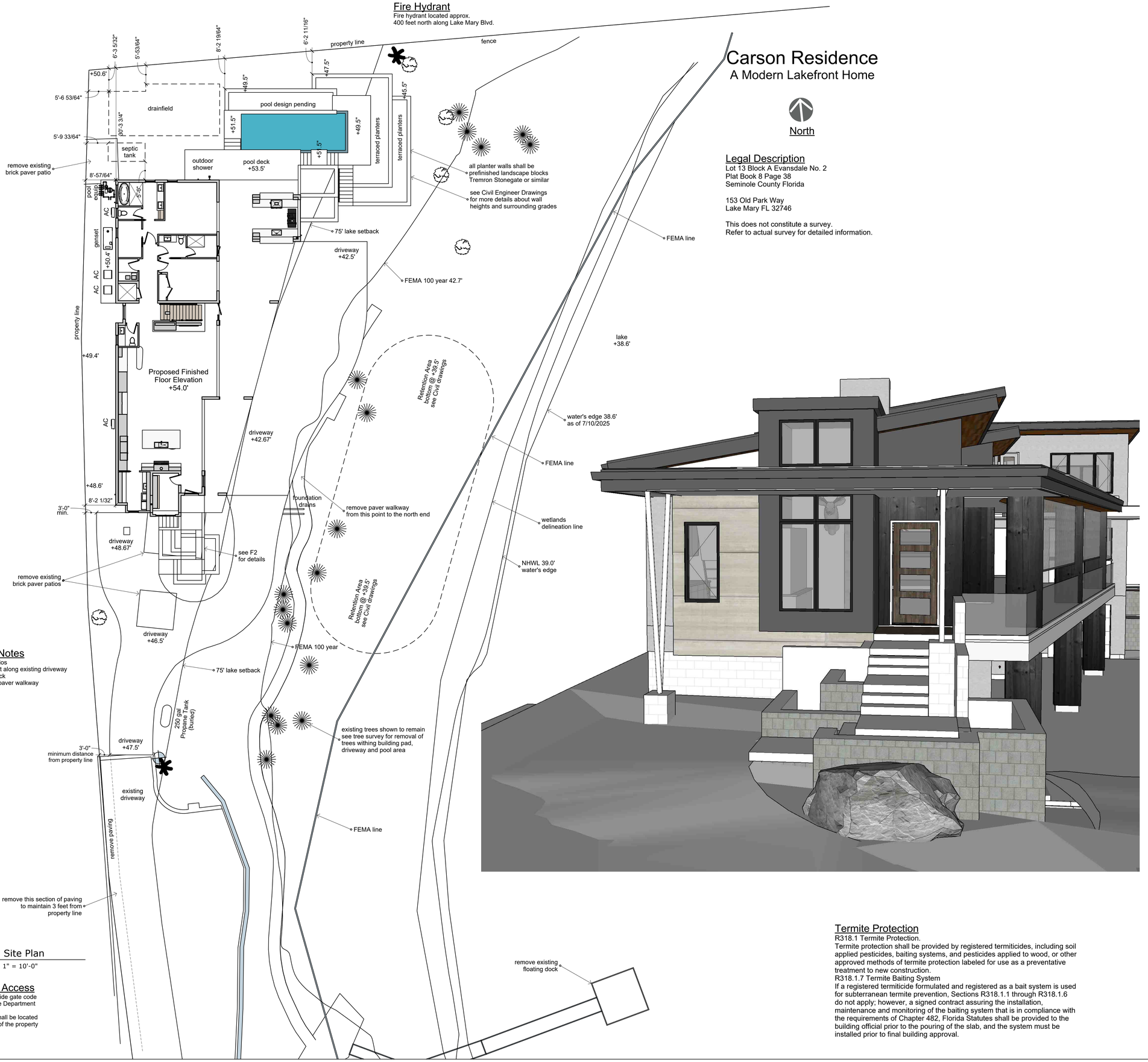

Demolition Notes

Remove 3 brick patios
Remove up to 3 feet along existing driveway
Remove floating dock
Remove portion of paver walkway

SP - Site Plan
Scale: 1" = 10'-0"

Fire Dept. Access

Owner shall provide gate code to Lake Mary Fire Department

A Fire Hydrant shall be located within 1000 feet of the property

Carson Residence

A Modern Lakefront Home

North

Legal Description

Lot 13 Block A Evansdale No. 2
Plat Book 8 Page 38
Seminole County Florida

153 Old Park Way
Lake Mary FL 32746

This does not constitute a survey.
Refer to actual survey for detailed information.

Termite Protection

R318.1 Termite Protection.
Termite protection shall be provided by registered termiticides, including soil applied pesticides, baiting systems, and pesticides applied to wood, or other approved methods of termite protection labeled for use as a preventative treatment to new construction.
R318.1.7 Termite Baiting System
If a registered termiticide formulated and registered as a bait system is used for subterranean termite prevention, Sections R318.1.1 through R318.1.6 do not apply; however, a signed contract assuring the installation, maintenance and monitoring of the baiting system that is in compliance with the requirements of Chapter 482, Florida Statutes shall be provided to the building official prior to the pouring of the slab, and the system must be installed prior to final building approval.

Groninger Custom Homes, Inc.

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Permitting Jurisdition

City of Lake Mary
911 Wallace Ct.
Lake Mary FL 32746
407-585-1361
LakeMaryFL.com/building

Area Calcs

2352	2nd floor AC
1404	3rd floor AC
3756	AC space
2822	garage (1st floor)
28	entries
965	covered balcony
329	outdoor kitchen
7900	under roof
123	3rd floor balcony
8023	total

Lot Area

49,658	Lot
2822	1st floor
1300	pool deck
3879	driveway
8001	total
24,829	50% allowed

Notes

The new home shall be built of concrete block on the first and second levels. The foundation shall have a masonry stemwall approx. 24" tall. The third level shall be wood frame construction. The exterior of the home shall be predominantly stucco finish and the roof shall be standing seam metal.

The new home shall be built per requirements of the 2023 Florida Building Code 8th edition and the standards of the most-recent version of NAHB Performance Guidelines.

Fire Sprinklers are required and a separate permit shall be obtained by a licensed fire sprinkler contractor.

A Fire Hydrant shall be located within 1000 feet of the property.

Page Index

Additional Drawings

Epicore Deck System
BlueLinx Framing Details
Topographical Survey
Tree Survey
Civil Drawings

alba ENGINEERING
C.A. #30556

DANIEL SOUTER, P.E.
P.E.# 63901
P.O. BOX 547774
ORLANDO, FL 32854
PHONE (407) 421-4866

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2025.10.01 16:34:05-04'00'

Kg3d Home Design LLC
2711 Woodside Avenue
Winter Park FL 32789
(321) 439-1047

Carson Residence
Lot 13 Evansdale 2 PB 8 Pg. 38
153 Old Park Way
Lake Mary FL 32746

groningerhomes.com
Design Build Consult

Date
09/22/25

SP

Framing & Lumber:

All lumber shall be Southern Yellow Pine No. 2 with 19% or less moisture content.
Exterior lumber shall be pressure treated. Non-bearing studs may be Spruce No. 2.

All 3-ply and 4-ply beams shall be bolted together with 1/2" diameter thru-bolts @24" staggered, or
3-ply beams shall be bolted together with 1/4"x4.5" SDS @12" on both sides, or
4-ply beams shall be bolted together with 1/4"x6" SDS @12" on both sides.

Unless noted otherwise:
1. use HETA16 for CMU to trusses, joists and beams
2. use LSTA30 or HTS20 for frame to joists and beams
3. use MTS12 for frame to trusses
4. use HUS26 as a 1-ply hanger and HGUS26-2 as 2-ply hanger
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6. all exterior walls to be treated as bearing walls
7. MTSA36 and HTS20 may be interchanged
8. all ganged (multple) studs shall have SP4; SP4 may be used in lieu of SP1 & SP2
9. provide hip roof deck support per APA guide

If a lintel strap is missed:
1. use HTSM16 w/ (4) 1/4"x2-1/4" Tapcon for up to 1175lbs uplift, and
2. use (2) HTSM16 for up to 2350lbs uplift.

See F1 & M1 for vertical dowel locations
See R1 for roof overhang details

0520 exterior doors
- 01 <3680 entry IS>
- 02 <3068 1501 OS>
- 03 <3080 1501 SF>
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0530 special doors
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0580 windows
- A <24x20 PW>
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- W <120x114 SF>

Windows & Doors:

0580 - Windows
Windows shall be PGT Industries
Casement CA640 FL245-R16
Fixed PW640 FL243-R28
Fixed PW7620A FL243-R28
Black aluminum frames, EnergyStar rated.
U-Factor (0.4) and SHGC (0.25)
All 2nd & 3rd story windows shall be min. 24" above the floor.

Exterior Doors shall be Plastpro Fiberglass FL17347 on
Composite Kerfed Jambs with Stainless Steel Hinges

Garage Doors shall be Clopay 3203 Sectional FL5678

Design Pressures allowed per Window and Door Size
-39.6 PSF - less than 20 SQ FT
-37.0 PSF - greater than 20 and up to 50 SQ FT
-33.4 PSF - greater than 50 and up to 100 SQ FT
-30.8 PSF - greater than 100 and up to 500 SQ FT
See Pg. N1 for Window Buck installation details.

Insulation:

CMU Walls insulated with Core-Fill 500 foam R-value: 9.1
Frame Walls insulated with Icynene Classic Max foam R-value: 20
Roof Deck insualted with Icynene Classic Max foam R-value: 20

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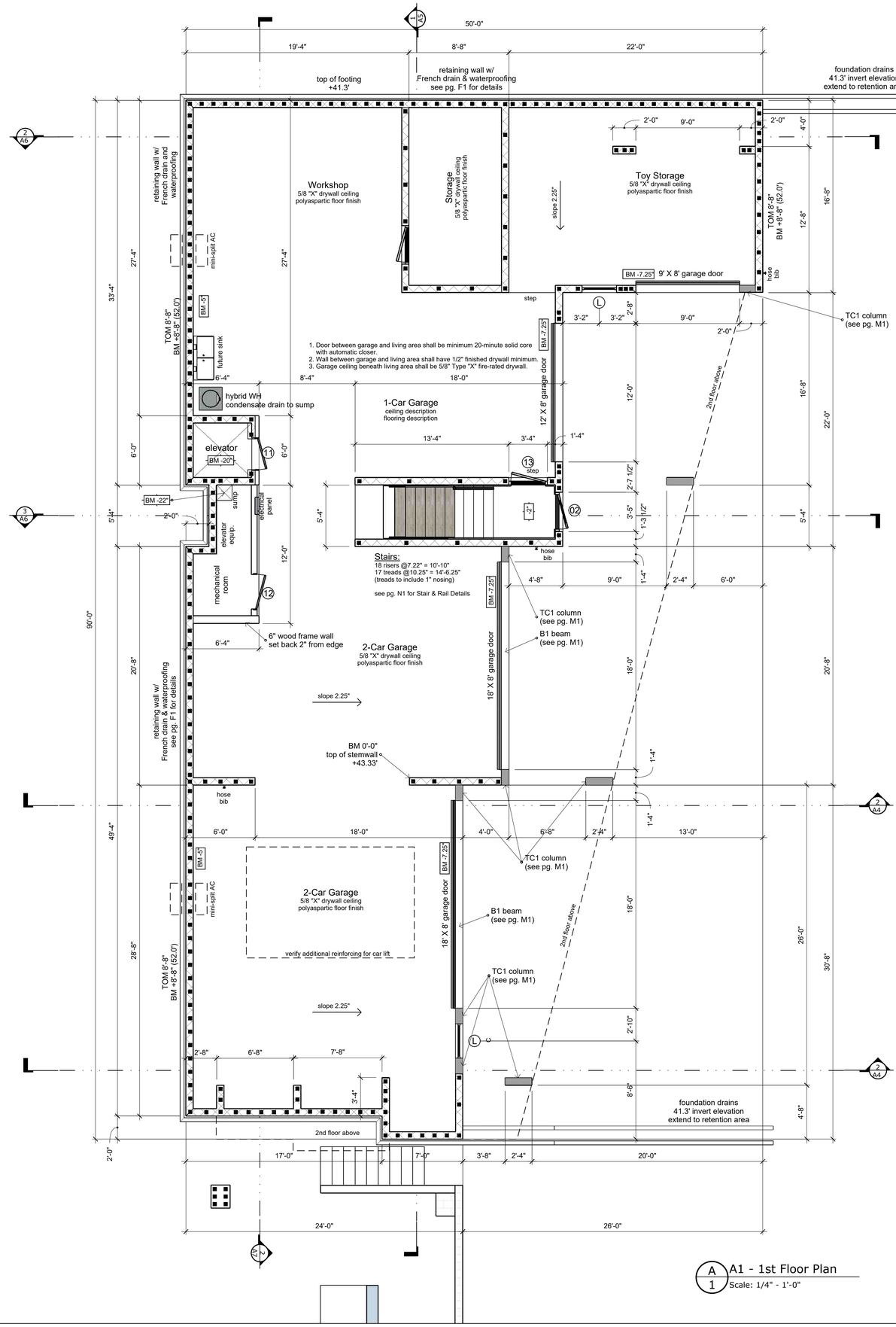
Design Criteria:

This structure has been designed to meet or exceed the wind load requirements of the 2023 Florida Building Code Residential 8th Edition Section R301 Design Criteria and ASCE 7-22.
1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
3. Wind Exposure = Category C
4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and
   Height & Exposure Adjustment Coefficient is 1.40

Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

All details and sections shown on the drawings are intended to be typical and shall apply to any similar situation shown elsewhere except where specific reference is given. Architectural drawings provide reference and information but are not intended to be structural. See structural drawings for engineered components and material requirements.



A1 - 1st Floor Plan
Scale: 1/4" - 1'-0"

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Area Calcs

2352	2nd floor AC
1404	3rd floor AC
3756	AC space
2822	garage
28	entries
965	covered balcony
329	outdoor kitchen
7900	under roof
123	3rd floor balcony
8023	total

Notes

All stated bearing heights are from Bench Mark (BM)

HVAC Notes

HVAC Equipment shall be min. 16 SEER with 2-speed condenser and air-handler. Thermostats shall be programmable, WiFi connected and include humidity control. Ventilation shall include "quiet" bath fans, 3) 8" range hood vents, 2) dryer vents and wall boxes, make up air and fresh air systems.
1st level garage shall have 2) mini-split ductless AC systems.

Blower door test shall be provided prior to final mechanical inspection.

Fire Sprinkler Notes

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A Fire Hydrant shall be located within 1000 feet of the property.

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groningerhomes.com
Design Build Consult

Date
09/22/25

A1

Page
02 of 26

Framing & Lumber:

All lumber shall be Southern Yellow Pine No. 2 with 19% or less moisture content.
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Garage Doors shall be Clopay 3203 Sectional FL5678

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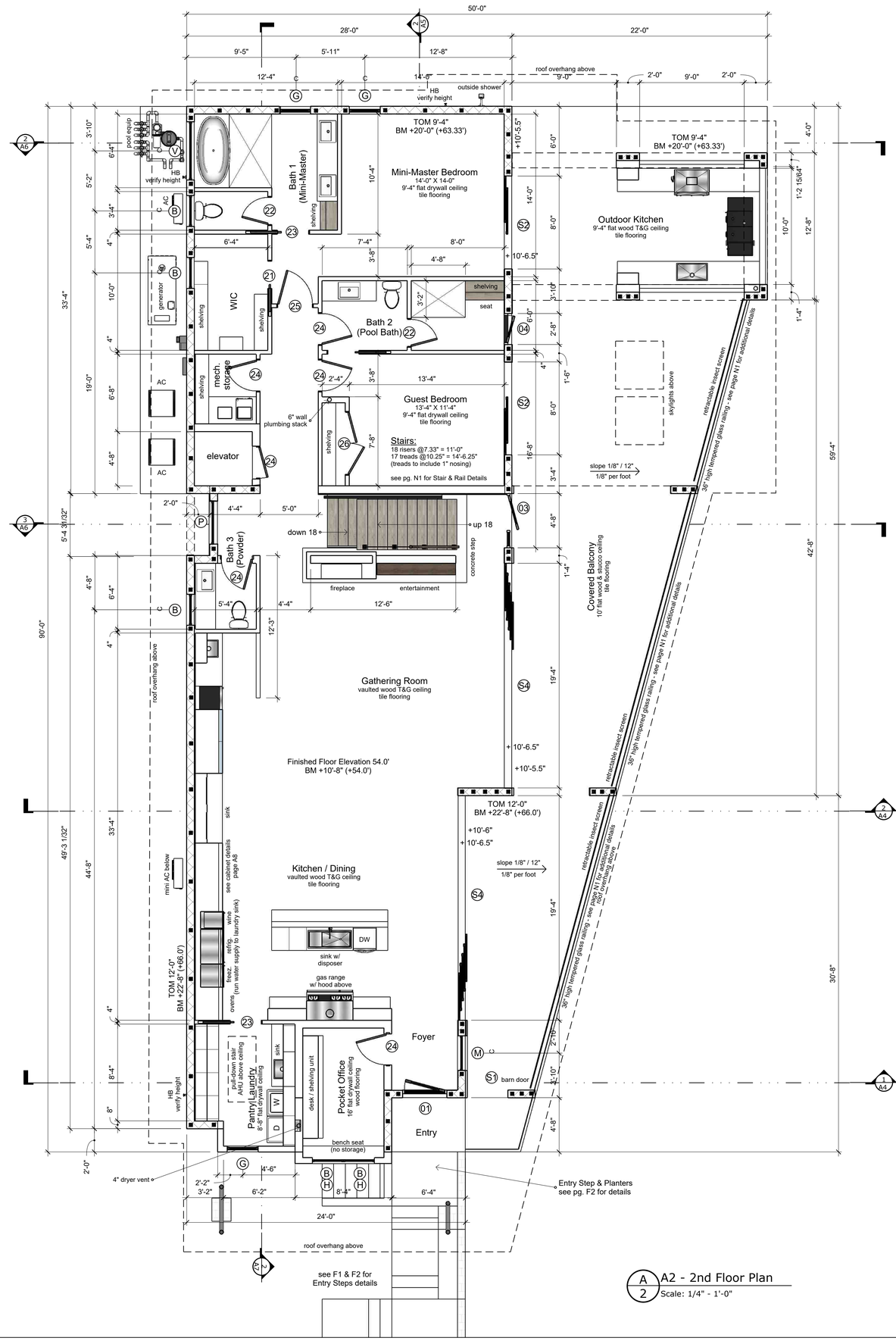

A2 - 2nd Floor Plan
Scale: 1/4" - 1'-0"

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Notes

All 2nd story windows shall be min. 24" AFF.
All stated bearing heights are from Finished Floor.

HVAC Notes

HVAC Equipment shall be min. 16 SEER with 2-speed condenser and air-handler. Thermostats shall be programmable, WiFi connected and include humidity control. Ventilation shall include "quiet" bath fans, 3) 8" range hood vents, 2) dryer vents and wall boxes, make up air and fresh air systems.
1st level garage shall have 2) mini-split ductless AC systems.

Blower door test shall be provided prior to final mechanical inspection.

Plumbing Notes

Verify location of solar panels so that all plumbing roof vents shall be located to avoid obstruction. All roof penetrations shall not be visible from the front of the house.

Fire Sprinkler Notes

Fire Sprinklers are required and a separate permit shall be obtained by a licensed fire sprinkler contractor.

A Fire Hydrant shall be located within 1000 feet of the property.

See F1 & F2 and M1 & M2 for additional dimensions

See T2 for Window Headers

alba ENGINEERING
C.A. #30556

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Design Build Consult

Date
09/22/25

A2

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-39.6 PSF - less than 20 SQ FT
-37.0 PSF - greater than 20 and up to 50 SQ FT
-33.4 PSF - greater than 50 and up to 100 SQ FT
-30.8 PSF - greater than 100 and up to 500 SQ FT
See Pg. N1 for Window Buck installation details.

Insulation:

CMU Walls insulated with Core-Fill 500 foam R-value: 9.1
Frame Walls insulated with Icynene Classic Max foam R-value: 20
Roof Deck insualted with Icynene Classic Max foam R-value: 20

Design Criteria:

This structure has been designed to meet or exceed the wind load
requirements of the 2023 Florida Building Code Residential 8th Edition
Section R301 Design Criteria and ASCE 7-22.

1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
3. Wind Exposure = Category C
4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and
   Height & Exposure Adjustment Coefficient is 1.40

Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

All details and sections shown on the drawings are intended to be typical and shall apply
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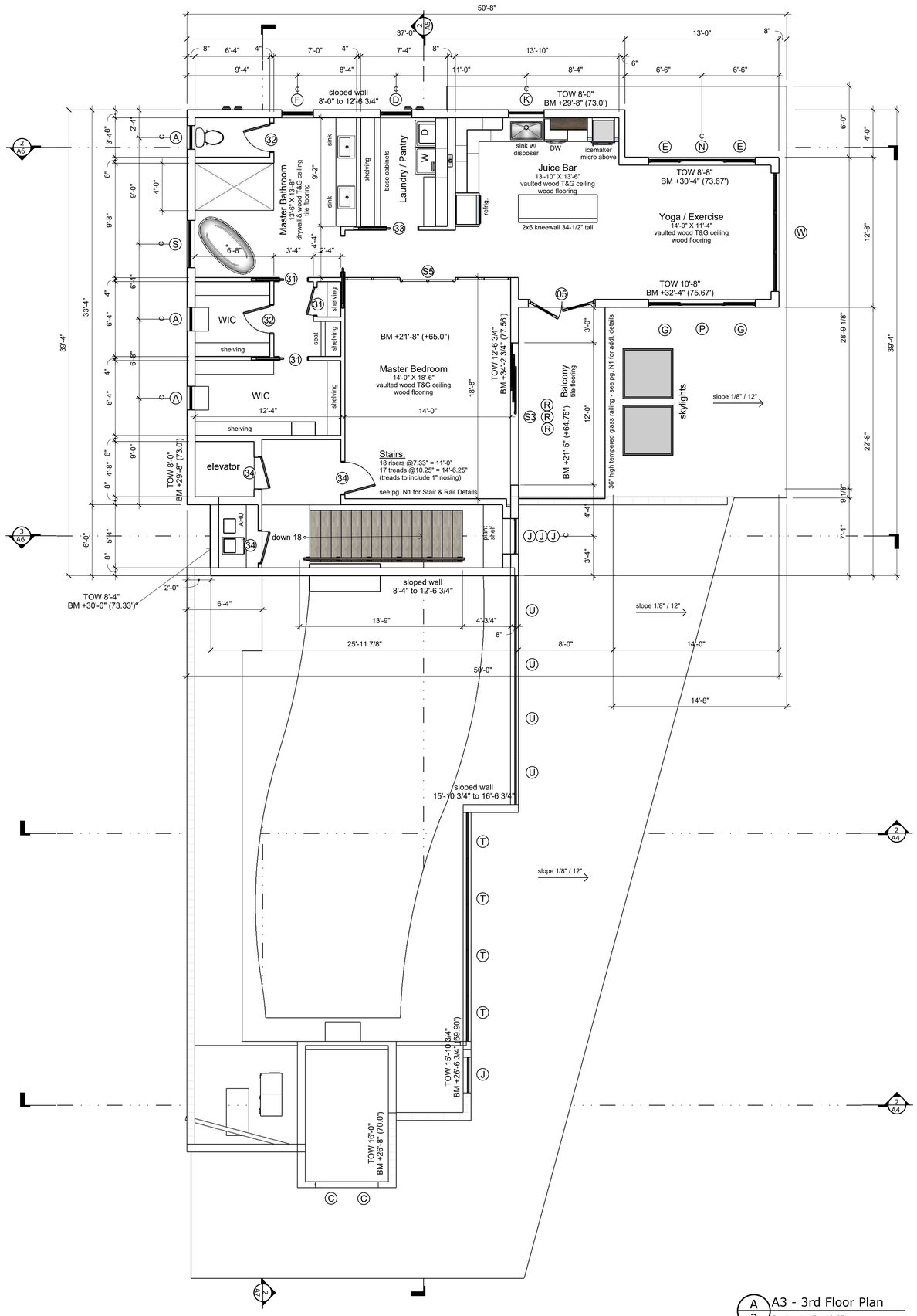
See structural drawings for engineered components and material requirements.



A3 - 3rd Floor Plan
Scale: 1/4" - 1'-0"

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HVAC Notes

HVAC Equipment shall be min. 16 SEER with
2-speed condenser and air-handler. Thermostats
shall be programmable, WiFi connected and include
humidity control. Ventilation shall include "quiet" bath
fans, 3) 8" range hood vents, 2) dryer vents and wall
boxes, make up air and fresh air systems.
1st level garage shall have 2) mini-split ductless AC
systems.

Blower door test shall be provided prior to final
mechanical inspection.

Plumbing Notes

Verify location of solar panels so that all plumbing roof
vents shall be located to avoid obstruction. All roof
penetrations shall not be visible from the front of the
house.

Fire Sprinkler Notes

Fire Sprinklers are required and a separate permit shall
be obtained by a licensed fire sprinkler contractor.

A Fire Hydrant shall be located within 1000 feet of the
property.

3rd Story Notes:

All 3rd story walls shall be 2x6 @ 16" O.C.
All exterior headers shall be (3) 2x8's.

SWS - Shear Wall Section

Shearwalls - Attach sill plate to wall below with
1/4" dia. Tapcons at 16" O.C. and with
(2) Simpson SDS 25312 at each truss.
Provide
(2) Simpson HTS16 or
(2) HTSM16 at end of each wall.

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Carson Residence
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A3

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See structural drawings for engineered components and material requirements.

2 / A4 Section
Scale: 1/4" - 1'-0"

1 / A4 Section
Scale: 1/4" - 1'-0"

Roof:
0680 - Roofing
Standing Seam Metal Roof (no roof vents)
GulfLok Eval Non-HVHZ
FBC FL33818-R2

GAF EverGuard TPO Roof System
FBC FL5293.2 R65

Foam Insulation (sealed attic)
5/8" plywood "Zip" roof deck
32" overhang typical (see R1 for details)
1X6 Cypress T&G soffits (no venting)

All Roof Penetrations shall not be visible from the front of the house.

See Overhang Details pg. R1.

Notes:
0640 - Exterior Wall Finish
7/8" Stucco Sand Finish
on wood framing with
galvanized lath on 15# felt
over housewrap on 7/16" OSB
(typical detail at 2nd floor)
See N1 for ASTM requirements.

5/8" Textured Masonry Finish
on CMU walls

Windows & Doors:
0580 - Windows
Windows shall be PGT Industries
Casement CA640 FL245-R16
Fixed PW640 FL243-R28
Fixed PW7620A FL243-R28
Black aluminum frames, EnergyStar rated.
U-Factor (0.4) and SHGC (0.25)
All 2nd & 3rd story windows shall be min. 24" above the floor.

Exterior Doors shall be Plastpro Fiberglass FL17347 on Composite Kerfed Jambs with Stainless Steel Hinges

Garage Doors shall be Clopay 3203 Sectional FL5678

Design Pressures allowed per Window and Door Size
-39.6 PSF - less than 20 SQ FT
-37.0 PSF - greater than 20 and up to 50 SQ FT
-33.4 PSF - greater than 50 and up to 100 SQ FT
-30.8 PSF - greater than 100 and up to 500 SQ FT
See Pg. N1 for Window Buck installation details.

All 2nd story windows shall be min. 24" above finished floor.

A / 4 A4 - Front South
Scale: 1/4" - 1'-0"

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C.A. #30556

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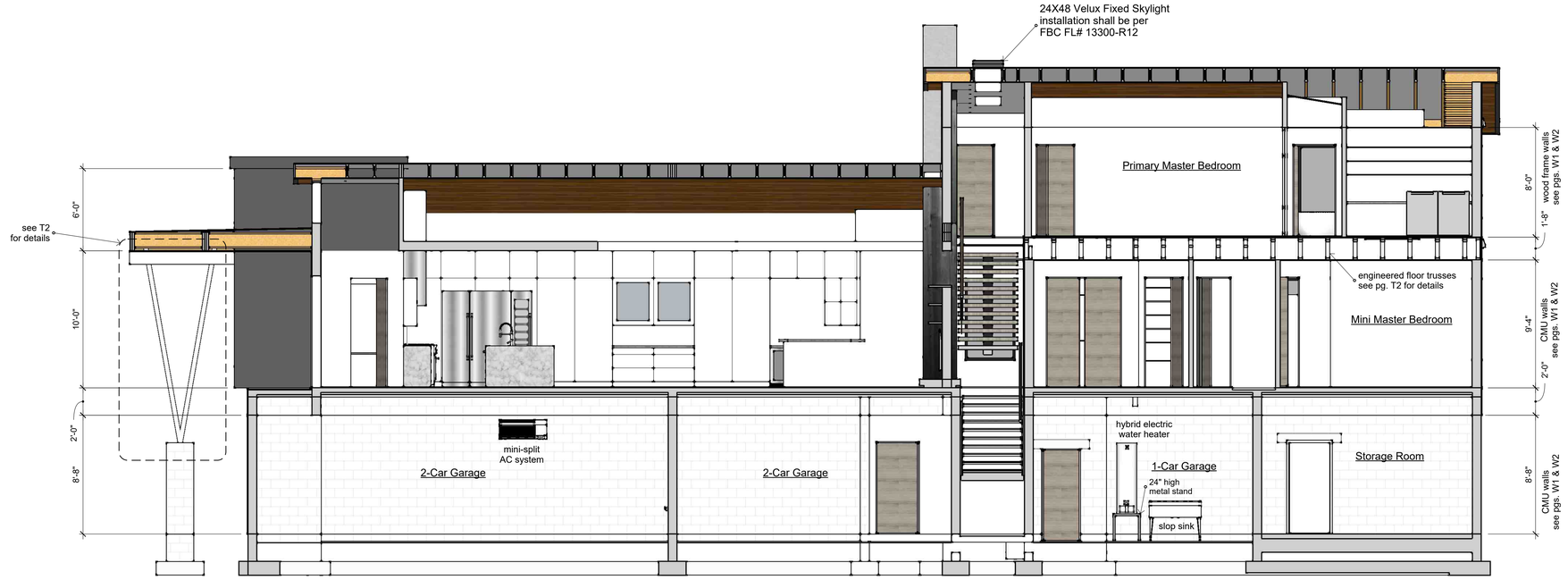
09/22/25

A4



1 A5 Section
Scale: 1/4" - 1'-0"

A 5 A5 - Right East
Scale: 1/4" - 1'-0"

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Roof Notes:
0680 - Roofing
Standing Seam Metal Roof (no roof vents)
GulfLok Eval Non-HVHZ
FBC FL33818-R2

GAF EverGuard TPO Roof System
FBC FL5293.2 R65

Foam Insulation (sealed attic)
5/8" plywood "Zip" roof deck
32" overhang typical (see R1 for details)
1X6 Cypress T&G soffits (no venting)

All Roof Penetrations shall not be visible from the front of the house.

See Overhang Details pg. R1.

Elevation Notes:
0640 - Exterior Wall Finish
7/8" Stucco Sand Finish
on wood framing with
galvanized lath on 15# felt
over housewrap on 7/16" OSB
(typical detail at 2nd floor)
See N1 for ASTM requirements.

5/8" Textured Masonry Finish
on CMU walls

Windows and Doors:
0580 - Windows
Windows shall be PGT Industries
Casement CA640 FL245-R16
Fixed PW640 FL243-R28
Fixed PW7620A FL243-R28
Black aluminum frames, EnergyStar rated.
U-Factor (0.4) and SHGC (0.25)
All 2nd & 3rd story windows shall be min. 24" above the floor.

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Design Pressures allowed per Window and Door Size
-39.6 PSF - less than 20 SQ FT
-37.0 PSF - greater than 20 and up to 50 SQ FT
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-30.8 PSF - greater than 100 and up to 500 SQ FT
See Pg. N1 for Window Buck installation details.

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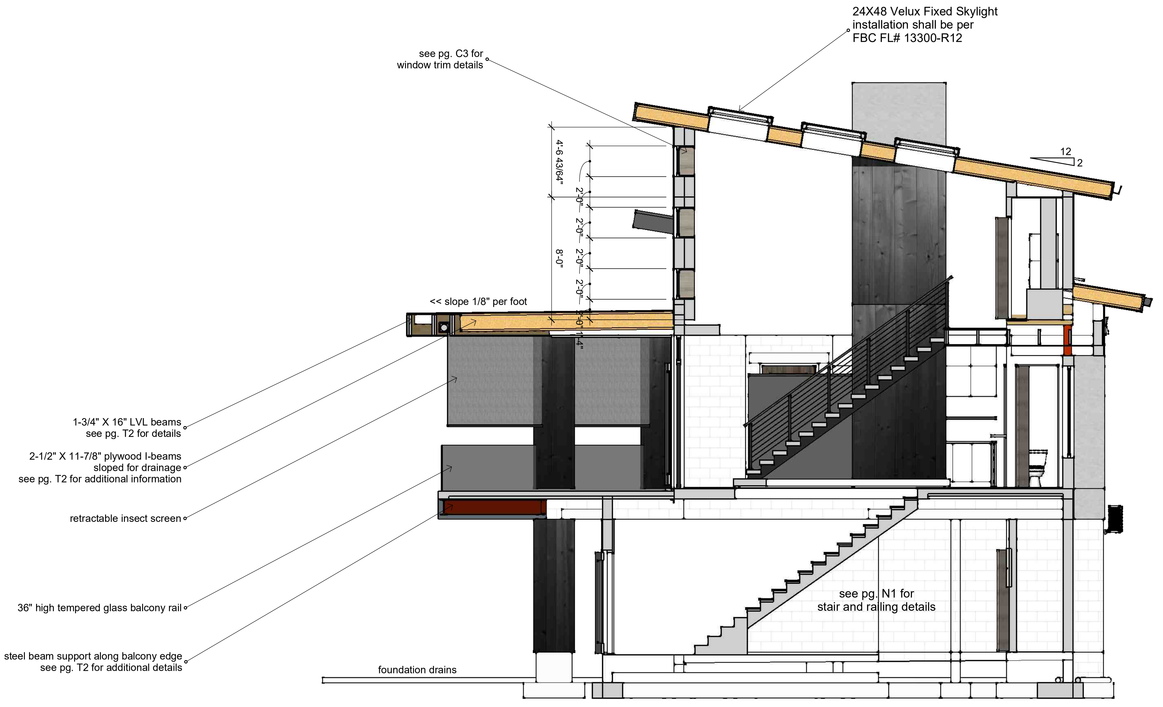
A5



A6 - Back North
Scale: 1/4" - 1'-0"

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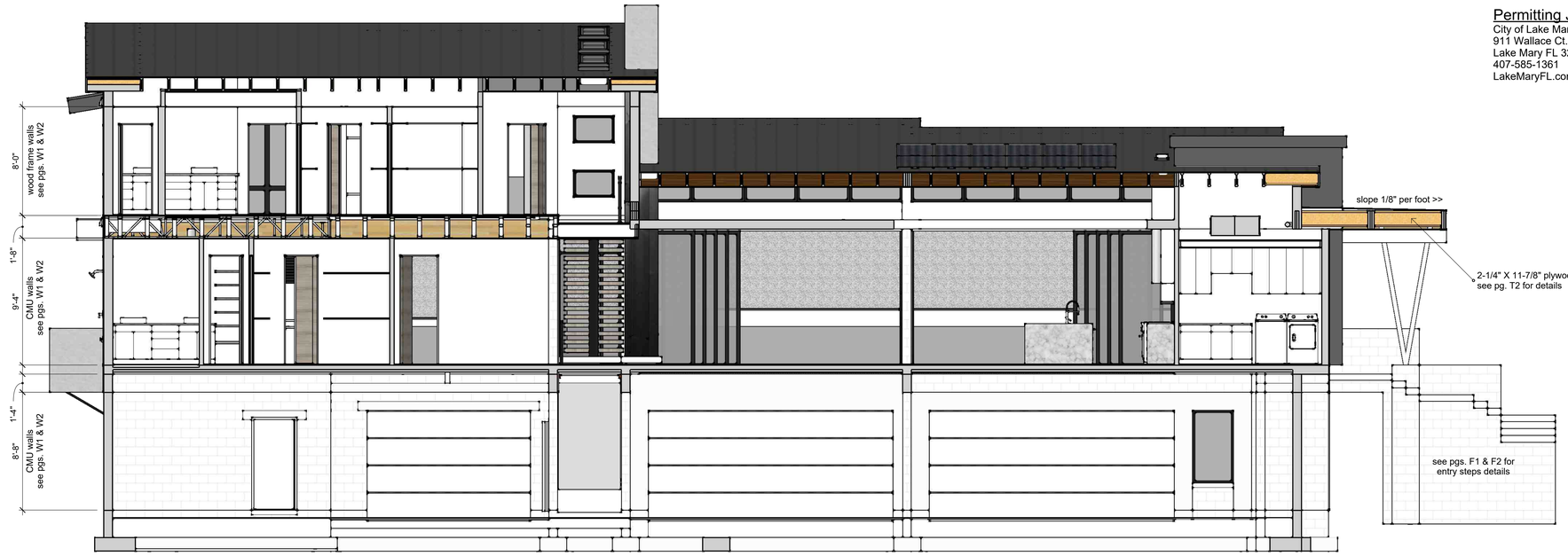

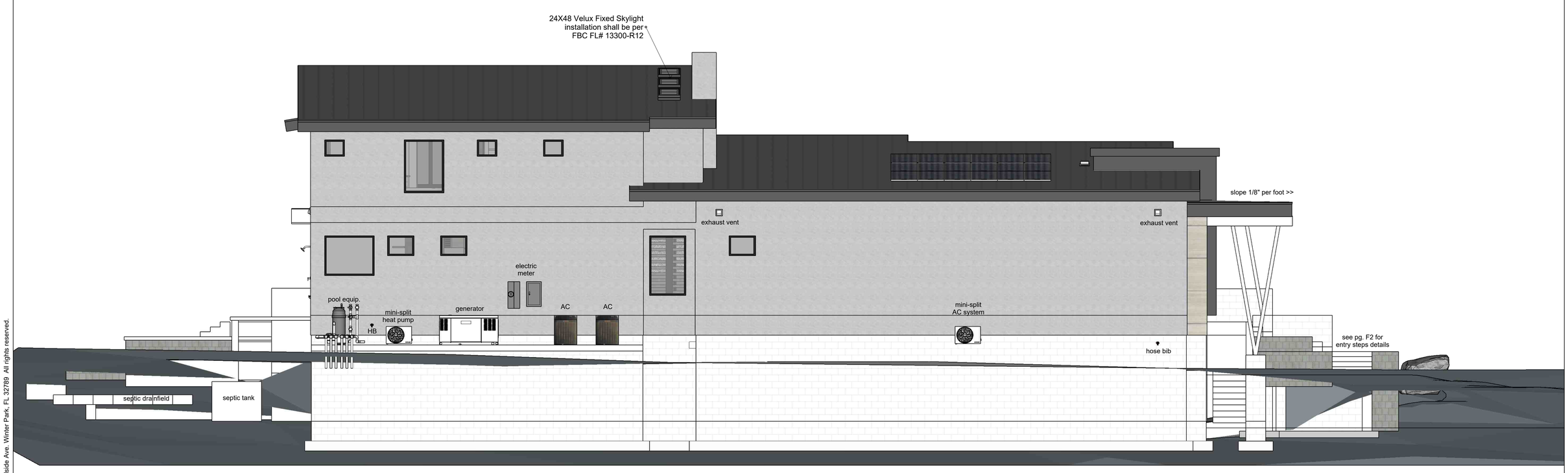

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A7 - Left West
Scale: 1/4" - 1'-0"

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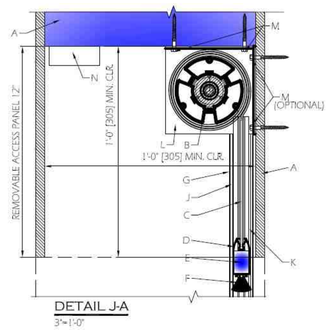
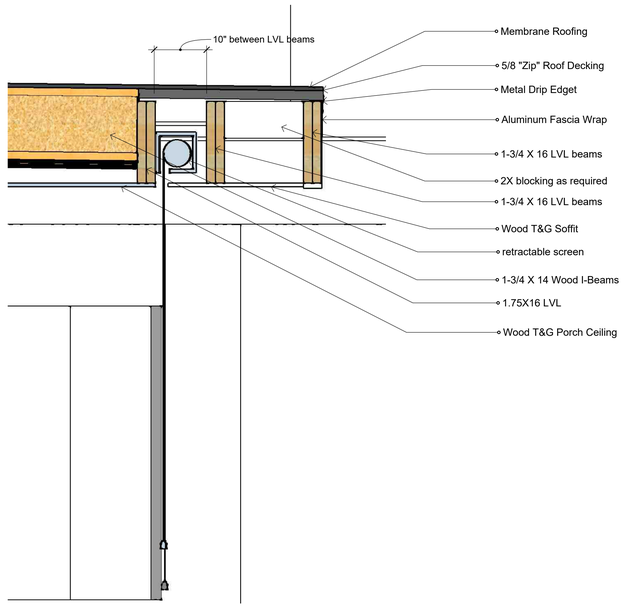
A7

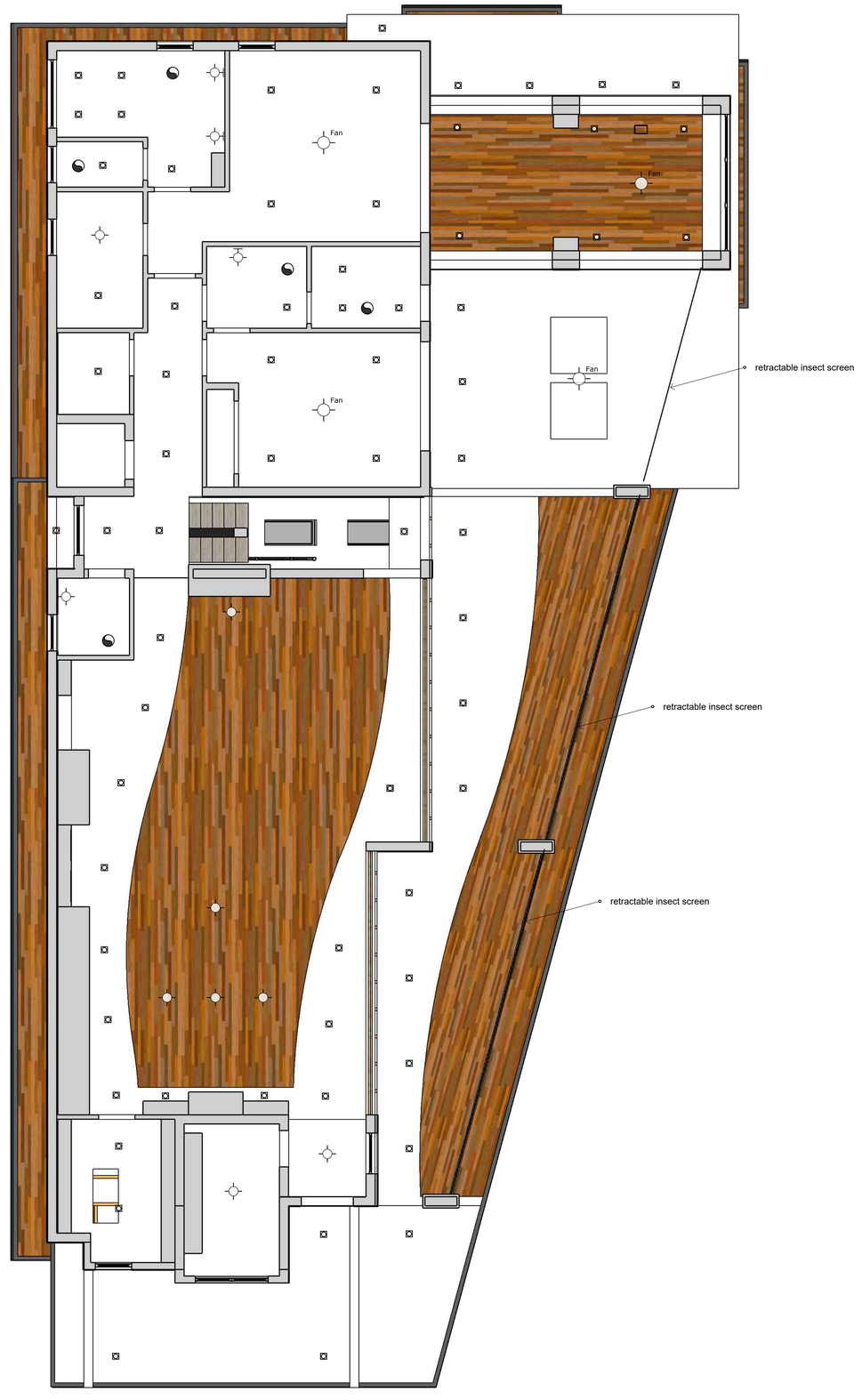


DETAIL J-A
3"=1'-0"

A. HEADER & FASCIA (BY OTHERS) REMOVABLE ACCESS PANEL REQUIRED ON EITHER FRONT OR BOTTOM POCKET, COMPLETE WIDTH OF UNIT
B. ROLLER ASSEMBLY
C. SCREEN
D. 'WEIGHT' BAR
E. STEEL BAR INSERT WEIGHT
F. FELT STRIP
G. U-CHANNEL
H. CHANNEL ATTACHMENT SCREWS
J. CUP
K. INSERT TRACK
L. ROLLER MOUNTING ANGLE
M. ATTACHMENT SCREWS FASTEN UP INTO HEADER OR BACK INTO POCKET
N. RECOMMENDED LOCATION FOR POWER SOURCE

Retractable Screens Detail
Scale: 1" = 1'-0"





C2 - Ceiling Plan
Scale: 1/4" - 1'-0"

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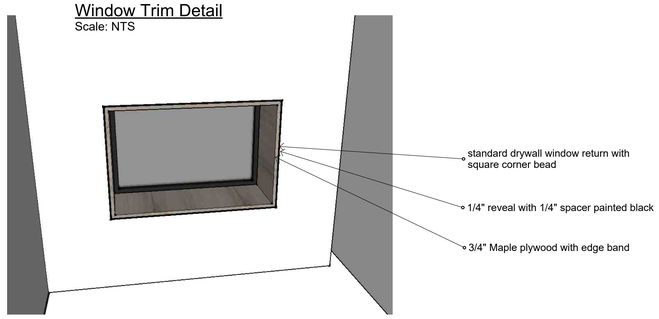
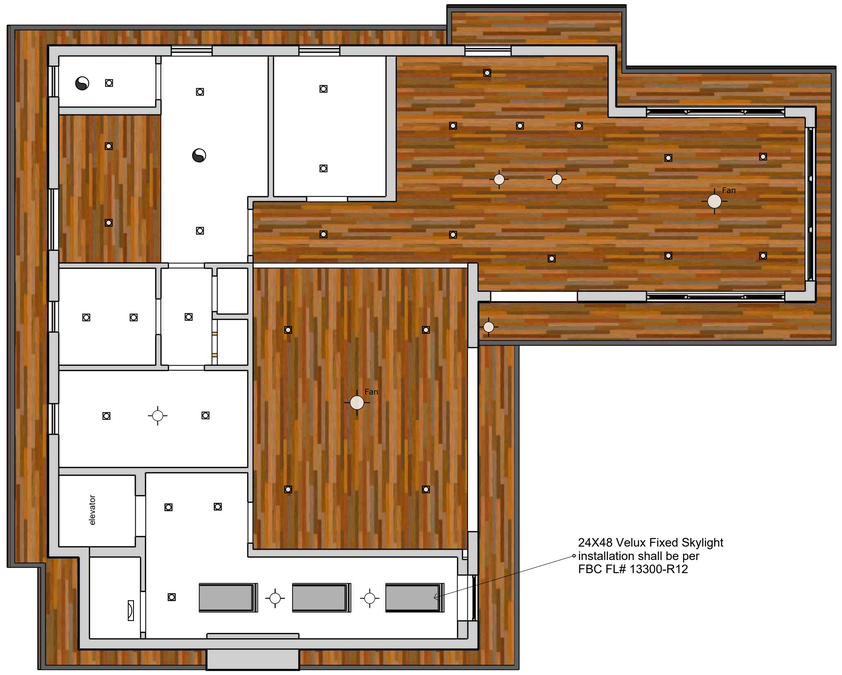
C2

Window Trim Detail
Scale: NTS



Trim Details
Scale: NTS



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C3

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C3 - Ceiling Plan
Scale: 1/4" - 1'-0"

Electric Notes:

This is a diagrammatic drawing intended to show lighting and convenience outlets only.
Electrical contractor shall be responsible to verify all code and equipment requirements to include location and sizing of all devices and connections. Electrical contractro shall install complete electrical service as required by code and electric utility company.

Smoke detectors required in each bedroom.
Smoke and CO detectors required within 10ft. outside all bedroom doors.

1. All bedroom outlets shall be arc fault interrupters
2. All kitchen, bathroom and laundry outlets shall be GFI
3. All garage and outdoor outlets shall be GFI
4. All outdoor outlets shall be weatherproof

Electrical contractor shall provide and install:
all 110V outlets per code
power to low voltage panel and security system
wiring for garage door opener(s) and doorbell(s)
power to irrigation time clock and wiring for rain sensor
all appliances and equipment as shown

All listed fixture heights shall be measured from finished floor.
TV & telephone wiring by others.

Notes and Equipment:
All 1st Level Electrical Devices shall be min. 24" above the floor.

01) 220v Car Charger outlet
02) Mini-Split Heat Pump AC (2 locations)
03) Hybrid Electric Water Heater
04) Car Lift
05) Elevator Equipment
06) 26KW Generator
07) Dehumidifier
08) duplex outlet inside cabinet
09) LED lighting under cabinet
10) 110V power for septic system air pump
11) 110V stub for landscape lighting 2) locations
12) motorized shade trellis
13) retractable screens
14) 2 infrared heaters - verify requirements

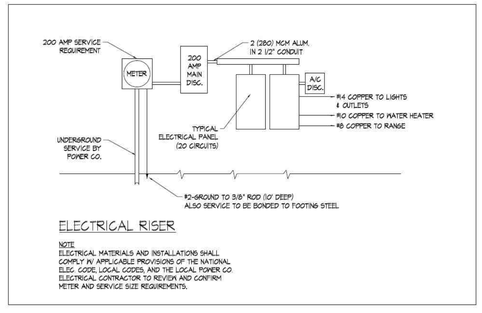
Closet lights shall have door jamb switch 5) locations

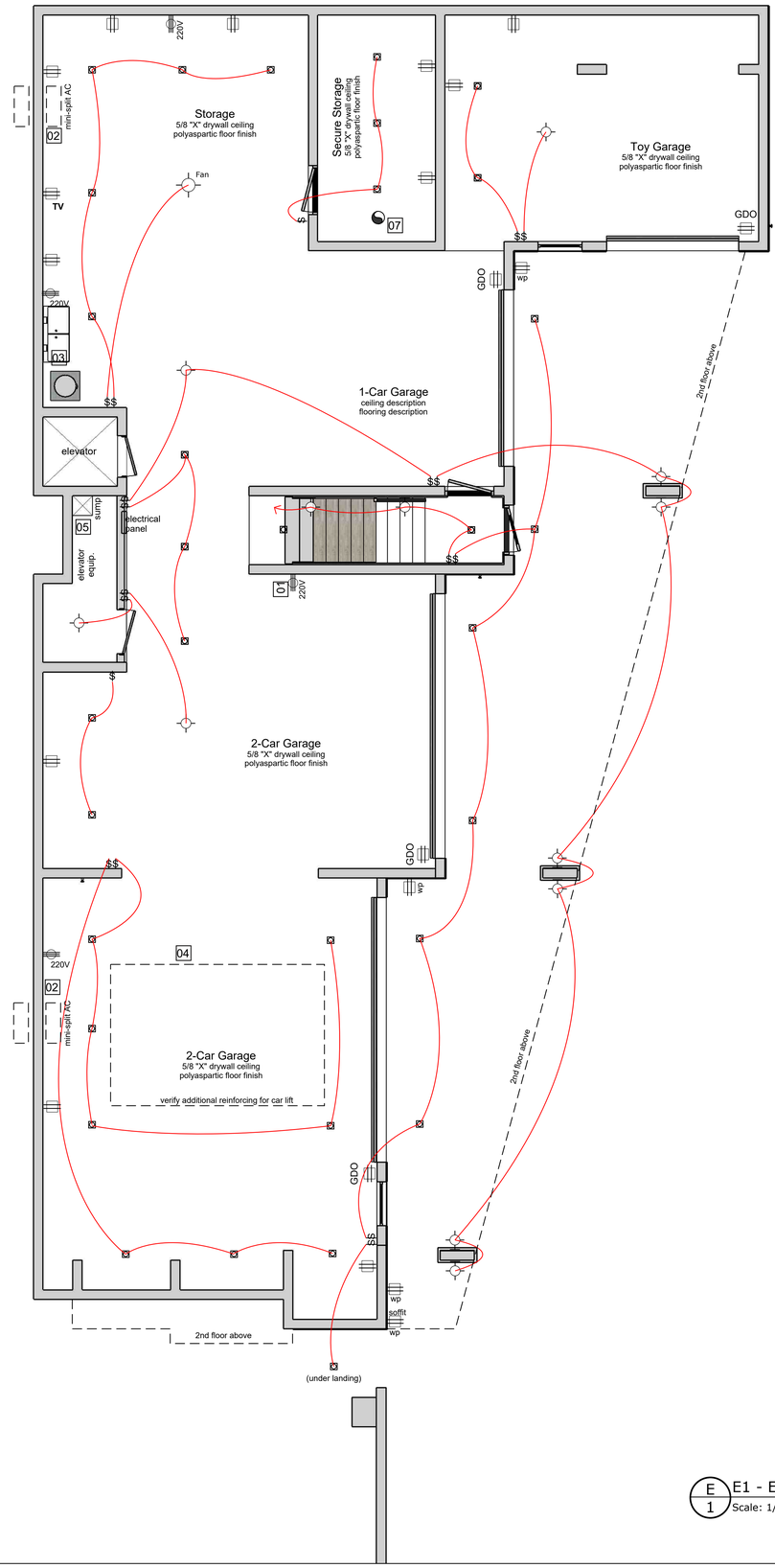
Electric Legend:

Electric Legend may not be accurate.
Electrical contractor shall verify all quantities to meet code and complete electrical work per devices indicated on drawings.

duplex outlet		ceiling light	
220v outlet		ceiling fan	Fan
GFI outlet		wall light	
floor outlet		recessed light	
smoke detector		custom trim	
disconnect	D	under-cabinet	
exhaust fan		closet light	
keypad		controlled switch	
timer		controlled dimmer	

300 amp underground electric service detail





E1 - Electrical
Scale: 1/4" - 1'-0"

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Notes

Equipment in the garage? 220V outlets?
Ventilation in safe room?

HVAC Equipment shall be min. 16 SEER with 2-speed condenser and air-handler. Thermostats shall be programmable, WiFi connected and include humidity control. Ventilation shall include "quiet" bath fans, 3) 8" range hood vents, 2) dryer vents and wall boxes, make up air and fresh air systems.
1st level garage shall have 2) mini-split ductless AC systems.

Blower door test shall be provided prior to final mechanical inspection.

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Design Build Consult

Date
09/22/25

E1

Electric Notes:

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Smoke detectors required in each bedroom.
Smoke and CO detectors required within 10ft. outside all bedroom doors.

1. All bedroom outlets shall be arc fault interrupters
2. All kitchen, bathroom and laundry outlets shall be GFI
3. All garage and outdoor outlets shall be GFI
4. All outdoor outlets shall be weatherproof

Electrical contractor shall provide and install:
all 110V outlets per code
power to low voltage panel and security system
wiring for garage door opener(s) and doorbell(s)
power to irrigation time clock and wiring for rain sensor
all appliances and equipment as shown

All listed fixture heights shall be measured from finished floor.
TV & telephone wiring by others.

Notes and Equipment:
All 1st Level Electrical Devices shall be min. 24" above the floor.

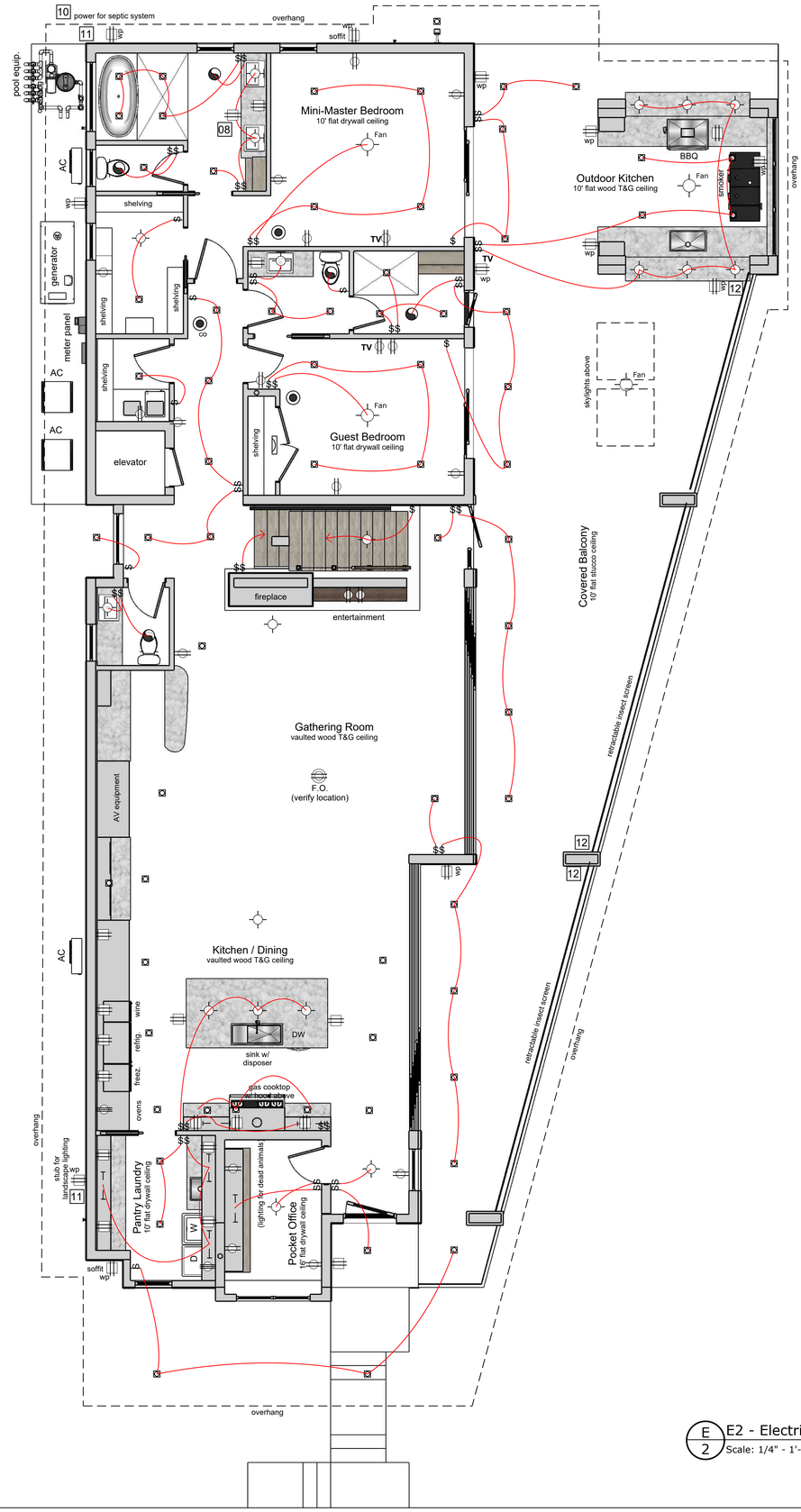
01) 220v Car Charger outlet
02) Mini-Split Heat Pump AC (2 locations)
03) Hybrid Electric Water Heater
04) Car Lift
05) Elevator Equipment
06) 26KW Generator
07) Dehumidifier
08) duplex outlet inside cabinet
09) LED lighting under cabinet
10) 110V power for septic system air pump
11) 110V stub for landscape lighting 2) locations
12) retractable screens
13) 2 infrared heaters - verify requirements

Closet lights shall have door jamb switch 5) locations

Electric Legend:

Electric Legend may not be accurate.
Electrical contractor shall verify all quantities to meet code and complete electrical work per devices indicated on drawings.

duplex outlet		ceiling light	
220v outlet		ceiling fan	Fan
GFI outlet		wall light	
floor outlet		recessed light	
smoke detector		custom trim	
disconnect	D	under-cabinet	
exhaust fan		closet light	
keypad		controlled switch	
timer		controlled dimmer	



E2 - Electrical
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Notes

AV equipment rack with ventilation.

HVAC Equipment shall be min. 16 SEER with 2-speed condenser and air-handler. Thermostats shall be programmable, WiFi connected and include humidity control. Ventilation shall include "quiet" bath fans, 3) 8" range hood vents, 2) dryer vents and wall boxes, make up air and fresh air systems.
1st level garage shall have 2) mini-split ductless AC systems.

Blower door test shall be provided prior to final mechanical inspection.

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PHONE (407) 421-4866

DANIEL SOUTER STATE OF FLORIDA No. 63901 PROFESSIONAL ENGINEER

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Kg3d Home Design LLC
2711 Woodside Avenue
Winter Park FL 32789
(321) 439-1047

Carson Residence
Lot 13 Evansdale 2 PB 8 Pg. 38
153 Old Park Way
Lake Mary FL 32746

groningerhomes.com
Design Build Consult

Date
09/22/25

E2

Electric Notes:

This is a diagrammatic drawing intended to show lighting and convenience outlets only. Electrical contractor shall be responsible to verify all code and equipment requirements to include location and sizing of all devices and connections. Electrical contractro shall install complete electrical service as required by code and electric utility company.

Smoke detectors required in each bedroom.
Smoke and CO detectors required within 10ft. outside all bedroom doors.

1. All bedroom outlets shall be arc fault interrupters
2. All kitchen, bathroom and laundry outlets shall be GFI
3. All garage and outdoor outlets shall be GFI
4. All outdoor outlets shall be weatherproof

Electrical contractor shall provide and install:
all 110V outlets per code
power to low voltage panel and security system
wiring for garage door opener(s) and doorbell(s)
power to irrigation time clock and wiring for rain sensor
all appliances and equipment as shown

All listed fixture heights shall be measured from finished floor.
TV & telephone wiring by others.

Notes and Equipment:
All 1st Level Electrical Devices shall be min. 24" above the floor.

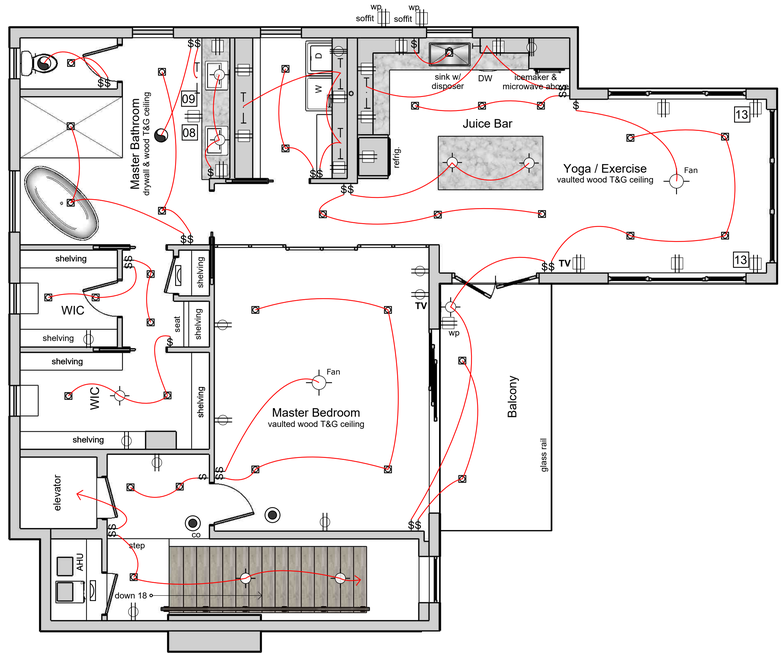
01) 220v Car Charger outlet
02) Mini-Split Heat Pump AC (2 locations)
03) Hybrid Electric Water Heater
04) Car Lift
05) Elevator Equipment
06) 26KW Generator
07) Dehumidifier
08) duplex outlet inside cabinet
09) LED lighting under cabinet
10) 110V power for septic system air pump
11) 110V stub for landscape lighting 2) locations
12) motorized shade trellis
13) retractable screens
14) 2 infrared heaters - verify requirements

Closet lights shall have door jamb switch 5) locations

Electric Legend:

Electric Legend may not be accurate.
Electrical contractor shall verify all quantities to meet code and complete electrical work per devices indicated on drawings.

duplex outlet		ceiling light	
220v outlet		ceiling fan	Fan
GFI outlet		wall light	
floor outlet		recessed light	
smoke detector		custom trim	
disconnect	D	under-cabinet	
exhaust fan		closet light	
keypad		controlled switch	
timer		controlled dimmer	



E3 - Electrical
Scale: 1/4" - 1'-0"

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Permitting Jurisdition

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Lake Mary FL 32746
407-585-1361
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HVAC Notes

HVAC Equipment shall be min. 16 SEER with 2-speed condenser and air-handler. Thermostats shall be programmable, WiFi connected and include humidity control. Ventilation shall include "quiet" bath fans, 3) 8" range hood vents, 2) dryer vents and wall boxes, make up air and fresh air systems.
1st level garage shall have 2) mini-split ductless AC systems.

Blower door test shall be provided prior to final mechanical inspection.

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DANIEL SOUTER LICENSE No 63901 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Design Build Consult

Date
09/22/25

E3

Page
13 of 26

Foundation and Slab

Footings have been designed for soil bearing capacity of 2000 PSF.

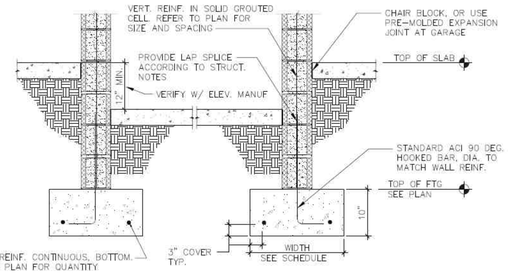
Footings shall bear on soil compacted to a density of at least 95% of standard Proctor maximum density test. Fill dirt under slab shall be compacted to at least 95% of standard Proctor.

Concrete shall be 2500 PSI unconfined compressive strength at 28 days.
Reinforcing steel (rebar) shall conform to ASTM 615 grade 40.
Continuous vertical and horizontal rebar in footins, beams and other concrete shall be spliced by wiring together with minimum 25" overlap.

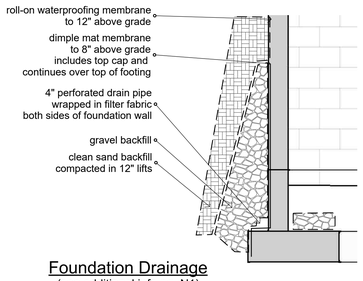
If stemwall exceeds 32", install 1)#5 rebar vertical @4' o.c. max. and fill all cells with grout.
If stemwall exceeds 48", install 1)#5 rebar vertical @4' o.c. max. and, 1)#5 rebar horizontal @2' o.c. max. in U-block and fill all cells with grout.
If dowel is missed, drill 3/4" hole and install #5 rebar using epoxy (Simpson #ET) w/ 6"embedment.

See A1 and F1 for window schedule.
See S3 for window and door opening dimensions.

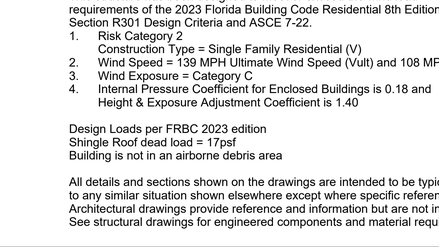
Elevator Pit Detail



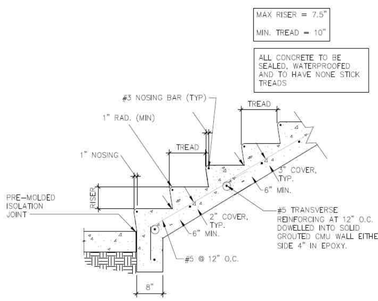
Foundation Drainage



Foundation Drainage
(see additional info pg. N1)

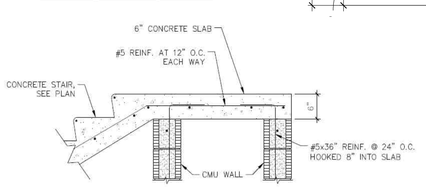


Entry Steps
Scale: 1/2" = 1'-0"



Concrete Stairs

Landing at Entry Stairs



Termite Protection

R318.1 Termite Protection.
Termite protection shall be provided by registered termiticides, including soil applied pesticides, baiting systems, and pesticides applied to wood, or other approved methods of termite protection labeled for use as a preventative treatment to new construction.
R318.1.7 Termite Baiting System
If a registered termiticide formulated and registered as a bait system is used for subterranean termite prevention, Sections R318.1.1 through R318.1.6 do not apply; however, a signed contract assuring the installation, maintenance and monitoring of the baiting system that is in compliance with the requirements of Chapter 482, Florida Statutes shall be provided to the building official prior to the pouring of the slab, and the system must be installed prior to final building approval.

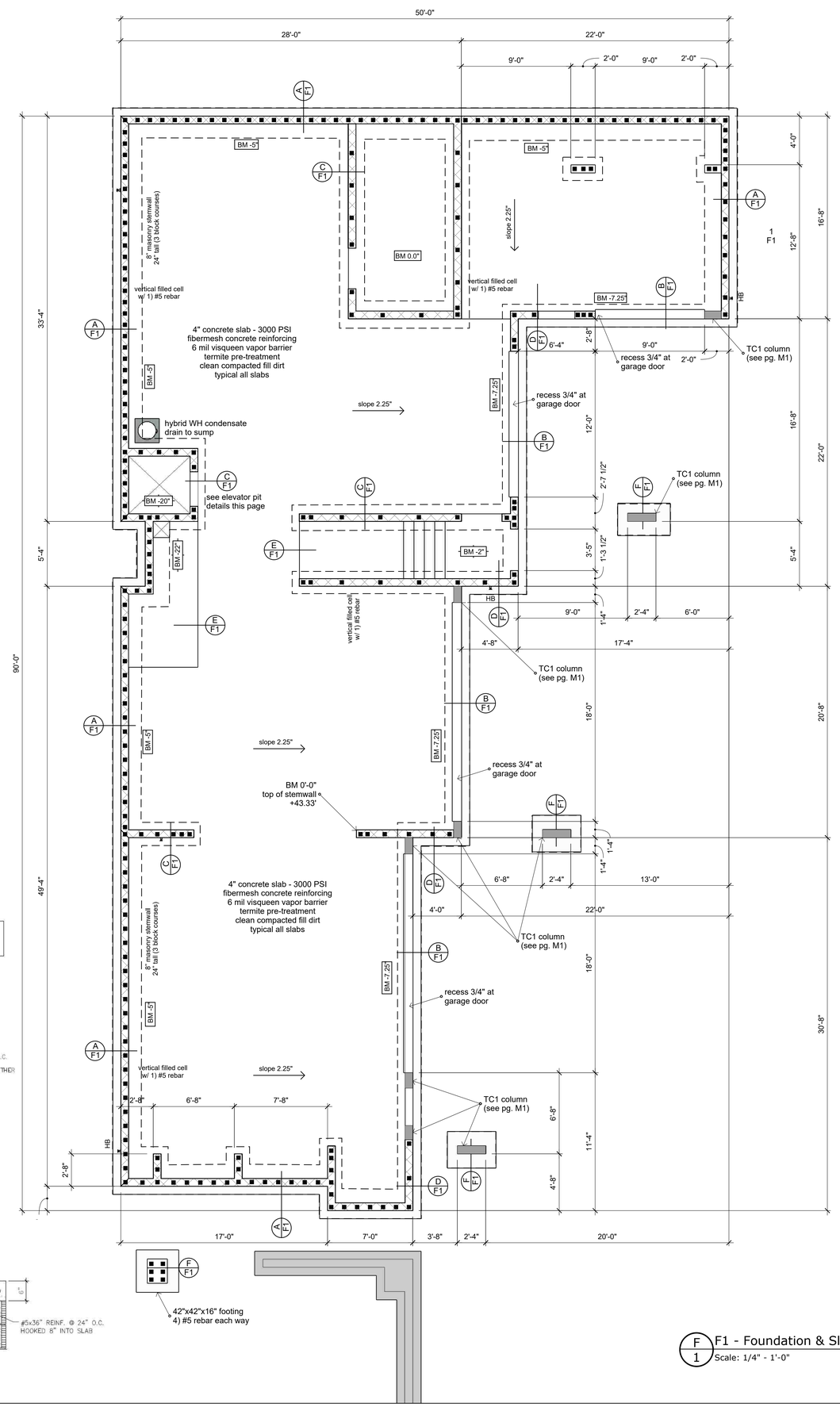
Design Criteria:

This structure has been designed to meet or exceed the wind load requirements of the 2023 Florida Building Code Residential 8th Edition Section R301 Design Criteria and ASCE 7-22.

1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
3. Wind Exposure = Category C
4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and Height & Exposure Adjustment Coefficient is 1.40

Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

All details and sections shown on the drawings are intended to be typical and shall apply to any similar situation shown elsewhere except where specific reference is given. Architectural drawings provide reference and information but are not intended to be structural. See structural drawings for engineered components and material requirements.



F1 - Foundation & Slab
Scale: 1/4" - 1'-0"

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Permitting Jurisdition

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Footing Schedule

A/F1 - 14X36 w/ 4) #5 continuous
#5 transvers bars @32" O.C.
#5 upright dowels @16" O.C.
see foundation waterproofing notes

B/F1 - 12X24 w/ 3) #5 continuous
#5 upright dowels per plan

C/F1 - 12X24 w/ 3) #5 continuous
#5 upright dowels @24" O.C. min.

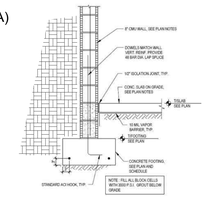
D/F1 - 12X24 w/ 3) #5 continuous
#5 upright dowels @48" O.C. min.

E/F1 - 8X16 w/ 2) #5 continuous
monolithic stepdown per plan

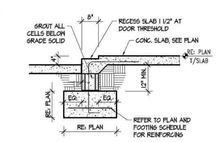
F/F1 - 36X48X12 pad footing w/
#5 rebar @12" O.C. each way

Footing Details

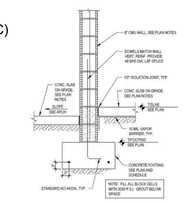
A)



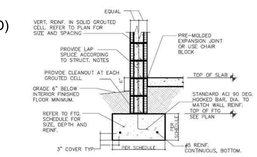
B)



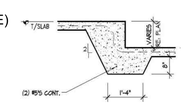
C)



D)



E)



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Design Build Consult

Date
09/22/25

F1

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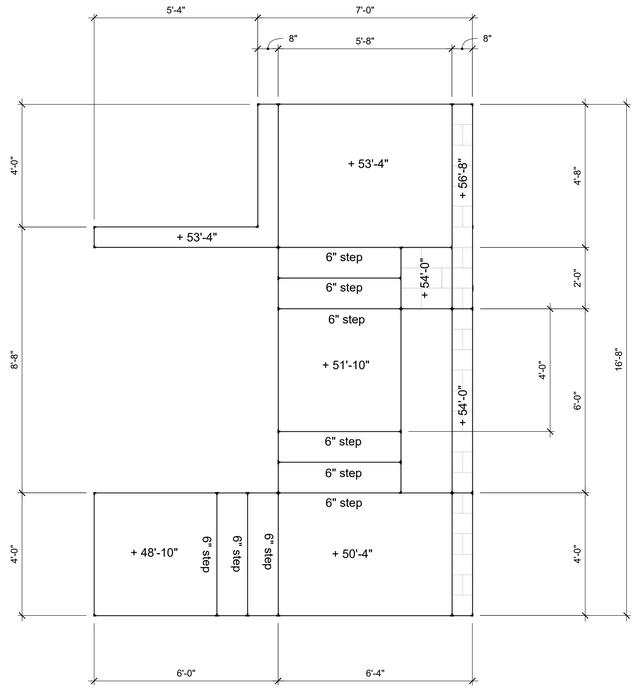

Entry Steps
Scale: 1/2" = 1'-0"

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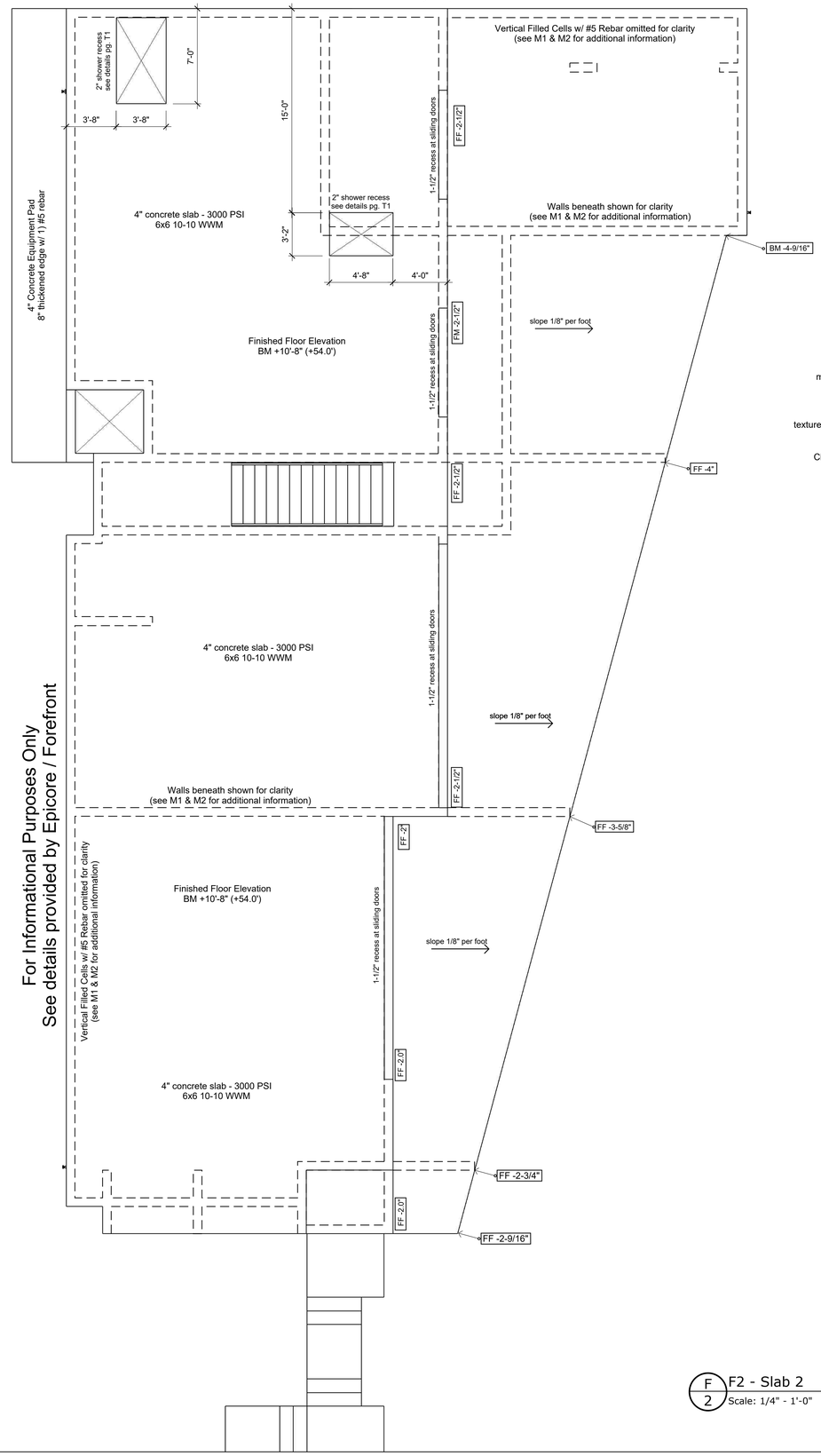
For Informational Purposes Only
See details provided by Epicore / Forefront

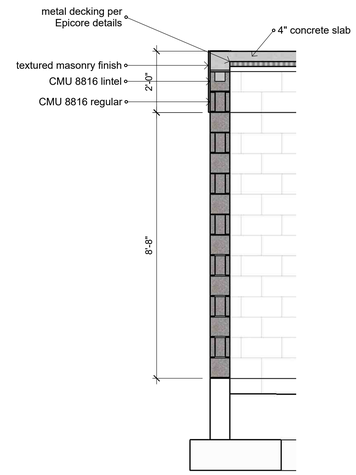


For Informational Purposes Only
See details provided by Epicore / Forefront

Top of Wall Detail

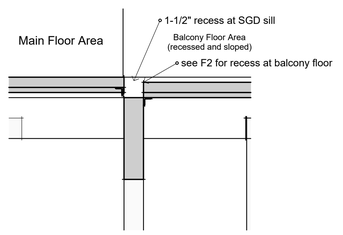
Scale: 1/2" = 1'-0"

See additional details pg. T1

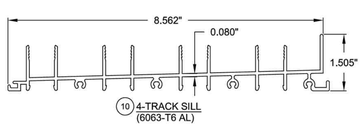


Sliding Glass Door Sill Detail

Scale: 1/2" = 1'-0"



Sliding Glass Door Sill



F2 - Slab 2
Scale: 1/4" - 1'-0"

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F2

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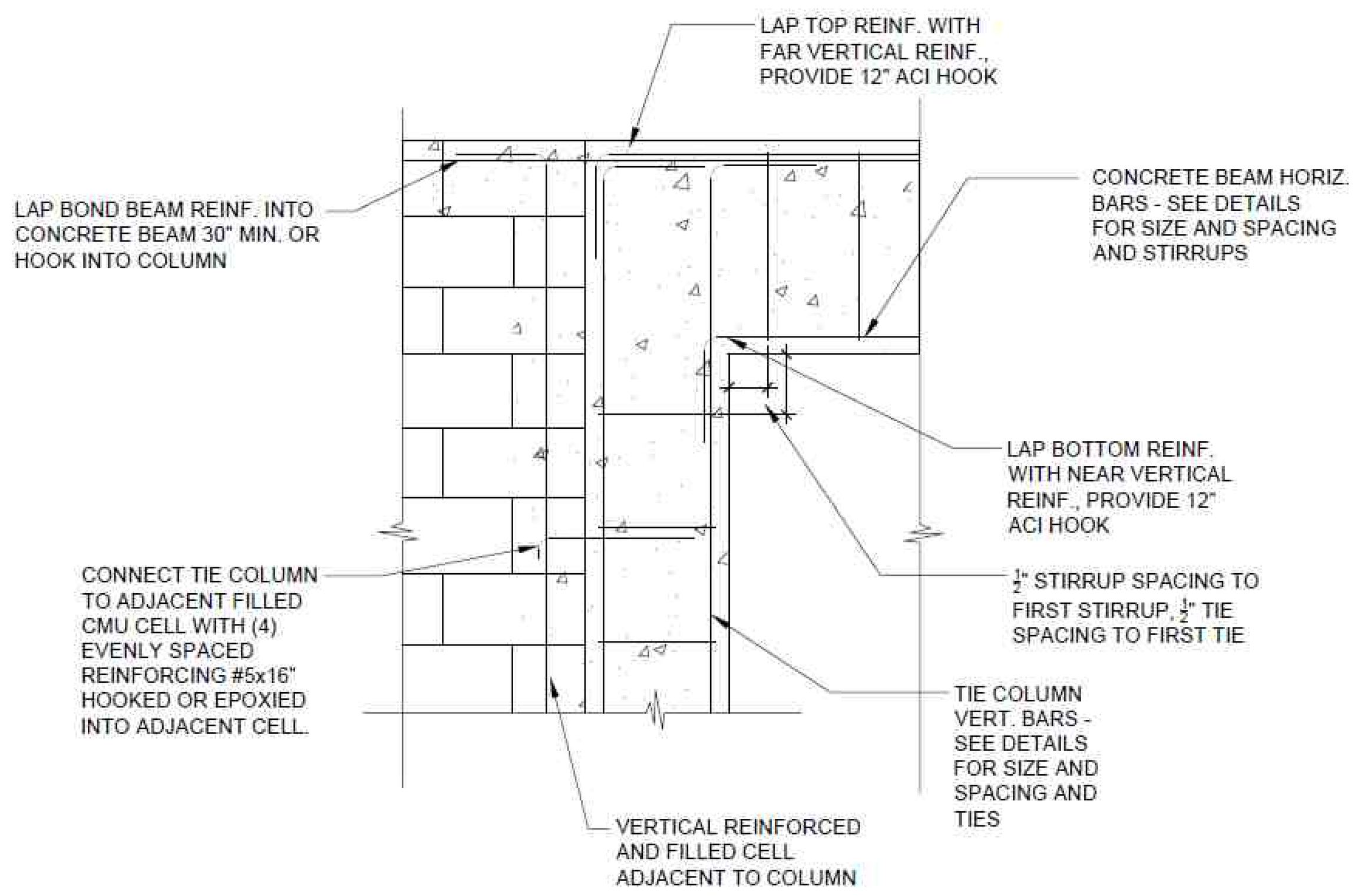
See A1 and F1 for window schedule.
See S3 for window and door opening dimensions.



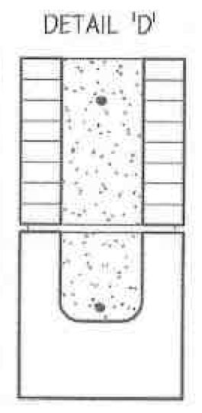
CONCRETE BEAM/COLUMN REINFORCING DETAIL

PRECAST LINTEL (8"X16" COMPOSITE)

LINTEL PROPERTIES			SAFE GRAVITY LOADS (PLF)		SAFE UPLIFT LOADS (PLF)	
MARK NO.	TOTAL LINTEL SIZE	NOMINAL CLEAR SPAN	SOLID (1) #5U DETAIL C	SOLID (1)#5U & L DETAIL D	SOLID (1)#5U &(Ø)#5L DETAIL C	SOLID (1)#5U & L DETAIL D
L-1	2'-10"	1'-6"	6794	10000	10000	10000
L-2	3'-6"	2'-2"	7902	10000	8237	8237
L-3	4'-0"	2'-8"	5692	10000	5124	5124
L-4	4'-6"	3'-2"	4288	10000	3709	3709
L-5	5'-4"	4'-0"	3219	6297	4261	4261
L-6	5'-10"	4'-6"	3780	5037	2121	2121
L-7	6'-6"	5'-2"	3609	3848	2704	2704
L-8	7'-6"	6'-2"	2994	2878	1953	1953
L-9	8'-4"	7'-0"	2496	2384	1157	1157
L-10	9'-4"	8'-0"	1994	1959	974	974
L-11	10'-6"	9'-2"	1535	1618	819	819
L-12	11'-4"	10'-0"	1472	1433	765	765
L-13	12'-6"	11'-2"	1270	1237	609	609
L-14	13'-4"	12'-0"	1155	1126	524	524
L-15	14'-0"	12'-8"	1077	1050	467	467
L-16 (P.S.)	14'-8"	13'-4"	1087	1087	555	556
L-17 (P.S.)	15'-4"	14'-0"	1022	1022	943	943
L-18 (P.S.)	17'-4"	16'-0"	864	864	731	731
L-19 (P.S.)	19'-4"	18'-0"	747	747	573	573
L-20 (P.S.)	20'-0"	18'-8"	714	714	536	536
L-21 (P.S.)	21'-4"	20'-8"	656	656	462	462
L-22 (P.S.)	24'-0"	22'-8"	563	563	360	360

NOTE: (P.S.) REPRESENT PRECAST LINTELS PRESTRESSED USING (2) 7/16" DIAMETER PRESTRESSING STRANDS.

DETAIL 'D'

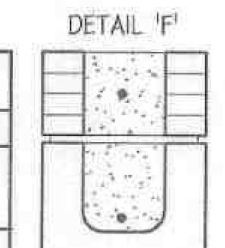


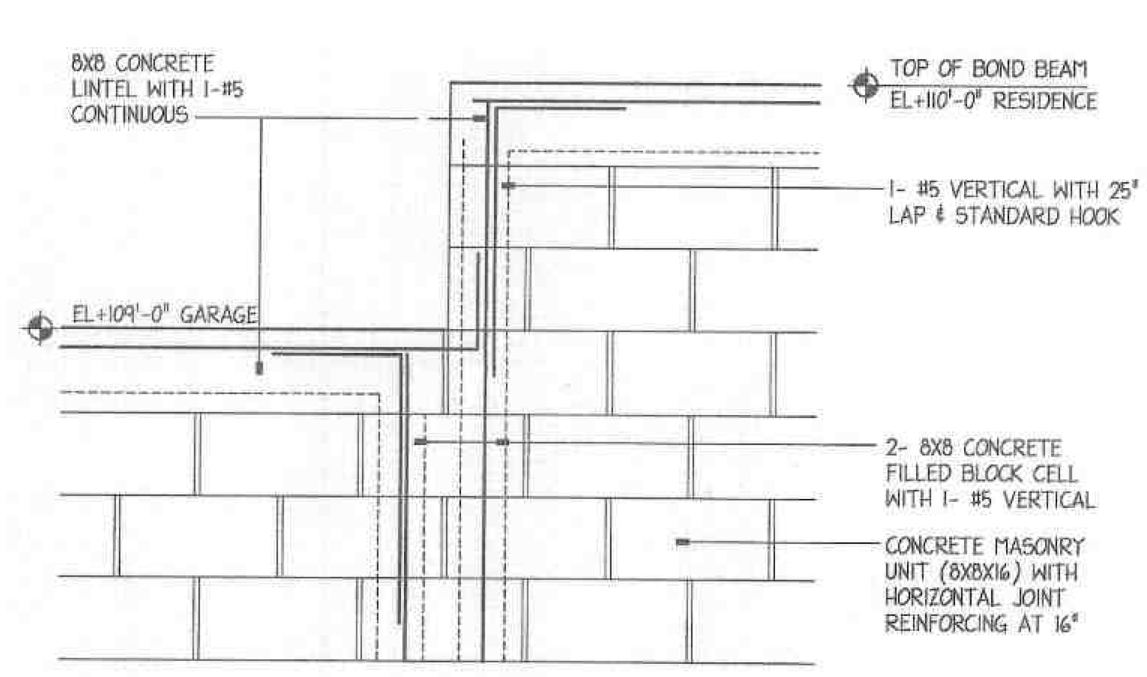
PRECAST LINTEL (8"X12" COMPOSITE)

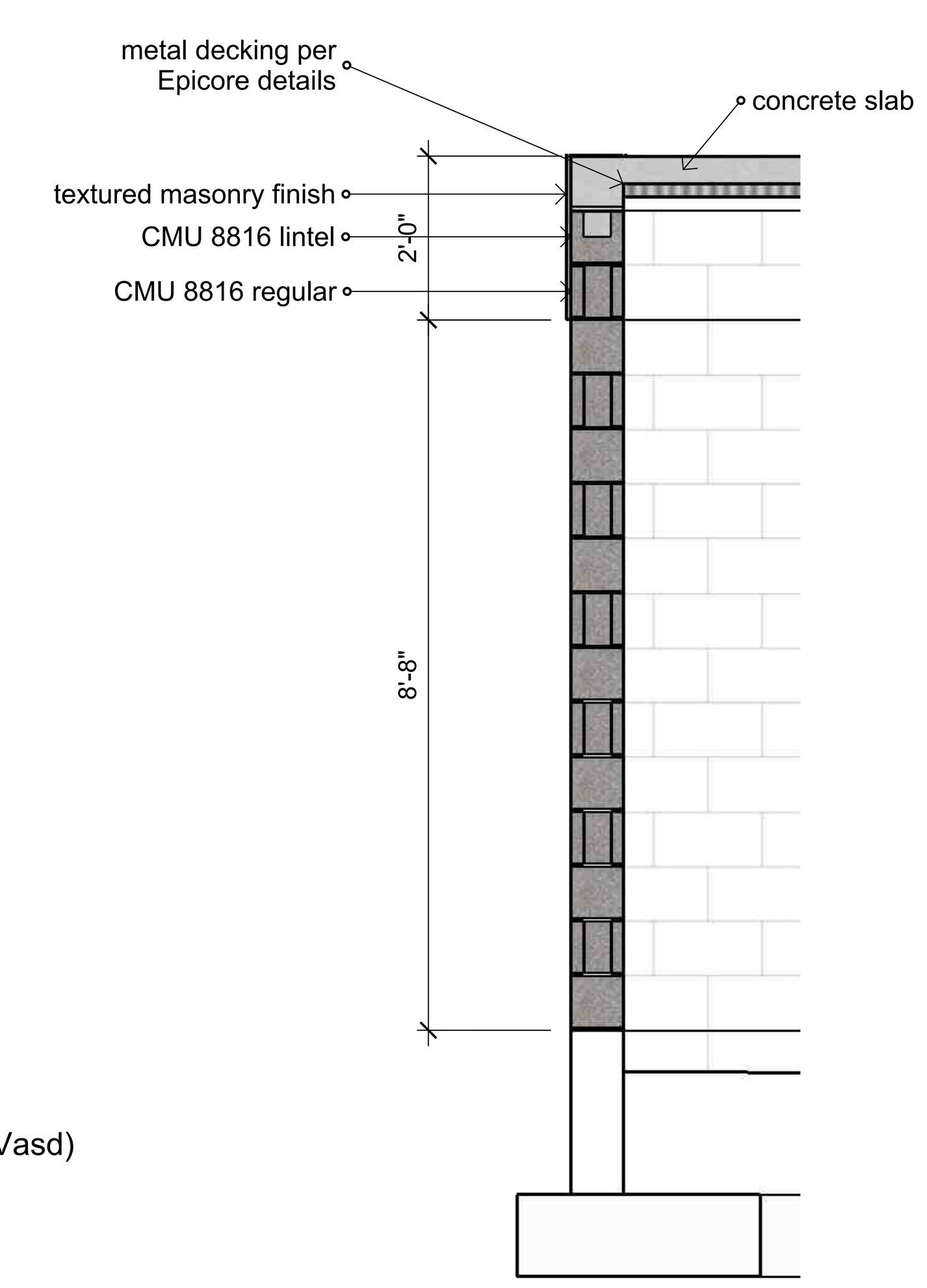
TOTAL ALLOWABLE SUPERIMPOSED LOAD-POUNDS PER LINEAR FOOT					
MARK NO.	NOMINAL CLEAR SPAN	TOTAL LINTEL SIZE	FILLED (1) #5 T&B F	FILLED (1)#5T (2)#5B G	FILLED (2) #5T&B H
L-1	1'-6"	2'-10"	11187	11463	11739
L-2	2'-2"	3'-6"	7716	7908	8099
L-3	2'-8"	4'-0"	6246	6401	6556
L-4	3'-2"	4'-6"	5252	5383	5514
L-5	4'-0"	5'-4"	4140	4244	4347
L-6	4'-6"	5'-10"	3670	3762	3854
L-7	5'-2"	6'-6"	3190	3270	3350
L-8	6'-2"	7'-6"	2654	2722	2789
L-9	7'-0"	8'-4"	2328	2387	2447
L-10	8'-0"	9'-4"	2026	2078	2130
L-11	9'-2"	10'-6"	1757	1802	1847
L-12	10'-0"	11'-4"	1603	1645	1686
L-13	11'-2"	12'-6"	1427	1464	1501
L-14	12'-0"	13'-4"	1321	1356	1391
L-15	12'-8"	14'-0"	1247	1280	1312
L-16 (P.S.)	13'-4"	14'-8"	1157	1195	1388
L-17 (P.S.)	14'-0"	15'-4"	1085	1122	1305
L-18 (P.S.)	16'-0"	17'-4"	908	940	1100
L-19 (P.S.)	18'-0"	19'-4"	763	782	941
L-20 (P.S.)	18'-8"	20'-0"	685	703	882
L-21 (P.S.)	20'-8"	21'-4"	498	512	658
L-22 (P.S.)	22'-8"	24'-0"	358	369	490

NOTE: (P.S.) REPRESENT PRECAST LINTELS PRESTRESSED USING (2) 7/16" DIAMETER PRESTRESSING STRANDS.

DETAIL 'F'







Design Criteria:

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1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
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4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and Height & Exposure Adjustment Coefficient is 1.40

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Shingle Roof dead load = 17psf
Building is not in an airborne debris area

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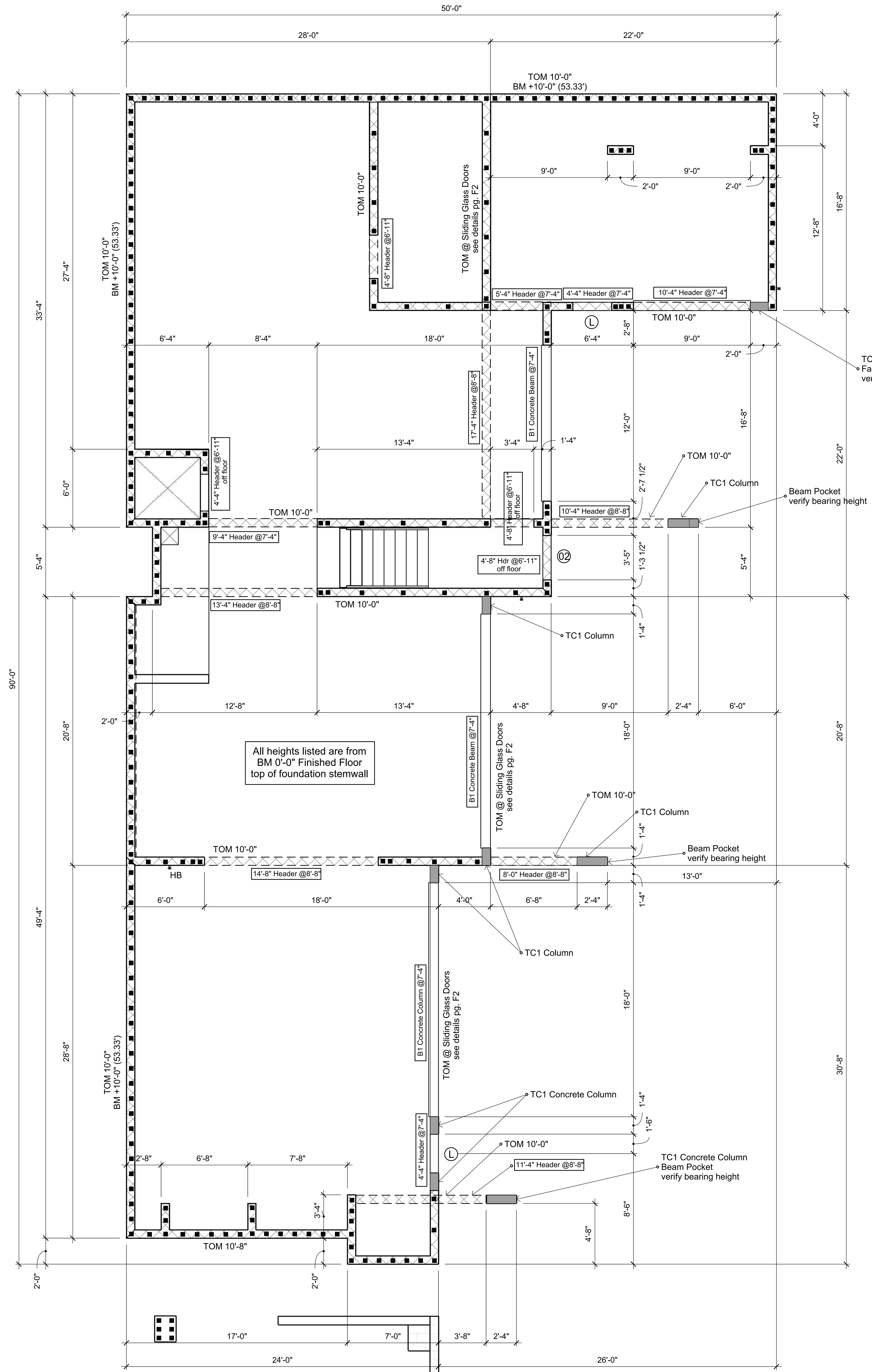

M1 - Masonry & Lintel
Scale: 1/4" - 1'-0"

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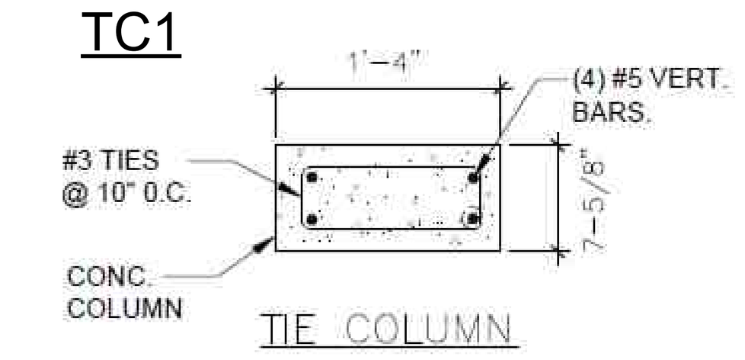
Notes

See pg. A1 for window and door sizes

TC1



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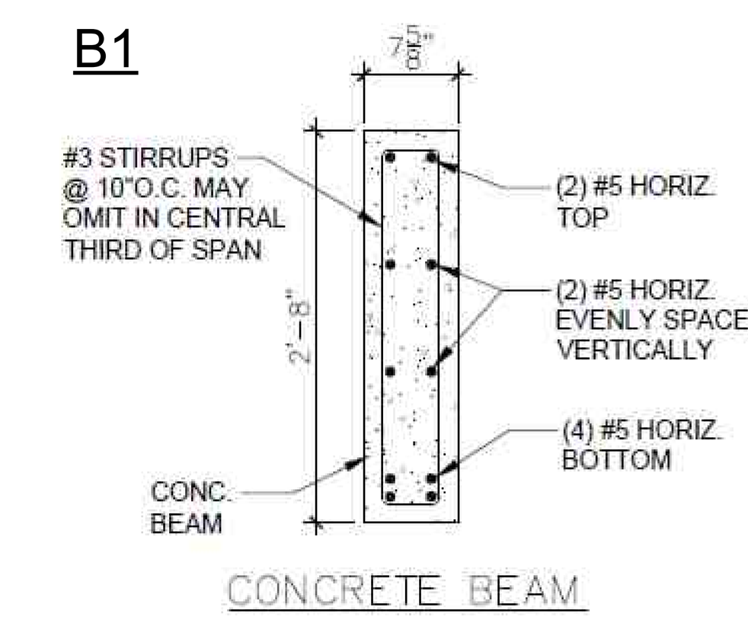
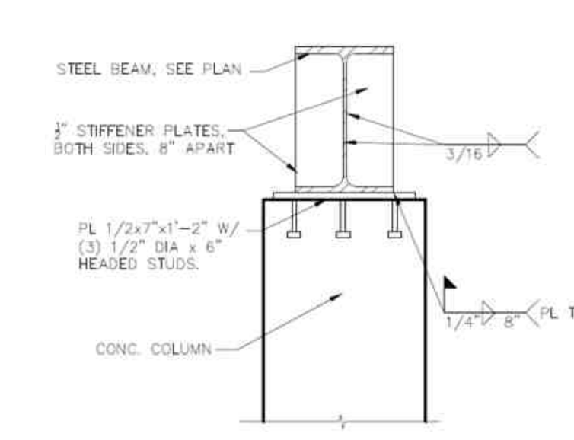
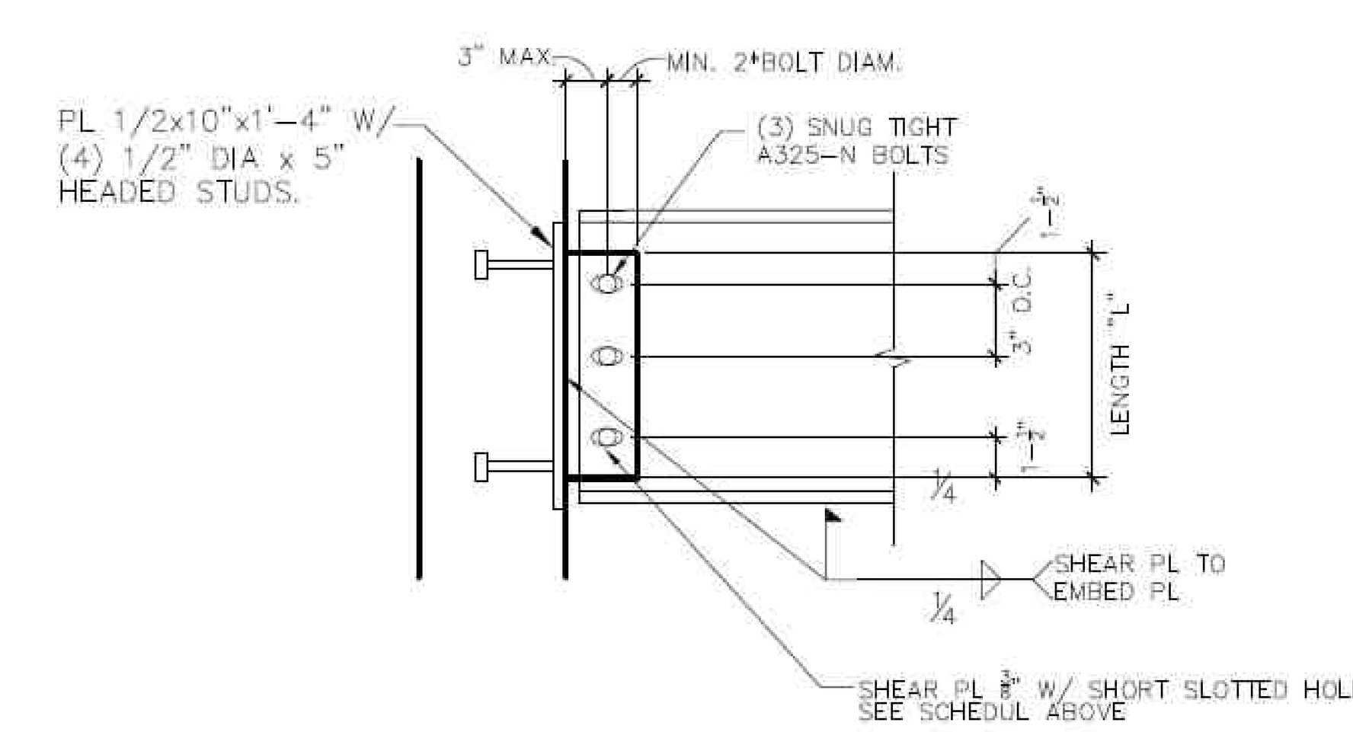


Top Bearing Detail



Face Mounting Detail



BEAM SIZES	3/4"Ø A325N BOLTS	SHEAR PL LENGTH(L)
W12, W14, W16	3	9"
W18	4	12"
W21	5	15"
W24	6	18"

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153 Old Park Way
Lake Mary FL 32746

groningerhomes.com
Design Build Consult

Date
09/22/25

M1

Foundation and Slab

Footings have been designed for soil bearing capacity of 2000 PSF.

Footings shall bear on soil compacted to a density of at least 95% of standard Proctor maximum density test.
Fill dirt under slab shall be compacted to at least 95% of standard Proctor.

Concrete shall be 2500 PSI unconfined compressive strength at 28 days.
Reinforcing steel (rebar) shall conform to ASTM 615 grade 40.
Continuous vertical and horizontal rebar in footins, beams and other concrete shall be spliced by wiring together with minimum 25" overlap.

If stemwall exceeds 32", install 1)#5 rebar vertical @4' o.c. max. and fill all cells with grout.
If stemwall exceeds 48", install 1)#5 rebar vertical @4' o.c. max. and, 1)#5 rebar horizontal @2' o.c. max. in U-block and fill all cells with grout.
If dowel is missed, drill 3/4" hole and install #5 rebar using epoxy (Simpson #ET) w/ 6"embedment.

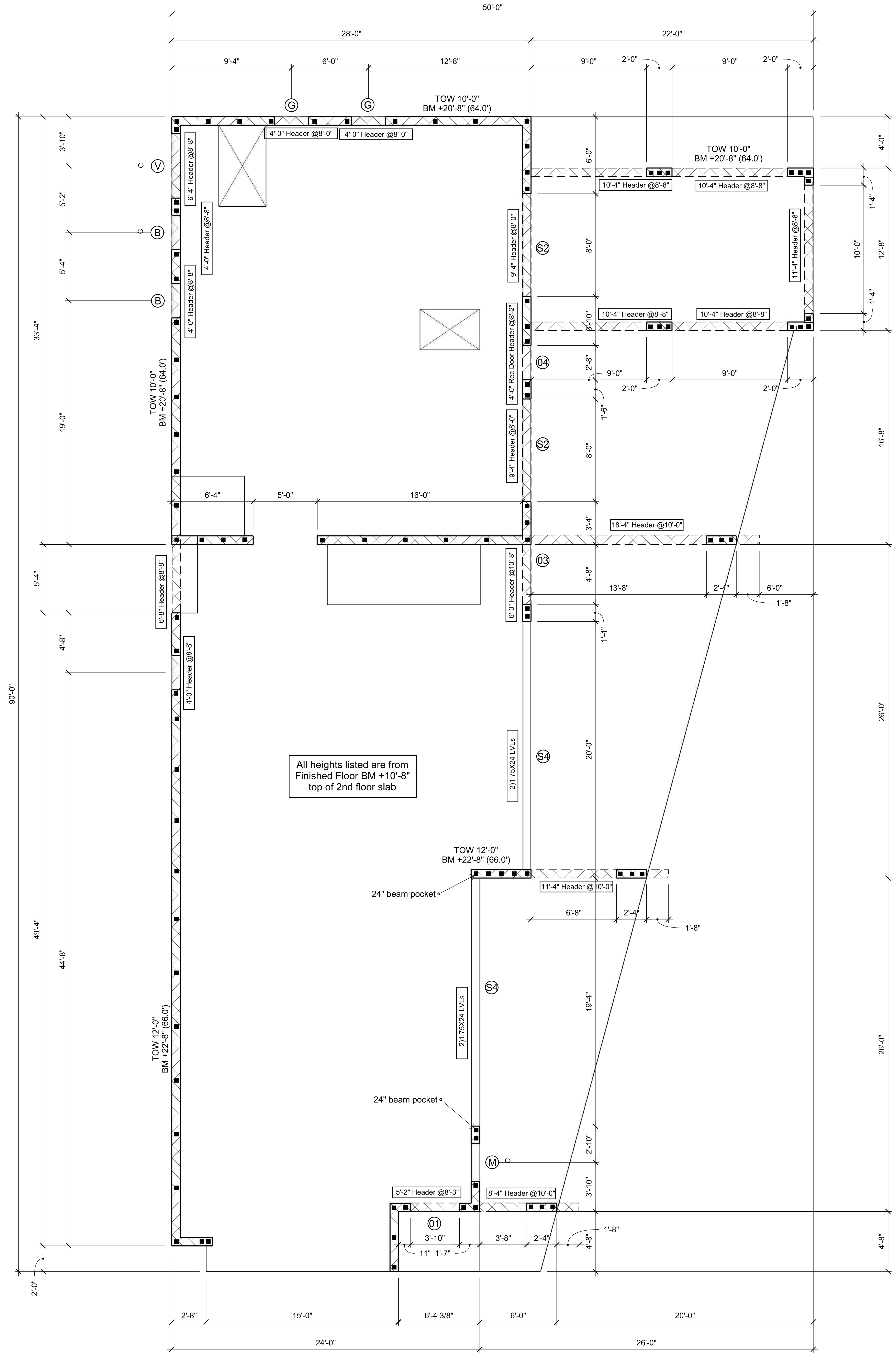
See A1 and F1 for window schedule.
See S3 for window and door opening dimensions.

PRECAST LINTEL (8"X16" COMPOSITE)

LINTEL PROPERTIES			SAFE GRAVITY LOADS (PLF)		SAFE UPLIFT LOADS (PLF)	
MARK NO.	TOTAL LINTEL SIZE	NOMINAL CLEAR SPAN	SOLID (1) #5U DETAIL C	SOLID (1)#5U & L DETAIL D	SOLID (1)#5U &(Ø)#5L DETAIL C	SOLID (1)#5U & L DETAIL D
L-1	2'-10"	1'-6"	6794	10000	10000	10000
L-2	3'-6"	2'-2"	7902	10000	8237	8237
L-3	4'-0"	2'-8"	5692	10000	5124	5124
L-4	4'-6"	3'-2"	4288	10000	3709	3709
L-5	5'-4"	4'-0"	3219	6297	4261	4261
L-6	5'-10"	4'-6"	3780	5097	2121	2121
L-7	6'-6"	5'-2"	3609	3848	2704	2704
L-8	7'-6"	6'-2"	2994	2878	1953	1953
L-9	8'-4"	7'-0"	2496	2384	1157	1157
L-10	9'-4"	8'-0"	1994	1959	974	974
L-11	10'-6"	9'-2"	1535	1618	819	819
L-12	11'-4"	10'-0"	1472	1433	765	765
L-13	12'-6"	11'-2"	1270	1237	609	609
L-14	13'-4"	12'-0"	1155	1126	524	524
L-15	14'-0"	12'-8"	1077	1050	467	467
L-16 (P.S.)	14'-8"	13'-4"	1087	1087	555	556
L-17 (P.S.)	15'-4"	14'-0"	1022	1022	943	943
L-18 (P.S.)	17'-4"	16'-0"	864	864	731	731
L-19 (P.S.)	19'-4"	18'-0"	747	747	573	573
L-20 (P.S.)	20'-0"	18'-8"	714	714	536	536
L-21 (P.S.)	21'-4"	20'-8"	656	656	462	462
L-22 (P.S.)	24'-0"	22'-8"	563	563	360	360

NOTE: (P.S.) REPRESENT PRECAST LINTELS PRESTRESSED USING (2) 7/16" DIAMETER PRESTRESSING STRANDS.

DETAIL 'D'



M2 - Masonry & Lintel
Scale: 1/4" - 1'-0"

Design Criteria:

This structure has been designed to meet or exceed the wind load requirements of the 2023 Florida Building Code Residential 8th Edition Section R301 Design Criteria and ASCE 7-22.

1. Risk Category 2
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3. Wind Exposure = Category C
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Building is not in an airborne debris area

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Notes

See pg. A2 for window and door sizes

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DANIEL SOUTER LICENSE No. 63901 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Design Build Consult

Date
09/22/25

M2

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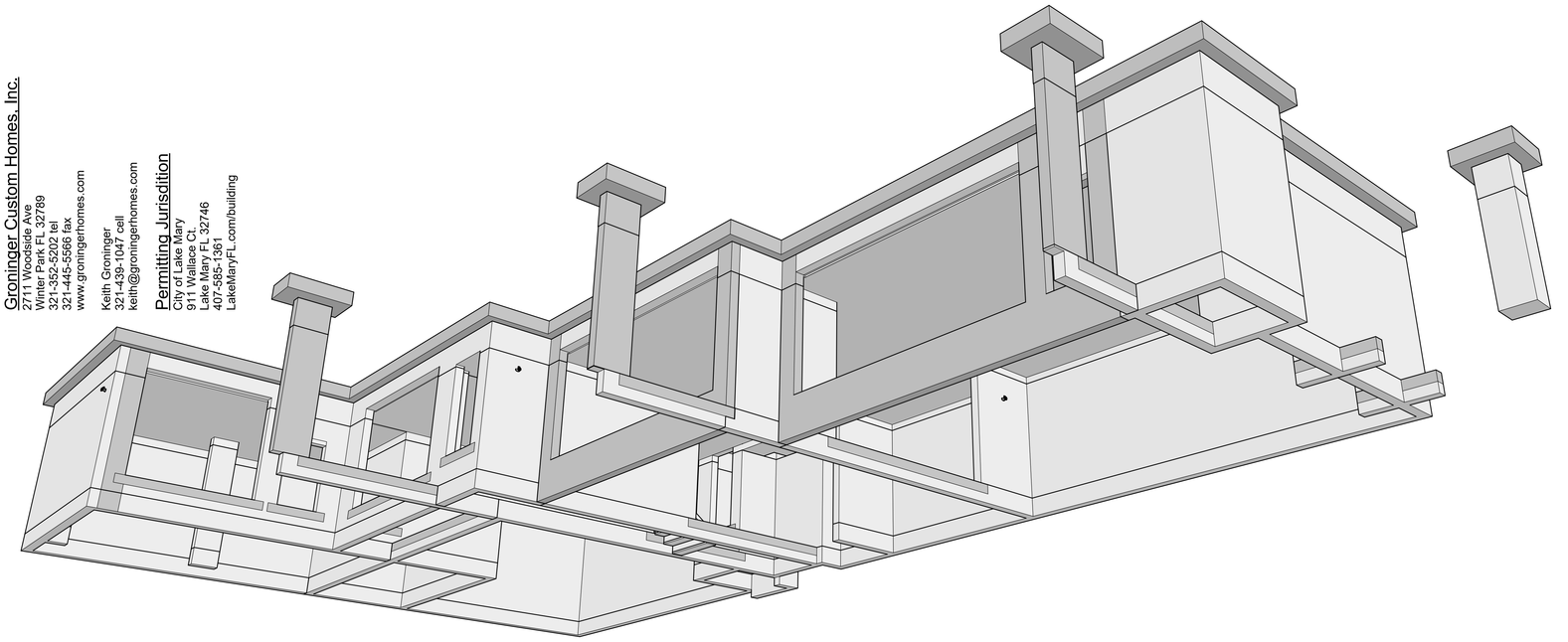

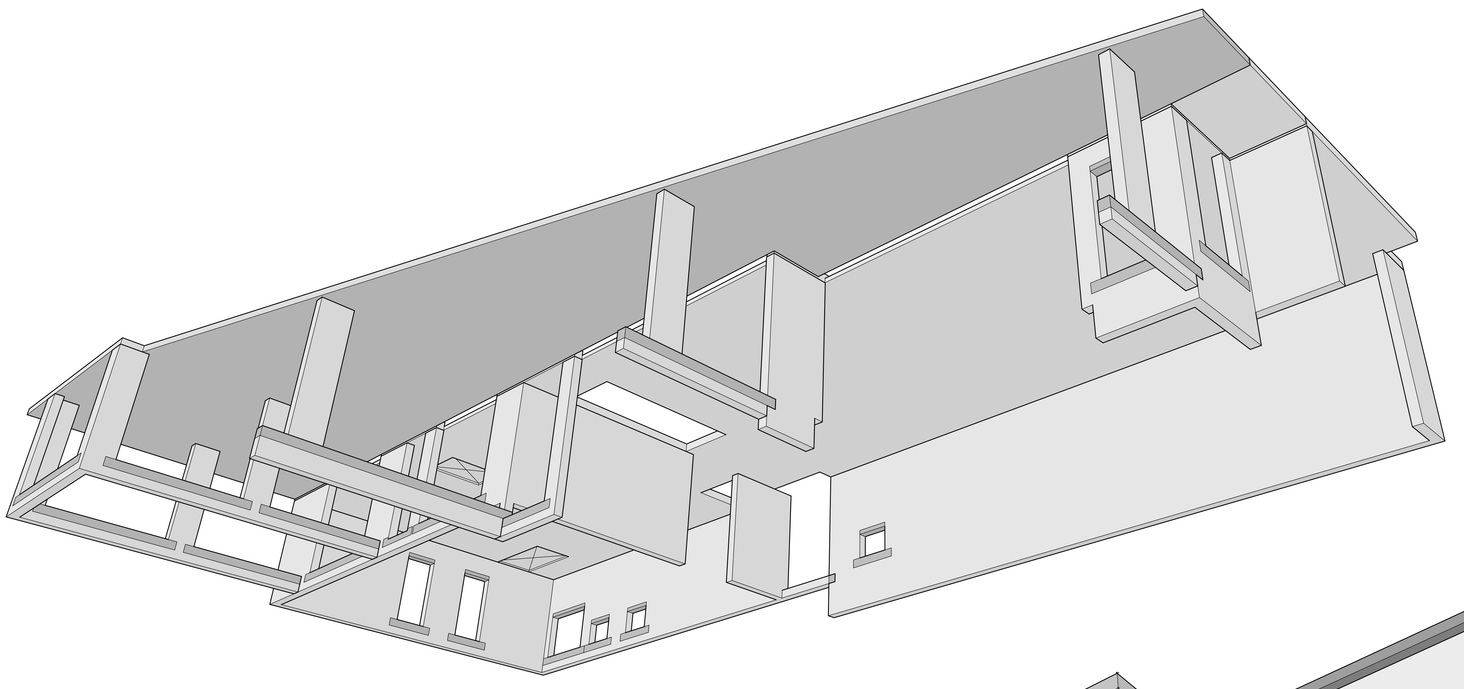

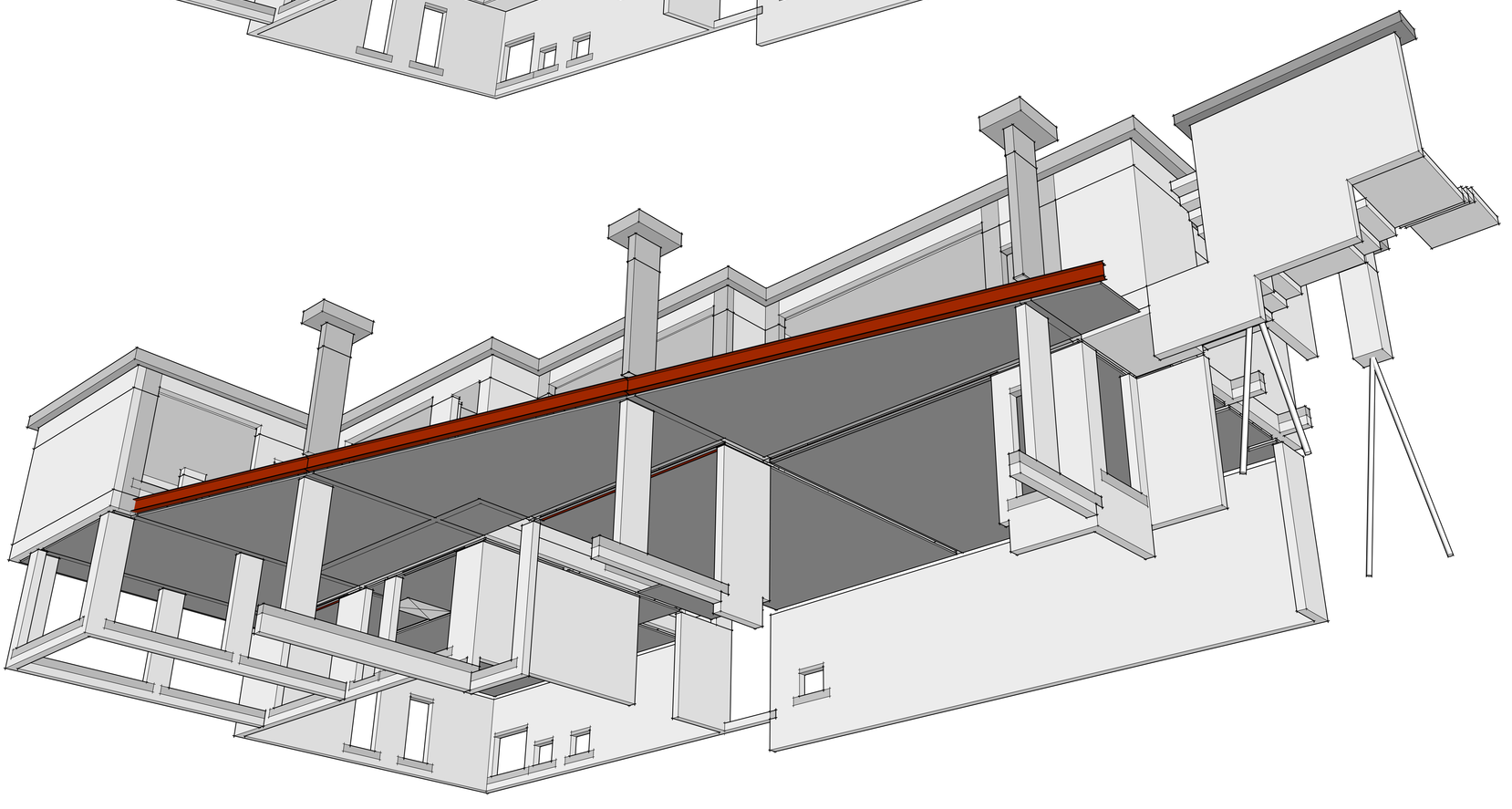

M C MC - Masonry & Concrete
Scale: 1/4" - 1'-0"

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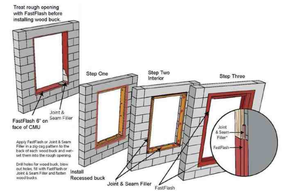
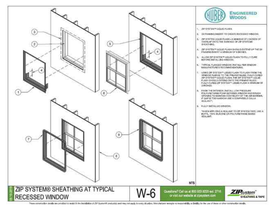
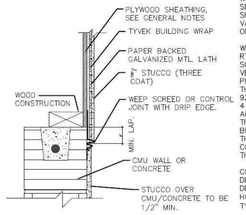
Date 09/22/25
MC
Page 15 of 26







STUCCO OVER WOOD FRAME TO BE $\frac{7}{8}$" THICKNESS MIN.

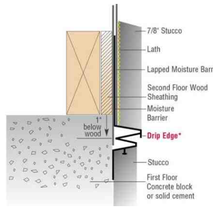
LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION RESISTANT MATERIALS. INSTALL PER FBC SECTION R703.6.1. EXPANDED METAL OR WOVEN WIRE LATH SHALL BE ATTACHED WITH 1-1/2", 11 GAUGE NAILS WITH $\frac{7}{16}$" HEAD, OR 7/8" 16 GAGE STAPLES SPACED, NO MORE THAN 6 INCHES.

WATER RESISTIVE BARRIER TO BE INSTALLED PER FBC SECTION R703.2. WHERE INSTALLED OVER WOOD SHEATHING, SHALL INCLUDE A WATER-RESISTIVE VAPOR-PERMEABLE BARRIER EQUIVALENT TO TWO LAYERS OF GRADE D PAPER, COMPLY WITH ASTM D 226.

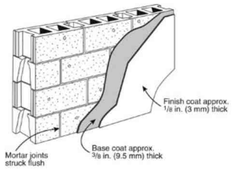
WEEP SCREED TO BE INSTALLED PER FBC SECTION R703.6.2.1. A MINIMUM 26 GAUGE GALVANIZED WEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3.5 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE OR THE TOP OF CMU WALL IN ACCORDANCE WITH ASTM C 926. THE WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER-RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AN TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED.

CONTROL JOINTS IN STUCCO TO BE INSTALLED TO DELINEATE AREAS NOT MORE THAT 144 SQ FT AND TO DELINEATE AREAS NOT MORE THAN 100 SQ FT FOR ALL HORIZONTAL APPLICATIONS (CEILINGS, CURVES OR ANGLE TYPE STRUCTURES), PER ASTM C 1063.

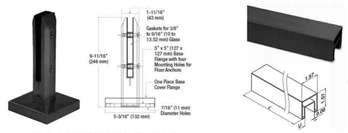
CASING BEADS – NON LOAD-BEARING MEMBERS SHALL BE ISOLATED FROM LOAD BEARING MEMBERS; AND ALL PENETRATING ELEMENTS WITH CASING BEADS OR OTHER SUITABLE MEANS TO AVOID TRANSFER OF STRUCTURAL LOADS, AND TO SEPARATE FROM DISSIMILAR MATERIALS. WHERE VERTICAL AND HORIZONTAL STUCCO SURFACES MEET, METHODS OF DRAINAGE SHOULD BE PROVIDED PER ASTM C 926

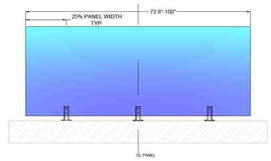


Solid Base for Stucco



Balcony Railing Details
NTS





REQUIRED SPIGOT ARRANGEMENT FOR 72.8"-100" PANEL WIDTH
100" PANEL SHOWN

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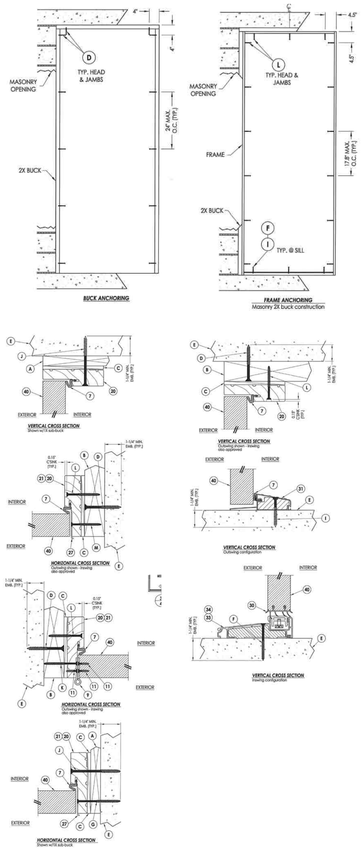
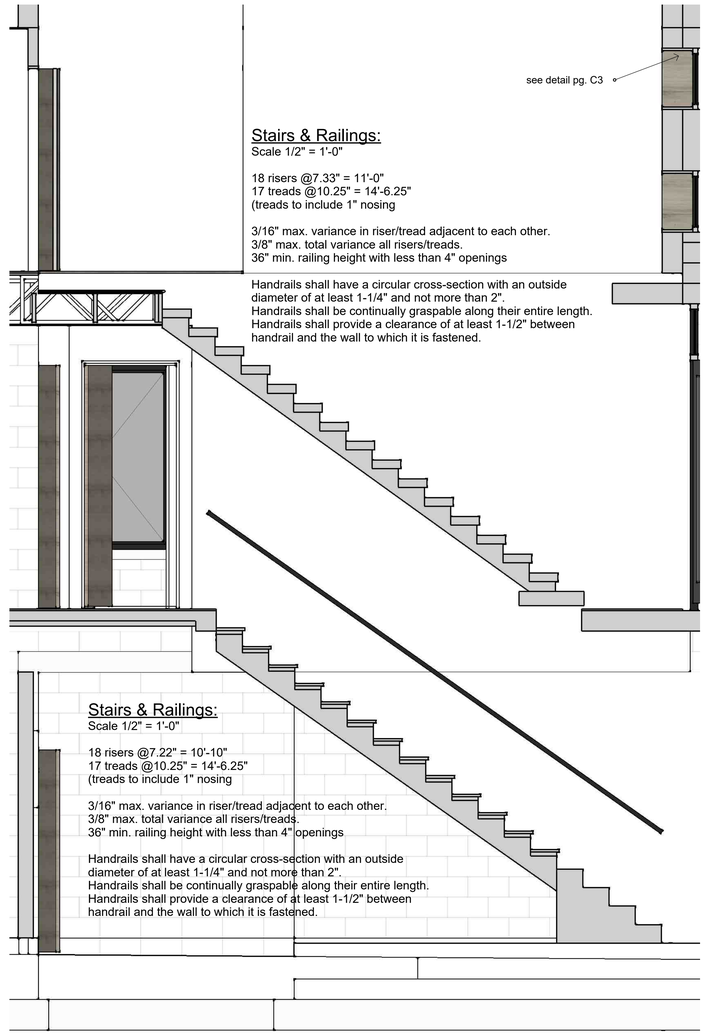
DRAFTSTOPPING

PROVIDE DRAFTSTOPPING PER FBC–R302.12. IN COMBUSTIBLE CONSTRUCTION WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR–CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATE EQUAL AREAS.





Stairs & Railings:
Scale 1/2" = 1'-0"

18 risers @7.33" = 11'-0"
17 treads @10.25" = 14'-6.25"
(treads to include 1" nosing

3/16" max. variance in riser/tread adjacent to each other.
3/8" max. total variance all risers/treads.
36" min. railing height with less than 4" openings

Handrails shall have a circular cross-section with an outside diameter of at least 1-1/4" and not more than 2".
Handrails shall be continually graspable along their entire length.
Handrails shall provide a clearance of at least 1-1/2" between handrail and the wall to which it is fastened.

Stairs & Railings:
Scale 1/2" = 1'-0"

18 risers @7.22" = 10'-10"
17 treads @10.25" = 14'-6.25"
(treads to include 1" nosing

3/16" max. variance in riser/tread adjacent to each other.
3/8" max. total variance all risers/treads.
36" min. railing height with less than 4" openings

Handrails shall have a circular cross-section with an outside diameter of at least 1-1/4" and not more than 2".
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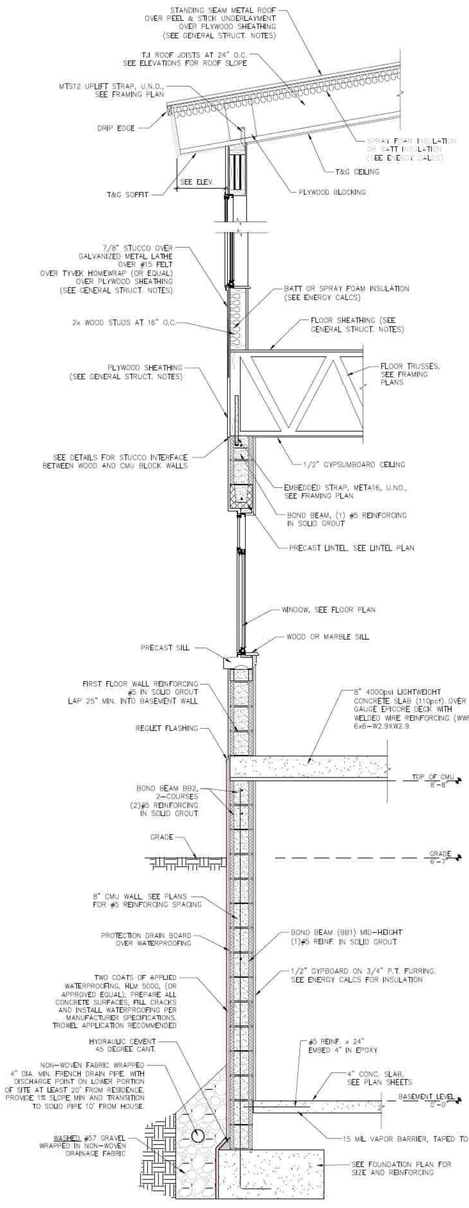

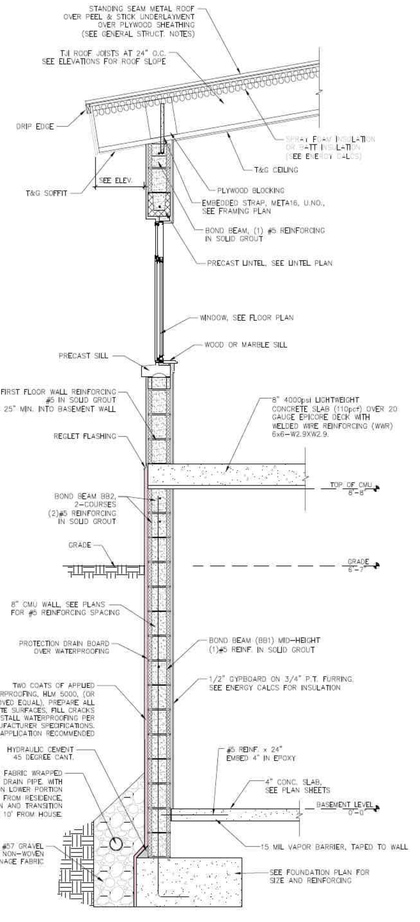

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Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

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Architectural drawings provide reference and information but are not intended to be structural.
See structural drawings for engineered components and material requirements.

Refer to Window and Door Manufacturers' installation details. All installations shall be in compliance with respective, current Florida Building Code Product Approval requirements.
Kg3d Home Design LLC and consulting engineers accept no responsibility for proper installation of building materials and products related to the exterior building shell or any other part of the building.
Exterior building shell components include but aren't limited to roofing, flashings, building wrap, windows, doors, stucco, siding, sheathing any products or materials exposed to the weather.

N1 - Notes & Details
Scale: 1/4" - 1'-0"

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N1

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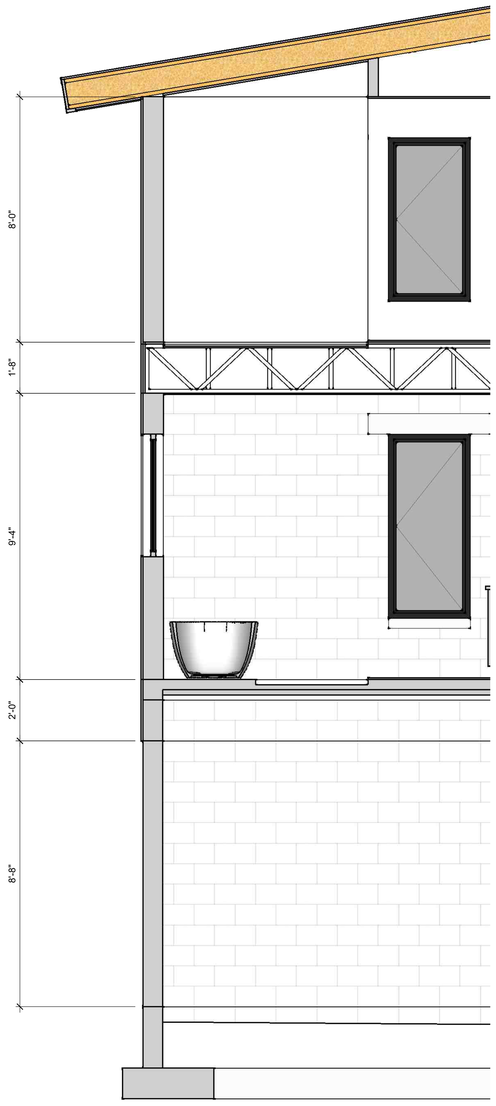

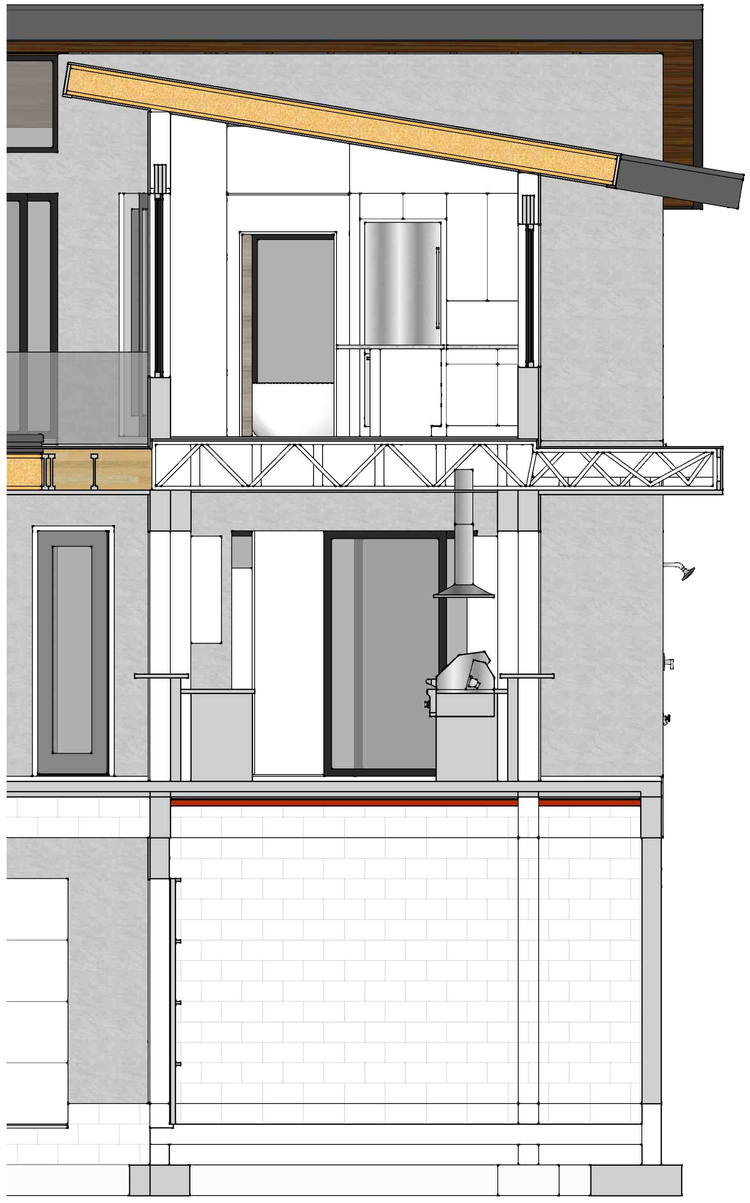

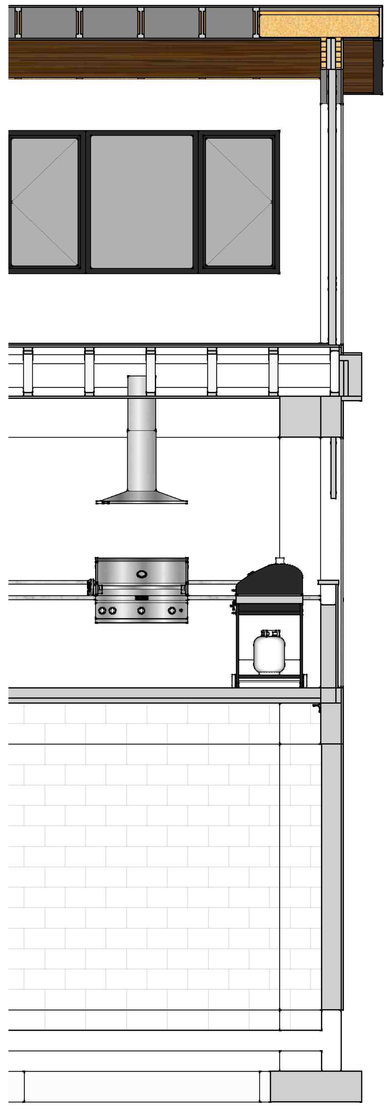

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N2 - Notes & Details
Scale: 1/4" - 1'-0"

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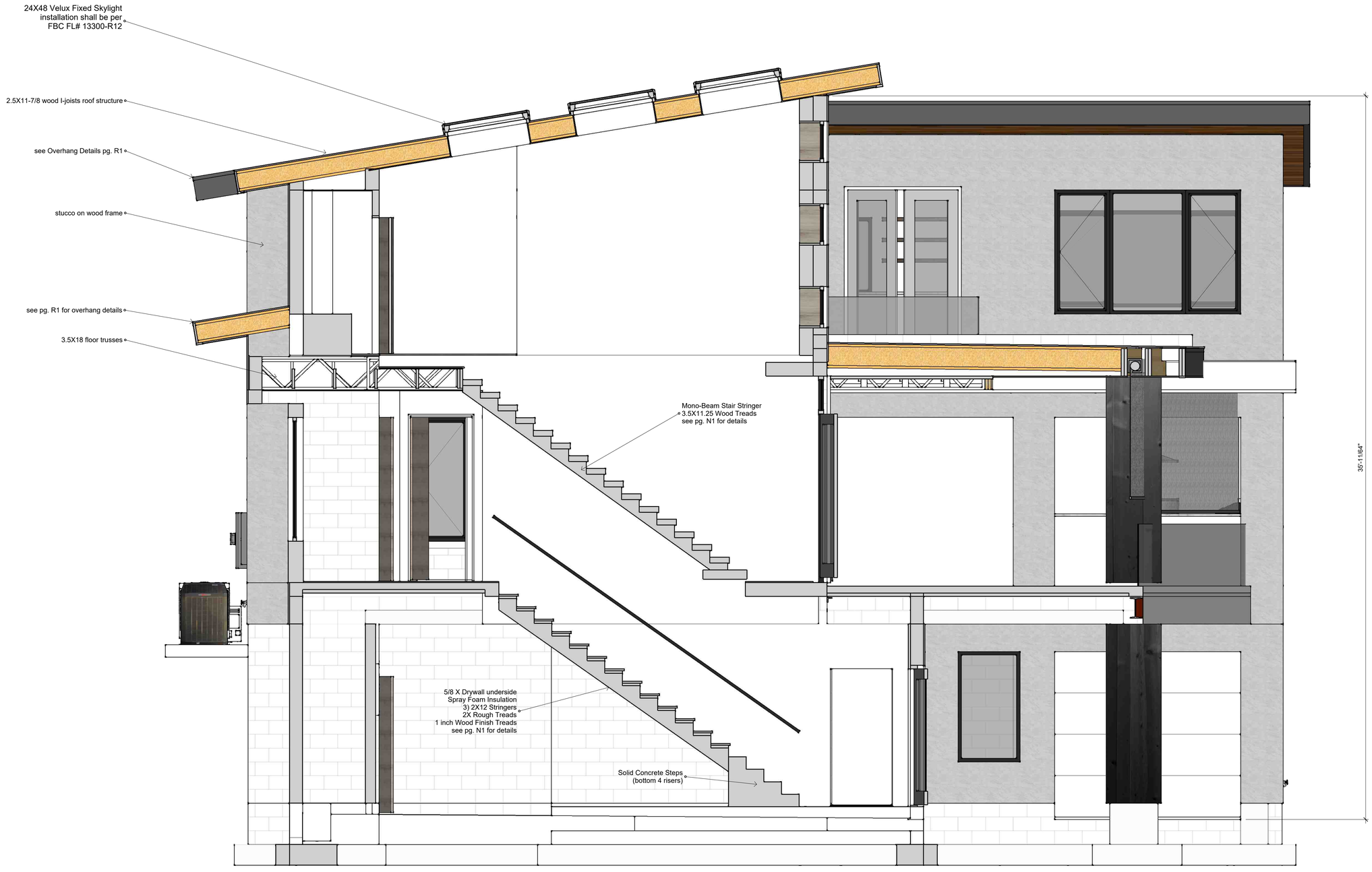
keith@groningerhomes.com

Permitting Jurisdition
City of Lake Mary
911 Wallace Ct.
Lake Mary FL 32746
407-585-1361
LakeMaryFL.com/building



All details and sections shown on the drawings are intended to be typical and shall apply to any similar situation shown elsewhere except where specific reference is given. Architectural drawings provide reference and information but are not intended to be structural. See structural drawings for engineered components and material requirements.

N3 - Notes & Details
Scale: 1/4" - 1'-0"

alba ENGINEERING
C.A. #30556
DANIEL SOUTER, P.E.
P.E.# 63901
P.O. BOX 547774
ORLANDO, FL 32854
PHONE (407) 421-4866

DANIEL SOUTER LICENSE No. 63901 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Daniel Souter, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies
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Kg3d Home Design LLC
2711 Woodside Avenue
Winter Park FL 32789
(321) 439-1047

Carson Residence
Lot 13 Evansdale 2 PB 8 Pg. 38
153 Old Park Way
Lake Mary FL 32746

groningerhomes.com
Design Build Consult

Date
09/22/25

N3

1. BUILDING CODES

A. ALL CONSTRUCTION SHALL CONFORM WITH THE 2023 (8th EDITION) FLORIDA BUILDING CODE – RESIDENTIAL

B. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH THE GOVERNING LOCAL BUILDING CODE OR LOCAL JURISDICTIONAL REQUIREMENTS.

2. DESIGN LOADS

A. THE DESIGN DEAD LOADING FOR ALL FRAMING IS BASED ON THE CONSTRUCTION MATERIALS SHOWN ON THE DRAWINGS AND INDICATED IN THE SPECIFICATIONS. ALL FRAMING IS DESIGNED FOR THE FOLLOWING UNIFORM DEAD LOADS APPLIED IN ADDITION TO STRUCTURE SELF WEIGHT:

MECH., ELECT., PLUMBING, CEILING, ETC.....15PSF
ROOFING (TILE).....10PSF
ROOFING (SHINGLE, METAL, SINGLE PLY).....5PSF

B. THE MINIMUM DESIGN UNIFORMLY DISTRIBUTED LIVE LOADING FOR ALL NEW FRAMING SHALL BE AS FOLLOWS:

FLOOR LIVE LOADS
UNINHABITABLE ATTICS WITHOUT STORAGE.....10PSF
UNINHABITABLE ATTICS W/ LIMITED STORAGE.....20PSF
HABITABLE ATTICS AND ATTICS WITH STAIRS.....30PSF
SLEEPING AREAS.....30PSF
ALL OTHER AREAS INCL. STAIRS.....40PSF
BALCONIES (EXTERIOR) AND DECKS.....50PSF
PASSENGER VEHICLE GARAGES.....50PSF

ROOF LIVE LOAD.....20PSF

C. HANDRAIL/GUARDRAIL LIVE LOADS
GUARDS AND HANDRAILS (HIGHER OF) 200LB PT LOAD OR 50PLF

D. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR THE METHOD OF CONSTRUCTION AND SHALL PROVIDE ALL TEMPORARY BRACING AND SHORING REQUIRED TO MAINTAIN THE STABILITY OF THE STRUCTURE AND TO SUPPORT CONSTRUCTION LOADS DURING CONSTRUCTION, INCLUDING SOILS ON WALLS FROM BACKFILLING PRIOR TO PLACING SLABS ON GRADE. DESIGN OF ALL BRACING IS THE CONTRACTORS RESPONSIBILITY. ANY SHORING OR BRACING ENGINEERING REQUIRED IS THE RESPONSIBILITY OF OTHERS.

3. MISCELLANEOUS

A. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER.

B. THE CONTRACTOR SHALL REVIEW THE ARCHITECTURAL, MECHANICAL, ELECTRICAL PLUMBING AND STRUCTURAL DRAWINGS FOR LOCATION AND DIMENSION OF CHASES, INSERTS, OPENINGS, SLEEVES, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.

C. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DISCREPANCIES AND OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONALS.

D. SCALES SHOWN ON THE CONSTRUCTION DOCUMENTS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.

4. SPREAD FOOTING FOUNDATIONS

A. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE LOCATED AS INDICATED ON THE DRAWINGS.

B. ALL FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. THE ALLOWABLE SOIL BEARING PRESSURE SHALL BE FIELD VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER AND APPROVED PRIOR TO PLACING FOUNDATIONS. SHOULD THE ACTUAL SOIL BEARING PRESSURE BE LESS THAN 2000 PSF, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

C. ALL FILL PLACED UNDER SPREAD FOOTINGS SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 OR ALTERNATIVE REQUIREMENTS PROVIDED BY A GEOTECHNICAL ENGINEER.

D. ALL EXISTING SOIL CONTAINING GRAVEL, CONSTRUCTION OR DEMOLITION DEBRIS, ORGANIC SUBSTANCES, OR OTHER FOREIGN OBJECTS SHALL BE REMOVED FROM THE REGION WITHIN THE FOOTPRINT OF THE STRUCTURE.

5. STRUCTURAL FILL

A. NEW FILL MATERIAL AND EXISTING BASE MATERIAL SHALL BE FREE OF ALL REFUSE, DEBRIS, AND ORGANIC MATTER AND SHALL BE APPROVED FOR USE BY A GEOTECHNICAL ENGINEER.

B. FILL MATERIAL SHALL BE DEPOSITED IN 8 INCH MAXIMUM LOOSE LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 OR ALTERNATIVE REQUIREMENTS PROVIDED BY A GEOTECHNICAL ENGINEER.

6. SLABS ON GRADE

A. ALL SLABS ON GRADE SHALL CONSIST OF A 4 INCH THICK 2500 PSI (MIN) SLAB PLACED OVER A 6 MIL (MIN.) POLYETHYLENE VAPOR RETARDER OVER CLEAN COMPACTED FILL REINFORCED WITH POLYPROPOLENE FIBERS (FIBERMESH OR EQUAL), MIN. 1–1/2" LONG AT A RATE OF 1.5 LBS/ CY OF CONCRETE. ALL EDGES OF VAPOR RETARDER SHALL BE LAPPED 6 INCHES MIN. AND TAPED AT ALL JOINTS/PENETRATIONS.

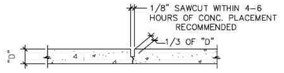
B. ANY TERMITE TREATMENT SPECIFIED AND PERMITTED BY FBC–1816 IS ACCEPTABLE, INCLUDING:
SOIL TREATMENT WITH REGISTERED TERMITICIDE, OR
BAITING SYSTEMS (SENTRICON OR APPROVED EQUAL), OR
PESTICIDES APPLIED TO WOOD (BORA–CARE OR APPROVED EQUAL)

C. SLABS ON GRADE SHALL BE SCREEDED, FLOATED, AND STEEL TROWELLED TO FORM AN SMOOTH, DENSE, AND PLANE SURFACE. ANY BROOM FINISHED AREAS OF CONCRETE TO BE COORDINATED WITH OWNER

D. PLACE CONCRETE PER ACI 302. CONTRACTOR SHALL READ, UNDERSTAND FOLLOW GUIDELINES SET FORTH FOR PREPARING SUBGRADE, PLACING, CONSOLIDATING, FINISHING AND CURING CONCRETE SLABS.

E. EXTEND SLAB 1–1/2" INCHES MIN. AT DOOR OPENINGS AND SLIDING GLASS DOORS, AND RECESS 1" MIN. FOR TRACKS/THRESHOLDS AS NECESSARY.

F. SAWCUT CONTROL JOINTS IN CONCRETE SLAB RECOMMENDED AT 12'–0" O.C. MAX



NOTE: RECOMMENDED SPACING OF CONTROL JOINTS NOT TO EXCEED MAX. SPACING OF 12'–0"

7. CAST IN PLACE CONCRETE

A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)"; AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318)".

B. IN ADDITION TO THE ABOVE, ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING:

1. REC. PRACTICE FOR HOT WEATHER CONCRETING (ACI 305).
2. REC. PRACTICE FOR COLD WEATHER CONCRETING (ACI 306).
3. REC. PRACTICE FOR CONCRETE FORMWORK (ACI 347).

C. ALL CONCRETE EXPOSED TO PUBLIC VIEW SHALL CONFORM TO THE REQUIREMENTS FOR ARCHITECTURAL CONCRETE CONTAINED IN ACI 301.

D. ALL CONCRETE; UNLESS NOTED OTHERWISE, SHALL BE STONE AGGREGATE CONCRETE HAVING THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTHS:

FOUNDATIONS	2500 PSI
SLABS ON GRADE	2500 PSI
BEAMS/COLUMNS/ELEVATED SLABS	3000 PSI

ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 5% +/– 1%. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE SHALL BE 1", AND MAXIMUM SLUMP SHALL BE 4", 3" FOR SLABS ON GRADE. ALL CONCRETE EXCEPT FOOTINGS SHALL CONTAIN A WATER REDUCING ADMIXTURE. PORTLAND CEMENT SHALL CONFORM TO ASTM C 150 AND NORMAL WEIGHT AGGREGATES SHALL CONFORM ASTM C 33.

E. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO GRADE 60 MIN. GRADE 40 ACCEPTABLE FOR FOUNDATIONS. ALL WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM A 185. LAP ALL REINFORCING BARS A MINIMUM OF 48 BAR DIAMETERS (30" FOR #5 REINF.) AND ALL W.W.F. A MINIMUM OF TWO FULL GRIDS, UNLESS OTHERWISE INDICATED.

G. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE CRSI "MANUAL OF STANDARD PRACTICE", ACI 315" DETAILS AND DETAILING OF CONCRETE REINFORCEMENT", ACI SP 66 "DETAILING MANUAL".

H. GROUND BLAST FURNACE SLAG MAY BE USED TO REPLACE UP TO 50 PERCENT OF THE PORTLAND CEMENT IN A CONCRETE MIX, AND FLY ASH OR POZZOLAN MAY BE USED TO REPLACE UP TO 25 PERCENT OF PORTLAND CEMENT, SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND SHALL CONFORM TO ASTM C 989.

L. MINIMUM COVER FOR ALL REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:

FOUNDATIONS	3 INCHES
SLABS ON GRADE	2 INCHES (TOP)
ALL OTHER CONCRETE	ACI STANDARDS

8. CONCRETE MASONRY

A. ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5/TMS 402)" AND TO THE "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 602)".

B. ALL CONCRETE MASONRY SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH OF MASONRY, f'm = 1500 PSI.

C. ALL WALLS SHALL BE CONSTRUCTED OF NORMAL WEIGHT HOLLOW LOAD BEARING UNITS CONFORMING TO ASTM C90 WITH A NET COMPRESSIVE STRENGTH OF 1900 PSI.

D. ALL EXTERIOR WALLS AND BEARING WALLS SHALL BE CONSTRUCTED WITH TYPE "S" CEMENT LIME MORTAR ABOVE GRADE, AND TYPE "M" BELOW GRADE. ALL MORTAR SHALL CONFORM TO ASTM C270 WITH TYPE "S" MORTAR OBTAINING AN AVERAGE COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS AND TYPE "M" MORTAR OBTAINING AN AVERAGE COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

E. ALL FILL FOR CONCRETE MASONRY SHALL BE GROUT CONFORMING TO ASTM C 476 WITH A COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

F. ALL MASONRY WALLS SHALL BE REINFORCED WITH 9 GA LADDER TYPE GALVANIZED HORIZONTAL JOINT REINFORCING CONFORMING TO ASTM A 82 AND SPACED VERTICALLY AT 16" O.C., UNLESS OTHERWISE INDICATED. PROVIDE CORNER AND TEE PIECES AT ALL INTERSECTIONS. LAP ALL JOINTS 6" MINIMUM. LADDER REINF. IS RECOMMENDED FOR SHRINKAGE CRACK CONTROL, HOWEVER, AT GENERAL CONTRACTOR DISCRETION THE LADDER REINFORCING MAY BE ELIMINATED AND IS NOT A FBC MANDATED REQUIREMENT.

G. ALL REINFORONG BARS FOR MASONRY SHALL BE NEW BILLET STEEL CONFORMING TO GRADE 40 MIN

H. ALL VERTICAL REINFORCING SHALL BE LAP SPLICED A MINIMUM OF 48 BAR DIAMETERS (30" FOR #5 REINF.) UNLESS OTHERWISE INDICATED (25" LAP IS ACCEPTABLE AT FOUNDATION STUB UP REINF.). ALL MASONRY CORES CONTAINING VERTICAL REINFORCING SHALL BE GROUTED SOLID.

I. IF VERTICAL REINF. IS MISSING/MISPLACED, REPLACEMENT REINF. MAY BE DOWELLED INTO FOOTING 5" MIN. WITH EPOXY.

9. EPOXY

A. ALL EPOXY CALLED FOR IN PLANS TO BE SIMPSON SET (CONCRETE OR MASONRY), SIMPSON HP–ET, (CONCRETE OR MASONRY), HILTI HIT–RE 500 V3 (CONCRETE), OR HILTI HIT–HY 270 (MASONRY).

8. CONCRETE MASONRY

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B. ALL CONCRETE MASONRY SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH OF MASONRY, f'm = 1500 PSI.

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D. ALL EXTERIOR WALLS AND BEARING WALLS SHALL BE CONSTRUCTED WITH TYPE "S" CEMENT LIME MORTAR ABOVE GRADE, AND TYPE "M" BELOW GRADE. ALL MORTAR SHALL CONFORM TO ASTM C270 WITH TYPE "S" MORTAR OBTAINING AN AVERAGE COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS AND TYPE "M" MORTAR OBTAINING AN AVERAGE COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

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I. IF VERTICAL REINF. IS MISSING/MISPLACED, REPLACEMENT REINF. MAY BE DOWELLED INTO FOOTING 5" MIN. WITH EPOXY.

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12. WOOD

A. ALL STRUCTURAL SHEATHING SHALL CONFORM TO THE DESIGN SPECIFICATIONS OF THE AMERICAN PLYWOOD ASSOCIATION. APA PS 1. PLYWOOD SHALL HAVE A MINIMUM OF THREE CONTINUOUS SPANS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. ALL SHEATHING SHALL BE SPAN RATED FOR THE LOADS AND FRAMING SPACING AS INDICATED ON THE DRAWINGS.

B. FLOOR SHEATHING:
USE 23/32" PLYWOOD (MIN.) FOR FLOOR SHEATHING. FASTEN PLYWOOD TO FLOOR TRUSSES W/ #8 SCREWS AT 6" O.C. AND GLUE.

C. ROOF SHEATHING:
USE 19/32" (5/8") CDX, OR ZIP, OR OSB (MIN.) FOR ROOF SHEATHING. FASTEN TO ROOF FRAMING W/ 8d RING SHANK NAILS (ASTM F1667 RSRS–03) AT 6" O.C. AT ALL PANEL EDGE SUPPORTS AND 6" O.C. AT ALL INTERIOR SUPPORTS. REDUCE NAIL SPACING TO 4" O.C. WITHIN 4'–0" OF ALL ROOF EDGES PER DIAGRAM SHOWN BELOW (ZONES 2 AND 3). IN EXPOSURE B AREAS CONTRACTOR PERMITTED TO SUBSTITUTE 15/32" (1/2") CDX OR 7/16" ZIP/OSB USING FLYWOOD SHEATHING CLIPS AND WITH OWNERS APPROVAL. IN EXPOSURE B AREAS FASTENERS MAY BE INSTALLED AT 6" O.C. AT ALL LOCATIONS. ROOF SHEATHING SHALL NOT CANTILEVER MORE THAN 9" BEYOND A GABLE END WALL UNLESS SUPPORTED BY GABLE OVERHANG FRAMING.

D. VERTICAL WALL SHEATHING (INC. GABLES, TRUSS HEELS ETC.):
USE 15/32" CDX OR 7/16" OSB/ZIP (MIN.) FOR WALL SHEATHING.
FASTEN SHEATHING TO STUDS W/ 8d NAILS @ 6" O.C. AT ALL EDGE SUPPORTS AND 6" O.C. AT ALL INTERIOR SUPPORTS. (MIN. PENETRATION 1–1/2")

E. WOOD GRADE SHALL BE REGULAR SOUTHERN PINE NO. 2, 19% MOISTURE CONTENT MAX., Fb = 1400psi MIN. 2x4 STUDS MAY BE SPRUCE, PINE OR FIR.

F. ALL MANUFACTURED/GLULAM/POWERBEAM/LVL MEMBERS TO HAVE A MINIMUM BENDING STRESS OF Fb = 2250psi AND COMPLY WITH FBCR 802.1.2.

G. ALL DOUBLE BEAMS TO BE CONNECTED WITH 12d NAILS AT 16" O.C. STAGGERED, MIN. ALL TRIPLE AND QUADRUPLE BEAMS TO BE CONNECTED WITH ½" DIA. LAG SCREWS AT 16" O.C. ON BOTH FACES OF BEAM.

H. ALL SIMPSON CONNECTORS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, INCLUDING NUMBER, LENGTH AND DIAMETER OF FASTENER. WHERE CONNECTOR HAS MULTIPLE OPTIONS FOR NUMBER OF NAIL HOLES TO BE FILLED, THE MAX. NUMBER OF NAIL HOLES SHOULD BE FILLED U.N.O.

I. ALL WOOD IN CONTACT WITH THE GROUND AND THAT SUPPORTS PERMANENT STRUCTURES INTENDED FOR HUMAN OCCUPANCY SHALL BE APPROVED PRESERVATIVE TREATED WOOD (FBC R317.1.2.). FASTENERS IN CONTACT WITH PRESERVATIVE TREATED WOOD TO COMPLY WITH FBC R317.3.1. OR PROVIDE BUILDING PAPER OR PEEL & STICK BARRIER BETWEEN CMU/WOOD.

J. INTERIOR NON–LOAD BEARING STUD WALLS TO BE 2x4 STUDS SPACED AT 24" ON CENTER.

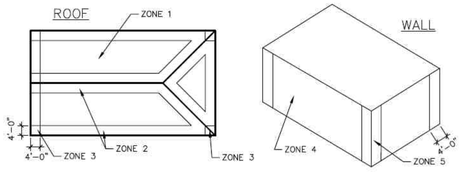
13. WIND LOADING:

DESIGN WIND SPEED Vult = 139 MPH (Vasd = 108 MPH)
RISK CATEGORY = II
WIND EXPOSURE CATEGORY = C
INTERNAL PRESSURE COEFF. (ASCE ENCLOSED BLDG) = ± 0.18

COMPONENTS AND CLADDING
WIND PRESSURE SCHEDULE
Vasd VALUES
(ROOF ANGLE 20°– 27°)

	ZONE	TRIBUTARY AREA	PRESSURE
HIP–ROOF	1	10 20 50 100	+22.1, –39.6 +19.0, –42.1 +15.1, –29.1 +14.0, –24.6
	2	10 20 50 100	+22.1, –54.7 +19.0, –48.9 +15.1, –41.1 +14.0, –35.4
	3	10 20 50 100	+22.1, –54.7 +19.0, –48.9 +15.1, –41.1 +14.0, –35.4
GABLE–ROOF	1	10 20 50 100	+22.1, –42.1 +19.0, –42.1 +15.1, –35.8 +14.0, –30.9
	2	10 20 50 100	+22.1, –67.2 +19.0, –58.9 +15.1, –47.9 +14.0, –39.6
	3	10 20 50 100	+22.1, –79.8 +19.0, –67.2 +15.1, –49.7 +14.0, –49.7
1ST STORY WALL	4	10 20 50 100	+25.7, –27.7 +24.4, –26.6 +23.0, –25.0 +21.8, –24.0
	5	10 20 50 100	+25.7, –34.2 +24.4, –31.9 +23.0, –28.9 +21.8, –26.6
2ND STORY WALL	4	10 20 50 100	+27.3, –29.5 +26.1, –28.4 +24.5, –26.7 +23.2, –25.5
	5	10 20 50 100	+27.3, –36.5 +26.1, –34.1 +24.5, –30.8 +23.2, –28.4

ALL WINDOWS AND DOORS TO BE SELECTED FROM WALL PRESSURE TABLES. ZONES 2, 3 & 5 WITHIN 4'–0" OF CORNERS/EDGES.



14. STRUCTURAL AND MISCELLANEOUS STEEL

A. ALL STEEL CONSTRUCTION SHALL CONFORM TO THE FIFTEENTH EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS; ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

B. ALL STRUCTURAL STEEL (WIDE FLANGE BEAMS, COLUMNS, ETC.) SHALL CONFORM TO ASTM A 992 GRADE 50.

C. ALL MISCELLANEOUS STEEL (ANGLES, PLATES, ETC.) SHALL CONFORM TO ASTM A 36 HAVING A MINIMUM YIELD STRENGTH OF Fy = 36,000 PSI.

D. ALL STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A 501 HAVING A MINIMUM YIELD STRENGTH OF Fy = 36,000 PSI OR TO ASTM A 53, TYPE "E" OR "S" GRADE "B", HAVING A MINIMUM YIELD STRENGTH OF Fy = 35,000 PSI.

E. ALL STRUCTURAL STEEL TUBES SHALL CONFORM TO ASTM A 500, GRADE "B", HAVING A MINIMUM YIELD STRENGTH OF Fy = 50,000 PSI.

F. ALL BEAM CONNECTIONS SHALL DEVELOP THE FULL UNIFORM LOAD CAPACITY OF THE MEMBER WITH DUE CONSIDERATION OF CONCENTRATED LOADS. BOLTED CONNECTIONS SHALL USE NO LESS THAN TWO 3/4" DIA. ASTM A325N OR A490 HIGH STRENGTH BOLTS. CONFORM TO AISC SPECIFICATION "STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". ALL STEEL BOLTED CONNECTIONS SHALL BE SNUG–TIGHT UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL WELDED CONNECTIONS SHALL USE E70XX ELECTRODES.

G. ALL ANCHOR RODS AND BOLTS, EPOXY BOLT CONNECTIONS, AND ALL THREADED RODS INDICATED ON PLANS SHALL BE A36 THREADED ROD (OR GREATER STRENGTH) U.N.O. ON PLANS OR DETAILS. WHERE A WELDED ROD OR BOLT IS INDICATED ON THE PLANS, THIS SHALL BE A36 OR A572 TYPE ANCHOR RODS (NOT HEADED STUDS).

H. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY CERTIFIED WELDERS AND CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AWS D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE INDICATED.

I. ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED WITH AN APPROVED CORROSION RESISTANT PRIMER AND SHALL BE PERFORMED IN STRICT ACCORDANCE WITH AISC AND SSPC SPECIFICATIONS AND THE MANUFACTURER'S RECOMMENDATIONS.

J. GROUT FOR BASE AND BEARING PLATES SHALL BE NON–SHRINK, NON–METALLIC GROUT CONFORMING TO ASTM C 827 WITH MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.

K. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INDICATING THE SIZES, EXTENT, AND LOCATION OF ALL STRUCTURAL AND MISCELLANEOUS STEEL FRAMING INCLUDING ALL CONNECTIONS, FASTENERS, AND BEARINGS.

L. ALL STEEL MEMBERS THAT WILL BE PERMANENTLY EXPOSED TO WEATHER, SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 FOLLOWING FABRICATION.

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Date
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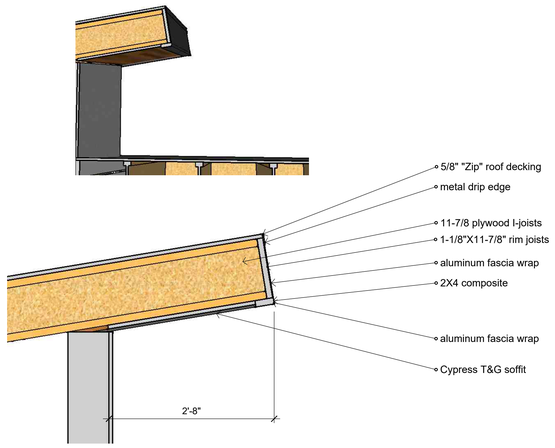
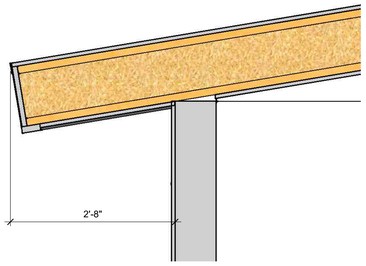
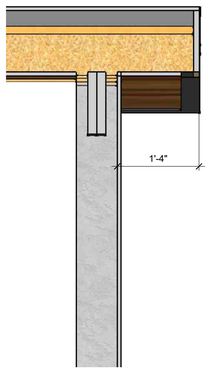
N4







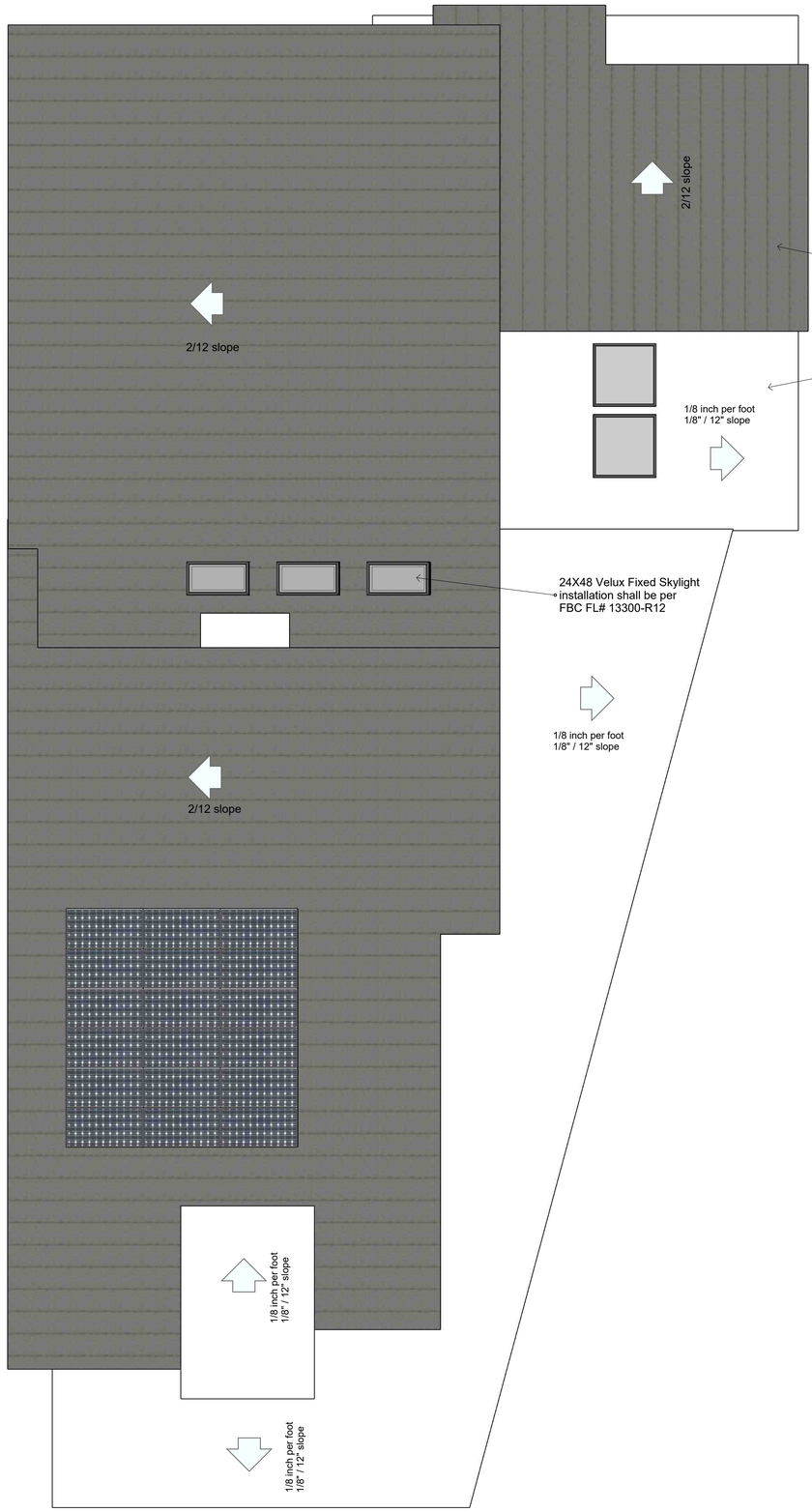
Design Criteria:

This structure has been designed to meet or exceed the wind load requirements of the 2023 Florida Building Code Residential 8th Edition Section R301 Design Criteria and ASCE 7-22.

1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
3. Wind Exposure = Category C
4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and Height & Exposure Adjustment Coefficient is 1.40

Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

All details and sections shown on the drawings are intended to be typical and shall apply to any similar situation shown elsewhere except where specific reference is given. Architectural drawings provide reference and information but are not intended to be structural. See structural drawings for engineered components and material requirements.



R1 - Roof
1
Scale: 1/4" - 1'-0"

Groninger Custom Homes, Inc.
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www.groningerhomes.com

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keith@groningerhomes.com

Permitting Jurisdition

City of Lake Mary
911 Wallace Ct.
Lake Mary FL 32746
407-585-1361
LakeMaryFL.com/building

Rooting Notes

1. Show all roof vents, plumbing stacks and penetrations.

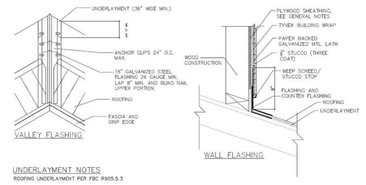
0680 - Roofing
Standing Seam Metal Roof (no roof vents)
GulfLok Eval Non-HVHZ
FBC FL33818-R2

GAF EverGuard TPO Roof System
FBC FL5293.2 R65

Foam Insulation (sealed attic)
5/8" plywood "Zip" roof deck
32" overhang typical (see R1 for details)
1X6 Cypress T&G soffits (no venting)

All Roof Penetrations shall not be visible from the front of the house.

See Overhang Details pg. R1.



UNDERLAYMENT NOTES
ROOFING UNDERLAYMENT PER FBC R905.5.3

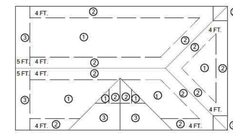
UNDERLAYMENT 2:12 TO 4:12, ASTM D226, TYPE I OR II OR ASTM D4869 TYPE I, II OR IV OR ASTM D6757.

UNDERLAYMENT 4:12 AND GREATER, ASTM D226, TYPE II OR ASTM D4869 TYPE IV OR ASTM D6757.

FOR ROOF SLOPES FROM 2:12 AND LESS THAN 4:12 THE UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER. APPLY A 19 INCH STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36 INCH WIDE SHEETS OF UNDERLAYMENT, OVERLAPPED SUCCESSIVELY 19 INCHES AND FASTENING WITH 1 INCH ROUND CAP NAILS ATTACHED TO A NAILABLE DECK WITH TWO ROWS IN THE FIELD OF THE SHEET WITH A MAX SPACING OF 12 INCHES O.C. AND ONE ROW AT THE OVERLAPS FASTENED 6 INCHES O.C.

FOR ROOF SLOPES 4:12 AND GREATER THE UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER. UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES, FASTENED WITH 1 INCH ROUND CAP NAILS ATTACHED TO A NAILABLE DECK WITH TWO STAGGERED ROWS IN THE FIELD OF THE SHEET WITH A MAX SPACING OF 12 INCHES O.C. AND ONE ROW AT THE OVERLAPS FASTENED 6 INCHES O.C.

ASTM D1970 SELF ADHERED UNDERLAYMENT MAY BE USED INSTEAD OF NAILED UNDERLAYMENT IN ALL CASES.



NAILING ZONES (SHINGLE AND TILE)
ZONE 1: 8d RING SHANK NAILS @ 6" O.C. ON EDGE & 6" O.C IN FIELD

ZONE 2: 8d RING SHANK NAILS @ 6" O.C. ON EDGE & 6" O.C IN FIELD

ZONE 3: 8d RING SHANK NAILS @ 4" O.C. ON EDGE & 4" O.C. IN FIELD

FOR SHEATHING SPECIFICATIONS, SEE SHEATHING NOTES BELOW

(NOTE: IF 5/8" PLYWOOD IS USED, CONTRACTOR MUST USE 10d RING SHANK NAILS)

FLOOR SHEATHING
PLYWOOD FLOORING TO BE MIN. 3/4" T & G PLYWOOD GLUE & SCREWED WITH #8x2¼" SCREWS AT 6" O.C. ALL EDGES & 12" O.C. INTERMEDIATE U.N.O. (GENERAL FLOOR FINISHES ARE ACCEPTABLE IF LIGHTWEIGHT CONCRETE OR SELF LEVELING CONCRETE IS REQUIRED CONTACT E.O.R. ALONG WITH TRUSS COMPANY TO VERIFY FLOOR TRUSS DESIGN.

ROOF SHEATHING
TILE ROOFING SYSTEM (SEE ARCH.) OVER MIN. 1/2" OSB (4 PLY) PLYWOOD, SHINGLE OR METAL ROOFING SYSTEM (SEE ARCH.) OVER MIN. 1/2" OSB SPAN RATED $^{24}/_{16}$ ON PRE-ENGINEERED WOOD TRUSSES AT 2'-0" O.C. MAX. OR CONVENTIONAL FRAME ROOF. (SEE PLAN FOR SIZE AND SPACING. SEE ARCHITECTURAL PLAN FOR TYPICAL ROOF SLOPE AND OTHER INFORMATION.

alba ENGINEERING
C.A. #30556

DANIEL SOUTER, P.E.
P.E.# 63907
P.O. BOX 547774
ORLANDO, FL 32854
PHONE (407) 421-4866

This item has been digitally signed and sealed by Daniel Souter, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
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Carson Residence
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153 Old Park Way
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groningerhomes.com
Design Build Consult

Date
09/22/25

R1

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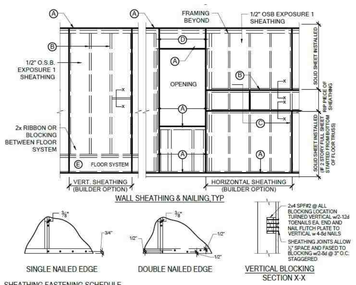
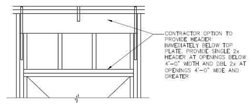


SHEATHING FASTENING SCHEDULE

- (A) 2-ROWS 8d COMMON NAILS @ 4" O.C.
- (B) 8d COMMON NAILS @ 6" O.C.
- (C) STAGGER ALL VERTICAL JOINTS: 8d COMMON NAILS @ 4" O.C.
- (D) PLYWOOD SPLICES @ HEADER - NAIL SHEATHING TO HEADER w/ 8d COMMON NAILS @ 4" O.C. (2) ROWS @ TOP AND BOTTOM
- (E) (2) 8d NAILS @ 3" O.C. TO EACH TRUSS END OR @ VERTICAL MEMBER IF GABLE END

GENERAL SHEATHING NOTES:

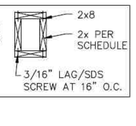
1. SHEATHING MAY BE INSTALLED VERTICALLY OR HORIZONTALLY, ATTACH PER NAILING SCHEDULE. PANEL EDGES WILL NEED TO BE ATTACHED TO STUD AND OR BLOCKING AT ALL EDGES. **A MINIMUM 1/8" SPACE IS RECOMMENDED BETWEEN PANELS AT EDGES AND END JOINTS TO ALLOW FOR EXPANSION. FASTENERS SHALL NOT PENETRATE SURFACE MORE THAN 1/8".**
2. NAILS FOR WALL SHEATHING USE 8d MUST BE MIN .131"x2 1/2"
3. DO NOT OVERDRIVE NAILS: FASTENERS SHALL NOT PENETRATE SURFACE MORE THAN 1/8"

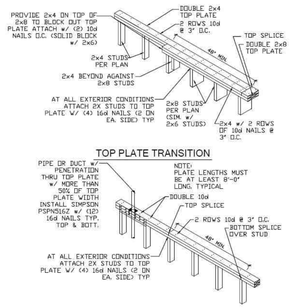


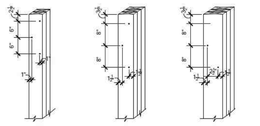
Door & Window Headers

Description:

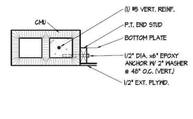
FOR 2x8 STUD WALLS AT LOCATIONS CALLED OUT ON PLAN SHEETS, PROVIDE 2x8 BOX HEADERS WITH HORIZONTAL 2x8 TOP AND BOTTOM SUBSTITUTE SP6 CONNECTORS WITH SP8s

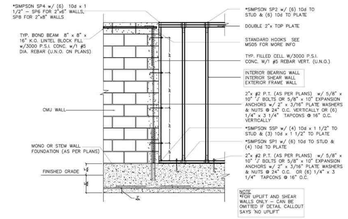






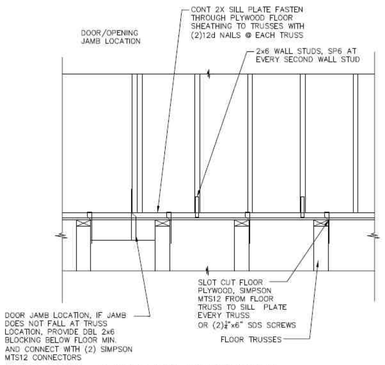
NOTES:
1) ADJACENT NAILS ARE DRIVEN FROM OPPOSITE SIDES OF THE COLUMN.
2) ALL NAILS PENETRATE AT LEAST 3/4" OF THE THICKNESS OF THE LAST LAMINATION
3) FOR 4-PLY, PROVIDE 1/4"DIA. x 5 1/2" LAG SCREWS OR EQUAL (SPACE AS SHOWN FOR 3-PLY)
4) REFER TO NDS SECTION 15.3 FOR ADDITIONAL INFO.



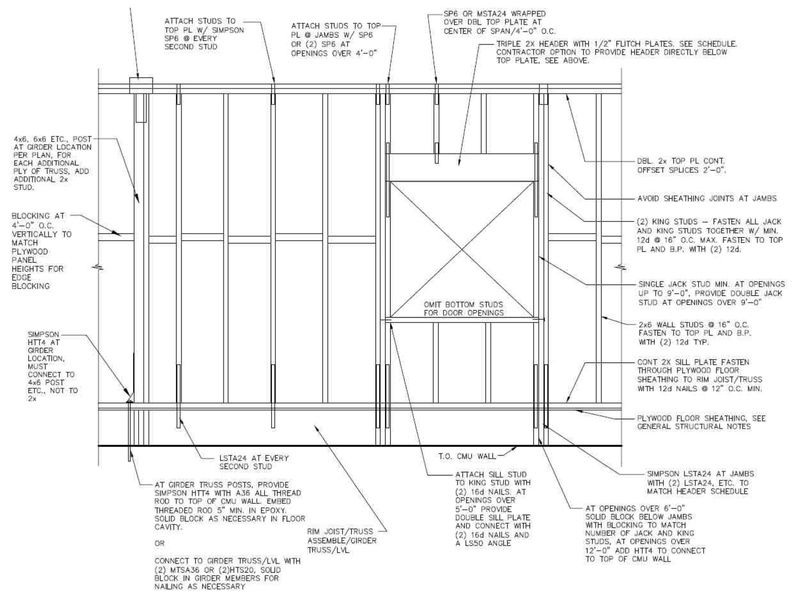


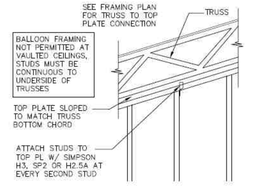
WOOD HEADER SCHEDULE

OPENING WIDTH	MIN. RQD HEADERS	UPLIFT CONNECTIONS AT HEADER TO JACK STUD	# KING STUDS
OPNG < 5'-0"	(3) 2X6	LSTA12	1
5'-1" < OPNG < 7'-0"	(3) 2X8	(2) LSTA12	2
7'-1" < OPNG < 9'-0"	(3) 2X10	(2) LSTA24	2
9'-1" < OPNG < 12'-0"	(3) 2X12	(2) MSTA24	2
12'-1" < OPNG < 16'-0"	(3) 2X16 LVLs	(3) MSTA24	3
TRIPLE 2x12s MAY BE USED FOR ALL OPENINGS UP TO 12'-0"			

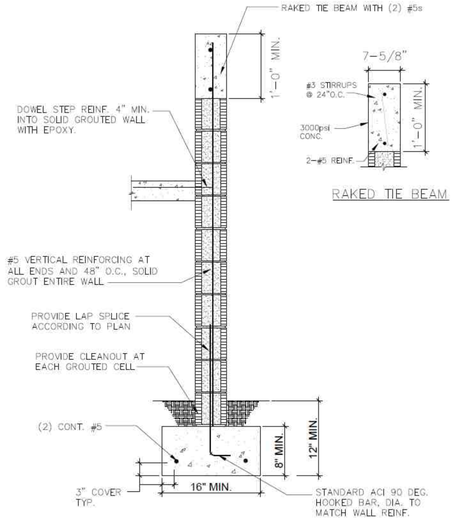


BEARING WALL PERPENDICULAR TO TRUSSES (INTERIOR LOCATION)





GABLE WALL AT VAULTED CEILING



Design Criteria:

This structure has been designed to meet or exceed the wind load requirements of the 2023 Florida Building Code Residential 8th Edition Section R301 Design Criteria and ASCE 7-22.

1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
3. Wind Exposure = Category C
4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and Height & Exposure Adjustment Coefficient is 1.40

Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

All details and sections shown on the drawings are intended to be typical and shall apply to any similar situation shown elsewhere except where specific reference is given. Architectural drawings provide reference and information but are not intended to be structural. See structural drawings for engineered components and material requirements.

S1 - Structural Details
Scale: 1/4" - 1'-0"

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groningerhomes.com
Design Build Consult

Date
09/22/25

S1

Page
24 of 26

THIRD FLOOR

I Joist

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J6	BLI 40	2.5	14			4	14-0-0
J5	BLI 40	2.5	14			6	12-0-0
J4	BLI 40	2.5	14			10	10-0-0
J3	BLI 40	2.5	14			9	8-0-0
J2	BLI 40	2.5	14			22	6-0-0
J1	BLI 40	2.5	14			4	2-0-0
J15	BLI 90	3.5	11.875			14	32-0-0
J13	BLI 90	3.5	11.875			10	28-0-0
J10	BLI 90	3.5	11.875			2	14-0-0
J9	BLI 90	3.5	11.875			1	10-0-0
J8	BLI 90	3.5	11.875			4	6-0-0
J7	BLI 90	3.5	11.875			33	4-0-0
B32	BLI 90	3.5	11.875			1	14-0-0
B31	BLI 90	3.5	11.875			1	10-0-0
J19	BLI 90	3.5	14			1	12-0-0
J18	BLI 90	3.5	14			2	8-0-0
J17	BLI 90	3.5	14			7	6-0-0
J16	BLI 90	3.5	14			4	4-0-0

LVL/LSL

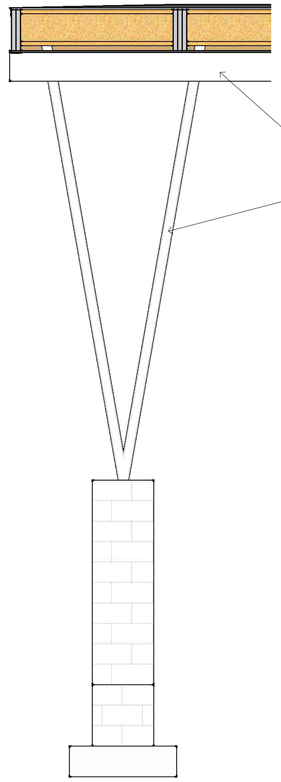
Label	Description	Width	Depth	Qty	Plies	Pcs	Length
B10	onCENTER 2.1E LVL	1.75	11.875	1	4	4	34-0-0
B7	onCENTER 2.1E LVL	1.75	11.875	1	2	2	30-0-0
B9	onCENTER 2.1E LVL	1.75	11.875	1	3	3	20-0-0
B29	onCENTER 2.1E LVL	1.75	11.875	1	3	3	20-0-0
B1	onCENTER 2.1E LVL	1.75	11.875	1	2	2	6-0-0
B5	onCENTER 2.1E LVL	1.75	11.875	1	2	2	6-0-0
B15	onCENTER 2.1E LVL	1.75	14	1	2	2	18-0-0
B36	onCENTER 2.1E LVL	1.75	14	1	2	2	18-0-0
B37	onCENTER 2.1E LVL	1.75	14	1	2	2	18-0-0
B14	onCENTER 2.1E LVL	1.75	14	1	2	2	14-0-0
B13	onCENTER 2.1E LVL	1.75	14	1	2	2	10-0-0
B34	onCENTER 2.1E LVL	1.75	14	1	2	2	10-0-0
B35	onCENTER 2.1E LVL	1.75	14	1	2	2	10-0-0
B12	onCENTER 2.1E LVL	1.75	14	1	2	2	8-0-0
B3	onCENTER 2.1E LVL	1.75	14			1	6-0-0
B11	onCENTER 2.1E LVL	1.75	14			1	6-0-0
B25	onCENTER 2.1E LVL	1.75	14			1	6-0-0
B33	onCENTER 2.1E LVL	1.75	14			1	6-0-0
Lg1	onCENTER 2.1E LVL	1.75	14			2	26-0-0
Lg1	onCENTER 2.1E LVL	1.75	14			1	10-0-0
Lg1	onCENTER 2.1E LVL	1.75	14			1	8-0-0
B21	onCENTER 2.1E LVL	1.75	16	1	3	3	30-0-0
B30	onCENTER 2.1E LVL	1.75	16	1	2	2	30-0-0
B20	onCENTER 2.1E LVL	1.75	16	1	3	3	28-0-0
B19	onCENTER 2.1E LVL	1.75	16	1	2	2	28-0-0
B38	onCENTER 2.1E LVL	1.75	16	1	2	2	28-0-0
B39	onCENTER 2.1E LVL	1.75	16	1	2	2	28-0-0
B40	onCENTER 2.1E LVL	1.75	16	1	2	2	28-0-0
B41	onCENTER 2.1E LVL	1.75	16	1	2	2	28-0-0
B42	onCENTER 2.1E LVL	1.75	16	1	2	2	28-0-0
B18	onCENTER 2.1E LVL	1.75	16	1	2	2	14-0-0
B16	onCENTER 2.1E LVL	1.75	16	1	2	2	12-0-0
B17	onCENTER 2.1E LVL	1.75	16	1	2	2	8-0-0
B24	onCENTER 2.1E LVL	1.75	20	1	2	2	18-0-0

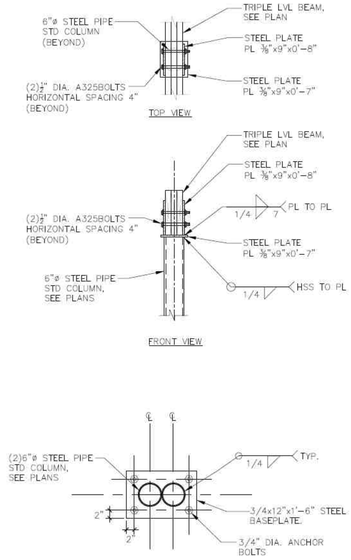
Rim Board

Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R2	onCENTER Rim Board SE 1.125 X 11.875	1.125	11.875			8	12-0-0
R3	onCENTER LVL RIM	1.75	11.875			3	16-0-0

Hanger

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners	Supported Member fasteners
H4	6	HU412 (Min)			16 16d	6 10d
H5	1	SUR/L414-L	Var	Var	18 16d	8 16d
H6	15	LSSR410Z-R	Var	Var	20 16d	13 16dx2 1/2
H7	8	HU14 (Min)			28 16d	8 10dx1 1/2
H9	1	HUC416 (Min)			20 16d	8 10d
H10	26	LSSR2.56Z-R	Var	Var	13 10dx2 1/2	9 10dx1 1/2
H11	79	IUS2.56/14 (Min)			12 10dx1 1/2	
H12	5	LSSR410Z	Var	Var	20 16d	13 16dx2 1/2
H13	26	IUS3.56/11.88 (Min)			12 10d	
H14	1	HUC310			14 16d	6 10dx1 1/2
H18	1	IUS3.56/16 (Min)			14 10d	
H19	2	HHUS5.50/10			30 16d	10 16d
H20	24	U410X SLD10	Var	Var		
H21	24	U410X SLU10	Var	Var		





T2 - Roof Framing
Scale: 1/4" - 1'-0"

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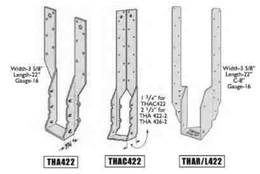
Notes

1. Verify tub and toilet locations.
2. Verify recessed can lighting locations.
3. Pre-install newel posts in the floor system.
4. Provide AC duct chases.

onCENTER® 2.1E LVL Multiple Ply Fastening

Fastener Type	LVL Depth	Fastener Rows	Fastener Spacing	2 Ply 3½" Wide	3 Ply 5½" Wide	4 Ply 7" Wide	Notes
16d Nails pneumatic (0.131"x 3.5") or common (0.162" x 3.5")	7½" - 11½"	2 (shown)	12"			Not Permitted	These minimum requirements are adequate only when all loads are evenly applied to top surface of all plies. If loads are applied to side face(s) of beam, see designer's specifications. Top and bottom rows of connectors should be 2" from edge. Fastening for depths less than 7½" requires special consideration. Contact BlueLinx. Fasteners must have full embedment of shank, but must not be over-driven, over-tightened, or countersunk.
	14" - 18"	3	12"				
	24"	4	12"				
½" Through Bolts	7½" - 18"	2 (shown)	24"				
	24"	3	24"				
				2½" Screw Length	3½" Screw Length	5" Screw Length	
USP WS or Simpson SDS Screws	7½" - 18"	2 (shown)	24"				Bolt holes must be 1/32" to 1/16" larger than bolt diameter. Bolts must extend through full thickness of member and at least ½" beyond. Use a washer under head and nut. Spacings closer than those indicated may be acceptable, but require evaluation. Please contact BlueLinx. Install screws per manufacturer's guidelines.
	24"	3	24"				
				3½" - 3½" Screw Length	5" Screw Length	5½" Screw Length	
Simpson SDW22 WSW6, TrussLOK, or FastLOK Screws	7½" - 18"	2	24"				
	24"	3 (shown)	24"				



The THA series is specifically designed for the truss industry. However, depending on the application, other brands and hanger options that provide equivalent performance are available.

NOTES ON FRAMING CONNECTORS:

For minimum / maximum nailing installation methods and blocking, refer to the Simpson Strongtie Catalog at www.strongtie.com.

The THA series is specifically designed for the truss industry. However, depending on the application, other brands and hanger options that provide equivalent performance are available.

Courtesy of Simpson Strong-Tie Co., Inc.

Legend

PS	Point load support		Bearing wall
◇	Load from above		Bearing wall above
WS	Web stiffeners		Non-bearing partition wall above
DJ	Double joist		BLI Joist
XJ	Extra joist		Trimmable truss
			onCENTER LVL
			onCENTER Rim Board
			2x by Others
			Note: Dropped beams are hatched

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Kg3d Home Design LLC
2711 Woodside Avenue
Winter Park FL 32789
(321) 439-1047

Carson Residence
Lot 13 Evansdale 2 PB 8 Pg. 38
153 Old Park Way
Lake Mary FL 32746

groningerhomes.com
Design Build Consult

Date
09/22/25

T2

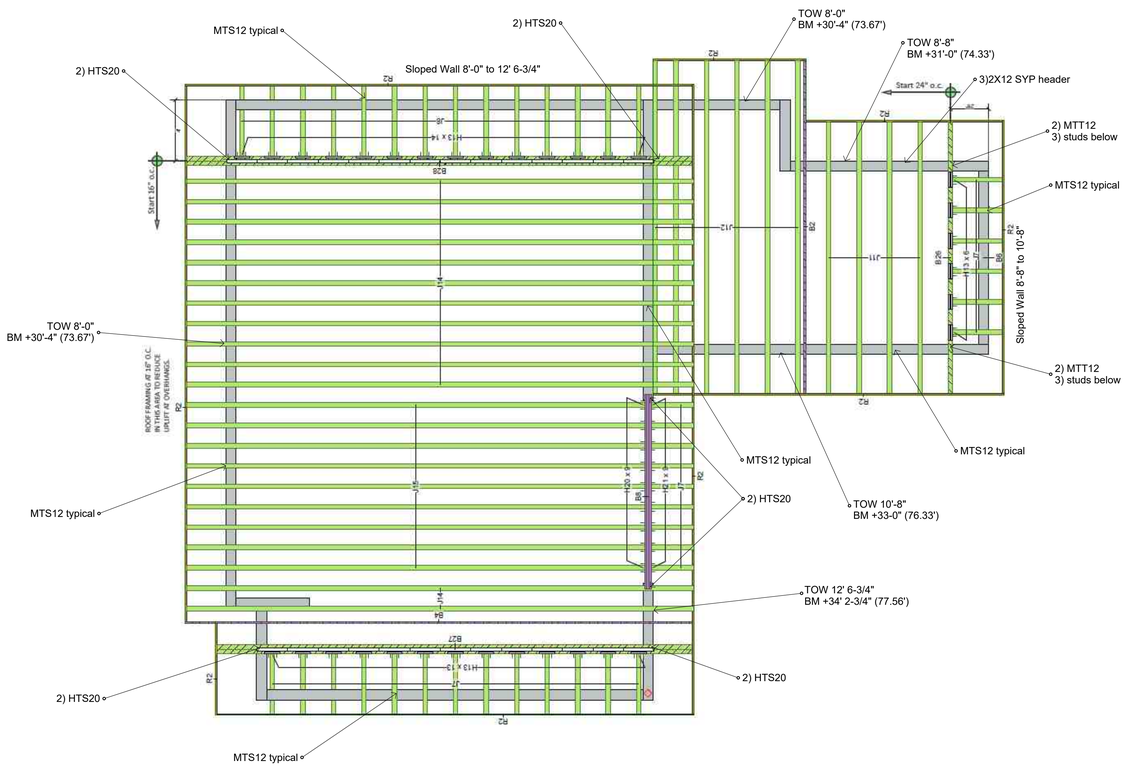
Page
25 of 26

ROOF							
I Joist							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length
J14	BLI 90	3.5	11.875			13	34-0-0
J15	BLI 90	3.5	11.875			9	32-0-0
J12	BLI 90	3.5	11.875			6	24-0-0
J11	BLI 90	3.5	11.875			4	20-0-0
J8	BLI 90	3.5	11.875			14	6-0-0
J7	BLI 90	3.5	11.875			28	4-0-0
B28	BLI 90	3.5	11.875	1	2	2	34-0-0
B27	BLI 90	3.5	11.875	1	2	2	32-0-0
B26	BLI 90	3.5	11.875			1	20-0-0
LVL/LSL							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length
B4	onCENTER 2.1E LVL	1.75	11.875			1	34-0-0
B2	onCENTER 2.1E LVL	1.75	11.875			1	24-0-0
B8	onCENTER 2.1E LVL	1.75	11.875	1	3	3	14-0-0
B6	onCENTER 2.1E LVL	1.75	11.875	1	2	2	14-0-0
Rim Board							
Label	Description	Width	Depth	Qty	Plies	Pcs	Length
R2	onCENTER Rim Board SE 1.125 X 11.875	1.125	11.875			18	12-0-0
Hanger							

Label	Pcs	Description	Skew	Slope	Beam/Girder fasteners
H13	33	IUS3.06/11.88 (Min)			12 10d
H20	9	U410X SLD10	Var	Var	
H21	9	U410X SLU10	Var	Var	

onCENTER® 2.1E LVL Multiple Ply Fastening

Fastener Type	Lft. Depth	Fastener Rows	Fastener Spacing	2 Ply 3½" Wide	3 Ply 5½" Wide	4 Ply 7" Wide	Notes
16d Nails pneumatic (0.131"x 3.5") or common (0.162" x 3.5")	7½" - 11½"	2 (shown)	12"			Not Permitted	These minimum requirements are adequate only when all loads are evenly applied to top surface of all plies. If loads are applied to side face(s) of beam, see designer's specifications. Top and bottom rows of connectors should be 2" from edge. Fastening for depths less than 7½" requires special consideration. Contact BlueLinx. Fasteners must have full embedment of shank, but must not be over-driven, over-tightened, or countersunk. Bolt holes must be 1/32" to 1/16" larger than bolt diameter. Bolts must extend through full thickness of member and at least ½" beyond. Use a washer under head and nut. Spacings closer than those indicated may be acceptable, but require evaluation. Please contact BlueLinx. Install screws per manufacturer's guidelines.
	14" - 18"	3	12"				
½" Through Bolts	7½" - 18"	2 (shown)	24"				
	24"	3	24"				
				3½" Screw Length	5½" Screw Length	6" Screw Length	
SDS® WS or Simpson SDS Screws	7½" - 18"	2 (shown)	24"				
	24"	3	24"				
				3½"-3½" Screw Length	5" Screw Length	6½" Screw Length	
Simpson SDW22 WSWH, TrussLOK, or FlatLOK Screws	7½" - 18"	2	24"				
	24"	3 (shown)	24"				



CONTRACTOR TO VERIFY TRUSS LAYOUT PLAN PROVIDED BY TRUSS COMPANY WITH DELIVERY OF TRUSSES MATCHES TRUSS FRAMING PLAN SHOWN ON THIS SHEET AND REPORT ANY DISCREPANCIES TO ENGINEER OF RECORD, PRIOR TO BEGINNING WORK.

NOTES:

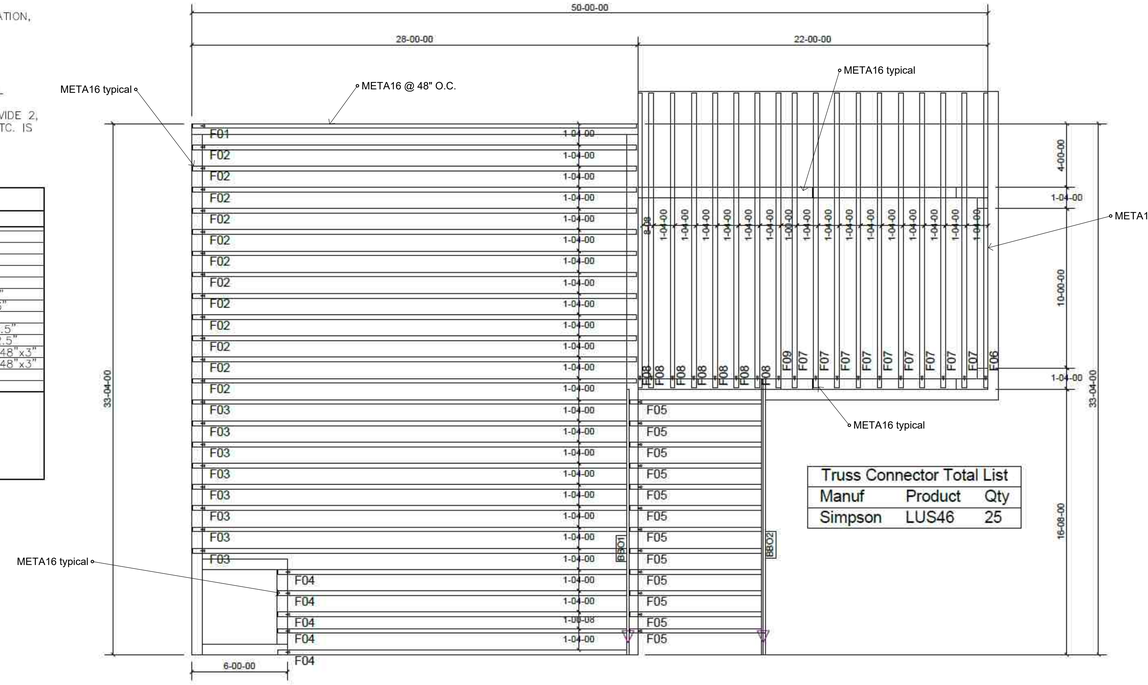
1. TOP OF WALL ELEVATION/TRUSS BEARING ELEVATION, SEE ELEVATION SHEETS
2. SEE GENERAL STRUCTURAL NOTES FOR ROOF SHEATHING.
3. SEE DETAIL SHEETS FOR GABLE BRACING DETAIL
4. AT ALL 2, 3, ETC. PLY TRUSS LOCATIONS, PROVIDE 2, 3, ETC. WALL STUDS TO MATCH, UNLESS 4x6 ETC. IS ALREADY SPECIFICALLY PROVIDED IN PLAN.

TRUSS CONNECTOR SCHEDULE			
CALLOUT	CONNECTOR	ALLOWABLE UPLIFT LOAD	FASTENERS
TC1	META16	1450 LB	EMBEDDED, (8) 0.148"x1.5" NAILS TO TRUSS
TC2	META16 @ 4'-0" O.C.	1450 LB	EMBEDDED, (8) 0.148"x1.5" NAILS TO TRUSS
TC3	MTS12	990 LB	(14) 0.148"x1.5" NAILS
TC4	LSTA15 @ 4'-0" O.C.	1110 LB	(12) 0.148"x2.5" NAILS
TC5	H2.5A	575 LB	(10) 0.131"x2.5" NAILS
TC6	VCTR	370 LB	TRUSS (4) 0.148"x3", VALLEY (3) 0.148"x1.5"
TC7	MGT	3965 LB	(1)5/8" ATR 5", EMBED, TRUSS (22)0.148"x3"
TC8	HTS20	1310 LB	(24) 0.148"x1.5" NAILS
TC9	HTT4	4235 LB	(1)5/8" ATR 5", EMBED, TRUSS (18)0.162"x2.5"
TC10	HTT5	5090 LB	(1)5/8" ATR 5", EMBED, TRUSS (26)0.162"x2.5"
TC11	HTSM16	1110 LB	CMU-(4) 1/4"x2-1/4" TITEN, TRUSS (8) 0.148"x3"
TC12	MSTAM24	1375 LB	CMU-(5) 1/4"x2-1/4" TITEN, TRUSS (9) 0.148"x3"
TC13	(2)META16	1 PLY 1985 LB, 2PLY+ 1900 LB	EMBEDDED, (8) 0.148"x1.5" NAILS TO TRUSS
TC14	H2.5A	700 LB	(10) 0.148"x1.5" NAILS

META16 CONNECTORS MAY BE REPLACED WITH HETA16 (1810 LB).
ANY MISSING META16s MAY BE REPLACED WITH HTSM16s.

ALL TRUSS TO CMU CONNECTIONS, META16 (TC1) U.N.O.

ALL TRUSS TO WOOD FRAME CONNECTIONS, MTS12 (TC3) U.N.O.



T3 - Floor & Roof Framing
Scale: 1/4" - 1'-0"

Design Criteria:

This structure has been designed to meet or exceed the wind load requirements of the 2023 Florida Building Code Residential 8th Edition Section R301 Design Criteria and ASCE 7-22.

1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
3. Wind Exposure = Category C
4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and Height & Exposure Adjustment Coefficient is 1.40

Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

All details and sections shown on the drawings are intended to be typical and shall apply to any similar situation shown elsewhere except where specific reference is given. Architectural drawings provide reference and information but are not intended to be structural. See structural drawings for engineered components and material requirements.

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Permitting Jurisdition

City of Lake Mary
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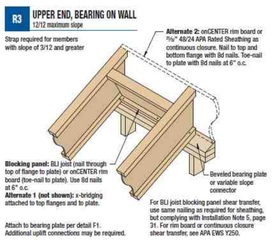
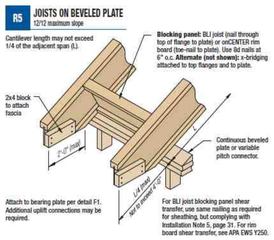
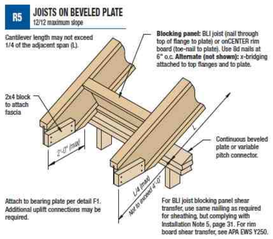
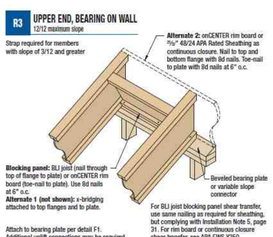
Notes

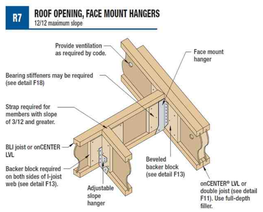
1. Verify tub and toilet locations.
2. Verify recessed can lighting locations.
3. Pre-install newel posts in the floor system.
4. Provide AC duct chases.
5. Provide attic storage where possible.











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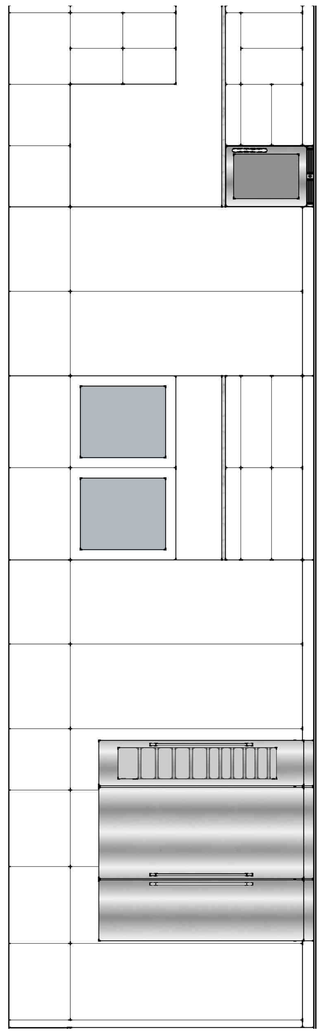
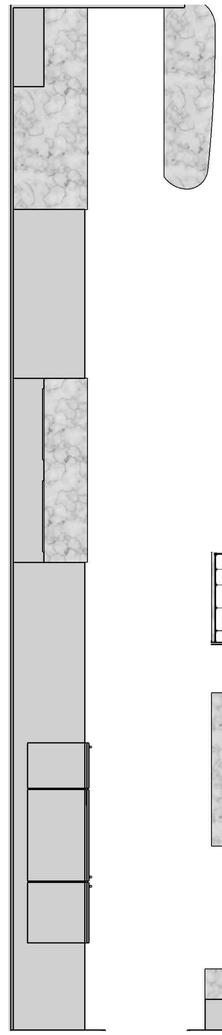
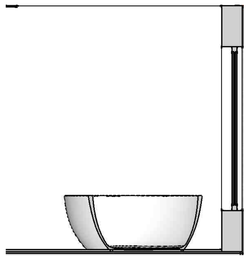
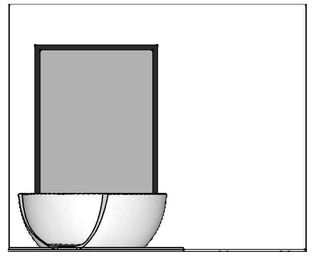
Notes

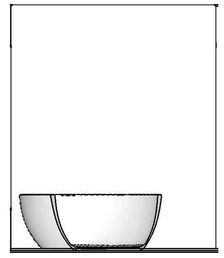
1. Verify height and location of all shower heads and valves.

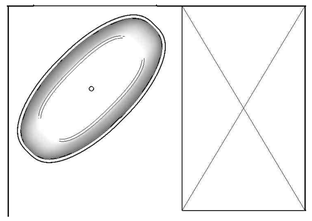


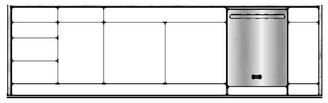


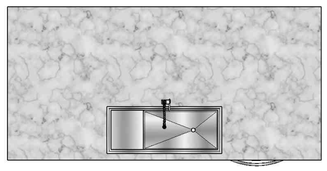


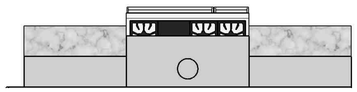


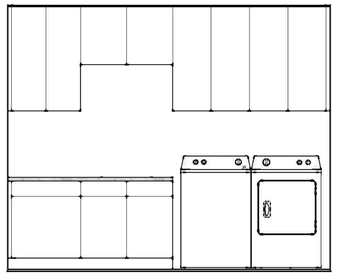


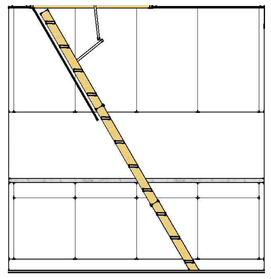


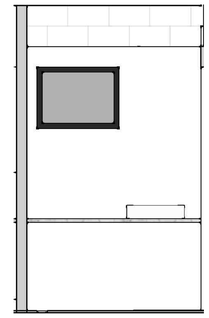


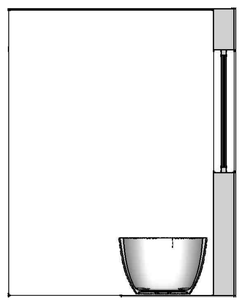


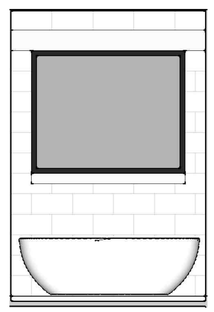


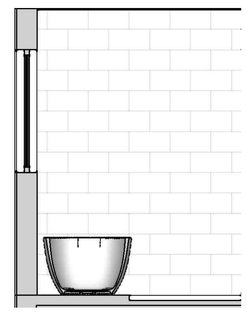


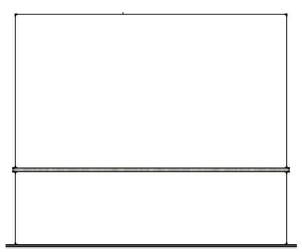


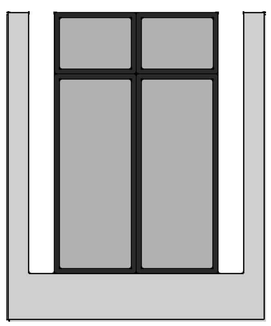


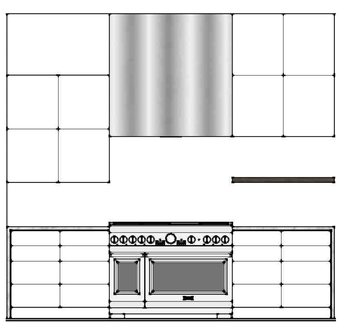


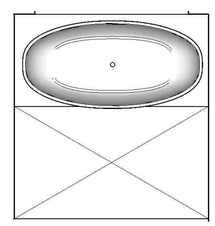












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D1 - Design Images
Scale: 1/2" - 1'-0"

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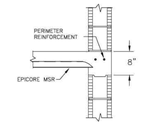
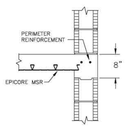
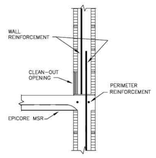
D1



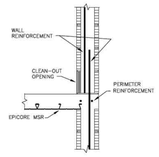
EXTERIOR WALL SECTION
THICKEN EDGE TO MAINTAIN
BLOCK COURSES
(EPICORE MSR PERPENDICULAR)



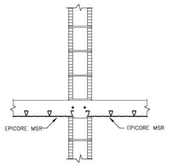
EXTERIOR WALL SECTION
THICKEN EDGE TO MAINTAIN
BLOCK COURSES
(EPICORE MSR PARALLEL)



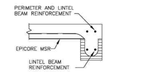
EXTERIOR WALL SECTION
WITH GROUTED BLOCK CELLS
(EPICORE MSR PERPENDICULAR)



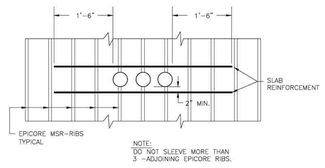
EXTERIOR WALL SECTION
WITH GROUTED BLOCK CELLS
(EPICORE MSR PARALLEL)



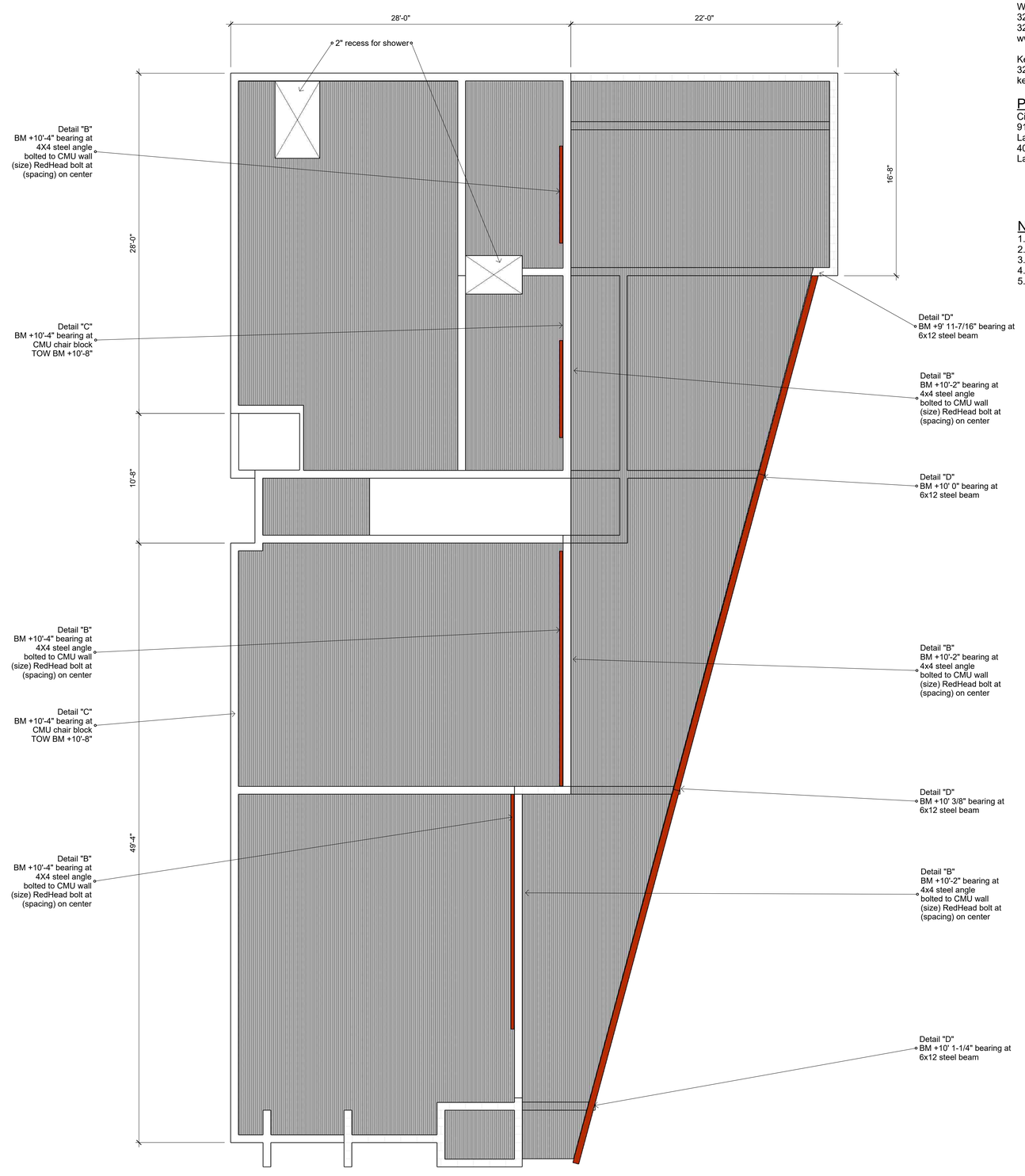
INTERIOR WALL SECTION
(EPICORE MSR PARALLEL)



EXTERIOR WALL SECTION
@ U-BLOCK LINTEL
(EPICORE MSR PERPENDICULAR)



TYPICAL PIPE SLEEVE DETAIL



T1 archive
1 Scale: 1/4" - 1'-0"

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Notes

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Kg3d Home Design LLC
2711 Woodside Avenue
Winter Park FL 32789
(321) 439-1047

Carson Residence
Lot 13 Evansdale 2 PB 8 Pg. 38
153 Old Park Way
Lake Mary FL 32746

groningerhomes.com
Design Build Consult

Date
09/22/25

T1

Groninger Custom Homes, Inc.
2711 Woodside Ave
Winter Park FL 32789
321-352-5202 tel
321-445-5566 fax
www.groninerhomes.com

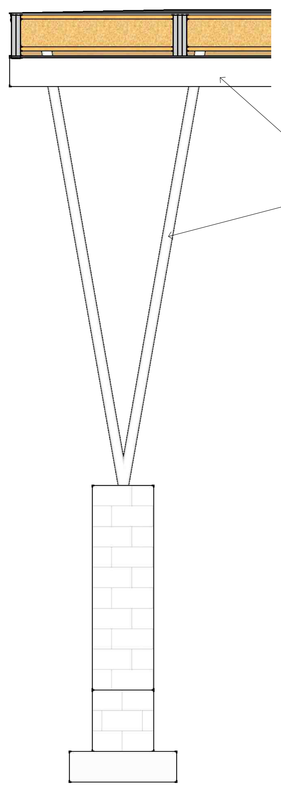
Keith Groninger
321-439-1047 cell
keith@groninerhomes.com

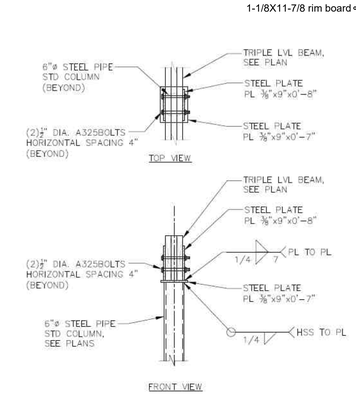
Permitting Jurisdition

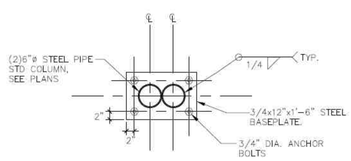
City of Lake Mary
911 Wallace Ct.
Lake Mary FL 32746
407-585-1361
LakeMaryFL.com/building

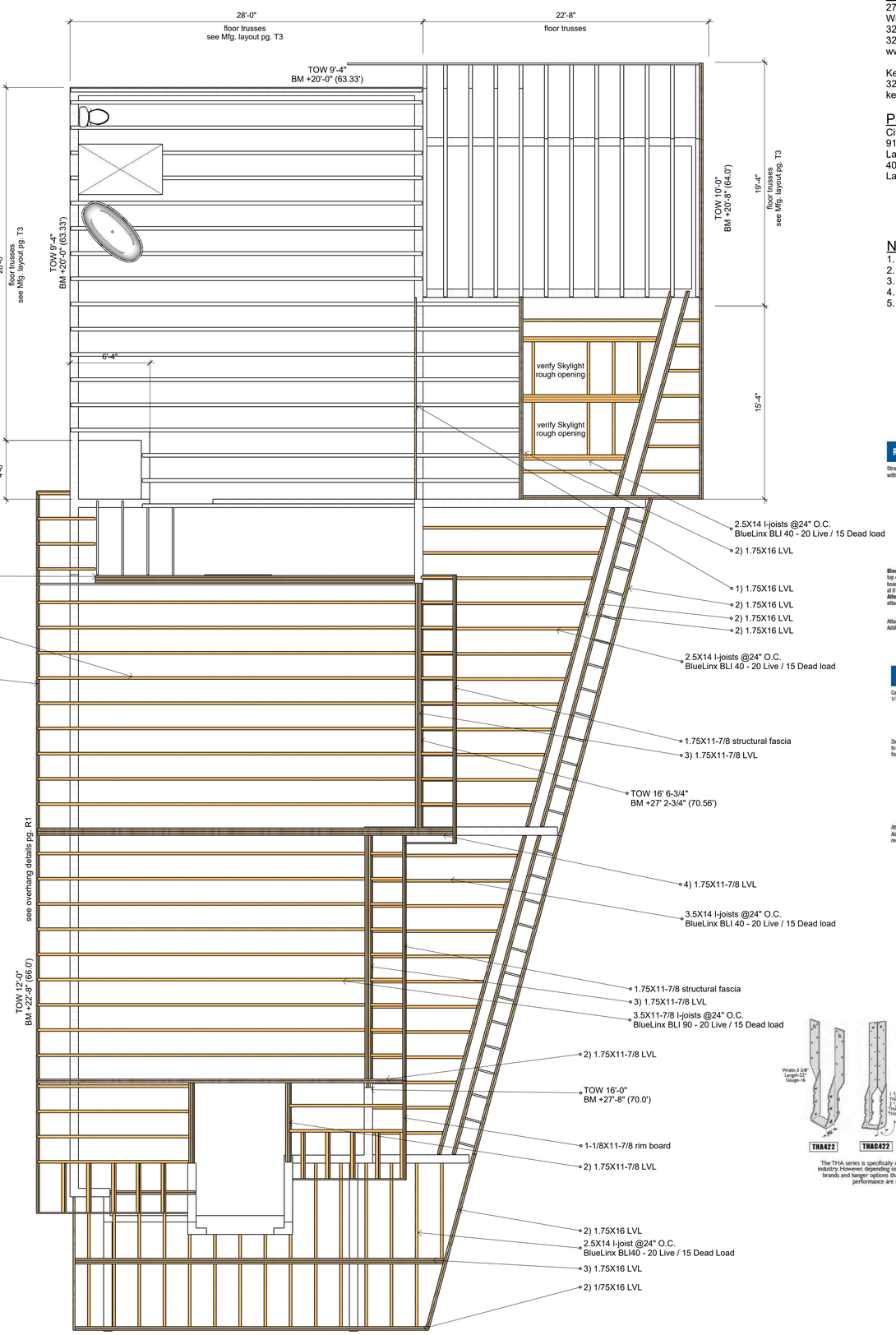
Notes

1. Verify tub and toilet locations.
2. Verify recessed can lighting locations.
3. Pre-install newel posts in the floor system.
4. Provide AC duct chases.
5. Provide attic storage where possible.

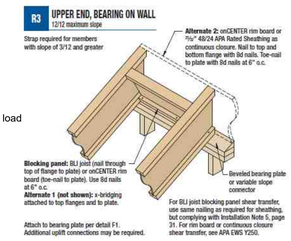


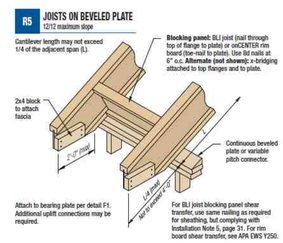


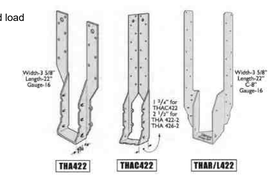




T2 archive
Scale: 1/4" - 1'-0"







The THA series is specifically designed for the truss industry. However, depending on the application, other brands and hanger options that provide equivalent performance are available.

NOTES ON FRAMING CONNECTORS:

For minimum / maximum nailing installation methods and blocking, refer to the Simpson Strongtie Catalog at www.strongtie.com.

The THA series is specifically designed for the truss industry. However, depending on the application, other brands and hanger options that provide equivalent performance are available.

Courtesy of Simpson Strong-Tie Co., Inc.

Design Criteria:

This structure has been designed to meet or exceed the wind load requirements of the 2023 Florida Building Code Residential 8th Edition Section R301 Design Criteria and ASCE 7-22.

1. Risk Category 2
   Construction Type = Single Family Residential (V)
2. Wind Speed = 139 MPH Ultimate Wind Speed (Vult) and 108 MPH (Vasd)
3. Wind Exposure = Category C
4. Internal Pressure Coefficient for Enclosed Buildings is 0.18 and Height & Exposure Adjustment Coefficient is 1.40

Design Loads per FRBC 2023 edition
Shingle Roof dead load = 17psf
Building is not in an airborne debris area

All details and sections shown on the drawings are intended to be typical and shall apply to any similar situation shown elsewhere except where specific reference is given. Architectural drawings provide reference and information but are not intended to be structural. See structural drawings for engineered components and material requirements.

alba ENGINEERING
C.A. #30556
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P.E.# 63907
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PHONE (407) 421-4866

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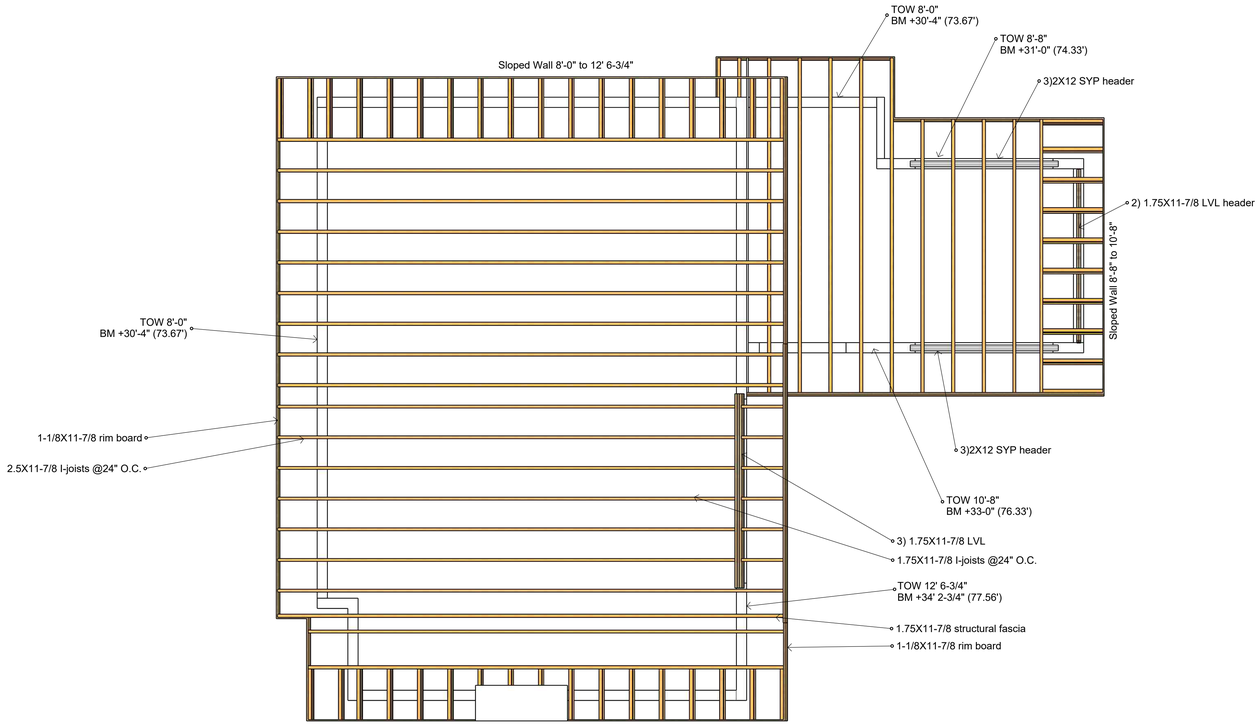

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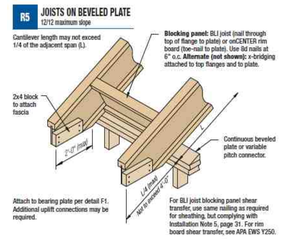
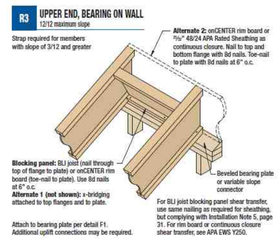
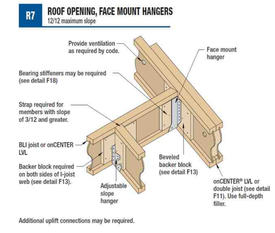






CONTRACTOR TO VERIFY TRUSS LAYOUT PLAN PROVIDED BY TRUSS COMPANY WITH DELIVERY OF TRUSSES MATCHES TRUSS FRAMING PLAN SHOWN ON THIS SHEET AND REPORT ANY DISCREPANCIES TO ENGINEER OF RECORD, PRIOR TO BEGINNING WORK.

NOTES:

1. TOP OF WALL ELEVATION/TRUSS BEARING ELEVATION, SEE ELEVATION SHEETS
2. SEE GENERAL STRUCTURAL NOTES FOR ROOF SHEATHING.
3. SEE DETAIL SHEETS FOR GABLE BRACING DETAIL
4. AT ALL 2, 3, ETC. PLY TRUSS LOCATIONS, PROVIDE 2, 3, ETC. WALL STUDS TO MATCH, UNLESS 4x6 ETC. IS ALREADY SPECIFICALLY PROVIDED IN PLAN.

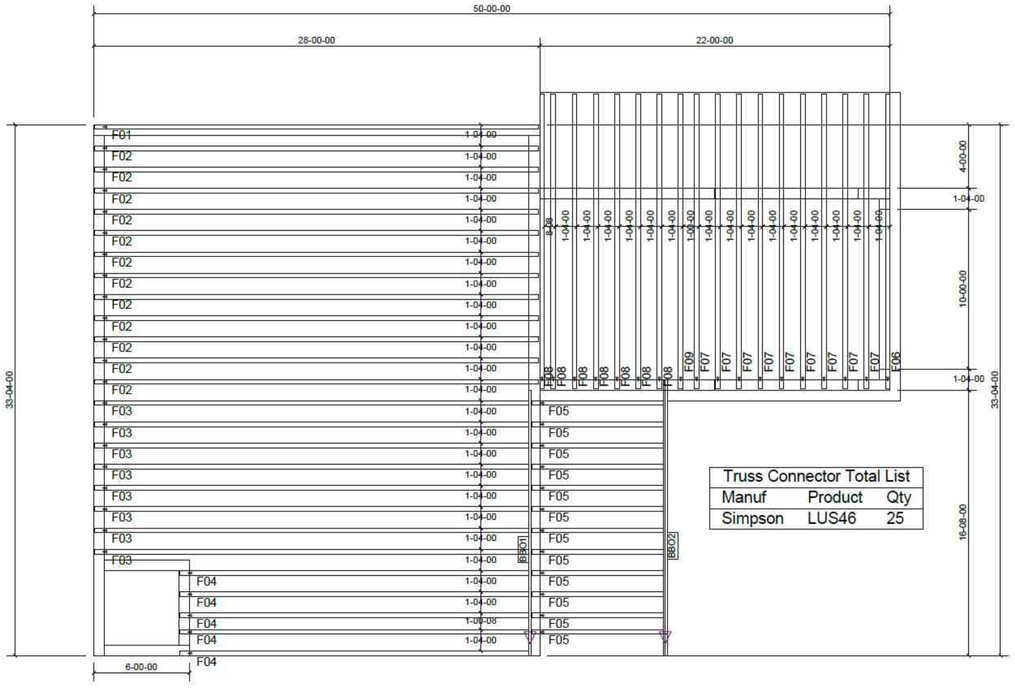
TRUSS CONNECTOR SCHEDULE

CALLOUT	CONNECTOR	ALLOWABLE UPLIFT LOAD	FASTENERS
TC1	META16	1450 LB	EMBEDDED, (8) 0.148"x1.5" NAILS TO TRUSS
TC2	META16 @ 4'-0" O.C.	1450 LB	EMBEDDED, (8) 0.148"x1.5" NAILS TO TRUSS
TC3	MTS12	990 LB	(14) 0.148"x1.5" NAILS
TC4	LSTA15 @ 4'-0" O.C.	1110 LB	(12) 0.148"x2.5" NAILS
TC5	H2.5A	575 LB	(10) 0.131"x2.5" NAILS
TC6	VCTR	370 LB	TRUSS (4) 0.148"x3", VALLEY (3) 0.148"x1.5"
TC7	MGT	3965 LB	(1)5/8" ATR 5", EMBED, TRUSS (22)0.148"x3"
TC8	HTS20	1310 LB	(24) 0.148"x1.5" NAILS
TC9	HTT4	4235 LB	(1)5/8" ATR 5", EMBED, TRUSS (18)0.162"x2.5"
TC10	HTT5	5090 LB	(1)5/8" ATR 5", EMBED, TRUSS (26)0.162"x2.5"
TC11	HTSM16	1110 LB	CMU-(4) 1/4"x2-1/4" TITEN, TRUSS (8) 0.148"x3"
TC12	MSTAM24	1375 LB	CMU-(5) 1/4"x2-1/4" TITEN, TRUSS (9) 0.148"x3"
TC13	(2)META16	1 PLY 1985 LB, 2PLY+ 1900 LB	EMBEDDED, (8) 0.148"x1.5" NAILS TO TRUSS
TC14	H2.5A	700 LB	(10) 0.148"x1.5" NAILS

META16 CONNECTORS MAY BE REPLACED WITH HETA16 (1810 LB).
ANY MISSING META16s MAY BE REPLACED WITH HTSM16s.

ALL TRUSS TO CMU CONNECTIONS, META16 (TC1) U.N.O.

ALL TRUSS TO WOOD FRAME CONNECTIONS, MTS12 (TC3) U.N.O.



Truss Connector Total List		
Manuf	Product	Qty
Simpson	LUS46	25

T3 archive
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DANIEL SOUTER No. 63001 STATE OF FLORIDA PROFESSIONAL ENGINEER

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