BRADLEY LANE RESIDENCE

PROJECT INFORMATION

CITY HUDSON
COUNTY SUMMIT COUNTY
ZONING DISTRICT 4 HISTORIC

PROJECT NEW TWO STORY SINGLE FAMILY RESIDENCE.

PROJECT TEAM

ARCHITECT:

HARA ARCHITECTS
P 419.410.6241

CONTACT: NATE BAILEY

STRUCTURAL:

I A LEWIN
P 330.289.1058

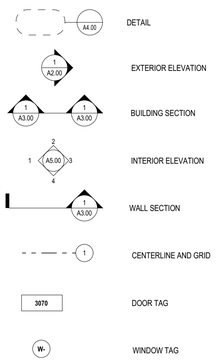
CONTACT: BRIAN TOMCIK

DRAWING INDEX

ABBREVIATIONS

ABV	ABOVE
A/C	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
AHJ	AUTHORITY HAVING JURISDICTION
ALUM	ALUMINUM
APPROX.	APPROXIMATELY
ARCH	ARCHITECTURAL
ASPH	ASPHALT
BD	BOARD
BLDG	BUILDING
BOTT	BOTTOM OF
BRG	BEARING
BOTT	BOTTOM
BTW	BETWEEN
CF	CUBIC FEET
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CO	CLEAN OUT
CONT	CONTINUOUS
DBL	DOUBLE
DEPT	DEPARTMENT
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL
EQ	EQUAL
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN.	FINISHED
FLR	FLOOR
FT	FOOT
FTG	FOOTING
FUR	FURRING
GALV	GALVANIZED
GA	GAUGE
GC	GENERAL CONTRACTOR
GYP. BD.	GYPSUM BOARD
GYP	GYPSUM
HC	HOLLOW CORE
HDWR.	HARDWARE
HM	HOLLOW METAL
HVAC	HEATING, VENTILATION, AND AIR COND.
HT	HEIGHT
INSUL	INSULATION
JST	JOIST
LAM	LAMINATED
LF	LINEAR FOOT
MAS	MASONRY
MATL	MATERIAL
MAX.	MAXIMUM
MECH	MECHANICAL
MFG.	MANUFACTURER
MIN.	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
NOM	NOMINAL
NTS	NOT TO SCALE
O/	OVER
O.C.	ON CENTER
OPN	OPENING
PREFAB	PREFABRICATED
PLYWD	PLYWOOD
P. LAM	PLASTIC LAMINATE
PR	PAIR
PSI	POUNDS PER SQUARE INCH
REF	REFERENCE
RM	ROOM
RO	ROUGH OPENING
REQ	REQUIRED
SC	SOLID CORE
SECT	SECTION
SIM.	SIMILAR
STRUC	STRUCTURAL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
W/	WITH
WWF	WELDED WIRE FABRIC

DRAWING SYMBOLS



PROJECT LOCATION

PROJECT GENERAL NOTES

THE CONTRACTOR WILL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, PERMITS, TAXES, AND INSURANCE NECESSARY TO COMPLETE THE WORK INDICATED AND/ OR IMPLIED IN THE CONSTRUCTION DOCUMENTS UNLESS NOTED OTHERWISE AND WILL COORDINATE THE WORK RESPONSIBILITIES OF ALL SUBCONTRACTORS. ALL LABOR AND MATERIALS TO CARRY OUT FULLY THE INTENTIONS OF THE PLANS AND SPECIFICATIONS ARE PART OF THE CONTRACT, WHETHER OR NOT SPECIFICALLY DOCUMENTED.

ALL WORK WILL CONFORM TO THE CURRENT OHIO BUILDING, MECHANICAL & PLUMBING CODES, AS WELL AS THE CURRENT NATIONAL BOARD OF FIRE UNDERWRITERS AND ALL OTHER APPLICABLE CITY CODES, LOCAL LAWS, AND AUTHORITIES HAVING JURISDICTION. CODE STANDARDS AND PUBLICATIONS OF PRIVATE AND PUBLIC BODIES MENTIONED WITHIN THE SPECIFICATIONS OR ON THE DRAWINGS, WILL BE CONSIDERED TO BE THOSE IN FORCE AT THE TIME OF THE CONTRACT AWARD.

THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CONTROLLED INSPECTIONS AND ANY TECHNICAL TESTING REQUIRED FOR CONTROLLED INSPECTIONS AS STIPULATED BY ALL APPLICABLE CODES.

ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT WILL BE NEW AND FREE OF DEFECTS AND WILL BE SUPPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED, AND CONDITIONED AS DIRECTED BY THE RESPECTIVE MANUFACTURERS, UNLESS SPECIFIED OTHERWISE.

THE CONTRACTOR WILL NOTIFY THE ARCHITECT OF ANY ERRORS, OMISSIONS, CONFLICTS, OR AMBIGUITIES IN AND BETWEEN THE DRAWINGS AND THE SPECIFICATIONS PRIOR TO PROCEEDING WITH THE WORK. IF SUCH NOTICE IS NOT FURNISHED TO THE ARCHITECT, THE CONTRACTOR WILL BE DEEMED TO HAVE INSPECTED THE DRAWINGS AND SPECIFICATIONS AND TO HAVE FOUND THEM IN PROPER FORM FOR EXECUTION.

THE CONTRACTOR REPRESENTS THAT HE HAS HAD ADEQUATE ACCESS TO THE JOB SITE AND BUILDING AREA IN WHICH THE WORK IS TO BE PERFORMED, THAT HE HAS SATISFIED HIMSELF AT TO THE NATURE AND LOCATION OF WORK, INCLUDING ANY OBSTRUCTIONS, SCOPE OF WORK, ACTUAL LEVELS, THE EQUIPMENT AND FACILITIES NEEDED PRELIMINARY TO AND DURING THE EXECUTION OF THE WORK AND ALL OTHER MATTERS, WHICH CAN IN ANY WAY AFFECT THE WORK OR THE COST THEREOF UNDER THIS CONTRACT, AND THAT HE HAS STUDIED THE CONTRACT DOCUMENTS AND ALL OTHER DOCUMENTS PERTAINING TO THE INSTALLATION OF OTHER TRADES WHICH MAY INFLUENCE HIS WORK.

THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY, INCLUDING RESPONSIBILITY FOR ALL RELATED COSTS FOR ANY AND ALL WORK DONE WITHOUT THE APPROVAL OF THE ARCHITECT IF SUCH WORK IS IN CONFLICT WITH THE CONTRACT, DRAWINGS, OR SPECIFICATIONS.

THE OWNER WILL ESTABLISH THE LIMITS OF THE CONSTRUCTION SITE IN ADDITION TO ANY CONTRACT LIMIT LINES SHOWN IN THE DRAWINGS. THE CONTRACTOR WILL CONTINUE HIS OPERATIONS WITHIN THESE LIMITS, UNLESS UPON WRITTEN REQUEST AND REPLY, A VARIANCE IS AGREED TO BY THE OWNER. THE CONTRACTOR WILL BE RESPONSIBLE FOR TRESPASS ON AND/ OR DAMAGE TO OTHER PROPERTY BY ANY OF HIS EMPLOYEES OR HIS SUBCONTRACTOR'S EMPLOYEES.

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE SAFE WORKING CONDITIONS AT THE SITE. THE ARCHITECT AND OWNER WILL NOT BE DEEMED TO HAVE ANY RESPONSIBILITY OR LIABILITY IN CONNECTION HEREWITH.

CONSTRUCTION OPERATIONS WILL NOT INVOLVE INTERRUPTION OF HEATING, WATER, ELECTRICAL, OR OTHER SERVICES TO ANY PORTION OF THE BUILDING OUTSIDE THE LIMITS OF THE CONSTRUCTION SITE DESCRIBED IN NOTE 9.

THE CONTRACTOR WILL BE RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES CUASED BY DEFECTIVE OR ILL TIMED WORK AT NO ADDITIONAL COST TO THE OWNER.

NO SUBSTITUTIONS ARE PERMITTED EXCEPT WHERE THE TERM "APPROVED EQUAL" APPEARS. ALL SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE ARCHITECT. THE CONTRACTOR IS TO SUBMIT SAMPLES OR CATALOG CUTS OF ALL VISIBLE MATERIALS AND EQUIPMENT FOR THE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION.

HARA ARCHITECTS

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PROJECT TEAM:

ARCHITECT
HARA ARCHITECTS

STRUCTURAL
I A LEWIN

BRADLEY LANE RESIDENCE
BRADLEY LANE, HUDSON, OHIO 44236

PROJECT #: 2410

ISSUE	ID	DATE
AHBR	A	12/30/2024

PROGRESS

NOT FOR CONSTRUCTION

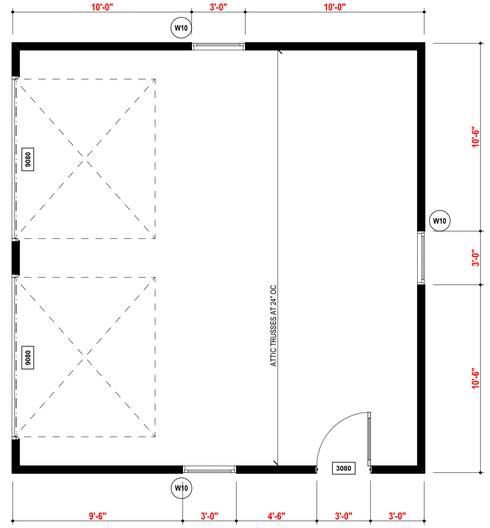
12/30/2024

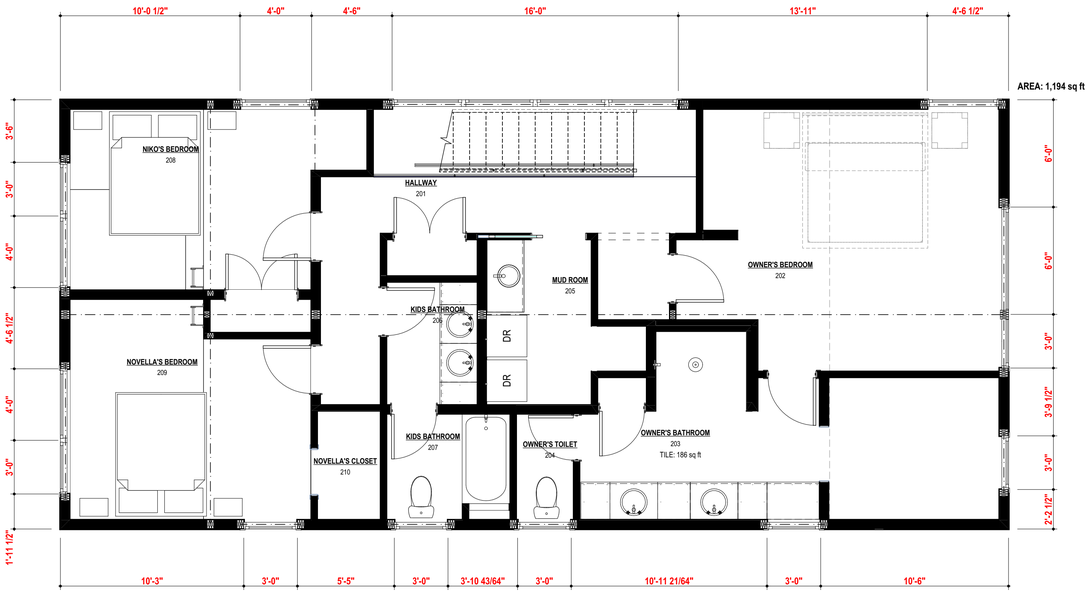
COVER SHEET

G100

1 FIRST FLOOR

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





2 SECOND FLOOR

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

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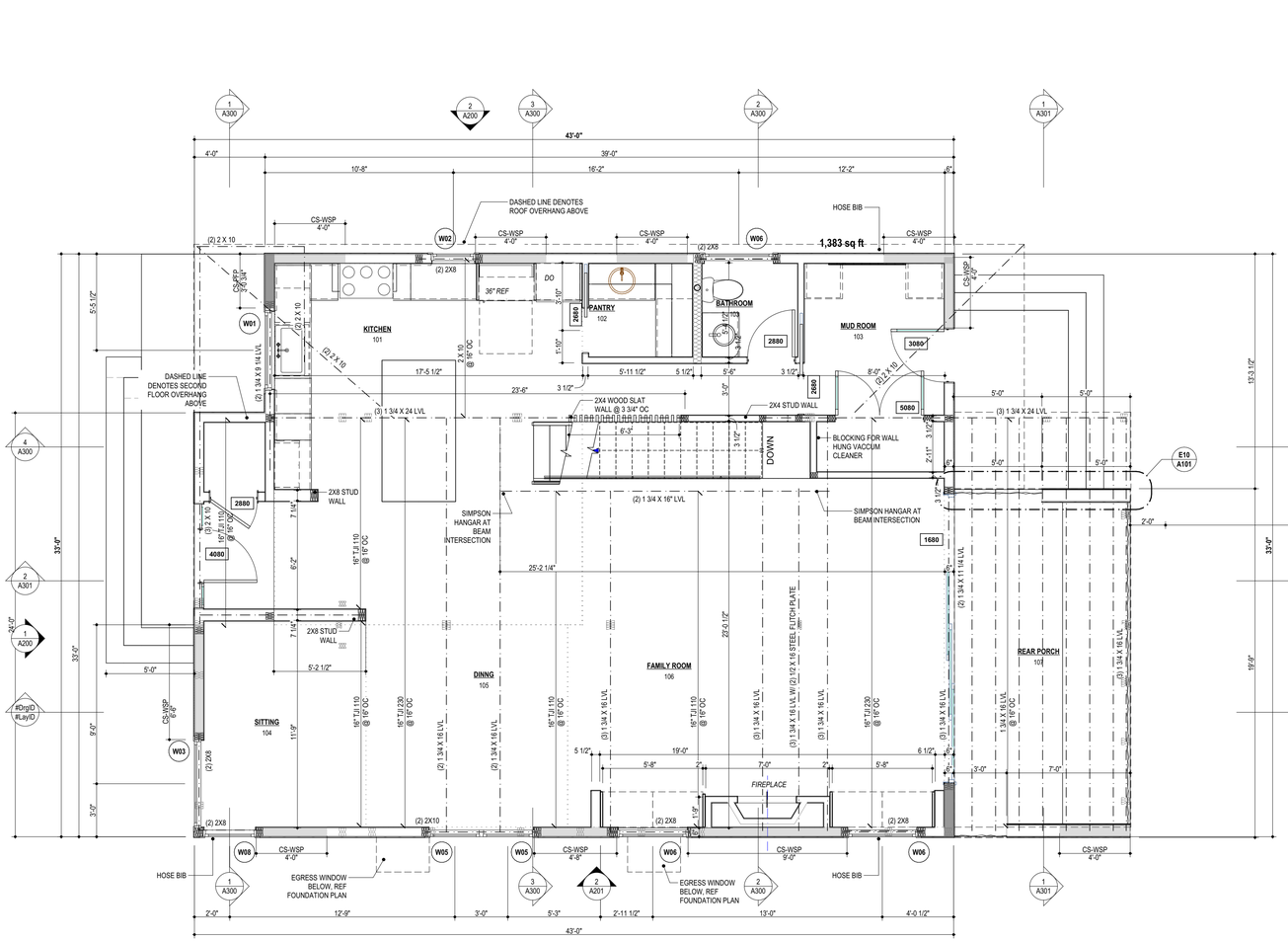
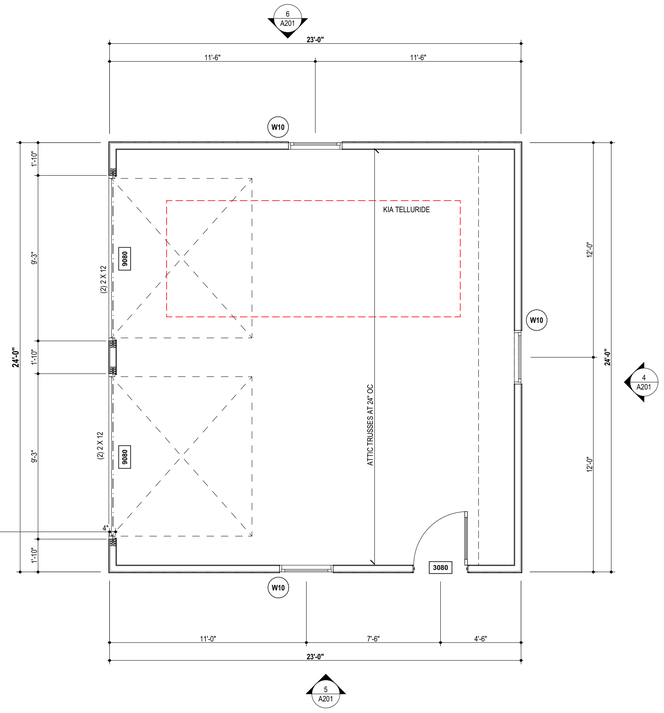
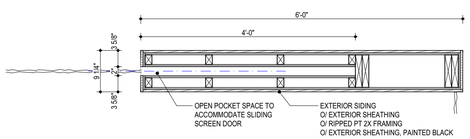
WINDOW DIMENSIONS





3 FIRST FLOOR PLAN

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



5 PLAN DETAIL

SCALE: 3/4" = 1'-0"

WINDOW SCHEDULE		
ID	QTY	W x H
W01	1	4'-6"x 5'-6"
W01	1	5'-0"x 5'-6"
W01	1	6'-0"x 5'-6"
W01	2	3'-0"x 5'-6"
W02	3	2'-6"x 5'-6"
W03	1	5'-0"x 7'-0"
W04	4	3'-0"x 4'-8"
W04	7	3'-0"x 5'-0"
W05	2	3'-0"x 6'-0"
W06	19	4'-0"x 4'-0"

FRAMING CONNECTIONS

2X10

LUS28	2X10 ROOF RAFTER TO (3) 1 3/4" X 11 1/4" LVL STRUCTURAL RIDGE
JB210A	2X10 RAFTER TO FLITCH BEAM
U2102	(2) 2X10 TO (2) 2X10
WP210-2	(2) 2X10 TO FLITCH BEAM
LUS210-2	(2) 2X10 TO LVL
LUS210-3	(3) 2X10 TO LVL
HU210-3TF	(3) 2X10 TO FLITCH BEAM

TJI

IU1.81/16 MAX	TJI 110 TO LVL
IT1.81/16	TJI 110 TO FLITCH BEAM
IU2.37/16 MAX	TJI 230 TO LVL
IT2.37/16	TJI 230 TO FLITCH BEAM

LVL

HHU5.50/10	(3) 9 1/4 LVL TO (3) 16 TJI
HHU5.50/10	(3) 16 LVL TO (2) 16 LVL
HUCQ412	(2) 16 LVL TO (2) 16 LVL
HUCQ412	(2) 16 LVL TO (3) 24 LVL
WP1.81 H=16	(2) 16 LVL TO FLITCH BEAM
BA1.81/16 MIN	(1) 16 LVL TO (2) 16 LVL

FLOOR PLAN GENERAL NOTES

VERIFY DIMENSIONS AND CONDITIONS IN FIELD. WHEN DIMENSIONS AND/OR CONDITIONS AS INDICATED ON DRAWINGS CONFLICT WITH ACTUAL, CONTACT ARCHITECT FOR CLARIFICATION

PROVIDE SOUND DEADENING INSULATION AROUND BEDROOMS, BATHROOMS, MECHANICAL ROOMS, AND PLUMBING STACKS

BLOCK WEBS SOLID AT BEARING WALL LOCATIONS ABOVE

CONTRACTOR TO EXTEND ALL POSTS DOWN TO SOUND FOUNDATION, INSTALL FULL DEPTH SOLID BLOCKING AT ALL POINT LOAD LOCATIONS.

ALL FOOTINGS TO EXTEND DOWN TO FROST LEVEL MINIMUM.

COORDINATE EXACT LOCATIONS OF FLOOR DRAINS WITH MECHANICAL CONTRACTOR.

PROVIDE 5/8" GYP. BOARD TYPE "X" ON GARAGE CEILINGS.

ALL INTERIOR DOORS TO BE 1 7/8" SOLID CORE WOOD DOORS. COORDINATE WITH FINISH PLANS FOR FINAL FINISH SELECTIONS

ALL INTERIOR TRIM TO BE POPLAR OR APPROVED EQUAL. COORDINATE WITH INTERIOR ELEVATIONS AND MILLWORK DRAWINGS FOR SELECT TYPES AND PROFILES.

ALL MILLWORK TO BE PER DRAWINGS.

REFER TO CONSULTANT DRAWINGS IF APPLICABLE FOR COORDINATION OF WORK BETWEEN TRADES

FLOOR TRUSS CRITERIA
TCL= 30 PSF
TCDL= 10 PSF
BCDL= 10 PSF
NET UPLIFT= 15 PSF
19/32" APA RATED EXPOSURE 1 OSB

ROOF TRUSS CRITERIA
TCLL= 25 PSF
TCDL= 10 PSF
BCDL= 10 PSF
NET UPLIFT= 10 PSF
ATTIC LL= 40 PSF
ΔTTL < L/240

WOOD HEADERS (U.N.O.)

OPENING	HEADERS	NON BEARING	BEARING
UP TO 4'-0"	(2) 2 X 8	1 JACK, 1 KING	1 JACK, 1 KING
4'-0" - 6'-0"	(2) 2 X 10	1 JACK, 1 KING	2 JACK, 1 KING
6'-1" - 8'-0"	(2) 2 X 12	1 JACK, 1 KING	2 JACK, 1 KING
8'-1" - 10'-0"	(2) 11 1/4 LVL	2 JACK, 1 KING	3 JACK, 1 KING

INDICATES WEB STIFFENING BELOW BEARING WALL ABOVE

INDICATES AREA OF ADDITIONAL FRAMING REQUIRED

INDICATES POINT LOAD FROM ABOVE

INDICATES LOCATION OF BEARING WALL ABOVE

INDICATES BEARING WALL

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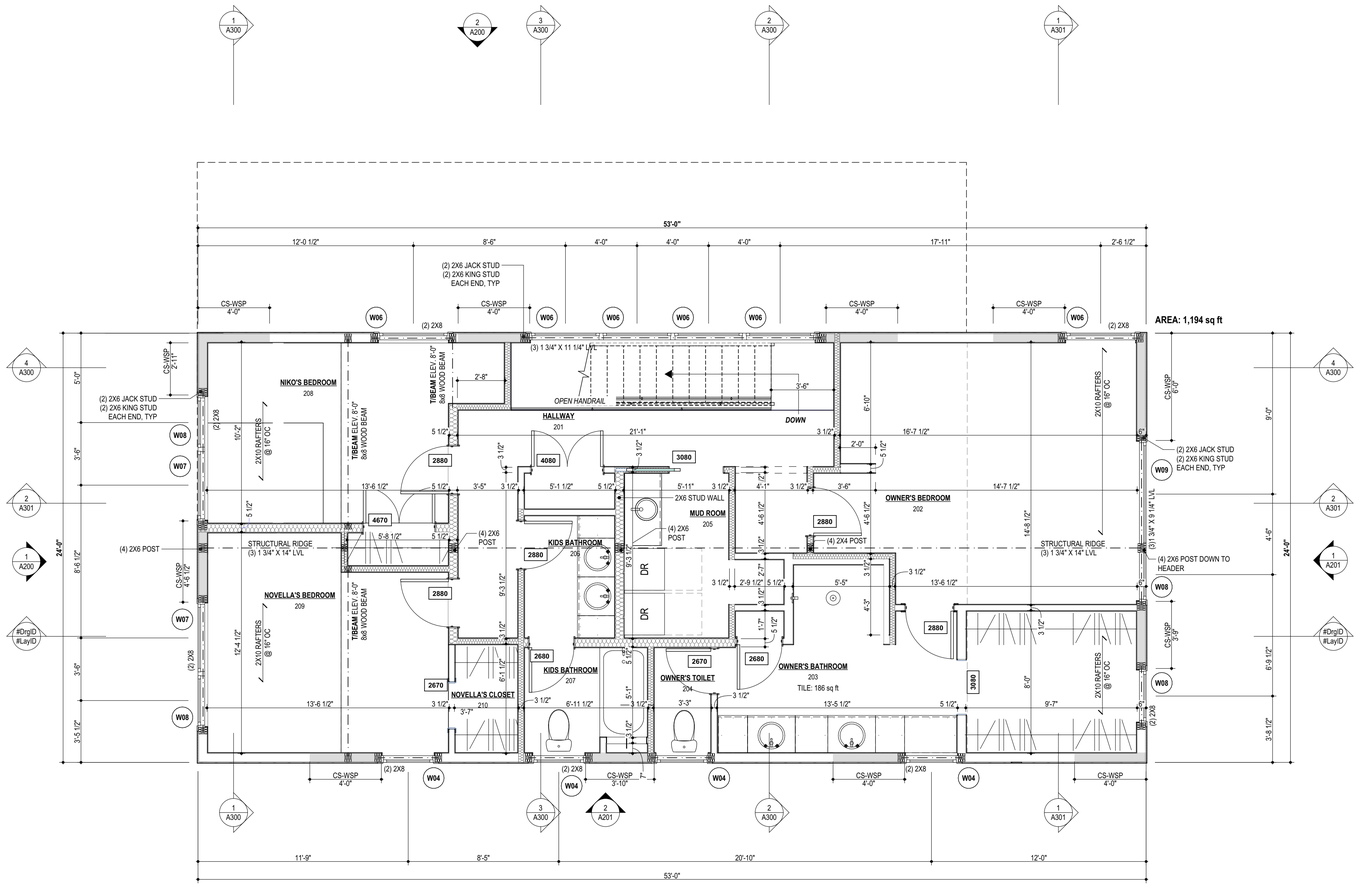
FIRST FLOOR PLAN & NOTES

A101



1 SECOND FLOOR PLAN

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

WINDOW SCHEDULE		
ID	QTY	W x H
W01	1	4'-6"x 5'-6"
W01	1	5'-0"x 5'-6"
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4'-0" - 6'-0"	(2) 2 X 10	1 JACK, 1 KING	2 JACK, 1 KING
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8'-1" - 10'-0"	(2) 11 1/4 LVL	2 JACK, 1 KING	3 JACK, 1 KING

INDICATES WEB STIFFENING BELOW BEARING WALL ABOVE

INDICATES AREA OF ADDITIONAL FRAMING REQUIRED

INDICATES POINT LOAD FROM ABOVE

INDICATES LOCATION OF BEARING WALL ABOVE

INDICATES BEARING WALL

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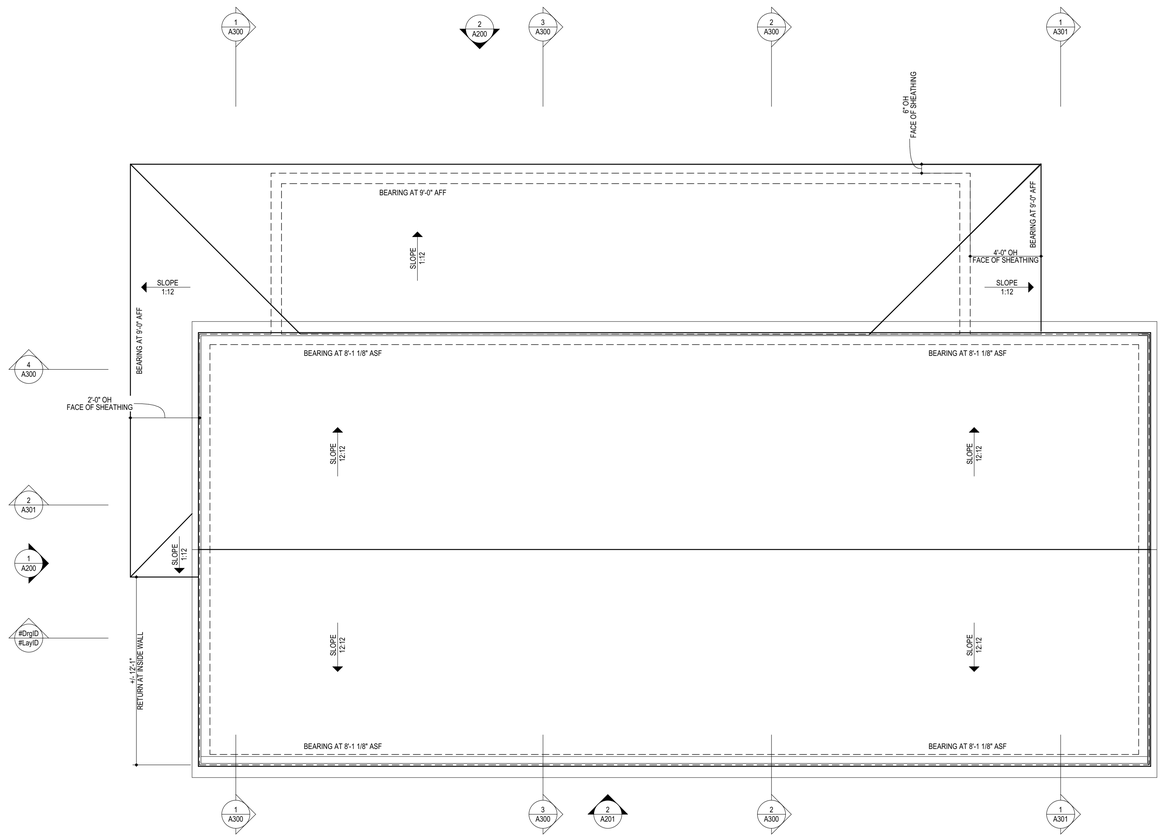
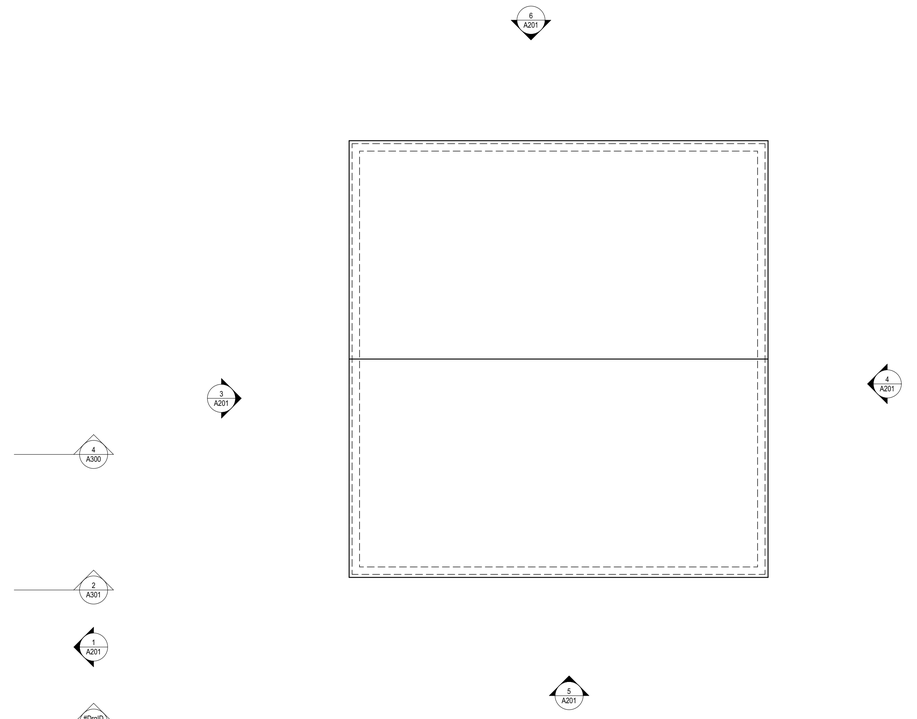
SECOND FLOOR PLAN & NOTES

A102





1 ROOF PLAN

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

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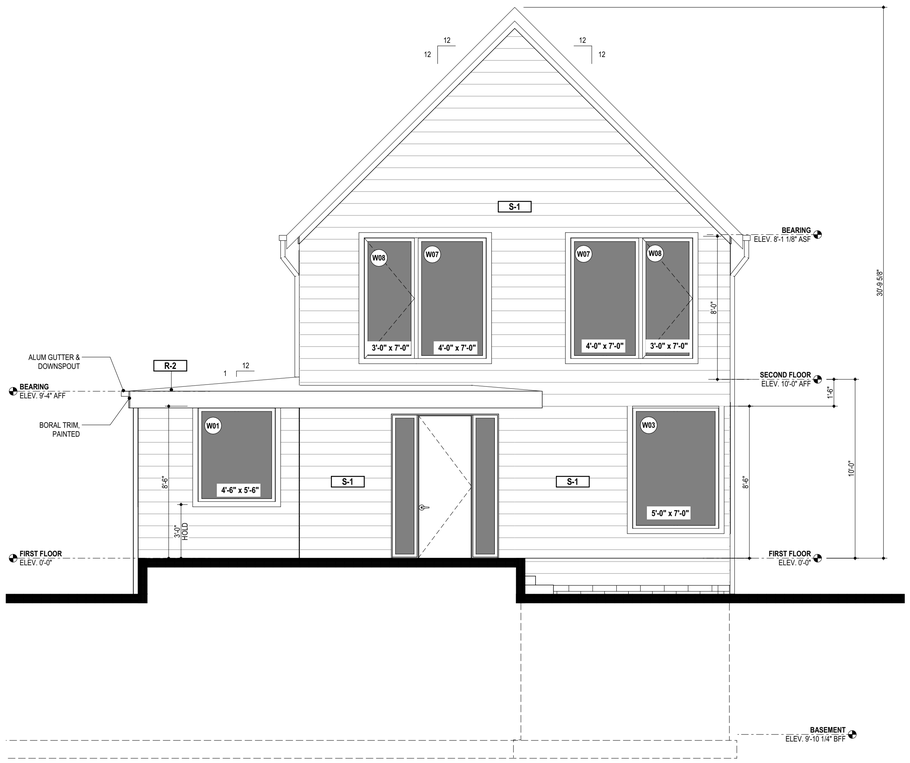
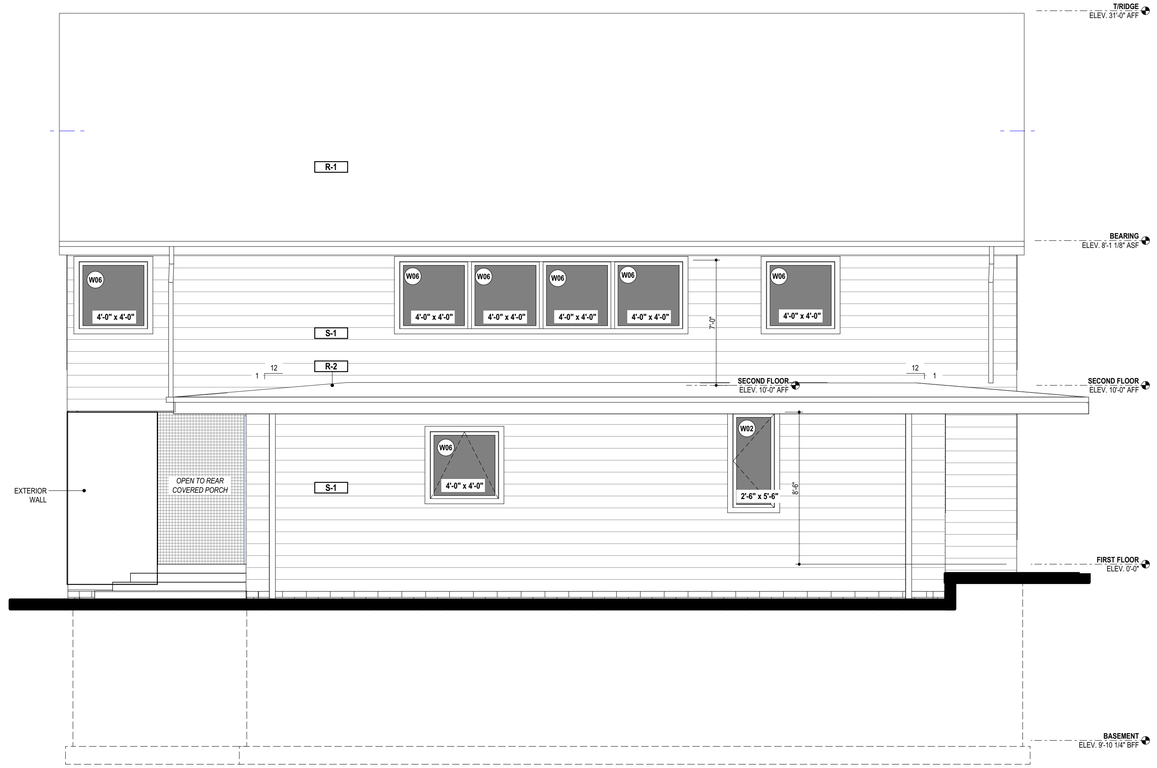
ROOF PLAN

A103



1 WEST ELEVATION (FRONT OF HOUSE)

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



2 NORTH ELEVATION (SIDE OF HOUSE)

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

MATERIAL SCHEDULE

ALL MATERIAL ASSEMBLIES LISTED BELOW TO OCCUR OVER THE FOLLOWING UNLESS NOTED OTHERWISE:

O/ ZIP SYSTEM WALL SHEATHING
O/ 2X6 STUDS W/ 4" CLOSED CELL SPRAY FOAM INSULATION

SIDING (S-1)
FIBER CEMENT NICKEL GAP SIDING, VERTICAL ORIENTATION - 1X8

SIDING (S-2)
FIBER CEMENT NICKEL GAP SIDING, VERTICAL ORIENTATION - 1X10

TRIM (TR-1)
BORAL EXTERIOR TRIM 5/4 X 3 (1" X 2 1/2")

ROOF ASSEMBLIES LISTED BELOW TO OCCUR OVER THE FOLLOWING:

O/ ZIP SYSTEM ROOF SHEATHING
O/ 2X12 RAFTERS AT 16" OC W/ 2" AIR BAFFLE
W/ 10" CLOSED CELL SPRAY FOAM INSULATION

ASPHALT SHINGLE ROOF (R-1)
30 YEAR ARCHITECTURAL ASPHALT SHINGLE
ICE GUARD SHOULD BE INSTALLED AT ALL EAVES AND VALLEYS, UP 72", AND WRAPPED OVER THE FACE OF ALL FASCIAS.

EXTERIOR ELEVATION GENERAL NOTES

ROOF SOFFITS TO MATCH EXISTING RESIDENCE UNLESS NOTED OTHERWISE.

ALL FIBER CEMENT EXTERIOR TRIM TO BE AZEK OR BORAL, PAINTED, O APPROVED EQUAL.

ALL EXPOSED WOOD ELEMENTS AND TONGUE AND GROOVE CEILINGS IS TO B PINE, STAINED AND SEALED. COORDINATE FINAL COLOR WITH ARCHITECT AN OWNER

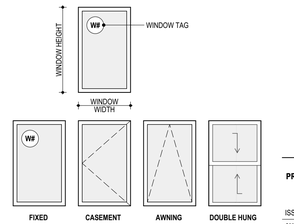
ALL ROOF PENETRATIONS TO BE COORDINATED WITH ARCHITECT PRIOR T INSTALLTION TO ENSURE AESTHETIC EXPECTATIONS ARE MAINTAINED.

GUTTER PROFILES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ORDERING

SAFETY GLAZING TO BE IN ACCORDANCE WITH THE 2019 RESIDENTIAL CODE O OHIO (SECTION R308)

BEDROOM EGRESS WINDOWS TO COMPLY WITH THE 2019 RESIDENTIAL CODE O OHIO (SECTION R310)

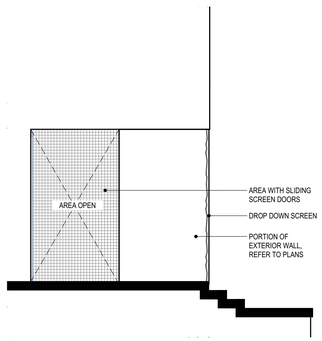
WINDOW LEGEND



BASIS OF DESIGN:
QUAKER CITYLINE ALUMINUM WINDOWS

**** WINDOW COUNT PROVIDED FOR GENERAL REFERENCE AND VERIFICATION ONLY. CONTRACTOR TO VERIFY TOTAL NUMBER OF WINDOWS WITH DOCUMENTS.**

WINDOW SCHEDULE		
ID	**QTY**	**W x H**
W01	*1*	*4'-6"x5'-6"*
W01	*1*	*5'-0"x5'-6"*
W01	*1*	*6'-0"x5'-6"*
W01	*2*	*3'-0"x5'-6"*
W02	*3*	*2'-6"x5'-6"*
W03	*1*	*5'-0"x7'-0"*
W04	*4*	*3'-0"x4'-8"*
W04	*7*	*3'-0"x5'-0"*
W05	*2*	*3'-0"x6'-0"*
W06	*19*	*4'-0"x4'-0"*



4 PARTIAL SOUTH ELEVATION (SIDE OF HOUSE)

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

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PROJECT #: 2410

ISSUE	ID	DATE
AHBR	A	12/30/2024

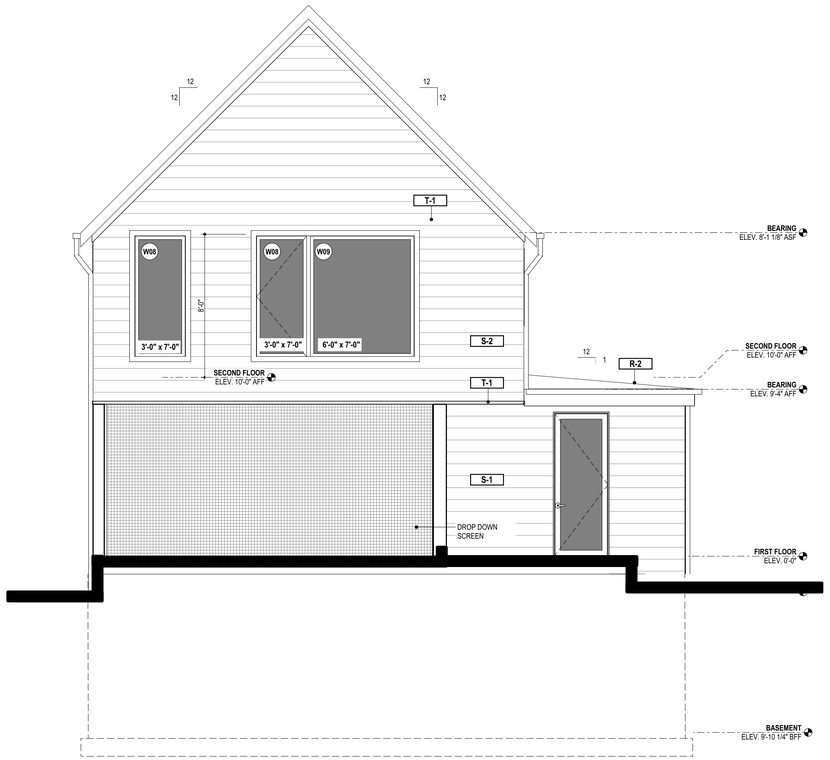
PROGRESS

NOT FOR CONSTRUCTION

12/30/2024

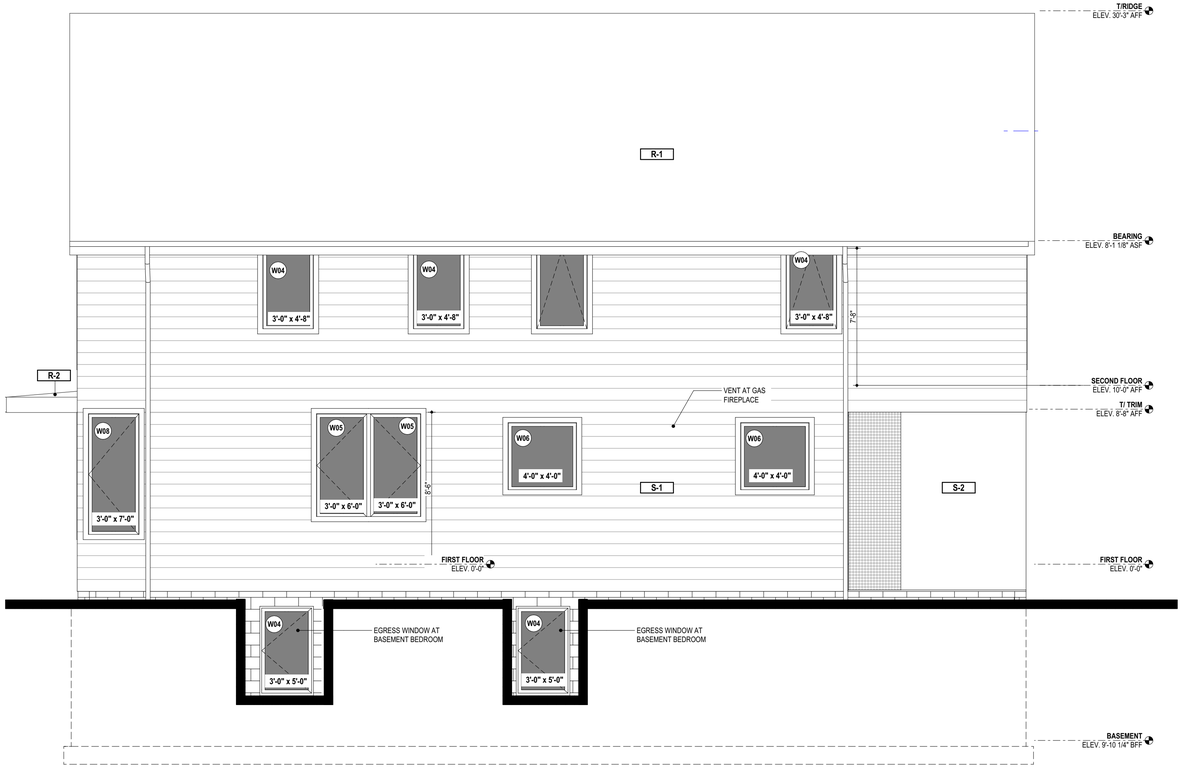
EXTERIOR ELEVATIONS

A200



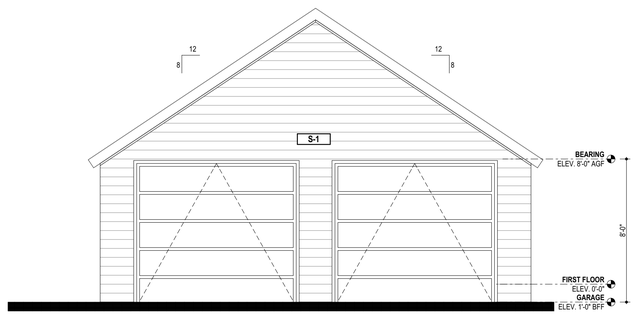
1 EAST ELEVATION (REAR OF HOUSE)

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



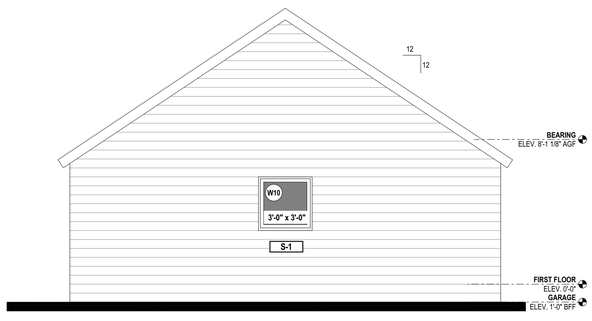
2 SOUTH ELEVATION (SIDE OF HOUSE)

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



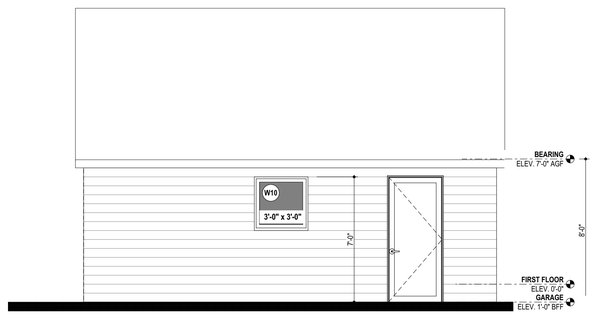
3 GARAGE: WEST ELEVATION (FRONT OF GARAGE)

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



4 GARAGE: EAST ELEVATION (REAR OF GARAGE)

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



5 GARAGE: SOUTH ELEVATION (SIDE OF GARAGE)

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

MATERIAL SCHEDULE

ALL MATERIAL ASSEMBLIES LISTED BELOW TO OCCUR OVER THE FOLLOWING UNLESS NOTED OTHERWISE:

O/ ZIP SYSTEM WALL SHEATHING
O/ 2X6 STUDS W/ 4" CLOSED CELL SPRAY FOAM INSULATION

SIDING (S-1)
FIBER CEMENT NICKEL GAP SIDING, VERTICAL ORIENTATION - 1X8

SIDING (S-2)
FIBER CEMENT NICKEL GAP SIDING, VERTICAL ORIENTATION - 1X10

TRIM (TR-1)
BORAL EXTERIOR TRIM 5/4 X 3 (1" X 2 1/2")

ROOF ASSEMBLIES LISTED BELOW TO OCCUR OVER THE FOLLOWING:

O/ ZIP SYSTEM ROOF SHEATHING
O/ 2X12 RAFTERS AT 16" OC W/ 2" AIR BAFFLE
W/ 10" CLOSED CELL SPRAY FOAM INSULATION

ASPHALT SHINGLE ROOF (R-1)
30 YEAR ARCHITECTURAL ASPHALT SHINGLE
ICE GUARD SHOULD BE INSTALLED AT ALL EAVES AND VALLEYS, UP 72", AND WRAPPED OVER THE FACE OF ALL FASCIAS.

EXTERIOR ELEVATION GENERAL NOTES

ROOF SOFFITS TO MATCH EXISTING RESIDENCE UNLESS NOTED OTHERWISE.

ALL FIBER CEMENT EXTERIOR TRIM TO BE AZEK OR BORAL, PAINTED, OR APPROVED EQUAL.

ALL EXPOSED WOOD ELEMENTS AND TONGUE AND GROOVE CEILINGS IS TO BE PINE, STAINED AND SEALED. COORDINATE FINAL COLOR WITH ARCHITECT AND OWNER

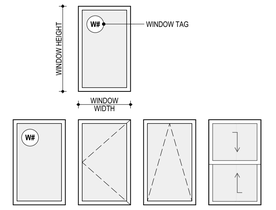
ALL ROOF PENETRATIONS TO BE COORDINATED WITH ARCHITECT PRIOR TO INSTALLTION TO ENSURE AESTHETIC EXPECTATIONS ARE MAINTAINED.

GUTTER PROFILES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ORDERING

SAFETY GLAZING TO BE IN ACCORDANCE WITH THE 2019 RESIDENTIAL CODE OF OHIO (SECTION R308)

BEDROOM EGRESS WINDOWS TO COMPLY WITH THE 2019 RESIDENTIAL CODE OF OHIO (SECTION R310)

WINDOW LEGEND



BASIS OF DESIGN:
QUAKER CITYLINE ALUMINUM WINDOWS

**** WINDOW COUNT PROVIDED FOR GENERAL REFERENCE AND VERIFICATION ONLY. CONTRACTOR TO VERIFY TOTAL NUMBER OF WINDOWS WITH DOCUMENTS.**

WINDOW SCHEDULE

ID	QTY	W x H
W01	*1*	*4'-6"x 5'-6"*
W01	*1*	*5'-0"x 5'-6"*
W01	*1*	*6'-0"x 5'-6"*
W01	*2*	*3'-0"x 5'-6"*
W02	*3*	*2'-6"x 5'-6"*
W03	*1*	*5'-0"x 7'-0"*
W04	*4*	*3'-0"x 4'-8"*
W04	*7*	*3'-0"x 5'-0"*
W05	*2*	*3'-0"x 6'-0"*
W06	*19*	*4'-0"x 4'-0"*

HARA ARCHITECTS
haraarchitects.com

PROJECT TEAM:

ARCHITECT
HARA ARCHITECTS

STRUCTURAL
I A LEWIN

BRADLEY LANE RESIDENCE

BRADLEY LANE, HUDSON, OHIO 44236

PROJECT #: 2410

ISSUE	ID	DATE
AHBR	A	12/30/2024

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EXTERIOR ELEVATIONS

A201

GAF Timberline HDZ®
High Definition® Lifetime¹ Shingles

4

GAF
LAYERLOCK™
TECHNOLOGY

America's #1-selling shingle just got better — again

Now with GAF Time-Release Algae-Fighting Technology and LayerLock™ Technology, Timberline HDZ® offers everything you can expect from an architectural shingle roof, and more.

Timberline HDZ® Shingles

Benefits:

- **LayerLock™ Technology** — mechanically fuses the common bond between overlapping shingle layers
- **Up to 99.9% nailing accuracy** — the StrikeZone™ nailing area is so easy to hit that a roofer placed 999 out of 1,000 nails correctly in our test[1]
- **WindProven™ Limited Wind Warranty** — when installed with the required combination of GAF Accessories, Timberline HDZ® Shingles are eligible for a wind warranty with no maximum wind speed limitation[3]
- **Dura Grip™** sealant pairs with the micrograule surface of the StrikeZone™ nailing area. Then, an asphalt to-asphalt monolithic bond cures for durability, strength, and exceptional wind uplift performance.
- **25-year StainGuard Plus™ Algae Protection Limited Warranty** against blue-green algae discoloration.[2] Proprietary GAF Time-Release Algae-Fighting Technology helps protect your shingles from unsightly stains.
- **For the best look** — use TimberTex® Premium Ridge Cap Shingles or TimberCrest® Premium SBS-Modified Ridge Cap Shingles

Colors:

Harvest Blend Colors[5]

Product details:

Product/System Specifics

- Fiberglass asphalt construction
- **Dimensions (approx.)**: 13 ¼" x 39 ⅜" (337 x 1,000 mm)
- **Exposure**: 5 ⅝" (143 mm)
- **Bundles/Square**: 3
- **Pieces/Square**: 64
- **StainGuard Plus™ Algae Protection**[2] Limited Warranty
- **Hip/Ridge**: TimberTex®; TimberCrest®; Seal-A-Ridge®; Z®Ridge; Ridglass®[5]
- **Starter**: Pro-Start®; QuickStart®; WeatherBlocker™

Applicable Standards & Protocols:

- UL Listed to ANSI/UL 790 Class A
- State of Florida approved
- Classified by UL in accordance with ICC-ES AC438
- Meets ASTM D7158, Class H
- Meets ASTM D3161, Class F
- Meets ASTM D3018, Type 1
- Meets ASTM D3462[4]
- Miami-Dade County Product Control approved
- ICC-ES Evaluation Reports ESR-1475 and ESR-3267
- Meets Texas Department of Insurance Requirements
- Rated by the CRRC; Can be used to comply with Title 24 Cool Roof requirements (some colors)

† Lifetime refers to the length of warranty coverage provided and means as long as the original individual owner(s) of a single-family detached residence [or eligible second owner(s)] owns the property where the qualifying GAF products are installed. For other owners/structures, Lifetime coverage is not applicable. Lifetime coverage on shingles requires the use of GAF Lifetime Shingles only. See the *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. Lifetime coverage on shingles and accessories requires the use of any GAF Lifetime Shingle and at least 3 qualifying GAF Accessories. See the *GAF Roofing System Limited Warranty* for complete coverage and restrictions. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*. Visit gaf.com/LRS for qualifying GAF products.

[1] Results based on study conducted by Home Innovation Research Labs, an independent research lab, comparing installation of Timberline HD® Shingles to Timberline HDZ® Shingles on a 16-square roof deck using standard 4-nail nailing pattern under controlled laboratory conditions. Actual results may vary.

[2] 25-year StainGuard Plus™ Algae Protection Limited Warranty against blue-green algae discoloration is available only on products sold in packages bearing the StainGuard Plus™ logo. See *GAF Shingle & Accessory Limited Warranty* for complete coverage and restrictions and qualifying products.

[3] 15-year WindProven™ limited wind warranty on GAF Shingles with LayerLock™ Technology requires the use of GAF Starter Strips, Roof Deck Protection, Ridge Cap Shingles, and Leak Barrier or Attic Ventilation. See *GAF Roofing System Limited Warranty* for complete coverage and restrictions. Visit gaf.com/LRS for qualifying GAF products. For installations not eligible for the *GAF Roofing System Limited Warranty*, see the *GAF Shingle & Accessory Limited Warranty*.

[4] Periodically tested by independent and internal labs to ensure compliance with ASTM D3462 at time of manufacture.

[5] Harvest Blend colors are only available on TimberTex® Ridge Cap Shingles, Seal-A-Ridge® Ridge Cap Shingles, and TimberCrest® Premium SBS-Modified Ridge Cap Shingles.

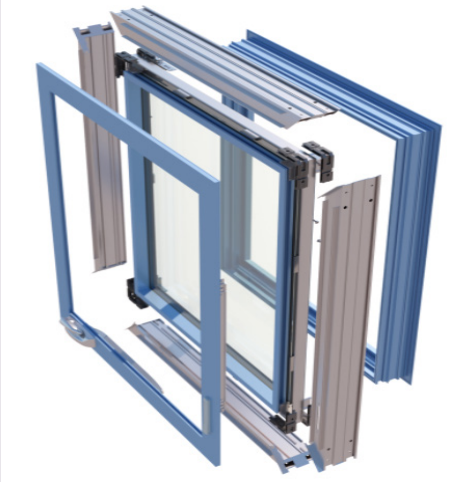
Note: It is difficult to reproduce the color clarity and actual color blends of these products. Before selecting your color, please ask to see several full-size shingles.

We protect what matters most™

CityLine Windows (C600, C605)

Contemporary styling and modern features showcase the fine lines and angled accents that define CityLine Windows. Extreme sizes, bold configurations and narrow sightlines bring together the next generation of windows; refined and presented to fashion your home and embolden the core of its architectural styling.

CityLine Windows utilize a sealant-injected double corner key construction for maximum strength in the corner joinery and frame. This composition ensures that every product will provide superior performance.



OptiCore®, a patented technology designed to bring performance and sophisitcation to the contemporary construction market. Offering unparalleled thermal efficiency, superior integrity and dynamic sound reduction, OptiCore® brings to life a proprietary view of our own world.

OPTICORE TECHNOLOGY

QUARTZ LUXURY

CityLine Window (C600, C605) Highlights, Performance and Operations

- Patented OptiCore® Technology Framing System
  - 4-1/8” Architectural Grade Aluminum Frame
  - 4-9/16” and 6-9/16” Jamb Depths
  - Dual Euro-Groove Frame System
- Azo-Core Thermal Barrier System for Increased Energy Efficiency and Reduced Thermal Conductivity
- Multiple Glazing Package Options Compliment Region and Climate
- Structural Mull Availability Offers Wider and Taller Sizing Options
- Square (C600) and Bevel (C605) Stop Options for Enhanced Exterior Look
- Internal or Simulated Divided Light (SDLs) Grids Available
- High-Performance 2604 and 2605 Powder and Class 1 Anodized Finishes
- Optional Exterior and Interior (Two-Tone) Color Finish Options
- Custom Color Matching and Heat Reflective Paint Options
- Easily Removable FlexScreen System

Window Sizing				
Operation	Width		Height	
	Min	Max	Min	Max
Direct Set	15”	144”	15”	144”
Anchor Leg	15”	144”	15”	144”
Casement	24”	48”	22”	96”
Casement Push-Out	18”	48”	24”	72”
Awning	24”	72”	24”	84”

Window Performance						
Operation	Rating	Structural Load (P.S.F.)	Air Infiltration	Water (P.S.F.)	U-Value	SHGC
Direct Set	AW-PG100	100	0.01	12.11	0.15 - 0.29	0.24 - 0.36
Anchor Leg	CW-70	70.18	0.01	12.11	0.24 - 0.29	0.24 - 0.29
Casement	AW-PG70	70.18	0.01	12.11	0.20 - 0.32	0.19 - 0.29
Casement Push-Out	Pending					
Awning	AW-PG70	70.18	0.01	12.11	0.20 - 0.32	0.19 - 0.29

Interior & Exterior Color Options

QUAKER WINDOWS & DOORS

Quaker Window Products
504 U.S. Hwy 63 South
Freeburg, MO 65035
(800) 347-0438
www.quartzluxurywindows.com

Discover More Here:

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 5¼ in. to 12 in. create a range of exposures from 4 in. to 10¾ 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.

Select Cedarmill©

Smooth

Beaded Cedarmill©

Beaded Smooth

Custom Colonial Roughsawn®

Custom Colonial Smooth®

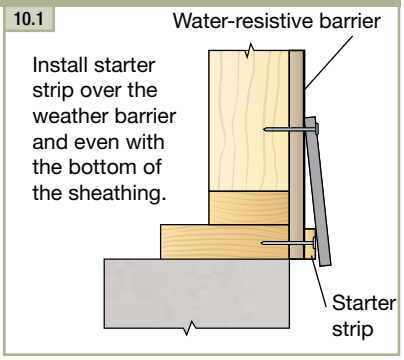
Installation of HardiePlank® Lap Siding

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 1¼ 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.

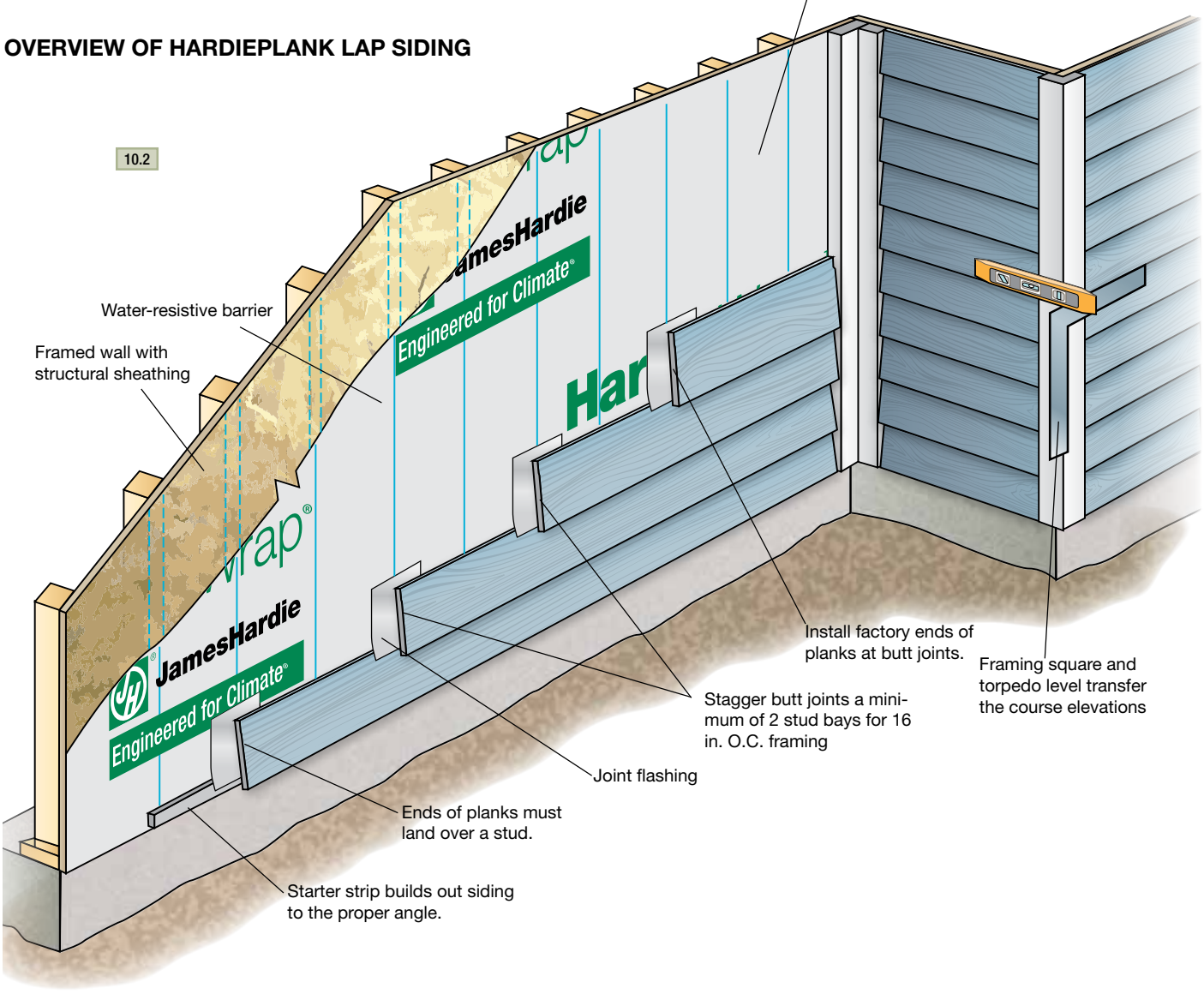
10.1



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

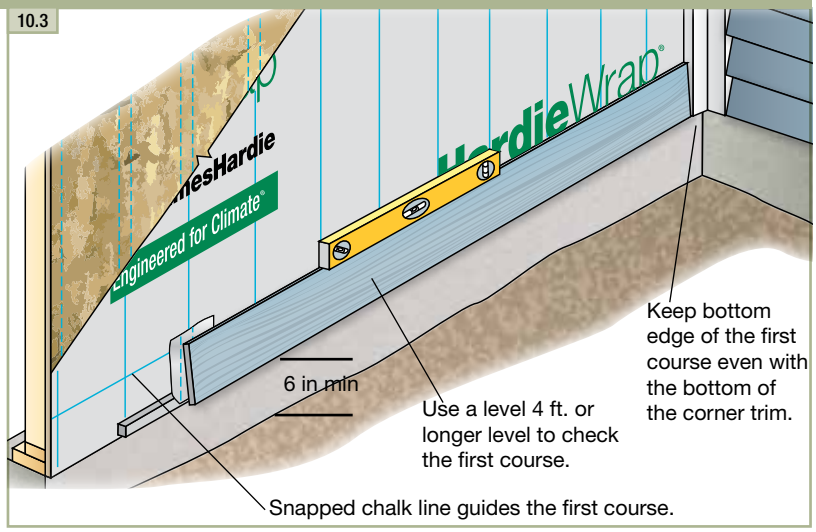
10.2



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.

10.3



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 ¼ in below the edge of the starter strip (maintain required clearances) and secure.
3. Run the siding to the HardieTrim® board leaving a 1/8 in. gap between the siding and trim.

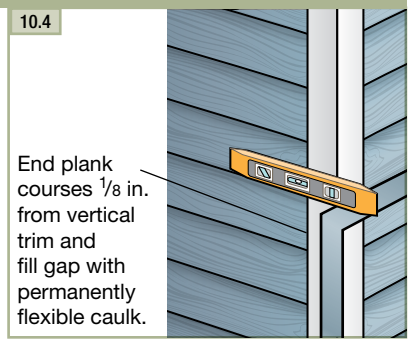
The bottom of the siding should be kept even with the bottom of the trim, or if desired, the trim may extend below the bottom of the siding. But the siding should never hang below the trim. ***When installing the first course make sure ground clearances are in accordance with James Hardie requirements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

PLANK ALIGNMENT AT CORNERS

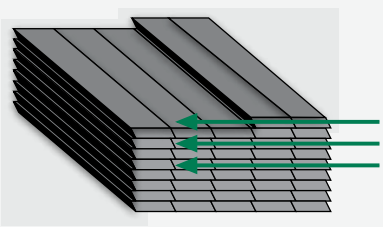
For the best looking installation, make sure that the heights of the plank courses match on both sides of a corner. Use a framing square, speed square or a level to match up the plank heights. Check every few courses to make sure proper heights are being maintained.

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.

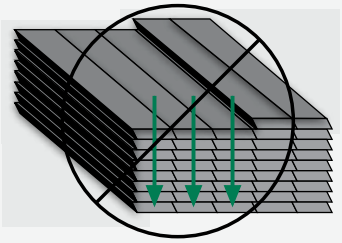
10.4



Pull from accross the stack



Do not go down the stack



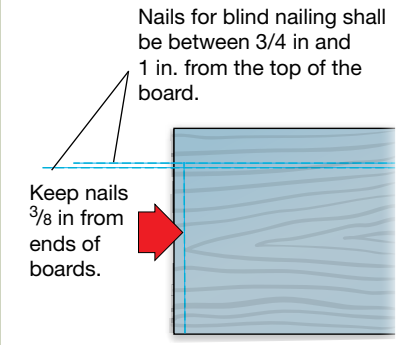
Installation of HardiePlank® Lap Siding (cont.)

BLIND NAILING (nailing through top of plank)

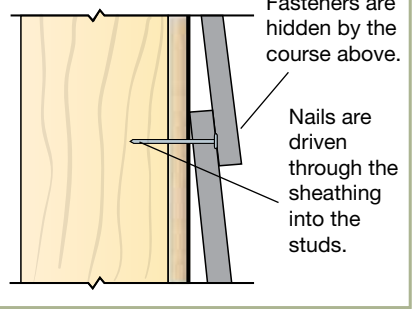
Blind nailing is recommended for installing any type of HardiePlank® lap siding including ColorPlus® siding. With blind nailing, each course covers the fasteners on the course below, which provides a better looking installation.

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.

10.5 **Blind nailing measurments**



10.6 **Blind nailing**

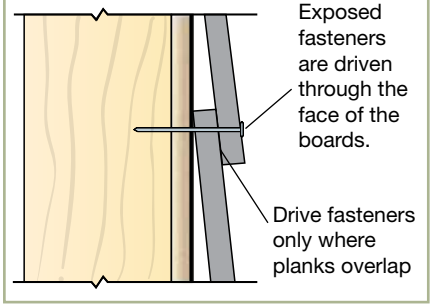


Avoid placing fasteners near the top edge of the plank. This practice, called “high nailing”, may lead to loose planks, unwanted gaps or rattling. **Pin-backed corners may be done for aesthetic purposes only. Finish nails are recommended for pin-backs. Headed siding nails are allowed. Place pin-backs no closer than 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**

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**

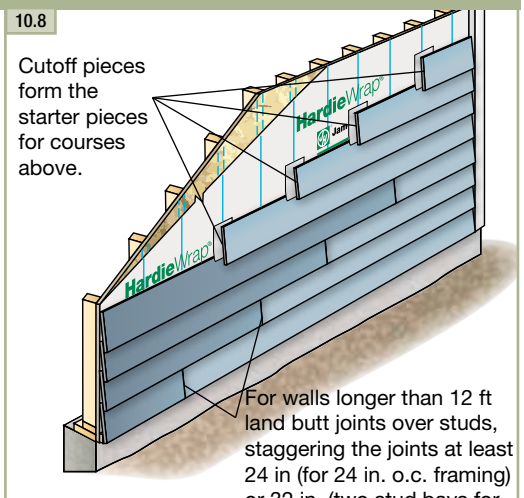


STAGGERING THE BUTT JOINTS

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



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

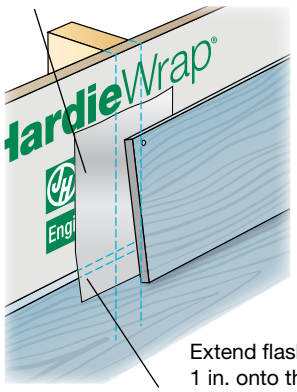
Flashing behind butt joints provides an extra level of protection against the entry of water at the joint. James Hardie recommends 6 in. wide flashing that overlaps the course below by 1 in. Some local building codes may require different size flashing.

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.

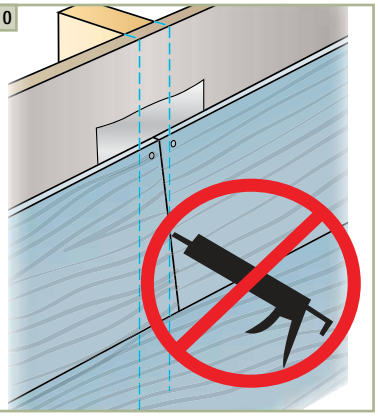
TIP: Joint flashing can be quickly and easily made by cutting a 6 in. wide section off a roll of housewrap. Tape the roll tightly at the cut mark and cut the section off using a miter saw with a carbide blade. Individual sheets then can be cut to length with a utility knife.

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



10.10



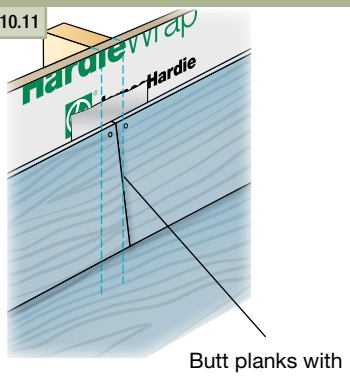
Caulking at HardiePlank lap siding butt joints is not recommended for ColorPlus for aesthetic reasons as the caulking and ColorPlus will weather differently. For the same reason, do not caulk exposed nail heads. Refer to the ColorPlus touch-up section for details

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.

10.11



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.)

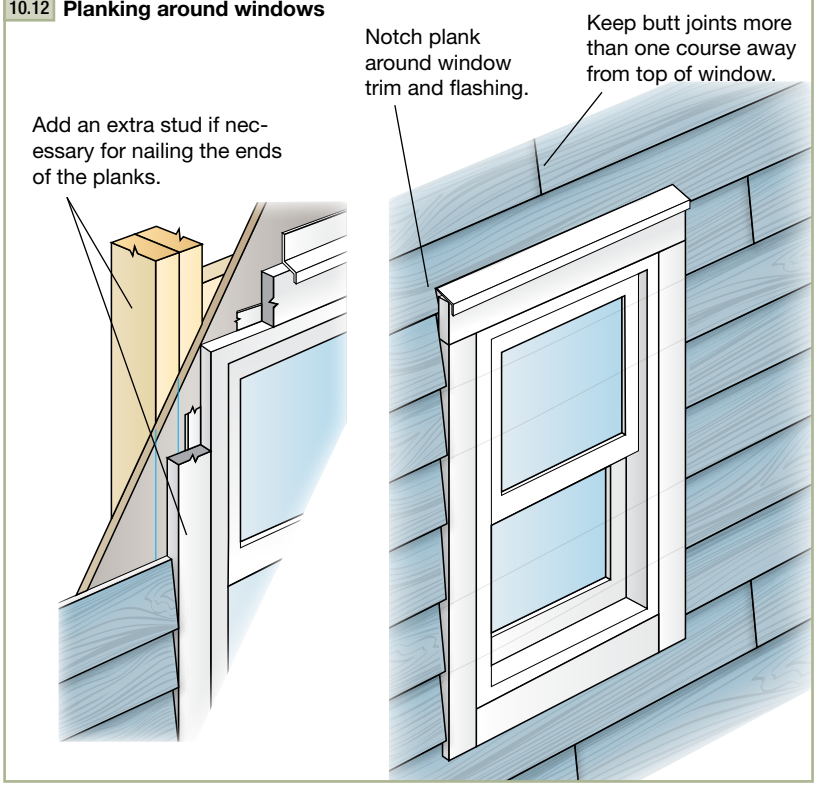
CONTINUING THE INSTALLATION

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.

10.12 **Planking around windows**



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.

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.

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:

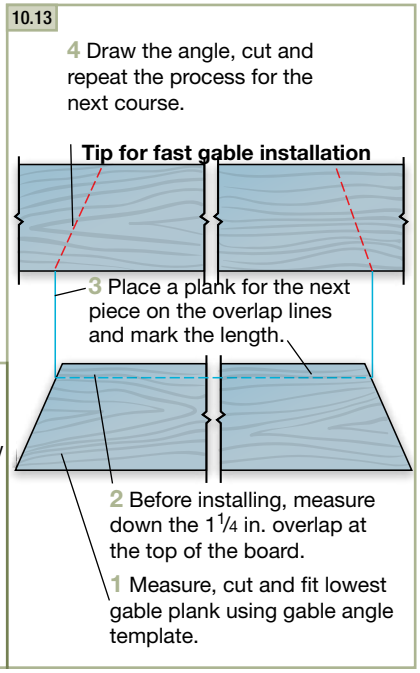
1. Tack up a small scrap piece of siding where the first gable course is going.
2. Hold a second small piece of siding against the eave or rake board.
3. Trace the angle onto the scrap.
4. Cut that line and label the scrap as the template for the gable angle. The template can then be used to transfer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

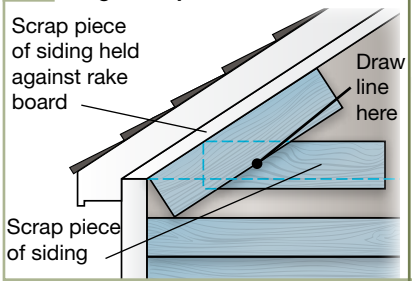
1. Cut and fit the lowest course of siding.
2. Before installing, lay it flat and measure down 1¼ in. from the top edge of the plank for the course overlap. Make a mark on both ends.
3. Set a piece of uncut siding on top of the first piece, aligning the bottom edge with the overlap marks. Transfer the 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.

10.13



10.14 **Angle Template**



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
wood studs	blind nail	16 in o.c.	3 9
		24 in o.c.	16
	face nail	16 in o.c.	2 5
		24 in o.c.	2 5
steel studs*	blind nail	16 in o.c.	8 13
		24 in o.c.	
	face nail	16 in o.c.	7 12
		24 in o.c.	
Direct to Masonry			14
7/16 in OSB or equivalent (face nailed)			4

Fastener Type

2 — .113 in. x .267 in x 2 in. — 6D common

3 — .093 in. x .222 in. x 2 in. — 6D siding nail

9 — No 11ga 1.25 in long — roofing nail

7 — Ribbed Bugle-Head No. 8 .323 in. x 1.625 in — screws

8 — Ribbed Wafer-Head No. 8 (.375 in x 1.25 in)

12 — [AKN-100] .100 in x .25 in x 1.5 in — ET&F

13 — [AGS-100] .100 in x .313 in. x 1.5 in

14 — [ASTM C-90] ASM-144-125 (P/C) .30 in x .14 in x 1.25 in — masonry nail

5 — .113 in. x .260 in x 2.375 in — 8D common

16 — No 11ga 1.75 in long — roofing nail

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 DECEMBER 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

1. Position cutting station so that airflow blows dust away from the user and others near the cutting area.
2. Cut using one of the following methods:
   - a. 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.
   - b. Better: Circular saw equipped with a dust collection feature (e.g. Roan® saw) and a HardieBlade saw blade.
   - c. 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.

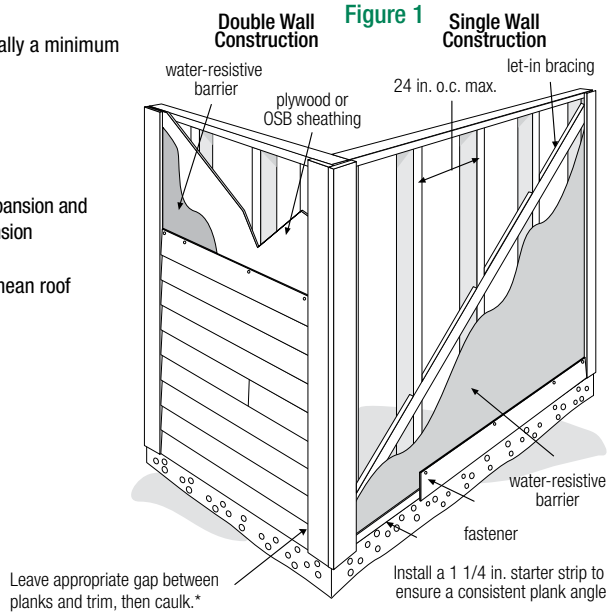
IMPORTANT: The Occupational Safety and Health Administration (OSHA) regulates workplace exposure to silica dust. For construction sites, OSHA has deemed that cutting fiber cement with a circular saw having a blade diameter less than 8 inches and connected to a commercially available dust collection system 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.

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 housewrap[1], which complies with building code requirements.
- When installing James Hardie products all clearance details in figs. 3-14 must be followed.
- 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.

Figure 1



INSTALLATION: JOINT TREATMENT

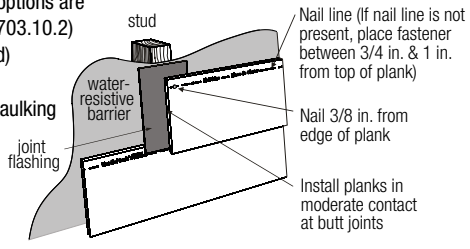
One or more of the following joint treatment options are required by code (as referenced 2009 IRC R703.10.2)

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

Figure 2



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

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

SELECT CEDARMILL© | SMOOTH | BEADED CEDARMILL© | BEADED SMOOTH | CUSTOM COLONIAL™ SMOOTH | CUSTOM COLONIAL™ ROUGHSAWN

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HS11119 P1/4 12/19

CLEARANCE AND FLASHING REQUIREMENTS

Figure 3
Roof to Wall

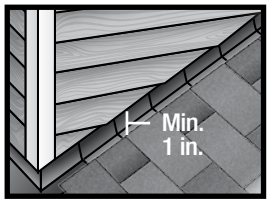


Figure 4
Horizontal Flashing

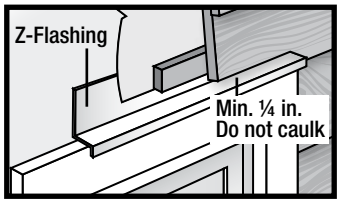


Figure 5
Kickout Flashing

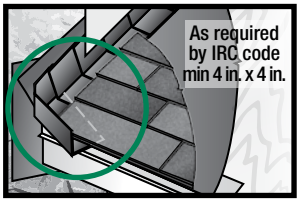


Figure 6
Slabs, Path, Steps to Siding

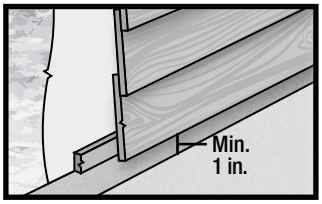


Figure 7
Deck to Wall

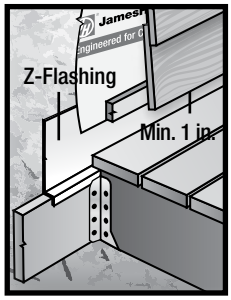


Figure 8
Ground to Siding

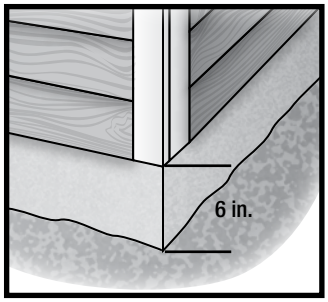


Figure 9
Gutter to Siding

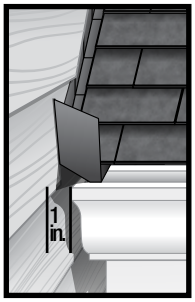


Figure 10
Sheltered Areas

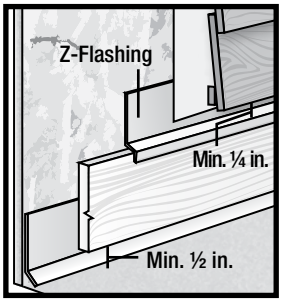


Figure 11
Mortar/Masonry

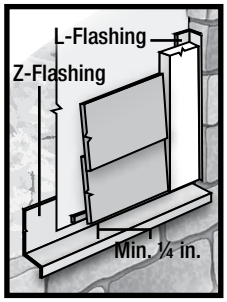


Figure 12
Drip Edge

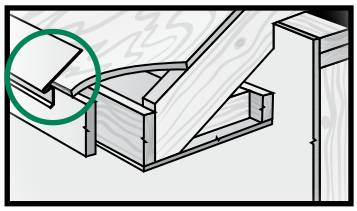


Figure 13
Block Penetration
(Recommended in HZ10)

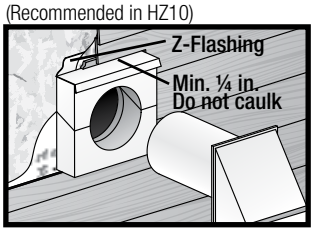
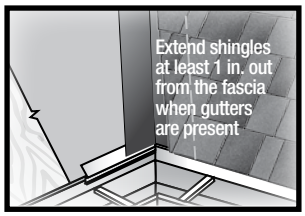


Figure 14
Valley/Shingle Extension



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

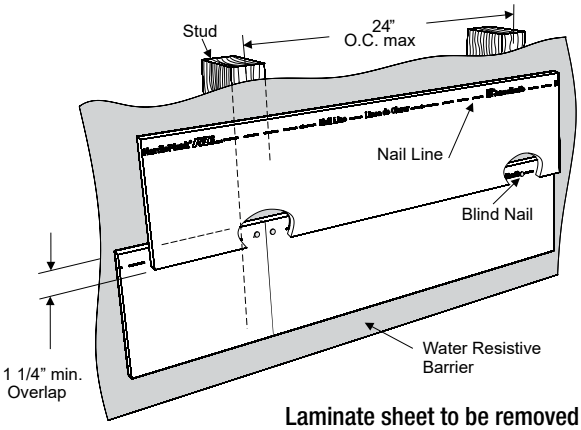


Figure 15

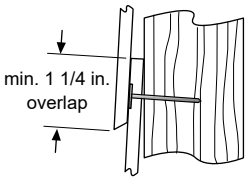
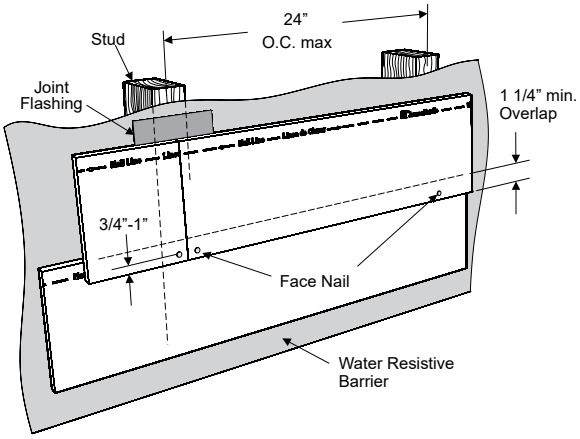


Figure 16



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

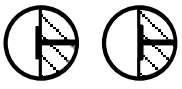
Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

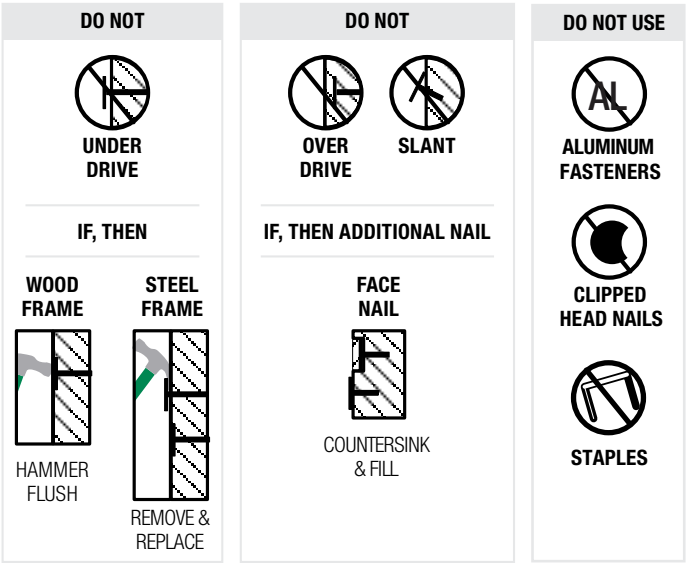
CAULKING

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".**

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).





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.

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 coaters, 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.

PAINTING JAMES HARDIE® SIDING AND TRIM PRODUCTS WITH COLORPLUS® TECHNOLOGY

When repainting ColorPlus products, James Hardie recommends the following regarding surface preparation and topcoat application:

- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section

COVERAGE CHART/ESTIMATING GUIDE

Number of 12 ft. planks, does not include waste

COVERAGE AREA LESS OPENINGS		HARDIEPLANK® LAP SIDING WIDTH								
SQ (1 SQ = 100 sq.ft.)	(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.

HS11119 P4/4 12/19

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: I 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.