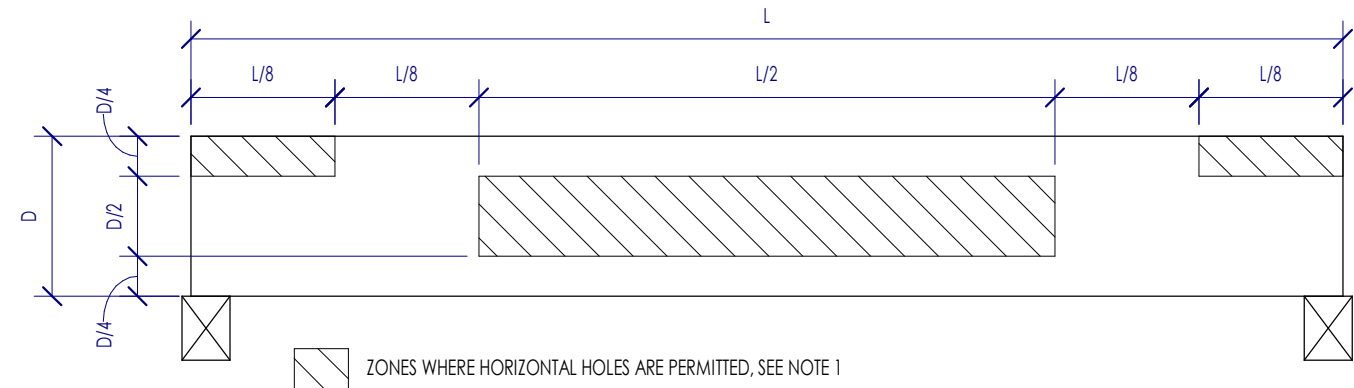


TYPICAL FASTENING SCHEDULE			
CONNECTION ID	CONNECTION TYPE	FASTENING	FASTENING ORIENTATION
1	JOIST TO BIL OR GIRDER	(1) - 0.131"Ø X 3"	TOENAIL
2	SOLE PLATE TO JOIST OR BLOCKING	0.148"Ø X 3"X NAILS @ 12" OC NAILS	FACE NAIL
3	TOP PLATE TO STUD	(1) - 0.131"Ø X 3" NAILS	END NAIL
4	STUD TO SOLE PLATE - OPTION 1	(2) - 1/4" COMMON   (2) - 0.131"Ø X 3" NAILS	END NAIL
5	STUD TO SOLE PLATE - OPTION 2	(4) 0.131"Ø X 3" NAILS	TOENAIL
6	DOUBLE/MULTIPLE STUDS	REFERENCE DETAIL 3A/S4.0	FACE NAIL
7	DOUBLE TOP PLATES	0.131"Ø X 3" NAILS @ 12" OC	FACE NAIL
8	DOUBLE TOP PLATE SPICE	REFERENCE DETAIL 3A/S4.0	FACE NAIL
9	BLOCKING BETWEEN JOISTS/RAFTERS TO TOP PLATE	(1) - 0.131"Ø X 3" NAILS	TOENAIL
10	RIM JOIST TO TOP PLATE	0.131"Ø X 3" NAILS @ 6" OC	TOENAIL
11	CeILING JOIST TO TOP PLATE	(1) - 0.131"Ø X 3" NAILS	TOENAIL
12	CeILING JOIST LAP OVER PARTITION	(1) - 0.131"Ø X 3" NAILS	FACE NAIL
13	CeILING JOIST TO PARALLEL RAFTERS	(1) - 0.131"Ø X 3" NAILS	FACE NAIL
14	RAFTER TO TOP PLATE	(1) - 0.131"Ø X 3" NAILS	TOENAIL
15	BUILT-UP CORNER STUDS	0.131"Ø X 3" NAILS @ 16" OC	FACE NAIL
16	BUILT-UP BEAMS	REFERENCE DETAIL 2A/S4.0	FACE NAIL
17	COLLAR TIE TO RAFTER	(1) - 0.131"Ø X 3" NAILS	FACE NAIL
18	JACK RAFTER TO HP	(1) - 0.131"Ø X 3" NAILS	TOENAIL
19	RAFTER TO RIDGE BOARD/BEAM	(1) - 0.131"Ø X 3" NAILS	TOENAIL
20	BLOCKING AT STUDS	(1) - 0.131"Ø X 3" NAILS EACH SIDE	TOENAIL

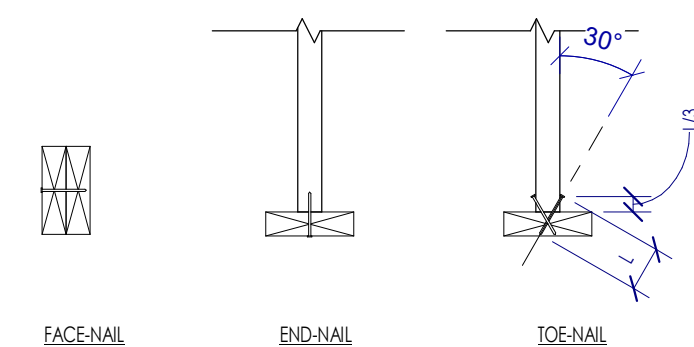
NOTES:  
1. THESE CONNECTIONS ARE TO BE APPLIED UNLESS NOTED OTHERWISE IN PLAN SECTION, ELEVATION OR DETAIL VIEWS.

6D S4.0 TYPICAL WOOD FASTENING SCHEDULE

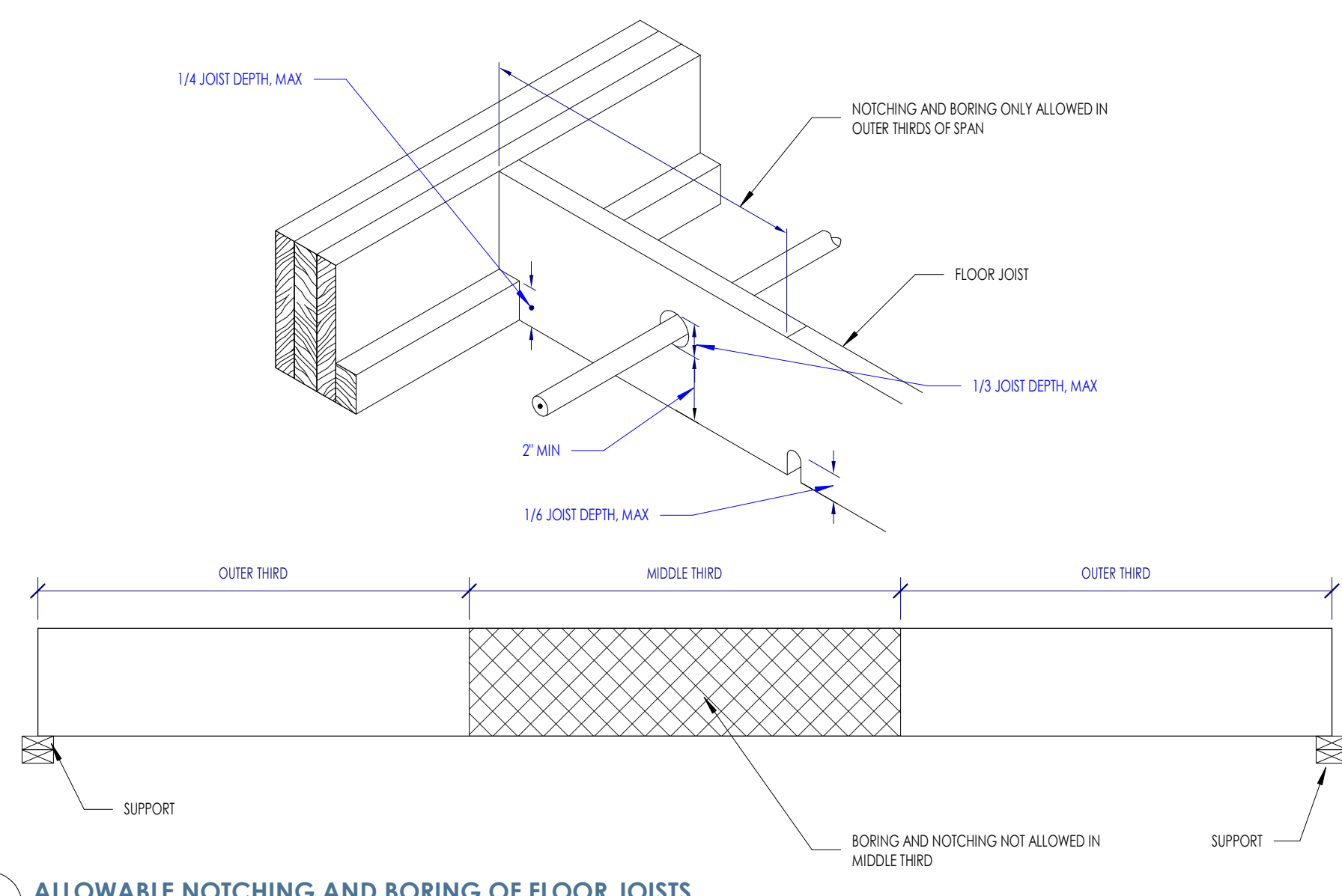


NOTES:  
1. HOLE SIZE: THE HOLE DIAMETER SHALL NOT EXCEED 1/4" OR 10% WHICHEVER IS SMALLER.  
2. SPACING: FOR LARGER HOLE DIAMETERS OR FOR HOLES OUTSIDE OF THE PERMITTED ZONES, WRITTEN PERMISSION MUST BE OBTAINED FROM THE ECR.  
3. LIMITATIONS: THE ABOVE CRITERIA ONLY APPLY TO SIMPLY SUPPORTED, UNIFORMLY LOADED GLUE LAMINATED BEAMS. FOR BEAMS THAT ARE EITHER CONTINUOUS ACROSS MULTIPLE SPANS OR THAT ARE SUPPORTING NON-UNIFORM LOADS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE ECR.

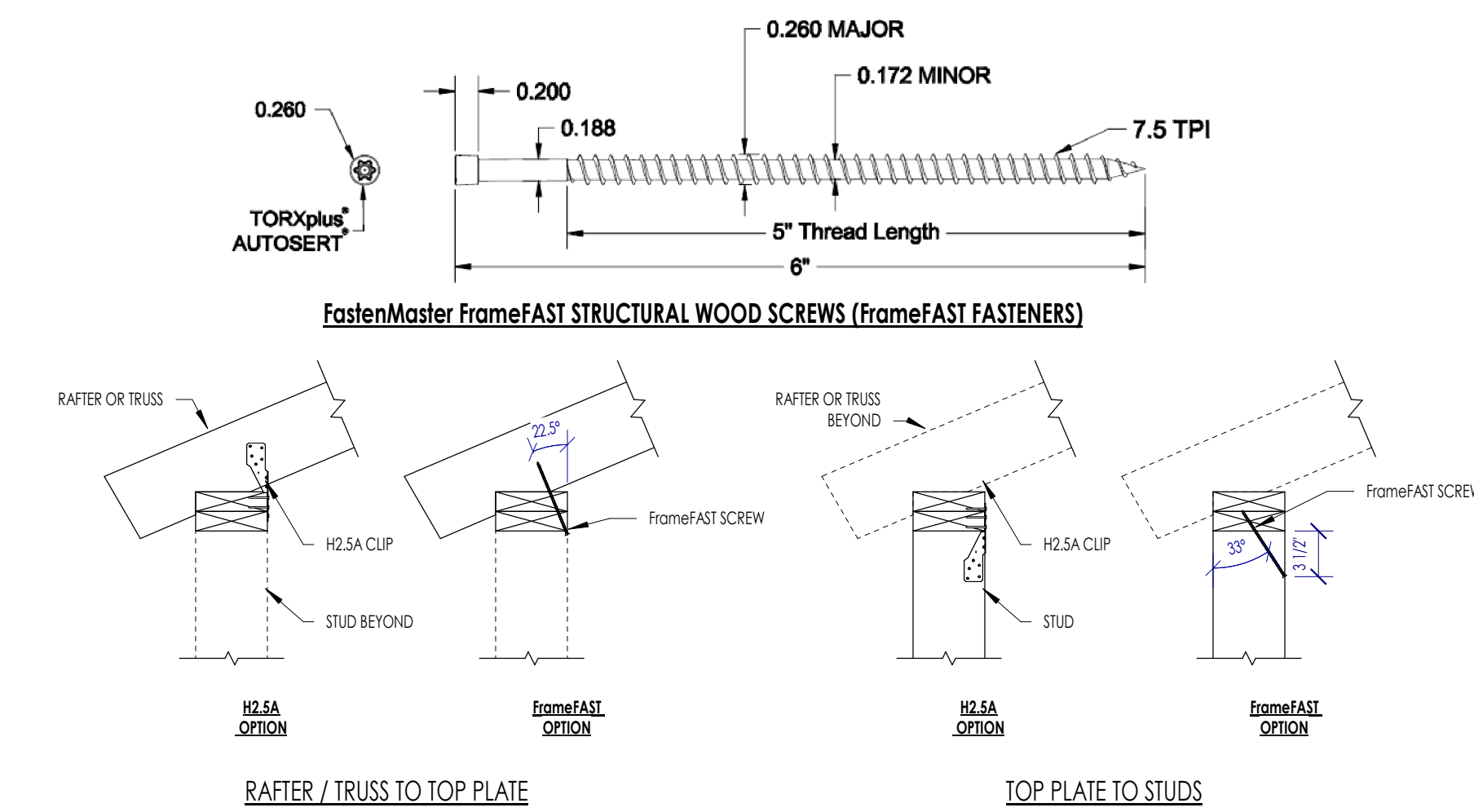
4E S4.0 ALLOWABLE HORIZONTAL HOLE LOCATIONS IN GLUE LAMINATED TIMBER BEAMS



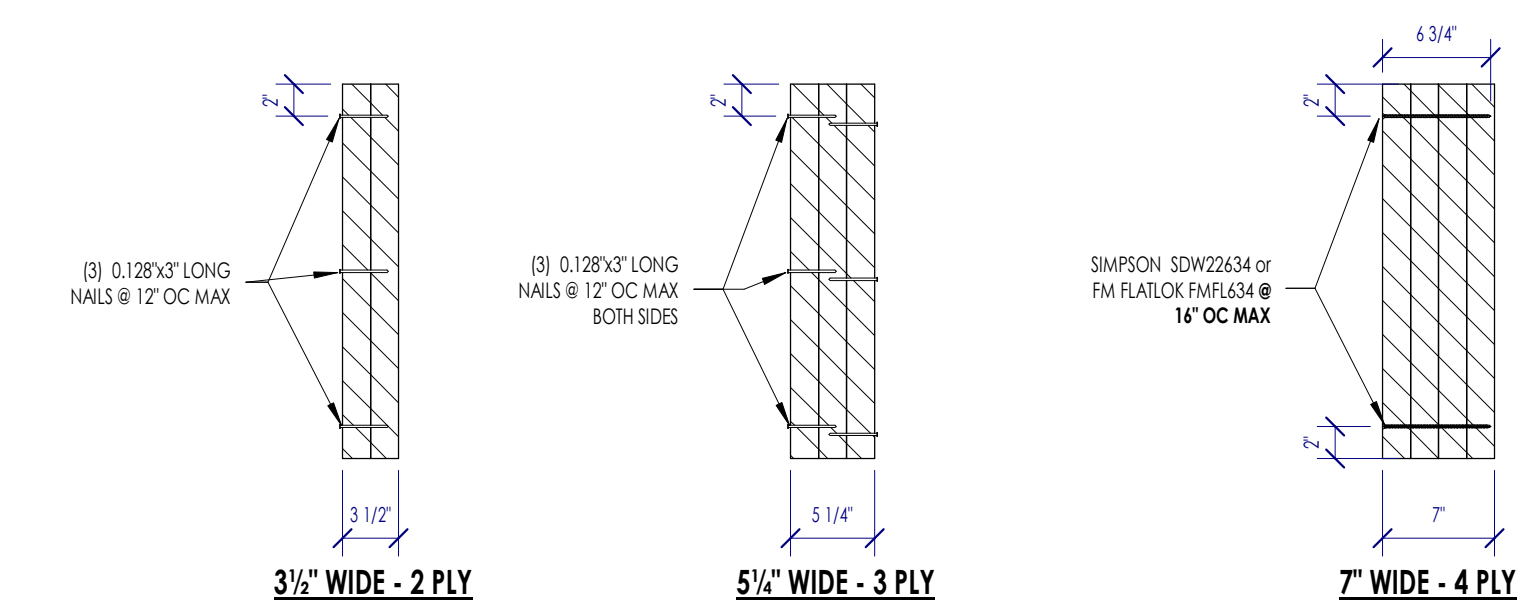
4D S4.0 TYPICAL NAILING CONFIGURATIONS



6C S4.0 ALLOWABLE NOTCHING AND BORING OF FLOOR JOISTS



4C S4.0 ALLOWABLE SUBSTITUTION OF H2.5A CLIPS WITH FrameFAST SCREWS - UPLIFT LOAD PATH



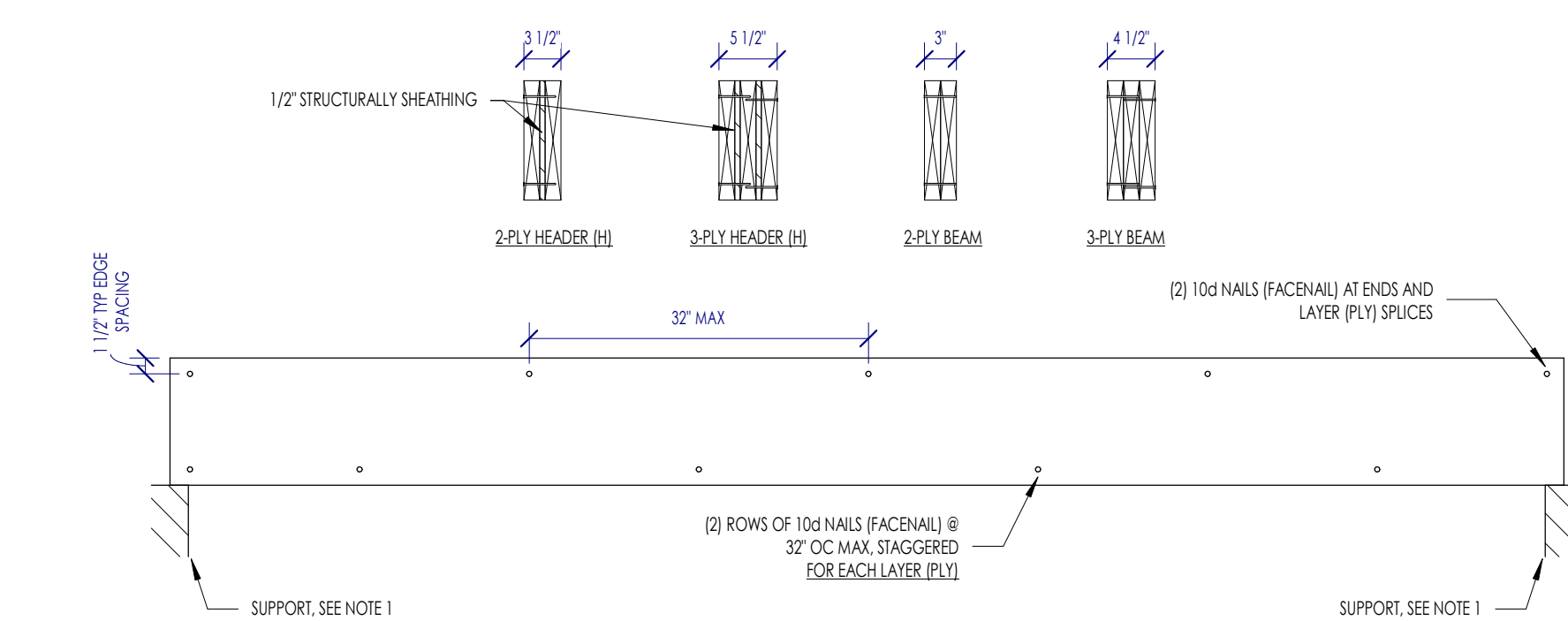
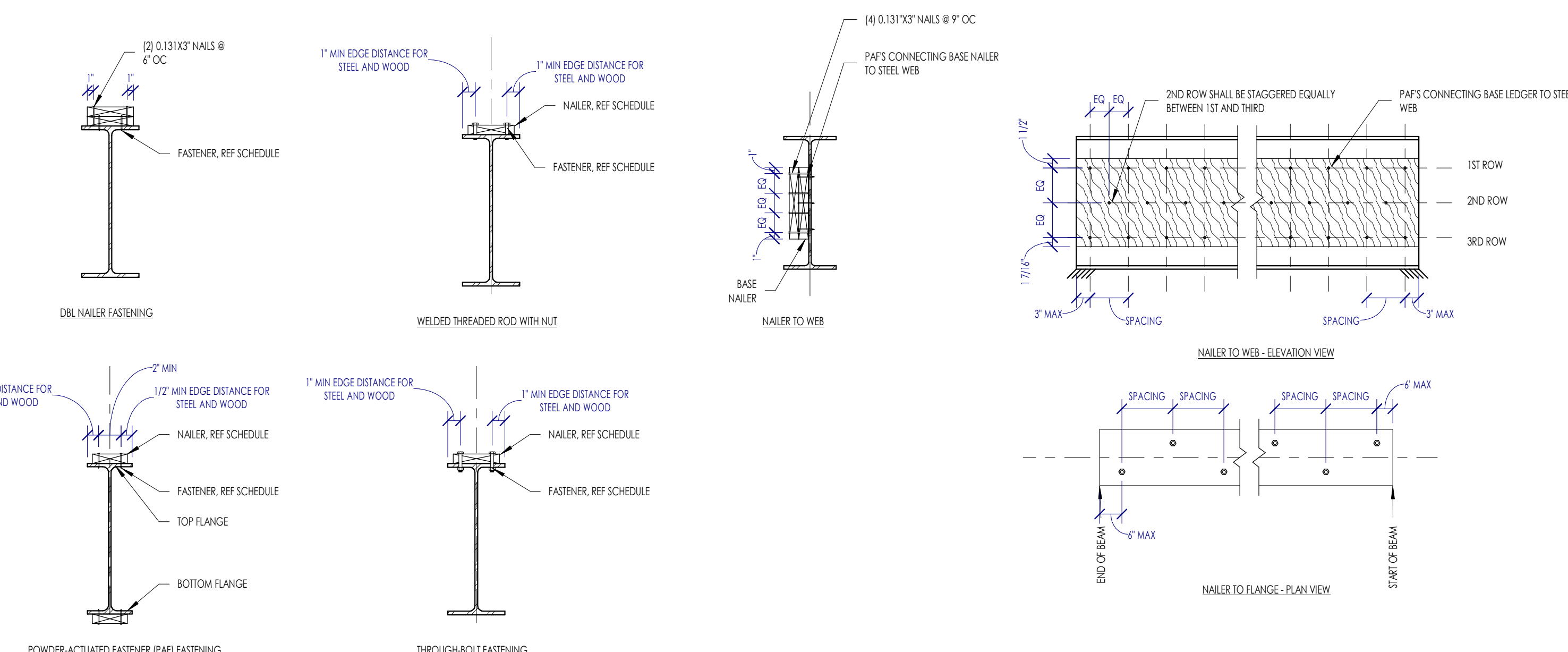
2C S4.0 TYPICAL LVL MULTIPLE PLY FASTENING REQUIREMENTS

FASTENER SCHEDULE - TO BEAM TOP FLANGE			FASTENER SCHEDULE - TO BEAM WEB / BOTTOM FLANGE		
l <sub>1</sub> (ft)	PAF FASTENER	BOLT / ROD*	l <sub>2</sub> (ft)	PAF FASTENER	BOLT / ROD*
≤ 0.35	X-1/4 @ 12" OC	1/2"Ø @ 24" OC	≤ 0.35	(1) - X-1/4 @ 12" OC	(2) - 1/2"Ø @ 24" OC
0.35 < l <sub>1</sub> ≤ 0.44	D5-47 @ 12" OC	1/2"Ø @ 24" OC	0.35 < l <sub>2</sub> ≤ 0.44	(1) - D5-47 @ 12" OC	(2) - 1/2"Ø @ 24" OC
l <sub>1</sub> > 0.44	N/A	1/2"Ø @ 12" OC	l <sub>2</sub> > 0.44	N/A	(2) - 1/2"Ø @ 12" OC

NAILER SCHEDULE - TO BEAM FLANGE		NAILER SCHEDULE - TO BEAM WEB	
b (ft)	NAILER SIZE	d (ft)	NAILER SIZE
≤ 5.5	2x4	≤ 5	2x4
5.5 < b ≤ 7.25	2x6	5 < d ≤ 6.75	2x6
l > 7.25	2x8	6.75 < d ≤ 8.75	2x8
		8.75 < d ≤ 10.75	2x10
		10.75 < d ≤ 15	(2) - 2x8
		15 < d ≤ 19	(2) - 2x10
		19 < d ≤ 23	(2) - 2x12
		d > 23	(3) - 2x8

NOTES:  
1. ALL FASTENERS SHALL BE STAGGERED.  
2. FASTENER DESCRIPTIONS, ALL FASTENERS ARE POWDER-ACTUATED FASTENERS MFR'D BY HELIX, INC.  
A. 80147  
B. UNIVERSAL SHANK FASTENER WITH A SHANK DIAMETER OF 0.157" AND A SHANK LENGTH OF 47 mm (1.85")  
C. 80147  
D. HEAVY DUTY SMOOTH SHANK FASTENER WITH A SHANK DIAMETER OF 0.177" AND A SHANK LENGTH OF 47 mm (1.85")  
3. FASTENER INSTALLATION SHALL FOLLOW ALL SPECIFICATIONS PER THE MFR.  
4. THROUGH BOLTS SHALL BE GALVANNEED ASTM A509 BOLTS. THROUGH BOLTS SHALL BE GALVANNEED ASTM F1554 GR.36.

4A S4.0 WOOD NAILER TO TOP OF STRUCTURAL STEEL



2A S4.0 TYPICAL NAILING BUILT UP BEAMS, GIRDERS & HEADERS

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Date	Description
06/02/2022	Review before Permit