

# THERAPY/OFFICE TI

ESD 112

5305 E 18th St. VANCOUVER, WA 98661

PERMIT SET

2026.05.15

**1.1 - DESIGN STANDARD**  
2021 INTERNATIONAL BUILDING CODE (IBC) WITH THE 2024 WASHINGTON STATE AMENDMENTS

**1.2 - DESIGN CRITERIA**  
1. 5 psf LATERAL LOAD ON INTERIOR PARTITION WALLS.

**1.3 - GENERAL**  
1. THESE STRUCTURAL NOTES ARE A SUPPLEMENT TO THE SPECIFICATIONS.  
2. SPECIFICATIONS AND CODES REFERENCED IN THESE NOTES ARE THE VERSIONS MOST RECENTLY ADOPTED BY THE PERMITTING AUTHORITY.  
3. VERIFY DIMENSIONS AND CONDITIONS WITH THE ARCHITECTURAL DRAWINGS. FIELD VERIFY DIMENSIONS AND ELEVATIONS RELATIVE TO THE EXISTING STRUCTURE PRIOR TO FABRICATION OF MATERIALS.  
4. FOR FEATURES OF CONSTRUCTION NOT FULLY SHOWN, PROVIDE THE SAME TYPE AND CHARACTER AS SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.  
5. APPLY, PLACE, ERECT OR INSTALL ALL PRODUCTS AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.  
6. PROVIDE BLOCKING BETWEEN STUDS (OR OTHER MEANS OF BRACING) AT WOOD BEARING WALLS TO PREVENT STUD BUCKLING PRIOR TO INSTALLATION OF GYPSUM WALLBOARD.

**3.12 - POST-INSTALLED ANCHORS**  
FOR ANCHORS ON THE CONSTRUCTION DOCUMENTS NOT NOTED WITH A SPECIFIC PRODUCT TYPE OR MANUFACTURER, THE CONTRACTOR SHALL USE APPROVED ANCHORS SPECIFIED IN THE TABLE BELOW.  
1. THE FOLLOWING PRODUCTS SHALL BE INSTALLED PER THE REQUIREMENTS OF THE REFERENCED PRODUCT APPROVALS SHOWN BELOW, UNLESS NOTED OTHERWISE.  
2. NO SUBSTITUTIONS SHALL BE MADE FOR POST-INSTALLED ANCHORS SHOWN ON THE CONSTRUCTION DOCUMENTS WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS PREPARED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT OCCURS, DEMONSTRATING THAT THE PROPOSED ANCHORS HAVE PERFORMANCE VALUES EQUIVALENT TO OR HIGHER THAN THOSE SHOWN ON THE DRAWINGS.

ITEM	APPROVED PRODUCTS	CODE REPORT NUMBER
SCREW ANCHOR (CONCRETE)	HILTI KH-EZ	ESR-3027
	SIMPSON TITEN HD	ESR-2713
	DEWALT SCREW-BOLT +	ESR-3889
	DEWALT SNAKE +	ESR-2272

**5.1 - STRUCTURAL STEEL**  
1. DETAIL, FABRICATE, ERECT, IDENTIFY AND PAINT STRUCTURAL STEEL ACCORDING TO AISC SPECIFICATIONS; EXCEPT CONTRACTOR SHALL USE THE ARCHITECTURAL DRAWINGS IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS FOR DIMENSIONS AND STRUCTURAL STEEL NOT SHOWN ON THE STRUCTURAL DOCUMENTS.  
2. WELDING:  
A. CONFORM WITH AWS SPECIFICATIONS.  
B. WELDERS TO BE QUALIFIED UNDER AWS AND WABO SPECIFICATIONS.  
C. FIELD WELDING IS NOTED ON THE DRAWINGS FOR GUIDANCE. THE ERECTOR IS RESPONSIBLE FOR THE MEANS, METHODS, AND SAFETY OF ERECTION OF THE STRUCTURAL STEEL.  
3. CONTRACTOR TO DESIGN AND PROVIDE ERECTION AIDS (BOLTS, CLIPS, SHIMS, SEATS, ETC.) REQUIRED TO FACILITATE CONSTRUCTION.

STRUCTURAL SHAPES			
ITEM	ASTM	GRADE (STRENGTH)	
HSS	RECTANGULAR	A500	GRADE C (Fy = 50 KSI)

STRUCTURAL FASTENERS			
ITEM	ASTM	GRADE (STRENGTH)	
COMMON BOLTS	A307	GRADE A (Fu = 66 KSI)	

**6.7 - NAILING AND CONNECTION SCHEDULE**  
1. MINIMUM NUMBER OF NAILS FOR WOOD MEMBERS, UNLESS NOTED OTHERWISE ON DRAWINGS.  
2. NAILS IN CONTACT WITH PRESSURE-TREATED LUMBER SHALL BE DOUBLE HOT DIPPED GALVANIZED EXCEPT WHEN IN CONTACT WITH ZINC BORATE OR SBX/DOT PRESERVATIVE TREATMENT.

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS	SPACING AND LOCATION
<b>WALL</b>		
STUD TO STUD (NOT AT BRACED WALL PANELS)	16d	24" OC FACE NAIL
	10d	16" OC FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d	16" OC FACE NAIL
	10d	12" OC FACE NAIL
BUILT-UP HEADER (2" TO 2" HEADER)	16d	16" OC EACH EDGE, FACE NAIL
CONTINUOUS HEADER TO STUD	(4) 8d OR (4) 10d	TOE NAIL
TOP PLATE TO TOP PLATE	16d	16" OC FACE NAIL
	10d	12" OC FACE NAIL
TOP PLATE TO TOP PLATE, AT END JOINTS	(3) 16d OR (12) 10d	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d	16" OC FACE NAIL
	10d	12" OC FACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS	(2) 16d OR (4) 10d	16" OC FACE NAIL
STUD TO TOP OR BOTTOM PLATE	(3) 16d OR (4) 10d	TOE NAIL
	(2) 16d OR (3) 10d	TOE NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	(2) 16d OR (3) 10d	FACE NAIL

NOTE: SEE FASTENING SCHEDULE IBC TABLE 2304.10 FOR ALTERNATE MINIMUM FASTENING OPTIONS.

FRAMING NAILS		
CALLOUT	MINIMUM SHANK DIAMETER (IN)	LENGTH (IN)
6d	0.113	2
8d	0.131	2-1/2
10d	0.148	3
16d	0.162	3-1/2
20d	0.192	4
40d	0.225	5
60d	0.263	6

NOTE: NAILS AND STAPLES ARE CARBON STEEL MEETING THE SPECIFICATIONS OF ASTM F1667.

**6.9 - OTHER WOOD CONNECTIONS**  
1. FRAMING CONNECTORS: SIMPSON STRONG-TIE OR APPROVED.  
A. FILL ALL NAIL HOLES WITH NAILS AS SPECIFIED BY THE CONNECTOR MANUFACTURER, UNLESS NOTED OTHERWISE.  
2. PROVIDE STANDARD PLATE WASHERS UNDER HEADS OR NUTS OF BOLTS BEARING ON WOOD. SEE SHEAR WALL SCHEDULE FOR SQUARE WASHER REQUIREMENTS AT SHEAR WALLS.  
3. ANCHOR ALL PLATES WITH A MINIMUM OF 3 ANCHORS PER PIECE.



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REVISIONS:

STRUCTURAL NOTES  
THERAPY/OFFICE TI

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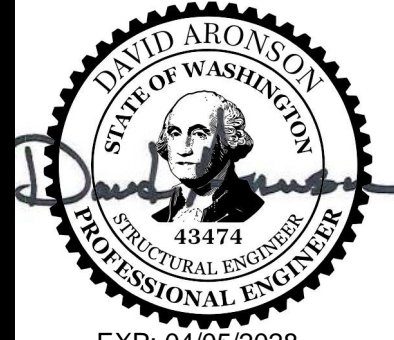
Date: 2026.05.15  
Drawn by: ATW  
Checked by: BG, DA

SHEET NO.

**S1.1**

Project No. 2026.00





**KGA**  
Structural Engineers  
**KRAMER**  
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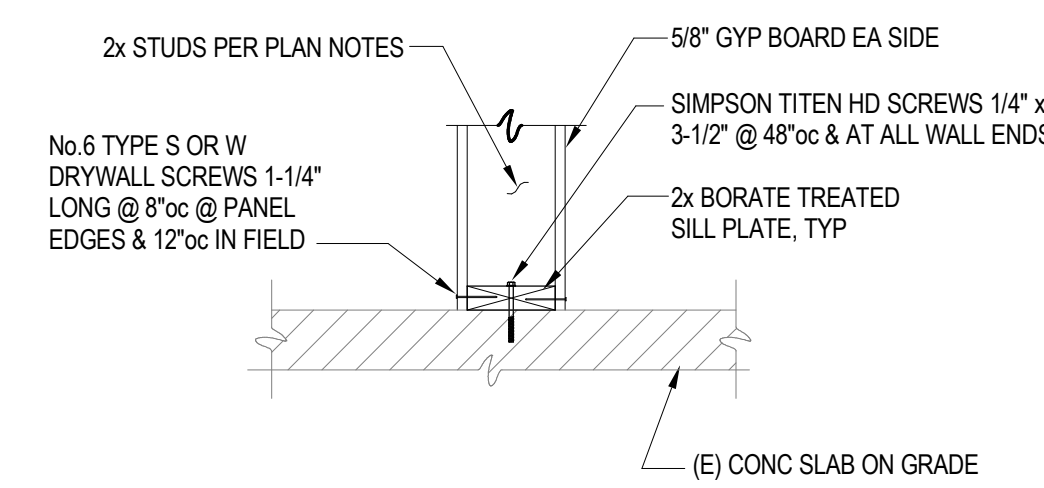
DETAILS  
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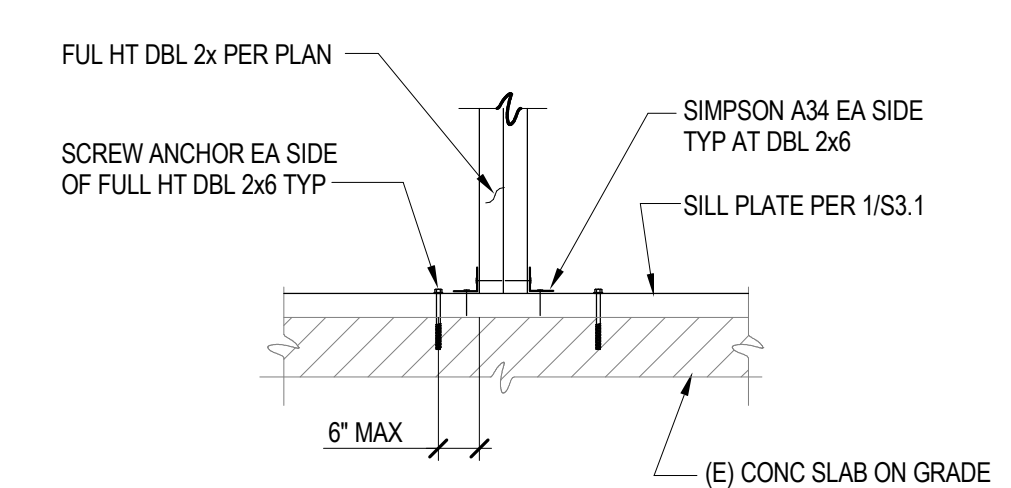
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**S3.1**

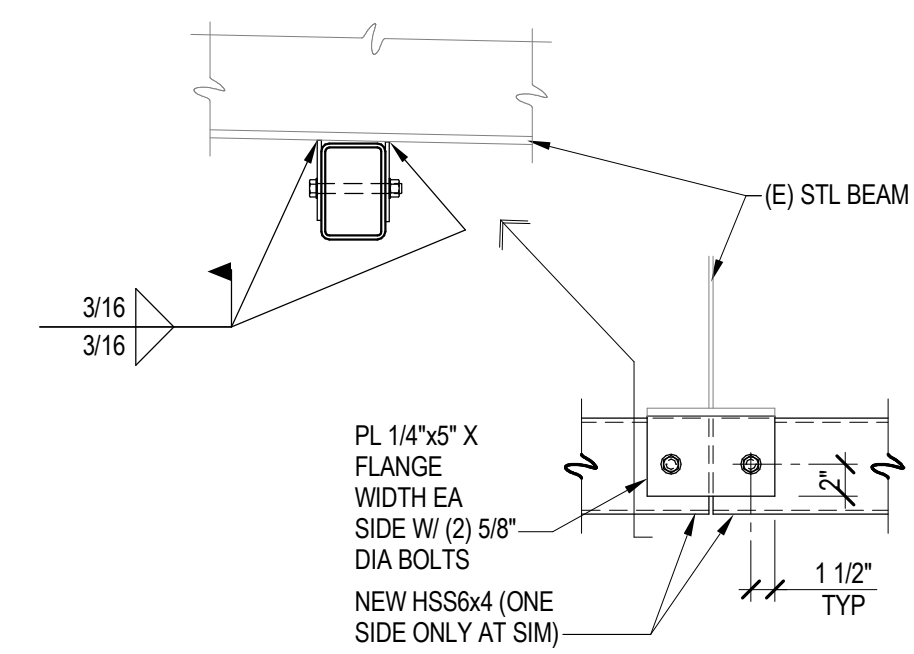
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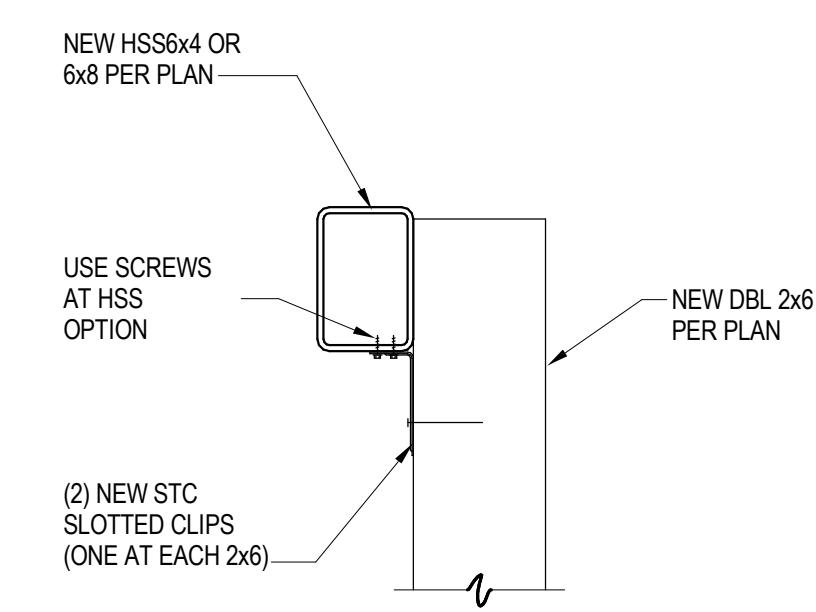
**1 SECTION**  
S3.1 1" = 1'-0"



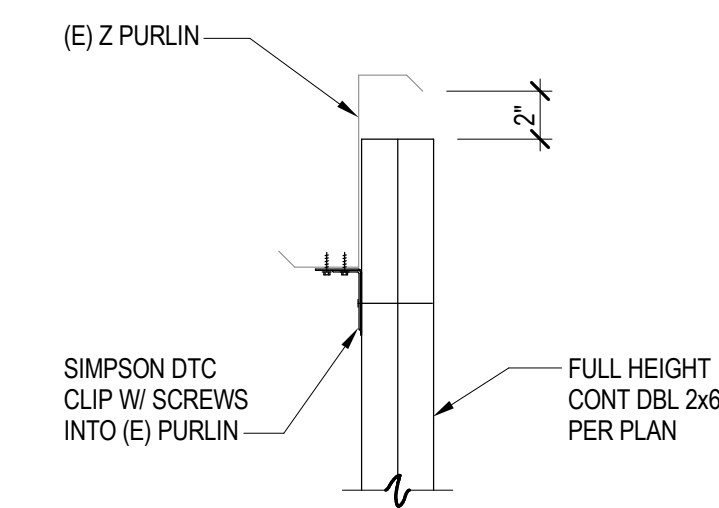
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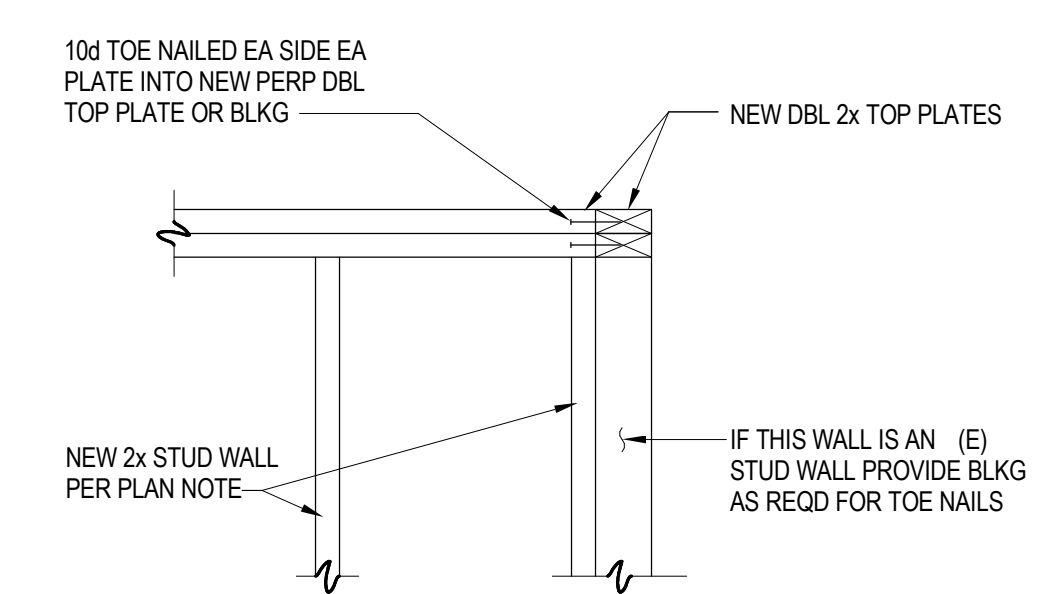
**3 SECTION**  
S3.1 1" = 1'-0"



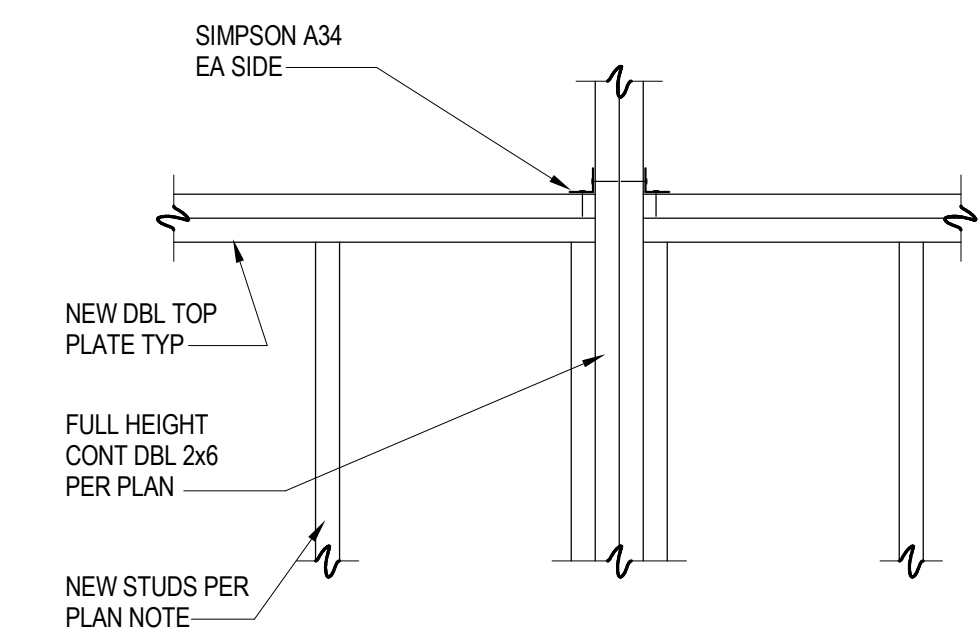
**4 SECTION**  
S3.1 1 1/2" = 1'-0"



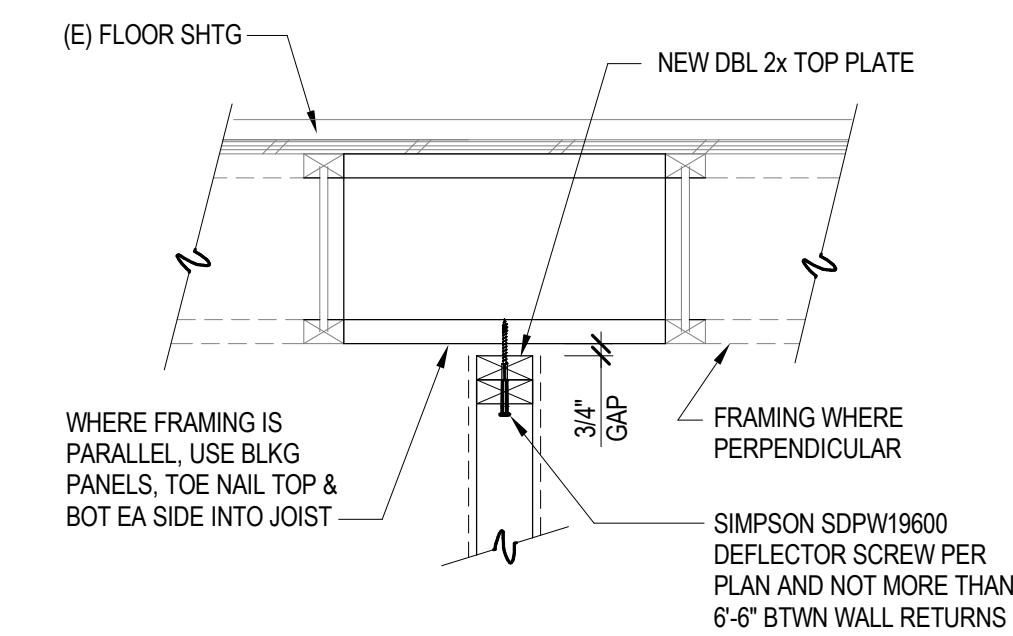
**5 SECTION**  
S3.1 1 1/2" = 1'-0"



**6 SECTION**  
S3.1 1" = 1'-0"



**7 SECTION**  
S3.1 1" = 1'-0"



**8 SECTION**  
S3.1 1" = 1'-0"