

# Development Services

## From Concept to Construction

Phone: 503-823-7300 Email: [bds@portlandoregon.gov](mailto:bds@portlandoregon.gov) 1900 SW 4th Ave, Portland, OR 97201

More Contact Info (<http://www.portlandoregon.gov/bds/article/519984>)



### APPEAL SUMMARY

**Status:** Item 1: Decision Rendered. Item 2: No Appeal Required.

<b>Appeal ID:</b> 18777	<b>Project Address:</b> 3314-3318 SE 16th Ave
<b>Hearing Date:</b> 12/19/18	<b>Appellant Name:</b> David McLaughlin
<b>Case No.:</b> B-003	<b>Appellant Phone:</b> 5038106843
<b>Appeal Type:</b> Building	<b>Plans Examiner/Inspector:</b> John Cooley
<b>Project Type:</b> commercial	<b>Stories:</b> 4 <b>Occupancy:</b> R-2 <b>Construction Type:</b> V-A
<b>Building/Business Name:</b>	<b>Fire Sprinklers:</b> Yes - Throughout
<b>Appeal Involves:</b> Erection of a new structure	<b>LUR or Permit Application No.:</b> 18-243377-CO
<b>Plan Submitted Option:</b> pdf [File 1] [File 2] [File 3] [File 4] [File 5]	<b>Proposed use:</b> Multifamily Residential Apartments

### APPEAL INFORMATION SHEET

#### Appeal item 1

<b>Code Section</b>	OSSC Table 716.5 and Table 716.6
<b>Requires</b>	<p>A minimum door assembly fire rating of 20 minutes for 1-HR and ½-HR rated Corridor Fire Partition Walls (OSSC Table 716.5).</p> <p>A minimum window assembly fire rating of 20 minutes for ½-HR rated Interior Fire Partition Walls and a minimum window assembly fire rating of 45 minutes for 1-HR rated Interior Fire Partition Walls (OSSC Table 716.5).</p>
<b>Proposed Design</b>	<p>The proposed design consists of 1-HR fire rated corridor partition walls separating interior Common Area / Amenity Spaces from adjacent Corridors on Floors 1 – 4 (see attached plans for locations). For visibility into Common Area / Amenity Spaces, a full-lite wood entry door and full height wood framed windows with ¼" tempered fixed glazing are proposed to visually connect the adjacent spaces. The building will be fully sprinklered in accordance with NFPA Standard 13 and installed per 903.3.1.1. Water curtain sprinkler protection for the glazing and entry door is proposed in lieu of fire rated doors and windows. The sprinklers for the water curtain are proposed to be spaced not more than 6 feet apart and placed a minimum of 6 inches and a maximum of 12 inches from the opening(s) and a maximum of 12 inches below the ceiling. Sprinklers are to be installed on the occupied (common area / amenity) side of the openings in accordance with Fire Marshal approval through a separate permit from the Fire Marshal's Office.</p>
<b>Reason for alternative</b>	<p>The Common Area / Amenity Spaces are provided in the building in order to meet City of Portland Zoning Code requirements for Bike Parking and Required Indoor / Outdoor Areas. To provide a clear visual connection and visual access between the corridors and Common Area / Amenity Spaces, full height wood framed windows and full-lite wood entry doors with sprinkler curtain protection are proposed. Water curtain sprinkler systems have been effectively used and approved</p>

on numerous code appeals from the City of Portland to protect penetrations in fire partitions. We therefore believe that water curtain sprinklers are an acceptable means of protecting unrated glazing and door assemblies in order to maintain adequate fire protection.

## Appeal item 2

<b>Code Section</b>	OSSC Section 721.1 Prescriptive Fire Resistance
<b>Requires</b>	Where materials that change the capacity for heat dissipation are incorporated into a fire-resistance-rated assembly, fire test results or other substantiating data shall be made available to the building official to show that the required fire-resistance-rating time period is not reduced.
<b>Proposed Design</b>	<p>Appeal ID #18456 was approved for an Unvented roof assembly with 5.5 inches of spray foam insulation (R-38), with the remainder of the cavity filled with R-21 unfaced batt insulation. Per a Life Safety checksheet item from reviewer John Cooley, this previously approved assembly does not address proposed adjustments to the fire rating of the listed assembly (the addition of spray foam insulation) as identified in OSSC section 721.1.</p> <p>The proposed re-design of this assembly is a 1-hour roof framing assembly that creates an unvented enclosed joist cavity composed of a roof membrane over protection board; 15/32 inch min roof sheathing (underlayment); and 3/4 inch structural sheathing fastened to 2 X 12 wood joists or 11-1/4" deep engineered wood joist @ 16" O.C. 5½ inches of Icynene Classic open cell spray foam insulation will be applied directly to the underside of the roof sheathing creating an air-impermeable layer of insulation (see section 3.4 in the attached ICC-ES Evaluation Report ESR-1826) with a minimum R-Value of R-20. The remainder of the cavity will be filled with R-21 unfaced batt insulation. The addition of spray foam insulation will comply with the 1-HR rated tested horizontal assembly identified in section 4.5.1.3 Assembly 3 in the attached ICC-ES Evaluation Report ESR-1826 (see Exhibits #A1, #B1, and #C1).</p>
<b>Reason for alternative</b>	The proposed unvented 1-HR rated roof assembly is provided in response to a Life Safety checksheet item for Permit #18-24337-CO. Based on the fire-resistance-rated assembly identified in ICC-ES Evaluation Report ESR-1826, evidence is provided showing that the fire-resistance-rating time period is not reduced with the addition of spray foam insulation to the assembly.

## APPEAL DECISION

**1. Type 13 water curtain sprinkler protection at non-fire rated glazing in interior one half hour rated corridors: Granted provided windows are non-operable doors are on closers and sprinklers are spaced not more than 6 feet apart and placed a minimum of 6 inches and a maximum of 12 inches from the opening(s) and a maximum of 12 inches below the ceiling. Sprinklers are to be installed on the occupied side of the openings. A separate permit from the Fire Marshal's Office is required.**

**2. Alternate one hour roof ceiling assembly: No appeal required.  
Appellant may contact John Butler (503 823-7339) with questions.**

The Administrative Appeal Board finds with the conditions noted, that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to [www.portlandoregon.gov/bds/appealsinfo](http://www.portlandoregon.gov/bds/appealsinfo), call (503) 823-7300 or come in to the Development Services Center.





1ST FLOOR PLAN  
1/8" = 1'-0"

Project Location  
RIVER APARTMENTS  
3314-3318 SE 16th Ave  
Portland, OR 97202



THESE DRAWINGS ARE FOR  
CONSTRUCTION BY  
JEAN-PIERRE VEILLET  
SITEWORKS, INC. ONLY

Date: 2018.12.11

Drawn By: ATC / DSM

Phase: CODE APPEAL

Revisions:  
Number Description Date

Sheet Name  
1ST FLOOR PLAN

Sheet No.

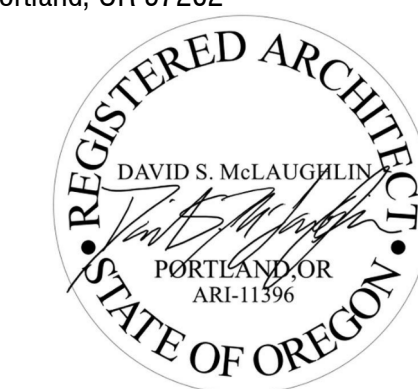
BCA-111





2ND FLOOR PLAN 1  
1/8" = 1'-0"

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BCA-112





3RD FLOOR PLAN  
1/8" = 1'-0"

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BCA-113





4TH FLOOR PLAN  
1/8" = 1'-0" 1

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BCA-114

## EXHIBIT C1

### COMPANY

Johns Manville, a Berkshire Hathaway company, was founded in 1858. Our ownership by Berkshire Hathaway, one of the most admired companies in the world and one of the most financially secure, allows JM to invest for the future. This enables JM to continue delivering the broadest range of insulation products in the industry and offering innovative solutions that meet your needs.

### DESCRIPTION

JM Formaldehyde-free™ thermal and acoustical insulation is made of long, resilient glass fibers bonded with a thermosetting resin. A wide range of thermal resistance R-values is available to provide thermal control for both vertical and horizontal applications. JM insulation is available unfaced or with a variety of facings, including kraft or foil vapor retarder.

### USE

JM Formaldehyde-free™ thermal and acoustical insulation can be used in a wide variety of wood frame, engineered wood and steel frame construction applications, including:

**New Construction:** residential homes and commercial buildings interior and exterior walls, floors and ceilings for thermal and sound control, as well as basement wall insulation.

**Retrofit:** adding insulation to attics, crawl spaces and above suspended ceilings.

### INSTALLATION

JM insulation cuts easily with an ordinary utility knife, and unfaced or tabless versions install easily by simply pressing in place between studs or joists in standard framing. Standard facings have stapling tabs for attachment to framing if additional securement is required.

### PACKAGING

JM insulation is compression-packaged for savings in storage and freight costs.

### DESIGN CONSIDERATIONS

Kraft and standard foil facings on this product will burn and must not be left exposed. It must be covered with gypsum board or another approved interior finish. Where an exposed application is required, use FSK-25 flame-resistant faced insulation.

In colder climate areas, vapor retarders (whether attached to the insulation or applied separately) are often placed toward the heated or conditioned side of the wall. This is done to reduce water vapor penetration into the wall from the building interior. Check your local building codes for vapor retarder requirements.

Refer to JM guide specifications for further design considerations and required installation instructions.

### LIMITATIONS OF USE

Check applicable building codes.



Actual color of product may be lighter than image.  
Product image typical of material produced in the USA.

### PERFORMANCE ADVANTAGES

**Formaldehyde-free:** will not off-gas formaldehyde in the indoor environment.

**Thermally Efficient:** provides effective resistance to heat transfer with R-values up to R-49 (RSI-8.6).

**Sound Control:** reduces transmission of sound through exterior and interior walls and floor or ceiling assemblies.

**Fire Resistant and Noncombustible:** see Physical Properties.

**Durable Inorganic Glass:** will not rot, mildew or deteriorate and is noncorrosive to pipes, wiring and metal studs.

**Superior Performance:** bonded glass fibers are dimensionally stable and will not slump within the wall cavity, settle or break down during normal applications.

### ENERGY AND ENVIRONMENT



\*GREENGUARD certification is not intended for residential environments. Instead, the certification is intended only for buildings meeting ASHRAE 62.1-2007 commercial building ventilation rates. This certification is proof that the product meets the GREENGUARD Environmental Institute's indoor air quality standards and product emission standards for VOCs.



## APPLICABLE STANDARDS & BUILDING CODE CLASSIFICATION

JM UNFACED INSULATION	JM KRAFT FACED INSULATION	JM FOIL FACED INSULATION
ASTM C665, Type I; ASTM E136	ASTM C665, Type II Class C, Category 1	ASTM C665, Type III, Class B, Category 1
IBC, ALL TYPES	IBC TYPES III, IV, V	IBC TYPES III, IV, V

## STANDARD SIZES\*

R-VALUE (hr•ft <sup>2</sup> •°F/Btu)	RSI VALUE (m <sup>2</sup> •°C/Watts)	THICKNESS**	WIDTH†		
		in (mm)	WOOD FRAMING in (mm)		METAL FRAMING in (mm)
††	††	2¾ (70)	—		16 (406) 24 (610)
11	1.9	3½ (89) 3¾ (92)	15 (381)	19 (483)	23 (584) 16 (406) 24 (610)
13	2.3	3½ (89) 3¾ (92)	15 (381)		23 (584) 16 (406) 24 (610)
15	2.6	3½ (89)	15 (381)		—
19	3.3	6½ (165)	15 (381)	19 (483)	23 (584) 16 (406) 24 (610)
20	3.5	5½ (140)	15 (381)		—
21	3.7	5½ (140)	15 (381)		23 (584) 16 (406)
22	3.9	7½ (191)	15 (381)		—
30	5.3	10¼ (260)	16 (406)	19 (483)	24 (610) 16 (406) 24 (610)
30‡	5.3	8¼ (210)	15½ (394)		23¾ (600) —
38	6.7	13 (330)	16 (406)		24 (610) 16 (406) 24 (610)
38‡	6.7	10¼ (260)	15½ (394)		23¾ (600) —
49	8.6	13½ (343)	16 (406)		24 (610) 16 (406) 24 (610)

\* Consult your local JM sales representative or product availability chart for available sizes and R-values (RSI-values) including wide-roll products.

\*\* Thickness may vary by producing location.

† Special widths and lengths may be available. Check with your local JM sales representative. Standard product lengths include 48", 93" and 96" (1219 mm, 2362 mm and 2438 mm) batts.

†† For sound control applications in interior walls.

‡ Cathedral ceiling application.

## PHYSICAL PROPERTIES\*\*

PRODUCTION	FLAME SPREAD	SMOKE DEVELOPED	VAPOR RETARDER (PERMS)	WATER VAPOR SORPTION
Unfaced*	<25	<50	N/A	<5%
Foil Faced	<75	<150	0.05	N/A
Kraft Faced	N/R	N/R	1	N/A

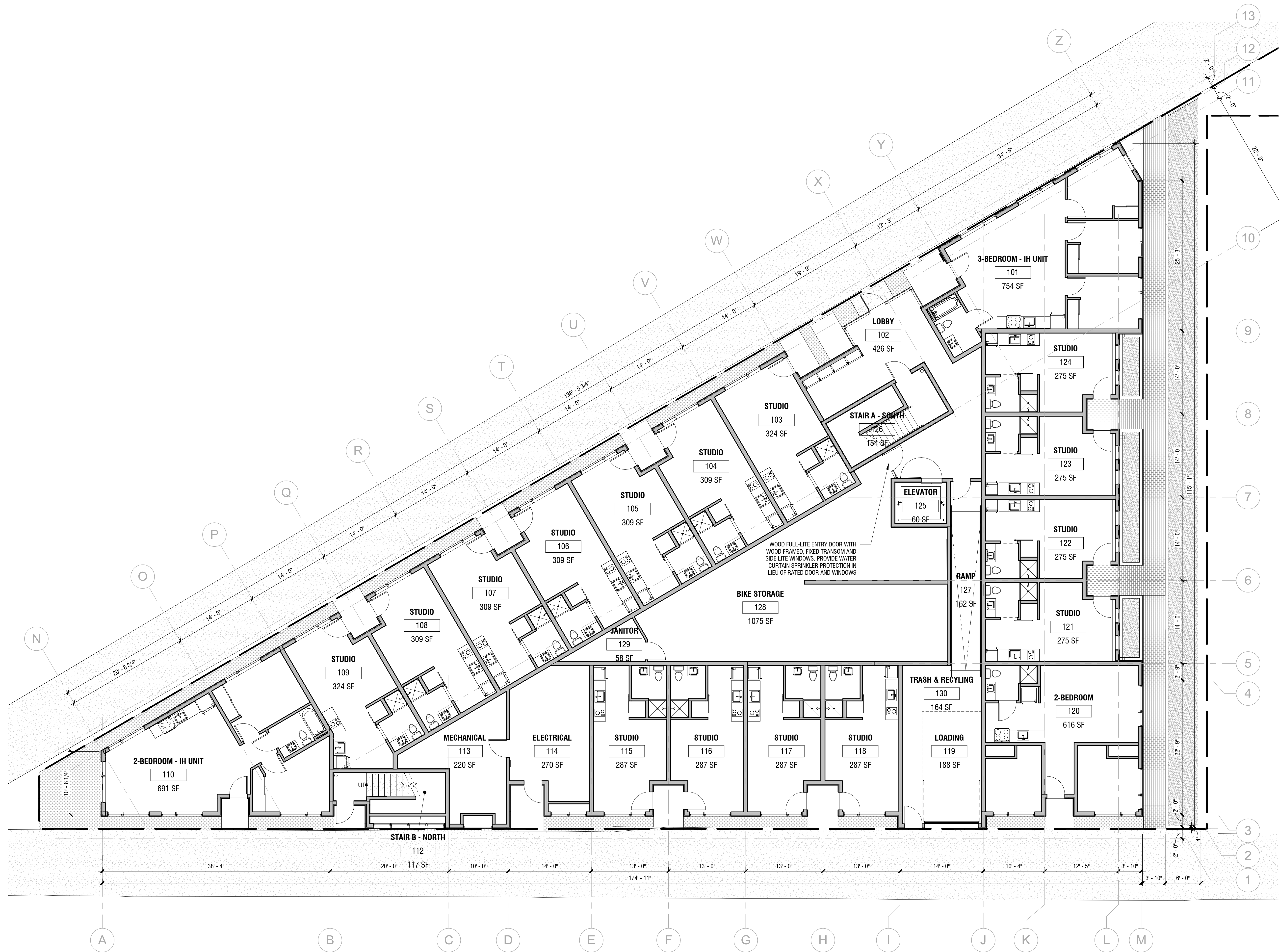
‡‡ **Products are tested in accordance:** R-value ASTM C518 | Surface Burning Characteristics ASTM E84 | Perm Rating ASTM E96 | Water Vapor Sorption ASTM C1104

Kraft and standard foil facing will burn. Do not leave exposed. Facing must be installed in substantial contact with an approved ceiling, floor or wall material. Keep open flame and other heat sources away from facing. Do not place insulation within 3" of light fixtures or similar electrical devices unless device is labeled for contact with insulation. Use only unfaced insulation between wood framing and masonry chimneys. Do not use insulation in spaces around metal chimneys, fireplaces, or flues. JM Unfaced insulation is considered non-combustible by model building codes. Flame Spread 25 products are flame spread rated and can be left exposed where codes allow. See package for warnings, fire hazard and installation instructions, or call 800-654-3103.

Due to potential skin irritation, unfaced insulation should not be used for exposed applications where it will be subject to human contact.

\* Unfaced fiberglass insulation is considered noncombustible according to ASTM E136.





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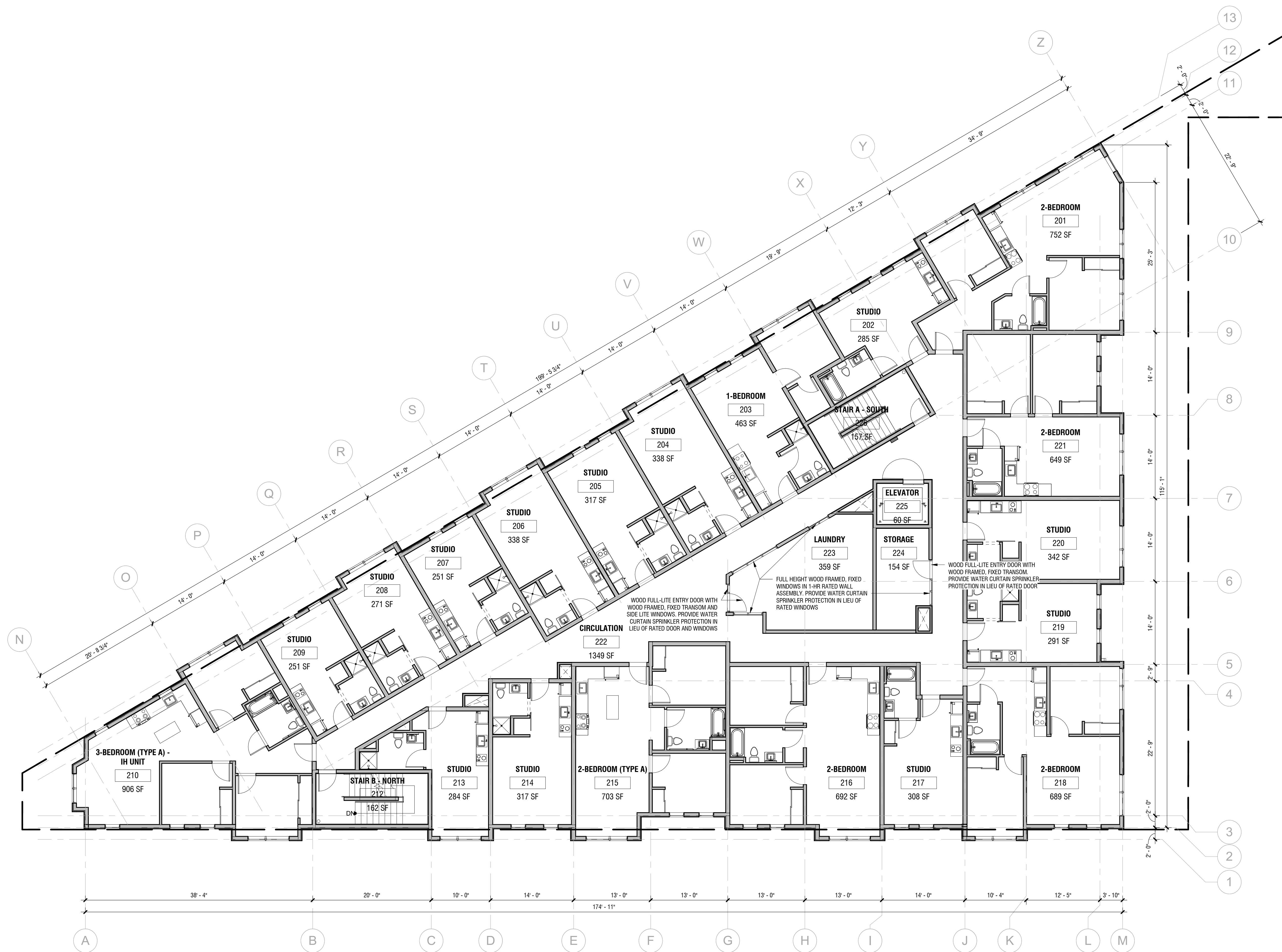
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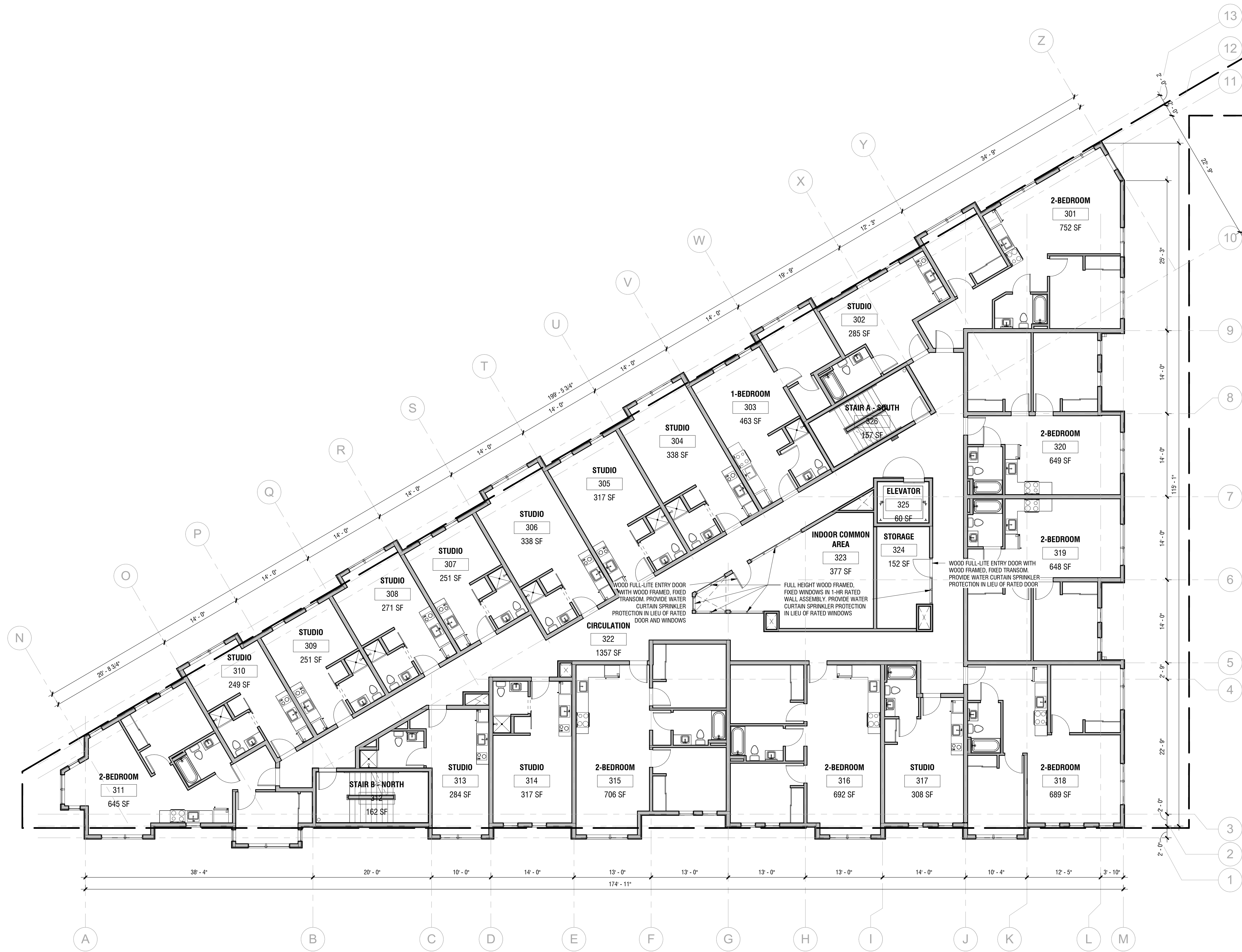
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3RD FLOOR PLAN  
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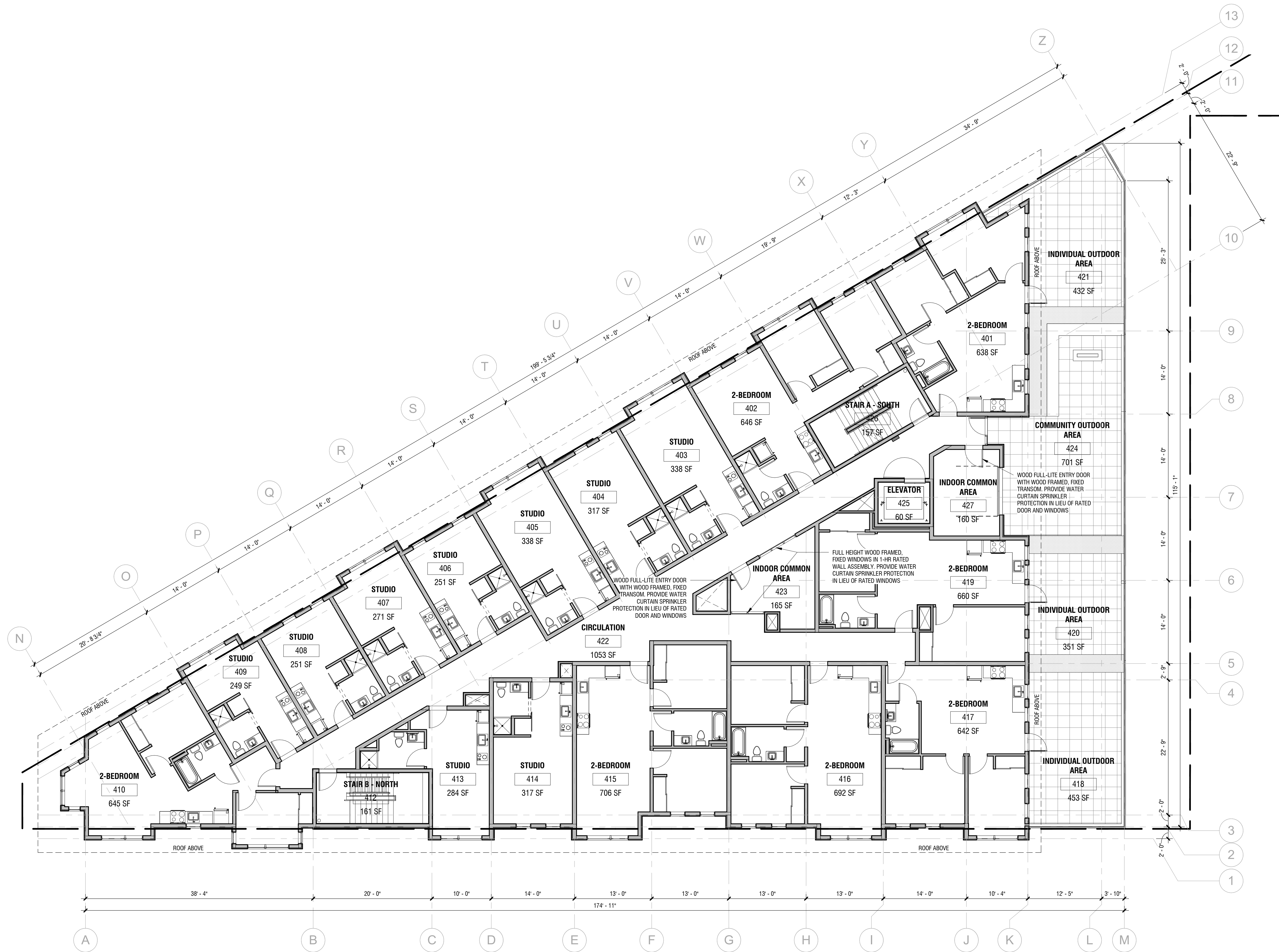
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4TH FLOOR PLAN  
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