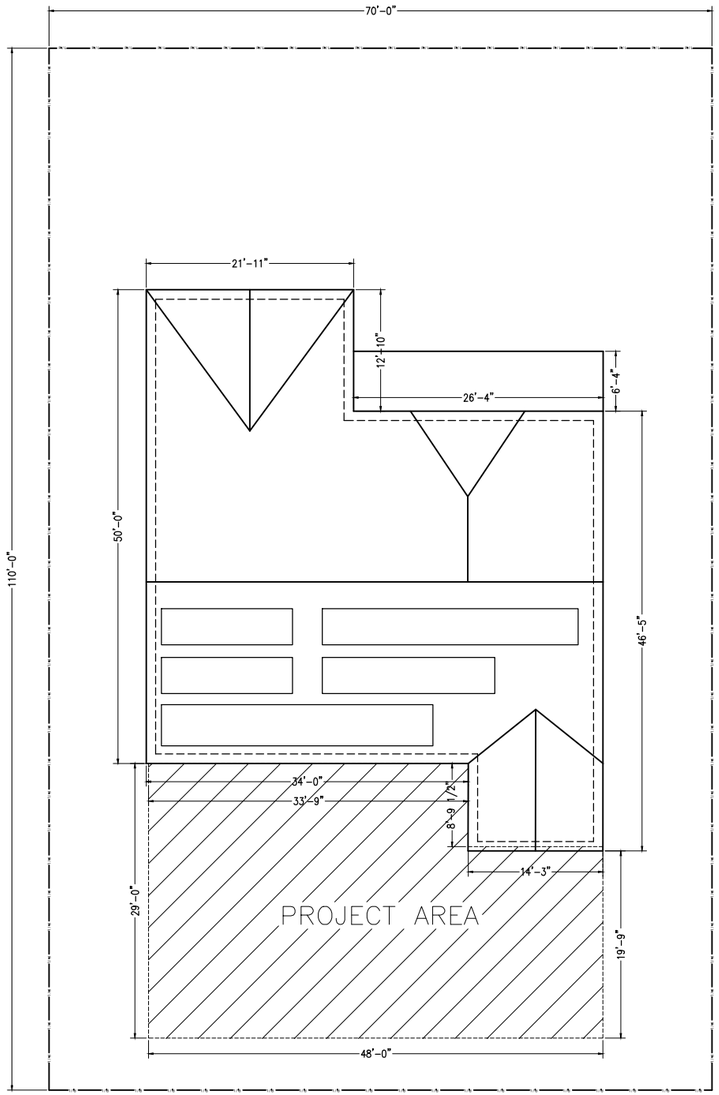
PROPERTY ADDRESS:

OWNER:



SITE PLAN

SCALE: 1/16" =1'-0"

NORTH

INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION
0-0 (1 OF 9)	COVER SHEET & SITE PLAN
0-1 (2 OF 9)	GENERAL NOTES
0-2 (3 OF 9)	ELEVATIONS
0-3 (4 OF 9)	SECTIONS
0-4 (5 OF 9)	FOUNDATION PLAN
0-5 (6 OF 9)	FRAMING PLAN
0-6 (7 OF 9)	DETAILS
0-7 (8 OF 9)	GENERAL NOTES
0-8 (9 OF 9)	GENERAL NOTES

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:
APN :
LOT:
TRACT:
YEAR BUILT:
ZONING CODE:

OWNER'S NAME:

OWNER'S ADDRESS:

SHEET TITLE:
COVER SHEET & SITE PLAN

SCALE: AS NOTED

DATE:
11/ 23 / 2021

00

CONCRETE

1. CONCRETE SHALL CONFORM TO THE APPLICABLE PROVISION OF CHAPTER 19 OF THE CALIFORNIA BUILDING CODE - 2019 EDITION.
2. ALL CONCRETE CONSTRUCTION WORK SHALL CONFORM TO THE LATEST EDITION OF AC1318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AND THE LATEST EDITION OF ACI117 "SPECIFICATIONS OF TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS".
3. INSPECTION BY A DEPUTY INSPECTOR IS REQUIRE FOR ALL CONCRETE WITH f'c > 2500 PSI.
4. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE OWNER ARCHITECT, ENGINEER, AND BUILDING DEPARTMENT FOR APPROVAL BEFORE USE.

5. MATERIAL -

5.1. CONCRETE -
CONCRETE SHALL BE READY-MIXED AND SHALL CONFORM TO ASTM C94.
THE MAXIMUM CEMENT RATIO FOR STRUCTURAL CONCRETE SHALL BE 0.45.
MAXIMUM AGGREGATE SIZE - 1 ½ INCHES.
SLUMP - 4 INCHES PLUS OR MINUS 1 INCH.
28 DAY COMPRESSIVE STRENGTH - 3,000 P.S.I.
CEMENT- PORTLAND CEMENT CONFORMING TO ASTM C150, TYPE II OR III.
AGGREGATE- SHALL CONFORM TO ASTM C33 AND THE CALIFORNIA BUILDING CODE 2019 EDITION.
ADMIXTURES - WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER OF RECORD.

5.2. REINFORCEMENT -
REINFORCING BARS SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 WITH BAR MARKS LEGIBLY ROLLED INTO THE SURFACE INDICATING THE SIZE, TYPE OF STEEL AND YIELD STRENGTH. ALL WELDED REINFORCEMENT BARS SHALL MEET THE REQUIREMENTS OF ASTM A706.
CONCRETE COVARAGE TO FACE OF REINFORCEMENT BARS, UNLESS OTHERWISE NOTED ON PLANS, SHALL BE:

-3 INCHES WHERE CONCRETE IS CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.
- 1 ½ INCHES FOR #5 OR SMALLER WHERE CONCRETE I EXPOSED TO EARTH OR WEATHER AFTER REMOVAL OF FORMS.

- ALL BENDS TO BE MADE COLD.
- DO NOT WELD REINFORCING UNLESS SPECIAL APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
- #5 AND LARGER REINFORCING BARS SHALL NOT BE SPLICES EXCEPT AS LOCATED AND DETAILED ON THE DRAWINGS.
- #4 AND SMALLER BARS WITH LENGTHS NOT SHOWN SHALL BE CONTINUOUS. PROVIDE CLASS B SPLICE UNLESS NOT ED OTHERWISE.
- ALL LONGITUDINAL REBAR SHALL TERMINATE WITH A STANDARD HOOK .

5.1. FORMS -
FORMS SHALL CONFORM TO THE SHAPE, LINES AND DIMENSIONS SHOWN ON THE PLANS AND SHALL BE SUFFICIENTLY TIGHT TO PREVENT LEAKAGE OF MORTAR ABOVE FINISHED GRADE. FORMS SHALL BE SECURELY BRACED AND HELD IN PLACE. CONCRETE FOOTINGS BELOW THE FINISHED GRADE MAY BE FORMED. FORMS (AND SOIL THAT CONCRETE WILL BE PLACED AGAINST) SHALL BE WETTED DOWN JUST PRIOR TO PLACING CONCRETE. ALL FORMS SHALL BE REMOVED AFTER THE CONCRETE HAS SET.

5.2. WORKMANSHIP -
A. REINFORCING - REINFORCING BARS SHALL BE ACCURATELY PLACED AND SECURED AND SHALL BE SUPPORTED BY CHAIRS, SPACERS OR HANGERS. ALL BAR SPLICES SHALL BE LAPPED A MINIMUM OF 45 BAR DIAMETERS UNLESS OTHERWISE NOTED. STAGGER SPLICES WHEN POSSIBLE. REINFORCEMENT HALL BE FREE OF ALL LOOSE RUST OR SCALE. CLEAR SPACING BETWEEN REINFORCEMENT BARS SHALL BE 1 ½ BAR DIAMETER OR 1 ½" MIN.
B. PLACING - THE CONCRETE SHALL BE PLACED IN A MANNER O AS TO PREVENT SEPARATION OF THE AGGREGATE AND SHALL BE WELL CONSOLIDATED TO PREVENT THE FORMING OF VOIDS.
C. FINISHING - THE TOP OF THE SLAB/FOOTING SHALL BE GIVEN A LIGHT BROOM FINISH. FORMED SURFACES SHALL BE GIVEN A SACK FINISH. ALL VOIDS AND HOLES HALL BE REPAIRED PRIOR TO FINISHING.
D. CURING - CONCRETE MUST BE WET CURED CONTINUOUSLY AND UNINTERRUPTED FOR A MINIMUM OF 7 DAYS SUBSEQUENT TO INITIAL SETUP. BEFORE BEING LOADED WITH BUILDING LOADS (EQUIPMENT, MAT'L, ETC...) CONTRACTOR I RESPONSIBLE TO ENSURE THAT CONCRETE IS SUFFICIENTLY CURED BEFORE SERVICE LOADS ARE APPLIED TO CONCRETE.

6. FORMS ANCHORS AND DOWELS DRILLED INTO CONCRETE:
6.1. "SET-XP" BY SIMPSON STRONG TIE (COLA RP #25744, ESR#25o8)
6.2. "HIT-HY 200" BY HILTI, INC. (COLA RP#25964, ESR#31187)
6.3. "HIT-RE 500 V3" BY HILTI, INC. (COLA RP#26o28, ESR#3814)
6.4. ANCHORS: ASTM F1554 GR. 55 UNLESS OTHERWISE NOTED.
6.5. ALL ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ICC-ES REPORT AND COLA REPORT AND MANUFACTURERS RECOMMENDATIONS.
6.6. PRIOR TO DRILLING OR CORING, THE CONTRACTOR SHALL VERIFY THE EXISTING CONCRETE THICKNESS TO PREVENT DAMAGE TO THE OPPOSITE FACE AND SHALL IDENTIFY EXISTING REINFORCING LOCATIONS BY NONDESTRUCTIVE TECHNIQUES TO AVOID DAMAGE EXISTING REINFORCING.
6.7. FOR EXTERIOR AND FOR EXPOSED APPLICATIONS ANCHORS MUST BE HOT DIP GALVANIZED OR STAINLESS STEEL.

PRE-CONSTRUCTION MEETING:

THE OWNER OR THE OWNER'S REPRESENTATIVE MUST COORDINATE WITH BUILDING OFFICIAL FOR CONDUCTING A PRE-CONTRUCTION MEETING. THE MEETING MUST TAKE PLACE AFTER EXCAVATION AND EXPOSURE OF EXITING STRUCTURAL ELEMENTS AND CONNECTIONS AND PRIOR TO INSTALLATION OF ANY NEW STRUCTURAL ELEMENTS. THE MEETING TO BE ATTENDED BY THE ENGINEER, CONTRACTOR, AND THE BUILDING INSPECTOR.
THE PURPOSE OF THE MEETING SHALL BE TO IDENTIFY THE MAJOR STRUCTURAL ELEMENTS, CONNECTIONS AND EXISTING CONDITIONS THAT AFFECT THE VERTICAL AND LATERAL LOAD SYSTEMS OF THE STRUCTURE AND TO REVIEW SCHEDULING OF THE REQUIRED OBSERVATIONS.

INSPECTIONS

THE OWNER OR THE OWNER'S REPRESENTATIVE MUST COORDINATE WITH BUILDING OFFICIAL FOR CONDUCTING ALL REQUIRED INSPECTIONS INCLUDING BUT NOT LIMITED TO INSPECTIONS FOR FOLLOWING ACTIVITIES :

1. FOUNDATION- PRIOR TO POURING CONCRETE
1.1. FORMWORK PLACEMENT, DIMENSIONS, AND ELEVATIONS
1.2. REINFORCEMENT BARS PLACEMENT
1.3. CAST-IN PLACE ANCHOR BOLTS
1.4. EPOXY ANCHOR/DOWEL INTO EXIST. CONCRETE (CONTINUOUS)

2. FRAMING- PRIOR TO CLOSING WALLS

3. SHEAR WALLS- PRIOR TO CLOSING WALLS
3.1. EDGE NAILING
3.2. HOLD-DOWNS

HOLD-DOWNS MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.

PERIODIC INSPECTION IS REQUIRED FOR WOOD SHEAR WALLS INCLUDING NAILING, ANCHORING, AND OTHER FASTENING TO COMPONENTS OF THE SEISMIC FORCE RESISTING SYSTEM.

CONTINUOUS INSPECTION IS REQUIRED FOR POST INSTALLED EPOXY ANCHOR/DOWEL INSTALLATION.

SPECIAL INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED WHERE THE FASTENER SPACING IS 4 INCHES ON CENTER OR LESS.

NOTES:

1. AU. SPLICES SHALL BE TENSION LAP SPLICES U.N.O.

2. All DEVELOPMENT LENGTH WITH STANDARD HOOKS "Ldh" SHALL BE TYPE 1 UNLESS TYPE 2 CAN BE USED AS SHOWN IN ILLUSTRATION BELOW

3. LENGTHS SHOWN ARE FOR GRADE 60 UNCOATED BARS.

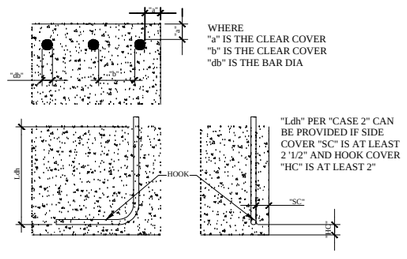
4. LENGTHS SHOWN ARE FOR NORMAL WEICHT CONCRETE (N.W.). INCREASE LENGTHS 30% FOR LIGHT WEIGHT CONCRETE AND AT FOUR BAR BUNDIES (WHERE 2 BARS LAP WITH 2 OTHER BARS) INDMDUAL BARS WITHIN A BUNDLE SHALL NOT OVERLAP

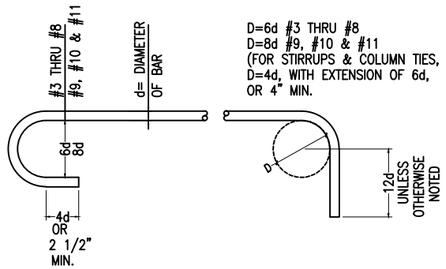
5. TOP BARS - HORIZONTAL BARS PlACED WITH MORE THAN 12" Of' FRESH CONCRETE CAST BELOW THEM

6. INCREASE LENGTHS 50% WHERE o < db OR WHERE b < db FOR BEAMS ANO COLUMNS OR WHERE b < 2db FOR OTHER ELEMENTS

7. FOR # 14 ANO #18 BARS, US£ MECHANICAL SPLICE IN ACCORDANCE WITH IBC REQUIREMENTS.

	TENSION LAP SPLICE LENGTH (IN) (CLASS B)						DEVELOPMENT LENGTH "Ld" (IN) (CLASS A)						DEVELOPMENT LENGTH "Ldh" (IN) STANDARD HOOK		
conc f ' c	N.W. 3000 PSI		N.W. 4000 PSI		N.W. 5000 PSI		N.W. 3000 PSI		N.W. 4000 PSI		N.W. 5000 PSI		N.W. 3000 PSI	N.W. 4000 PSI	
BAR SIZE	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	CASE 1	CASE 2	CASE 1
#3	29	22	28	20	28	20	23	17	21	15	21	15	9	6	8
#4	39	29	34	25	30	23	30	22	26	19	23	17	11	8	10
#5	48	36	42	31	38	28	37	28	32	24	29	22	14	10	12
#6	58	43	50	37	45	34	45	33	39	29	35	26	17	12	15
#7	81	63	71	54	63	49	63	48	54	42	49	38	20	14	17
#8	93	72	81	62	72	56	72	55	62	48	56	43	22	16	19
#9	105	81	91	70	81	63	81	62	70	54	63	48	81	18	22
#10	118	91	102	79	92	70	91	70	79	61	70	54	91	20	24
#11	131	101	113	87	102	78	101	78	87	67	78	60	101	22	27





PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:
APN :
LOT:
TRACT:
YEAR BUILT:
ZONING CODE:

OWNER'S NAME:

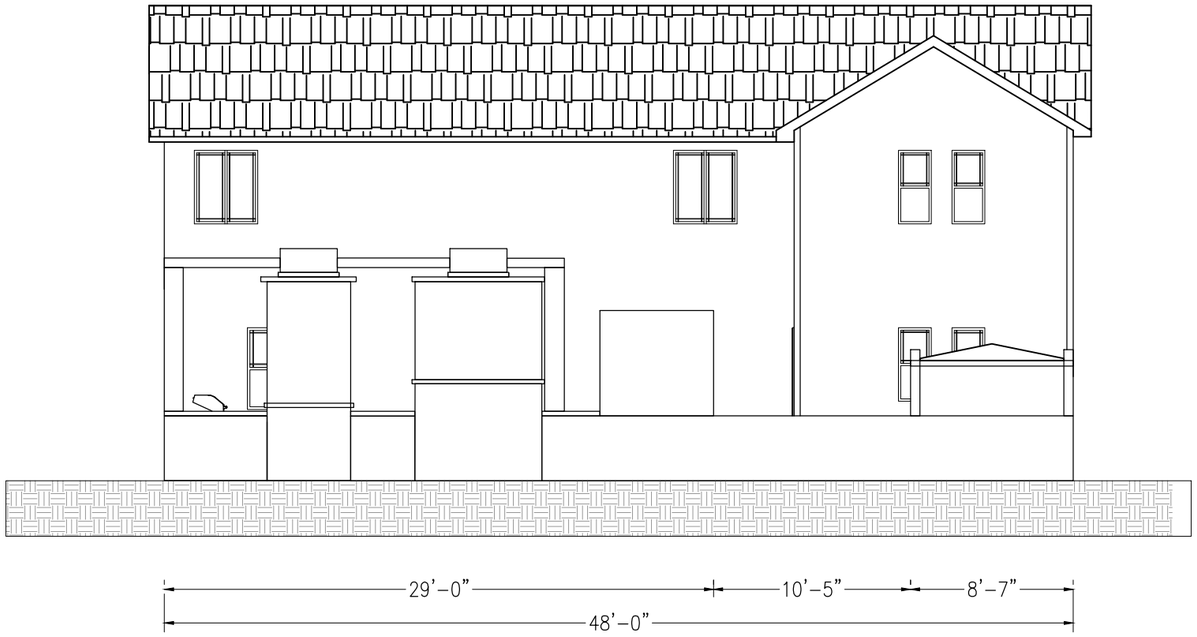
OWNER'S ADDRESS:

SHEET TITLE: GENERAL NOTE

SCALE: AS NOTED

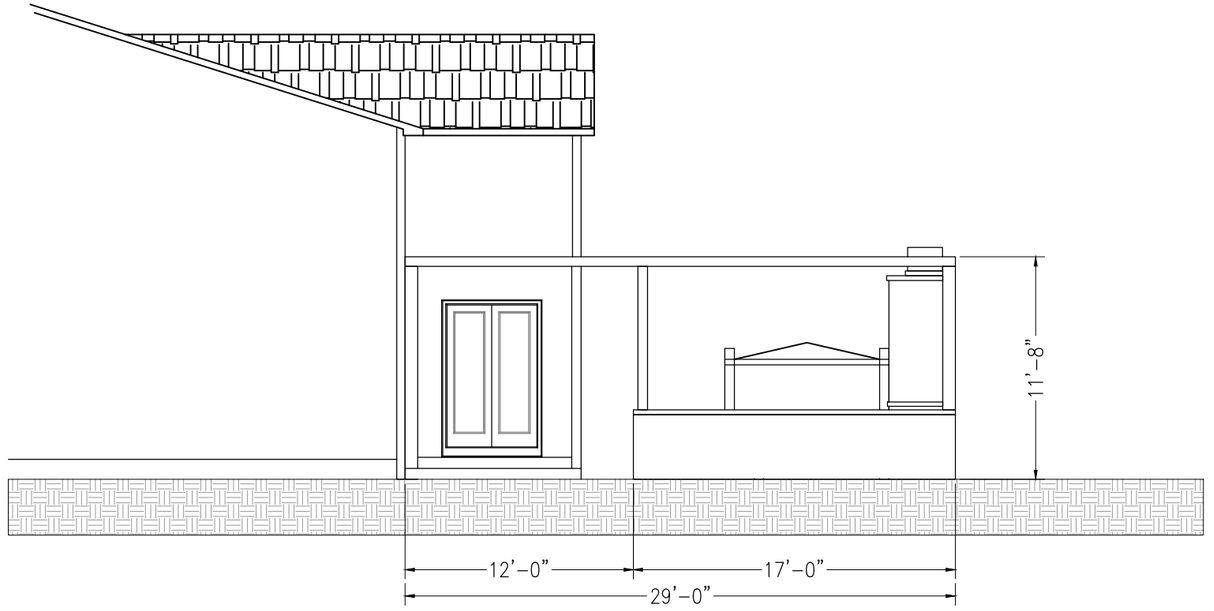
DATE: 11/ 23 / 2021

0-1



2-2 ELEVATION

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



A-A ELEVATION

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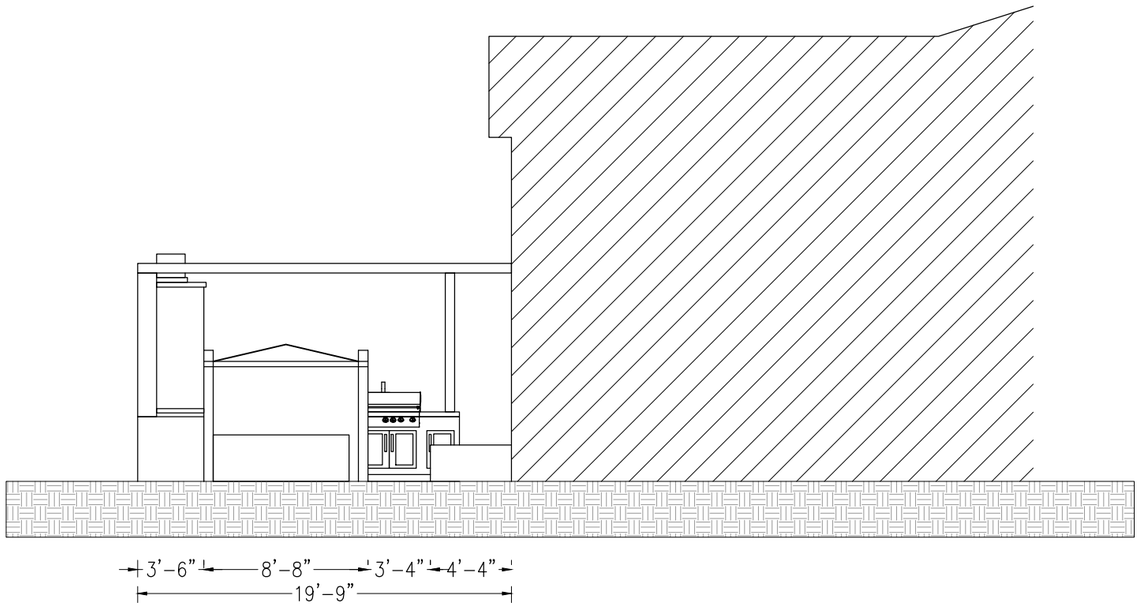


D-D ELEVATION

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

ALL NEW MATERIAL TO BE WEATHER PROTECTED/ANTI-RUST.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL.

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:

APN :

LOT:

TRACT:

YEAR BUILT:

ZONING CODE:

OWNER'S NAME:

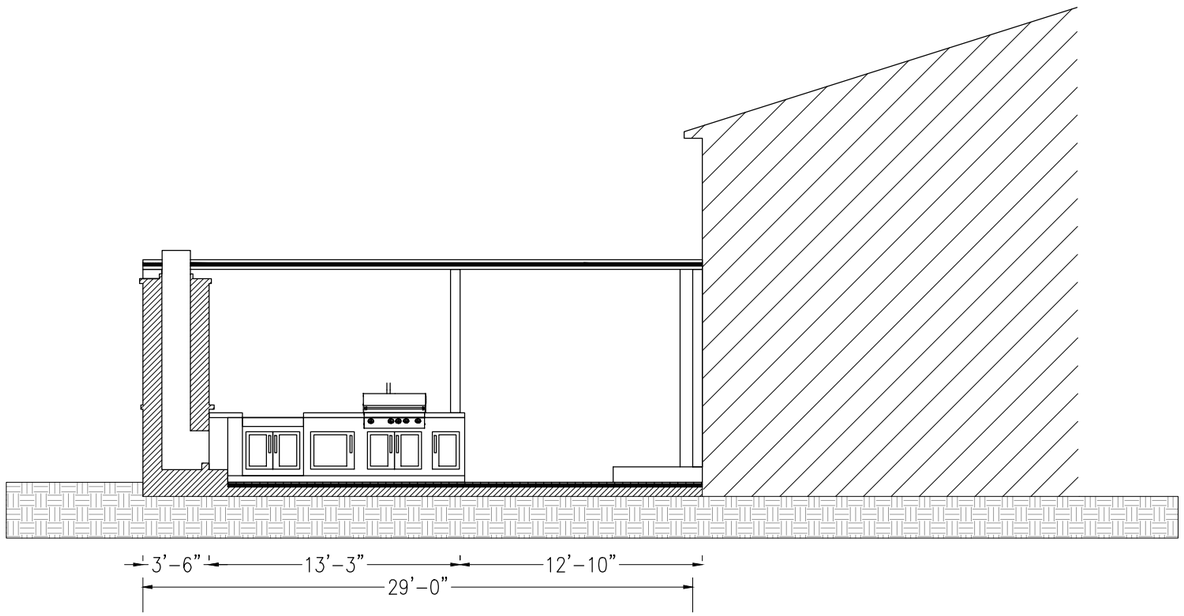
OWNER'S ADDRESS:

SHEET TITLE: ELEVATIONS

SCALE: AS NOTED

DATE: 11/ 23 / 2021

0-2



SECTION B-B

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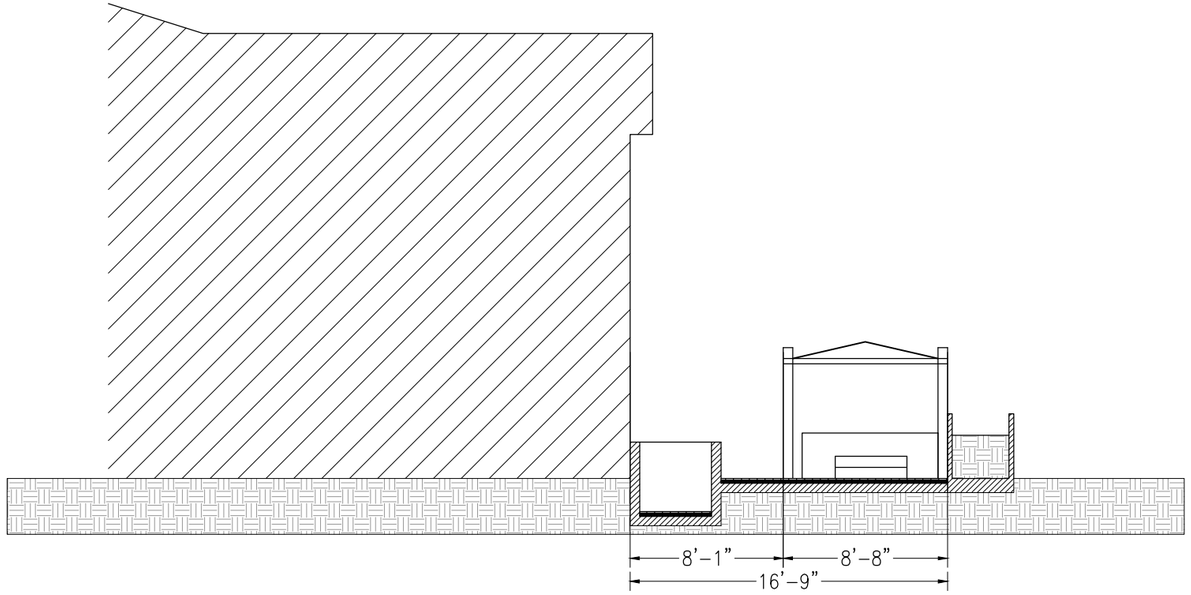

SECTION C-C

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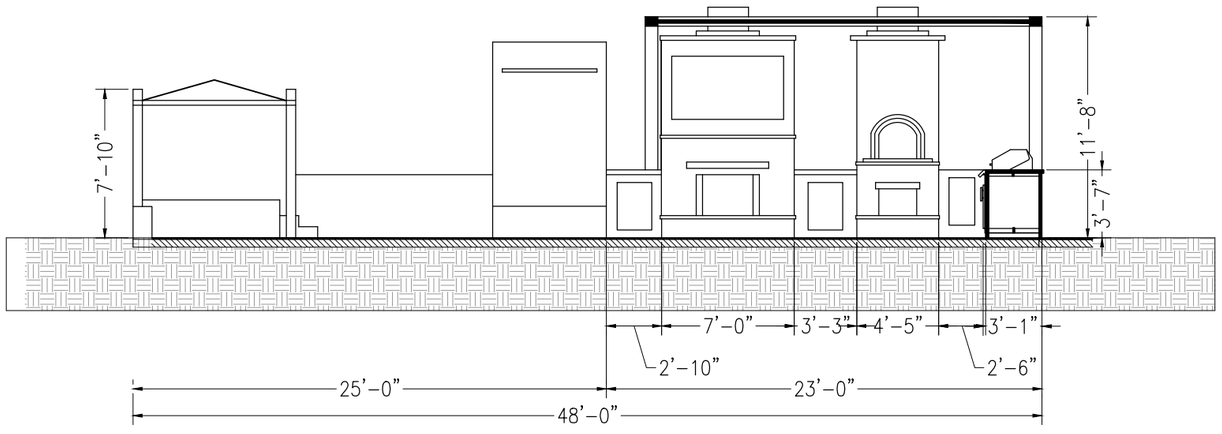


SECTION 1-1

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

ALL NEW MATERIAL TO BE WEATHER PROTECTED/ANTI-RUST.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL.

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:

APN :

LOT:

TRACT:

YEAR BUILT:

ZONING CODE:

OWNER'S NAME:

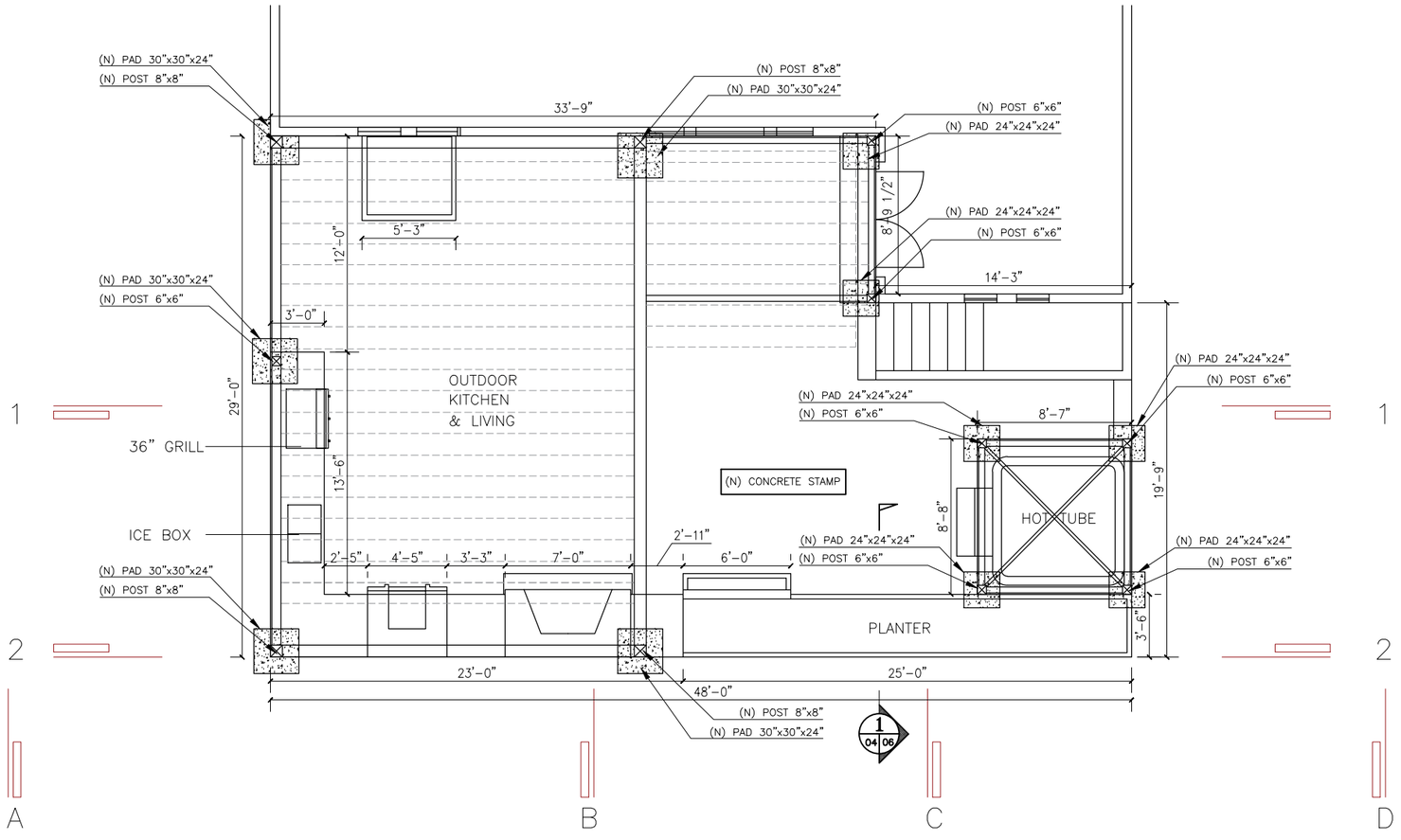
OWNER'S ADDRESS:

SHEET TITLE: SECTIONS

SCALE: AS NOTED

DATE: 11/ 23 / 2021

0-3



FONDATION PLAN

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

NORTH

ALL NEW MATERIAL TO BE WEATHER PROTECTED/ANTI-RUST.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL.

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:
APN :
LOT:
TRACT:
YEAR BUILT:
ZONING CODE:

OWNER'S NAME:

OWNER'S ADDRESS:

SHEET TITLE: FONDATION PLAN

SCALE: AS NOTED

DATE: 11/ 23 / 2021

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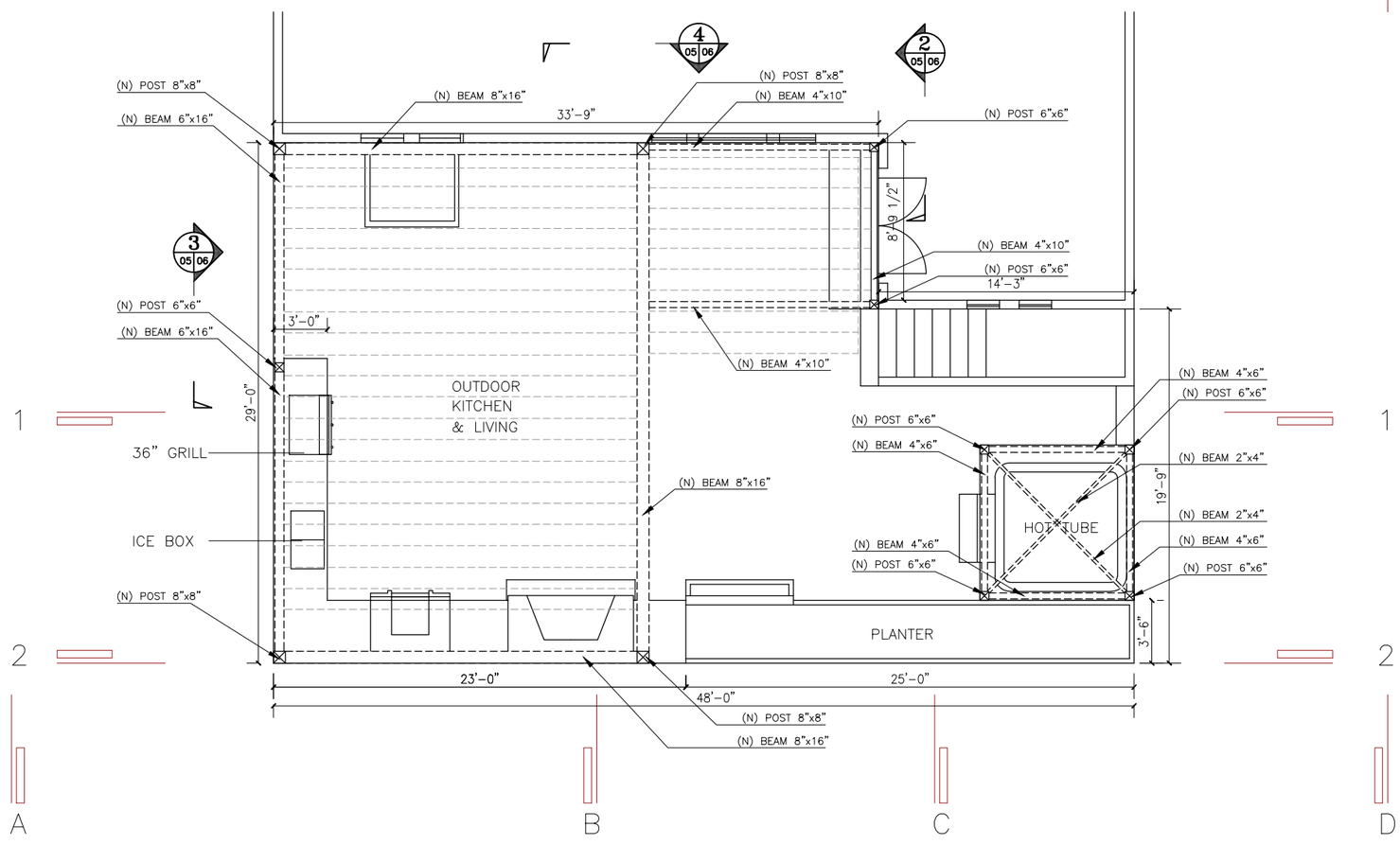


ALL NEW MATERIAL TO BE WEATHER PROTECTED/ANTI-RUST.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL.

FRAMING PLAN

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

NORTH

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:
APN :
LOT:
TRACT:
YEAR BUILT:
ZONING CODE:

OWNER'S NAME:

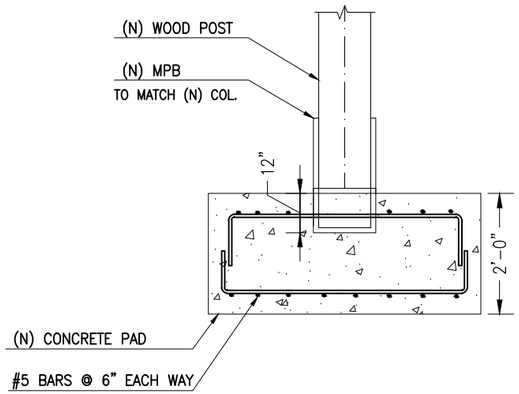
OWNER'S ADDRESS:

SHEET TITLE: FRAMING PLAN

SCALE: AS NOTED

DATE: 11/ 23 / 2021

0-5



1 / 04 | 06 FOOTING DETAIL
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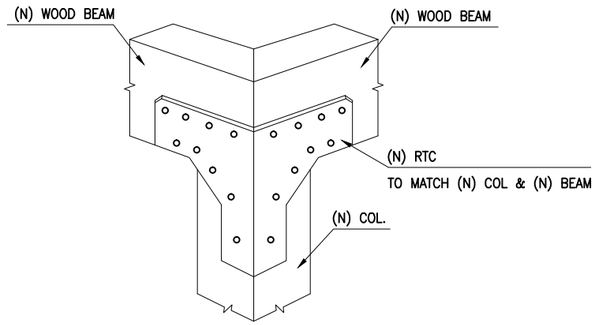

2 / 05 | 06 CONNECTION DETAILS
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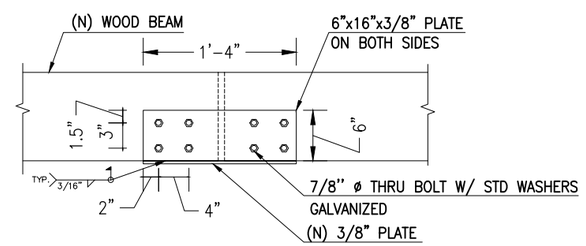

(N) WOOD BEAM SPLICE DETAIL
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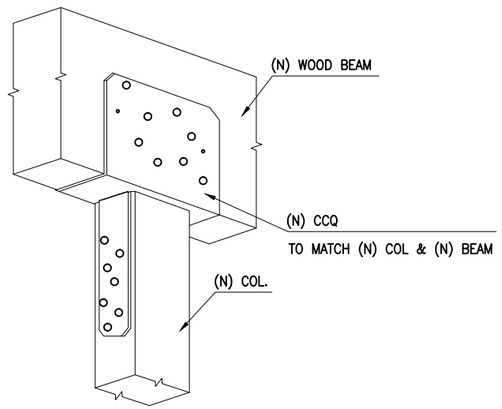

3 / 05 | 06 CONNECTION DETAILS
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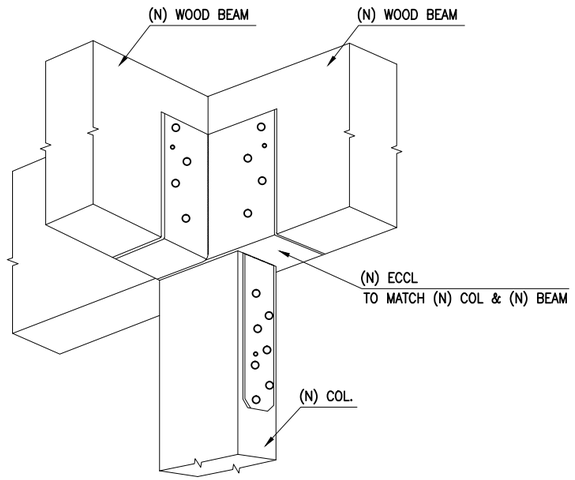

4 / 05 | 06 CONNECTION DETAILS
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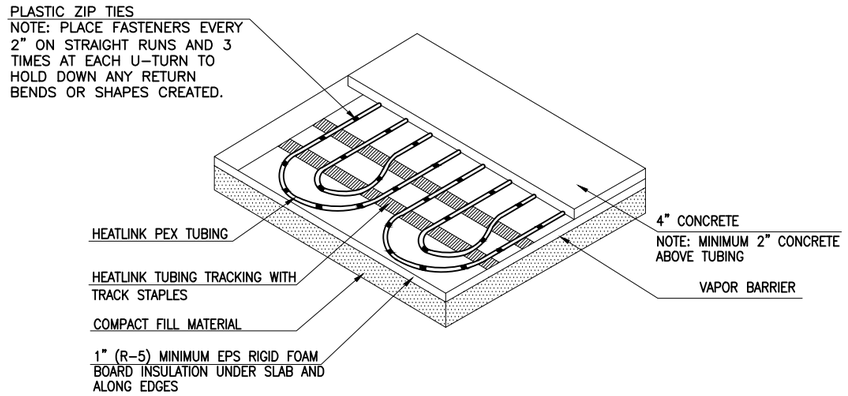

6 / - SNOW MELTING SYSTEM DETAIL
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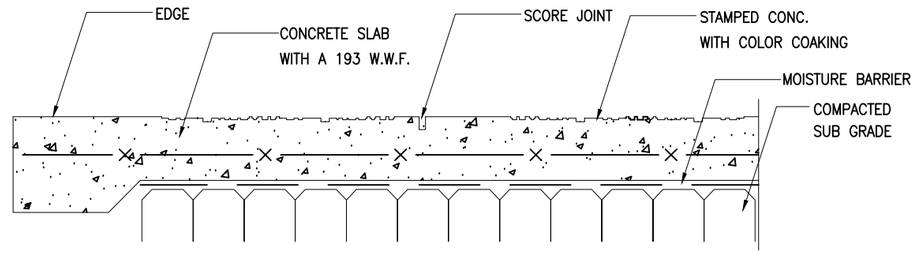

5 / - STAMPED CON.(PAVING, FOR PEDESTRIANS)
SCALE : N.T.S.

ALL NEW MATERIAL TO BE WEATHER PROTECTED/ANTI-RUST.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL.

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:
APN :
LOT:
TRACT:
YEAR BUILT:
ZONING CODE:

OWNER'S NAME:

OWNER'S ADDRESS:

SHEET TITLE: DETAILS

SCALE: AS NOTED

DATE: 11/ 23 / 2021

0-6

WOOD FRAMING

1. **FASTENER REQUIREMENTS.** THE NUMBER, SIZE, AND SPACING OF FASTENERS CONNECTING WOOD MEMBERS/ELEMENTS SHALL NOT BE LESS THAN THAT SET FORTH IN CRC TABLE R602.3(1). (CRC R502.9, CRC R602.3, AND CRC R802.2)

2. **STUD SIZE, HEIGHT, AND SPACING.** THE SIZE, HEIGHT, AND SPACING OF STUDS SHALL BE IN ACCORDANCE WITH CRC TABLE R602.3(5). (CRC R602.3.1)

3. **SILL PLATE.** STUDS SHALL HAVE FULL BEARING ON NOMINAL 2-INCH THICK OR LARGER SILL PLATE WITH WIDTH AT LEAST EQUAL TO STUD WIDTH. (CRC R602,3,4)

4. **BEARING STUDS.** WHERE JOISTS, TRUSSES, OR RAFTERS ARE SPACED MORE THAN 16 INCHES ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES OF THE STUDS BENEATH. (CRC R602.3.3)

5. **DRILLING AND NOTCHING OF STUDS.** ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25% OF ITS WIDTH. STUDS IN NONBEARING PARTITIONS MAY BE NOTCHED TO A DEPTH NOT TO EXCEED 40% OF A SINGLE STUD WIDTH. ANY STUD MAY BE BORED OR DRILLED, PROVIDED THE DIAMETER OF THE RESULTING HOLE IS NO MORE THAN 60% OF THE STUD WIDTH, THE EDGE OF THE HOLE IS NO MORE THAN 5/8 INCH TO THE EDGE OF THE STUD, AND THE HOLE IS NOT LOCATED IN THE SAME SECTION AS A CUT OR NOTCH. STUDS LOCATED IN EXTERIOR WALL OR BEARING PARTITIONS DRILLED OVER 40% AND UP TO 60% SHALL ALSO BE DOUBLED WITH NO MORE THAN TWO SUCCESSIVE STUDS BORED. (CRC R602.6)

6. **TOP PLATE.** WOOD STUD WALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND AT INTERSECTIONS WITH OTHER PARTITIONS. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET AT LEAST 24 INCHES. JOINTS IN PLATES NEED NOT OCCUR OVER STUDS. PLATES SHALL BE MINIMUM NOMINAL 2 INCHES THICK AND HAVE WIDTH AT LEAST EQUAL TO WIDTH OF STUDS. (CRC R602.3,2)

7. **TOP PLATE SPLICES.** TOP PLATE LAP SPLICES SHALL BE FACE-NAILED WITH MINIMUM 8 16D NAILS ON EACH SIDE OF SPLICE. (CRC R602,10.8.1)

8. **DRILLING AND NOTCHING OF TOP PLATE.** WHEN PIPING OR DUCTWORK IS PLACED IN OR PARTLY IN AN EXTERIOR WALL OR INTERIOR LOAD-BEARING WALL, NECESSITATING CUTTING, DRILLING, OR NOTCHING OF THE TOP PLATE BY MORE THAN 50% OF ITS WIDTH, A GALVANIZED METAL TIE NOT LESS THAN 0.054-INCH THICK AND 1-1/2-INCHES WIDE SHALL BE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE OPENING WITH NOT LESS THAN 8 10D NAILS HAVING A MINIMUM LENGTH OF 1-1/2 INCHES AT EACH SIDE OR EQUIVALENT. THE METAL TIE MUST EXTEND MINIMUM 6 INCHES PAST THE OPENING. (CRC R602.6,1)

9. **CRIPPLE WALLS.** FOUNDATION CRIPPLE WALLS SHALL BE FRAMED OF STUDS NOT LESS IN SIZE THAN THE STUDDING ABOVE. CRIPPLE WALLS MORE THAN 4 FEET IN HEIGHT SHALL HAVE STUDS SIZED AS REQUIRED FOR AN ADDITIONAL STORY. CRIPPLE WALLS WITH STUD HEIGHT LESS THAN 14 INCHES SHALL BE SHEATHED ON AT LEAST ONE SIDE WITH A WOOD STRUCTURAL PANEL FASTENED TO BOTH THE TOP AND BOTTOM PLATES IN ACCORDANCE WITH TABLE R602.3(1), OR THE CRIPPLE WALLS SHALL BE CONSTRUCTED OF SOLID BLOCKING. CRIPPLE WALLS SHALL BE SUPPORTED ON CONTINUOUS FOUNDATIONS. (CRC R602,9)

10. **WALL BRACING.** BUILDINGS SHALL BE BRACED IN ACCORDANCE WITH THE METHODS ALLOWED PER CRC R602.10.2, CRC R602.10.4, AND/OR CRC R602.10.5.

11. **BRACED WALL LINE SPACING.** SPACING BETWEEN BRACED WALL LINES SHALL NOT EXCEED 20 FEET OR ALTERNATE PROVISIONS OF CRC R602.10.1.3.

12. **SHEAR WALL CUMULATIVE LENGTH.** THE CUMULATIVE LENGTH OF SHEAR WALLS WITHIN EACH BRACED WALL LINE SHALL MEET THE PROVISIONS OF CRC TABLE R602.10.3(1) FOR WIND LOADS AND CRC TABLE R602.10.3(2) FOR SEISMIC LOADS. (CRC R602.10.1.1)

13. **SHEAR WALL SPACING.** SHEAR WALLS SHALL BE LOCATED NOT MORE THAN 25 FEET ON CENTER. (CRC R602.10.2.2)

14. **SHEAR WALL OFFSET.** SHEAR WALLS MAY BE OFFSET OUT-OF-PLAN NOT MORE THAN 4 FEET FROM THE DESIGNATED BRACED WALL LINE AND NOT MORE THAN 8 FEET FROM ANY OTHER OFFSET WALL CONSIDERED PART OF THE SAME BRACED WALL LINE. (CRC R602,10,1,2)

15. **SHEAR WALL LOCATION.** SHEAR WALLS SHALL BE LOCATED AT THE ENDS OF EACH BRACED WALL LINE OR MEET THE ALTERNATE PROVISIONS OF CRC R602.10,2.2.

16. **INDIVIDUAL SHEAR WALL LENGTH.** SHEAR WALLS SHALL MEET MINIMUM LENGTH REQUIREMENTS OF CRC R602.10,6.5.1.

17. **CRIPPLE WALL BRACING.** CRIPPLE WALLS SHALL BE BRACED PER CRC R602.10,11.

18. **SHEAR WALL AND DIAPHRAGM NAILING.** ALL SHEAR WALLS, ROOF DIAPHRAGMS, AND FLOOR DIAPHRAGMS SHALL BE NAILED TO SUPPORTING CONSTRUCTION PER CRC TABLE R602.3(1). (CRC R604,3)

19. **SHEAR WALL JOINTS.** ALL VERTICAL JOINTS IN SHEAR WALL SHEATHING SHALL OCCUR OVER, AND BE FASTENED TO, COMMON STUDS. HORIZONTAL JOINTS IN SHEAR WALLS SHALL OCCUR OVER, AND BE FASTENED TO, MINIMUM 1-1/2-INCH-THICK BLOCKING. (CRC R602.10.10)

20. **FRAMING OVER OPENINGS.** HEADERS, DOUBLE JOISTS, OR TRUSSES OF ADEQUATE SIZE TO TRANSFER LOADS TO VERTICAL MEMBERS SHALL BE PROVIDED OVER WINDOW AND DOOR OPENINGS IN LOAD-BEARING WALLS AND PARTITIONS. (CBC 2304.3.2)

21. **JOISTS UNDER BEARING PARTITIONS.** JOISTS UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. DOUBLE JOISTS, SIZED TO ADEQUATELY SUPPORT THE LOAD, THAT ARE SEPARATED TO PERMIT THE INSTALLATION OF PIPING OR VENTS SHALL BE FULL-DEPTH SOLID-BLOCKED WITH MINIMUM 2-INCH NOMINAL LUMBER SPACED AT MAXIMUM 4 FEET ON CENTER. BEARING PARTITIONS PERPENDICULAR TO JOISTS SHALL NOT BE OFFSET FROM SUPPORTING GIRDERS, WALLS, OR PARTITIONS MORE THAN THE JOIST DEPTH UNLESS SUCH JOISTS ARE OF SUFFICIENT SIZE TO CARRY THE ADDITIONAL LOAD. (CRC R502.4)

22. **JOISTS ABOVE OR BELOW SHEAR WALLS.** WHERE JOISTS ARE PERPENDICULAR TO A SHEAR WALL ABOVE OR BELOW, A RIM JOIST, BAND JOIST, OR BLOCKING SHALL BE PROVIDED ALONG THE ENTIRE LENGTH OF THE SHEAR WALL. WHERE JOISTS ARE PARALLEL TO A SHEAR WALL ABOVE OR BELOW, A RIM JOIST, END JOIST, OR OTHER PARALLEL FRAMING SHALL BE PROVIDED DIRECTLY ABOVE AND/OR BELOW THE SHEAR WALL. WHERE A PARALLEL FRAMING MEMBER CANNOT BE LOCATED DIRECTLY ABOVE AND/OR BELOW THE SHEAR WALL, FULL-DEPTH BLOCKING AT 16-INCH SPACING SHALL BE PROVIDED BETWEEN THE PARALLEL FRAMING MEMBERS TO EACH SIDE OF THE SHEAR WALL. (CRC R602,10.8)

23. **FLOOR MEMBER BEARING.** THE ENDS OF EACH FLOOR JOIST, BEAM, OR GIRDER SHALL HAVE MINIMUM 1-1/2 INCHES OF BEARING ON WOOD OR METAL AND MINIMUM 3 INCHES OF BEARING ON MASONRY OR CONCRETE EXCEPT WHERE SUPPORTED ON A 1-INCH-BY-4-INCH RIBBON STRIP AND NAILED TO THE ADJOINING STUD OR BY THE USE OF APPROVED JOIST HANGERS. (CRC R502,6)

24. **FLOOR JOIST LAP.** FLOOR JOISTS FRAMING OPPOSITE SIDES OVER A BEARING SUPPORT SHALL LAP MINIMUM 3 INCHES AND SHALL BE NAILED TOGETHER WITHIN MINIMUM 3 10D FACE NAILS. A WOOD OR METAL SPLICE WITH STRENGTH EQUAL TO OR GREATER THAN THAT PROVIDED BY THE LAP IS PERMITTED. (CRC R502,6,1)

25. **FLOOR JOIST-TO-GIRDER SUPPORT.** FLOOR JOISTS FRAMING INTO THE SIDE OF A WOOD GIRDER SHALL BE SUPPORTED BY APPROVED FRAMING ANCHORS OR ON LEDGER STRIPS MINIMUM NOMINAL 2 INCHES BY 2 INCHES. (CRC R502,6.2)

26. **FLOOR JOIST LATERAL RESTRAINT.** FLOOR JOISTS SHALL BE SUPPORTED LATERALLY AT ENDS AND EACH INTERMEDIATE SUPPORT BY MINIMUM 2-INCH FULL-DEPTH BLOCKING, BY ATTACHMENT TO FULL-DEPTH HEADER, BAND JOIST, OR RIM JOIST, TO AN ADJOINING STUD, OR SHALL BE OTHERWISE PROVIDED WITH LATERAL SUPPORT TO PREVENT ROTATION. (CRC R502.7)

27. **FLOOR JOIST BRIDGING.** FLOOR JOISTS EXCEEDING NOMINAL 2 INCHES BY 12 INCHES SHALL BE SUPPORTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL), OR A CONTINUOUS 1-INCH-BY-3-INCH STRIP NAILED ACROSS THE BOTTOM OF JOISTS PERPENDICULAR TO JOISTS AT MAXIMUM 8-FOOT INTERVALS. (CRC R502.7.1)

28. **FRAMING OF FLOOR OPENINGS.** OPENINGS IN FLOOR FRAMING SHALL BE FRAMED WITH A HEADER AND TRIMMER JOISTS. WHEN THE HEADER JOIST SPAN DOES NOT EXCEED 4 FEET, THE HEADER JOIST MAY BE A SINGLE MEMBER THE SAME SIZE AS THE FLOOR JOIST. SINGLE TRIMMER JOISTS MAY BE USED TO CARRY A SINGLE HEADER JOIST LOCATED WITHIN 3 FEET OF THE TRIMMER JOIST BEARING. WHEN THE HEADER JOIST SPAN EXCEEDS 4 FEET, THE TRIMMER JOISTS AND HEADER JOIST SHALL BE DOUBLED AND OF SUFFICIENT CROSS SECTION TO SUPPORT THE FLOOR JOISTS FRAMING INTO THE HEADER. APPROVED HANGERS SHALL BE USED FOR THE HEADER-JOIST-TO-TRIMMER-JOIST CONNECTIONS WHEN THE HEADER JOIST SPAN EXCEEDS 6 FEET. TAIL JOISTS OVER 12 FEET LONG SHALL BE SUPPORTED AT THE HEADER BY FRAMING ANCHORS OR ON LEDGER STRIPS MINIMUM 2 INCHES BY 2 INCHES. (CRC R502.10)

29. **GIRDERS.** GIRDERS FOR SINGLE-STORY CONSTRUCTION OR GIRDERS SUPPORTING LOADS FROM A SINGLE FLOOR SHALL NOT BE LESS THAN 4 INCHES BY 6 INCHES FOR SPANS 6 FEET OR LESS, PROVIDED THAT GIRDERS ARE SPACED NOT MORE THAN 8 FEET ON CENTER. OTHER GIRDERS SHALL BE DESIGNED TO SUPPORT THE LOADS SPECIFIED IN THE CBC. GIRDER END JOINTS SHALL OCCUR OVER SUPPORTS. WHEN A GIRDER IS SPLICED OVER A SUPPORT, AN ADEQUATE TIE SHALL BE PROVIDED. THE ENDS OF BEAMS OR GIRDERS SUPPORTED ON MASONRY OR CONCRETE SHALL NOT HAVE LESS THAN 3 INCHES OF BEARING. (CBC 2308.7)

30. **RIDGES, HIPS, AND VALLEYS.** RAFTERS SHALL BE FRAMED TO A RIDGE BOARD OR TO EACH OTHER WITH A GUSSET PLATE AS A TIE. RIDGE BOARDS SHALL BE MINIMUM 1-INCH NOMINAL THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER. AT ALL VALLEY AND HIPS, THERE SHALL BE A VALLEY OR HIP RAFTER NOT LESS THAN 2-INCH NOMINAL THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER. HIP AND VALLEY RAFTERS SHALL BE SUPPORTED AT THE RIDGE BY A BRACE TO A BEARING PARTITION OR BE DESIGNED TO CARRY AND DISTRIBUTE THE SPECIFIC LOAD AT THAT POINT. WHERE THE ROOF PITCH IS LESS THAN 3:12 SLOPE (25% GRADIENT), STRUCTURAL MEMBERS THAT SUPPORT RAFTERS AND CEILINGS JOISTS, SUCH AS RIDGES, HIPS, AND VALLEYS, SHALL BE DESIGNED AS BEAMS. (CRC R802.3)

31. **CEILING JOIST AND RAFTER CONNECTIONS.** CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER PER CRC TABLE R802.5.1(9), AND THE RAFTER SHALL BE NAILED TO THE WALL TOP PLATE PER CRC TABLE R602.3(1). CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED PER CRC TABLE R802,5,1(9) WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAFTERS TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING WHEN SUCH JOISTS ARE PARALLEL TO RAFTERS. WHERE CEILING JOISTS ARE NOT CONNECTED TO THE RAFTERS AT THE WALL TOP PLATE, JOISTS CONNECTED HIGHER IN THE ATTIC SHALL BE INSTALLED AS RAFTER TIES, OR RAFTER TIES SHALL BE INSTALLED TO PROVIDE A CONTINUOUS TIE. WHERE CEILING JOISTS ARE NOT PARALLEL TO RAFTERS, RAFTER TIES SHALL BE INSTALLED. RAFTER TIES SHALL BE MINIMUM 2 INCHES BY 4 INCHES NOMINAL, INSTALLED PER CRC TABLE R802,5,1(9),OR CONNECTIONS OF EQUIVALENT CAPACITIES SHALL BE PROVIDED. WHERE CEILINGS JOISTS OR RAFTER TIES ARE NOT PROVIDED, THE RIDGE FORMED BY THESE RAFTERS SHALL BE SUPPORTED BY A WALL OR ENGINEER-DESIGNED GIRDER. (CRC R802,3.1)

32. **CEILING JOISTS LAPPED.** ENDS OF CEILING JOISTS SHALL BE LAPPED MINIMUM 3 INCHES OR BUTTED OVER BEARING PARTITIONS OR BEAMS AND TOENAILED TO THE BEARING ELEMENT. WHERE CEILING JOISTS PROVIDE RESISTANCE TO RAFTER THRUST, LAPPED JOISTS SHALL BE NAILED TOGETHER PER CRC TABLE R602,3(1) AND BUTTED JOISTS SHALL BE TIED TOGETHER IN A MANNER TO RESIST SUCH THRUST. (CRC R802,3,2)

33. **COLLAR TIES.** COLLAR TIES OR RIDGE STRAPS TO RESIST WIND UPLIFT SHALL BE CONNECTED IN THE UPPER THIRD OF THE ATTIC SPACE. COLLAR TIES SHALL BE A MINIMUM 1 INCH BY 4 INCHES NOMINAL AND SPACED AT MAXIMUM 4 FEET ON CENTER. (CRC R802.3.1)

34. **PURLINS.** PURLINS INSTALLED TO REDUCE THE SPAN OF RAFTERS SHALL BE SIZED NOT LESS THAN THE REQUIRED SIZE OF THE RAFTERS THEY SUPPORT. PURLINS SHALL BE CONTINUOUS AND SHALL BE SUPPORTED BY 2-INCH-BY-4-INCH NOMINAL BRACES INSTALLED TO BEARING WALLS AT A MINIMUM 45-DEGREE SLOPE FROM HORIZONTAL. THE BRACES SHALL BE SPACED MAXIMUM 4 FEET ON CENTER WITH A MAXIMUM 8-FOOT UNBRACED LENGTH. (CRC R802.5.1)

35. **ROOF/CEILING MEMBER BEARING.** THE ENDS OF EACH RAFTER OR CEILING JOIST SHALL HAVE NOT LESS THAN 1-1/2 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES OF BEARING ON MASONRY OR CONCRETE. (CRC R802.6)

36. **ROOF/CEILING MEMBER LATERAL SUPPORT.** ROOF FRAMING MEMBERS AND CEILING JOISTS WITH A NOMINAL DEPTH-TO-THICKNESS RATIO EXCEEDING 5:1 SHALL BE PROVIDED WITH LATERAL SUPPORT AT POINTS OF BEARING TO PREVENT ROTATION. (CRC R802.8)

37. **ROOF/CEILING BRIDGING.** RAFTERS AND CEILING JOISTS WITH A NOMINAL DEPTH-TO-THICKNESS RATIO EXCEEDING 6:1 SHALL BE SUPPORTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL), OR A CONTINUOUS 1-INCH-BY-3-INCH WOOD STRIP NAILED ACROSS THE RAFTERS OR CEILING JOISTS AT MAXIMUM 8-FOOT INTERVALS. (CRC R802,8,1)

38. **FRAMING OF ROOF/CEILING OPENINGS.** OPENINGS IN ROOF AND CEILING FRAMING SHALL BE FRAMED WITH A HEADER AND TRIMMER JOISTS. WHEN THE HEADER JOIST SPAN DOES NOT EXCEED 4 FEET, THE HEADER JOIST MAY BE A SINGLE MEMBER THE SAME SIZE AS THE CEILING JOIST OR RAFTER. SINGLE TRIMMER JOISTS MAY BE USED TO CARRY A SINGLE HEADER JOIST LOCATED WITHIN 3 FEET OF THE TRIMMER JOIST BEARING. WHEN THE HEADER JOIST SPAN EXCEEDS 4 FEET, THE TRIMMER JOISTS AND HEADER JOIST SHALL BE DOUBLED AND OF SUFFICIENT CROSS SECTION TO SUPPORT THE CEILING JOISTS OR RAFTERS FRAMING INTO THE HEADER. APPROVED HANGERS SHALL BE USED FOR THE HEADER-JOIST-TO-TRIMMER-JOIST CONNECTIONS WHEN THE HEADER JOIST SPAN EXCEEDS 6 FEET. TAIL JOISTS OVER 12 FEET LONG SHALL BE SUPPORTED AT THE HEADER BY FRAMING ANCHORS OR ON LEDGER STRIPS MINIMUM 2 INCHES BY 2 INCHES. (CRC R502,10)

39. **ROOF FRAMING ABOVE SHEAR WALLS.** RAFTERS OR ROOF TRUSSES SHALL BE CONNECTED TO TOP PLATES OF SHEAR WALLS WITH BLOCKING BETWEEN THE RAFTERS OR TRUSSES. (CRC R602,10,8)

40. **ROOF DIAPHRAGM UNDER FILL FRAMING.** ROOF PLYWOOD SHALL BE CONTINUOUS UNDER CALIFORNIA FILL FRAMING.

41. **ROOF DIAPHRAGM AT RIDGES.** MINIMUM 2-INCH NOMINAL BLOCKING REQUIRED FOR ROOF DIAPHRAGM NAILING AT RIDGES.

42. **BLOCKING OF ROOF TRUSSES.** MINIMUM 2-INCH NOMINAL BLOCKING REQUIRED BETWEEN TRUSSES AT RIDGE LINES AND AT POINTS OF BEARING AT EXTERIOR WALLS.

43. **TRUSS CLEARANCE**. MINIMUM 1/2-INCH CLEARANCE REQUIRED BETWEEN TOP PLATES OF INTERIOR NON-BEARING PARTITIONS AND BOTTOM CHORDS OF TRUSSES.

44. **DRILLING, CUTTING, AND NOTCHING OF ROOF/FLOOR FRAMING.** NOTCHES IN SOLID LUMBER JOISTS, RAFTERS, BLOCKING, AND BEAMS SHALL NOT EXCEED ONE-SIXTH THE MEMBER DEPTH, SHALL BE NOT LONGER THAN ONE-THIRD THE MEMBER DEPTH, AND SHALL NOT BE LOCATED IN THE MIDDLE ONE-THIRD OF THE SPAN. NOTCHES AT MEMBER ENDS SHALL NOT EXCEED ONE-FOURTH THE MEMBER DEPTH. THE TENSION SIDE OF MEMBERS 4 INCHES OR GREATER IN NOMINAL THICKNESS SHALL NOT BE NOTCHED EXCEPT AT MEMBER ENDS. THE DIAMETER OF HOLES BORED OR CUT INTO MEMBERS SHALL NOT EXCEED ONE-THIRD THE MEMBER DEPTH. HOLES SHALL NOT BE CLOSER THAN 2 INCHES TO THE TOP OR BOTTOM OF THE MEMBER OR TO ANY OTHER HOLE LOCATED IN THE MEMBER. WHERE THE MEMBER IS ALSO NOTCHED, THE HOLE SHALL NOT BE CLOSER THAN 2 INCHES TO THE NOTCH. (CRC R502,8,1)

45. **EXTERIOR LANDINGS, DECKS, BALCONIES, AND STAIRS.** SUCH ELEMENTS SHALL BE POSITIVELY ANCHORED TO THE PRIMARY STRUCTURE TO RESIST BOTH VERTICAL AND LATERAL FORCES OR SHALL BE DESIGNED TO BE SELF-SUPPORTING. ATTACHMENT SHALL NOT BE ACCOMPLISHED BY USE OF TOENAILS OR NAILS SUBJECT TO WITHDRAWAL. (CRC R311.3)

46. **FIREBLOCKING.** FIREBLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS (CRC R302.11 AND CRC R1003.19):
   a. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
      i. VERTICALLY AT THE CEILING AND FLOOR LEVELS
      ii. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET
   b. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS
   c. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN
   d. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION
   e. AT CHIMNEYS AND FIREPLACES PER ITEM E.49
   f. CORNICES OF A TWO-FAMILY DWELLING AT THE LINE OF DWELLING-UNIT SEPARATION

47. **FIREBLOCKING MATERIALS.** EXCEPT AS OTHERWISE SPECIFIED IN ITEMS E.48 AND E.49, FIREBLOCKING SHALL CONSIST OF THE FOLLOWING MATERIALS WITH THE INTEGRITY MAINTAINED (CRC R302.11.1):
   a. TWO-INCH NOMINAL LUMBER
   b. TWO THICKNESSES OF ONE-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS
   c. ONE THICKNESS OF 23/32-INCH WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY 23/32-INCH WOOD STRUCTURAL PANEL
   d. ONE THICKNESS OF 3/4-INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD
   e. 1/2-INCH GYPSUM BOARD
   f. 1/4-INCH CEMENT-BASED MILLBOARD
   g. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OF OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH THE 10-FOOT HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS. UNFACED FIBERGLASS BATT INSULATION USED AS FIREBLOCKING SHALL FILL THE ENTIRE CROSS-SECTION OF THE WALL CAVITY TO A MINIMUM HEIGHT OF 16 INCHES MEASURED VERTICALLY.

48. **FIREBLOCKING AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES, AND WIRES AT CEILING AND FLOOR LEVEL.** SUCH OPENINGS SHALL BE FIREBLOCKED WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. (CRC R302.11)

49. **FIREBLOCKING OF CHIMNEYS AND FIREPLACES.** ALL SPACES BETWEEN CHIMNEYS AND FLOORS AND CEILINGS THROUGH WHICH CHIMNEYS PASS SHALL BE FIREBLOCKED WITH NONCOMBUSTIBLE MATERIAL SECURELY FASTENED IN PLACE. THE FIREBLOCKING OF SPACES BETWEEN CHIMNEYS AND WOOD JOISTS, BEAMS, OR HEADERS SHALL BE SELF-SUPPORTING OR BE PLACED ON STRIPS OF METAL OR METAL LATH LAID ACROSS THE SPACES BETWEEN COMBUSTIBLE MATERIAL AND THE CHIMNEY. (CRC R1003.19)

50. **DRAFTSTOPPING.** 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 APPROXIMATELY EQUAL AREAS. WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOW, DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES (CRC R302.12):
   a. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING
   b. FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS

51. **DRAFTSTOPPING MATERIALS.** DRAFTSTOPPING SHALL NOT BE LESS THAN 1/2-INCH GYPSUM BOARD, 3/8-INCH WOOD STRUCTURAL PANELS, OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. DRAFTSTOPPING SHALL BE INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBERS UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL. THE INTEGRITY OF DRAFTSTOPS SHALL BE MAINTAINED. (CRC R302.12.1)

52. **COMBUSTIBLE INSULATION CLEARANCE.** COMBUSTIBLE INSULATION SHALL BE SEPARATED MINIMUM 3 INCHES FROM RECESSED LUMINAIRES, FAN MOTORS, AND OTHER HEAT-PRODUCING DEVICES. (CRC R302.14)

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:
APN :
LOT:
TRACT:
YEAR BUILT:
ZONING CODE:

OWNER'S NAME:

OWNER'S ADDRESS:

SHEET TITLE: GENERAL NOTE

SCALE: AS NOTED

DATE: 11/ 23 / 2021

0-7

FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

	ELEMENT/CONNECTION	FASTENER	LOCATION
	ROOF		
1.	Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3 - 8d common ($2^1/_2$" × 0.131") 3-10d box (3"x0.128") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples, 7/16" crown	Toenail each end
	Blocking between rafters or truss not at the wall top plate, to rafter or truss	2 - 8d common ($2^1/_2$" × 0.131") 2 - 3" × 0.131" nails 2 - 3" 14 gage staples	toenail each end
	Flat blocking to truss and web filler	2-16d common ($3^1/_2$"x0.162") 3-3"x0.131" nails 3-3" 14 gage staples	end nail Face nail
2.	Ceiling joists to top plate	16d common ($3^1/_2$"x0.162") @6" o.c. 3-3"x0.131" nails @ 6" o.c. 3-3" 14 gage staples @ 6" o.c.	Toenail each joist
3.	Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (Table and Section2308.7.3.1)	3-8d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Face nail
4.	Ceiling joists attached to parallel rafter (heel joint) (Table and Section2308.7.3.1)	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail
5.	Collar tie to rafter	Table 2308.7.3.1	Face nail
6.	Rafter or roof truss to top plate (Table and section 2308.7.5)	3-10d common 4-10d box 4-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown 3-10 common 3-16d box 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail Toenail [c]
7.	Roof rafters to ridge valley	2-16d common	End nail
	joist, rafter or truss	2-10d box 2-3"x0.131" nails 2-3" 14 gage staples, 7/16" crown	
	WOOD STRUCTURAL PANS, SUB FLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING [b]		
31.	3/8"-1/2"	6d common or deformed (2"x0.113") (subfloor and wall) 8d box or deformed (roof) 2 3/8"x0.113" nail (subfloor and wall)	6" edge 12" intermediate supports
		1 ½" 16 gage staple, 7/16" crown	4" edge
		2 3/8" x0.113" nail (roof)	8" intermediate supports
		1 ¾"16 gage staple, 7/16" crown (roof)	3" edge 6" intermediate supports
32.	19/32" –3/4"	8d common 6d deformed	6" edge 12" intermediate supports
		2 3/8"x0.113 nail 2" 16" gage staple, 7/16" crown	4" edge 8" intermediate supports
33.	7/8" – 1/4"	10d common 8d deformed	6" edge 12" intermediate supports
	OTHER EXTERIOR WALL SHEATHING		
34.	1/2" fiberboard sheathing[b]	1 ½" galvanized roof nail 1 ¾" 16 gage staple with 7/16" or 1" crown	3" edge 6" intermediate supports
35.	25/32" fiberboard sheathing [b]	1 ½" galvanized roof nail 1 ½" 16 gage staple with 7/16" or 1" crown	3" edge 6" intermediate supports
	WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING		
36.	¾" and less	8d common 6d deformed	6" edge 12" intermediate supports
37.	7/8" 1"	8d common 8d deformed	6" edge 12" intermediate supports
38.	1 1/8"-1 ¼"	10d common 8d deformed	6" edge 12" intermediate supports
	PANEL SIDING TO FRAMING		
39.	½" or less	6d corrosion-resistant siding 6d corrosion-resistant casing	6" edge 12" intermediate supports
40.	5/8"	8d corrosion-resistant siding 8d corrosion-resistant casing	6" edge 12" intermediate supports
	INTERSIOR PANELING		
41.	¼"	4d casing 4d finish	6" edge 12" intermediate supports
42.	3/8"	6d casing 6d finish	6" edge 12" intermediate supports

For SI: 1 inch = 25.4 mm.

a. Nails spaced at 6 inches at intermediate supports where spans are 48" or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

b. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

	or hip rafters; or roof rafter to 2" ridge beam	3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	
		3-10d common 3-16d box 4-10d box 4-3"x0.131" nails 4- 3" 14 gage staples, 7/16" crown	Toenail
	WALL		
8.	Stud to Stud (not at braced wall panels)	16d common	24" o.c. face nail
		10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	16" o.c. face nail
9.	Stud to stud and abutting studs at intersecting wall corners (at **braced wall panels**)	16d common	16" o.c. face nail
		16d box	12" o.c. face nail
		3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
10.	Built-up header	16d common	16" o.c. each edge, face nail
		16d box	12" o.c. each edge, face nail
11.	Continuous header to stud	4-8d common 4-10d box	Toenail
12.	Top plate to top plate	16d common	16" o.c. face nail
		10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	12" o.c. face nail
13.	Top plate to top plate, at end joints	8-16d common 12-10d box 12-3"x0.131" nails 12-3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (min 24" lap splice length each side of end joint)
14.	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common 16d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	16" o.c. face nail 12" o.c. face nail
15.	Bottom plate to joist, rim joist, band joist or blocking at **braced wall panels**	2-16d common 3-16d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	16" o.c. face nail
16.	Stud to top or bottom plate	4-8d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Toenail
		2-16d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	End nail

c. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafters shall be permitted to be reduced by one nail.

** See Table 2304.10.1 for more information

17.	Top or bottom plate to stud	2-16d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	End nail
18.	Top plates, laps at corners and intersections	2-16d common 3-10d box 3- 3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Face nail
19.	1" brace to each stud and plate	2-8d common 2-10d box 2- 3"x0.131" nails 2- 3" 14 gage staples, 7/16" crown	Face nail
20.	1"x6" sheathing to each bearing	2-8d common 2-10d box	Face nail
21.	1"8" and wider sheathing to each bearing	3-8d common 3-10d box	Face nail
	FLOOR		
22.	Joist to sill, top plate, or girder	3-8d common 3-10d box 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Toenail
23.	Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common 10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	6" o.c., toenail
24.	1"x6" subfloor or less to each joist	2-8d common 2-10d box	Face nail
25.	2" subfloor to joist or girder	2-16d common	Face nail
26.	2" plank	2-16d common	Each bearing, face nail
27.	Built up girders and beams, 2" lumber layers	20d common	32" o.c. face nail at top and bottom staggered on opposite sides
		10d box 3"x0.131" nails 3" 14 gage staples, 7/16" crown	24" o.c. face nail at top and bottom staggered on opposite sides
		And 2-20d common 3-10dbox 3- 3"x0.131" nails 3- 3" 14 gage staples, 7/16" crown	Ends and at each splice, face nail
28.	Ledger strip supporting joists or rafters	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
29.	Joist to band joist or rim joist	3-16d common 4-10d box 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	End nail
30.	Bridging or blocking to	2-8d common	Each end, toenail

A. NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING A.CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN; 80 KSI FOR SHANK DIAMETER OF 0.192 INCH (20D COMMON NAIL), 90 KSI FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LARGER THAN 0.177 INCH, AND 100 KSI FOR SHANK DIAMETERS OF 0.142 INCH OR LESS.

B. STAPLES ARE 16 GAGE WIRE AND HAVE A MINIMUM 7/16-INCH ON DIAMETER CROWN WIDTH.

C. NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR GREATER.

D. FOUR-FOOT BY 8-FOOT OR 4-FOOT BY 9-FOOT PANELS SHALL BE APPLIED VERTICALLY.

E. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2).

F. FOR WOOD STRUCTURAL PANEL ROOF SHEATHING ATTACHED TO GABLE END ROOF FRAMING AND TO INTERMEDIATE SUPPORTS WITHIN 48 INCHES OF ROOF EDGES AND RIDGES, NAILS SHALL BE SPACED AT 6 INCHES ON CENTER WHERE THE ULTIMATE DESIGN WIND SPEED IS LESS THAN 130 MPH AND SHALL BE SPACED 4 INCHES ON CENTER WHERE THE ULTIMATE DESIGN WIND SPEED IS 130 MPH OR GREATER BUT LESS THAN 140 MPH.

G. GYPSUM SHEATHING SHALL CONFORM TO ASTM CL396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 253. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C208.

H. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING AND AT FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING.

I. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE, PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TOE NAILS FROM THE CEILING JOIST TO TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED.

J. RSRS-01 IS A ROOF SHEATHING RING SHANK NAIL MEETING THE SPECIFICATIONS IN ASTM FI667.

PROJECT SCOPE

LEGAL PROPERTY DESCRIPTION:
APN :
LOT:
TRACT:
YEAR BUILT:
ZONING CODE:

OWNER'S NAME:

OWNER'S ADDRESS:

SHEET TITLE: GENERAL NOTE

SCALE: AS NOTED

DATE: 11/ 23 / 2021

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