

| COMPONENTS & CLADDING WIND PRESSURES (PSF) 115 MPH (3 SEC GUST), EXPOSURE C, LRFD | | | | | | | | | | | | | | | | | | | | |
|--|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| ZONE | HEIGHT | | | | | | | | | | | | | | | | | | | |
| | 0-15' | | 15-20' | | 20-25' | | 25-30' | | 30-35' | | 35-40' | | 40-45' | | 45-50' | | 50-55' | | 55-60' | |
| 1 | +16.0 | -28.8 | +16.0 | -30.7 | +16.0 | -32.1 | +16.0 | -33.3 | +16.0 | -34.5 | +16.0 | -35.5 | +16.0 | -36.4 | +16.0 | -37.1 | +16.0 | -37.8 | +16.0 | -38.6 |
| 2 | +16.0 | -48.3 | +16.0 | -51.5 | +16.0 | -53.9 | +16.0 | -55.9 | +16.0 | -57.9 | +16.0 | -59.5 | +16.0 | -61.0 | +16.0 | -62.2 | +16.0 | -63.4 | +16.0 | -64.6 |
| 3 | +16.0 | -72.7 | +16.0 | -77.5 | +16.0 | -81.1 | +16.0 | -84.1 | +16.0 | -87.1 | +16.0 | -89.5 | +16.0 | -92.0 | +16.0 | -93.8 | +16.0 | -95.6 | +16.0 | -97.4 |
| 4 | +28.8 | -31.2 | +30.7 | -33.3 | +32.1 | -34.8 | +33.3 | -36.1 | +34.5 | -37.4 | +35.5 | -38.4 | +36.4 | -39.5 | +37.1 | -40.2 | +37.8 | -41.0 | +38.6 | -41.8 |
| 5 | +28.8 | -38.6 | +30.7 | -41.2 | +32.1 | -43.1 | +33.3 | -44.7 | +34.5 | -46.3 | +35.5 | -47.5 | +36.4 | -48.8 | +37.1 | -49.8 | +37.8 | -50.7 | +38.6 | -51.7 |

NOTES:

- WIND ZONES ARE IN ACCORDANCE WITH ASCE 7-10, FIGURE 30.5-1 WITH A ROOF ANGLE 0° - 7° (FLAT ROOF)
- PRESSURES ARE BASED ON AN EFFECTIVE WIND AREA OF 10 SQUARE FEET.
- PRESSURES SHOWN ARE NOMINAL WIND PRESSURES AT ULTIMATE LOAD LEVEL (LRFD) AND SHALL BE USED IN ACCORDANCE WITH THE LOAD COMBINATIONS SPECIFIED IN ASCE 7-10, CHAPTER 2.
- DESIGNER MAY USE THE APPROPRIATE ADJUSTMENT FACTORS OR METHODS OF ASCE 7-10 TO COMPUTE COMPONENT & CLADDING PRESSURES FOR SPECIFIC COMPONENTS OF THIS STRUCTURE.
- PRESSURES SHOWN ARE APPLIED NORMAL TO THE SURFACE, FOR EXPOSURE & HEIGHT INDICATED ON THE TABLE. ADJUST TO OTHER CONDITIONS USING EQUATION 30.5-1.
- PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES, RESPECTIVELY.
- NOTATION:
a: 10 PERCENT OF LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3 FT (0.9 m).
h: MEAN ROOF HEIGHT, IN FEET (METERS), EXCEPT THAT EAVE HEIGHT SHALL BE USED FOR ROOF ANGLES <10°.
θ: ANGLE OF PLANE OF ROOF FROM HORIZONTAL, IN DEGREES.

FLAT ROOF

HIP ROOF (7° < θ ≤ 27°)

GABLE ROOF (θ ≤ 7°)

GABLE ROOF (7° < θ ≤ 45°)

INTERIOR ZONES

END ZONES

CORNER ZONES

- CONNECTION TYPE:
- JOIST TO SILL OR GIRDER, TOENAIL
 - BRIDGING TO JOIST, TOENAIL EACH END
 - 1"x6" (25MMx152MM) SUBFLOOR OR LESS TO JOIST, FACE NAIL
 - WIDER THAN 1" X 6"(25MMx152MM) SUBFLOOR TO JOIST, FACE NAIL
 - 2" (52MM) SUBFLOOR TO GIRDER, BLIND AND FACE NAIL
 - SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL
 - SOLE PLATE TO JOIST OR BLOCKING, AT BRACED W. PANELS
 - TOP PLATE TO STUD, END NAIL
 - STUD TO SOLE PLATE
 - DOUBLE STUDS, FACE NAIL
 - DOUBLE TOP PLATES, TYPICAL FACE NAIL
 - DOUBLE TOP PLATES, LAP SPLICE
 - BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL
 - RIM JOIST TO TOP PLATE, TOENAIL

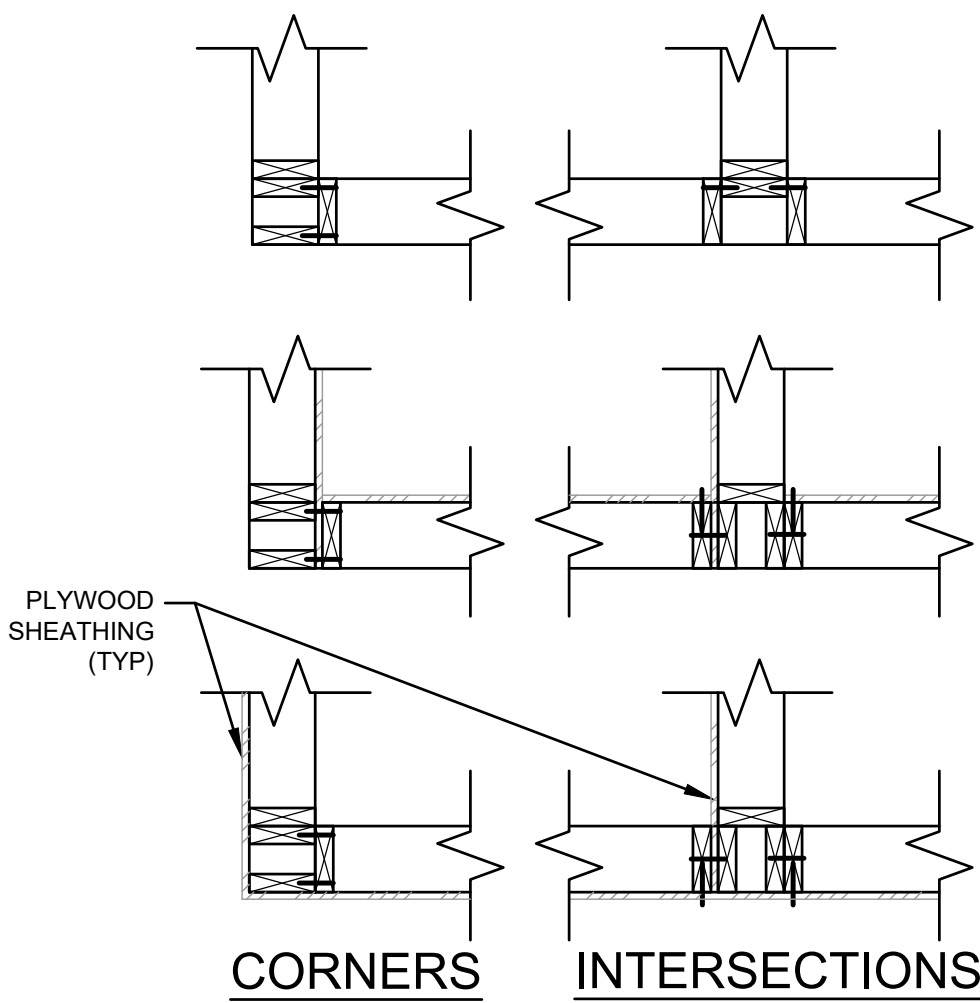
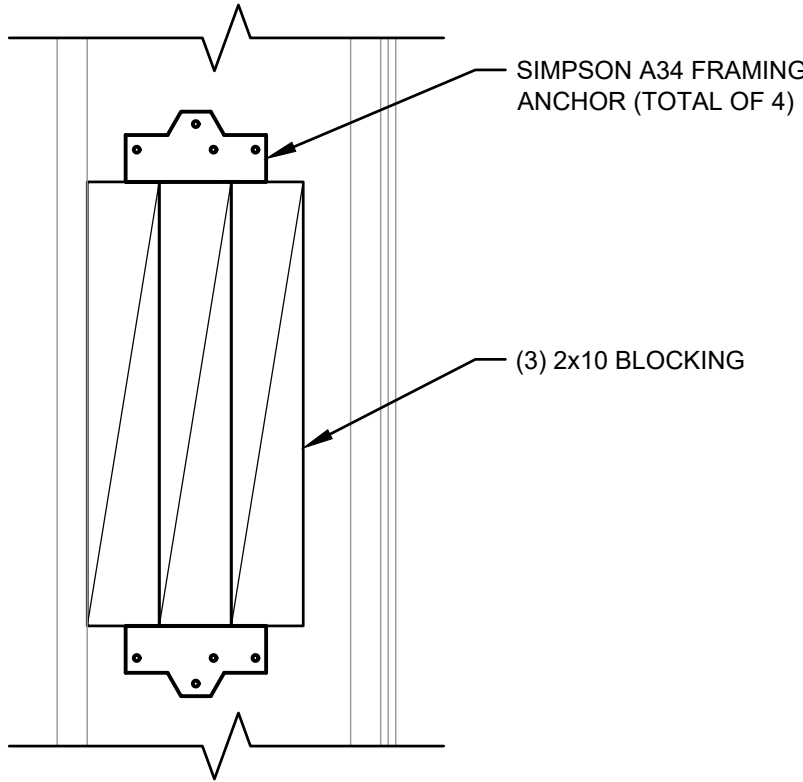
- NAILING:
- (3-8d)
 - (2-8d)
 - (2-8d)
 - (3-8d)
 - (2-16d)
 - (16d @ 16" O.C.)
 - (3-16d PER 16")
 - (2-16d)
 - (2-16d END NAIL)
 - (16d @ 24", O.C.)
 - (16d @ 16" O.C.)
 - (8-16d)
 - (3-8d)
 - (8d @ 6" O.C.)

- CONNECTION TYPE:
- TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL
 - CONTINUOUS HEADER, TWO PIECES
 - CEILING JOISTS TO PLATE, TOENAIL
 - CONTINUOUS HEADER TO STUD, TOENAIL
 - CEILING JOISTS, LAP OVER PARTITIONS, FACE NAIL
 - CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL
 - RAFTER TO PLATE, TOENAIL
 - 1" (25MM) BRACE TO EACH STUD AND PLATE, FACE NAIL
 - 1"x8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL
 - WIDER THAN 1"x8" SHEATHING TO EACH BEARING, FACE NAIL
 - BUILT-UP CORNER STUDS
 - 2" PLANKS
 - 2x6 BOX BEAM / HEADER
 - BUILT-UP GIRDER AND BEAMS

- NAILING:
- (2-16d)
 - (16d @ 16" O.C. ALONG EDGE)
 - (3-8d)
 - (4-8d)
 - (3-16d)
 - (3-16d)
 - (3-8d)
 - (2-8d)
 - (2-8d)
 - (3-8d)
 - (16d @ 24" O.C.)
 - (2-16d AT EACH SPLICE)
 - (12d @ 12" O.C.)
 - (20d @ 32" O.C. AT TOP & BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLICE)

NAILING SCHEDULE

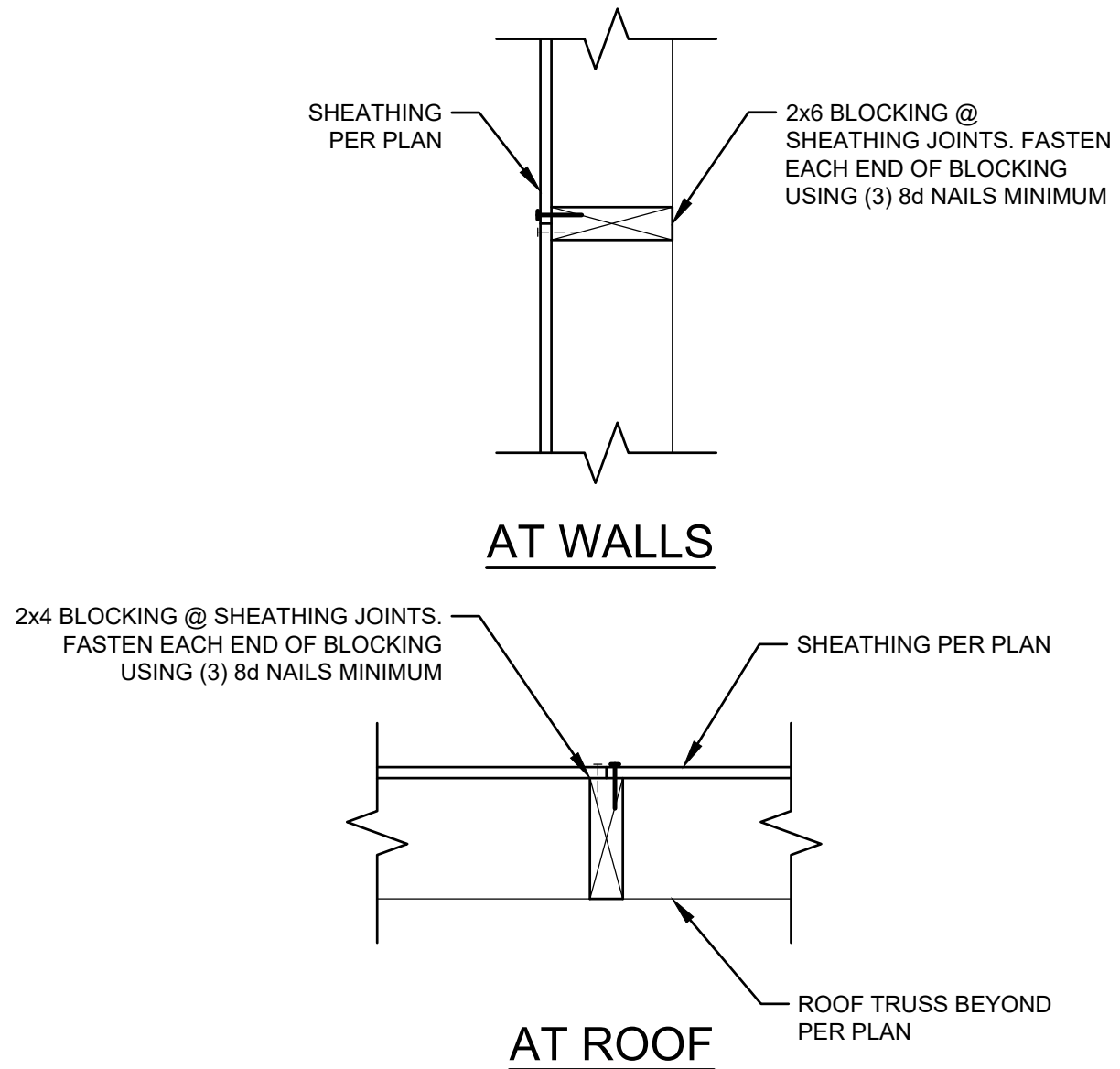
2
S0.2



NOTE:
ALL STUDS SHOWN ARE 2x.

COMPONENTS & CLADDING WIND PRESSURE TABLE

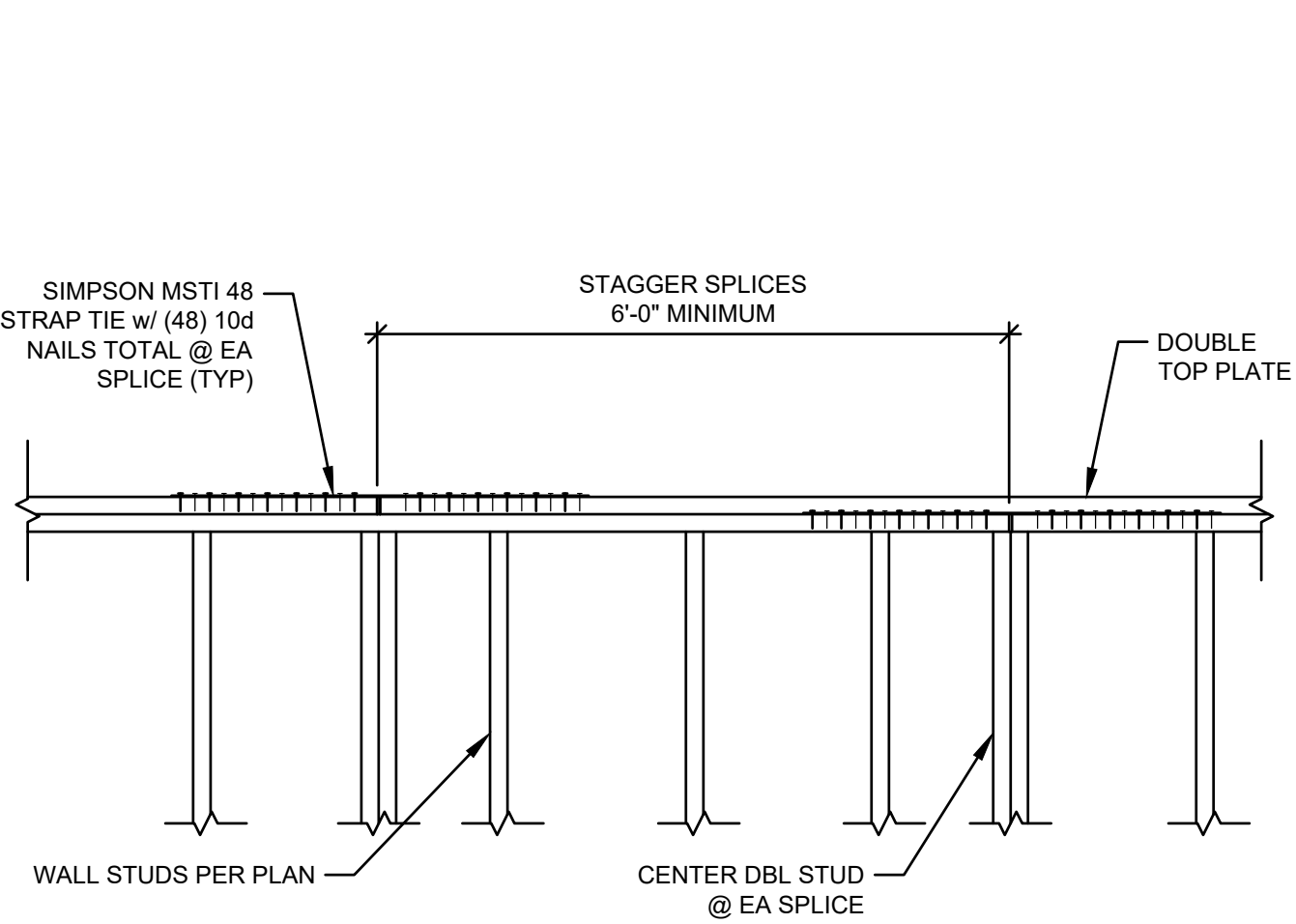
1
S0.2



BLOCKING DETAILS

N.T.S.

5
S0.2



TOP PLATE SPLICE DETAILS

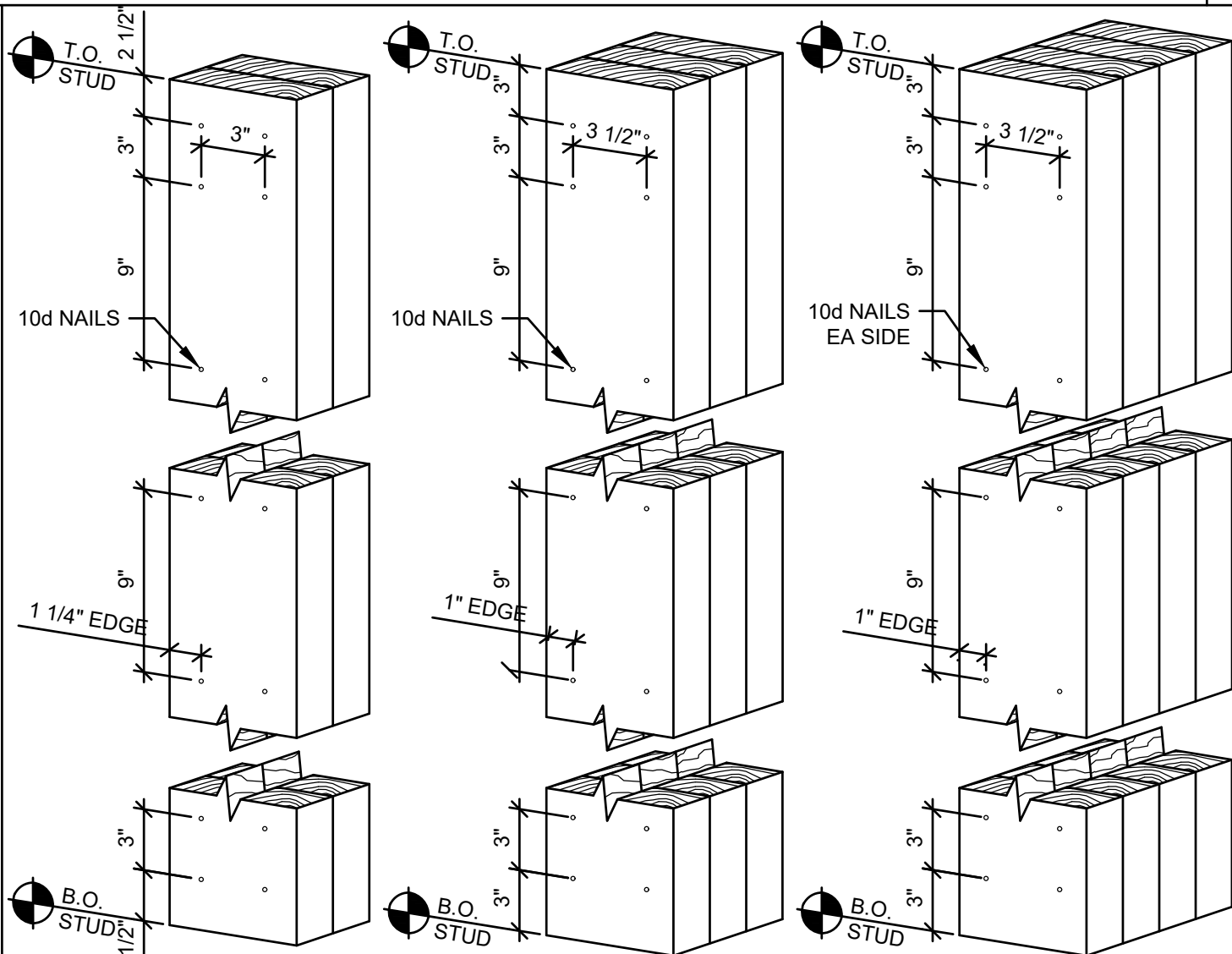
N.T.S.

6
S0.2

BLOCKING DETAIL

N.T.S.

3
S0.2



BUILT-UP STUD DETAILS

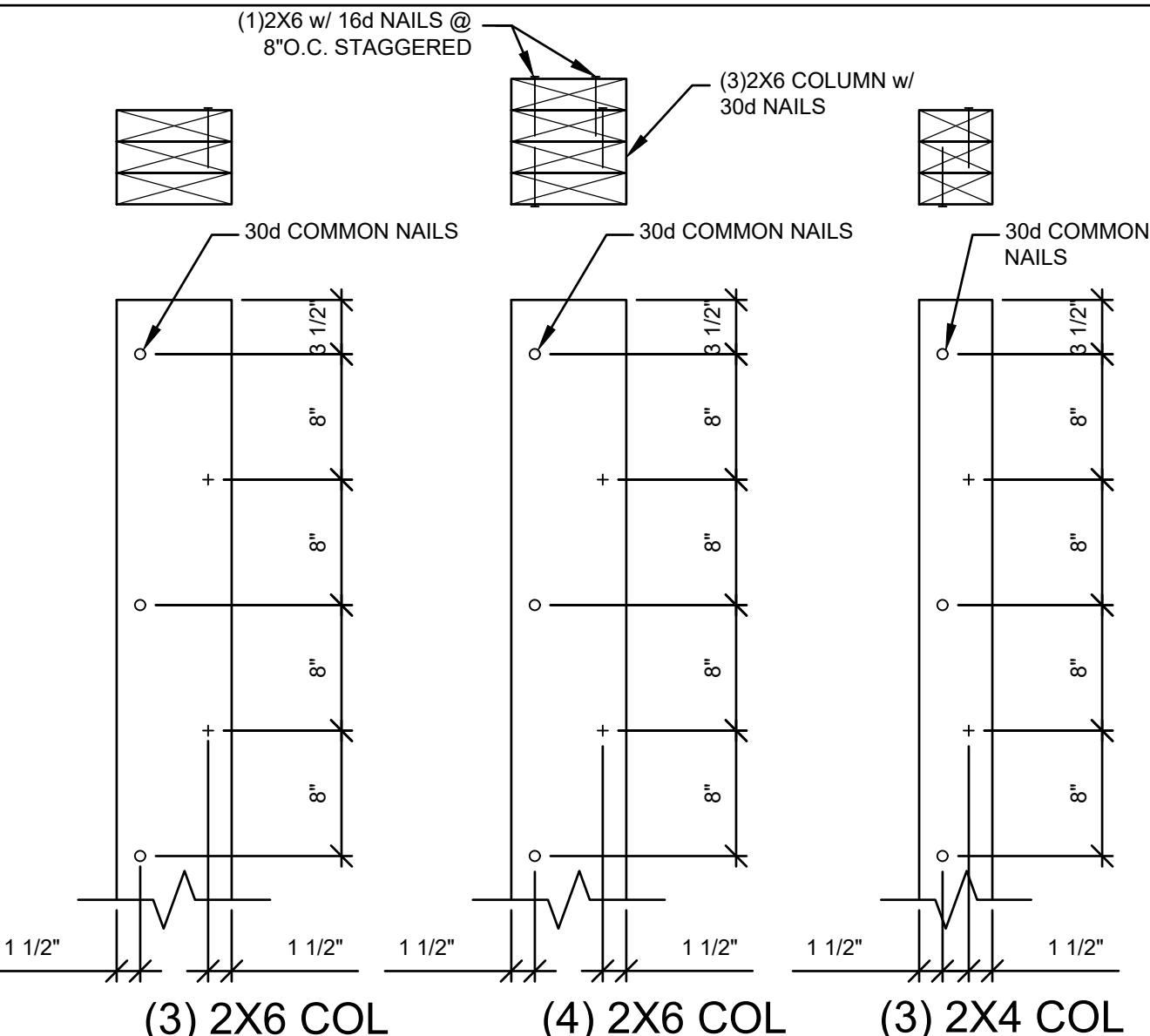
N.T.S.

7
S0.2

WOOD FRAMING DETAILS

N.T.S.

4
S0.2



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MO CERTIFICATE OF AUTHORITY : 001400

PAGE McNAGHTEN ASSOC., INC.
PROFESSIONAL ENGINEERING
CORPORATION
d/b/a PMA ENGINEERING
MISSOURI STATE CERTIFICATE
OF AUTHORITY # 001400



06.02.2020
VALERIE J.K. BAEHR, P.E.
MO# 2017016721

18048.20002

CONTRACT DATE: 06.01.2020
BUILDING TYPE: CONVERSION
PLAN VERSION: ME - TL
BRAND DESIGNER: X.XXXXX
SITE NUMBER: 314544
STORE NUMBER:

TACO BELL
4132 MILLER ST
BETHANY, MO

EXPLORER
CONVERSION

TYPICAL
DETAILS

S0.2