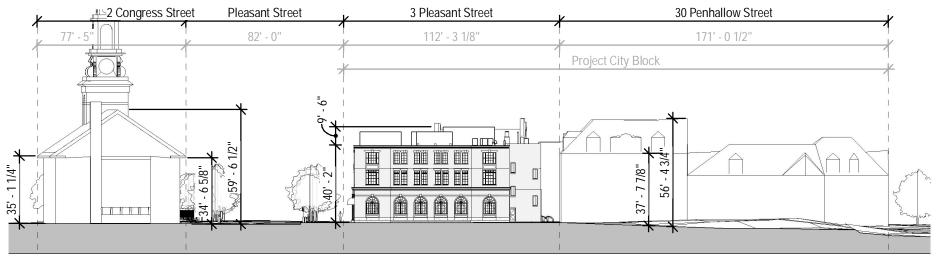
1 Market Street

37' - 11 5/8'

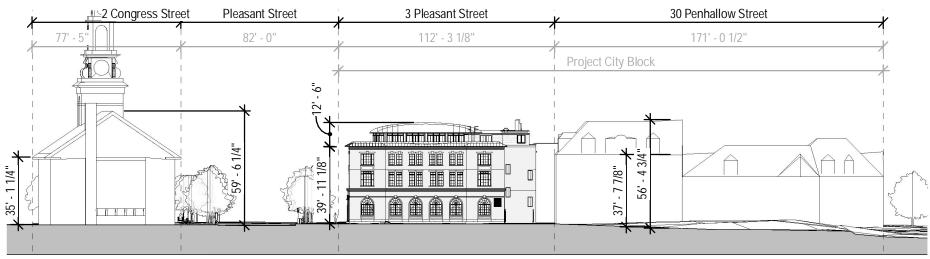
Street Section Key Plan 1" = 100'-0"

Congress Street

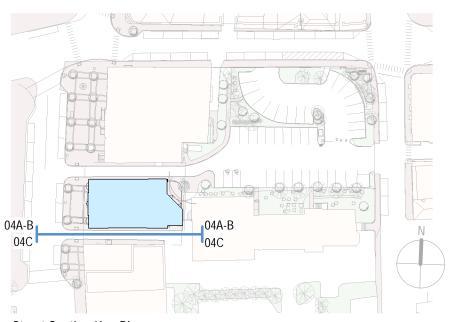
101' - 1 7/8'

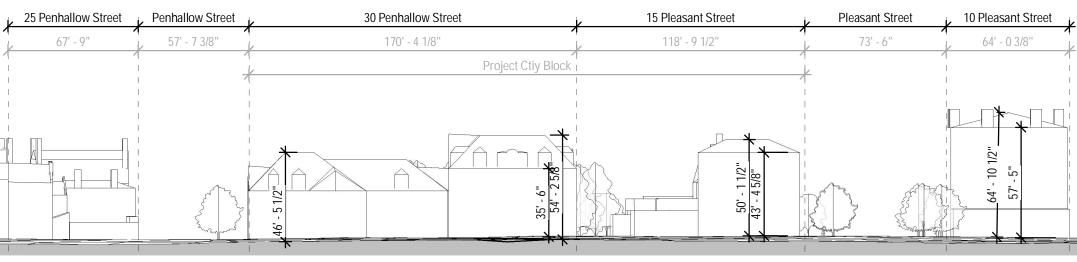


Street Section 04A - Pedestrian Way (Existing Building South Side) Looking North Existing 1" = 50'-0"



Street Section 04B - Pedestrian Way (Existing Building South Side) Looking North Proposed 1" = 50'-0"





Street Section 04C - Pedestrian Way (Existing Building South Side) Looking South Existing 1" = 50'-0"

Street Section Key Plan

1" = 100'-0"



SCALE: As indicated

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NE BIRDS-EYE VIEW



NE REAR PERSPECTIVE



2 NE REAR PERSPECTIVE



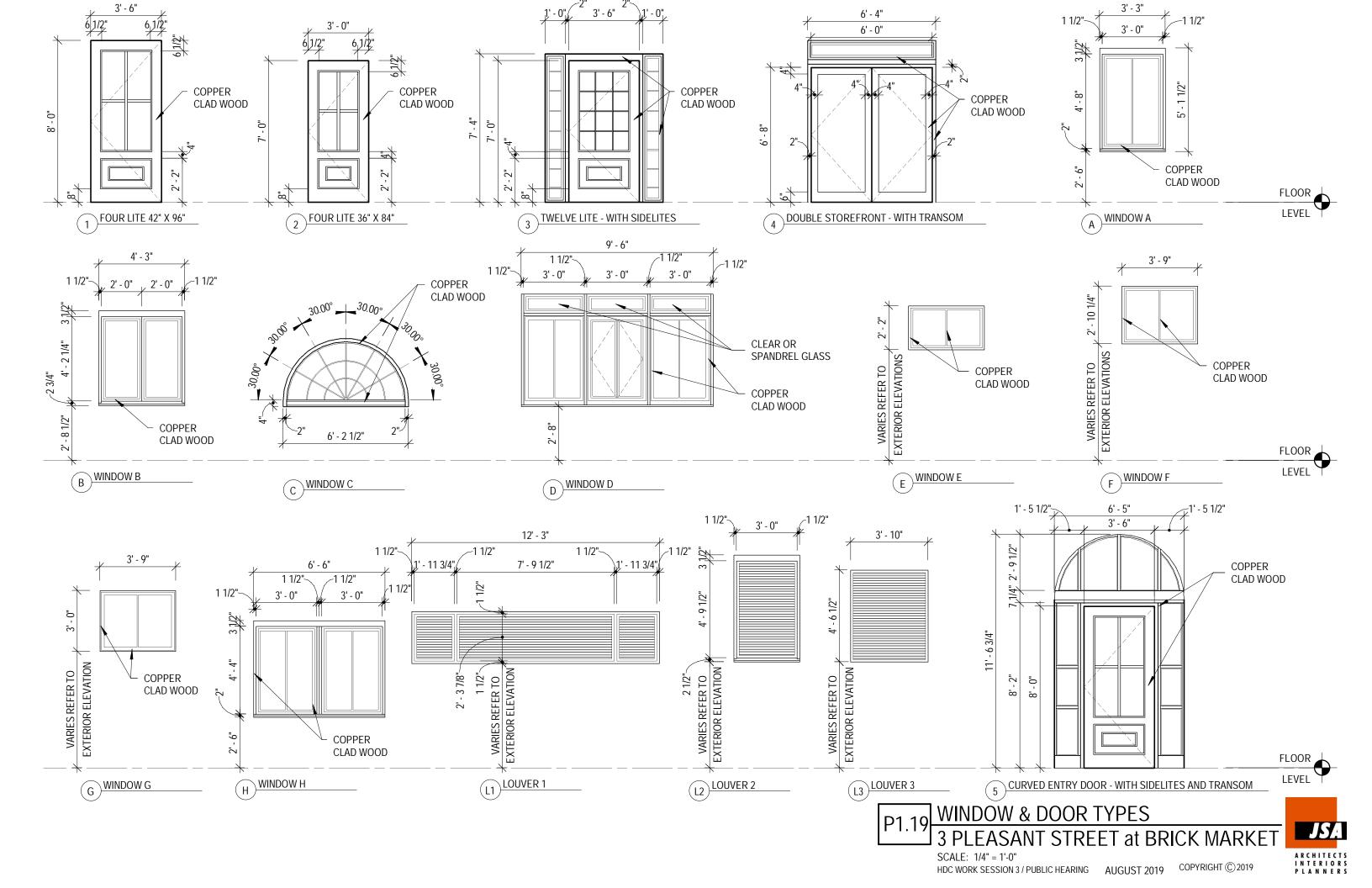
WEST FRONT PERSPECTIVE



SCALE:

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MATERIALS PRODUCT DATA

PUBLIC HEARING - AUGUST 2019

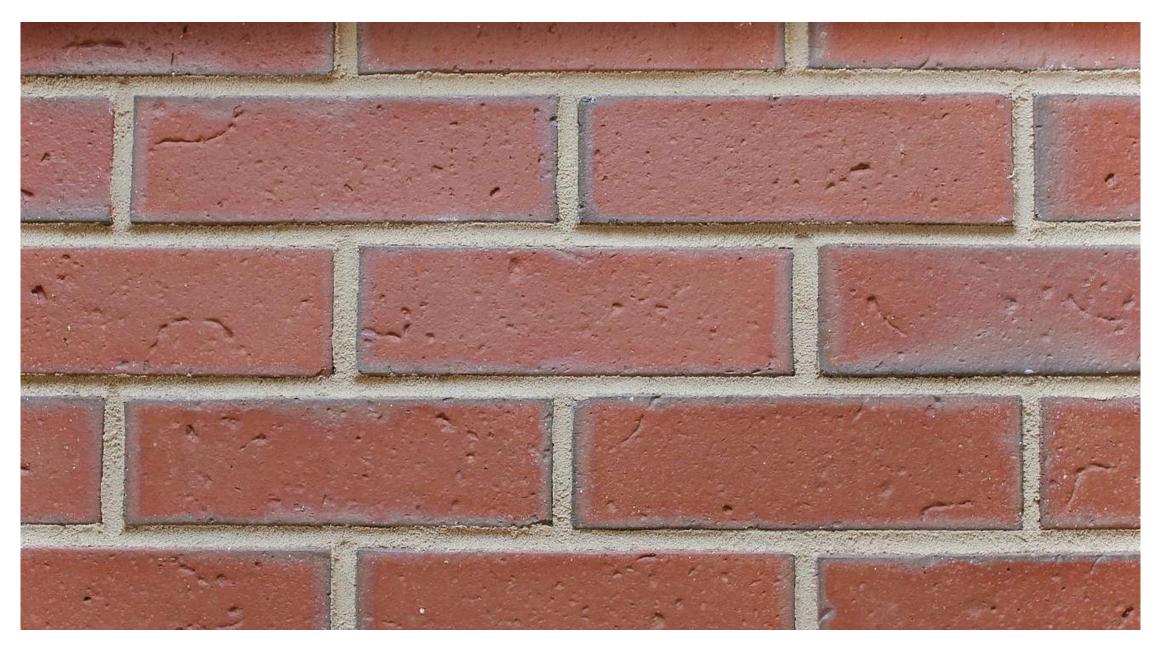
INDEX

- 1. BRICK MASONRY
- 2. CAST LIMESTONE UNITS
- 3. COPPER SIDING-Continental Bronze
- 4. WINDOWS
- 5. WOOD SIDING
- 6. METAL MESH RAILINGS

	Project: 3 Pleasant Street				Reference Drawing
JSA	Title: MATERIALS PRODUCT DATA			Scale:	Reference:
ARCHITECTS		273 Corporate Drive	Portsmouth, NH 03801	Drawn By	Sketch No:
INTERIORS PLANNERS	www.jsainc.com	T 603.436.2551	F 603.436.6973	Date:	4.5

Portsmouth Jacksonville

8-1-2019



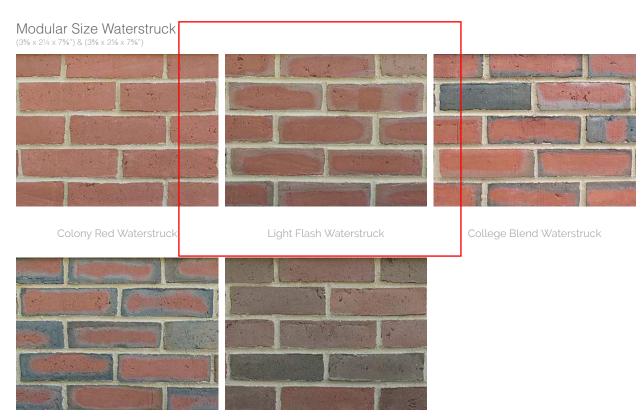
Old Port Blend Narrow Flashed Range



Waterstruck Brick

Water-struck Brick has become symbolic of the mindset and cultural fabric of New England: hard, somewhat irregular in appearance, steadfast but unpredictable, and stubbornly able to withstand adversity and thrive in a hostile physical climate. First fired in the 17th century in Medford, Massachusetts, from clay from the Mystic River flats, water-struck brick was the essential building block of Georgian New England and remains the choice for institutions and individuals seeking links to the great tradition of building in that part of the world.

• David N. Fixler, AIA, LEED

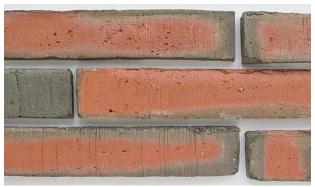


Blackstone Range Waterstruck

Brownstone Blend Waterstruck

Norman Size Waterstruck

3 5/8 x 2 1/4 x 11 5/8



Norman Full Range

Additional Ranges Coming Soon

Roman Size Waterstruck





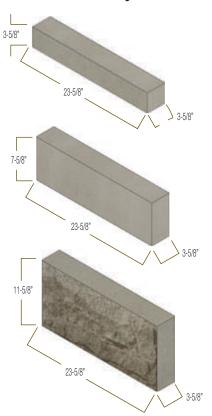


Robert D. Love Downtown YMCA - Wichita, KS | Schaefer Johnson Cox Frey Architecture | Sandrift Sandblasted

Arriscraft Renaissance® Masonry Units offer architects, builders and property owners a premium stone with exceptional performance, beauty and flexibility. Our unique Natural Process technology mimics how stone is created in the earth – yielding cement-free stone products with the aesthetic, strength and durability benefits of quarried stone, plus cost effective installation.

Renaissance® units are offered in standard sizes and colors, yet offer tremendous flexibility through custom colors, blends, shapes and sizes - in rocked, smooth, satin, or sandblasted finishes. Discover the unparalleled beauty and design opportunities of Renaissance® Masonry Units, backed by an industryunique lifetime product warranty.

Standard Masonry Units





NATURAL EDGE®

Our Natural Process technology replicates how stone is formed in the earth and creates products with the aesthetics and durability of guarried stone, plus the benefits of standard installation and unlimited supply.



SELECTION

Our comprehensive product range includes: the classic Renaissance® stone, a robust Building Stone collection, three versatile thin-clad options, various brick styles (including our long, contemporary option), Adair® limestone, and a full offering of cast accessories.



SOLUTIONS

We lead the industry in premier product support, including an extensive technical library, complimentary Masonry Envelope Review services, personal technical support, and renowned custom color and blend development. Our on-site technical services can provide historical matching, unique colors and custom blends, as required.



Arriscraft stone brings timeless elegance to our modern design. The best products, the best service, the best results.

MILAN MALINOVIC, PRINCIPAL Design Cooperative, LLC





INNOVATION

Product innovation at Arriscraft continues to meet market demands for modern stone designs and lightweight, thin stone solutions, as well as matching processes to replicate historical stone as quarries close after decades of use. We also continuously improve our manufacturing process to lead the industry in green and sustainability initiatives.



FDUCATION

We educate daily through our technical support, AIA credit courses, and an ever-broadening information base. Our website offers high-res color sheets, data sheets, seamless texture images, a Building Stone Calculator, plus our growing blog of articles and tips. For decades we've provided complimentary mason training and student tours, and sponsored the University of Waterloo Architecture Lecture Series.



Color Selection

Renaissance® Masonry Units are available in a stunning range of natural standard colors. Arriscraft offers custom color development and also allows customers to create custom blends using different standard colors. With so much creative flexibility, Arriscraft can bring any design to life.

Because all Arriscraft products are manufactured to have through-body color, units can be cut, chiseled and dressed on-site. In addition, designers can order custom shapes and sizes to create truly unique projects.



Rappahannock River Hall, CNU | Newport News, VA | Glave & Holmes Architecture | Wheat Rocked and Sandblasted



Upson County Regional Medical Center - Barnesville, GA | David A. Tyler | Café Smooth, Ginger Rocked

Cambridge ON Canada Colors















Carbon



Ryegrass

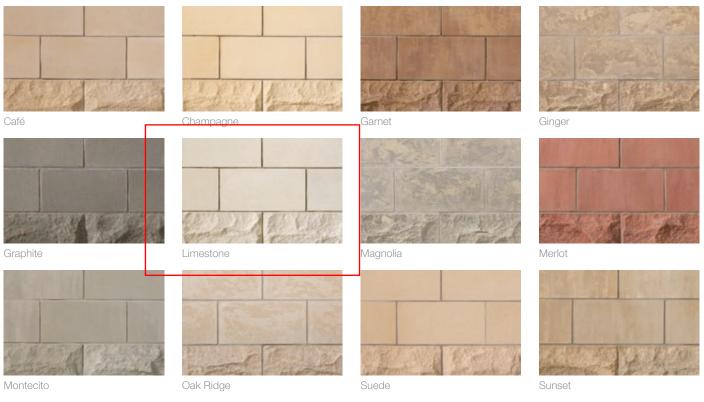


Driftwood



Sandrift

Fort Valley GA USA Colors



Renaissance® Masonry Units





Limestone

Rocked and Satin Made in Fort Valley, Georgia



STAR BLUE™



A Prestige Metal Material from Zahner

Star Blue copper a lead-free material with custom patina on copper-alloy sheet metal. The sophisticated material is part of Zahner's line of raw patinated materials which are designed to age like tanned leather and vintage wine. The result is a look that can function both for contemporary as well as historic aesthetics.

Designed to Age and Endure

An iridescent surface, the Star Blue copper appearance benefits from a microfilm which develops on the exterior layer of the material. The oxidized layer is like a living protecting barrier which grows and evolves as it further oxidizes.

For exteriors, this apperance will change over time. If sealed and maintained, it is possible for a custom copper patina such as Star Blue to maintain its iridescent luster. As an interior surface, the Star Blue copper's unique finish can last indefinitely, especially if the material is sealed.





Meeting EPA Standards for Patinated Copper

Star Blue copper is produced in Zahner's award-winning, EPA compliant facility. Patina effluent is properly captured and disposed of in compliance with local, state, and federal regulations. This ensures the health and safety for the families who work at Zahner, as well as the community at large in which it is made.



Patina vs. Paint

Surface patina should not be confused with paint. Patina is a mineralized oxide on metal that is self-limiting (rust, for instance, is not self-limiting because it will continue to eat through a surface). It is a reaction to the elements that in turn provides a protective barrier from the elements. While paints will have a short lifespan, deteriorating over time, a patina on metal can last for generations.









Exterior and Interior Applications

Star Blue copper can be used on interior and exterior applications. The patina will not rub off. However, over time, the patina appearance will continue to change. As the mineralized patina reacts with the atmosphere, it will continue to change in tone and contrast as it further oxidizes.





Revere's Newest Architectural Copper

A "pre-aged" natural oxide finish provides subtle beauty.



Inside:

- Technical Details
- Installation
- Handling
- Specifications



ContinentalBronze®

ContinentalBronze — Is premier architectural copper produced to ASTM B370 that has been "pre-aged" to a natural brown/bronze oxide finish under controlled conditions — without chemicals. The oxide is essentially the same as the one that forms on plain, "red" copper within two to five years after it is exposed to the local microenvironment. It is **not** a paint or resin-based coating applied to aluminum or steel, nor is it an alloy (does not contain tin).

The aesthetics of *ContinentalBronze* are similar to those of plain copper that has been exposed to the atmosphere for several years. *ContinentalBronze* will not appear as a uniform, monochromatic surface but rather "alive" and vivid with variations of shade or hue within and between sheets or coils. In essence, what we have done is to "leap ahead" in time.

The oxide is not a permanent finish; rather, it is an advancement of natural weathering. As it is exposed to the elements, *ContinentalBronze* will continue to age and eventually assume a mature, green patina. The time required for this to occur cannot be predicted as the process depends on local (micro) environmental conditions and severity of exposure. In most cases, 10 or more years will be required for the oxide to convert to a green (sulfate) patina, although the time required will vary.



Why Use ContinentalBronze?

This "leap in time" can be especially appealing for wall claddings (which typically age slowly), soffits (which age slower still), interior applications (which may not age at all), and locations where the reflectivity of new, bare copper is prohibited by codes or might be aesthetically objectionable.



ContinentalBronze shown in contrast to a naturally aged copper wall with 4+ years of exposure.

Given sufficient time and continued weathering, all copper will develop a more or less uniform brown/bronze coloration. However, in some cases the time frame is too long and/or the transitional appearance is unacceptable.



As experienced in this photo above, bare copper installations can produce some natural, but alarming aesthetics.

ContinentalBronze can be used to accentuate entranceways as well as interior applications.

Environmentally Sound

As with all Revere architectural coppers, *ContinentalBronze* is very environmentally friendly. It is made from 90% to 95% recycled copper that has been harvested from within 500 miles of our facility in Rome, NY. It is an ideal material for roofing, wall cladding, rainwater goods, and similar applications. For LEED projects you gain the durability, sustainability, beauty, and recyclability of copper.



90-95% of the time, we are able to use recycled scrap and avoid mining and smelting operations.

ContinentalBronze is made from mainly "number 1, bare-bright" scrap. Coated wire and/or other materials that emit VOCs or similar compounds are not used during melting or fabrication (rolling).

Market conditions dictate when and where recyclable copper is available. Nevertheless, well over 75% of this material is obtained from sources within 500 miles of our plant. Due to the competitive nature of the scrap copper market we cannot disclose individual locations (or cities) from which we obtain copper.

Depending upon market conditions the exact percentage of recycled copper and mix of post-consumer and post-industrial material will vary. Since market conditions change constantly Revere cannot accurately identify the ratio of post-consumer to post-industrial copper in a given order. Therefore, Revere uses the conservative position that its copper contains only post-industrial material.

All of Revere's architectural sheet copper is made in Rome, NY – approximately 95 miles west of Albany, NY.

Durability/Weathering of Oxide

ContinentalBronze maintains all the positive features of working with bare copper – ease of forming, bending, and general installation practices.

To ensure the most aesthetically pleasing application, Revere suggests standard industry sheet metal practices, such as those presented in the Eighth Edition of *Copper and Common Sense*, be applied. This includes, but is not limited to: the use of clean gloves during forming and installation of copper, minimizing traffic on installed copper, soldering techniques, and more.

The oxide is a hard and durable surface, and is able to withstand most normal forming, bending, and installation practices. Nevertheless, bending or brake forming can result in loss of oxide crystals and produce "pencil lines" of bare copper. The oxide may be scratched if subjected to a combination of pressure and abrasion, and may exhibit fingerprints.



As installed



10 months exposure in a Northeastern coastal environment







Maintaining a Statuary Brown Color

There are a number of methods and products used to protect statuary finishes. In Revere's experience, periodic oiling is usually the easiest and least expensive.

Oiling does <u>not</u> create or hasten the development of a statuary color. Rather, it may improve the uniformity of the oxide film and impart richness and depth of color that could not be produced by natural weathering alone.

Oils used for this purpose are many and varied. They include linseed oil (raw or boiled); lemon oil; lemon-grass oil; paraffin oil; castor oil; and sometimes vegetable oil. Our experience indicates that either raw or boiled linseed oil is as good as any, and has the added advantages of low cost and ample supply. Boiled linseed oil dries more quickly upon application than the raw type of oil. Because it is less prone to pick up dust particles from the air, boiled linseed oil seems to be used more often than raw oil.

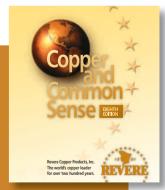
Under ordinary circumstances it is not necessary to clean the metal, either chemically or mechanically, prior to oiling.

The oiling procedure is not at all complicated. It consists of applying a liberal coating of oil to the metal surface with a brush or rag and then wiping off the excess oil with a clean, dry rag to leave a thin, even film. Local atmospheric conditions tend to influence the durability of the coating or the number of coatings required to produce the desired effect. There are reports of installations varying in age from one to almost 20 years that are still giving satisfactory performance with only one application of oil. For the average installation we suggest two coats be used initially.

Periodic oiling is the method that has been (and still is) used to maintain the statuary color of the Seagram's Building in New

York City for over 50 years.

Since 1945, Revere has published Copper and Common Sense, which is now the industry's



most widely referenced sheet-copper design manual. To learn how to obtain the latest edition visit us at www.reverecopper.com.

Technical Guide P

Cyprium Collection



The Cyprium Collection features copper and bronze clad windows and doors unique in design and construction.

These hand-wrought living surfaces develop distinctive patinas that adopt and define the individual aesthetic character of the homes to which they belong.

The Cyprium Collection is available in Casement, Awning, Picture/Direct Set, Specialty Windows, Terrace Doors and LiftSlide Doors.

Copper natura patina Casement window with 7/8" (22 mm) Simulated Divided Lites (SDL).

Bronze Palette





Bronze Natura Bronze Umbra



Bronze Verdigris

Copper Palette







Copper Verdigris

Patinas, the living finishes that cloak copper and bronze, are as unique as their location. Environmental factors such as humidity and salinity work together with time to coat the surfaces with a signature patina. Treasured as a mark of lasting value, each patina is distinct and ever-changing.

Patinas typically progress from their natural state, through earthy browns and finally settle into a distinctive verdigris green.

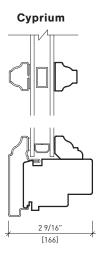
As the patina ages, residue may wash down and be visible on surfaces beneath the cladding. This is natural and adds to the classic appeal of Cyprium windows and doors.

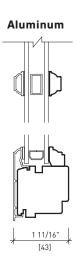
Note: Colors may not be exactly as shown.

Deep Interior & Exterior Profiles

As the illustration shows, Cyprium Collection profiles - and their matching interior wood muntins and glass stops feature a deep relief profile. Nominal .040" Copper and Bronze cladding is used to craft a rich, architecturally balanced appearance.

Cyprium SDL are also available in 7/8" (22 mm) as shown, 1 1/4" (32 mm) or 2" (51 mm).







Triple Sash

Cyprium windows are built with a triple laminated sash that accommodates deeper cladding and glazing stop profiles.



Copper Natura

Soldered Joints

Lead-free hand soldered joints render an authentic appearance that is both attractive and functional. Soldered joints create a cohesive, watertight body for frame and sash members resulting in a uniform reaction to temperature fluctuation.



Copper Natura

Recessed Mullion

Recessed from the face of the sill and frame, this classical mullion detail adds visual harmony. Cyprium's deep sills are well suited to masonry wall construction.



Profile Depth

Loewen's ensured fit and finish, superior design and guarantee of fine material make Cyprium a lifetime design investment.



Bronze Umbra

Capped Sill End

Hand-fitted sill caps are soldered in place for structural integrity and a finished appearance.



Bronze Verdigris

Picture/Direct Set Profiles

Picture/Direct Set (fixed, non-sashed units) offer an even deeper offset from the face of sill, head and frame members to the vertical plane of the glass.

Cyprium Profiles 7/8" [22] 1 1/4" [32] 2" [51] Wood (Interior) Metal Clad (Exterior)

Casement & Awning Hardware



Hannover Casement And Awning Handle And Cover (Oil Rubbed Bronze)



Provence Casement And Awning Handle And Cover (Oil Rubbed Bronze)



Tango Casement And Awning Handle And Cover (Bronze)

Solid Bronze Door Hardware



Churchill Handle (Rustic Bronze)



Shropshire Handle (Rustic Bronze)

Solid Brass Hardware



Meran Handle (Oil Rubbed Bronze)

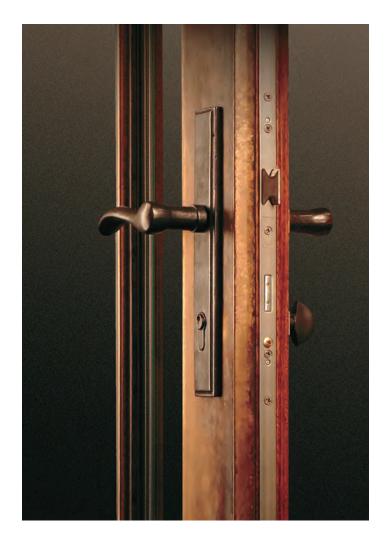


Verona Handle (Oil Rubbed Bronze)



Rodos Handle (Oil Rubbed Bronze)







Cyprium Terrace and French Terrace doors are available with flat or raised exterior panels and mid-rails.

Robust feel and superior security (left). Raised exterior panel (above).



Cyprium Collection Doors

Loewen's full clad door panels combine rugged performance with architectural elegance.

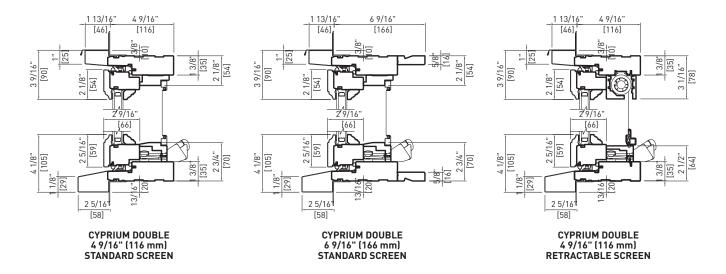
A fitting partner to legendary Loewen Douglas Fir (standard) or Mahogany (optional) construction, Cyprium doors offer robust security and timeless style with individuality derived from nature's "perfect imperfection" of a living patina.

Equipped with standard multi-point hardware - with stainless steel exposed components - Cyprium door and entryway systems are secure and reliable.

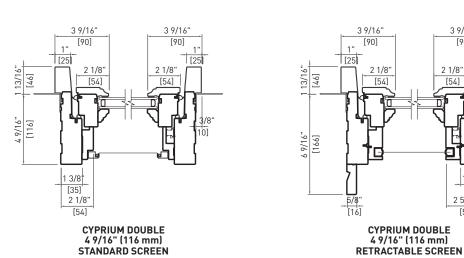
Bronze Umbra patina Terrace door featuring 7/8" Simulated Divided Lites (SDL).

Cyprium Casement Window Detail

Head & Sill Detail



Plan View



- · Other jamb widths available. Note:
 - All dimensions to have +/- 1/16" (2mm) tolerance.

3 9/16"

[90]

2 1/8"

[54]

[25]

10]

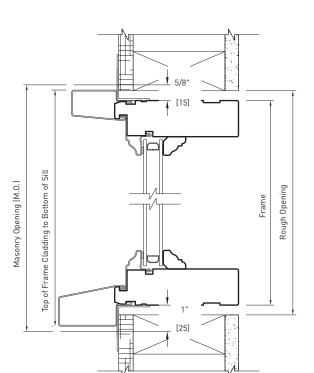
1 3/8

2 5/16" [59]

[35]

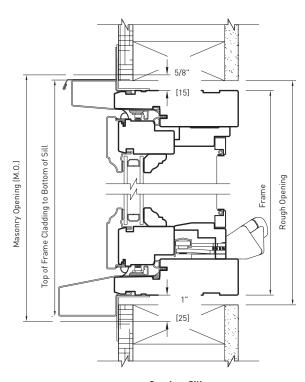
Masonry Opening Cyprium

Cyprium Frame Cladding. Add 5/8" (15mm) to Frame Dimensions at Head & Sides.



Cyprium Sill. Add 1" (25 mm) to Frame Dimension at Sill.

Cyprium Frame Cladding. Add 5/8" (15mm) to Frame Dimensions at Head & Sides.



Cyprium Sill. Add 1" (25 mm) to Frame Dimension at Sill.

EXAMPLE #1: PS1 2415, Frame dimensions, 94 1/2" [2400mm] x 59 1/16" [1500mm].

Masonry width = 94 1/2" (2400mm) + [5/8" (15mm) x 2] = 95 3/4" (2430mm)

Masonry height = 59 1/16" (1500mm) + 5/8" (15mm) + 1" (25mm) = 60 11/16" (1540mm)

EXAMPLE #2: CA1 0816, Frame dimensions, 31 1/2" [800mm] x 63" [1600mm].

Masonry width = $31 \frac{1}{2}$ " (800mm) + [5/8" (15mm) x 2] = $32 \frac{3}{4}$ " (830mm) Masonry height = 63" (1600mm) + 5/8" (15mm) + 1" (25mm) = 64 5/8" (1640mm)



Ultra Series







The Ultra Series

Kolbe's Ultra Series windows and doors can mimic the traditional style of wood windows and doors with a warm wood interior and intricate exterior trim details, or they can accommodate modern design needs. Choose from an extensive palette of exterior colors, interior wood species and finishes, divided lite profiles, and more.

The Ultra Series provides:

- Versatile styling, from traditional to modern architectural details
- Divided lite profiles & patterns; aesthetic & efficient glass choices
- Wood interior in familiar to exotic wood species
- Strong and durable extruded aluminum exterior
- A palette of 50+ exterior & 20 interior pre-finish choices





Residential Construction

Years of innovation at Kolbe have led to products with great design flexibility for residential construction. Whether it's renovation or new construction, we offer products that add your signature style into your home. Your design reflects not only an architectural style, but also your individualism – from colonial to contemporary, Kolbe has the products to help you express yourself.



Commercial Capabilities

Each of our windows and doors are built-to-order. Uniquely crafted to each project's specifications, Kolbe provides endless options and design solutions in configurations suitable for commercial projects. Our technical specialists can help provide support on various aspects of your commercial project.



Historical Renovation

Our reputation for producing custom-crafted windows and doors with attention to intricate details lends itself perfectly to historical renovation projects. Our products are designed to marry traditional design aesthetics with advanced technology and sustainability, and we offer many options to restore beauty to your project while maintaining historic character. In addition to providing aesthetics and efficiency, Kolbe can work with you to meet building codes and historical district requirements.



Energy Efficiency

Kolbe windows and doors are available with a wide variety of glass options to meet your energy needs in any climate. In fact, many Kolbe products meet or exceed ENERGY STAR® guidelines in most climate zones while reducing energy costs for home and business owners.



Sustainable Design

Due to our commitment to maintaining ecological sustainability, Kolbe sources most of the components used in our window and door products from within 500 miles of our factory. The wood species we use are renewable resources sourced from managed forests, while our standard glass contains 25-30% recycled content. In addition, we can provide The Forest Stewardship Council® (FSC®)-certified wood species for many of our window and door products (FSC® license code FSC-C019541).



Impact Certification

Impact modifications are available on a number of Kolbe windows and doors. Our products are specially designed with the strength and durability to withstand hurricane force winds and flying debris, and are independently tested to meet or exceed strict building codes in coastal regions. There are no unsightly rods or extra locks to fasten, so Kolbe's impact-certified products offer the same beautiful appearance as non-impact products.



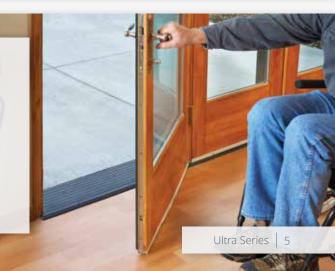
Design Options

For over 70 years, Kolbe products have been all about customization. We offer many options for our windows and doors, including wood species, custom divided lite patterns, unique shapes, and many interior and exterior finishes to complement the design aesthetic of any project. We're known worldwide for our custom solutions and have worked closely with architects to build distinctive windows and doors that help bring your most innovative ideas to life.



Universal Design

Universal design is the concept of creating spaces that are accessible and comfortable for individuals of diverse physical ability levels. Kolbe offers options for a variety of windows and doors that are not only designed to make independent living possible, but to do it with quality, style and flexibility. Kolbe's options, such as sill ramps, motorized operators, larger cranks and lever door handles, can help make independent living easier.





Casements

The design and performance of Ultra Series casements are the features that make these windows so popular. Most casements open from the side to a 90-degree angle, allowing for maximum ventilation. Multi-point locking levers offer a sleek, convenient way to tightly secure your windows from one locking location.

Crank-Out Casements | Crank-Out XL Casements | Push-Out & Push-Out EP Casements | French Casements | Picture & Transom Units | Picture Combination Units | Bow & Bay Units | Segment Head & Half-Circle Top Units



Crank-Out XL Casement Kolbe's crank-out XL casements fill massive openings for generous views and ventilation. A simple cranking operation opens and closes the window easily, despite the large size, with a choice of handle styles that fold down to avoid interference with curtains or drapes.

Crank-Out XL Casement Standard Features

- ▶ 2-1/4" thick sash
- Overall jamb width is 4-9/16" (basic box width is 3-1/4" plus extensions)
- Constructed of pine, with pine interior stops and wood mull casings on mulled units
- Exterior wood parts are treated
- Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (meets performance requirements of AAMA 2605)
- Accessory grooves are integral to the extruded frames for the easy addition of accessories
- ▶ Energy efficient, insulating Solar Low-E glass
- ► Glazed to the interior with beveled wood glazing beads

NOTE: All measurements are nominal.

* Standard only on units without brickmould.

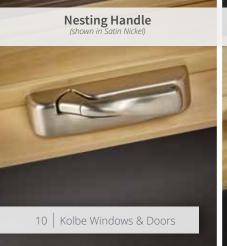
- Interior insect screen with Clay-colored aluminum frame and BetterVue® fiberglass mesh
- ► Clay-colored nesting handle and locking lever with multi-point locking system
- Corrosion resistant, dual-arm operators with concealed, adjustable hinges (On "W" series and wider. Dyad operators with concealed, adjustable hinges on units narrower than "W"; single-arm operators with Tri-Euro hinges for added support on segment head, half-circle top and impact units)
- Heavy vinyl nailing fins with head drip caps*

Hardware

- ▶ Nesting handle and locking lever[†] provide a sleek look and are unobtrusive. Available in Clay, White, Beige, Bright Brass, Antique Brass, Satin Nickel, Antique Nickel, Rustic Umber, Oil-Rubbed** or Matte Black.
- ▶ Metal Ashlar handle with multi-point locking lever. Available in White, Rustic Umber, Satin Nickel or Matte Black.
- Nesting handle with custodial lock prohibits unauthorized operation. Available in White, Beige, Rustic Umber or Matte Black.
- ▶ Universal design casement handle and lock are larger and offer ease-of-use for people with physical limitations. Available in White or Clay.

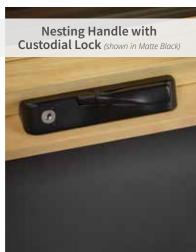
†Locking lever is not available on French casements.

**The Oil-Rubbed finish is a living finish, which means that it will change appearance over time with use.











Crank-Out XL Casement Options

Glass (pg. 200)

- Solar Gain Low-E
- Solar Advanced Control Low-E
- Solar Control Low-E
- ThermaPlus™ Low-E
- Neat®
- Triple pane
- Patterned-, bronze-, or gray-lite
- Tempered or laminated
- Other options standard to the industry

Divided Lites (pg. 201)

- Performance divided lites with 5/8", 7/8", 1-1/8", 1-3/8", 1-3/4", 2-1/4" or 4-1/2" bars
- Grilles-in-the-airspace

Insect Screens

- Insect screen with aluminum or UltraVue® fiberglass mesh; frame available in White, Beige, Dark Bronze anodized, Clear anodized, or Coal Black
- Retractable insect screen kit with beveled or square cover (pg. 204)
- Wood wrapped insect screen frame (not available on radius top units)
- Brass insect screen with Brass frame (not available on radius top units)

NOTE: All measurements are nominal.

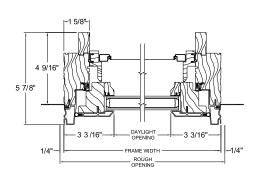
Other Options (not all options are available on all casement types; custom options are also available)

- French crank-out casements
- Other wood species and FSC®-certified wood (pg. 198)
- Interior prefinishing (pg. 198)
- Interior casing
- Ovolo or square profile glazing beads and interior divided lite bars (pg. 201)
- Prep for stool
- Extruded aluminum accessories applied to accessory grooves on the exterior frame (pgs. 206-212)
- Ashlar handle in Satin Nickel, White, Rustic Umber or Matte Black
- Single-arm operators with Euro hinges (meet emergency escape and rescue requirements on some "L" Series casements)
- Stainless steel exterior operator parts
- Extension jambs (up to 12" applied, over 12" shipped loose for field application)
- Galvanized steel installation clips
- Factory-installed Window Opening Control Device (WOCĎ) (pg. 203)
- High performance or impact performance modifications (pg. 205)

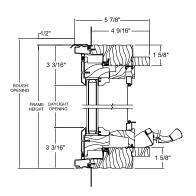


Crank-Out XL Casements | Double Pane

Horizontal Section

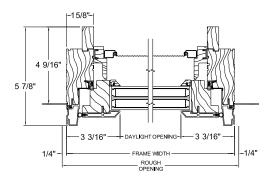


Vertical Section

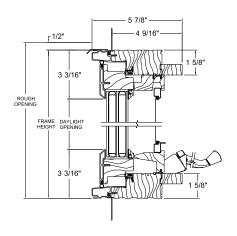


Crank-Out XL Casements with 4-9/16" Jamb | Triple Pane

Horizontal Section



Vertical Section



Exterior Color Optio

Mudpie

Gingersnap

Onyx

Corbeau

Cider

Papaya

Galaxy Silver

Ultra Series products a fluoropolymer coating, durability and resistance t and weathering. It carries proves Kolbe's commitm In addition to the standa specified, as can 4 anoc mica fluoropolymer finis

ducts are finished with a 70% PVDF sating, which is the best choice for stance to chemicals, abrasion, corrosion, carries up to a 30-year warranty, which simmitment to providing the very best. standard colors, custom colors can be 4 anodized aluminum finishes and 4 er finishes.			White		Cloud	Ultra Pure White
			Abalone)	Alabaster	Camel
Nutmeg	Khaki	Sahara	Beige		Natural Cotton	—Spiced Vinegar
Truffle	Bronze	Rustic	Shadow	,	Shale	Smokestack
Coal Black	Midnight	Steel Gray	Slate		Castlerock	Timberwolf
Sapphire	Coastal Storm	Anchor Gray	Lunar		Emerald Isle	Mediterranean
Copper Canyon	Maize	Green Tea Leaf	Basil		Hartford Green	Mystic Ivy
Roma	Chutney	Create Your Color		ized	Clear	Champagne
			Mica	Anodized		
Silverstorm	Cosmic Gray	Night Sky			Black	Dark Bronze

Some options for our products may have limited color offerings or may incur a nominal charge. Check with your Kolbe dealer for further details on pricing and availability. Printed images of exterior finishes may vary slightly from actual colors. Selections should be made based on actual color samples available from your Kolbe dealer. There is a "color range" with anodized colors. That is, there is an acceptable "light" to "dark" color range that can be experienced on any job. According to AAMA 611-98 specifications, Section 8.3, the range may be up to 5 Delta E's. We can provide from our anodized vendor color samples of this color range if requested. The color range is due to numerous variables which include (but are not limited to) the shape of the parts, alloy variations and time in the anodizing process. This could mean that a sash part may appear slightly different in color than a frame part. This is/will be acceptable. Even the samples that may be provided may vary from the final product due to the variables. You must be aware of this as this will be considered acceptable.

Glass Options

Glass

Kolbe offers glazing options to provide optimum energy efficiency for the geographic region in which you live. Low-E is a "smart" coating that reduces energy transfer through the insulating glass unit. The result is reduced heating and cooling costs throughout the year. Low-E coatings also reduce the potential for condensation, as well as provide protection against fading of furniture, fabrics and carpeting.

Kolbe offers the following Low-E glass options, as well as many specialized options.

Solar Low-E

Suitable for most climates and meets most energy zone requirements. Solar Low-E glass is designed to reflect room-side heat back into the room during winter months. In summer, visible sunlight is allowed in while blocking most of the sun's infrared heat energy. Kolbe's standard.

Solar Gain Low-E

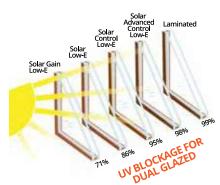
When the weather turns frigid, Solar Gain Low-E glass is the perfect cold remedy. It keeps homes warmer and more comfortable by blocking heat loss to the outside and letting the sun's heat stream in to increase solar heat gain.

Solar Advanced Control Low-E

A tinted glass recommended for warm climates that achieves solar control over a wide range of the spectrum, while also helping to reduce glare.

Solar Control Low-E

Offers an ideal balance of solar control and high visibility by blocking 95% of UV rays while maintaining the interior temperature.



NOTE: Tested units include argon. The laminate has 1/4" inner pane. Based on Lawrence Berkeley Lab (LBL) Window 5.2 © 2003 analysis for classical UV transmission data.

ThermaPlus™ Low-E

An additional Low-E coating which helps to meet the strictest energy requirements by providing protection against heat loss and UV damage. Available with dual pane versions of Solar Low-E, Solar Control Low-E or Solar Advanced Control Low-E glass.

Triple Pane

Provides a greater energy performing window that keeps indoor air warm and comfortable, prevents heat loss and lowers your heating bills. It is constructed with three panes of glass, thermal spacer bars and is available in Solar Low-E, Solar Gain Low-E, Solar Control Low-E and Solar Advanced Control Low-E glass.

Preserve® Film

A protective film that protects the glass surfaces from scratches during transit and construction, as well as reducing the time involved in job site clean-up.

Tinted, Colored or Patterned

Provides shading, privacy or visual interest.

Standard in Kolbe doors to address safety concerns. Also available in window units to meet specific building codes.

Laminated

Benefits include safety, security, sound control and provides the ultimate in UV blockage.

Glazing utilized to withstand harsh environmental conditions, especially in coastal regions. Combined with an impact rated product, this glazing offers the highest level of security.

Harnesses the sun's UV rays to loosen dirt so water can rinse it away, leaving windows virtually spotless. A special sputter-coating process makes the glass ultra smooth, so the water "sheets off" more readily than it would on uncoated glass, allowing you to spend less time cleaning.

Not all glass is available on all products. Please contact your Kolbe dealer for product specifics. Neat and Preserve are trademarks of Cardinal IG. Low-E insulating glass with a stainless steel spacer bar carries a 20-year warranty. Not all glass options listed have the same glass warranty. Please contact your dealer for details.

Divided Lite Options

Expand the character of your home or project by adding one of our divided lite options to your windows and doors. Choose anything from a traditional, colonial-style pattern to a unique, custom design to accentuate the overall appearance of your project. Kolbe offers two types of divided lites for Ultra Series products: performance divided lites and grilles-in-the-airspace. As standard, wood bars have a beveled profile, however, an ovolo profile or a square profile is also available. Divided lite cross section drawings can be found on pg. 213.

Performance Divided Lites

Kolbe's performance divided lite (PDL) glazing system gives the appearance of true divided lites without sacrificing energy efficiency. Extruded aluminum bars are adhered to the exterior and pine bars are adhered to the interior of the single lite of insulating glass. Aesthetically pleasing spacer bars are installed within the insulating glass unit. Together, these bars create the illusion of true divided lites. PDL bars are available in 5/8", 7/8", 1-1/8", 1-3/8", 1-3/4", 2-1/4" or 4-1/2" bar widths. The exterior finish of the aluminum bars will match the exterior finish on the unit. Variations on the PDL option may include custom grille patterns, custom bar widths or no spacer bars. Some designs may have a composite material for the exterior PDL bar.





Beveled

Ovolo



Square

Grilles-in-the-Airspace

Grilles-in-the-airspace are constructed with aluminum bars sealed between two panes of insulating glass, offering the look of divided panes while reducing cleaning time. For units with 7/8" insulating glass, contoured, 3/4" wide bars are standard in White, Beige, Sand, Rustic, Hartford Green and Chutney. Optional colors are light wood and dark wood faux finishes. Two-tone contour or flat grilles are available with either light or dark wood faux finishes to the interior and White to the exterior. Also available for 7/8" insulating glass are 5/16" wide Brass and Pewter pencil bars.



Glazing Beads & Muntin Bars

As standard, glazing beads have a beveled profile, but may also be ordered with an ovolo or square profile. Matching muntin bars are available on units with performance divided lites (PDL). Units will have beveled muntin bars on the exterior, regardless of which profile is chosen for the interior (See divided lite cross section drawings on pg. 213).







Beveled

Ovolo

Square

Options & Accessories

Exterior Trim Options

Ultra Series windows and doors are standard without brickmould. For a more distinctive look, numerous different extruded aluminum trim profiles are available. Various sill nosings can also be applied with brickmould to enhance the overall appearance and to create the perfect look. Custom brickmoulds and casings are available as well; talk to your local Kolbe dealer for more information.



1-15/16" brickmould



1-5/8" brickmould



2" flat casing



2" flat casing with backband



3-1/2" profiled brickmould



3-1/2" flat casing



3-1/2" flat casing with backband



Ogee casing



Bull nose casing



Historic brickmould



Pavilion brickmould



Stucco casing



Beaded casing



Beaded casing with backband



Chicago brickmould (field applied only)

Universal Design

To meet the needs of homeowners with physical limitations, Kolbe offers a variety of windows and doors that are designed to make independent living possible. From door sills that create a flush surface for easier passage between the interior and exterior, to window and door hardware that provides ease of operation, we have numerous options that will help make living at home far easier. Whether your project is new construction or you are adapting an existing residence for a special need, Kolbe's windows and doors with universal design options will give you the freedom and style you are seeking.

Casements



Longer crank handles with large knobs for casement windows make operating easier. Available in white or clay.



Larger levers for multi-point casement locks make locking of a casement window easy. Available in white or clay.



Motorized operators make opening and closing casement windows simple and effortless. Available in white or clay.

Double Hungs



A crank handle hardware kit for double hungs allows the bottom sash to be operated with minimal effort Available in white

Swinging Doors



Wider door sizes help provide additional space for those who use mobility aids.



ADA-compliant sills (thermal break and non-thermal break) for swinging doors create a flush surface for easy access to pass through.



Lever handles for swinging doors are available in a variety of styles and finishes and make operation easier than doors with knobs.

Sliding Doors



Aluminum sill ramp kits for Garden-Aire sliding patio doors allow smooth transitioning between the interior and exterior of the home.

Many of these options meet standards of the Americans with Disabilities Act. Other options, such as taller bottom rails on doors, are also available to meet these standards. Certain product limitations and modifications may apply. Please contact your local Kolbe dealer for more information.

Window Opening Control Devices (WOCDs)

Kolbe offers Window Opening Control Devices (WOCDs) that restrict the size of the open window area to less than 4 inches, and feature a limit release mechanism to allow for emergency escape. These devices allow the window to latch into place at a predetermined position and automatically re-latch when closed. The WOCDs meet the ASTMF2090-13 requirements.

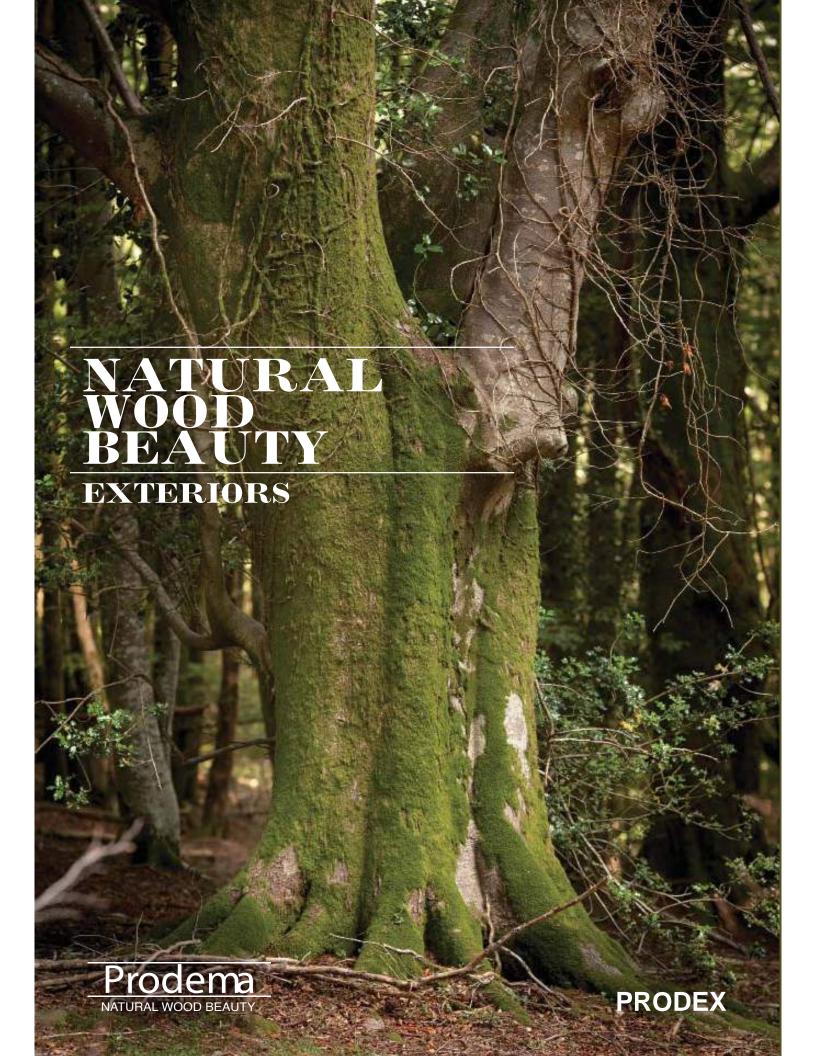
WOCDs can be factory applied to Ultra Series Sterling double hungs, XL Sterling double hungs, and Traditional double hungs, and are available in a Satin Nickel finish. WOCDs may also be field-applied to crank-out and push-out casements.



Double Hung with WOCD



Crank-out Casement with WOCD





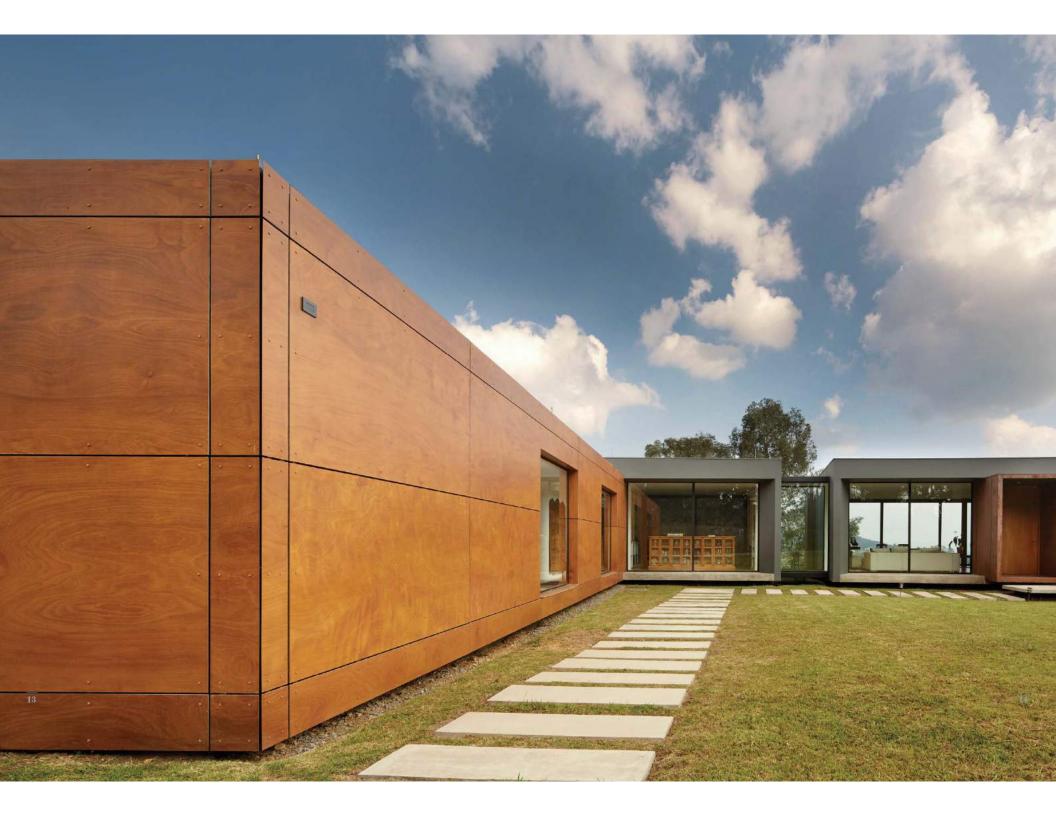


THE ELEGANCE OF NATURAL WOOD

Our objective is to provide the world of architecture with unique materials that help architects design warm, beautiful, comfortable spaces that improve the quality of life for all.

Energy efficient buildings with the elegance of natural wood.









PRODEX pushes the envelope in facade design as architects partner with Prodema to create innovative designs never thought possible. A product that allows your vision become reality by offering versatility, warmth, elegance, and remarkable performance.

Here at **Prodema** we work hard to be a source of inspiration for architects. This partnership has translated into prestigious architectural design awards, globally.

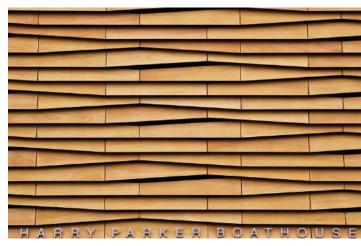






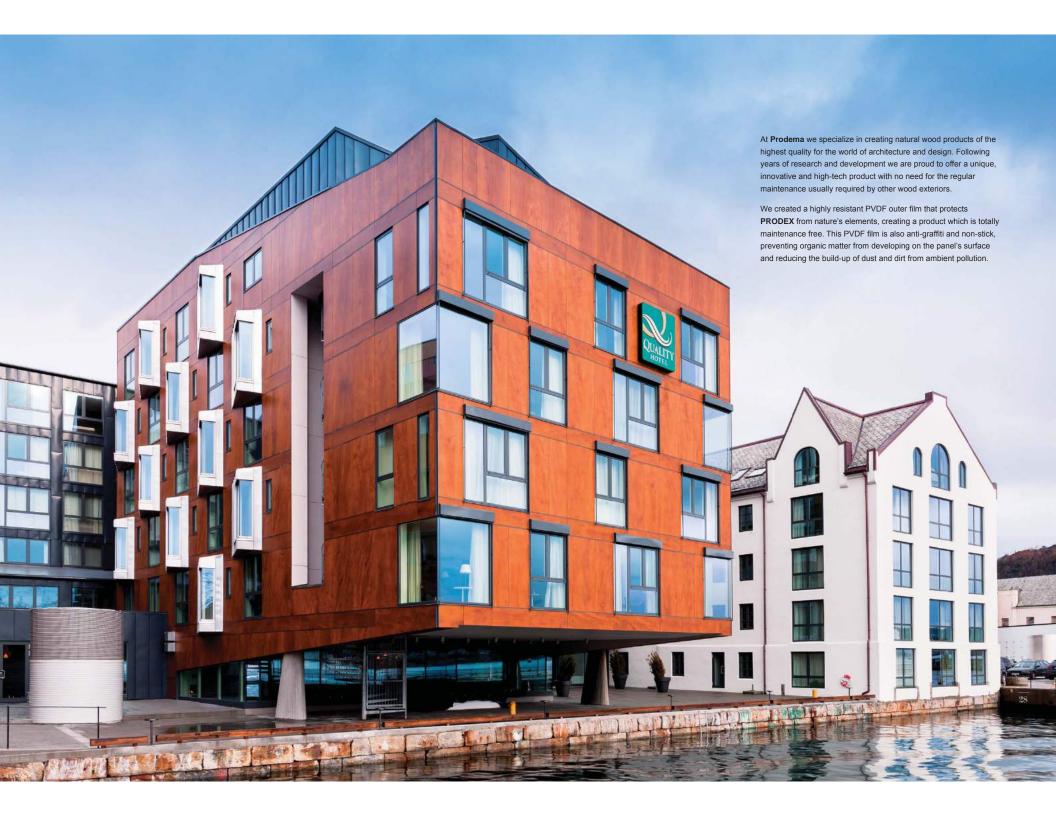
Harry Parker Boathouse, Boston

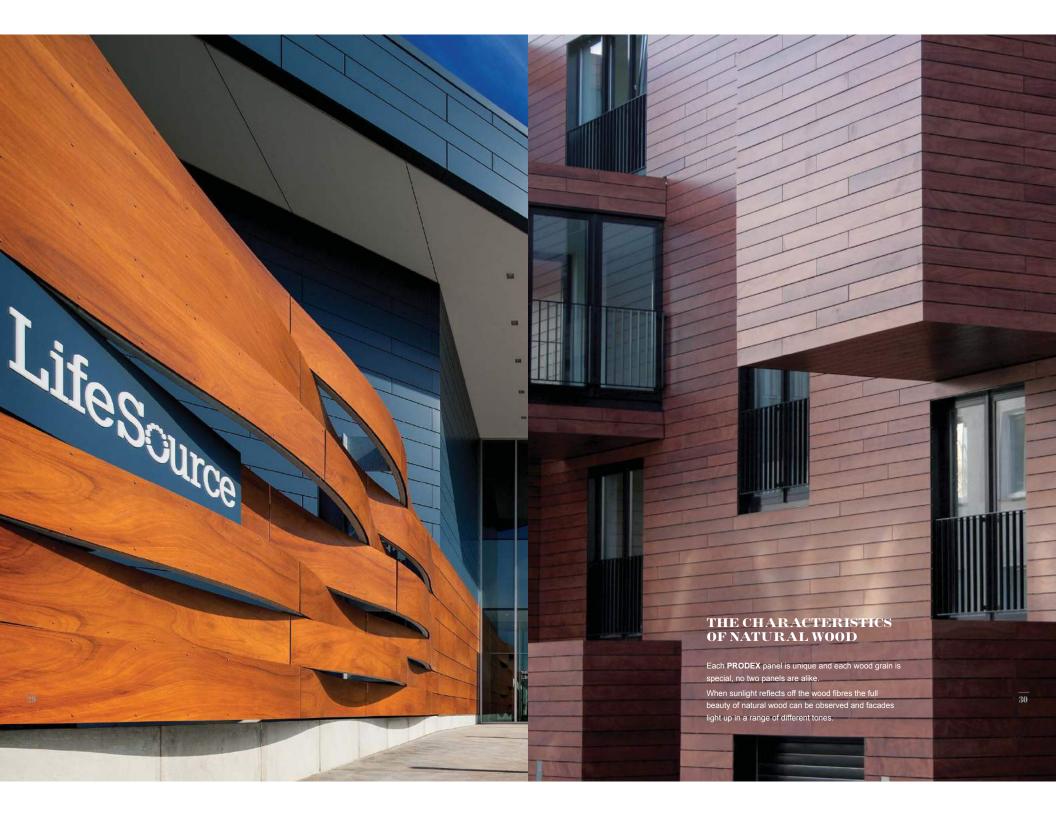
2014 AIA Institute Honor Awards for Architecture. Chicago Athenaeum American Architecture Award 2008.















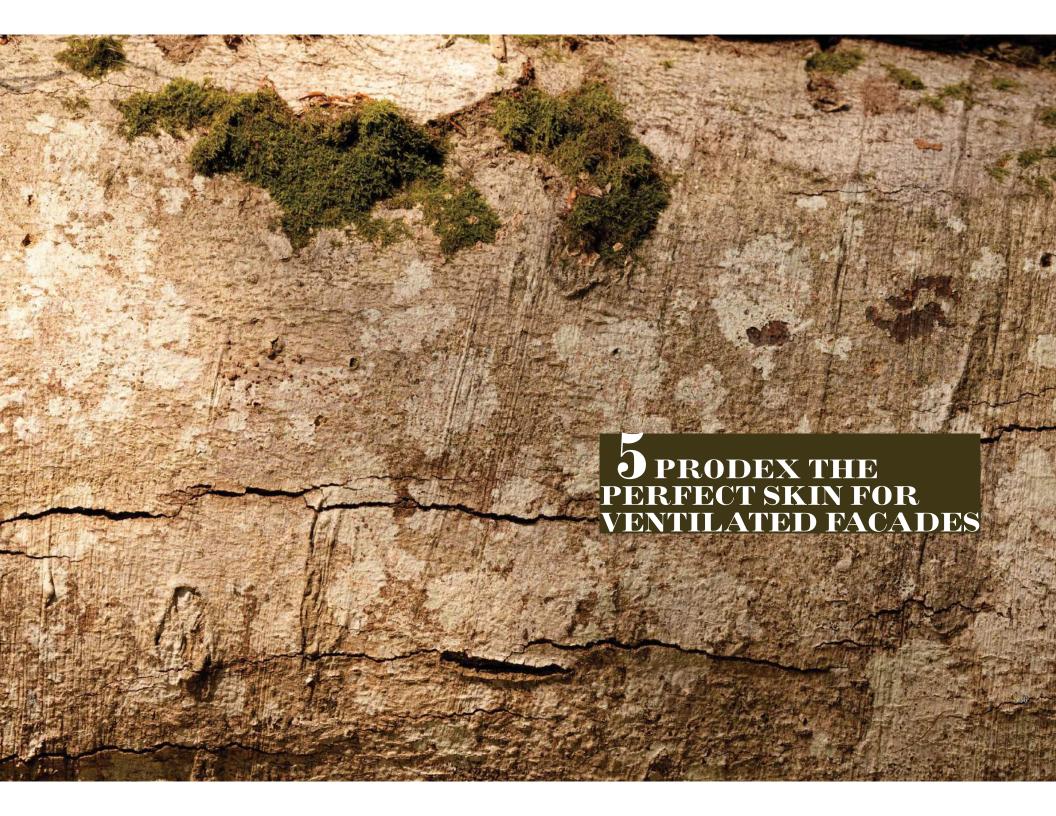




At **Prodema** quality design and innovation are of upmost important to us. However, our respect for nature is even more important: being both our source of material and our inspiration. At **Prodema** we work to promote sustainable construction by maximizing wellbeing with environmental efficiency in building projects.

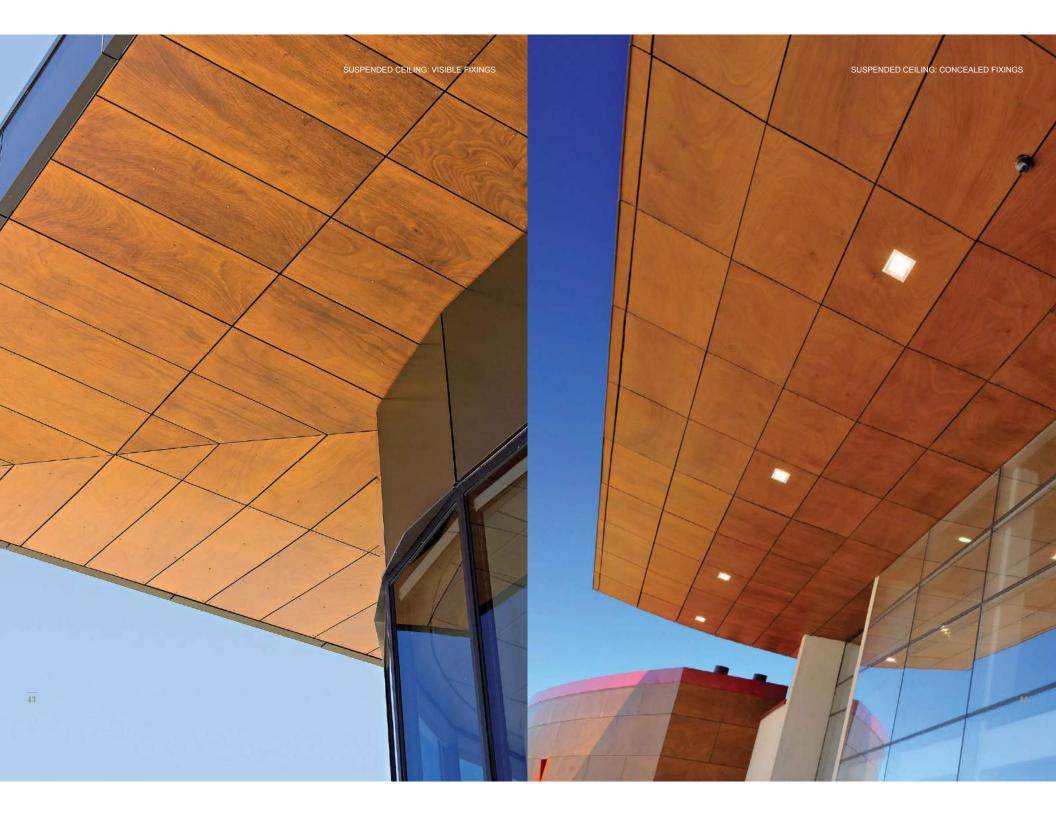
Using Prodema also provides points in green building certification schemes such as LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assesment Methodology).

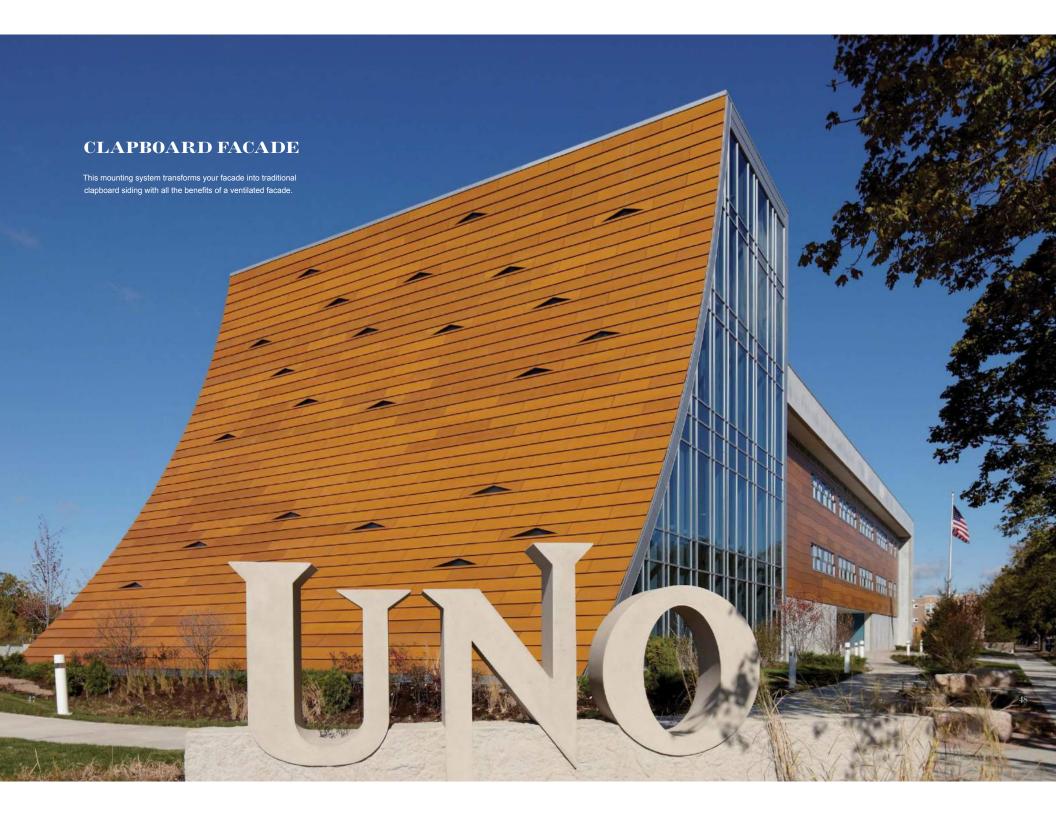
Prodema also boasts **PEFC** certification, the guarantee that our products have been manufactured with raw forest materials managed in a socially and environmentally responsible way.

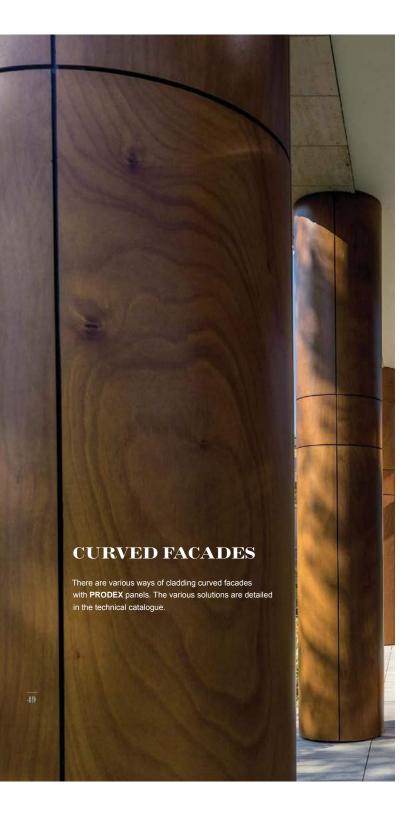


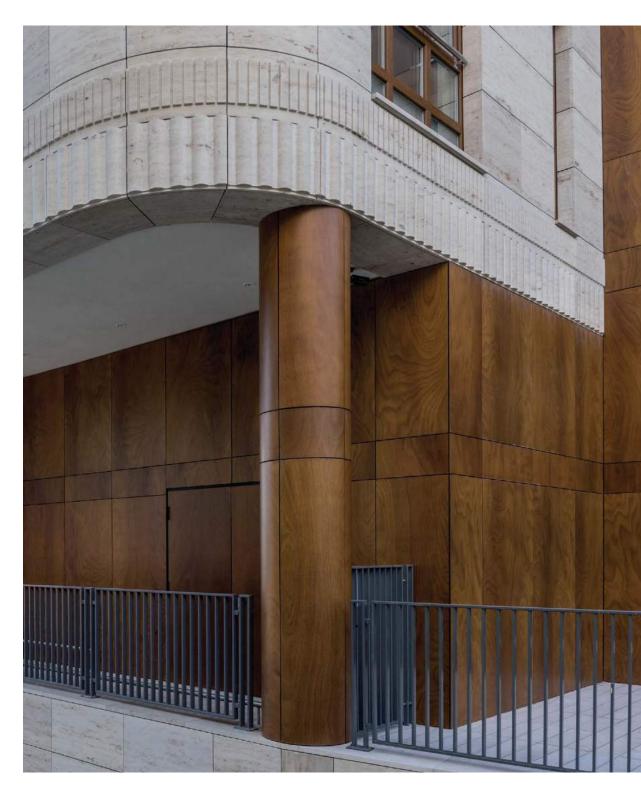


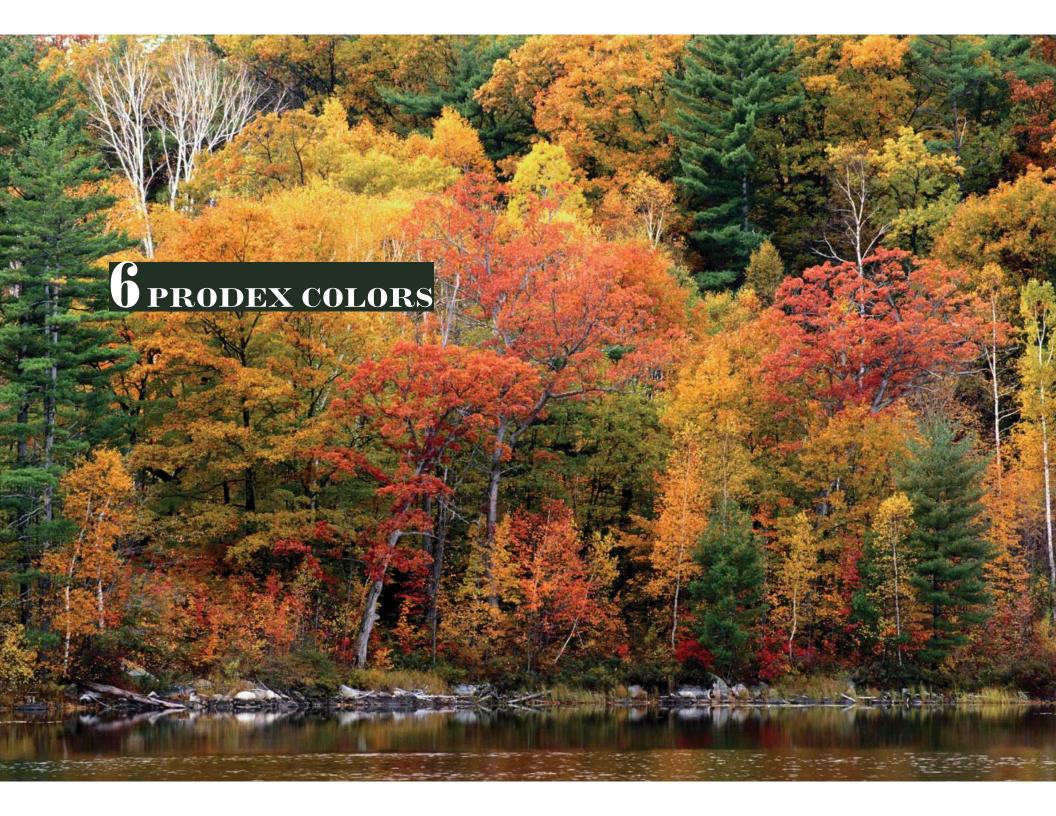












IN THE PRODEX TECHNICAL CATALOGUE ALL THE TECHNICAL SPECIFICATIONS AND POSSIBLE USES FOR THE PRODUCT CAN BE FOUND

PANEL COMPOSITION:

PRODEX panels have a bakelite core covered with a natural wood veneer that is specially treated to ensure maximum resistance.

We have developed an exterior PVDF film with non-stick qualities in order to achieve a maximum level of care for the wood, ensuring panels are protected from moisture, rain, sunlight, and even the build-up of dirt on the panels' surface.

MAINTENANCE-FREE:

PRODEX natural wood panels do not need the regular maintenance other woods for exterior require.

AESTHETIC:

PRODEX panels offer the design world the possibility to create natural, living facades with a wide range of tones and creative options available.

RESISTANCE AND DURABILITY:

PRODEX panels are the perfect material for cladding facades thanks to the panel's technical qualities. The panel's bakelite core means it is possible to adjust the panel's thickness and its subsequent technical qualities making PRODEX the ideal solution for all types of projects.

PRODEX panels are extremely hard, rendering them perfectly resistant to continuous exposure to sunlight and sharp changes in temperature and humidity.

They also offer a high level of durability against termite attacks and maximum resistance to vandalism.

PRODEX panels also offer excellent dimensional stability.

CLEANING:

The PVDF surface prevents dust and all kinds of dirt from sticking to the panel surface, ensuring ease of maintenance and cleaning.

ANTI-GRAFFITI RESISTENCE:

The outer chemical non-stick layer impregnated into PRODEX panels prevents aerosol paint from sticking permanently to the surface.

PANEL DIMENSIONS:

Length x width: 2.440 mm x 1.220 mm. Thicknesses 6, 8, 10, 12, 14, 16, 18, 20, 22 mm.

FIRE RATING:

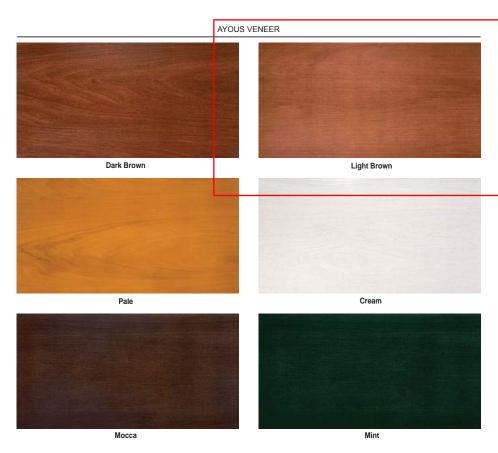
On request, panels may be supplied with different reactions to fire in line with standard EN 13.501-1:

▼ PRODEX C - s1, d0

¥ PRODEX IGN B - s1, d0

▼ PRODEX: Class B for North America

▼ PRODEX IGN: Class A for North America



OKUME VENEER



Ice grey



GKD Metal Fabrics are technologically advanced woven metal fabrics suitable to large or small scale applications, both interior and exterior. We provide a complete design-build solution, custom engineering and installing each project with proprietary attachments. Our metal fabrics are manufactured on four continents, adding drama and beauty to great architecture throughout the world.

A Design-Build Solution

A Turnkey Product

When you specify GKD metal fabrics, we will work with you on concept development, design, engineering, fabrication, delivery and on-site installation, including the hardware for attachment. Our team of professionals

is accustomed to working worldwide with the most demanding designs and programs, collaborating with your team to realize your vision — without compromise.

For the Long Haul GKD metal fabrics are the smart choice environmentally friendly, durable and virtually maintenance-free. Our stainless steel is an energy efficient product to manufacture, made with recycled material as well as being recyclable itself. Non-corrosive, GKD metal fabrics can be simply washed with water if it ever becomes necessary.





Façades

Woven metal façades provide both utility and beauty for any structure, from a parking lot to a museum. Around the world, residences, offices, factories, hospitals, schools and sports facilities are protected and enriched

by GKD metal fabrics. The open weaves offer transparency and functionality, enticing from the outside without obscuring views from within, allowing for air circulation while also providing the necessary security







Mandarin



Product SpecificationsFlexible, two directions

Material **Bronze** Open Area 37% 0.50 lbs/sqft Weight

Max. width 12'

System Components Flat & angle

Flats with clevis Flats, clevis & binding rod

Applications

Mesh Wall Coverings Ceilings Mesh Partitions

North American Headquarters

North America GKD-USA, Inc.

825 Chesapeake Drive Cambridge MD 21613 Direct: 410.901.8429 or

410.901.8428

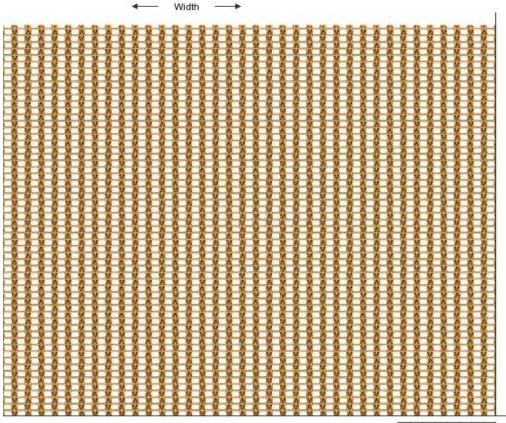
410-221-0544 Fax: metalfabrics@gkdusa.com





Please refer to page 2 for Solar Control Data





Inches



Mandarin





GKD-USA offers a complete sunshade technical program. Our engineering team works with you to provide an assessment and application analysis to your specific need or project. GKD Metal Fabric Sunshading Façades offer significant energy saving, comfort, and a pleasant work environment by filtering light and providing transparent views to the outside.

North American Headquarters

North America GKD-USA, Inc.

825 Chesapeake Drive Cambridge MD 21613 Direct: 410.901.8429 or

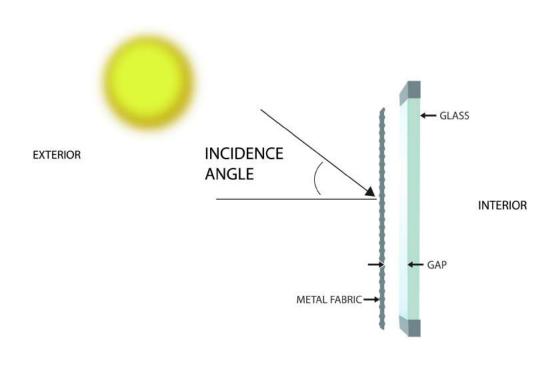
410.901.8428

Fax: 410-221-0544 metalfabrics@gkdusa.com

GKD

Solar Control Data

Percentage of Visible Light Transmittance Percentage of Visible Light Reflectance Solar Gain Coefficient (SHGC) Minimum 0.23, Maximum 0.41 Minimum 0.25, Maximum 0.33 Minimum 0.18, Maximum 0.30



SOLAR CONTROL DATA NOTES:

Test per EN 410 "Glass in building - Determination of luminous and solar characteristics of glazing" SHGC per EN 13363-1 "Solar protection devices combined with glazing - calculation of solar and light transmittance" Glazing system constants: Uglazing = 1.2 W/m²K, gglazing= 0.60

TVtot = Visible light transmittance

PVtot = Visible light reflectance

gtot = Solar Heat Gain Coefficient (SHGC)