



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

**APPLICATION FOR OSHPD PREAPPROVAL OF  
MANUFACTURER'S CERTIFICATION (OPM)**

OFFICE USE ONLY

**APPLICATION #: OPM-0637**

**OSHPD Preapproval of Manufacturer's Certification (OPM)**

Type:  New  Renewal/Update

**Manufacturer Information**

Manufacturer: mfPHD

Manufacturer's Technical Representative: Jason Keith

Mailing Address: 3831 Old Lorena Rd, Lorena, TX 76655

Telephone: (254) 715-4426

Email: jkeith@mfphd.com

**Product Information**

Product Name: Fortress Stainless Steel Wall System

Product Type: Wall Finish

Product Model Number: Fortress

General Description: The mfPHD Fortress Modular Wall System is a prefabricated, panelized wall finish that provides healthcare facilities long term flexibility, cleanability and durability of their walls. The system itself is comprised of panels, ceiling/base profiles, and a back plate system. The system attaches to traditional framing or an existing wall surface.

**Applicant Information**

Applicant Company Name: mfPHD

Contact Person: Bill Summers

Mailing Address: 714C S State St., Ukiah, CA 95482

Telephone: () -

Email: bsummers@mfphd.com

Title: CA/NV Business Development

\*Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs\*

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



**OSHPD**



## OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

### Registered Design Professional Preparing Engineering Recommendations

Company Name: KPFF

Name: Aaron Reynolds

California License Number: S4338

Mailing Address: 700 South Flower Street, Suite 2100, Los Angeles, CA 90017

Telephone: (213) 310-8478

Email: Aaron.Reynolds@kpff.com

### OSHPD 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): STC Ratings, Surface Burning Characteristics of Building Materials per ASTM E84-15a,

\*Use of criteria other than those adopted by the California Building Standards Code, 2019 (CBSC 2019) 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 2019 may be used when approved by OSHPD prior to testing.

Analysis

Experience Data

Combination of Testing, Analysis, and/or Experience Data (Please Specify): \_\_\_\_\_

### OSHPD Approval

Date: 12/20/2021

Name: Mohammad Aliaari

Title: Senior Structural Engineer

Condition of Approval (if applicable): \_\_\_\_\_

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



# OSHPD

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## NOTES:

1. THESE DRAWINGS ARE PREPARED FOR MODULAR FABRICATION PER HOSPITAL DESIGN (mfPHD), LORENA, TEXAS.
2. THE CONTRACTOR AND INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT (OSHPD) PRE-APPROVAL PROGRAMS WEBSITE.
3. THIS PRE-APPROVAL COVERS THE SUPPORTS AND ATTACHMENTS OF THE FORTRESS STAINLESS STEEL METAL PANEL TO THE SUPPORTING STRUCTURE. THE FORTRESS STAINLESS STEEL METAL PANEL AND ATTACHMENT HARDWARE ARE SUPPLIED BY THE MANUFACTURER.
4. THIS PRE-APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA WHERE  $S_{DS}$  IS LESS THAN OR EQUAL TO 1.94 ( $F_p = 1.4W_p$ ), AS NOTED IN THE DESIGN CRITERIA ON PG 2.
5. THE FORTRESS STAINLESS STEEL WALL SYSTEM IS FOR INTERIOR USE ONLY. THE FORTRESS STAINLESS STEEL WALL SYSTEM IS NOT SUBJECT TO EXTERIOR CONDITIONS OR APPLICATIONS WHERE THE STRUCTURE MAY BE CLASSIFIED AS AN OPEN STRUCTURE.
6. ARCHITECTURAL AND LIFE SAFETY CODE COMPLIANCES TO BE REVIEWED AT PROJECT SUBMITTAL. THE FORTRESS STAINLESS STEEL WALL SYSTEM IS INTENDED TO BE INSTALLED OVER A RATED ASSEMBLY WHERE OCCURS.



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**GENERAL NOTES:**

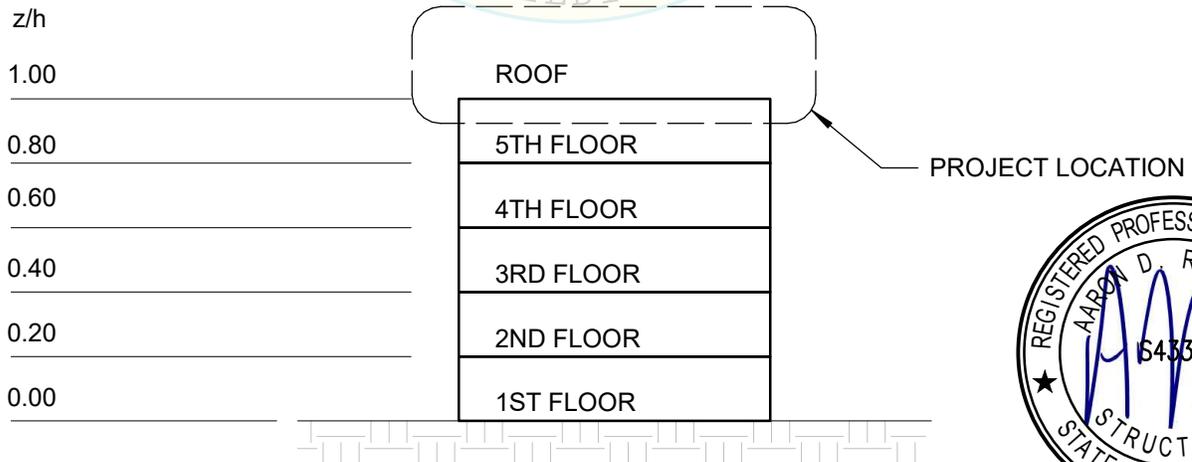
1. THIS OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM MUST BE BASED ON THE CBC 2019.
2. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SEOR) FOR A SITE SPECIFIC PROJECT TO VERIFY:
  - A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES AND WEIGHT SPECIFIED FOR EACH COMPONENT IN ADDITION TO ALL OTHER LOADS. PROVIDE AND DESIGN SUPPLEMENTARY MEMBERS AS REQUIRED.
  - B. THAT THE INSTALLATION IS IN CONFORMANCE WITH THE CBC 2019 AND WITH THE DETAILS SHOWN IN THIS PREAPPROVAL.
  - C. THAT THE ACTUAL COMPONENT'S WEIGHT, CENTER OF GRAVITY (CG) LOCATION, ATTACHMENT LOCATIONS, ATTACHMENT DETAILS, AND THE MATERIAL AND GAGE OF THE COMPONENT WHERE ATTACHMENTS ARE MADE, AGREE WITH THE INFORMATION SHOWN ON THE PRE-APPROVAL DOCUMENTS.

**DESIGN CRITERIA**

1. EARTHQUAKE DESIGN DATA:
  - MAPPED ACCELERATION PARAMETERS PER 2019 CBC SECTION 1613A.3.1:
 

SEISMIC IMPORTANCE FACTOR ( $I_p$ ) = 1.5

$S_{Ds}$  = 1.94 MAX
  - RISK CATEGORY = IV
  - LATERAL SYSTEM DESCRIPTION COMPONENTS = NON STRUCTURAL
  - RESPONSE MODIFICATION FACTOR ( $R_p$ ) = 2.5 / 2021
  - COMPONENT AMPLIFICATION FACTOR ( $a_p$ ) = 1.0
  - $z/h = 1.0$



## COLD-FORMED STEEL (LIGHT GAGE METAL FRAMING)

1. ALL LIGHT GAGE METAL FRAMING CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 2210A OF THE CODE AND AISI "SPECIFICATIONS FOR DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS".
2. ALL CALCULATED MEMBER PROPERTIES PER AISI SPECIFICATIONS ARE BASED ON THE FOLLOWING THICKNESS:

MINIMUM THICKNESS	REFERENCE GAGE	DESIGN THICKNESS
43 MIL	18 GA	0.0451"
54 MIL	16 GA	0.0566"

3. ALL LIGHT GAGE METAL FRAMING SHALL BE GALVANIZED AND SHALL CONFORM WITH FOLLOWING THICKNESS:

GALVANIZED BACKING PLATES:  
16 (54) GAGE (MILS)

ASTM A653 SQ, GR 50  
(Fy = 50,000 PSI)

GALVANIZED END CLOSURES,  
BRIDGING AND ACCESSORIES  
16 (54) GAGE (MILS)

ASTM A653 SQ, GR 50  
(Fy = 50,000 PSI)

STAINLESS STEEL 316 WALL  
PANELS 18 (43) GAGE (MILS)

ASTM A240, ASTM A480  
(Fy = 42,000 PSI)

4. SCREW THREADS SHALL TAP INTO AND SHALL ENGAGE THE ENTIRE THICKNESS OF ALL PIECES BEING JOINED, AND NOT LESS THAN THREE COMPLETE THREADS SHALL PENETRATE BEYOND THE METAL JOINED. SELF-DRILLING SCREWS MAY BE USED PROVIDED THE DRILL POINT IS SIZED SO DRILLING IS COMPLETED BEFORE THE LEAD THREADS OF THE SCREW BEGIN ENGAGING METAL. WHERE THE DRAWINGS CALL FOR A SCREW SIZE THAT DOES NOT HAVE A DRILL POINT OF SUFFICIENT LENGTH, INCREASE THE SCREW SIZE TO COMPLY WITH THESE REQUIREMENTS. PRE-DRILLED HOLE DIAMETERS SHALL NOT EXCEED THE DIAMETER OF THE DRILL POINT FOR ANY SELF DRILLING SCREWS PROPOSED. OVER-SIZED PRE-DRILLED HOLES ARE NOT PERMITTED.
5. THE CONTRACTOR IS PROHIBITED FROM USING TORCHES TO BURN HOLES IN TRACKS OR STUD.
6. NO ELEMENT, COMPONENT, CABINET, OR SHELF SHALL BE SUPPORTED BY OR ATTACHED TO THE FORTRESS STAINLESS STEEL METAL PANEL. ELEMENTS MAY BE ATTACHED THROUGH THE STAINLESS STEEL METAL PANEL TO ADDITIONAL BACKING PROVIDED BY OTHERS AS NOTED ON THE FOLLOWING PAGES.

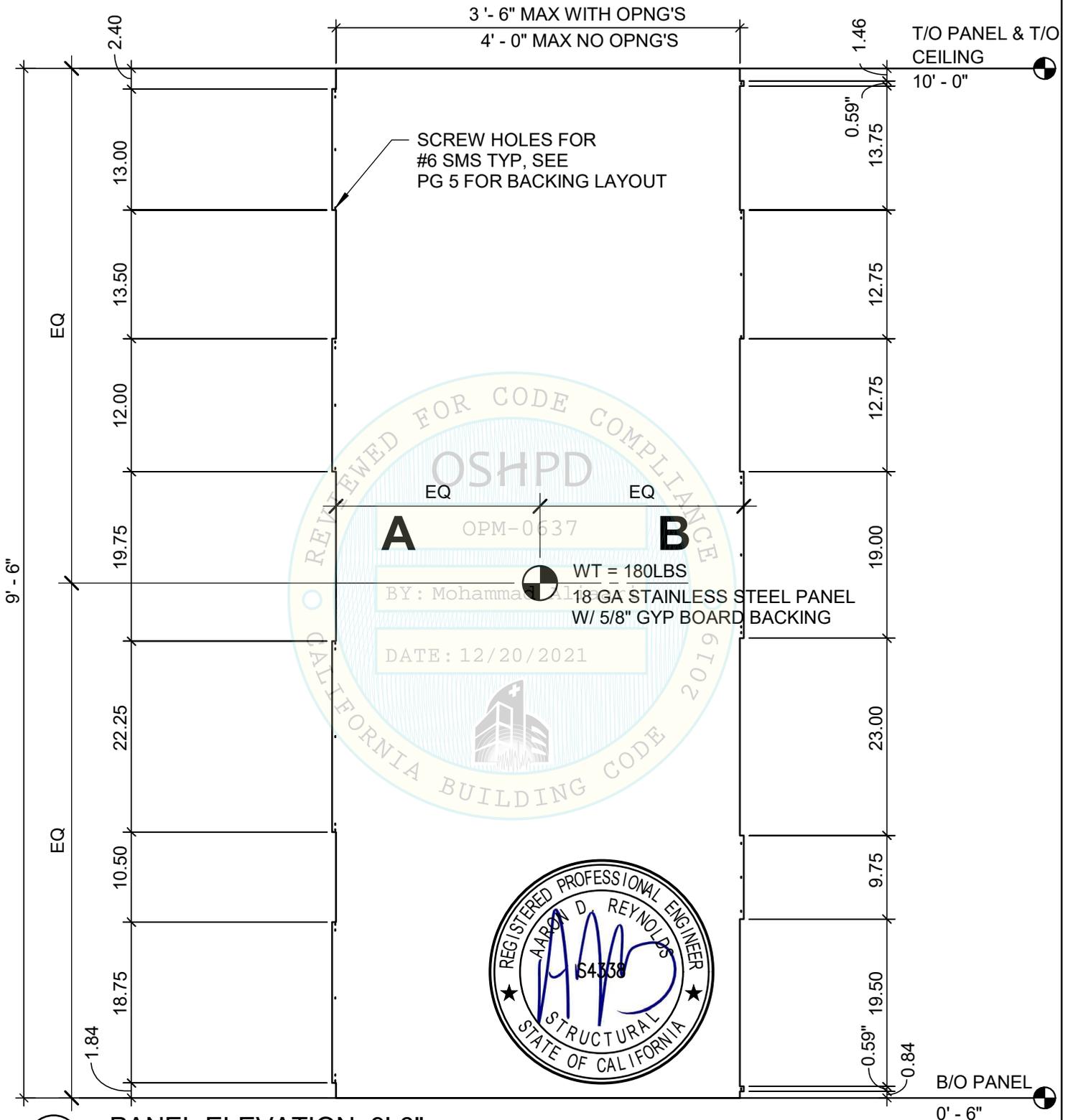


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**PANEL ELEVATION, 9'-6"**

3/4" = 1'-0"



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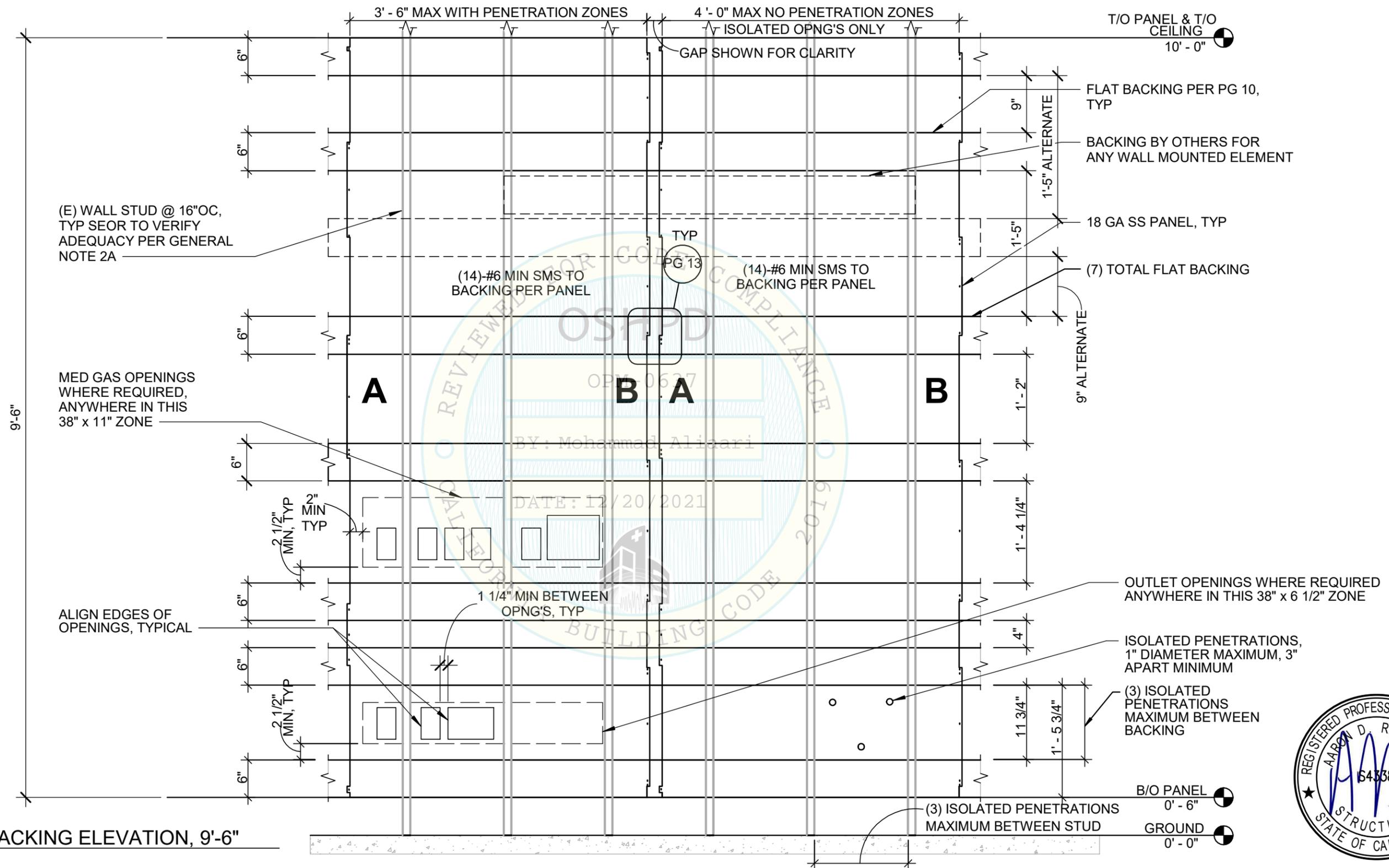
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Approval Date

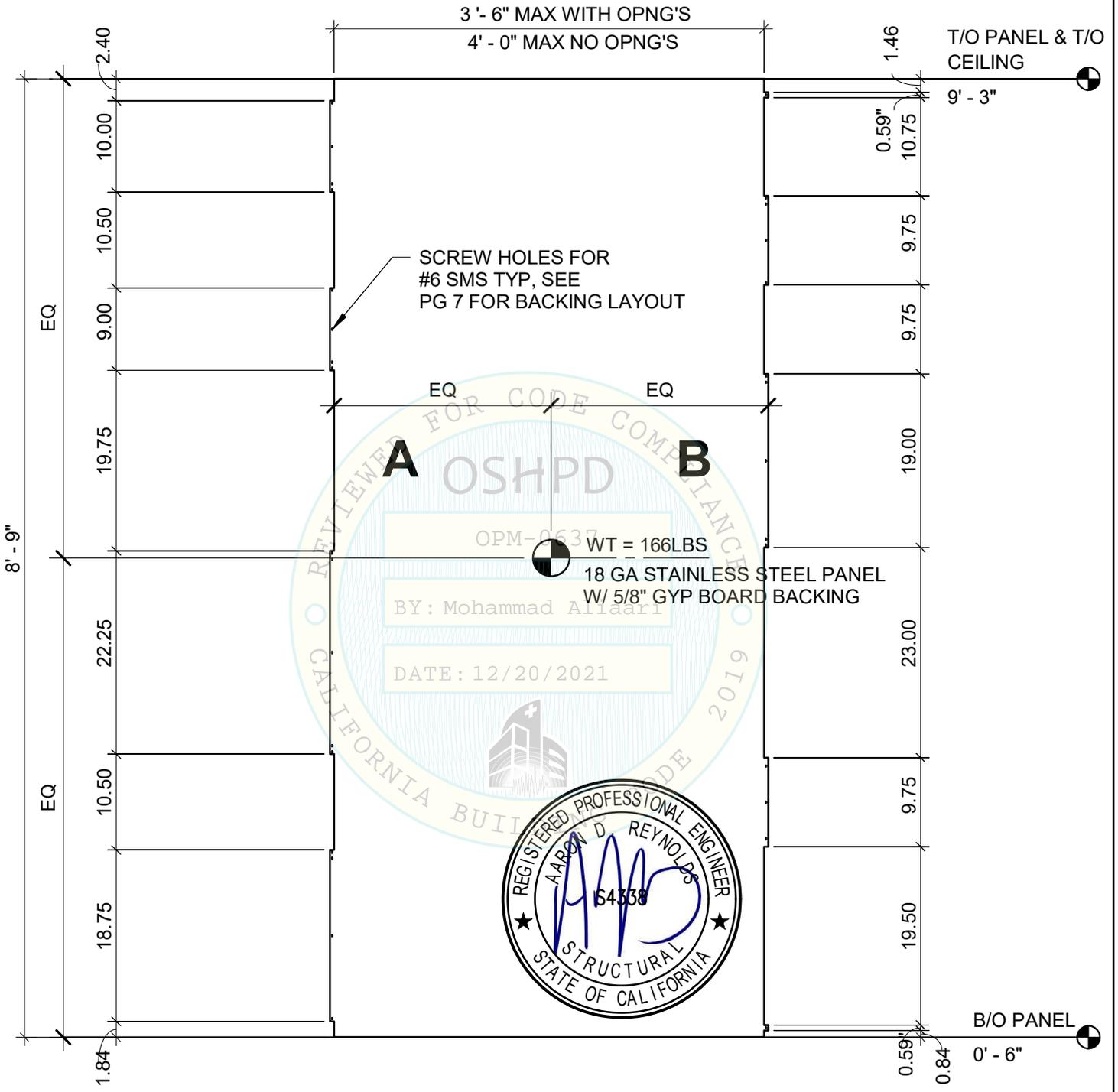
OPM-0637: Reviewed for Code Compliance by Mohammad Aliaari  
OPM-0637

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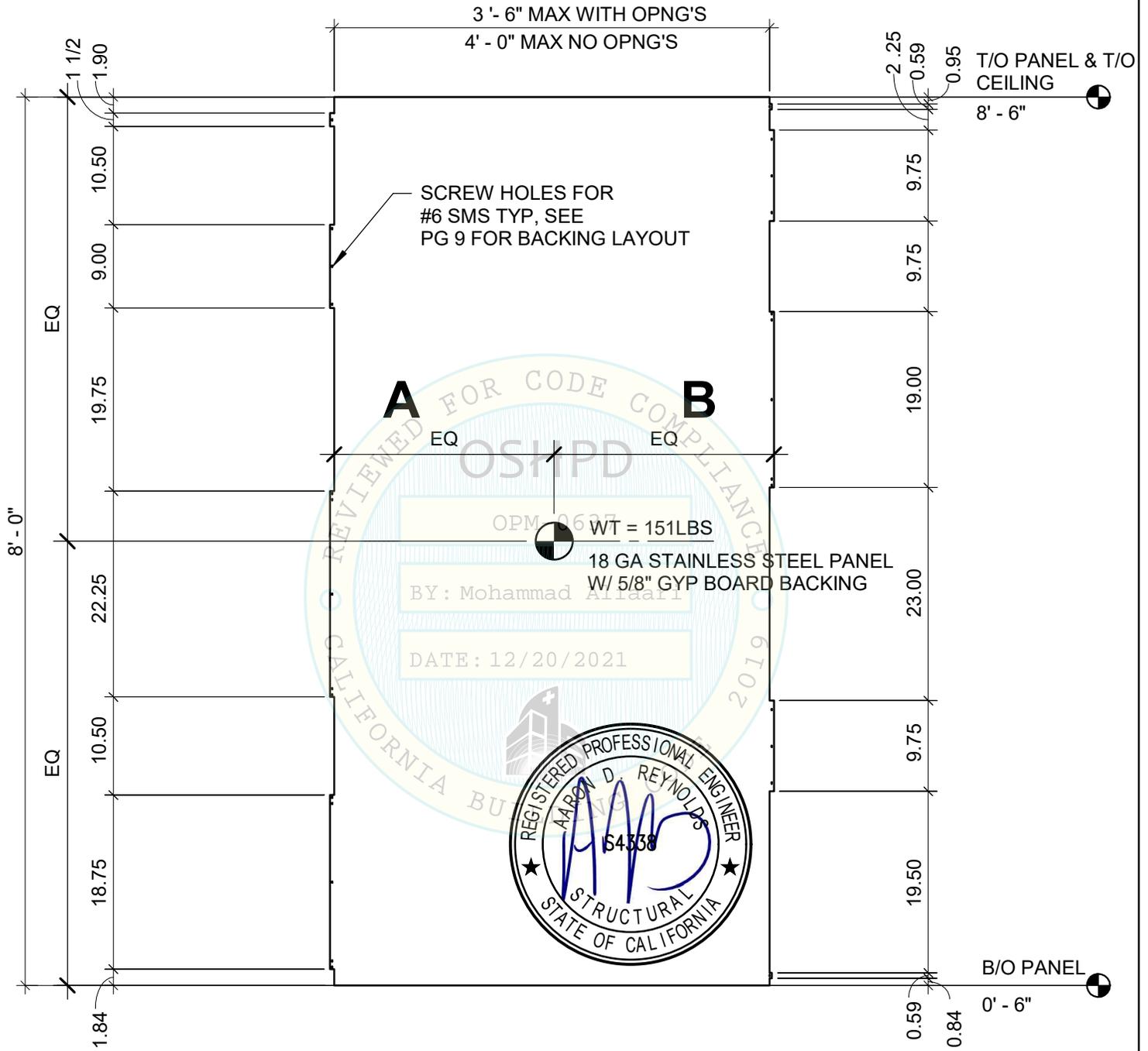
**1** PANEL BACKING ELEVATION, 9'-6"  
3/4" = 1'-0"



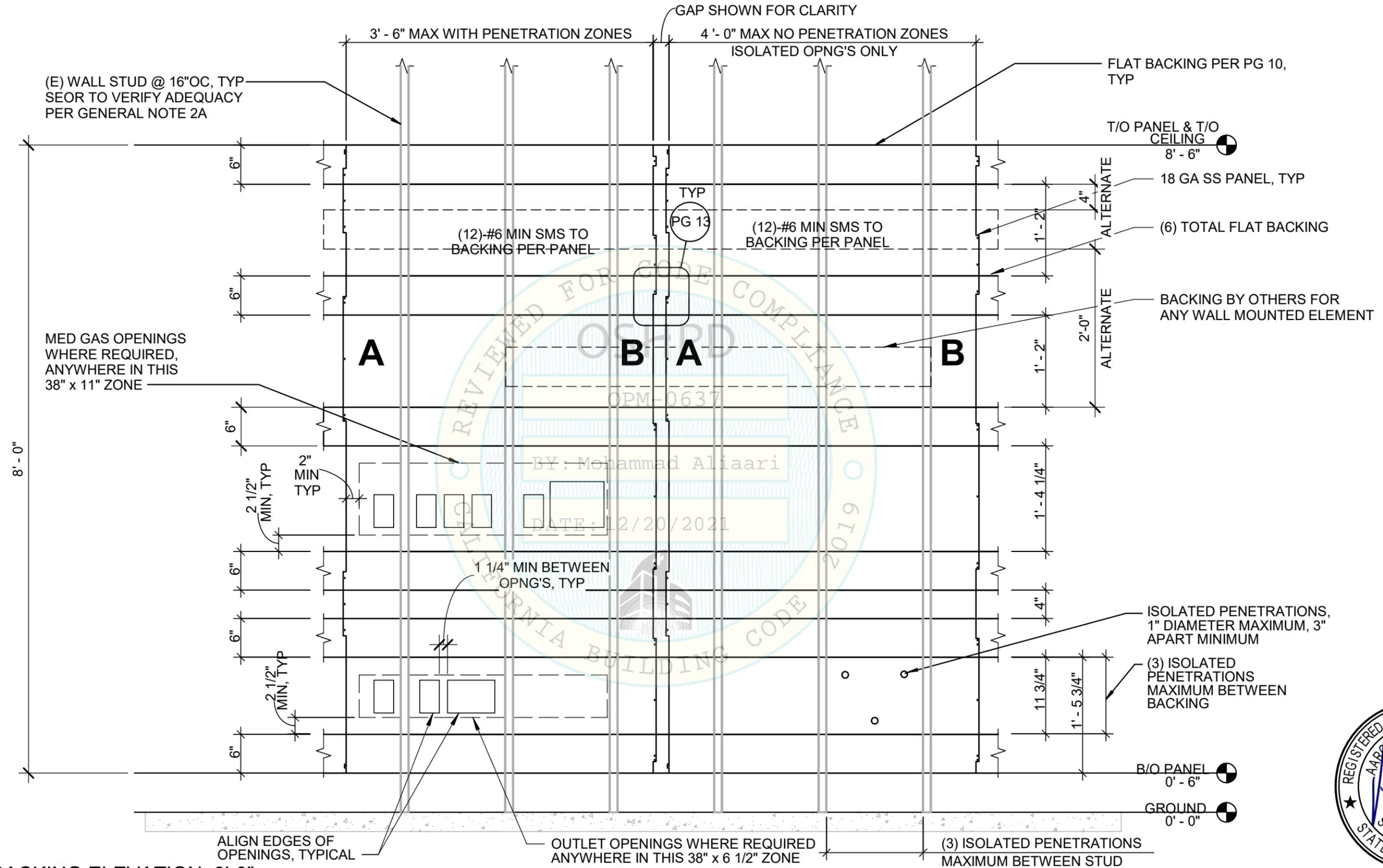


1 PANEL ELEVATION, 8'-9"  
3/4" = 1'-0"



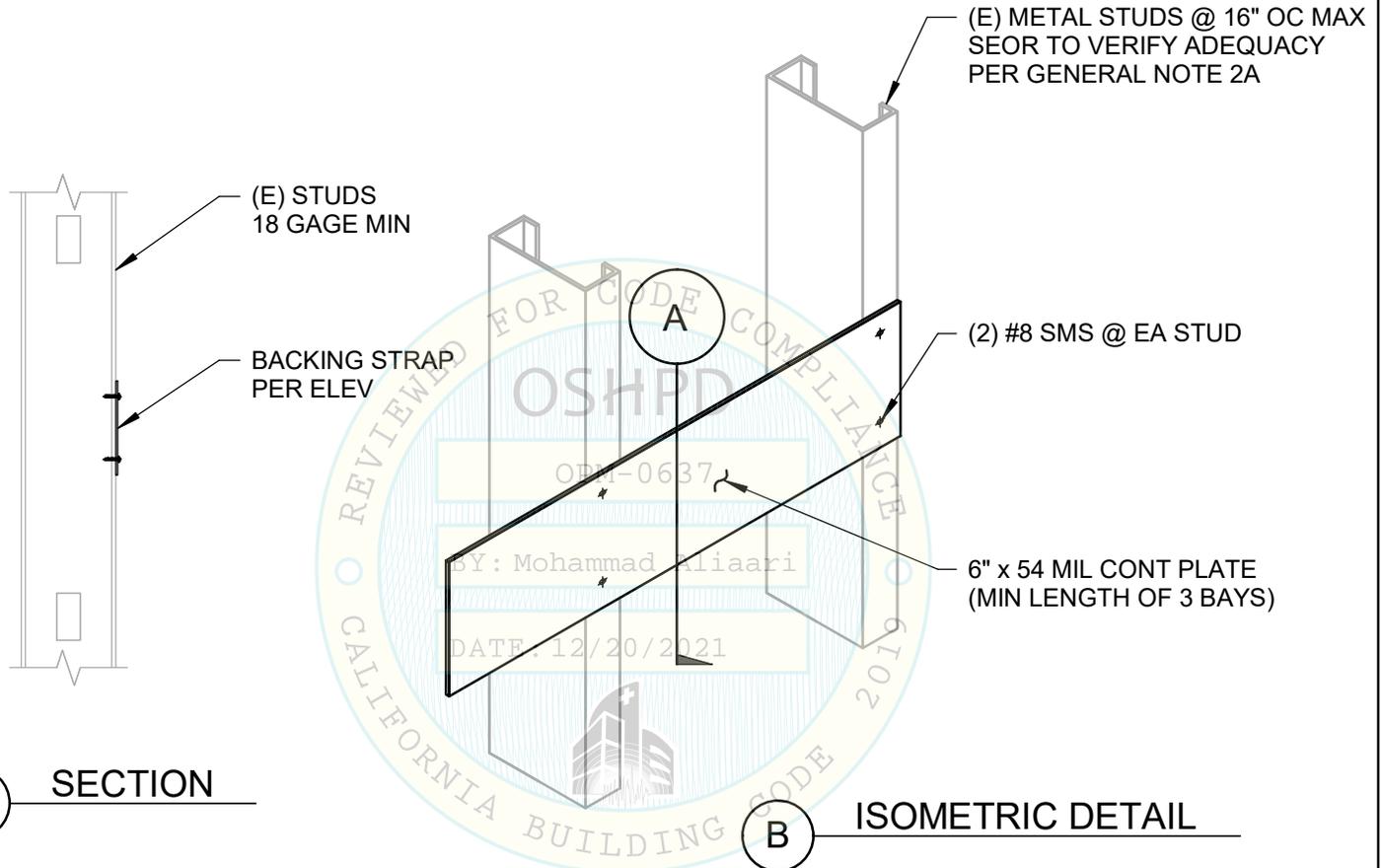


1 PANEL ELEVATION, 8'-0"  
3/4" = 1'-0"



1 PANEL BACKING ELEVATION, 8'-0"  
3/4" = 1'-0"

NOTE:  
NO ELEMENT, COMPONENT, CABINET, OR SHELF  
SHALL BE SUPPORTED BY OR ATTACHED TO THE FORTRESS  
STAINLESS STEEL METAL PANEL BACKING. ELEMENTS MAY  
BE ATTACHED THROUGH THE STAINLESS STEEL METAL  
PANEL TO ADDITIONAL BACKING PROVIDED BY OTHERS AS  
NOTED ON PAGES 5, 7, AND 9 OF 15.



**TYPICAL FLAT STRAP BACKING**

1" = 1'-0"



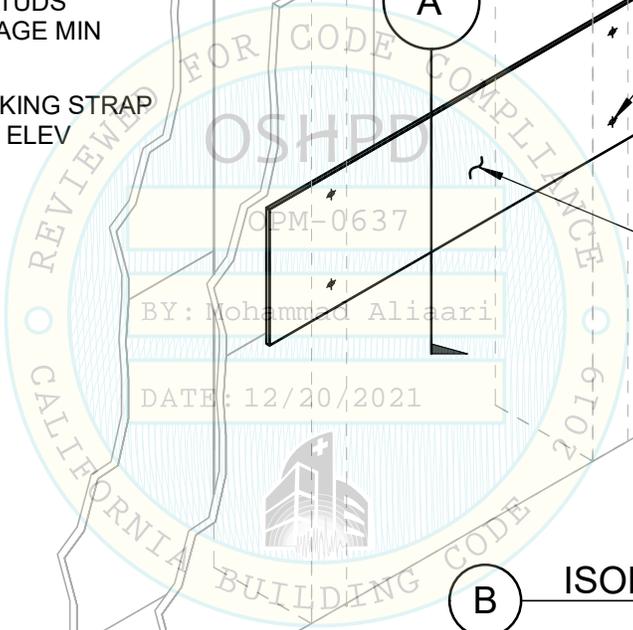
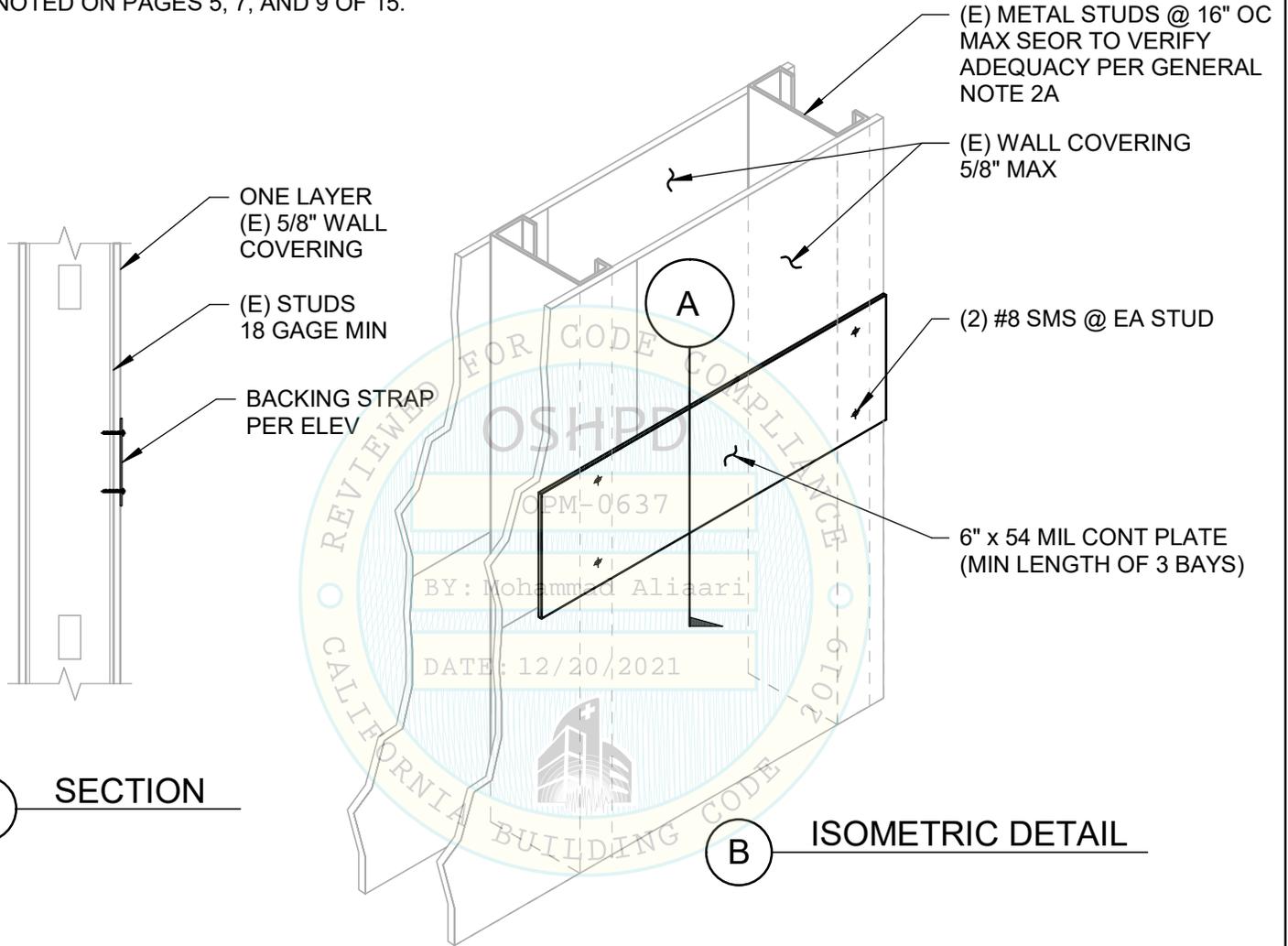
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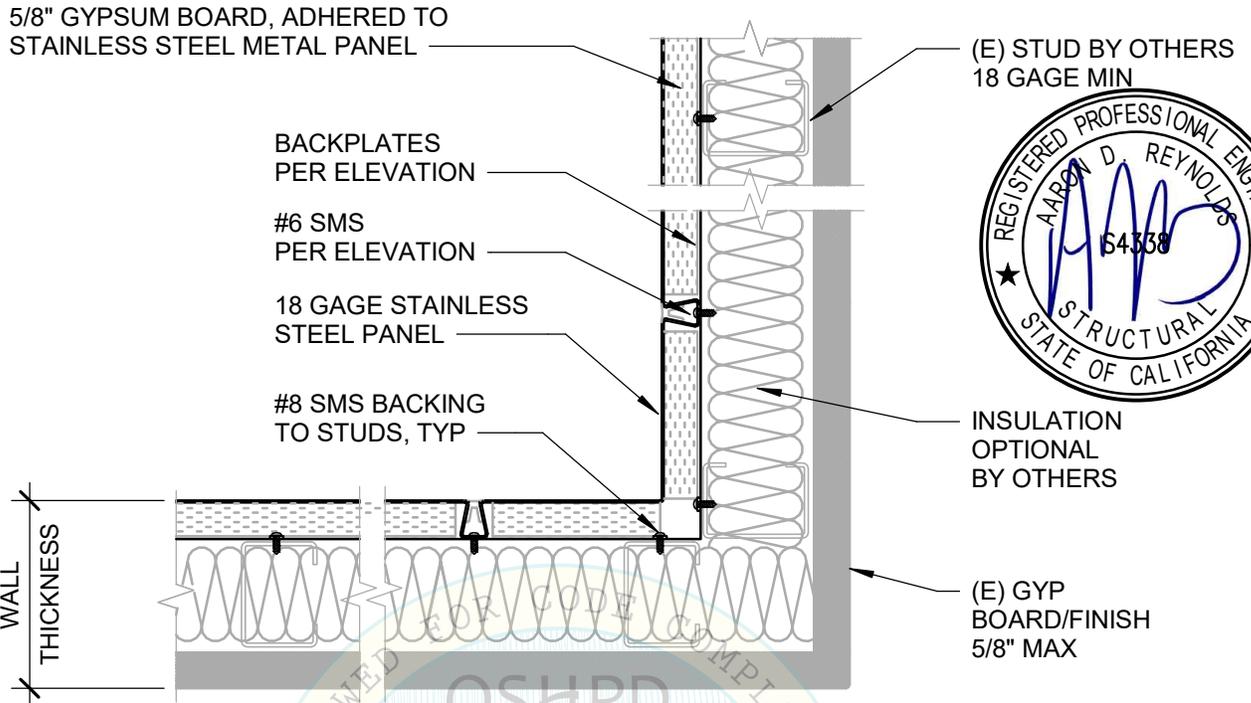
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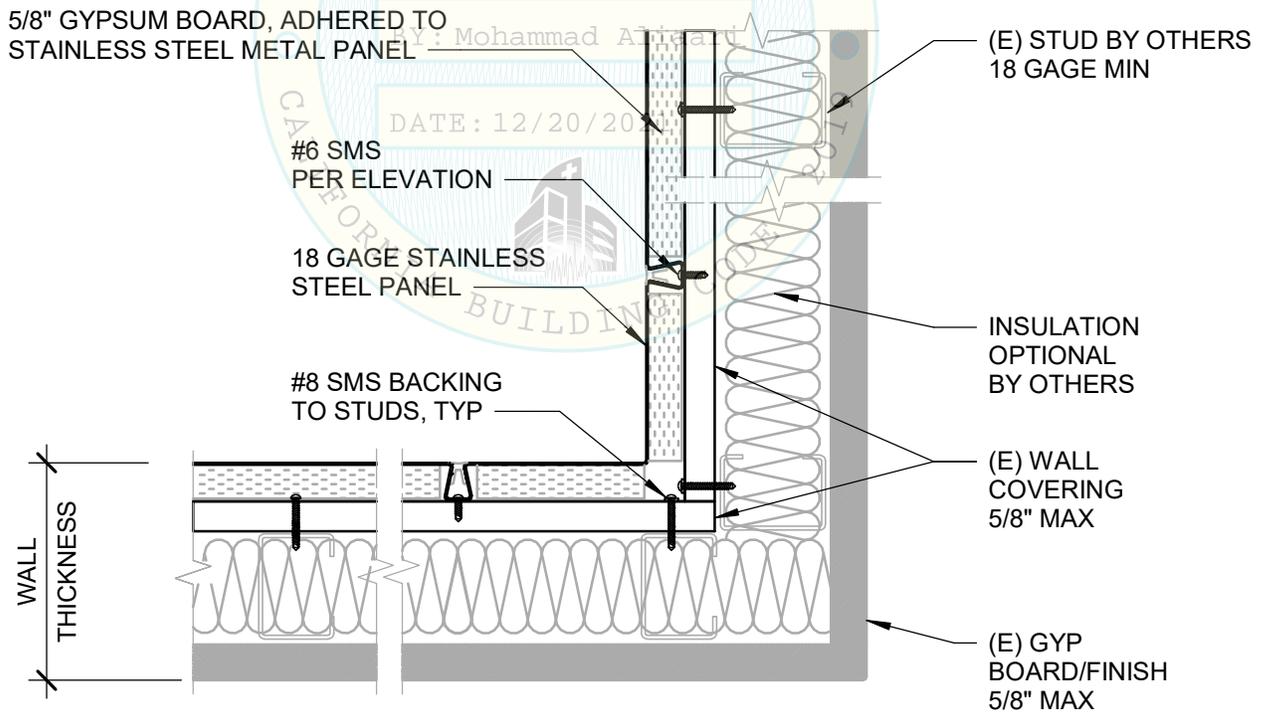
TYPICAL FLAT STRAP BACKING OVER WALL COVERING

1" = 1'-0"





**A** PANEL PLAN VIEW  
3" = 1'-0"



**B** PANEL PLAN VIEW OVER WALL COVERING  
3" = 1'-0"



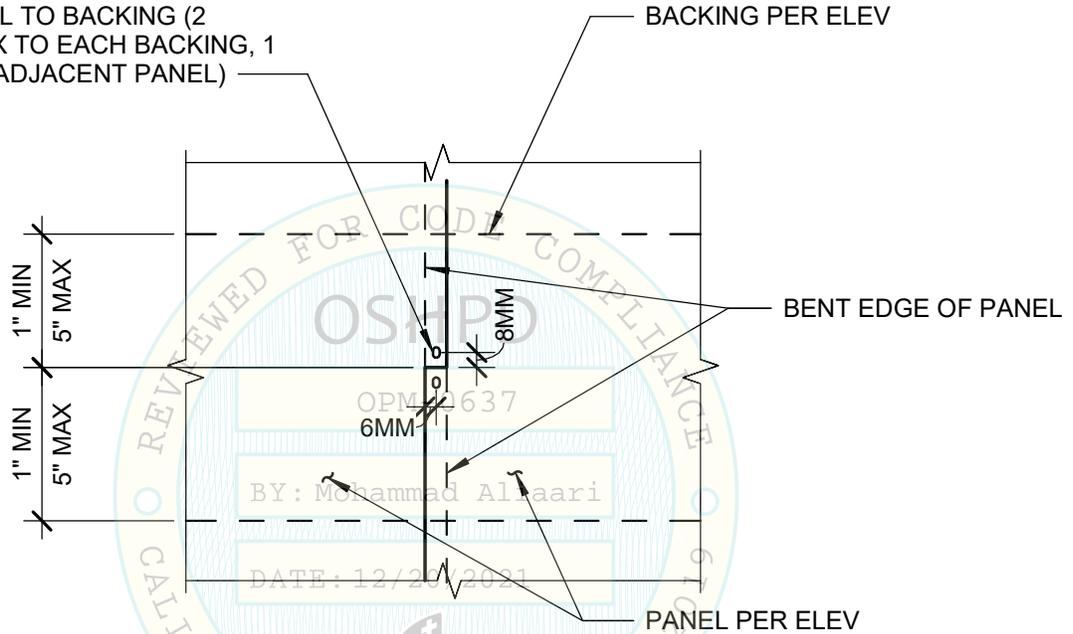
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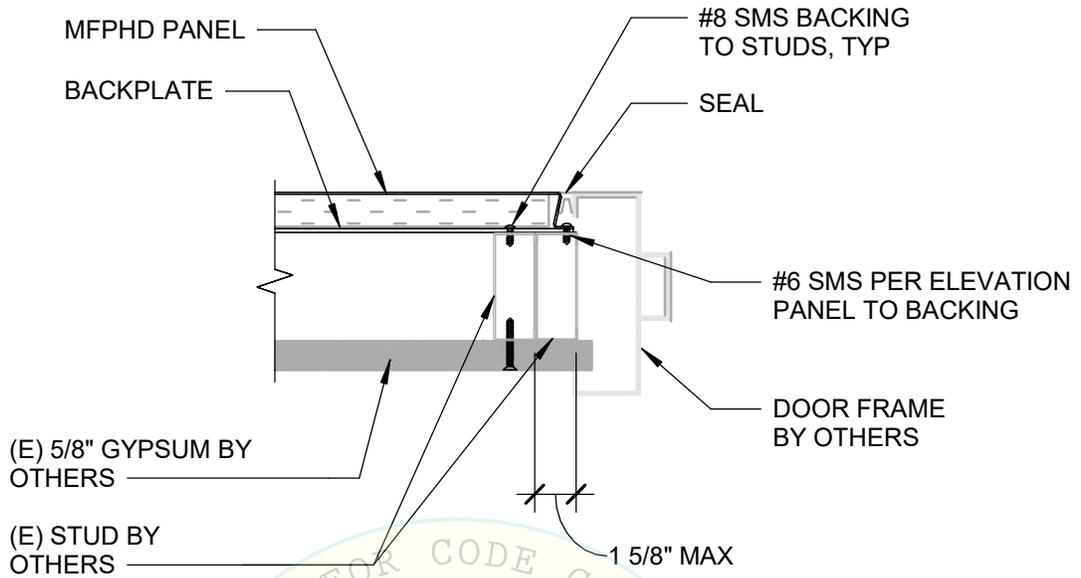
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#6 SMS PANEL TO BACKING (2  
SCREWS MAX TO EACH BACKING, 1  
EACH FROM ADJACENT PANEL)

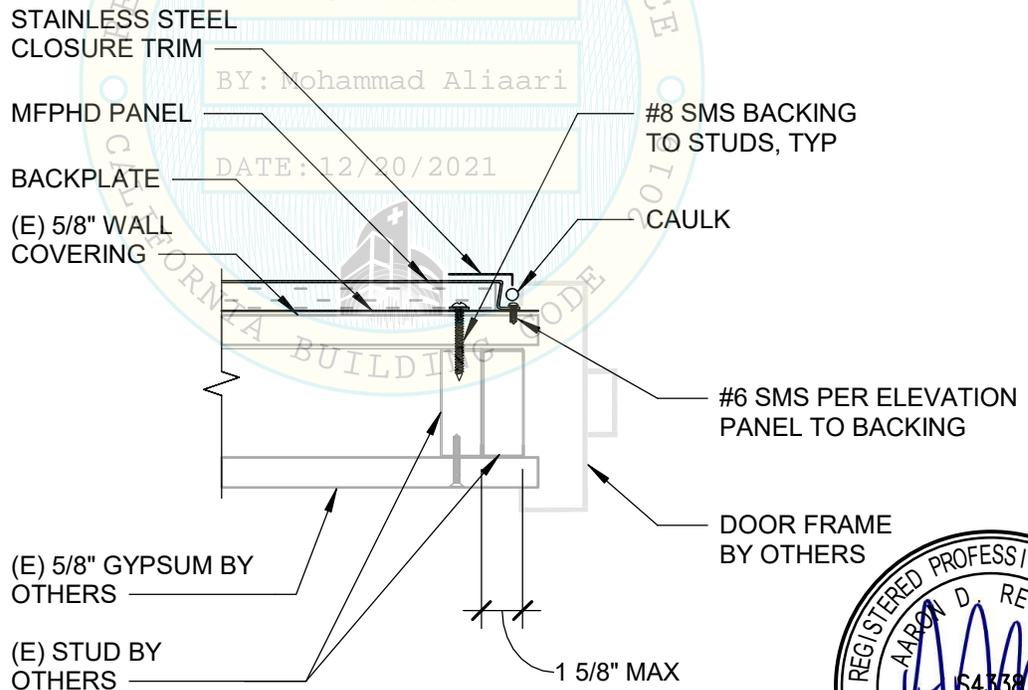


1 TYP PANEL CONNECTION  
3" = 1'-0"



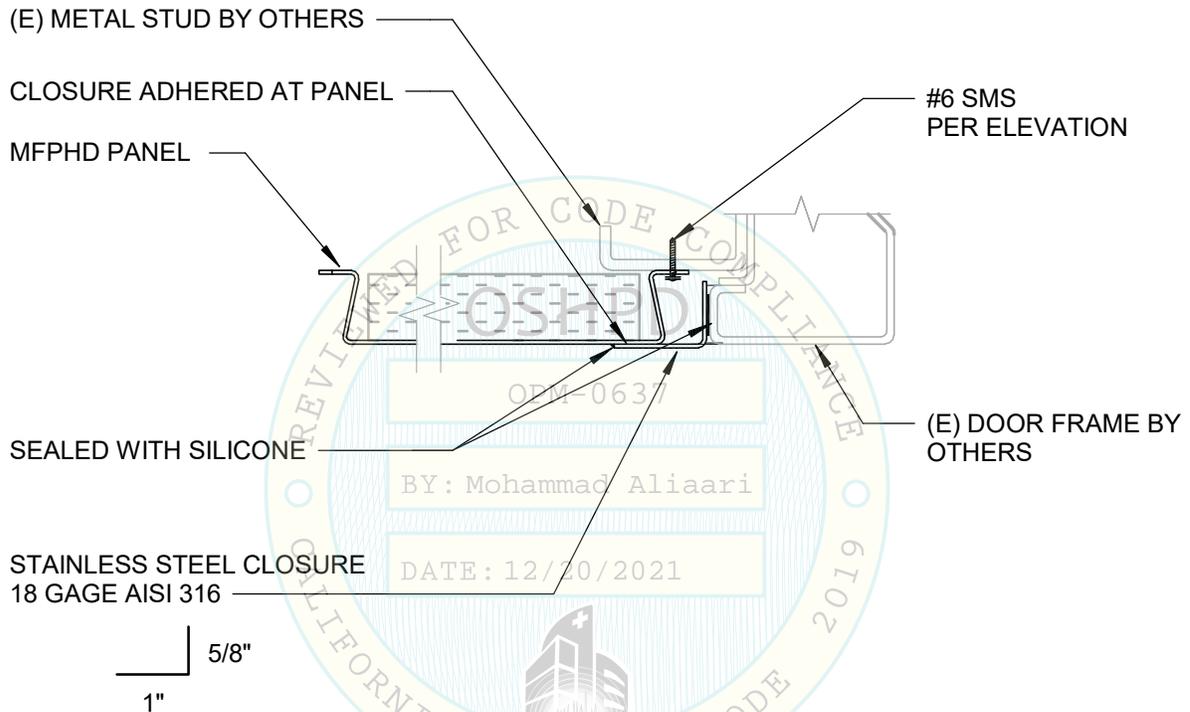


**A** TYPICAL DOOR JAMB  
3" = 1'-0"



**B** TYPICAL DOOR JAMB OVER WALL COVERING  
3" = 1'-0"





1 TRIM DETAIL  
6" = 1'-0"



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