Development Services

From Concept to Construction

Phone: 503-823-7300 Email: bds@portlandoregon.gov 1900 SW 4th Ave, Portland, OR 97201
More Contact Info (http://www.portlandoregon.gov//bds/article/519984)

APPEAL SUMMARY

Status: Decision Rendered

Appeal ID: 25043	**Project Address:** 5211 NE 148th Ave
Hearing Date: 8/11/21	**Appellant Name:** Melissa Meiners
Case No.: B-002	**Appellant Phone:** (503) 708-2157
Appeal Type: Building	**Plans Examiner/Inspector:** Brian McCall, Anne Schmidt
Project Type: commercial	**Stories:** 2 **Occupancy:** F-1, S-1, S-2 **Construction Type:** V-B
Building/Business Name: Level Beer	**Fire Sprinklers:** No
Appeal Involves: Alteration of an existing structure	**LUR or Permit Application No.:** 20-194410-CO
Plan Submitted Option: pdf [File 1] [File 2] [File 3] [File 4] [File 5] [File 6] [File 7]	**Proposed use:** Brewery, Storage

APPEAL INFORMATION SHEET

Appeal item 1

Code Section	705.5
Requires	The required fire-resistance rating of exterior walls with a fire separation distance of less than or equal to 10 feet shall be rated for exposure to fire from both sides.
Code Modification or Alternate Requested	Allow the use of intumescent paint on exterior wood siding to provide equivalent 1-hour fire protection in lieu of type 'X' gypsum sheathing on the exterior side of the assembly.
Proposed Design	The proposed alterations for this permit are for a 2nd story addition to the warehouse portion of the building. The building is located less than 10 feet from the south property line at this area. This portion of the exterior wall is required to be 1-hour fire-resistance rated per Tables 601 & 602 and rated from both sides. The existing south exterior wall at the first story was constructed previously with wood panel siding (T1-11) over (2) layers fire-rated gypsum sheathing over (1) layer wood structural sheathing. The new portion of the south exterior wall at the 2nd story had (1) layer of T-11 wood siding panels installed over 1/2" wood structural sheathing on the wood framing without fire-rated gypsum board. The T1-11 is intended to be the final exterior finish to match the rest of the building. The interior side of this wall will have (1) layer Type 'X' gypsum board installed.
Reason for alternative	The new portion of the south exterior wall at the 2nd story had (1) layer of T-11 wood siding panels installed over 1/2" wood structural sheathing on the wood framing without fire-rated gypsum board as was originally detailed in the approved permit plans. The T1-11 is intended to be the final exposed exterior finish. Per OSSC Section 104.10, an alternative method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the

provisions of the code, and that the material, method or work offered is, for the purposes intended, not less than equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

The applicant proposes an alternative method of construction that provides equivalent fire resistance in lieu of the listed, tested assembly as originally detailed in the approved permit plans. The proposal is to use Shield Industries Inc. ForceField FireGuard E-84 intumescent paint for wood on the exterior wood siding. (1) layer 5/8" Type 'X' gypsum board will still be installed at the interior side of this assembly.

As outlined in Evaluation Report 442, section 4.2, ForceField FireGuard E-84 is permitted to be used as a component of a fire-resistance rated assembly in accordance with IBC(OSSC) section 703.2, based on testing in accordance with ASTM E119 or UL 263. The Shield Industries, Inc. product data sheet for the ForceField FireGuard E-84 Intumescent Paint states it is an intumescent coating designed for the fire protection of gypsum and wood.

A 2-hour fire test (Report No. GL 115511) provides evidence that a fire-resistance rating utilizing the FireGuard E-84 intumescent coating can achieve the required fire-protection when applied directly to a 1/2" (7/16") wood substrate. The main differences between this fire test (Report No. GL 115511) and the assembly proposed in this application is that we're trying to achieve a 1-hour fire-resistance rating, not 2-hours. The proposed assembly would have (1) layer 5/8" Type 'X' gypsum board installed to provide a 40 minute fire-resistance rating per Table 722.6.2(1) from the interior. The intumescent coating would be applied on the exterior wood siding with the required thickness to achieve a 1-hour fire-resistance overall assembly rating, as outlined in Evaluation Report 442.

The applicant requests that FireGuard E-84 intumescent coating installed on the exterior wood siding be allowed in lieu of the (1) layer of 5/8" Type 'X' gypsum board, meeting the requirements of the 1-hour exterior wall to be rated from both sides, meeting the requirements of Sections 104.10 & 705.5.

APPEAL DECISION

Alternate 1 hour fire rated exterior wall assembly with use of intumescent paint on exterior wood siding in lieu of type 'X' gypsum sheathing: Denied. Proposal does not provide equivalent Life Safety protection.
Appellant may contact John Butler (503 865-6427) or e-mail at John.Butler@portlandoregon.gov with questions.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 90 calendar days of the date this decision is published. For information on the appeals process, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.

Melissa Meiners

From: Kevin Hawlk <khawlk@shieldindustries.com>
Sent: Thursday, July 29, 2021 12:09 PM
To: Melissa Meiners
Subject: FireGuard E-84 Intumescent Coating
Attachments: W-11 - 2 Hour .75 Plywood Wall.pdf; W-13 - 2 Hour Wood Exterior Wall Assembly.pdf; EER 55314 - 1 Hour Exterior Hardi Plank.pdf; GL 61011 - 1 Hour Interior Wall 10mil.pdf; GL 115511 plywood wall .75 inch 2 hr.pdf; GL 115711 2 hr top coated 25 mil.pdf; Standard Certification.pdf; ANSI Certificate of Accre.pdf; GuardianFireCert-12-1-14.pdf; Guardian-Fire-Testing-Laboratories-Inc-Cert-and-Scope-File-12-21-2018_1545404919.pdf; er_0442-2021.pdf; TDS FireGuard Z-1.pdf

Melissa,

Thank you for taking some time this afternoon to talk with me, per our conversation you are interested in providing additional fire protection to the wall of an existing constructed exterior wall assembly. Attached you will find a few third party assembly designs and testing reports for the submittal process through the local AHJ, it is required to get the material approved through the local building official prior to purchase and installation as the material is a life safety product.

Please note that none of the assembly designs directly match your proposed application, but it is our hopes that they show with significate evidence the ability of our material to extend the fire resistance of assemblies the material is applied to.

When utilizing FireGuard E-84® Intumescent Coating in an exterior fashion, the mil thickness requirement must be increased by 10 mil dry on top of the required mil thickness for the specific rating desired. This is to help the coating maintain a lasting life in the exterior elements.

Application Guideline

Exterior

- Application area must be protected from the exterior elements at all times during the application until the final finish is fully installed
- Structure and surface must be properly prepared in accordance with the primer manufacture specifications
- FireGuard E-84® Intumescent Coating must be installed the specified and approved application thicknesses for the intended application area 34 mils dry (25.47 SQFT/GAL)
    - Typical Coat Weight
        - Airless Spray Rig - min. 2000psi (.19-.21 mil tip) – 20-25 mils wet (10-13.5 Mils Dry)
            - 24 Hours between each coat
            - Each coat will be built up in several light weight passes to build to the final wet thickness of 20 -25 mils wet, attempting to accelerate this process will cause the material to sag and slide leaving areas will too high of an application thickness as well as areas with too low of application thickness.
        - Roller/ Brush - Heavy nap roller – 5 -10 mils wet Max (2.7 – 5.4 Mils Dry)
            - Typical application with a roller or brush can have 2 coats per day
- FireGuard Z-1 Tie Coating (350 SQFT/GAL)

- FireGuard Z-1 Tie Coating is designed to seal the intumescent coating so a continuous barrier is required, this can be achieved with a single coat using an airless sprayer with a .13 mil tip or with multiple coats of a roller/ brush.
- FireGuard Z-1 Tie Coating bust be allowed to cure for 4-5 days prior to applying the final exterior grade finish.

Kevin M. Hawlk
Director - Business Development Manager & Technical Services
Shield Industries Inc.
(800) 332-6327 - (770) 517-6869 - Fax (770) 517-6863

From: Kevin Hawlk
Sent: Friday, July 23, 2021 2:33 PM
To: Melissa@koblecreative.com
Subject: FireGuard E-84 Intumescent Coating

Melissa

Thank you for your inquiry, life safety materials like the FireGuard E-84® Intumescent Coating are tested in what is referred to as assembly based designs under ASTM E-119 conditions, these designs represent a minimum bases required in the assembly construction to achieve the desired 1 and 2 hour ratings. In our testing reports which I have attached to this email our minimum based assembly is a .5" gypsum wall assembly which consists of .5" gypsum on both sides of the wall assembly, this is then treated with a specific thickness of the FireGuard E-84® Intumescent Coating, the application and protection of the intumescent coating is directional so if the wall requires the rating on both sides the application would need to be on both sides of the wall assembly. Our testing and supporting documentation also takes into account if you wish to finish over the intumescent coating i.e. topcoat. If you wish to change the aesthetics of the material by top coating there will be a different application thickness required as well as the use of our tie coating material FireGuard Z-1.

- TDS for applications on Wood
- FireGuard Z-1 Tie-Coat TDS (Required when top coating the FireGuard E-84® Intumescent Coating)
- W-1 - 1 Hour Non- Top Coated Wall Assembly Drawing
    - Required dry film thickness - 10 Mil dry Application – 86.6 SQFT / GAL
- W-12 –1 Hour Top Coated Gypsum Wall Assembly Drawing
    - Required dry film thickness - 19 Mil Dry Application – 45.57 SQFT/GAL
- EER 35313 – 1 Hour Top Coated Gypsum Wall Evaluation Report

- ASTM E-119 – 1 Hour Non-Top Coated Gypsum Wall Assembly Testing Report GL 61011
- ASTM E-119 – 2 Hour Top Coated Gypsum Wall Assembly Testing Report GL 115711
- Listing Certificate
- Guardian Fire Laboratories Accreditation
- IAPMO ES Report

Application Guideline

- Application area must be protected from the exterior elements at all times during the application until the final finish is fully installed
- Structure and surface must be properly prepared in accordance with the primer manufacture specifications
- FireGuard E-84® Intumescent Coating must be installed the specified and approved application thicknesses for the intended application area
    - Typical Coat Weight
        - Airless Spray Rig - min. 2000psi (.19-.21 mil tip) – 20-25 mils wet (10-13.5 Mils Dry)
            - 24 Hours between each coat
            - Each coat will be built up in several light weight passes to build to the final wet thickness of 20 -25 mils wet, attempting to accelerate this process will cause the material to sag and slide leaving areas will too high of an application thickness as well as areas with too low of application thickness.
        - Roller/ Brush - Heavy nap roller – 5 -10 mils wet Max (2.7 – 5.4 Mils Dry)
            - Typical application with a roller or brush can have 2 coats per day
- FireGuard Z-1 Tie Coating (350 SQFT/GAL)
    - FireGuard Z-1 Tie Coating is designed to seal the intumescent coating so a continuous barrier is required, this can be achieved with a single coat using a airless sprayer with a .13 mil tip or with multiple coats of a roller/ brush.
    - FireGuard Z-1 Tie Coating bust be allowed to cure for 4-5 days prior to applying the final finish.

Please feel free to contact me with any further questions.

Kevin M. Hawlk
Director - Business Development Manager & Technical Services
Shield Industries Inc.
(800) 332-6327 - (770) 517-6869 - Fax (770) 517-6863

Shield Industries, Inc.

GUARDIAN FIRE TESTING LABORATORIES, INC.

Product Certification

Accredited to ISO 17025, ISO 17020 & Guide 65 Through ANSI/ASQ/ANAB/ACLASS

Shield Industries, Inc.

131 Smokehill Lane, Woodstock, GA 30188

ForceField® FIREGUARD E-84® Intumescent Coating

Standards Tested To: ASTM E-119;
ASTM E-84 Extended Time (ASTM E-2768)

Guardian Test Report #s: GL 47510; 60911; 61011; 71011; 71611; 88211; 88311-A; 88411; 115311; 115411;115511; 115611; 115711; 58812; 58912.

(The test reports cover results when coating is applied to different categories of substrates. Application instructions are shown on product label.)

Guardian Report #s: EER 66112-October 29, 2012; EER 68612-November 15, 2012; EER 77812-December 6, 2012; EER 16714 rev. January 24, 2014

GUARDIAN®

Suzanne Pearson

Administrator

Certifying Product Reliability Against Fire

Updated: 2/1/14

Shield Industries, Inc.

ForceField® FireGuard E-84® Intumescent Paint For Gypsum/ Wood/ OSB

Application Conditions

Generic Type Water-based intumescent coating designed for the fire protection of gypsum and wood.

Description Thin film intumescent coating that creates a fire retardant and fire resistant barrier on a wide range of building surfaces including gypsum, wood, and steel (see tech data sheet for steel).

Listed and certified by Guardian Fire Test Laboratories Inc.

Features
-ASTM E-119 ASTM E-84 Tested
-Decorative Finish- Gives a smooth decorative finish.
-Can be top-coated to color choice.
-Can be brushed on, rolled on, or sprayed on
-Durable finish- Provides a hard, impact and abrasion resistant surface
-Topcoat finishes smooth
-Thin film coating- space saving footprints
-Low VOC content
-LEED compliant

Color White
Finish Smooth

Primers Can be used as a finished coat or a primer.

Topcoats For interior space a topcoat is optional. For exterior applications the material must be top coated with an impermeable exterior coating. The choice of topcoat will depend on project requirements and mil thickness of intumescent coating. FireGuard E-84® Intumescent Coating must be allowed to cure for 4-5 days prior to the application of a topcoat. Application must be protected from the elements until topcoat is in place. When applying a top coat, dry mil applications thickness to achieve a desired rating may change.

Wet Film Thickness Up to 25 - 30 mils per coat

Dry Film Thickness Up to 13.5 – 16.2 mils per coat

Solids Content By volume 54%

Coverage rate
866ft²/Gal at 1mil
86ft²/Gal at 10mil
28.9ft²/Gal at 30mil
Allow for loss in mixing and application.

VOC Content 3.6 g/l

Limitations Not for use on exterior environments or for interior steelwork that will be exposed to freeze/thaw cycling or long-term surface temperatures over 140˚F (60˚C) in normal use without the use of a suitable topcoat.

Substrates & Surface Preparation

General Prior to application surfaces need to be cleaned by removing all oil, grease or any loose particles that may interfere with the bond of ForceField® FireGuard®. It is highly recommended to prime drywall substrates before the application of FireGuard E-84®.
On wood substrates where the wood is extremely old and dried out, it will be necessary to scrape off any old flaking off paint (if painted) and prime the surface before the application of FireGuard E-84®.

Performance Data

Standards Tested To	Results
ASTM 2768 / ASTM E-84 30 min Extended	Flame Spread- 0 Smoke Index- 5
ASTM E-84	
ASTM E-119	1 & 2 Hour on gypsum and wood wall and floor/ceiling assemblies
UL 263	
NFPA 251	
ULC-S-101	

Mixing & Thinning

Mixer Use ½" electric or air driven drill with a slotted paddle mixer (300rpm under load).

Mixing Fireguard® must be mixed using a ½" electric or air driven drill with a slotted paddle or jiffy mixer blade. Mix material for a minimum of 5 minutes to achieve the necessary texture required before spraying.

Thinning Do not thin.

Tinting Do not tint.

Application Procedures

Brushed or Rolled Generally creates an 11 to 12 mil wet application. Multiple coats will be required to meet specifications to the job requirements. Allow each coat to completely dry to touch before applying next coat.

Airless Spray A single coat, built up with a number of quick passes, allows greater control over quantities, thickness and finish. In most conditions, it is advantageous to apply two thin coats rather than one thick coat

March 2015.

Shield Industries, Inc.
131 Smokehill lane. Woodstock, GA 30188 (770) 517-6869

Application Procedures

Application Rates

At an ambient temperature of 70˚F (21˚C), the following application rates are applicable:
25 – 30 mils per coat (wet)
24 hour recoat time between coats
1 coat per day
*Fireguard can be recoated when previous coat has a shore D hardness of 50 measured at 70˚F (21˚C)

Wet Film Thickness

Frequent thickness measurements with a wet film gauge are recommended during the application process to ensure uniform thickness

Dry Film Thickness

Final thickness can be measured using an electronic dry film thickness gauge. Positector 200 or equivalent may be used. Wet mil thickness dries to 54%. (i.e. 20mil wet = 10.6mil dry)

Application Equipment Guidelines

Listed below are general equipment guidelines for the application of this product when spray applied.

Airless Spray Airlessco LP540 or equivalent

Spray Gun Standard airless spray gun

Spray Tips 0.019”- 0.021”

Fan Size 4”-10” (depending on section being sprayed)

Hose Length 150’ (45m)

Material Hose 3/8” (9.25mm) I.D. minimum

Whip Hose ¼” (6.35 mm) I.D minimum (optional)

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Minimum	70˚F (21˚C)	50˚F (10˚C)	50˚F (10˚C)	0%
Maximum	100˚F (38˚C)	125˚F (52˚C)	110˚F (43˚C)	85%

Fireguard must be protected from exposure to weather. Protect from freezing.

Curing Schedule

Surface Temp. & 50 % Relative Humidity	Dry to Recoat
77˚F (25˚C)	24 Hours

*It is recommended to apply one per day. Drying time will vary with temp. Thinner coats as well as air movement will help drying time. Another coat of Fireguard® can be applied when previous coat has a Shore D hardness of 50 measured at 70˚F (21˚C). It can be top coated when a hardness of 60 is achieved after 4-5 day cure time.

Cleanup & Safety

Cleanup Pump, Gun, Tips, Hoses, and Mixers should be cleaned once per day with clean water.

Safety It is recommended protective equipment should be worn when applying Fireguard®, including spray suits, eye protection, gloves, and respirators. Refer to Fireguard® Material Safety Data Sheet.

Ventilation Ventilation should not be less than 4 complete air exchanges per hour until the material is dry.

Maintenance

General If coating becomes damaged, rebuild required thickness by spray, brush or roll. When dry, smooth and finish with topcoat to match. Damaged areas must be abraded back to a firm edge by sanding or scraping. The topcoat should be abraded back 1” (25.4 mm) from the damaged area. The surface must be clean and dry before applying Fireguard E-84®.

Testing/ Certifications

Uncertainty Measurement in Guardian’s fire testing is less than 1% as per ASTM E 2536-06.

Guardian is accredited and meets the requirements of ISO/IEC 17025 as verified by ANSI/ASQ National Accreditation Board/ A CLASS. Refer to certificate and scope of accreditation report AT1247. Guardian also is accredited as an inspection agency per ISO 17020 through ANSI/ASQ National Accreditation Board/ ACLASS, Report 1547.

N.B.: ANSI/ASQ/ACLASS is a signatory member of the International Laboratory Accreditation Cooperation’s (ILAC) Mutual Recognition Arrangement (MRA).

ANSI/ASQ/ACLASS accreditation of Guardian ensures global recognition for Guardian’s services.

Storage, Packaging & Handeling

Shelf Life 1 year from production date
*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in unopened original container.

Shipping Weight approximately 12 lbs. per gallon (1.44 kg/l)

Storage Store indoors in a dry environment between 33˚F-100˚F (1˚C - 38˚C). Protect from freezing.

Packaging

May 2015

Shield Industries, Inc.
131 Smokehill lane. Woodstock, GA 30188 (770) 517-6869

SITE AERIAL

VICINITY MAP

STREET TREE ACTIVITY IS NOT APPROVED AS PART OF THIS PERMIT.
ADDITIONAL PERMITS ARE REQUIRED PRIOR TO PRUNING, REMOVING, OR PLANTING STREET TREES. CALL 823-8733 FOR MORE INFORMATION.

Address	**5211 NE 148TH AVE**
Address2	**PORTLAND, OR 97230**
Property ID	R318541
Tax Roll	SECTION 24 1N 2E, TL 500 2.59 ACRES DEFERRAL-POTENTIAL ADDITIONAL TAX
Use	WHSE SHOWROOM
Lot	TL 500
County	Multnomah
State ID	1N2E24B 500
New State ID	1N2E24B -00500
Alt Account Number	R942240160
Map Number	2545 OLD

SCOPE OF WORK:
ADD 2ND LEVEL TO EXISTING SINGLE LEVEL BUILDING. NEW LEVEL WILL BE USED FOR EMPTY BEER CANS AND KEGS AND WILL **NOT** CONTAIN STORAGE RACKS.
NO CHANGE TO EXISTING IMPERVIOUS AREAS, NO CHANGE TO BUILDING COVERAGE.
NO CHANGE TO EXISTING STORMWATER DISPOAL SYSTEM.
NO EXTERIOR SITE WORK PROPOSED.

SITE INFORMATION

LOT AREA:	114,011 S.F.
ROOF AREA:	12,973 S.F.
BUILDING FOOTPRINT:	11,855 S.F.
IMPERVIOUS SITE AREA:	40,719 S.F.
LANDSCAPE AREA:	61,437 S.F.

SITE SUMMARY

LOT:	TL 500
ZONING:	IG2 / GENERAL INDUSTRIAL 2
MAP:	2545
OVERLAY:	c / ENVIRONMENTAL CONSERVATION h / AIRCRAFT LANDING OVERLAY x / PDX NOISE IMPACT ZONE
PLAN DISTRIC:	SS - COLUMBIA SOUTH SHORE
USE CATEGORY:	RETAIL SALES AND SERVICE
PROPERTY ID:	R318541

SEPARATE PERMITS:
ELECTRICAL PERMITS, PLUMBING PERMITS, HVAC PERMITS

DEFERRED SUBMITTALS
HANDRAILS & GUARDRAILS

RELEVANT PERMIT NUMBERS:
16-285457-CO (SHELL PERMIT)
18-258006-CO

BUILDING IS CURRENTLY FULLY COMPLIANT, SUCH THAT NO ACCESSIBILITY UPGRADES CAN BE DONE.

ZONING ANALYSIS

ZONING:	IG2 / General Industrial 2
OVERLAY:	h / Aircraft Landing Overlay c / Enviromental Conservation x / PDX Noise Impact Zone
USE CATEGORY:	Manufacture & production
BUILDING COVERAGE:	max. 85% of site area
MIN BUILDING SETBACK:	0'-0"
MAX BUILDING SETBACK:	none
MIN. LANDSCAPED AREA:	min. 15% of site area
REQUIRED BIKE PARKING:	Per Table 266-6: Manufacturing & Production:
long term spaces -	2, or 1 per 15,000 sf of ner builiding area
short term spaces -	none
Retail Sales and Service:	
long term spaces -	2, or 1 per 12,000 sf of ner builiding area
short term spaces -	2, or 1 per 5,000 sf of ner builiding area
PROVIDED BIKE PARKING:	1 long-term spaces 2 short-term spaces

WATER KEYNOTE:

Premises-Isolation Backflow Protection
Required by Water Quality Backflow (WQBF) Review

Water Bureau Backflow Assembly Installation Requirements:
www.portlandoregon.gov/water/backflowinstallationrequirements
Title 21.12.320, 28.08.020 and/or OAR 333-061-0070, 333-061-0071
Plan Approved for Construction: Errors and Omissions Excepted.

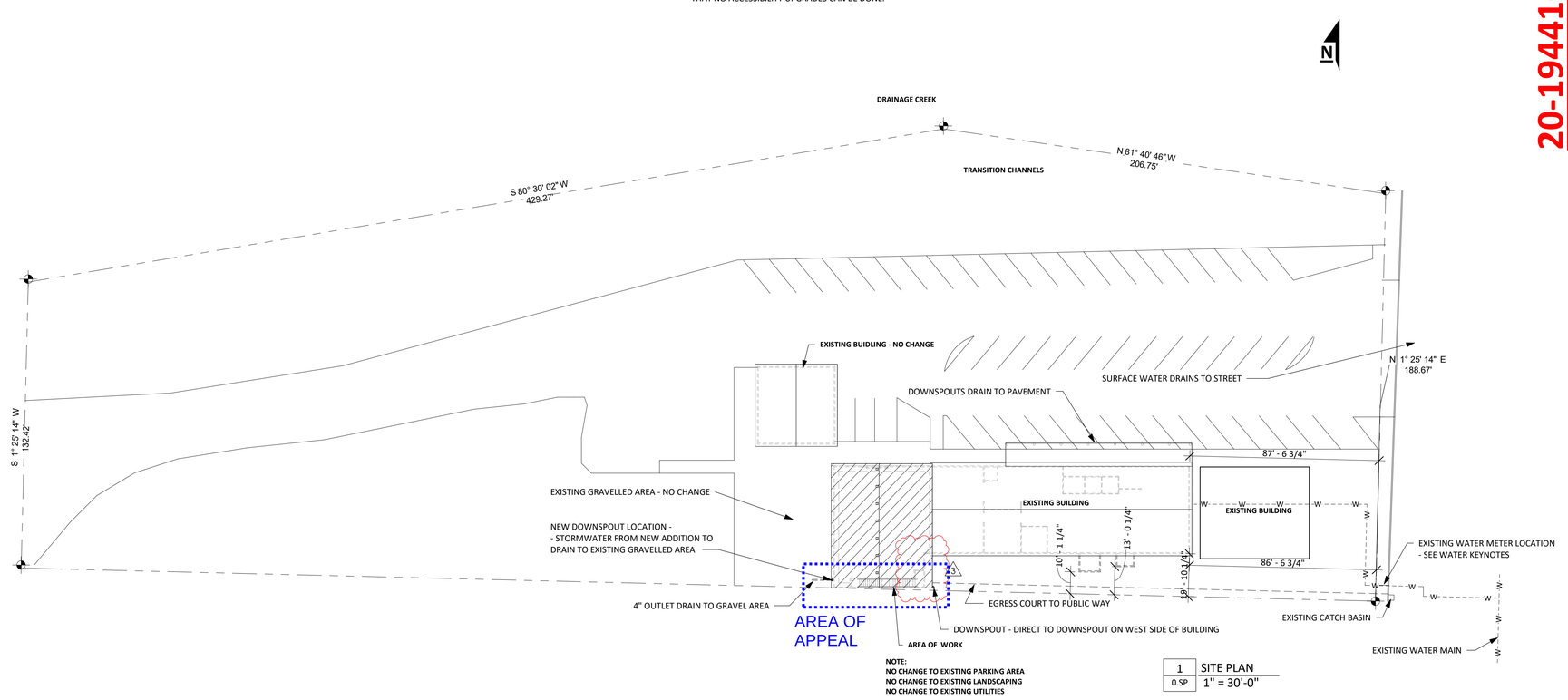
DOMESTIC WATER SERVICE:
Backflow Prevention Assemblies Must Conform to EPA Lead Free Requirements.

Reduced Pressure Backflow Assembly (RPBA) Required.

RPBA is to be installed 12" above finished grade in a prefabricated insulated outdoor enclosure atop of a 4" thick concrete pad. All exposed piping inside the enclosure must be insulated with closed-cell foam pipe insulation.

Landscape irrigation point-of-connection (POC) to domestic plumbing system must occur downstream of the domestic water service premises-isolation (PI) backflow protection.

Installation of a premise-isolation backflow assembly will create a closed system and may result in problems associated with **thermal expansion**. Installer responsible for making provisions for thermal expansion.



RECEIVED

APPEAL

20-194410-000-00-CO

/kōblə/CREATIVE

Koble Creative Architecture LLC
Portland, Oregon / koblecreative.com

REGISTERED ARCHITECT
TERRY AMUNDSON
PORTLAND, OREGON
4766
STATE OF OREGON

LEVEL BEER

5211 NE 148TH AVE

DATE: 11/03/20
DRAWN BY:
JOB NO: 21-007
REV NO:
1 Chksht Resp 12/30/20
2 Chksht Resp 01/25/21
3 Stair Rev 07/30/21

SITE PLAN

0.SP

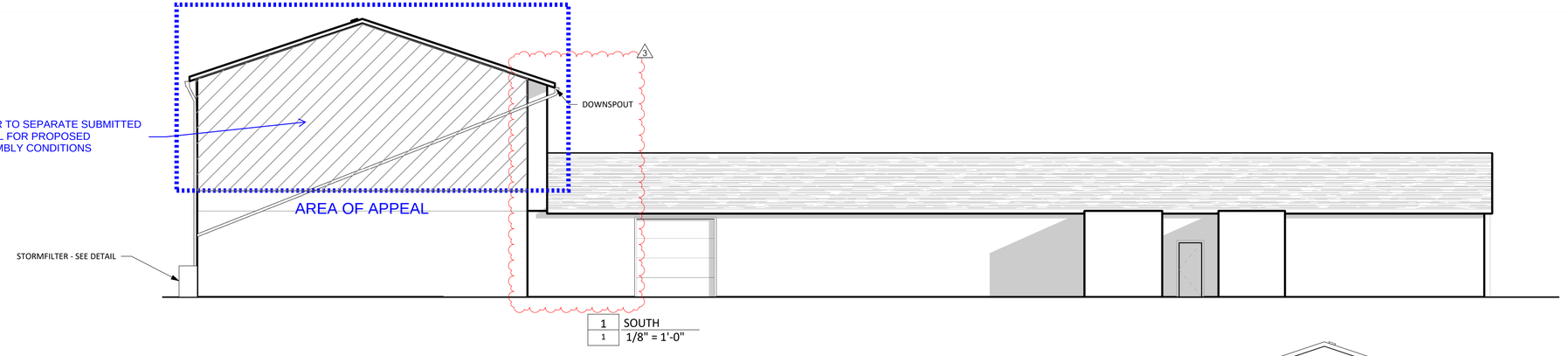
PERMIT SET

BUILDING CODE ANALYSIS / 2019 OSSC

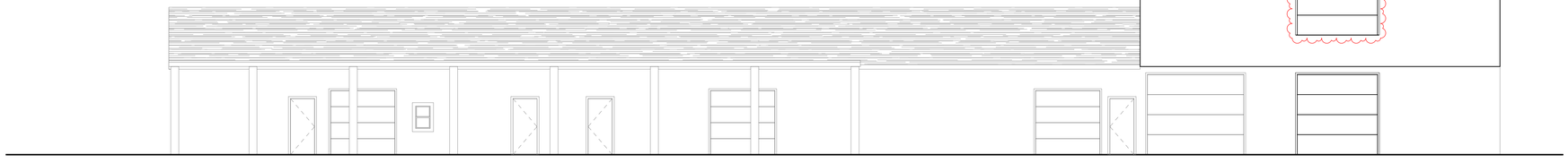
BUILDING TYPE: V-B
EXISTING OCCUPANCY: F-1, B, S-1, S-2
PROPOSED 2ND STORY ADDITION OCCUPANCY: S-2
BUILDING HT: 27'-4" / 2 story
SPRINKLERS: No
DETECTION: No
SITE AREA: 627'-11" x 218'-6" = 113,975 sf
AREA OF IMPROVEMENTS: 2,532 sf
ZONING CODE:
ALLOWABLE HEIGHTS AND AREA ANALYSIS
MAX HEIGHT (PER TABLE 140-3):IG2: no limit
MAX AREA (PER TABLE 140-3): 85% of site area - 96,878 sf
BUILDING CODE:
ALLOWABLE HEIGHTS AND AREA ANALYSIS
MAX HEIGHT ABOVE GRADE PLANE - 40'
MAX STORIES ABOVE GRADE PLAN - 2
TABULATED MAX. BUILDING SIZE PER 506.2.4
Ao = 17,000 S.F. ALLOWABLE AREA
CALCULATION PER 506.2.4 - [8,500 SF + (8500*1)
EQUATION 5-4
W = [41' * 30' + 166' * 30' + 57 * 30'] / 402 = 19.7
FRONTAGE INCREASE
If = [264'/402']19.7/30 = 1

The General Contractor shall schedule a Firestopping Meeting with the Building Inspector and all Subcontractors that will be installing firestopping materials. Each Subcontractor will provide a list of Firestop materials/assemblies which will be used, the type of penetrations where each material/assembly will be used; and the listing and approval information (i.e. UL, ICC or other approved report/listing numbers.) This information must be submitted to, and approved by, the Building Inspector prior to any installation."

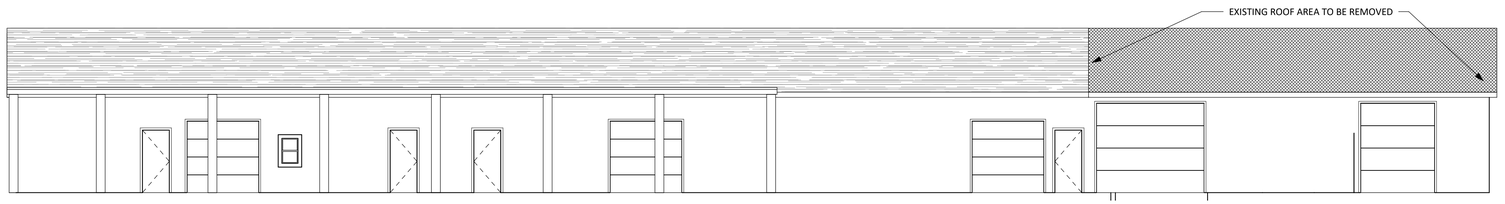
REFER TO SEPARATE SUBMITTED DETAIL FOR PROPOSED ASSEMBLY CONDITIONS



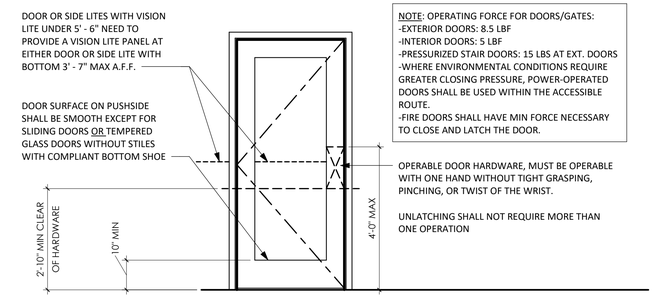
1 SOUTH
1 1/8" = 1'-0"



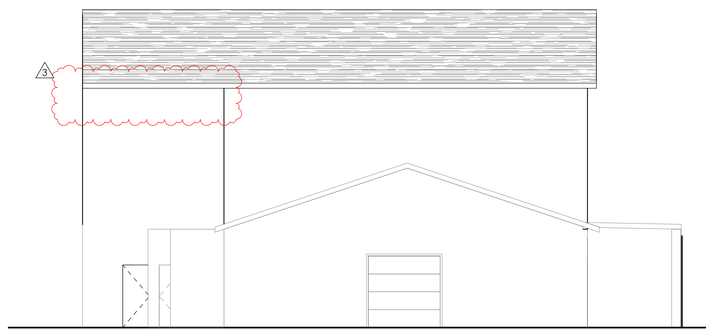
3 NORTH
1 1/8" = 1'-0"



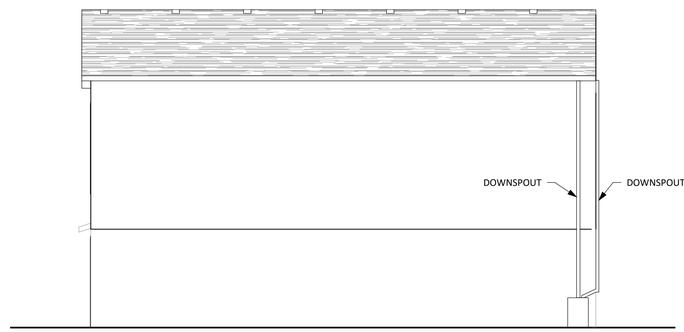
5 EXISTING NORTH ELEVATION
1 1/8" = 1'-0"



6 TYPICAL DOOR ELEVATION
1 1/2" = 1'-0"



2 EAST
1 1/8" = 1'-0"



4 WEST
1 1/8" = 1'-0"

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Koble Creative Architecture LLC
Portland, Oregon / koblecreative.com

REGISTERED ARCHITECT
TERRY AMUNDSON
PORTLAND, OREGON
1766
STATE OF OREGON

LEVEL BEER

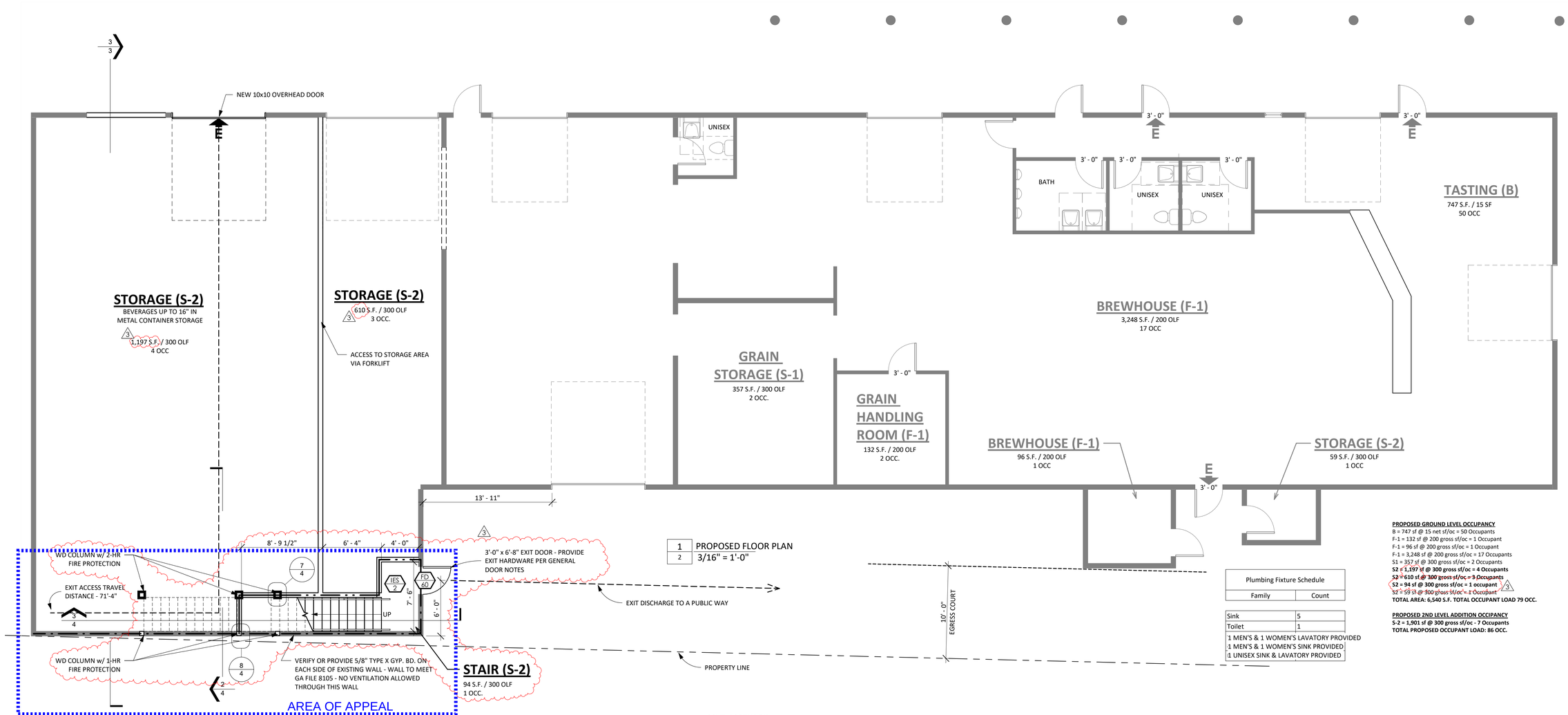
5211 NE 148TH AVE

DATE: 11/03/20
DRAWN BY:
JOB NO: 21-007
REV NO:
1 Chksht Resp 12/30/20
2 Chksht Resp 01/25/21
3 Stair Rev 07/30/21

ELEVATIONS

1

PERMIT SET



1 PROPOSED FLOOR PLAN
2 3/16" = 1'-0"

PROPOSED GROUND LEVEL OCCUPANCY
B = 747 sf @ 15 net sf/oc = 50 Occupants
F-1 = 132 sf @ 200 gross sf/oc = 1 Occupant
F-1 = 96 sf @ 200 gross sf/oc = 1 Occupant
F-1 = 3,248 sf @ 200 gross sf/oc = 17 Occupants
S1 = 357 sf @ 300 gross sf/oc = 2 Occupants
S2 = 1,197 sf @ 300 gross sf/oc = 4 Occupants
~~S2 = 610 sf @ 300 gross sf/oc = 3 Occupants~~
S2 = 94 sf @ 300 gross sf/oc = 1 occupant
S2 = 59 sf @ 300 gross sf/oc = 1 Occupant
TOTAL AREA: 6,540 S.F. TOTAL OCCUPANT LOAD 79 OCC.

PROPOSED 2ND LEVEL ADDITION OCCIPANCY
S-2 = 1,901 sf @ 300 gross sf/oc - 7 Occupants
TOTAL PROPOSED OCCUPANT LOAD: 86 OCC.

Plumbing Fixture Schedule	
Family	Count
Sink	5
Toilet	1
1 MEN'S & 1 WOMEN'S LAVATORY PROVIDED	
1 MEN'S & 1 WOMEN'S SINK PROVIDED	
1 UNISEX SINK & LAVATORY PROVIDED	

EXTERIOR WALLS

GA FILE NO. WP 8105	GENERIC	1 HOUR FIRE

GYPSUM WALLBOARD, GYPSUM SHEATHING, WOOD STUDS

EXTERIOR SIDE: One layer 48" wide 5/8" type X gypsum sheathing applied parallel to 2 x 4 wood studs 24" o.c. with 1 3/4" galvanized roofing nails 4" o.c. at vertical joints and 7" o.c. at intermediate studs and top and bottom plates . Joints of gypsum sheathing may be left utreated. Extrerior cladding to be attached through sheathing to studs.

INTERIOR SIDE: One layer 5/8" type X gypsum wallboard, water-resistant gypsum backing board, or gypsum veneer base applied parallel or at right angles to studs with 6d coated nails 1 7/8" long, 0.0915" shank, 1/4" heads 7" o.c. **(LOAD-BEARING)**

REFER TO SEPARATE SUBMITTED DETAIL FOR PROPOSED ASSEMBLY CONDITIONS

Thickness: Varies
Approx. Weight: 7 psf
Fire Test: See WP 3510 (UL R3501-47, -48, 9-17-65, UL Design U309; UL R1319-129, 7-22-70, UL Design U314)

REVISIONS TO THIS DETAIL PENDING APPEAL DETERMINATION

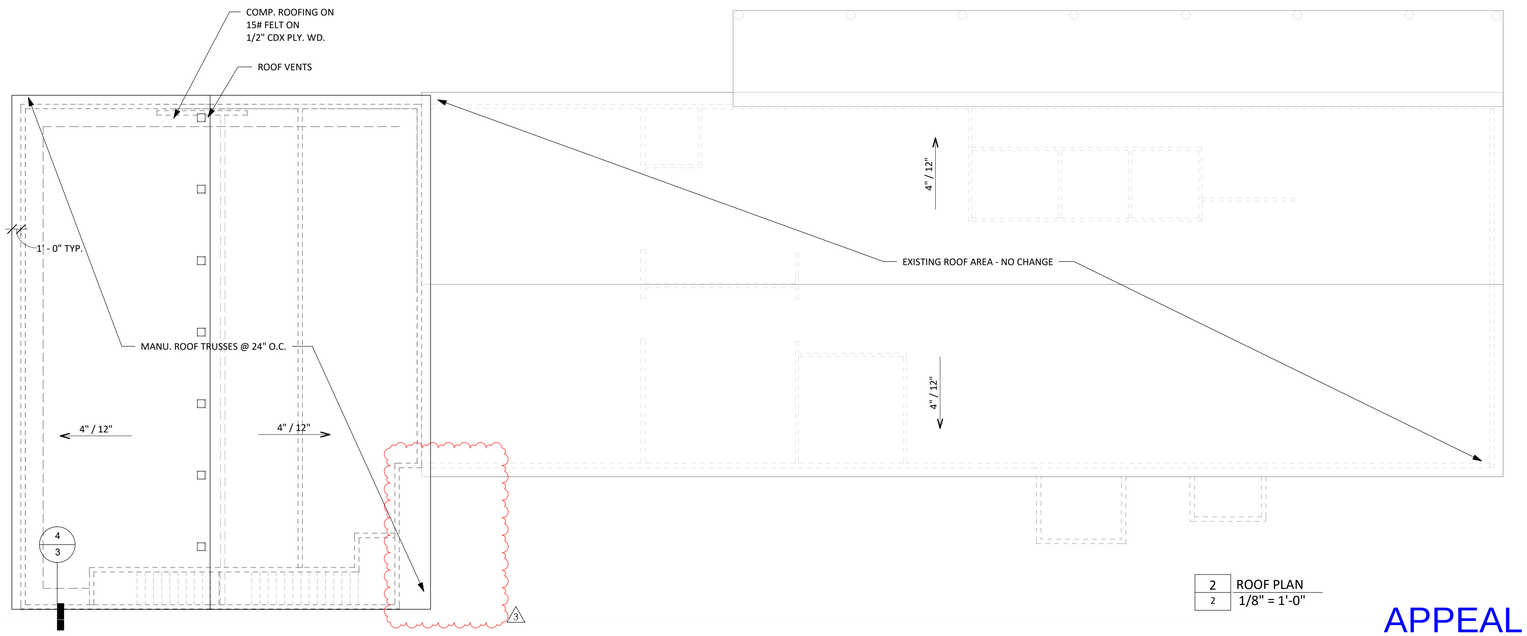
CODE LEGEND

IES # **INTERIOR EXIT STAIRWAY (IES)** PER SECTION 1022. WITH PROTECTION REQUIRED PER SECTION 707 AND 711. (RATING IN HOURS)

FD # **FIRE DOOR** W/ OPENING PROTECTION PER SECTION 716. (RATING IN MINUTES)

WALL TYPE LEGEND

- EXISTING WALL
- NEW WALL
- DEMOLISHED WALL
- EXISTING WALL RETROFITTED INTO 1 HOUR FIRE BARRIER (GA 8105)
- 2 HOUR FIRE BARRIER (UL U301)
- 2 HOUR HORIZONTAL FIRE SEPARATION (UL L538)



2 ROOF PLAN
2 1/8" = 1'-0"

APPEAL

/kōblə/CREATIVE

Koble Creative Architecture LLC
Portland, Oregon / koblecreative.com

REGISTERED ARCHITECT
TERRY AMUNDSON
PORTLAND, OREGON
1766
STATE OF OREGON

LEVEL BEER

5211 NE 148TH AVE

DATE: 11/03/20
DRAWN BY:
JOB NO: 21-007
REV NO:
1 Chksht Resp 12/30/20
2 Chksht Resp 01/25/21
3 Stair Rev 07/30/21

1st FLOOR PLAN

2

PERMIT SET

GENERAL CONDITIONS

1. ALL WORK SHALL CONFORM WITH THE LATEST ADOPTED ISSUE OF THE 2019 OREGON STRUCTURAL SPECIALTY CODE
2. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING THE PLANS AND SITE CONDITIONS AND TO NOTIFY THE ARCHITECT OF ANY ERRORS OR OMISSIONS PRIOR TO THE START OF CONSTRUCTION.
3. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS

SITE WORK

1. REMOVE TOP SOIL AND ORGANIC MATERIAL FROM THE BUILDING SITE, STOCKPILING ON SITE FOR FINAL GRADING IF POSSIBLE.
2. FOOTINGS ARE TO BEAR ON UNDISTURBED LEVEL SOIL, STEPPED AS REQUIRED TO MAINTAIN THE REQUIRED DEPTH BELOW FINISH GRADE.
3. ANY FILL UNDER GRADE SUPPORTED CONCRETE SLABS TO BE 4" THICK (MIN.) SAND COMPACTED TO 95%.
4. CONCRETE SLABS TO BE 4" THICK, 3000 P.S.I AT 28 DAYS WITH CONTROL JOINTS AT 25' O/C (MAX.) EACH WAY
5. FINISH GRADES ARE TO REMAIN AT LEAST 6" BELOW FINISH SIDING.

FOUNDATIONS

1. CONCRETE - MIX AND 28 DAY STRENGTH OF CONCRETE
   - BASEMENT WALLS & FOUNDATION NOT EXPOSED TO WEATHER 2500 PSI
   - BASEMENT & INTERIOR SLABS ON GRADE: 2500 PSI
   - BASEMENT WALLS & FOUNDATIONS EXPOSED TO WEATHER AND GARAGE SLABS: 3000 PSI
   - PORCHES, STEPS & CARPORT SLABS EXPOSED TO WEATHER: 3000 PSI
2. ALL REINFORCING STEEL TO BE A-615 GRADE 60. WELDED WIRE MESH TO BE A-185.
3. LAP ALL CONTINUOUS BARS 30 x DIA. (MIN.) PLACE ALL REINFORCING AS PER A.C.I. CODES & STANDARDS.
4. PROVIDE A MINIMUM CLEARANCE OF 18" UNDER GIRDERS, BEAMS, OR JOISTS.
5. COVER ENTIRE CRAWL SPACE WITH 6 MIL. BLACK "VISQUEEN" AND EXTEND UP FOUNDATION WALLS AND FASTEN TO MUD SILL
6. PROVIDE A MINIMUM OF 1 S.F. OF NET VENTILATION AREA FOR EACH 1500 S.F. OF CRAWL SPACE AREA. VENTS ARE TO BE CLOSABLE AND HAVE 1/4" OPENINGS IN CORROSIVE RESISTANT SCREEN. POST NOTICE ABOUT OPENING VENTS NEAR ELECTRICAL PANEL.
7. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
8. BEAM POCKETS IN CONCRETE WALLS TO HAVE 1/2" AIR SPACE AT SIDES AND ENDS AND 3" OF BEARING (MIN.)
9. MUD SILLS TO BE 2x6 PRESSURE TREATED WOOD WITH 1/2" DIA. x 10" ANCHOR BOLTS SPACED 6'-0" O/C, OR PER SHEAR WALL SCHEDULE AND WITHIN 12" OF CORNERS. LAYOUT FOR 14' LONG 2x6 P.T. SILL PLATE, PROVIDE AB. EACH SIDE OF SILL SPLICES.
10. PROVIDE 4" DIA. PERFORATED DRAIN TILE BELOW THE TOP OF FOOTINGS.

FLASHING & MOISTURE PROTECTION

1. CONTRACTOR TO PROVIDE A "WATER TIGHT ENCLOSURE" FOR THE VALLEY ENVIRONMENT, EMPLOYING THE HIGHEST QUALITY MATERIALS, CRAFTSMAN AND CONSTRUCTION METHODOLOGY, BOTH GENERAL AND SPECIFIC TO THE VALLEY
2. ALL EXTERIOR FLASHING ARE TO BE CONSTRUCTED WITH MIN. GAGE 28 EXPOSED & 30 GAGE CONCEALED, BAKED ENAMEL
3. FLASHING SHALL BE INSTALLED AT JUNCTIONS OF CHIMNEYS AND ROOFS,IN ROOF VALLEYS AND AROUND ALL ROOF OPENINGS, INCLUDING SKYLIGHTS, ROOF VENTS, ROOF EDGES BOTH RAKE AND EAVE.
4. FLASHING SHALL BE INSTALLED AROUND ALL EXTERIOR DOORS AND WINDOWS, TRANSITIONS BETWEEN SIDING AND ROOF.
5. ALL FLASHING TO BE INSTALLED PER "SMACNA" LATEST EDITION OF THE "ARCHITECTURAL SHEET METAL MANUAL".
6. BUILDING WRAP OF "TYVEK" OR SAME TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS, INCLUDING WRAPPING WINDOW AND DOOR OPENINGS AND TAPING JOINTS.
7. FLASHING FOR WINDOWS: INSTALL ADHESIVE FLASHING THE WIDTH OF SILL AND UP 12" EACH JAMB, AND LAP ENTIRE LENGTH OF JAMB, AND LAP ADHESIVE FLASHING THE WIDTH OF HEAD AND LAP 12" DOWN EACH JAMB. (DETAIL)

NAILING SCHEDULE:

JOIST TO SILL OF GIRDER:	(3) 8d	TOE NAIL
BRIDGE TO JOIST	(2) 8d	TOE NAIL
BOTTOM PLATE TO JOIST	16d@16" O.C.	FACE NAIL
PLYWOOD SUBFLOOR	8d@6"	EDGE NAIL
	8d @ 12"	INTERIOR
TOP PLATE TO JOIST	(2)16d	END NAIL
STUD TO BOTTOM PLATE	(4)8d	TOE OR END NAIL
DOUBLE STUDS	16d@ 16" O.C.	FACE NAIL
DOUBLE TOP PLATE	16d@ 16" O.C.	FACE NAIL
CONTINUOUS HEADER (2 PC)	16d@ 16" O.C.	EDGE NAIL
CEILING JOIST TO PLATE	(3) 8d	FACE NAIL
CEILING JOIST LAP OVER PLATE	(3) 16d	FACE NAIL
CEILING JOIST TO RAFTER	(3) 16d	FACE NAIL
RAFTER TO TOP PLATE	(3) 8d	TOE NAIL
COLLAR TIES (EACH END)	(6) 10d (U.N.O.)	FACE NAIL
BUILD UP CORNER STUDS	16d @ 24" O.C.	FACE NAIL
TOP PLATE AT INTERSECTIONS	(2) 16d	FACE NAIL
MULTIPLE LVL'S (2 PLIES)	2 ROWS - 16d @ 12" O.C.	STAGGERED
MULTIPLE LVL'S (3 PLIES)	2 ROWS - 16d @ 12" O.C.	STAGGERED
MULTIPLE JOISTS (UP TO 3)	2 ROWS - 16d @ 12" O.C.	STAGGERED
1x6 SPACED SHEATHING	(2) 8d	FACE NAIL
RAFTERS TO HIPS, VALLEY OR RIDGE	(4) 16d	

NAILING SCHEDULE:

ROOF	ROOF	ROOF
JOIST OR RAFTER TO TOP PLATE:	(3) 8d	TOE NAIL
CEILING JOISTS TO PLATE:	(2) 8d	TOE NAIL
CEILING JOIST LAP OVER PLATE:	(3) 10d	FACE NAIL
COLLAR TIES (EACH END):	(6) 10d	FACE NAIL
RAFTER TO TOP PLATE:	(2) 16d	TOE NAIL
RAFTERS TO HIPS, VALLEY OR RIDGE:	(4) 16d	TOE NAIL
CEILING JOIST TO RAFTER:	(3) 16d	FACE NAIL
WALLS	WALLS	WALLS
BUILT-UP CORNER STUDS:	10d @ 24" O.C.	
BUILT-UP HEADER (2 PC W/ 1/2" SPACER):	16d @ 16" O.C. ALONG EA. EDGE	
CONT. HEADER (2 PC):	(4) 8d	TOE NAIL
CONT. HEADER TO STUD:	10d@ 24" O.C.	FACE NAIL
DOUBLE STUDS:	10d@ 24" O.C.	FACE NAIL
DOUBLE TOP PLATE:		
DOUBLE TOP PLATE-	(8)16d"	FACE NAIL IN LAPPED AREA
(MIN. 24" OFFSET OF END JOISTS):	16d	FACE NAIL
SOLE PLATE TO JOIST, SOLID DECK OR BLOCKING:		
SOLE PLATE TO JOIST-	(3) 16d PER 16"	
SOLID DECK OR BLOCKING @ BRACED WALL PANELS:	(3) 8d -OR- (2) 16d	TOE NAIL
STUD TO SOLE PLATE:	(2) 16d	END NAIL
TOP OR SOLE PLATE TO STUD:	(2) 10d	FACE NAIL
TOP PLATES, LAPS @ CORNERS AND INTERSECTIONS:	(2) 8d -OR- (2) STAPLES (1 3/4")	FACE NAIL
1" BRACE TO EA. STUD AND PLATE:	(2) 8d -OR- (2) STAPLES (1 3/4")	FACE NAIL
1"x6" SHEATHING TO EA. BEARING:	(2) 8d -OR- (2) STAPLES (1 3/4")	FACE NAIL
1"x8" SHEATHING TO EA. BEARING:	(3) 8d	FACE NAIL
WIDER THAN 1"x8" SHEATHING TO EA. BEARING:	FLOORS	FLOORS
FLOORS	(3) 8d	TOE NAIL
JOIST TO SILL OR GIRDER	(2) 8d -OR- 2 STAPLES	FACE NAIL
1"x6" SUBFLOOR OR LESS TO EA. JOIST	(2) 16d	BLIND AND FACE NAIL
2" SUBFLOOR TO JOIST OR GIRDER	8d @ 6" O.C.	TOE NAIL
RIM JOIST TO TOP PLATE (ROOF APPLICATIONS ALSO)	(2) 16d @ EA. BEARING	
2" PLANKS (PLANK AND BEAM - FLOOR & ROOF)	10d@ 32" O.C. @ TOP & BTM. & STAGGERED	
BUILT-UP GIRDERS AND BEAMS (2" LUMBER LAYERS)	2 NAILS @ ENDS AND @ EA/. SPLICE	
MULTIPLE LVL'S (2 PLIES)	2 ROWS - 16d @ 12" O.C.	STAGGERED
MULTIPLE LVL'S (3 PLIES)	2 ROWS - 16d @ 12" O.C.	STAGGERED
MULTIPLE LVL'S (4 PLIES) (UP TO 12" DEPTH)	2 ROWS - 1/4"x6" SDS SCREWS @ 12" O.C.	STAGGERED
MULTIPLE LVL'S (4 PLIES) (UP TO 18" DEPTH)	3 ROWS - 1/4"x6" SDS SCREWS @ 12" O.C.	STAGGERED
MULTIPLE JOISTS (UP TO 3)	2 ROWS - 16d @ 12" O.C.	STAGGERED

WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLE BOARD WALL SHEATHING TO FRAMING

3/8" - 1/2"	6d COMMON NAIL (SUBFLOOR WALL)	EDGES(6") | INTERMEDIATE SUPPORTS (12")
	8d COMMON NAIL (ROOF)	EDGES(6") | INTERMEDIATE SUPPORTS (12")
19/32" - 1"	8d COMMON NAIL	EDGES(6") | INTERMEDIATE SUPPORTS (12")
1 1/8" - 1 1/4"	10d COMMON NAIL	EDGES(6") | INTERMEDIATE SUPPORTS (12")
	10d DEFORMED NAIL	EDGES(6") | INTERMEDIATE SUPPORTS (12")
OTHER WALL SHEATHING	OTHER WALL SHEATHING	OTHER WALL SHEATHING
1/2" STRUCTURAL CELLULOSIC FIBER BD. SHEATHING	1/2" GALV. ROOFING NAIL,7/16" CROWN OR 1" CROWN STAPLE 16ga., 1 1/4" LONG	EDGES(3") | INTERMEDIATE SUPPORTS (6")
25/32" STRUCTURAL CELLULOSIC FIBER BD. SHEATHING	3/4" GALV. ROOFING NAIL,7/16" CROWN OR 1" CROWN STAPLE 16ga., 1 1/2" LONG	EDGES(3") | INTERMEDIATE SUPPORTS (6")
1/2" GYP. SHEATHING	1 1/2" GALV. ROOFING NAIL; STAPLE GALV, 1 1/2" LONG; 1 1/4" SCREWS, TYPE W OR S	EDGES(7") | INTERMEDIATE SUPPORTS (7")
5/8 GYP. SHEATHING	1 3/4" GALV. ROOFING NAIL; STAPLE GALV., 1 5/8" LONG; 1 5/8" SCREWS, TYPE W OR S	EDGES(7") | INTERMEDIATE SUPPORTS (7")

WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING

3/4" AND LESS	6d DEFORMED NAIL -OR- 8d COMMON NAIL	EDGES(6") | INTERMEDIATE SUPPORTS (12")
7/8" - 1"	8d DEFORMED NAIL -OR- 8d COMMON NAIL	EDGES(6") | INTERMEDIATE SUPPORTS (12")
1 1/8" - 1 1/4"	10d DEFORMED NAIL -OR- 8d COMMON NAIL	EDGES(6") | INTERMEDIATE SUPPORTS (12")

2 GENERAL NOTES
3 1/4" = 1'-0"

WALL TYPE LEGEND

- EXISTING WALL
- NEW WALL
- DEMOLISHED WALL
- EXISTING WALL RETROFITTED INTO 1 HOUR FIRE BARRIER (GA 8105)
- 2 HOUR FIRE BARRIER (UL U301)
- 2 HOUR HORIZONTAL ASSEMBLY (UL L538 or GA FC 5725)

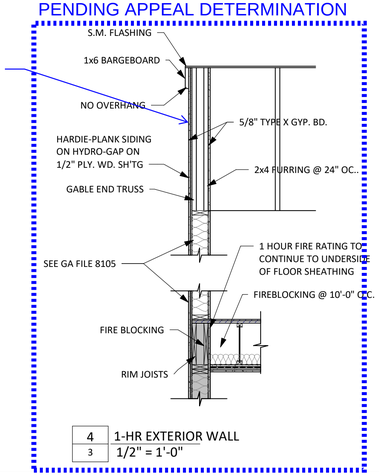
CODE LEGEND

IES # **INTERIOR EXIT STAIRWAY (IES)** PER SECTION 1022. WITH PROTECTION REQUIRED PER SECTION 707 AND 711. (RATING IN HOURS)

FD # **FIRE DOOR** W/ OPENING PROTECTION PER SECTION 716. (RATING IN MINUTES)

REVISIONS TO THIS DETAIL PENDING APPEAL DETERMINATION

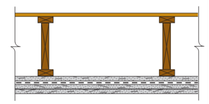
REFER TO SEPARATE SUBMITTED DETAIL FOR PROPOSED ASSEMBLY CONDITIONS



4 3 1-HR EXTERIOR WALL 1/2" = 1'-0"

2-Hour Fire Rating

Design Reference: UL L538, cUL L538



Weight per Sq. Ft.: 8.0 (39 Kg/m²)

Base Layer: 5/8" (15.9 mm) ToughRock® Fireguard C® gypsum board or 5/8" (15.9 mm) DensArmor Plus® Fireguard C® applied perpendicular to I-shaped wood joists or wood and steel trusses, spaced 19.2" (488 mm) o.c. maximum, with 1-5/8" (41 mm) Type S drywall screws, 8" (203 mm) o.c. Resilient channels attached 16" (406 mm) o.c. through base layer perpendicular to joists or trusses with 1-7/8" (48 mm) Type S drywall screws.

Middle Layer: 5/8" (15.9 mm) ToughRock Fireguard C gypsum board or 5/8" (15.9 mm) DensArmor Plus Fireguard C applied perpendicular to resilient channels with 1" (25.4 mm) Type S drywall screws 8" (203.2 mm) o.c. Screws located 1-1/2" (38 mm) to 2" (51 mm) and 5/8" (15.9 mm) to 3/4" (19 mm) from side and end joints respectively.

Face Layer: 5/8" (15.9 mm) ToughRock Fireguard C gypsum board or 5/8" (15.9 mm) DensArmor Plus Fireguard C applied perpendicular to channels with 1-5/8" (41 mm) Type S drywall screws, 8" (203 mm) o.c. Joints in the face layer are offset 16" (406 mm) from those in the middle layer. 5/8" (15.9 mm) T&G plywood floor perpendicular to joists with adhesives and 8d cement coated nails 12" (305 mm) o.c.

5 3 2 HOUR FLOOR / CEILING ASSEMBLY

Base Layer: 5/8" (15.9 mm) ToughRock® Fireguard X® or 5/8" (15.9 mm) DensArmor Plus® Fireguard® gypsum panels applied vertically or horizontally using 1-7/8" (48 mm) 6d coated nails 6" (152 mm) o.c. to each side of 2" x 4" wood studs 16" (406 mm) o.c. Face Layer: 5/8" (15.9 mm) ToughRock® Fireguard X® Products or 5/8" (15.9 mm) DensArmor Plus Fireguard gypsum panels applied vertically or horizontally to studs over base layer with 2-3/8" (60 mm) 8d coated nails 8" (203 mm) o.c. Stagger joints 16" (406 mm) o.c. each layer and side. Sound Tested with studs 16" (406 mm) o.c. and with nails for base layer spaced 6" (152 mm) o.c.

Hourly Rating: **2-hour**

STC Rating:

Fire Test Reference: **UL U301, cUL U301**

Sound Test Reference:

Approved for Assembly:

DensArmor Plus® Fireguard C® Products
DensArmor Plus® Fireguard® Products
DensElement® Barrier Sheathing
DensGlass® Fireguard® Sheathing
DensShield® Fireguard® Tile Backer
ToughRock® Fireguard C® Products
ToughRock® Fireguard X® Mold-Guard™ Products
ToughRock® Fireguard X® Products
ToughRock® Lite-Weight Fire-Rated Products (Meets the fire rating but not included in Sound Testing)

6 3 2 HOUR FIRE BARRIER ASSEMBLY

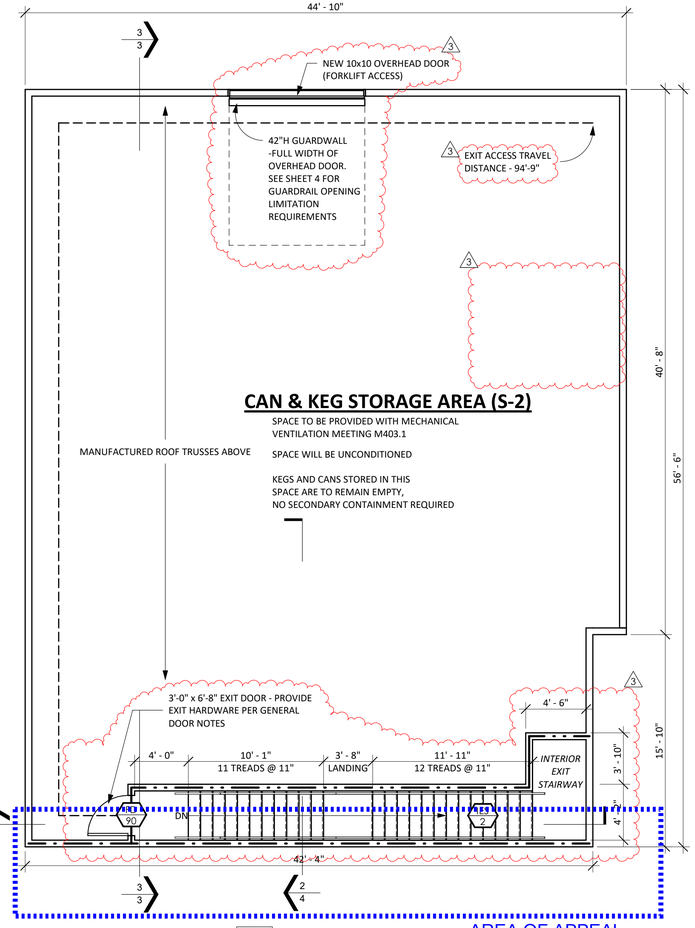
GA FILE NO. FC 5725	GENERIC	2 HOUR FIRE

WOOD FLOOR, WOOD JOISTS, GYPSUM WALLBOARD, RIGID FURRING CHANNELS

Base layer ⅝" type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1¼" Type W drywall screws 12" o.c. **Second** layer ⅝" type X gypsum wallboard applied at right angles to joists with 2" Type W drywall screws 12" o.c. Second layer joints offset 24" from base layer joints. **Third** layer ⅝" type X gypsum wallboard applied at right angles to joists with 2½" Type W drywall screws 12" o.c. Third layer joints offset 12" from second layer joints. Hat-shaped rigid furring channels 24" o.c. applied at right angles to joists over third layer with two 2½" long Type W drywall screws at each joist. **Face** layer ⅝" type X gypsum wallboard applied at right angles to furring channels with 1⅛" Type S drywall screws 12" o.c. Wood joists supporting ¾" T & G edge plywood floor applied at right angles to joists with 8d nails 6" o.c. at joints and 12" at intermediate joists. **Ceiling provides two-hour fire-resistance protection for wood framing.**

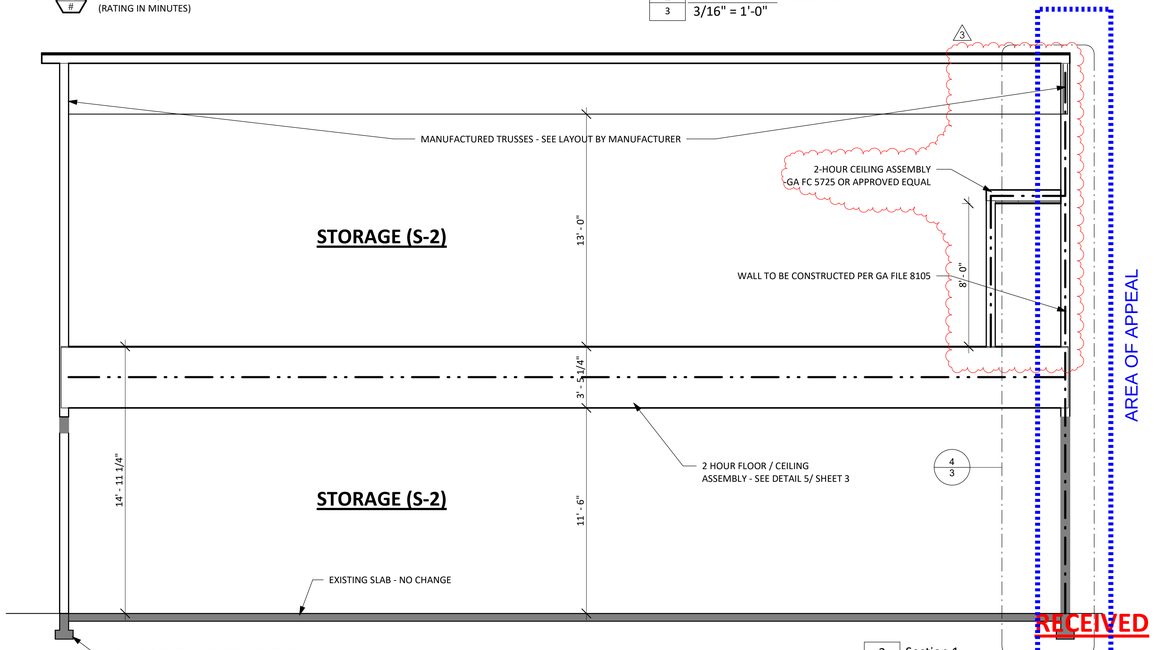
Approx. Ceiling Weight: 12 psf
Fire Test: UL R4024, 00NK26545, 4-27-01, UL Design L556

7 3 2 HOUR CEILING ASSEMBLY



1 3 PROPOSED 2nd FLOOR PLAN 3/16" = 1'-0"

AREA OF APPEAL



3 Section 1 1/4" = 1'-0"

AREA OF APPEAL

RECEIVED

APPEAL

/kōblə/CREATIVE

Koble Creative Architecture LLC
Portland, Oregon / koblecreative.com

REGISTERED ARCHITECT TERRY AMUNDSON PORTLAND, OREGON 4766 STATE OF OREGON

LEVEL BEER

5211 NE 148TH AVE

DATE: 11/03/20
DRAWN BY:
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REV NO:
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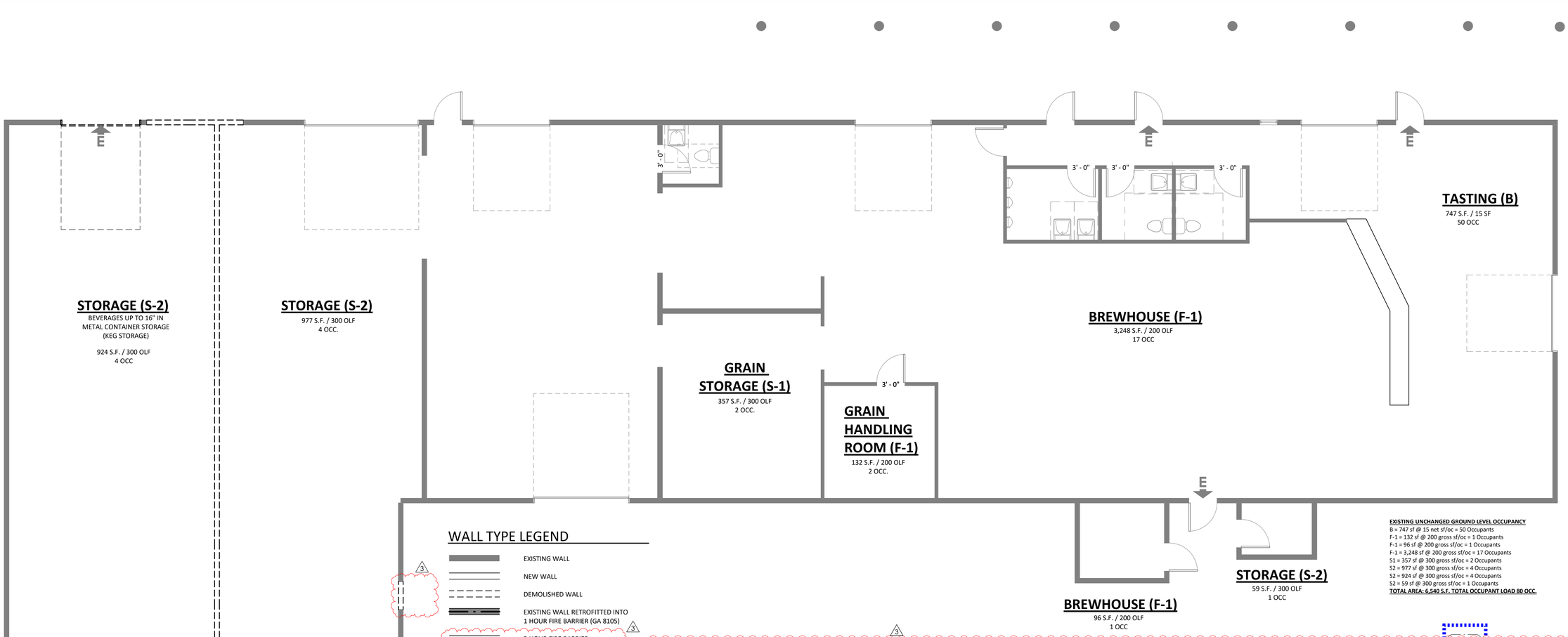
2ND FLOOR PLAN

3

PERMIT SET



EXISTING UNCHANGED GROUND LEVEL OCCUPANCY
B = 747 sf @ 15 net sf/oc = 50 Occupants
F-1 = 132 sf @ 200 gross sf/oc = 1 Occupants
F-1 = 96 sf @ 200 gross sf/oc = 1 Occupants
F-1 = 3,248 sf @ 200 gross sf/oc = 17 Occupants
S1 = 357 sf @ 300 gross sf/oc = 2 Occupants
S2 = 977 sf @ 300 gross sf/oc = 4 Occupants
S2 = 924 sf @ 300 gross sf/oc = 4 Occupants
S2 = 59 sf @ 300 gross sf/oc = 1 Occupants
TOTAL AREA: 6,540 S.F. TOTAL OCCUPANT LOAD 80 OCC.

WALL TYPE LEGEND

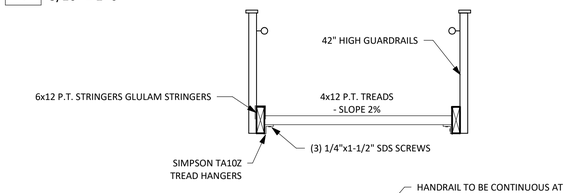
- EXISTING WALL
- NEW WALL
- DEMOLISHED WALL
- EXISTING WALL RETROFITTED INTO 1 HOUR FIRE BARRIER (GA 8105)
- 2 HOUR FIRE BARRIER (UL U301)
- 2 HOUR HORIZONTAL ASSEMBLY (UL L538 or GA FC 5725)

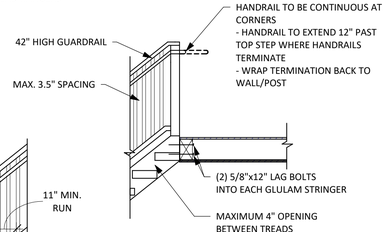
CODE LEGEND

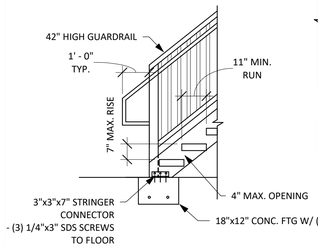
IES # — **INTERIOR EXIT STAIRWAY (IES)** PER SECTION 1022. WITH PROTECTION REQUIRED PER SECTION 707 AND 711. (RATING IN HOURS)

FD # — **FIRE DOOR** W/ OPENING PROTECTION PER SECTION 716. (RATING IN MINUTES)

1 / 4 EXISTING FLOOR PLAN
3/16" = 1'-0"





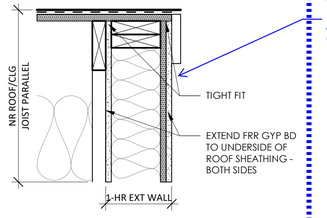


4 / 4 STAIR DETAILS
3/8" = 1'-0"

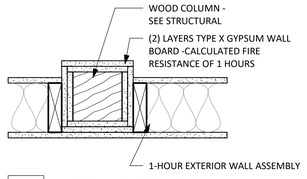
GUARDRAILS & HANDRAILS ARE TO BE DEFERRED SUBMITTAL

REVISIONS TO THIS DETAIL PENDING APPEAL DETERMINATION

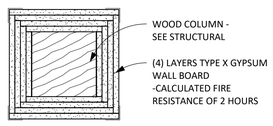
REFER TO SEPARATE SUBMITTED DETAIL FOR PROPOSED ASSEMBLY CONDITIONS



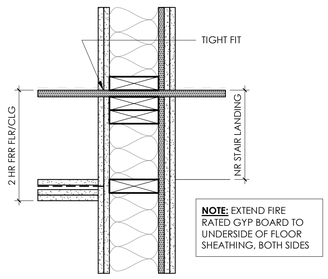
5 / 4 1 HR FIRE BARRIER @ ROOF TERMINATION
1 1/2" = 1'-0"



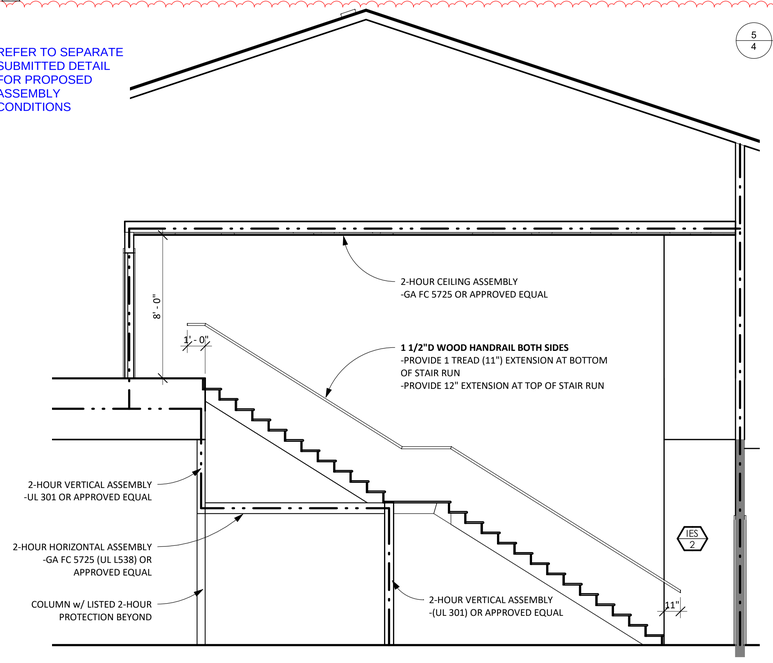
8 / 4 1-HR COLUMN PROTECTION
1 1/2" = 1'-0"



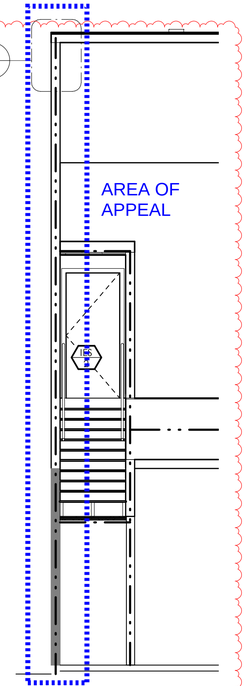
7 / 4 2-HR COLUMN PROTECTION
1 1/2" = 1'-0"



6 / 4 2-HR FIRE BARRIER @ 2 HR FLR/CLG
1 1/2" = 1'-0"



3 / 4 INTERIOR EXIT STAIR 1
1/4" = 1'-0"



2 / 4 INTERIOR EXIT STAIR 2
1/4" = 1'-0"

APPEAL

/kōblə/CREATIVE

Koble Creative Architecture LLC
Portland, Oregon / koblecreative.com

REGISTERED ARCHITECT
TERRY AMUNDSON
PORTLAND, OREGON
1766
STATE OF OREGON

LEVEL BEER

5211 NE 148TH AVE

DATE: 11/03/20
DRAWN BY:
JOB NO: 21-007
REV NO:
1 Chksht Resp 12/30/20
2 Chksht Resp 01/25/21
3 Stair Rev 07/30/21

EXISTING FLOOR PLAN, SECTIONS, DETAILS

4

PERMIT SET

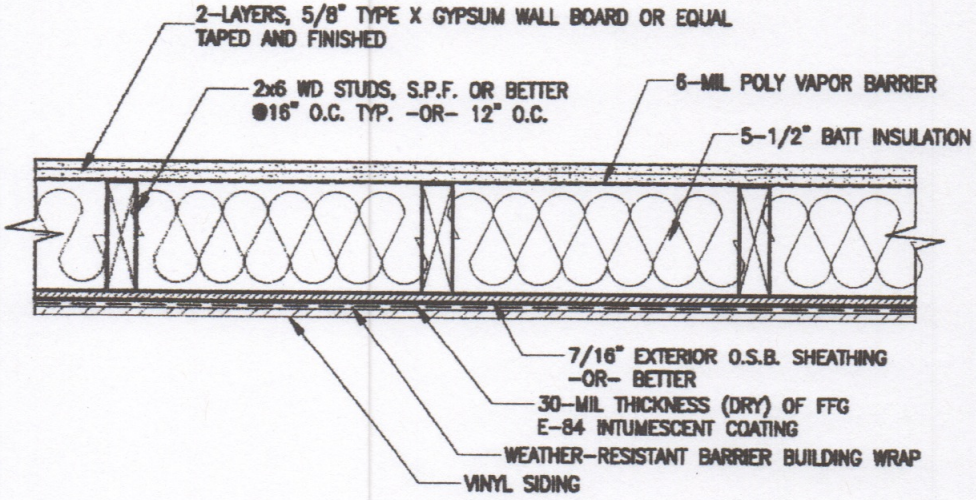
Shield Industries, Inc.

W-13

2 HOUR FIRE ASSEMBLY– WOOD FRAMED WALL
W/ 7/16" EXTERIOR O.S.B. SHEATHING
LOAD BEARING WALL

TYPICAL FRAME WALL ASSEMBLY: S.P.F. STUDS OR BETTER AT 16" O.C., WITH FIBERGLASS INSULATION, 2–LAYERS, TYPE X, 5/8" GYPSUM WALL BOARD (INTERIOR SIDE) W/ 7/16" O.S.B. EXTERIOR SHEATHING (EXTERIOR SIDE). EXTERIOR O.S.B. TREATED WITH 30–MIL THICKNESS (DRY) OF ForceField Fireguard E–84 TO EXTERIOR EXPOSED SIDE.

INTERIOR SIDE



EXTERIOR SIDE

FIRE TEST ENDURANCE RATING:	2 HOUR
STANDARD TESTED TO:	ASTM E–119–10b, UL 263, NFPA 251, ULC–S–101
FIRE TESTED LABORATORY:	GUARDIAN FIRE TESTING LABORATORIES 480 HINMAN AVE BUFFALO, NY 14216
REPORT NO:	GL 115511
PRODUCT:	ForceField FireGuard E–84 INTUMESCENT COATING (FFG E–84)
MANUFACTURER:	SHIELD INDUSTRIES, INC. 131 SMOKEHILL LANE WOODSTOCK, GA 30188

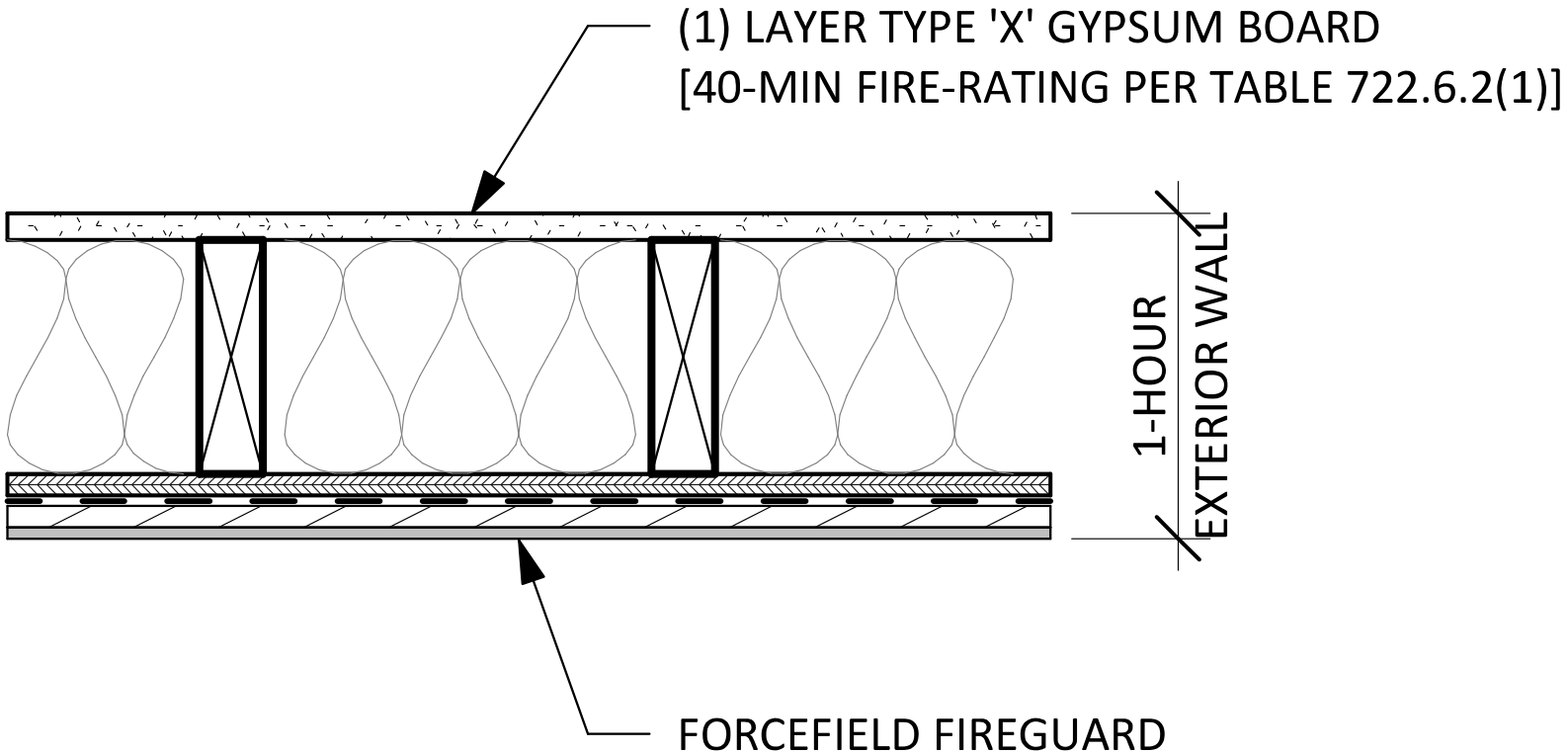
* SEE MANUFACTURER APPLICATION INSTRUCTIONS AND SPECIFICATIONS FOR SURFACE PREPARATION AND APPLICATION PROCESS

GUARDIAN

R. Joseph Pearson 10/14/14

REGISTERED PROFESSIONAL ENGINEER
LAURA ANN HINTON
4367
INDUSTRIAL
STATE OF CALIFORNIA

Laura Hinton 10/14/2014



7	1-HR EXTERIOR WALL - PROPOSED
1	1 1/2" = 1'-0"