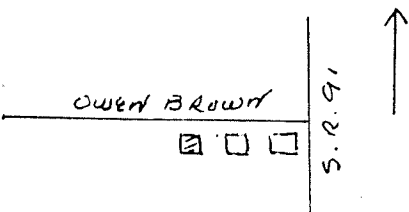
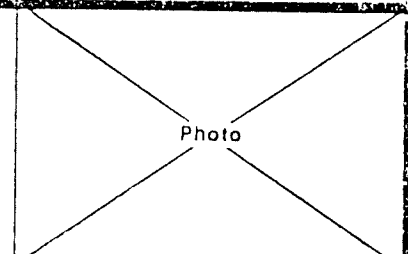


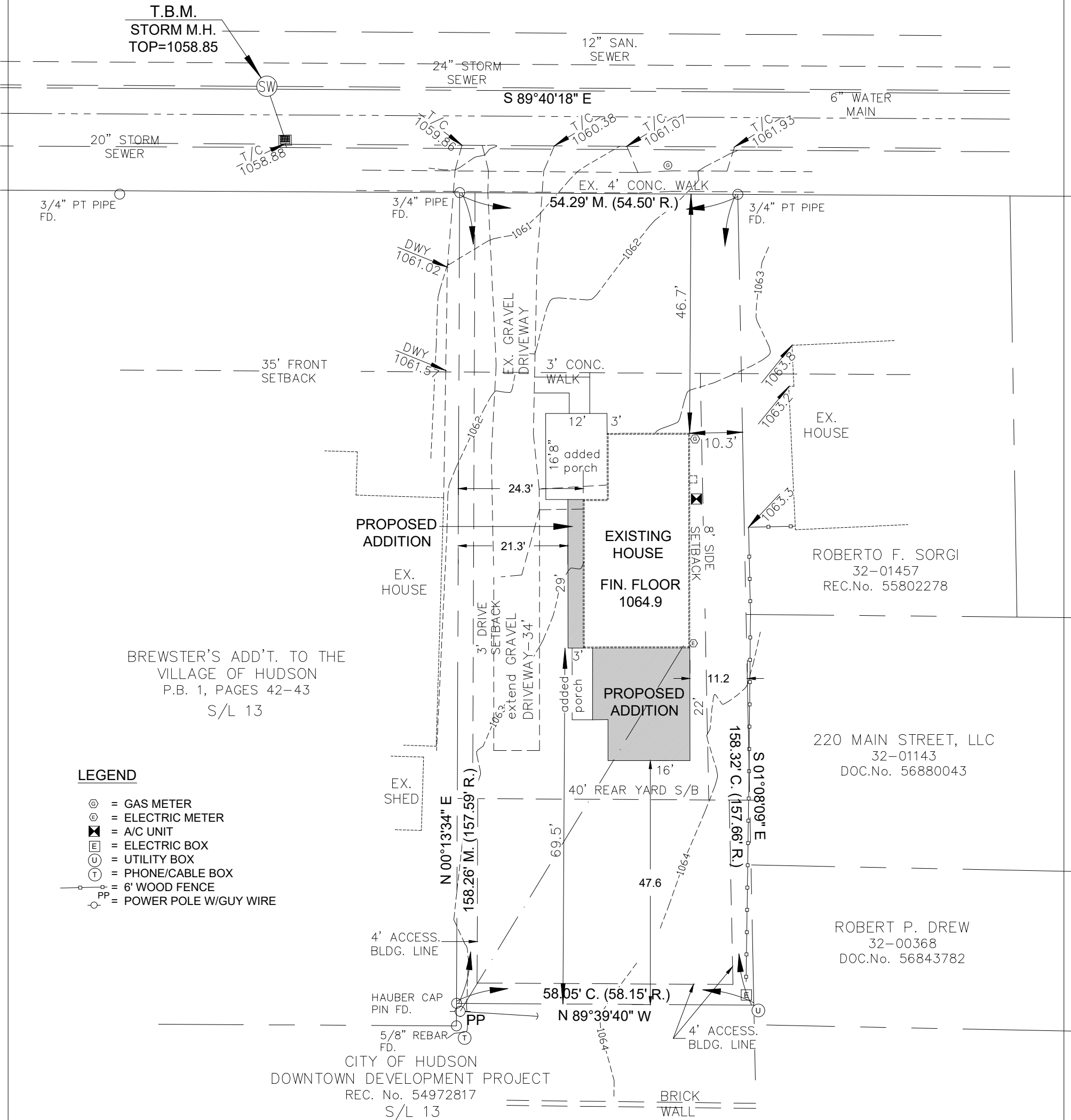
No.		4. Present Name(s)	
County Summit		Residence, Nola Weiss	
Location of Negatives HHA 38-4		5. Other Name(s)	
S c Location		16. Thematic Category C	
16 Owen Brown Street		17. Date(s) or Period c. 1860	
City or Town If Rural, Township & Vicinity Hudson		18. Style or Design Gothic Revival	
Site Plan with North Arrow		19. Architect or Engineer	
		20. Contractor or Builder	
		21. Original Use, if apparent residence	
		22. Present Use residence	
		23. Ownership Public <input type="checkbox"/> Private <input type="checkbox"/>	
Coordinates		24. Owner's Name & Address, if known Nola Weiss 16 Owen Brown Street Hudson, Ohio 44236	
Lat. _____ Long. _____		25. Open to Public? Yes <input type="checkbox"/> No <input type="checkbox"/>	
U.T.M. Reference 7 463000 4565615			
Easting Northing		26. Local Contact Person or Organization Hudson Heritage Association	
Site <input type="checkbox"/> Building <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Object <input type="checkbox"/>		27. Other Surveys in Which Included	
On National Register? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		37. Condition Interior _____ Exterior fair	
12. Is It Eligible? Yes <input type="checkbox"/> No <input type="checkbox"/>		38. Preservation Underway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
14. District Potentially? Yes <input type="checkbox"/> No <input type="checkbox"/>		39. Endangered? By What? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Name of Established District Hudson Historic District		40. Visible from Public Road? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Further Description of Important Features		41. Distance from and Frontage on Road 48' 54'	
Jigsaw trim at roof line; 3 small high windows in side windows altered on east side.			
History and Significance Moved from 21 Clinton Street, present site of Morse Instrument Co.			
Description of Environment and Outbuildings Quiet residential street of historic houses. Main Street Commercial area at rear.			
Sources of Information		46. Prepared by F. Barlow, L. Newkirk	
Summit County Tax Assessment Records		47. Organization HHA	
Personal inspection		48. Date 49. Revision Date(s)	

Summit

Residence, Nola Weiss

Other Name(s)

OWEN BROWN STREET 40'



IMPERVIOUS SURFACE CALCULATION
TOTAL LOT AREA = 8,890 S.F.
ALLOWABLE IMPERVIOUS SURFACE AREA = 3,556 S.F. (40%)
CURRENT IMPERVIOUS SURFACE AREA = 2,500 S.F. (28.0%)
DATE : 1-30-25

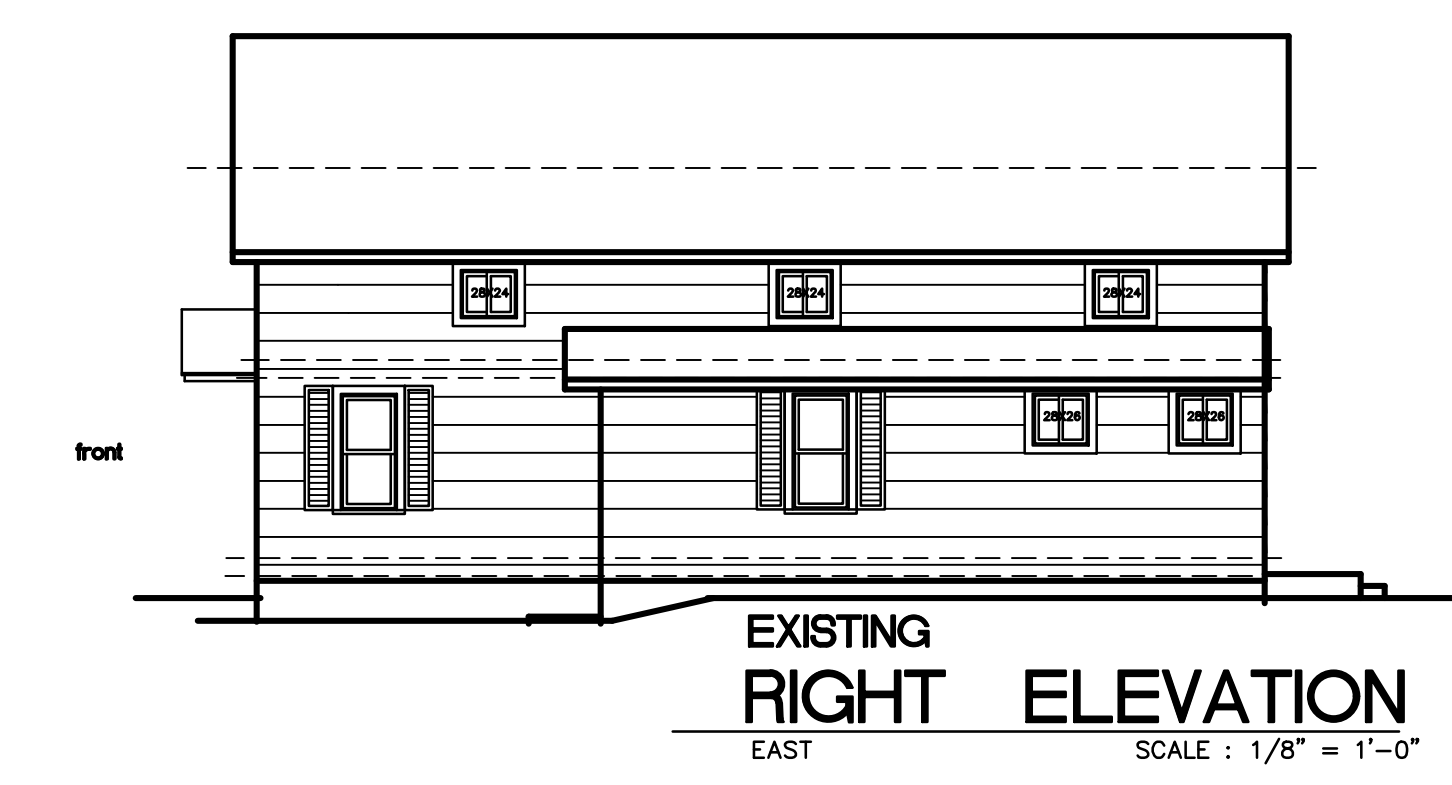
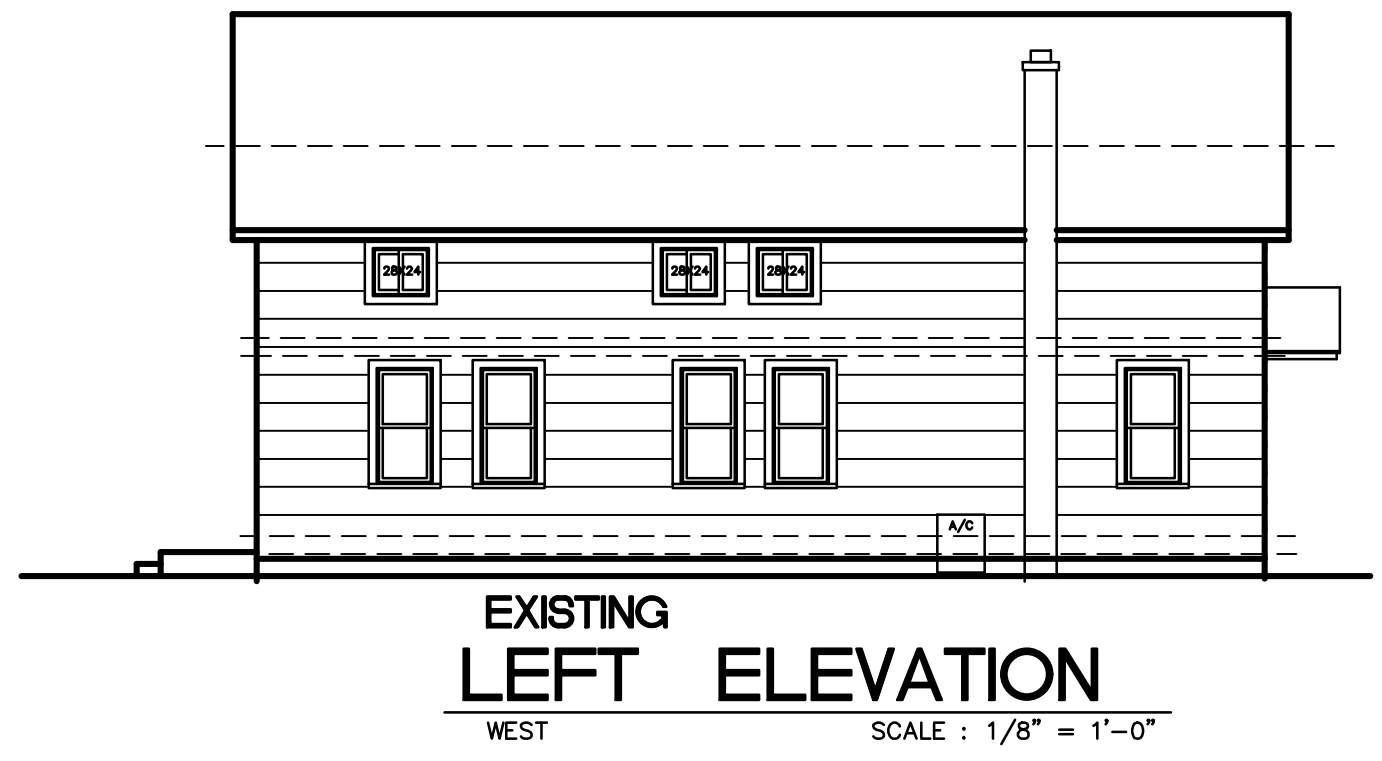
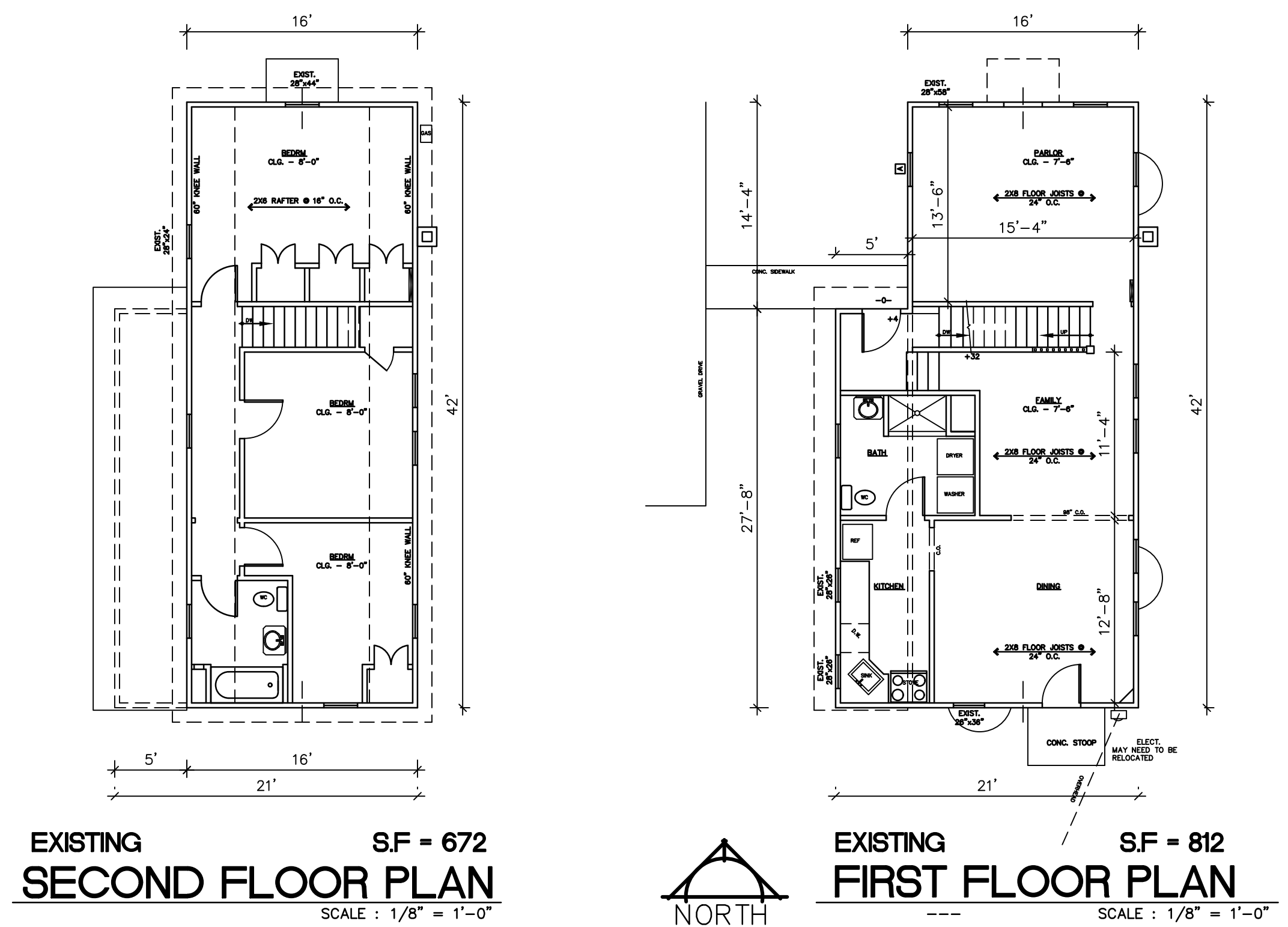


I HEREBY CERTIFY THAT I HAVE SURVEYED THE LAND SHOWN ON THIS PLAT AND THAT THIS PLAT IS A CORRECT REPRESENTATION OF THE LAND SHOWN HEREON.

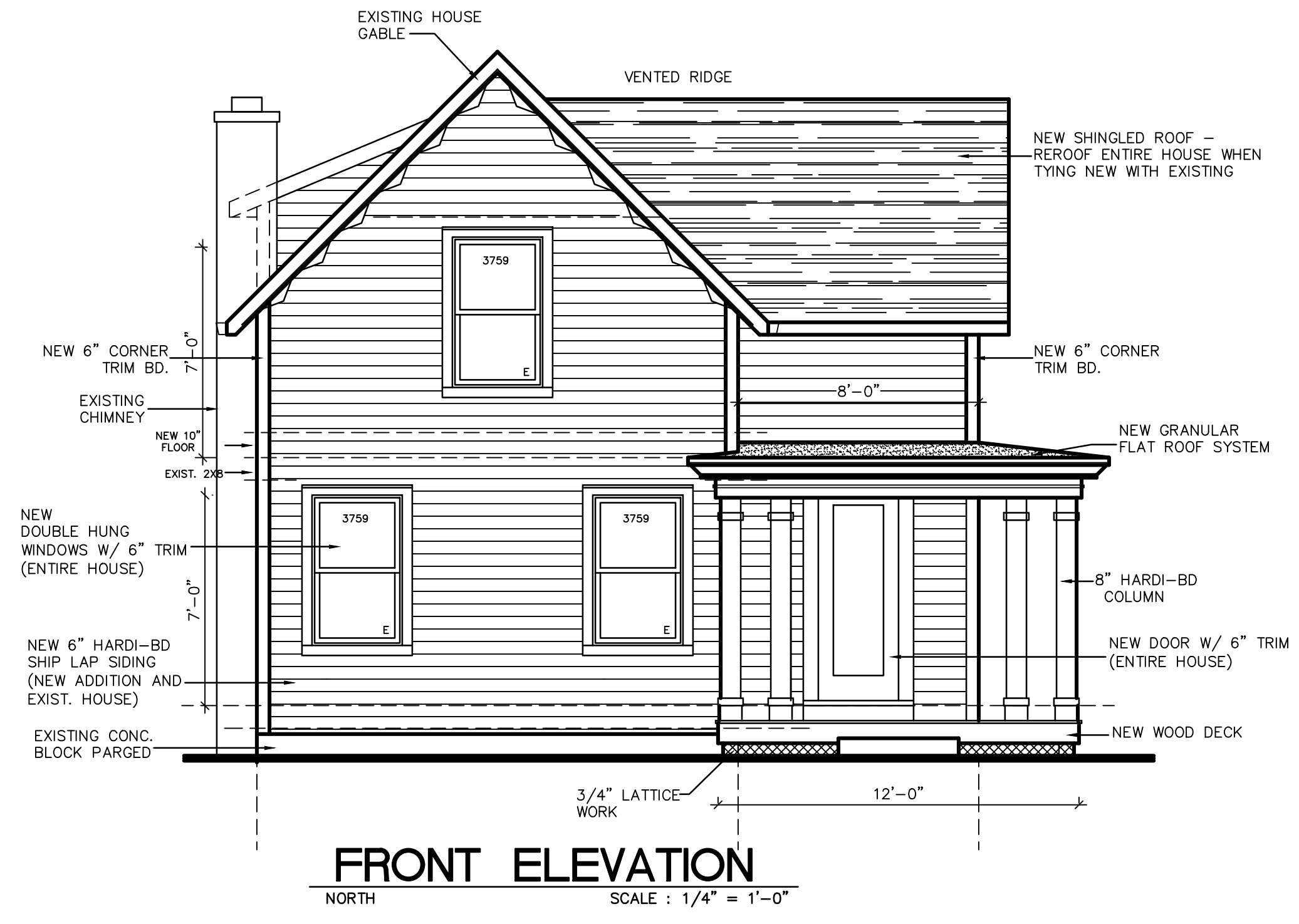
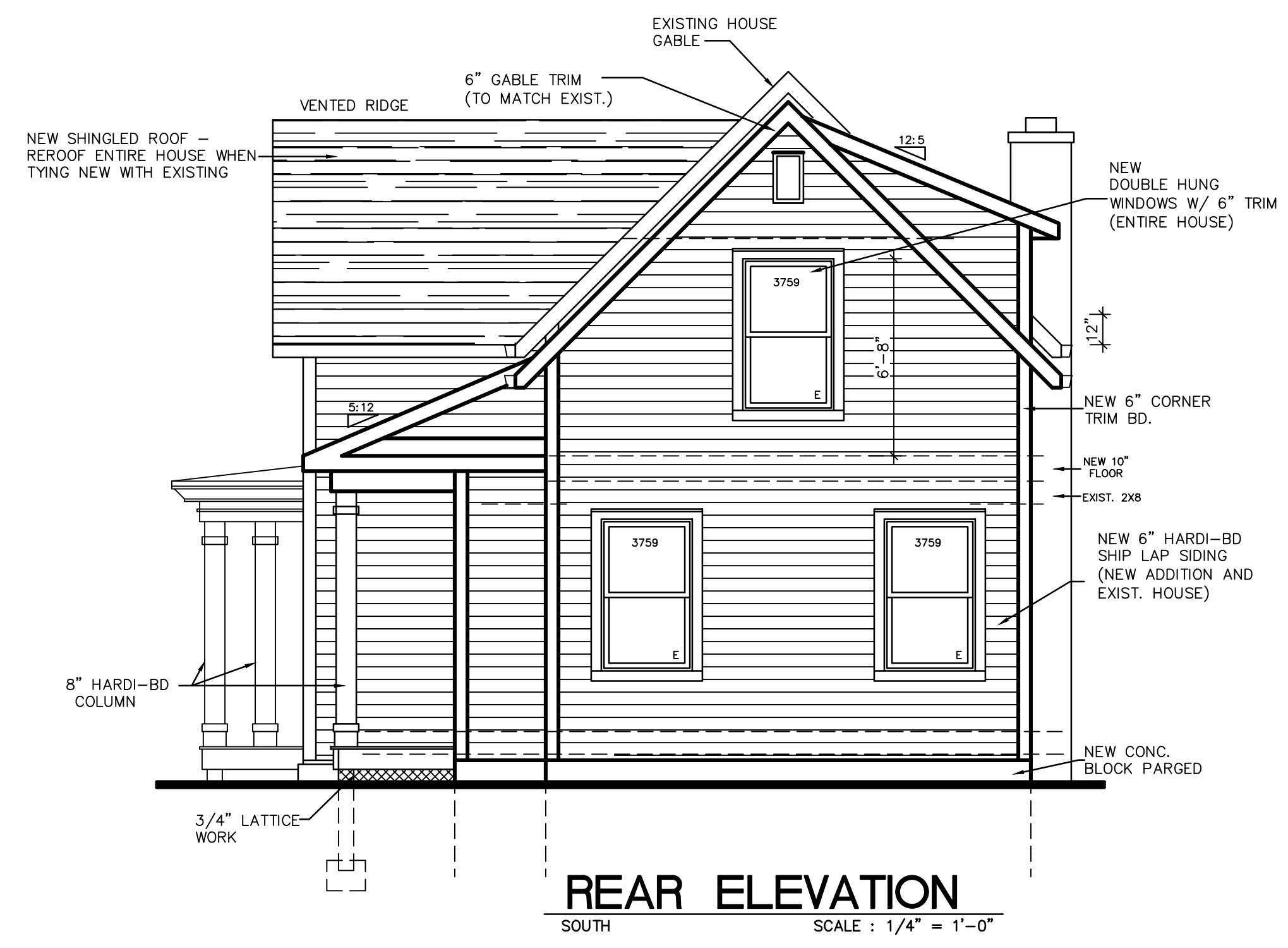
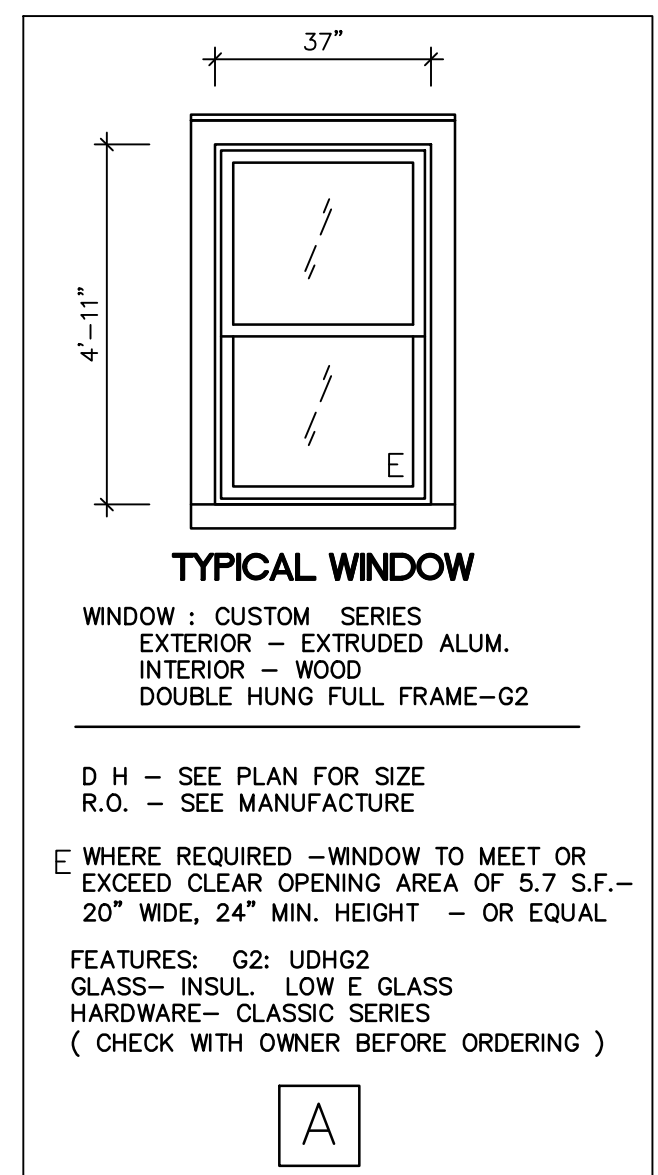
LAURI R. CULP, P.S. 7834
CULP SURVEYING, LLC
3853 RIDGEVIEW DRIVE
RICHFIELD, OHIO 44286
330-815-3765

BASE DRAWING BY:

16 OWEN BROWN STREET
PT. OF ORIG. HUDSON TWP. LOT 55, BLOCK 20
PPN 32-00338
CITY OF HUDSON
SUMMIT COUNTY, OHIO
DECEMBER, 2024 SCALE: 1" = 20'



EXISTING



PROPOSED

DRAWING INDEX:	
1 - ELEVATIONS , NOTES	
2 - ELEVATIONS	
3 - FIRST FLOOR PLAN	
SECOND FLOOR PLAN	
- (S1) SITE PLAN	

1/4" SCALE-24X36

COSTLOW & ASSOCIATES,LLC
1885 ARNDALE RD. - SUITE "C"
STOW , OHIO 44224
PHONE 330-688-9500
Email- Gordon.Costlow@gmail.com

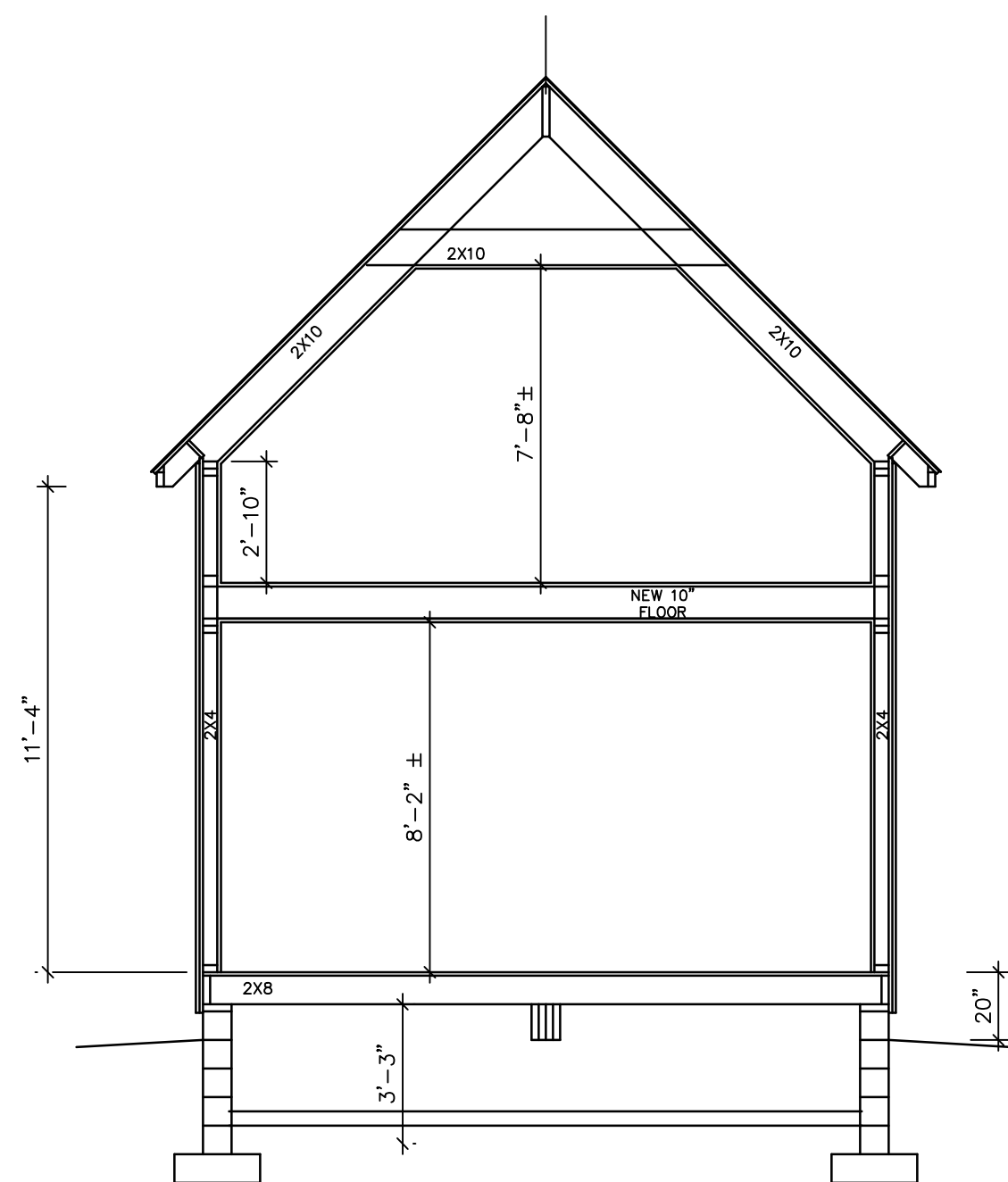
DATE:
12-08-2024
1-29-2025

CHANGES AFTER
ARCH. BD. COMMENTS
1-1-24
--- WITH ITEM #

OWNER - MARK & KATHY MADAR , 330-701-1308
Email- mmadar58@gmail.com
HOUSE ADDITION PLAN
16 OWEN BROWN ST , HUDSON , OHIO 44236
SUMMIT COUNTY , PP#3200338

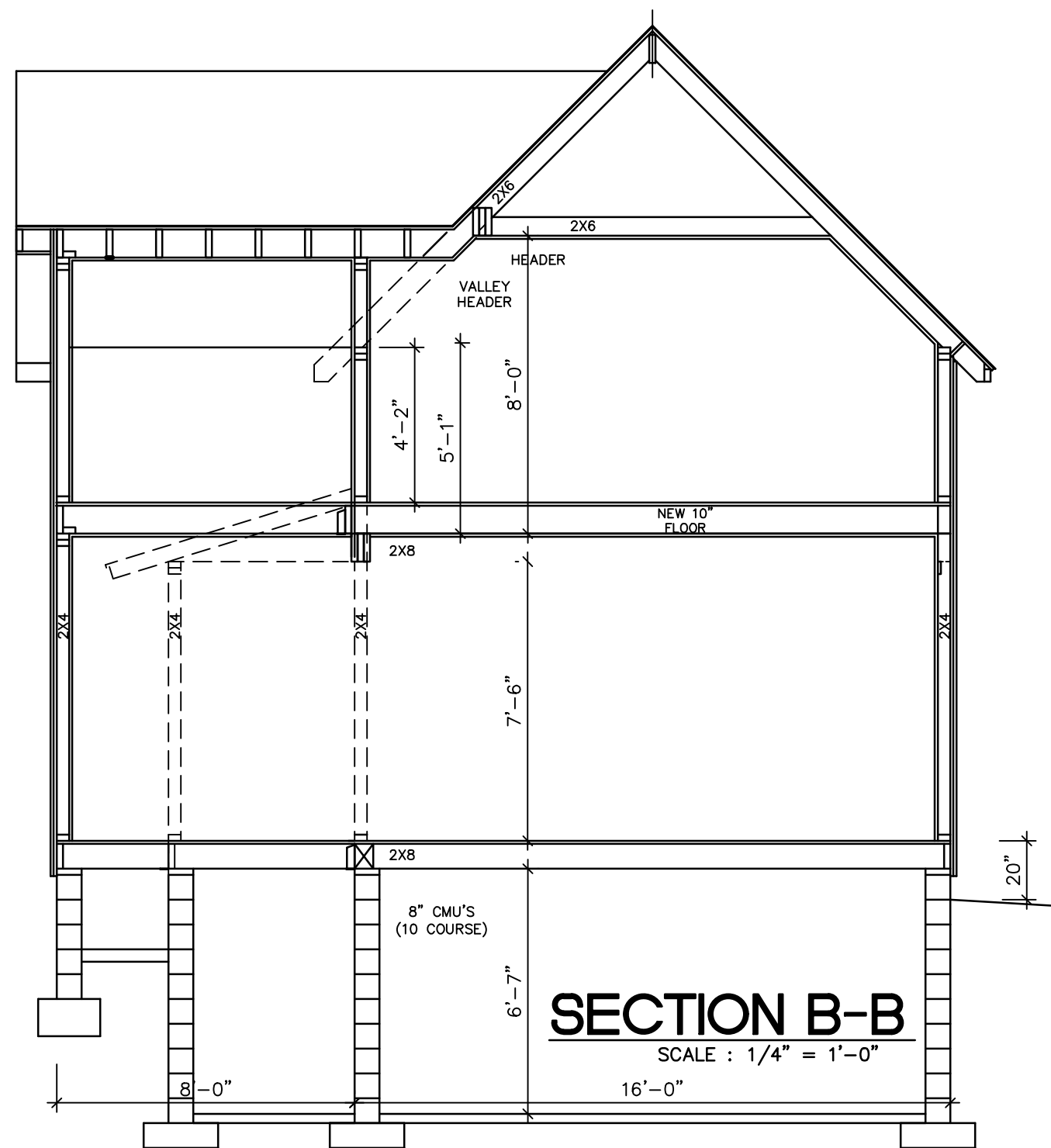
R24-20

1
OF #



SECTION A-A

SCALE : 1/4" = 1'-0"



SECTION B-B

SCALE : 1/4" = 1'-0"

NEW SHINGLED ROOF -
REROOF ENTIRE HOUSE WHEN
TYING NEW WITH EXISTING

NEW 6" CORNER
TRIM BD.

NEW 10" FLOOR

NEW DOUBLE HUNG
WINDOWS W/ 6" TRIM
(ENTIRE HOUSE)

NEW 6" HARDI-BD
SHIP LAP SIDING
(NEW ADDITION AND
EXIST. HOUSE)

EXISTING CONC.
BLOCK PARGED

STRUCTURAL NOTES:

1. THE DRAWING SHOW THE GENERAL DETAILS OF THE CONSTRUCTION.
THE CONTRACTOR SHALL NOTIFY THE DESIGNER WHERE ADDITIONAL
DETAILS ARE REQUIRED, OR WHERE CONDITIONS ARE ENCOUNTERED
THAT ARE NOT SHOWN BY THE DRAWINGS.

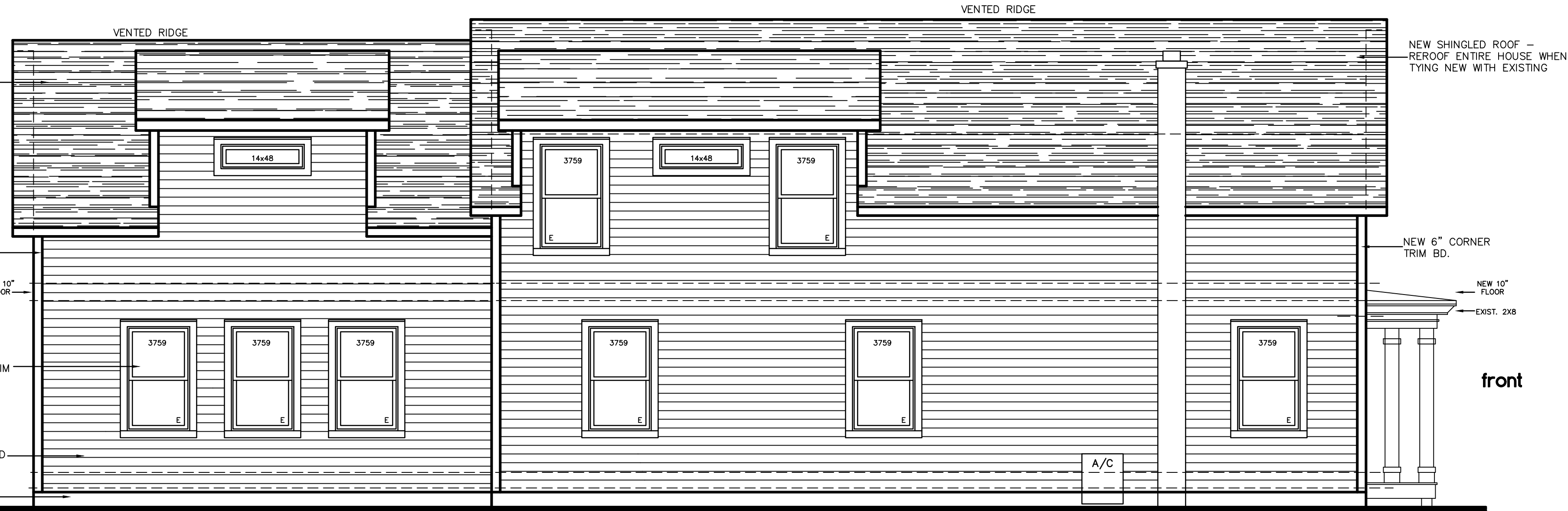
2. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS PRIOR TO
FABRICATION AND CONSTRUCTION.

3. BUILDING LOADS:
LIVE LOADS: ROOF = 30 PSF , CEILING = 20 PSF
: FLOOR = 50 PSF, ATTIC FLOOR = 30 PSF
DEAD LOADS: ROOF = 15 PSF , CEILING = 10 PSF
: FLOOR = 10 PSF

SOIL BEARING CAP. = 2000 PSF (MIN.)

CONCRETE : FOUNDATIONS - f'c = 3,000 PSI
WALLS AND SLABES - f'c = 4,000 PSI
EXTERIOR /GARAGE SLABS TO HAVE 6 %
ENTRAAINED AIR.
REBAR - ASTM A 615 GR 60
WWF - ASTM A 185
SLUMP - 4" MAX.

4. FRAMING:
LUMBER(MIN.) E= 1,600,000 PSI , Fb=850 PSI, Fv=85 PSI
MICROLAM(LVL) E=2,000,000 PSI , Fb=2800 PSI, Fv=285 PSI
STEEL : ASTM A-36 , E=29,000,000 PSI, Fb=22KSI, Fv=14.5KSI

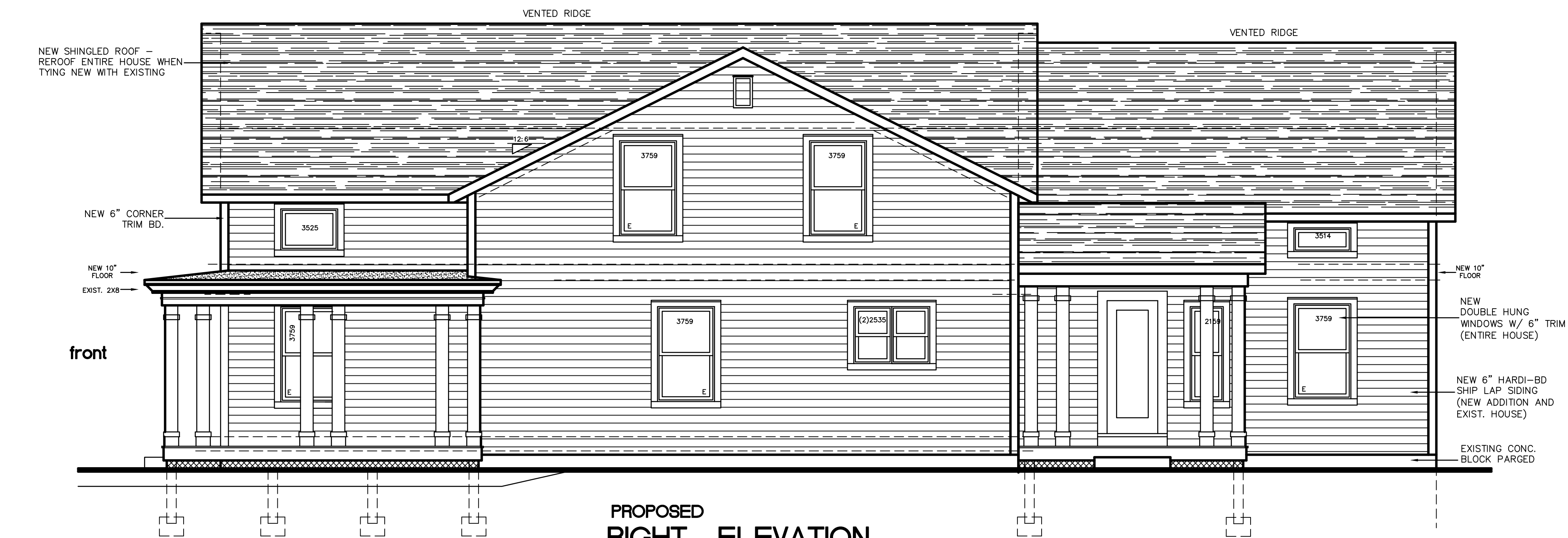


LEFT ELEVATION

WEST SCALE : 1/4" = 1'-0"

NOTES:

- ALL WORK TO BE CONSTRUCTED UNDER CITY OF AKRON (SUMMIT CO.) INSPECTION. BUILDING MATERIALS AND CONSTRUCTION TO MEET LOCAL CODES AND "BASIC BUILDING CODE. ALL PROPER PERMITS MUST BE OBTAINED FOR ALL CONSTRUCTION WORK (WHICH HAS BEEN APPROVED BY PROPER DEPARTMENTS) PRIOR TO ANY CONSTRUCTION. ALL CONTRACTORS INCLUDING GENERAL, H.V.A.C., ELECTRICAL, PLUMBING AND FIRE SUPPRESSION MUST BE LICENSED TO DO WORK WITHIN THE GOVERNING MUNICIPALITY.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SHOW ALL WORK COMPLETE AND FUNCTIONING PROJECT, EVEN THOUGH EVERY ITEM INCIDENTAL TO THE WORK MAY NOT BE COMPLETELY DETAILED. IT IS ASSUMED THAT THE CONTRACTORS ARE SUFFICIENTLY SKILLED AND EXPERIENCED IN THEIR WORK TO ANTICIPATE THE NORMAL REQUIREMENTS OF A COMPLETE JOB. ALL SECTIONS, DETAILS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE , UNLESS OTHERWISE SHOWN, WHERE METHODS OF INSTALLATION ARE NOT COMPLETELY COVERED ON THE DRAWINGS OR SPECIFICATIONS, THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S LATEST WRITTEN SPEC'S.
- BY SUBMITTING BID TO OWNER, BIDDER INDICATES THAT HE HAS EXAMINED THE SITE AND THESE DRAWINGS THOROUGHLY AND HAS FAMILIARIZED HIMSELF WITH ALL FACTORS THAT MAY AFFECT COST, PROGRESS OR PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL THE REQUIRED INSPECTIONS AND SHALL NOTIFY OFFICIALS WELL IN ADVANCE OF ALL SUCH INSPECTIONS.
- CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DEBRIS AND GARBAGE RESULTING FROM THE EXECUTION OF THE WORK IN THIS PROJECT PRIOR TO ISSUANCE OF FINAL PAYMENT.
- THESE DRAWINGS INDICATE INTENT ONLY. ALL CONTRACTORS SHALL FIELD VERIFY AND APPROVE ALL DIMENSIONS, LOCATIONS AND ALL EXISTING CONDITIONS AFFECTING THIS PROJECT PRIOR TO EXECUTION OF WORK.
- CONTRACTOR TO PROVIDE SEALED ROOF TRUSSES SPEC. (INCLUDING LOAD BEARING TRUSS) TO BUILDING DEPART. BEFORE INSTALLING THEM.



PROPOSED RIGHT ELEVATION

EAST SCALE : 1/4" = 1'-0"

PROPOSED

OWNER - MARK & KATHY MADAR , 330-701-1308

Email- mmadar58@gmail.com

HOUSE ADDITION PLAN

16 OWEN BROWN ST , HUDSON , OHIO 44236

SUMMIT COUNTY , PP#3200338

COSTLOW & ASSOCIATES, LLC
1865 ARDALE RD. - SUITE "C"
STOW , OHIO 44224
PHONE : 330-688-8500
Email- Gordon.Costlow@gmail.com
old plan-419-08

DATE:
12-08-2024
1-29-2025

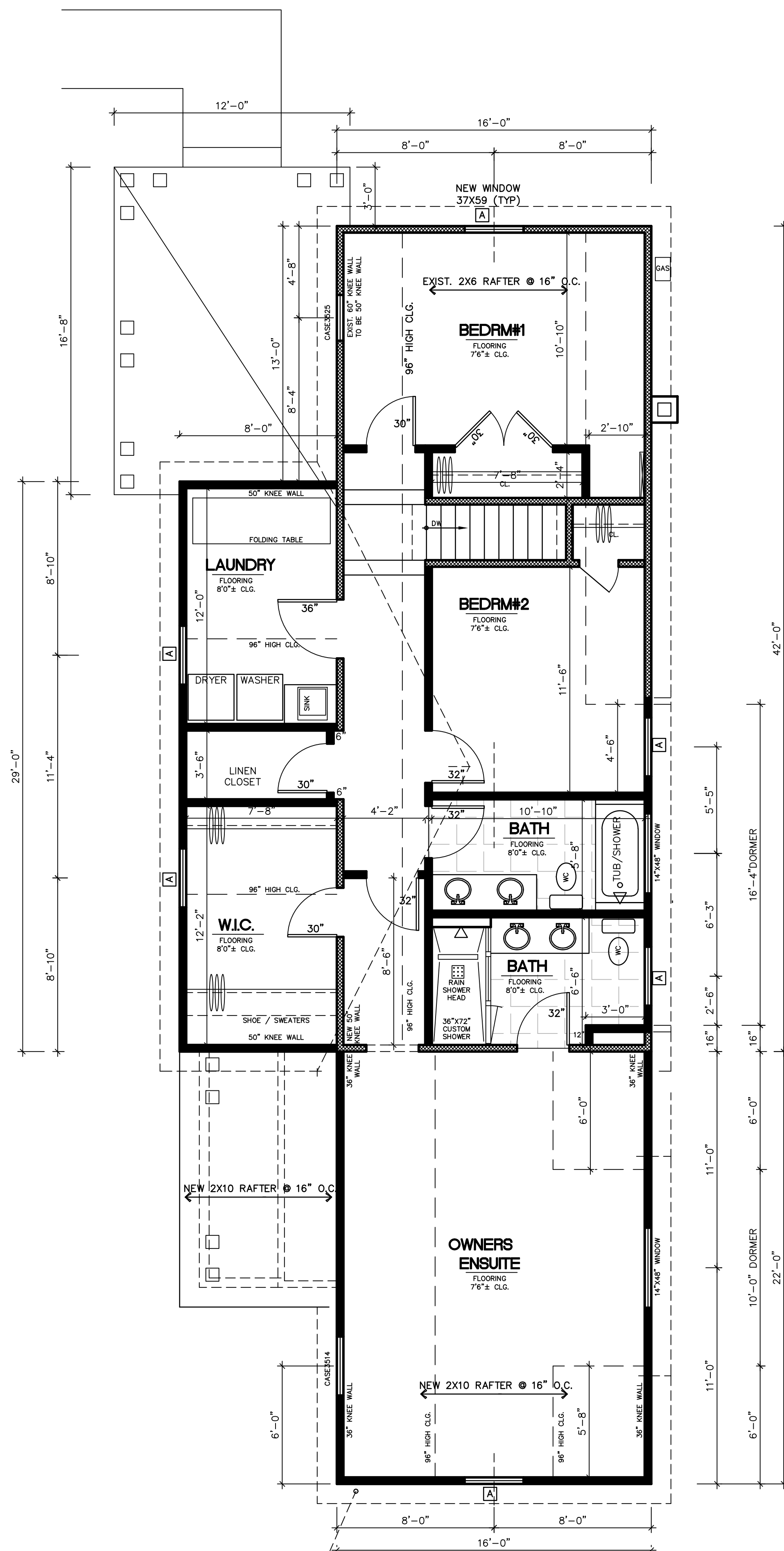
CHANGES AFTER
ARCH. BD. COMMENTS
1-1-24
-- WITH ITEM #

R24-20

2

OF #

1/4" SCALE-24X36



PROPOSED S.F. = 1,252
SECOND FLOOR PLAN
 --- SCALE : 1/4" = 1'-0"

SCALE : 1/4" = 1'-0"

EXISTING HOUSE

1 ST FLOOR S.F. = 812
2 ND FLOOR S.F. = 672

2 ND FLOOR S.F. = 672

TOTAL S.F. = 1,484

PROPOSED HOUSE

1 ST FLOOR S.F. = 1,288

2 ND FLOOR S.F. = 1,252

TOTAL S.F. = 2,540

1,056 S.F. ADDED TO EXISTING HOUSE
PLUS 2 PORCHES

OWNER - MARK & KATHY MADAR

330-701-1308

16 OWEN BROWN ST

HUDSON , OHIO 44236

SUMMIT COUNTY , PP#3200338

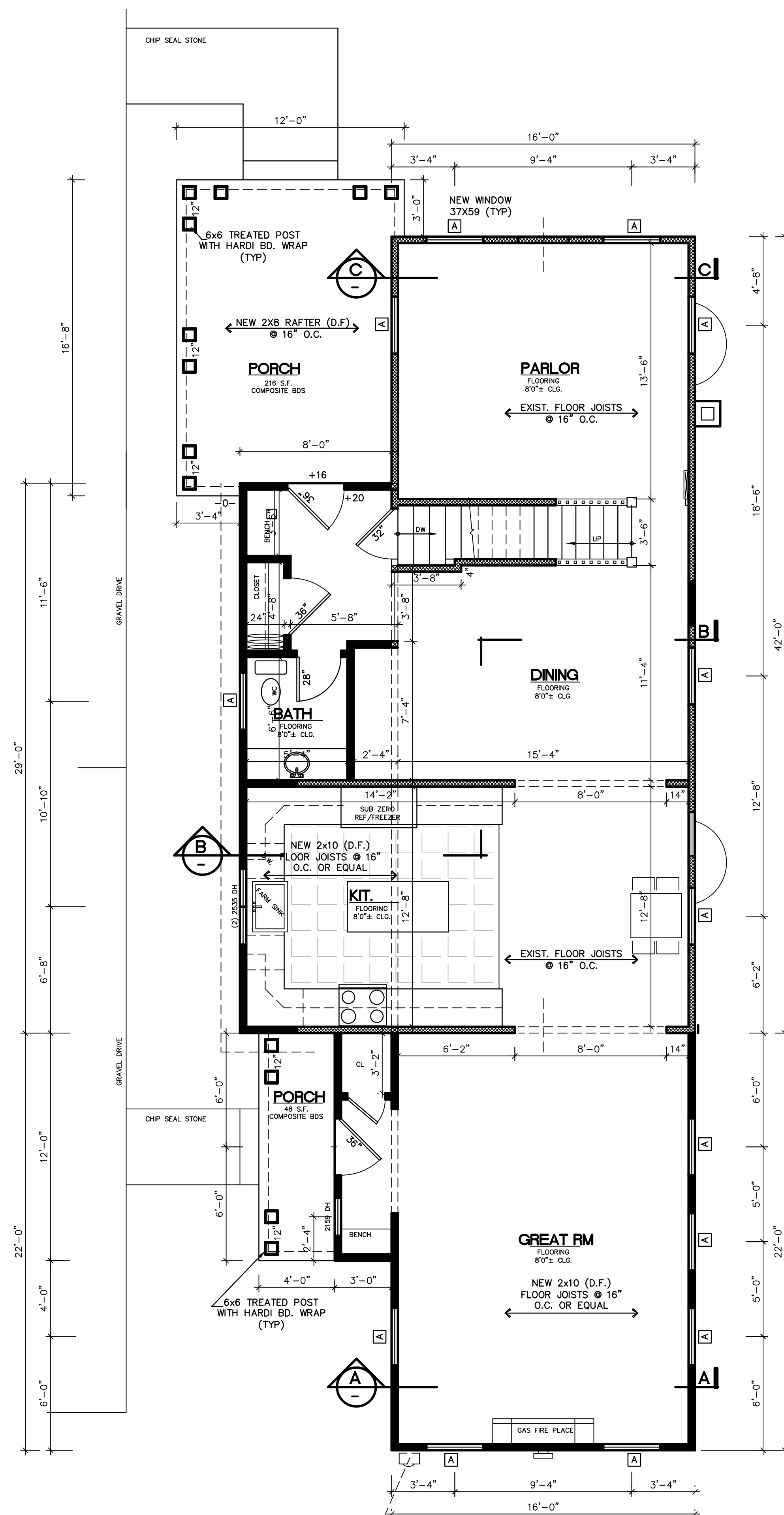


 DENOTES : EXISTING HOUSE WALLS

DENOTES : NEW STUD WALLS AT 16" O.C.
 AND INSULATION

--- --
DENOTES: EXISTING 8" CONC. BLOCK WALLS

DENOTES: NEW 8" CONC. BLOCK WALLS
WITH REINFORCING



PROPOSED S.F. = 1,288
FIRST FLOOR PLAN
--- SCALE : 1/4" = 1'-

SCALE : $1/4" = 1'-0"$

1/4" SCALE-24X36

PROPOSED

OWNER – MARK & KATHY MADAR , 330-701-1308

ARK & RAIHY MADAR , 330-
Email- mmadar58@gmail.com


HOUSE ADDITION PLAN

HOUSE ADDITION
16 OWEN BROWN ST , HUDSON , OHIO 44236

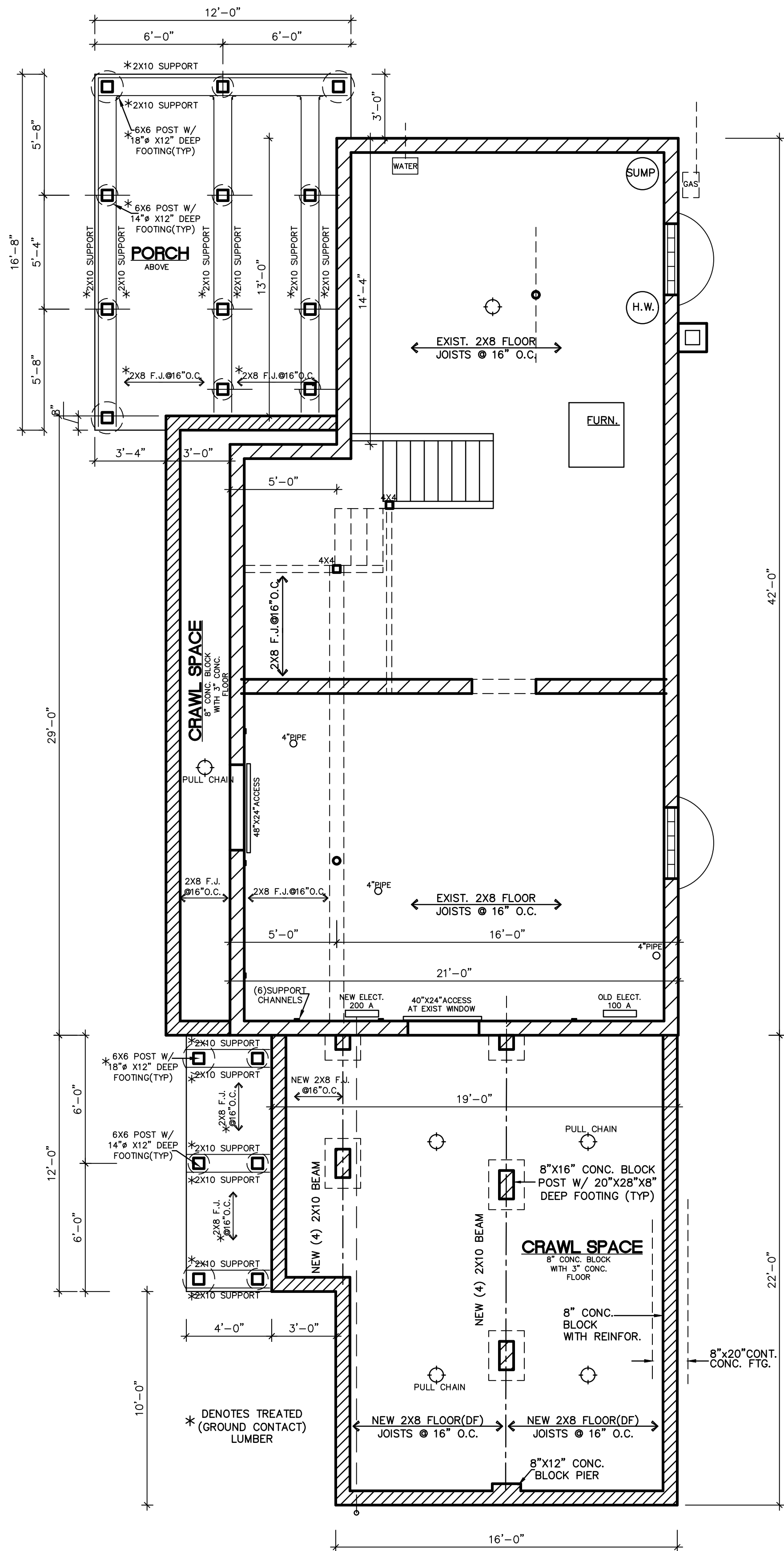
16 OWEN BROWN ST , HUDSON
SUMMIT COUNTY , PP#3200338

COSTLOW & ASSOCIATES,LLC
1865 ARDALE RD. - SUITE "C"
STOW , OHIO 44224
PHONE 330-688-9500
Email- Gordon.Costlow@gmail.com

DATE: 12-08-2024
1-29-2025

# CHANGES AFTER
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-- WITH ITEM #

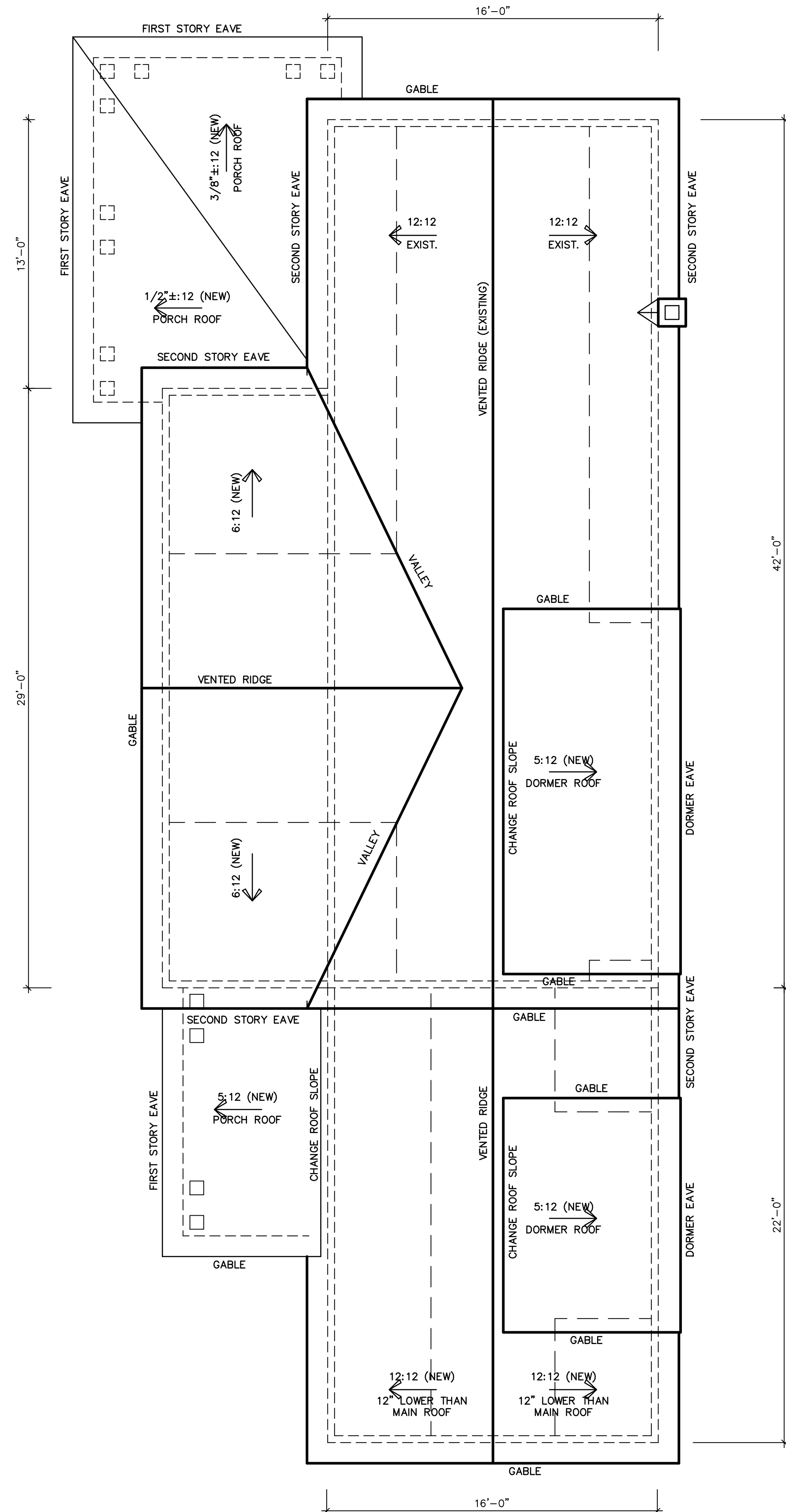


PROPOSED
BASEMENT PLAN

SCALE : 1/4" = 1'-0"

NEW HOUSE SPEC'S

WINDOW : "PELLA" LIFESTYLE SERIES
EXTERIOR-ALUMINUM-GLAD(ENDURACLAD)
INTERIOR - WOOD
SIDING : "HARDI BD"- LAP SMOOTH LAP STYLE
PRIMED AND PAINTED TO OWNERS COLOR
ROOFING : "OWEN CORNING" ARCHITECTURE
DIMENSIONAL SHINGLES.
TRU DEFINITION



PROPOSED
ROOF PLAN

SCALE : 1/4" = 1'-0"

1/4" SCALE-24X36

OWNER - MARK & KATHY MADAR , 330-701-1308

Email- mmadar58@gmail.com

HOUSE ADDITION PLAN

16 OWEN BROWN ST , HUDSON , OHIO 44236
SUMMIT COUNTY , PP#3200338

R24-20

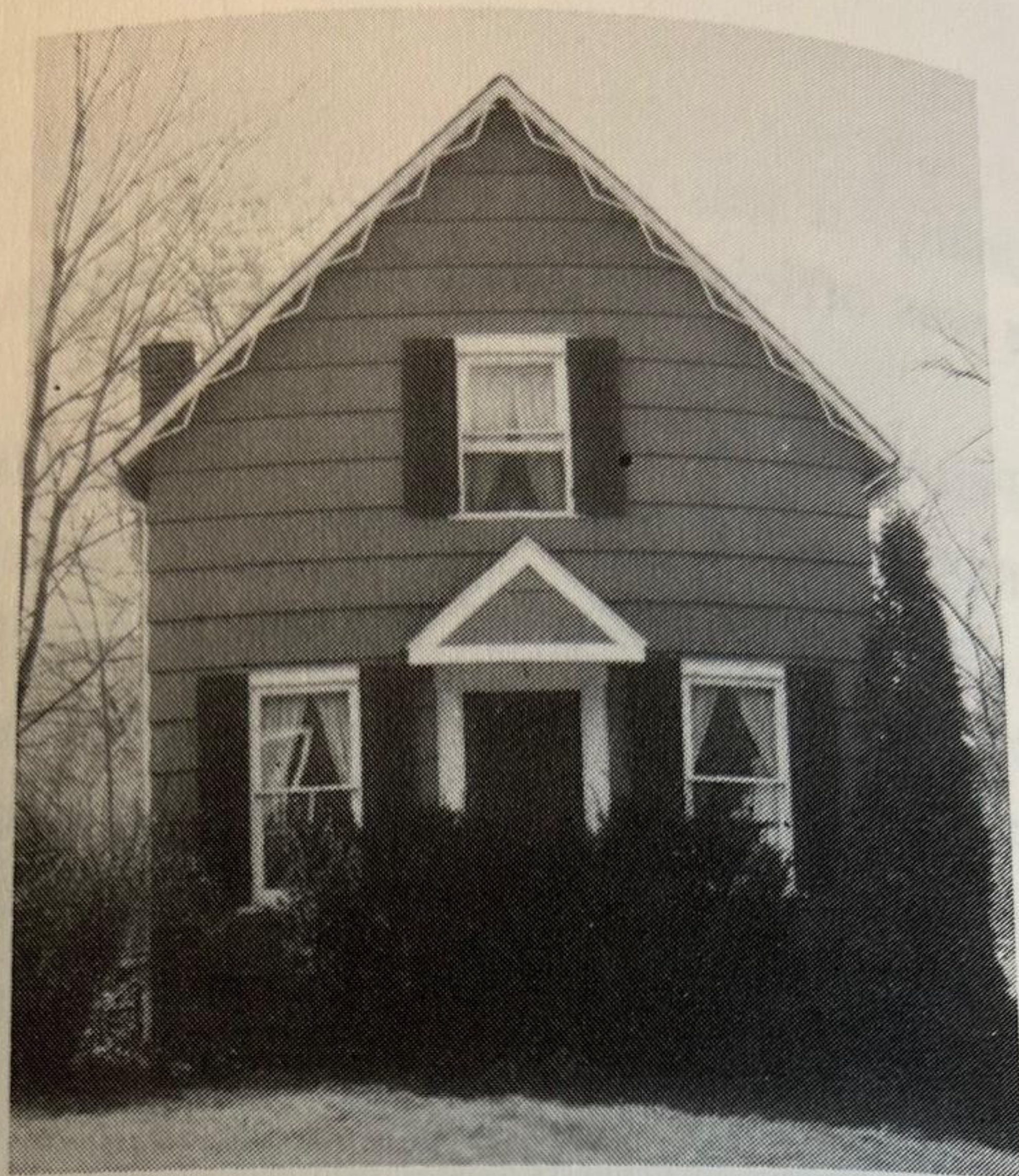
4

OF #

CHANGES AFTER
ARCH. BD. COMMENTS
1-1-24
-- WITH ITEM #

DATE:
12-08-2024
1-29-2025
2-03-2025

COSTLOW & ASSOCIATES,LLC
1865 ARNDALE RD. - SUITE "C"
STOW , OHIO 44224
PHONE : 330-888-8500
Email- Gordon.Costlow@gmail.com
old plan-#19-08



259

One of several houses moved from Clinton Street to make way for the Morse Instrument Company headquarters. The style is Gothic Revival; it was probably built c. 1860. The roof pitch is steep, with jigsaw trim on the front gable. The original siding has been replaced or covered with wood shingles; the windows on the front facade have been altered; the pedimented overhang at the front door is a late addition.



MLS Now



16











CRESTLINE®

Elite Clad



ALUMINUM CLAD WINDOWS & PATIO DOORS



Crestline
Windows & Doors



Table of Contents

Why Crestline	3
Performance Glass	4-5
Options.....	6-8
Double Hung Windows.....	9
Gliding Windows.....	10
Casement/Awning Windows	11
Specialty Shaped Windows	12
Sliding Patio Doors	13
Hinged Patio Doors	14

CHOICES

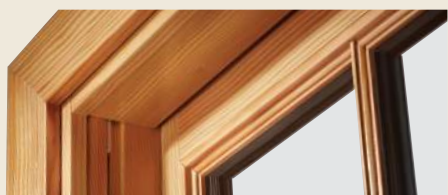
Why Crestline® Elite Premium Clad?

We're More Than Just Vanilla Windows

Vanilla ice cream is good, but sometimes you want more choices. It's the same with windows and doors. Instead of settling for the basic, discover the possibilities with Crestline Elite. As you read this brochure, you will see that there are no limits to what you can do when designing your windows and patio doors. With Crestline, if you can dream it, you can have it.

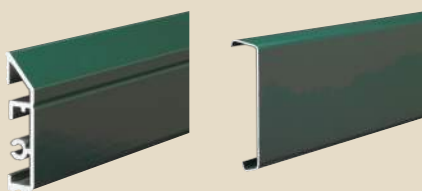
Uncompromising Craftsmanship

Cut corners? Not Crestline. Since 1892, we have been handcrafting some of the finest doors and windows on the market, which means you can count on them to be exceptionally beautiful, reliable, and easy to operate.



OPTIONS, OPTIONS, AND MORE OPTIONS

Crestline offers a full line of new construction and replacement products, all with the options you need to set your home apart. Choose from a wide variety of styles, standard and custom sizes and shapes, elegant wood interiors, unlimited exterior colors, designer hardware colors, and glass, grille and trim options. With so much to choose from, you'll discover the perfect windows and doors for your home.

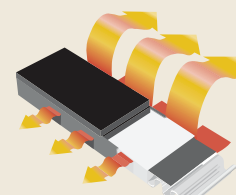


Ours

Other Manufacturers

WORRY-FREE EXTERIORS

Our uniquely designed extruded aluminum cladding is 50% stronger than thin roll-form cladding used on many other windows. And stronger cladding means better protection against water and air infiltration, denting, and fading.



ENERGY-EFFICIENT SYSTEM

Crestline's Real Warm Edge® spacer system bonds the two panes of insulated window or door glass together. This non-metallic spacer limits the amount of heat or cold that passes through the glass, making your home more comfortable.

WOOD SHIELD™ 30-YEAR WARRANTY



Wood components used in the production of Crestline windows and doors are treated with an advanced process called Wood Shield™ that prevents any rot and decay. This warranty coverage includes all wood species offered, with 30-year coverage on clad wood windows.

LOOK BEYOND THE BASIC

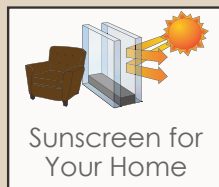
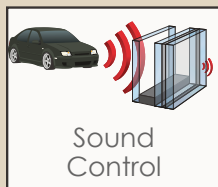
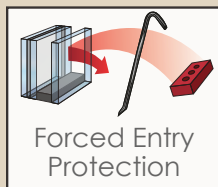
SAVE ENERGY

We build some of the best windows on the market. So it follows that we use the best technology to help you use less energy, spend less to heat and cool your home, and spend less time on maintenance.

Our wide variety of glass options enable you to achieve optimum energy performance and comfort in any climate.



SAFEGUARD™ offers an optional high-strength PVP interlayer creating a strong laminated inside pane of glass that increases resistance against certain impacts, thermal stress, and chemical deterioration. This helps protect your home from intruders, storms, loud sounds, and can even contribute to lower home insurance premiums.



HIGH-PERFORMANCE GLASS

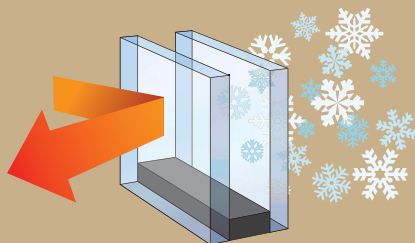
- Zo-e-shield® 5
- Zo-e-shield® 5 Extreme
- Zo-e-shield® 7
- Standard Lo-E
- Lo-E 240 for glare control and comfort
- Inert gas-filled airspace for improved energy efficiency*
- Tinted - Bronze and Gray
- Tempered
- Obscure
- High-altitude
- Safeguard certified



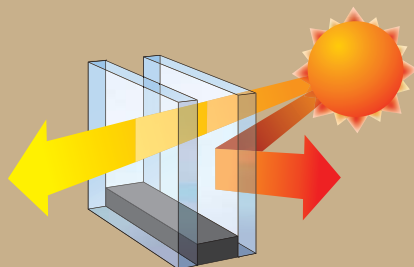
AS AN ENERGY STAR PARTNER,
Crestline® has determined that all products bearing the ENERGY STAR logo meet or exceed the ENERGY STAR guidelines for energy efficiency.

* Harmless inert gas increases energy efficiency by minimizing the transfer of warm and cold air. Not available in all states. Check for availability.

COMFORT YEAR ROUND



During the winter, Zo-e-shield® minimizes heat loss, keeping rooms warmer

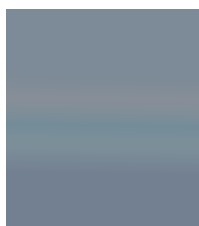


During the summer, Zo-e-shield® reflects the sun's heat, keeping rooms cooler



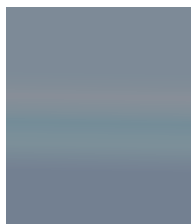
SAVE MONEY, SAVE TIME.

Glass Options



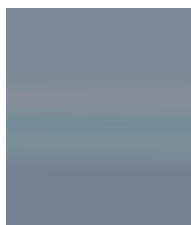
Standard Lo-E²

- 2 panes of glass
- Double layer of Lo-E coating
- Optional inert gas-filled insulating airspace
- Real Warm-Edge[®] spacer



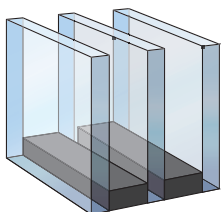
Zo-e-shield ⁵

- 2 panes of glass
- Triple layer of Lo-E coating
- Optional inert gas-filled insulating airspace
- Real Warm-Edge[®] spacer



Zo-e-shield ^{5E}

- 2 panes of glass
- Triple layer of Lo-E coating
- Extreme Lo-E interior coating
- Optional inert gas-filled insulating airspace
- Real Warm-Edge[®] spacer



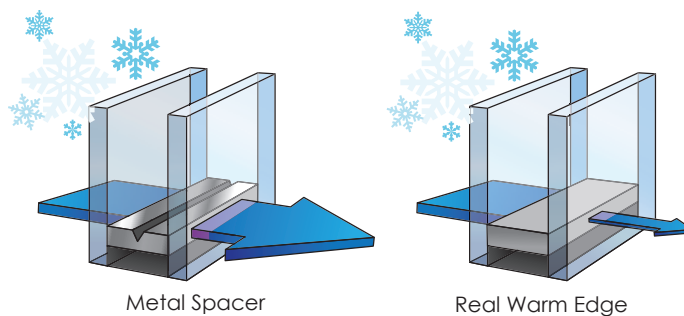
Zo-e-shield ⁷

- 3 panes of glass
- Multiple layers of Lo-E coating
- Optional 2 inert gas-filled insulating airspaces
- 2 Real Warm-Edge[®] spacers
- Available in casements, awnings, pictures and special shapes



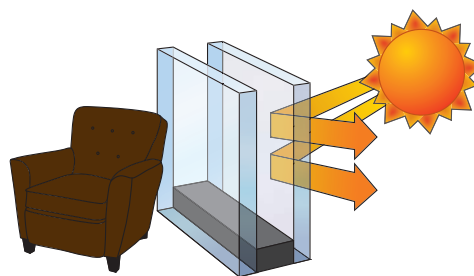
What is Zo-e-shield[®] Glass?

Zo-e-shield[®] was designed for comfort and engineered for efficiency. Below are just a few of the added benefits of Zo-e-shield[®] glass. To learn more go to zoeshield.com.



REAL WARM-EDGE[®] SPACER

Crestline[®]'s Real Warm-Edge[®] spacer has no metal to transfer temperatures. This improves the efficiency of the glass and reduces condensation and frost build-up.



SUNSCREEN FOR YOUR HOME

Furniture and flooring can be easily damaged by the sun. Crestline's Zo-e-shield[®] glass will filter out 95% of the harmful UV rays.



IMAGINE

The right interior can make an ordinary room extraordinary. Crestline® Elite offers premium pine interiors (standard), as well as an array of hardwood options, including oak, maple, alder (knotty), cherry, mahogany, and vertical grain Douglas fir. So you can order a cherry interior for your den, a standard pine interior for your kitchen, or choose a wood that coordinates with your home's moldings and trim.

Interior Finish Choices

All Elite windows and doors have a ready-to-finish wood interior. Or choose one of our prefinish options and we'll prime, paint, seal or stain your interiors for you, saving you time, work and money.

FACTORY-STAINED INTERIORS

Our optional factory-stained pine or oak interiors feature two Clear Satin top coats for a beautiful, long-wearing finish. Best of all, they cost up to 50% less than staining them yourself.

- Five-step factory finish is applied to components prior to assembly for maximum coverage and protection
- Wood is stained and sealed on all surfaces—not just the top and sides—to seal out moisture
- Windows and doors arrive prefinished and ready to install—no additional work required

SOLID WOOD INTERIORS



Pine
(Standard)



Oak



Maple



Alder (Knotty)



Cherry



Mahogany



Douglas Fir

Wood within same species may vary in color and grain.

Crestline reserves the right to substitute ash for oak. These two hardwoods are virtually identical in color, texture, grain variation and finishing characteristics.

FACTORY FINISHES



Clear Satin



Golden Oak
Stain



Fruitwood
Stain



Chestnut
Stain



Painted
White

Stains available on pine and oak.

Colors are approximate

ACCENTUATE YOUR WINDOWS

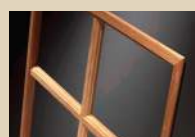
Our grille program has more flexibility so you have more options. Choose from distinctive grille styles, multiple configurations, and standard Prairie, Colonial and Gothic patterns. Or request a custom pattern that's all your own.



5/8" Flat
Grilles in
Airspace



5/8", 3/4" and
15/16" Profiled
Grilles in Airspace



7/8"
Perimeter
Removable
Wood Grilles



5/8", 7/8", 1-1/8"
and 2" Simulated
Divided Lites

Grille In Airspace. Prefinished aluminum grilles situated between the window panes where they are safe from dust, dirt and damage.

Two-Toned Grilles. 3/4" profiled aluminum grilles finished white on the interior with any of our 8 standard clad colors on the exterior.

Perimeter Removable Wood Grilles. Grilles that snap on and off of your window's interior for easy cleaning.

Simulated Divided Lites. Combines historically authentic grilles on the interior and exterior surfaces of your glass with grille work between the glass; stronger, more energy efficient and more affordable than true divided lites.

...YOUR PERFECT HOME.

Exterior Trim Options

ALUMINUM-CLAD TRIM



7/8" Brickmould



1-11/16" Brickmould*



3-5/16" Flat Casing*



3-5/16" Historical Brickmould*

*Factory-applied trims will require masonry straps for installation.

Exterior Color Options

Our extruded aluminum-clad exteriors come in 8 standard colors so you have more choices—all at no additional cost. Want more options? Upgrade to one of our 47 Designer Series colors. Or request a custom color; anything is possible with our Custom Color-Match process.

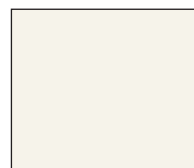
STANDARD COLORS



White



Almond



Cream



Taupe



Hunter Green



Brown



Brick Red



Dark Bronze



Charcoal Black



Jet Black



Terra Bronze



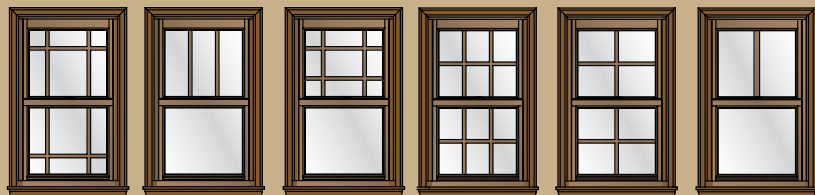
47 Designer Series Colors



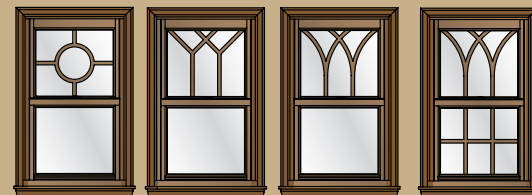
Custom Color Match

Colors are approximate

GRILLE PATTERNS



Prairie and Colonial Patterns



Custom Patterns

ACCENTUATE

Patterns may be affected by glass size. Drawings required for custom patterns.

ACCENTUATE YOUR DÉCOR

Add an elegant touch to any room with our Crestline® Elite hardware styles and finishes. We offer a wide assortment of colors so you can achieve the look you envision for your home.

Patio Door Hardware/Finishes



PREMIUM-STYLE HINGED DOOR



SLIDING DOOR



Window Hardware/Finishes



Colors are approximate

THE RESULTS STAND FOR THEMSELVES



Crestline is one of the few window manufacturers that certify and label their products according to AAMA (American Architectural Manufacturers Association). This elite certification program assures the highest level of quality and performance.

Crestline's unique design allows most products to achieve structural performance levels required in high wind areas.

A Time-Honored Classic

Our classic double hung windows are popular for their timeless beauty and ease of use. Both sash open so you can enjoy fresh air from both portions of your window at the same time. Select from a variety of grille options.

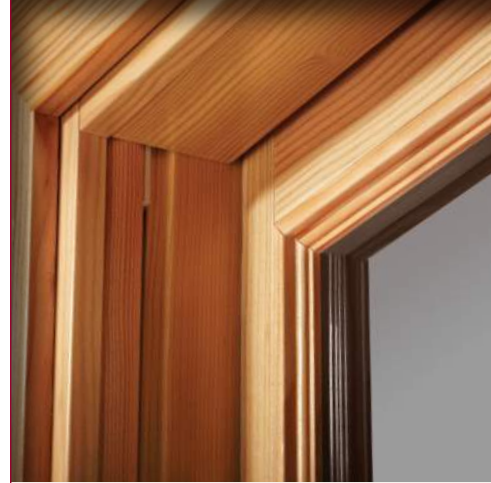
Security for Your Home



Our stylish recessed lock and concealed keeper look great and create a secure, weathertight seal.

Count on Our Construction

From the solid wood construction to the Innovative Constant Force Balance™ system, Crestline® Elite double hung windows outperform. Recessed latches enable you to tilt or remove both sash for cleaning. A built-in lift rail eliminates unnecessary hardware, keeping a clean look.



OPTIONAL WOOD JAMB

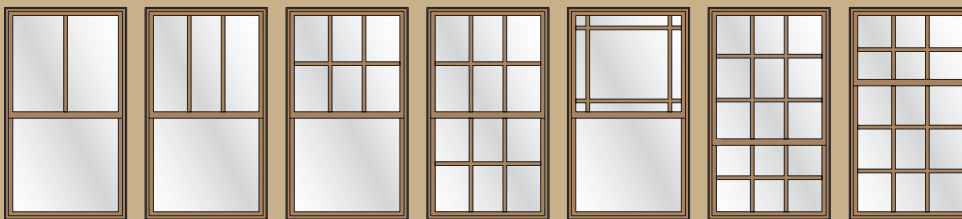
An optional vinyl jamb liner with a solid wood insert is available to conceal the balance system. All hardwood species have a matching insert; pine units have a maple insert. Clad units also have a matching exterior clad filler.



CREATE AN ANGLE BAY

Add drama to your room with multiple double hung windows combined into an elegant 30° or 45° angle bay.

OPTIONAL COLONIAL AND PRAIRIE GRILLE PATTERNS



Patterns may be affected by glass size.
Drawing required for custom patterns.

Oriel Style

Cottage Style

DOUBLE HUNG WINDOWS





CONTEMPORARY DESIGN

Crestline® Elite's double gliding windows add contemporary sophistication to your home, and are an ideal choice when outdoor space does not accommodate a crank-out sash.

Versatile and Energy Efficient Option For any Space

Gliding windows are classically styled, with understated simplicity and ease-of-use. The sash glide effortlessly to allow an abundance of fresh air inside.

Simplify Window Cleaning



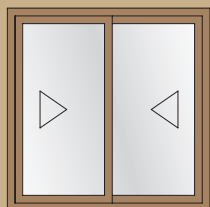
To make cleaning less of a chore, both sash tilt in for easy removal.

Feel How Easily They Work

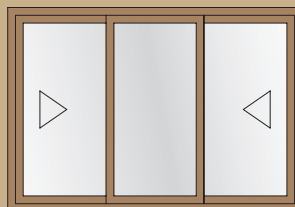
Horizontally operating sash glide effortlessly on durable nylon rollers and a smooth nylon track.



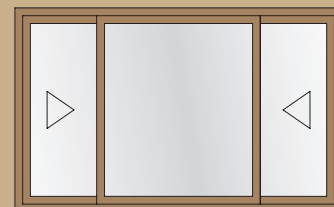
VIEWED FROM EXTERIOR



Double Gliding
Standard Operation



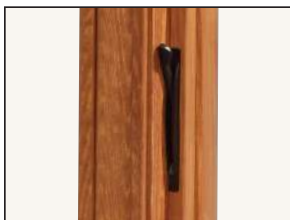
Triple Equal End Vent



Triple End Vent

DOUBLE GLIDING WINDOWS

Have Peace of Mind



Durable, all metal locks ensure the sash holds tight to the frame. Each lock is profiled to match the contours of the wood frame.

Fold Down the Handles

After opening or closing your casement or awning window simply fold the handle out of the way. Made of durable metal for smooth operation, the handle nests in its own keeper for added convenience and visual appeal. Corrosion-resistant seacoast hardware is also available.

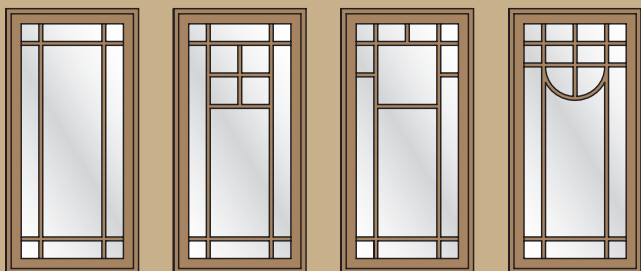


Breathe Easier



Crestline® Elite awning windows are the perfect choice for allowing ventilation in tight areas.

OPTIONAL COLONIAL AND PRAIRIE GRILLE PATTERNS



Patterns may be affected by glass size.
Drawing required for custom patterns.



CREATE A BOW OR ANGLE BAY WINDOW

Combine a series of casements to create the graceful curves of a bow window or the dramatic dimensions of a 30° or 45° angle bay.



CASEMENT/AWNING WINDOWS



AWNING WINDOWS

Stacked columns. Running ribbons of glass. Dramatic blocks of light. Create imaginative home designs without forsaking function.





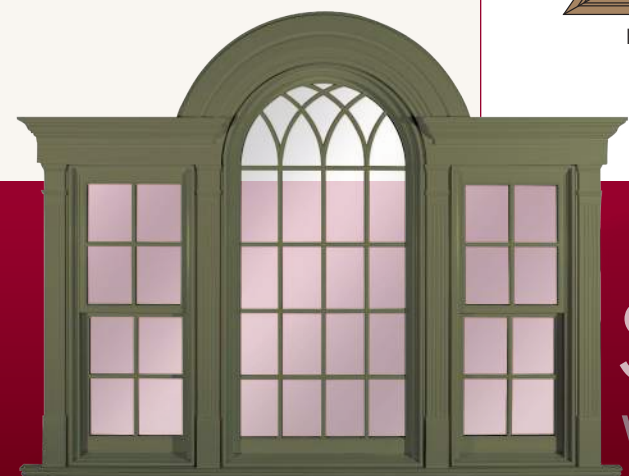
CREATE A SHAPE

If you can imagine it, we can build it. After all, no one should put limits on your creativity.



TRUE CUSTOM WINDOWS

Individually crafted to fit your unique design and dimensions. The results? A one-of-a-kind window you won't find in any other home.



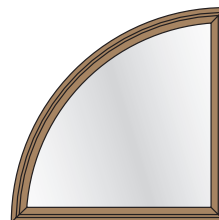
Your Window, Your Way

We make custom windows every day, so there's no need to settle for the basics. Whatever you envision for your home—geometric shapes, half rounds, radius tops, and custom shapes—you can have.

Every Crestline® Elite window and door is available in custom sizes, made to your specifications for a perfect fit.



Full Circle



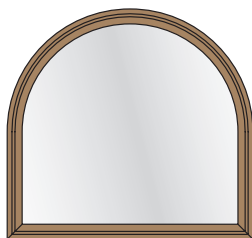
Quarter Circle



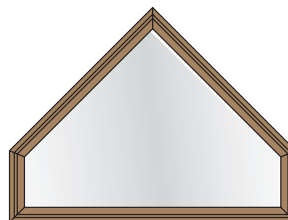
Eye brow



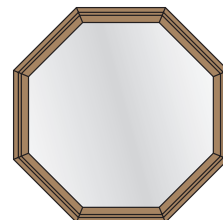
Ellipse



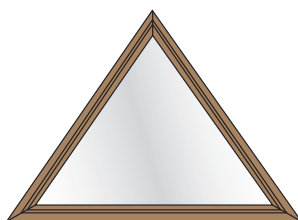
Extended Half Circle



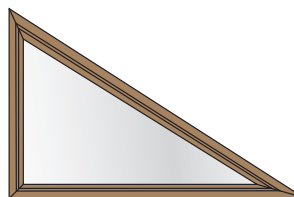
Pentagon



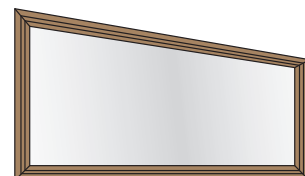
Octagon



Isosceles Triangle



Right Triangle



Trapezoid

Interested in additional shapes? Ask about our complete selection.

SPECIALTY SHAPED WINDOWS

Added Security for Your Home



Our sliding patio doors have an optional spring-loaded foot bolt that you can lock even when the door is open.

Comfortable Handles

Our sliding patio doors come standard with ergonomically correct handles for easy, comfortable use.

Worry-Free Operation

All of our sliding patio doors have adjustable, heavy-duty dual tandem rollers so your door glides easily, time after time.

We Have Style

Our French-style patio doors feature wide stiles and rails for a classic look.

Our traditional sliding patio doors have narrow stiles and rails and more glass to expand your view.

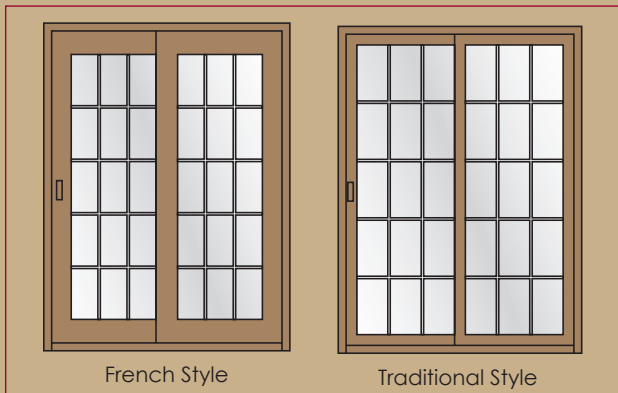


CLASSIC OR CONTEMPORARY

Whether your home is casual or elegant, Crestline® Elite has the patio doors to complement your style.



DUAL TANDEM ROLLERS



SLIDING PATIO DOORS





TRANSFORM YOUR ROOM
With the architectural details
of our hinged patio doors.



ACCENTUATE YOUR ARCHITECTURE
Choose our optional raised panel
for a more historical appearance.



Be Secure



All hinged doors are equipped with a corrosion-resistant locking system that secures the door at multiple locations with the turn of a handle.

Get a Better Fit

Our hinged patio doors come with four fully adjustable hinges—versus the industry standard of three—to ensure proper fit, proper swing, and an energy-efficient seal.



Get Extra-Strong Doors



Our optional, premium heavy-duty doors have 2-1/4" solid wood core panels for extra strength and durability.

In-Swing and Out-Swing Designs

Center hinged and French in-swing and out-swing styles are available in standard and custom heights from 6' 8" all the way to 10' 0" so you can get the door that's perfect for your home.



HINGED PATIO DOORS



CRESTLINE®

Elite Clad



Crestline Windows and Doors
P.O. Box 309
Medford, WI 54401

www.crestlinewindows.com
Customer Service: 800-826-5509

Crestline reserves the right to change product materials, specifications and methods of manufacture without prior notice. Please verify unit dimensions and/or rough openings with your local **MENARDS** store.

Printed in the USA
1271924 04/15

HardiePlank® Lap Siding Product Description

HardiePlank® lap siding is factory-primed fiber-cement lap siding available in a variety of styles and textures. Please see your local James Hardie® product dealer for product availability. HardiePlank lap siding comes in 12 ft. lengths. Nominal widths from 5 1/4 in to 12 in. create a range of exposures from 4 in to 10 3/4 in

HardiePlank lap siding is also available with ColorPlus® Technology as one of James Hardie's prefinished products. ColorPlus® Technology is a factory applied, oven-baked finish available on a variety of James Hardie siding and trim products. See your local dealer for details and availability of products, colors, and accessories.

The HZ5® product line is right at home in climates with freezing temperatures, seasonal temperature variations, snow and ice. HZ5® boards are the result of our generational evolution of our time-tested products. We've evolved our substrate composition to be specifically designed to perform in conditions found in these climates. To ensure that its beauty matches its durability, we've engineered the surface for higher performance, giving it superior paint adhesion and moisture resistance. In addition, we've added a drip edge to the HardiePlank® HZ5® lap siding product to provide improved water management in conditions specific to HZ5® climates.



Select Cedarmill®



Smooth



Beaded Cedarmill®



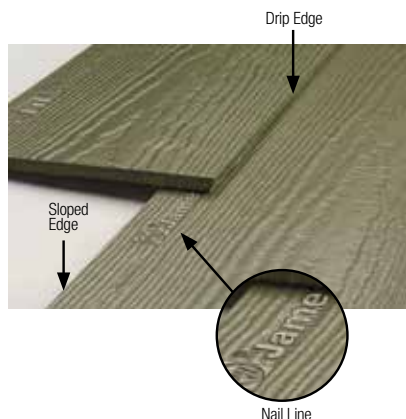
Beaded Smooth



Custom Colonial Roughsawn®



Custom Colonial Smooth®

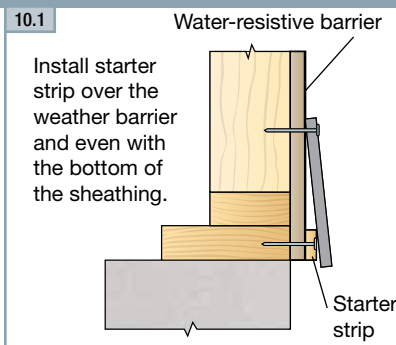


Installation of HardiePlank® Lap Siding

INSTALL A STARTER STRIP

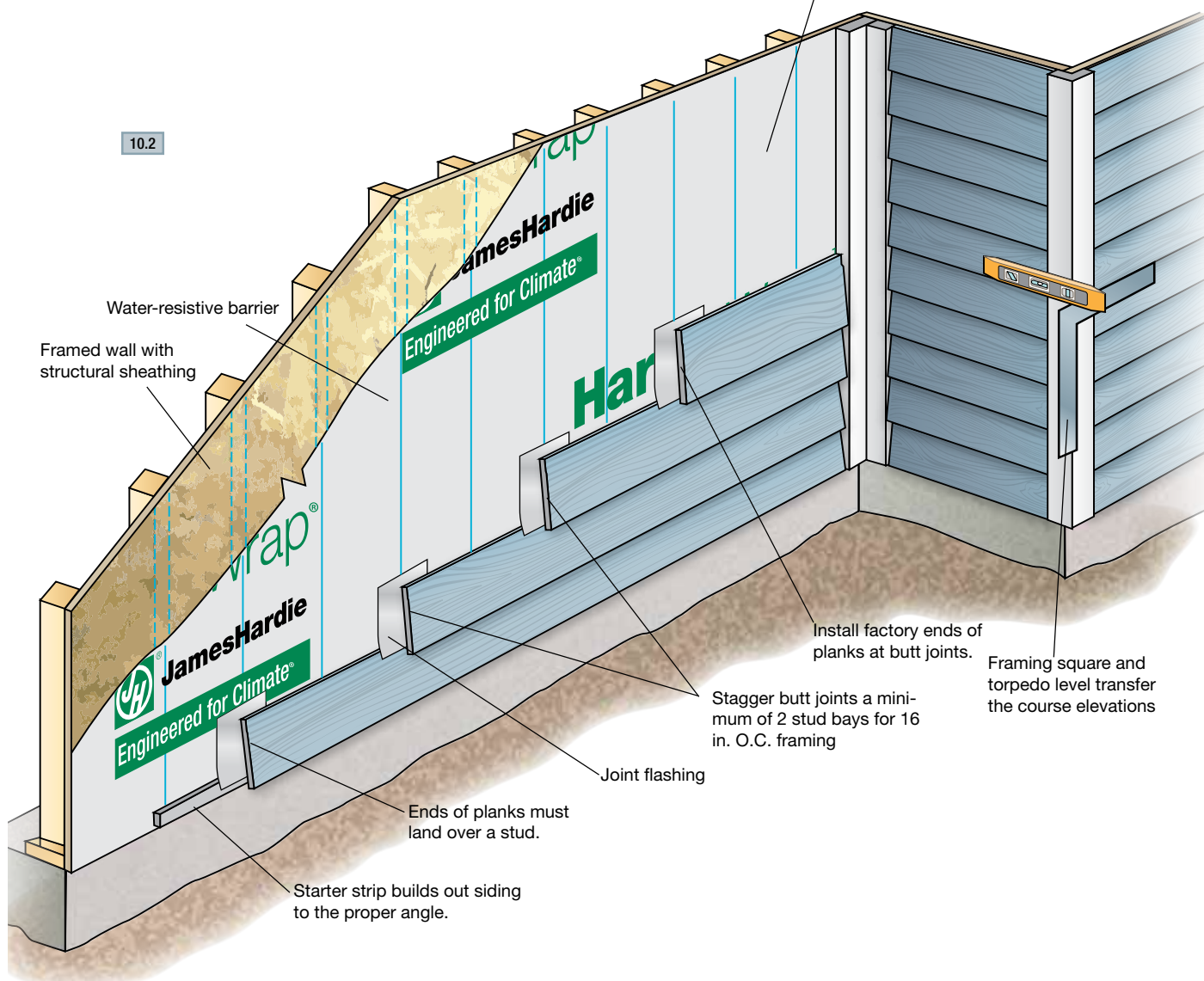
HardiePlank® lap siding requires a starter strip beneath the first course to set it on the proper angle and to create a proper drip edge at the bottom of the siding. Starter strips are easily made by ripping 1 ¼ in. pieces of HardiePlank siding from full or partial planks.

The bottom of the starter strip should be installed even with the bottom of the mudsill or the bottom edge of the sheathing. The strip must be installed over the water-resistive barrier, but occasional gaps should be left in the starter strip to allow any accumulated moisture behind the siding to drain away safely.



TIP: For accurate fastening, snap vertical chalk lines on the water-resistive barrier at the center of every stud location.

OVERVIEW OF HARDIEPLANK LAP SIDING

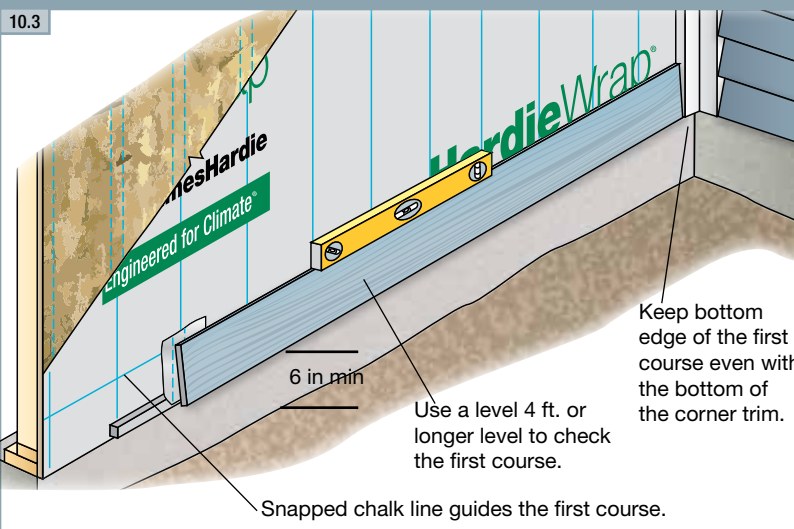


INSTALLING THE PLANKS

The first course of HardiePlank® siding is critical to the proper installation of the plank on the rest of the building. The first course should start at the lowest point of the house and within required clearances. Special attention should be made to ensure that it's straight and level. Attention should also be paid to staggering any butt joints in the planks so that the installation is attractive while making efficient use of material.

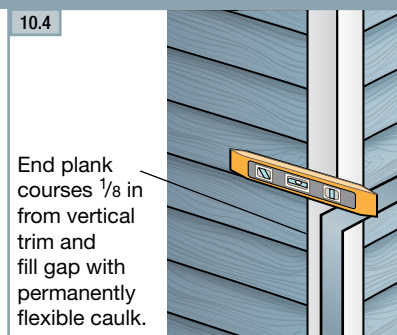
1. Use a level (4 ft. or longer) or chalked level line to be sure that the first course is level. As installation proceeds up the wall, periodically check the level and straightness of the courses. When correcting for flatness over products such as exterior insulation, use drywall shims. It is good practice to snap a chalk line every 3 to 5 courses to keep the planks straight and level.
2. Position the bottom edge of the first course of siding a minimum $\frac{1}{4}$ in below the edge of the starter strip (maintain required clearances) and secure.
3. Run the siding to the HardieTrim® board leaving a $\frac{1}{8}$ in. gap between the siding and trim.

The bottom of the siding should be kept even with the bottom of the trim, or if desired, the trim may extend below the bottom of the siding. But the siding should never hang below the trim. ***When installing the first course make sure ground clearances are in accordance with James Hardie requirements and those of local codes.**



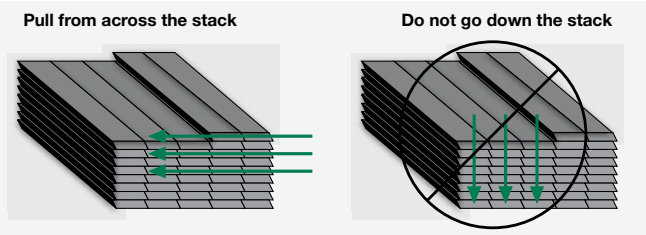
PLANK ALIGNMENT AT CORNERS

For the best looking installation, make sure that the heights of the plank courses match on both sides of a corner. Use a framing square, speed square or a level to match up the plank heights. Check every few courses to make sure proper heights are being maintained.



HANDLING

IMPORTANT: To prevent damage to the drip edge, extra care should be taken when removing planks from the pallet, while handling, and when installing with a lap gauge. Planks are interlocked together on the pallet, therefore they should be removed from the pallet horizontally (side to side) to allow planks to unlock themselves from one another.



TIP: When taking planks from the pallet installation, avoid repeating the texture pattern by working across the pallet. Two to four planks can be removed from a stack at one time. But then material should be taken from adjacent stacks, again working across the pallet. Texture repeat is typically a concern on large walls with few breaks such as windows or doors.

Installation of HardiePlank® Lap Siding (cont.)

BLIND NAILING (nailing through top of plank)

Blind nailing is recommended for installing any type of HardiePlank® lap siding including ColorPlus® siding. With blind nailing, each course covers the fasteners on the course below, which provides a better looking installation.

For blind nailing HardiePlank lap siding, James Hardie recommends driving fasteners 1 in. from the top edge of the plank. Additionally fasteners should be

placed no closer than 3/8 in from the ends of the plank.

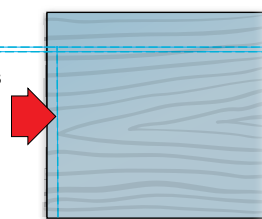
HardiePlank® HZ5® Lap Siding is manufactured with a nail line that should be used as a guide for proper nail placement when blind nailing. This nail line should not be used as a lap line.

Avoid placing fasteners near the top edge of the plank. This practice, called “high nailing”, may lead to loose planks, unwanted gaps or rattling. **Pin-backed corners may be done for aesthetic purposes only. Finish nails are recommended for pin-backs. Headed siding nails are allowed. Place pin-backs no closer than 1in. from plank ends & 3/4in. from plank edge into min. 3/8in. wood structural panel. Pin-backs are not a substitute for blind or face nailing**

10.5 Blind nailing measurements

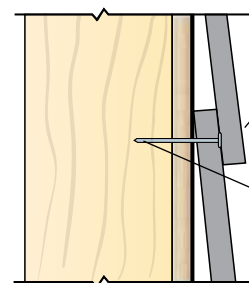
Nails for blind nailing shall be between 3/4 in and 1 in. from the top of the board.

Keep nails 3/8 in from ends of boards.



10.6 Blind nailing

Fasteners are hidden by the course above. Nails are driven through the sheathing into the studs.

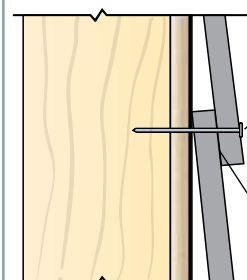


FACE NAILING (nailing through the overlap at the bottom of the plank)

Although blind nailing is recommended by James Hardie, face nailing may be required for certain installations including: installations in high wind areas, fastening into OSB or equivalent sheathing without penetrating a stud, or when dictated by specific building codes. Refer to Appendix D for related code matters.

10.7 Face nailing

Exposed fasteners are driven through the face of the boards. Drive fasteners only where planks overlap



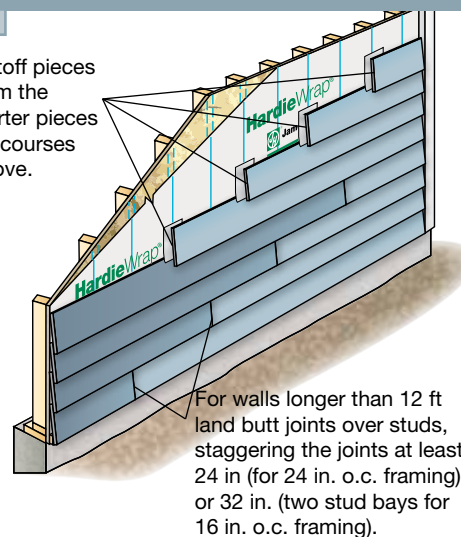
STAGGERING THE BUTT JOINTS

For walls longer than 12 ft, it is necessary to butt joint additional lengths of HardiePlank siding. These butt joints should be staggered to avoid noticeable patterns, which is determined by the placement of the first course. Butt joints between consecutive courses should be spaced apart by at least two stud bays for 16 in. o.c. framing or one bay for 24 in. o.c. framing.

While random placement of the planks is usually the most aesthetically pleasing, a progressive stagger pattern can make the job easier and faster without the pattern becoming too noticeable. With this strategy, the cut off piece for one course becomes the starter piece for a course above, making efficient use of materials and ensuring that all butt joints land on studs. The pattern can be modified for different stud placement.

10.8

Cutoff pieces form the starter pieces for courses above.



For walls longer than 12 ft land butt joints over studs, staggering the joints at least 24 in (for 24 in. o.c. framing) or 32 in. (two stud bays for 16 in. o.c. framing).

JOINT FLASHING

One or more of the following joint treatment options are required by code (as referenced 2009 IRC R703.10.2)

- A. Joint Flashing (James Hardie recommended)
- B. Caulking* (Caulking is not recommended for ColorPlus for aesthetic reasons as the Caulking and ColorPlus will weather differently. For the same reason, do not caulk nail heads on ColorPlus products.)
- C. "H" jointer cover

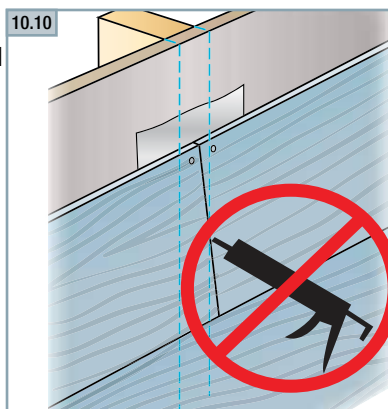
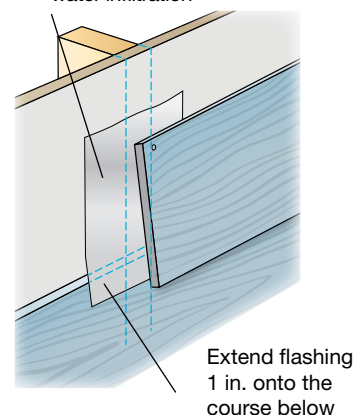
Flashing behind butt joints provides an extra level of protection against the entry of water at the joint. James Hardie recommends 6 in. wide flashing that overlaps the course below by 1 in. Some local building codes may require different size flashing.

Joint-flashing material must be durable, waterproof materials that do not react with cement products. Examples of suitable material include finished coil stock and code compliant water-resistive barriers. Other products may also be suitable.

TIP: Joint flashing can be quickly and easily made by cutting a 6 in. wide section off a roll of housewrap. Tape the roll tightly at the cut mark and cut the section off using a miter saw with a carbide blade. Individual sheets then can be cut to length with a utility knife.

TIP: Use light-colored joint flashing when using light-colored ColorPlus lap siding or other siding with a light-colored finish. Dark-color joint flashings should be used on siding with dark finishes.

10.9 Flashing behind to add an additional layer of protection from water infiltration

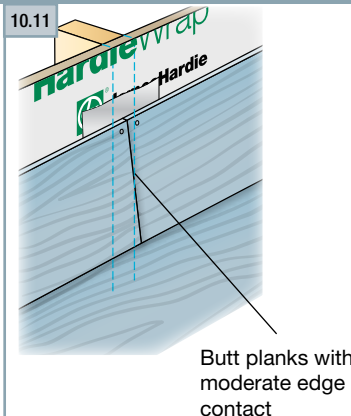


Caulking at HardiePlank lap siding butt joints is not recommended for ColorPlus for aesthetic reasons as the caulking and ColorPlus will weather differently. For the same reason, do not caulk exposed nail heads. Refer to the ColorPlus touch-up section for details

JOINT PLACEMENT AND TREATMENT

Butt joints in HardiePlank lap siding should always land on a stud. Butt joints between studs are not recommended and should be avoided. Whenever possible, factory-finished ends should be used at butt joints.

Place cut ends where the siding meets a corner, door, window trim, or other break in the wall where the joint is to be caulked. If cut ends are used in a butt joint between planks, James Hardie requires sealing cut ends for all products. For ColorPlus products, use the color-matched edge coater to seal the cut end.



COLORPLUS® TIP: When installing HardiePlank lap siding with ColorPlus Technology, position the plank in the immediate area where the plank is to be fastened. Do not place the plank on the course below and slide into position. Doing so may scuff or scratch the ColorPlus finish on the installed piece.

Installation of HardiePlank® Lap Siding (cont.)

CONTINUING THE INSTALLATION

Once the initial course of HardiePlank® siding is fastened to the wall, continue installing successive courses with full 12 ft. pieces (follow the stagger pattern for longer walls), or until a window, door or other opening interrupts the course (fig 10.12). Notch planks as needed to fit around windows and doors. Again, be sure to seal all cut edges. Avoid placing butt joints directly above or below windows or above doors. Separate the joint from the opening by at least one course of siding.

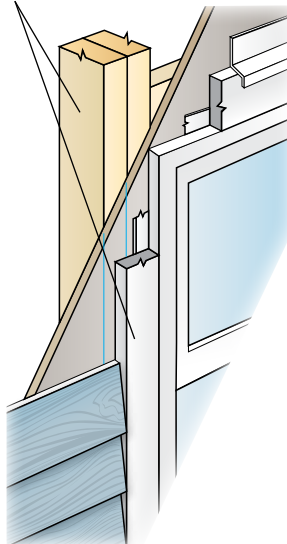
Where butt joints land on a stud, make sure there is enough stud space for plank on both sides of the joint to land properly. Optimally both sides of a butt joint should land in the middle of a stud with 3/4 in landing space for each side. The minimum stud space for a plank to land is 3/8 in

Pay special attention to window, doors, and corners that have been trimmed before the siding goes on. Vertical trim boards may cover the king studs beside windows or doors, or they may cover up corner studs leaving no room for nailing the siding. In these places add extra studs as needed.

If corners are trimmed with HardieTrim® 5/4, 4/4 boards, it may be necessary to measure and cut the first pieces of siding to make sure the butt joints land on studs.

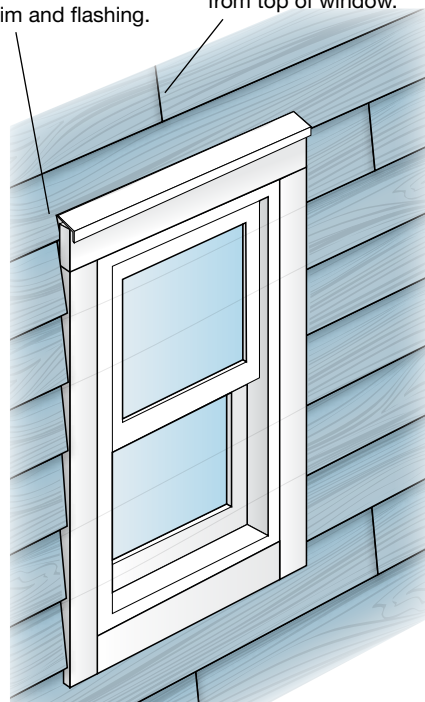
10.12 Planking around windows

Add an extra stud if necessary for nailing the ends of the planks.



Notch plank around window trim and flashing.

Keep butt joints more than one course away from top of window.



COLORPLUS TIP: HardiePlank lap siding with ColorPlus Technology is shipped with a protective laminate slip sheet, which should be left in place during cutting and fastening to reduce marring and scratching. The sheet should be removed immediately after each plank is installed.



INSTALLING HARDIEPLANK® SIDING ON GABLE WALLS

Siding gable walls can be challenging, and some of the keys to siding gable walls efficiently are determining the angle or pitch of the roof, properly staging materials, and ensuring that the plank lengths are measured accurately.

To estimate the amount of siding needed to complete a gable end, use the estimating tools located in Appendix C.

Stage enough material on the pump jacks or scaffolding to complete the gable end, but take care not to overload the staging. When possible, a cut table should be located on the pump jacks or scaffolding, which frees up crew members to work on other walls.

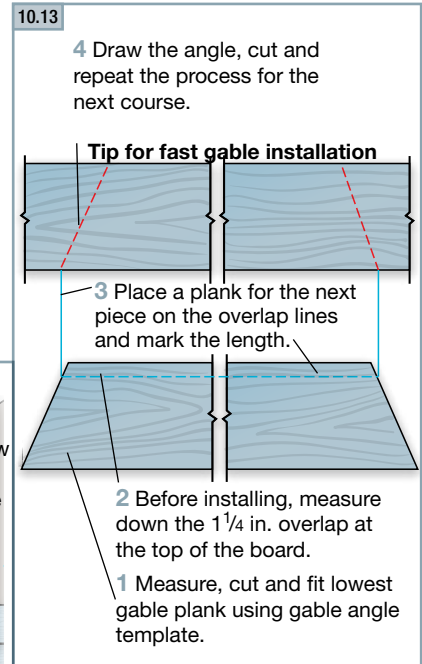
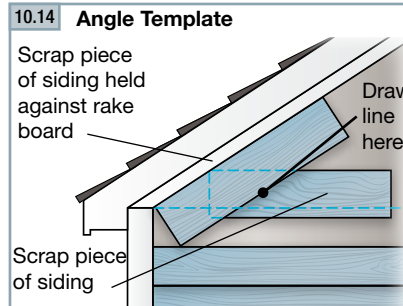
To cut planks for the gable:

1. Tack up a small scrap piece of siding where the first gable course is going.
2. Hold a second small piece of siding against the eave or rake board.
3. Trace the angle onto the scrap.
4. Cut that line and label the scrap as the template for the gable angle. The template can then be used to transfer the angle onto the larger pieces for cutting and installation.
5. Periodically check the angle as you progress up the wall.

The quickest way to measure and cut consecutive courses of siding for a gable is to work off the previous piece.




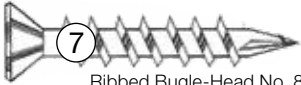



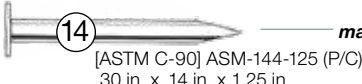



1. Cut and fit the lowest course of siding.
2. Before installing, lay it flat and measure down 1 1/4 in. from the top edge of the plank for the course overlap. Make a mark on both ends.
3. Set a piece of uncut siding on top of the first piece, aligning the bottom edge with the overlap marks. Transfer the length directly to the uncut piece.
4. Draw the gable angle with the template, cut the angle and then repeat the process for the next course.

TIP: Stainless steel fasteners are recommended when installing James Hardie® products.



HARDIEPLANK® SIDING FASTENER SPECIFICATIONS

The Fastener Specifications table shows fastener options for a variety of different nailing substrates. Please refer to the applicable ESR report online (see back page) to determine which fastener meets your wind load design criteria.

Fastener Substrate			Approved Fastener	Fastener Type
wood studs	blind nail	16 in o.c.		 ② .113 in x .267 in x 2 in — 6D common
		24 in o.c.	③ ⑨ ⑩	 ③ .093 in x .222 in. x 2 in — 6D siding nail
	face nail	16 in o.c.	② ⑤	 ⑨ No 11ga 1.25 in long — roofing nail
		24 in o.c.	② ⑤	 ⑦ Ribbed Bugle-Head No. 8 .323 in x 1.625 in — screws
steel studs*	blind nail	16 in o.c.		 ⑧ Ribbed Wafer-Head No. 8 (.375 in x 1.25 in) — screws
		24 in o.c.	⑧ ⑬	 ⑫ [AKN-100] .100 in x .25 in x 1.5 in — ET&F
	face nail	16 in o.c.		 ⑬ [AGS-100] .100 in x .313 in x 1.5 in — ET&F
		24 in o.c.	⑦ ⑫	 ⑭ [ASTM C-90] ASM-144-125 (P/C) .30 in x .14 in x 1.25 in — masonry nail
		Direct to Masonry	⑭	 ⑤ .113 in x .260 in x 2.375 in — 8D common
		7/16 in OSB or equivalent (face nailed)	④	 ⑯ No 11ga 1.75 in long — roofing nail
		④	 ④ .091 in. x .221 in. x 1.5 in — 4D siding nail	

*When blind fastening 9.5 in or wider product onto steel studs, use screws.

● indicates recommended fasteners



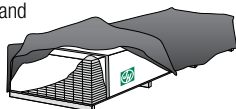
HardiePlank® Lap Siding

EFFECTIVE SEPTEMBER 2019

IMPORTANT: FAILURE TO FOLLOW JAMES HARDIE WRITTEN INSTALLATION INSTRUCTIONS AND COMPLY WITH APPLICABLE BUILDING CODES MAY VIOLATE LOCAL LAWS, AFFECT BUILDING ENVELOPE PERFORMANCE AND MAY AFFECT WARRANTY COVERAGE. FAILURE TO COMPLY WITH ALL HEALTH AND SAFETY REGULATIONS WHEN CUTTING AND INSTALLING THIS PRODUCT MAY RESULT IN PERSONAL INJURY. BEFORE INSTALLATION, CONFIRM YOU ARE USING THE CORRECT HARDIEZONE® PRODUCT INSTRUCTIONS BY VISITING HARDIEZONE.COM OR CALL 1-866-942-7343 (866-9-HARDIE)

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing siding wet or saturated may result in shrinkage at butt joints. Carry planks on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.



CUTTING INSTRUCTIONS

OUTDOORS

- Position cutting station so that airflow blows dust away from the user and others near the cutting area.
- Cut using one of the following methods:
 - Best:** Circular saw equipped with a HardieBlade® saw blade and attached vacuum dust collection system. Shears (manual, pneumatic or electric) may also be used, not recommended for products thicker than 7/16 in.
 - Better:** Circular saw equipped with a dust collection feature (e.g. Roan® saw) and a HardieBlade saw blade.
 - Good:** Circular saw equipped with a HardieBlade saw blade.

INDOORS

DO NOT grind or cut with a power saw indoors. Cut using shears (manual, pneumatic or electric) or the score and snap method, not recommended for products thicker than 7/16 in.

- DO NOT dry sweep dust; use wet dust suppression or vacuum to collect dust.
- For maximum dust reduction, James Hardie recommends using the "Best" cutting practices. Always follow the equipment manufacturer's instructions for proper operation.
- For best performance when cutting with a circular saw, James Hardie recommends using HardieBlade® saw blades.
- Go to jameshardiepros.com for additional cutting and dust control recommendations.

IMPORTANT: The Occupational Safety and Health Administration (OSHA) regulates workplace exposure to silica dust. For construction sites, OSHA has deemed that cutting fiber cement with a circular saw having a blade diameter less than 8 inches and connected to a commercially available dust collection system per manufacturer's instructions results in exposures below the OSHA Permissible Exposure Limit (PEL) for respirable crystalline silica, without the need for additional respiratory protection.

If you are unsure about how to comply with OSHA silica dust regulations, consult a qualified industrial hygienist or safety professional, or contact your James Hardie technical sales representative for assistance. James Hardie makes no representation or warranty that adopting a particular cutting practice will assure your compliance with OSHA rules or other applicable laws and safety requirements.

IMPORTANT: To prevent damage to the drip edge, extra care should be taken when removing planks from the pallet, while handling, and when installing with a lap gauge. Please see additional handling requirements on page 4.

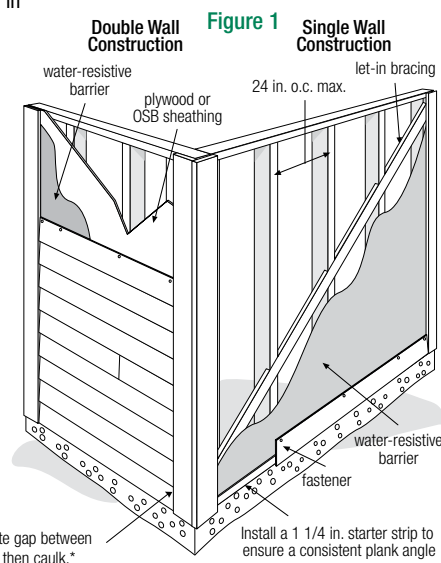
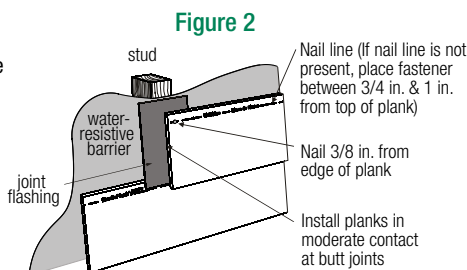
GENERAL REQUIREMENTS:

- HardiePlank® lap siding can be installed over braced wood or steel studs, 20 gauge (33 mils) minimum to 16 gauge (54 mils) maximum, spaced a maximum of 24 in o.c. or directly to minimum 7/16 in thick OSB sheathing. See General Fastening Requirements. Irregularities in framing and sheathing can mirror through the finished application. Correct irregularities before installing siding.
- Information on installing James Hardie products over non-nailable substrates (ex: gypsum, foam, etc.) can be located in JH Tech Bulletin 19 at www.jamehardie.com
- A water-resistive barrier is required in accordance with local building code requirements. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements. James Hardie will assume no responsibility for water infiltration. James Hardie does manufacture HardieWrap® Weather Barrier, a non-woven non-perforated housewrap¹, which complies with building code requirements.
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6 in. in the first 10 ft..
- Do not use HardiePlank lap siding in Fascia or Trim applications.
- Do not install James Hardie products, such that they may remain in contact with standing water.
- HardiePlank lap siding may be installed on flat vertical wall applications only.
- For larger projects, including commercial and multi-family projects, where the span of the wall is significant in length, the designer and/or architect should take into consideration the coefficient of thermal expansion and moisture movement of the product in their design. These values can be found in the Technical Bulletin "Expansion Characteristics of James Hardie® Siding Products" at www.jameshardie.com.
- James Hardie Building Products provides installation /wind load information for buildings with a maximum mean roof height of 85 feet. For information on installations above 60 feet, please contact JH technical support.

INSTALLATION: JOINT TREATMENT

One or more of the following joint treatment options are required by code (as referenced 2009 IRC R703.10.2)

- Joint Flashing (James Hardie recommended)
- Caulking* (Caulking is not recommended for ColorPlus for aesthetic reasons as the Caulking and ColorPlus will weather differently. For the same reason, do not caulk nail heads on ColorPlus products.)
- "H" jointer cover



Note: Field painting over caulking may produce a sheen difference when compared to the field painted PrimePlus. *Refer to Caulking section in these instructions.

¹For additional information on HardieWrap® Weather Barrier, consult James Hardie at 1-866-4Hardie or www.hardiewrap.com

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CLEARANCE AND FLASHING REQUIREMENTS

Figure 3
Roof to Wall

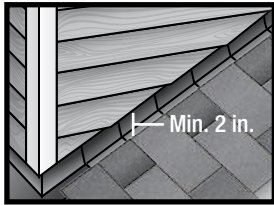


Figure 4
Horizontal Flashing

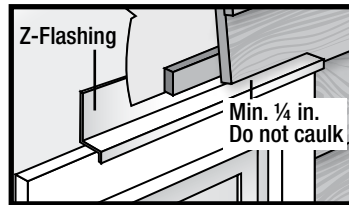


Figure 5
Kickout Flashing

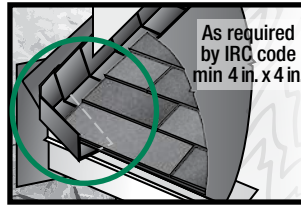


Figure 6
Slabs, Path, Steps to Siding

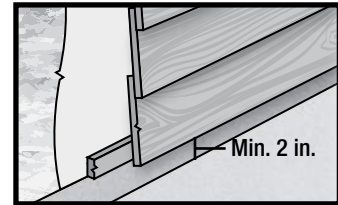


Figure 7
Deck to Wall

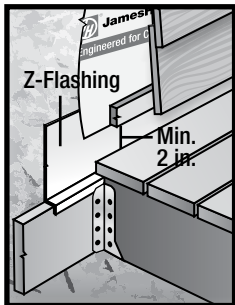


Figure 8
Ground to Siding

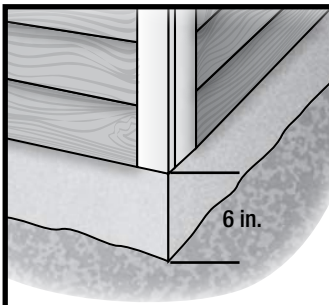


Figure 9
Gutter to Siding

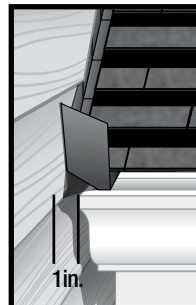


Figure 10
Sheltered Areas

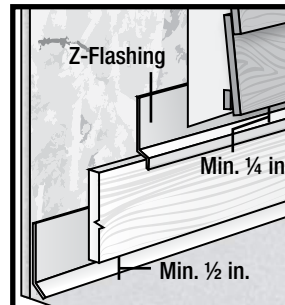


Figure 11
Mortar/Masonry

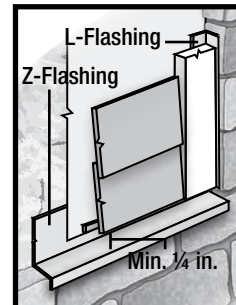


Figure 12
Drip Edge

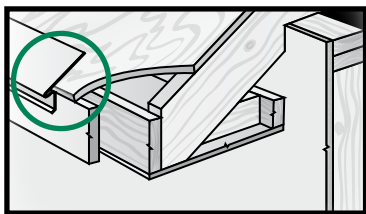


Figure 13
Block Penetration

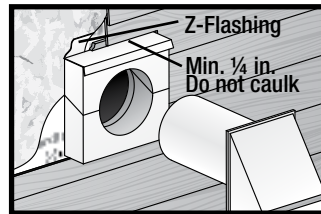
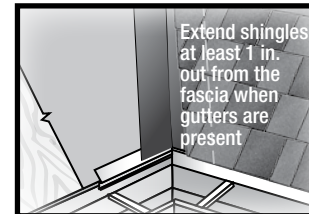


Figure 14
Valley/Shingle Extension



FASTENER REQUIREMENTS*

Refer to the applicable ESR report online to determine which fastener meets your wind load design criteria.

Blind Nailing is the preferred method of installation for HardiePlank® lap siding products. Face nailing should only be used where required by code for high wind areas and must not be used in conjunction with Blind nailing (Please see JH Tech bulletin 17 for exemption when doing a repair).

BLIND NAILING

Nails - Wood Framing

- Siding nail (0.09 in. shank x 0.221 in. HD x 2 in. long)
- 11ga. roofing nail (0.121 in. shank x 0.371 in. HD x 1.25 in. long)

Screws - Steel Framing

- Ribbed Wafer-head or equivalent (No. 8 x 1 1/4 in. long x 0.375 in. HD) Screws must penetrate 3 threads into metal framing.

Nails - Steel Framing

- ET & F Panelfast® nails or equivalent (0.10 in. shank x 0.313 in. HD x 1-1/2 in. long) Nails must penetrate minimum 1/4 in. into metal framing.

OSB minimum 7/16 in.

- Siding nail (0.09 in. shank x 0.215 in. HD x 1-1/2 in. long)
- Ribbed Wafer-head or equivalent (No. 8 x 1 5/8 in. long x 0.375 in. HD).

FACE NAILING

Nails - Wood Framing

- 6d (0.113 in. shank x 0.267 in. HD x 2 in. long)
- Siding nail (0.09" shank x 0.221" HD x 2" long)

Screws - Steel Framing

- Ribbed Bugle-head or equivalent (No. 8-18 x 1-5/8 in. long x 0.323 in. HD) Screws must penetrate 3 threads into metal framing.

Nails - Steel Framing

- ET & F pin or equivalent (0.10 in. shank x 0.25 in. HD x 1-1/2 in. long) Nails must penetrate minimum 1/4 in. into metal framing.

OSB minimum 7/16 in.

- Siding nail (0.09 in. shank x 0.221 in. HD x 1-1/2 in. long)

*Also see General Fastening Requirements; and when considering alternative fastening options refer to James Hardie's Technical Bulletin USTB 5 - Fastening Tips for HardiePlank Lap Siding.

FASTENER REQUIREMENTS *continued*

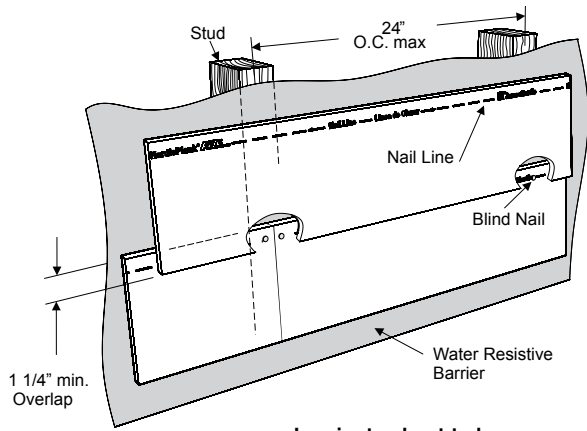
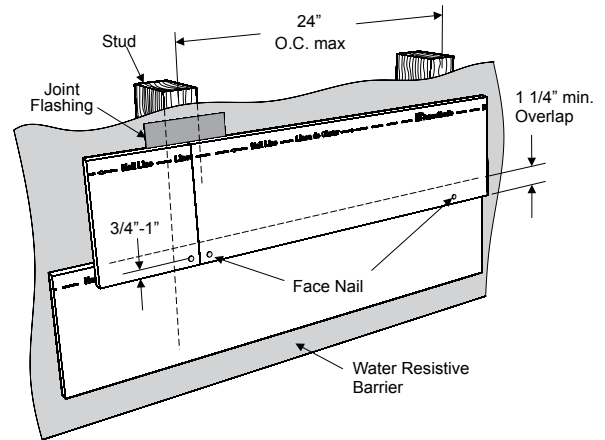
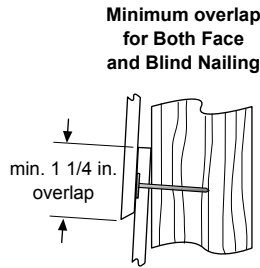


Figure 14 **Figure 15**



Laminate sheet to be removed immediately after installation of each course for ColorPlus® products.

Pin-backed corners may be done for aesthetic purposes only. Finish nails are recommended for pin-backs. Headed siding nails are allowed. Place pin-backs no closer than 1 in. from plank ends and 3/4 in. from plank edge into min. 3/8 in. wood structural panel. Pin-backs are not a substitute for blind or face nailing.

GENERAL FASTENING REQUIREMENTS

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. James Hardie recommends the use of quality, hot-dipped galvanized nails. James Hardie is not responsible for the corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing James Hardie® products near the ocean, large bodies of water, or in very humid climates.

Manufacturers of ACQ and CA preservative-treated wood recommend spacer materials or other physical barriers to prevent direct contact of ACQ or CA preservative-treated wood and aluminum products. Fasteners used to attach HardieTrim Tabs to preservative-treated wood shall be of hot dipped zinc-coated galvanized steel or stainless steel and in accordance to 2009 IRC R317.3 or 2009 IBC 2304.9.5

- Consult applicable product evaluation or listing for correct fasteners type and placement to achieve specified design wind loads.
- NOTE: Published wind loads may not be applicable to all areas where Local Building Codes have specific jurisdiction. Consult James Hardie Technical Services if you are unsure of applicable compliance documentation.
- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space).
- NOTE: Whenever a structural member is present, HardiePlank should be fastened with even spacing to the structural member. The tables allowing direct to OSB or plywood should only be used when traditional framing is not available.

CUT EDGE TREATMENT

Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

CAULKING

For best results use an Elastomeric Joint Sealant complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer's written instructions.

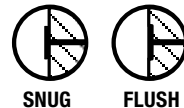
Note: some caulking manufacturers do not allow "tooling".

PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® products. Factory-primed James Hardie products must be painted within 180 days of installation. 100% acrylic topcoats are recommended. Do not paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

PNEUMATIC FASTENING

James Hardie products can be hand nailed or fastened with a pneumatic tool. Pneumatic fastening is highly recommended. Set air pressure so that the fastener is driven snug with the surface of the siding. A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the nail is driven. If setting the nail depth proves difficult, choose a setting that under drives the nail. (Drive under driven nails snug with a smooth faced hammer - Does not apply for installation to steel framing).



DO NOT



**UNDER
DRIVE**

IF, THEN

WOOD FRAME



**HAMMER
FLUSH**

STEEL FRAME



**REMOVE &
REPLACE**

DO NOT



**OVER
DRIVE**



SLANT

IF, THEN ADDITIONAL NAIL

FACE NAIL



**COUNTERSINK
& FILL**

DO NOT USE



**ALUMINUM
FASTENERS**



**CLIPPED
HEAD NAILS**



STAPLES



COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Care should be taken when handling and cutting James Hardie ColorPlus® products. During installation use a wet soft cloth or soft brush to gently wipe off any residue or construction dust left on the product, then rinse with a garden hose.
- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up should be used sparingly. If large areas require touch-up, replace the damaged area with new HardiePlank® lap siding with ColorPlus® Technology.
- Laminate sheet must be removed immediately after installation of each course.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your ColorPlus® product dealer.
- Treat all other non-factory cut edges using the ColorPlus Technology edge coat, available from your ColorPlus product dealer.

Note: James Hardie does not warrant the usage of third party touch-up or paints used as touch-up on James Hardie ColorPlus products.

Problems with appearance or performance arising from use of third party touch-up paints or paints used as touch-up that are not James Hardie touch-up will not be covered under the James Hardie ColorPlus Limited Finish Warranty.

COVERAGE CHART/ESTIMATING GUIDE

Number of 12 ft. planks, does not include waste

COVERAGE AREA
LESS
OPENINGS

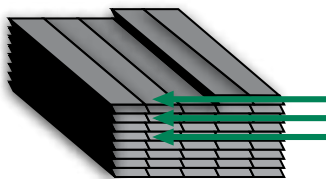
SQ (1 SQ = 100 sq.ft.)	HARDIEPLANK® LAP SIDING WIDTH									
	(exposure)	5 1/4 4	6 1/4 5	7 1/4 6	7 1/2 6 1/4	8 6 3/4	8 1/4 7	9 1/4 8	9 1/2 8 1/4	12 10 3/4
1		25	20	17	16	15	14	13	13	9
2		50	40	33	32	30	29	25	25	19
3		75	60	50	48	44	43	38	38	28
4		100	80	67	64	59	57	50	50	37
5		125	100	83	80	74	71	63	63	47
6		150	120	100	96	89	86	75	75	56
7		175	140	117	112	104	100	88	88	65
8		200	160	133	128	119	114	100	100	74
9		225	180	150	144	133	129	113	113	84
10		250	200	167	160	148	143	125	125	93
11		275	220	183	176	163	157	138	138	102
12		300	240	200	192	178	171	150	150	112
13		325	260	217	208	193	186	163	163	121
14		350	280	233	224	207	200	175	175	130
15		375	300	250	240	222	214	188	188	140
16		400	320	267	256	237	229	200	200	149
17		425	340	283	272	252	243	213	213	158
18		450	360	300	288	267	257	225	225	167
19		475	380	317	304	281	271	238	238	177
20		500	400	333	320	296	286	250	250	186

This coverage chart is meant as a guide. Actual usage is subject to variables such as building design. James Hardie does not assume responsibility for over or under ordering of product.

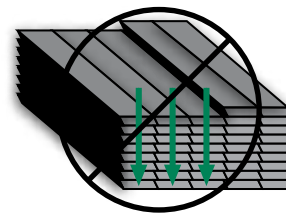
ADDITIONAL HANDLING REQUIREMENTS

IMPORTANT: To prevent damage to the drip edge, extra care should be taken when removing planks from the pallet, while handling, and when installing with a lap gauge. Planks are interlocked together on the pallet, therefore they should be removed from the pallet horizontally (side to side) to allow planks to unlock themselves from one another.

Pull from across the stack



Do not go down the stack



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SILICA WARNING

DANGER: May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product. Refer to the current product Safety Data Sheet before use. The hazard associated with fiber cement arises from crystalline silica present in the dust generated by activities such as cutting, machining, drilling, routing, sawing, crushing, or otherwise abrading fiber cement, and when cleaning up, disposing of or moving the dust. When doing any of these activities in a manner that generates dust you must (1) comply with the OSHA standard for silica dust and/or other applicable law, (2) follow James Hardie cutting instructions to reduce or limit the release of dust; (3) warn others in the area to avoid breathing the dust; (4) when using mechanical saw or high speed cutting tools, work outdoors and use dust collection equipment; and (5) if no other dust controls are available, wear a dust mask or respirator that meets NIOSH requirements (e.g. N-95 dust mask). During clean-up, use a well maintained vacuum and filter appropriate for capturing fine (respirable) dust or use wet clean-up methods - never dry sweep.

WARNING: This product can expose you to chemicals including respirable crystalline silica, which is known to the State of California to cause cancer. For more information go to P65Warnings.ca.gov.

RECOGNITION: In accordance with ICC-ES Evaluation Report ESR-2290, HardiePlank® lap siding is recognized as a suitable alternate to that specified in the 2006, 2009, 2012 & 2015 International Residential Code for One and Two-Family Dwellings, and the 2006, 2009, 2012 & 2015 International Building Code. HardiePlank lap siding is also recognized for application in the following: City of Los Angeles Research Report No. 24862, State of Florida Product Approval FL#13192, Miami-Dade County Florida NOA No. 17-0406.06, U.S. Dept. of HUD Materials Release 1263f, Texas Department of Insurance Product Evaluation EC-23, City of New York MEA 223-93-M, and California DSA PA-019. These documents should also be consulted for additional information concerning the suitability of this product for specific applications.



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DURATION®

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Tejas con tecnología patentada SureNail®



Driftwood®





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Tejas laminadas

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Add comfort and energy performance
Más confort y desempeño energético

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Aislamiento para áticos PINK® Fiberglas™ aplicado por impulsión

REGISTER YOUR WARRANTY

Registering your Owens Corning® warranty ensures it's easily referenced should you ever need to access it. The process is easy—just have your installation date, shingle type, shingle color and number of squares ready. Then go online to www.owenscorning.com/roofingstandardwarranty or call 1-800-ROOFING (1-800-766-3464) to finish the process.



SCAN TO REGISTER YOUR WARRANTY

Escanee para registrar su garantía

REGISTRE SU GARANTÍA

Al registrar su garantía de Owens Corning® la podrá consultar rápidamente si fuera necesario acceder a ella. El proceso es simple: tenga a mano la fecha de instalación, el tipo y color de tejas y la cantidad de cuadrados. Luego, visite www.owenscorning.com/roofingstandardwarranty o llame al 1-800-ROOFING (1-800-766-3464) para completar el proceso.



DEEP DIMENSION OUTSTANDING PERFORMANCE

Duration® Shingles offer:

- The high-performance of SureNail® Technology
- A TruDefinition® Color Platform
- A Limited Lifetime Warranty*¹ for as long as you own your home
- The protection of a 130-MPH* wind warranty
- StreakGuard® Protection with a 25-year Algae Resistance Limited Warranty^{3/8}
- Rated Class 3 for Impact Resistance⁶ and may qualify for a homeowner insurance discount⁷

UNA NUEVA DIMENSIÓN DESEMPEÑO SOBRESALIENTE

Las tejas Duration® ofrecen:

- El gran desempeño de la tecnología SureNail®
- La gama de colores TruDefinition®
- Una garantía limitada de por vida*¹ mientras sea propietario de la vivienda
- La protección de una garantía contra vientos de hasta 210 km/h (130 mph)*
- Protección StreakGuard® con una garantía limitada de 25 años de resistencia a las algas ^{3/8}
- Clasificación nominal 3 para resistencia a los impactos⁶ y puede ser aplicable a descuento por seguro del propietario⁷



Don't let black streaks lower the value or curb appeal of your home.

Owens Corning blends specialized copper-lined granules, developed by 3M, a leading producer of roofing granules, into our colorful shingles. This helps resist blue-green algae growth.

No deje que las manchas de algas afecten al valor o aspecto de su vivienda.

En sus coloridas tejas, Owens Corning añade gránulos especiales con recubrimiento de cobre, desarrollados por 3M, un productor líder de gránulos para techos. Esto ayuda a prevenir la proliferación de algas azul-verdosas.



THE FINISHING TOUCH

OWENS CORNING® HIP & RIDGE SHINGLES

Owens Corning® Hip & Ridge Shingles are uniquely color matched to TruDefinition® Duration® Shingles. The multiple color blends are only available from Owens Corning Roofing and offer a finished look for the roof.

EL TOQUE FINAL

TEJAS DE LIMATESA Y CUMBRERA DE OWENS CORNING®

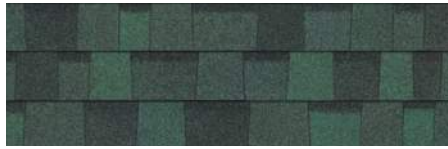
Las tejas de limatesa y cumbrera de Owens Corning® se ofrecen en una exclusiva gama de colores para combinar con las tejas Duration® TruDefinition®. Esta gran variedad de combinaciones de colores es una exclusividad de Owens Corning Roofing para lograr techos con un acabado único.

TruDefinition®
DURATION®

Shingles with Patented SureNail® Technology | Tejas con tecnología patentada SureNail®



Brownwood¹



Chateau Green¹



Colonial Slate¹



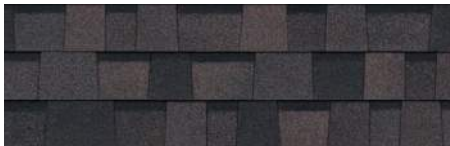
Desert Rose¹



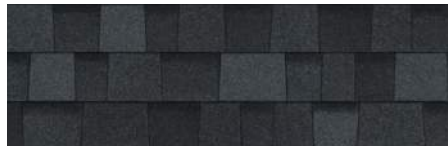
Driftwood¹



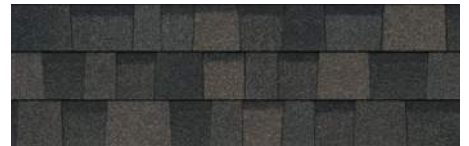
Estate Gray¹



Midnight Plum^{1/5}



Onyx Black¹



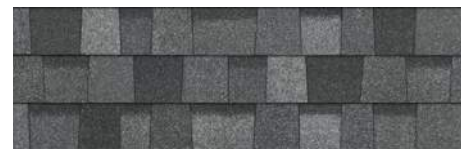
Peppercorn¹



Sand Castle¹



Sierra Gray¹



Slatestone Gray¹



Teak¹



Terra Cotta¹



Williamsburg Gray¹

COLOR DISCLAIMER

As color experts, we know getting the shingle color right is a big part of any roofing purchase. Due to printing color variations, in addition to viewing shingle literature, we suggest you request an actual shingle sample to see how it will appear on your home and with your home's exterior elements in various natural lighting conditions. Lastly, we recommend you verify your color choice by seeing it installed on an actual home; your roofing contractor or supplier can provide a sample and may be able to direct you to a local installation.

DESCARGO DE RESPONSABILIDAD SOBRE LOS COLORES

En tanto que especialistas en color, sabemos que obtener el color de teja perfecto es una parte importante en toda compra de techos. Debido a las variaciones en los colores impresos, además de mirar folletos de tejas, le sugerimos que solicite una muestra de la teja para ver como se verá en su hogar y con los elementos externos de la vivienda bajo distintas condiciones de luz natural. Finalmente, le recomendamos que para verificar su elección de colores, vea cómo lucen las tejas ya instaladas en una vivienda; su contratista de techos o su proveedor le pueden dar una muestra e incluso indicarle dónde ver un techo ya instalado.

THERE'S A LINE BETWEEN A GOOD SHINGLE AND A GREAT SHINGLE.®

It's the nailing line on your shingles. The difference between a good shingle and a great shingle is having Patented SureNail® Technology, only from Owens Corning.

HAY UNA GRAN DIFERENCIA ENTRE UNA BUENA TEJA Y UNA TEJA EXCELENTE™

Es la línea de clavado en su tejas. La diferencia entre una buena teja y una teja excelente es la tecnología patentada SureNail®, una exclusividad de Owens Corning.



Excellent Adhesive Power

Helps keep the shingle layers laminated.

Excelente poder adhesivo

Ayuda a conservar el laminado de las capas de las tejas.

Outstanding Grip

The SureNail® strip enhances the already amazing grip of our proprietary Tru-Bond®** sealant for exceptional wind resistance of a 130-MPH wind warranty.

Agarre excepcional

La banda SureNail® mejora el excelente agarre de nuestro sellador patentado Tru-Bond®** con una garantía de resistencia al viento excepcional de 120 km/h (130 mph).

Breakthrough Design

Patented SureNail® Technology is the first and only reinforced nailing zone on the face of the shingle.

Diseño innovador

La tecnología patentada SureNail® es la primera y la única que provee un área de clavado reforzada en la cara de la teja.

"No Guess" Wide Nailing Zone

This tough, engineered woven-fabric strip is embedded in the shingle to create an easy-to-see, strong, durable fastener zone.

Área de clavado ancha, sin cálculos "a ojo"

Esta banda resistente de tela mecánica tejida está incrustada en la teja para proveer un área de sujeción resistente, duradera y fácil de detectar.

Triple Layer Protection®

A unique "triple layer" of reinforcement occurs when the fabric overlays the two shingle layers, providing increased protection against "nail pull" from the wind.

Triple Layer Protection®

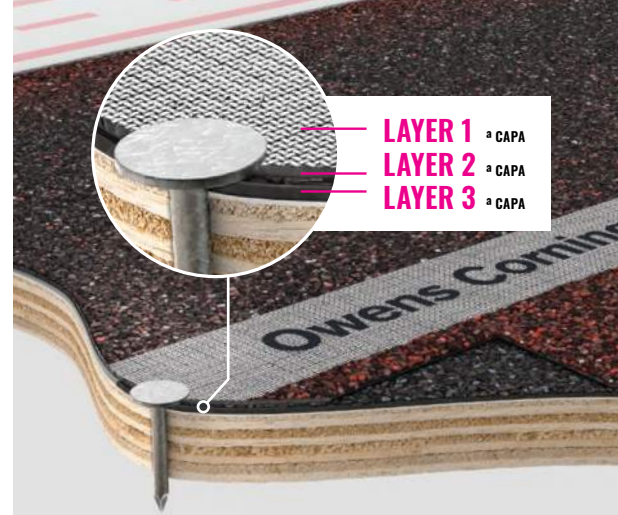
Cuando la tela cubre las dos capas de la teja, se forma una "triple capa" de refuerzo excepcional que ofrece una mayor protección ante el "arranque de clavos" debido al viento.

Double the Common Bond

SureNail® features up to a 200% wider bond between the shingle layers in the nailing zone over standard shingles.

Duplica la adherencia común

En comparación con las tejas comunes, SureNail® ofrece un área de unión hasta un 200 % más ancha entre las capas de la teja en el área de clavado.



THE PROOF IS IN THE PERFORMANCE LA PRUEBA ESTÁ EN EL DESEMPEÑO



Up to

2.5X
BETTER
NAIL PULL-THROUGH RESISTANCE

Hasta

2.5X
MEJOR
RESISTENCIA A LA TRACCIÓN DE LOS CLAVOS



Up to

9X
BETTER
NAIL BLOW-THROUGH RESISTANCE

Hasta

9X
MEJOR
RESISTENCIA AL DESPRENDIMIENTO DE LOS CLAVOS



Up to

2X
BETTER
DELAMINATION RESISTANCE

Hasta

2X
MEJOR
RESISTENCIA A LA DELAMINACIÓN

Product Attributes

Warranty Length*†
Limited Lifetime (for as long as you own your home)
Wind Resistance Limited Warranty*
130-MPH
Algae Resistance Limited Warranty*§
25 Years
TRU PROtection® Non-Prorated Limited Warranty* Period
10 Years



TruDefinition® Duration® Shingles
Product Specifications

Size	13¼" x 39¾"
Application Exposure	5%"
Shingles per Bundle	Not less than 20
Average Shingle Count per 3 Bundles	64
Average Coverage per 3 Bundles	98.4 sq. ft.

Applicable Standards and Codes

ASTM D3462
ASTM D228
ASTM D3018 (Type 1)
ICC-ES AC438#
ASTM D3161 (Class F Wind Resistance)
ASTM D7158 (Class H Wind Resistance)
ASTM E108/UL 790 (Class A Fire Resistance)
UL 2218 (Class 3 Impact Resistance)⁵
FM 4473 (Class 3 Impact Resistance)⁶
PRI ER 1378E01
Florida Product Approval
Miami-Dade County Product Approval²

Características del producto

Período de garantía*†
Garantía limitada de por vida (mientras sea propietario de la vivienda)
Garantía limitada de resistencia al viento*
210 km/h (130 mph)
Garantía limitada de resistencia a las algas*§
25 años
Período no prorrateado de garantía limitada TRU PROtection®
10 años



Especificaciones de las tejas Duration®
TruDefinition®

Tamaño	33.65 x 100 cm (13¼ x 39¾ pulg)
Exposición de aplicación	14.3 cm (5% pulg)
Tejas por paquete	20 como mínimo
Cantidad promedio de tejas por 3 paquetes	64
Cobertura promedio por 3 paquetes	9.14 m² (98.4 pies²)

Normas y códigos pertinentes

ASTM D3462
ASTM D228
ASTM D3018 (Tipo 1)
ICC-ES AC438#
ASTM D3161 (Resistencia al viento, Clase F)
ASTM D7158 (Resistencia al viento Clase H)
ASTM E108/UL 790 (Resistencia al fuego Clase A)
UL 2218 (Resistencia a impactos de clase 3)⁶
FM 4473 (Resistencia a impactos de clase 3)⁶
PRI ER 1378E01
Aprobación del producto en el estado de Florida
Producto aprobado por el condado de Miami-Dade²

* See actual warranty for complete details, limitations and requirements.

† 40-Year Limited Warranty on commercial projects.

† Owens Corning testing against competing products with wide, single-layer nailing zones when following manufacturers' installation instructions and nailing in the middle of the allowable nailing zone.

** Tru-Bond® is a proprietary premium weathering-grade asphalt sealant that is blended by Owens Corning Roofing® and Asphalt, LLC.

+ The amount of Triple Layer Protection® may vary on shingle-to-shingle basis.

International Code Council Evaluation Services Acceptance Criteria for Alternative Asphalt Shingles.

^ Excludes non-Owens Corning® roofing products such as flashing, fasteners, pipe boots and wood decking.

1 See Color Disclaimer information on page 3 for additional details.

2 Applies to all areas that recognize Miami-Dade Notice of Acceptance (NOA).

3 Shingles are algae resistant to control the growth of algae and discoloration.

§ Installation must include use of an Owens Corning® Hip & Ridge product. See actual warranty for details.

5 Owens Corning® Bourbon and Midnight Plum shingles include a patent pending design.

6 Qualifying Owens Corning Hip & Ridge Shingles may be required to complete a UL 2218 and/or FM 4473 Class 3 Impact-Resistant Roof System. Due to the variability in real storm conditions, a Class Rating on any product does not guarantee that it will withstand damage from hailstorms or other acts of God. Owens Corning shingles are not covered under a warranty for hail damage.

7 Homeowners should check with their insurance company to see if they qualify.

SureNail® Technology is not a guarantee of performance in all weather conditions.

For patent information, please visit [owenscorning.com/patents](https://www.owenscorning.com/patents).

* Consulte la garantía para obtener una lista completa de detalles, limitaciones y requisitos.

† Garantía limitada de 40 años para proyectos comerciales.

† Ensayos comparativos de Owens Corning con productos de la competencia con zonas de clavado ancho de una sola capa cuando se siguen las instrucciones de instalación del fabricante y se clava en el medio de la zona de clavado permitida.

** Tru-Bond® es un sellador asfáltico patentado de calidad premium formulado por Owens Corning Roofing® and Asphalt, LLC.

+ La cantidad de Triple Layer Protection® puede variar entre una teja y otra.

Criterios de aceptación de los servicios de evaluación del Consejo Internacional de Códigos para tejas asfálticas alternativas.

^ Se excluyen productos para techos no fabricados por Owens Corning®, como tapajuntas, sujetadores, bases de tubos y estructuras de soporte de madera.

1 Para obtener más información, consulte el Descargo de responsabilidad sobre los colores, en la página 3.

2 Aplicable a todas las zonas que reconocen el Aviso de aceptación (NOA, Notice of Acceptance) del condado de Miami Dade.

3 Las tejas son resistentes a las algas para controlar su desarrollo y la decoloración.

§ La instalación debe incluir el uso de un producto para limatesa y cumbre de Owens Corning®.

5 Las tejas de Owens Corning® Bourbon y Midnight Plum incluye un diseño con patente pendiente.

6 Es posible que se requiera el uso de tejas aptas para limatesa y cumbre de Owens Corning para completar un sistema de techo resistente a impactos UL 2218 y/o FM 4473 Clase 3. Debido a la variación de las condiciones de tormenta real, una calificación de clase en cualquier producto no garantiza que soportará daños por tormentas de granizo u otros casos fortuitos. Las tejas de Owens Corning no están cubiertas por una garantía por daños de granizo.

7 Los propietarios deben verificar con su aseguradora para saber si califican.

La tecnología SureNail® no es una garantía de desempeño en todos los tipos de condiciones climáticas.

Para información sobre la patente, visite www.owenscorning.com/patents.



OWENS CORNING ROOFING AND ASPHALT, LLC
ONE OWENS CORNING PARKWAY
TOLEDO, OHIO, USA 43659
1-800-GET-PINK® | 1-800-438-7465
www.owenscorning.com

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(Brookville, Medina, Minneapolis, Summit)

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Pella® Lifestyle Series

Clad/Wood



#1 performing wood window and patio door for the combination of energy, sound and value.¹

Triple-pane casement



Dual-pane double-hung window with Hidden Screen



- **Easy-to-learn Pella Steady Set™ interior installation system**

Pella Steady Set Interior Installation System is a revolutionary, award-winning and safer way to install new construction windows.¹ The simple system is the fastest, most labor efficient wood window installation system with uncompromising quality.² Available on select windows.

- **Performance redefined**

You don't have to compromise on any aspect of performance. Available performance solutions offer an unbeatable combination of energy efficiency, sound control and value.³

- **ENERGY STAR® certified⁴**

Pella products offer energy-efficient options that will meet or exceed ENERGY STAR guidelines in all 50 states. Pella Lifestyle Series products with triple-pane glass have been awarded ENERGY STAR Most Efficient Mark in 2023.

- **Enhanced sound control**

Our patented, triple-pane design with Advanced Low-E glass allows for mixed glass thickness for enhanced sound dampening resulting in an average 52% noise reduction versus single-pane windows.⁵

- **Intentional design for improved durability**

Intentional jamb on sill design helps seal the end grain of the wood and elevates it off the rough opening, reducing the potential for moisture.

- **Durable 3-way corner joints**

Three-way corner joints are made up of mortise-and-tenon, metal fasteners and commercial adhesive for added strength and durability.

- **Low-maintenance exteriors**

Aluminum-clad exteriors with EnduraClad® finish resists fading and chalking. It is applied in an overlapping fashion for exceptional protection.

- **Exclusive wood protection**

Pella's exclusive EnduraGuard® wood protection is applied after the pieces have been cut and milled, but prior to final assembly. It provides advanced protection against the effects of moisture, decay, stains from mold and mildew — as well as termite damage.

- **Time-tested innovations**

Create unique room-by-room solutions and achieve project goals with performance options and purposeful innovations like the Hidden Screen and integrated blinds, shades and security sensors. For more information on integrated wireless security sensors, go to connectpella.com.

- **Best limited lifetime warranty⁶**

Pella Lifestyle Series products are covered by the best limited lifetime warranty in the industry for wood windows and patio doors.⁶

- **Testing beyond requirements**

At Pella, our products are tested beyond requirements to help ensure they have long-lasting performance and reduce call-backs for you.

- **Hidden Screen**

The revolutionary Hidden Screen appears when you open a double-hung window and folds away when it is closed. It provides a clear view when the window is closed and improves curb appeal year-round.

Available in these window and patio door styles:⁷



Special shape windows also available.

^{1,2,3,4,5,6,7} See back cover for disclosures.

Product Specifications


Window & Patio Door Styles	Min. Width	Min. Height	Max. Width	Max. Height	Performance Class & Grade	Performance Values			Frame/Install
						U-Factor	SHGC	STC	
Awning Dual-pane vent	21"	17"	59"	59"	LC30 – LC50	0.25 - 0.34	0.19 - 0.51	25-28	Pella Steady Set- Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Awning Triple-pane vent	21"	17"	59"	59"	R20 - CW50	0.20 - 0.28	0.15 - 0.41	31-37	
Casement Dual-pane vent	17"	17"	35"	73"	LC30-LC50	0.25 - 0.34	0.19 - 0.58	25-31	
Casement Triple-pane vent	17"	17"	35"	73"	R20-CW50	0.20-0.25	0.17-0.46	31-37	
Fixed Casement Dual-pane	17"	17"	73"	73"	LC30-LC50	0.23 - 0.35	0.20 - 0.57	29-32	
Fixed Casement Triple-pane	17"	17"	73"	73"	R20-CW50	0.19 – 0.27	0.15 – 0.49	33-37	
Double-Hung Dual-pane vent	21"	35"	48"	84"	LC30-LC50	0.25 - 0.34	0.20 – 0.48	27-31	Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Hinged Patio Door Dual-pane single door	30"	80"	38"	96"	LC50	0.26 – 0.32	0.18 – 0.48	31	
Hinged Patio Door Triple-pane single door	30"	80"	38"	96"	LC55	0.23 – 0.28	0.12 – 0.34	34-36	
Hinged Patio Door Dual-pane double door	60"	80"	75"	96"	LC50	0.25-0.29	0.18-0.48	30-32	
Hinged Patio Door Triple-pane double door	50"	80"	75"	96"	LC55	0.22-0.26	0.14-0.38	34-36	
Sliding Patio Door Dual-pane single-door fixed (O)	31"	80"	49"	96"	CW50	0.24-0.33	0.18-0.51	27	
Sliding Patio Door Triple-pane single-door fixed (O)	31"	80"	49"	96"	CW60	0.21-0.27	0.17-0.45	33-36	
Sliding Patio Door Dual-pane double-door vent (OX or XO)	60"	80"	96"	96"	R20-LC50	0.24 – 0.34	0.18-0.51	29-32	
Sliding Patio Door Triple-pane double-door vent (OX or XO)	60"	80"	96"	96"	R25-LC60	0.22 – 0.29	0.16 - .44	33-36	

Window sizes available in 1/4" increments
Special sizes available in triple-pane patio doors. For more information regarding performance, visit pella.com/performance. For more information regarding frame and installation types, visit installpella.com.


Window Hardware

Essential Collection

Select from popular designs and finishes to suit every style.




Fold-away Crank

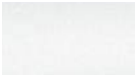


Cam-Action Lock


Finishes:




Champagne




White




Brown



Matte Black



Satin Nickel




Satin Brass


Patio Door Hardware

Essential Collection

Elevate your style and transform a home with elegant selections.




Hinged Patio Door Handle




Sliding Patio Door Handle


Finishes:




Champagne




White




Brown



Matte Black



Satin Nickel

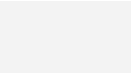


Satin Brass

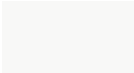
Colors

Prefinished Pine Interior Colors

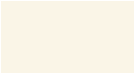
We can prefinish pine in your choice of several paint and stain colors. Unfinished or primed and ready-to-paint are also available.




White




Bright White




Linen White




Golden Oak Stain



Early American Stain



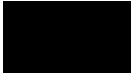
Provincial Stain



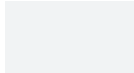
Black Stain

Aluminum-Clad Exterior Colors


Our low-maintenance EnduraClad® exterior finish resists fading and helps protect windows and patio doors for years. Seacoast EnduraClad protective finish for coastal projects with high salt exposure is also available.




Black




White




Brown




Fossil




Iron Ore



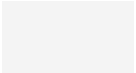
Portobello




Putty




Almond




Classic White



Brick Red



Hartford Green




Wolf Gray


Integrated Blinds & Shades

Integrated Blinds⁸


Raise blinds up for an unobstructed view or tilt to let in just the right amount of light. Our best integrated and accessible blinds are available manual or motorized with Pella® Insynctive® technology.




White




Poplar White




Bisque




Storm



Golden



Mocha




Black


Integrated Shades⁸

Our best integrated fabric shades feature a white exterior fabric for a uniform look from the street. Integrated and accessible shades are available manual or motorized with Pella Insynctive technology.


Light-Filtering:



White




Silver




Maize


Room-Darkening:



Cotton



Bamboo



Ash

Haven't landed on the final blind or shade color selection? No problem. With our patented triple-pane design, you and your customer can make those decisions later in the schedule. Our triple-pane products come with all of the hardware to add a blind or shade straight from the factory or at a later time in the building or remodeling process.

Screens⁹

Hidden Screen

The Hidden Screen appears when you open a double-hung window and folds away when the window is closed. It allows 44% more natural light into your home when a window is closed than a standard screen.¹⁰ Hidden Screen cartridge available in Black, White, Brown, Fossil and Iron Ore colors to match or complement the exterior cladding color choice.

Rolscreen®

Rolscreen soft-closing retractable screens roll out of sight when not in use. Available on casement and awning windows and sliding patio doors.

InView™

InView flat screens let in 14% more light and are 8% more open for improved airflow when compared to the conventional fiberglass screen.¹¹

^{8,9,10,11} See back cover for disclosures.

Performance Packages

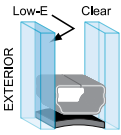
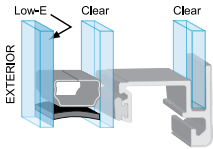
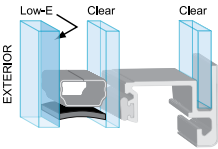
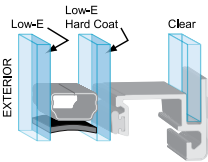
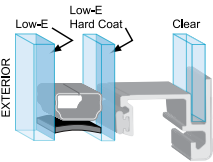
To make things easier, we've created performance packages.

Performance solutions offer an unbeatable combination of energy efficiency, sound control and value.¹ Create room-by-room solutions with the upgraded triple-pane glass design.

All values below are averages compared with single-pane windows.



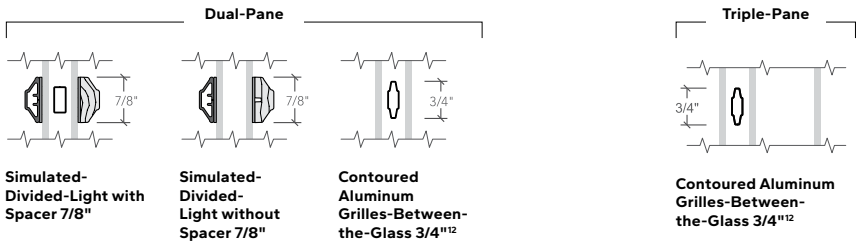
Pella® Lifestyle Series offers products awarded ENERGY STAR® Most Efficient for 2023.⁴

Base	Performance 71% More Energy Efficient ¹⁰ + 34% Noise Reduction ⁵	Sound Control 52% Noise Reduction ⁵	Energy Efficiency 83% More Energy Efficient ¹⁰	Ultimate Performance 79% More Energy Efficient ¹⁰ + 52% Noise Reduction ⁵
 Advanced Low-E Two panes of insulating, energy-efficient glass and our most popular features and options.	 Advanced Low-E SunDefense Low-E or NaturalSun Low-E A triple-pane glass design for a combination of both improved energy efficiency and sound performance.	 Advanced Low-E, SunDefense Low-E or NaturalSun Low-E Sound-reduction glazing Triple-pane glass design featuring mixed glass thicknesses for enhanced sound dampening.	 AdvancedComfort A triple-pane glass design with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.	 AdvancedComfort Sound-reduction glazing A triple-pane glass design featuring mixed glass thicknesses with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.

Patented triple-pane glass design gives flexibility to add integrated blinds or shades without impacting performance.

Grilles

Choose the look of true divided light or make cleaning easier by selecting grilles-between-the-glass.



The Best Limited Lifetime Warranty in the Industry

We know your reputation matters and you stake your reputation on quality, dependable products. That's why we have the best limited lifetime warranty in the industry for wood windows and patio doors.⁶

¹ Compared to leading national wood window brands recommended installation methods for new construction windows.

² Comparing average install time and plumb/level/square measurements of leading national wood window brands when installed following the manufacturer's standard installation methods for new construction windows.

³ Performance solutions require upgrades to triple-pane, AdvancedComfort Low-E and mixed glass thickness. Based on comparing product quotes and published STC/OITC and U-Factor ratings of leading national wood window and patio door brands.

⁴ Some Pella products may not meet ENERGY STAR certification in Canada. For more information, contact your local Pella sales representative or go to nrcan.gc.ca/energy/products/categories/fenestration/13739.

⁵ Reduction in sound based on OITC ratings of Pella Lifestyle Series windows with respective performance package compared to a single-pane wood or vinyl window with an OITC of 19. Calculated by using the sound transmission loss values in the 80 to 4000 Hz range as measured in accordance with ASTM E-90(09). Actual results may vary.

⁶ Based on comparing written limited warranties of leading national wood window and wood patio door brands. See written limited warranty for details, including exceptions and limitations, at pella.com/warranty.

⁷ Double-hung windows available in dual-pane only.

⁸ Available with triple-pane products only.

⁹ Requires the Insynctive App on a smart device, an Insynctive Bridge and a wireless home router with internet connection.

¹⁰ Window energy efficiency calculated in a computer simulation using RESFEN 6.0 default parameters for a 2000 sq. foot new construction single-story home when Pella Lifestyle Series windows with the respective performance package are compared to a single-pane wood or vinyl window. The energy efficiency and actual savings will vary by location. The average window energy efficiency is based on a national average of 94 modeled cities across the country and weighting based on population. For more details see pella.com/methodology.

¹¹ Improved airflow is based on calculated screen cloth openness. Screen cloth transmittance was measured using an integrated sphere spectrophotometer.

¹² Appearance of exterior grille color may vary depending on the Low-E insulating glass selection.

