

C-5 PRESENTATION PART2/1

GENERAL NOTES:
DESIGNED BY BSA STRUCTURAL ENGINEERS
DESIGN LOADS: BASED ON ASCE 7-10 CODE AND 2015 INTERNATIONAL RESIDENTIAL CODE.

THE STRUCTURAL COMPONENTS OF THIS PROJECT HAVE BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE IRC CODE, 2015 EDITION. THE DESIGN LOADS ARE AS FOLLOWS:

CEILING LOADS:	
DEAD	10 PSF
LIVE	20 PSF
ROOF LOADS:	
DEAD	12 PSF (COMP. ROOF)
DEAD	20 PSF (TILE ROOF)
LIVE	20 PSF
ROOF LOADS FOR TRUSSES ROOF:	
DEAD	
ROOF TOP CHORD	12 PSF
ROOF BOTTOM CHORD	8 PSF
LIVE	
ROOF TOP CHORD	20 PSF
ROOF BOTTOM CHORD	10 PSF

NOTES: REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND CONSTRUCTION DETAILS FOR ALL FIRE RATED WALLS AND PLAN DIMENSIONS TO ALL WALLS AND OTHER ELEMENTS. BOTTOM CHORD LIVE LOADS DO NOT HAVE TO BE APPLIED CONCURRENTLY WITH TOP CHORD LIVE LOADS.

WOOD CONSTRUCTION GENERAL NOTE:

V1. NON-LOAD BEARING DOOR AND WINDOW HEADERS SHALL BE A MINIMUM OF (2)-2x6'S, GRADE #2, FOR LOAD BEARING WALLS. HEADERS SHALL BE AS SHOWN ON THE PLANS AND TABLES AND SHALL BE GRADE #2 SOUTHERN PINE OR DOUGLAS FIR-LARCH, OR AN EQUIVALENT WOOD. ANY SINGLE SPAN GLULAM'S SHOWN SHALL BE VISUALLY GRADED WESTERN SPECIES, GRADE 24F-V3 (F(b)=2400 PSI). ANY MULTI SPAN GLULAM'S AND GLULAM CANTILEVERED OVER SUPPORTS SHALL BE GRADE 24F-V3. LUMBER FOR PLATES, BRACING, BRIDGING, AND BLOCKING SHALL BE GRADE #2 OR BETTER SOUTHERN PINE OR DOUGLAS FIR-LARCH. ALL LSL, LVL, AND PSL MEMBERS SHOWN ON THE PLANS SHALL MEET THE MINIMUM SPECIFICATIONS AND INSTALLATION REQUIREMENTS PER THE Weyerhaeuser Corporation.

V2. STUDS SHALL BE PER THE GRADE SHOWN ON THE TABLE ON THIS SHEET. WOOD POSTS AND COLUMNS SHALL BE GRADE "GRADE #2 OR BETTER" U.N.O.

V3. ROOF TRUSSES SHALL BE SPACED AT 2'-0" ON CENTER (MAX.) UNLESS OTHERWISE NOTED ON THE PLANS OR SPACING CONTROLLED BY TRUSS DEFLECTIONS.

V4. JOIST AND TRUSS CONNECTIONS TO SUPPORTING BEAMS SHALL BE MADE WITH SIMPSON SERIES, GALVANIZED STEEL JOIST HANGERS AND CONNECTORS, UNLESS DETAILED OTHERWISE. FLUSH-TYPE AND SKEWED CONNECTIONS USING THESE JOIST HANGERS SHALL UTILIZE THE HANGER TYPE AND SIZE, AND NUMBER OF FASTENERS SPECIFIED BY THE CONNECTOR MANUFACTURER FOR THE MEMBER SIZE TO BE SUPPORTED.

V5. WHERE MULTIPLE JOISTS OR HEADERS OCCUR, AND THE HEADER SPAN IS GREATER THAN 4'-0", A STUD FOR EACH MEMBER SHALL BE PROVIDED, I.E., USE DOUBLE JACK STUDS AND DOUBLE KING STUDS ON EACH SIDE OF OPENINGS 4'-1" TO 8'-0" WIDE. UNLESS OTHERWISE SHOWN ON THE PLANS, USE TRIPLE STUD COLUMNS (RE: DETAIL S5.215) UNDER ALL LVL AND GLULAM BEAMS, AND UNDER ALL FLOOR TRUSS GIRDERS AND PRIMARY ROOF TRUSS GIRDERS AT POINTS OF BEARING. CONTINUE ALL LOADS DOWN TO THE CONCRETE FOUNDATION.

V6. STUDDING SHALL BE DOUBLED AT ALL CORNERS, ANGLES AND EACH FACE OF OPENINGS.

V7. ALL LUMBER EMBEDDED OR PLACED ON CONCRETE (INCLUDING ALL SILL PLATES) SHALL BE PRESSURE TREATED.

V8. BOTTOM EXTERIOR SILL PLATES AND INTERIOR SHEAR WALL SILL PLATES SHALL BE FASTENED TO THE CONCRETE SLAB 1/2"x0" J" BOLTS OR EXPANSION ANCHORS AT 48" O.C. AND ALSO WITH 0.145"x0.3" PINS AT 16" ON CENTER, AND AT THE ENDS OF SHEAR WALLS WITH SIMPSON HIT4 HOLDDOVNS. ALL INTERIOR BEARING WALLS SHALL BE FASTENED WITH 0.145"x0.3" PINS AT 16" O.C. NON-LOAD BEARING PARTITION WALLS SHALL BE FASTENED TO THE SLAB WITH 0.145"x0.3" PINS AT 24" O.C.

V9. BUILT UP POST, COLUMNS, STUDS OR JMB'S (ETC., AXIAL COMPRESSION MEMBERS) SHALL BE NAILED OR BOLTED ACCORDING TO NATIONAL DESIGN STANDARDS (NDS) LATEST EDITION.

V10. FASTENING OF ALL WOOD-TO-WOOD CONNECTIONS AND WOOD-TO-CONCRETE CONNECTIONS SHALL MEET THE MINIMUM REQUIREMENTS PER IRC 2015; ALL WOOD FRAMING SHALL COMPLY WITH LOCAL BUILDING CODES.

- BSA STRUCTURAL ENGINEERS RESERVES THE RIGHT TO THESE PLANS AS OF THE YEAR DATED
- ALL CONSTRUCTIONS PRESENTED IN THIS PLAN AND NOT ADDRESSED BY THE PLANS SHALL BE CONSTRUCTED PER TYPICAL CONSTRUCTION METHODS IN COMPLIANCE WITH THE LATEST BUILDING CODE ADOPTED BY THE LOCAL CITIES
- THE BUILDER SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES, AND SHALL ENSURE CONFORMANCE WITH BEST PRACTICE
- IF CONDITIONS BE DISCOVERED THAT ARE DIFFERENT THAN THOSE THAT ARE ANTICIPATED IN THE PLANS, CONTACT THE ENGINEER OF THE RECORD FOR ASSISTANCE
- THE BUILDER IS RESPONSIBLE FOR ADEQUATE SHORING, BRACING, FORMWORK, ETC., AS REQUIRED FOR PROTECTION OF LIFE AND PROPERTY, TO SUPPORT ANY CONSTRUCTION LOADS, AND TO MAINTAIN ALL BUILDING COMPONENTS SAFELY IN PLACE PRIOR TO THEIR FINAL ASSEMBLY AND ANCHORAGE INTO THE COMPLETED STRUCTURE.
- IT'S THE CONTRACTOR RESPONSIBILITY TO INSURE THE PUBLIC SAFETY PER OSHA OCCUPATIONAL SAFETY MANUAL.
- ALL HORIZONTAL FRAMING MEMBERS SHALL BE SOLID (NOT JOINTED LUMBERS).

CEILING JOISTS

- ALL CEILING JOISTS ARE #2 GRADE AND 24" O.C. U.N.O.
- DESIGN VALUE FOR VISUALLY GRADED LUMBER (#2 SOUTHERN YELLOW PINE) AND SHOULD COMPLY WITH THE DESIGN VALUES SET BY THE AMERICAN WOOD COUNCIL (AWC) EFFECTED ON JUNE 2013.

LUMBER	Fb(PSI)	Fv(PSI)	E(KSI)
2x6	1000	175	1400
2x8	925	175	1400
2x10	800	175	1400
2x12	750	175	1400

WALL NOTES:

- ALL STUDS SHALL BE #2 GRADE.
- HEADER SIZE PER FRAMING PLAN.
- TOP PLATE TO BE DOUBLE 2x4" U.N.O.
- DOUBLE TOP PLATE TO BE CONNECTED AT SPLICE W/2 ROWS OF 3x0.131 @ 4" O.C. (EACH SIDE @ INTERSECTION). SPLICES NEED NOT OCCUR OVER A STUD
- ALL STUD SIZE, HEIGHT, AND SPACING.

PER RC 2015

WOOD STUD BEARING WALL TABLE (MINIMUM REQUIREMENTS)

LOCATION	MAX. HEIGHT	STUD SIZE / SPACING	GRADE
EXTERIOR WALLS	10'-1"	2x6's AT 16" O.C. OR 2x4's AT 16" O.C.	#2
	12'-1"	2x6's AT 16" O.C. OR (2)-2x4's AT 16" O.C.	#2
	15'-1"	2x6's AT 12" O.C.	#2
INTERIOR LOAD BEARING WALLS	10'-1"	2x6's AT 16" O.C. OR 2x4's AT 16" O.C.	#2
	12'-1"	2x6's AT 16" O.C. OR (2)-2x4's AT 16" O.C.	#2
	15'-1"	2x6's AT 12" O.C.	#2
INTERIOR NON-LOAD BEARING WALLS	10'-1"	2x6's AT 24" O.C. OR 2x4's AT 24" O.C.	STUD
	12'-1"	2x6's AT 24" O.C. OR 2x4's AT 16" O.C.	STUD
	15'-1"	2x6's AT 16" O.C. OR 2x4's AT 12" O.C.	#2

ROOF NOTES:

- MATERIAL LOAD UP TO 5 PSF FOR COMPOSITION ROOF AND UP TO 15 PSF FOR TILE ROOF.
- ROOF SHEATHING SHALL BE 1/2" THICK MIN. U.N.O.
- BRACES UP TO 6' SHALL BE 2x6". LONGER BRACES (6'-16') SHALL BE MADE OF 2x6" AND LONGER BRACES (16'-27') SHALL BE MADE OF 2x10" FASTENED TOGETHER IN A "L" OR "T" PATTERN.
- VERIFY ALL DIMENSIONS AGAINST ARCHITECTURAL.
- ALL PURLIN SIZE SHALL MATCH RAFTER SIZE
- ALL FRAMING AND CONSTRUCTION MEMBERS TO BE PER 2015 IRC CODE.

BEAMS

- ALL BEAMS SHALL BE LATERALLY BRACED AT ALL SUPPORT POINTS. FLOATING BEAMS SHOULD HAVE ADDITIONAL LATERAL SUPPORT AT 1/3 SPAN POINTS. ALL KICKERS SHOULD BE PLACED AT AN ANGLE BETWEEN 45° AND HORIZONTAL.
- FLOATING BEAMS SHALL HAVE A MINIMUM CLEARANCE OF 1-1/2" FROM BOTTOM OF BEAM.
- 1-3 PLY BEAMS CAN BE NAILED TOGETHER, CONNECT 4 AND 5 PLY BEAM WITH 1/2"x0 THROUGH BOLTS @ 24" O.C. TOP AND BOTTOM.

MINIMUM CAPACITY FOR ENGINEERED BEAM.

TYPE	Fb(PSI)	Fv(PSI)	E(KSI)
LVL	2,600	295	2,000
LSL	2,325	310	1,550
PSL	2,900	290	2,000

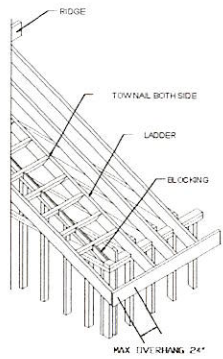
FLOOR AND FLOOR JOISTS

- LATERALLY SUPPORT JOISTS AT THE ENDS BY FULL DEPTH SOLID BLOCKING, ATTACHMENT TO A HEADER, BAND OR RIM JOIST, OR TO AN ADJOINING STUD.
- DO NOT USE TOPPING SLABS UNLESS NOTED OTHERWISE ON PLAN.

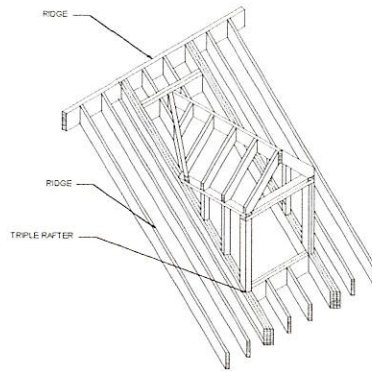


REVISIONS	DESCRIPTIONS	DATE	INITIAL	6004 SIERRA BRANDE DRIVE				BSA		TBPE FIRM LICENSE #: 19354 2911 A.W. GRIMES BLVD, SUITE 203 PFLUGERVILLE, TX 78660 PH: (512)-577-2974 ADMIN@BSA-ENGINEERS.COM FOUNDATION FRAMING/ WIND BRACING INSPECTION		SHEET # N1 OF 4	
A-REV				SUBDIVISION		DATE	08-24-2020		STRUCTURAL ENGINEERS				
B-REV				LOT	BLOCK	PH/SEC	JOB NO.						
C-REV				CITY	AUSTIN, TEXAS 78759		DRN BY	RA					
D-REV				CLIENT			CHK BY	SA					

C-5 PRESENTATION PART 2/3



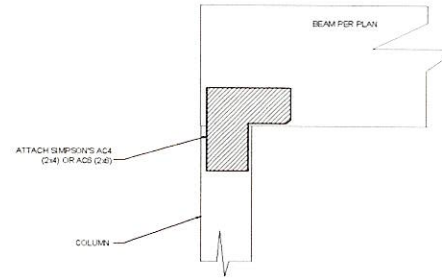
1 ROOF GABLE OVERHANG DETAIL



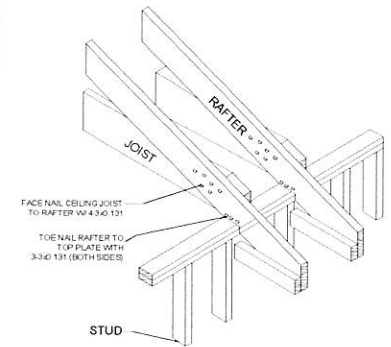
2 ROOF DORMER FRAMING (TYP.)

1" BRACE	1" BRACE
MAX LENGTH	ROOF BRACE
6'-0"	2x6
18'-0"	2x8 T
22'-0"	2x10 T

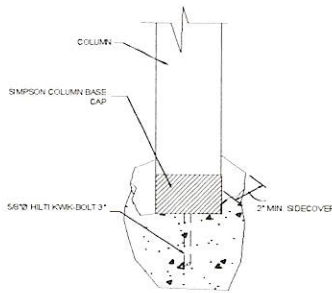
3 ROOF BRACE SIZES



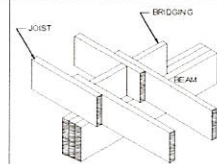
4 BEAM AND COLUMN CONNECTION



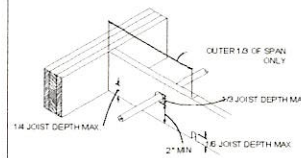
5 ROOF FRAMING AT EAVE W/FLAT CEILING



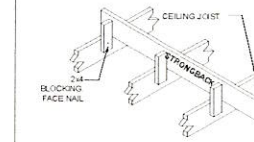
6 COLUMN BASE (TYP.)



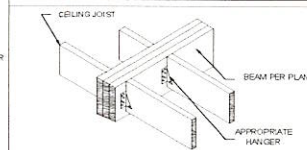
7 JOIST RESTING ON WALL OR BEAM



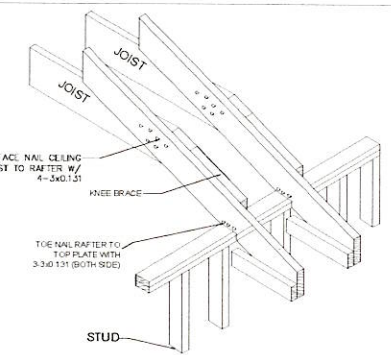
9 NOTCHING AND BORING OF JOISTS



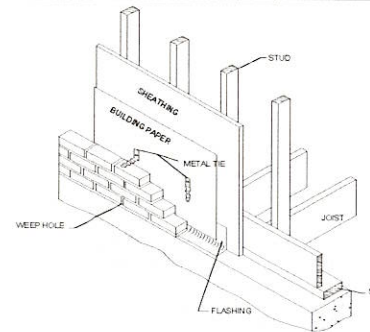
10 STRONGBACK



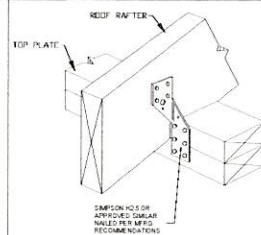
8 CONCEALED BEAM AND CEILING JOIST



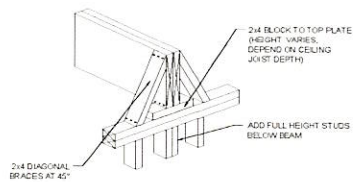
14 ROOF FRAMING AT EAVE W/COFFERED CEILING (TYP.)



13 APPLICATION OF MASONRY VENEER TO WOOD FRAMING



12 RAFTER CONNECTION AT RAISE PLATE HEIGHT
PLATE HEIGHT HIGHER THAN CEILING HEIGHT.



11 FLOATING BEAM

THE DETAILS SHOW ONLY TYPICAL CONDITIONS AND DO NOT REPRESENT EVERY CONDITION. THEY DO NOT CONVEY OR IMPLY THE MEANS AND METHODS TO IMPLEMENT THE DESIGN.

NOT TO SCALE



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A-REV			
B-REV			
C-REV			
D-REV			

6004 SIERRA BRANDE DRIVE

SUBDIVISION	DATE	08-24-2020
LOT	BLOCK	PH/SEC
CITY	AUSTIN, TEXAS 78759	DRN BY
CLIENT	SA	CHK BY

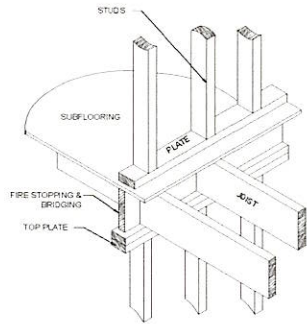


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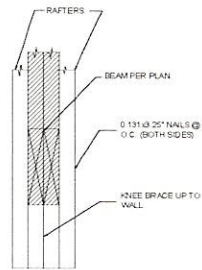
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N2 OF 4

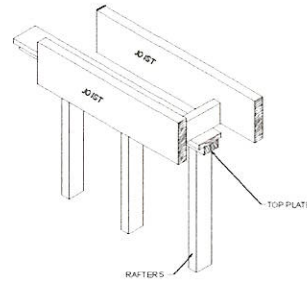
C-5 PRESENTATION PART 2/4



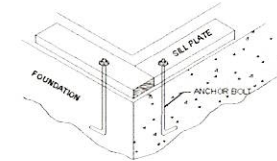
15 PLATFORM WALL OVER BEARING WALL (TYP.)



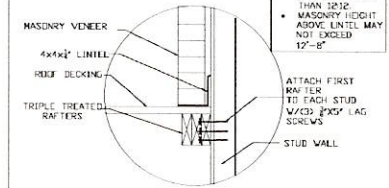
16 RAFTERS SUPPORTED BEAM (RSB)



17 ATTACHMENT OF NON BEARING CEILING FRAMING (TYP.)



18 SILL TO FOUNDATION CONNECTION (TYP.)



19 MASONRY ABOVE ROOF (TYP.)

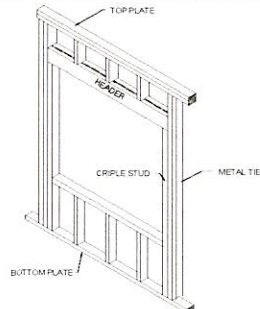
# OF RAFTER ROW	2x4	2x6	2x8	2x10	2x12
NAIL ROW	1	1	2	2	3
END DISTANCE	12"	12"	12"	12"	12"
SPACE BETWEEN COL	12"	12"	12"	12"	12"
SPACE BETWEEN COLUMN	12"	12"	12"	12"	12"

WHEN ONE NAIL PER ROW IS SPECIFIED, NAILS IN ADJACENT ROWS SHALL BE DRIVEN FROM OPPOSITE SIDES IN OPPOSITE COLUMNS.

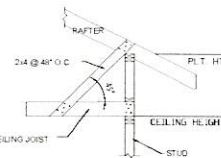
4 1/2" SIMPSON SDS SCREWS MAY REPLACE 300 NAILS 4 6" SIMPSON SDS SCREWS MAY REPLACE 500 NAILS

SOLID TIMBER MEMBERS OF EQUAL OR GREATER SIZE MAY BE USED INSTEAD OF SPECIFIED STUD PACKS.

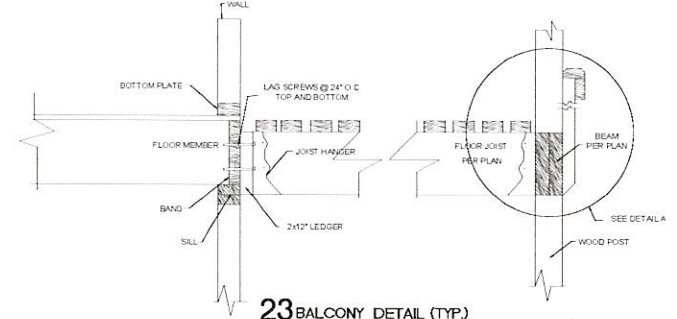
20 STUD PACK COLUMN



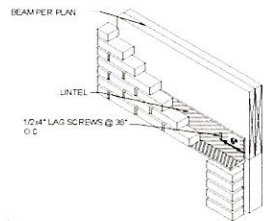
21 WINDOW OPENING FRAMING (TYP.)



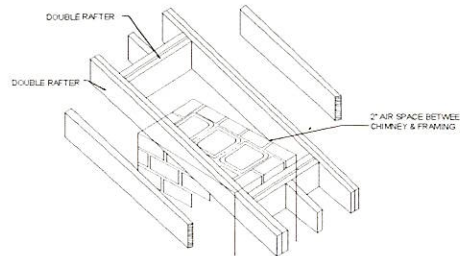
22 TENSION TIE (TYP.)



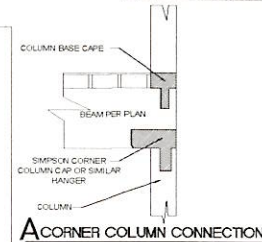
23 BALCONY DETAIL (TYP.)



24 MASONRY ABOVE OPENING (TYP.)



25 ROOF FRAMING AROUND CHIMNEY



26 CORNER COLUMN CONNECTION



NOT TO SCALE

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C-REV			
D-REV			

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CLIENT		CHK BY	SA



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SHEET #
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SHEET #
N4 OF 4