OAK HAVEN

ABBREVIATIONS

ABV	ABOVE	HDR	HEADER	A.A.	PRESSURE TREATED WD
AFF	ABOVE FINISH FLOOR	HGT	HEIGHT	PWD	POWDER
C	CARPET	H.R.	HALF ROUND	R	RISER
CAB	CABINET	HS	HARD SURFACE	RAD	RADIUS
CL	CENTER LINE	HWD	HARDWOOD (FLOORS)	REF	REFRIGERATOR
CLG	CEILING	I.L.O.	IN LIEU OF	REV	REVISION
COL	COLUMN	ISUL	INSULATED(TION)	R&M	RANGE W/MICROWAVE
CONC	CONCRETE	INT	INTERIOR	RM	ROOM
CPT	CARPET	ITC	IN THE CLEAR	R.O.	ROUGH OPENING
DBL	DOUBLE	KIT	KITCHEN	R/S	ROD & SHELF(S)
DIM	DIMENSION	K/S	KNEE SPACE	SD	SMOKE DETECTOR
DN	DOWN (STAIRS)	LIV	LIVING	SEC	SECTION
DRY	DRYER MACHINE	LTL	LINTEL	SQ.FT.	SQUARE FOOTAGE
DTL	DETAIL	LVR	LOUVER	SH	SINGLE HUNG
EA	EACH	MAX	MAXIMUM	STD	STANDARD
EB	EYEBROW	MIN	MINIMUM	TEMP	TEMPERED (GLASS)
ELEV	ELEVATION	MISC	MISCELLANEOUS	TR	TRANSOM
ELEC	ELECTRIC(AL)	MULL	MULLION(ED)	TYP	TYPICAL
EQ	EQUAL	N/A	NOT APPLICABLE	UNF	UNFINISHED
EXT	EXTERIOR	OA	OVERALL	U.N.O.	UNLESS NOTED OTHERWISE
F.F.	FINISH FLOOR (LINE)	OBS	OBSCURE (GLASS)	VB	VANITY BASE
FXD	FIXED GLASS	O.C.	ON CENTER	W	WASHER
FIN	FINISH	O.H.	OVERHANG	WD	WOOD
FLR	FLOOR(ING)	OPNG	OPENING	WH	WATER HEATER
FP	FIREPLACE	OPT	OPTIONAL	WIC	WALK-IN CLOSET
FUR	FURRED(ING)	PED	PEDESTAL (SINK)	W/ W/O	WITH or WITHOUT
GFI	GROUND FAULT CIRCUIT INTERRUPT	OSB	ORIENTED STRAND BOARD	WP	WATERPROOF(ING)
HB	HOSE BIB	PL	PLATE (HEIGHT)		

GENERAL NOTES

1 - GENERAL BUILDING & DESIGN REQUIREMENTS

1) THE ATTACHED PLANS & SPECIFICATIONS ARE THE SOLE PROPERTY OF TRI POINTE HOMES ANY UNAUTHORIZED USE OF THESE PLANS WITHOUT PRIOR WRITTEN CONSENT OF TRI POINTE HOMES IS STRICTLY PROHIBITED.
2) TRI POINTE HOMES DESIGNS & BUILDS HOUSING AS SET FORTH BY THE FORMAT AND PROVISIONS OF THE INTERNATIONAL RESIDENTIAL CODE (IRC), AND THE NATIONAL ELECTRIC CODE (NEC). ANY NON-CONFORMING DOCUMENTS DISCOVERED BY THE CONTRACTOR OR HIS AGENTS SHALL BE CALLED TO THE IMMEDIATE ATTENTION OF TRI POINTE HOMES BY CALLING (469)329-0470.
3) THESE PLANS ARE SUBJECT TO MODIFICATIONS TO MEET CODE REQUIREMENTS AND/OR TO FACILITATE MECHANICAL/ ELECTRICAL/ PLUMBING INSTALLATION AND/ OR TO IMPLEMENT DESIGN IMPROVEMENTS. ANY INTENTION TO MODIFY THESE PLANS MUST BE APPROVED IN WRITING BY TRI POINTE HOMES
4) CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AFFECTING CONTRACTOR'S PRODUCTS, INSTALLATIONS, OR FABRICATIONS IN THE FIELD PRIOR TO EXPEDITING THE CONSTRUCTION OF SUCH WORK. FIELD VERIFY ALL DIMENSIONS – DO NOT SCALE DRAWINGS!! CONTRACTOR IS RESPONSIBLE FOR SURVEYING THE PROJECT AND BECOMING FAMILIAR WITH THE EXISTING CONDITIONS AND SCOPE OF WORK INCLUDING BUT NOT LIMITED TO SITE AND SOIL BEARING CONDITIONS.
5) ERRORS AND OMISSIONS WHICH MAY OCCUR IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT, IN WRITING, AND WRITTEN INSTRUCTION SHALL BE OBTAINED PRIOR TO PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ERRORS, DISCREPANCIES, OR OMISSIONS FOR WHICH THE CONTRACTOR FAILED TO NOTIFY THE ARCHITECT PRIOR TO CONSTRUCTION AND/ OR FABRICATION OF THE WORK.

2 - SITE CONSTRUCTION

1) BACK FILL SHALL BE FREE FROM VEGETATION AND CONSTRUCTION DEBRIS.
2) BACK FILL SHALL BE PLACED IN LIFTS AND COMPACTED IN SUCH A MANNER AS BACKFILL TO NOT DAMAGE THE FOUNDATION WALLS OR ANY WATERPROOFING/ DAMPPROOFING MATERIALS.

3 - CONCRETE

1) SLOPE ON GARAGE SLAB SHALL BE 1/8" PER FOOT TOWARDS VEHICLE DOOR. SLOPE ON PORCH AND PATIOS SHALL BE 1/8" PER FOOT AWAY FROM HOUSE.

4 - MASONRY

1) ALL EXTERIOR BRICK MUST MEET ASTM C-216 FOR "SW" CONDITIONS
2) MASONRY VENEER SHALL BE ATTACHED TO SUPPORTING WALLS w/ CORRUGATED METAL TIES IN ACCORDANCE WITH R703.7.4.1 – I.R.C. OR LOCAL CODE REQUIREMENTS
3) WEEPHOLES SHALL BE PROVIDED ALONG THE OUTSIDE WYTHE OF EXTERIOR MASONRY WALLS AT 33" O.C. MAX. SHALL BE A MIN. OF 3/16" IN DIAMETER, AND LOCATED IMMEDIATELY ABOVE THE FLASHING PER R703.7.6 – I.R.C.

5 - METALS

6 - WOOD AND PLASTICS

7 - THERMAL & MOISTURE PROTECTION

1) FIRE STOPPING AND/ OR DRAFT STOPPING SHALL MEET THE REQUIREMENTS OF IRC R602.8.
2) ATTIC VENTILATION SHALL BE PROVIDED AT 1/300 th OF THE AREA OF THE SPACE VENTILATED. CROSS VENTILATION WITH HALF OF THE VENTILATED AREA SHALL BE PROVIDED BY ROOF VENTS AND THE OTHER HALF BY SOFFIT VENTS. VENTS SHALL BE PLACED SO AS TO NOT ALLOW INFILTRATION OF RAIN OR SNOW.
3) PROVIDE APPROVED TILE BACKER DRYWALL FOR ALL SHOWER AND BATH SPACE
4) PROVIDE ATTIC VENTILATION PER IRC-R806.1

8 - DOORS AND WINDOWS

1) REVIEW ALL WINDOW HDR HEIGHTS PER PLATE HT. AND VERIFY W/ ELEVATIONS AND CORNICE DETAILS
2) TEMPERED GLASS SHALL BE USED IN HAZARDOUS AREAS AS DESCRIBED IN SECTION R308.4 – I.R.C.
3) FRONT DOOR WIDTH PER IRC-R311.3
4) GARAGE DOOR PER IRC-R309.1
5) EMERGENCY EGRESS SHALL MEET REQUIREMENTS OF SECTION R310 – I.R.C. 2018 – SLEEPING ROOMS SHALL HAVE AT LEAST ONE EGRESS OPENING OF NOT LESS THAN 5.7 SF AND A CLEAR OPENING OF NOT LESS THAN 20" WIDE X 24" HIGH AND SHALL NOT BE MORE THAN 44" ABOVE THE FLOOR.

15 - MECHANICALS

1) WOOD BUILT CHIMNEYS AND FIREPLACES SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS, AND ARE SUBJECT TO MECHANICAL INSPECTION PER IRC SECTION R1002.1.
2) EXTERIOR AIR INTAKE FOR COMBUSTION AIR PER IRC SECTION AS REQUIRED BY LOCAL MUNICIPALITY

16 - ELECTRICAL

1) ALL ELECTRICAL INSTALLATION SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE (NEC). ALL MATERIAL AND EQUIPMENT SHALL BEAR THE LABEL OF APPROVAL OF THE UNDERWRITERS LABORATORIES, INC.
2) ELECTRICAL CONTRACTOR SHALL VERIFY SPACE REQUIRED FOR METER INSTALLATION BEFORE CONSTRUCTION AND SHALL NOTIFY GENERAL CONTRACTOR OF ANY DISCREPANCIES.
3) VERIFY LOCATION OF ALL RECEPTACLES FOR APPLIANCES WITH MANUFACTURER SPECIFICATIONS.
4) GROUND FAULT INTERRUPTS SHALL BE LOCATED PER THE NEC.
5) ALL SWITCHES SHALL BE INSTALLED AT 3'-6" ABOVE FINISHED FLOOR TO CENTERLINE OF SWITCH UNLESS NOTED OTHERWISE.
6) ALL CONVENIENCE OUTLETS SHALL BE INSTALLED W/ CENTERLINE OF OUTLET LOCATED 1'-3" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
7) ALL CONVENIENCE OUTLETS WITH SWITCHES TO BE SWITCH AT TOP ONLY.
8) ALL EXTERIOR WALL BRACKET FIXTURES SHALL BE INSTALLED AS NOTED ON PLANS.
9) APPROVED SMOKE DETECTORS SHALL BE LOCATED ON EVERY STORY OF THE DWELLING UNIT AS PER IRC SECTION R317 (SEE SHEET B1.1 FOR LOCATIONS). WHERE MORE THAN ONE DETECTOR IS REQUIRED THEY SHALL BE INTERCONNECTED. POWER SOURCE SHALL BE BUILDING POWER w/ BATTERY BACKUP.
10) CONDUCTORS SHALL BE OF COPPER.

GENERAL FRAMING SPECS AND CONSTRUCTION NOTES STAIRS:

1) THE MAXIMUM RISER HEIGHT SHALL BE 7 3/4 INCHES AND THE MINIMUM TREAD DEPTH SHALL BE 10 INCHES IN ACCORDANCE WITH SECTION I.R.C.
2) HANDRAILS HAVING MINIMUM AND MAXIMUM HEIGHTS OF 34 INCHES AND 38 INCHES SHALL BE PROVIDED ON AT LEAST ONE SIDE OF STAIRWAYS IN ACCORDANCE WITH SECTION R315.1 – I.R.C.
3) HANDRAIL AND BALUSTRADE (WHERE PRESENT) SHALL BE CONSTRUCTED ACCORDING TO IRC.
4) ALL REQUIRED HAND RAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS W/ 2 OR MORE RISERS FROM A POINT ABOVE THE THE TOP RISER OF A FLIGHT TO A POINT ABOVE THE LOWEST RISER OF THE FLIGHT. ENDS SHALL BE RETURNED OR SHALL TERMINATE AT NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1.5" BETWEEN THE WALL AND HAND RAIL.

WALLS:

1) ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD. ALL STUDS ARE 3 1/2" UNLESS NOTED. ALL DIMENSIONS PRESENTED HERE ARE FRAME DIMENSIONS ONLY.
2) SEPARATION BETWEEN THE RESIDENCE AND THE GARAGE SHALL BE MAINTAINED BY INSTALLATION OF $\frac{1}{2}$" GYPSUM BOARD ON ALL COMMON WALLS. 2-STORY HOMES REQUIRE 5/8" TYPE X GYPSUM BOARD AT GARAGE CEILINGS WHERE HABITABLE ROOMS ARE PRESENT ABOVE.

FLOORS:

1) STRUCTURAL FLOOR MEMBERS SHALL NOT BE CUT, BORED, OR NOTCHED IN EXCESS OF THE LIMITATIONS SPECIFIED IN IRC.
2) THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON MASONRY OR CONCRETE OR AS OTHERWISE SPECIFIED IN IRC.
3) ALL DIMENSIONAL FLOOR JOISTS TO BE PER ENGINEER STRUCTURAL PLANS.

FRAMING:

1) ALL FRAMING DIMENSIONS TO FACE OF MEMBER.
2) ALL BEARING HEADERS TO BE PER ENGINEERING PLANS.
3) FIRE STOPPING AND/ OR DRAFT STOPPING SHALL MEET THE REQUIREMENTS OF IRC R602.8.

ROOF:

1) HIP AND VALLEY RAFTERS SHALL BE SUPPORTED AT RIDGE DOWN TO BEARING PARTITION. CUT ENDS OF RAFTERS SHALL BE FULLY SUPPORTED WALL AND RIDGE.
2) REQUIRED VENTILATION AREAS CALCULATED AT 1/300 RATIO.

SQUARE FOOTAGE

Elevation "B"

(Slab S.F.)

Slab Area	Sq. Ft.
FIRST FLOOR	1674
2 BAY GARAGE	405
PORCH	38
COVERED OUTDOOR LIVING	162
Total Slab Area	**2279**

(Outside of Frame S.F.)

A/C Area	Sq. Ft.
FIRST FLOOR	1674
2 BAY GARAGE	405
Total A/C Area	**2079**
Non-A/C Area	**Sq. Ft.**
PORCH	38
COVERED OUTDOOR LIVING	162
Total Non-A/C Area	**200**

(Inside of Frame S.F.)

A/C Area	Sq. Ft.
FIRST FLOOR	2013
Total A/C Area	**2013**

NOTE: ALL OPTIONAL SQUARE FOOTAGES LISTED ARE INDEPENDENT OF AND IN ADDITION TO BASE SQUARE FOOTAGES.

OPTIONS

GREAT ROOM FIREPLACE
GOURMET KITCHEN 2
PRIMARY BATH 1
OUTDOOR LIVING PATIO
8' TALL DOORS - FIRST FLR
FULLY INSULATED GARAGE
LAUNDRY CABS W/SINK

Under 9,000 SQFT

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code
07/15/2025
Harnett COUNTY NORTH CAROLINA

BUILDING CODE COMPLIANCE

CONSTRUCTION PLANS DESIGNED TO MEET OR EXCEED MINIMUM CODE REQUIREMENTS OF 2018 I.R.C.
ELECTRICAL PLANS DESIGNED TO MEET OR EXCEED MINIMUM CODE REQUIREMENTS OF 2020 N.E.C.

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SHEET LEGEND

SHEET NO.	TYPE OF SHEET/LAYOUT
"G0.01"	COVER SHEET & GEN. NOTES
"G0.11"	REVISIONS & SYMBOLS
"S1.10B"	BASE FOUNDATION PLAN – ELEVATION 'B'
"A1.10B"	FIRST FLOOR PLAN – ELEVATION 'B'
"A2.01B"	EXTERIOR ELEVATIONS – 'B'
"A2.02B"	EXTERIOR ELEVATIONS – 'B'
"A3.01B"	ROOF PLAN – ELEVATION 'B'
"A4.01"	INTERIOR DETAIL SHEET
"E1.10B"	1ST FLR. ELECTRICAL PLAN – ELEVATION 'B'
"E1.11B"	1ST FLR. ELECTRICAL PLAN UPGRADE OPTIONS – ELEVATION 'B'
"D1.1"	DETAILS

Serenity - Lot 291 - 5919-03 (Oak Haven) - Elevation B

*Tile Walls at Bath 2 Tub
*Optional Primary Bath 1 with Zero Entry Pan
*Fire Rated Garage Side
*Fire Rated Non Garage Side
*Heatilator Novus 36" Gas Fireplace
*Fully Insulated Garage
*Optional 8' Interior Doors at 1st Floor
*Gourmet Kitchen Layout 2 w. Cooktop and Appliance Hood
*Laundry Sink w/ Base Cabinets and Upper Cabinets
*Optional Outdoor Living Patio

SYMBOLS

- ELEVATION KEY OR SECTION KEY (4.1)
- CENTERLINE
- CEILING TRANSITION LINE
- HB HOSE BIB (FREEZE PROOF)
- GAS LINE STUB
- TB TOWEL BAR
- PH PAPER HOLDER
- TR TOWEL RING
- SHOWER HEAD
- SHOWER CONTROLS
- TUB/SHOWER
- LAVATORY
- DBL SINK
- LAUNDRY SINK
- PEDESTAL SINK
- WATER CLOSET
- PLYWOOD
- INSULATING SHEATHING
- BATT INSULATION
- RIGID INSULATION
- CONCRETE
- SAND OR GRAVEL FILL
- STONE
- 2x FRAME WALL
- BRICK VENEER
- STONE VENEER

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COVER SHEET & GENERAL NOTES

SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

PLAN NAME: OAK HAVEN

SHEET #: G0.01

REVISION INDEX

REL. #	DESCRIPTION	DATE	DRAWN BY
5919-03	NEW PLAN	10/01/2024	ACC
	ADDED ATTIC PULL-DOWN, REVISED ROD/SHELF IN PRIMARY WIC, ADDED OPTIONS - SCREENED COVERED OUTDOOR LIVING, GOURMET KITCHEN KITCHEN, ZERO ENTRY SHOWER AT PRIMARY BATH, ADDED TRIM SURROUNDING VENTS AT VARIOUS ELEVATIONS, REVISED BENCH DETAIL, ADDED OPT. LAUNDRY CABINETS, ADDED (2) 4-LED LIGHTS IN GARAGE, REVISED ELECT LIGHTING AND SWITCHES IN PRIMARY BATH, ADDED DISHWASHER ACCESSIBLE DISCONNECT SWITCH AND COUNTER-TOP AIR SWITCH FOR DISPOSAL NOTES	01/19/2025	ACC
	ADDED SHOWER NICHE NOTE, ADDED CURB TO SHOWERS, REVISED INT/EXT FIREPLACE DEPTHS, REVISED OPENING HEADER HEIGHTS THROUGHOUT, REVISED REAR EXTERIOR DOOR TO 3', ADDED DOOR HEIGHTS TO MAIN FLOOR NOTES, ADDED BATH ACCESSORY HEIGHTS TO MAIN FLOOR NOTES, ADDED ZERO ENTRY SHOWER DETAIL, REMOVED PRIMARY BATH 2 OPTION, ADDED OUTDOOR LIVING PATIO OPTION, ADDED PARTIAL SHOWER NICHE DETAIL, ADDED GOURMET KITCHEN INTERIOR, REVISED ELECTRICAL / ELECTRICAL OPTION AT GREAT ROOM AND PRIMARY BATH.	04/13/2025	ACC

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REVISIONS & SYMBOLS

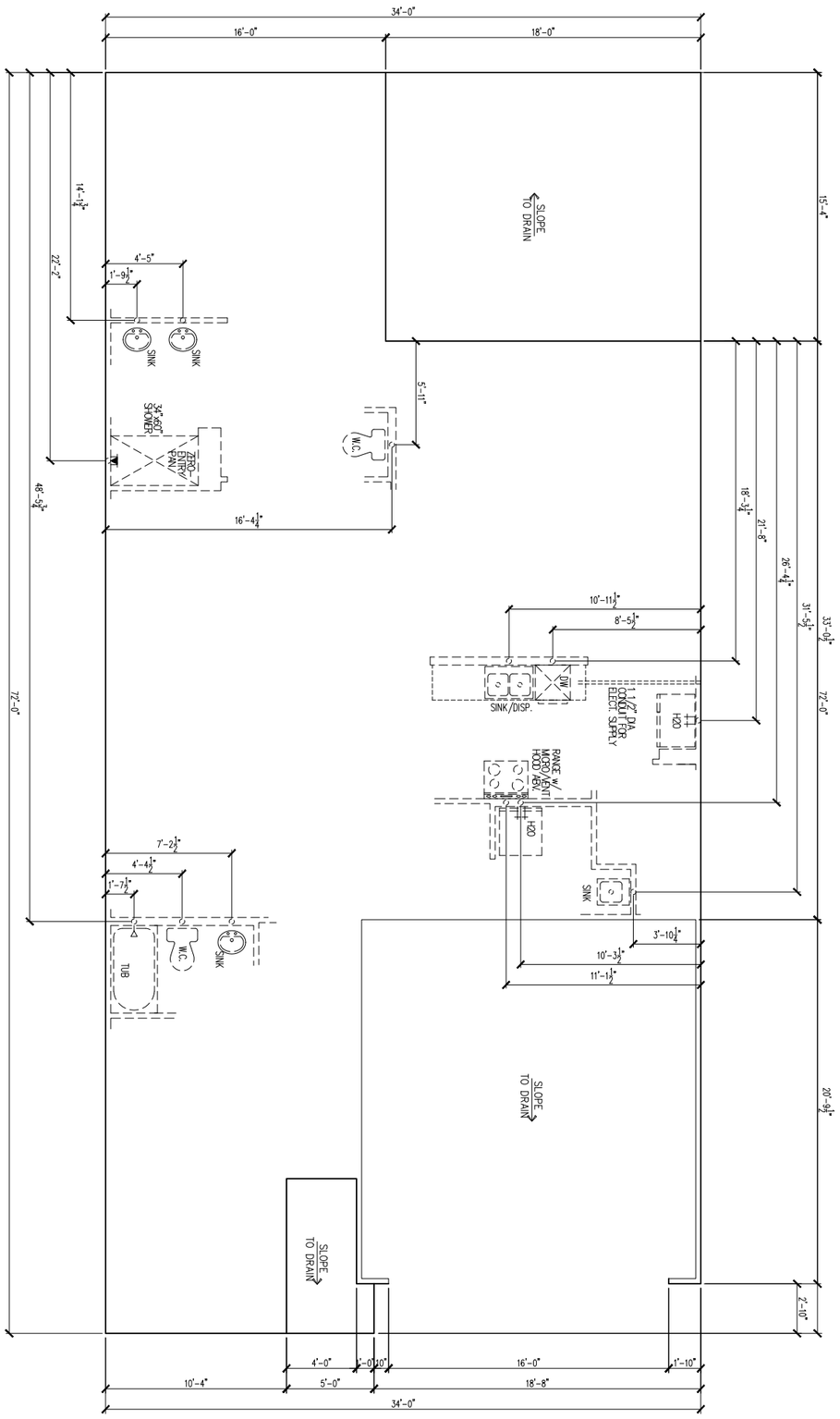
SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

PLAN NAME: OAK HAVEN

SHEET #: G0.11



SHEET #
S1.10B

PLAN NAME
OAK HAVEN

PLAN #
5919-03

Issue Date: 10-01-24
Drawn By: ACC

BASE FOUNDATION PLAN

SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

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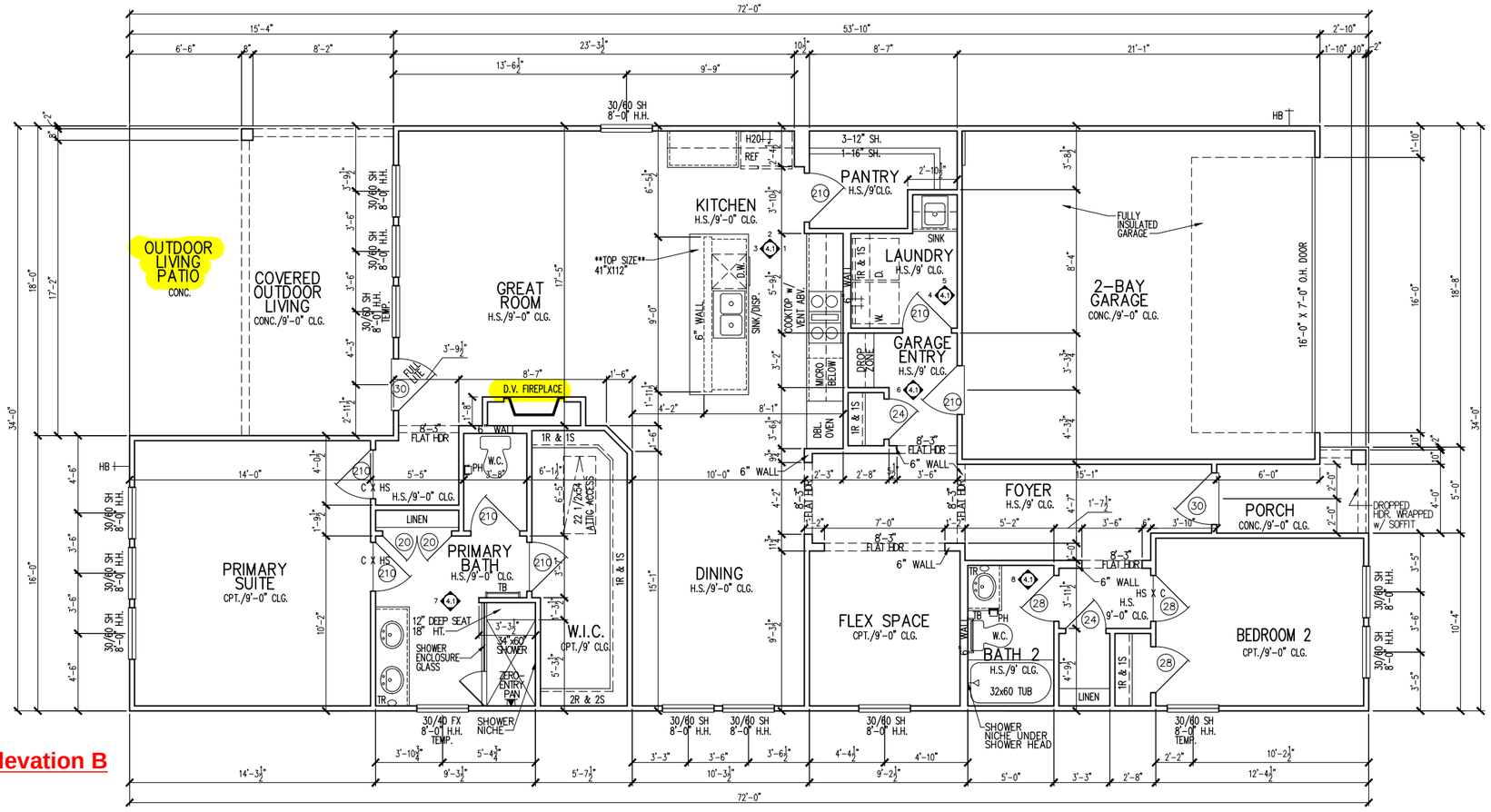
MAIN FLOOR NOTES

#	EXPLANATION
1.	ALL NON-DIMENSIONED PARTITIONS ARE 3-1/2" ROUGH
2.	ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS NOTED OTHERWISE (U.N.O.)
3.	PROVIDE MIN. 2-2x12's w/ 1/2" PLYWD. FLITCH PLATE AT ALL EXTERIOR WALL OPENINGS & INTERIOR BEARING WALL OPENINGS U.N.O.
4.	ALL EXTERIOR DIM's ARE TO FACE OF STUDS U.N.O.
5.	ALL TRUSSES TO BEAR ON EXTERIOR WALLS AND/OR GIRDER TRUSS U.N.O.
6.	TRUSS MFG. TO SIZE MEMBERS, FASTENERS, HANGERS & SET SPACING FOR ALL TRUSSES
7.	WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR EGRESS OPENING OF 5.7 SQ. FT. w/MIN DIM's OF 24" IN HT AND 20" IN WIDTH; SILL HT NOT TO EXCEED 44" AFF
8.	ALL BALUSTER TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALUSTER
9.	ALL ELEC. & MECH. EQUIPMENT & METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS; CONTRACTOR TO VERIFY
10.	FOR ADDITIONAL NOTES, SEE GENERAL NOTES ON TITLE SHEET & DETAILS
11.	ALL TYP. WINDOWS 6'-0" IN HT AND SMALLER, THE HEAD HEIGHT SHALL BE 8'-10" ABOVE FINISHED FLOOR (U.N.O.)
12.	STRUCTURAL ENGINEERING PROVIDED BY OTHERS
13.	REFER TO INTERIOR ELEVATIONS SHEET TO VIEW BUBBLE CALLOUTS
14.	FIRST FLOOR INTERIOR DOOR HEIGHTS ARE 8' TALL DOORS. DOORS AT OPTIONAL LOFT ARE 6'-8".
15.	BATH ACCESSORY INSTALLATION HEIGHTS ARE MEASURED TO CENTER OF ACCESSORY: TB - 48" A.F.F. TR - 20" ABV. VANITY COUNTER-TOP TH - 70" A.F.F. TP - 26" A.F.F.
16.	SHUT-OFF VALVE TO BE LOCATED IN GARAGE



Serenity - Lot 291 - 5919-03 (Oak Haven) - Elevation B

*Tile Walls at Bath 2 Tub
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1st FLOOR PLAN

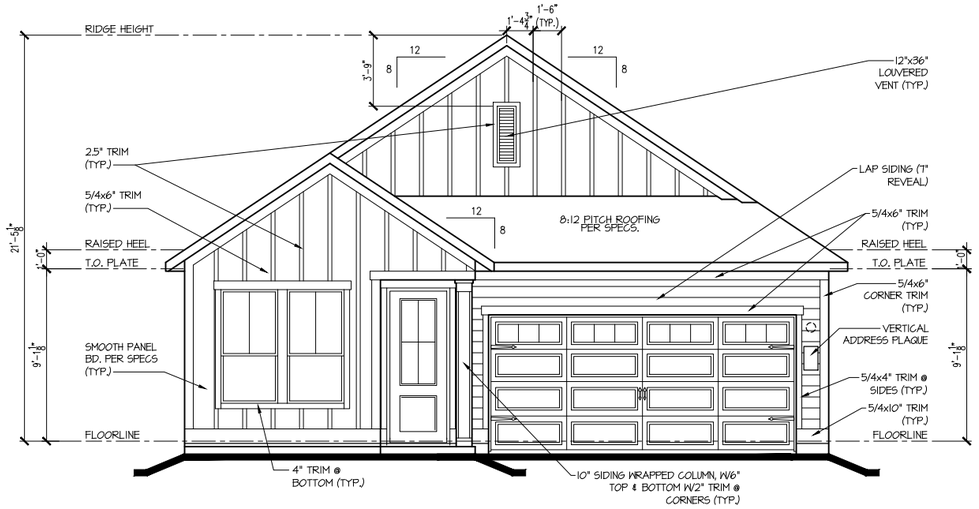
SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

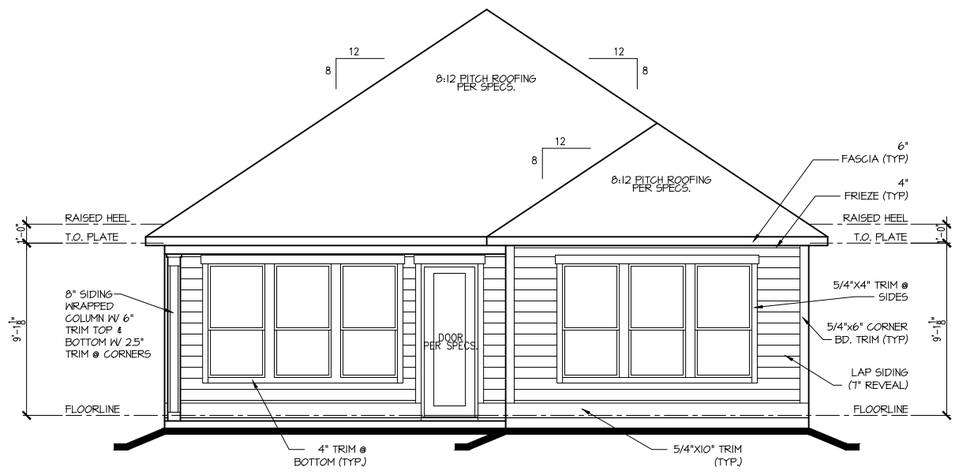
PLAN NAME: OAK HAVEN

SHEET #: A1.10



FRONT ELEV. "B"

1/8"=1'-0"



REAR ELEV. "B"

1/8"=1'-0"

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EXTERIOR ELEVATIONS

SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

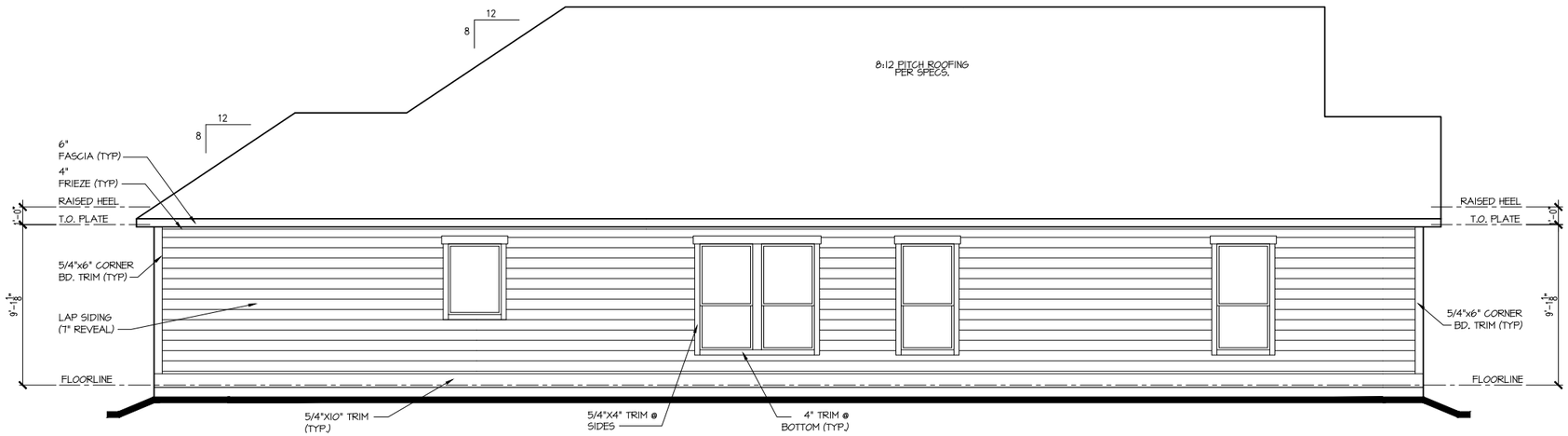
Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

PLAN NAME: OAK HAVEN

SHEET #: A2.01B

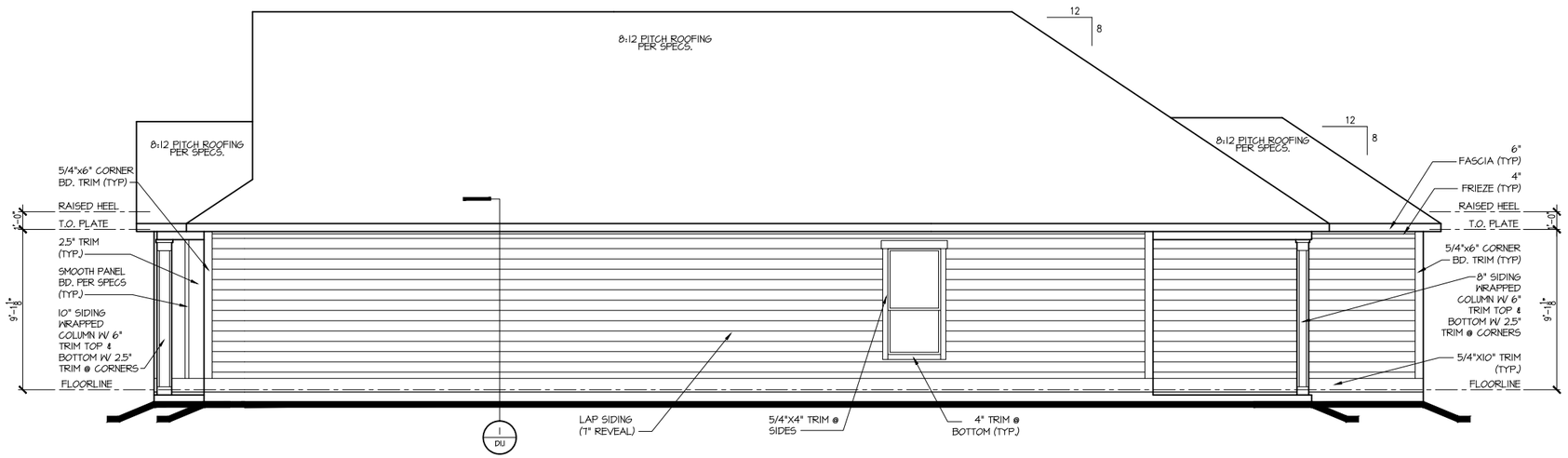
FIRE-RATED WALL



LEFT ELEV. "B"

1/8"=1'-0"

FIRE-RATED WALL



RIGHT ELEV. "B"

1/8"=1'-0"

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EXTERIOR ELEVATIONS

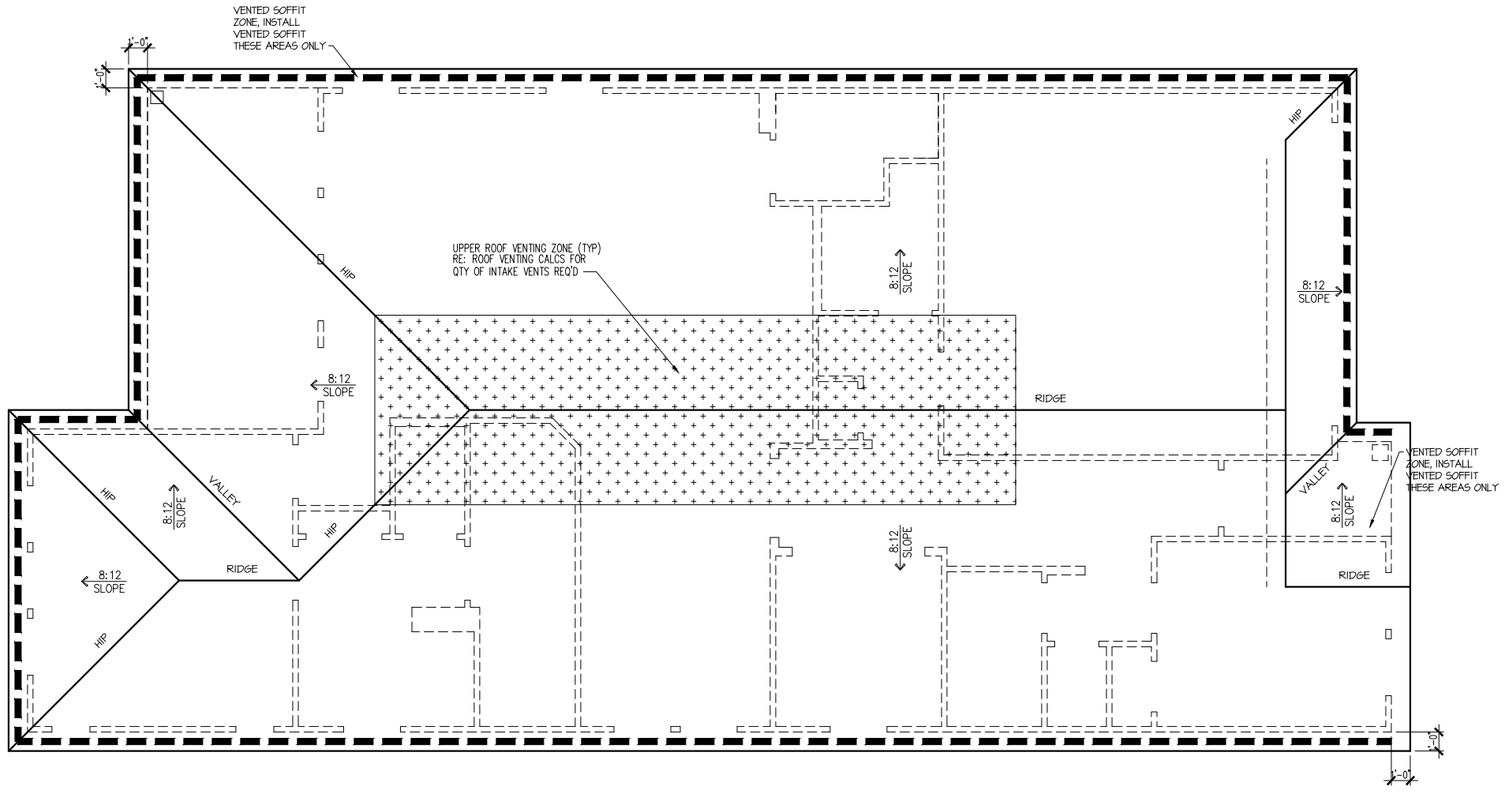
SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

PLAN NAME: OAK HAVEN

SHEET #: A2.02B



Attic Venting Calculations Elev. "B"

ROOF INFORMATION	BASE
TOTAL SF ROOF AREA	2497
AVAILABLE L.F. ROOF SOFFIT	198
AVAILABLE L.F. ROOF RIDGE	47
VENT TYPES	QTY VENTS REQ'D
LOWER VENTS CONTINUOUS SOFFIT VENTING @ 5 SI/LF	120 LF
UPPER VENTS SLANT 150 VENTS @ 150 SI/VENT	4
UPPER VENTS 4' RIDGE VENTS @ 72 SI/VENT	8

NOTE:
QTY OF UPPER VENTS SHOWN COVERS 100% OF UPPER VENTING. NO MIXING OF VENT TYPES FOR UPPER VENTING IS FIGURED FOR IN THIS TABLE.

ROOF PLAN 'B'

SCALE: 1/8" = 1'-0"

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ROOF PLAN

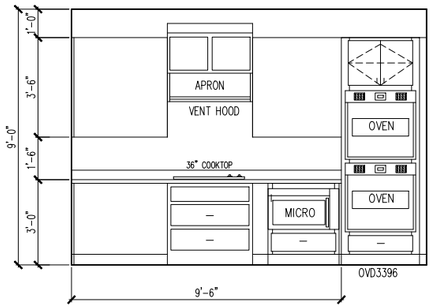
SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

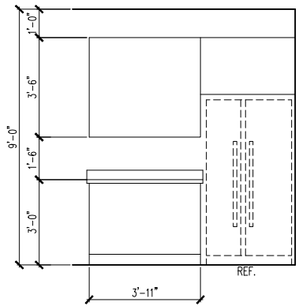
PLAN #: 5919-03

PLAN NAME: OAK HAVEN

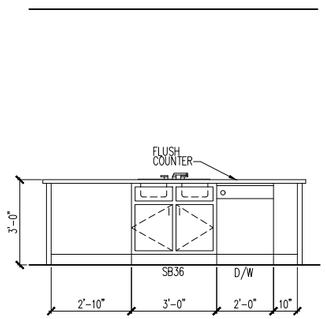
SHEET #: A3.01B



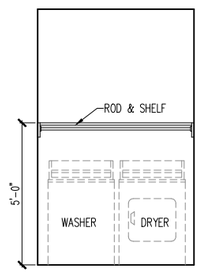
1 KITCHEN



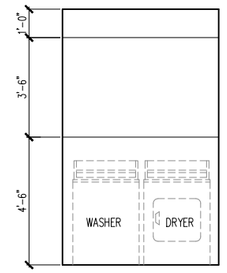
2 KITCHEN



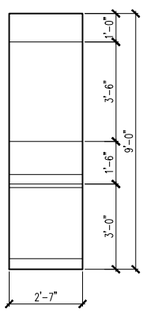
3 KITCHEN ISLAND



4 LAUNDRY ROOM

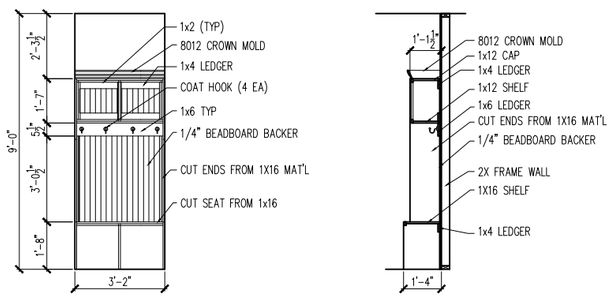


4 LAUNDRY ROOM w/ OPT CABINETS

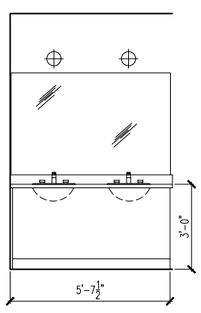


5 LAUNDRY ROOM

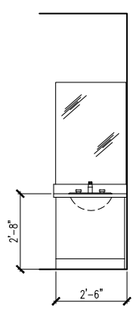
FRONT VIEW SIDE VIEW



6 TYPICAL BENCH DETAIL (DROP ZONE)



7 PRIMARY BATH



8 BATH 2

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INTERIOR DETAIL SHEET

SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

PLAN NAME: OAK HAVEN

SHEET #: A4.01

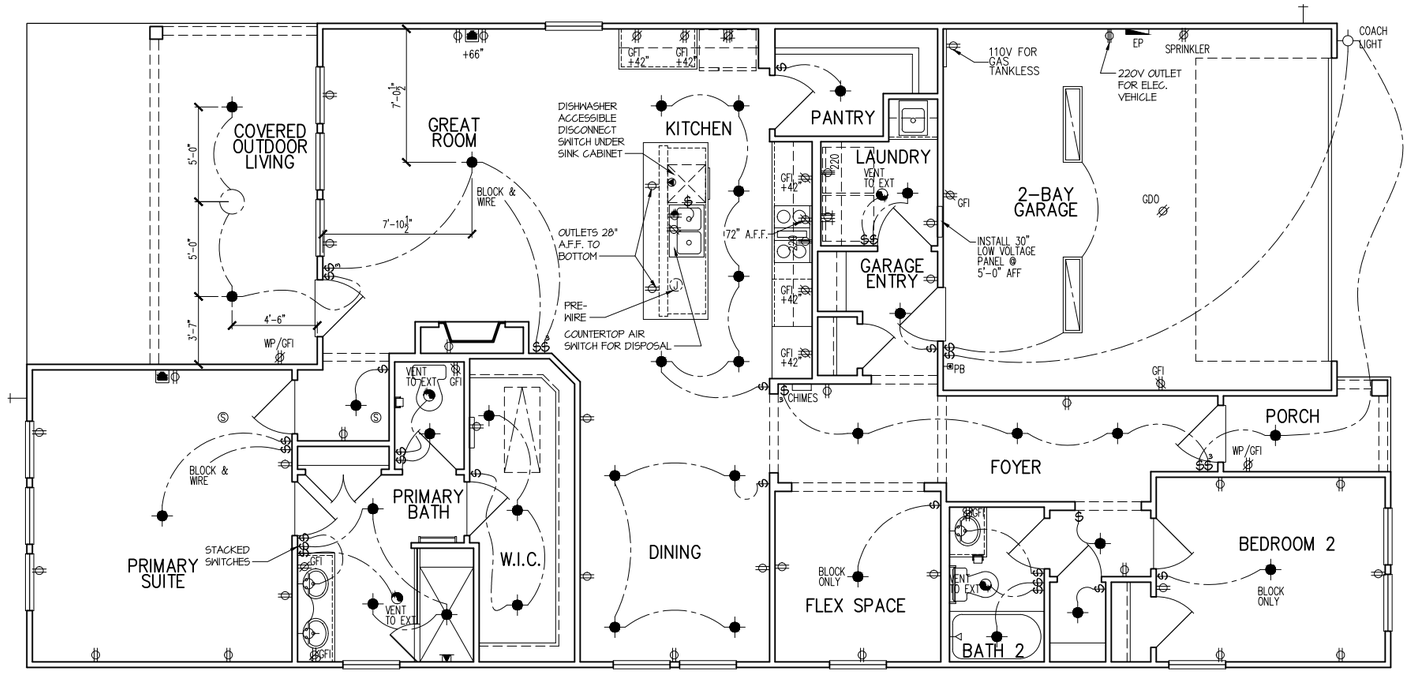
ELECTRICAL FIXTURE SCHEDULE	
DESCRIPTION	SYMBOL
110V OUTLET	
220V OUTLET	220
1/2 HOT OUTLET	
GFI OUTLET	GFI
WP GFI OUTLET	WP/GFI
GARAGE DOOR OPENER OUTLET	GDO
SECURITY SYSTEM	SEC SYS
DISHWASHER	DW
JUNCTION BOX	J
CEILING MOUNTED LIGHT	
CEILING FAN w/ LIGHT KIT	PROVIDE BRACING
RECESSED CEILING LIGHT	
RECESSED WATER PROOF LIGHT	WP
WALL MOUNTED LIGHT	
WALL MOUNTED PUSH BUTTON	PB
TWO WAY SWITCH	
THREE WAY SWITCH	3
FOUR WAY SWITCH	4
DIMMER SWITCH	DIM
EXHAUST VENTS	VENT TO EXT
LOW VOLTAGE PANEL	
PHONE OUTLET	PH
TV OUTLET	TV
DATA & RG6 COMBO BOX	
SMOKE DETECTOR	S
CARBON MONOXIDE SMOKE DETECTOR COMBO	CM/SD
DOOR CHIMES	CHIMES
ELECTRICAL PANEL	EP
SURFACE MOUNT LED	
EXTERIOR WALL MOUNT UPLIGHT	
SOFFIT MOUNT FLOOD LIGHT	
UNDER COUNTER LIGHTING	UCL
SMURF TUBE	

ELECTRICAL NOTES:

1. PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE AND CARBON MONOXIDE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES
2. PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRIC CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
3. ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.
4. HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
5. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.

ELECTRICAL DEVICES:	ABOVE FINISHED FLOOR:
SWITCHES OVER COUNTER	48" TO CL
WALL OUTLETS OVER COUNTER	+42" TO BOTTOM OF HORIZONTAL OUTLET(TYP. @ COUNTER)
REMAINING SWITCHES	48" TO CL
WALL OUTLETS	12" TO CL
BATH VANITY BRACKET OUTLET (1" ABOVE TOP OF VANITY)	1,2
WATER SOFTENER AND SUMP OUTLETS	48" TO CL
EXTERIOR GFI OUTLETS	12" TO CL
GARAGE GFI (ABOVE GARAGE FLOOR)	48" TO CL
FRONT DOOR COACH LIGHT	80" TO CL
GARAGE DOOR COACH LIGHT, (ABOVE GARAGE FLOOR)	84" TO CL
THERMOSTAT	54" TO CL
DOORBELL CHIMES	84" TO CL
DOORBELL BUTTON	LEVEL W/ DR HANDLE
KITCHEN HOOD FAN "WHIP"	66" TO CL
KITCHEN WALL HUNG MICROWAVE OUTLET	72" TO CL
KITCHEN DISHWASHER RECEPTACLE	UNDER SINK
KITCHEN RANGE	24" TO CL
KITCHEN REFRIGERATOR	48" TO CL
WASHER/DRYER OUTLET	48" TO CL

CL = CENTER LINE
1 = FIELD VERIFY
2 = MASTER BATH STANDARD 30" HIGH VANITY TO BE RAISED 4"



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1st FLOOR ELECTRICAL PLAN

SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

PLAN NAME: OAK HAVEN

SHEET #: E1.10B

ELECTRICAL FIXTURE SCHEDULE	
DESCRIPTION	SYMBOL
110V OUTLET	
220V OUTLET	220
1/2 HOT OUTLET	
GFI OUTLET	GFI
WP GFI OUTLET	WP/GFI
GARAGE DOOR OPENER OUTLET	GDO
SECURITY SYSTEM	SEC SYS
DISHWASHER	DW
JUNCTION BOX	J
CEILING MOUNTED LIGHT	
CEILING FAN w/ LIGHT KIT	PROVIDE BRACING
RECESSED CEILING LIGHT	
RECESSED WATER PROOF LIGHT	WP
WALL MOUNTED LIGHT	
WALL MOUNTED PUSH BUTTON	PB
TWO WAY SWITCH	
THREE WAY SWITCH	3
FOUR WAY SWITCH	4
DIMMER SWITCH	DIM
EXHAUST VENTS	VENT TO EXT
LOW VOLTAGE PANEL	
PHONE OUTLET	PH
TV OUTLET	TV
DATA & RG6 COMBO BOX	
SMOKE DETECTOR	S
CARBON MONOXIDE SMOKE DETECTOR COMBO	CM/SD
DOOR CHIMES	CHIMES
ELECTRICAL PANEL	EP
SURFACE MOUNT LED	
EXTERIOR WALL MOUNT UPLIGHT	
SOFFIT MOUNT FLOOD LIGHT	
UNDER COUNTER LIGHTING	UCL
SMURF TUBE	

ELECTRICAL NOTES:

1. PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE AND CARBON MONOXIDE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES
2. PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRIC CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
3. ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.
4. HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
5. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.

ELECTRICAL DEVICES:	ABOVE FINISHED FLOOR:
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KITCHEN DISHWASHER RECEPTACLE	UNDER SINK
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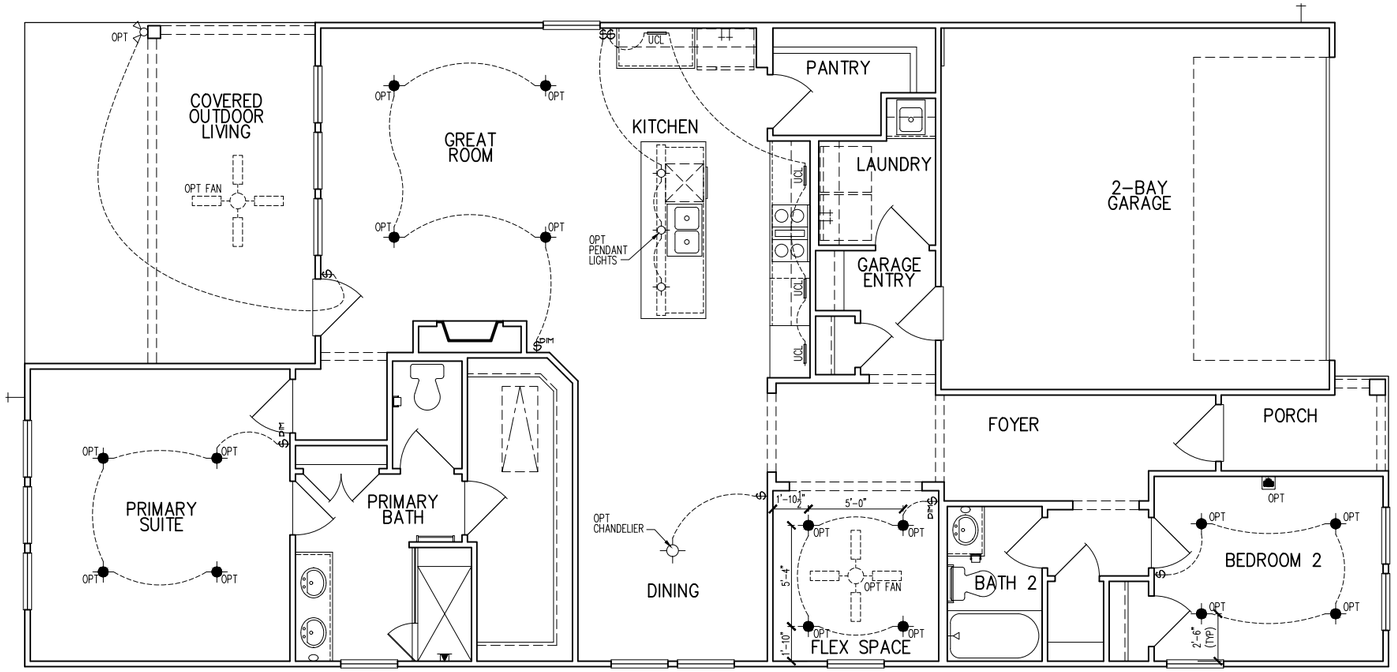
CL = CENTER LINE
1 = FIELD VERIFY
2 = MASTER BATH STANDARD 30" HIGH VANITY TO BE RAISED 4"



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1st FLOOR ELEC. PLAN - OPITONS

SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

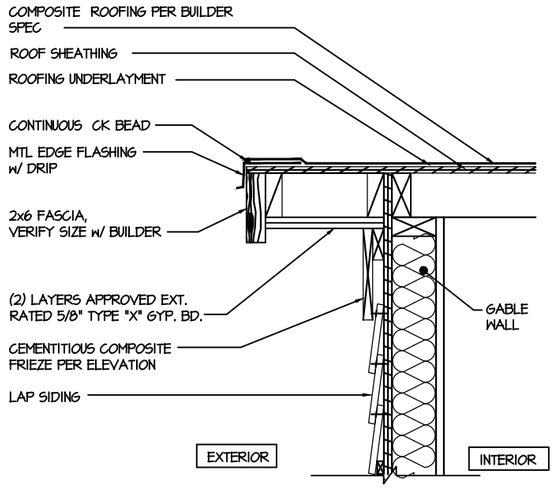
PLAN #: 5919-03

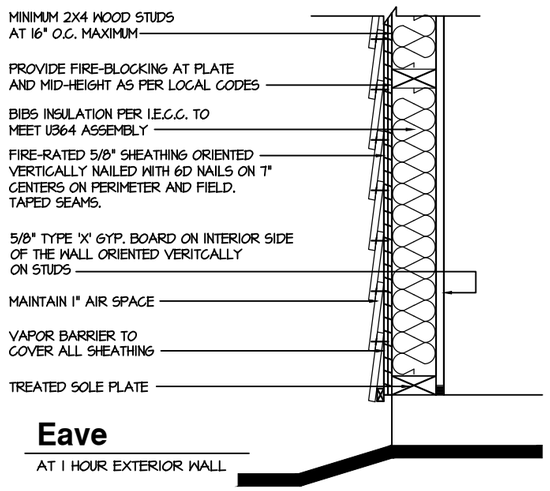
PLAN NAME: OAK HAVEN

SHEET #: E1.11B

NOTE:
1. FIREWALL COMPIES WITH UL DESIGN #U364 FOR 1 HR. FIREWALL ASSEMBLY

GLASS BLOCK IS NOT TO EXCEED 100 SQ. FT.
60 MIN. FIRE-RATED GLASS BLOCK ONLY



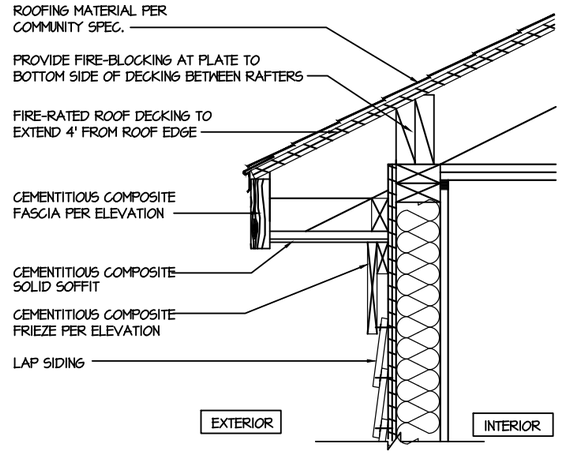


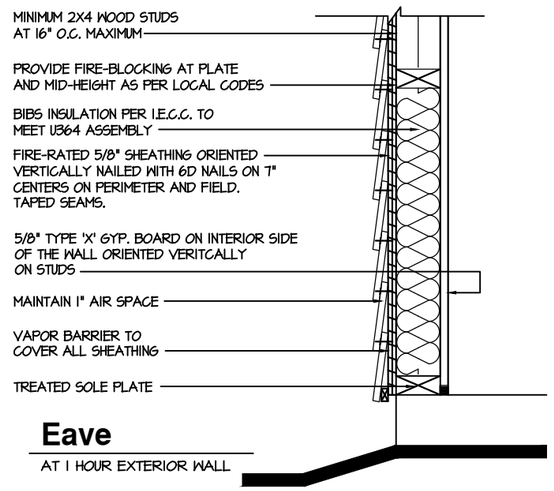
2 1 Hour Wall

AT EXTERIOR WALL — 1 HOUR FIRE-RESISTIVE CONSTRUCTION (PROPERTY LINE)

NOTE:
1. FIREWALL COMPIES WITH UL DESIGN #U364 FOR 1 HR. FIREWALL ASSEMBLY

GLASS BLOCK IS NOT TO EXCEED 100 SQ. FT.
60 MIN. FIRE-RATED GLASS BLOCK ONLY





1 1 Hour Wall

AT EXTERIOR WALL — 1 HOUR FIRE-RESISTIVE CONSTRUCTION (PROPERTY LINE)

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DETAILS

SUBDIVISION: ALTIS @ SERENITY
ADDRESS: 174 SERENE XING
LOT: 291

Issue Date: 10-01-24
Drawn By: ACC

PLAN #: 5919-03

PLAN NAME: OAK HAVEN

SHEET #: D1.1

GENERAL STRUCTURAL NOTES

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES STONE/MARBLE OR WET BED CONSTRUCTED FLOORS - CONTACT M+K FOR EXCLUDED FLOOR DESIGNS)
- PER THE GUIDELINES OF THE TILE COUNCIL OF NORTH AMERICA (TCNA HANDBOOK), IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO VERIFY THAT THE FINISHES TO BE INSTALLED MATCH THE DESIGN CRITERIA NOTED ABOVE (UNDER "DESIGN LOADS") .
- FLOOR SYSTEMS & SHEATHING HAVE BEEN DESIGNED TO SUPPORT ADDITIONAL DEAD LOAD FROM CERAMIC TILE (EXCLUDING MARBLE OR STONE). HOWEVER, IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO PROVIDE PROPER UNDERLAYMENT, UNCOUPLING MEMBRANE AND MORTAR/GROUT PER THE ASSEMBLY DESIGNATIONS IN THE TCNA HANDBOOK (TILE COUNCIL OF NORTH AMERICA).
- AT I-JOIST FLOORS, PROVIDE 1 1/8" MIN. OSB RIM BOARD.
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.
- I-JOIST/TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH. & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR' 24" O.C, EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND
  - 2 ½" x 0.131" NAILS @ 6"O.C. @ PANEL EDGES & @ 12"O.C. FIELD.
  - 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
  - 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD.

ROOF FRAMING

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
  - W/ 2 ½" x 0.131" NAILS @ 6"O.C. @ PANEL EDGES & @ 12" O.C. FIELD.
  - W/ 2 3/8" x 0.120" NAILS @ 4"O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
  - W/ 2 3/8" x 0.113" NAILS @ 3"O.C. @ PANEL EDGES & @ 6" O.C. FIELD.
- WITHIN 48" OF ALL ROOF EDGES, RIDGES, & HIPS FASTEN ROOF SHEATHING FIELDS PER EDGE NAILING SPEC.
- FASTEN EACH ROOF TRUSS TO TOP PLATE W/ SIMPSON H2.5T CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H2.5T CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O.
- ROOF TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BCSI 1 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- SUPPORT SHORT SPAN ROOF TRUSSES w/2x4 LEDGER FASTENED TO FRAMING w/(2) 3" x 0.120" NAILS @ 16" O.C. (UP TO 1' SPAN).

MiK STND. - MAR 2016

CONNECTION SPECIFICATIONS (TYP. U.N.O.)

DESCRIPTION OF BLDG. ELEMENT	3"x0.131" NAILS	3"x0.120" NAILS
JOIST TO SOLE PLATE	(3) TOENAILS	(3) TOENAILS*
SOLE PL. TO JOIST/RIM OR BLK'G	NAILS @ 4" o.c.	NAILS @ 4" o.c.
STUD TO PLATE	(4) TOENAILS/ (3)END NAILS	(4) TOENAILS/ (4)END NAILS*
RIM TO TOP PLATE	TOENAILS @ 6" o.c.	TOENAILS @ 4" o.c.*
BLK'G. BTWN. JOISTS TO TOP PL.	(3) TOENAILS EA. END	(3) TOENAILS EA. END*
DOUBLE STUD	NAILS @ 16" o.c.	NAILS @ 16" o.c.
DOUBLE TOP PLATE	NAILS @ 12" o.c.	NAILS @ 8" o.c.
DOUBLE TOP PLATE LAP SPLICE	(12) NAILS IN LAPPED AREA (24" MIN.)	(15) NAILS IN LAPPED AREA (24" MIN.)
TOP PLATE LAP @ CORNERS & INTERSECTING WALLS	(3) NAILS	(3) NAILS
RAFTER/TRUSS TO TOP PLATE	(4) TOENAILS + (1) SIMPSON H2.5T	(4) TOENAILS + (1) SIMPSON H2.5T
GAB. END TRUSS TO DBL. TOP PL.	TOENAILS @ 8" o.c.	TOENAILS @ 6" o.c.
R.T. W/ HEEL HT. 9 1/4" TO 12"	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 6" O.C.	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 4" O.C.
R.T. W/ HEEL HT. 12" TO 16"	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 6" O.C.	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 4" O.C.
R.T. W/ HEEL HT. UP TO 24"	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C.	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C.*
R.T. W/ HEEL HT. 24" TO 48"	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL*
WALL TO FOUNDATION	WALL SHTG. LAP W/ SILL PL. & FASTENED PER SHEAR WALL FASTENING SPEC.	

* 2½"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. (ONLY ACCEPTABLE WHERE * ARE SHOWN)

GENERAL STRUCTURAL NOTES

DESIGN LOADING

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE.
- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.
- DESIGN LOADS:

ROOF	SNOW = 15 PSF (12 PSF GROUND SNOW, TRUSSES) LIVE = 20 PSF (REDUCIBLE BASED ON ROOF PITCH) DEAD = 7 PSF T.C., 10 PSF B.C. LOAD DURATION FACTOR = 1.25
FLOOR	LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (I-JOISTS), 15 PSF (FLOOR TRUSSES) ADD'L 10 PSF @ CERAMIC TILE IN KITCHEN, SUNROOMS, BATHS, FOYER, LAUND. & MUDRMS
SOIL	2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)
WIND	115 MPH, EXPOSURE B

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE (IRC TABLE R602.3(1)) OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- EXT. & INT. BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SPF/SP #2 GRADE LUMBER, OR BETTER, U.N.O..
  - WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL INTERIOR BEARING WALLS ARE ASSUMED TO BE SHEATHED W/ GYP WALL BOARD (ONE SIDE MIN.) OR PROVIDE MID HT. BLOCKING.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SPF) OR SOUTHERN PINE #2 (SP) LUMBER, OR BETTER. SUPPORT ALL HEADERS/ BEAMS W/ (1)2x JACK STUD & (1)2x KING STUD, MINIMUM.
  - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, U.N.O..
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x 'STUD' GRADE MEMBERS SPACED @ 24" O.C. (MAX., U.N.O.)
  - HEADERS IN NON-LOAD BEARING WALLS SHALL BE: (1)2x4/6 FLAT @ OPENINGS UP TO 4', (2)2x4/6 FLAT UP TO 8'.
- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).
- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING:
  - 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0x10^6 psi
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
  - 'LVL' - Fb=2400 psi; Fc⊥=2500 psi; E=1.8x10^6 psi
- FOR 2 & 3 PLY BEAMS OF EQUAL 1¾" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS ¼"x3½" SIMPSON SDS SCREWS (OR 3½" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES FOR 3-PLY CONDITION. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3 ½" OR 5 ¼" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.
- FOR 4 PLY BEAMS OF EQUAL 1¾" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF ¼"x6" SIMPSON SDS SCREWS (OR 6 ¾" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREWS 2" FROM EDGE. A SOLID 1" BEAM IS ACCEPTABLE.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND./BEARING. BLOCKING TO MATCH POST ABOVE.
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4 CAP & ABW44 BASE, U.N.O.
- CORROSION NOTES:
  - BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.

Lot 291

Elevation B

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE.
- FOOTING DESIGN - 2,000 PSF ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.
- FASTEN 2x4/6 SILL PLATES TO CONC FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
  - 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C.,T" MIN. EMBEDMENT
  - 1/2" DIA. x 6" LONG SIMPSON TITEN HD @ 6'-0" O.C.
  - SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C. (CONCRETE)
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ PERIMETER FOUNDATION SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2.
- BUILDER TO VERIFY CORROSION-RESISTANCE COMPATIBILITY OF HARDWARE & FASTENERS IN CONTACT W/ PRESERVATIVE-TREATED WOOD. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.
- FOOTINGS SHALL BE PLAIN CONCRETE, U.N.O.
- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
  - f'c = 3,000 psi: ..... FOOTINGS & INTERIOR SLABS ON GRADE
  - 3,500 psi: ..... GARAGE & EXTERIOR SLABS ON GRADE
  - fy = 60,000 psi
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE (TYP.) OR 12" MIN IN REGIONS WHERE CODE FROST DEPTH IS NOT APPLICABLE. CONSULT SOILS REPORT OR BUILDING DEPT. FOR MINIMUM DEPTH BELOW GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP.
  - JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMUM)
  - JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
  - CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SLABS
- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

MiK STND. - MAY 2012

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON CS16 STRAP TIE W/ 14" END LENGTH
HD-2	SIMPSON MSTC66 STRAP TIE W/ 24" END LENGTH
HD-3	SIMPSON HTT4 HOLD-DOWN *
HD-4	SIMPSON HDU5-SDS2.5 HOLD-DOWN *
HD-5	SIMPSON STHD14RJ HOLD-DOWN *

* UTILIZE SIMPSON "SET-3G" EPOXY SYSTEM TO FASTEN ⅝" DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 12" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 ¾" OF EDGE OF FOUNDATION.

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x¼"
	3 FT. MAX	L3"x3"x¼"
6'-0"	12 FT. MAX	L4"x3"x¼"
	20 FT. MAX	L5"x3½"x⅝"
8'-0"	3 FT. MAX	L4"x4"x¼" *
	12 FT. MAX	L5"x3½"x⅝"
	16 FT. MAX	L6"x3½"x⅝"
12'-6"	12 FT. MAX	L6"x3½"x⅝"
16'-0"	2 FT. MAX	L7"x4"x½" **
	3 FT. MAX	L8"x4"x½" **

ALL LINTELS:
- SHALL SUPPORT 2 ⅝" - 3½" VENEER W/ 40 psf MAXIMUM WEIGHT.
< 16' SHALL HAVE 4" MIN. BEARING
>= 16' SHALL HAVE 8" MIN. BEARING
< 16' SHALL NOT BE FASTENED BACK TO HEADER.
>= 16' SHALL BE FASTENED BACK TO WOOD HEADER IN WALL @48"o.c. W/ ½" DIA. x 3 ½" LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES.
- MAX. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.
- ALL LINTELS SHALL BE LONG LEG VERTICAL.
- WHEN SUPPORTING VENEER < 9" HIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3 ½" HIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT FINISHING.
- SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS.
* FOR QUEEN VENEER USE L4x3½"
** FOR 3½" VENEER ONLY. SEE PLAN FOR VENEER SUPPORT IF VENEER < 3½" THICK.

MiK STND. - MAY 2016

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO M+K FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

TRUSSES/JOISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUSH BEAMS DO NOT EXCEED THE FOLLOWING:

A. ROOF TRUSSES:
   1/4" DEAD LOAD
B. FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:
   1/8" DEAD LOAD

ABSOLUTE DEAD LOAD DEFECTION OF FLOOR TRUSSES/ATTIC TRUSSES WHEN ADJACENT TO FLOOR FRAMING BY OTHERS SHALL BE LIMITED TO 3/16". (NOT DIFFERENTIAL DEFLECTION)

FLOOR JOIST NOTES

- ALL FLOOR JOISTS SHALL BE THE DEPTH SPECIFIED ON PLAN
- FLOOR JOISTS SERIES & SPACING IS PER THE FLOOR JOIST MANUF.
  - SPACING SHALL NOT EXCEED 19.2" O.C. (MAX.)
  - @ LOCATION OF TILE: SPACING SHALL NOT EXCEED 16" O.C. (MAX.)

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:

115 MPH WIND IN 2018 NCSBC:RC

(115 MPH WIND SPEED IN ASCE 7-10 WIND MAP, PER IRC R301.2.1.1) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1604) & ASCE 7-10, AS PERMITTED BY R301.1.3 OF THE 2018 NCSBC:RC. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBC:RC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5† R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD:
  FASTEN SHEATHING W/ 2 3/8"x0.113 NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP, U.N.O.)
- ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUDS) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 ¾" 16 GA STAPLES (⅞" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C IN FIELD.

3" O.C. EDGE NAILING

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W/ 2 3/8" x 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE PANEL FIELD NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUD) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

TYP. UNIT SEPARATION WALL SHEATHING SPECIFICATION

- 1/2" OR 5/8" GYPSUM WALL BOARD:
  FASTEN GWB SHEATHING TO FRAMING W/ 1 3/8"x0.086" COOLER NAILS OR 1 ¼" DRYWALL SCREWS @ 7" O.C. TO PANEL EDGES & PANEL FIELD (INCLUDING T&B PLATES).

NOTES

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING. IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT WILL BE SPECIFICALLY NOTED ON PLAN.
- DESIGN ASSUMES 16" O.C MAX. STUD SPACING, U.N.O.
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS:
  FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

- - - INDICATES EXTENT OF INT. OSB SHEARWALL, BLOCKED PANEL EDGES, AND/OR 3" O.C. EDGE NAILING

▶ INDICATES HOLDOWN

MiK STND. - MAR 2016

seal:

5/16/25

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 47622 ... SHALL BE SEALED

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Mulhern+Kulp project number: 243-24029

project mgr: SMK
drawn by: MEG
issue date: 08-14-2024

REVISIONS:

date:	initial:
11/06/2024 UPDATED MODEL NAME, OPT. EXT. GOV'D. PORCH, OPT. OFFICE	SMM
12/16/2024 ADDED DORMER TO ELEV. D	MEM
5/15/2025 MISC. ARCH. UPDATE	JPP

tri pointe HOMES

GENERAL NOTES

5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

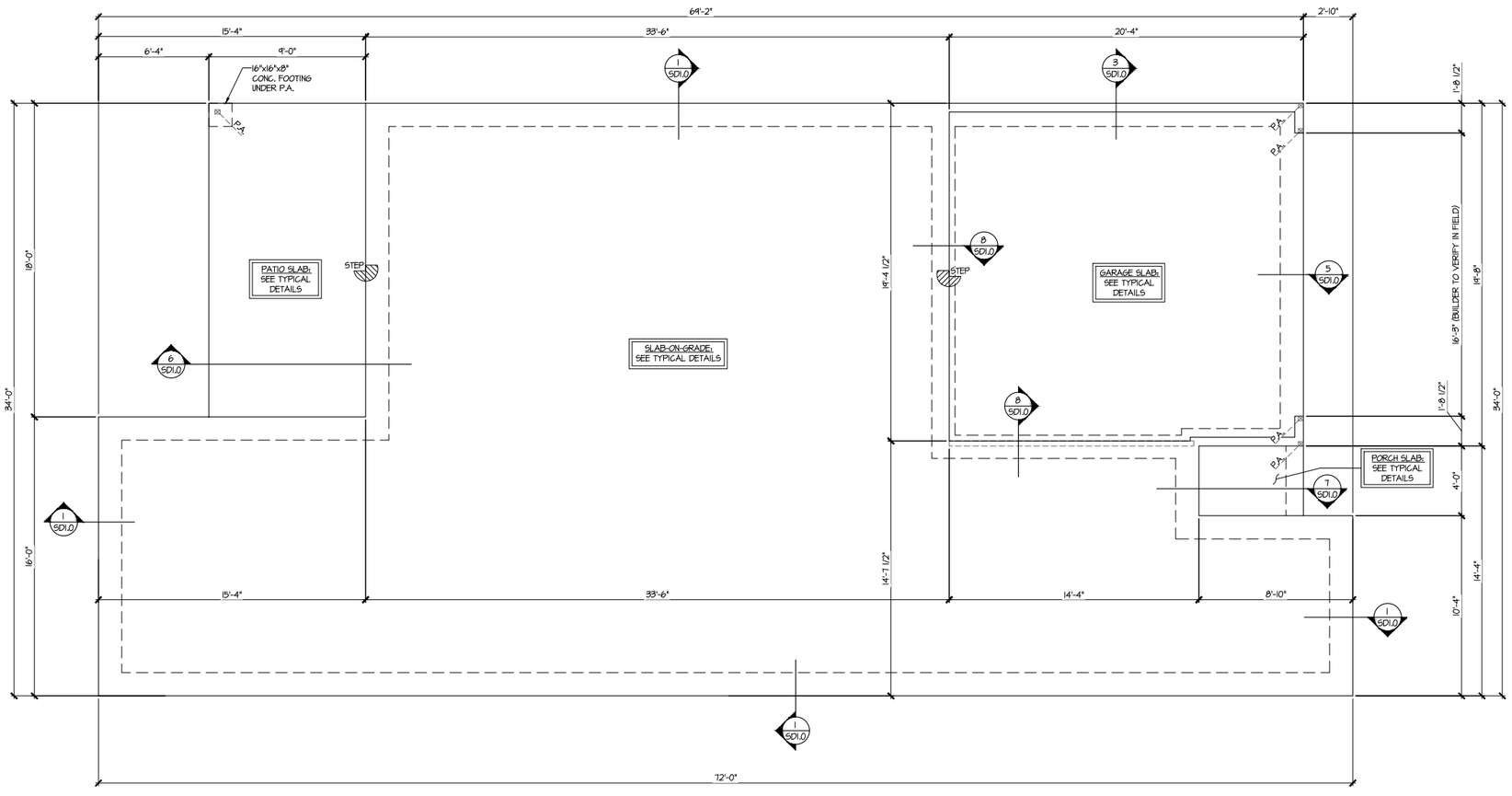
sheet:

S0.0

Lot 291

Elevation B

See S1.1 for Elevation B Specific Details



1 SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET)

ELEV. A

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM / HEADER
- INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
- V.T.O.F. EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
- EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
- INDICATES HOLDDOWN
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

seal: 5/16/25

NORTH CAROLINA PROFESSIONAL SEAL 047622 ENGINEER SHAWN KEITH MULHERN

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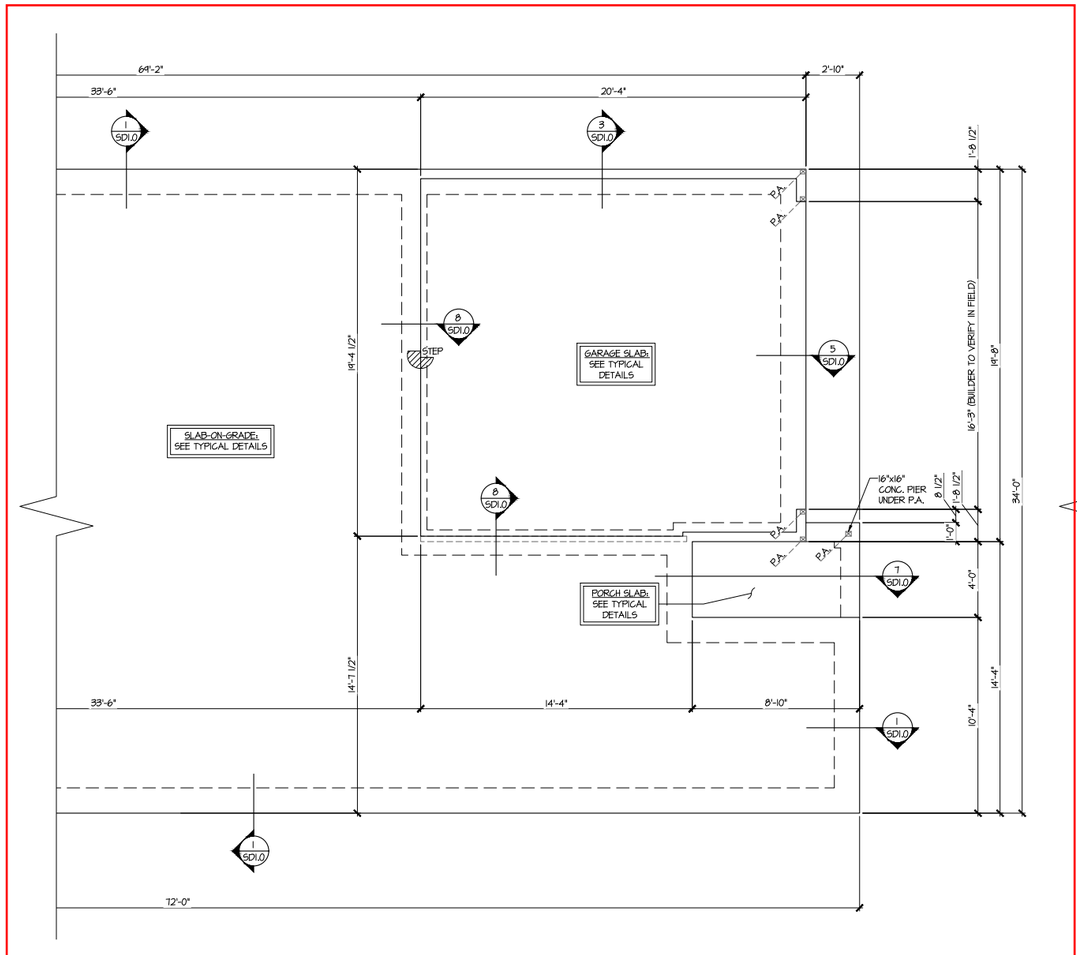
FOUNDATION PLAN

5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

sheet: S1.0

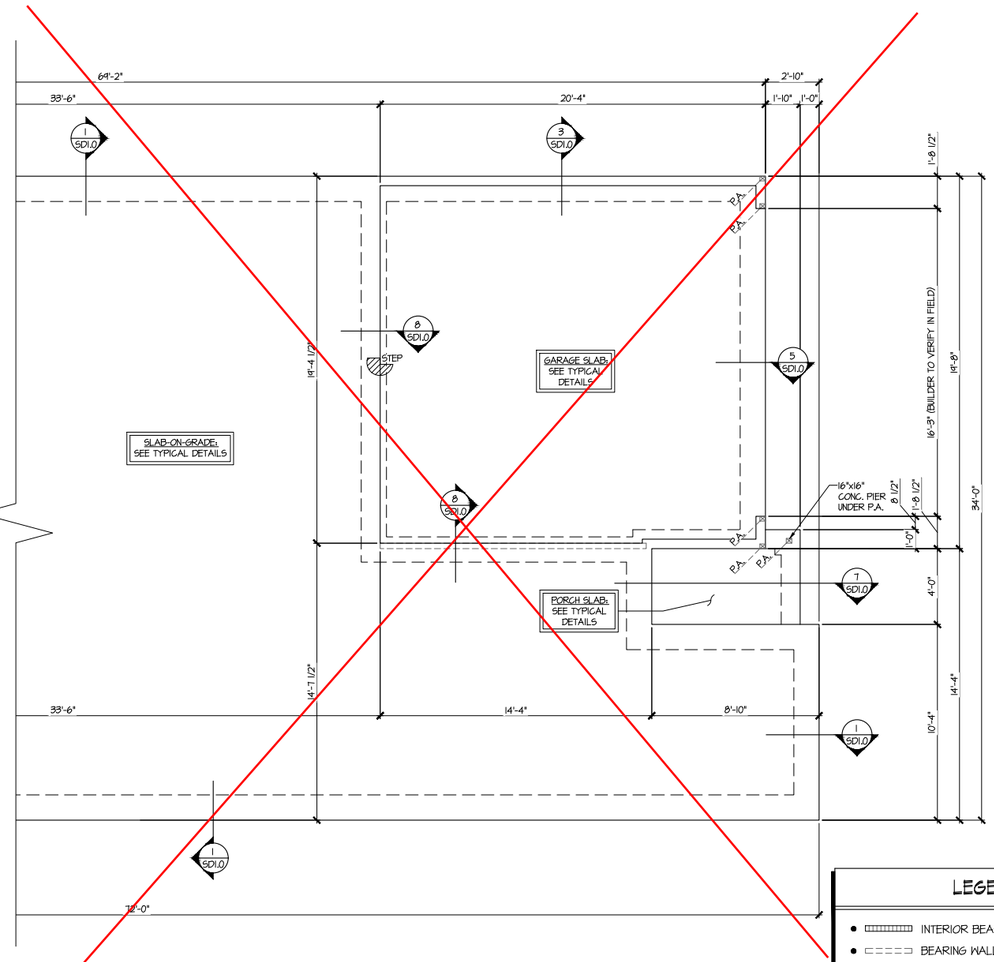
Lot 291

Elevation B



1 PARTIAL SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET) ELEV. B SEE ELEV. A FOR MORE INFO



2 PARTIAL SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET) ELEV. C SEE ELEV. A FOR MORE INFO

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM / HEADER
- INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
- V1.0 F EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
- EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
- INDICATES HOLDOWN
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

seal: 5/16/25

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5/15/2025 MISC. ARCH. UPDATE	JPP

tri pointe HOMES

FOUNDATION PLAN

5919-03 MODEL

SERENITY

MASTER SET

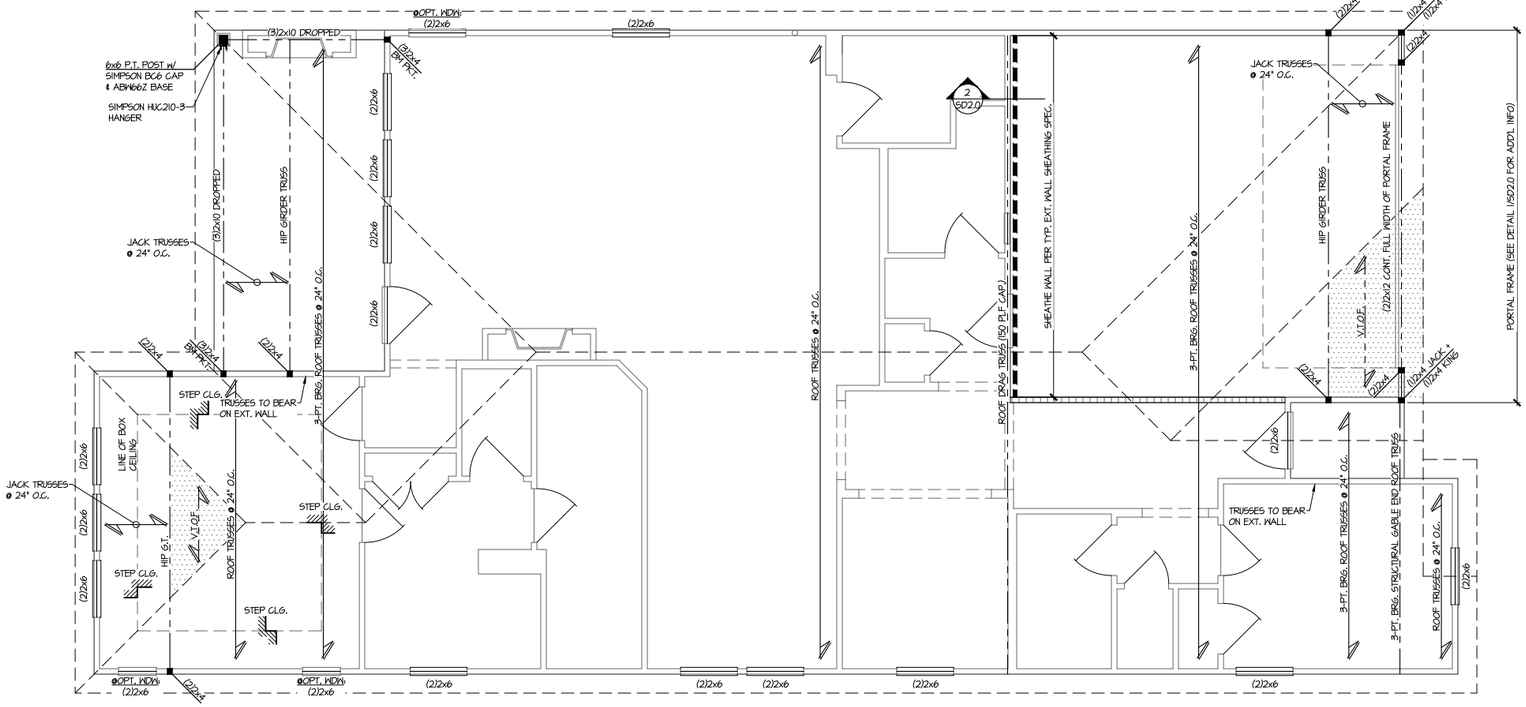
RALEIGH, NC

sheet: S1.1

Lot 291

Elevation B

See S2.1 for Elevation B Specific Details



ROOF FRAMING PLAN

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET)

ELEV. A

THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM / HEADER
- INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
- V.T.O.F. EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
- EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
- INDICATES HOLDOWN
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

seal: 5/16/25

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5/15/2025 MISC. ARCH. UPDATE	JPP

tri pointe HOMES

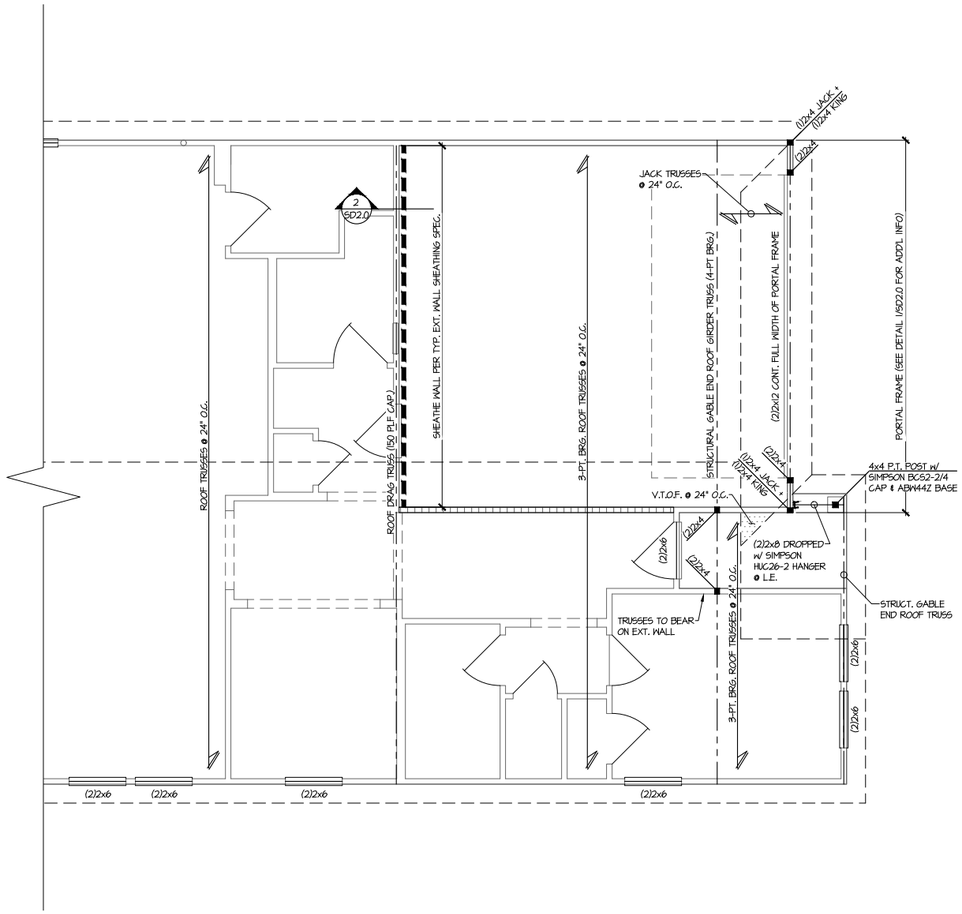
ROOF FRAMING PLAN

5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

sheet: S2.0

Lot 291

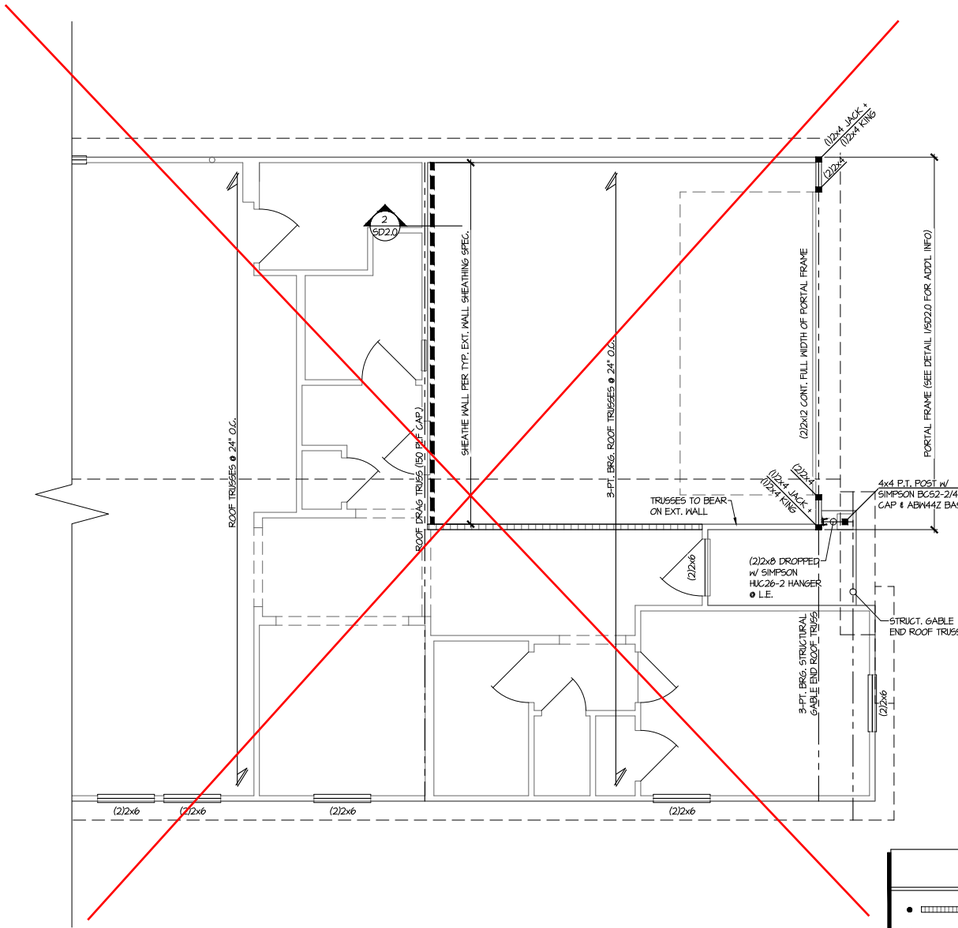
Elevation B



1 PARTIAL ROOF FRAMING PLAN

SCALE: 1/4"=1'-0" (22x24 SHEET)
1/8"=1'-0" (11x17 SHEET)

ELEV. B
SEE ELEV. A FOR MORE INFO



2 PARTIAL ROOF FRAMING PLAN

SCALE: 1/4"=1'-0" (22x24 SHEET)
1/8"=1'-0" (11x17 SHEET)

ELEV. C
SEE ELEV. A FOR MORE INFO

THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM / HEADER
- INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
- V.T.O.F. EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
- EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
- INDICATES HOLDOWN
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

seal: 6/11/25

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5/15/2025 MISC. ARCH. UPDATE	JPP

tri pointe HOMES

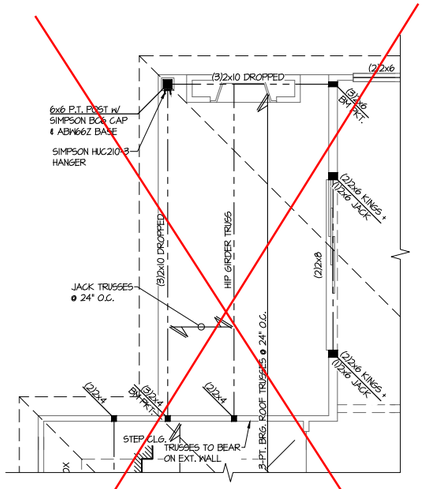
ROOF FRAMING PLAN

5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

sheet:
S2.1

Lot 291

Elevation B

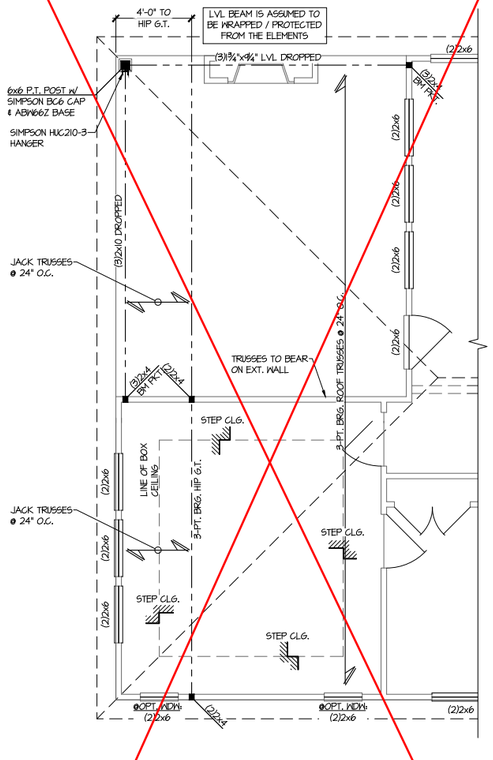


PARTIAL ROOF FRAMING PLAN
OPT. 9080 MULTI SLIDE DOOR

1

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET)

ELEV. A SHOWN. ALL ELEV. SIM.

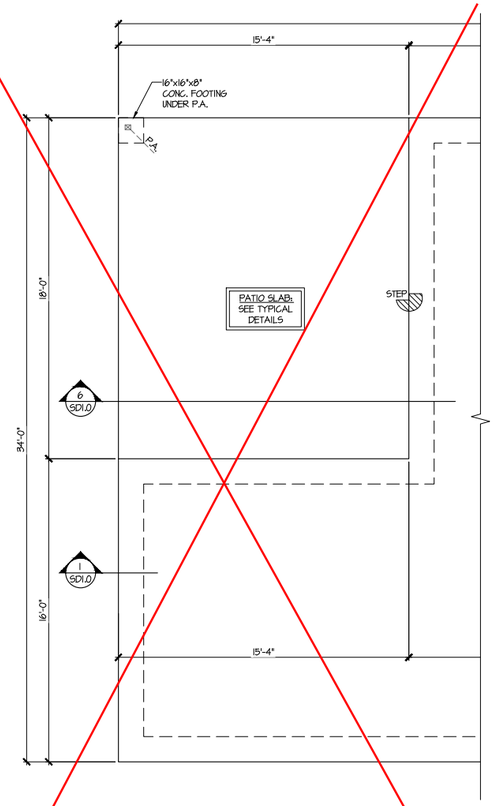


PARTIAL ROOF FRAMING PLAN
OPT. EXT. COVERED PORCH

2

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET)

ELEV. A ALL ELEV. SIM. OPT. SCREENED EXTENDED COVERED OUTDOOR LIVING SIM.

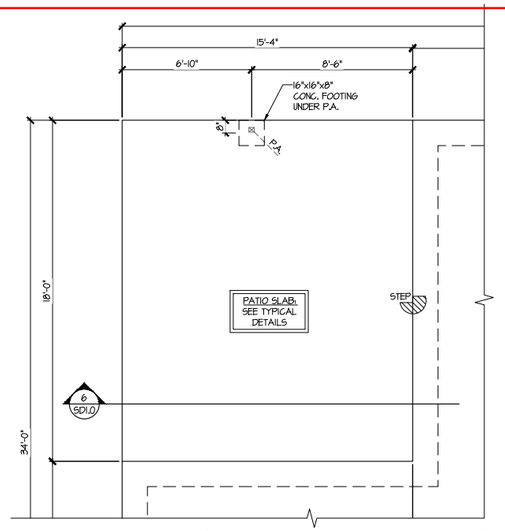


PARTIAL SLAB FOUNDATION PLAN
OPT. EXT. COVERED PORCH

3

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET)

ELEV. A ALL ELEV. SIM.



PARTIAL SLAB FOUNDATION PLAN
OPT. OUTDOOR LIVING PATIO

4

SCALE: 1/4"=1'-0" (22x24 SHEET) 1/8"=1'-0" (11x17 SHEET)

ELEV. A SHOWN. ALL ELEV. SIM.

Optional Outdoor Living Patio is Only Outdoor Option Selected

THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM / HEADER
- INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
- V.I.O.F. EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
- EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
- INDICATES HOLDDOWN
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

seal: 6/11/25

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047622 SHAUN M. FEIDEN

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3655 Brookside Parkway, Suite 250 • Alpharetta, GA 30022
p.770-777-0874 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 243-24029

project mgr: SMK
drawn by: MEG
issue date: 08-14-2024

REVISIONS:

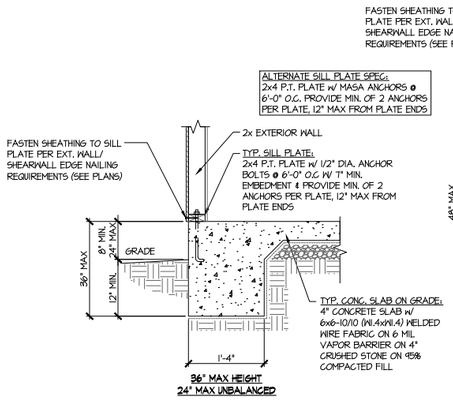
date:	initial:
11/06/2024 UPDATED MODEL NAME, OPT. EXT. COVD. PORCH, OPT. OFFICE	SMM
12/16/2024 ADDED DORMER TO ELEV. D	MEM
5/15/2025 MISC. ARCH. UPDATE	JPP

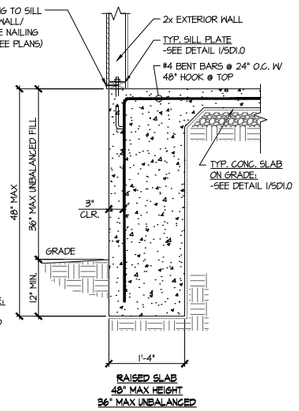
tri pointe HOMES

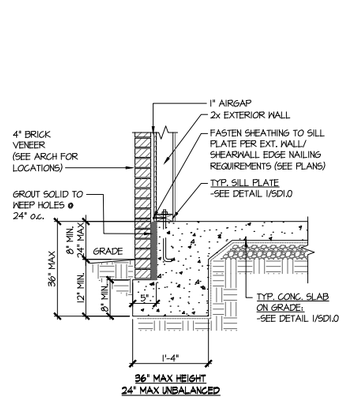
OPTION FRAMING PLANS

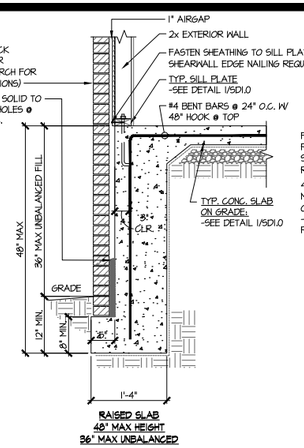
5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

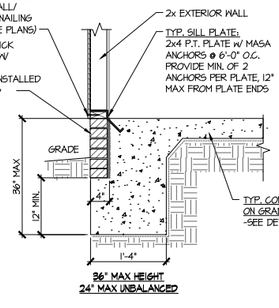
sheet: S3.0

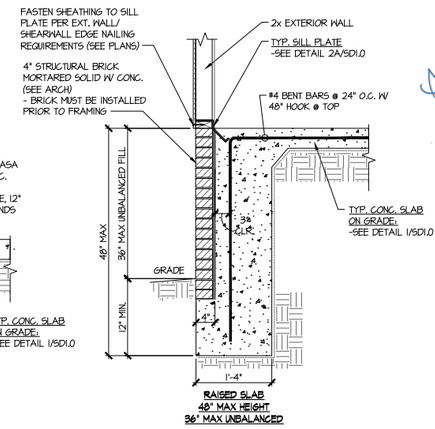






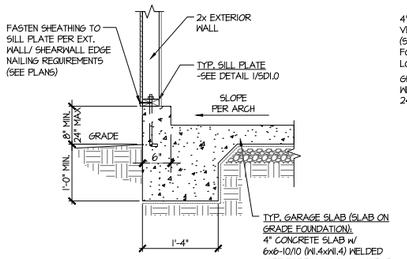






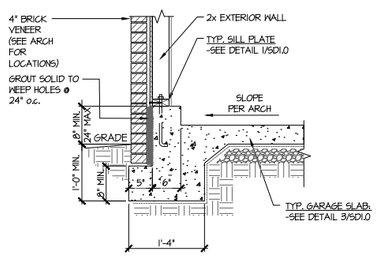
1 TYPICAL TURNDOWN @ EXT. WALL

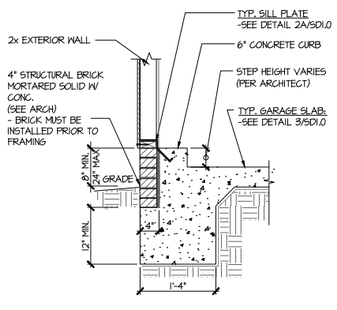
SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)

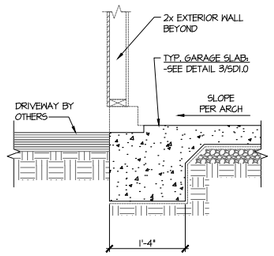


2 TYPICAL TURNDOWN @ EXT. WALL (BRICK)

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)

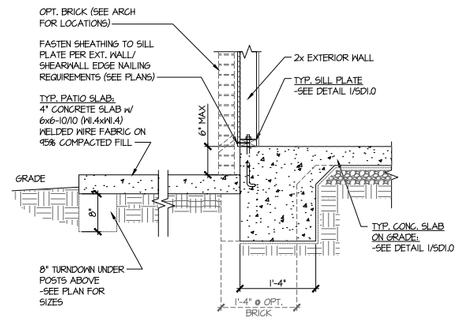






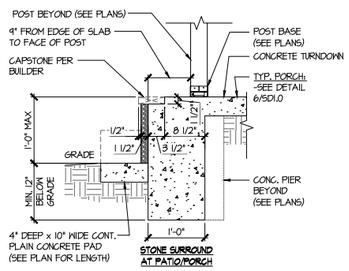
2A TYPICAL TURNDOWN @ EXT. WALL (FLUSH BRICK)

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)



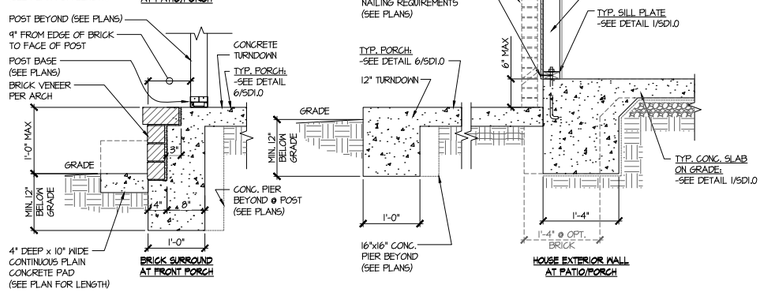
3 TYPICAL TURNDOWN @ EXT. GARAGE WALL

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)



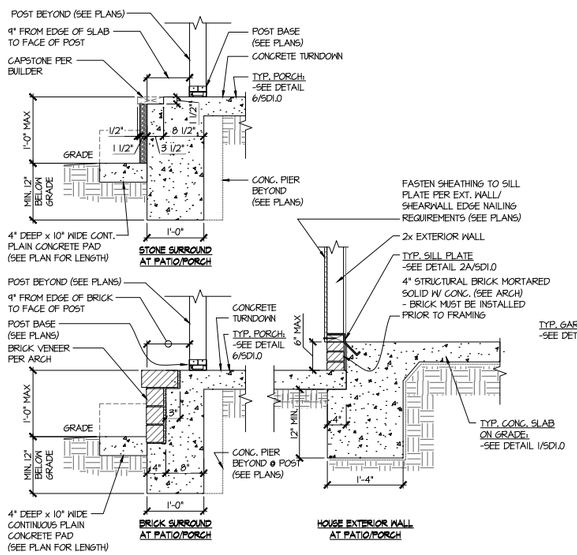
4 TYPICAL TURNDOWN @ EXT. GARAGE WALL (BRICK)

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)



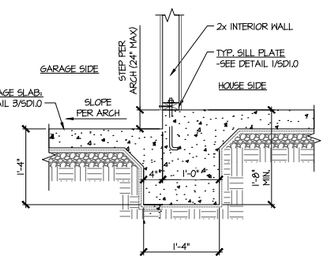
4A TYPICAL TURNDOWN @ EXT. GARAGE WALL (FLUSH BRICK)

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)



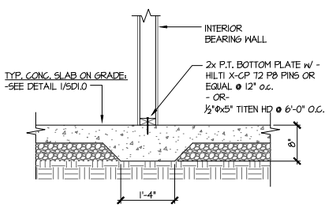
5 GARAGE OPENING

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)



6 TYPICAL TURNDOWN @ REAR PATIO

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)



7 TYPICAL TURNDOWN @ FRONT PORCH

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)

7A TYPICAL TURNDOWN PATIO/PORCH (FLUSH BRICK)

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)

8 TYPICAL INT. FOOTING BETWEEN HOUSE & GARAGE

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)

9 TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL

SCALE: 3/4"=1'-0" (22x34 SHEETS)
SCALE: 3/8"=1'-0" (11x17 SHEETS)

seal: 5/16/25

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 47622 SHAWN M. SHEDDEN

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Mulhern+Kulp project number: 243-24029

project mgr:	SMK
drawn by:	MEG
issue date:	08-14-2024

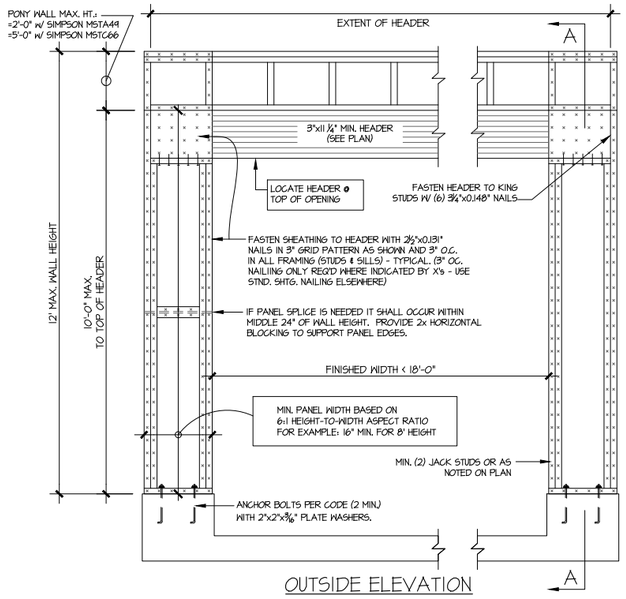
REVISIONS:

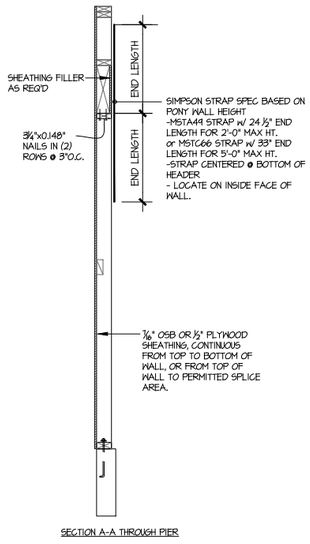
date:	initial:
11/06/2024 UPDATED MODEL NAME, OPT. EXT. GOV'D, PORCH, OPT. OFFICE	SMM
12/16/2024 ADDED DORMER TO ELEV. D	MEM
5/15/2025 MISC. ARCH. UPDATE	JPP

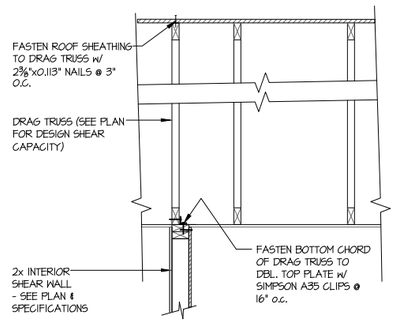
tri pointe HOMES

FOUNDATION DETAILS
5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

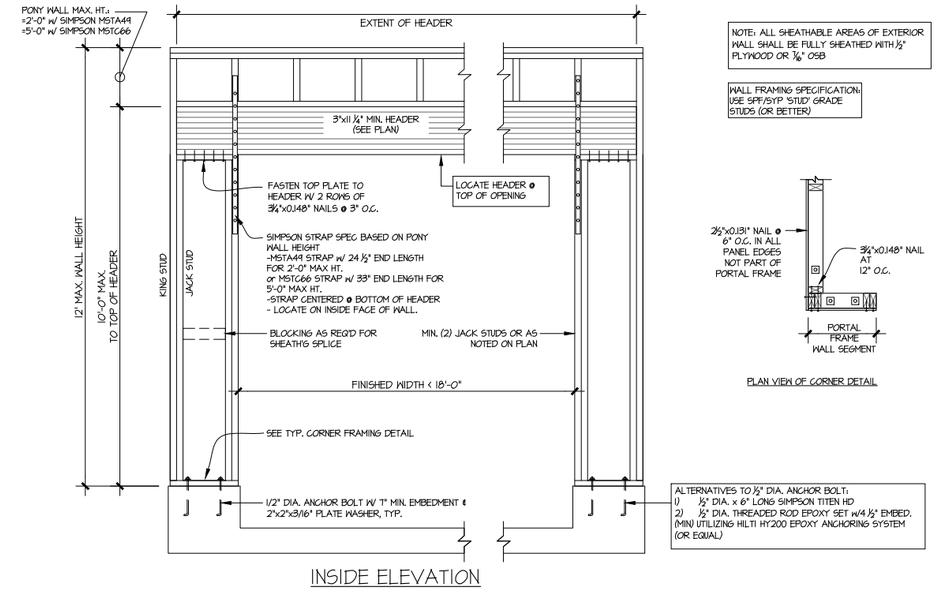
sheet: SD1.0







2 INTERIOR DRAG TRUSS DETAIL
SCALE: 3/4"=1'-0"



PLAN VIEW OF CORNER DETAIL

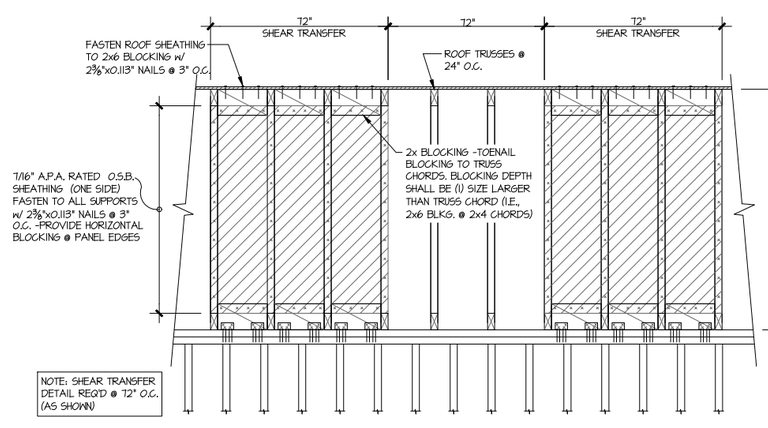
NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH ½" PLYWOOD OR 7/16" OSB

WALL FRAMING SPECIFICATION: USE SPF/SYP 'STUD' GRADE STUDS (OR BETTER)

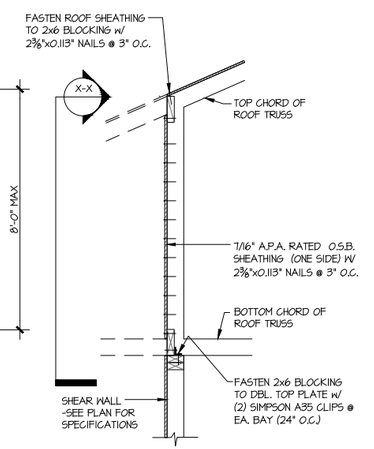
ALTERNATIVES TO ½" DIA. ANCHOR BOLT:
1) ½" DIA. x 6" LONG SIMPSON TITEN HD
2) ½" DIA. THREADED ROD EPOXY SET w/4 ½" EMBED. (MIN) UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM (OR EQUAL)

1 GARAGE PORTAL FRAME BRACING ELEVATION
SCALE: N.T.S.

BOTH SIDES OF GARAGE DOOR
115 MPH WIND SPEED (ULT)



TYPICAL SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL
X-X SCALE: 3/4"=1'-0"



TYPICAL SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL
3 SCALE: 3/4"=1'-0"

seal: 5/16/25
NORTH CAROLINA PROFESSIONAL SEAL 047622 ENGINEER SHAWN KEITH SNIDER

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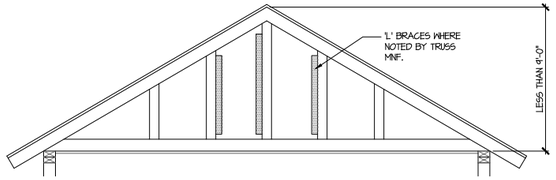
5/15/2025 MISC. ARCH. UPDATE	JPP

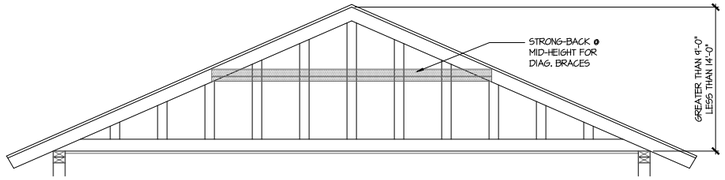
tri pointe HOMES

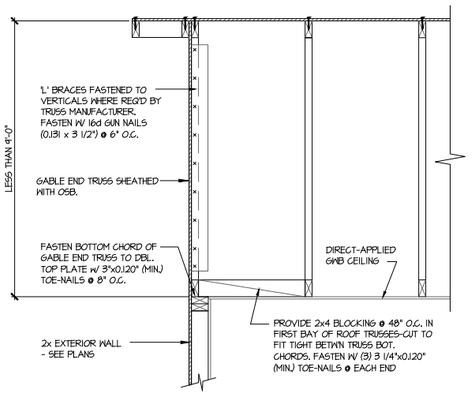
FRAMING DETAILS

5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

sheet: SD2.0

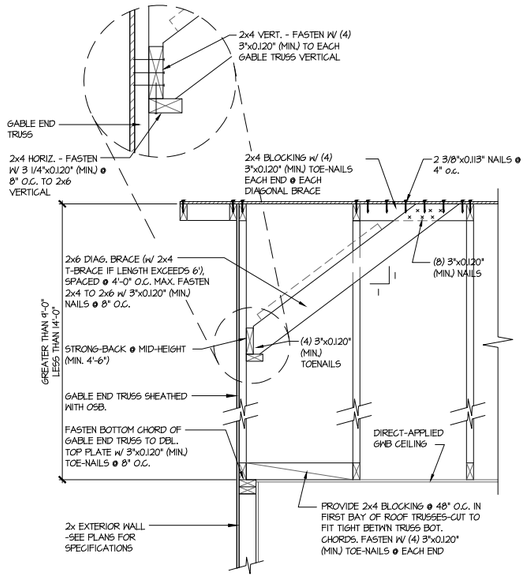






A TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D @ GABLE END TRUSS HEIGHT UP TO 9'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT IS LESS THAN 9'-0". 'L' BRACES REQUIRED WHERE NOTED BY TRUSS MANUFACTURER.



B TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D @ GABLE END TRUSS HEIGHT BETWN 9'-0" TO 14'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT EXCEEDS 9'-0". 'L' BRACES NOT REQUIRED.

seal: 5/16/25

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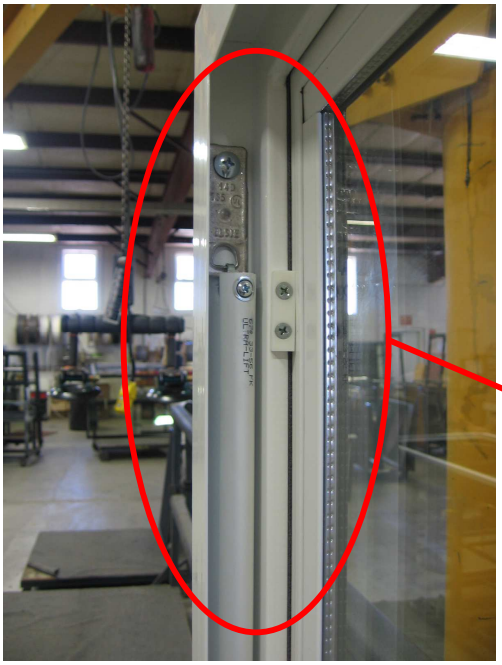
tri pointe HOMES

FRAMING DETAILS

5919-03 MODEL
SERENITY
MASTER SET
RALEIGH, NC

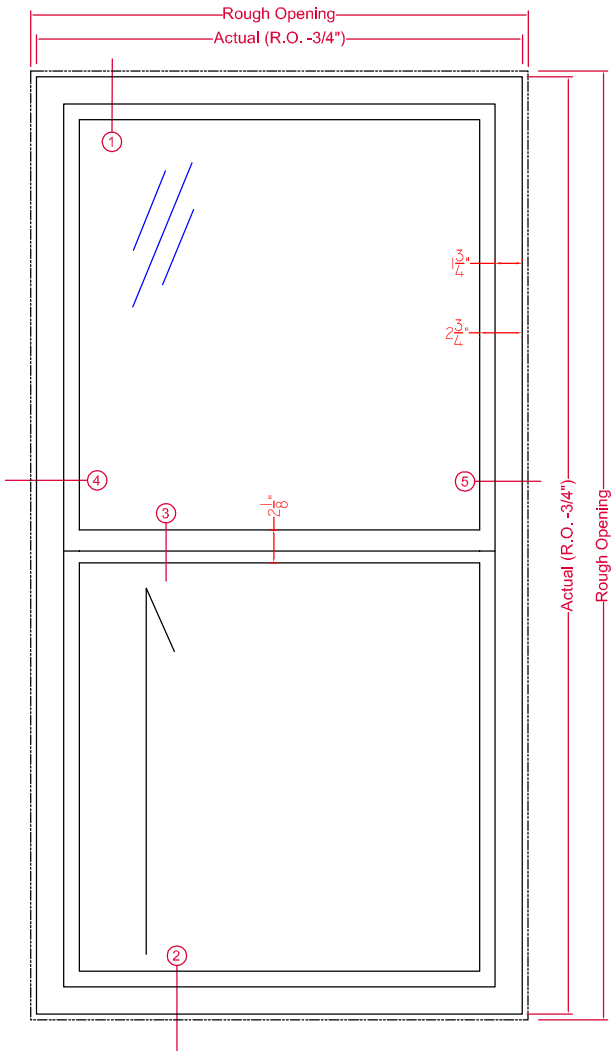
sheet:
SD2.1

925 Single Hung



Fusible Link with
Attached Balance Spring

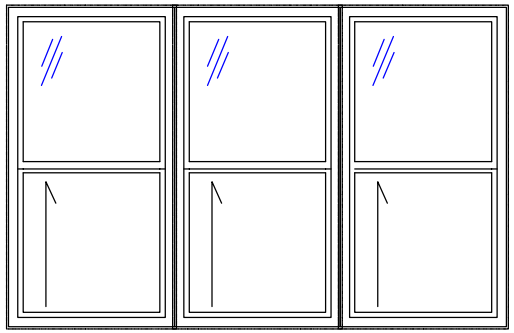
Latch and Handle



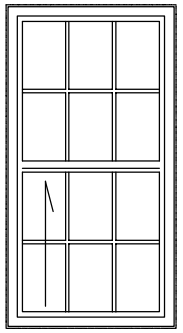
Typical Exterior Elevation

Fyre-Tec Series 925 Single Hung Window

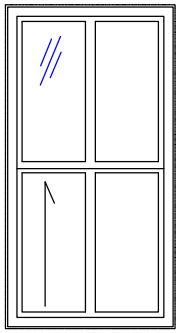
45- or 60-Minute UL Rated



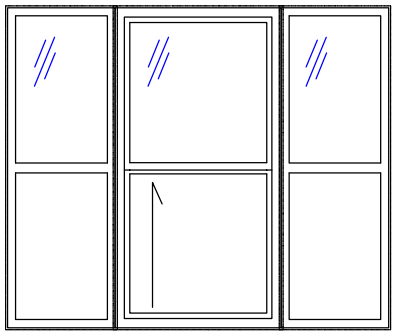
Mulled with Zero Vertical Mullions



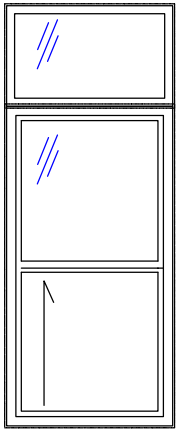
Internal 5/8" Grids In IGU



True Muntins

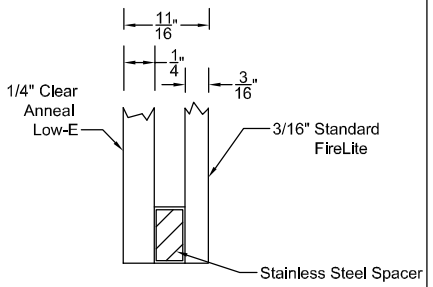


Mulled with Zero Vertical Mullions and Series 950 Fixed Lites



Mulled with Series 950 Transom

Typical IGU Makeup

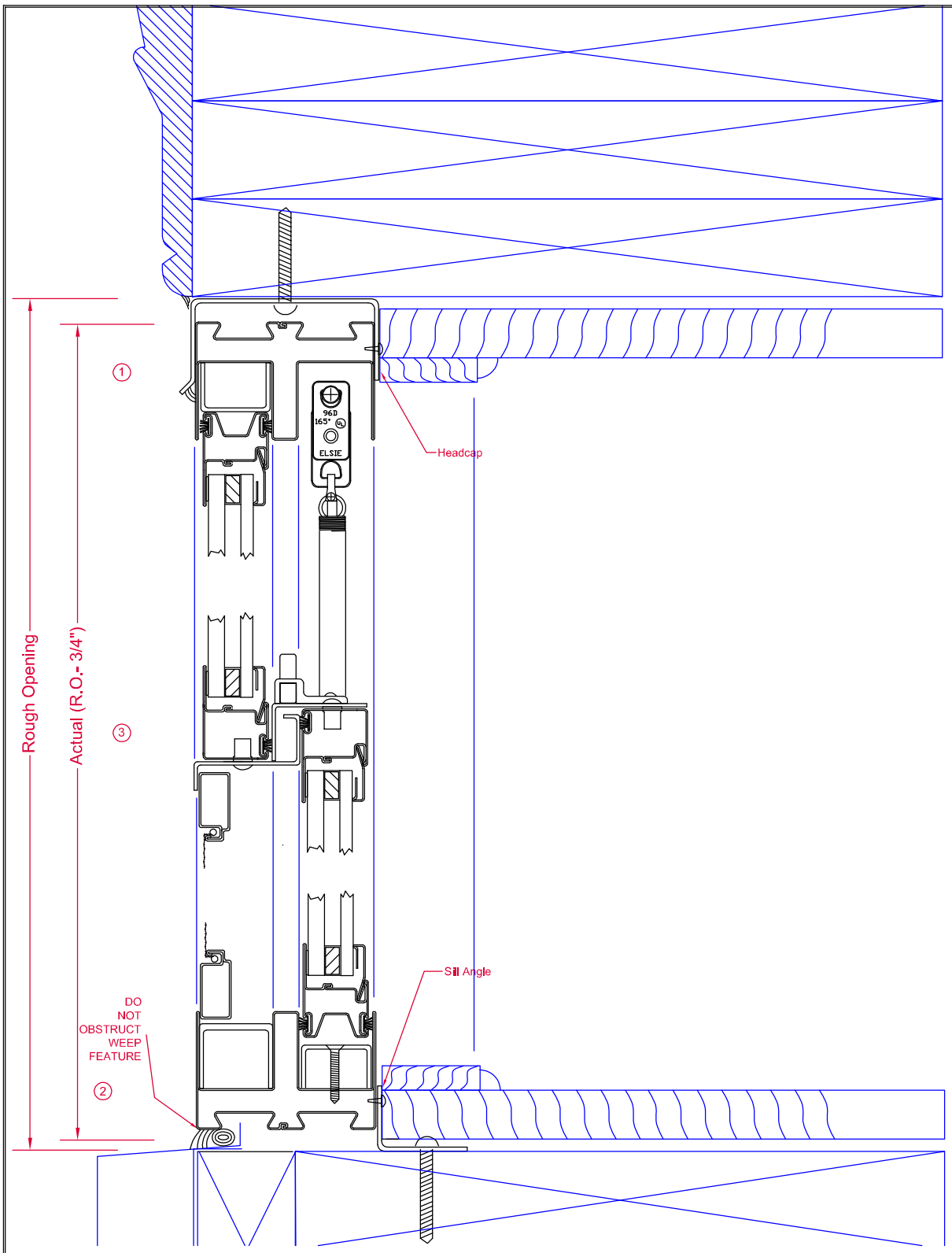


May include 1 hour UL rated ceramic with 1/4" clear anneal Low-E. Many other combinations are available depending on the reqirements for safety glazing or U-values. Wireglass IGU available.

See Fire-Rated Glazing Section for various options and configurations for U.L. labeled glazing.

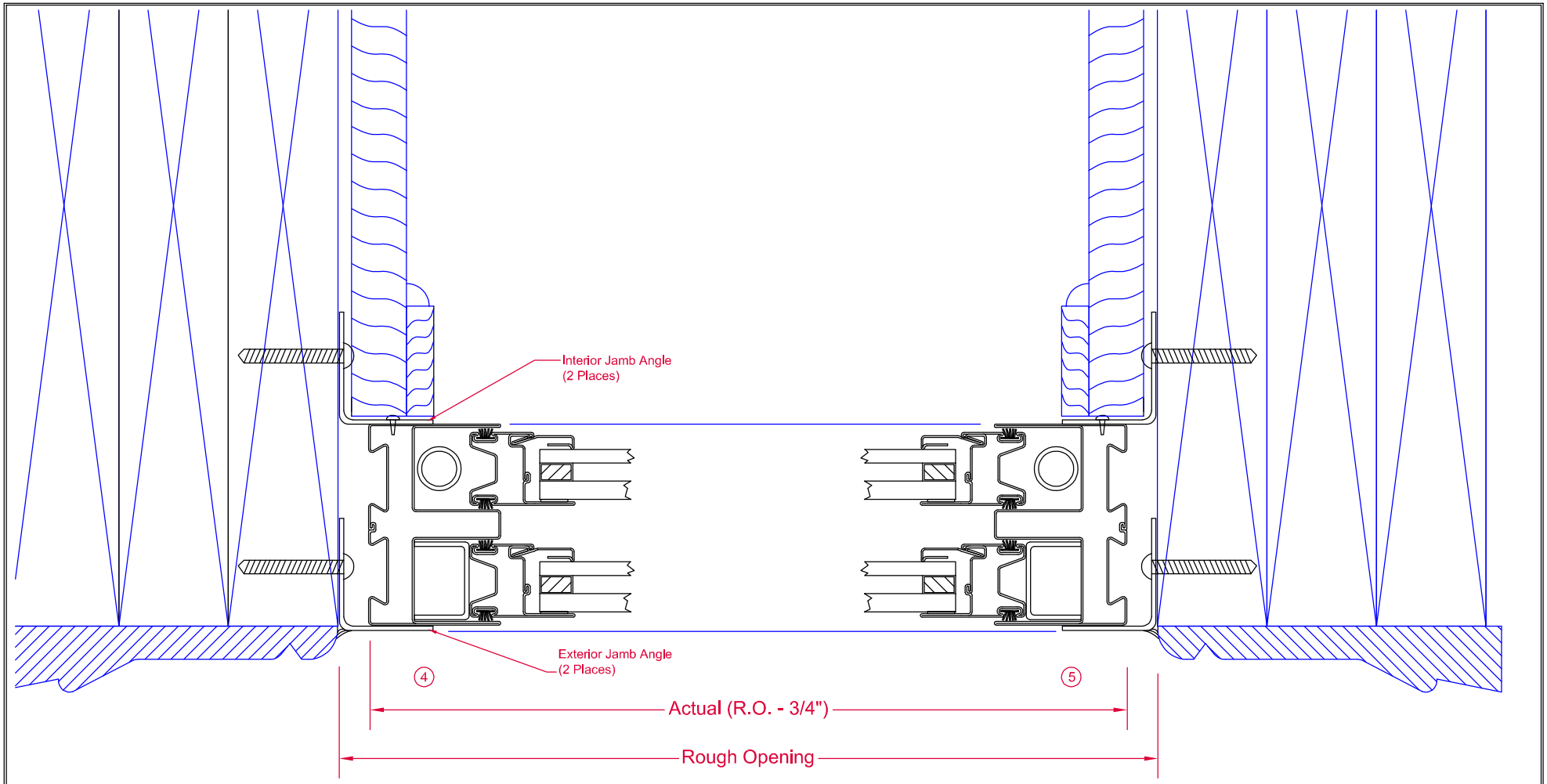
925 SINGLE HUNG - SUBFRAME INSTALLATION

DWN BY: JDD	FYRE-TEC
CK'D BY:	P.O. Box 278, 701 Centennial Road Wayne, NE 68787
DATE: 11-30-2015	
TOLERANCE: 1. FRACTIONS ±1/16 2. DECIMALS +- .0625 3. ANGLES +- 1/2 DEGREE EXCEPT AS NOTED	
MAT'L	SCALE: 1:8
PAGE: 1/3	DWG NO. MODEL 925



HEAD/SILL-SUBFRAME

DWN BY: JDD	FYRE-TEC
CK'D BY:	P.O. Box 278, 701 Centennial Road Wayne, NE 68787
DATE: 11-30-2015	
TOLERANCE: 1. FRACTIONS ±1/16 2. DECIMALS +- .0625 3. ANGLES +- 1/2 DEGREE EXCEPT AS NOTED	
MAT'L	SCALE: 1:1.5
PAGE: 2/3	DWG No. MODEL 925

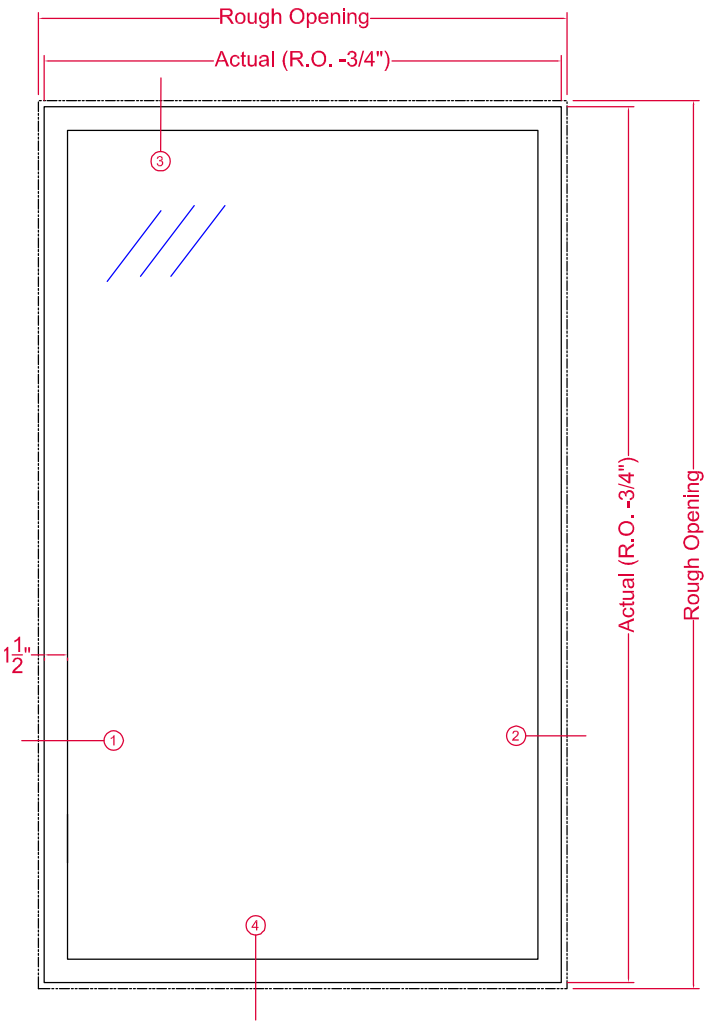


JAMB - SUBFRAME INSTALLATION KIT

DWN BY	JDD
CK'D BY	
DATE	11-30-2015
SCALE	1:1.5
PAGE	3/3
DWG NO.	MODEL 925
MATL	

TOLERANCE:
1. FRACTIONS ±1/16
2. DECIMALS +- .0625
3. ANGLES +- 1/2 DEGREE
EXCEPT AS NOTED

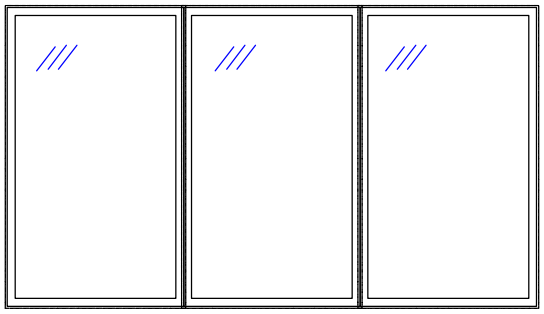
FYRE-TEC
P.O. Box 278, 701 Centennial Road
Wayne, NE 68787



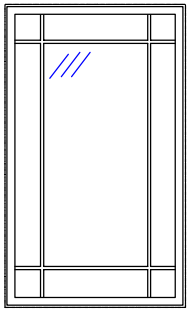
Typical Exterior Elevation

Fyre-Tec Series 950 Fixed Lite Window

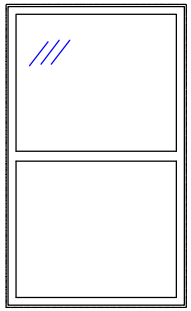
45- or 60-Minute UL Rated



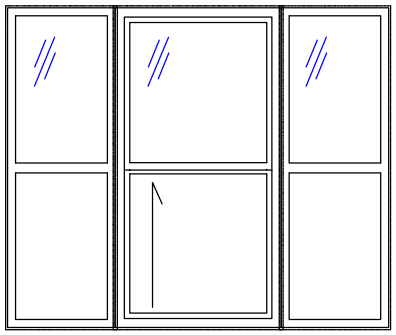
Mulled with Zero Vertical Mullions



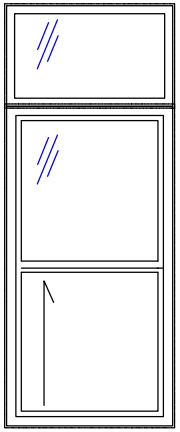
Internal 5/8" Grids In IGU



True Muntins

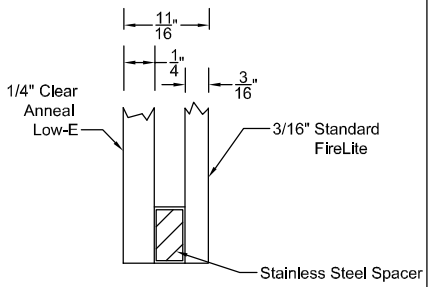


Mulled with Zero Vertical Mullions and Series 925 Single Hung



Transom Mulled Over 925 Single Hung

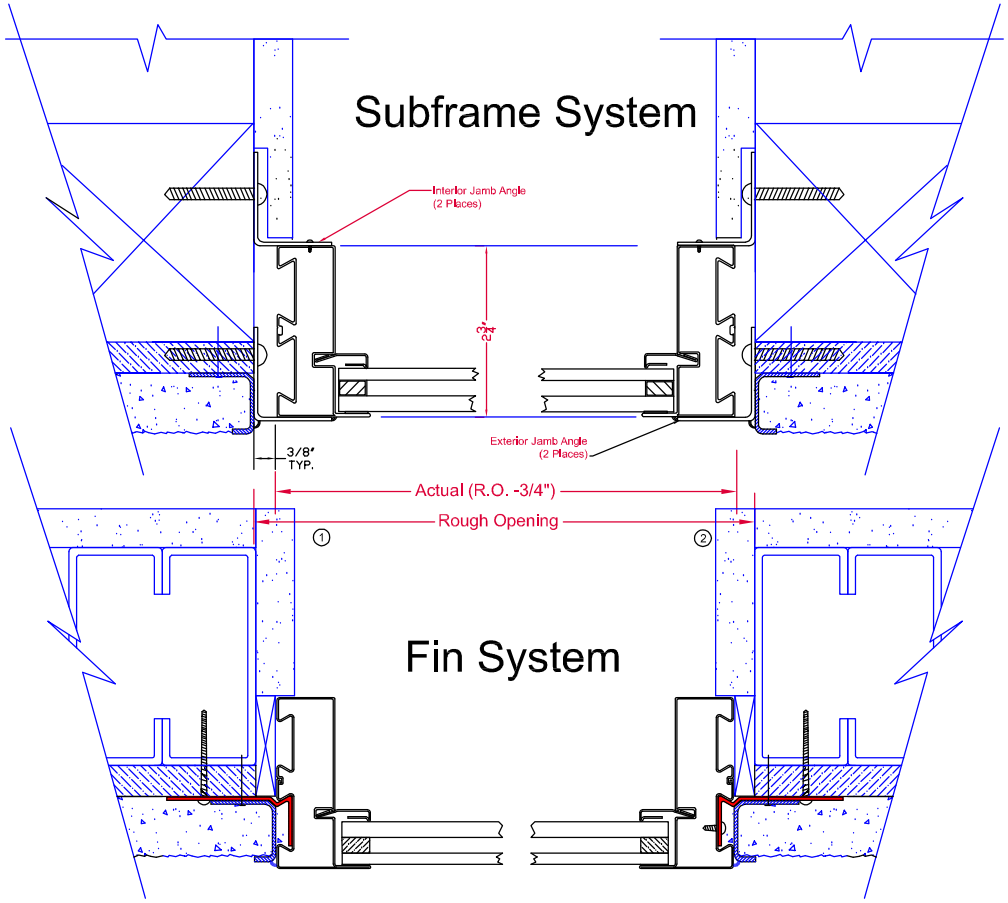
Typical IGU Makeup



May include 1 hour UL rated ceramic with 1/4" clear anneal Low-E. Many other combinations are available depending on the reqirements for safety glazing or U-values. Wireglass IGU available.

Series 950 Fixed Lite Window

DWN BY: JDD	FYRE-TEC
CK'D BY:	P.O. Box 278, 701 Centennial Road Wayne, NE 68787
DATE: 11-30-2015	
TOLERANCE: 1. FRACTIONS ±1/16 2. DECIMALS +- .0625 3. ANGLES +- 1/2 DEGREE EXCEPT AS NOTED	
MAT'L	SCALE: 1:8
PAGE: 1/3	DWG NO. MODEL 950

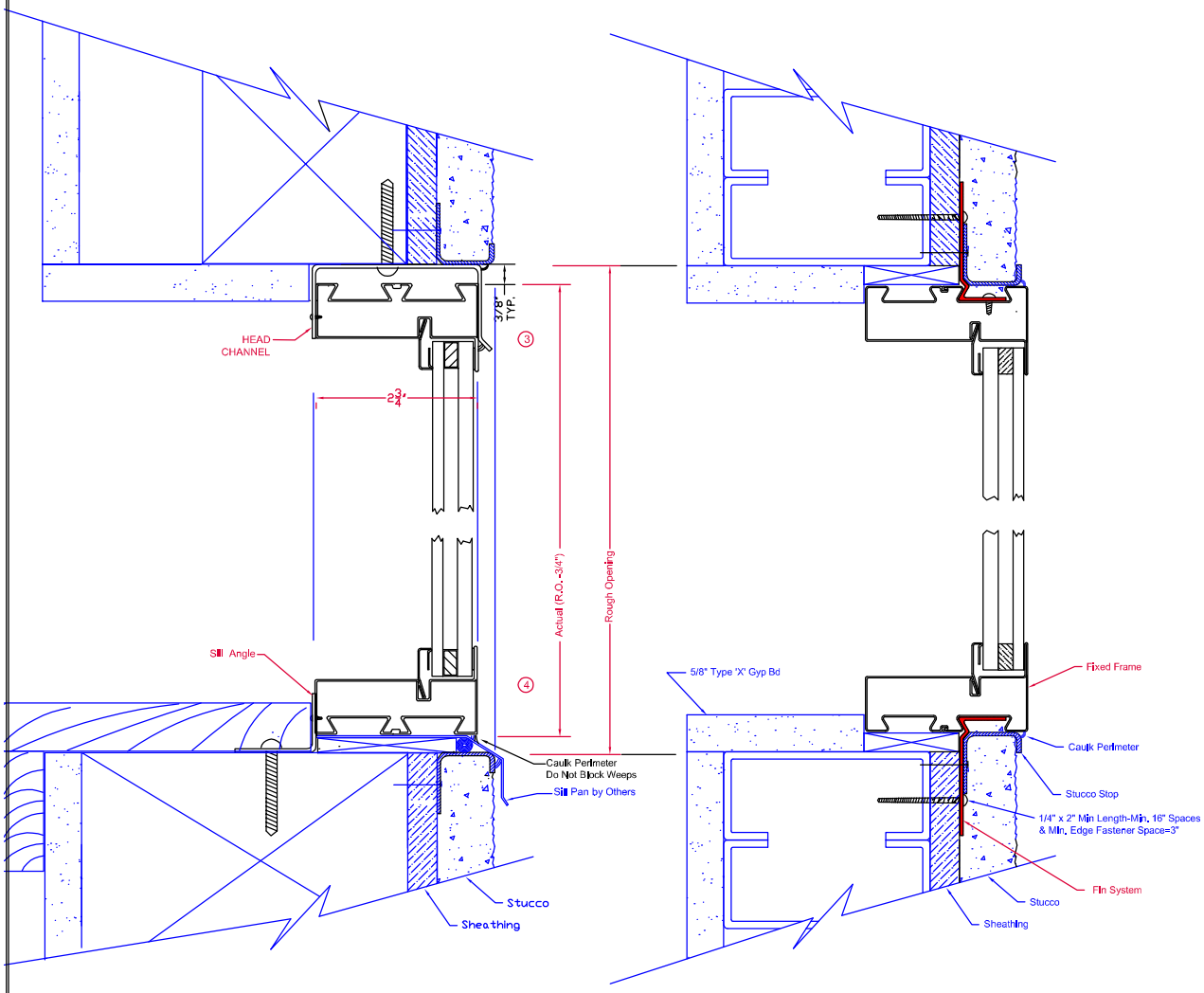


JAMB

DWN BY	JDD
CK'D BY	
DATE	11-30-2015
SCALE	1:2
PAGE	3/3
DWG No.	MODEL 950
MATL	

TOLERANCE:
1. FRACTIONS ±1/16
2. DECIMALS +- .0625
3. ANGLES +- 1/2 DEGREE
EXCEPT AS NOTED

FYRE-TEC
P.O. Box 278, 701 Centennial Road
Wayne, NE 68787



Subframe System

Fin System

HEAD/SILL

DWN BY: JDD	CK'D BY:		
TOLERANCE: 1. FRACTIONS ±1/16 2. DECIMALS +- .0625 3. ANGLES +- 1/2 DEGREE EXCEPT AS NOTED	DATE: 11-30-2015		
MAT'L	SCALE: 1:2	PAGE: 2/3	DWG No. MODEL 950

FYRE-TEC
P.O. Box 278, 701 Centennial Road
Wayne, NE 68787

Fin Mounting System
Installation Procedure

The window and installation components should be inspected for any shipping damage. All local codes must be followed and supersede any of the following instructions. All finished surfaces of the window must be protected from damage to frame, paint, and glazing surfaces throughout the complete installation and wall finalization. This is to include stucco, drywall, brickwash or any other cleaning technique other than that recommended by Fyre-Tec. Failure to protect the window will VOID any applicable warranties. Protective coverings are recommended.

Opening Requirements

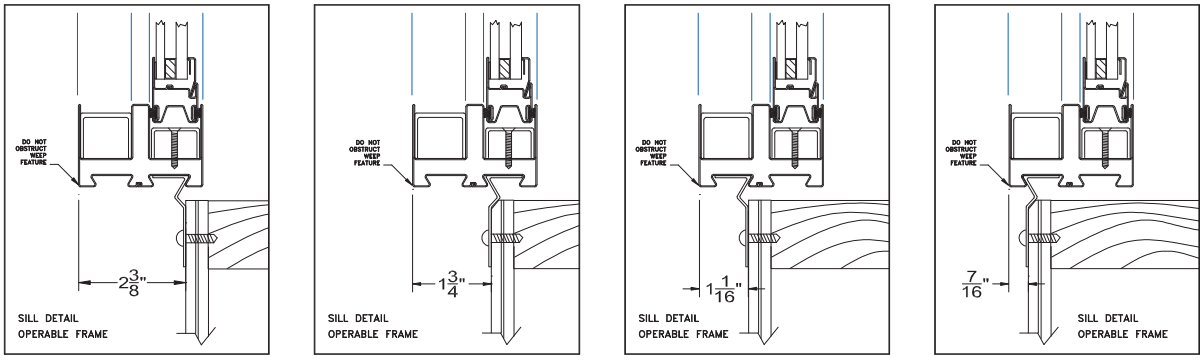
The opening should be built square and plumb and large enough to accept the window(s) provided. Windows are provided ¾" less in both width and height from the rough or nominal opening size. This allows for a 3/8" gap around the entire perimeter of the window to be properly squared and shimmed in the opening. It is recommended that the sill of the window be shimmed no less than ¼" above the construction sill to accommodate the weep feature of the window.

Opening Preparation

The window opening is to be prepared in conformance with local code and approved construction drawings. On openings other than masonry it is recommended that the perimeter be prepped with an air-barrier type window wrap and flashing system. Sill panning is recommended for optimal protection against water penetration. Panning and air barriers are not provided by Fyre-tec.

Fin Mounting to Window

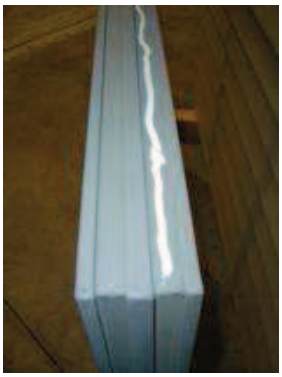
The mounting fins are supplied loose and are to be mounted to the window with the self-tapping screws supplied. Window frame depth in relationship to the finished wall may be adjusted in four increments by selecting the mounting position on the perimeter of the frame as shown in the following layout.

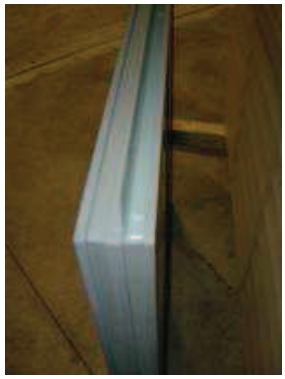


Attachment Procedure

1. *Pre-drill holes using a 3/16" bit in the fin to be mounted to the window (short leg). The screws are to be positioned 1" from each end of the individual fins and then placed 24" on center thereafter. The hole should be centered on the leg. *Pre-drill holes using a bit large enough to accept fasteners being used in fin for mounting to wall (Long Leg). Hole locations should be no more than 3" from each end of the individual fins and then placed 16" on center thereafter. The holes should be place in a known location as to allow fastener to penetrate a structural member of the wall.
2. Caulk bedding is to be applied around the perimeter of the frame in the frame recess that the fin is intended to be mounted. As shown (A). Any other holes or voids in the perimeter of the frame must be sealed as well to prevent water penetration into the wall cavity.
3. Screw the fin to the window as shown in (B) & (C)

(A) (B) (C)





Note: The sill of **operable windows** have additional factory applied butyl tape to further assist in preventing water leaking into wall cavity.

Window Installation in Opening

Installation will require a minimum of two people.
One individual should remain on the exterior to hold the window in place and the other on the interior to center the window in the opening using a flat pry-bar or shim. All sides on the interior should have approximately 3/8" gap from wall opening to window edge. Shim using an approved material. Check window for level in the opening and complete shim application. Once the window is shimmed properly, attach the fin on the exterior to a structural member per an approved method as laid out by an architect or authority having jurisdiction. Special attention should be made with the weep feature of the window in the exterior sill. A minimum 1/4" gap should be maintained between the sill of the window and the construction sill of the wall to allow for proper weeping and drainage from the window.

INTERIOR

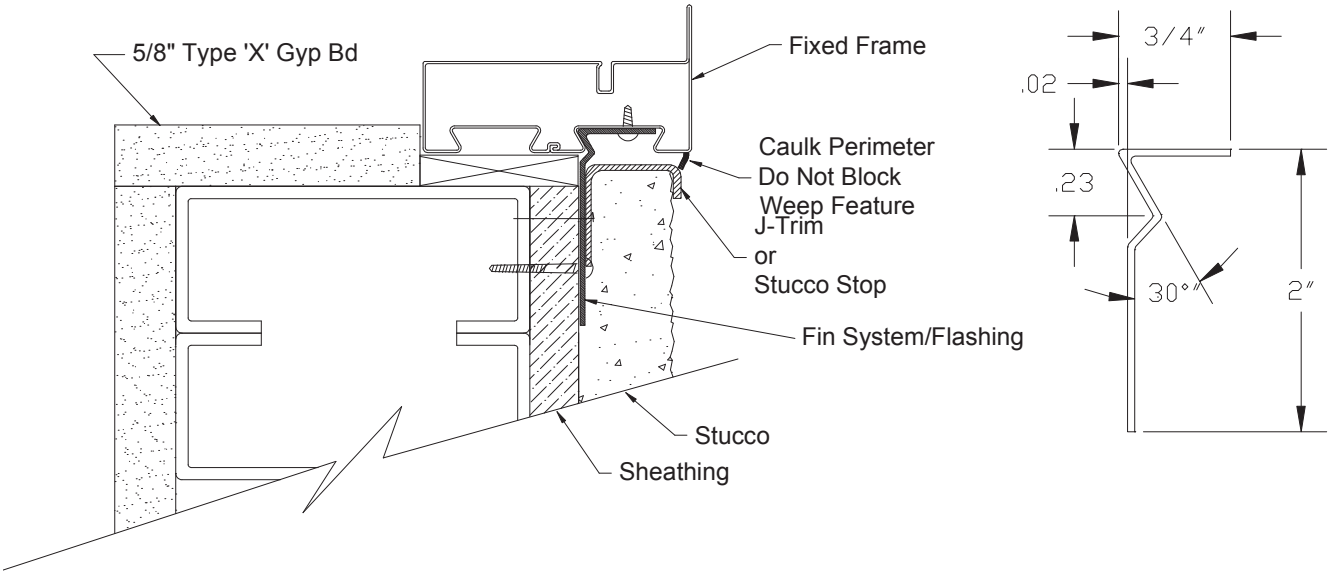
EXTERIOR

When attaching the Fin to the wall section keep the corners loose to apply the Fin corner pieces. Caulk corner of wall where Fin will be placed as seen in picture to (left). Pull fin away from wall slightly and slide fin underneath as shown in picture (lower left). Once all Fin corners are installed caulk all exposed seams using an approved sealant shown (lower right). The window is now ready to be flashed.

Flashing the Installation

Flashing the exterior gives added protection against water penetration. The recommended procedure for flashing the opening is to use a flexible adhesive backed window wrap. Each application of the window wrap should be cut extra long as to allow over lapping in each of the corners, at least the width of the wrap itself. The wrap should contact the window frame and be applied per manufacture specification.

If stucco is the desired finished wall exterior a J-channel trim must be used to keep the stucco from contacting the perimeter of the window frame. Protection against stucco from getting on the window and glazing surfaces is important.



Finalizing the Installation & Weep Feature

Once the wall construction is complete and stucco, siding, masonry or other application is complete, a perimeter beading of approved sealant is needed. Use caution when sealing around the weep feature.

The weep feature is a very important part in the longevity of the window's life span. On exterior applications special attention should be made to the exterior sill and the windows weep feature. The weep located 2" in from both corners of the sill and should be inspected or verified that the weep is open to a gap of 1/8" by approximately 7/8" long. Verification ensures that the weep has not been pinched down or crimped shut during shipping, handling, and installation. Failure to inspect the weep feature prior to finalizing the project can lead to water leakage as well as premature rusting with the window. If the slot needs additional adjustment carefully use a flat screwdriver or small pry-bar to make the gap more. Do not use excessive force, which can cause the frame to tear or crack the protective paint.

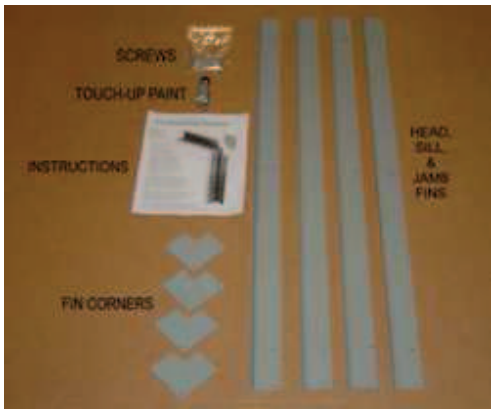
Tools Recommended:

-Safety glasses	-Pencil	-Power tool with drilling and screwing capabilities
-Measuring tape	-Hammer	-Saw or power saw with metal cutting capabilities
-Caulking Gun	-Level	-Pry-bar for shimming and squaring

Supplies Needed:

Notice All supplies must be approved and meet local code requirements. Contact your local inspector for a list of their approved products.

-Sealant -Fasteners -Shims



Parts Shipped

Contained within each individual crate supplied are:

1-Window

*1-Trim kit containing:

- Instructions
- 1-Head Fin
- 1-Sill Fin
- 2-Jamb Fins
- 4-Fin Corners
- **Touchup paint

**Screws for applying fin
(Not shown)
Mullions if applicable
Notes:
The window and parts should be inspected for shipping damage prior to installation
*If trim kit exceeds the length of the window it will be provided in separate box.

**Note: Depending upon the quantity of windows, touchup paint and screws may be provided in larger bags with enough quantity to cover the whole order. These bags will be attached to only one or several trim kits depending on order quantity. Location of these items will be identified on the shipped crate being marked as “SCREWS”

Fire-Rated Glass Ceramic
Fire-Rating: 20-90 Minutes

FireLite is a 3/16" (5 mm) thick fire-rated glazing material. It is listed for use in non-impact safety-rated locations such as transoms and borrowed lites.

BIM 3D Model Available

ultraHD® TECHNOLOGY

UL Classified & Labeled

Fire-Rated

Hose Stream Tested

Positive Pressure Tested

FEATURES

- ultraHD® Technology for improved surface quality, clarity and color
- Fire-rated for up to 90 minutes with required hose stream test
- Clear and wireless glass ceramic
- Available in two surface grades: Premium and Standard
- Fits in Fireframes® Designer Series frames from TGP, or standard fire-rated frames
- Withstands thermal shock
- Large sizes available
- May be lightly sandblasted or etched on one side without affecting fire rating
- May be insulated (see FireLite IGU fact sheet)

Notes:

1. This product is not a barrier to radiant heat, as it does not meet test standards ASTM E119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact TGP regarding Pilkington Pyrostop®.

2. FireLite is not an impact safety-rated product and should not be specified as such. However, TGP does offer FireLite Plus® and FireLite® NT which carry both fire and impact safety ratings. Please contact TGP for more details.

SURFACE GRADES

Standard Grade - Polished for a surface quality that is comparable to alternative fire-rated ceramics marketed as having a premium finish.

Premium Grade - Finish ground and polished on both surfaces to provide superior surface quality, improving overall clarity and providing a surface that is unmatched by alternative products.

LISTINGS/STANDARDS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Tests performed in accordance with:

UL 9	NFPA 80	CAN4 S-104	MEA 290-90-M-6
UL 10B	NFPA 257	CAN4 S-106	LARR 25798
UL 10C			

MAXIMUM EXPOSED AREA

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING	OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	OTHER THAN DOORS	3,325 in^2 / 23.09 ft^2 (2.15 m^2)	95" (2,413 mm)		95" (2,413 mm)
90 min.	OTHER THAN DOORS	2,627 in^2 / 18.24 ft^2 (1.69 m^2)	56–1/2" (1,435 mm)		56–1/2" (1,435 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.
Note: Individual lite sizes cannot exceed "Max. Exposed Area" shown above.

MAXIMUM SHEET SIZE

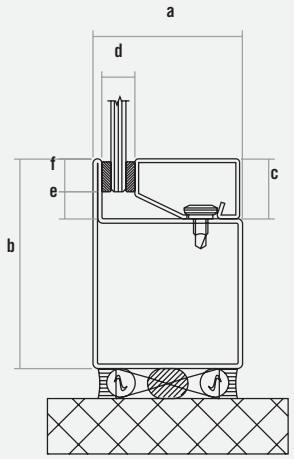
SURFACE FINISH	Premium	Standard	Obscure
	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)	36" x 96" (.91 m x 2.43m)

GENERAL CHARACTERISTICS

THICKNESS:	3/16" (5 mm) overall
WEIGHT:	2.56 lb / ft^2 (12.5 kg / m^2)
APPROX. VISIBLE TRANSMISSION:	88%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER'S SCALE):	700
FIRE RATING:	20 to 90 minutes
IMPACT SAFETY RATING:	None
STC RATING:	35

Detail based on use of Fireframes Designer Series narrow profile framing

Glazing Thickness:	3/16" – 1" (5 mm - 25.4 mm)
a. Frame width:	2" (51 mm)
b. Frame height:	2-3/4" (70 mm)
c. Stop height:	3/4" (19 mm)
d. Pocket width:	1/2" – 1-1/4" (12.7 mm x 31.8 mm)
e. Edge clearance:	1/4" (6.4 mm)
f. Bite:	1/2" (12.7 mm)



LABELING

Each piece of FireLite shall be permanently labeled with the FireLite logo, UL logo and fire rating.

INSTALLATION

FireLite shall be glazed into the appropriate fire-rated framing with an approved glazing compound (pure silicone, closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in^2 (.8987 m^2) FireLite shall be glazed with fire-rated glazing tape as supplied by TGP.

Inspect each piece of FireLite immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

STORAGE & HANDLING

FireLite must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

FAMILY OF PRODUCTS

TGP offers a complete family of products for all your fire-rated glazing needs, ranging from 20 minute to 3 hour applications. More information is available online at fireglass.com.

Fire-Rated, Impact Safety-Rated Glass Ceramic With Surface-Applied Film Fire-Rating: 20-180 Minutes

FireLite NT is a 3/16" (5 mm) thick fire-rated and impact safety-rated glazing material, composed of FireLite and fire-rated surface-applied film. It is listed for use in doors, sidelites, transoms and borrowed lites.

BIM 3D Model Available

ultraHD® TECHNOLOGY

UL Classified & Labeled

Fire-Rated

Hose Stream Tested

Impact-Rated

Positive Pressure Tested

FEATURES

- ultraHD® Technology for improved surface quality, clarity and color
- Fire-rated for up to 180 minutes with required hose stream test
- Available in two surface grades: Premium and Standard
- Wireless glass ceramic with high performance surface-applied approved fire-rated film
- Impact safety-rated–meets ANSI Z97.1 and CPSC 16 CFR1201 (Cat. I and II)
- Fits in Fireframes® Designer Series from TGP, or standard fire-rated frames
- Withstands thermal shock
- Large sizes available
- May be lightly sandblasted or etched on the unfilmed side without affecting fire rating
- Protects from fire and impact on both sides of the glass
- May be insulated (see FireLite IGU fact sheet)
- 3-year limited warranty

Note: This product is not a barrier to radiant heat, as it does not meet test standards ASTM E119 or UL 263. If your jurisdiction requires a "barrier to heat" product, please contact TGP regarding Pilkington Pyrostop®.

SURFACE GRADES

Standard Grade - Polished for a surface quality that is comparable to alternative fire-rated ceramics marketed as having a premium finish.

Premium Grade - Finish ground and polished on both surfaces to provide superior surface quality, improving overall clarity and providing a surface that is unmatched by alternative products.

LISTINGS/STANDARDS

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Tests performed in accordance with:

UL 9	NFPA 80	CAN4 S-104	MEA 290-90-M-6
UL 10B	NFPA 252	CAN4 S-106	LARR 25798
UL 10C	NFPA 257		

MAXIMUM EXPOSED AREA

RATING	ASSEMBLY	MAX. EXPOSED AREA	MAX. WIDTH OF EXPOSED GLAZING OR	MAX. HEIGHT OF EXPOSED GLAZING
20 to 60 min.	DOORS (non-temp rise)	3,204 in^2 / 22.25 ft^2 (2.07 m^2)	36” (914 mm)	89” (2,260 mm)
	DOORS (temp rise)	100 in^2 / 0.69 ft^2 (.06 m^2)	12” (304 mm)	33” (838 mm)
	OTHER THAN DOORS	3,325 in^2 / 23.09 ft^2 (2.15 m^2)	95” (2,413 mm)	95” (2,413 mm)
90 min.	DOORS (non-temp rise)	2,034 in^2 / 14.13 ft^2 (1.31 m^2)	36” (914 mm)	56-1/2” (1,435 mm)
	DOORS (temp rise)	100 in^2 / 0.69 ft^2 (.06 m^2)	12” (304 mm)	33” (838 mm)
	OTHER THAN DOORS	2,627 in^2 / 18.24 ft^2 (1.69 m^2)	56-1/2” (1,435 mm)	56-1/2” (1,435 mm)
180 min.	DOORS	100 in^2 / 0.69 ft^2 (.06 m^2)	12” (304 mm)	33” (838 mm)

Check with frame manufacturer for maximum tested glass sizes and required stop height.
Note: Individual lite sizes cannot exceed “Max. Exposed Area” shown above.

MAXIMUM SHEET SIZE

SURFACE FINISH	Premium	Standard	Obscure
	48" x 96" (1.21 m x 2.43 m)	48" x 96" (1.21 m x 2.43 m)	36" x 96" (.91 m x 2.43m)

GENERAL CHARACTERISTICS

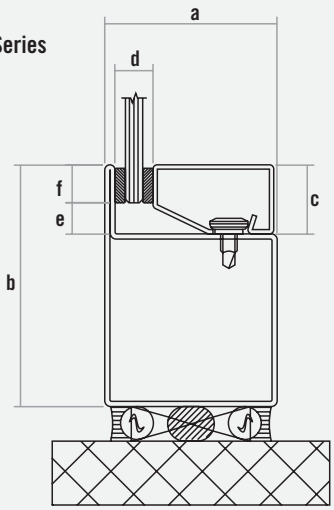
THICKNESS:	3/16” (5 mm) overall
WEIGHT:	2.56 lb / ft^2 (12.5 kg / m^2)
APPROX. VISIBLE TRANSMISSION:	88%
APPROX. VISIBLE REFLECTION:	9%
HARDNESS (VICKER’S SCALE):	700
FIRE RATING:	20 minutes to 3 hours
IMPACT SAFETY RATING:	Meets ANSI Z97.1 and CPSC 16FR1201 (Cat. I and II)
STC RATING:	35

LABELING

Each piece of FireLite NT shall be permanently labeled with the FireLite NT logo, UL logo and fire rating.

Detail based on use of Fireframes Designer Series narrow profile framing

Glazing Thickness:	3/16" – 1" (5 mm - 25.4 mm)
a. Frame width:	2" (51 mm)
b. Frame height:	2-3/4" (70 mm)
c. Stop height:	3/4" (19 mm)
d. Pocket width:	1/2" – 1-1/4" (12.7 mm x 31.8 mm)
e. Edge clearance:	1/4" (6.4 mm)
f. Bite:	1/2" (12.7 mm)



INSTALLATION

FireLite NT shall be glazed into the appropriate fire-rated framing with an approved glazing compound (closed cell PVC tape or DAP 33 putty) as supplied by the installer. For 90 minute ratings that exceed 1,393 in^2 (.8987 m^2), FireLite NT shall be glazed with fire-rated glazing tape as supplied by TGP.

Inspect each piece of FireLite NT immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the "roll out" method, individual pieces of FireLite NT may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

STORAGE & HANDLING

FireLiteNT must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

FAMILY OF PRODUCTS

TGP offers a complete family of products for all your fire-rated glazing needs, ranging from 20 minute to 3 hour applications. More information is available online at fireglass.com, or by calling 800.426.0279.

Fireglass®20
Fire-rated, impact safety-rated glass

FireLite®
Fire-rated glass ceramic

FireLite® NT
Fire-rated, impact safety-rated glass ceramic with surface-applied film

FireLite Plus®
Fire-rated, impact safety-rated glass ceramic

FireLite® IGU
Fire-rated or fire/impact safety-rated insulated glass units

Pilkington Pyrostop®
Fire-rated, impact safety-rated transparent wall panels

WireLite®
Fire-rated, wired glass

WireLite® NT
Fire-rated, impact safety-rated wired glass with surface-applied film

Fireframes®
Fire-rated framing & doors for use with all TGP glass products

SECTION 08510
STEEL WINDOWS
UL Labeled Fire-Rated Single Hung (925)

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Fire Rated Steel Windows (Single Hung) – 60-Minute UL Labeled

1.2 RELATED SECTIONS

A. Section 08800 – Glass, Glazing, and Glazing Materials

1.3 REFERENCES

A. ASTM A 569-(1991a; R 1993) Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial Quality

B. ASTM A 653-(1994) Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

C. ASTM B 633-(1985; R 1994) Electrodeposited Coatings of Zinc on Iron and Steel

D. ASTM B 766-(1986; R 1993) Electrodeposited Coatings of Cadmium

E. ASTM E 283-(1991) Determining the Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors Under Specific Pressure Differences Across the Specimen

F. ASTM E 330-(1990) Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference

G. ASTM E 547-(1993) Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential

H. ASME B18.6.3- (1972; R 1991) Machine Screws and Machine Screw Nuts

I. ASME B18.6.4- (1981; R 1991) Thread Forming and Thread Cutting Tapping Screws and Metallic Drive Screws (Inch Series)

J. NFPA 80-(2007) Fire Doors and Windows

K. NFPA 101-(2006) Safety to Life from Fire in Buildings and Structures

L. UL9-Fire Tests of Window Assemblies

M. File No. R13157-D.V. Fyre-Tec Classification

1.4 PERFORMANCE REQUIREMENTS (Based on a single window in a testing lab environment)

A. Single Hung steel windows shall conform to the H-C30 voluntary specifications in AAMA/NWWDA 101/I.S.2-97 and be designed to meet the following performance requirements. Fire-rated windows shall bear the Underwriters Laboratories, Inc. label including the manufacturer's file number for the indicated rating.

1. Structural Performance: Structural test pressures on window units shall be for positive load (inward) and negative load (outward) in accordance with ASTM E 330 at a static pressure of 45 PSF. After testing, there shall be no glass breakage, permanent damage to fasteners, hardware parts, support arms or actuating mechanisms or any other damage which could cause window to be inoperable. There shall be no permanent deformation of any main frame, sash or ventilator member in excess of the requirements established by AAMA/NWWDA 101/I.S.2-97 for the window types specified in this section.

2. Air Infiltration: Air infiltration shall not exceed .3 SCFM per square foot of window area at a static air pressure difference of 1.57 PSF as established by AAMA/NWWDA 101/I.S.2-97 when tested in accordance with ASTM E 283.

3. Water Resistance: When tested in accordance with ASTM E 547, there shall be no water leakage at a static air pressure difference of 4.50 PSF.

B. Fire Protective: Fire protective rating shall meet requirements as tested and classified by Underwriters Laboratories Inc, in accordance with UL-9. Products shall meet the requirements of Underwriters Laboratories Inc. The Listing Mark of UL on the product will be accepted as evidence of compliance.

C. Life Safety Criteria: Windows shall conform to NFPA 101 Life Safety Code when rescue and/or second means of escape are indicated.

1.5 SUBMITALS

A. Manufacturer's descriptive data and catalog cut sheets.

B. Drawings indicating elevations of windows, rough-opening dimensions for each type and size of windows, section details, fastenings, generic method of installation and anchorage, glazing details, method of glazing, muntin divider details, mullion details, weather-stripping details, types and locations of operating hardware, window type and indicating compliance with fire safety code, where required. Refer to Authority Having Jurisdiction for specific installation, wall detail, and anchorage requirements.

C. Manufacturer's preprinted installation instructions and cleaning instructions.

D. Manufacturer's standard color samples of painted finishes.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

B. Manufacturer's Qualifications: A firm with not less than 10-years' experience in manufacture of similar type steel windows.

1.7 DELIVERY, STORAGE AND HANDLING

A. Delivery:

1. Manufacturer's original, unopened, undamaged containers, identification labels intact. Inspect for damage upon delivery.

2. Handle and store products according to manufacturer's recommendations.

B. Storage and Protection:

1. Store materials protected from exposure to harmful weather conditions and at temperature and humidity conditions recommended be manufacturer

2. Store windows to prevent damage or marring of finish. Store in shipping containers under cover on building site.

1.8 PROJECT CONDITIONS

A. Verify actual openings by field measurements before fabrication, show recorded measurements on shop drawings.

B. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

1.9 WARRANTY

A. Manufacturer's standard warranty to be 3 years from the date of shipping.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Series 925 Single Hung Windows as manufactured by D.V. Fyre-Tec, Inc.; 701 Centennial Road; Wayne, NE 68787; Tel: 1-800-377-3261; Fax; 1-402-375-4261; Web: www.fyre-tec.com; Email; info@fyre-tec.com.

B. Architect approved equal.

2.2 STEEL WINDOW TYPES

A. Single hung steel windows shall be designed for inside field glazing, and for glass types scheduled on drawings or otherwise specified. Units shall be complete with glass and glazing provisions to meet requirements of paragraph WINDOW PERFORMANCE. Glazing material shall be compatible with steel, and shall not require painting.

B. Fire-rated windows shall conform to UL-9 and shall be labeled with a 1- hour fire-test rating as specified in the window schedule. Units shall be designed and fabricated to meet glass sizes, window sizes, and opening dimensions established by NFPA 80. Hardware shall conform to NFPA 80 requirements. All operable fire-rated windows are to be self-closing and latching by means of a heat activated fusible link operator.

2.3 MATERIALS

A. Steel Frames and Inserts

1. Steel frames and inserts shall be fabricated from roll-formed galvanized lock-forming quality steel per ASTM A 653.

2. Frame and insert corners shall mitered and welded. Integral muntins where required shall be galvanized roll-formed material fitted and welded.

3. Operable insert/sash shall be supported on two adjustable heavy-duty spiral wound balances.

B. Installation Kits

1. Provide attachable fin installation kits for all windows.

2. Provide subframe installation kits for all windows.

C. Weather Stripping

1. Weather-stripping for the inserts shall be designed to meet water penetration and air infiltration requirements specified under paragraph WINDOW PERFORMANCE, and shall be manufactured of material compatible with steel and resistant to weather. Weather-strips shall be factory applied and easily replaced in the field.

D. Screens

1. Insect screens shall be steel window manufacturer's standard design, and shall be provided where scheduled on drawings. Insect screens shall be fabricated of roll formed galvanized steel frames and (18x16) plastic coated glass conforming fiber mesh screening conforming to ASTM D 3656.

E. Formed Component Parts

1. Formed component parts shall be hot-rolled sheet steel conforming to ASTM A 569, commercial quality with a minimum of 0.15 percent carbon.

2. Sheet steel shall be zinc coated (galvanized) by the hot-dip process in accordance with ASTM A 653 or ASTM A 924.

F. Screws and Bolts

1. Screws and bolts shall conform to ASTM B 766, ASME B18.6.3 and ASME B18.6.4.

G. Fasteners

1. Fastening devices shall be window manufacturer's design made from cadmium-plated steel, zinc-plated steel, nickel/chrome-plated steel or magnetic stainless steel.

H. Window Anchors

1. Anchors for installing windows shall be stainless steel or hot-dip zinc coated steel conforming to ASTM A 123.

I. Glass and Glazing

1. Standard clear ceramic glass (1 hour rated)

2. Insulated glass units.

2.4 FABRICATION

A. Fabricate windows in accordance with approved shop drawings.

B. Frame sections shall be one-piece sections with corners mitered, welded and dressed smooth.

C. Required muntins shall be securely welded to the frame members and at all intersections.

D. All windows shall be designed for inside glazing.

E. All windows shall be factory glazed with UL labeled glass meeting or exceeding the hourly rating required for the frame label. Individual lites shall display a UL label permanently affixed and in accordance with the requirements of the International Building Code and NFPA 80.

2.5 FINISHES – All products will be provided with a paint coating.

A. Finish Coat – Manufacturer's Standard Color (Iceberg White – Iceberg White/Black)

1. Steel windows, fins, mullions, cover plates and associated parts shall be cleaned, pre-treated with iron phosphate and factory powder coated and cured with a manufacturer's standard color in a dry film thickness of not less than 0.050 mm (2.0 mil).

PART 3 EXECUTION

3.1 EXAMINATION

A. Window openings shall conform to details and dimensions shown on the approved shop drawings.

B. Notify the Architect immediately of conditions that may adversely affect the window installation. Correct conditions prior to installing windows.

3.2 INSTALLATION

A. Steel windows shall be installed in accordance with approved shop drawings and manufacturer's approved recommendations.

B. Fire-rated windows shall be installed in compliance with NFPA 80 and NFPA 101.

C. Steel surfaces in close proximity with masonry, concrete, wood, and dissimilar metals other than stainless steel, zinc, cadmium, or small areas of white bronze shall be protected from direct contact.

D. Verify that weep features at the bottom of the sills are opened at least 1/8" x 1". Failure to do so may lead to premature finish failures and void warranty.

E. The completed window installation shall be watertight.

3.3 ADJUSTING AND CLEANING

A. Steel window finish and glass shall be cleaned on interior and exterior sides in accordance with window manufacturer's recommendation. Alkaline, abrasive or brick wash agents shall not be used.

B. Operable sash shall be adjusted per manufacturer's instruction to provide minimal operating force.

3.4 PROTECTION

A. Protect installed products and finished surfaces from damage during construction.

B. Touch-up any abraded surface of the window finish with air dry paint furnished by the window manufacturer.

-- END OF SECTION –

SECTION 08510
STEEL WINDOWS
UL Labeled Fire-Rated Fixed Lite (950)

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Fire Rated Steel Windows (Fixed Lite) – 60-Minute UL Labeled

1.2 RELATED SECTIONS

A. Section 08800 – Glass, Glazing, and Glazing Materials

1.3 REFERENCES

A. ASTM A 569-(1991a; R 1993) Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial Quality

B. ASTM A 653-(1994) Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

C. ASTM B 633-(1985; R 1994) Electrodeposited Coatings of Zinc on Iron and Steel

D. ASTM B 766-(1986; R 1993) Electrodeposited Coatings of Cadmium

E. ASTM E 283-(1991) Determining the Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors Under Specific Pressure Differences Across the Specimen

F. ASTM E 330-(1990) Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference

G. ASTM E 547-(1993) Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential

H. ASME B18.6.3- (1972; R 1991) Machine Screws and Machine Screw Nuts

I. ASME B18.6.4- (1981; R 1991) Thread Forming and Thread Cutting Tapping Screws and Metallic Drive Screws (Inch Series)

J. NFPA 80-(2007) Fire Doors and Windows

K. NFPA 101-(2006) Safety to Life from Fire in Buildings and Structures

L. UL9-Fire Tests of Window Assemblies

M. File No. R13157-D.V. Fyre-Tec Classification

1.4 PERFORMANCE REQUIREMENTS (Based on a single window in a testing lab environment)

A. Fixed lite steel windows shall be designed to meet F-C30 voluntary specifications in AAMA/NWWDA 101/I.S.2-97 and be designed to meet the following performance requirements. Fire-rated windows shall bear the Underwriters Laboratories, Inc. label including the manufacturer's file number for the indicated rating.

1. Air Infiltration: Air infiltration shall not exceed .3 SCFM per square foot of window area at a static air pressure difference of 1.57 PSF as established by AAMA/NWWDA 101/I.S.2-97 when tested in accordance with ASTM E 283.

2. Water Resistance: When tested in accordance with ASTM E 547, there shall be no water leakage at a static air pressure difference of 4.50 PSF.

B. Fire Protective: Fire protective rating shall meet requirements as tested and classified by Underwriters Laboratories Inc, in accordance with UL-9. Products shall meet the requirements of Underwriters Laboratories Inc. The Listing Mark of UL on the product will be accepted as evidence of compliance.

C. Life Safety Criteria: Windows shall conform to NFPA 101 Life Safety Code when rescue and/or second means of escape are indicated.

1.5 SUBMITALS

A. Manufacturer's descriptive data and catalog cut sheets.

B. Drawings indicating elevations of windows, rough-opening dimensions for each type and size of windows, section details, fastenings, generic method of installation and anchorage, glazing details, method of glazing, muntin divider details, mullion details, weather-stripping details, types and locations of operating hardware, window type and indicating compliance with fire safety code, where required. Refer to Authority Having Jurisdiction for specific installation, wall detail, and anchorage requirements.

C. Manufacturer's preprinted installation instructions and cleaning instructions.

D. Manufacturer's standard color samples of painted finishes.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

B. Manufacturer's Qualifications: A firm with not less than 10-years' experience in manufacture of similar type steel windows.

1.7 DELIVERY, STORAGE AND HANDLING

A. Delivery:

1. Manufacturer's original, unopened, undamaged containers, identification labels intact. Inspect for damage upon delivery.

2. Handle and store products according to manufacturer's recommendations.

B. Storage and Protection:

1. Store materials protected from exposure to harmful weather conditions and at temperature and humidity conditions recommended be manufacturer

2. Store windows to prevent damage or marring of finish. Store in shipping containers under cover on building site.

1.8 PROJECT CONDITIONS

A. Verify actual openings by field measurements before fabrication, show recorded measurements on shop drawings.

B. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

1.9 WARRANTY

A. Manufacturer's standard warranty to be 3 years from the date of shipping.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Series 950 Fixed Lite Windows as manufactured by D.V. Fyre-Tec, Inc.; 701 Centennial Road; Wayne, NE 68787; Tel: 1-800-377-3261; Fax; 1-402-375-4261; Web: www.fyre-tec.com; Email; info@fyre-tec.com.

B. Architect approved equal.

2.2 STEEL WINDOW TYPES

A. Fixed Lite steel windows shall be designed for inside field glazing, and for glass types scheduled on drawings or otherwise specified. Units shall be complete with glass and glazing provisions to meet requirements of paragraph WINDOW PERFORMANCE. Glazing material shall be compatible with steel, and shall not require painting.

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E. Fasteners

1. Fastening devices shall be window manufacturer's design made from, cadmium-plated steel, zinc-plated steel, nickel/chrome-plated steel or magnetic stainless steel.

F. Window Anchors

1. Anchors for installing windows shall be stainless steel or hot-dip zinc coated steel conforming to ASTM A 123.

G. Glass and Glazing

1. Standard clear ceramic glass (1 hour rated).

2. Safety filmed clear ceramic glass CPSC16CFR1201 Cat I & II (1- hour rated).

3. Insulated glass units.

2.4 FABRICATION

A. Fabricate windows in accordance with approved shop drawings.

B. Frame sections shall be one-piece sections with corners mitered, welded and dressed smooth.

C. Required muntins shall be securely welded to the frame members and at all intersections.

D. All windows shall be designed for inside glazing.

E. All windows shall be factory glazed with UL labeled glass meeting or exceeding the hourly rating required for the frame label. Individual lites shall display a UL label permanently affixed and in accordance with the requirements of the International Building Code and NFPA 80.

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