

GENERAL NOTES ENERGY STAR
 1. THE PROJECT INTENDS TO MEET VERSION 3.0 - NEW JERSEY ENERGY STAR HOMES REQUIREMENT.
 2. ATTIC STAIR OR HATCH SHALL BE ENERGY STAR V.3 APPROVED PREFABRICATED STAIR OR HATCH.
 WATER MANAGEMENT SYSTEM BUILDER NOTES

SECTION 1: WATER-MANAGED SITE AND FOUNDATION

- 1.1. PATIO SLABS, PORCH SLABS, WALKS, AND DRIVEWAYS SLOPED >0.25 INCHES PER FOOT AWAY FROM HOME TO EDGE OF SURFACE OR 10 FOOT, WHICHEVER IS LESS. (SEE SHEET A-1)
- 1.2. BACK-FILL TO BE TAMPED AND FINAL GRADE SLOPED >0.5 INCHES PER FOOT AWAY FROM HOME FOR >10 FEET. (SEE SHEET A-3)
- 1.3. PROVIDE CAPILLARY BREAK BENEATH ALL SLABS (EG. SLAB ON GRADE, BASEMENT SLAB) EXCEPT CRAWLSPACE SLABS USING EITHER:
 6 MIL POLYETHYLENE SHEETING, LAPPED 6-12 INCHES, OR
 1 INCH EXTRUDED POLYSTYRENE INSULATION WITH TAPED JOINTS.
- 1.4. CAPILLARY BREAK AT ALL CRAWLSPACE FLOORS USING > 6 MIL POLYETHYLENE SHEETING, LAPPED 6-12 INCHES.
- 1.5. EXTERIOR SURFACE OF BELOW-GRADE WALLS TO BE DAMPROOFED (SEE SHEET A-3)
- 1.6. CLASS 1 VAPOR RETARDERS NOT TO BE INSTALLED ON INTERIOR SIDE OF AIR PERMEABLE INSULATION IN EXTERIOR BELOW-GRADE WALLS.
- 1.7. SUMP PUMP COVERS MECHANICALLY ATTACHED WITH FULL GASKET SEAL OR EQUIVALENT.
- 1.8. DRAIN TILE SURROUNDED WITH CLEAN GRAVEL AND FABRIC FILTER (SEE SHT. A-1)

SECTION 2: WATER-MANAGED WALL ASSEMBLY

- 2.1. FLASHING AT BOTTOM OF EXTERIOR WALLS WITH WEEP HOLES INCLUDED FOR MASONRY VENEER AND WEEP SCREED FOR STUCCO CLADDING SYSTEMS, OR EQUIVALENT DRAINAGE SYSTEM. (SEE DETAIL F1 SHEET A-1)
- 2.2. FULLY SEALED CONTINUOUS DRAINAGE PLANE BEHIND EXTERIOR CLADDING THAT LAPS OVER IN ITEM 2.1. ADDITIONAL BOND-BREAK DRAINAGE PLANE LAYER PROVIDED BEHIND ALL STUCCO AND NONSTRUCTURAL MASONRY CLADDING WALL ASSEMBLIES. (SEE DETAIL F1 SHEET A-1)
- 2.3. WINDOW AND DOOR OPENINGS FULLY FLASHED. APPLY PAN FLASHING OVER THE ROUGH SILL FRAMING, INCLUSIVE OF THE CORNERS OF THE SILL FRAMING; SIDE FLASHING THAT EXTENDS OVER PAN FLASHING; AND TOP FLASHING THAT EXTENDS OVER SIDE FLASHING. FLASHING TO MEET ALL MANUFACTURER'S RECOMMENDATIONS AND SPECS. (SEE SHEET A-2)

SECTION 3: WATER-MANAGED ROOF ASSEMBLY

- 3.1. STEP AND KICK-OUT FLASHING AT ALL ROOF-WALL INTERSECTIONS, EXTENDING > 4 INCHES ON WALL SURFACE ABOVE ROOF DECK AND INTEGRATED WITH DRAINAGE PLANE ABOVE. INTERSECTING WALL SIDING SHALL TERMINATE 1 INCH ABOVE THE ROOF OR HIGHER, PER MANUFACTURER'S RECOMMENDATIONS.
- 3.2. FOR HOMES THAT DON'T HAVE A SLAB-ON-GRADE FOUNDATION AND DO HAVE EXPANSIVE OR COLLAPSIBLE SOILS, GUTTERS AND DOWNSPOUTS PROVIDED THAT EMPTY TO LATERAL PIPING THAT DEPOSITS WATER ON SLOPING FINAL GRADE 5 FEET FROM FOUNDATION OR TO UNDERGROUND CATCHMENT SYSTEM > 10 FEET FROM FOUNDATION.
- 3.3. SELF-SEALING BITUMINOUS MEMBRANE OR EQUIVALENT AT ALL VALLEYS AND ROOF DECK PENETRATIONS.
- 3.4. IN 2009 IECC CLIMATE ZONES 5 AND HIGHER, SELF-SEALING BITUMINOUS MEMBRANE OR EQUIVALENT OVER SHEATHING AT EAVES FROM THE EDGE OF THE ROOF LINE TO > 2 FEET UP ROOF DECK FROM THE INTERIOR PLANE OF THE EXTERIOR WALL.

SECTION 4: WATER-MANAGED BUILDING MATERIALS

- 4.1. WALL-TO-WALL CARPET NOT INSTALLED WITHIN 2.5 FEET OF TOILETS, TUBS AND SHOWERS.
 - 4.2. CEMENT BOARD OR EQUIVALENT MOISTURE-RELATED BACKING MATERIAL INSTALLED ON ALL WALLS BEHIND TUB AND SHOWER ENCLOSURES COMPOSED OF TILE OR PANEL ASSEMBLIES WITH CAULKED JOINTS. PAPER-FACED BACKER BOARD SHALL NOT BE USED.
 - 4.3. N/A FOR CLIMATE ZONE 5
 - 4.4. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE OR MOLD SHALL NOT BE INSTALLED.
- USES**
 4.5. INTERIOR WALLS NOT ENCLOSED (E.G. WITH DRYWALL) IF EITHER THE FRAMING MEMBERS OR INSULATION PRODUCTS HAVE HIGH MOISTURE CONTENT.

THERMAL ENCLOSURE SYSTEM BUILDER NOTES

SECTION 1: HIGH-PERFORMANCE FENESTRATION

- 1.1. PRESCRIPTIVE PATH: FENESTRATION TO MEET OR EXCEED ENERGY STAR REQUIREMENTS. FOR ZONE 5: WINDOW U<=0.30 SKYLIGHTS .55
- 1.2. PERFORMANCE PATH: FENESTRATION SHALL MEET OR EXCEED 2009 IECC REQUIREMENTS

SECTION 2: QUALITY INSTALLED INSULATION

- 2.1. INSULATION LEVELS INSTALLED ARE:
 WALLS: R-21 BATT INSULATION IN STUD CAVITY. MIN. R-5 EXTERIOR CONTINUOUS 1" RIGID INSULATION, TAPED AND SEALED.
 CEILING: R-30 BATT INSULATION BETWEEN ROOF TRUSSES. UNFACED R-11 BATT INSULATION ROLLED PERPENDICULAR ACROSS R-30 BATT.
 FLOOR: R-38 BATT BETWEEN FLOOR JOISTS. 1" (MIN. R-5) RIGID BOARD INSULATION CUT AND FITTED IN BOTTOM OF JOISTS BELOW BATT INSULATION TO FILL JOIST SPACE.
- 2.2. ALL CEILING, WALL, FLOOR, AND SLAB INSULATION SHALL ACHIEVE RESNET-DEFINED GRADE I INSULATION OR, ALTERNATIVELY, GRADE II FOR SURGACES WITH INSULATED SHEATHING AT LEVELS DEFINED IN ITEM 4.1.
- WALLS: GRADE 11
 CEILING: GRADE 1
 FLOOR: GRADE 1

SECTION 3: FULLY ALIGNED AIR BARRIERS

- AT EACH INSULATED LOCATION NOTED BELOW, A COMPLETE AIR BARRIER SHALL BE PROVIDED THAT IS FULLY ALIGNED WITH THE INSULATION AS FOLLOWS:
 AT INTERIOR SURFACE OF CEILINGS.
 AT INTERIOR EDGE OF ATTIC EAVE USING A WIND BAFFLE THAT EXTENDS TO THE FULL HEIGHT OF THE INSULATION. INCLUDE A BAFFLE IN EVERY BAY OR A TABBED BAFFLE IN EACH BAY WITH A SOFFIT VENT THAT WILL ALSO PREVENT WIND WASHING OF INSULATION IN ADJACENT BAYS.
 AT EXTERIOR AND INTERIOR SURFACE OF WALLS
 AT INTERIOR SURFACE OF FLOORS, INCLUDING SUPPORTS TO ENSURE PERMANENT CONTACT AND BLOCKING AT EXPOSED EDGE.

3.1. WALLS

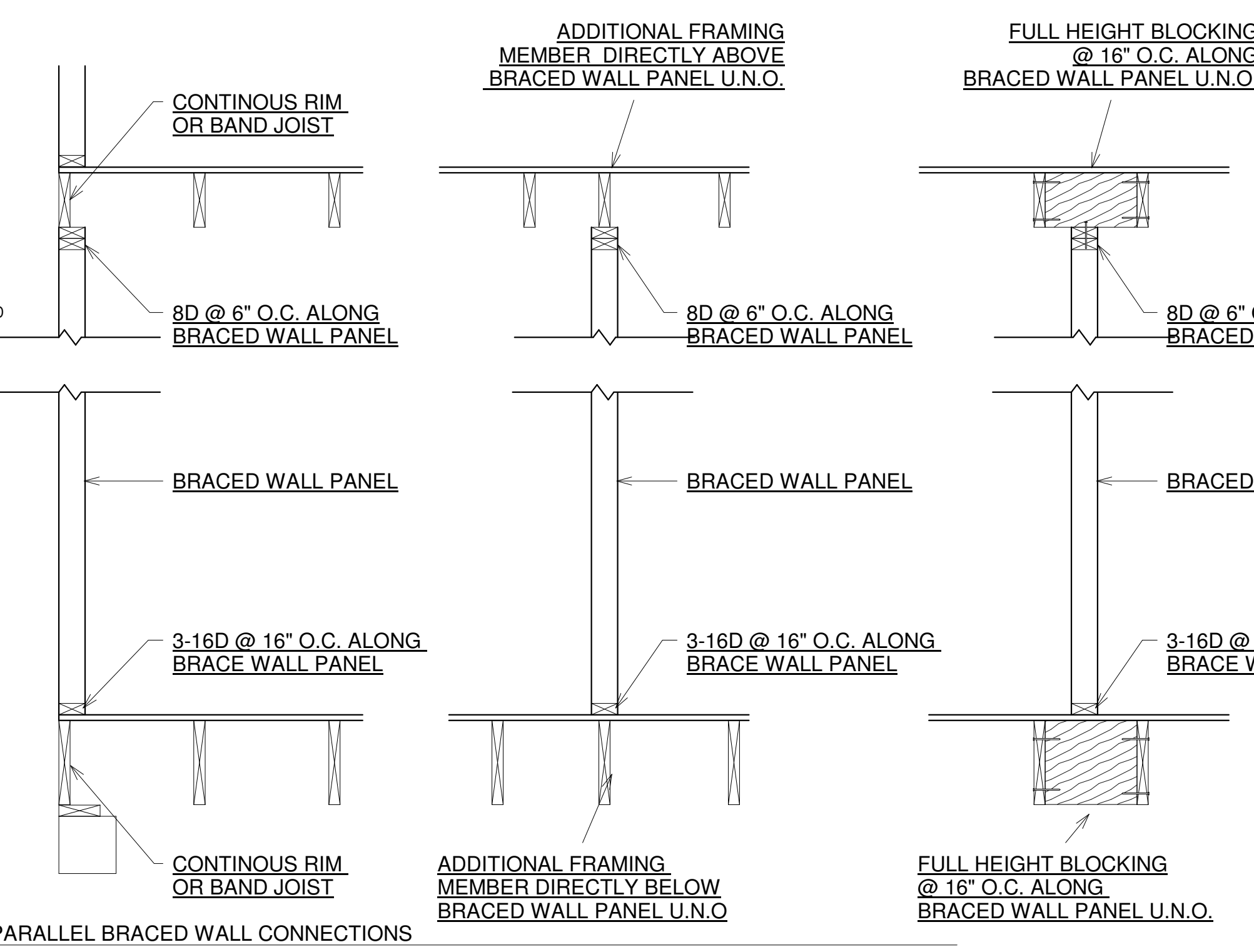
- 3.1.1 WALLS BEHIND SHOWERS AND TUBS
- 3.1.2 WALLS BEHIND FIREPLACES
- 3.1.3 ATTIC KNEE WALLS
- 3.1.4 SKYLIGHT SHAFT WALLS
- 3.1.5 WALL ADJOINING PORCH ROOF
- 3.1.6 STAIRCASE WALLS
- 3.1.7 DOUBLE WALLS
- 3.1.8 GARAGE RIM/BAND JOIST ADJOINING CONDITIONED SPACE
- 3.1.9 ALL OTHER EXTERIOR WALLS

SECTION 4: REDUCED THERMAL BRIDGING

- 4.1. FOR INSULATED CEILINGS WITH ATTIC SPACE ABOVE (i.e. NON-CATHEDRALIZED), GRADE I INSULATION EXTENDS TO THE INSIDE FACE OF THE EXTERIOR WALL BELOW MIN. R-21
- 4.2. FOR SLABS ON GRADE, 100% OF SLAB EDGE INSULATION TO MIN. R-5 AT THE DEPTH SPECIFIED BY 2009 IECC AND ALIGNED WITH THE THERMAL BOUNDARY OF THE WALLS.
- 4.3. INSULATION BENEATH ATTIC PLATFORMS (e.g. HVAC PLATFORMS, WALKWAYS) MIN. R-21
- 4.4. REDUCE THERMAL BRIDGING AT ABOVE-GRADE WALLS SEPARATING CONDITIONED FROM UNCONDITIONED SPACE (RIM/BAND JOISTS EXEMPTED) USING ONE OF THE FOLLOWING OPTIONS:
 4.4.1 CONTINUOUS RIGID INSULATION, INSULATED SIDING, OR COMBINATION OF THE TWO: MIN. R-5 OR
 4.4.2 STRUCTURAL INSULATED PANELS (SIPS) OR
 4.4.3 INSULATED CONCRETE FORMS (ICFS) OR
 4.4.4 DOUBLE WALL FRAMING OR
 4.4.5 ADVANCED FRAMING, INCLUDING ALL OF THE ITEMS BELOW:
 4.4.5a ALL CORNERS INSULATED MIN. R-5 TO EDGE AND
 4.4.5b ALL HEADERS ABOVE WINDOWS AND DOORS INSULATED AND
 4.4.5c FRAMING LIMITED @ WINDOWS AND DOORS AND
 4.4.5d ALL INTERIOR/EXTERIOR WALL INTERSECTIONS INSULATED TO THE SAME R-VALUE AS THE REST OF THE EXTERIOR WALL AND
 4.4.5e MINIMUM STUD SPACING OF 16" O.C. FOR 2X4 FRAMING, AND 24" O.C. FOR 2X6 FRAMING UNLESS CONSTRUCTION DOCUMENTS SPECIFY OTHER SPACING IS STRUCTURALLY REQUIRED.
- 4.5. MINIMUM STUD SPACING OF 16" O.C. FOR 2X4 FRAMING, AND 24" O.C. FOR 2X6 FRAMING UNLESS CONSTRUCTION DOCUMENTS SPECIFY OTHER SPACING IS STRUCTURALLY REQUIRED.

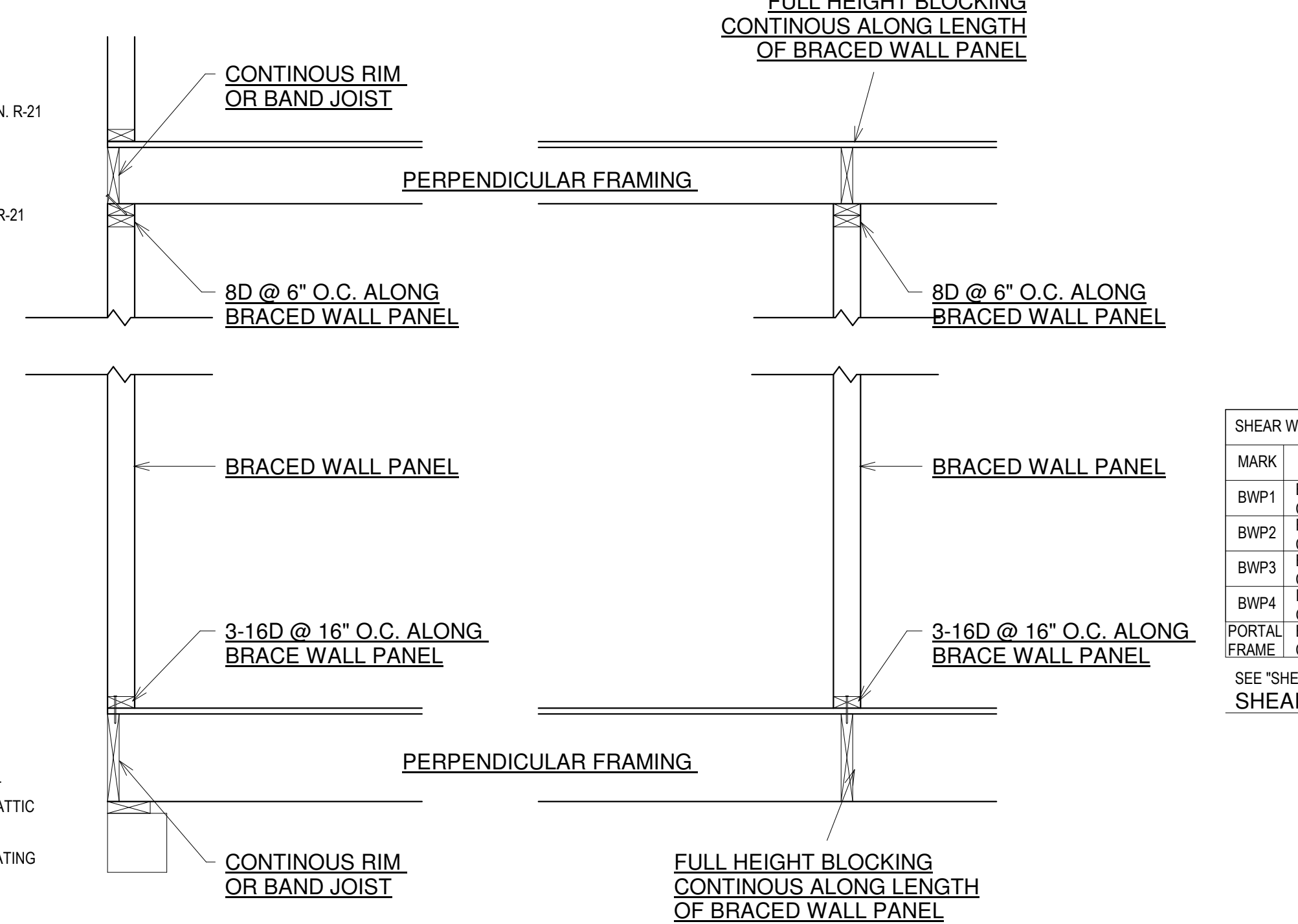
SECTION 5: AIR SEALING

- 5.1. PENETRATIONS TO UNCONDITIONED SPACE FULLY SEALED WITH SOLID BLOCKING OR FLASHING AS NEEDED AND GAPS SEALED WITH CAULK OR FOAM.
 5.1.1 DUCT/FLUE SHAFT
 5.1.2 PLUMBING/PIPING
 5.1.3 ELECTRICAL WIRING
 5.1.4 BATHROOM AND KITCHEN EXHAUST FANS
 5.1.5 RECESSED LIGHTING FIXTURES ADJACENT TO UNCONDITIONED SPACE (AT LABELLED AND FULLY GASKETED, ALSO, IF IN INSULATED CEILING WITHOUT ATTIC ABOVE, EXTERIOR SURFACE OF FIXTURE INSULATED TO R-11 OR HIGHER TO MINIMIZE CONDENSATION POTENTIAL)
 5.1.6 LIGHT TUBES ADJACENT TO UNCONDITIONED SPACE INCLUDE LENS SEPARATING UNCONDITIONED AND CONDITIONED SPACE AND ARE FULLY GASKETED
- 5.2. CRACKS IN THE BUILDING ENVELOPE FULLY SEALED
 5.2.1 ALL SILL PLATES ADJACENT TO CONDITIONED SPACE SEALED TO FOUNDATION OR SUB-FLOOR WITH CAULK, FOAM, OR EQUIVALENT MATERIAL. FOAM GASKET ALSO PLACED BENEATH SILL PLATE IF RESTING ATOP CONCRETE OR MASONRY AND ADJACENT TO UNCONDITIONED SPACE.
 5.2.2 AT TOP OF WALLS ADJOINING UNCONDITIONED SPACES, CONTINUOUS TOP PLATES OR SEALED BLOCKING USING CAULK, FOAM, OR EQUIVALENT MATERIAL
 5.2.3 DRYWALL SEALED TO TOP PLATE AT ALL UNCONDITIONED ATTIC/WALL INTERFACES USING CAULK, FOAM, DRYWALL ADHESIVE (BUT NOT OTHER CONSTRUCTION ADHESIVES), OR EQUIVALENT MATERIAL. EITHER APPLY SEALANT DIRECTLY BETWEEN DRYWALL AND TOP PLATE OR TO THE SEAM BETWEEN THE TWO FROM THE ATTIC ABOVE
 5.2.4 ROUGH OPENING AROUND WINDOWS AND EXTERIOR DOORS SEALED WITH FOAM
 5.2.5 MARRIAGE JOINTS BETWEEN MODULAR HOME MODULES AT ALL EXTERIOR BOUNDARY CONDITIONS FULLY SEALED WITH GASKET AND FOAM.
 5.2.6 ALL SEAMS BETWEEN STRUCTURAL INSULATED PANELS (SIPS)/FOAMED AND/OR TAPED PER MANUFACTURER'S INSTRUCTIONS
 5.2.7 IN MULTIFAMILY BUILDINGS, THE GAP BETWEEN THE DRYWALL SHAFT WALL (I.E. COMMON WALL) AND THE STRUCTURAL FRAMING BETWEEN UNITS FULLY SEALED AT ALL EXTERIOR BOUNDARIES
- 5.3. OTHER OPENINGS
 5.3.1 DOORS ADJACENT TO UNCONDITIONED SPACE (E.G. ATTICS, GARAGES, BASEMENTS) OR AMBIENT CONDITIONS GASKETED OR MADE SUBSTANTIALLY AIR-TIGHT (SEE SHEET A-2)
 5.3.2 ATTIC ACCESS PANELS AND DROP-DOWN STAIRS EQUIPPED WITH A DURABLE MIN. R-10 INSULATED COVER THAT IS GASKETED (I.E. NOT CAULKED) TO PRODUCE CONTINUOUS AIR SEAL WHEN OCCUPANT IS NOT ACCESSING ATTIC (SEE SHEET A-2)
 5.3.3 WHOLE-HOUSE FANS EQUIPPED WITH A DURABLE MIN. R-10 INSULATED COVER THAT IS GASKETED AND EITHER INSTALLED ON THE HOUSE SIDE OR MECHANICALLY OPERATED



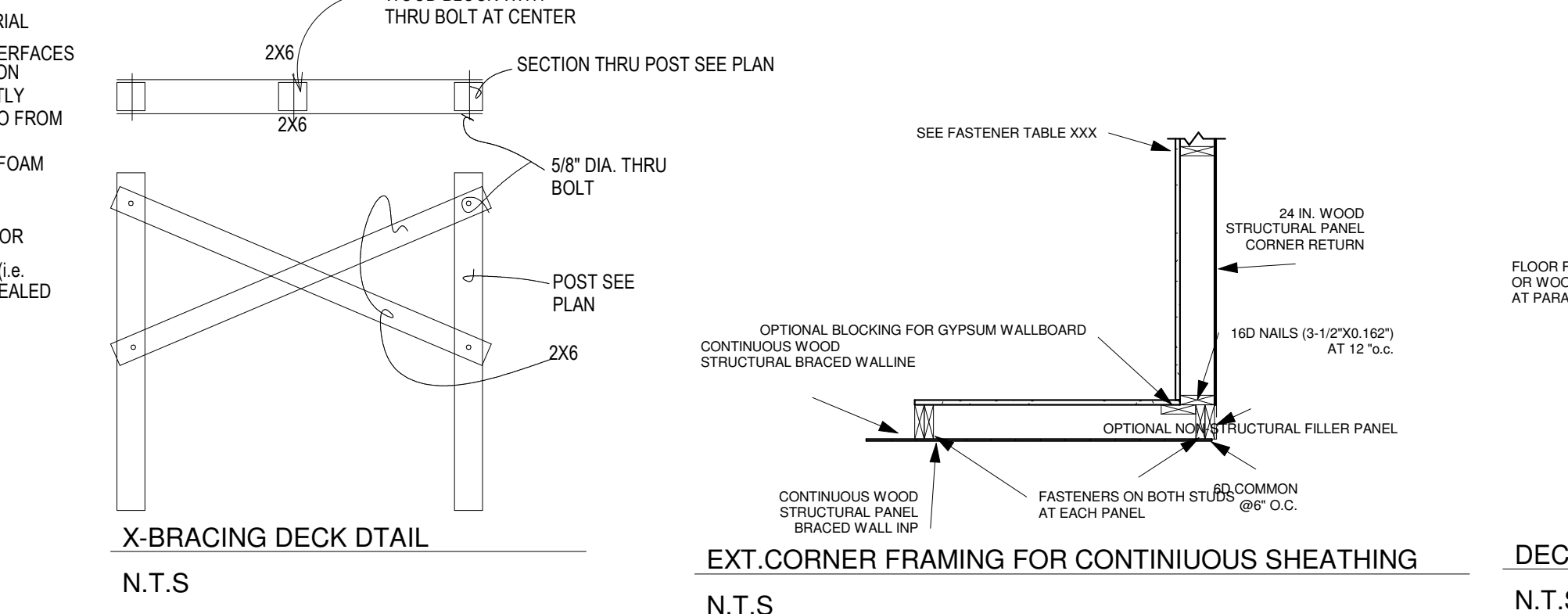
PARALLEL BRACED WALL CONNECTIONS

N.T.S



PERPENDICULAR BRACED WALL PANEL CONNECTIONS

N.T.S

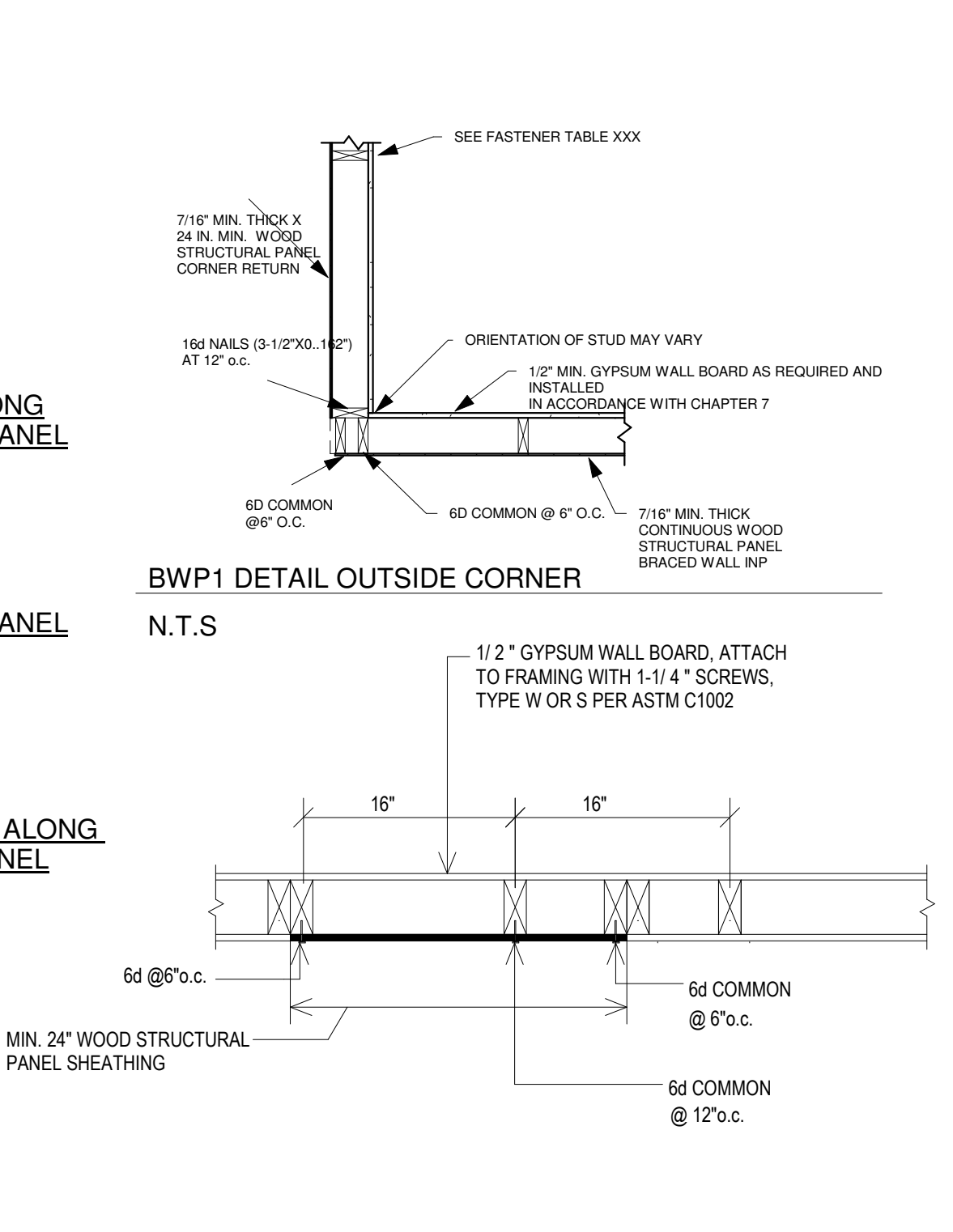


X-BRACING DECK DETAIL

N.T.S

EXT. CORNER FRAMING FOR CONTINUOUS SHEATHING

N.T.S

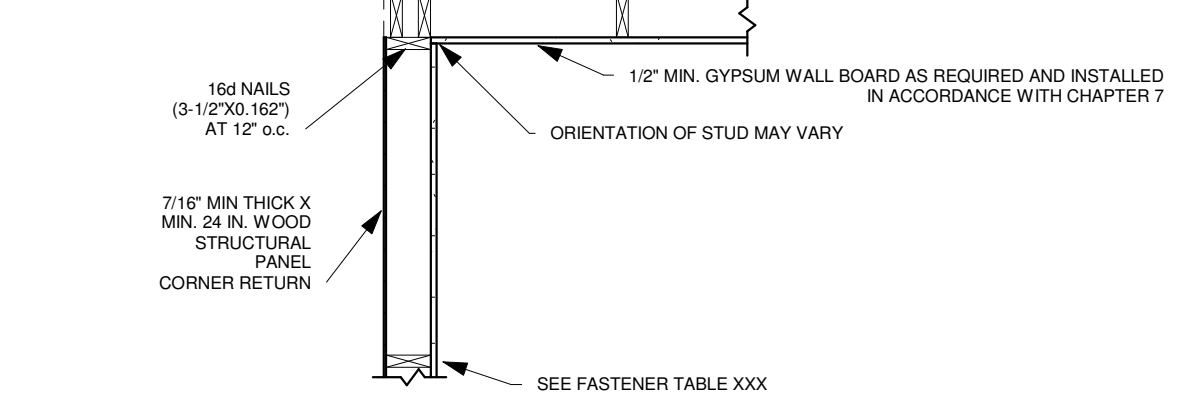


BWP1 DETAIL OUTSIDE CORNER

N.T.S

BWP2 DETAIL FIELD OF WALL

N.T.S



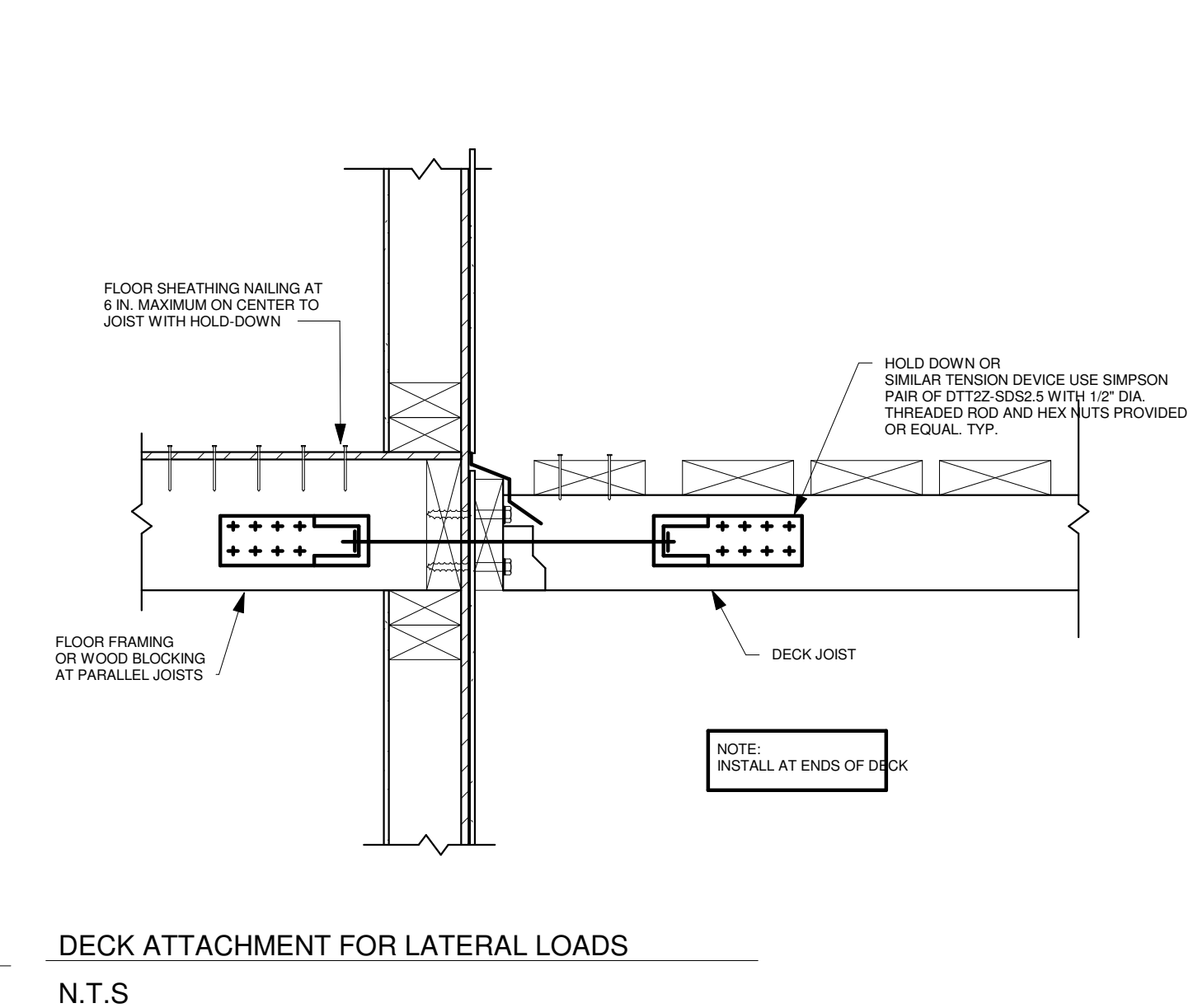
BWP3 INSIDE CORNER

N.T.S

SHEAR WALL SCHEDULE		FASTENERS @	FASTENERS @	
MARK	TYPE	PANEL EDGE	FIELD OF PANEL	COMMENTS
BWP1	EXTERIOR CORNER, CS-WSP	6d @ 6" O.C.	6d @ 12" O.C.	*
BWP2	FIELD OF WALL, CS-WSP	6d @ 6" O.C.	6d @ 12" O.C.	*
BWP3	EXTERIOR CORNER, CS-WSP	6d @ 4" O.C.	6d @ 6" O.C.	*
BWP4	INTERIOR GYPSUM BOARD	NAILS OR SCREWS/NAILS OR SCREWS PER IRC @ 7" O.C.	PER IRC @ 7" O.C.	*
PORTAL	EXTERIOR, CS-PP	SEE PLAN	SEE DETAIL	DOUBLE PORTAL

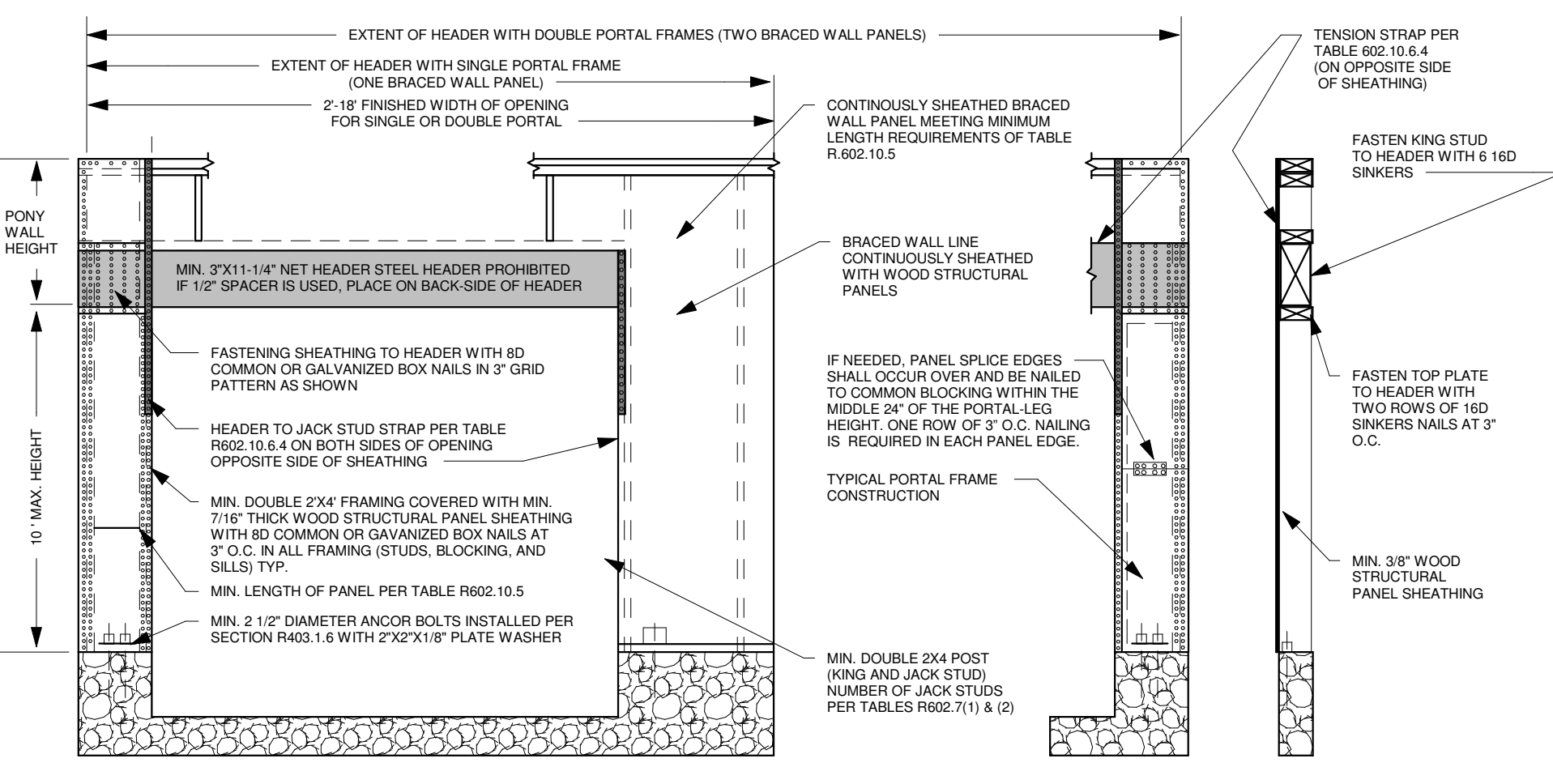
SEE "SHEAR PANEL DETAILS" *BLOCK ALL HORIZ. PANEL EDGES WITH 2X4

SHEAR WALL SCHEDULE

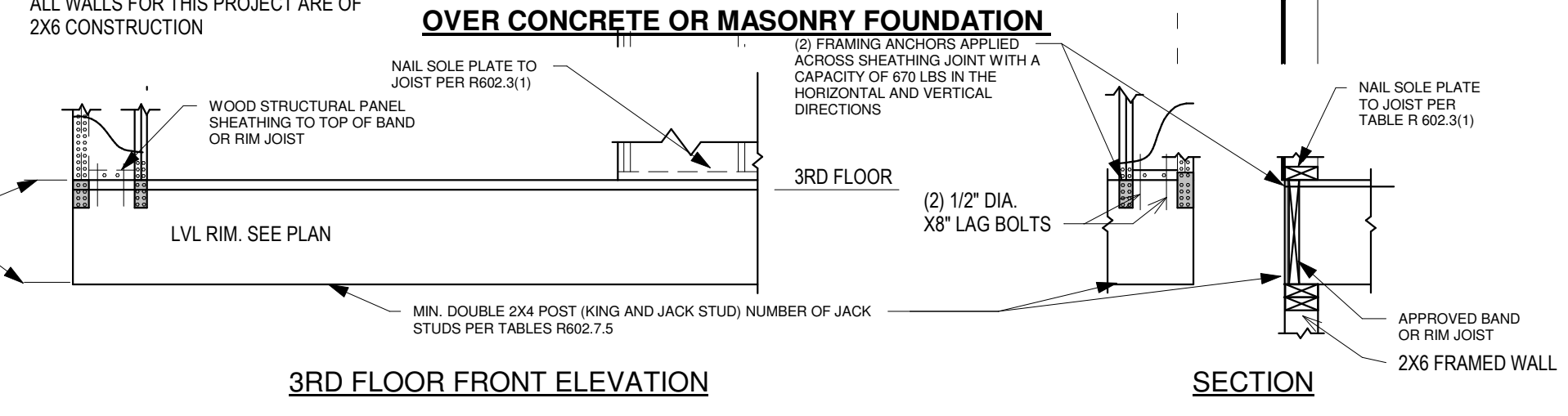


DECK ATTACHMENT FOR LATERAL LOADS

N.T.S

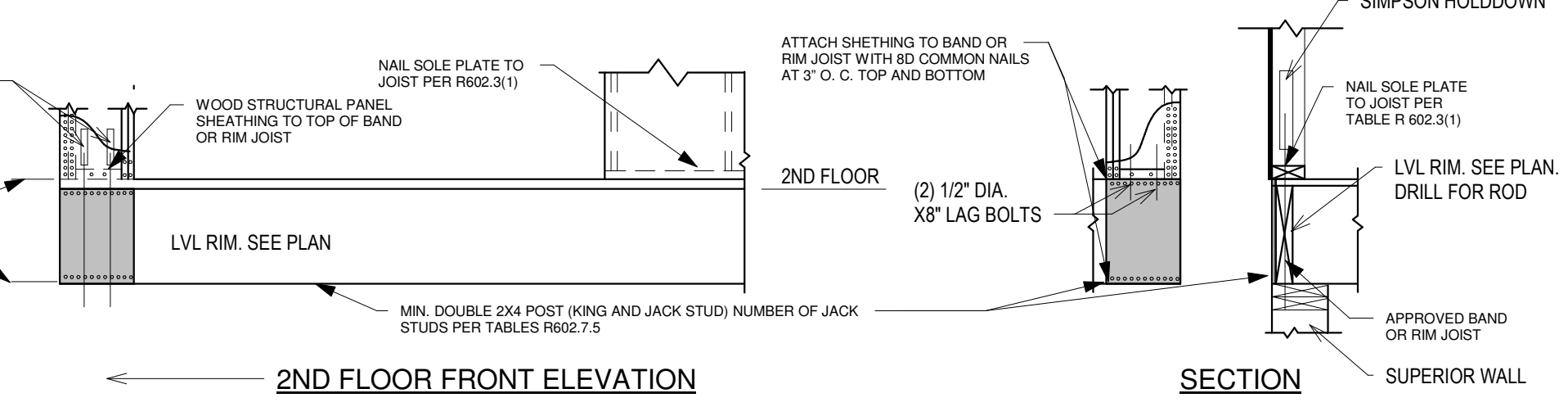


OVER CONCRETE OR MASONRY FOUNDATION



OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION

(WHERE PORTAL SHEETING DOES NOT LAP OVER BAND OR RIM JOIST)



OVER RAISED WOOD FLOOR - OVERLAP OPTION

(WHERE PORTAL SHEATHING LAPS OVER BAND OR RIM JOIST)

OVER CONCRETE OR MASONRY OR WOOD FRAMING OPTIONS

1/2" = 1'-0"

Mark	Date	Description
A	9/20/22	RELEASED FOR PERMITS

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CITY:

ISSUE DATE:	11/24/19
SCALE:	As indicated
DRAWN BY:	Author
JOB NO.:	22-P107
TITLE:	ENERGY STAR NOTES
SHEET NO.:	A-6
SHEET:	A-6 OF 6

Cathy F. Benson