23' x 24' Modern Garage Plan

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Content

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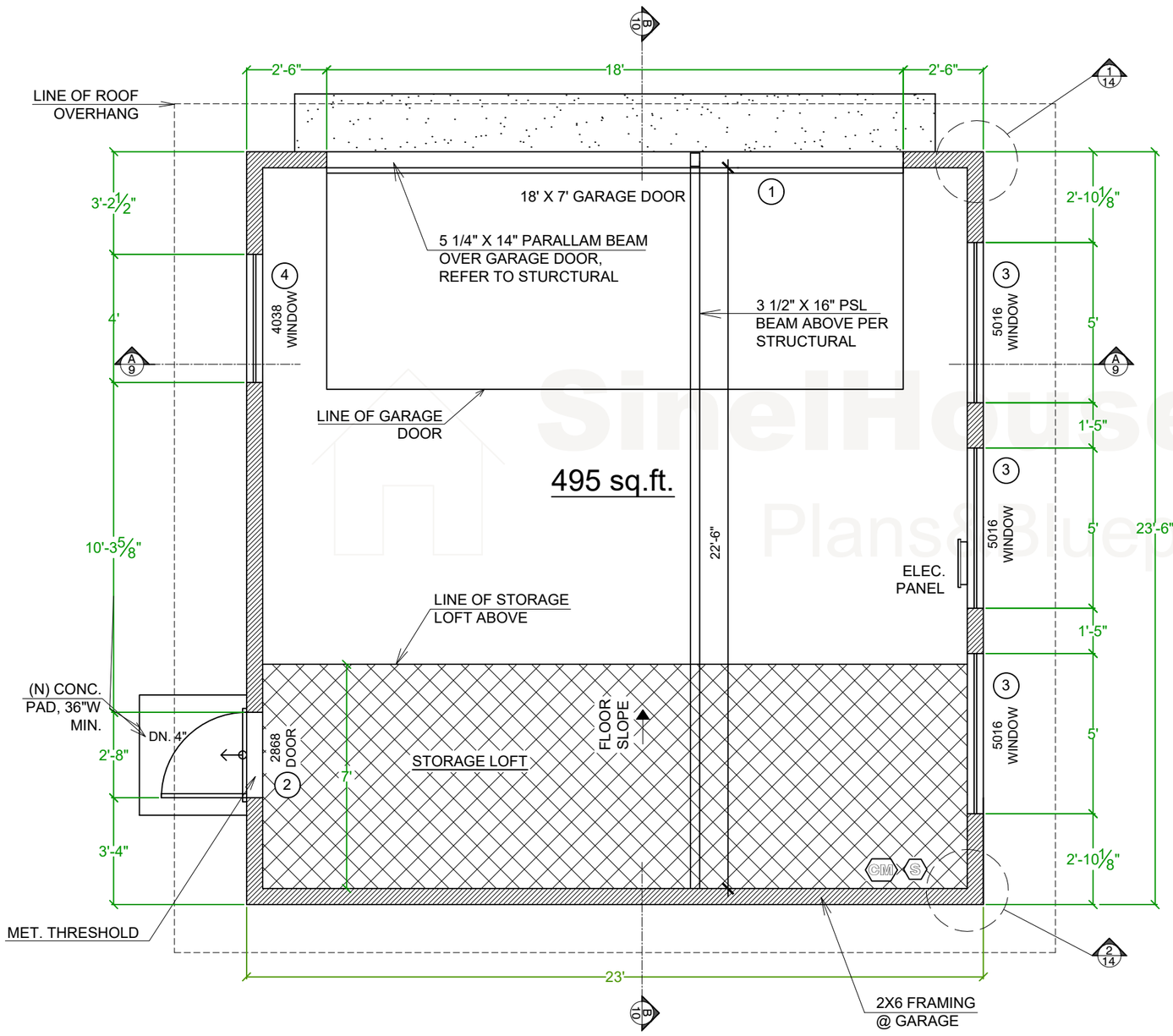
Material Lists:
Material Lists are based upon the drawings contained in this plan set. Actual quantities may vary based upon actual site conditions.

Floor Plan
(scale 1/4" = 1'-0")



LEGEND:

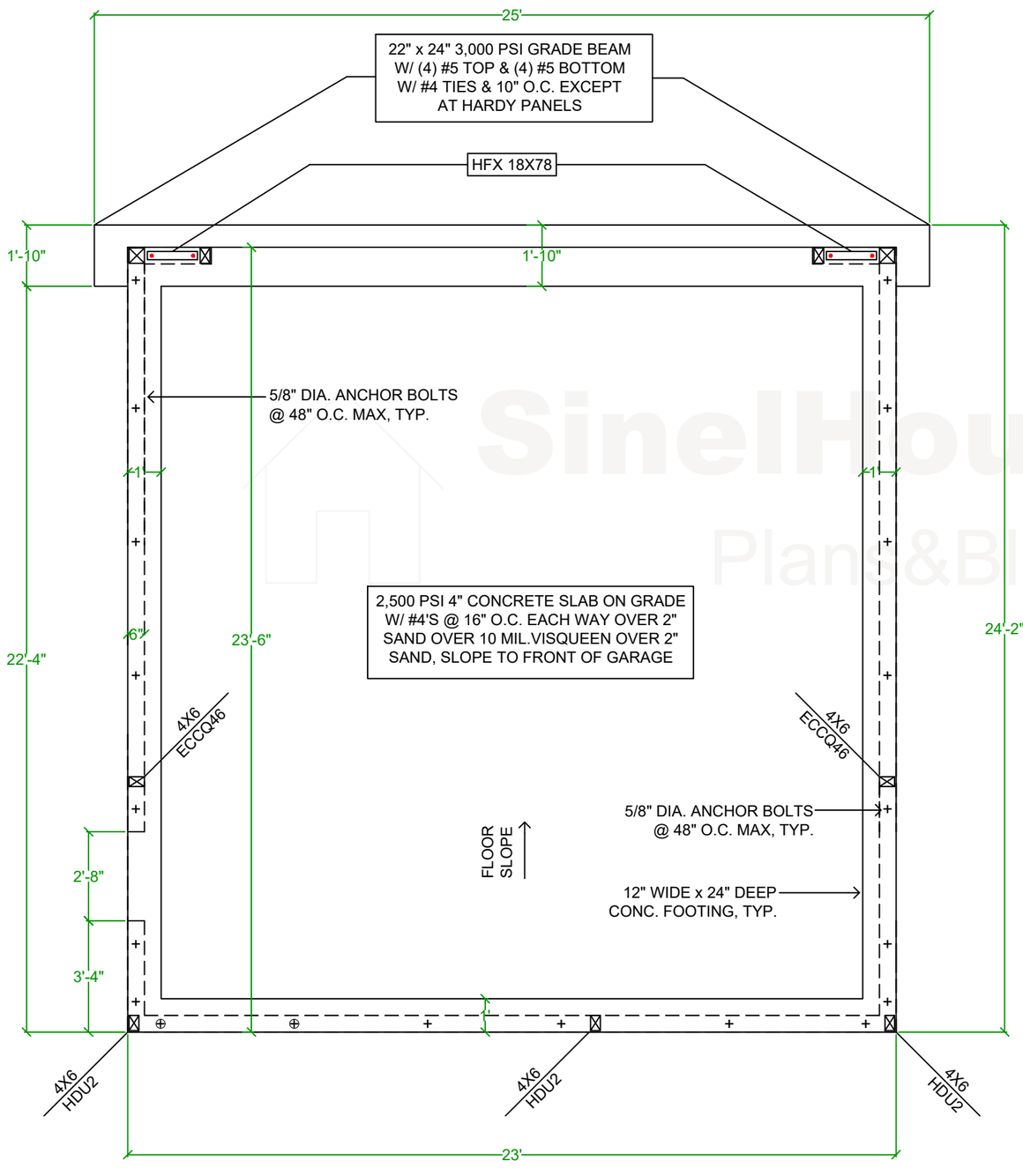
- 2X6 WALLS
- STORAGE LOFT

VENTILATION NOTES:

1. 0 S.F. OF NEW ATTIC VENTILATION REQUIRED (NO ATTIC SPACE).

2. 0 S.F. TOTAL UNDER-FLOOR VENTILATION REQUIRED (SLAB ON GRADE FOUNDATION).

Foundation Plan
(scale 1/4" = 1'-0")



FOUNDATION NOTES:

ALLOWABLE SOIL BEARING VALUE=1000 PSF FOR FOUNDATIONS PLACED 24" MIN. INTO NATURAL UNDISTURBED SOIL AT EXTERIOR FOOTINGS AND 18" MIN. AT INTERIOR FOOTINGS.

IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, A SOILS INVESTIGATION REPORT MAY BE REQUIRED.

EXPANSIVE SOIL REQUIREMENTS

IF SOIL IS FOUND TO BE EXPANSIVE, THE FOOTINGS MUST MEET THE FOLLOWING REQUIREMENTS:

a) DEPTH OF FOOTINGS BELOW THE NATURAL AND FINISH GRADES SHALL NOT BE LESS THAN 24 INCHES FOR EXTERIOR AND 18 INCHES FOR INTERIOR FOOTINGS.

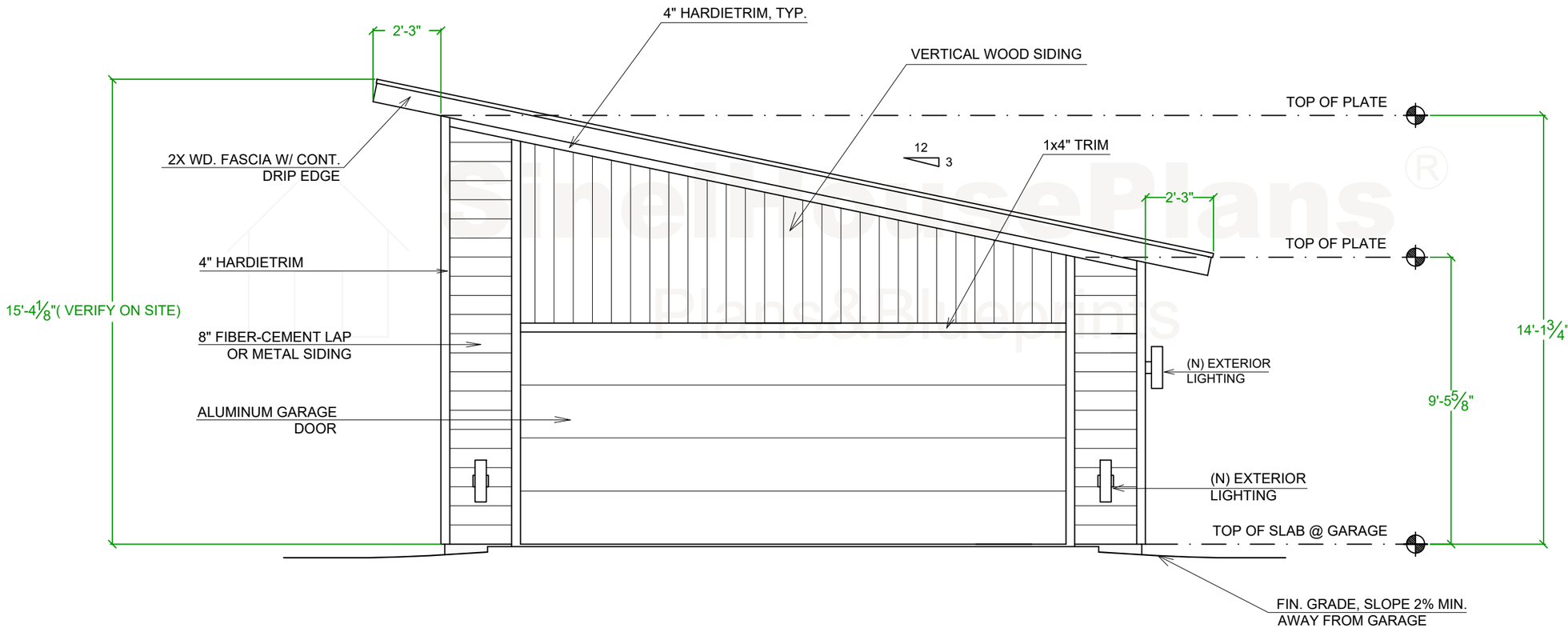
b) EXTERIOR WALLS AND INTERIOR BEARING WALLS SHALL BE SUPPORTED ON CONTINUOUS FOOTINGS.

c) FOOTINGS SHALL BE REINFORCED WITH MINIMUM FOUR 1/2" DIAMETER DEFORMED REINFORCING BARS. TWO BARS WITHIN 4" OF THE BOTTOM OF THE FOOTING AND TWO BARS WITHIN 4" OF THE TOP OF THE FOOTINGS.

d) THE SOIL BELOW AN INTERIOR CONCRETE SLAB SHALL BE SATURATED WITH MOISTURE TO A DEPTH OF 18" PRIOR TO PLACING THE CONCRETE.

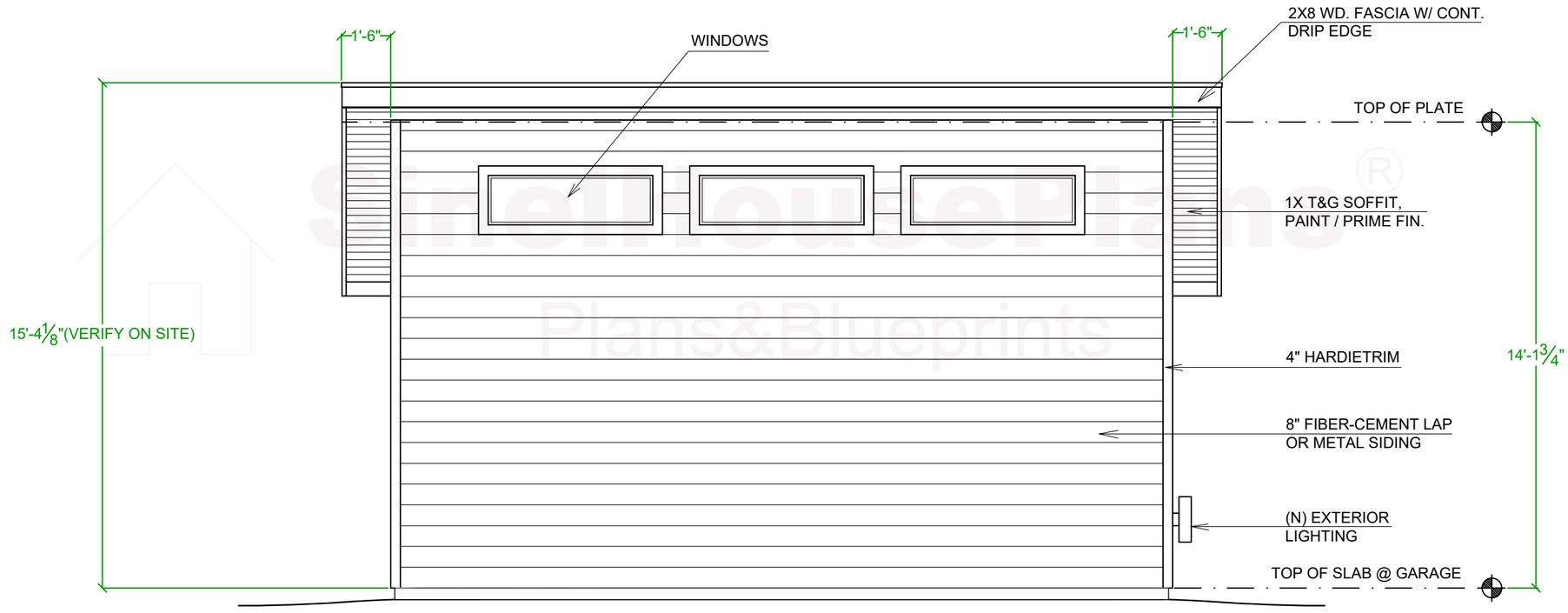
Front Wall Elevation

(scale 1/4" = 1'-0")



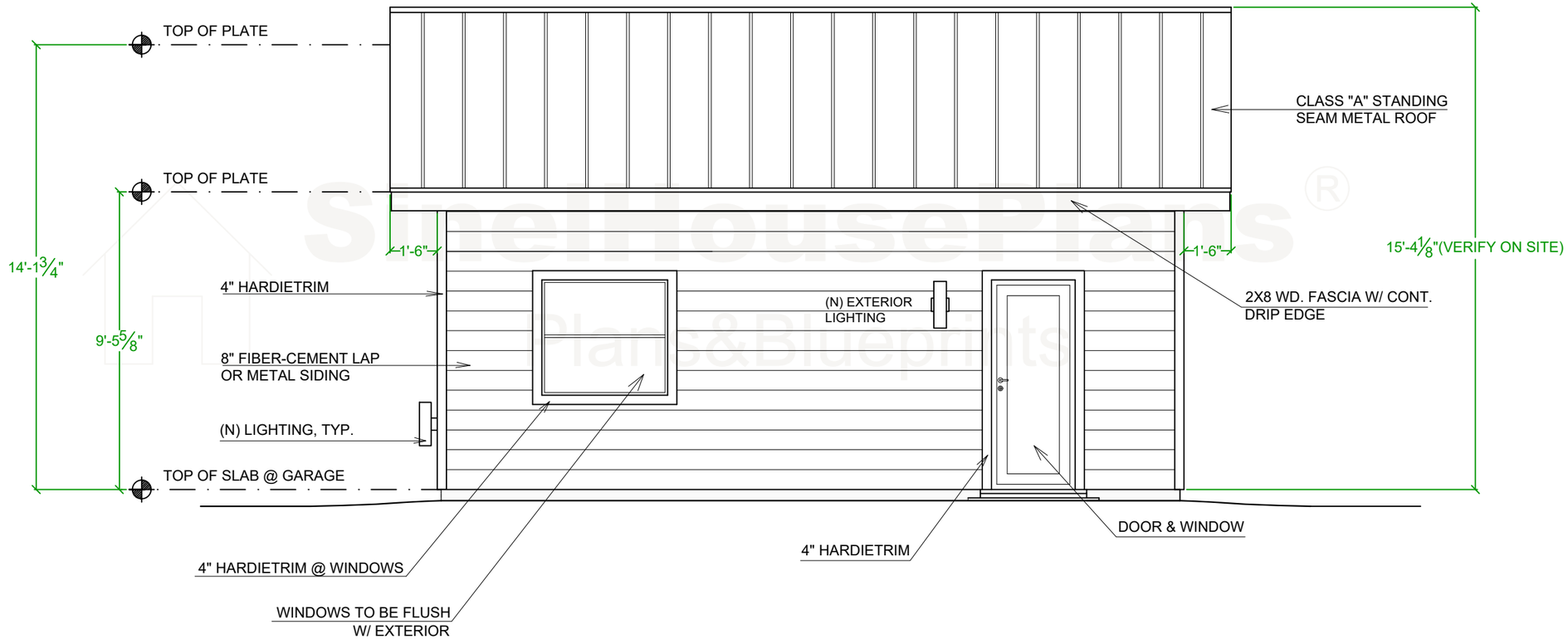
Left Wall Elevation

(scale 1/4" = 1'-0")



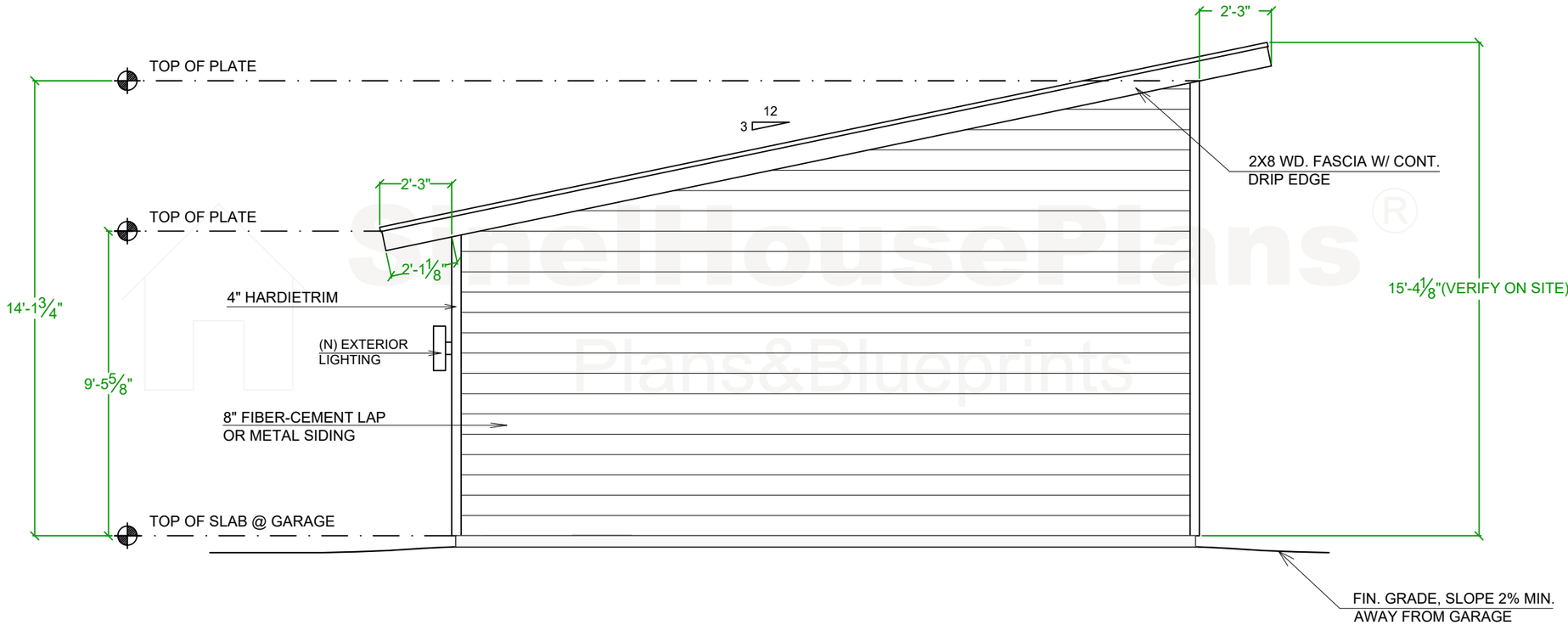
Right Wall Elevation

(scale 1/4" = 1'-0")



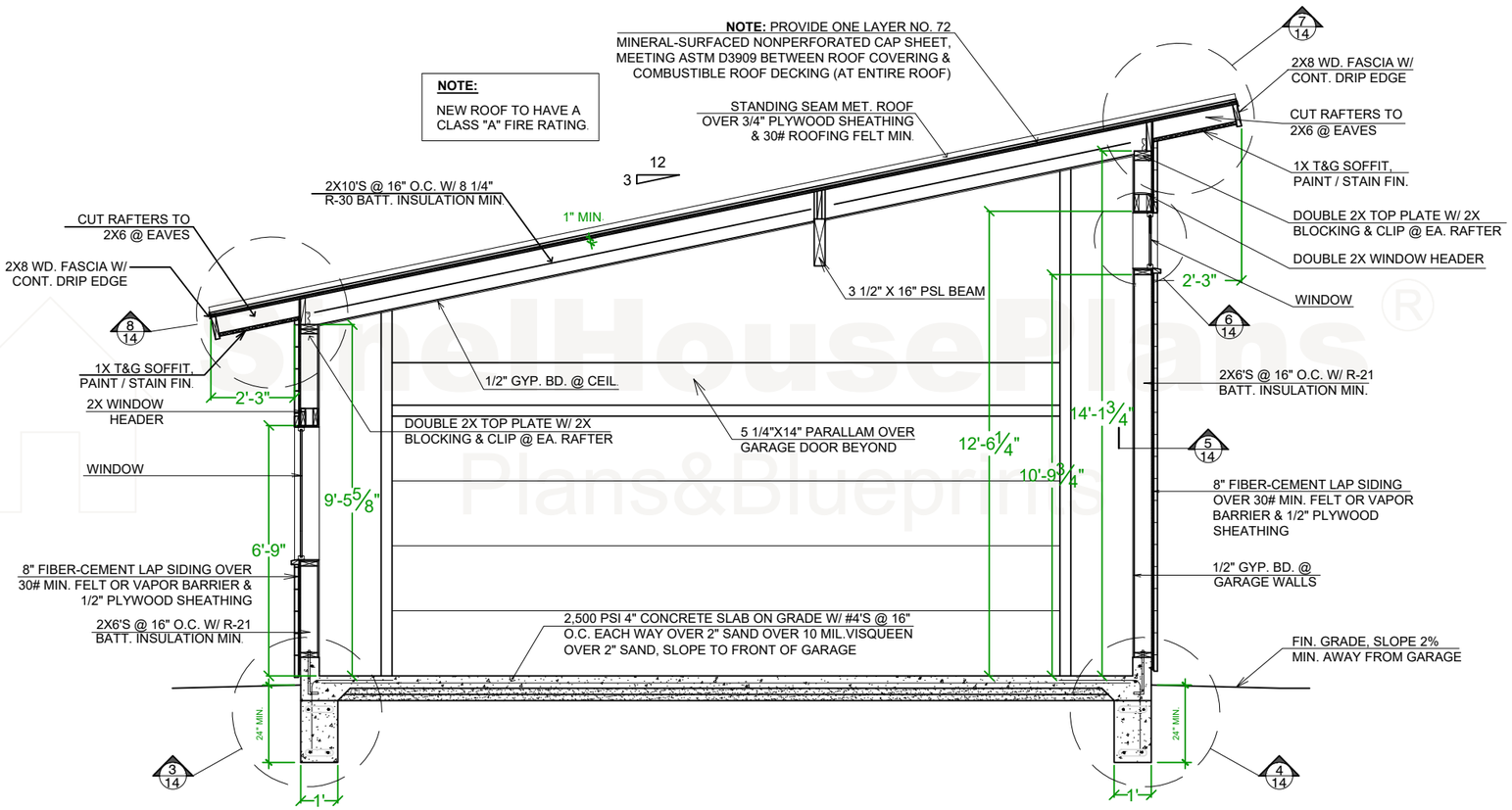
Rear Wall Elevation

(scale 1/4" = 1'-0")



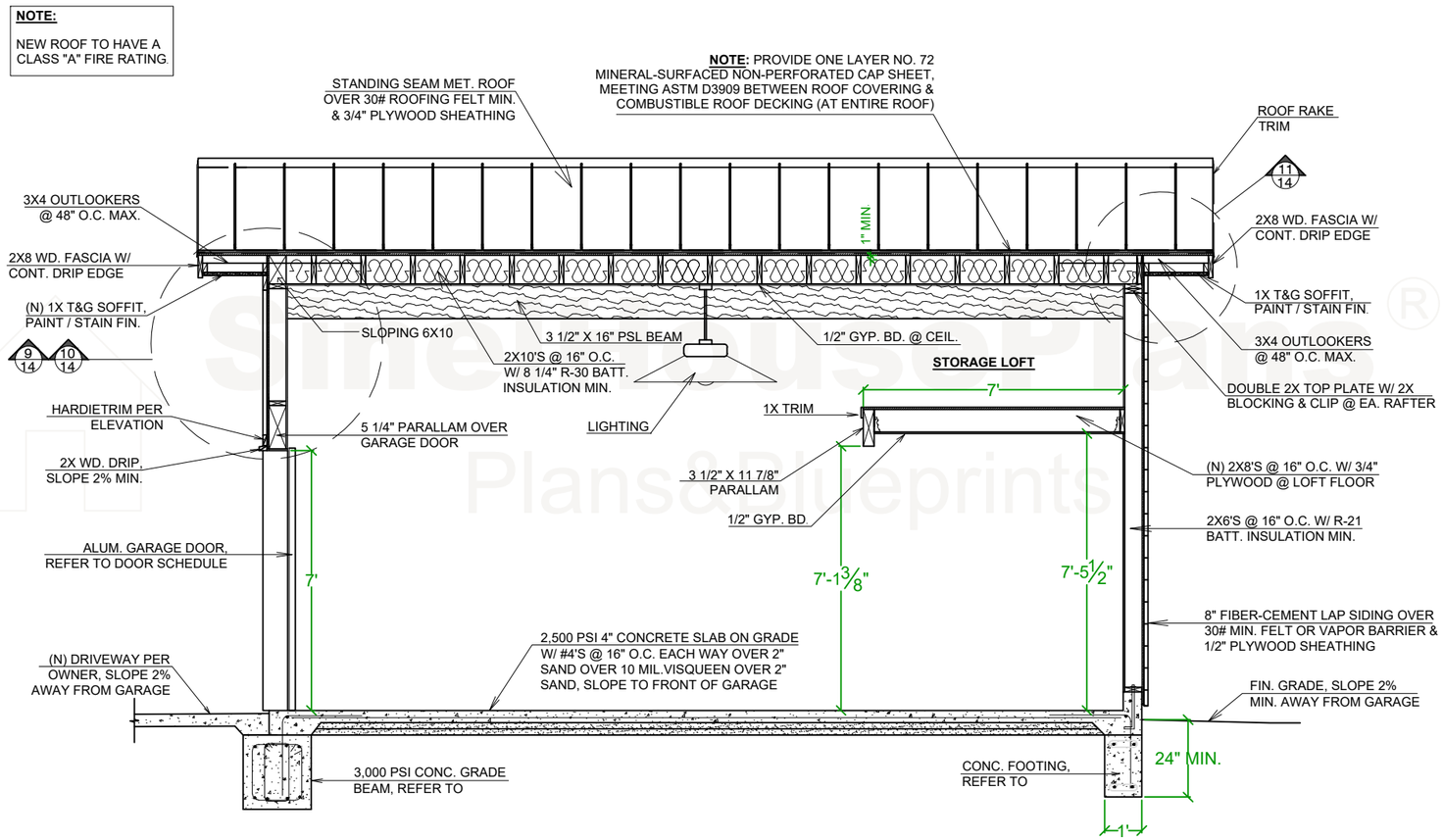
Section A - A

(scale 1/4" = 1'-0")



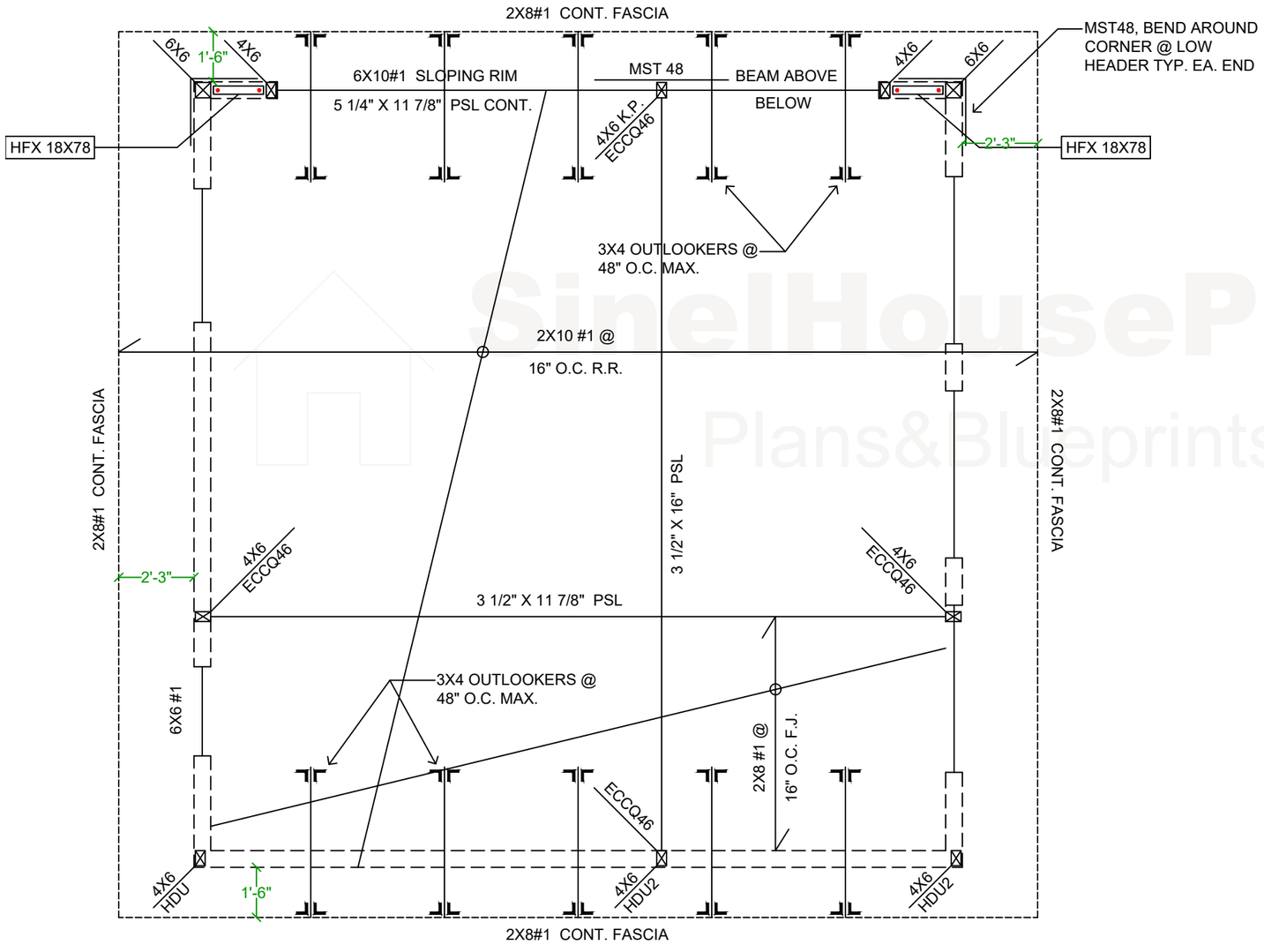
Section B - B

(scale 1/4" = 1'-0")



Framing Plan

(scale 1/4" = 1'-0")



STRUCTURAL ENGINEERING NOTES:

ANY STRUCTURAL ENGINEERING PLANS, CALCULATIONS, REQUIREMENTS, OR SPECIFICATIONS (INCLUDING, BUT NOT LIMITED TO, ARCHITECTURAL CONSTRUCTION DETAILS) SHOWN WITHIN THESE PLANS ARE INTENDED ONLY AS A GUIDE.

BECAUSE OF THE DIFFERENCES IN BUILDING CODES, ZONE REQUIREMENTS, ORDINANCES AND BUILDING REGULATIONS, THESE PLANS MAY NEED TO BE MODIFIED TO COMPLY WITH LOCAL REQUIREMENTS REGARDING SNOW LOADS, ENERGY CODES, SOIL AND SEISMIC CONDITIONS AND A WIDE RANGE OF OTHER MATTERS. IN ADDITION, YOU MAY NEED TO OBTAIN PERMITS OR INSPECTIONS FROM LOCAL GOVERNMENT AGENCIES BEFORE AND WHILE IN CONSTRUCTION.

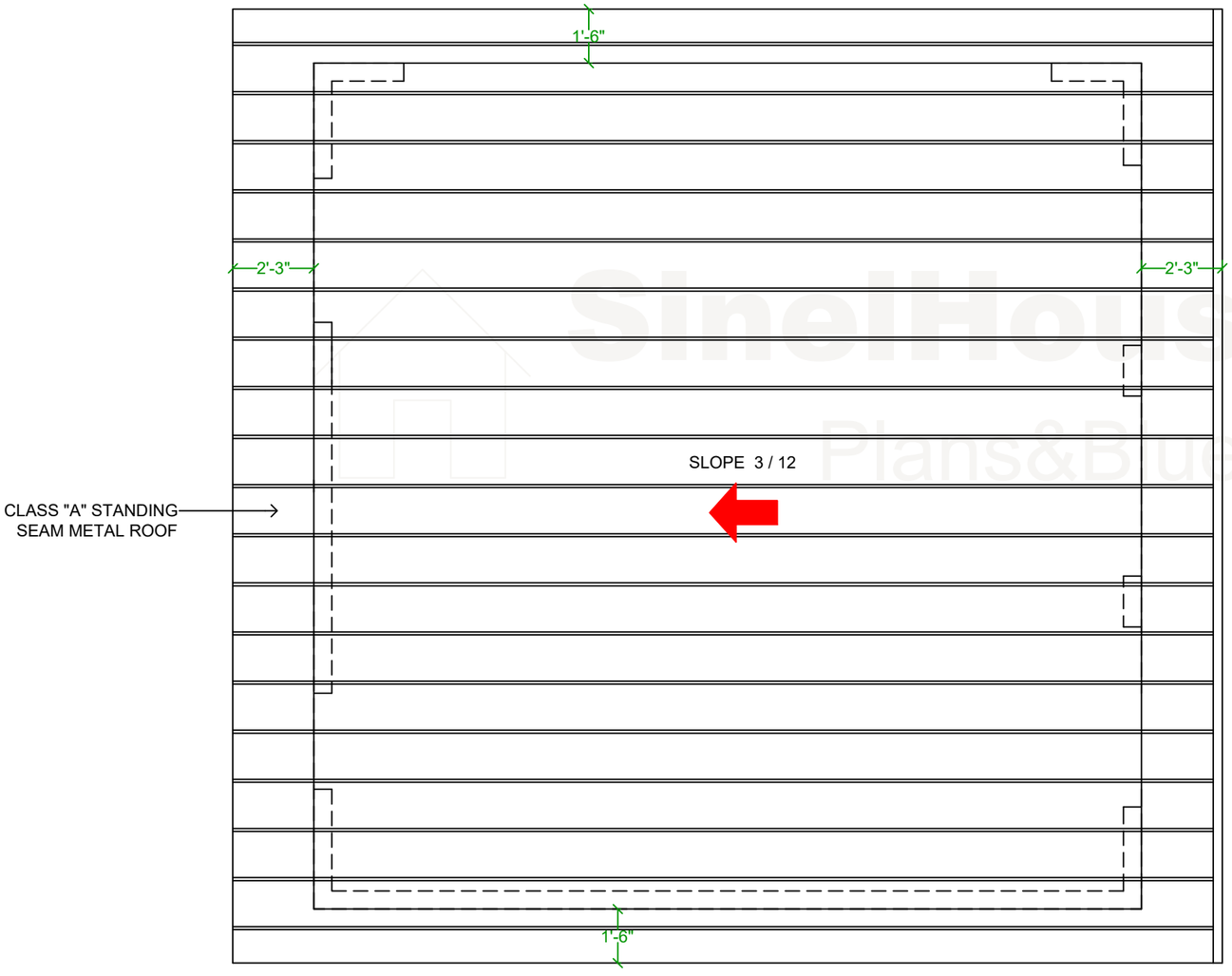
IT IS STRONGLY ADVISED TO CONSULT A STATE LICENSED STRUCTURAL ENGINEER TO ANALYZE THE DESIGNS HEREIN AND PROVIDE STRUCTURAL ENGINEERING DRAWINGS AND CALCULATIONS REQUIRED BY YOUR LOCAL BUILDING DEPARTMENT. EXAMPLES OF THIS WOULD BE, BUT NOT LIMITED TO:

- EARTHQUAKE-PRONE AREAS OF CALIFORNIA AND THE PACIFIC COAST
- HURRICANE RISK AREAS SUCH AS FLORIDA AND THE GULF STATES
- CAROLINAS AND ATLANTIC COAST
- NEW YORK, NEW JERSEY, NEVADA AND SECTIONS OF ILLINOIS

ADDITIONALLY, THESE PLANS DO NOT HAVE A PROFESSIONAL STAMP ATTACHED. IF YOUR BUILDING DEPARTMENT REQUIRES ONE, THEY WILL ONLY ACCEPT A STAMP FROM A PROFESSIONAL LICENSED IN THE STATE WHERE YOU PLAN TO BUILD. IN THIS CASE, YOU WILL NEED TO TAKE THE PLANS TO A LOCAL ENGINEER OR ARCHITECT FOR REVIEW AND STAMPING. IN ADDITION, PLANS WHICH ARE USED TO CONSTRUCT HOMES IN NEVADA ARE REQUIRED TO BE DRAWN BY A LICENSED NEVADA ARCHITECT.

Roof Plan

(scale 1/4" = 1'-0")



ROOF CLASSIFICATION NOTE:

ROOF TO HAVE A CLASS "A" FIRE RATING. ROOF COVERING ASSEMBLIES SHALL BE AN ICC-ES OR UL LISTED CLASS 'A' FIRE-RESISTIVE ROOF ASSEMBLY COMPLYING WITH ASTM E108 OR UL 790.

ROOF NOTES:

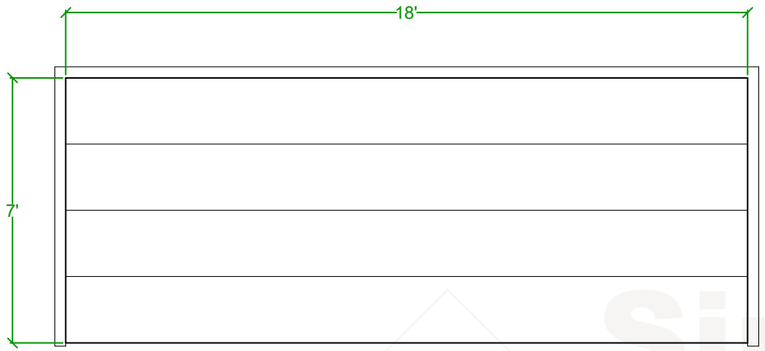
1) ROOF TO HAVE A CLASS "A" FIRE RATING.

2) PROVIDE ONE LAYER NO. 72 MINERAL-SURFACED NON-PERFORATED CAP SHEET, MEETING ASTM D3909, BETWEEN ROOF COVERING & COMBUSTIBLE ROOF DECKING.

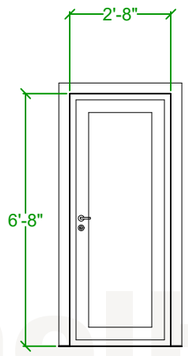
Window & Door Schedule

(scale 1/4" = 1'-0")

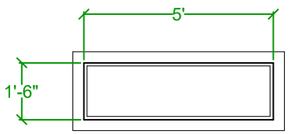
1 OVERHEAD GARAGE DOOR W/ OPENER



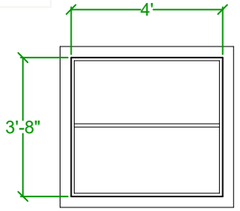
2 STEEL EXTERIOR DOOR & WINDOW



3 STANDARD WINDOW



4 DOUBLE-HUNG WINDOW



Door, Window

Description	Dimension, / Area SF/	Length	Qty.
Garage door	18'-0" (w) x 7'-0" (h)		1
Exterior door 2868	2'-8" (w) x 6'-8" (h)		1
Window 5016	5'-0" (w) x 1'-6" (h)		3
Window 4038	4'-0" (w) x 3'-8" (h)		1

DOOR NOTES:

1. EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

2. TEMPERED GLAZING SHALL BE PROVIDED AT HAZARDOUS LOCATIONS IDENTIFIED IN CRC R308. HAZARDOUS LOCATIONS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   a. GLAZING IN ALL DOORS.
   b. GLAZING IN BATH & SHOWER ENCLOSURES.
   c. GLAZING WITHIN A 24" ARC OF A DOOR EDGE.
   d. PANELS OVER 9 S.F. WITH THE LOWEST EDGE LESS THAN 18" ABOVE FIN. FLOOR AND HAVING A TOP EDGE GREATER THAN 36" ABOVE FIN. FLOOR.

WINDOW NOTES:

1. VERIFY ALL WINDOW DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

2. AT LEAST ONE OPENING PER BEDROOM SHALL PROVIDE A MINIMUM NET CLEAR OPENABLE AREA OF 5.7 SQ. FT. WITH A MINIMUM NET CLEAR OPENABLE WIDTH OF 20" AND A MINIMUM NET CLEAR OPENABLE HEIGHT OF 24" AND A FINISHED SILL HEIGHT NO LESS THAN 42" AND NOT MORE THAN 44" ABOVE THE FLOOR (R310.1).
   a. 20" MIN. CLEAR WIDTH
   b. 24" MIN. CLEAR HEIGHT
   c. 5.0 SF MIN. OPENABLE AREA AT GRADE-FLOOR ONLY, 5.7 SF MIN. ELSEWHERE.

3. GLAZING IN THE FOLLOWING LOCATIONS SHALL BE SAFETY GLAZING CONFORMING TO THE HUMAN IMPACT LOADS OF SECTION R308.3 (SEE EXCEPTIONS) (R308.4):

   A. FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BI-FOLD DOOR ASSEMBLIES.

   B. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE.

   C. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
   1) EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET.
   2) BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.
   3) TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR.
   4) ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE GLAZING.

   D. GLAZING IN RAILINGS.

   E. GLAZING IN ENCLOSURES FOR OR WALLS FACING HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.

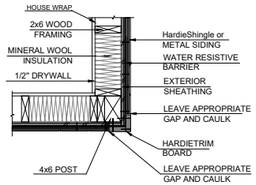
   F. GLAZING IN WALLS AND FENCES ADJACENT TO INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE AND WITHIN 60 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE WATER'S EDGE.

   G. GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS.

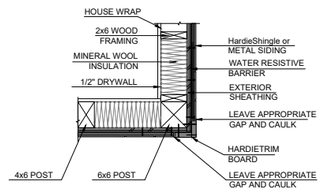
   H. GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD.

4. ALL WINDOWS SHALL BE DUAL-PANE, LOW-E WINDOWS.

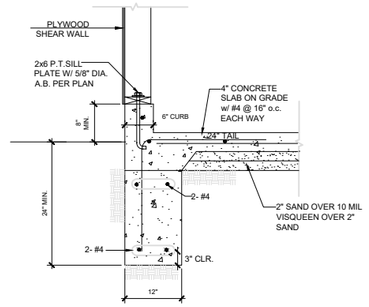
Detail 1
Corner
(scale 3/8" = 1'-0")



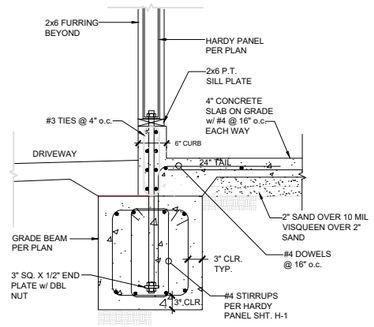
Detail 2
Corner
(scale 3/8" = 1'-0")



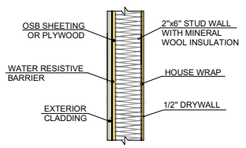
Detail 3
Exterior Wall
(scale 3/8" = 1'-0")



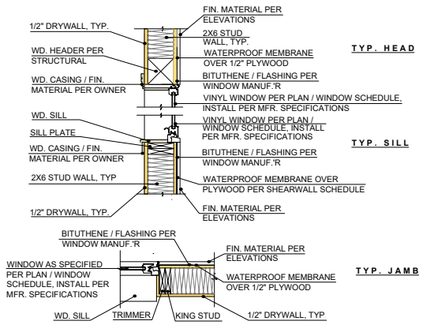
Detail 4
Exterior Wall
(scale 3/8" = 1'-0")



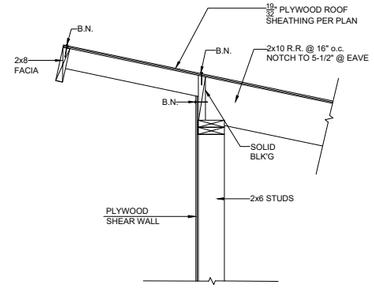
Detail 5
Exterior Wall
(scale 3/8" = 1'-0")



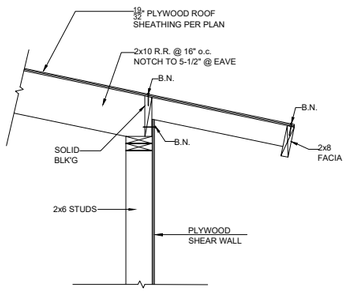
Detail 6
Window
(scale 3/8" = 1'-0")



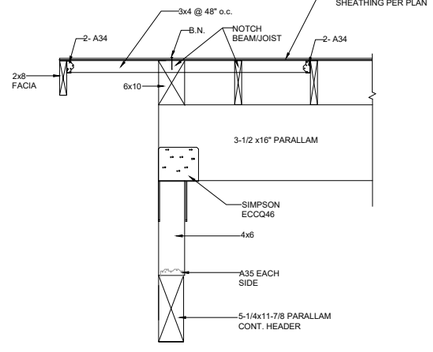
Detail 7
(Rafter Overhang Detail)
(scale 3/8" = 1'-0")



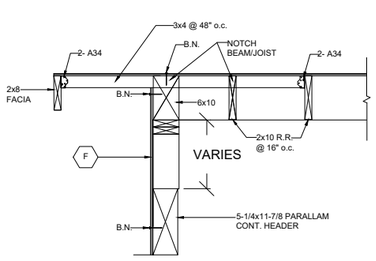
Detail 8
(Rafter Overhang Detail)
(scale 3/8" = 1'-0")



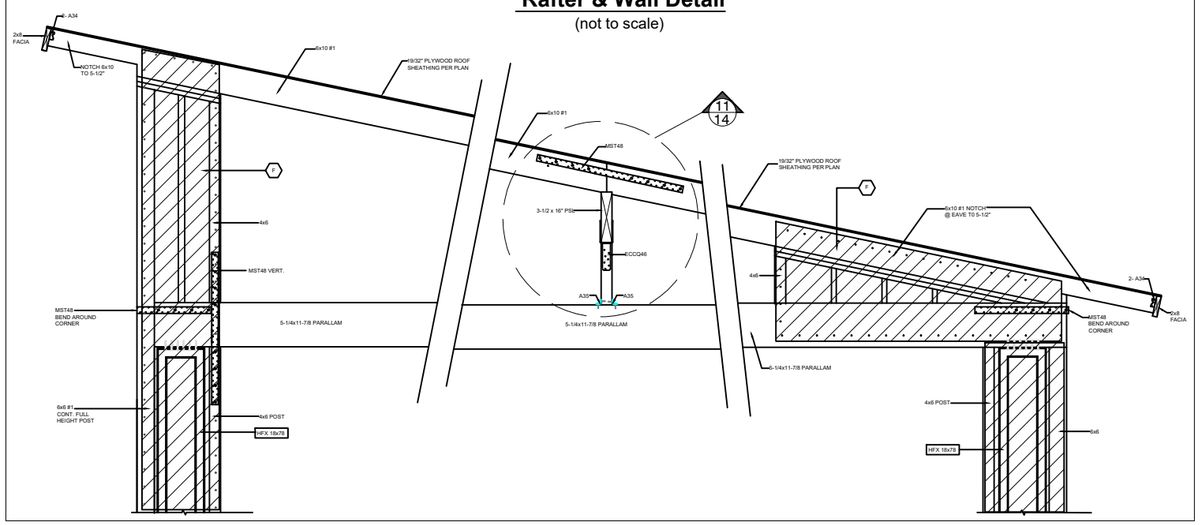
Detail 9
(Parallam Header Connection)
(scale 3/8" = 1'-0")



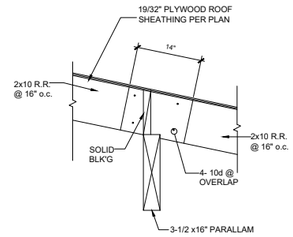
Detail 10
(Roof Gable End)
(scale 3/8" = 1'-0")



Rafter & Wall Detail
(not to scale)



Detail 11
(Rafter and Beam Connection)
(scale 3/8" = 1'-0")

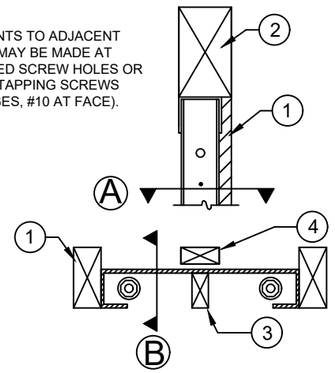


SinelHousePlans®
Plans&Blueprints

23' x 24' Modern Garage

Details

NOTE:
ATTACHMENTS TO ADJACENT TRIMMERS MAY BE MADE AT PREPUNCHED SCREW HOLES OR WITH SELF TAPPING SCREWS (#12 AT EDGES, #10 AT FACE).

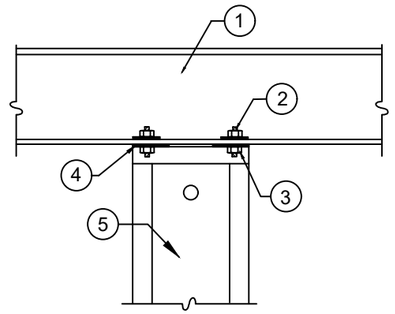


SECTION B

SECTION A

1. TRIMMERS PROVIDE FULL BEARING FOR HEADER ABOVE, DESIGN AND CONNECTIONS BY BUILDING DESIGN PROFESSIONAL.
2. 6x HEADER.
3. WOOD MEMBERS FOR BACKING MAY BE INSERTED VERTICALLY OR HORIZONTALLY IN THE PANEL CAVITY AS NEEDED.
4. WOOD MEMBER FLUSH TO FACE OF WALL FOR BACKING AS NEEDED.

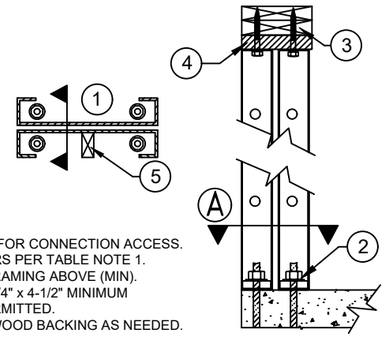
6x HEADER ABOVE-SECTIONS 1



1. STEEL BEAM PER PLANS
2. ALL THREAD RODS THRU-BOLTED TO STEEL BEAM BY BUILDING DESIGN PROFESSIONAL.
3. NUTS AND WASHERS PER TABLE NOTE 1.
4. *HARDY FRAME*® STACKING WASHERS (HFSW) REQUIRED TO BE WELDED INSIDE TOP CHANNEL OF LOWER PANEL.
5. *HARDY FRAME*® "STK" PANEL WITH STACKING WASHERS WELDED INSIDE THE TOP CHANNEL BY MANUFACTURER.

STEEL BEAM ABOVE THRU-BOLT 2

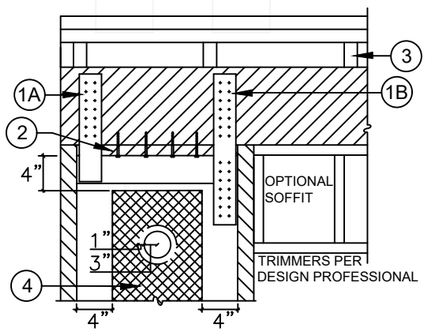
SECTION A



1. CAVITY ORIENTED FOR CONNECTION ACCESS.
2. NUTS AND WASHERS PER TABLE NOTE 1.
3. NOMINAL 8 INCH FRAMING ABOVE (MIN).
4. A 2x FILLER WITH 1/4" x 4-1/2" MINIMUM WS SCREWS IS PERMITTED.
5. FIELD INSTALLED WOOD BACKING AS NEEDED.

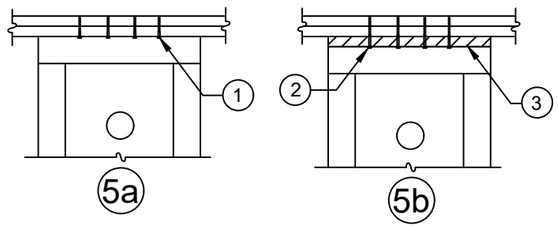
BACK TO BACK INSTALLATION 3

NOTE:
TO PREVENT DRILLING ADDITIONAL HOLES ORIENT THE PANEL CAVITY TOWARD THE FIXTURE BEING INSTALLED.



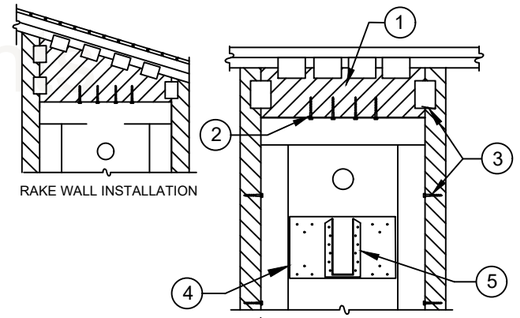
1. (A) PRE-WELDED STRAPS ARE PROVIDED ON 78" AND 79-1/2" PANEL HEIGHTS. THEY ARE AVAILABLE FOR OTHER HEIGHTS UPON REQUEST.
   (B) FIELD INSTALLED STRAPS WITH SELF TAPPING SCREWS ARE PERMITTED. THE DESIGN AND CONNECTION IS BY THE DESIGN PROFESSIONAL.
2. A 2x WOOD FILLER WITH 1/4"x4-1/2" (MIN.) WS SCREWS IS PERMITTED.
3. WHEN CRIPPLE STUDS OCCUR, SHEAR TRANSFER DESIGN TO BE PER THE BUILDING DESIGN PROFESSIONAL.
4. A 1" DIA. HOLE MAY BE ADDED IN THE PANEL FACE WHEN IT IS LOCATED IN THE UPPER HALF OF THE PANEL HEIGHT AND IS 4" MINIMUM FROM ANY EDGE. FOR PANELS MORE THAN 12" WIDE, ADDITIONAL HOLES MUST BE OFFSET 1" MINIMUM FROM THE 3" DIA. PREPUNCHED HOLE. FOR HOLES LARGER THAN 1" DIAMETER OR TO ADD MORE THAN ONE HOLE CONTACT MITEK HARDY FRAME TECHNICAL SUPPORT AT (800) 754-3030.

TOP CONNECTION TO HEADER 4



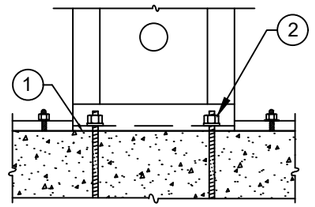
1. 1/4" x 3" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
2. 1/4" x 4-1/2" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
3. 2x WOOD FILLER.

TOP PLATE CONNECTIONS 5



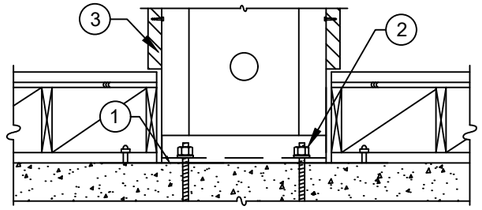
1. WOOD FILLER WITH USP MP4F CONNECTORS BOTH SIDES, QUANTITY BY BUILDING DESIGN PROFESSIONAL.
2. 1/4" x 3" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS INSTALLED THROUGH PRE-PUNCHED HOLES IN PANEL EDGES REQUIRED WHEN INSTALLING A FILLER GREATER THAN 1-1/2" ABOVE TO BRACE OUT-OF-PLANE HINGE OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL.
4. PRE-DRILL 3/16" DIA. HOLES, EVENLY SPACED IN FACE OF PANEL NO LESS THAN 2-1/4" OC AND INSTALL 1/4" DIA. WOOD SCREWS INTO 2x (MIN.) WOOD "LEDGER" IN PANEL CAVITY.
5. CONNECTOR AND ATTACHMENT BY BUILDING DESIGN PROFESSIONAL.

FILLER GREATER THAN 1-1/2 IN. 6



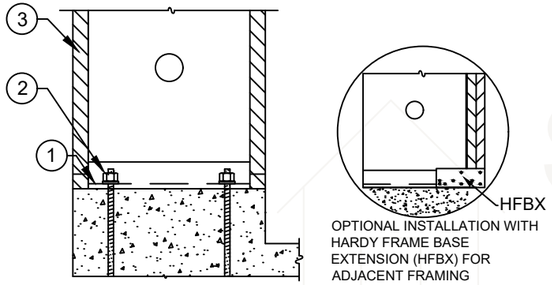
1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. NUTS AND WASHERS PER TABLE NOTE 1.

INSTALLATION ON CONCRETE (7)



1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. NUTS AND WASHERS PER TABLE NOTE 1.
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS INSTALLED AT THE PANEL EDGES WHEN INSTALLING A FILLER GREATER THAN 1-1/2" ABOVE OR WHEN SPECIFIED BY DESIGN PROFESSIONAL.

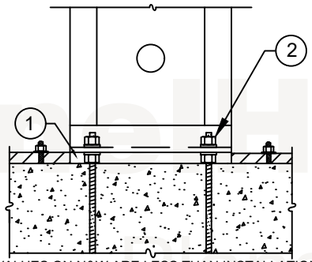
RAISED FLOOR HEAD-OUT (8)



OPTIONAL INSTALLATION WITH HARDY FRAME BASE EXTENSION (HFBX) FOR ADJACENT FRAMING

1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. NUTS AND WASHERS PER TABLE NOTE 1.
3. ADJACENT FRAMING OPTIONAL U.N.O. BY BUILDING DESIGN PROFESSIONAL.

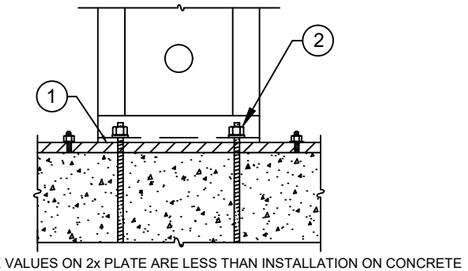
INSTALLATION ON CURB (9)



ALLOWABLE VALUES ON N&W ARE LESS THAN INSTALLATION ON CONCRETE

1. PLUS OR MINUS 1-1/2" GAP TO BE FILLED WITH 5,000 PSI NON-SHRINK GROUT (MINIMUM).
2. NUT AND WASHER GRADES PER TABLE NOTE 1.

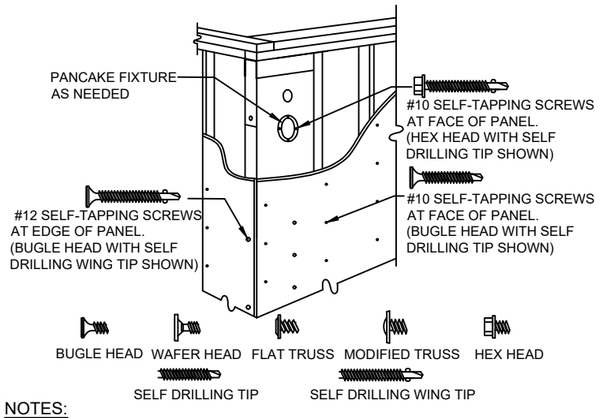
INSTALLATION ON NUTS & WASHERS (10)



ALLOWABLE VALUES ON 2x PLATE ARE LESS THAN INSTALLATION ON CONCRETE

1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND TREATED PLATE.
2. NUTS AND WASHERS PER TABLE NOTE 1.

INSTALLATION ON 2x PLATE (11)



NOTES:

A. SURFACE FINISHES, CONNECTORS AND FIXTURES ARE ATTACHED TO THE PANEL FACE WITH # 10 SELF-TAPPING SCREWS SPACED NO LESS THAN 2-1/4" OC.
B. ATTACHMENTS TO THE PANEL EDGES ARE MADE WITH # 12 SELF-TAPPING SCREWS.
C. STRUCTURAL CONNECTIONS ARE TO BE DESIGNED BY THE DESIGN PROFESSIONAL.
D. STRUCTURAL HARDWARE USED TO TRANSFER LOADS SHOULD NOT EXCEED 12 GAUGE.

HFX PANELS 78 IN. THROUGH NOMINAL 13 FEET

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter[1] (in)	Top Screw Qty[2] (ea)	Screw Qty Available at Edges (ea)[3]
HFX-12,15,18,21 & 24x78	78	3-1/2	1-1/8	9" Width = 5 12" Width = 6 15" Width = 8	4
HFX-9x79.5	79-1/2				
HFX-12,15,18,21 & 24x8	92-1/4				
HFX-9x8	93-3/4				
HFX-12,15,18,21 & 24x9	104-1/4				
HFX-12,15,18,21 & 24x10	116-1/4			18" Width = 10	5
HFX-15,18,21 & 24x11	128-1/4			21" Width = 12	
HFX-15,18,21 & 24x12	140-1/4			24" Width = 14	6
HFX-15,18,21 & 24x13	152-1/4				

BALLOON PANELS 14 FEET THROUGH 20 FEET

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter[1] (in)	Top Screw Qty[2] (ea)	Screw Qty Available at Edges (ea)[3]
HFX-15,18,21 & 24x14	164-1/4	3-1/2	1-1/8	15" Width = 8 18" Width = 10 21" Width = 12 24" Width = 14	6
HFX-15,18,21 & 24x15	176-1/4				
HFX-15,18,21 & 24x16	188-1/4				
HFX-15,18,21 & 24x17	200-1/4				7
HFX-15,18,21 & 24x18	212-1/4				
HFX-15,18,21 & 24x19	224-1/4				8
HFX-15,18,21 & 24x20	236-1/4				

TABLE NOTES

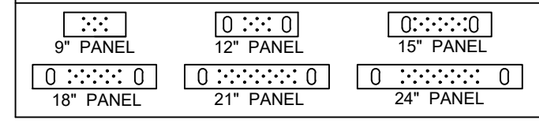
1. FOR STD OR HS GRADE HOLD DOWN ANCHOR BOLTS CONNECT TO THE PANEL BASE WITH HARDENED ROUND WASHERS BELOW GRADE 8 NUTS. ALTERNATE WASHERS ARE (2 EA) ROUND-FLAT OR (2 EA) SAE WASHERS ON EACH BOLT. ALTERNATE NUTS ARE 2H HEAVY HEX.
2. 1/4" DIAMETER MITEK®PRO SERIES™WS SCREWS. LENGTH IS 3" (MINIMUM) WHEN ATTACHED DIRECTLY TO THE COLLECTOR AND 4-1/2" (MINIMUM) WHEN INSTALLING A 2x FILLER ABOVE THE PANEL.
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS IS REQUIRED AT THE PANEL EDGES WHEN INSTALLING A FILLER ABOVE THE TOP CHANNEL THAT IS GREATER THAN 1-1/2" OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL.

(A)

INSTALLATION INSTRUCTIONS

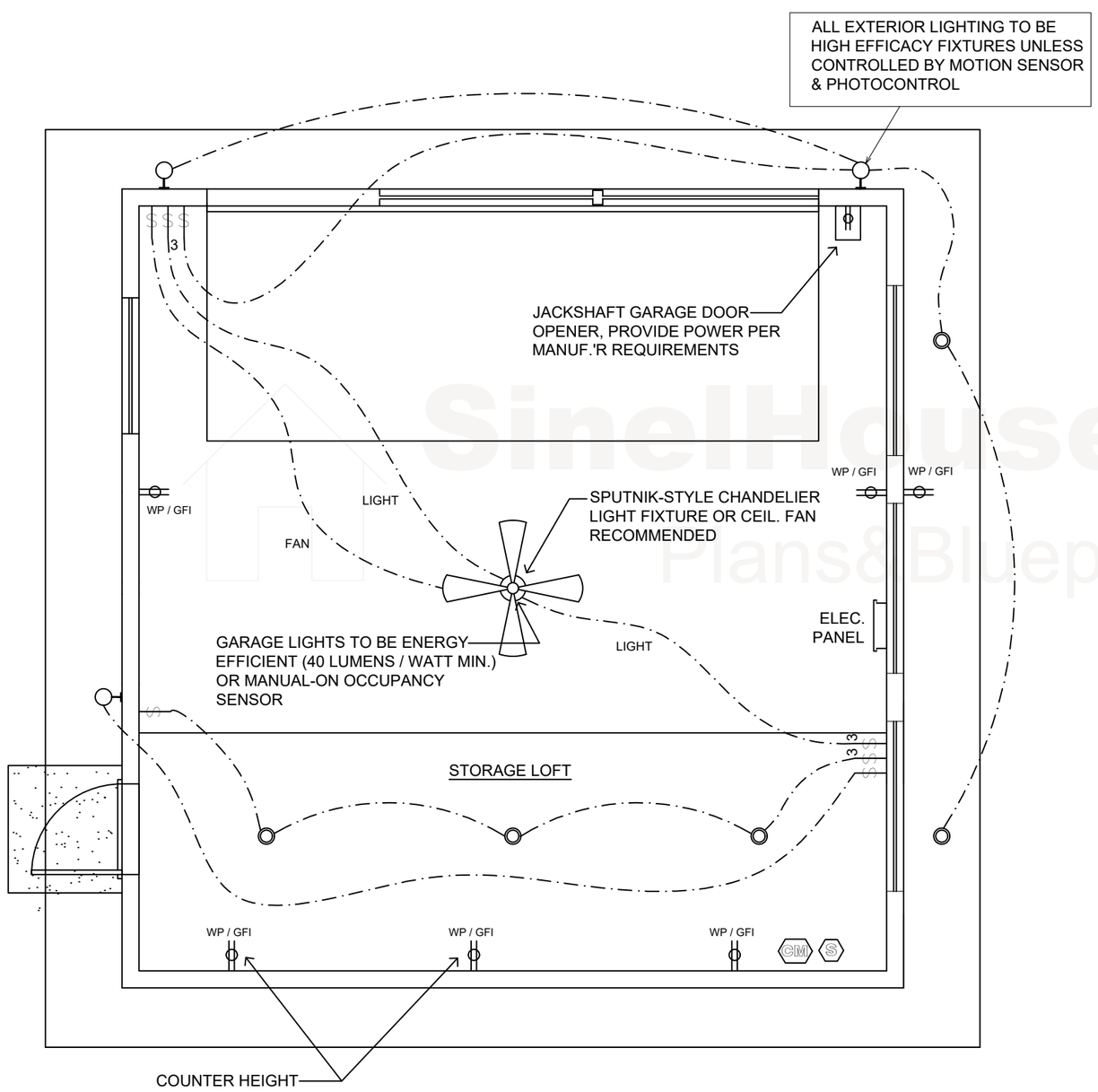
1. WHEN INSTALLING ON CONCRETE CONNECT WITH (1 EA) HARDENED ROUND WASHER BELOW (1 EA) GRADE 8 NUT, SECURE WITH A DEEP SOCKET (RECOMMENDED) UNTIL SNUG TIGHT. ALTERNATE WASHERS AND NUTS ARE PROVIDED IN TABLE NOTE 1.
2. INSTALLATION ON CONCRETE PROVIDES THE HIGHEST ALLOWABLE VALUES. CONFIRM WITH THE DESIGN PROFESSIONAL BEFORE INSTALLING ON OTHER SUPPORTING SURFACES.
3. USE 1/4"X4-1/2" MITEK PRO SERIES WS SCREWS AT TOP CONNECTIONS WITH A 2x FILLER. IF THE TOP OF PANEL IS IN DIRECT CONTACT WITH THE COLLECTOR ABOVE (TOP PLATES, HEADER, BEAM, ETC.) USE1/4 x 3" (MIN)
4. FOR INSTALLATIONS WITH A FILLER GREATER THAN 1-1/2" ABOVE, OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL, ADJACENT KING POSTS TO BRACE THE OUT-OF-PLANE HINGE CAN BE CONNECTED WITH 1/4" DIA. SCREWS THROUGH PRE-PUNCHED HOLES AT THE PANEL EDGES.

(B)



(C)

Electrical plan
(scale 1/4" = 1'-0")



ELECTRICAL LEGEND	
	110 VOLT DUPLEX RECEPTACLE
WP	110 V. WEATHERPROOF RECPTACLE
GFI	110 VOLT GROUND-FAULT CIRCUIT INTERRUPTER RECEPTACLE
	SINGLE POLE SWITCH
3	3 - WAY SWITCH
S	AC PWR'D. SMOKE DETECTOR
	RECESSED L.E.D. DOWN LIGHT
	WALL-MOUNTED WATERPROOF EXTERIOR BRACKET LIGHT
	CEILING FAN

S SMOKE DETECTOR NOTES:

SMOKE ALARM TO BE HARD-WIRED W/ BATTERY BACKUP.

CM CARBON MONOXIDE ALARM NOTES:

CARBON MONOXIDE ALARM TO BE HARD-WIRED WITH BATTERY BACKUP.

ELECTRICAL NOTES (AS APPLIES):

1. ANY ELECTRICAL / LIGHTING PLANS, REQUIREMENTS, OR SPECIFICATIONS SHOWN WITHIN THESE PLANS ARE INTENDED ONLY AS A GUIDE. BECAUSE OF THE DIFFERENCES IN BUILDING CODES, ZONE REQUIREMENTS, ORDINANCES AND BUILDING REGULATIONS, THESE PLANS MAY NEED TO BE MODIFIED TO COMPLY WITH LOCAL REQUIREMENTS. IT IS STRONGLY ADVISED TO CONSULT A LOCAL LICENSED ELECTRICIAN AND YOUR LOCAL BUILDING DEPARTMENT.

2. OWNER TO VERIFY FINAL LOCATION OF ALL SWITCHES & RECEPTACLES.

3. CONFIRM BREAKER AND BRANCH CIRCUIT SIZES REQUIRED FOR ANY HVAC AND PLUMBING EQUIPMENT BEFORE INSTALLING BRANCH CIRCUITS OR ORDERING LOAD CENTERS.

4. RATING OF DISCONNECT SWITCHES SHALL BE NOT LESS THAN THE RATING OF THE BRANCH CIRCUIT CONDUCTORS.

5. PROVIDE SCHEDULE 40 PVC CONDUIT FOR MECHANICAL PROTECTION OF SERVICE CONDUCTORS FROM THE UTILITY FURNISHED PAD MOUNTED TRANSFORMED TO THE METER BASE. CONDUIT SHALL BE 2" MINIMUM AND INSTALLATION SHOULD BE AS REQUIRED BY LOCAL ELECTRIC SERVICE PROVIDER. COORDINATE ROUTING OF THESE CONDUITS IN THE FIELD WITH THE UTILITY AND WITH THE OTHER SITE WORK. TOP OF ELECTRICAL METER SHALL BE MOUNTED 4'-8" ABOVE FINISH GRADE.

6. EXTERIOR LIGHTING ATTACHED TO THE BUILDING SHALL BE CONTROLLED BY MOTION SENSOR & PHOTOCONTROL.

GENERAL CONSTRUCTION NOTES

DIVISION 1: GENERAL DATA

1. ALL WORK SHALL BE IN CONFORMANCE WITH THE CURRENT LOCAL & NATIONAL BUILDING CODES, AND ANY OTHER GOVERNING BODY HAVING JURISDICTION OVER THE PROJECT.
2. THE PROJECT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE UNLESS SHOWN OTHERWISE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.
THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
3. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF ANY WORK AND SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES OR OMISSIONS.
4. CHANGES IN THE DRAWINGS AND SPECIFICATIONS SHALL BE MADE IN WRITING ONLY AND SIGNED BY BOTH THE OWNER AND THE GENERAL CONTRACTOR.
5. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS.
6. EXISTING UTILITIES: THE GENERAL CONTRACTOR SHALL NOTIFY ALL PERSONS WORKING AT THE PROJECT SITE OF EXISTING UTILITIES.
THE GENERAL CONTRACTOR SHALL LOCATE AND IDENTIFY ACTIVE UTILITY SERVICE AND TEMPORARILY DISCONNECT AND/OR DEACTIVATE THEM WHEN THEY CONSTITUTE A HAZARD TO WORK IN PROGRESS.
7. CONSTRUCTION UTILITIES: THE GENERAL CONTRACTOR MAY USE THE (OWNER'S / CLIENT'S) WATER, GAS, AND POWER DURING THE COURSE OF CONSTRUCTION.
8. WEATHER PROTECTION: THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING PROJECT RELATED WORK AREAS
FROM DAMAGE CAUSED BY RAIN AND OTHER NATURAL ELEMENTS. ALL WORK DAMAGED BY RAIN AND THE NATURAL ELEMENTS SHALL BE CORRECTED AND/OR REPAIRED BY THE GENERAL CONTRACTOR.
9. CLEANUP: THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CLEANUP, INCLUDING GLASS AND HARDWARE.
10. ENERGY CONSERVATION STANDARDS: ALL WORK SHALL COMPLY WITH THE ENERGY CONSERVATION STANDARDS FOR RESIDENTIAL BUILDINGS AS REQUIRED BY LOCAL CODES / AGENCIES.
11. SECURITY PROVISIONS: THE GENERAL CONTRACTOR SHALL REVIEW WITH THE OWNER THE PROJECT SECURITY PROVISIONS PRIOR TO THE COMMENCEMENT OF WORK.
SCREENS, BARRICADES, OR FENCES MADE OF MATERIAL WHICH PRECLUDE HUMAN CLIMBING SHALL BE PROVIDED AT EVERY PORTION OF EVERY ROOF, BALCONY, OR SIMILAR SURFACE WHICH IS WITHIN 8 FT. OF THE UTILITY POLE OR SIMILAR STRUCTURE.

A) WD. FLUSH-TYPE DOORS SHALL BE 1 3/8" THICK MIN. (1 3/4" THICK RECOMMENDED) WITH SOLID CORE CONSTRUCTION.
B) DOOR STOPS OF IN-SWINGING DOORS SHALL BE OF ONE-PIECE CONSTRUCTION WITH THE JAMB OR JOINED BY RABBET TO THE JAMB.
C) PROVIDE DEAD BOLTS WITH HARDENED INSERTS. DEADLOCKING LATCH WITH KEY-OPERATED LOCKS ON THE EXTERIOR. LOCKS MUST BE OPENABLE FROM INSIDE WITHOUT A KEY,
D) SPECIAL KNOWLEDGE, OR SPECIAL EFFORT.
E) STRAIGHT DEAD BOLTS SHALL HAVE A MIN. THROW OF 1" AND AN EMBEDMENT OF NOT LESS THAN 5/8", AND A HOOK-SHAPED OR EXPANDING-LUG DEADBOLT SHALL HAVE A MIN. THROW OF 3/4".
F) GLAZED OPENINGS WITHIN 40" OF THE DOOR LOCK WHEN THE DOOR IS IN THE CLOSED POSITION SHALL BE FULLY TEMPERED GLASS OR APPROVED BURGLARY RESISTANT MATERIAL.
G) OPENABLE WINDOWS SHALL BE PROVIDED WITH SUBSTANTIAL LOCKING DEVICES.

12. THE GENERAL CONTRACTOR SHALL REVIEW WITH THE OWNER THE ITEMS TO BE REMOVED AND SAVED, VERSUS REMOVED AND TRASHED, VERSUS REMOVED AND REINSTALLED,
PRIOR TO THE COMMENCEMENT OF WORK AS APPLIES.
13. SANITARY FACILITY: GENERAL CONTRACTOR TO PROVIDE PORTABLE TOILETS DURING THE DURATION OF THE JOB.

DIVISION 9: FINISHES

GYPSUM DRYWALL:

1. ALL EXISTING ROOMS, SURFACES, APPLIANCES, EQUIPMENT, AND HARDWARE TO BE PROPERLY PROTECTED FROM DAMAGE CAUSED BY DRYWALL MUD APPLICATIONS AND SANDING.
2. DRYWALL TO BE 1/2" GYPSUM BOARD UNLESS OTHERWISE NOTED, TAPED, FILLED, AND SANDED SMOOTH, READY FOR PAINT.
3. DRYWALL TO BE PROPERLY CUT-IN ELECTRICAL OUTLETS AND FIXTURES. DRYWALL SUBCONTRACTOR TO VERIFY SIZE OF FINISH TRIM PRIOR TO INSTALLATION OF DRYWALL.
4. ALL DRYWALL METAL TO BE PLUMB, LEVEL, AND FREE OF NICKS/DINGS UPON COMPLETION OF INSTALLATION.
5. LOWER 4'-0" OF BATHROOM AND LAUNDRY ROOM WALLS TO BE GREENBOARD.

PAINT:

1. SCOPE: FURNISH AND INSTALL ALL PAINT COMPLETE INCLUDING REQUIRED SEAL COATS, PRIME COATS, AND FINISH COATS.
2. PAINTING SUBCONTRACTOR IS TO PROTECT HIS WORK AND ALL ADJACENT WORK AT ALL TIMES WITH SUITABLE COVERINGS. UPON COMPLETION OF THE WORK, HE SHALL REMOVE ALL PAINT, STAIN, FINISH COATS, OVERSPRAY, AND SPOTS FROM ALL FLOORS, WALLS, DOORS, GLASS AND HARDWARE.
3. NEW INTERIOR PLASTER AND DRYWALL TO BE SEALED WITH ONE COAT OF PVA SEALER PRIOR TO PRIME AND FINISH COAT APPLICATIONS.
4. WOOD TRIM TO BE PAINTED WITH AN OIL BASE SEMIGLOSS ENAMEL.
5. TILE: ALL TILE IN SHOWERS TO HAVE ASPHALT BASE PAPER WITH METAL LATH AND PORTLAND CEMENT. SHOWER TO HAVE ONE NICHE MIN. FOR SHAMPOOS.

DIVISION 15: ELECTRICAL

1. ALL HOLES CUT INTO STUCCO OR DRYWALL BY MECHANICAL TRADES TO BE CUT CLEANLY TO A STUD AND BY USE OF A SAW.

2. SCOPE: FURNISH AND INSTALL ALL ELECTRICAL WORK COMPLETE INCLUDING TRENCHING, BACKFILLING, METERS, PANELS, UNDERGROUND SERVICE AND DISTRIBUTION, CONDUIT, OUTLET BOXES, WIRING, PLASTER RINGS, CIRCUIT BREAKERS, AND EQUIPMENT AND FIXTURES AS PER THE APPLIANCE AND EQUIPMENT SCHEDULE AND THE LIGHTING FIXTURE SCHEDULE. PROVIDE AND CONNECT THE REQUIRED SERVICE TO ALL APPLIANCES AND EQUIPMENT SHOWN ON THE DRAWINGS.

3. CONDUIT: ALL CONDUIT TO BE FLEXIBLE METAL CONDUIT.

4. SMOKE DETECTORS: SMOKE ALARMS TO BE INTERCONNECTED & HARD-WIRED W/ BATTERY BACKUP IN THE FOLLOWING:
   1. IN EACH BEDROOM
   2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE VICINITY OF THE BEDROOM.
   3. ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS.
   4. SHALL BE INTERCONNECTED HARD-WIRED WITH BATTERY BACKUP.

PLUMBING:

1. SCOPE: FURNISH AND INSTALL ALL PLUMBING COMPLETE INCLUDING DRAINS, VENTS, ROOF JACKS, SUPPLY LINES, AND APPLIANCES AND EQUIPMENT AS PER APPLIANCE AND EQUIPMENT SCHEDULE.
2. ALL SUPPLY LINES TO BE COPPER.
3. PROVIDE ULTRA-FLUSH WATER CLOSETS AT ALL TOILET LOCATIONS..
4. PROVIDE 72 IN. HIGH NON-ABSORBENT WALL ADJACENT TO SHOWER AND APPROVED SHATTER-RESISTANT MATERIALS FOR SHOWER ENCLOSURES.
5. WATER HEATER MUST BE STRAPPED TO THE WALL IN (2) PLACES.

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC):

1. SCOPE: FURNISH AND INSTALL ALL HVAC COMPLETE INCLUDING SUPPLY AND RETURN LINES, HEATING AND AIR CONDITIONING EQUIPMENT, THERMOSTAT, AND REGISTERS AS PER THE APPLIANCE AND EQUIPMENT SCHEDULE.

FLASHING:

1. SCOPE: FURNISH AND INSTALL ALL FLASHING COMPLETE INCLUDING BUILDING PAPER AND METAL FLASHINGS.
2. ALL METAL FLASHING TO BE GALVANIZED SHEET STEEL, AS PER ASTM-93.
3. ALL METAL FLASHING TO BE 24 GA. MINIMUM UNLESS NOTED OTHERWISE.

ROOFING:

1. SCOPE: FURNISH AND INSTALL ALL ROOFING COMPLETE INCLUDING METAL DRIP CAP, METAL ROOF JACKS, METAL ROOF VENTILATORS, UNDERLAYMENT PAPER AND FINISH AS SHOWN.
2. ROOF COVERING ASSEMBLIES SHALL BE AN ICC-ES OR UL LISTED CLASS "A" FIRE-RESISTIVE ROOF ASSEMBLY COMPLYING WITH ASTM E108 OR UL790.
3. PROVIDE ONE LAYER NO. 72 MINERAL-SURFACED NON-PERFORATED CAP SHEET, MEETING ASTM D3909 BETWEEN ROOF COVERING & COMBUSTIBLE ROOF DECKING WHERE APPLICABLE.
4. ROOF GUTTERS SHALL BE DESIGNED TO PREVENT THE ACCUMULATION OF LEAVES & DEBRIS.
5. ALL CRICKETS TO BE TORCH DOWN WITH FIBERGLASS BASE SHEET.
6. ALL VALLEYS TO HAVE GALVANIZED VALLEY FLASHING. SHINGLES TO BE CUT 3" TO CENTERLINE OF VALLEY.

WALLS:

1. WALLS: ALL EXTERIOR WALLS TO BE INSULATED WITH R-21 FIBERGLASS INSULATION MIN.
2. CEILING: ALL EXTERIOR CEILINGS TO BE INSULATED WITH R-30 FIBERGLASS INSULATION MIN.

WEATHERSTRIPPING:

1. ALL EXTERIOR DOORS AND WINDOWS TO BE PROPERLY WEATHERSTRIPPED TO PREVENT INFILTRATION OF AIR AND MOISTURE.

ABBREVIATIONS

AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
ARCH	ARCHITECT(URAL)
AT	ACOUSTICAL TILE
BD	BOARD
BLDG	BUILDING
BLK(G)	BLOCK(ING)
BM	BEAM
BOC	BOTTOM OF CONCRETE
BOT	BOTTOM
BRG	BEARING
BUR	BUILT-UP ROOF
CFCI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
C	CONTRACTOR
CPT	CARPET
CS	COUNTERSUNK
CT	CERAMIC TILE
DBL	DOUBLE
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIFF	DIFFUSER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DWG	DRAWING
(E)	EXISTING
EA	EACH
EJ	EXPANSION JOINT
EV	ELEVATION
ELEC	ELECTRICAL)
EMER	EMERGENCY
EP	ELECTRICAL PANEL
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXP	EXPANSION
EXT	EXTERIOR
FA	FRESH AIR
FAX	FACSIMILE
FD	FLOOR DRAIN
FIN	FINISH(ED)
FLR	FLOOR
FLUOR	FLUORESCENT
FO	FINISHED OPENING
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOW	FACE OF WALL
FURR	FURRING
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLASS/GLAZING
GYP	GYPSUM
HB	HOSE BIBB
HC	HOLLOW CORE
HDCP	HANDICAPPED
HDR	HEADER
HDWD	HARDWOOD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HTG	HEATING
HVAC	HEATING, VENT., AIR COND.
ID	INSIDE DIAMETER
INT	INTERIOR
JST	JOIST
JT	JOINT
LAM	LAMINATE(D)
LAV	LAVITORY
LL	LANDLORD
LWC	LIGHTWEIGHT CONCRETE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OVERFLOW DRAIN/OUTSIDE DIAMETER
OFOI	OWNER FURNISHED OWNER INSTALLED
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OPNG	OPENING
OPP	OPPOSITE
PART BD	PARTICLE BOARD
PIP	POURED IN PLACE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PNL	PANEL
PR	PAIR
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
R	RISER/RADIUS
RA	RETURN AIR
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RE:	REFER/REFERENCE
REQ'D	REQUIRED
RET	RETAINING
REV	REVISION/REVISED
RM	ROOM
RO	ROUGH OPENING
SAC	SUSPENDED ACOUSTIC CEILING
SAT	SUSPENDED ACOUSTIC TILE
SC	SOLID CORE
SD	STORM DRAIN
SECT	SECTION
SIM	SIMILAR
SPEC	SPECIFICATION(S)
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUC	STRUCTURAL
SUSP	SUSPENDED
SSD	SEE STRUCTURAL DRAWINGS
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEL	TELEPHONE
TEMP	TEMPERED
THK	THICK
TJ	TOOLED JOINT
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VB	VAPOR BARRIER
VERT	VERTICAL
VIF	VERIFY IN FIELD
VWC	VINYL WALL COVERING
W	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WP	WATERPROOFING
WDW	WINDOW
WWF	WELDED WIRE FABRIC
XFMR	TRANSFORMER