



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

APPLICATION FOR HCAI PREAPPROVAL OF
MANUFACTURER'S CERTIFICATION (OPM)

OFFICE USE ONLY

APPLICATION #: OPM-0735

HCAI Preapproval of Manufacturer's Certification (OPM)

Type: ☐ New ☒ Renewal/Update

Manufacturer Information

Manufacturer: Guldmann

Manufacturer's Technical Representative: Kimberly Tonione

Mailing Address: 14401 McCormick Drive, Suite A, Tampa, FL 33626

Telephone: (813) 880-0619

Email: kit@guldmann.net

Product Information

Product Name: Guldmann GH3 Patient Lift

Product Type: Patient Lift System

Product Model Number: GH3

General Description: A patient lift system that includes a console containing the motor and pulleys; a strap that extends out of the console; a hanger bar that attaches to the strap and to which a sling or seat attaches; a hand-held control unit for patient lift and movement regulation; and fixed ceiling-mounted or wall-mounted tracks.

Applicant Information

Applicant Company Name: Guldmann

Contact Person: Kimberly Tonione

Mailing Address: 14401 McCormick Drive, Suite A, Tampa, FL 33626

Telephone: (813) 725-4897

Email: kit@guldmann.net

Title: Project Manager

"A healthier California where all receive equitable, affordable, and quality health care"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

Registered Design Professional Preparing Engineering Recommendations

Company Name: FORELL / ELSESSER ENGINEERS, INC.

Name: Marco Scanu

California License Number: S4454

Mailing Address: 160 Pine Street, Suite 600, San Francisco, CA 94111

Telephone: (415) 837-0700

Email: scanu@forell.com

HCAI Special Seismic Certification Preapproval (OSP)

☐ Special Seismic Certification is preapproved under OSP

OSP Number: _____

Certification Method

Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950-16

☐ Other(s) (Please Specify): _____

*Use of criteria other than those adopted by the California Building Standards Code, 2022 (CBSC 2022) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBSC 2022 may be used when approved by HCAI prior to testing.

☒ Analysis

☐ Experience Data

☐ Combination of Testing, Analysis, and/or Experience Data (Please Specify): _____

HCAI Approval

Date: 5/20/2025

Name: William Staehlin

Title: Senior Structural Engineer

Condition of Approval (if applicable): _____

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY





Guldmann Inc.
14401 McCormick Drive
Tampa FL, 33626 Unit A
Fax: (813)-880-9558
Email: Info@Guldmann.net

NOTES

OPM-0735

SEOR PLEASE NOTE

- The Engineer-of-Record (SEOR) to verify the building structure is adequate to support the new equipment and support framing loads to be installed per this drawing.
- The equipment may be one of two types, or a combination of both: **Type 1:** "Room Cover System" per **Detail 1** and **5/GUL145**, and/or **Type 2:** "Upright Support" per **Details** on **GUL145.2**
- Type 1** "Room Cover System" loads: Select the values corresponding to the proposed Hoist Type and Rails to be used:

DESIGN LOADS BY HOIST RATING AND RAIL TYPE (LBS)											
Hoist	605 Lbs	825 Lbs	1,000 Lbs	1,000 Lbs	1,000 Lbs	1,000 Lbs	1,000 Lbs	1,000 Lbs	1,000 Lbs	1,000 Lbs	1,000 Lbs
Hanger Max	75	105	135	175	195	235	275	315	355	395	435
Branch, Vertical Component	12	18	24	30	36	42	48	54	60	66	72
Branch, Vertical Component	12	18	24	30	36	42	48	54	60	66	72

Table Notes:

- These loads are based on ASCE7-16 load combinations that include Dead, Live and Seismic Loadings. Additionally, hanger axial loads include dynamic load factors for movement and impact in the gravity cases.
- "Hanger loads" represent the load in any given hanger and do not reflect design loads in the various anchorage devices. Hanger values less than zero indicate net compression considering all effects. These values do not include any Do amplification.
- "Bracing" loads represent the load in any given brace and do not reflect design loads in the various anchorage devices. These values reflect the worst case for any brace angle. Where 0 values do not vary between 25 and 60 degrees from the horizontal. These values do not include any Do amplification.

4. Type 2 "Upright Support" loads:

	Gravity	Seismic
Vertical Force, Top of Post at Wall, Perpendicular to Wall	1,955	1,274
Lateral Force, Top of Post at Wall, Parallel to Wall	65	176
Out of Plane Lateral Force, anchors spaced along the length	20	20

Table Notes:

- Forces result from ASCE7-16 LRFD Load combinations. These values do not include any Do amplification.
- The lateral force due to gravity is the force required for stability of the top of post.



DATE: 05/16/2025
DRAWN BY: CML

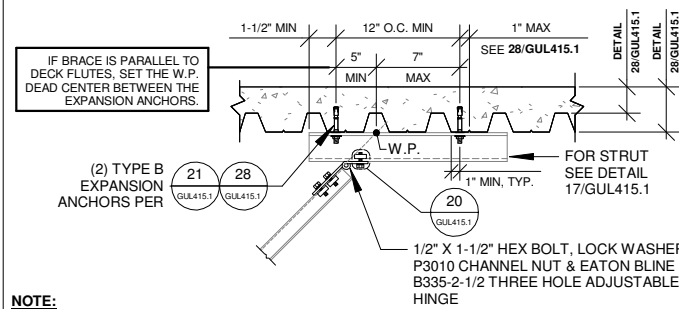
APPROVED BY:

PROJECT NAME:
GULDMANN PLFT. ATTACHMENT

SHEET DESCRIPTION:
CA 1/2" PAGE 1

SHEET NO:
GUL415 (1 OF 3)

METAL DECK DIMENSION & GAGE & TOPPING FILL THICKNESS AND TYPE FILL MUST CONFORM TO DETAIL 28/GUL415.1.

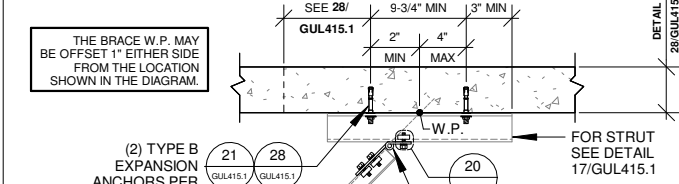


NOTE:

THE BRACE-STRUT ASSEMBLY MAY BE ANCHORED PARALLEL, SKEWED OR PERPENDICULAR TO THE METAL DECK RIBS BUT THE BRACE AND THE ANCHORED STRUT SHALL BE PARALLEL TO EACH OTHER. LENGTHEN THE STRUT AT SKEWED CONDITIONS SO THAT ANCHOR LOCATION WITHIN THE RIB COMPLIES TO THE REQUIREMENTS NOTED ABOVE.

11 BRACE CONN. AT METAL PAN DECK

FORMED SLAB TYPE AND THICKNESS SHALL CONFORM TO DETAIL 28/GUL415.1 REQUIREMENTS AND BE COMPOSED OF NORMAL WEIGHT CONCRETE ONLY.



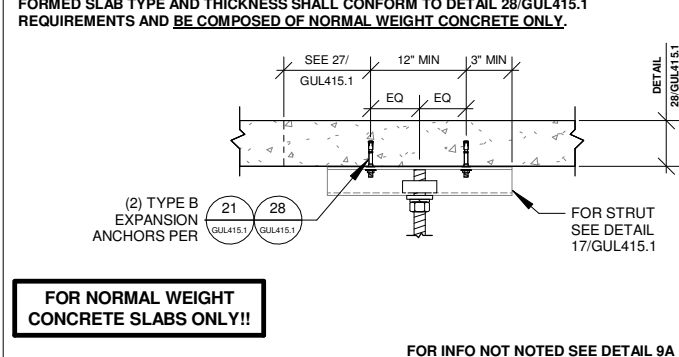
FOR NORMAL WEIGHT CONCRETE SLABS ONLY!!

NOTE:

THE BRACE-STRUT ASSEMBLY MAY BE ANCHORED PARALLEL, SKEWED OR PERPENDICULAR TO THE METAL DECK RIBS BUT THE BRACE AND THE ANCHORED STRUT SHALL BE PARALLEL TO EACH OTHER. LENGTHEN THE STRUT AT SKEWED CONDITIONS SO THAT ANCHOR LOCATION WITHIN THE RIB COMPLIES TO THE REQUIREMENTS NOTED ABOVE.

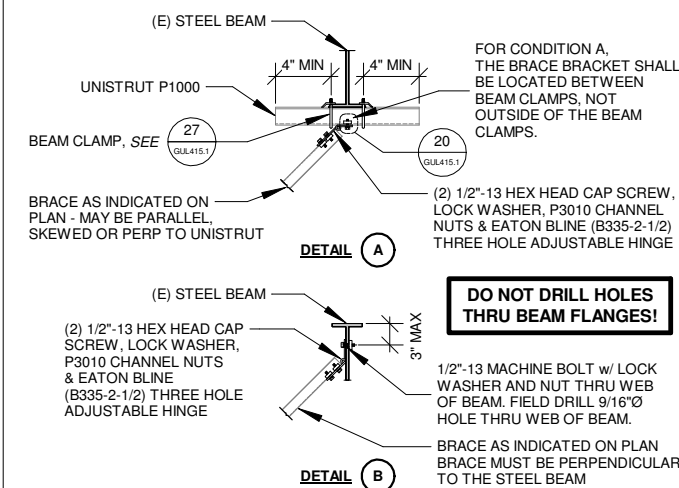
12 BRACE CONN. AT CONCRETE

FORMED SLAB TYPE AND THICKNESS SHALL CONFORM TO DETAIL 28/GUL415.1 REQUIREMENTS AND BE COMPOSED OF NORMAL WEIGHT CONCRETE ONLY.

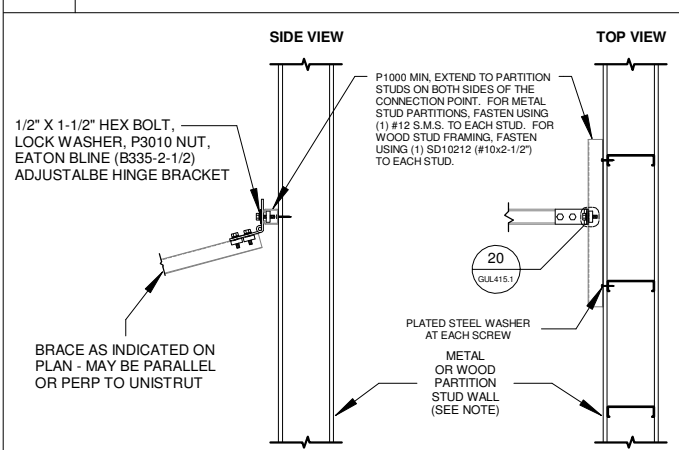


13 TYPICAL HANGER AT FLAT SLAB

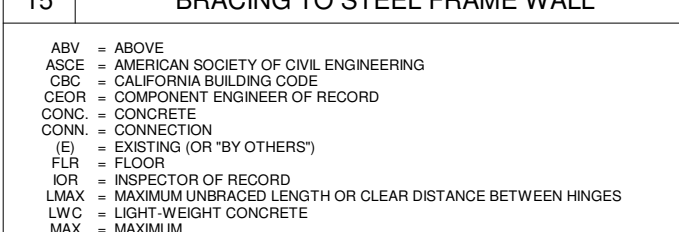
FOR INFO NOT NOTED SEE DETAIL 9A



14 BRACE CONN. AT STEEL FRAMING

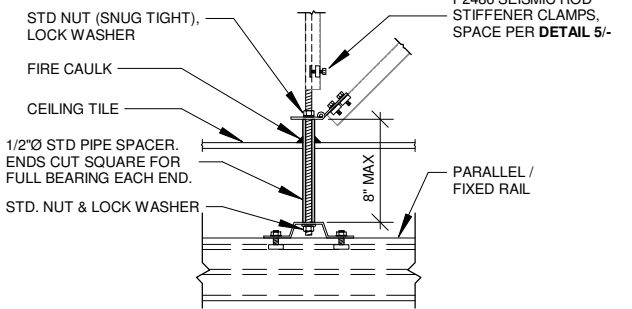
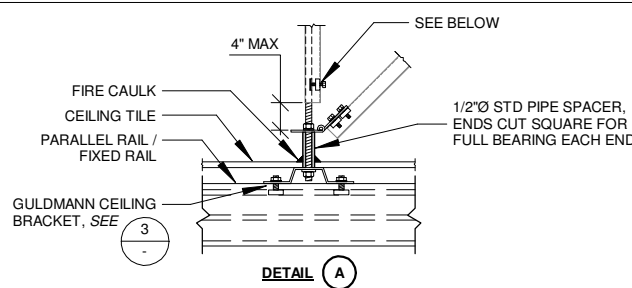


15 BRACING TO STEEL FRAME WALL



16 STANDARD ABBREVIATIONS

ABV	= ABOVE	MET	= METAL
ASCE	= AMERICAN SOCIETY OF CIVIL ENGINEERS	NWC	= NORMAL WEIGHT CONCRETE
CBC	= CALIFORNIA BUILDING CODE	PDF	= POWDER DRIVEN FASTENER
CEOR	= COMPONENT ENGINEER OF RECORD	PERP	= PERPENDICULAR
CONC.	= CONCRETE	RF	= ROOF
CONN.	= CONNECTION	SCHED	= SCHEDULE
(E)	= EXISTING (OR "BY OTHERS")	SEOR	= STRUCTURAL ENGINEER OF RECORD FOR THE BUILDING
FLR	= FLOOR	SM	= SIMILAR
IOR	= INSPECTOR OF RECORD	STD	= STANDARD
LMAX	= MAXIMUM UNBRACED LENGTH OR CLEAR DISTANCE BETWEEN HINGES	W	= WITH
LWC	= LIGHT-WEIGHT CONCRETE		
MAX	= MAXIMUM		



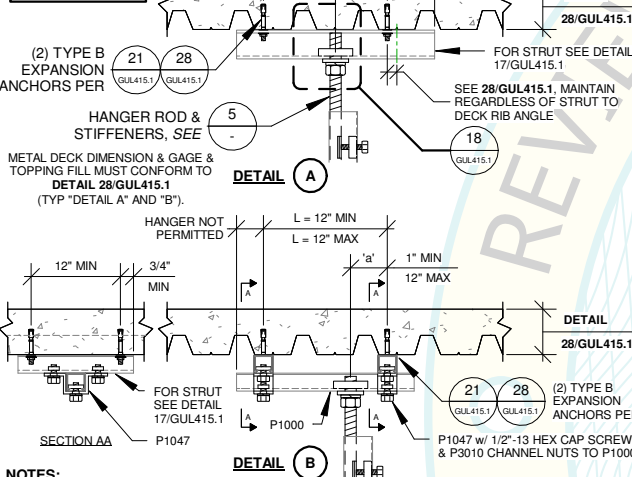
NOTES:

- SEE DETAIL 5 FOR GENERAL HANGER AND BRACE REQUIREMENTS.
- "DETAIL A" OR "B" IS OPTIONAL, DEPENDING ON WHERE THE PARALLEL RAIL IS SET RELATIVE TO THE FINISH CEILING.

8 TYPICAL SUSPENSION ROD AT CEILING CONDITION

SCHEDULE - HANGER LOCATION "a" LIMITS			
LOAD RATING	605	825	1,100
MINIMUM a/L	50	50	50
	INCH	INCH	INCH

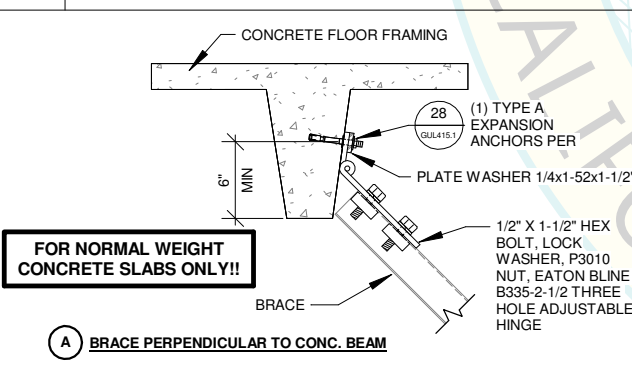
THE HANGER CAN BE NO CLOSER TO THE FINISH CEILING THAN DIMENSION "a". IF HANGER MUST BE CLOSER, USE "DETAIL B".



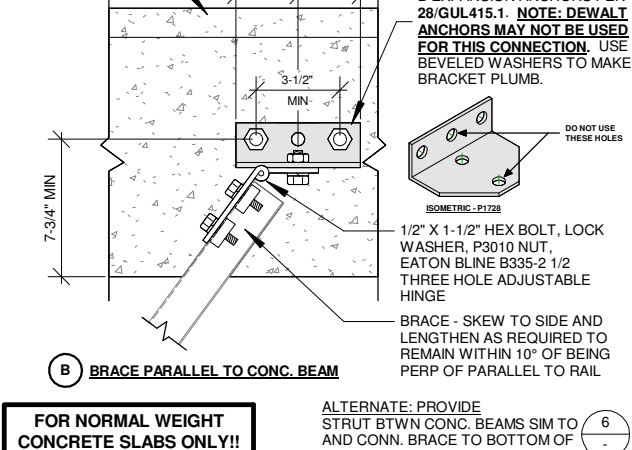
NOTES:

- IF THE HANGER LOCATION "a" CANNOT BE OBTAINED VIA "DETAIL A", "DETAIL B" MUST BE USED.
- IF STRUT IS PARALLEL TO DECK FLUTES & a/L IS SET TO 0.50 MIN, "DETAIL B" IS NOT REQUIRED FOR ALL HOIST LOAD RATINGS.

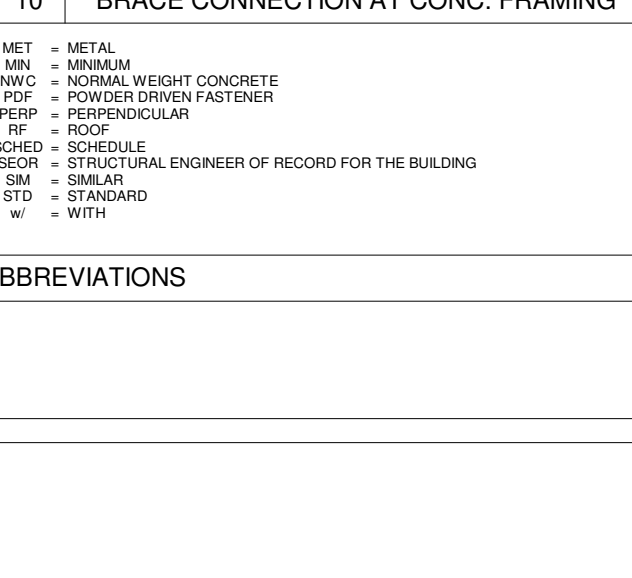
9 SUSPENSION ROD CONN. CONC. & METAL PAN



10 BRACE CONNECTION AT CONC. FRAMING



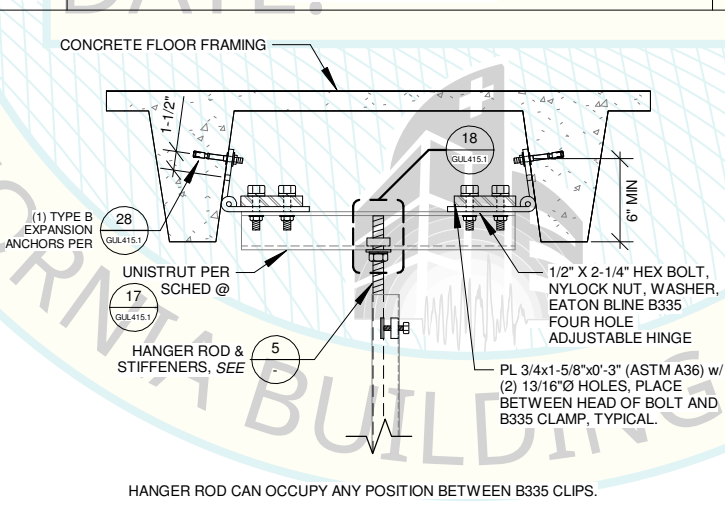
11 BRACE CONNECTION AT CONC. FRAMING



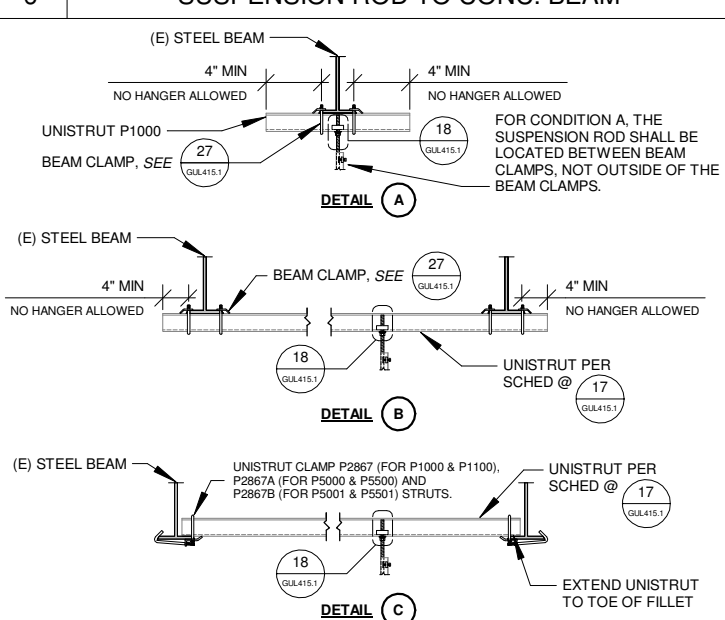
GENERAL NOTES:

- EARTHQUAKE DESIGN DATA: DESIGN STANDARDS: ASCE 7-16 2002 CBC IV Seismic = 2.00 MAXIMUM Seismic = 1.5 Seismic = 2.5 Seismic = 4.5 Seismic = 2.00W Seismic = 0.40W Seismic = 1.50 FOR LIVE LOAD LIMITING DEFLECTION: DESIGN BASIS: ALLOWABLE STRESS DESIGN (ASD) IS USED FOR ALL MEMBERS EXCEPT LOAD FACTOR RESISTANCE DESIGN (LRFD) IS USED FOR ALL POST-INSTALLED ANCHORS.
- AT THE DISCRETION OF THE SEOR, THIS PROJECT IS SUBJECT TO SPECIAL INSPECTIONS. SUBMIT REPORTS TO THE SEOR AND IOR. THE FOLLOWING SPECIAL TESTING AND INSPECTION SERVICES SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY HIRED BY THE OWNER:
 - REVIEW MILL CERTIFICATES *
 - TEST IDENTIFIED STEEL *
 - INSTALLATION TORQUE OF ALL BOLTING *
 - 31 FT/LB FOR M10 50 FT/LB FOR 1/2" Ø
 - LOAD TESTING OF INSTALLED SYSTEM ** PERFORMED BY QUALIFIED TESTING AGENCY HIRED BY THE OWNER EXCEPT WHERE THE IOR CAN PERFORM THE REQUIRED TESTING PERFORMED BY INSTALLER, REVIEW BY IOR
- STEEL GRADES: MISC SHAPES & PLATES: ASTM A-36 PIPE: ASTM A-53, GRADE B MACHINE BOLTS: ASTM A-307, SAE J429 GR 2 THREADED RODS: ASTM A-193 GRADE B7 ZINC COATED ALL-THREAD ROD
- WORKMANSHIP AND DETAILS SHALL CONFORM TO THE PRODUCT MANUFACTURERS STANDARDS, AISC SPECIFICATIONS, AISC STANDARDS AND THE GOVERNING BUILDING CODE.
- BOLT HOLES IN STEEL SHALL BE 1/16" LARGER IN DIAMETER THAN THE BOLT.
- ANY FIREPROOFING REMOVED FROM THE (E) STEEL BEAMS SHALL BE REPLACED WITH SAME THICKNESS OF THE SAME OR BETTER MATERIAL AND MEET ALL APPLICABLE APPROVED PROJECT STANDARDS.
- ALL UNISTRUT PARTS SHALL BE ELECTRO-GALVANIZED (EG) OR PRE-GALVANIZED (PG). CUT ENDS AND SCRATCHING OR GALVANIZING SHALL RECEIVE A COAT OF COLD GALVANIZING ZINC. B335-2 AND B335-4 HOLE HINGED CLIPS ARE PER THE EATON B-LINE PRODUCT LINE. DO NOT SUBSTITUTE.
- ALL HARDWARE MAYBE SUBSTITUTED w/ EQUAL OR BETTER HARDWARE. SPECIFICATION OF THE HARDWARE SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE SEOR AND HCAI.
- AT SYSTEM CONNECTIONS TO THE SUPER-STRUCTURE, DO NOT USE A SINGLE DEVICE TO ACCEPT MULTIPLE LOADS SUCH AS MULTIPLE HANGERS, HANGERS-BRACING, AND ANY SUCH COMBINATION. EACH HANGER AND/OR BRACE SHALL HAVE ITS OWN ANCHORAGE TO THE SUPER-STRUCTURE.
- GULDMANN PARTS MAY ONLY BE USED IF THE PART NUMBER IS REFERENCED ON THESE DRAWINGS.
- FOR ALL EXPANSION ANCHORS, SEE (DETAIL 28/GUL415.1).
- SHEET METAL SCREWS SHALL BE HILTI SELF-DRILLING SCREWS PER ESR-2196. MINIMUM EDGE DISTANCE IS 1.50, MINIMUM SPACING IS 3.00, WHERE "D" IS NOMINAL SCREW DIAMETER.
- ALL STUDS AND TRACKS SHALL BE MANUFACTURED BY CURRENT MEMBERS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) PER ICC-ES REPORT ESR-3046P. ALL MEMBERS 43 MIL OR LIGHTER SHALL BE MANUFACTURED PER ASTM A563 SS GRADE 33 AND MEMBERS 54 MIL OR HEAVIER PER ASTM A563 SS GRADE 50, CLASS I. MEMBERS SHALL BE UNPAINTED.
- FASTENING OF COLD FORMED METAL COMPONENTS SHALL BE WITH SELF-DRILLING SELF-TAPPING SCREWS, USING THE SIZE INDICATED ON THE DETAILS. SCREWS SHALL CONFORM TO ASTM C1513 AND HAVE A CORROSION-RESISTANCE COATING. SCREWS SHALL BE INSTALLED IN ACCORDANCE WITH THESE DETAILS AND THE MANUFACTURERS REQUIREMENTS AND FOLLOWING: SCREW THREADS SHALL TAP INTO AND SHALL ENGAGE THE ENTIRE THICKNESS OF ALL PIECES JOINED, AND NOT LESS THAN THREE COMPLETE THREADS SHALL PENETRATE BEYOND THE METALS JOINED. SCREW POINTS FOR SELF-DRILLING SCREWS SHALL BE SELECTED SO THAT DRILLING IS COMPLETED BEFORE THE LEAD THREADS BEGIN ENGAGING METAL. PRE-DRILLED HOLE DIAMETERS SHALL NOT EXCEED THE DIAMETER OF THE DRILL POINT.
- DO NOT MAKE ANY CONNECTIONS IN THE PROTECTED ZONE OF SEISMIC STEEL FRAMING. SEE PROJECT STRUCTURAL DRAWINGS FOR LOCATIONS. PROHIBITED CONNECTORS INCLUDE WELDED, BOLTED, SCREWED, POWDER DRIVEN OR ANY OTHER CONNECTOR.
- SEE DETAIL 28/GUL415.1 FOR STATEMENT OF SPECIAL INSPECTIONS.

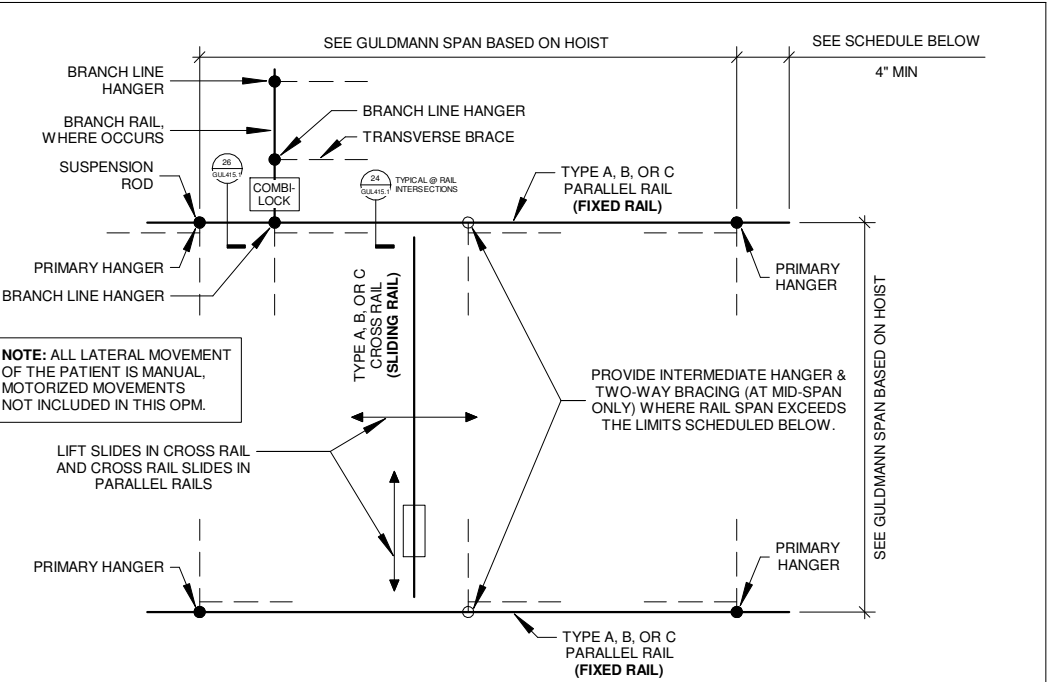
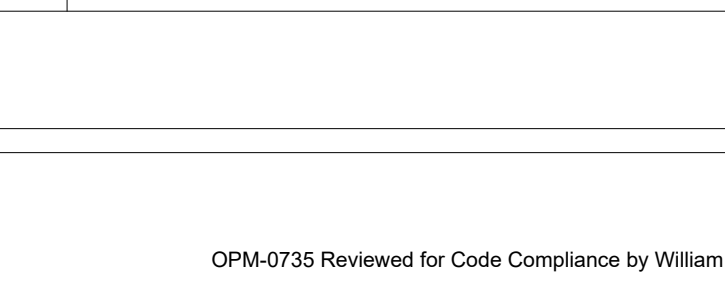
2 GENERAL NOTES



6 SUSPENSION ROD TO CONC. BEAM



7 SUSPENSION ROD TO STEEL BEAMS



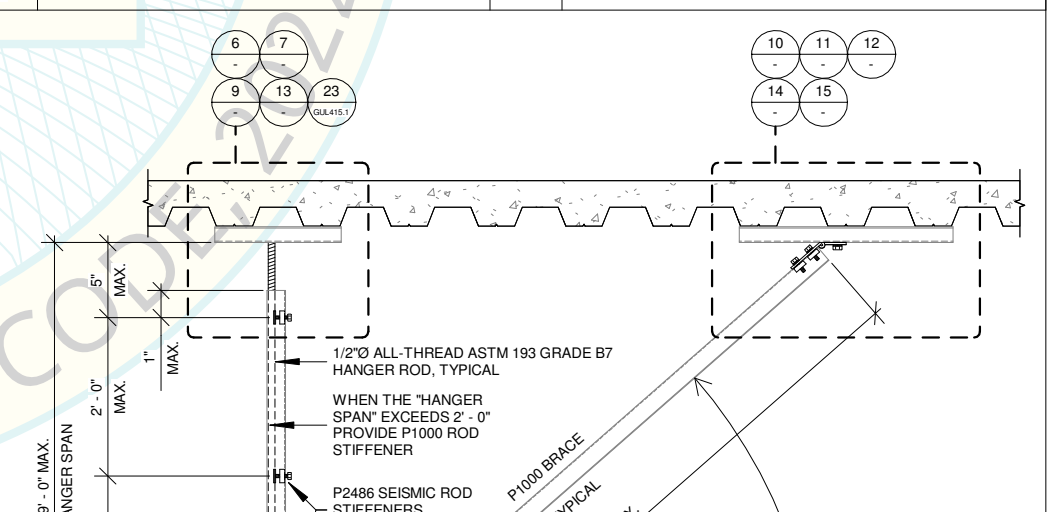
NOTES FOR DETAIL 1

- PROVIDE TWO-WAY SEISMIC BRACING AT EACH PRIMARY HANGER LOCATION (4 PAIRS MINIMUM EACH INSTALLATION).
- SEISMIC BRACES MAY BE ORIENTED 180° FROM THAT SHOWN.
- BRACES MAY BE ± 10° FROM BEING PARALLEL TO THE RAILS AT ANY LOCATION.
- ONE OR MORE BRANCH LINES MAY BE PROVIDED AT ANY LOCATION. PROVIDE HANGERS, BRACING, AND MAXIMUM SPANS AS PER DETAIL 28/GUL415.1.
- SEE DETAIL 5 ON THIS SHEET FOR HANGER AND BRACE REQUIREMENTS.

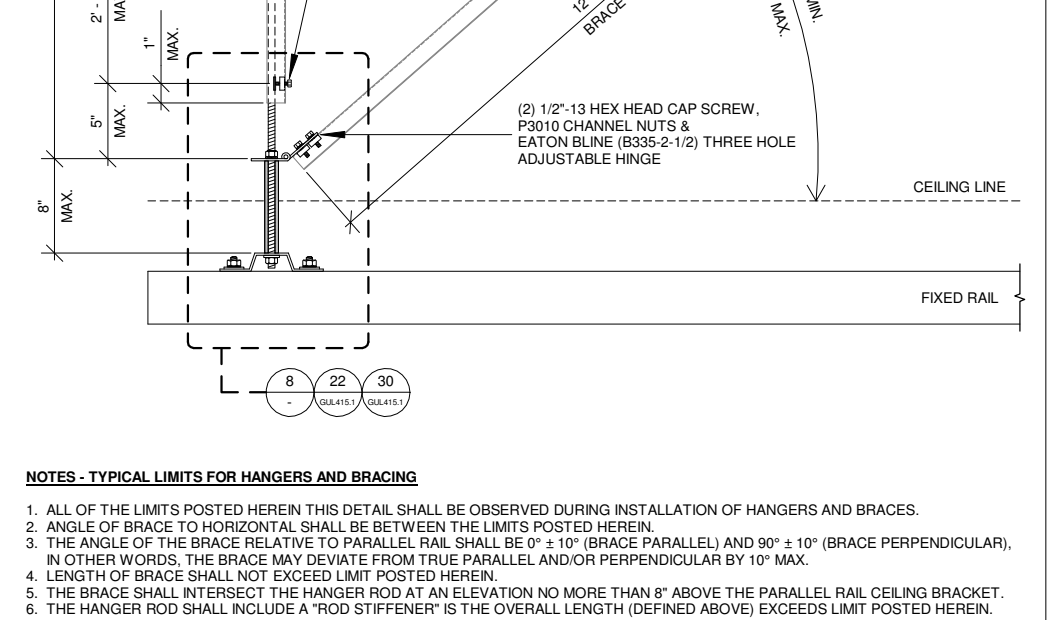
1 SCHEMATIC PLAN (ROOM COVER SYSTEM)

RAIL A			RAIL B			RAIL C		
LOAD LIMIT	CANTILEVER (BRIDGE CROSS)	CANTILEVER (RAIL CROSS)	SPAN BETWEEN SUPPORTS	CANTILEVER (BRIDGE CROSS)	CANTILEVER (RAIL CROSS)	SPAN BETWEEN SUPPORTS	CANTILEVER (BRIDGE CROSS)	CANTILEVER (RAIL CROSS)
605	10 1/4	16 1/2	59	19	24 3/4	176	25	30 3/4
825	10	15 3/4	49	16 1/2	22 1/2	157	22 1/4	28 1/4
1,100 (TYP)	18 3/4	15 1/4	49	24 3/4	21 1/4	137	29 1/2	25 3/4

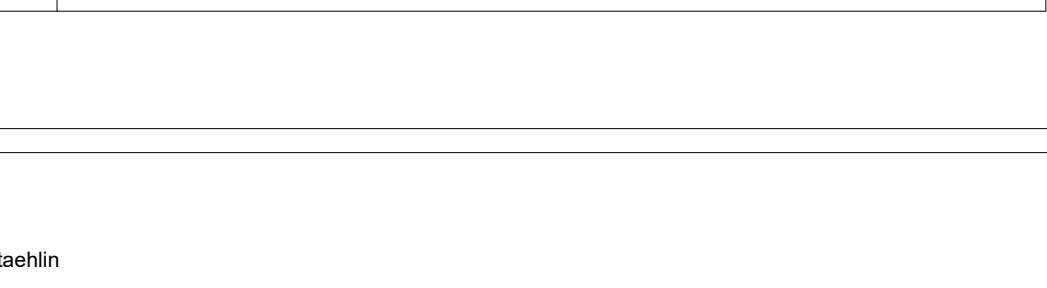
4 SUPPORT RAIL PROPERTIES-TYP



3 CEILING BRACKET DIMENSIONS



5 TYPICAL HANGER AND BRACE REQUIREMENTS

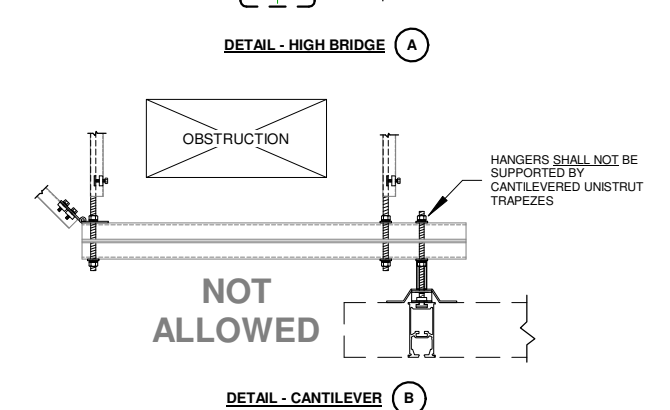
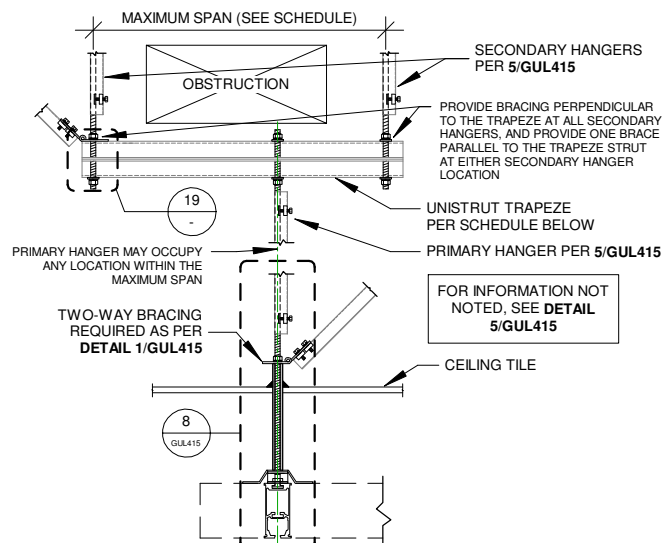




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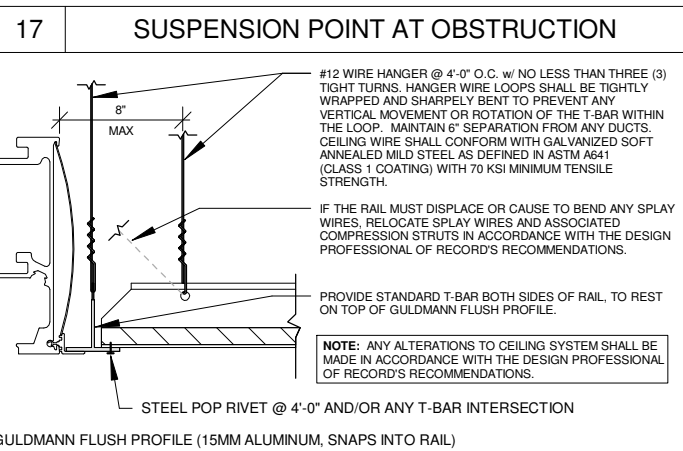
NOTES

OPM-0735

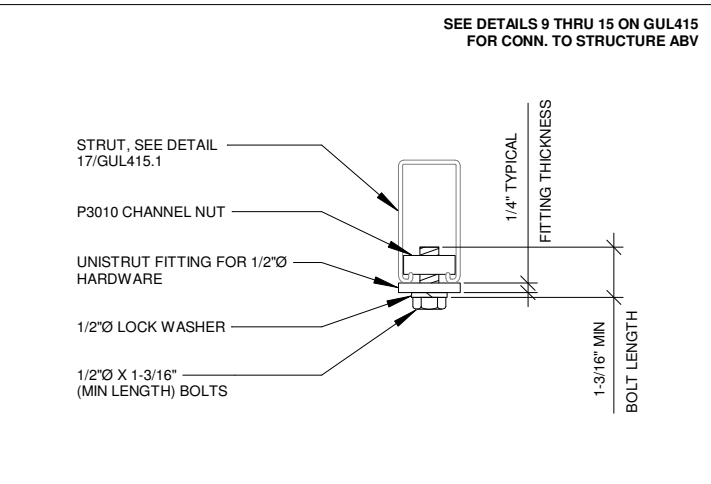


- NOTES:**
1. THE 'PRIMARY HANGER' CONNECTS THE GULDMANN RAIL TO THE TRAPEZE ABOVE AND THE 'SECONDARY HANGERS' CONNECT THE TRAPEZE TO THE STRUCTURE ABOVE. SEE DETAIL 'A' ABOVE FOR ILLUSTRATION.
 2. IN ALL CASES, PRIMARY HANGERS MUST BE CONNECTED TO A HORIZONTAL STRUT TO ALLOW DISTRIBUTION TO THE SECONDARY HANGERS AS SHOWN. THE MAXIMUM SPAN BETWEEN SECONDARY HANGERS SHALL MEET THE LIMITS POSTED IN THE SCHEDULE BELOW. THIS APPLIES TO THE CONDITIONS ILLUSTRATED HEREIN AND APPLIES WHEREVER THIS DETAIL IS INVOKED OR CALLED OUT.
 3. EACH UNISTRUT TRAPEZE ASSEMBLY SHALL BE BRACED IN TWO DIRECTIONS USING APPROVED BRACING CONNECTED AT THE TOP OF THE STRUT AS ILLUSTRATED IN DETAIL 'A' ABOVE. PROVIDE A BRACE PERPENDICULAR TO THE TRAPEZE AT EACH SECONDARY HANGER LOCATION AND PROVIDE A SINGLE BRACE PARALLEL TO THE TRAPEZE AT EITHER SECONDARY HANGER LOCATION.
 4. CANTILEVERED TRAPEZE BEAM ARE NOT ALLOWED. SEE DETAIL 'B'. PRIMARY HANGERS SHALL BE LOCATED BETWEEN THE SECONDARY HANGER LOCATIONS. NO EXCEPTIONS.
 5. PRIMARY & SECONDARY HANGERS AND ALL BRACING SHALL COMPLY WITH DETAIL 5/GUL415 AND SHALL BE ANCHORED USING DETAILS CALLED OUT ON 5/GUL415.

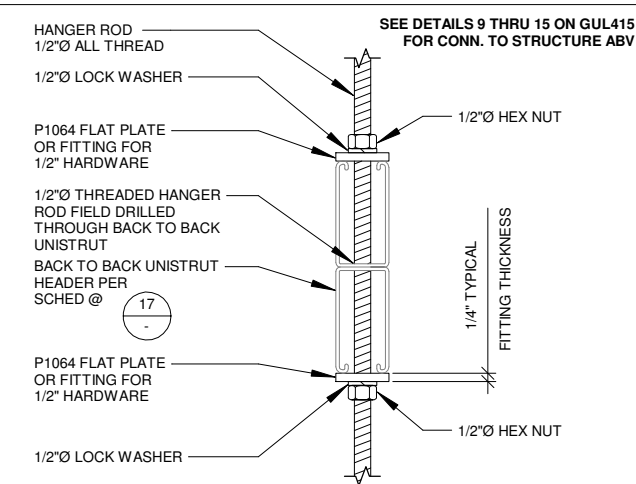
HOIST RATING	P1000	P1001	P5000	P5500	P5501	P5001
605	19	56	61	37	120	203
825	14	41	45	28	84	152
1,100	12	35	39	24	69	128



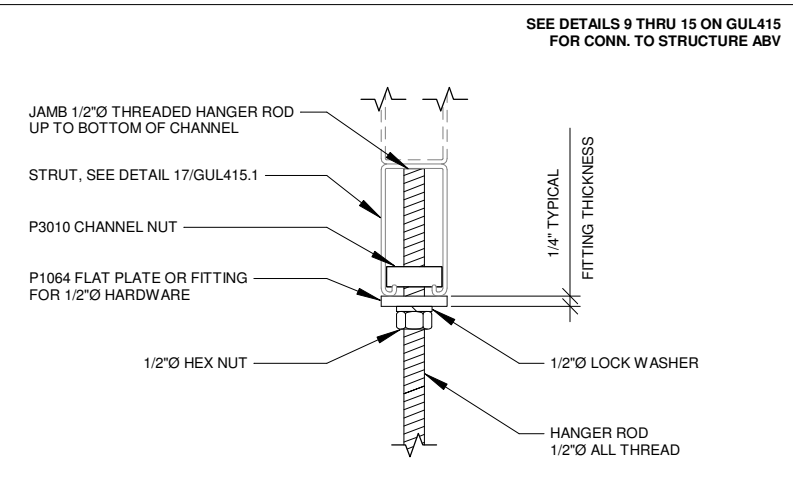
DATE: 05/16/2025
DRAWN BY: CML
APPROVED BY:
PROJECT NAME: GULDMANN PLFT. ATTACHMENT
SHEET DESCRIPTION: CA 1/2" PAGE 2
SHEET NO: GUL415.1 (2 OF 3)



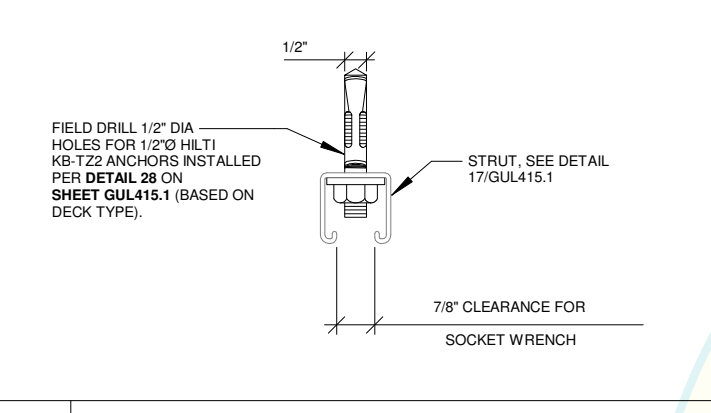
20 TYPICAL SINGLE UNISTRUT CHANNEL BOLTED CONNECTION



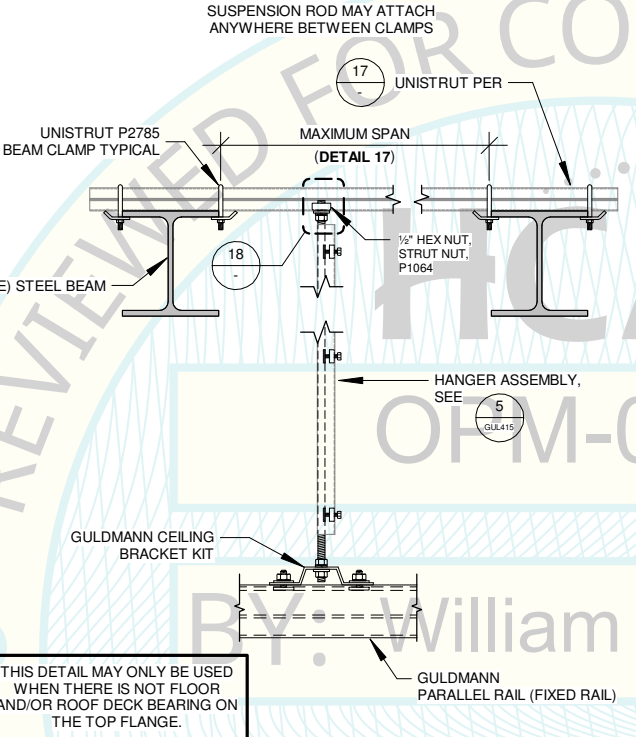
19 TYPICAL THROUGH-BOLT UNISTRUT CHANNEL HANGER ROD CONNECTION



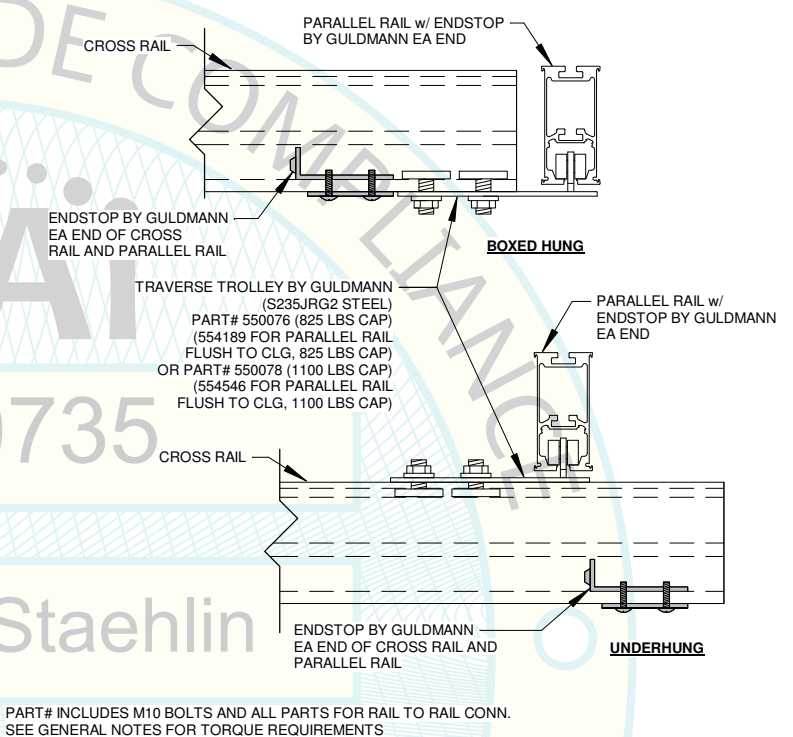
18 TYPICAL UNISTRUT CHANNEL HANGER ROD CONNECTION



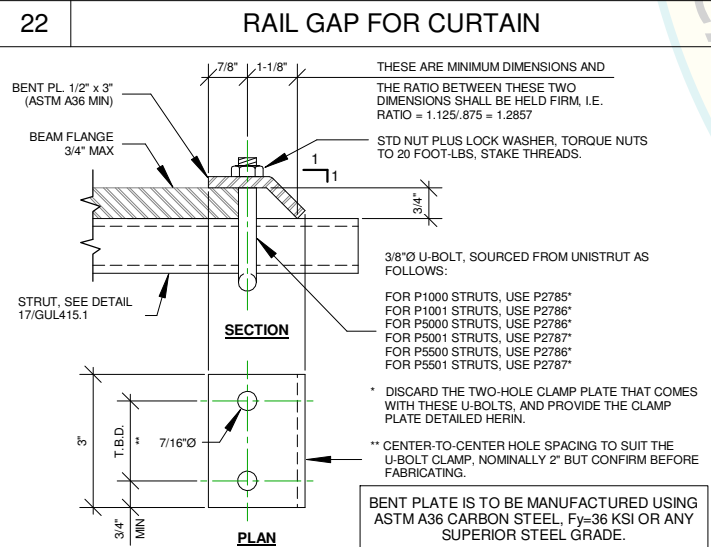
21 ANCHOR INTO CONCRETE



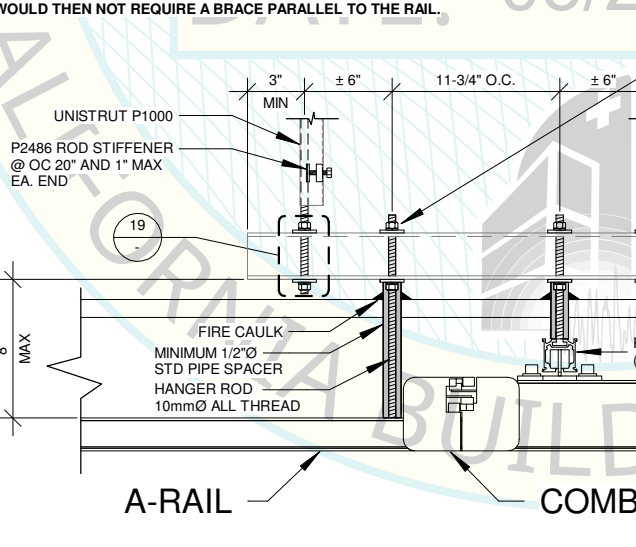
23 SECTION ABOVE STEEL FRAMING



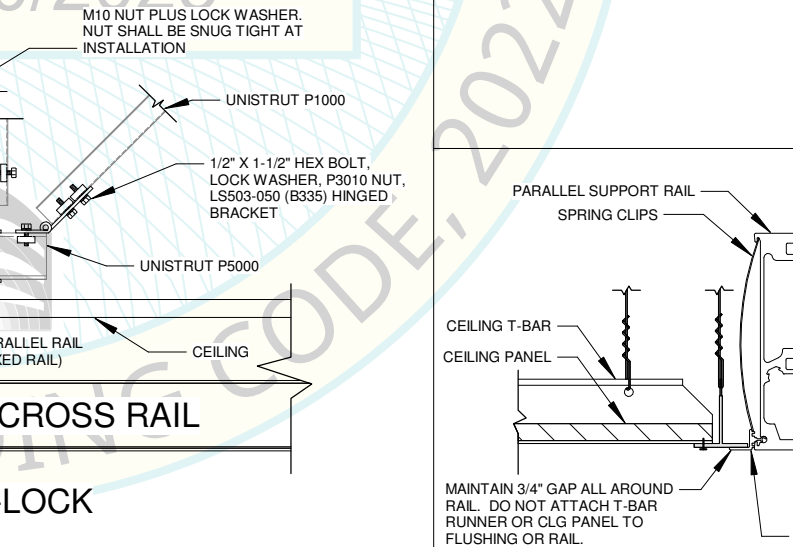
24 CROSS RAIL TO PARALLEL RAIL CONNECTION



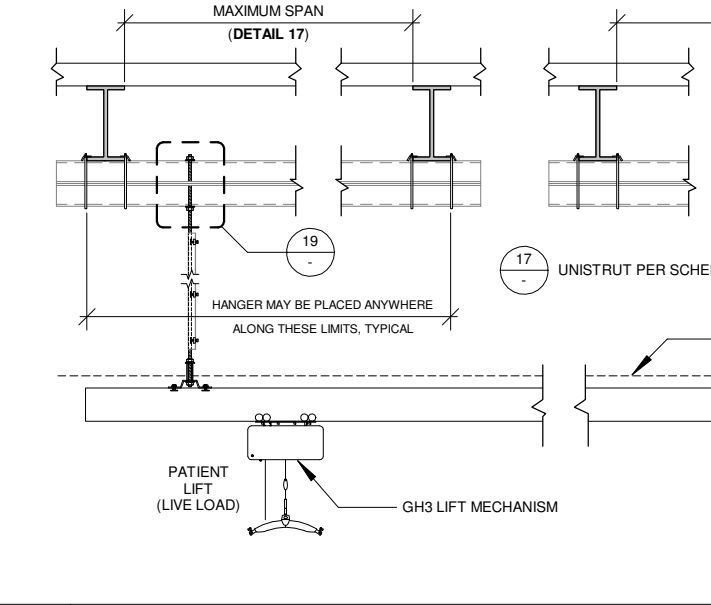
22 RAIL GAP FOR CURTAIN



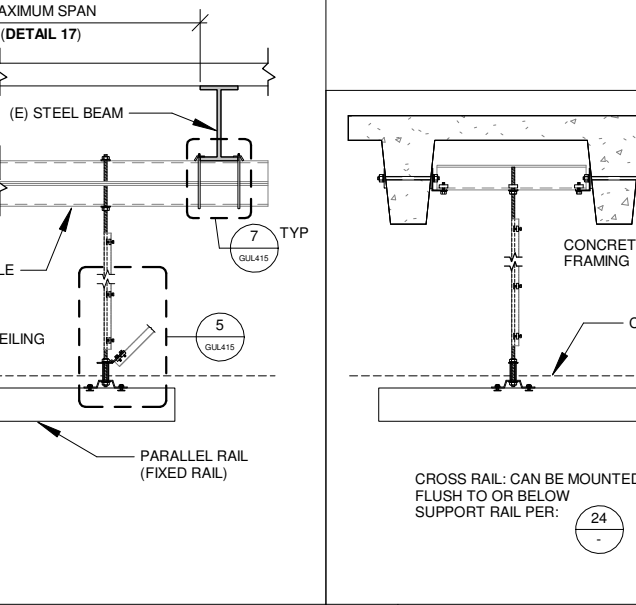
26 SUSPENSION AND BRACING FOR COMBI-LOCKS



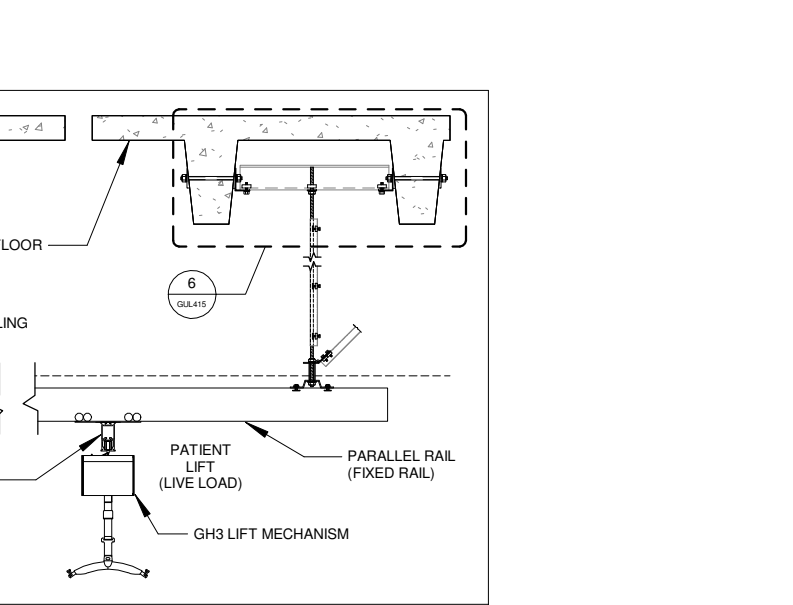
25 FLUSH PARALLEL RAIL AT CEILING



27 BEAM CLAMP DETAIL



30 SCHEMATIC SECTION UNDER STEEL FRAMING

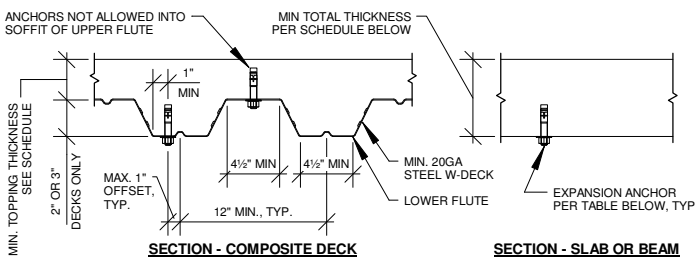


31 SCHEMATIC SECTION UNDER CONC. FRAMING

29 STATEMENT OF SPECIAL INSPECTIONS

EXPANSION ANCHOR GENERAL NOTES

1. ANCHORS SHALL BE HILTI KB-T22 PER ESR-4266, OR DEWALT POWER STUD-SD2 PER ESR-2502 OR SIMPSON STRONG BOLT STB2 PER ESR-3037 ONLY. DO NOT SUBSTITUTE ANCHORS FROM OTHER MANUFACTURERS, OTHER MODELS, OR OTHER DIAMETERS & HOLE DEPTHS. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE LISTED MANUFACTURERS ICC-ESR PRODUCT APPROVAL. IN ACCORDANCE WITH THE 'SCHEDULE FOR ANCHORS AND MINIMUM REQUIREMENTS' BELOW, AND IN ACCORDANCE WITH THE DIAGRAMS BELOW.
2. ANCHORS SHALL BE INSTALLED INTO THE SOFFIT OF A METAL DECK & CONCRETE FILL SYSTEM, OR INTO THE SOFFIT OF A FORMED CONCRETE SLAB. METAL DECK SHALL BE 2 OR 3 INCH "W" TYPE COMPOSITE METAL DECKING ONLY. MINIMUM CONCRETE STRENGTH SHALL BE $f_c \geq 3,000$ PSI. FOR METAL DECK FLOOR SYSTEMS, CONCRETE MIX MAY BE NORMAL WEIGHT OR LIGHT WEIGHT CONCRETE. FOR FORMED FLOOR SYSTEMS, NORMAL WEIGHT CONCRETE ONLY SHALL BE USED.
3. ANCHOR PLACEMENT SHALL NOT VIOLATE THE MINIMUM SPACING AND EDGE DISTANCE LIMITS POSTED IN THE 'SCHEDULE OF ANCHORS AND MINIMUM REQUIREMENTS' BELOW. NON-DESTRUCTIVE TESTING TO VERIFY REINFORCING LOCATIONS AND INSTALL NEW ANCHORS 1" CLEAR OF SUCH REINFORCING. SHOULD SLAB REINFORCING BE INADVERTENTLY DAMAGED, NOTIFY THE RDP IN RESPONSIBLE CHARGE IMMEDIATELY.
4. EXPANSION ANCHORS INSTALLED SHALL NOT NICK OR DAMAGE SLAB REINFORCING. USE NON-DESTRUCTIVE TESTING TO VERIFY REINFORCING LOCATIONS AND INSTALL NEW ANCHORS 1" CLEAR OF SUCH STRANDS. IF STRANDS ARE INADVERTENTLY NICKED OR DAMAGED, NOTIFY THE GENERAL CONTRACTOR AND RDP IN RESPONSIBLE CHARGE IMMEDIATELY.
5. THESE ANCHORS SHALL HAVE SPECIAL INSPECTION AND TESTING IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS POSTED BELOW. DETAIL 31/GUL415.1.



NOTE: MIN. SPACING AND/OR EDGE DISTANCES CAN BE REDUCED IF NOTED ON SPECIFIC DETAILS.

MAKE	TYPE	ANCHOR DIAMETER	MIN. EFFECTIVE EMBED, INCH	MIN. DEPTH OF HOLE	MIN. TOPPING THICKNESS	MIN. TOTAL THICKNESS	MINIMUM SPACING	MINIMUM EDGE DIST.	MIN. SPACING
HILTI KB-T22 PER ESR-4266	A	1/2"	2-1/2"	3-1/4"	2-1/2"	5"	3-1/4"	2"	7-1/2"
SIMPSON STRONG BOLT STB2 PER ESR-3037	B	1/2"	3-1/4"	4-1/4"	2-1/2"	5-1/2"	3-1/4"	2"	9-3/4"
DEWALT POWER STUD-SD2 PER ESR-2502	A	1/2"	2"	3-3/4"	2-1/4"	5-1/4"	3-1/4"	2"	6"
	B	1/2"	3-1/4"	4"	2-1/4"	5-3/4"	3-1/4"	2"	9-3/4"
DEWALT POWER STUD-SD2 PER ESR-2502	A	1/2"	2-1/2"	3"	1-1/2"	5-1/2"	3-1/4"	2"	7-1/2"
	B	1/2"	3-1/4"	4-1/8"	1-1/2"	6"	3-1/4"	2"	9-3/4"

28 EXPANSION ANCHOR GENERAL NOTES

- GENERAL**
1. SPECIAL INSPECTIONS SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE 2022 CALIFORNIA BUILDING CODE, CHAPTER 17A AND CHAPTER 19A, SECTION 1910A.5
 2. QUALITY ASSURANCE TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE OWNER. THE OWNER SHALL RETAIN A TESTING AGENCY WHO SHALL PERFORM THE REQUIRED TESTS AND INSPECTIONS AND SHALL PREPARE WRITTEN SUMMARY REPORTS OF ANY TEST OR INSPECTION, AND SUBMIT SAME TO THE INSTALLER AND THE IOR.
 3. THE EQUIPMENT INSTALLER SHALL NOTIFY THE OWNER'S TESTING AGENCY OF THE DATES OF ALL WORK IN NEED OF INSPECTION OR TESTING. NOTIFICATION SHALL BE SUFFICIENTLY IN ADVANCE TO ALLOW SCHEDULING OF INSPECTIONS AND TESTS, NOT LESS THAN 24 HOURS ADVANCE NOTIFICATION.
 4. THE INSTALLER SHALL NOTIFY THE INSPECTOR OF RECORD (IOR) OF ANY PENDING INSPECTIONS AND TESTING, AND SHALL NOTIFY THE IOR OF ANY INSPECTIONS OR TESTS THAT FAIL THE ACCEPTANCE CRITERIA.

EXPANSION ANCHORS

1. SPECIAL INSPECTION SHALL BE AS WRITTEN IN THE ICC-ESR PRODUCT APPROVALS LISTED ABOVE. THE SPECIAL INSPECTOR SHALL MAKE PERIODIC INSPECTIONS AT LEAST ONCE OF EACH DAYS ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, ANCHOR SPACING, EDGE DISTANCES, CONCRETE MEMBER THICKNESS, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT AND ADHERENCE TO MANUFACTURERS PRINTED INSTALLATION REQUIREMENTS.
2. THE PERMITTED ANCHORS LISTED ABOVE ARE TORQUE CONTROLLED ANCHORS AND SHALL BE TESTED USING A CALIBRATED TORQUE WRENCH TO VERIFY INSTALLATION TORQUES OF 50 FT-LBS FOR ALL HILTI KB-T22 ANCHORS, 40 FT-LBS FOR DEWALT POWERSTUD-SD2 ANCHORS OR 60 FT-LBS FOR SIMPSON STRONG BOLT 2 ANCHORS.
3. VERIFY TORQUE FOR 100% OF THE ANCHORS INSTALLED IN ONE DAYS WORK.
4. ACCEPTANCE CRITERIA: TORQUE-CONTROLLED POST-INSTALLED ANCHORS SHALL BE TESTED WITH A CALIBRATED WRENCH AND SHALL ATTAIN THE SPECIFIED TORQUE WITH ONE-HALF (1/2) TURN OF THE NUT.

GULDMANN MANUFACTURED COMPONENTS

1. VERIFY THE GENERAL SIZE, SHAPE AND MATERIAL CERTIFICATIONS FOR GULDMANN RAILS, BRACKETS AND CUSTOM MANUFACTURED ALUMINUM & STEEL COMPONENTS. MATERIAL PROPERTIES ARE LISTED ON THE DETAILS.

UNISTRUT CONSTRUCTION

1. PERIODIC SPECIAL INSPECTION PER 2022 CBC SECTION 1705A.13.3 FOR SEISMIC RESISTANCE, INCLUDING CONNECTION ASSEMBLIES, SIZES AND GRADES AND ALL FASTENERS. THERE ARE NO WELDED CONNECTIONS.



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NOTES

OPM-0735

NOTES ON UPRIGHT SUPPORT SYSTEM

1. THERE ARE TWO PERMITTED TYPES OF UPRIGHT POST INSTALLATION CONFIGURATIONS, AND THE REQUIREMENTS FOR EACH DIFFER AS NOTED BELOW:

TYPE 1 CONFIGURATIONS:

UPRIGHT POSTS AT EACH END OF EACH PARALLEL (FIXED) RAIL. ANCHOR UPRIGHT POST TO THE PARTITION WALL USING THE FLAT PLATE BACKING. SEE DETAILS 5 & 6/GUL415.2 OR 7/GUL415.2.

TYPE 2 CONFIGURATIONS:

A BLENDED SYSTEM UTILIZES A "ROOM COVER SYSTEM" PER DETAIL 1/GUL415 IN COMBINATION WITH ONE OR MORE "UPRIGHT POSTS".

TYPE 2 NOTE A:

PROVIDE A HANGER AND TWO WAY BRACE FOR EACH SUSPENDED PARALLEL (FIXED) RAIL SUPPORT PER 1/GUL415 AND ASSOCIATED DETAILS.

TYPE 2 NOTE B:

UPRIGHT POSTS MAY REPLACE A CEILING MOUNTED HANGER AND TWO-WAY BRACE ON A ONE-FOR-ONE BASIS TO SUIT ROOM AND LIFT GEOMETRY. THAT IS ONE UPRIGHT POST MAY REPLACE ONE HANGER PLUS ONE TWO-WAY BRACING PAIR ANCHORED TO THE STRUCTURE ABOVE.

TYPE 2 NOTE C:

IF AN UPRIGHT POST IS USED AT BOTH ENDS OF A PARALLEL (FIXED) RAIL, ANCHOR THE UPRIGHT POST TO THE WALL FRAMING USING DETAILS 1 THRU 7 ON THIS SHEET, THAT IS, VIA A FLAT PLATE BACKING (CONCEALED OR EXPOSED). HOWEVER, IF AN UPRIGHT POST IS USED AT ONLY ONE END OF A PARALLEL (FIXED) RAIL (THE OPPOSITE END BEING SUPPORTED BY A HANGER/TWO-WAY BRACE), THE SAME DETAILS 1 THRU 7 APPLY WITH ONE EXCEPTION:

- THE BACKING AT THE UPRIGHT BRACKET TO PARTITION WALL SHALL BE A CONCEALED COLD FORMED TRACK PER DETAIL 10/GUL415.2 WITH THE STEEL TUBE PER DETAIL 13/GUL415.2, UNLESS THE UPRIGHT BRACKET IS DIRECTLY CONNECTED TO A PARTITION STUD AS PER PLAN DETAIL A-A OF DETAIL 4/GUL415.2.

2. USE OF THE UPRIGHT POST REQUIRES THE PARTICIPATION OF THE STRUCTURAL AND DESIGN PROFESSIONAL OF RECORD TO VERIFY THE PARTITION WALL FRAMING AND ANCHORAGE. SEE "ENGINEER AND DESIGN PROFESSIONAL OF RECORD" NOTES BELOW.

STATEMENT OF SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS ARE REQUIRED FOR WORK SHOWN ON THIS DRAWING AND SHALL CONFORM TO THE REQUIREMENTS OF CBC SECTIONS 1704A.3, 1705A.1.1, 1705A.2, 1705A.2.6, 1705A.12, 1705A.13, 1705A.14 AND 2213A.1 AS FOLLOWS:

2. COLD-FORMED METALS AND FASTENERS
- Table 1705A.2.1, Item 3b: PERIODIC MATERIAL IDENTIFICATION FOR COLD FORMED METALS
- CBC 1705.12: COLD-FORMED METAL SIZES, ASSEMBLY AND FASTENING

3. MANUFACTURER'S PARTS
- Verify manufacturers certificates conform to the material properties and specifications shown here.

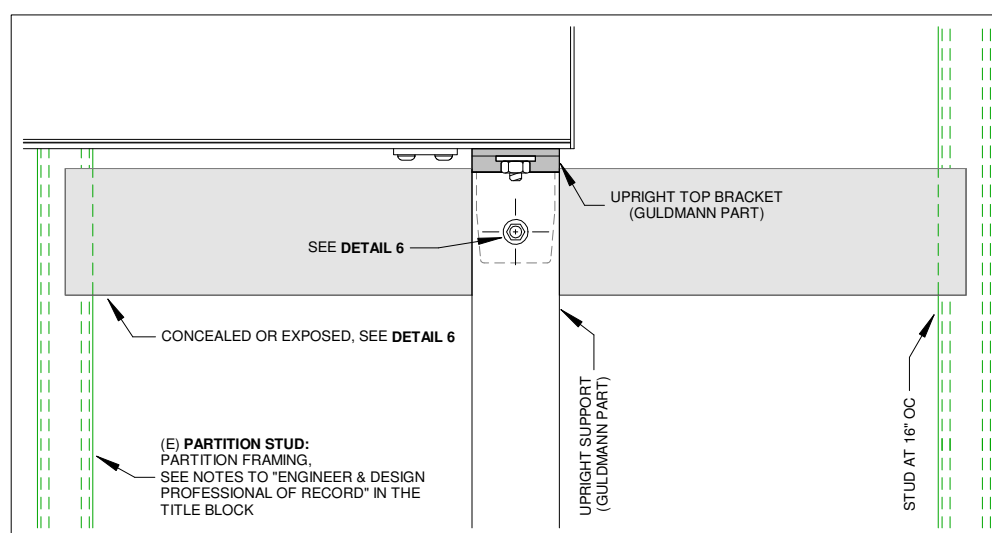
4. FIRE-PROTECTION
- For any alterations to existing project fire-protection work, provide special inspections per CBC Section 1705A.14

ENGINEER AND DESIGN PROFESSIONAL OF RECORD

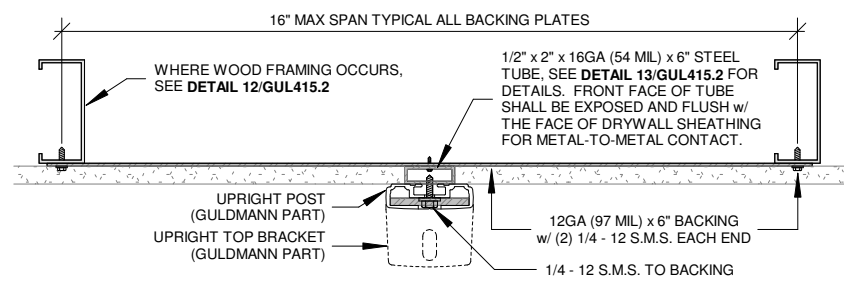
1. The Design Professional of Record shall verify the integrity and design of partition wall framing (including wall studs, backings, head and sill anchorages) for all elements of the partition wall connected to and resisting loads from the Upright Post. See notes & loads posted on Drawing GUL415.
2. The Structural Engineer of Record (SEOR) shall verify the building structure is adequate to support the new equipment and support framing to be installed per this drawing. See notes & loads posted on Drawing GUL415.



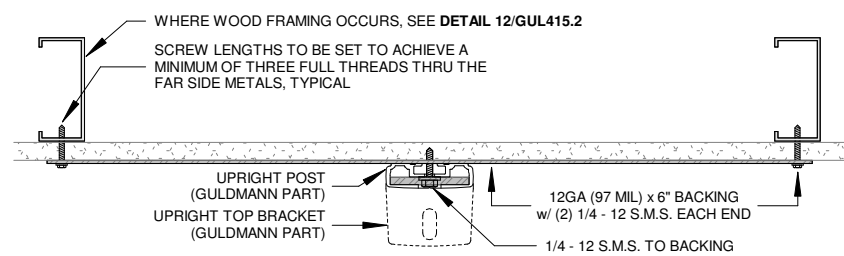
DATE:	05/16/2025	DRAWN BY:	CML
APPROVED BY:			
PROJECT NAME:	GULDMANN PLFT. ATTACHMENT		
SHEET DESCRIPTION:	Upright Support (Seismic)		
SHEET NO:	GUL415.2 (3 OF 3)		



5 UPRIGHT BRACKET - FACE VIEW

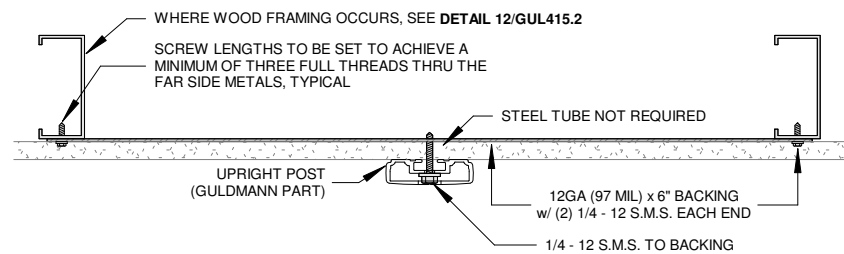


PLAN - CONCEALED BACKING

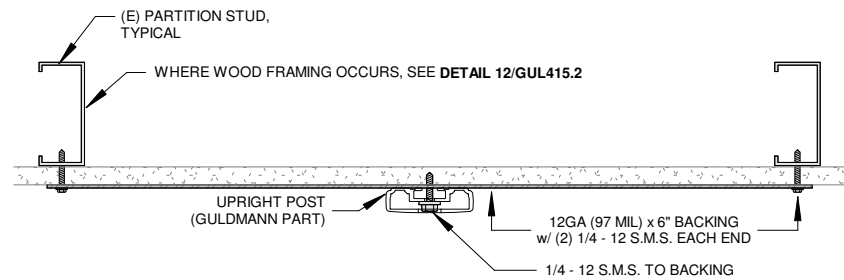


PLAN - EXPOSED BACKING

6 PLAN DETAILS - TOP BRACKET ANCHORS

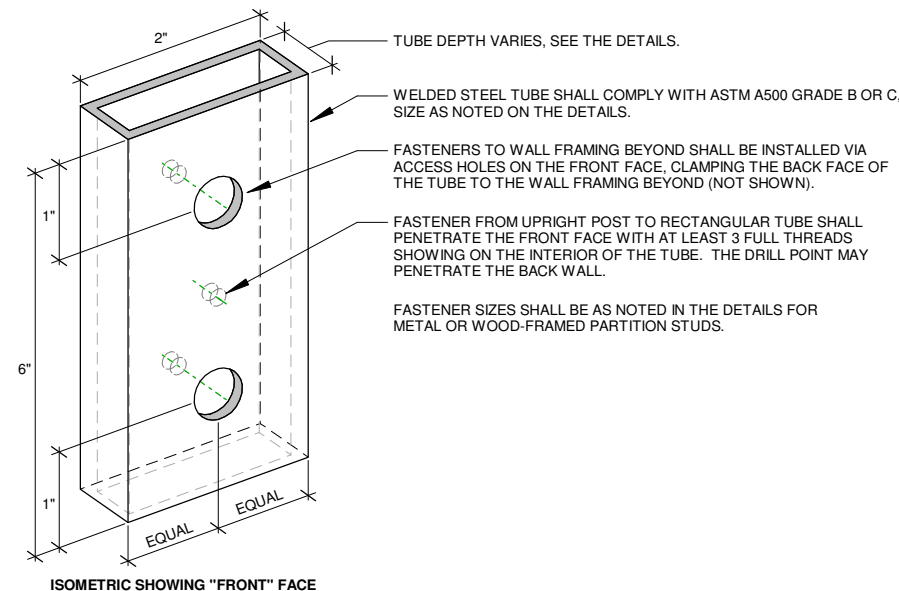


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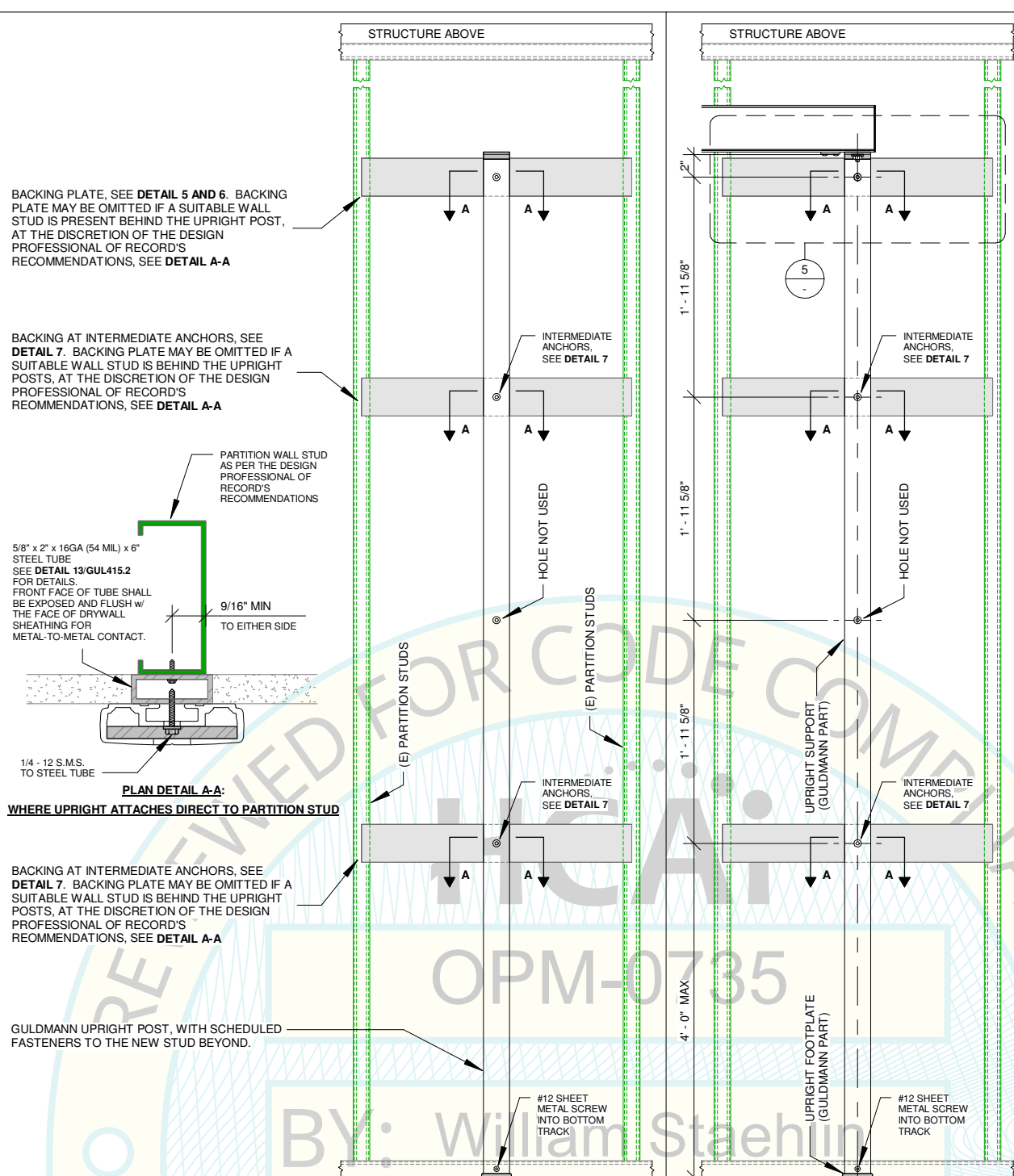


PLAN - EXPOSED BACKING

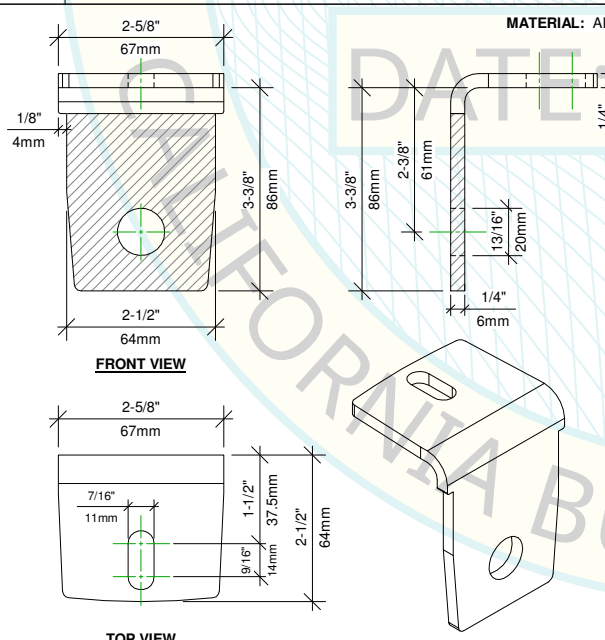
7 PLAN DETAILS - INTERMEDIATE ANCHORS



13 STEEL TUBE DETAIL



4 PARTITION WALL ELEVATION



8 UPRIGHT TOP BRACKET - SCHEMATIC

NOTES:

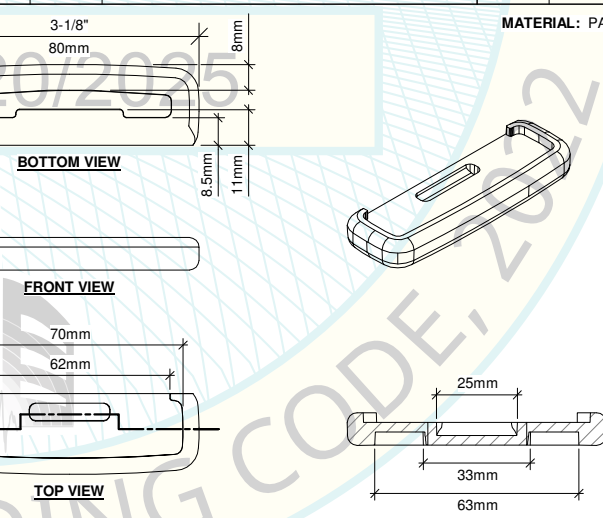
1. THE UPRIGHT SUPPORT SYSTEM MAY BE USED WHERE PARTITION WALLS ARE BUILT USING LIGHT-WOOD FRAME CONSTRUCTION, PROVIDED THE FOLLOWING REQUIREMENTS ARE FULFILLED:
2. THE STRENGTH OF THE PARTITION STUD FRAMING AND IT'S ANCHORAGE TO THE PRIMARY STRUCTURE SHALL BE VERIFIED BY THE ENGINEER AND THE DESIGN PROFESSIONAL OF RECORD IN ACCORDANCE WITH THE NOTES TITLED "ENGINEER AND DESIGN PROFESSIONAL OF RECORD" FOUND IN THE TITLE BLOCK OF THIS DRAWING.

3A. WHERE THE UPRIGHT POST OCCURS BETWEEN WALL STUDS, DETAILS 6 & 7/GUL415.2 SHALL BE USED WITH THE SAME METAL BACKING PLATE THICKNESS AND SPAN LIMITS, AS MODIFIED IN ITEM 3B AND 3C:
3B. BACKING PLATE TO WOOD WALL STUDS: (2) SIMPSON SD10212 (#10x2-2 1/2") WOOD SCREWS FOR EXPOSED BACKINGS AND (2) SD10112 WOOD SCREWS FOR CONCEALED BACKING PLATES.
3C. UPRIGHT POST TO BACKING PLATE OR STEEL TUBE: #12 S.M.S. WITH AT LEAST 3 FULL THREADS SHOWING ON THE INTERIOR OF THE TUBE (OR BACKSIDE OF BACKING PLATE WHERE NO TUBE OCCURS). THE DRILL POINT MAY PENETRATE THE BACK WALL OF THE TUBE.

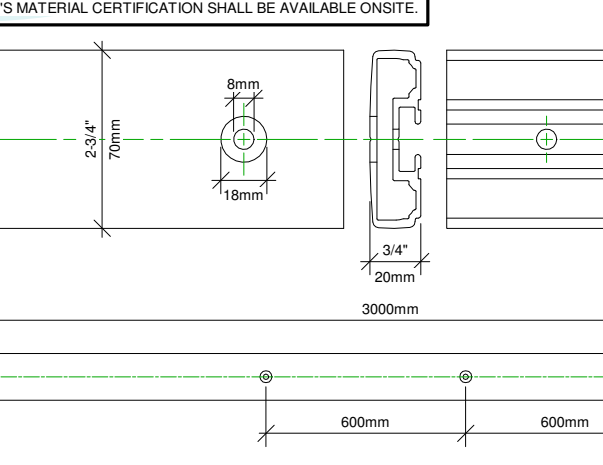
4A. WHERE THE UPRIGHT OCCURS DIRECTLY IN FRONT OF A WOOD WALL STUD, THE PLAN DETAIL OF DETAIL 4/GUL415.2 SHALL BE USED AS MODIFIED IN ITEMS 4B AND 4C:
4B. FASTENERS FROM THE STEEL TUBE TO THE WOOD STUD SHALL BE (2) SD10112 AS DETAILED ON DETAIL 13/GUL415.2
4C. FASTENERS FROM THE UPRIGHT POST TO THE STEEL TUBE SHALL BE (1) #12 S.M.S. AS DETAILED ON DETAIL 13/GUL415.2

12 WOOD FRAMED PARTITION WALLS

3 UPRIGHT FACE VIEW

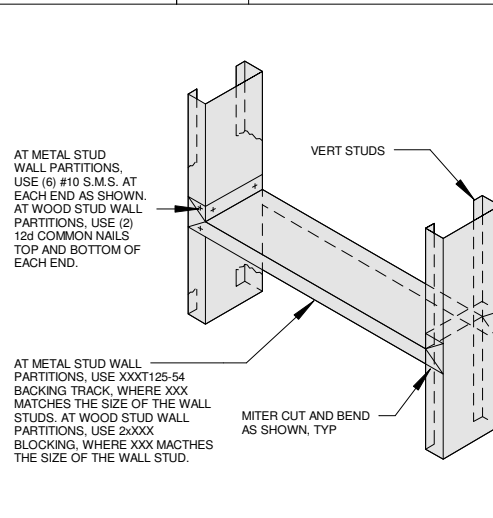


9 UPRIGHT FOOTPLATE - SCHEMATIC



11 UPRIGHT POST - SCHEMATIC

2 UPRIGHT SIDE w/ RAIL PARALLEL



10 XXXT150-54 BLOCKING DETAIL