SEE SCHEDULE SEE SCHEDULE TEMPERED GLASS -FINISHED FLOOR **DOOR TYPE 1** T = TEMPERED**DOOR TYPE 3 DOOR TYPE 4 DOOR TYPE 2 EXTERIOR WD DOOR BI-FOLD** POCKET HINGED W/ ALUMINUM EXTERIOR **CLADDING AND TEMPERED** DOOR LEGEND

DOOR GENERAL NOTES:

- 1. ALL DIMENSIONS SHALL BE FIELD VERIFIED.
- 2. SWING INDICATION IS DIAGAMMATIC ONLY, SEE PLAN AND ELEVATION FOR ACTUAL SWING. 3. GLAZING USED IN DOORS, GLAZING WITHIN 18" OF THE FLOOR AND WITHIN A 24" ARC OF A DOOR, AND
- GLAZING SUBJECT TO HUMAN IMPACT SHALL BE FULLY TEMPERED OR LAMINATED GLASS.
- 4. ALL ENTRY DOORS TO HAVE U-FACTOR VALUE OF 0.77 OR BETTER. 5. MATCH DOOR HARDWARE TO RATING AND ACCESSIBILITY REQUIREMENTS
- AS REQUIRED. 6. ENTRY DOORS TO MATCH EXISTING ENTRY DOOR FINISH AND COLOR.
- 7. INTERIOR DOORS AND FRAMES TO MATCH EXISTING ADJACENT INTERIOR DOORS

GASKETING

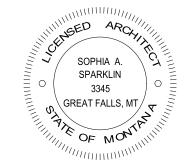
(3) PEMKO 158 ALUM ROCKWOOD 518 - US26D PEMKO AM 88 ENTRANCE HANDLES

NOTES:

- FINISH AND COLOR, UNLESS NOTED OTHERWISE. 8. AISLES LEADING TO REQUIRED EXITS SHALL HAVE A MINIMUM WIDTH OF 44". A WALKWAY WITH A MINIMUM
- 9. EXTERIOR CONCRETE SLABS AT DOOR OPENINGS SHALL HAVE A MAXIMUM SLOPE OF 1/4" PER FOOT.
- WIDTH OF 44" SHALL BE MAINTAINED CONTINUOUSLY TO A PUBLIC WAY.



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REVISIONS PHASE

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DOOR SCHEDULES

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							DO	OR SCHE	DULE		
		FRAM E	D(OOR		DOOR	FRAME				
MARK	ROOM	TYPE	S HEIGHT	IZE WIDTH	DOOR THICKNESS	GLAZING	MATERIAL	Construction Type	DOOR Material	HARDWARE	COMMENTS
101A	MUD	4	6' - 8"	2' - 10"	1 3/8"	N/A	WD	HOLLOW CORE	WD	4	POCKET DOOR
101B	MUD	2	6' - 8"	2' - 4"	1 1/2"	N/A	WD	HOLLOW CORE	WD	3	HINGED
102A	BED ROOM #1	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD		HINGED
102B	BED ROOM #1	3	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD		BI-FOLD
102C	BED ROOM #1	3	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
103A	BED ROOM #2	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD		HINGED
103B	BED ROOM #2	3	6' - 8"	6' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
104A	MASTER	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	2	HINGED
104B	MASTER	4	6' - 8"	8' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
104D	MASTER BATH	4	6' - 8"	2' - 10"	1 3/8"	N/A	WD	HOLLOW CORE	WD	4	POCKET DOOR
106A	BATH	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	2	HINGED
108A	DINING + LIVINGROOM	1	7' - 0"	3' - 0"	2"	Υ	WD/ALUM	SOLID CORE	WD/ALUM	1	EXTERIOR DOOR INTO FIRST FLOOR
109A	HALLWAY	2	6' - 8"	2' - 6"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	HINGED
109B	HALLWAY	3	7' - 0"	4' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
113A	STAIR	1	7' - 0"	3' - 0"	2"	Υ	WD/ALUM	SOLID CORE	WD/ALUM		EXTERIOR DOOR INTO STAIRWAY
B01A	BASEMENT	1	7' - 0"	3' - 0"	2"	Υ	WD/ALUM	SOLID CORE	WD/ALUM	1	EXTERIOR DOOR INTO BASEMENT
B01B	BASEMENT	2	6' - 8"	2' - 4"	1 1/2"	N/A	WD	HOLLOW CORE	WD	3	HINGED
B02A	MECHANICAL ROOM	2	6' - 8"	2' - 4"	1 1/2"	N/A	WD	HOLLOW CORE	WD	3	HINGED
ВОЗА	CLOSET	3	6' - 8"	2' - 6"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
B04	FUTURE BATHROOM	N/A	6' - 8"	2' - 10"	1 1/2"	-		HOLLOW CORE	N/A		NOT IN BID, INFORMATION FOR OWNERS USE ONLY
B05	FUTURE BEDROOM #1	N/A	6' - 8"	2' - 10"	1 1/2"	-		HOLLOW CORE	N/A		NOT IN BID, INFORMATION FOR OWNERS USE ONLY
B06	FUTURE BEDROOM #2	N/A	6' - 8"	2' - 10"	1 1/2"	-		HOLLOW CORE	N/A		NOT IN BID, INFORMATION FOR OWNERS USE ONLY
B07	BASEMENT	N/A	6' - 8"	2' - 10"	1 1/2"	_		HOLLOW CORE	N/A		NOT IN BID. INFORMATION FOR OWNERS USE ONLY

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

	HAR	D۷	VARE SCH	HEDULE
	HARDWARE SET#		FUNCTION	HINGES
	1	3	ENTRY	MCKINNEY T
	2	4	PRIVACY	MCKINNEY T
	3	3	PASSAGE	MCKINNEY T
	4	2	SLIDING	JOHNSON 10
	5	6	BI FOLD	JOHNSON 11
			HARDWARE NO 1) THE ABOVE 2) REVIEW BI F HARDWARE SE DRAWINGS	HARDWARE IS OLD DOOR SIZE
Y				
Υ				

JOHNSON 111FD

2) REVIEW BI FOLD DOOR SIZES PROVIDE THE CORRECT HARDWARE SETS FOR THE SIZE OF DOOR NOTED ON THE DRAWINGS

1) THE ABOVE HARDWARE IS BASIS OF DESIGN

MCKINNEY T2714 (3) PER DOOR

MCKINNEY T2714 (3) PER DOOR

MCKINNEY T2714 (3) PER DOOR

JOHNSON 1060 POCKET DOOR

HANDLES / PULLS

SCHLAGE F60 CAM, ACC SATIN NICKEL

PRIME-LINE SATIN NICKEL W LOCKING

SCHLAGE F40 ACC SATIN NICKEL

SCHLAGE F10 ACC SATIN NICKEL

PRIME-LINE KNOB SATIN NICKEL

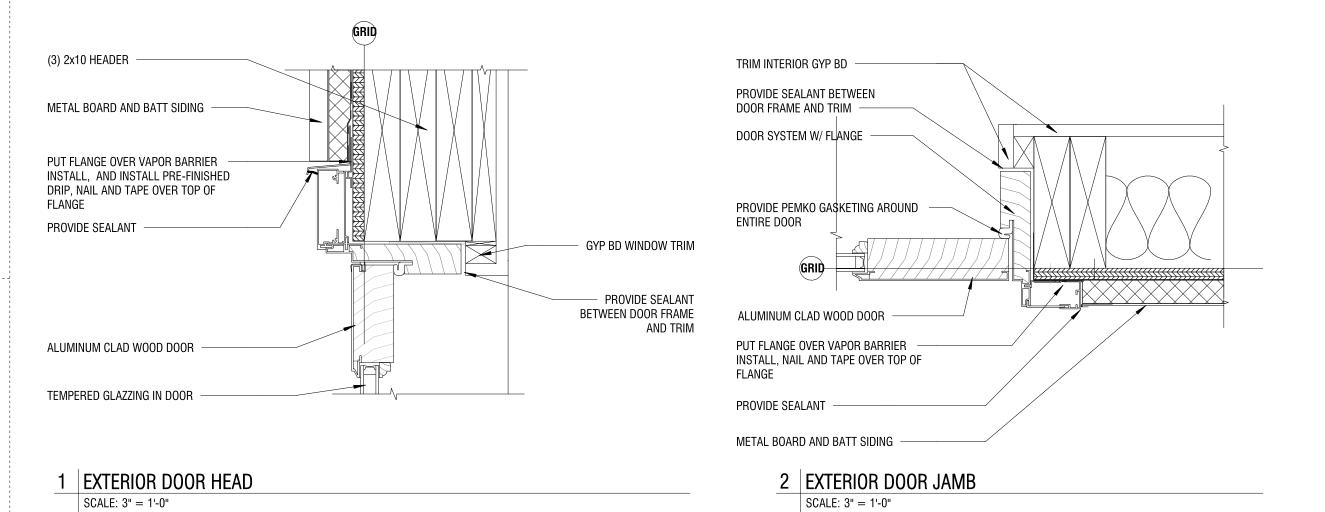
THRESHOLD

DOOR STOPS

ROCKWOOD 518 - US26D

ROCKWOOD 518 - US26D

		Ε	DO	OOR		D00R	FRAME				
MARK	ROOM	TVDE	S HEIGHT	ize Width	DOOR THICKNESS	GLAZING	MATERIAL	Construction	DOOR Material	HARDWARE	COMMENTS
IVIANN	NUUIVI	ITFE	ПЕІВПІ	חוטוא	IHICKINESS	GLAZING	IVIATERIAL	Туре	Maltiai	HANDWANE	GOIVIIVIEN 13
101A	MID	1	6' - 8"	2' - 10"	1 3/8"	N/A	WD	HOLLOW CORE	WD	4	POCKET DOOR
	MUD	2	6' - 8"	2' - 4"	1 1/2"	N/A	WD	HOLLOW CORE	WD	3	HINGED
102A	BED ROOM #1	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	2	HINGED
102B	BED ROOM #1	3	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD		BI-FOLD
	BED ROOM #1	3	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD		BI-FOLD
103A	BED ROOM #2	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD		HINGED
103B	BED ROOM #2	3	6' - 8"	6' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
104A	MASTER	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	2	HINGED
104B	MASTER	4	6' - 8"	8' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
104D	MASTER BATH	4	6' - 8"	2' - 10"	1 3/8"	N/A	WD	HOLLOW CORE	WD	4	POCKET DOOR
106A	BATH	2	6' - 8"	3' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	2	HINGED
108A	DINING + LIVINGROOM	1	7' - 0"	3' - 0"	2"	Υ	WD/ALUM	SOLID CORE	WD/ALUM	1	EXTERIOR DOOR INTO FIRST FLOOR
109A	HALLWAY	2	6' - 8"	2' - 6"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	HINGED
109B	HALLWAY	3	7' - 0"	4' - 0"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
113A	STAIR	1	7' - 0"	3' - 0"	2"	Υ	WD/ALUM	SOLID CORE	WD/ALUM		EXTERIOR DOOR INTO STAIRWAY
B01A	BASEMENT	1	7' - 0"	3' - 0"	2"	Υ	WD/ALUM	SOLID CORE	WD/ALUM	1	EXTERIOR DOOR INTO BASEMENT
B01B	BASEMENT	2	6' - 8"	2' - 4"	1 1/2"	N/A	WD	HOLLOW CORE	WD	3	HINGED
B02A	MECHANICAL ROOM	2	6' - 8"	2' - 4"	1 1/2"	N/A	WD	HOLLOW CORE	WD	3	HINGED
B03A	CLOSET	3	6' - 8"	2' - 6"	1 1/2"	N/A	WD	HOLLOW CORE	WD	5	BI-FOLD
B04	FUTURE BATHROOM	N/A	6' - 8"	2' - 10"	1 1/2"	-		HOLLOW CORE	N/A		NOT IN BID, INFORMATION FOR OWNERS USE ONLY
B05	FUTURE BEDROOM #1	N/A	6' - 8"	2' - 10"	1 1/2"	-		HOLLOW CORE	N/A		NOT IN BID, INFORMATION FOR OWNERS USE ONLY
B06	FUTURE BEDROOM #2	N/A	6' - 8"	2' - 10"	1 1/2"	-		HOLLOW CORE	N/A		NOT IN BID, INFORMATION FOR OWNERS USE ONLY
B07	BASEMENT	N/A	6' - 8"	2' - 10"	1 1/2"	-		HOLLOW CORE	N/A		NOT IN BID, INFORMATION FOR OWNERS USE ONLY



FINISHED FLOOR **WINDOW TYPE** T = TEMPERED**WINDOW TYPE WINDOW TYPE** WINDOW TYPE **WINDOW TYPE WINDOW TYPE**

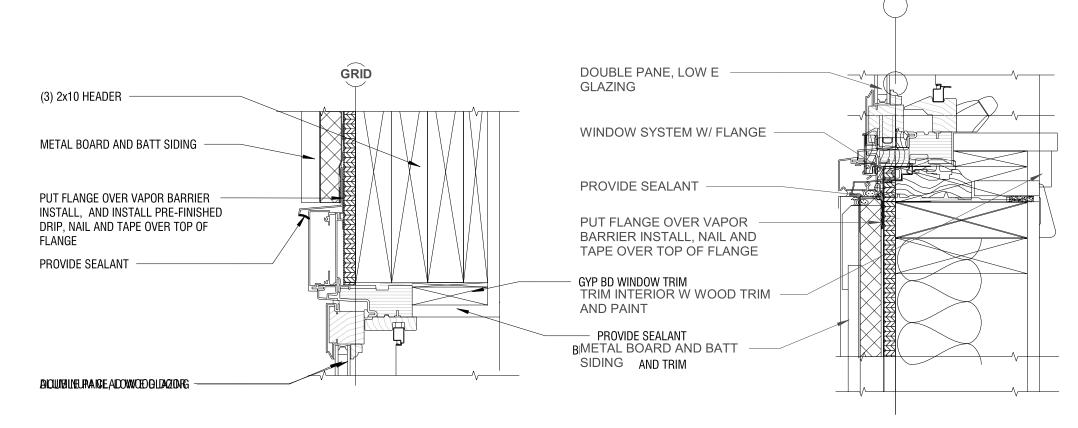
WINDOW LEGEND SCALE: 1/2" = 1'-0"

WINDOW SCHEDULE

					SILL	
MARK	TYPE	COUNT	WIDTH	HEIGHT	HEIGHT	REMARKS
А	48" x 48"	10	4' - 0"	4' - 0"	3' - 0"	
В	24" x 48"	4	4' - 0"	2' - 0"	1' - 0"	
С	24" x 48"	16	2' - 0"	4' - 0"	3' - 0"	CASEMENT WINDOW
D	48" x 72"	1	5' - 8"	4' - 0"	3' - 0"	PICTURE WINDOW
Е	72" x 36"	1	3' - 0"	6' - 0"	1' - 0"	PICTURE WINDOW
F	24" x 24"	2	2' - 0"	2' - 0"	5' - 0"	AWNING WINDOW

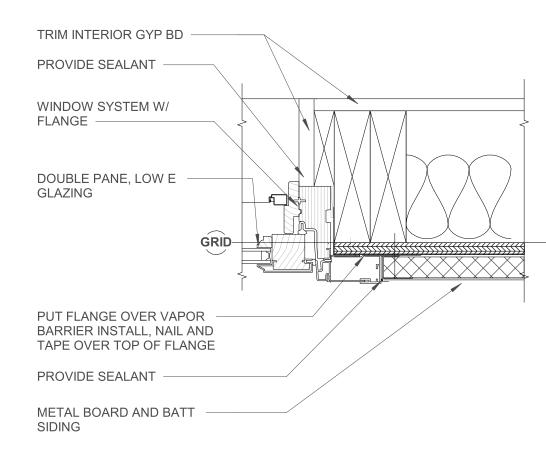
- 1. ALL GLASS WITHIN 18" OF FINISH FLOOR AND 24" FROM DOORS SHALL BE SAFETY GLASS PER IBC SECTION 2406.3.

 2. ALL WINDOWS ALUM FRAMES W/ DOUBLE-PANE GLASS
- 3. BASES OF WINDOW DESIGN ANDERSEN E SRIES WINDOWS, E-SERIES WINDOW PRODUCTS ARE EXTRUDED ALUMINUM CLAD WOOD



1 WINDOW HEAD SCALE: 3" = 1'-0"

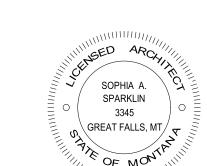
3 WINDOW SILL SCALE: 3" = 1'-0"



2 WINDOW JAMB SCALE: 3" = 1'-0"

WINDOW GENERAL NOTES:

- ALL DIMENSIONS SHALL BE FIELD VERIFIED.
 SWING INDICATION IS DIAGAMMATIC ONLY, SEE PLAN AND ELEVATION FOR ACTUAL SWING. 3. GLAZING USED IN DOORS, GLAZING WITHIN 18" OF THE FLOOR AND WITHIN A 24" ARC OF A DOOR, AND GLAZING SUBJECT TO HUMAN IMPACT SHALL BE FULLY TEMPERED OR LAMINATED GLASS.
- 4. ALL ENTRY DOORS TO HAVE U-FACTOR VALUE OF 0.77 OR BETTER.
 5. MATCH DOOR HARDWARE TO RATING AND ACCESSIBILITY REQUIREMENTS
- AS REQUIRED. 6. ENTRY DOORS TO MATCH EXISTING ENTRY DOOR FINISH AND COLOR.
- 7. INTERIOR DOORS AND FRAMES TO MATCH EXISTING ADJACENT INTERIOR DOORS FINISH AND COLOR, UNLESS NOTED OTHERWISE.
- 8. AISLES LEADING TO REQUIRED EXITS SHALL HAVE A MINIMUM WIDTH OF 44". A WALKWAY WITH A
- MINIMUM WIDTH OF 44" SHALL BE MAINTAINED CONTINUOUSLY TO A PUBLIC WAY.
 9. EXTERIOR CONCRETE SLABS AT DOOR OPENINGS SHALL HAVE A MAXIMUM SLOPE OF 1/4" PER FOOT.



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PHASE

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REVISIONS

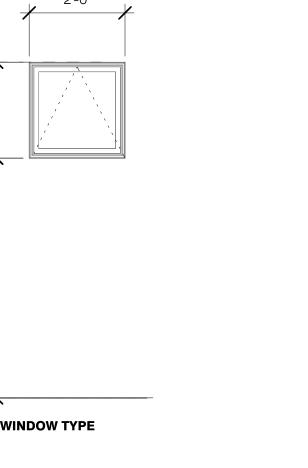
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WINDOW SCHEDULE

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GENERAL NOTES

CODES & STANDARDS

- 1. INTERNATIONAL BUILDING CODE 2018 IBC
- AMERICAN SOCIETY OF CIVIL ENGINEERS ASCE 7-16 AMERICAN CONCRETE INSTITUTE - ACI 318-14
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION AISC 360-16
- 5. SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS AISC 341-10
- 6. AMERICAN WELDING SOCIETY AWS D1.4/D1.4M-2017
- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION NDS 2018 8. INTERNATIONAL MASONRY INSTITUTE - TMS 402-16/TMS 602-16
- 9. ASTM STANDARDS FOR THE MATERIALS SPECIFIED.

DESIGN & STRUCTURAL CRITERIA

- 1. PROJECT LOCATION/LOCAL JURISDICTION: LEWISTOWN, MT
- OTHER STRUCTURAL ENGINEERING DESIGN FACTORS.
- 3. SOIL DESIGN CRITERIA
- 3.1. FROST DEPTH: 48 INCHES
- 3.2. ALLOWABLE BEARING PRESSURE: 1500 PSF COEFFICIENT OF FRICTION: .25
- 3.4. AT-REST EARTH PRESSURE: 60 PSF/FT 3.5. PASSIVE EARTH PRESSURE: 150 PSF/FT
- 4. DEAD LOADS
- 4.1. ROOF DEAD LOAD: 20 PSF 4.2. FLOOR DEAD LOAD: 17 PSF @ CARPET, 37 PSF @ TILE
- 5. LIVE LOADS
- ROOF LIVE LOAD: 20 PSF 5.2. FLOOR LIVE LOAD: 100 PSF @ PUBLIC ROOMS, 40 PSF @ PRIVATE ROOMS.
- AND 15 PSF @ PARTITIONS 6. WIND DESIGN CRITERIA
- 6.1. BASIC WIND SPEED: V = 110 MPH
- 6.2. EXPOSURE C 7. SEISMIC DESIGN CRITERIA
- 7.1. Ss = 0.103q, S1 = 0.047q
- 7.2. SITE SOIL CLASSIFICATION: D
- 7.3. SDS = 0.110q, SD1 = 0.075q7.4. SEISMIC DESIGN CATEGORY B
- SEISMIC DESIGN RESPONSE COEFFICIENT: Cs = 0.017
- 7.6. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
- 7.7. LATERAL FORCE RESISTING SYSTEM = WOOD WALLS W/ SHEATHING, R=6.5 8. SNOW DESIGN CRITERIA
- 8.1. GROUND SNOW LOAD (Pg): 55 PSF
- DESIGN ROOF SNOW LOAD (Pf): 43 PSF
- EXPOSURE FACTOR, Ce: 1.0
- 8.4. THERMAL FACTOR, Ct: 1.1
- IMPORTANCE FACTOR, Is: 1.0 8.6. ROOF SLOPE FACTOR, Cs: 1.0
- EXPOSURE C
- 8.8. DRIFTING: PER CODE 8.9. UNBALANCED: PER CODE
- 9. DEFLECTION
- 9.1. ROOF TOTAL LOAD: L/240
- 9.2. ROOF LIVE LOAD: L/360
- 9.3. FLOOR TOTAL LOAD: L/240
- 9.4. FLOOR LIVE LOAD: L/480 9.5. LATERAL SYSTEMS: L/180

MISCELLANEOUS

- 1. REFERENCE CIVIL DRAWINGS FOR EQUIPMENT LOCATION AND ORIENTATION ON THE 7. ALL HOOKS ON ALL BARS SHALL BE STANDARD 90 DEGREE HOOKS UNLESS SHOWN SITE. THE CONTRACTOR AND SUB-TRADES SHALL FURNISH ALL REQUIRED MATERIAL. LABOR, EQUIPMENT AND PERFORM ALL WORK AS NECESSARY, AS INDICATED ON THE WORK FOR A PROPERLY FINISHED, COMPLETE JOB.
- CONTRACTOR TO PASS BUILDING DEPT. OR ENGINEER INSPECTION FOR ROUGH CONSTRUCTION. THE LEVEL OF QUALITY AND TOLERANCE SHOULD BE APPROPRIATE FOR THE INSTALLED ELEMENT TO RECEIVE THE NEXT IN-LINE FINISH ASPECT OF CONSTRUCTION.
- 3. THE PURPOSE OF PROJECT DRAWINGS IS TO DEPICT THE OVERALL SCOPE OF THE DETAIL WITH THE OBJECTIVE OF PLAN CHECK APPROVAL AND ISSUANCE OF A BUILDING PERMIT. THIS MODERATE LEVEL OF DETAIL USED SHOULD ALLOW FOR A VARIETY OF STANDARD CONSTRUCTION METHODS AND SEQUENCES. THE PROJECT DRAWINGS ARE INTENDED TO COMPLY WITH THE ORDINANCES, RULES AND REGULATIONS OF THE JURISDICTION IN WHICH THE BUILDING IS LOCATED.
- 4. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNOLOGIES, SEQUENCES AND PROCEDURES.
- 5. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.
- 6. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.
- ALL CHANGES NECESSARY IF THEY CHOOSE AN OPTION AND THEY SHALL COORDINATE ALL DETAILS.
- 8. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
- 9. TYPICAL DETAILS ARE NOT CUT ON DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE.
- 10. IN THE CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS, PLANS/DETAILS OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR WILL BE DEEMED TO HAVE INCLUDED IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK, UNLESS PRIOR TO THE SUBMISSION OF THE PRICE, THE CONTRACTOR ASKS FOR A DECISION FROM THE ARCHITECT AS TO WHICH SHALL GOVERN. ACCORDINGLY, ANY CONFLICT IN OR BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADJUSTMENT IN THE CONTRACT PRICE.
- 11. VISITS TO THE JOBSITE BY THE ENGINEER TO OBSERVE CONSTRUCTION DO NOT IN ANY WAY MEAN THAT THEY ARE THE GUARANTORS OF THE CONTRACTORS WORK, NOR SUPERVISION, NOR SAFETY AT THE JOBSITE.

GENERAL NOTES - CONT

- 12. REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. REVIEW OF SUCH SHOP DRAWINGS BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR CORRECTNESS OF DIMENSIONS, FABRICATION DETAILS, SPACE REQUIREMENTS, AND ERRORS IN THE SHOP DRAWINGS, OR FOR DEVIATIONS FROM THE CONTRACT DRAWINGS OR SPECIFICATIONS UNLESS THE CONTRACTOR HAS SPECIFICALLY CALLED ATTENTION TO SUCH DEVIATIONS IN WRITING BY A LETTER ACCOMPANYING THE SHOP DRAWINGS AND THE ENGINEER APPROVES SUCH CHANGE OR DEVIATION IN WRITING.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK THAT CONFORMS TO THE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SAFETY AND HEALTH STANDARDS FOR THE CONSTRUCTION INDUSTRY.
- 2. RISK CATEGORY: CATEGORY II FOR DETERMINATION OF LOADING, IMPORTANCE & 14. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING WITH APPROPRIATE TRADES. DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. DO NOT PENETRATE ANY STRUCTURAL ELEMENTS (BEAMS, COLUMNS, WALLS, SLABS, STEEL DECKS, ETC.) WITHOUT PRIOR WRITTEN APPROVAL OF STRUCTURAL ENGINEER THROUGH ARCHITECT.
 - 15. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
 - 16. CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND ELEVATIONS SHOWN ON STRUCTURAL DRAWINGS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. NOTED SCALES ARE INTENDED FOR FULL SIZE PLANS. DO NOT SCALE DRAWINGS, USE FIGURED DIMENSIONS ONLY.

CONCRETE

- CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE." ALL REINFORCING SHALL CONFORM TO THE CRSI SPECIFICATIONS & HANDBOOK. CONCRETE PLACEMENT SHALL MEET ALL COLD WEATHER AND HOT WEATHER REQUIREMENTS OUTLINED IN ACI 306 & 305 RESPECTIVELY.
- 2. ADDITION OF WATER TO THE BATCH FOR MATERIAL WITH INSUFFICIENT SLUMP WILL NOT BE PERMITTED, UNLESS THE SUPPLIER HAS SPECIFICALLY WITHHELD WATER FROM THE BATCH STATE THE MAXIMUM AMOUNT OF WATER THAT CAN BE ADDED TO THE BATCH ON SITE. IN NO CASE SHALL THE DESIGN WATER TO CEMENTITIOUS MATERIAL RATIO BE EXCEEDED.
- 1", TO BE FIELD VERIFIED, PRIOR TO ADDING ADMIXTURE. AND NOT EXCEEDING 8" AT PLACEMENT.
- 4. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, INCLUDING SLABS ON GRADE AT 2'-0" OC AROUND AND UNDER-FLOOR DUCTS AND SLAB EDGES, REINFORCING, KEYS, ETC. MECHANICALLY VIBRATE ONLY THE TOP 5 FEET OF CAISSON CONCRETE. REVIBRATE TOP OF CAISSON 15 MINUTES AFTER PLACING CONCRETE.
- THE HOSE. THE HOSE SHALL NOT BE ALLOWED TO CONTACT THE REBAR OR TENDONS. THIS REQUIREMENT IS MANDATORY. DISCHARGE SHALL BE DIRECTED SO AS TO PREVENT DISPLACEMENT OF REBAR, TENDONS, OR ACCESSORIES.
- 6. REINFORCING SHALL BE CONTINUOUS AROUND ALL CORNERS AND THROUGH CONSTRUCTION JOINTS UNLESS SHOWN OTHERWISE.
- OTHERWISE.
- PROJECT DOCUMENTS, OR AS REASONABLY INFERRED TO EXECUTE THE SCOPE OF 8. REINFORCING STEEL SHALL NOT BE BENT OR STRAIGHTENED IN A MANNER INJURIOUS TO THE CONCRETE OR STEEL.
- 2. THE QUALITY OF WORKMANSHIP SHOULD BE SET AND SUPERVISED BY THE 9. ALL REINFORCING TO BE WELDED SHALL BE WELDED IN ACCORDANCE WITH AWS D1.4. NO TACK WELDING OF REINFORCING BARS IS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE BY STRUCTURAL ENGINEER.
 - 10. ALL CONDUITS, GROUND WIRES, DRAINS, ANCHOR BOLTS, OTHER EMBEDDED ITEMS, ETC. SHALL BE IN PLACE BEFORE CONCRETE PLACEMENT.
- PROJECT. THE PROJECT DRAWINGS HAVE BEEN DEVELOPED TO SHOW A LEVEL OF 11. REINFORCING LAP SPLICES IN CONCRETE SHALL BE PER TYPICAL DETAIL UNLESS NOTED OTHERWISE. ALL SPLICE LOCATIONS ARE SUBJECT TO APPROVAL. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF FOOTINGS AND WALLS.
 - 12. ALL FIELD BENDING OF REINFORCING SHALL BE STANDARD 90 DEGREE HOOKS AS DEFINED IN CURRENT ACI 318 UNLESS NOTED OR DETAILED OTHERWISE.
- STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE 13. WHEN TOTAL NUMBER OF REINFORCING BARS IS SHOWN ON DESIGN DRAWINGS AND SPACING IS NOT SPECIFIED. BARS SHALL BE EQUALLY SPACED.
 - 14. DETAILS OF REINFORCING NOT SHOWN IN THESE PLANS SHALL BE DONE IN ACCORDANCE WITH ACI 315 AND ACI 318.
 - 15. DRILLED PIER CONCRETE SHALL BE CHANNELED TO FREE FALL DOWN THE SHAFT WITHOUT STRIKING THE REINFORCING OR THE SIDES OF THE SHAFT. MAXIMUM HEIGHT OF FREE-FALL IS 10'-0".
- 7. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. THEY SHALL BE RESPONSIBLE FOR 16. ALL SLABS-ON-GRADE SHALL HAVE CONTROL JOINTS CUT IN CONCRETE WITHIN 8 HOURS OF PLACEMENT AT A SPACING NO GREATER THAN 10'OCEW (UNO ON PLANS).

FOUNDATION AND SOIL PREPARATION

SITE GRADING AND EXCAVATIONS

- 1. FOUNDATIONS HAVE BEEN DESIGNED BASED ON RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL EVALUATION BY TD&H ENGINEERING DATED JUNE 2020. THE FOLLOWING AIS NOTES ARE TYPICAL AND SHALL NOT GOVERN SITE SPECIFIC REQUIREMENTS AS OUTLINED IN THIS REPORT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THIS REPORT AND FOLLOWING THOSE RECOMMENDATIONS.
- 2. CONFORM TO IBC CHAPTER 18 "SOILS AND FOUNDATIONS".
- 3. ALL TOPSOIL AND ORGANIC MATERIAL, ASPHALT, CONCRETE AND RELATED CONSTRUCTION A DEBRIS SHALL BE REMOVED FROM THE PROPOSED BUILDING AND PAVEMENT AREAS AND ANY AREAS TO RECEIVE SITE GRADING FILL. FOR PLANNING PURPOSES, A MINIMUM @ STRIPPING THICKNESS OF 6 INCHES IS RECOMMENDED. THICKER STRIPPING DEPTHS MAY BL BE WARRANTED TO REMOVE ALL DETRIMENTAL ORGANICS AS DETERMINED ONCE ACTUAL STRIPPING OPERATIONS ARE PERFORMED.
- 4. ALL FILL AND BACKFILL SHALL BE NON-EXPANSIVE. FREE OF ORGANICS AND DEBRIS BO AND SHALL BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER. ALL FILL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS FOR F FINE-GRAINED SOILS AND NOT EXCEEDING 12 INCHES FOR GRANULAR SOILS. ALL FILL BI AND BACKFILL SHALL BE COMPACTED TO THE FOLLOWING PERCENTAGES OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 OR EQUIVALENT (E.G. ASTM D4253-D4254).

4.1.	BELOW FOUNDATIONS OR SPREAD FOOTINGS	95%
4.2.	BELOW SLAB-ON-GRADE CONSTRUCTION	95%
4.3.	FOUNDATION WALL BACKFILL	95%
4.4.	GENERAL LANDSCAPING OR NONSTRUCTURAL AREAS	92%

5. IMPORTED STRUCTURAL FILL SHALL BE NON-EXPANSIVE, FREE OF ORGANICS AND DEBRIS. AND CONFORM WITH THE MATERIAL REQUIREMENTS OUTLINED IN SECTION 02234 OF MPWSS.

SPREAD FOOTING FOUNDATIONS

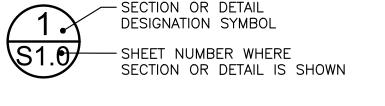
- BOTH INTERIOR AND EXTERIOR FOOTINGS SHALL BEAR ON PROPERLY COMPACTED NATIVE SOILS. AN ALLOWABLE SOIL BEARING PRESSURE OF 1,500 PSF WAS USED FOR ALL FOOTINGS.
- AT THE PLANT. IN SUCH CASE THE MIX DESIGN AND TRUCK TICKET MUST CLEARLY 2. SOILS DISTURBED BELOW THE PLANNED DEPTHS OF FOOTING EXCAVATIONS SHALL EITHER BE RECOMPACTED OR BE REPLACED WITH SUITABLE COMPACTED BACKFILL APPROVED BY THE GEOTECHNICAL ENGINEER.
- 3. CONCRETE CONTAINING SUPERPLASTICIZING ADMIXTURE SHALL HAVE A SLUMP OF 4" + / 3. THE BOTTOM OF THE FOOTING EXCAVATIONS SHALL BE FREE OF COBBLES AND BOULDERS TO AVOID STRESS CONCENTRATIONS ACTING ON THE BASE OF THE FOOTINGS.
 - 4. A REPRESENTATIVE OF THE PROJECT GEOTECHNICAL ENGINEER SHALL OBSERVE ALL FOOTING EXCAVATIONS AND BACKFILL PHASES PRIOR TO THE PLACEMENT OF CONCRETE FORMWORK.

FLOOR SLABS AND EXTERIOR FLATWORK

5. IF CONCRETE IS PLACED BY THE PUMP METHOD, SUPPORTS SHALL BE PRODUCED FOR 1. FOR NORMALLY LOADED, SLAB-ON-GRADE CONSTRUCTION, A MINIMUM 6-INCH CUSHION COURSE CONSISTING OF FREE-DRAINING, CRUSHED GRAVEL SHOULD BE PLACED BENEATH THE SLABS AND COMPACTED TO A MINIMUM OF 95 PERCENT DENSITY PER ASTM D698 (OR EQUIVALENT PER ASTM D4253-D4254). THIS MATERIAL SHOULD CONFORM TO F SECTION 02235 OF MPWSS AND INCORPORATE A MAXIMUM PARTICLE SIZE OF $\frac{3}{4}$ -INCH. PRIOR TO PLACING THE CUSHION COURSE, THE UPPER SIX INCHES OF SUBGRADE SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY PER ASTM D698.

LEGEND AND ABBREVIATIONS

LEGEND	AND ADDRE	VIATIONS	
AB	ANCHOR BOLT	HORIZ	HORIZONTAL
ACI	AMERICAN CONCRETE	HSA	HEADED STUD ANCHOR
7.01	INSTITUTE	HSS	HOLLOW STRUCT STEEL
AISC	AMERICAN INSTITUTE	IBC	INTERNATIONAL BUILDING
, 1100	OF STEEL CONSTRUCTION		CODE
ALT	ALTERNATE	INT	INTERIOR
APPROX	APPROXIMATE	L	STEEL ANGLE
ARCH	ARCHITECTURAL	LG	LIGHT GAUGE
ASTM	AMERICAN SOCIETY FOR	LLV	LONG LEG VERTICAL
7.01141	TESTING MATERIAL	LONG	LONGITUDINAL
AWS	AMERICAN WELDING	MAX	MAXIMUM
, 5	SOCIETY	MCJ	MASONRY CONTROL JOINT
@	AT	MECH	MECHANICAL
BLDG	BUILDING	MANUF OR MFR	MANUFACTURER
BLK'G	BLOCKING	MIN	MINIMUM
BM	BEAM	MISC	MISCELLANEOUS
BOC	BOTTOM OF CONCRETE	NO. OR #	NUMBER
BOF	BOTTOM OF FOOTING	(N)	NEW
BOS	BOTTOM OF STEEL/SLAB	NTS	NOT TO SCALE
BOT	BOTTOM OF	OC	ON CENTER
BRG	BEARING	OCEF	ON CENTER EACH FACE
BTB	BACK TO BACK	OCEW	ON CENTER EACH WAY
BTWN	BETWEEN	OPP	OPPOSITE
C	STEEL CHANNEL	OWJ	OPEN WEB JOIST
C CFS	COLD FORMED STEEL	PEMB	PRE-ENGINEERED METAL
CIP	CAST IN PLACE	LIND	BUILDING
CJ	CONTROL JOINT	PLCS	PLACES
€ OR CL	CENTERLINE	PL	PLATE
Q OR CL CLR	CLEAR	PREFAB	PREFABRICATED
CMU	CONCRETE MASONRY UNIT		POUNDS PER SQUARE FOOT
COL	COLUMN	PSI	POUNDS PER SQUARE INCH
CONC	CONCRETE	PT	PRESSURE TREATED
CONN	CONNECTION	REF	REFERENCE
CONT	CONTINUOUS	REINF	REINFORCEMENT
DEMO	DEMOLISH	REQ'D	REQUIRED
DET	DETAIL	REV	REVISION/REVISED
DF	DOUGLAS FIR	SCH OR SCHED	SCHEDULE
Ø OR DIA	DIAMETER	SFE SFE	SUBFLOOR ELEVATION
DIM	DIMENSION	SHT	SHEET
DJ	DOUBLE JOIST	SIM	SIMILAR
DWG	DRAWING	SOG	SLAB-ON-GRADE
EA	EACH	SPCS OR SPA	SPACE(S)
EA WAY OR EW	EACH WAY		
EF CONTRACTOR	EACH FACE	SPEC SQ	SPECIFICATION(S)
EJ	EXPANSION JOINT	STD	SQUARE STANDARD
EL OR ELEV	ELEVATION	STRUCT	STRUCTURAL
EMBED	EMBEDMENT	SYM	SYMMETRICAL
ENG	ENGINEER	T&B	TOP & BOTTOM
EOR	ENGINEER OF RECORD	T&G	TONGUE & GROOVE
EQ	EQUAL	THRU	THROUGH
EXIST OR (E)	EXISTING	TOB	TOP OF BEAM
EXP	EXPANSION	TOC	TOP OF CONCRETE
EXT	EXTERIOR	TOF	TOP OF FOOTING
FDT OR FND	FOUNDATION	TOS	
FF	FINISH FLOOR	TOW	TOP OF STEEL/SLAB TOP OF WALL
FLR	FLOOR	TRANS	TRANSVERSE
FTG	FOOTING	TYP	TYPICAL
GA	GAUGE	VIF	VERIFY IN FIELD
GALV	GALVANIZED	VERT	VERTICAL
GEN	GENERAL	UNO	UNLESS NOTED OTHERWISE
GLB	GLULAM BEAM	W/	WITH
GR	GRADE	W/ WF	WITH WIDE FLANGE
		WP	WORK POINT
		WT	WEIGHT
4 '4		***	•
4.4	CONCRETE	(1)	ELEVATION NOTED
		Y	ELAC NOTE
	CONCRETE MASONRY UNIT	X	FLAG NOTE
LX_X_X_X_X_X_X_		lack	DEVICION CDEOIEIED



STEEL IN SECTION

DRYPACK/FLOWABLE GROUT

1. THE SPACE BENEATH ALL BASEPLATES AND BEARING PLATES SHALL BE THOROUGHLY CLEANED BEFORE DRYPACKING OR GROUTING. DRYPACK/GROUT SOLID BENEATH ALL BASEPLATES AND BEARING PLATES. NO VOIDS ARE PERMISSIBLE. USE OF DRYPACK OR FLOWABLE GROUT IS AT THE PLANS OR DETAILS, DRYPACK/GROUT PER THE FOLLOWING:

REVISION SPECIFIED

- 1.1. DRYPACK PORTLAND CEMENT, ASTM C150, TYPE I; AND CLEAN, NATURAL SAND, ASTM C404, SIZE NO. 2, MINIMUM COMPRESSIVE STRENGTH SHALL BE 5000 PSI AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C109.
- 1.2. FLOWABLE GROUT PREMIXED, NONMETALLIC, NONCORROSIVE, NONSTAINING GROUT CONTAINING SELECTED SILICA SANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AGENTS, PLASTICIZING AND WATER-REDUCING AGENTS, COMPLYING WITH ASTM C1107, OF CONSISTENCY SUITABLE FOR APPLICATION, AND A 30-MINUTE WORKING TIME. MINIMUM COMPRESSIVE STRENGTH SHALL BE 5000 PSI AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C1107.
- 2. GROUTING IS THE RESPONSIBILITY OF THE CONCRETE CONTRACTOR. GROUTING SHOULD BE PREFORMED PROMPTLY ONCE STEEL COLUMNS ARE IN THEIR FINAL LOCATIONS. STEEL ERECTOR SHALL NOTIFY CONCRETE CONTRACTOR IMMEDIATELY UPON FINAL PLACEMENT OF COLUMNS.



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Date 100% CD **BID SET**

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GENERAL STRUCTURAL NOTES

REINFORCING BARS

HSS SQ OR RECT ASTM A500, GR C, Fy = 50 KSI HSS ROUND ASTM A500, GR C, Fy = 46 KSI

CONCRETE ALL (U.N.O.) PORTLAND CEMENT ASTM C150 TYPE II
W/C RATIO = 0.45 MAXIMUM

28 DAY f'c = 4000 PSI SLUMP RANGE 3-5 INCHES

AIR CONTENT = 4.5 - 7.5% (AIR CONTENT OF SLABS-ON-GRADE MAY BE REDUCED TO 2% MIN IF THE SLAB WILL BE PROTECTED FROM FREEZE/THAW CYCLES DURING AND AFTER CONSTRUCTION.)

3/4" MAXIMUM NORMAL WEIGHT AGGREGATE

ASTM A615, GRADE 60 (NON-WELDABLE)
ASTM A706, GRADE 60 (WELDABLE)
ASTM A-185 (WELDED WIRE FABRIC)

ANCHOR RODS ASTM F1554, GRADE 36

HIGH STRENGTH BOLTS ASTM A325N

BOLTS ASTM A307, GALVANIZED PER ASTM A153 (ONLY WHERE NOTED ON PLANS)

WELD METAL E70XX ELECTRODE

ADHESIVE ANCHORS CONCRETE HILTI HIT RE 500V3

ALL ASTM A36 ALL—THREAD WITH CHISEL POINT

WOOD SILL PLATES, D.F. #2
2x6 STUDS AND LARGER, H.F. #2

SIMPLE SPAN GLU-LAMINATED BEAMS, 24F-V4
CONTINUOUS SPAN GLU-LAMINATED BEAMS, 24F-V8
WALL SHEATHING, 24/16 OSB, EXPOSURE 1
ROOF SHEATHING, 40/20 CDX PLYWOOD

FLOOR SHEATHING, ¾" APA RATED STUD-I-FLOOR

ANCHOR ROD NOTES:

ANCHOR ROD LOCATIONS AND DIAMETERS ARE PER PLANS.

- 2. ALL ANCHOR RODS SHALL BE EITHER HEADED OR DOUBLE NUT WITH 1/4"x2"x2" STEEL WASHER.
- 3. MINIMUM EMBEDMENT PER PLANS.
- 4. ANCHOR RODS SHALL BE ASTM F1554 GR 36 MATERIAL.
- 5. ANCHOR NUTS SHALL BE INSTALLED SNUG TIGHT.
- 6. EPOXY AND EXPANSION ANCHORS SHALL BE HILTI (OR EQUAL) INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

SHOP DRAWINGS

- 1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER AND MUST RECEIVE APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING MATERIALS:
- 1.1. CONCRETE MIX DESIGN
 1.2. REBAR TYPE & LOCATION
- 1.3. BOLTS AND ANCHOR BOLTS
- 1.4. STEEL MEMBERS, PROPERTIES & LAYOUT
- 1.5. PRE—ENGINEERED TIMBER TRUSS LAYOUT & CALCULATIONS WITH P.E. STAMP IN THE STATE IN WHICH THE PROJECT IS LOCATED
- 1.6. FLOOR JOISTS
- DATA FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMISSION. ANY SHOP DRAWINGS OR PRODUCT DATA NOT REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR WILL BE RETURNED WITHOUT REVIEW.
- 3. ANY SHOP DRAWING NOT CHECKED AND INITIALED BY THE SUPPLIER/DETAILER PRIOR TO SUBMITTING FOR ARCHITECTURAL AND ENGINEERING REVIEW, WILL BE RETURNED WITHOUT REVIEW.
- 4. THE CONSTRUCTION DOCUMENTS MAY NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- 5. ELECTRONIC FILES OF CONSTRUCTION DOCUMENTS WILL NOT BE MADE AVAILABLE FOR USE AS SHOP DRAWINGS.

DEFERRED SUBMITTALS

- 1. DEFERRED SUBMITTALS ARE THOSE PORTIONS FOR THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF PERMIT APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE BUILDING OFFICIAL WITHIN A SPECIFIED PERIOD.
- 2. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD THROUGH THE ARCHITECT AND GENERAL CONTRACTOR WITHIN 6 WEEKS OF AWARD OF CONTRACT TO THE GENERAL CONTRACTOR. ONCE THE SUBMITTAL DOCUMENTS HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS, THE ENGINEER OF RECORD WILL FORWARD THEM TO THE ARCHITECT WITH A NOTATION INDICATION THAT THEY ARE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE ARCHITECT WILL FORWARD THE DEFERRED SUBMITTAL DOCUMENTS TO THE GENERAL CONTRACTOR WHO WILL MAINTAIN ONE SET ON SITE FOR REFERENCE BY THE CITY INSPECTOR. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
- 3. ITEMS THAT ARE SUBMITTED FOR CONSIDERATION AS DEFERRED SUBMITTALS ARE AS FOLLOWS:
 - LOWS:
 3.1. PREFABRICATED WOOD TRUSSES
 - 3.2. STRUCTURAL FILL MATERIAL3.3. CONCRETE MIX DESIGN

WOOD

- 1. ALL WOOD TO BE CONSTRUCTED USING STANDARD PRACTICES. LATEST EDITION OF NATIONAL DESIGN SPECIFICATION (NDS) APPLIES.
- 2. PROVIDE ALL ACCESSORY ITEMS FOR ENGINEERED WOOD PRODUCTS (BLOCKS, CLIPS, STRAPS, STIFFENERS, ETC) DESIGNED BY THE MANUFACTURER AS REQUIRED.
- 3. FOLLOW ALL MANUFACTURERS RECOMMENDATIONS FOR INSTALLATION OF ALL ENGINEERED WOOD PRODUCTS AND ALL FRAMING CONNECTORS, HANGERS AND ANCHORS.
- 4. PROVIDE FULL BEARING FOR ALL FRAMING MEMBERS UNLESS SHOWN OTHERWISE. ALL WALL FRAMING TO BE HF #2 OR BETTER (UNO). ALL GLUE LAMINATED BEAMS (GLB) SHALL BE 24F-V4 (24F-V8 FOR CONTINUOUS SPANS) AND AC V12 FOR EXPOSED APPLICATIONS UNLESS BEAM IS PROTECTED FROM WEATHER THEN 24F IS ACCEPTABLE. SILL PLATES TO BE DF #2.
- 5. WALLS TO HAVE 8d NAILS @ 6" OC AT EDGE AND 12" OC IN FIELD, FULLY BLOCKED.
 ALL OPENINGS TO HAVE 8d NAILS @ 3" OC ALL AROUND. UNO ON SHEAR WALL PLANS.
- 6. ROOF TRUSSES SHALL BE DESIGNED BY OTHERS AND BE SEALED BY A PROFESSIONAL ENGINEER IN THE STATE IN WHICH THE PROJECT IS LOCATED.
- 7. ALL TRUSSES AND OVERHANGS TO BE CONNECTED TO WALLS WITH SIMPSON H1 CLIPS.
- 8. ROOF TRUSSES AND MONOTRUSSES SHALL BE PRESSED—PLATE LUMBER, DESIGNED BY OTHERS, IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE TP1, AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 9. INSTALL TEMPORARY AND PERMANENT TRUSS BRACING ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND IN ACCORDANCE WITH BCSI GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES, 2018 EDITION.
- 10. INSTALL CONTINUOUS LATERAL RESTRAINT BRACING ACCORDING TO MANUFACTURER'S SPECIFICATIONS. CONTRACTOR TO PROVIDE A PROJECT-SPECIFIC PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING DESIGN SPECIFIED BY A REGISTERED DESIGN PROFESSIONAL IN ACCORDANCE WITH IBC 2303.4.1.2. CONTINUOUS LATERAL RESTRAINTS SHALL BE DIAGONALLY BRACED IN ACCORDANCE WITH BCSI-B3.
- 11. PLACE FLOOR AND ROOF SHEATHING WITH FACE GRAIN PERPENDICULAR TO THE SUPPORTS AND JOINTS STAGGERED OVER SUPPORTS. PLACE WALL SHEATHING WITH FACE GRAIN VERTICAL.
- 12. ALL TIMBER SHALL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS OUTLINED IN CHAPTER 23 OF THE 2018 IBC INCLUDING USING THE FASTENING SCHEDULE (TABLE 2304.10.1 OF 2018 IBC), EXCEPT AS NOTED DIFFERENTLY ON PLANS.
- 13. ALL ROOF AND FLOOR SHEATHING SHALL BE CDX PLYWOOD. ALL WALL SHEATHING SHALL BE ORIENTED STRAND BOARD. WALL SHEATHING SHALL EXTEND AND ATTACH TO (USING MIN 10d NAILS @ 6" OC, UNO) THE TOP AND BOTTOM OF THE WALL TOP AND BOTTOM HORIZONTAL PLATES (RESPECTIVELY). NO HORIZONTAL JOINT OF THE SHEATHING CAN BE WITHIN 2" OF THE TOP OR BOTTOM PLATE.
- 14. TYPICAL SUB-FLOOR SHALL BE 34" TONGUE & GROOVE APA RATED STURD-I-FLOOR PLYWOOD NAILED W/ 10d @ 6" OC AT SHEET EDGES AND @ 12" OC FIELD. TYPICAL ROOF SHEATHING SHALL BE 56" THICK APA SPAN RATED CD-X PLYWOOD NAILED W/ 10d @ 6" OC AT SHEET EDGES AND @ 12" OC FIELD.
- 15. ALL NAILS SHALL BE COMMON NAILS UNO.
- 16. ALL METAL FASTENERS AND CONNECTORS IN CONTACT WITH P.T. WOOD SHALL BE GALVANIZED.
- 17. ALL LUMBER IN CONTACT WITH GROUND, CONCRETE, OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED. ALL METAL EXPOSED TO WEATHER OR IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL, HOT DIPPED GALVANIZED (MIN. G180) OR OTHERWISE PROTECTED AGAINST CORROSION.
- 18. BRACE STUD WALLS UNTIL ALL PLYWOOD SUB-FLOOR, FLOOR TRUSSES, ROOF TRUSSES, AND SHEAR PANELS ARE IN PLACE.
- 2. THE GENERAL CONTRACTOR WILL REVIEW AND STAMP ALL SHOP DRAWINGS AND PRODUCT 19. ANCHOR RODS FOR HOLDOWNS SHALL HAVE TACK WELDED NUT OR DOUBLE NUT ON DATA FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMISSION.

 ANY SHOP DRAWINGS OR PRODUCT DATA NOT REVIEWED AND STAMPED BY THE GENERAL

 THE TOP OF THE UPPERMOST EMBEDDED NUT TO THE TOP OF THE CONCRETE.

STATEMENT OF SPECIAL INSPECTIONS

- 1. SPECIAL INSPECTION AND TESTING SHALL BE PROVIDED BY THE OWNER IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 IBC.
- 2. ALL SPECIAL INSPECTORS SHALL BE UNDER THE SUPERVISION OF A REGISTERED CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE IN WHICH THE WORK IS TO BE PERFORMED. ALL INSPECTIONS SHALL BE PERFORMED BY EXPERIENCED PERSONNEL MEETING THE REQUIREMENTS OF THE IBC AND AC291 "ACCREDITATION CRITERIA FOR SPECIAL INSPECTION AGENCIES" AND SHALL BE APPROVED BY THE LICENSED ENGINEER OF RECORD.
- 3. SPECIAL INSPECTIONS ARE NOT REQUIRED FOR WORK OF A MINOR NATURE AS APPROVED BY THE BUILDING OFFICIAL. NOR ARE THEY REQUIRED FOR GROUP U OCCUPANCIES.
- 4. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND— OR SEISMIC FORCE RESISTING SYSTEM SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK AS OUTLINED IN 1704.4 OF THE IBC.
- 5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR OR SPECIAL INSPECTION AGENCY AT LEAST TWO WORKING DAYS PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. ALL WORK PERFORMED WITHOUT THE REQUIRED SPECIAL INSPECTION IS SUBJECT TO REMOVAL.
- 6. SPECIAL INSPECTIONS SHALL BE REQUIRED FOR PROPOSED WORK THAT IS, IN THE OPINION OF THE BUILDING OFFICIAL, UNUSUAL IN ITS NATURE, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING EXAMPLES: CONSTRUCTION MATERIALS AND SYSTEMS THAT ARE ALTERNATIVES TO MATERIALS AND SYSTEMS PRESCRIBED BY THE IBC, UNUSUAL DESIGN APPLICATIONS OF MATERIALS PRESCRIBED IN THE IBC, AND MATERIALS AND SYSTEMS REQUIRED TO BE INSTALLED IN ACCORDANCE WITH ADDITIONAL MANUFACTURER'S INSTRUCTIONS THAT PRESCRIBE REQUIREMENTS NOT CONTAINED IN THE IBC OR IN STANDARDS REFERENCED BY THE IBC.

	TABLE 1705.3 REQUIRED SPECIAL INSPECTIONS AND TESTS OF	CON	ICRETE (CONSTRUCTIO	N
APPLIES	TYPE	CONT	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
Х	1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	×	ACI 318, CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
	2. REINFORCING BAR WELDING:				
	a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	_	×	AWS D1.4 ACI 318:	_
	b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/6"; AND		×	26.6.4	
	c. INSPECT ALL OTHER WELDS.	X			
Χ	3. INSPECT ANCHORS CAST IN CONCRETE.	_	X	ACI 318: 17.8.2	_
Х	4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.				
	a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	×		ACI 318: 17.8.2.4	_
	b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.		X	ACI 318: 17.8.2	
X	5. VERIFY USE OF REQUIRED DESIGN MIX	-	×	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2 1908.2, 1908.3
X	6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	_	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.10
Х	7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	Х	_	ACI 318: 26.5	1908.6, 1908.7 1908.8
Х	8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	_	Х	ACI 318: 26.5.3-26.5.5	1908.9
	9. INSPECT PRESTRESSED CONCRETE FOR:				
	a. APPLICATION OF PRESTRESSING FORCES; AND	X	_	ACI 318: 26.10	_
	b. GROUTING OF BONDED PRESTRESSING TENDONS.	X	_		
	10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	_	X	ACI 318: 26.9	_
	11. VERIFY IN—SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST—TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	_	×	ACI 318: 26.11.2	_
Х	12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	_	Х	ACI 318: 26.11.1.2(b)	_

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TABLE 1705.6 REQUIRED VERIFICATION AND INSPECTION OF SOILS						
APPLIES	VERIFICATION AND INSPECTION TASK	CONT	PERIODIC			
Х	1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		Х			
Х	2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X			
Х	3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		Х			
Х	4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	Х				
Х	5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		Х			



RESIDENCE

gs Trout Hatchert, Lewistown, MT 59404

FWP BIG

100% CD

BID SET

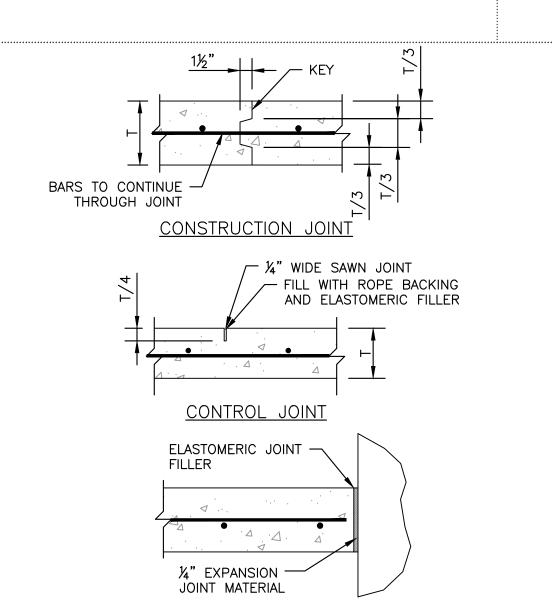
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GENERAL STRUCTURAL NOTES

S1.1



CONCRETE SLAB JOINT DETAILS NTS

EXPANSION JOINT

CAST-IN-PLACE (NONPRESTRESSED) CONCRETE	CONCRETE COVER
CAST AGAINST & EXPOSED TO EARTH	3"
EXPOSED TO EARTH OR WEATHER	
NO. 6 THROUGH NO. 18 BARS	2"
NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER	1½"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
SLABS, WALLS, JOISTS	
NO. 14 AND NO. 18 BARS	1½"
NO. 11 BAR, AND SMALLER	3/4"
BEAMS, COLUMNS	
PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS	1½"
SHELLS, FOLDED PLATE MEMBERS	
NO. 6 BAR AND LARGER	3/4"
NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER	<u>½"</u>

RADIUS = 3d FOR BARS NOTOVER #8, 4d FOR #9, #10 AND #11 BARS; 5d FOR #14 — LAP (SEE AND #18 BARS. TYP DETAIL) RADIUS = 5d FOR ALL GRADE 40 BARS WITH 180 DEG HOOK. (4" MIN) — MAX ½ LAP BUT NOT ─ WIRE TIES | MORE THAN 6" BEND AND HOOK DETAILS BAR OFFSET BAR CLEARANCE ENGINEER NOTE: BEND AROUND 11/2" PIN -ALT HOOP DET FOR #3 BARS. BEND FOR WHERE AROUND 2" PIN FOR #4 ALLOWED ON BARS. BEND AROUND 21/2" PLAN. PIN FOR #5 BARS.

OPEN HOOP W/ CROSSTIE

TYP CONC REINF BAR DETAILS NTS

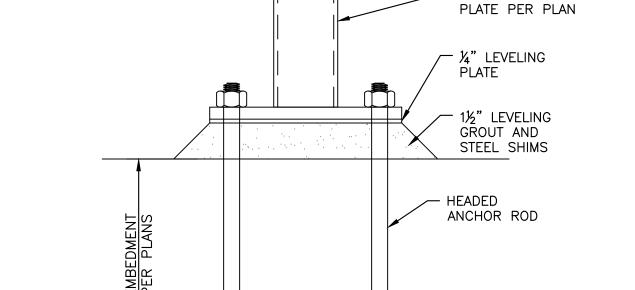
COLUMN TIES & BEAM STIRRUPS

В	AR SIZ	ZE	CONCRETE			
IN-LB	SOFT METRIC	AREA (IN*2)	HORIZ & VERT	TOP		
#3	#10	0.11	1'-7"	2'-1"		
#4	#13	0.20	2'-1"	2'-9"		
#5	#16	0.31	2'-7"	3'-5"		
#6	#19	0.44	3'-1"	4'-1"		
#7	#22	0.60	4'-6"	5'-11"		
#8	#25	0.79	5'-2"	6'-9"		
#9	#29	1.00	5'-10"	7'-7"		
#10	#32	1.27	6'-7"	8'-6"		
#11	#36	1.56	7'-3"	9'-6"		

- 1. FOR REINFORCING WITH EPOXY COATING, MULTIPLY LAP LENGTH SHOWN BY 1.5. 2. CONCRETE LAP LENGTHS ARE CLASS "B" BASED ON F'C=4,000 PSI WITH COVER REQUIREMENTS INDICATED AND BAR SPACING AT
- LEAST TWO BAR DIAMETERS. 3. TOP BAR LAPS ARE HORIZONTAL LAPS WHERE MORE THAN 12" OF
- FRESH CONCRETE IS PLACED BELOW THE BARS. 4. TOP BAR LENGTHS MAY BE USED AT ALL LOCATIONS IN CONCRETE

TYP. REINFORCING SPLICE LENGTHS

AT THE CONTRACTOR'S DISCRETION.



TYPICAL BLOCKOUT DETAIL

3 NTS

SLAB CONTROL JOINTS

AFTER COLUMN IS SET

- HSS COLUMN PER PLAN

- COLUMN & BASE

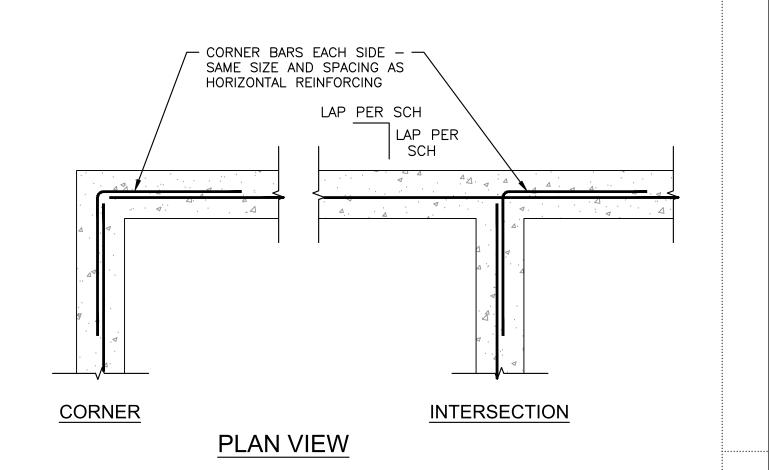
STANDARD HEX HEAD

- NON-SHRINK GROUT FLUSH WITH SLAB

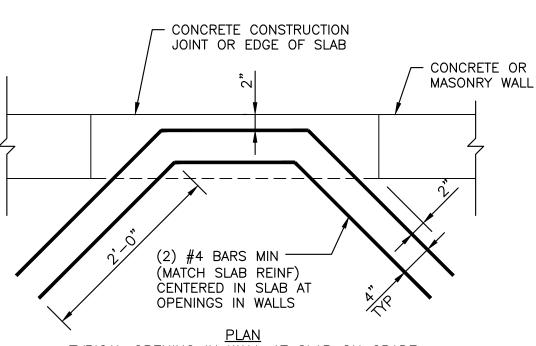
- SLAB BLOCKOUT,

PLACE CONCRETÉ

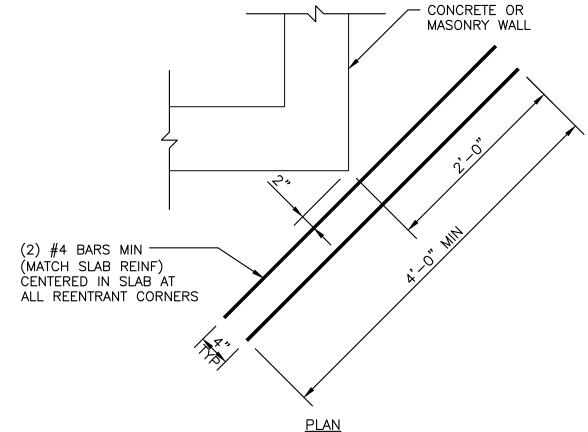
7 TYPICAL HEADED ANCHOR ROD DETAIL



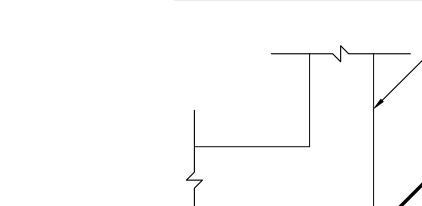
CORNER AND INTERSECTION CONCRETE REINFORCING DETAIL



<u>PLAN</u> TYPICAL OPENING IN WALL AT SLAB ON GRADE



TYPICAL REENTRANT CORNER (12) REINFORCING IN SLAB-ON-GRADE



<u>PLAN</u>

<u>TYPICAL AT REENTRANT CORNER REINFORCING IN SLAB ON GRADE</u>

BG

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TYPICAL DETAILS

S1.2

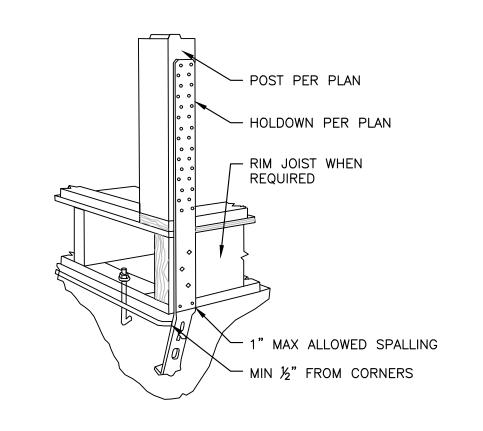
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(5) REINFORCING CONCRETE COVER

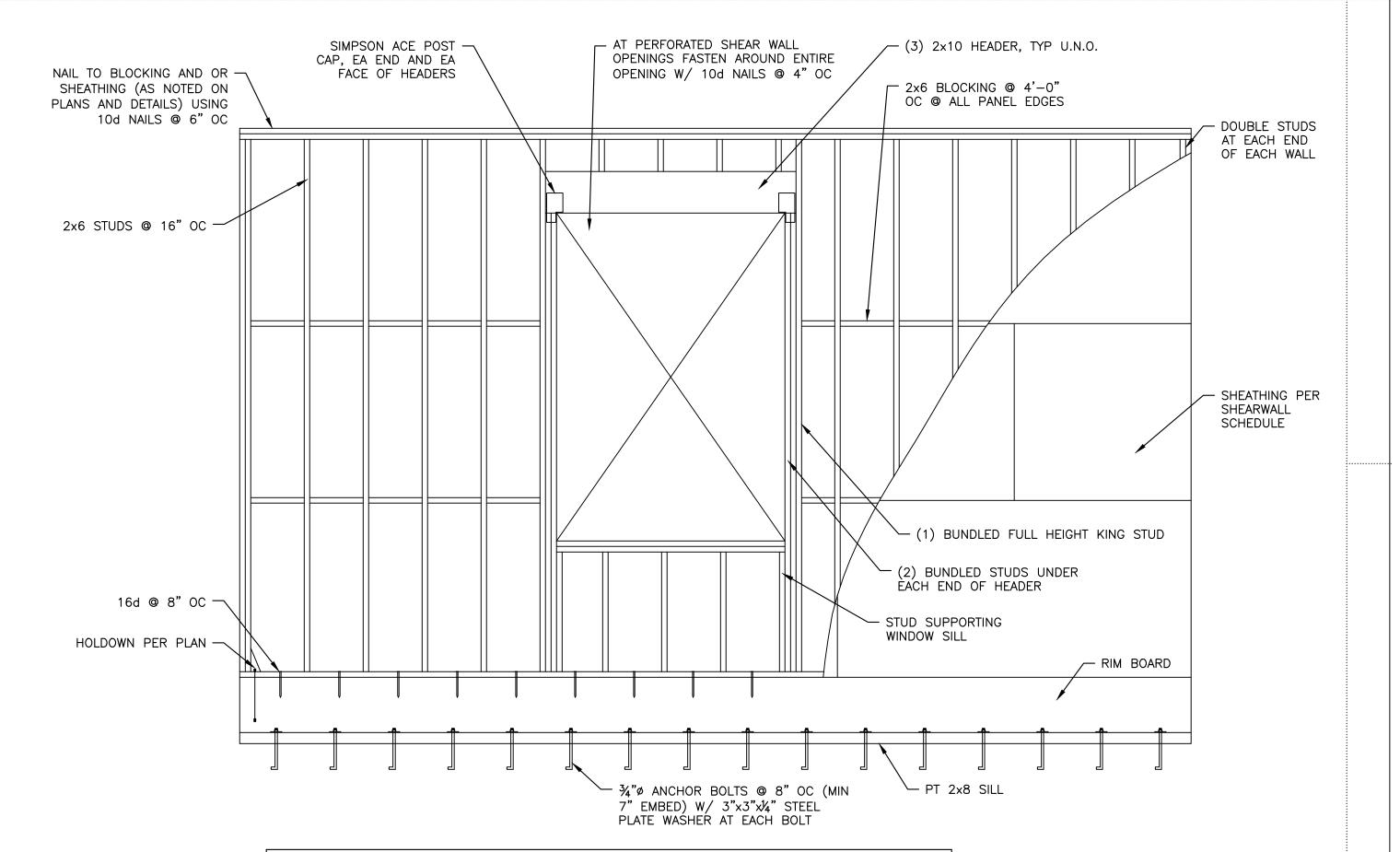
WHERE 24" CANNOT BE OBTAINED, 7 /- FLOOR OR ROOF LINE AND HOOK OR BEND (2) #5 VERTICALS r (2) #5 FOR OPENINGS 48" WIDE OR LESS. (2) #6 FOR OPENINGS WIDER THAN 48" (2) #5 TYPICAL CORNER ĎIÁGÖNAL BARS LAP PER SPLICE — WHERE WIDTH OF OPENING SCHEDULE EXCEEDS 2 TIMES WALL THICKNESS, JAMB BARS SHALL EXTEND FULL HEIGHT OF WALL. (2) #5 UNLESS LARGER BARS ÀRE SHOWN ON DETAILS. DEVELOPMENT -- DOWELS SAME SIZE LENGTH PER AS JAMB BARS SPLICE SCHEDULE

TYPICAL OPENING IN CONCRETE 9 WALL DETAIL

TDH 1201 TDH 4001



STAGGER SPLICES 4'-0" OC
MIN THRU-OUT & SPLICE @ | UPPER PLATE © SPLICE © | UPPER PLATE __ 16d @ 16" OC (8) 16d EA SIDE OF -SPLICE OR "SIMPSON" LSTA30 (1) SIDE PROVIDE STUD BELOW EA SPLICE **ELEVATION**



WOOD STUD SHEAR WALL SCHEDULE									
MARK	GWB & APA RATED PLYWOOD/OSB SHEATHING	NAIL SIZE	EDGE NAIL SPACING	FIELD NAIL SPACING	HOLDOWN				
SW1	⅓ ₆ "OSB	8d	6"	12"	NONE				
SW2	⅓ ₆ " OSB	8d	6"	12"	SIMPSON LSTHD8RJ				

1. USE 4'x8' WOOD STRUCTURAL PANELS WITH EXTERIOR GLUE.

2. FIELD FASTENERS SHALL BE 12" OC AND STUD SPACING SHALL BE NO GREATER THAN 16" OC. 3. USE 3"x3"x0.229" PLATE WASHERS WITH ALL ANCHOR BOLTS AND 7" MINIMUM EMBEDMENT.

4. NAIL SHEATHING TO PT SILL ON CONCRETE WALL @ 6" OC. 5. NAIL SHEATHING TO WALL SILL @ 6" OC.

7 TYPICAL WOOD BEARING WALL & SHEARWALL DETAIL



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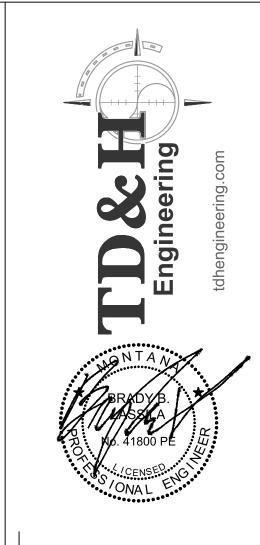
TYPICAL DETAILS

S1.3

TABLE 2304.10.1	FASTENING SCI	HEDULE
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
	ROOF	
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	$3 - 8d$ COMMON ($2\frac{1}{2}$ "x0.131"); OR $3 - 10d$ BOX (3 "x0.128"); OR $3 - 3$ " x 0.131" NAILS; OR $3 - 3$ " 14 GAGE STAPLES, $\frac{7}{16}$ " CROWN	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT	2 - 8d COMMON (2½"x0.131") 2 - 3" x 0.131" NAILS 2 - 3" 14 GAGE STAPLES	EACH END, TOENAIL
THE WALL TOP PLATE, TO RAFTER OR TRUSS.	2 - 16d COMMON (3½"x0.162") 3 - 3" x 0.131" NAILS 3 - 3" 14 GAGE STAPLES	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON (3½"x0.162") @ 6" O.C. 3" x 0.131" NAILS @ 6" O.C. 3" 14 GAGE STAPLES @ 6" O.C.	FACE NAIL
2. CEILING JOISTS TO TOP PLATE	3 - 8d COMMON (2½"x0.131"); OR 3 - 10d BOX (3"x0.128"); OR 3 - 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, ¾6" CROWN	EACH JOIST, TOENAIL
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST). (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	$3 - 16d$ COMMON ($3\frac{1}{2}$ "x0.162"); OR $4 - 10d$ BOX (3 "x0.128"); OR $4 - 3$ " x 0.131" NAILS; OR $4 - 3$ " 14 GAGE STAPLES, $\frac{7}{16}$ " CROWN	FACE NAIL
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT). (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	PER TABLE 2308.7.3.1	FACE NAIL
5. COLLAR TIE TO RAFTER	3 - 10d COMMON (3"x0.148"); OR 4 - 10d BOX (3"x0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/6" CROWN	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE (SEE SECTION 2308.7.5, TABLE 2308.7.5)	3 - 10d COMMON (3"x0.148"); OR 3 - 16d BOX (3½"x0.135"); OR 4 - 10d BOX (3"x0.128"); OR 4 - 3" x 0.131 NAILS; OR 4 - 3" 14 GAGE STAPLES, 7/6" CROWN	TOENAIL°
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP	2 - 16d COMMON (3½"x0.162"); OR 3 - 10d BOX (3"x0.128"); OR 3 - 3" x 0.131 NAILS; OR 3 - 3" 14 GAGE STAPLES, ¾6" CROWN	END NAIL
RAFTERS; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	3 - 10d COMMON (3"x0.148"); OR 4 - 16d BOX (3½"x0.135"); OR 4 - 10d BOX (3"x0.128"); OR 4 - 3" x 0.131 NAILS; OR 4 - 3" 14 GAGE STAPLES, 16" CROWN	TOENAIL

TABLE 2304.10.1-CONTINUED		FASTENING SCHEDULE		
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION		
WALL				
	16d COMMON (3 ½" x 0.162");	24" O.C. FACE NAIL		
8. STUD TO STUD (NOT AT BRACED WALL PANELS)	10d BOX (3"x0.128"); OR 3" x 0.131" NAILS; OR 3 — 3" 14 GAGE STAPLES, %6" CROWN	16" O.C. FACE NAIL		
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON (3½"×0.162"); OR	16" O.C. FACE NAIL		
	16d BOX (3½"x0.135"); OR	12" O.C. FACE NAIL		
	$3" \times 0.131"$ NAILS; OR $3 - 3"$ 14 GAGE STAPLES, $\%_6"$ CROWN	12" O.C. FACE NAIL		
10. BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON (3½"x0.162"); OR	16" O.C. EACH EDGE, FACE NAIL		
	16d BOX (3½"x0.135")	12" O.C. EACH EDGE, FACE NAIL		
11. CONTINUOUS HEADER TO STUD	4 - 8d COMMON (2½"x0.131"); OR 4 - 10d BOX (3"x0.128")	TOENAIL		
12. TOP PLATE TO TOP PLATE	16d COMMON (3½"x0.162"); OR	16" O.C. FACE NAIL		
	10d BOX (3"x0.128"); OR 3" x 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/6" CROWN	12" O.C. FACE NAIL		
13. TOP PLATE TO TOP PLATE, AT END JOINTS	8 - 16d COMMON (3½"x0.162");OR 12 - 10d BOX (3"x0.128"); OR 12 - 3" x 0.131" NAILS; OR 12 - 3" 14 GAGE STAPLES, ¾6" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)		
14 POTTOM DI ATE TO JOIST DIM JOIST DAND	16d COMMON (3½"x0.162"); OR	16" O.C. FACE NAIL		
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d BOX (3½"x0.135"); OR 3" x 0.131" NAILS; OR 3" 14 GAGE STAPLES, ¾6" CROWN	12" O.C. FACE NAIL		
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS	2 - 16d COMMON (3½"x0.162");OR 3 - 16d BOX (3½"x0.135"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, ¾6" CROWN	16" O.C. FACE NAIL		
16. STUD TO TOP OR BOTTOM PLATE	4 - 8d COMMON (2½"x0.131"); OR 4 - 10d BOX (3"x0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, ¾6" CROWN; OR	TOENAIL		
	2 — 16d COMMON (3½"x0.162");OR 3 — 10d BOX (3"x0.128"); OR 3 — 3" x 0.131" NAILS; OR 3 — 3" 14 GAGE STAPLES, %6" CROWN	END NAIL		
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2 - 16d COMMON (3½"x0.162")OR 3 - 10d BOX (3"x0.128"); OR 3 - 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, ¾6" CROWN	FACE NAIL		

TABLE 2304.10.1-CONTINUED	FASTE	ASTENING SCHEDULE	
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION	
	WALL		
18. 1" BRACE TO EACH STUD AND PLATE	2 - 8d COMMON (2½"x0.131"); OR 2 - 10d BOX (3"x0.128"); OR 2 - 3" x 0.131" NAILS; OR 2 - 3" 14 GAGE STAPLES, ¾6" CROWN	FACE NAIL	
19. 1" X 6" SHEATHING TO EACH BEARING	2 - 8d COMMON (2½"x0.131"); OR 2 - 10d BOX (3"x0.128")	FACE NAIL	
20. 1" X 8" AND WIDER SHEATHING TO EACH BEARING	3 - 8d COMMON (2½"x0.131"); OR 3 - 10d BOX (3"x0.128")	FACE NAIL	
	FLOOR		
21. JOIST TO SILL, TOP PLATE, OR GIRDER	3 — 8d COMMON (2½"x0.131"); OR 3 — 10d BOX (3"x0.128"); OR 3 — 3" x 0.131" NAILS; OR 3 — 3" 14 GAGE STAPLES, %6" CROWN	TOENAIL	
22. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON (2½"x0.131"); OR 10d BOX (3"x0.128"); OR 3" x 0.131" NAILS; OR 3" 14 GAGE STAPLES, ¾6" CROWN	6" O.C., TOENAIL	
23. 1" X 6" SUBFLOOR OR LESS TO EACH JOIST	2 - 8d COMMON (2½"x0.131"); OR 2 - 10d BOX (3"x0.128")	FACE NAIL	
24. 2" SUBFLOOR TO JOIST OR GIRDER	2 - 16d COMMON (3½"x0.162")	FACE NAIL	
25. 2" PLANKS (PLANK & BEAM — FLOOR & ROOF)	2 - 16d COMMON (3½"x0.162")	EACH BEARING, FACE NAII	
26. BUILT—UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4"x0.192")	32" O.C., FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES	
	10d BOX (3"x0.128"); OR 3" x 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/6" CROWN	24" O.C., FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES	
	AND: 2 - 20d COMMON (4"x0.192"); OR 3 - 10d BOX (3"x0.128"); OR 3 - 3" x 0.131" NAILS; OR 3 - 3" 14 GAGE STAPLES, 16" CROWN	ENDS AND AT EACH SPLICE, FACE NAIL	
27. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3 - 16d COMMON (3½"x0.162");OR 4 - 10d BOX (3"x0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, ¾6" CROWN	EACH JOIST OR RAFTER, FACE NAIL	
28. JOIST TO BAND JOIST OR RIM JOIST	3 - 16d COMMON (3½"x0.162");OR 4 - 10d BOX (3"x0.128"); OR 4 - 3" x 0.131" NAILS; OR 4 - 3" 14 GAGE STAPLES, ¾6" CROWN	END NAIL	
29. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2 - 8d COMMON (2½"x0.131"); OR 2 - 10d BOX (3"x0.128"); OR 2 - 3" x 0.131" NAILS; OR 2 - 3" 14 GAGE STAPLES, ¾6" CROWN	EACH END, TOENAIL	



SPRINGS RESIDENCE

Big springs Trout Hatchert, Lewis

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TYPICAL DETAILS

S1.4

TABLE 2304.10.1-CONTINUED		FASTENING SCHEDULE	
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING .	AND LOCATION
WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO		O FRAMING AND PARTICLE	BOARD WALL SHEATHING TO
		EDGES (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
	6d COMMON OR DEFORMED (2"x0.113") (SUBFLOOR AND WALL)	6	12
	8d COMMON OR DEFORMED (2½"x0.113") (ROOF) OR RSRS-01 (2¾"x0.113") NAIL (ROOF) ^d	6	12
30. ¾" − ½"	23/8" x 0.113" NAIL (SUBFLOOR AND WALL)	6	12
	1¾" 16 GAGE STAPLE, ¾6" CROWN (SUBFLOOR AND WALL)	4	8
	2%" x 0.113" NAIL (ROOF)	4	8
	1¾" 16 GAGE STAPLE, ¾6" CROWN (ROOF)	3	6
31. ¹⁹ / ₃₂ " – ¾"	8d COMMON (2½"x0.131"); OR 6d DEFORMED (2"x0.113") (SUBFLOOR AND WALL)	6	12
	8d COMMON OR DEFORMED (2½"x0.131") (ROOF) OR RSRS-01 (2¾"x0.113:) NAIL (ROOF) ^d	6	12
	$2\frac{\%}{8}$ " × 0.113" NAIL; OR 2" 16 GAGE STAPLE, $\frac{\%}{6}$ " CROWN	4	8
32. %" - 1¼"	10d COMMON (3"x0.148"); OR 8d DEFORMED (2½"x0.131")	6	12
	OTHER EXTERIOR WALL SHEATHING		
33. ½" FIBERBOARD SHEATHING ^b	1½" GALVANIZED ROOFING NAIL (%6" HEAD DIAMETER); OR 1½" 16 GAGE STAPLE WITH ¾6" OR 1" CROWN	3	6
34. ²⁵ / ₃₂ " FIBERBOARD SHEATHING ^b	1¾" GALVANIZED ROOFING NAIL (况6" DIAMETER HEAD); OR 1½" 16 GAGE STAPLE WITH 况6" OR 1" CROWN	3	6
WOOD STRUCTUR	RAL PANELS, COMBINATION SUBFLOOR UND	ERLAYMENT TO FRAMING	
35. ¾" AND LESS	8d COMMON (2½"x0.131"); OR 6d DEFORMED (2"x0.113")	6	12
36. %" - 1"	8d COMMON (2½"x0.131"); OR 8d DEFORMED (2½"x0.131")	6	12
37. 1½" - 1¼"	10d COMMON (3"x0.148"); OR 8d DEFORMED (2½"x0.131")	6	12
	PANEL SIDING TO FRAMING	•	·
38. ½" OR LESS	6d CORROSION-RESISTANT SIDING (1%" x 0.106"); OR 6d CORROSION-RESISTANT CASING (2" x 0.099")	6	12
39. %"	8d CORROSION-RESISTANT SIDING (2%" x 0.128"); OR 8d CORROSION-RESISTANT CASING (2½" x 0.113")	6	12

TABLE 2304.10.1-CONTINUED		FASTENING SCHEDULE		
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION		
WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, ROOD AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING				
		EDGES (INCHES)	INTERMEDIATE SUPPORTS (INCHES)	
INTERIOR PANELING				
40. ¼"	4d CASING (1½"x0.080"); OR 4d FINISH (1½"x0.072")	6	12	
41. ¾"	6d CASING (2"x0.099"); OR 6d FINISH (PANEL SUPPORTS AT 24 INCHES)	6	12	

- FOR SI: 1 INCH = 25.4 mm

 a. NAILS SPACED AT 6 INCHES AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48 INCHES 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).

 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 RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.

 d. RSRS-01 IS A ROOF SHEATHING RING SHANK NAIL MEETING THE SPECIFICATIONS IN ASTM F1667.



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TYPICAL DETAILS

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