LIFESTYLE BOUTIQUE HOTEL

LU 17-264667 DZM - 539 SW 10TH AVENUE

CITY OF PORTLAND

LAND USE HEARING

02.15.2018

Portland, Oregon

Owner/Developer: Graves Hospitality

Design: DLR Group

Project Valuation: $33 Million

DLR Group

GRAVES HOSPITALITY
DEVELOPMENT EXPERTISE. MANAGEMENT SAVY.

Index | "C" Exhibits

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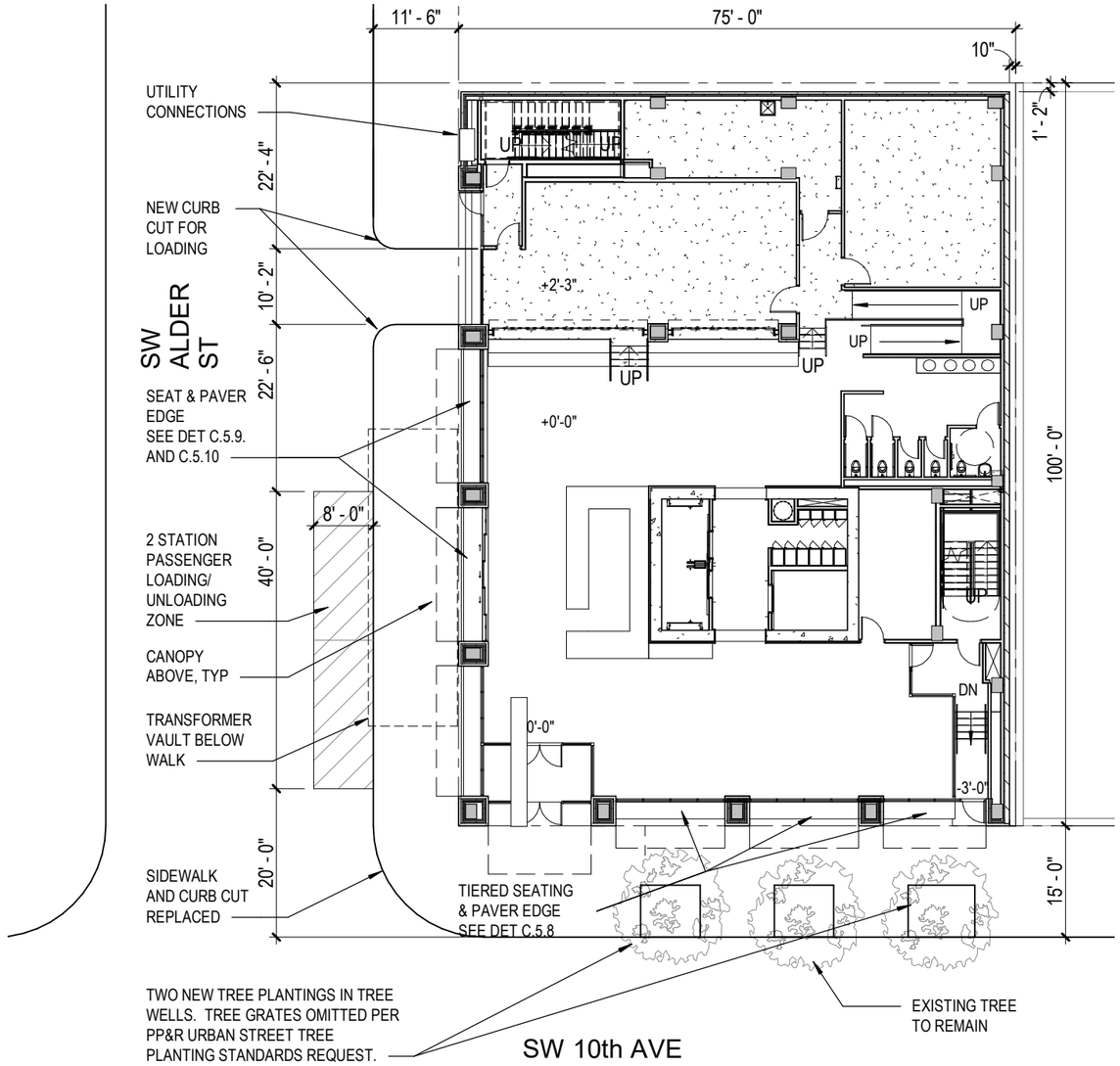
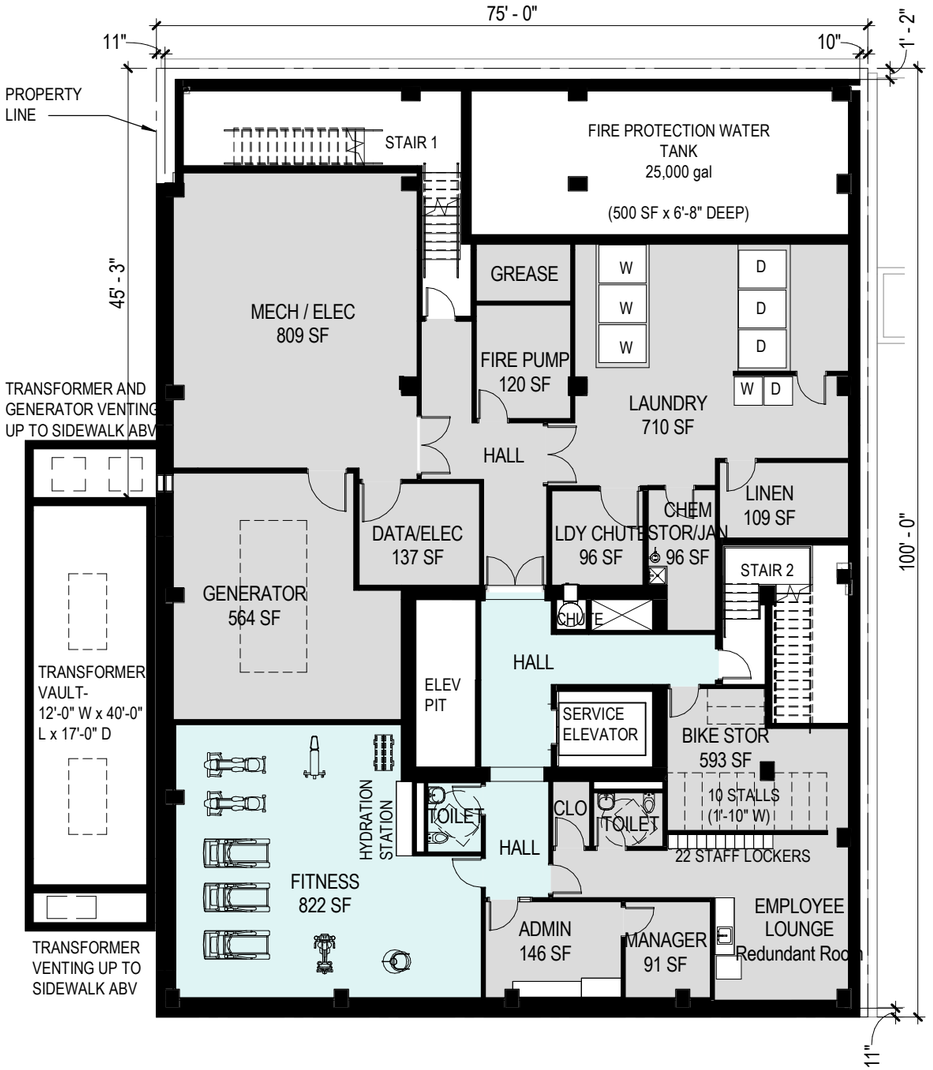
SITE PLAN



SEE CIVIL UTILITY PLAN (C.8.3) FOR TRANSFORMER, VAULT, SIGNAL POLES, CONTROLS, CABINET, AND STREET LIGHTING AT SIDEWALK.

SITE PLAN

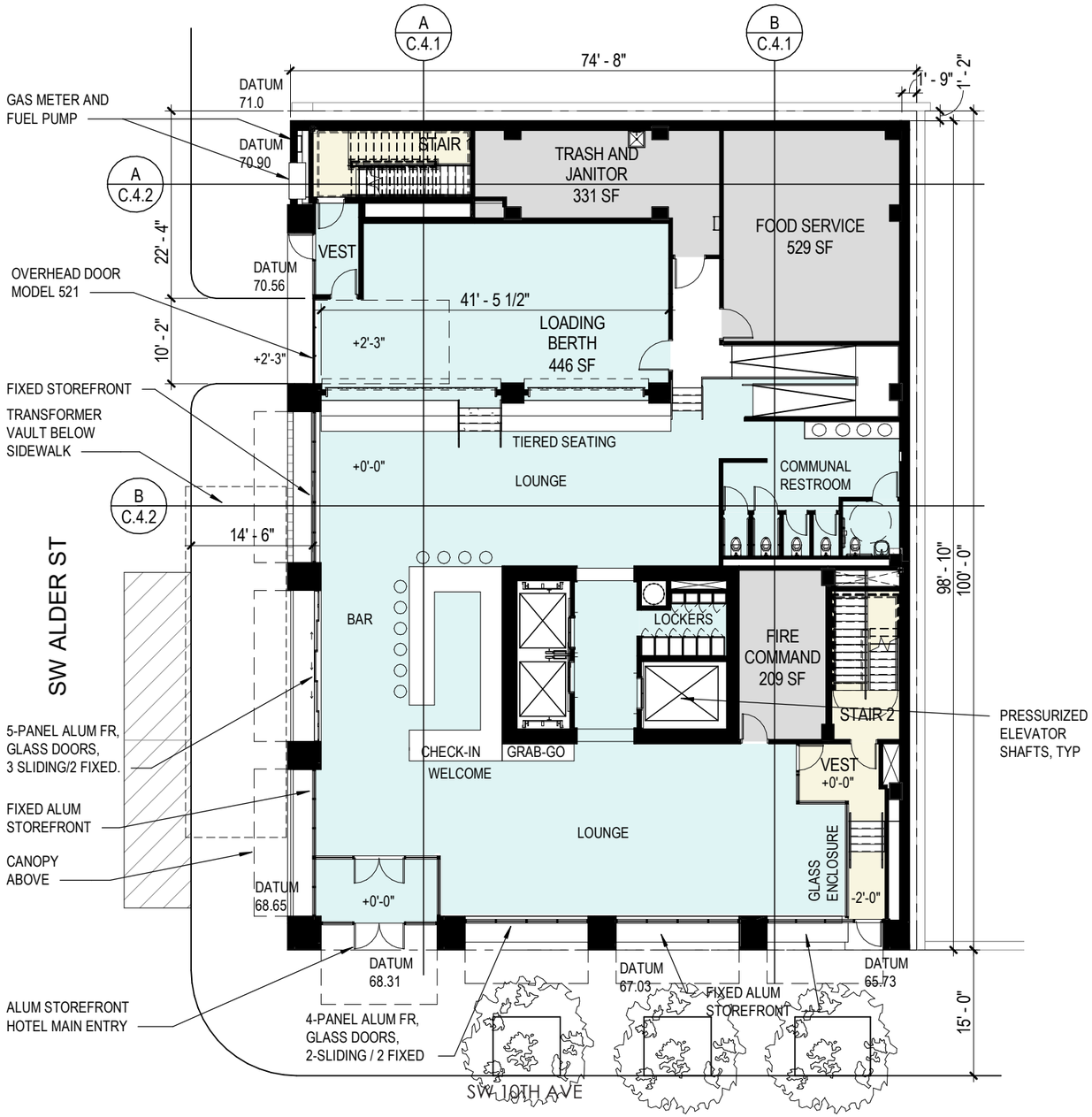
SCALE: 1/16" = 1'-0"



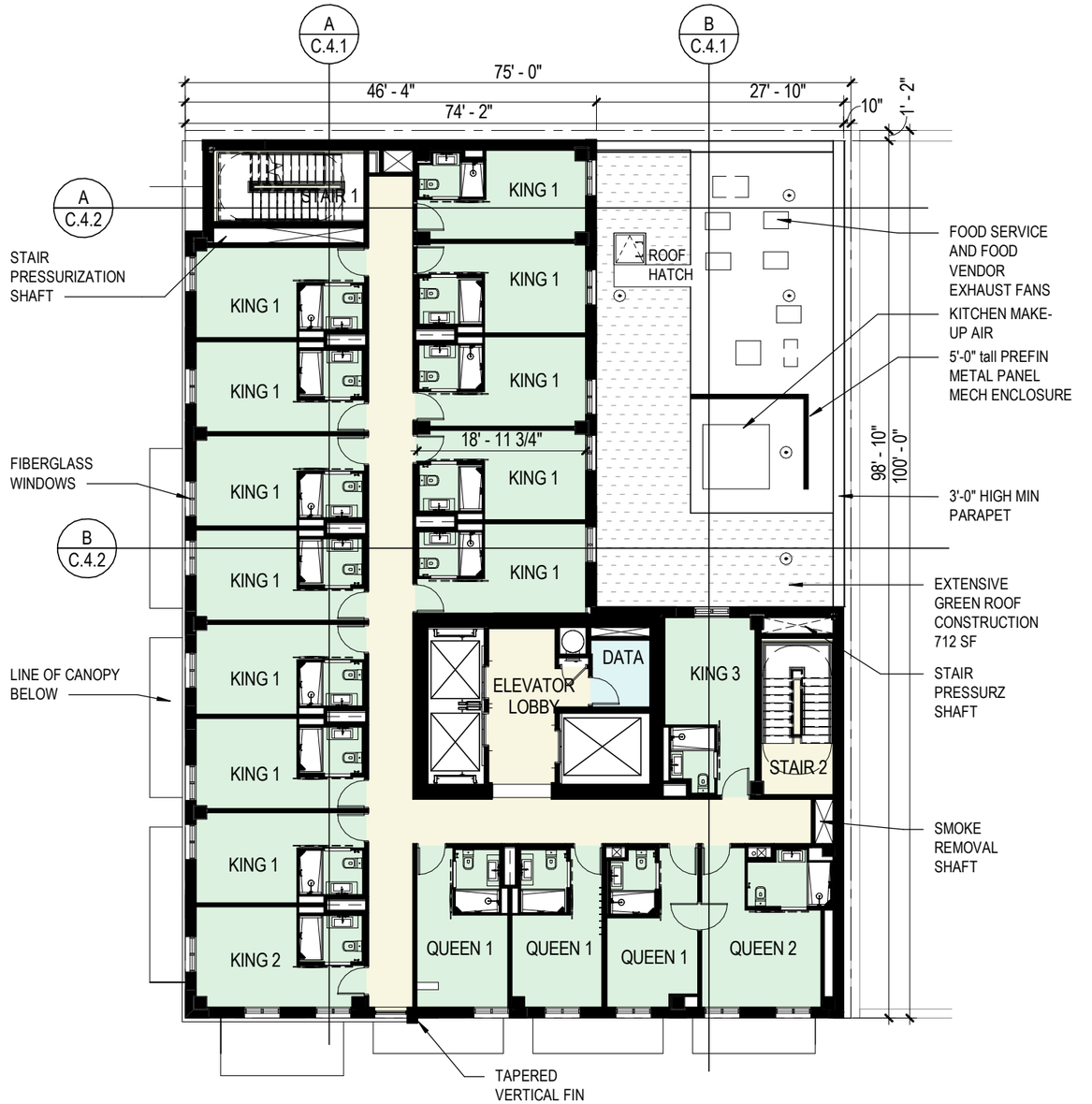
BASEMENT PLAN

SCALE: 1/16" = 1'-0"

FLOOR PLANS



LEVEL 1



LEVEL 2

SCALE: 1/16" = 1'-0"

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EXHIBIT C.2.2
LAND USE HEARING # (LU 17-264667 DZM)

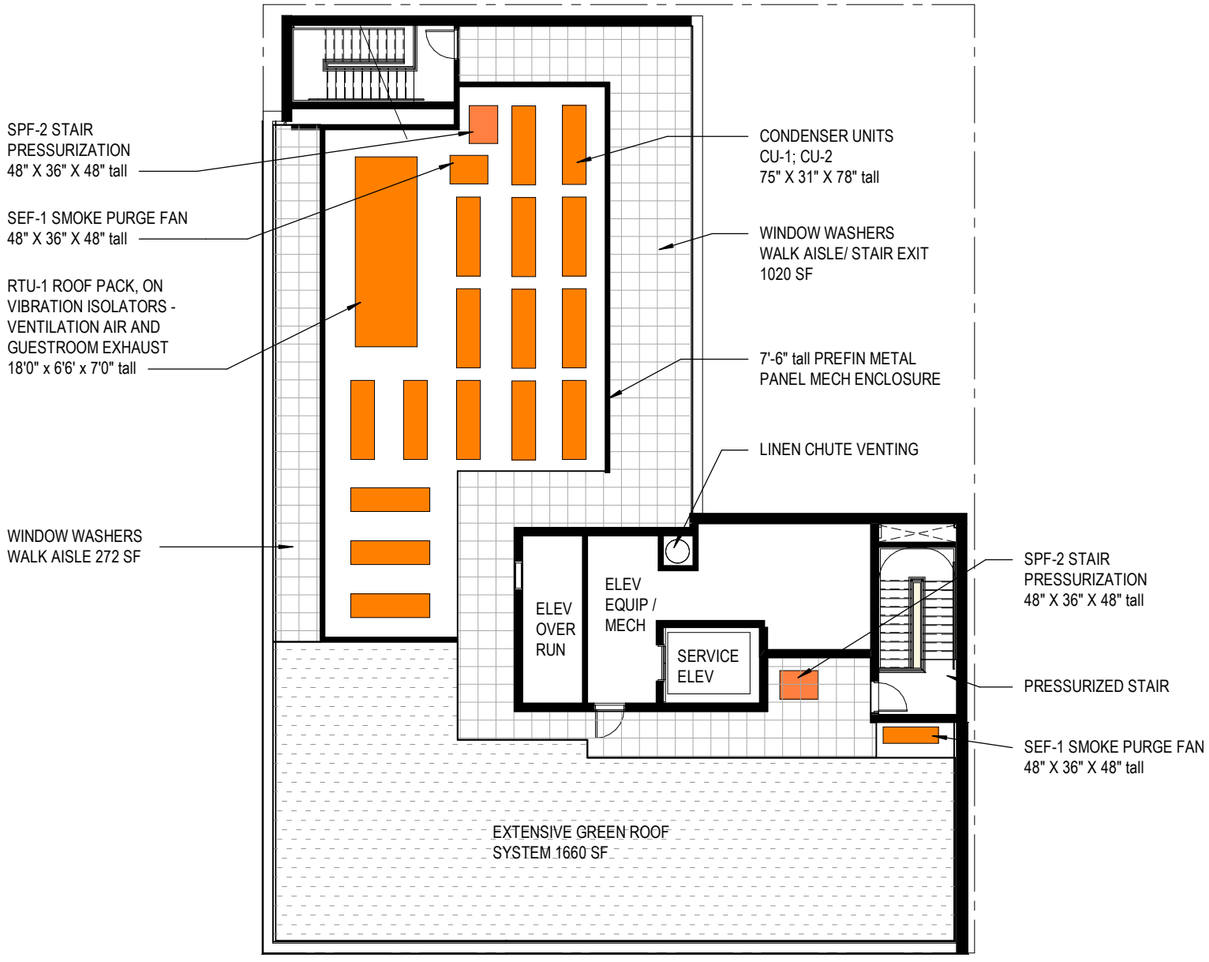
FLOOR PLANS

TYPICAL FLOOR (LEVELS 3-11)

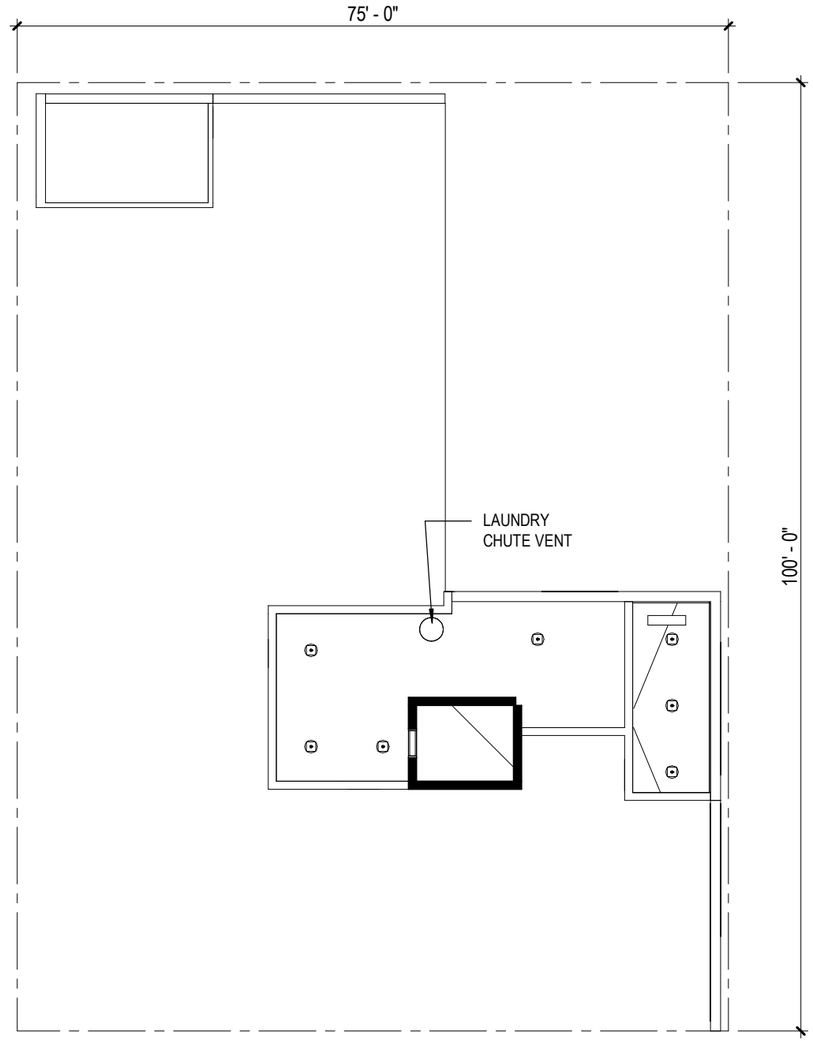
LEVEL 12

SCALE: 1/16" = 1'-0"

FLOOR PLANS



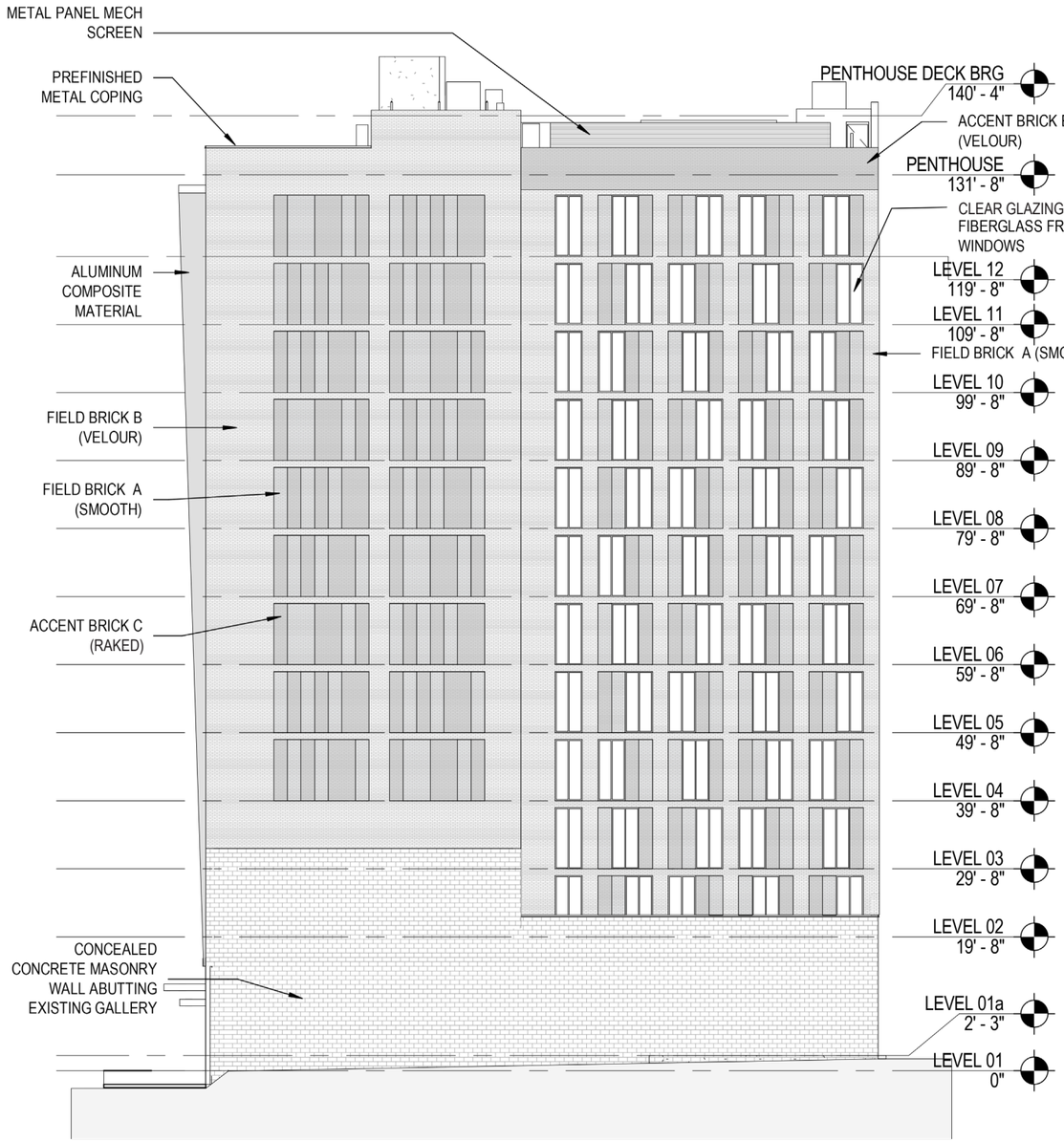
PENTHOUSE LEVEL



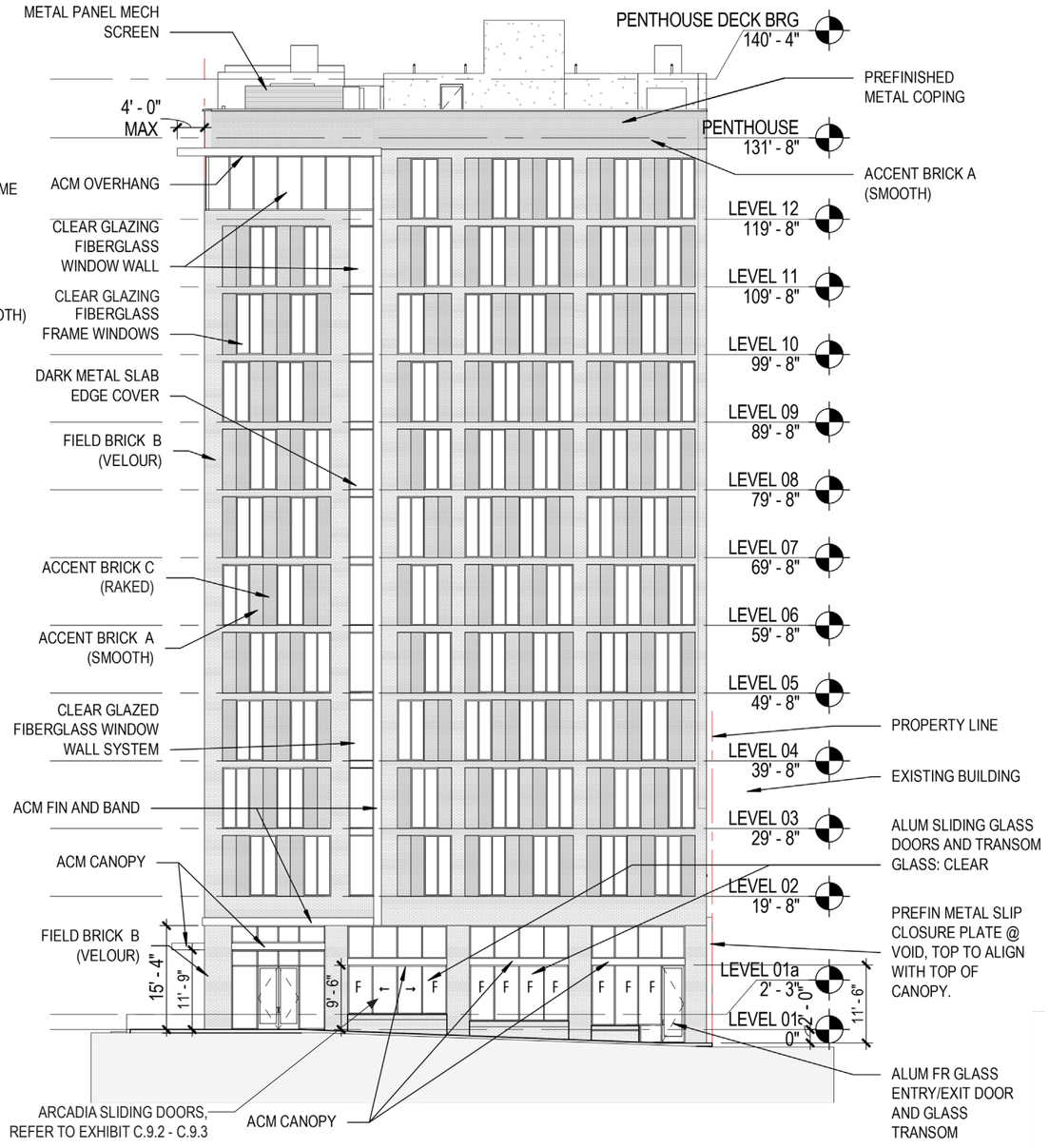
ROOF PLAN

SCALE: 1/16" = 1'-0"

ELEVATIONS



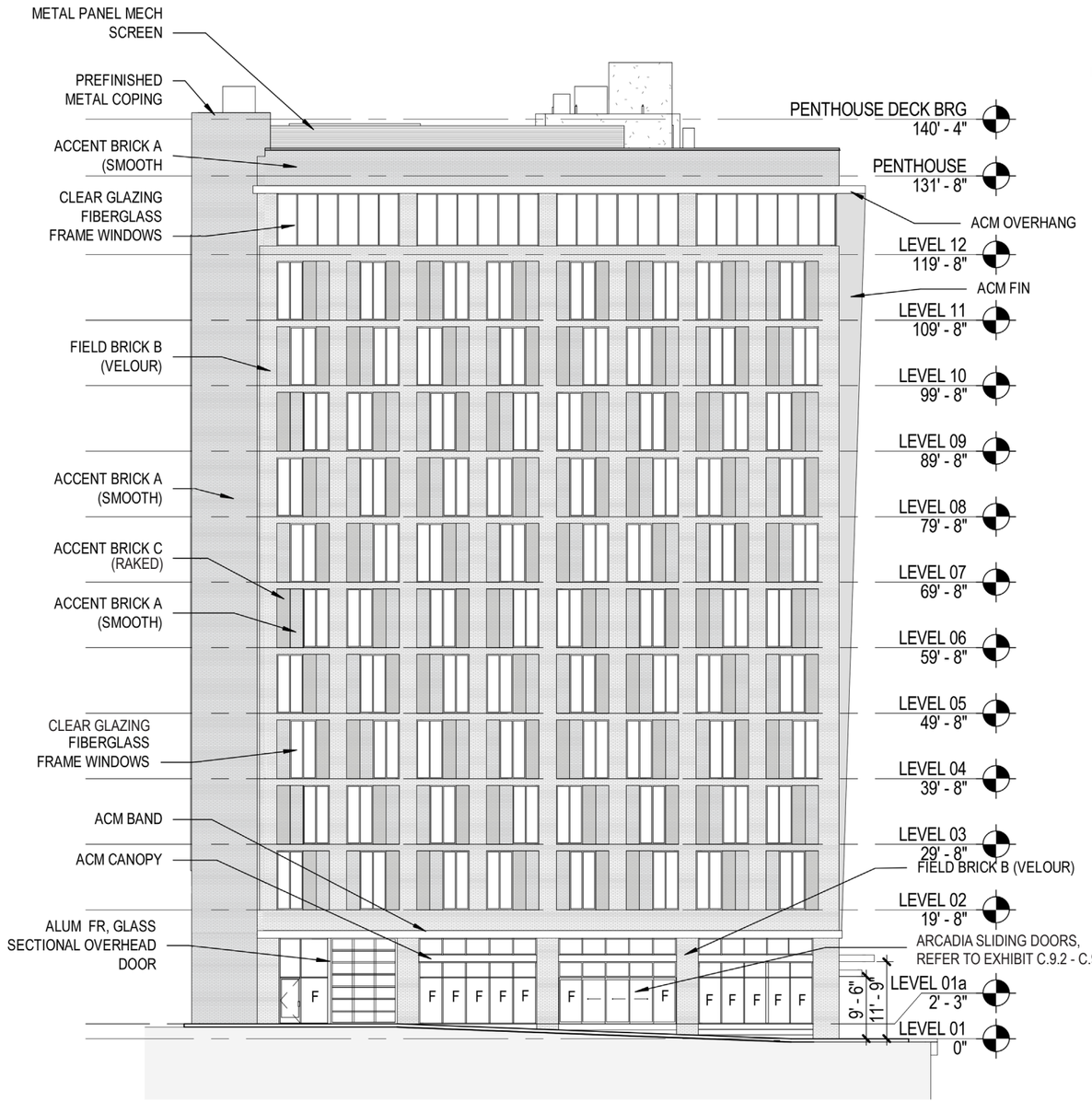
NORTH ELEVATION
(Rug Gallery Side)



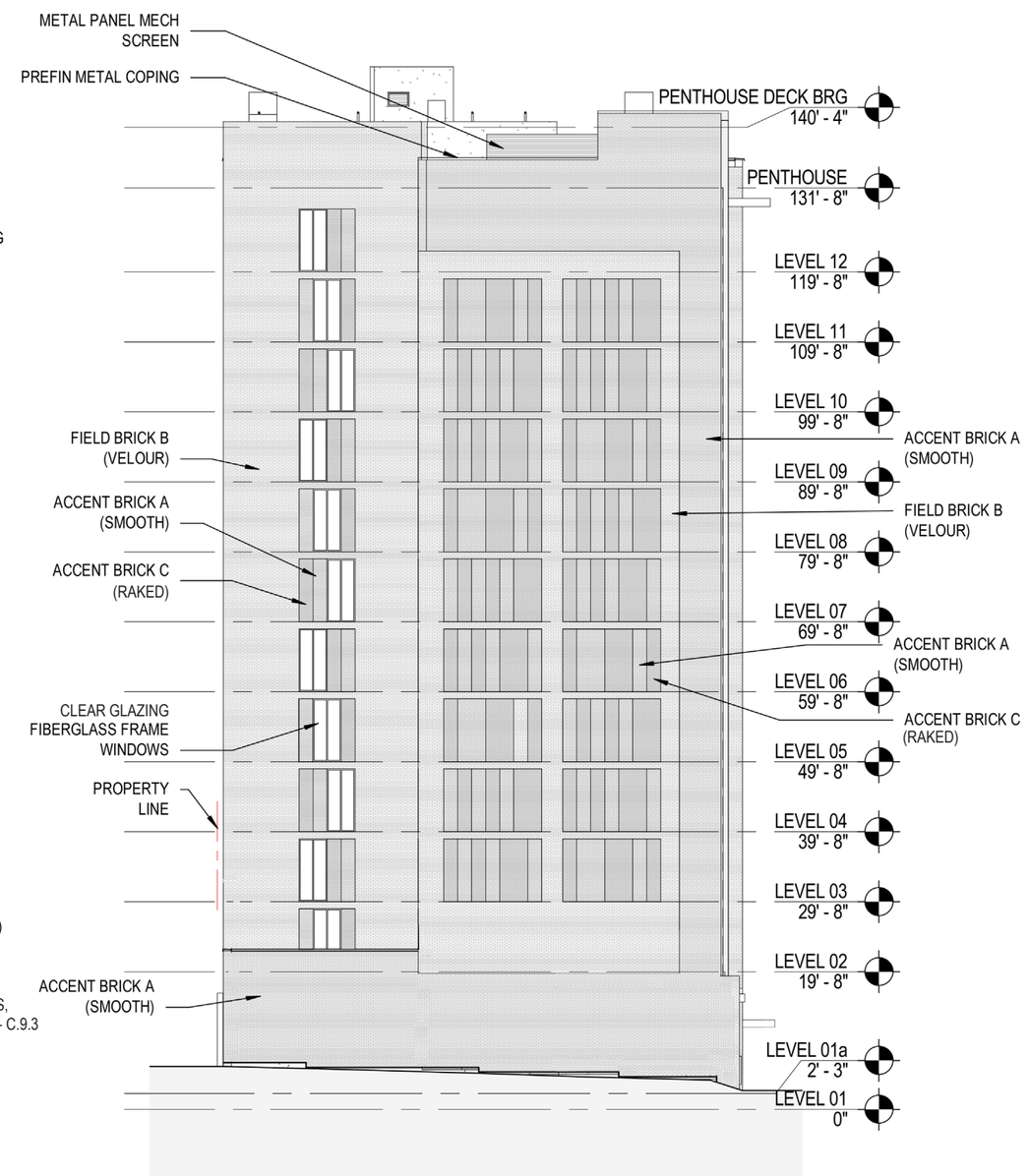
EAST ELEVATION
(SW 10th Ave)

SCALE: 3/64" = 1'-0"

ELEVATIONS



SOUTH ELEVATION
(SW Alder St)

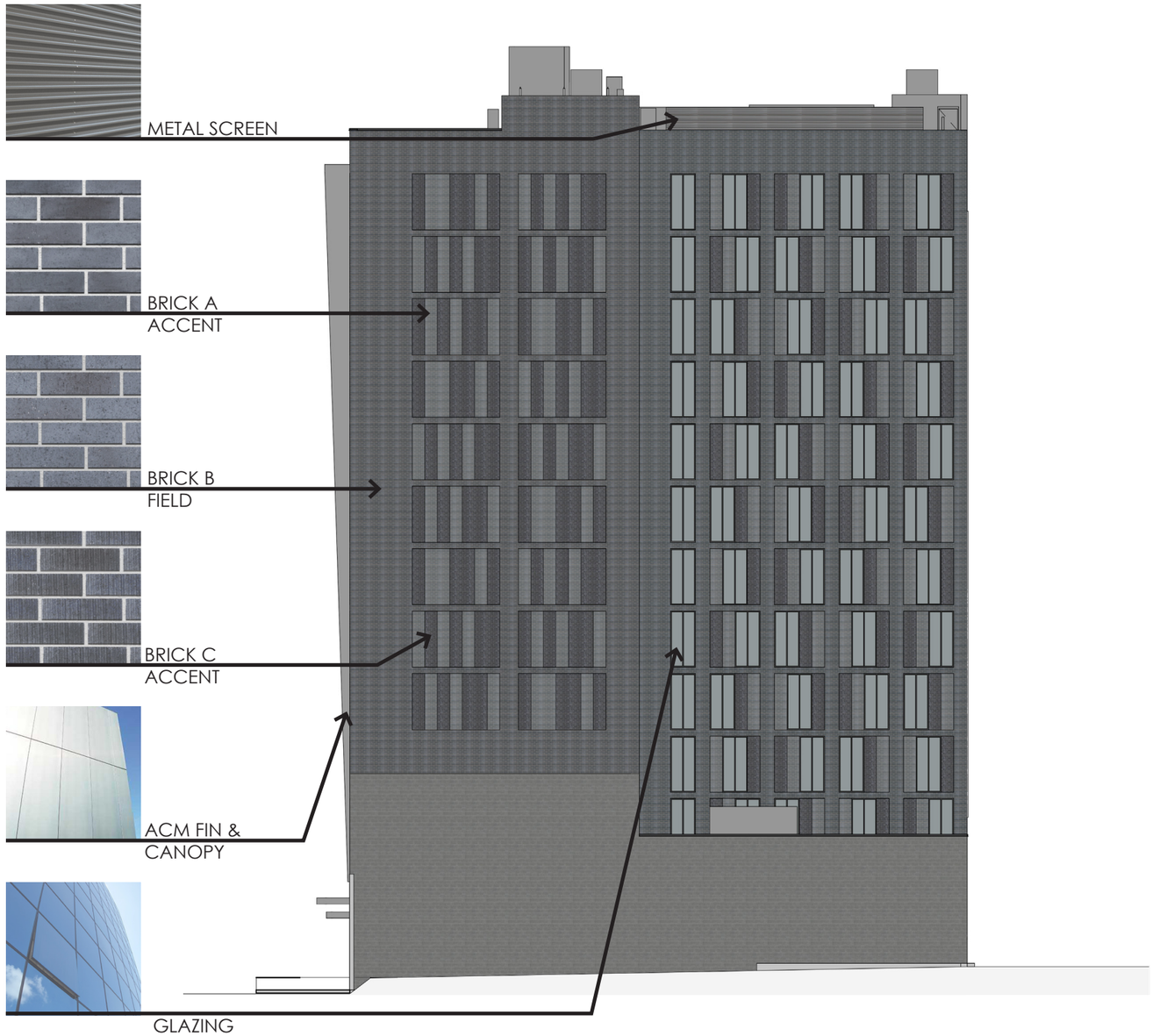


WEST ELEVATION
(Parking Garage Side)

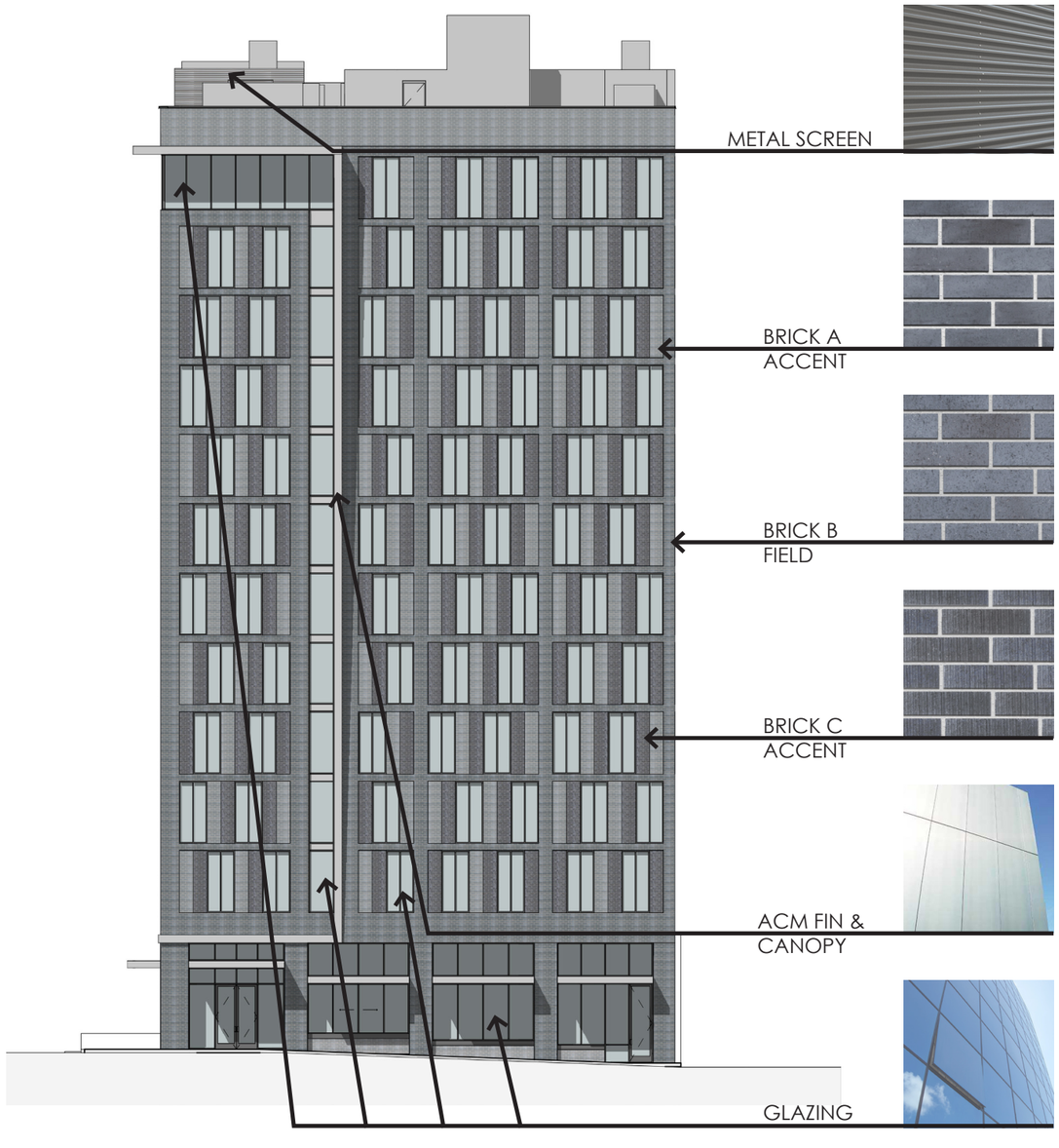
SCALE: 3/64" = 1'-0"

RENDERED ELEVATIONS

SEE EXHIBIT C.6.1 FOR MATERIALS
DESCRIPTION AND COLORS



NORTH ELEVATION

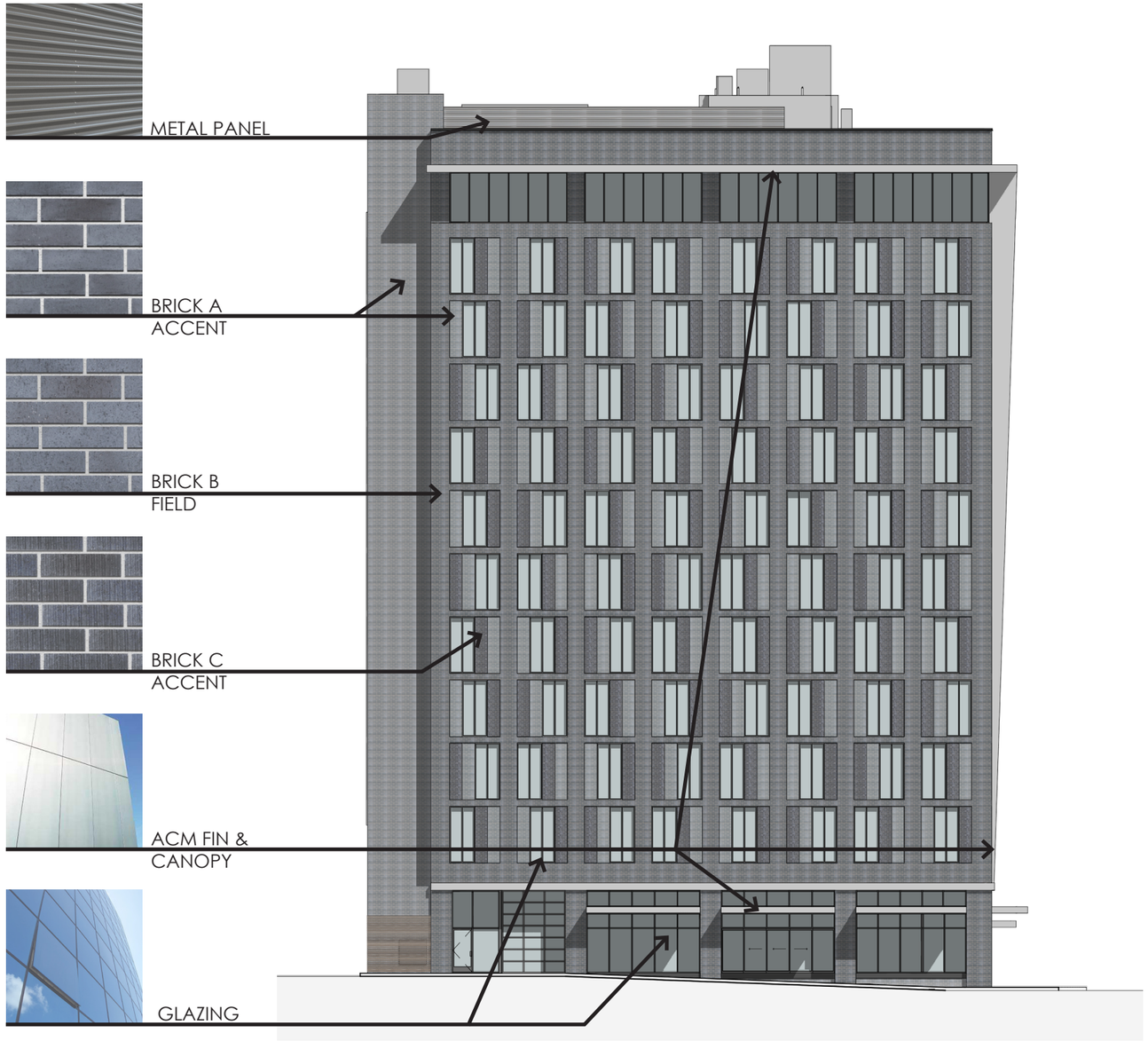


EAST ELEVATION

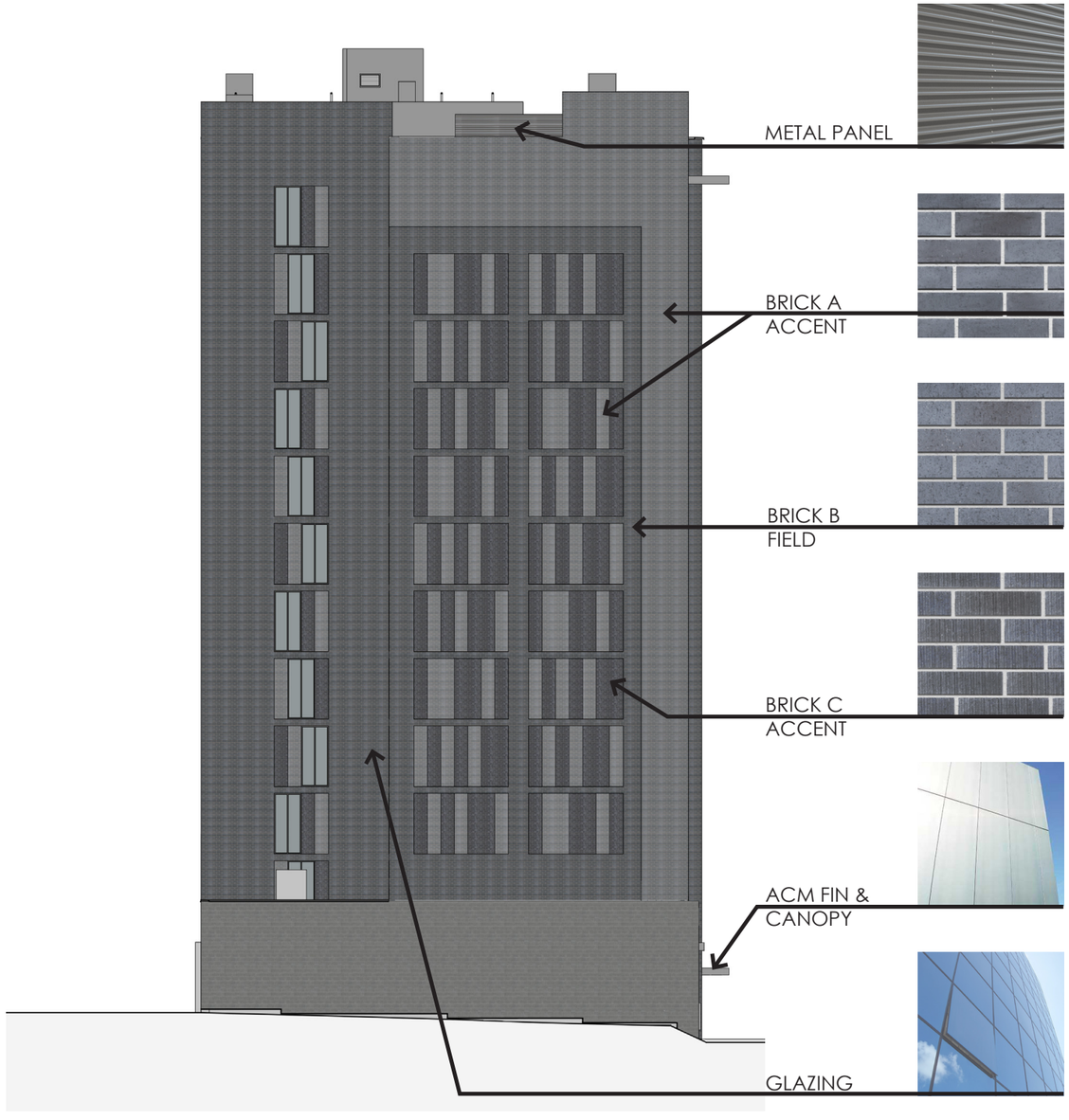
SCALE: 3/64" = 1'-0"

RENDERED ELEVATIONS

SEE EXHIBIT C.6.1 FOR MATERIALS
DESCRIPTION AND COLORS



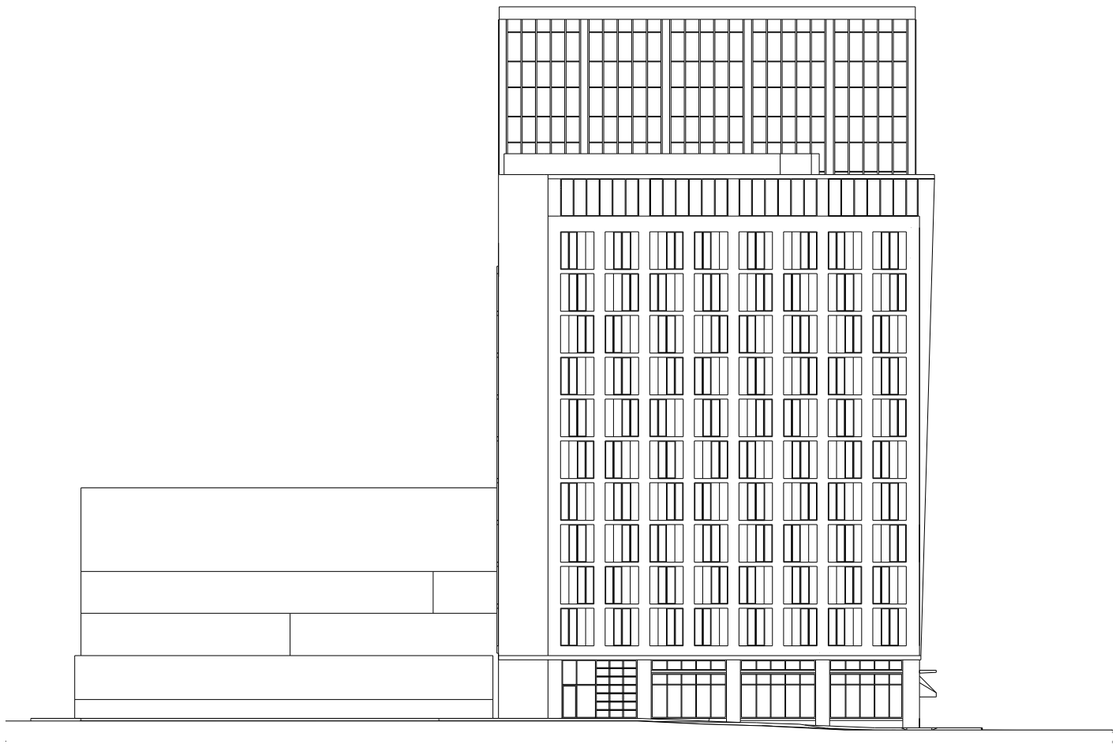
SOUTH ELEVATION



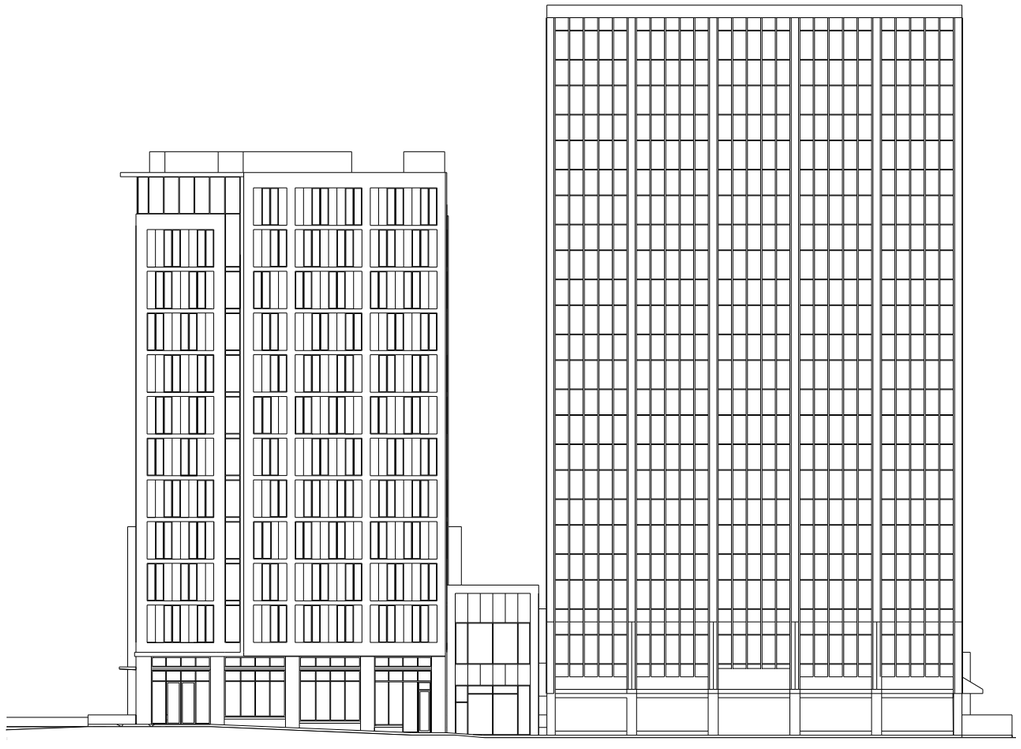
WEST ELEVATION

SCALE: 3/64" = 1'-0"

STREET FACING ELEVATIONS WITH CONTEXT



SOUTH ELEVATION



EAST ELEVATION

SCALE: 1" = 40'-0"

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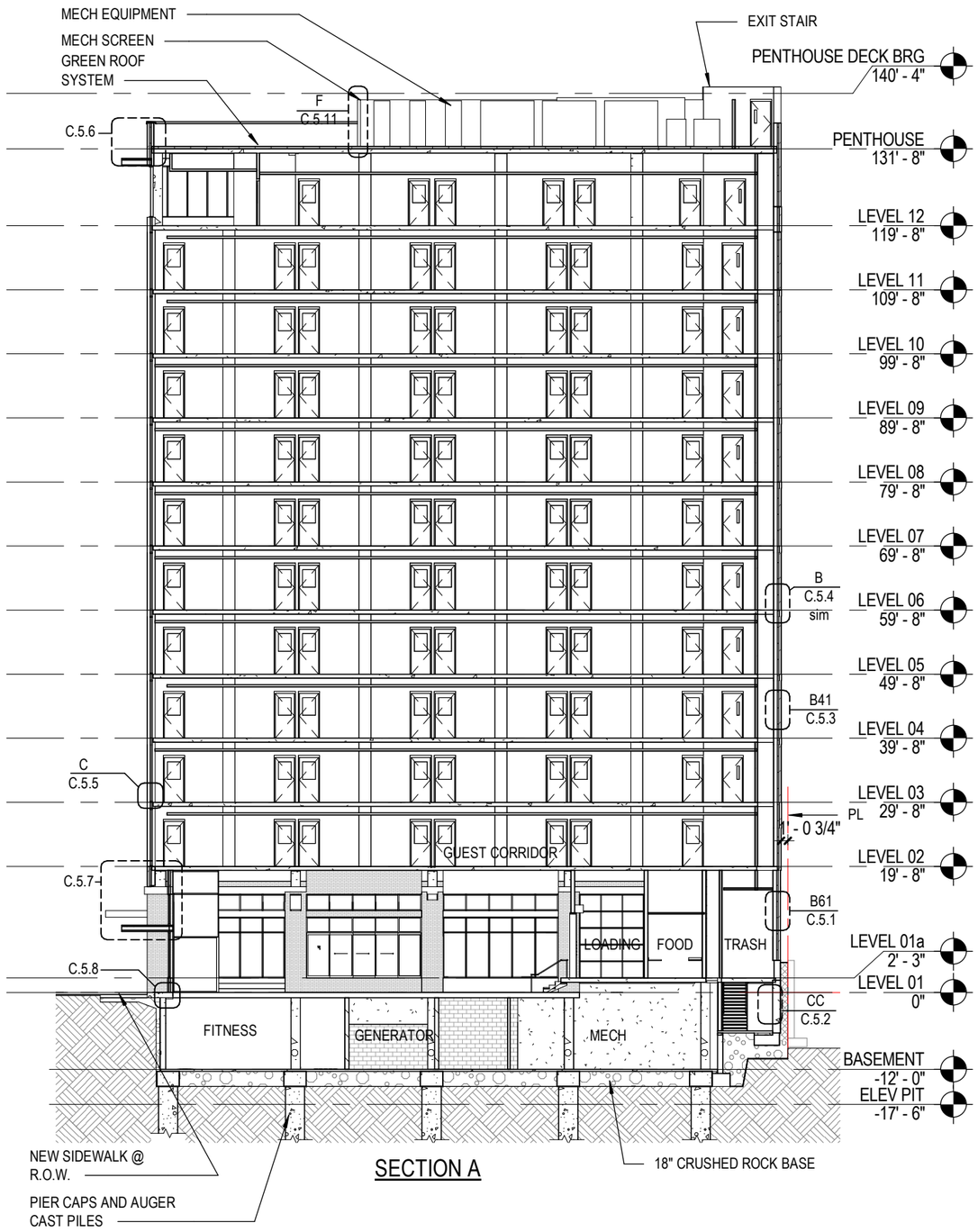
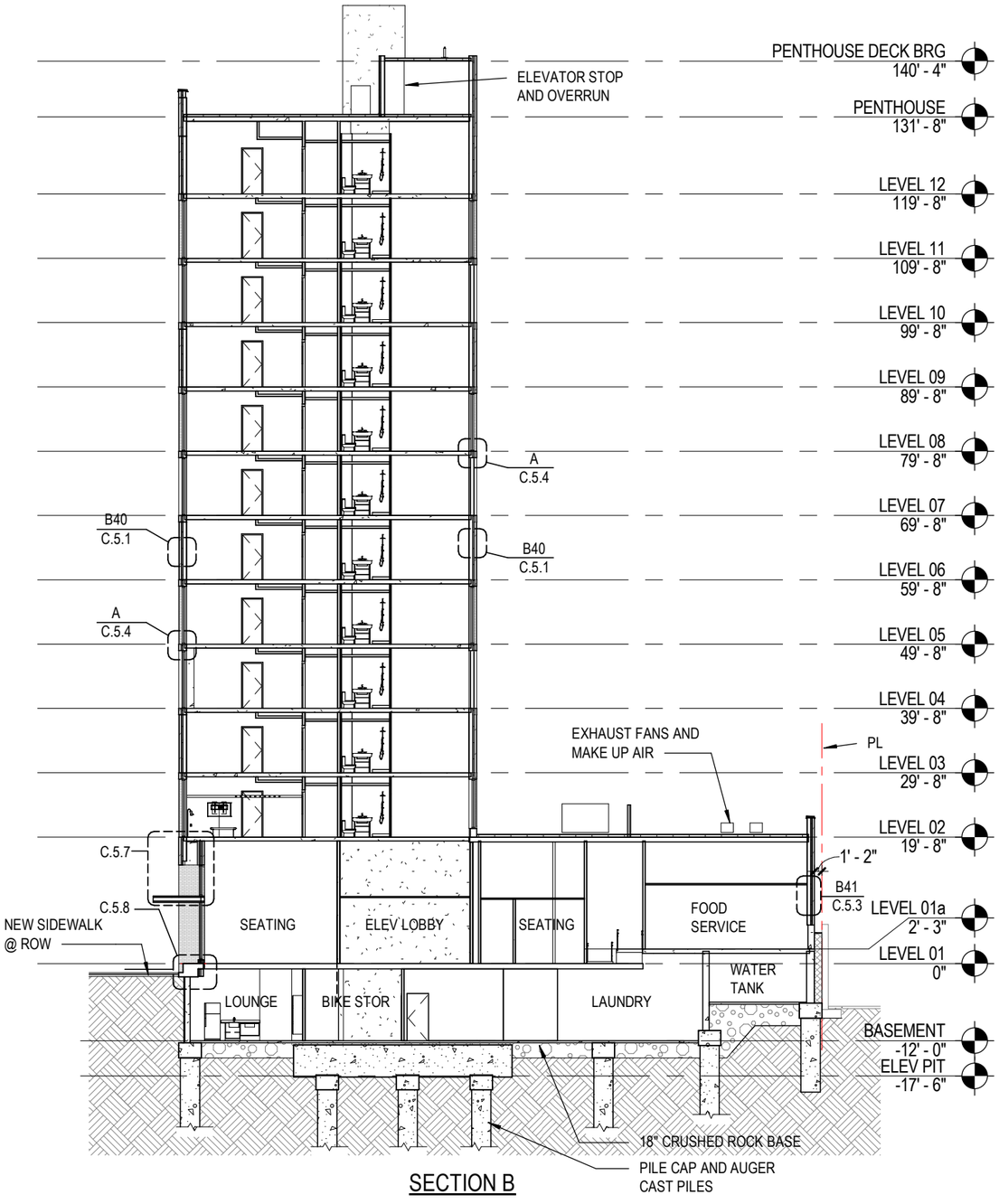
EXHIBIT C.3.5
LAND USE HEARING # (LU 17-264667 DZM)

BUILDING SECTIONS



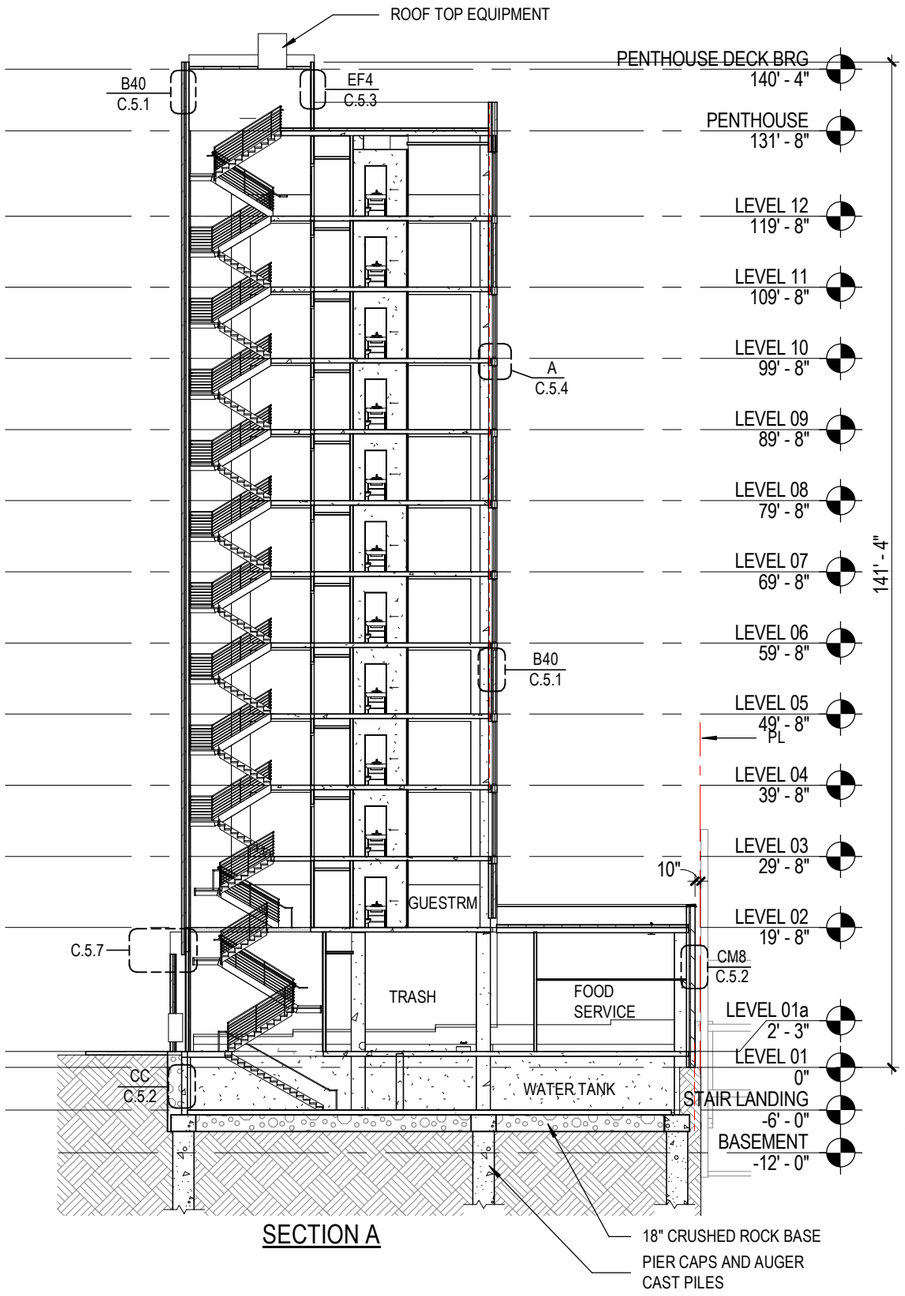
SECTION A



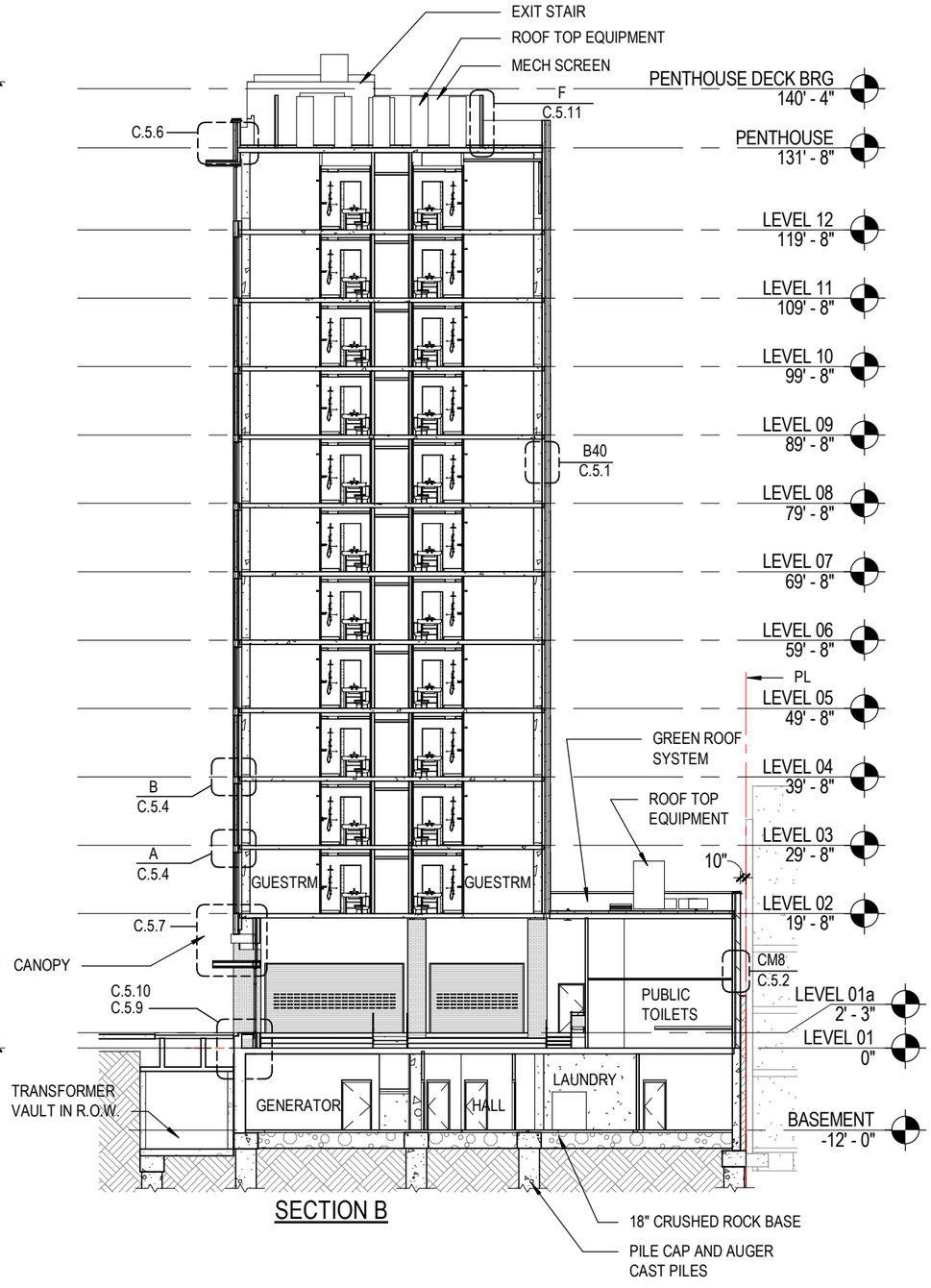
SECTION B

SCALE: 3/64" = 1'-0"

BUILDING SECTIONS



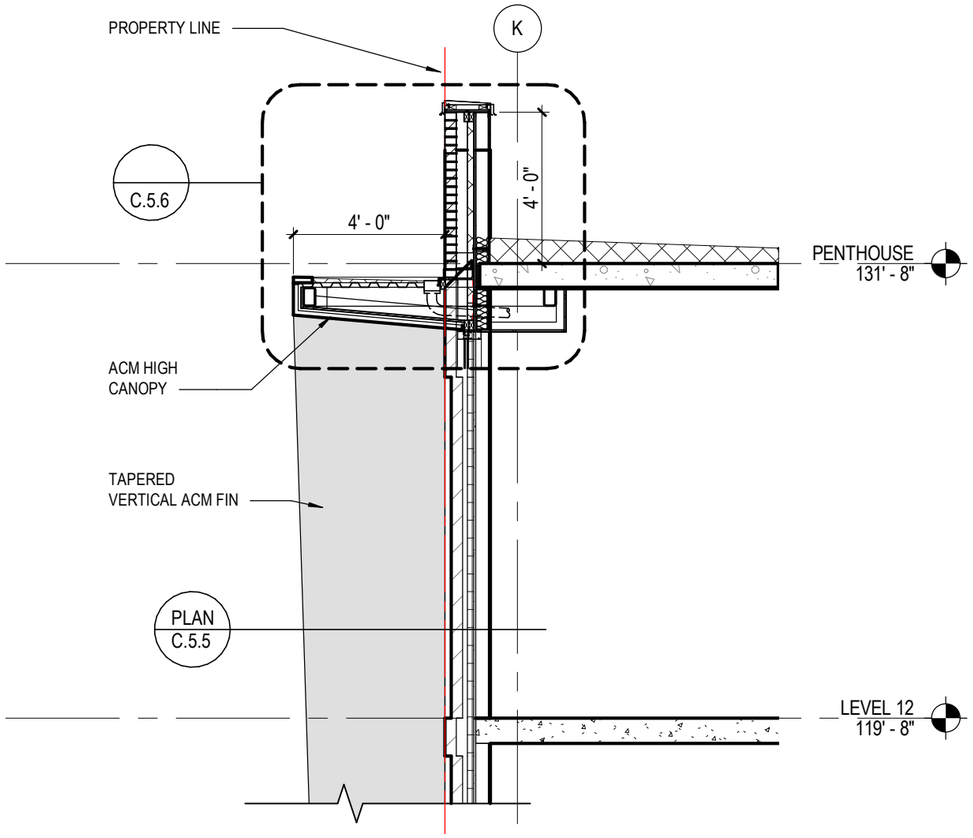
SECTION A

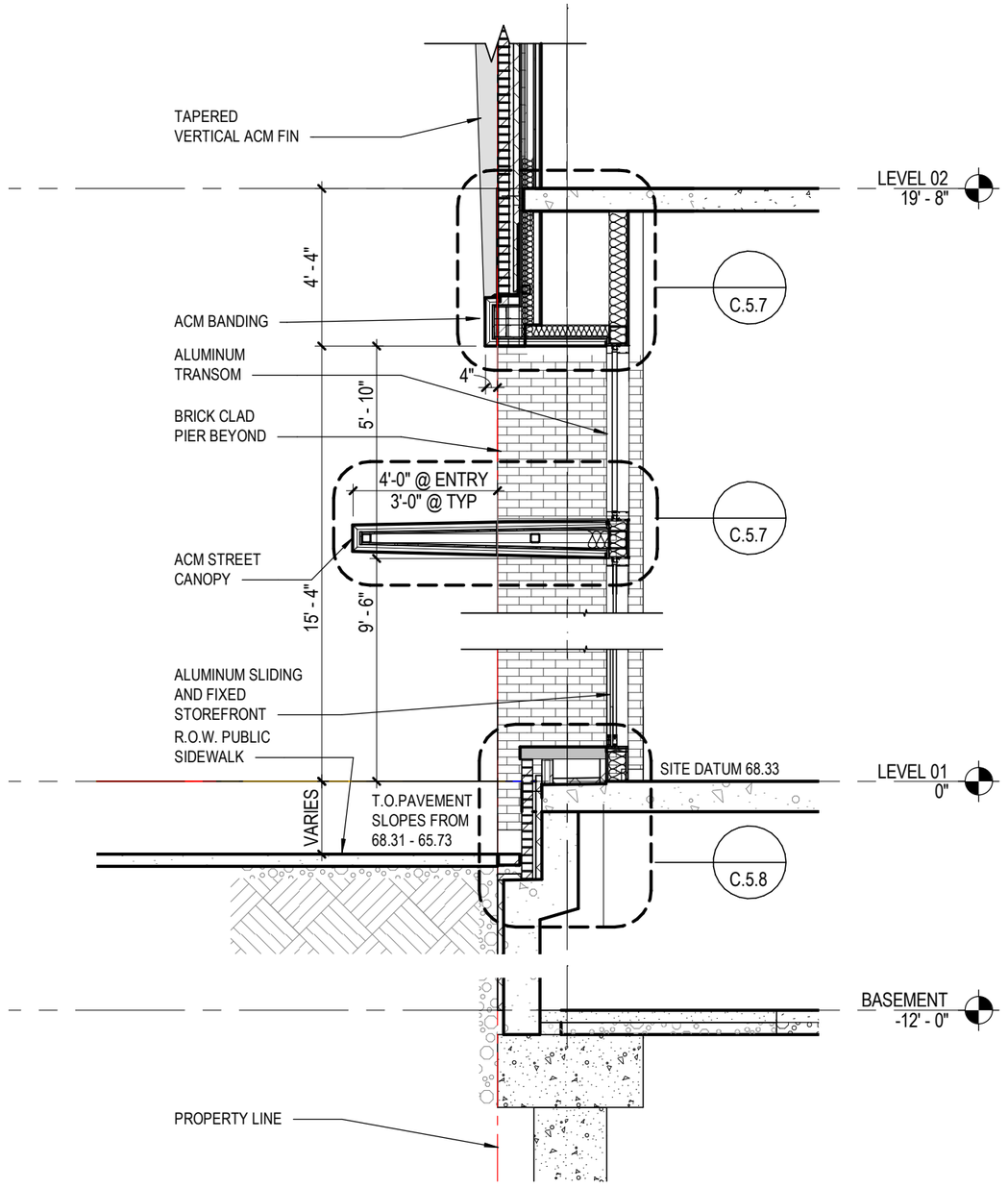


SECTION B

SCALE: 3/64" = 1'-0"

WALL SECTION



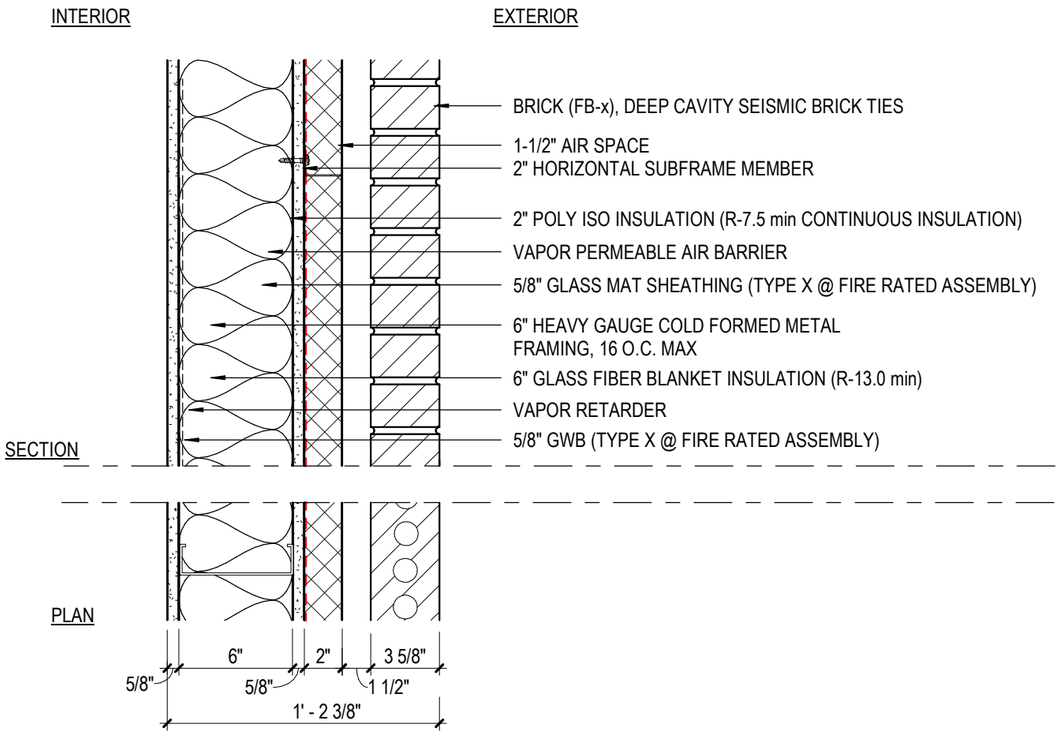


FIN / CANOPY / WALL SECTION

SCALE : 1/4" = 1'-0"

BUILDING DETAILS

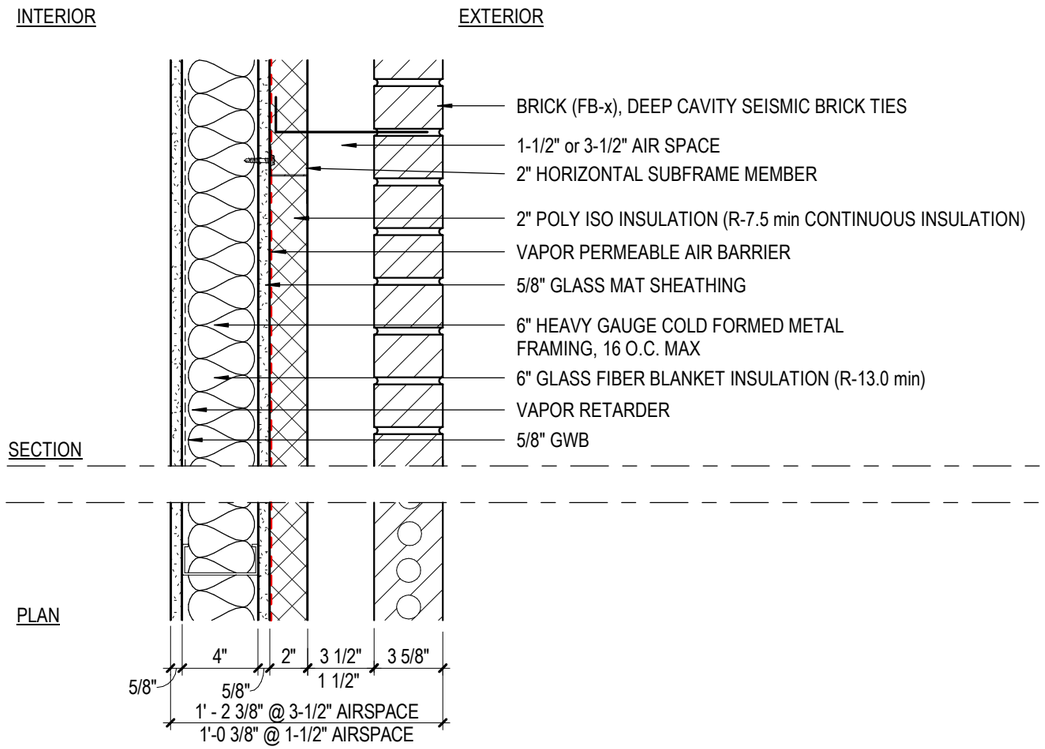
Exterior Wall Assemblies



B61
EXTERIOR BRICK ASSEMBLY

UL # _ UL 904
1-HOUR FIRE RATING
R- VALUE : 13.0 + 7.5 ci

B61-1	1-HOUR FIRE RATED



B40
EXTERIOR BRICK ASSEMBLY

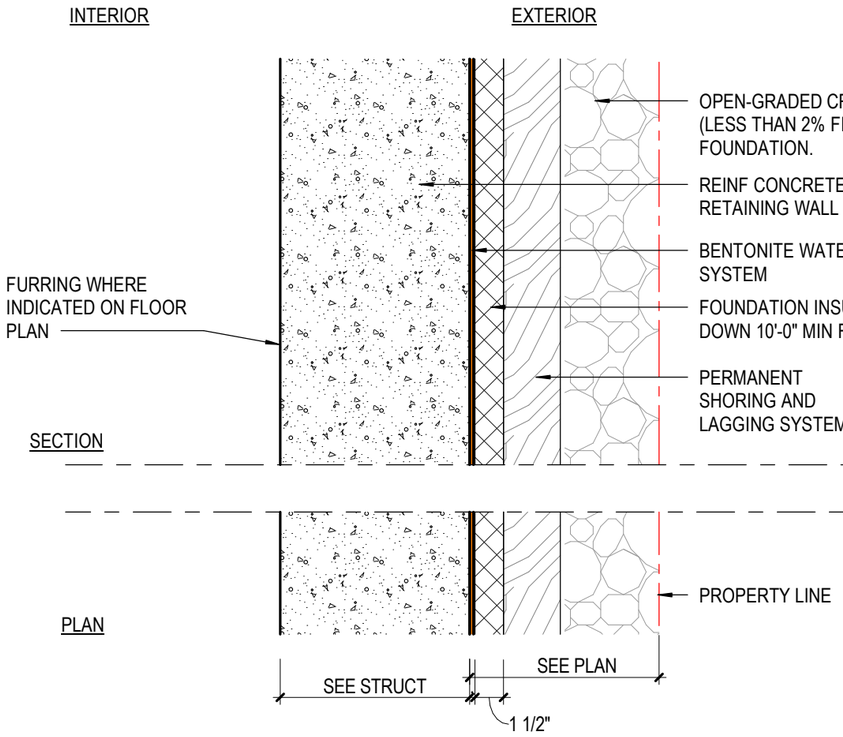
R- VALUE : 13.0 + 7.5 ci

B40-1	0-HOUR FIRE RATING
B40-3	0-HOUR FIRE RATING

EXTERIOR WALL ASSEMBLIES
SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

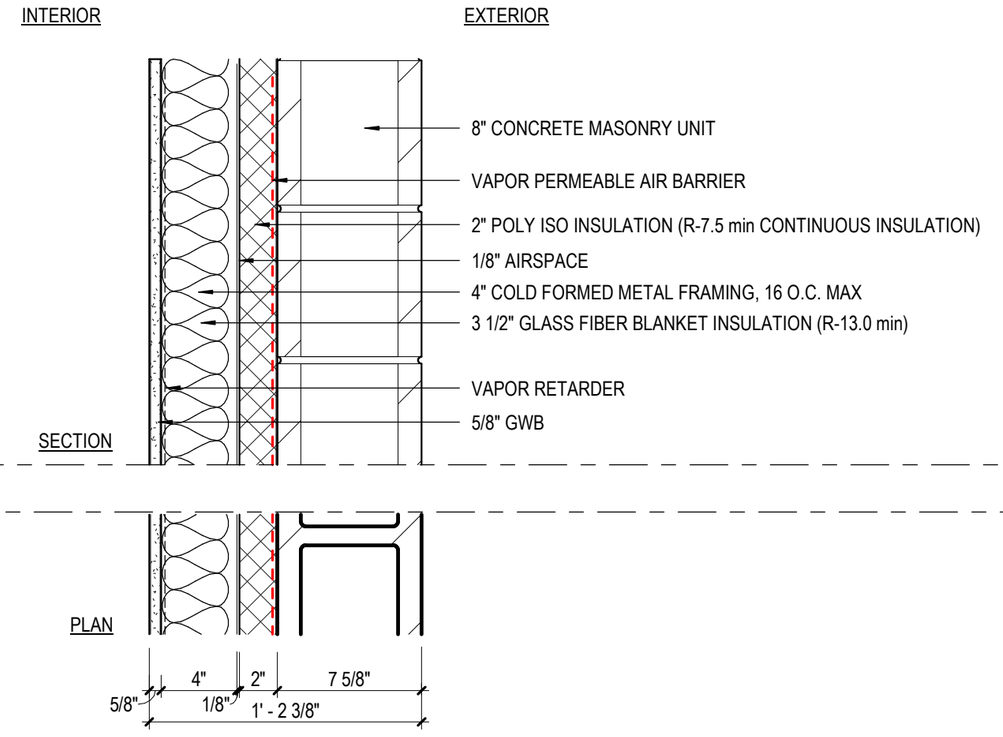
Exterior Wall Assemblies



CC
EXTERIOR CMU ASSEMBLY

UL # _ UL 904
1-HOUR FIRE RATING
R- VALUE : 13.0 + 7.5 ci

CC81 1-HOUR FIRE RATED



CM8
EXTERIOR CMU ASSEMBLY

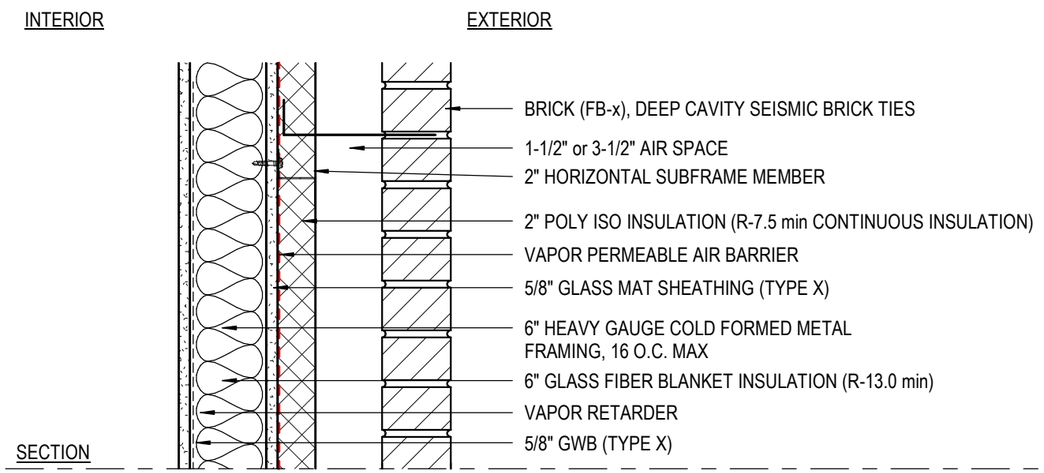
UL # _ UL 904
1-HOUR FIRE RATING
R- VALUE : 13.0 + 7.5 ci

CM81 1-HOUR FIRE RATED

EXTERIOR WALL ASSEMBLIES
SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

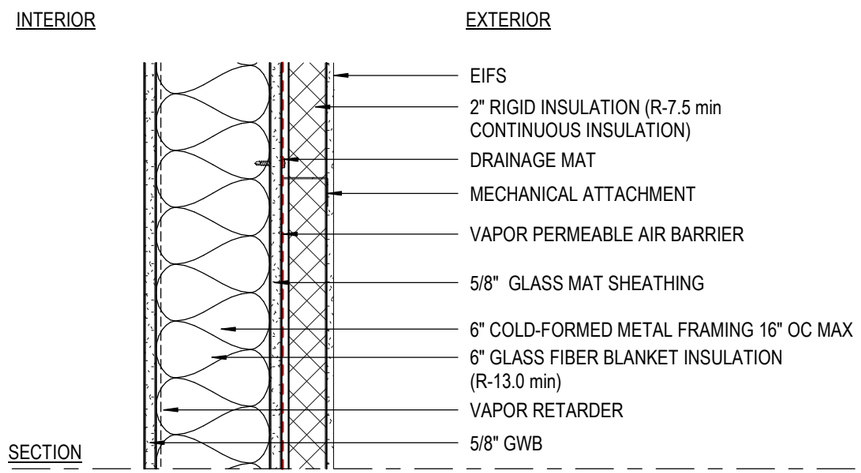
Exterior Wall Assemblies



B41
EXTERIOR BRICK ASSEMBLY

UL # _ UL 904
1-HOUR FIRE RATING
R- VALUE : 13.0 + 7.5 ci

B41-1	1-HOUR FIRE RATED
B41-3	1-HOUR FIRE RATED



EF4
EXTERIOR WALL ASSEMBLY

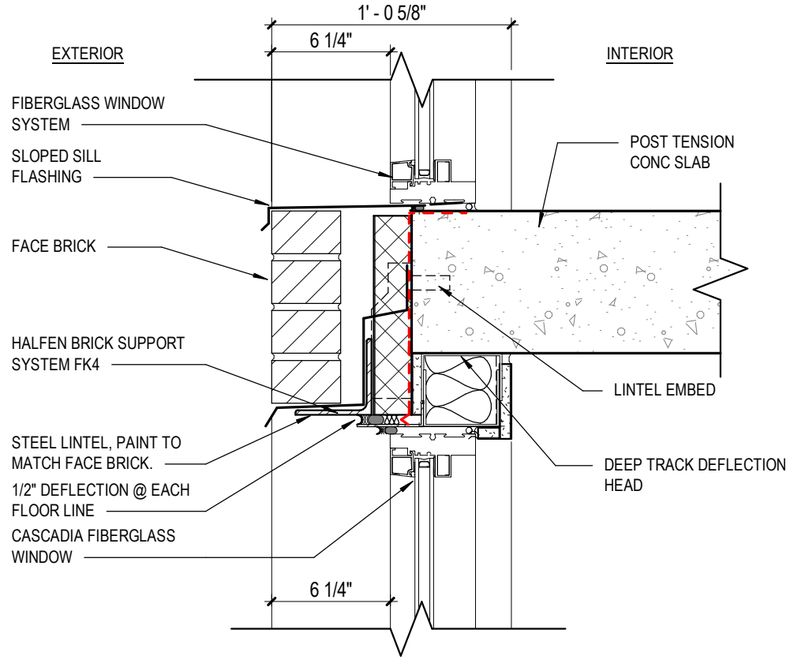
R- VALUE : 13.0 + 7.5 ci

EF4	0-HOUR FIRE RATING

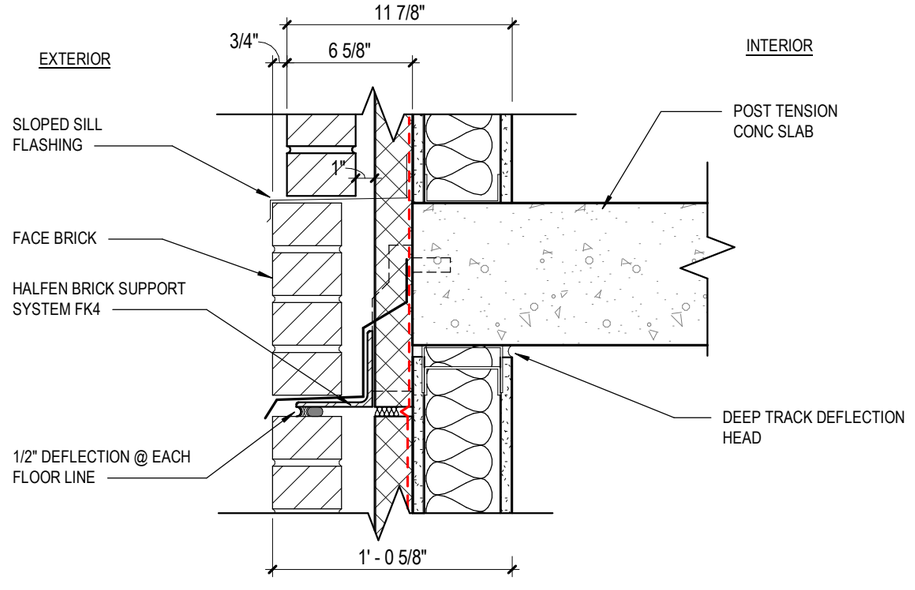
EXTERIOR WALL ASSEMBLIES
SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

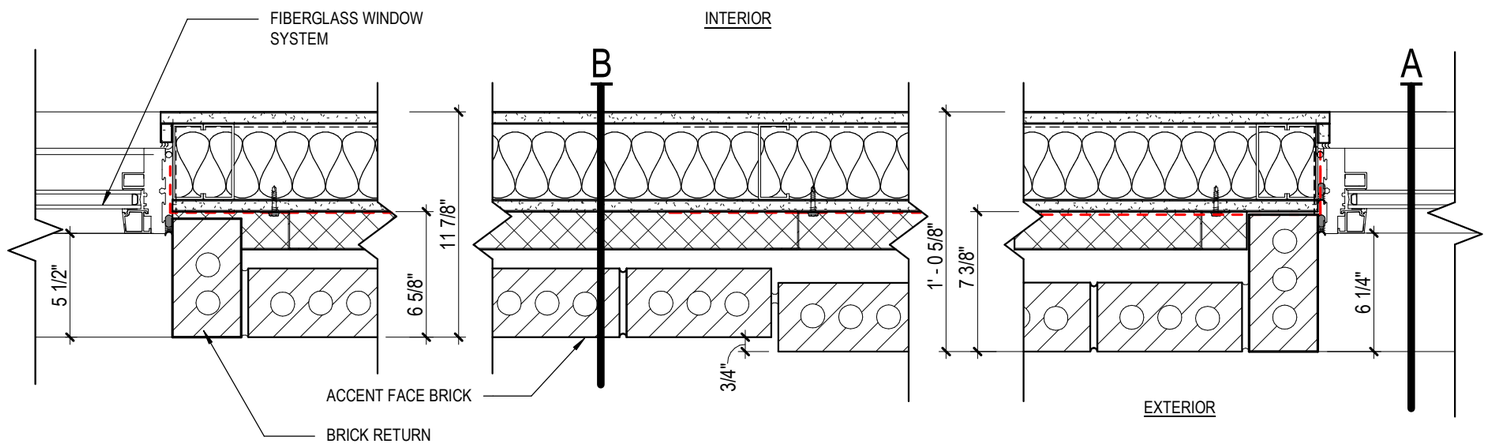
Brick / Window Assembly



SECTION A AT SILL
SCALE : 1 1/2" = 1'-0"



SECTION B AT FLOOR LINE
SCALE : 1 1/2" = 1'-0"



PLAN AT WINDOWS / BRICK OFFSET
SCALE : 1 1/2" = 1'-0"

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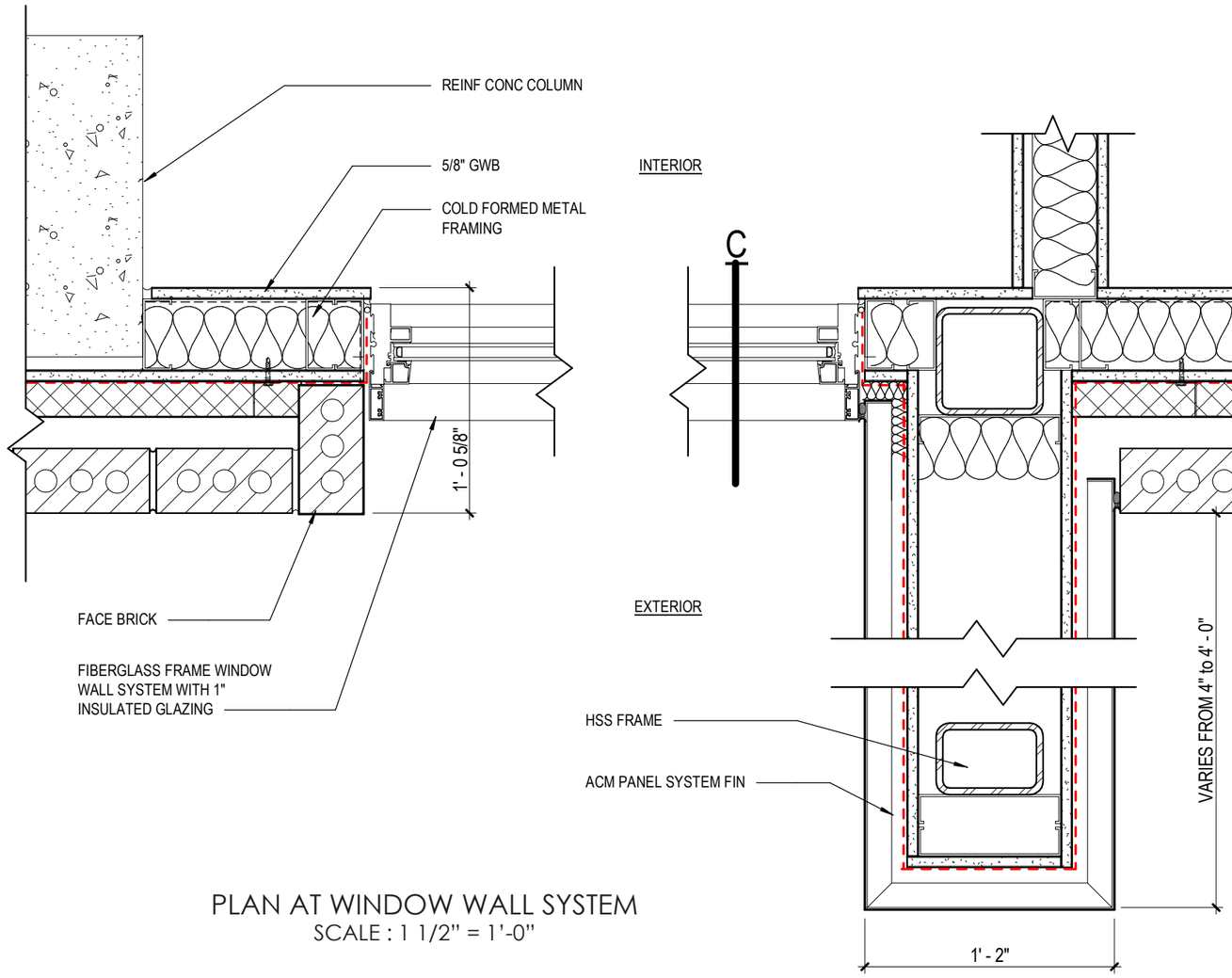
DEVELOPMENT EXPERTISE. MANAGEMENT SAVVY.

EXHIBIT C.5.4
LAND USE HEARING # (LU 17-264667 DZM)

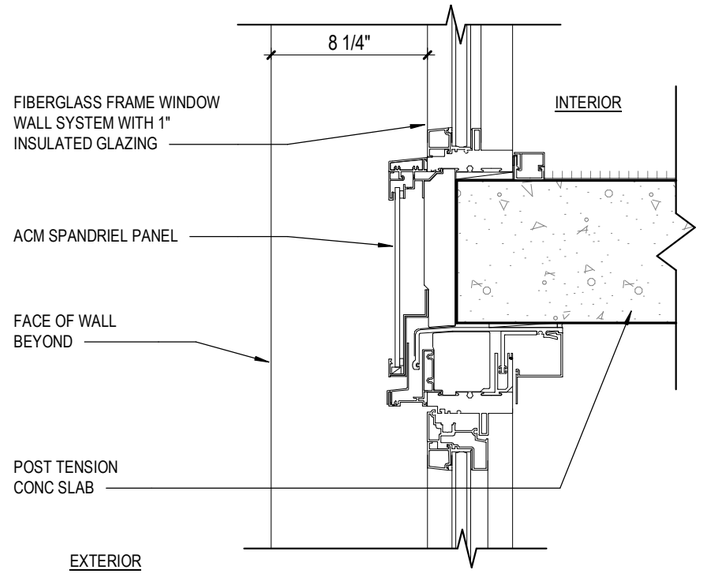
BUILDING DETAILS

Window Wall Assembly



PLAN AT WINDOW WALL SYSTEM

SCALE : 1 1/2" = 1'-0"

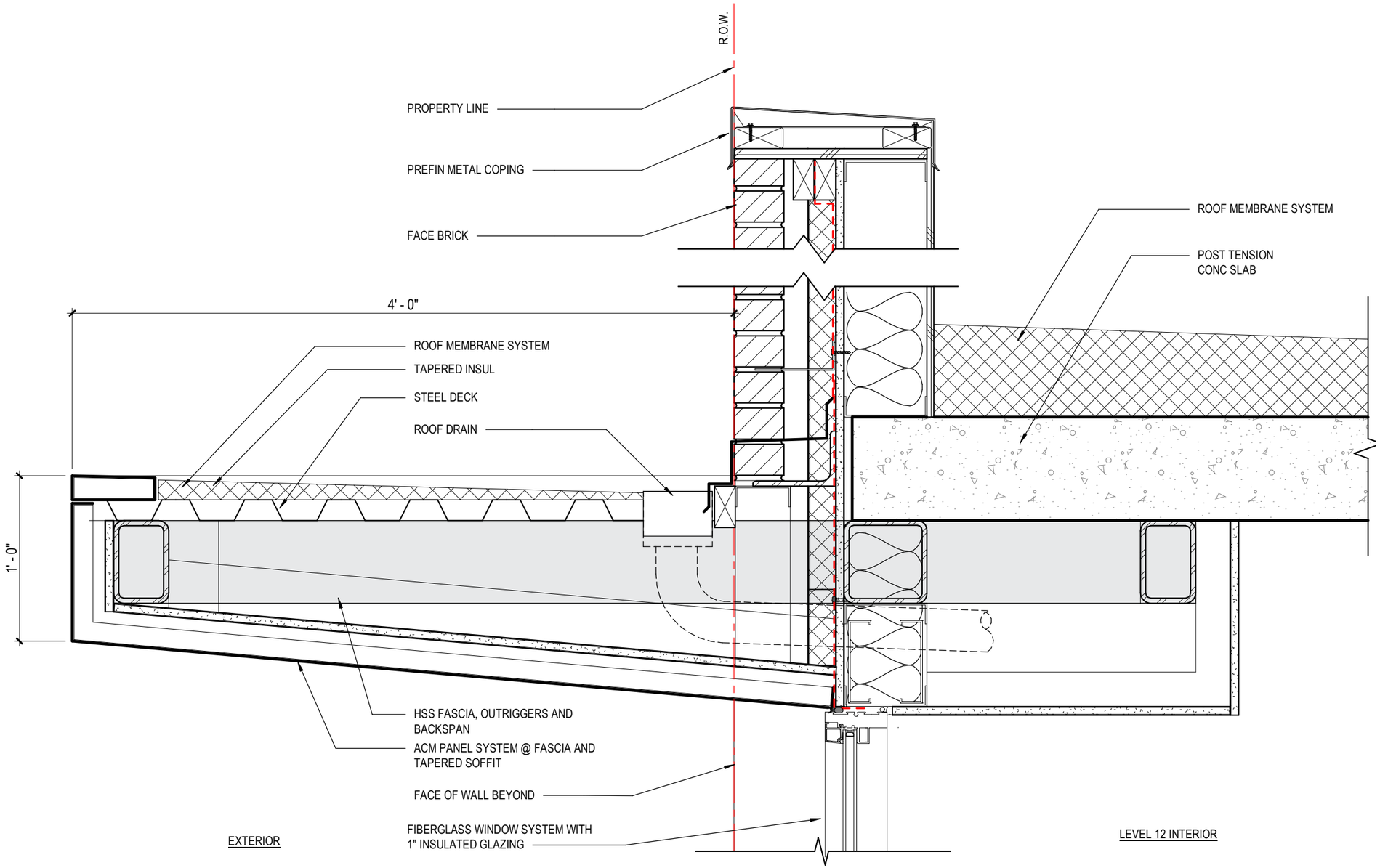


SECTION C AT FLOOR LINE

SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

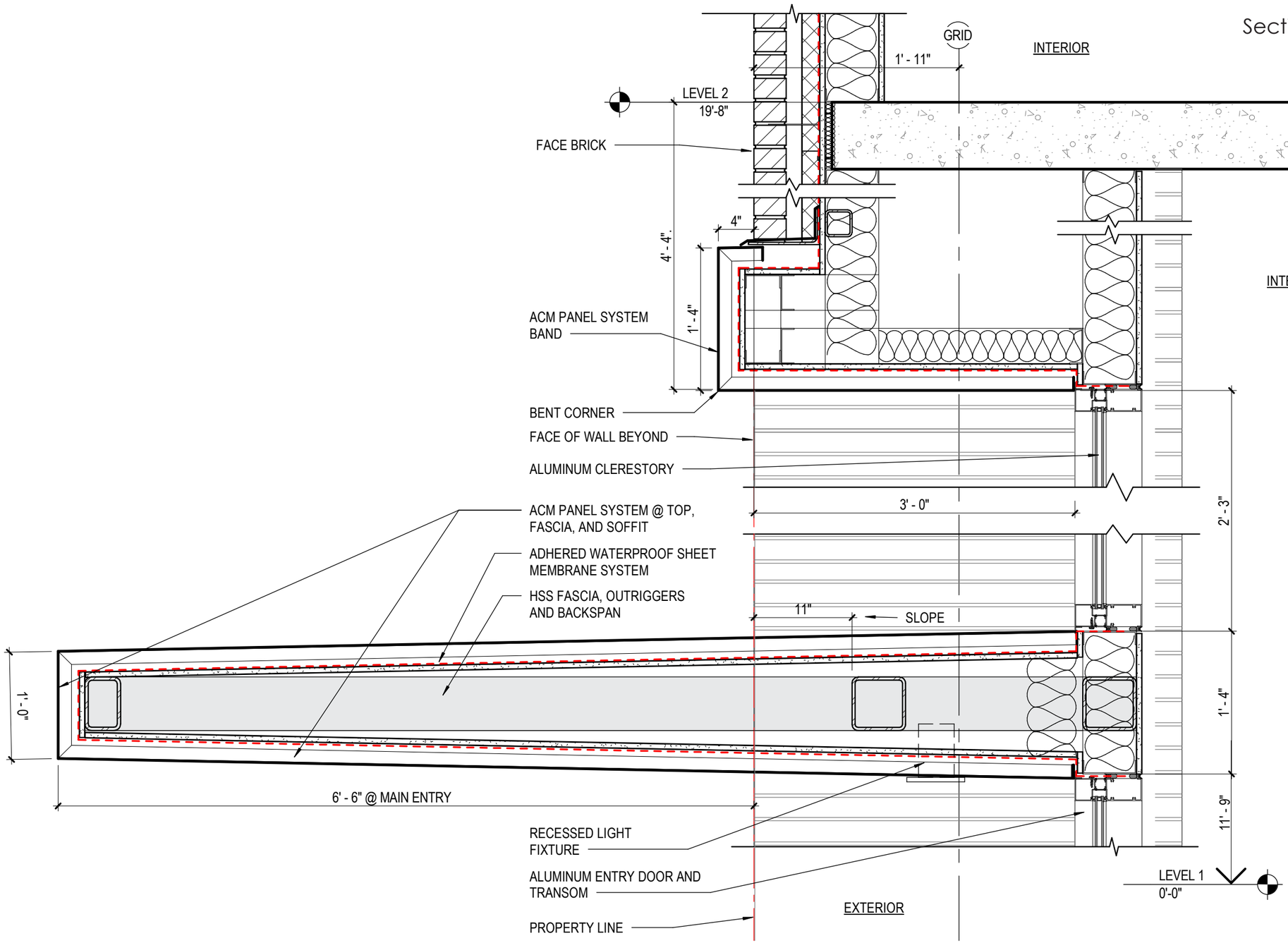
Section at Level 12 Canopy



SECTION AT LEVEL 12 CANOPY
SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

Section at Level 1 Main Entry Canopy

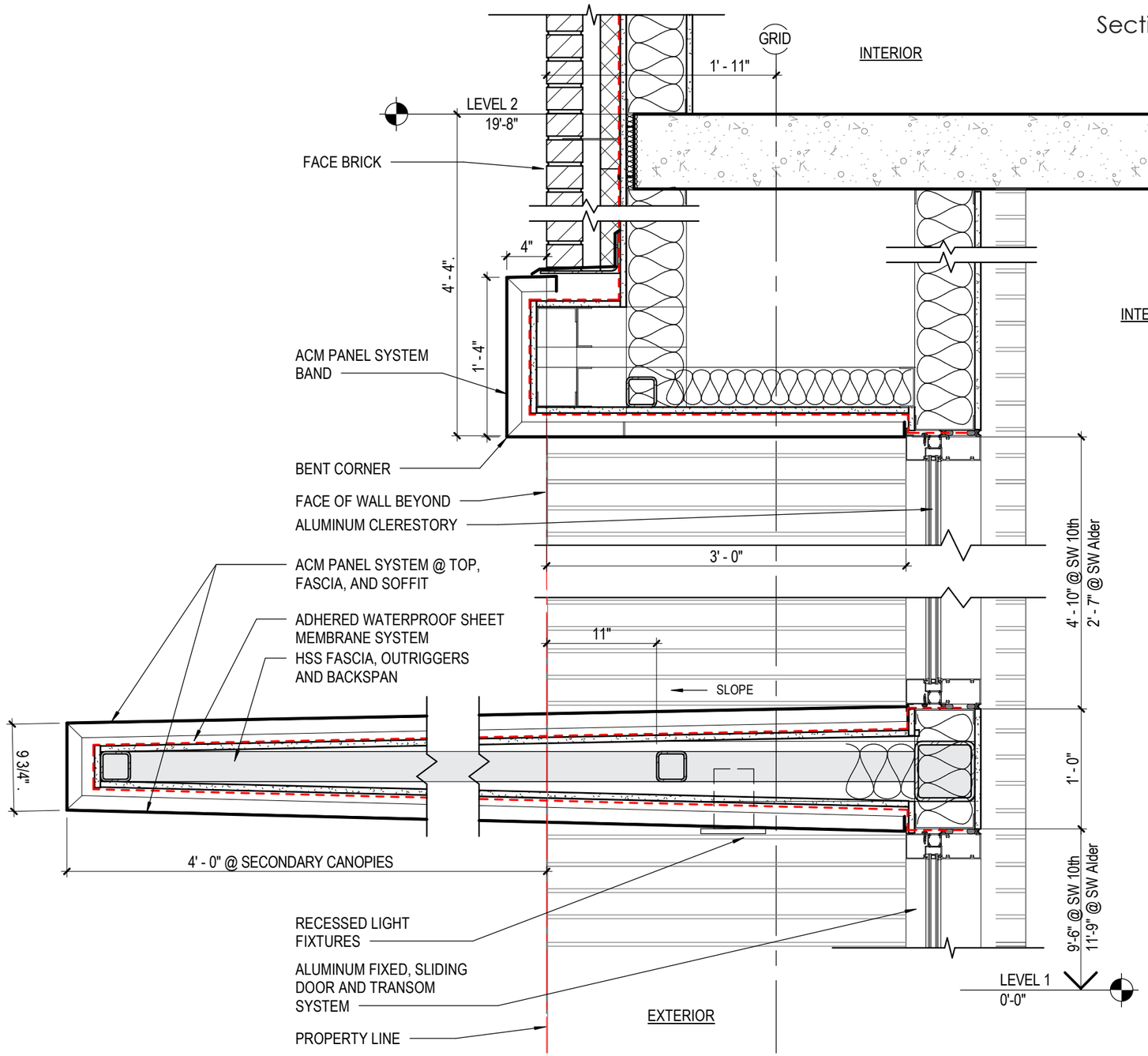


SECTION AT LEVEL 1 MAIN ENTRY CANOPY

SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

Section at Level 1 Seconary Canopies

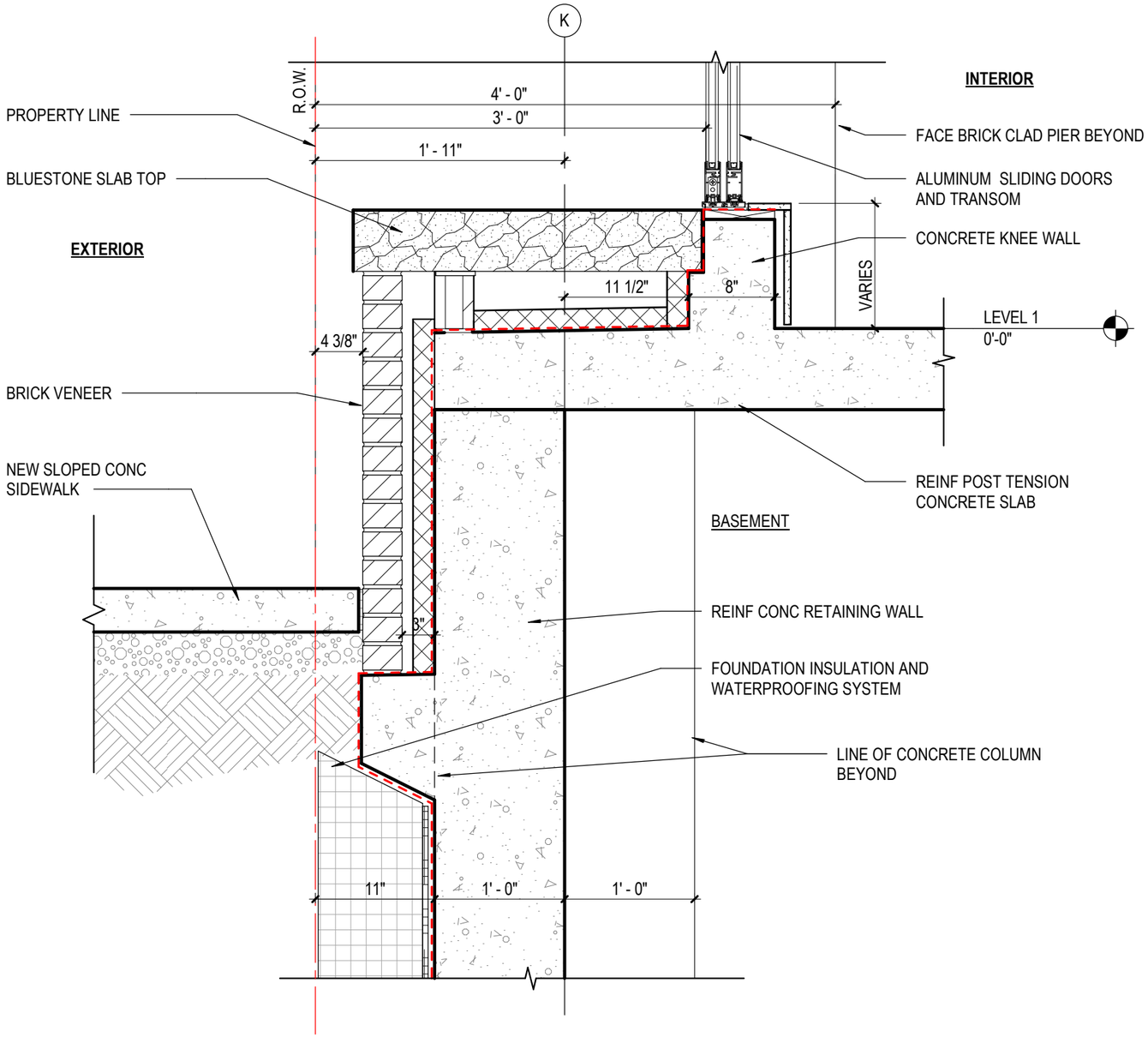


SECTION AT LEVEL 1 SECONARY CANOPIES

SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

Section at SW 10th Ave Level 1 Base

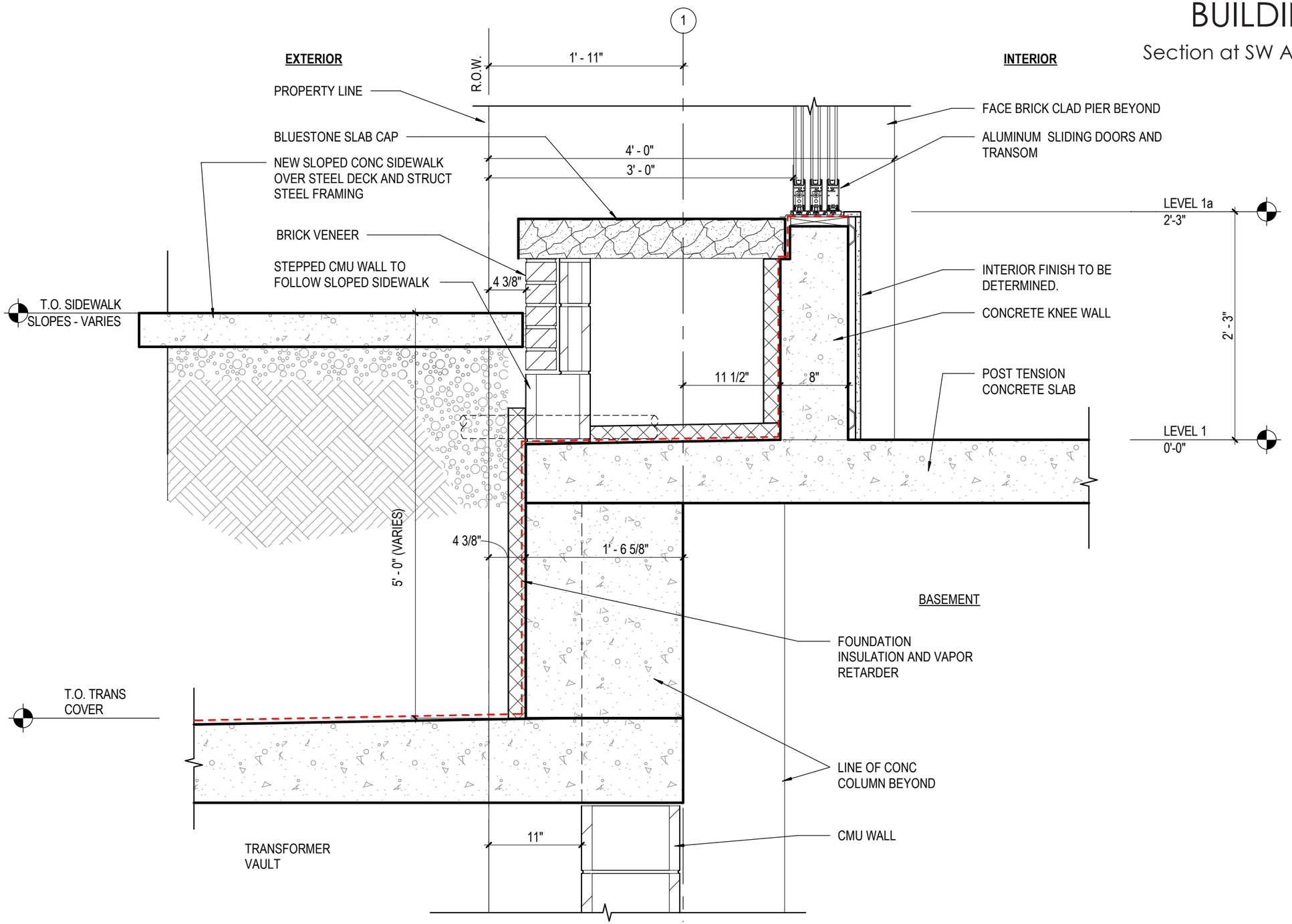


SECTION AT SW 10TH AVE LEVEL 1 BASE

SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

Section at SW Alder St Level 1 Base

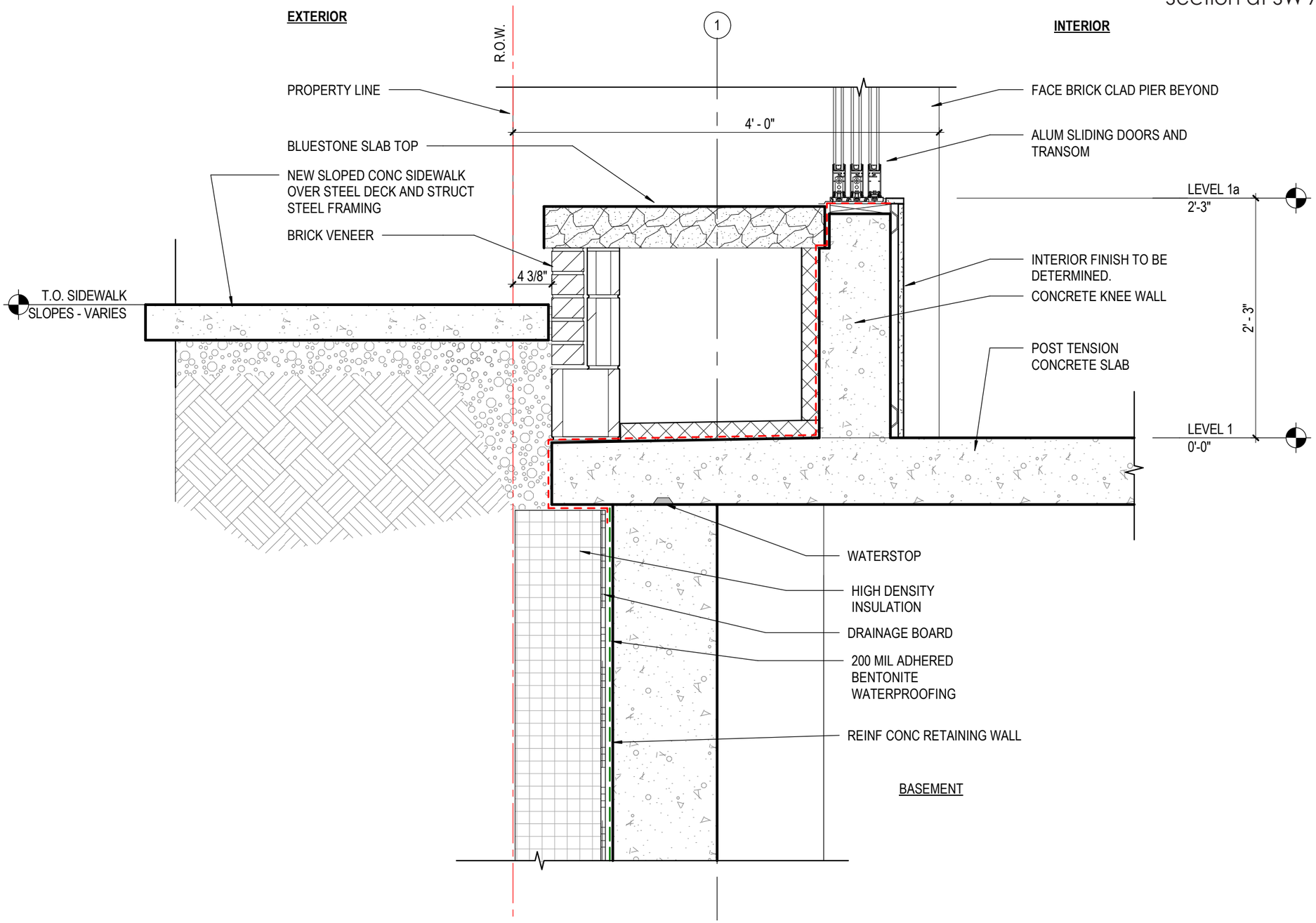


SECTION AT SW ALDER STREET LEVEL 1 BASE

SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

Section at SW Alder St Level 1 Base

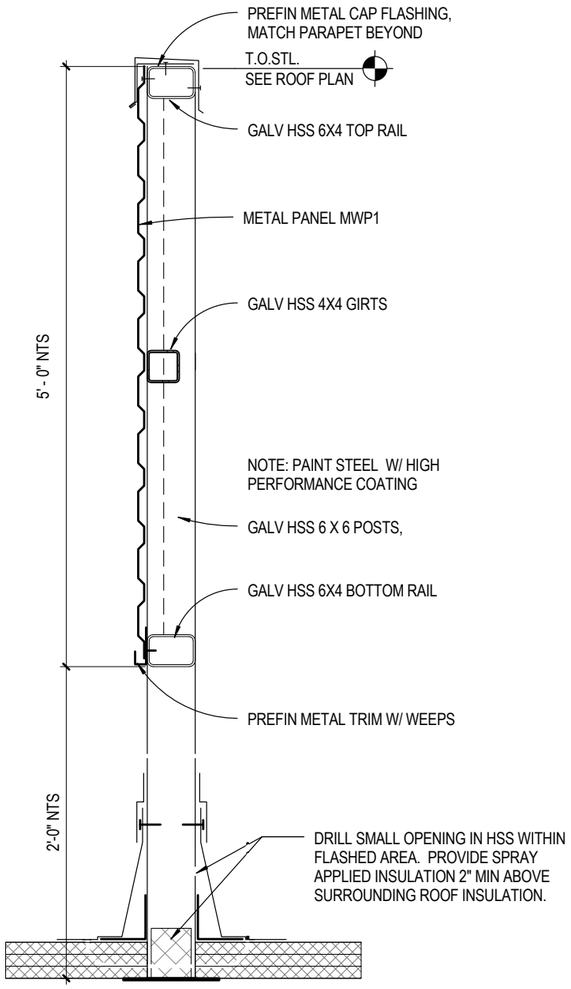


SECTION AT SW ALDER STREET LEVEL 1 BASE

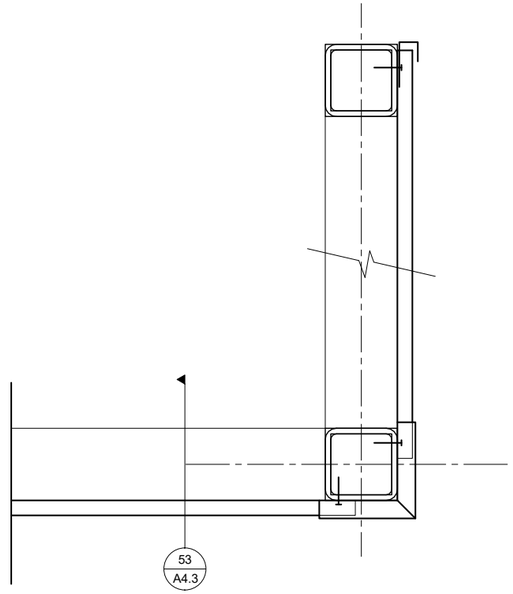
SCALE : 1 1/2" = 1'-0"

BUILDING DETAILS

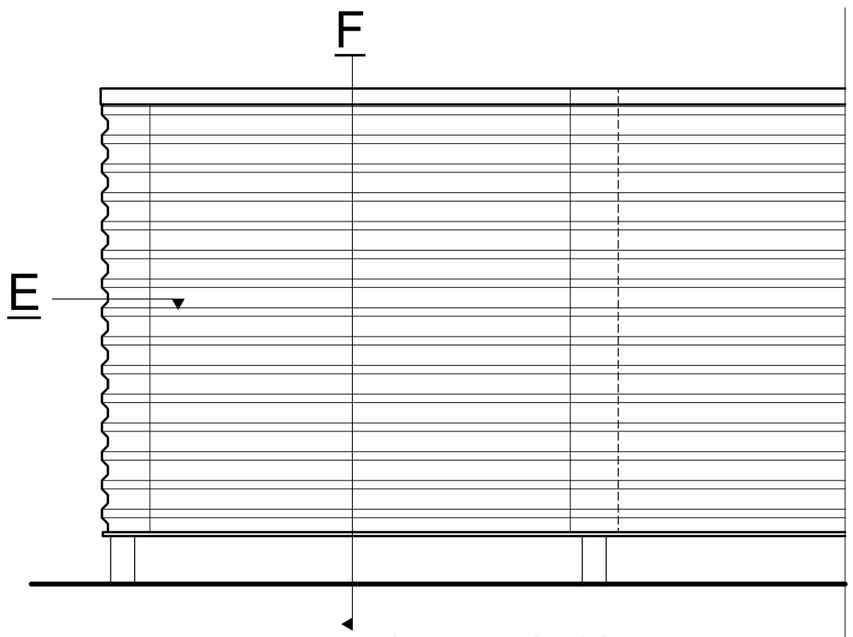
Mechanical Screen



SECTION F AT MECH SCREEN
SCALE : 1 1/2" = 1'-0"



PLAN E AT MECH SCREEN
SCALE : 1 1/2" = 1'-0"



ELEVATION AT MECH SCREEN
SCALE : 1 1/2" = 1'-0"

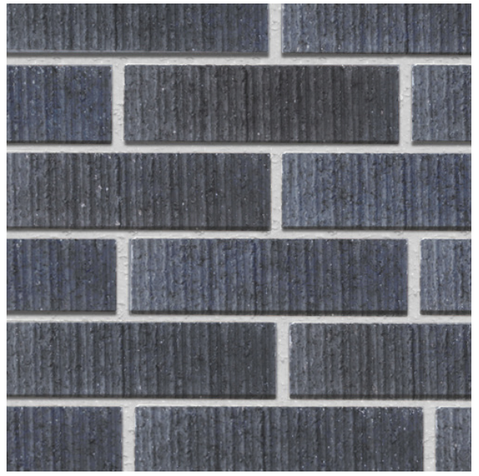
MATERIALS + COLORS

BRICK A: ACCENT
DARK IRON SPOT BRICK
SMOOTH

NOMINAL DIMENSION : 7-5/8" X 2-1/4"

BRICK B: FIELD
DARK IRON SPOT BRICK
VELOUR

NOMINAL DIMENSION : 7-5/8" X 2-1/4"

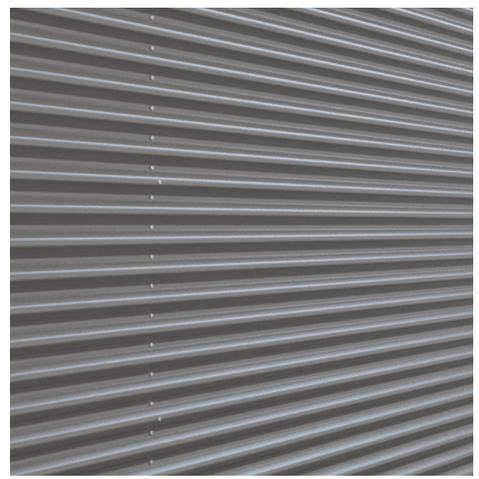


BRICK C: ACCENT
DARK IRON SPOT BRICK
RAKED

NOMINAL DIMENSION : 7-5/8" X 2-1/4"

ALUMINUM COMPOSITE
MATERIAL (ACM):
LIGHT METALLIC GREY

LOW-E GLAZING:
CLEAR



MECHANICAL EQUIP SCREEN:
METAL PANEL GUNMETAL

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EXHIBIT C.6.1
LAND USE HEARING # (LU 17-264667 DZM)

Surface wall - up/down lighting with single spike

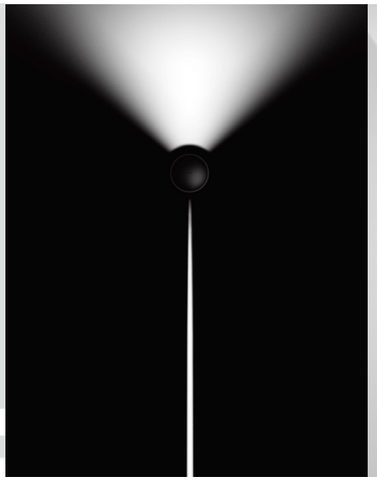
Designed for up and down lighting effects for interior and exterior locations featuring one collimated spike and one wide spread distribution.

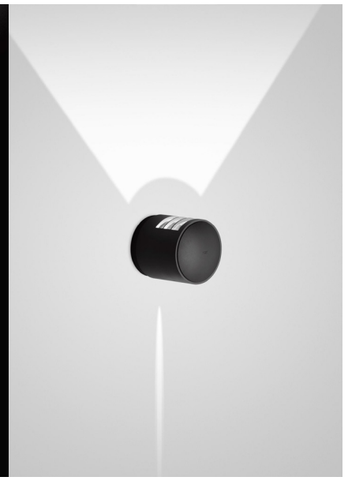
Wall mounted luminaires with fully shielded light source. Die-cast aluminum construction with clear borosilicate glass.

U.L. listed, suitable for wet locations.

Protection class: IP65

Finish: Standard BEGA colors.

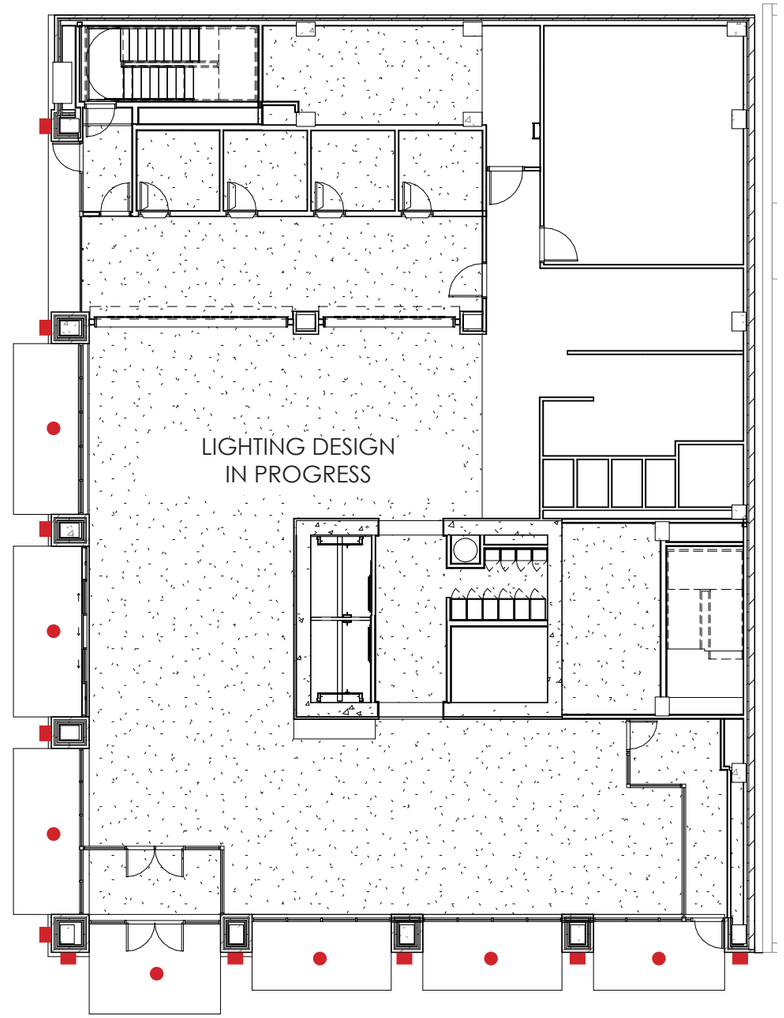




	Lamp	ß	T°C	A	B	C
33 222	(1) 39W T4 G8.5 MH			5 7/8	8 1/4	

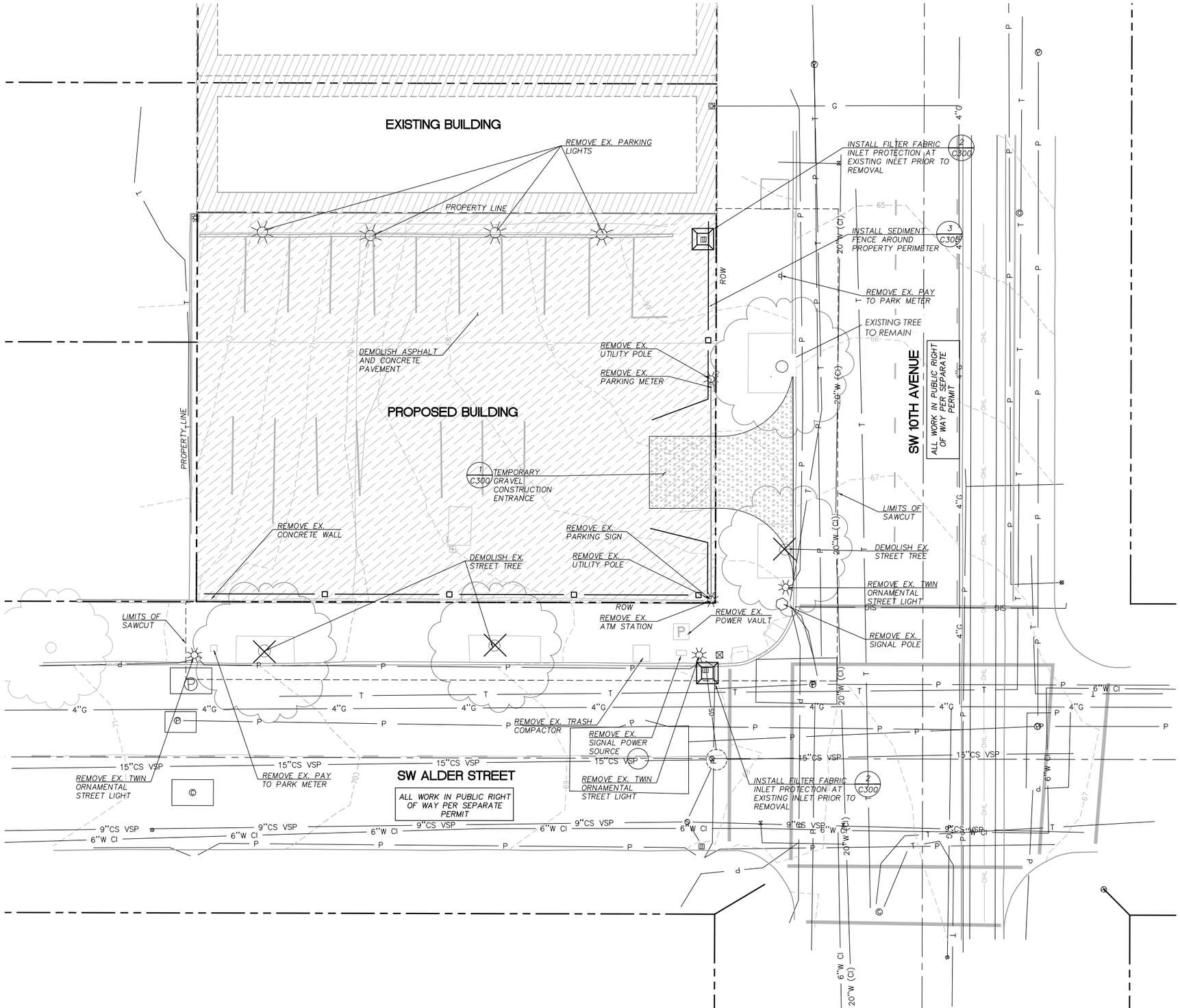
SOUTH ELEVATION
SCALE : 3/64" = 1'-0

EAST ELEVATION
SCALE : 3/64" = 1'-0



LEVEL 1 REFLECTED CEILING PLAN - CANOPY
SCALE : 1/16" = 1'-0"

CIVIL PLANS



DEMOLITION & EROSION CONTROL PLAN

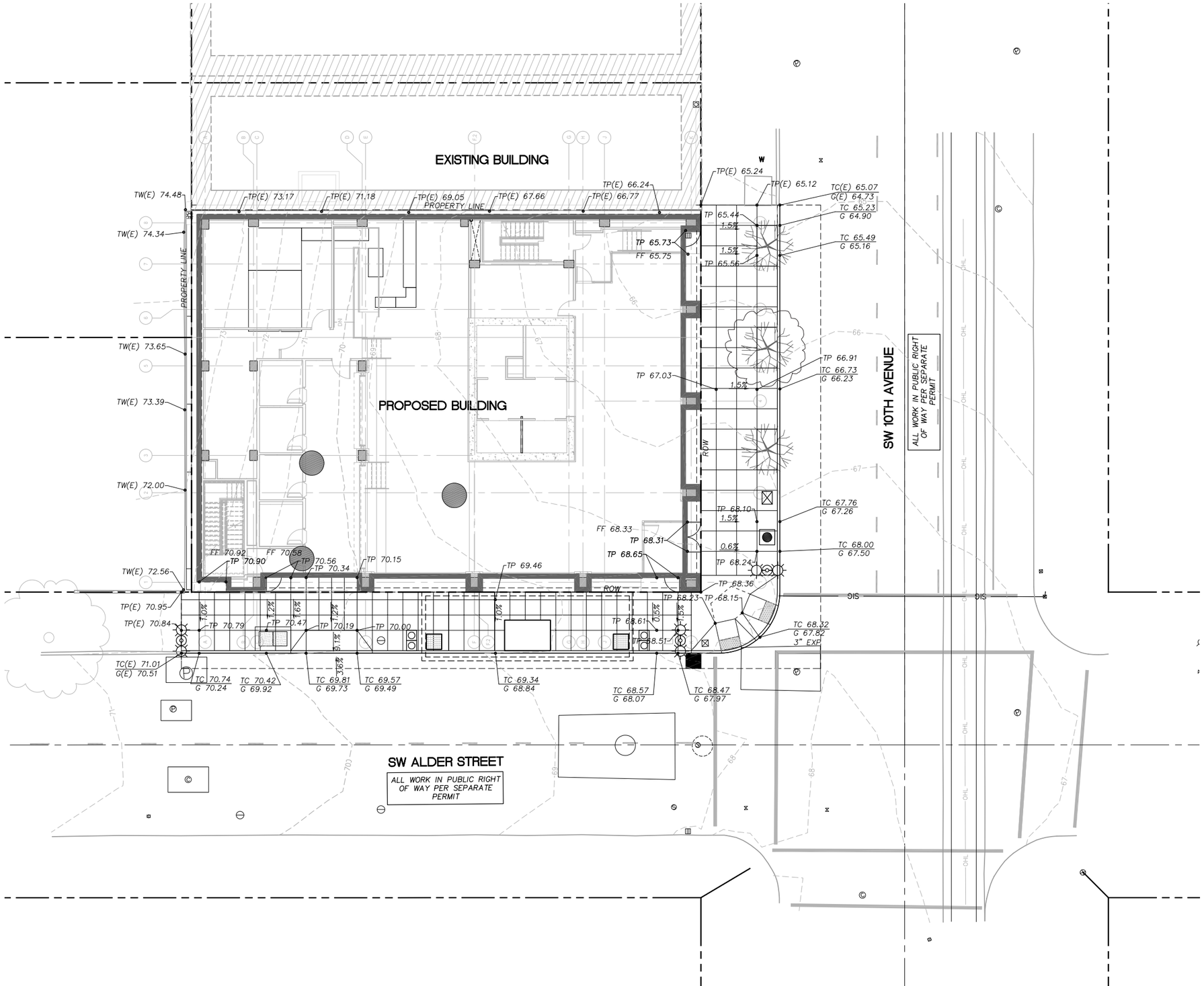
1 INCH = 10 FEET

EXHIBIT C.8.1
LAND USE HEARING # (LU 17-264667 DZM)

DLR Group

GRAVES HOSPITALITY
DEVELOPMENT EXPERTISE. MANAGEMENT SAVY.

CIVIL PLANS



GRADING PLAN
1 INCH = 10 FEET

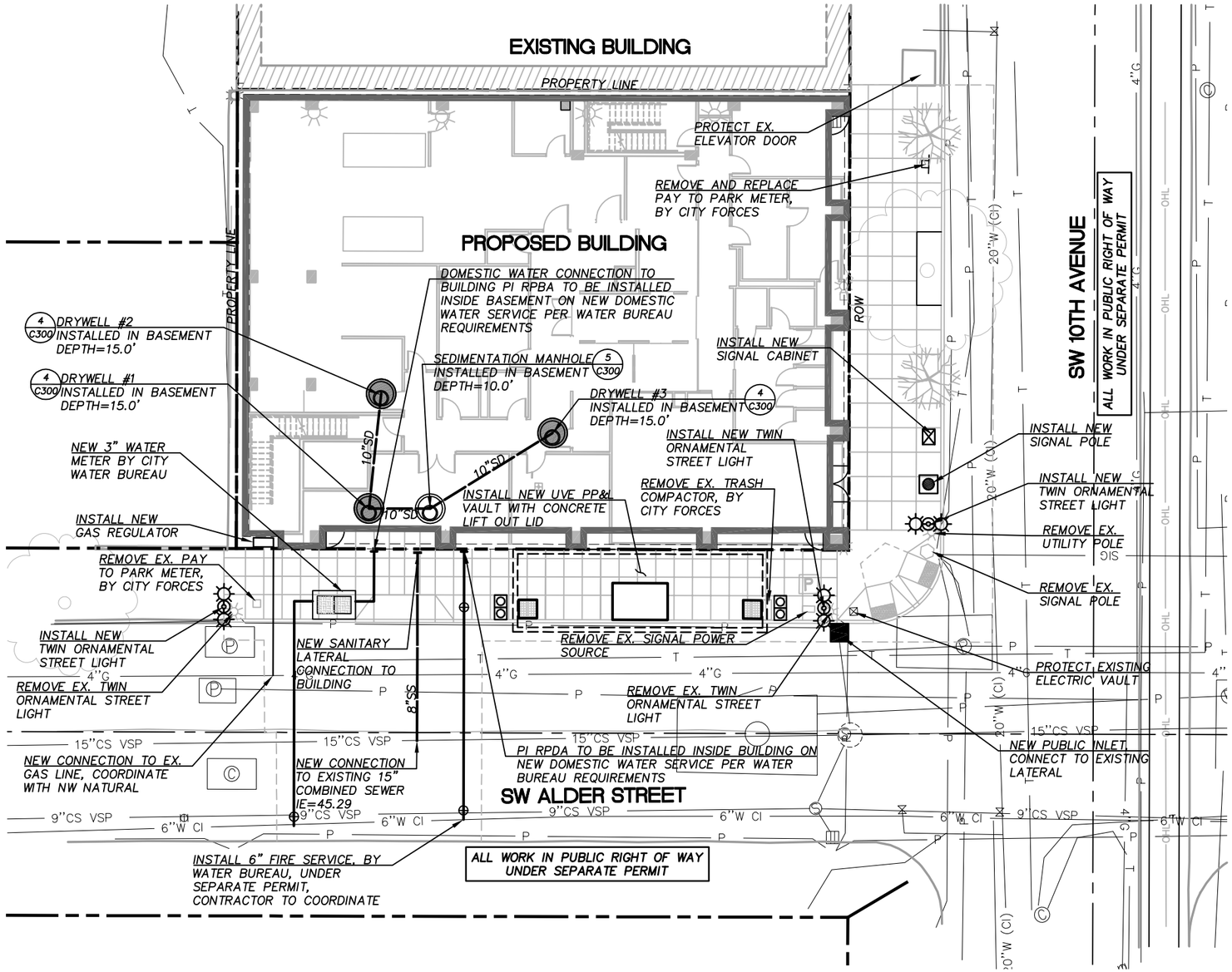
DLR Group

GRAVES HOSPITALITY
DEVELOPMENT EXPERTISE. MANAGEMENT SAVY.

EXHIBIT C.8.2
LAND USE HEARING # (LU 17-264667 DZM)

CIVIL PLANS

Utility



STORMWATER NARRATIVE

PRIVATE SITE:

WATER QUALITY & WATER QUANTITY

WATER QUANTITY AND QUALITY CONTROL REQUIREMENTS ARE MET WITH ONE DRYWELL AND ONE SEDIMENTATION MANHOLE. THE DRYWELL IS SIZED TO TREAT ALL NEWLY CONSTRUCTED IMPERVIOUS AREA.

DISPOSAL

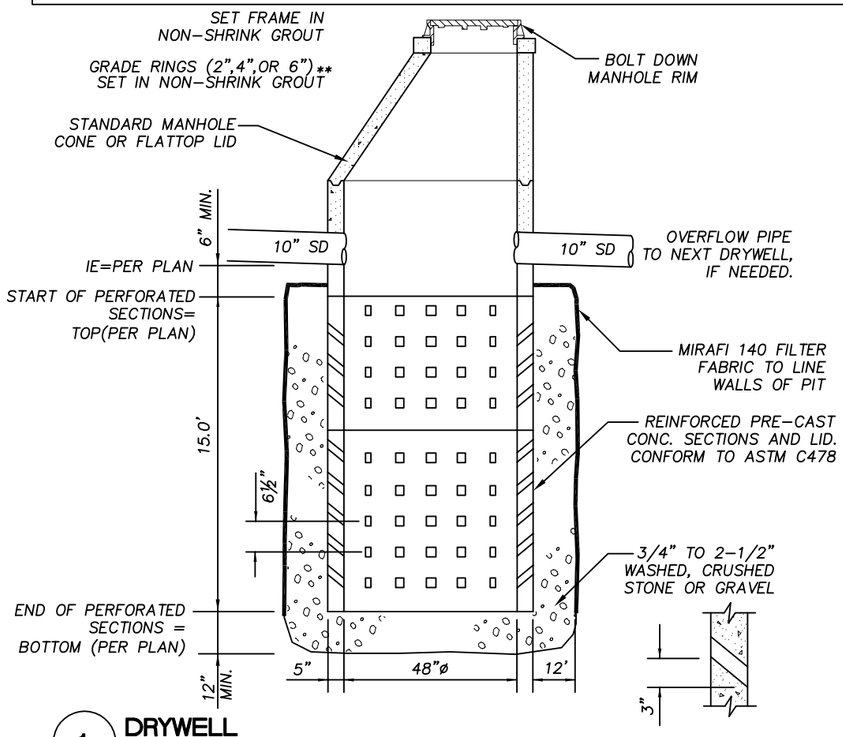
ALL RUNOFF FROM THE SITE WILL BE INFILTRATED ON SITE THROUGH THE USE OF DRYWELLS. THE PROJECT WILL FALL UNDER CATEGORY 2 OF THE STORMWATER DISPOSAL HIERARCHY.

PUBLIC STREET IMPROVEMENTS:

STORMWATER MANAGEMENT IS NOT REQUIRED FOR THE IMPROVEMENTS TO THE PUBLIC SIDEWALKS IN THE PUBLIC RIGHT OF WAY. THE EXISTING STORMWATER DRAINAGE FOR THE RIGHT OF WAY WILL BE PROTECTED DURING CONSTRUCTION.

PRIVATE UTILITY CONTACT LIST

PP&L:	*NW NATURAL:*	*PORTLAND WATER BUREAU:*
JOHN MOUDY	JODI WRIGHT	MARI MOORE
(503) 280-2722	(503) 367-4984	(503) 823-7364
john.moudy@pacificorp.com	jodi.wright@nwnatural.com	mari.more@portlandoregon.gov
CENTURY LINK:	*PORTLAND BES:*	
SCOTT MILLER	BEN KERSENS	
(503) 242-4144	(503) 823-5523	
scott.miller4@centurylink.com	ben.kersens@portlandoregon.gov	



1 **DRYWELL**

NTS

GRAPHIC SCALE

20 40

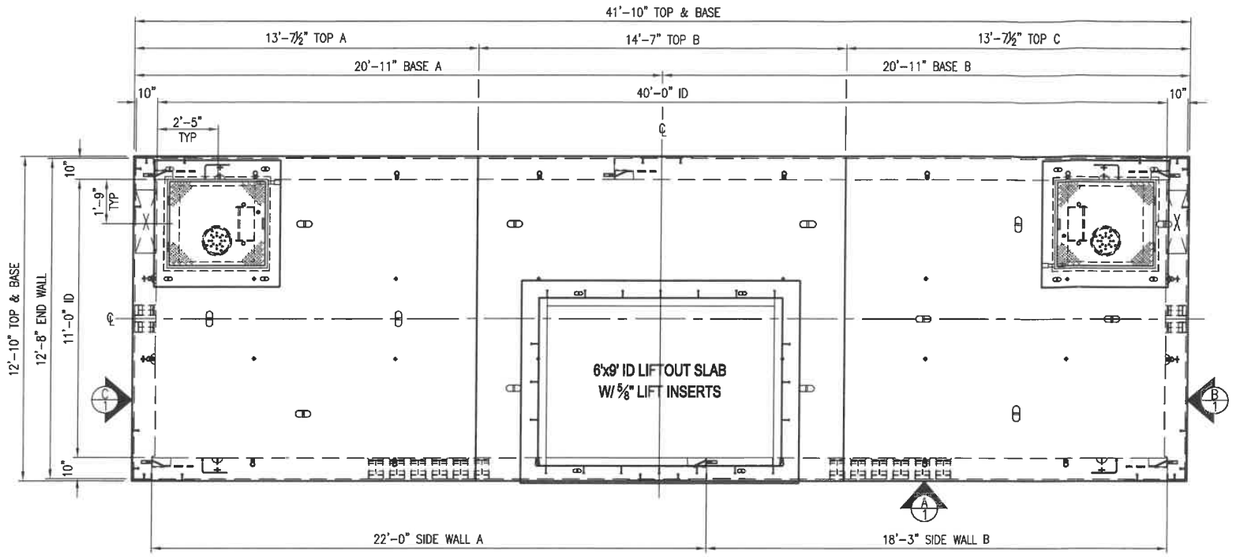
1 inch = 20ft.

Humber Design Group, Inc.

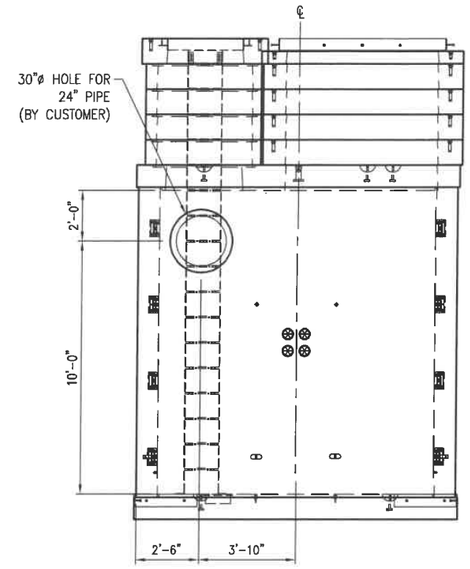
Portland, OR • 503.946.6690 • hdgpdx.com

CIVIL PLANS

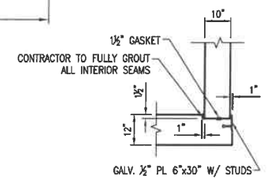
Transmitter



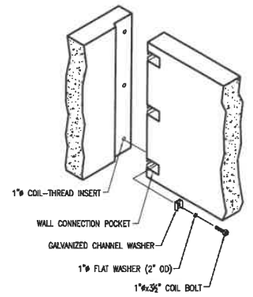
PLAN VIEW
SCALE: 3/16" = 1'-0"



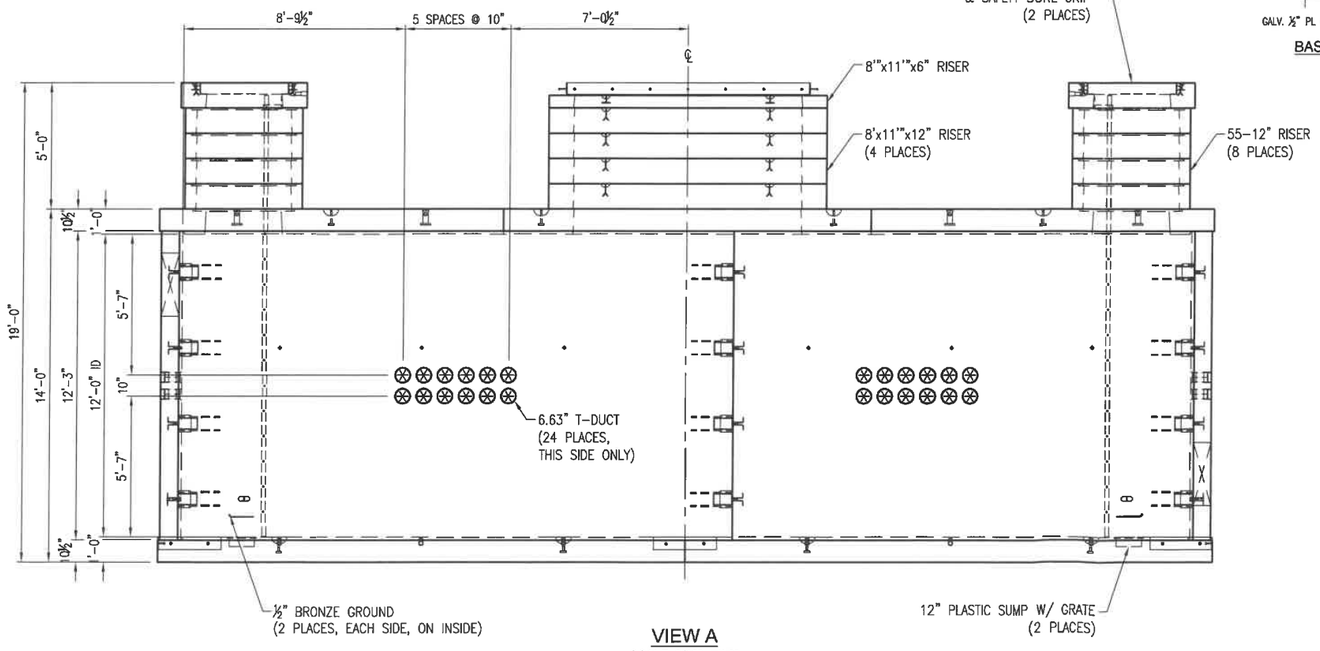
VIEW C
SCALE: 3/16" = 1'-0"



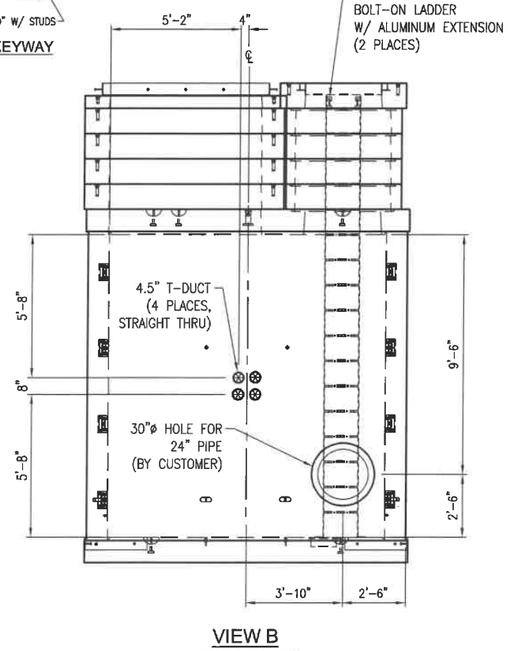
BASE KEYWAY



WALL CONNECTION DETAIL
BOLT CONNECTIONS ARE USED TO COMPRESS CONSEAL GASKET AND HOLD WALLS DURING ASSEMBLY; BOLT CONNECTIONS ARE NOT STRUCTURAL



VIEW A
SCALE: 3/16" = 1'-0"



VIEW B
SCALE: 3/16" = 1'-0"

STRUCTURAL NOTES

1.	CONCRETE:	28 DAY COMPRESSIVE STRENGTH f'c = 6,000 PS STRIPPING STRENGTH f'c = 2,500 PSI
2.	REBAR:	ASTM A-615 GRADE 60
3.	MESH:	ASTM A-1064 GRADE 65
4.	DESIGN:	-ACI-318 BUILDING CODE -AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES
5.	LOADS:	-HS-20 TRUCK WHEEL LOAD W/ IMPACT -ASTM C-857 "MIN. STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES" -ASTM C-890 "MIN. STRUCTURAL DESIGN LOADING FOR MONOLITHIC OR SECTIONAL PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES" -40 PCF LATERAL SOIL PRESSURE ABOVE WATERTABLE -80 PCF LATERAL SOIL PRESSURE BELOW WATERTABLE

CONTRACTOR TO PROVIDE:

1. A CRANE CAPABLE OF LIFTING WEIGHTS SHOWN
2. FOUR LABORERS TO ASSIST ASSEMBLY OF VAULT & GROUT ALL INTERIOR SEAMS AFTER ASSEMBLY W/ NON-SHRINK GROUT BEFORE BACKFILLING AROUND VAULT
3. CORE DRILL HOLES & SUPPLY VENTING

OLDCASTLE PRECAST TO PROVIDE:

1. LIFTING CLUTCHES: 2 TON; 4 TON; 8 TON
2. TILT-UP BRACES: 7'-9" TO 12'-6" (LARGE)
3. BUTYL RESIN GASKET
4. CONNECTION HARDWARE
5. ON-SITE ASSEMBLY TECHNICIAN

PRODUCT WEIGHTS

PRODUCT	QTY	WEIGHT
LIFTOUT SLAB	1	4,840 LB
6" RISER	1	2,550 LB
12" RISER	4	5,100 LB
SLAB W/ DOOR	2	2,280 LB
55-12" RISER	8	960 LB
TOP A	1	24,180 LB
TOP B	1	19,440 LB
TOP C	1	24,180 LB
SIDE WALL A	2	33,670 LB
SIDE WALL B	2	27,930 LB
END WALL	2	18,970 LB
BASE A	1	39,260 LB
BASE B	1	39,260 LB
TOTAL	27	347,490 LB

Oldcastle Precast®
PO Box 323 Wilsonville, OR 97070
PHONE: 503 682-2844 FAX: 503 682-2857

11'x40'x12' PANEL VAULT
SUBMITTAL
619 SW 11TH
PORTLAND, OR

CUSTOMER
PACIFICORP

DATE	SALES	DRAWN	ENGINEER	CHECKED	SALES ORDER	LN
3/7/17	TC	BH				

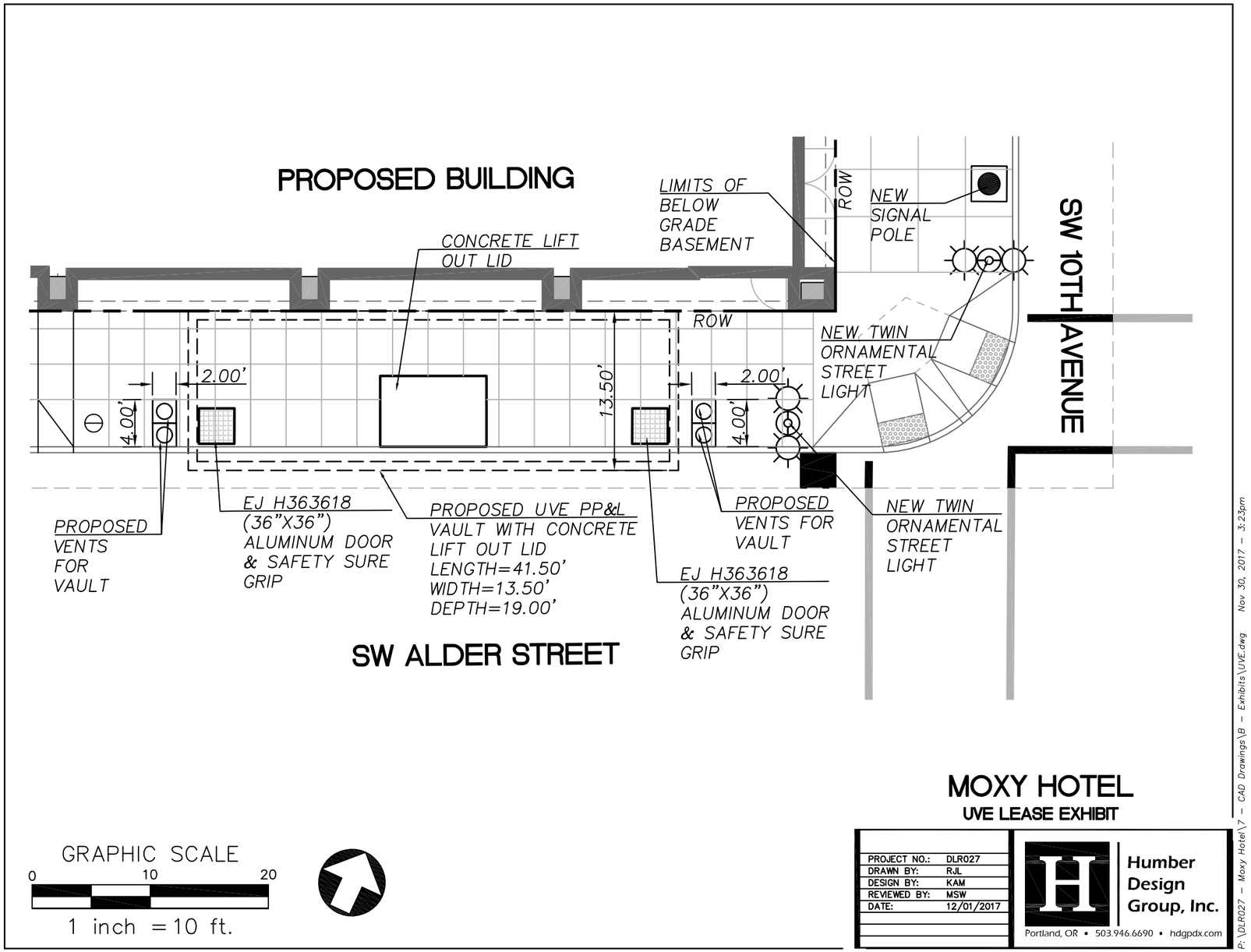
DRAWING NUMBER	REVISION	SHEET
11x40x12-PNL-PCORP-11TH-5FT RISERS	REV DATE	1 OF 1

DRAWINGS NOT TO SCALE

DLR Group

GRAVES HOSPITALITY
DEVELOPMENT EXPERTISE. MANAGEMENT SAVVY.

EXHIBIT C.8.4
LAND USE HEARING # (LU 17-264667 DZM)


PROPOSED BUILDING
LIMITS OF BELOW GRADE BASEMENT
ROW
NEW SIGNAL POLE
SW 10TH AVENUE
CONCRETE LIFT OUT LID
ROW
NEW TWIN ORNAMENTAL STREET LIGHT
2.00'
4.00'
13.50'
2.00'
4.00'
PROPOSED VENTS FOR VAULT
EJ H363618 (36"X36") ALUMINUM DOOR & SAFETY SURE GRIP
PROPOSED UVE PP&L VAULT WITH CONCRETE LIFT OUT LID LENGTH=41.50' WIDTH=13.50' DEPTH=19.00'
PROPOSED VENTS FOR VAULT
EJ H363618 (36"X36") ALUMINUM DOOR & SAFETY SURE GRIP
NEW TWIN ORNAMENTAL STREET LIGHT
SW ALDER STREET
GRAPHIC SCALE
0 10 20
1 inch = 10 ft.
MOXY HOTEL
UVE LEASE EXHIBIT
PROJECT NO.: DLR027
DRAWN BY: RJL
DESIGN BY: KAM
REVIEWED BY: MSW
DATE: 12/01/2017
Humber Design Group, Inc.
Portland, OR • 503.946.6690 • hdgpdx.com
P:\DLR027 - Moxy Hotel\7 - CAD Drawings\B - Exhibits\UVE.dwg Nov 30, 2017 - 3:23pm

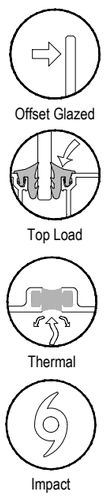
TC-470 SERIES

TC-470 SERIES THERMAL/IMPACT
2 1/4" X 4 1/2" WINDOW WALL SYSTEM


Penthouse at The Plaza Luxury Condominiums, Fort Lee, NJ

MULTIPLE CONFIGURATIONS AVAILABLE

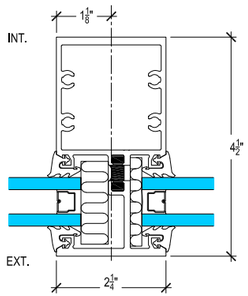
VISIT OUR WEBSITE AT: WWW.ARCADIAINC.COM FOR THE FOLLOWING:
Product Specifications (PDF) • Elevations & Plan Details (PDF & DWG) • Product Warranty Information (PDF) Maintenance & Cleaning Guidelines (PDF) • Product Installation Manuals (PDF)



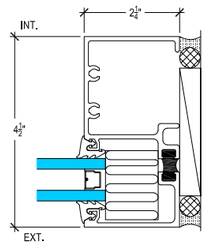
TC-470 SERIES
FEATURES AND OPTIONS

- Can be made to meet impact rated hurricane codes - optional
- Tested performances for hurricane impact resistant - ASTM 1886/1996
- Low air & water infiltration performance
- 2 ¼" x 4 ½" depth frame - versatile window wall system
- 4 ½" square 2-pc snap in tube available for mulling sections together in line and at 90 degree angles
- Set up for interior glazing - can accommodate 1", 1 1⁄16" or 1 ⅛" insulated glass
- Unlimited configuration options to accommodate any combination of fixed & operable windows
- Male-Female Jamb members to accommodate sections of window wall being mulled together
- Extruded - custom designed sub sills available to accommodate this system
- Ideal for slab to slab installations - high structural & water performance
- Installation videos available on YouTube search under "Arcadia Door"
- Stock finishes - dark bronze or satin clear anodized - class 1 - standard
- Duranar or Valspar finish or other anodized finish - optional

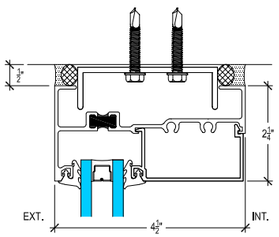
Can be made to meet impact rated hurricane codes - optional



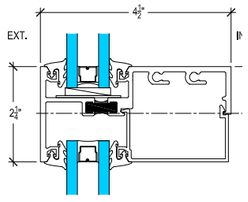
VERTICAL



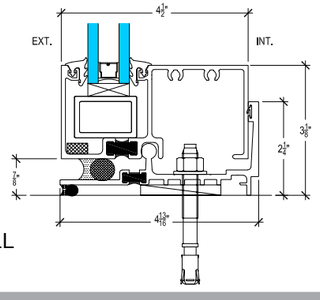
JAMB



HEAD



HORIZONTAL



SILL

FEATURES

CUT SHEETS

ARCADIA ALUMINUM SWING DOOR
@ LEVEL 1
PAGE 1 + 2 of 2

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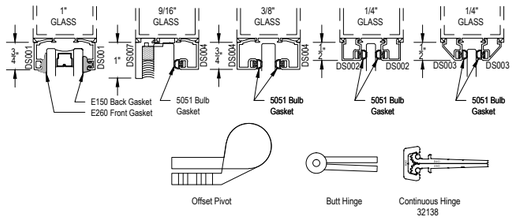
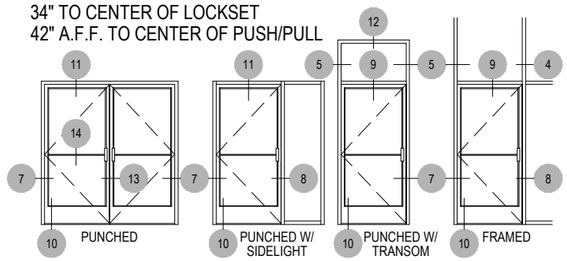
Thermal Strut | Top Load | Thermal System

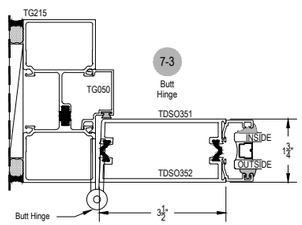
MS362T Series

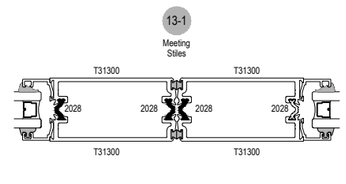
Description: Medium Stile - Offset Door
Function: Entrance
Detail: Typical Details
Scale: 3" = 1'-0"

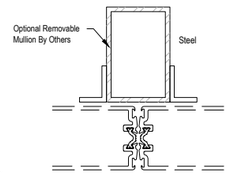
SHEET 1 OF 2

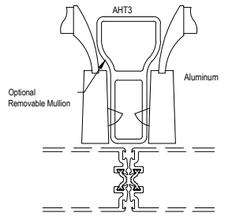


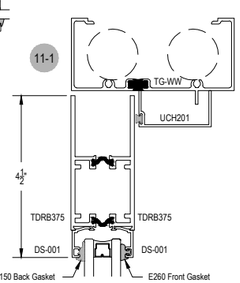


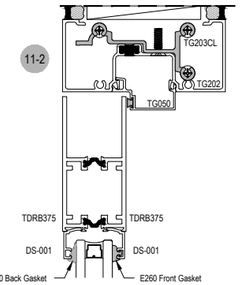


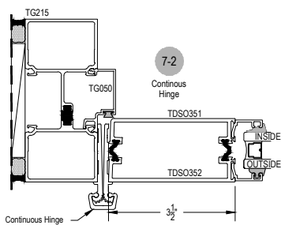


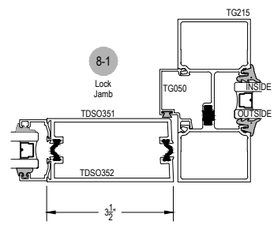


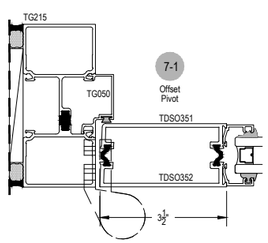


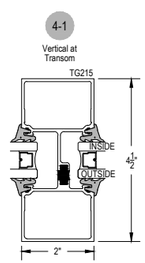


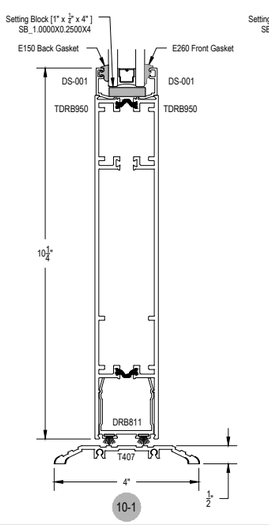


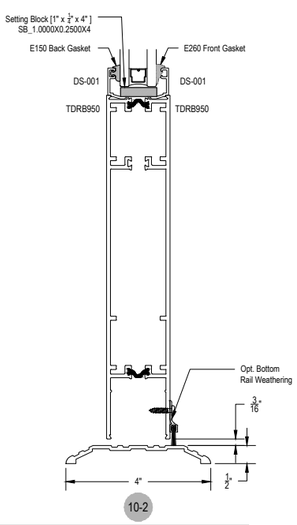












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Product Standards and Guide Specifications

1995 CSI SECTION 08120 Aluminum Doors And Frames
2004 CSI SECTION 08 11 16 Aluminum Doors And Frames

Part 1 – General

1.01 Summary
- A. Section includes:
  1. Thermally Broken Aluminum Doors and Frames
- B. Related Sections:

1.02 References
- A. American Architectural Manufacturers Association (AAMA)
- B. American Society for Testing and Materials (ASTM)
- C. Aluminum Association (AA)
- D. National Fenestration Rating Council (NFRC)

1.03 System Description
- A. General: In addition to requirements shown or specified, comply with:
  1. Applicable provisions of AAMA Aluminum Storefront and Entrance Manual for design, materials, fabrication and installation of component parts.
- B. Design Requirements: Arcadia MS362T Series Medium Stile Thermal Entrance is a single source package of door, door frame and hardware that is engineered for moderate to high traffic.
- C. Performance Requirements: Each assembly tested by a recognized testing laboratory or agency in accordance with specified test methods.
  1. Tested by the dual moment corner joint strength test.
  2. Thermal Transmittance (U-factor) shall not be more than (___) BTU/hr/ft^2/ºF per NFRC 100.
  3. Condensation Resistance (CR) shall not be less than (___) when gazed with (___) center of glass U-Factor per NFRC 500.
  4. Solar heat gain coefficient of no greater (___) as determined according to NFRC 200.
  5. Sound Transmission Class (STC) and Outdoor-Indoor Transmission Class (OITC) in accordance with ASTM E 90.

1.04 Quality Assurance
- A. Single Source Responsibility:
  1. Obtain entrances, storefronts, ribbon walls, window walls, curtain walls, window systems, and finish through one source from a single manufacturer.
- B. Provide test reports from AAMA accredited laboratories certifying the performances as specified in 1.03.

1.05 Warranty
- A. Door warranted against failure and/or deterioration of metals due to manufacturing process for a period of two (2) years.

Part 2 – Products

2.01 Manufacturers
- A. Acceptable Manufacturers:
  1. Arcadia, Inc., 2301 E Vernon, Vernon, CA. Telephone 323/269-7300, Fax 323/269-7390.
- B. Acceptable Products:
  1. Arcadia, Inc., MS362T Series, Medium Stile Thermal Door 1-3/4".
     a. Vertical Stiles: 3-1/2 inches.
     b. Top Rail: 3-5/8 inches.
     c. Bottom Rail: 10 inches.
     d. Glazing Stops: (Square or Beveled) snap-in type for _____ (1/4 or 1 inch) infill.
  2. Major portions of the door stiles a nominal .125 inches and glass stops .050 inches thick.

2.02 Materials and Accessories
- A. Door members: Extruded 6063-T6 aluminum alloy (ASTM B221-Alloy G.S. 10a T6).
- B. Thermal barrier consists of two glass reinforced polyamide nylon struts.
- C. Screws, fastening devices, and internal components: Aluminum, stainless steel, or zinc plated steel in accordance with ASTM A-164. Shall be aluminum or steel, providing the steel is properly isolated from aluminum.
- D. Glazing Gasket (compression-type design).
- E. Hard-backed poly-pile weatherstripping in door and /or frame. Meeting stile of all pair of doors have a double line hard- backed poly-pile astragal.
- F. Thermally broken extruded aluminum threshold with ribbed surface.

2.03 Hardware
- A. Hardware for aluminum doors and door frames shall be the entrance manufacturer's standard.
- B. If custom hardware is to be furnished by others, physical hardware must be submitted prior to any fabrication.

2.04 Finish
- A. Finish all exposed areas of aluminum and components as indicated.
  1. An Architectural Class II or I color anodic coating conforming with AA-M12C22A34/AA-M12C22A44.
     a. Anodized finish color shall be Colornodic _____. (AB1 Light Champagne, AB2 Champagne, AB3 Light Bronze, AB4 Medium Bronze, AB5 Standard Medium Bronze, AB6 Dark Bronze, AB7 Standard Dark Bronze, AB8 Black.)

  (or) 1. An Architectural Class II or I anodic coating conforming with AA-M12C22A31/AA-M12C22A41.
     a. Anodize finish color shall be Colornodic _____ (#11 Clear)

  (or) 1. Fluorocarbon Coating: AAMA 2605.2.
     a. Resin: 70% PVDF Kynar 500/Hylar 5000.
     b. Substrate: cleaned and pretreated with chromium phosphate.
     c. Primer: Manufacturer's standard resin base compatible coating. Dry film thickness.
        (a) Extrusion: Minimum 0.20 mil.
     d. Color Coat: 70% PVDF, dry film thickness.
        (a) Extrusion: 1.0 mil.
     e. Color: As selected by Architect.
     f. Acceptable Coatings Manufacturers:
        (a) PPG Industries, Inc.
        (b) Valspar Corporation

2.05 Door Fabrication
- A. Stiles and rails shall be tubular sections accurately joined, flush and hairline at corners with heavy concealed reinforcement brackets secured with machine bolts, with optional MIG weld. Exposed screws not permitted.
- B. Each door leaf equipped with an adjusting mechanism, located in the top rail near the lock stile.
- C. Prepare internal reinforcement for door hardware.

Part 3 – Execution

3.01 Examinations
- A. Examine conditions and verify substrate conditions are acceptable for product installation.

3.02 Installation
- A. Install in accordance with approved shop drawings and manufacturers installation instructions.

3.03 Field Quality Control
- A. Make all necessary final adjustments to attain normal operation of each door and its mechanical hardware.

END OF SECTION

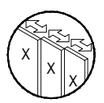
5820/5920 SERIES

~~5820/5920 SERIES~~ MULTI-PANEL / ~~POCKET~~ WALL-SLIDING PATIO DOOR SYSTEM

REPRESENTATIVE IMAGE OF APPLICATION WITH FIXED SIDELIGHTS

MULTIPLE CONFIGURATIONS AVAILABLE

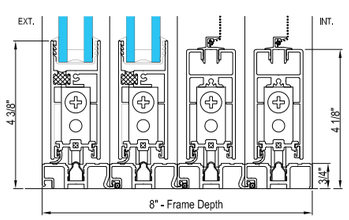
VISIT OUR WEBSITE AT: WWW.ARCADIAINC.COM FOR THE FOLLOWING:
Product Specifications (PDF) • Elevations & Plan Details (PDF & DWG) • Product Warranty Information (PDF) Maintenance & Cleaning Guidelines (PDF) • Product Installation Manuals (PDF)



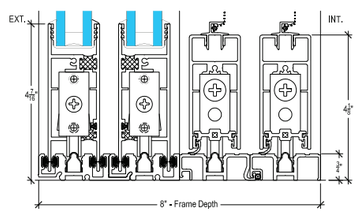
Multi Panel


Thermal


Impact



Ser 5820
3/4" Flush Sill
(1/2" Flush Sill - Optional)
(2" Backleg Sill - Optional)



Ser 5920
3/4" Flush Sill
(2" Backleg Sill - Optional)

~~5820/5920 SERIES~~ FEATURES AND OPTIONS

- 5820 series available with ½" or ¾" high flush sill best suited for interior use for a clean and refined look
- 5920 series with ¾" flush sill best suited for exterior use
- 2" backleg sill available for 5820 / 5920 series - optional
- Various extruded subsills available for added water protection
- Multiple 2" depth frames can be attached to each other for an endless combination of configurations
- Concealed recessed sill tracks available - optional
- Integrated weep holes at sill available for improved water performance - optional
- Can be configured as a pocket, wall or multi panel slider door with almost any configuration imaginable. Can also be configured as a 90 degree corner door or any other custom degree angular door
- Can be configured with interior or exterior insect screen panel doors
- Marine grade non-corrosive stainless steel track for optimum EZ gliding performance
- 3 different sizes of Arcadia EZ Glide precision bearing - marine grade all stainless steel tandem rollers with available roller wheel diameter sizes of 1 ½", 1 13/16" & 3" for varying load capacity panels
- Extruded 0.100" aluminum subsills available (L-shape or Z-shape)
- Marine grade 100% all stainless steel Adams Rite MS-1950 mortise lock - optional
- Adams Rite MS-1850 steel mortise lock with stainless steel hook - standard
- Interior/exterior aluminum extruded wire pull handles in clear or black anodized - standard (other finishes and styles available upon request)
- Interior brass thumb turn - standard. Exterior brass keyed cylinder - optional
- Adams Rite MS-1847 stainless steel mortise lock with optional turn lever escutcheon - optional
- Adams Rite flush pull either locking (to operate MS-1847) or dummy (single or int/ext set) - optional
- Futura flush interior/exterior aluminum handles (satin or black anodized) - optional
- Futura flush interior/exterior stainless steel handles - optional
- Futura flush stainless steel interior thumb turn - optional
- Stainless steel strike plate - optional
- All dry glazed with marine EPDM or PVC wrap around gaskets to accommodate ¼", ½", (monolithic) ⅝", 1", 1 1/16" 1 ⅛" (IG) glass
- Hi load interlockers & meeting stiles available for high wind load & structural performance
- Hi load vertical mullions available for mulling fixed panels together on the same track
- Stock finishes - dark bronze or satin clear anodized - class 1 or white Duracron paint - standard
- Any Duranar or Valspar finish or other anodized finish - optional

FEATURES

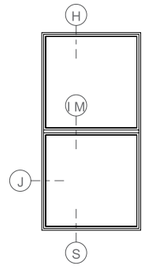
FIXED FRAME DIRECT SET

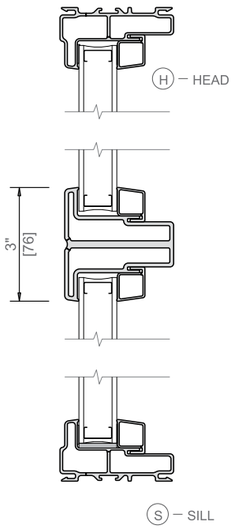
UNIT SECTIONS

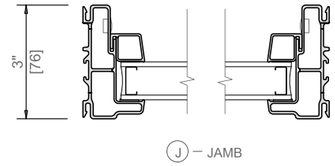
Block Frame

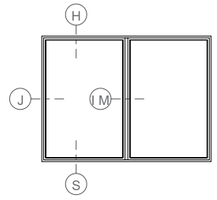
Composite with Integral Mullion

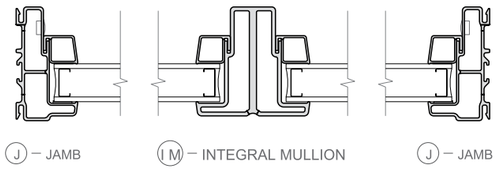
Pella Impervia

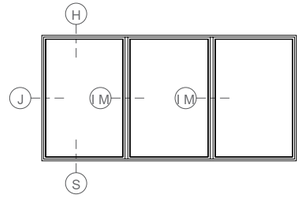


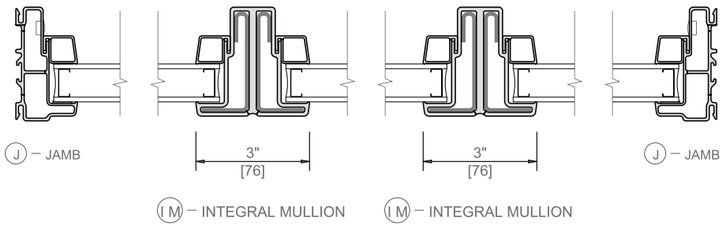












INTERNALLY REINFORCED

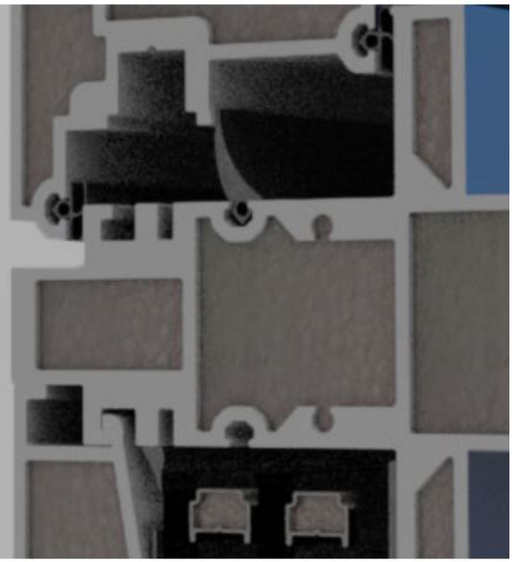
CASCADIA WINDOWS & DOORS

PRODUCTS TECHNOLOGY DESIGN TOOLS SUPPORT ABOUT US CONTACT US NEWS PRESS ROOM

UNIVERSAL SERIES

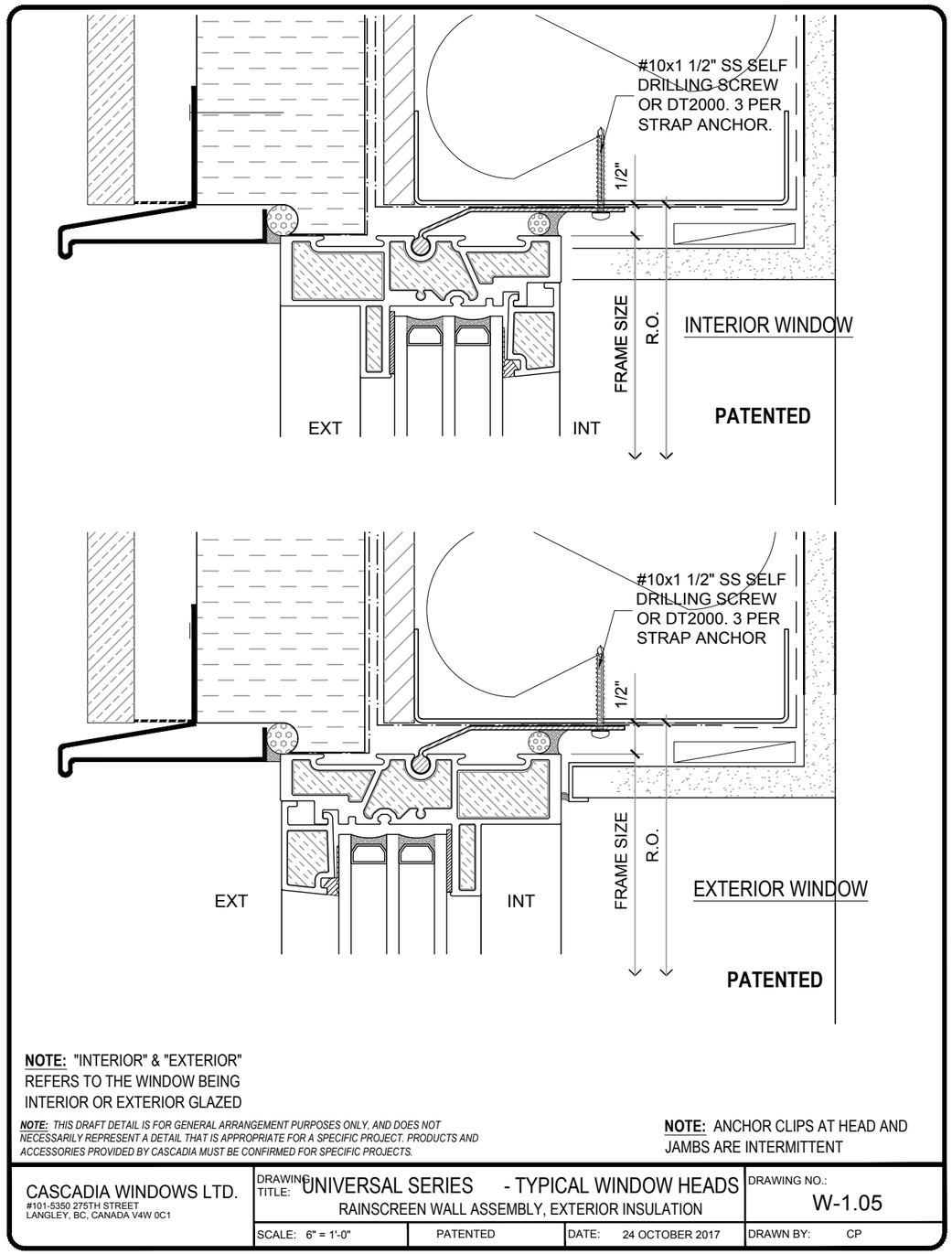
Our newest product is the Universal Series line of windows and doors. Offering one frame in place of many, the Universal Series improves on our existing lines in every way. It is the result of combining years of experience and cutting edge innovation.

Commercial-grade, all-fiberglass, complete window and door line - now Passive House Certified in the USA (PHIUS). (Internationally: projected for early 2018.)



UNIVERSAL SERIES

The Cascadia Universal Series is a new all-fiberglass system showcasing the latest in energy efficient window and door technology. Deliveries have begun for windows in Summer 2017, and will begin for doors in early 2018. Patented, and patents pending.



NOTE: "INTERIOR" & "EXTERIOR" REFERS TO THE WINDOW BEING INTERIOR OR EXTERIOR GLAZED

NOTE: *THIS DRAFT DETAIL IS FOR GENERAL ARRANGEMENT PURPOSES ONLY, AND DOES NOT NECESSARILY REPRESENT A DETAIL THAT IS APPROPRIATE FOR A SPECIFIC PROJECT. PRODUCTS AND ACCESSORIES PROVIDED BY CASCADIA MUST BE CONFIRMED FOR SPECIFIC PROJECTS.*

NOTE: ANCHOR CLIPS AT HEAD AND JAMBS ARE INTERMITTENT

CASCADIA WINDOWS LTD. #101-5350 275TH STREET LANGLEY, BC, CANADA V4W 0C1	DRAWING TITLE: UNIVERSAL SERIES - TYPICAL WINDOW HEADS RAINSCREEN WALL ASSEMBLY, EXTERIOR INSULATION			DRAWING NO.: W-1.05
	SCALE: 6" = 1'-0"	PATENTED	DATE: 24 OCTOBER 2017	DRAWN BY: CP

511/521/522

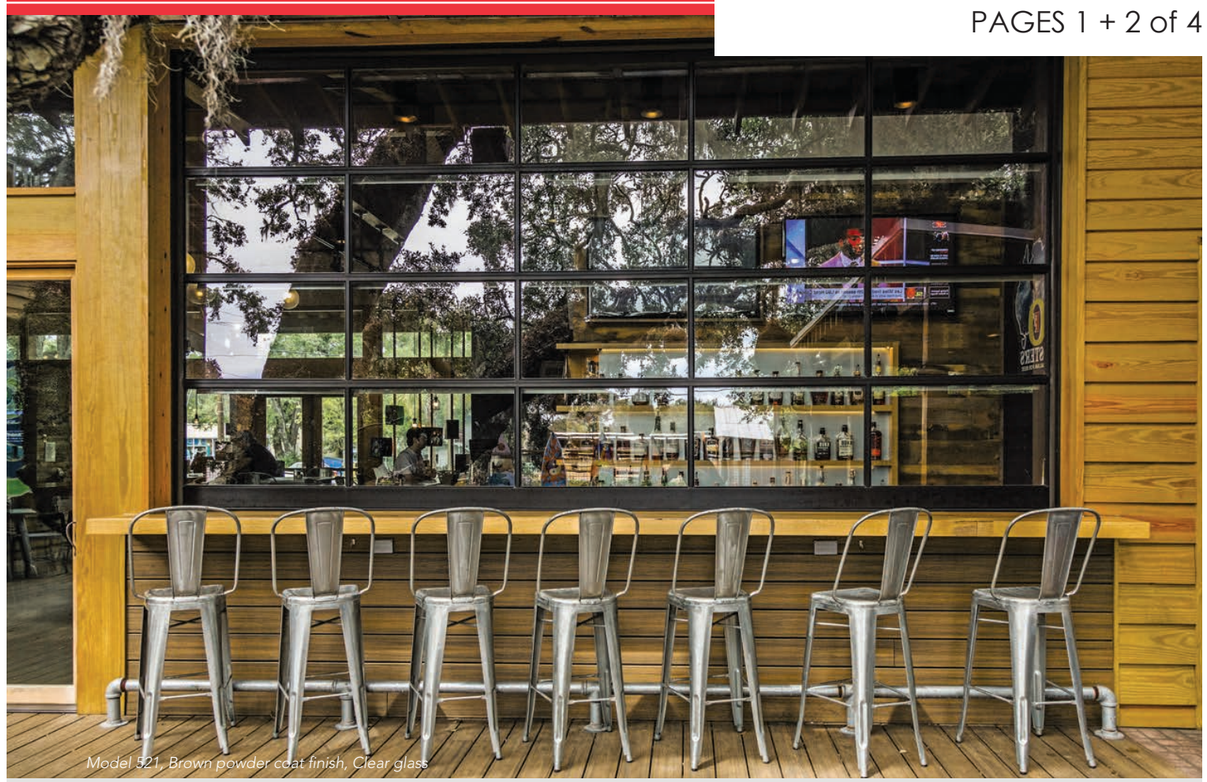
Aluminum Door Systems

ALUMINUM SECTIONAL DOORS

VISUAL ACCESS.
LIGHT INFILTRATION.
CONTEMPORARY LOOK.

OVERHEAD DOOR®

INDUSTRY LEADING
COMMERCIAL & INDUSTRIAL SOLUTIONS



Model 521, Brown powder coat finish, Clear glass

General features and benefits – Models 511/521

- **1 3/4" (45 mm) thick, corrosion-resistant 6063-T6 aluminum sections** with galvanized fixtures and hinges promotes durability and trouble-free operation
- **1/4" (6 mm) diameter through-rods** on all stiles and rails enhances strength and sturdiness
- **Top-quality materials, excellent field service and optional maintenance program** contribute to extended door life, low maintenance costs and maximum productivity
- **Glazing choices** include DSB glass, acrylic, tempered glass, clear polycarbonate, multi-wall polycarbonate, wire glass, Low E, Lexan and laminate
- **Standard clear anodized finish** for low-maintenance and corrosion-resistance
- **Optional finishes** include a wide range of powder coat colors offering an attractive and durable finish
- **Manual pull rope operation** with optional chain hoist or electric motor operator
- **Available in approximately 200 RAL powder coat colors** to match the aesthetic and design of your project. This color optional upgrade includes a hardening additive that provides an attractive and durable finish and easy-to-clean surface.

Cover image: *Model 521, Clear anodized finish with Clear glass.*

ALUMINUM DOOR SYSTEMS

MODELS **511/521/522** offer an attractive solution for commercial and industrial applications where visual access, light infiltration and aesthetics are key design considerations.

Model 521, Clear anodized finish with Clear glass

CUT SHEETS

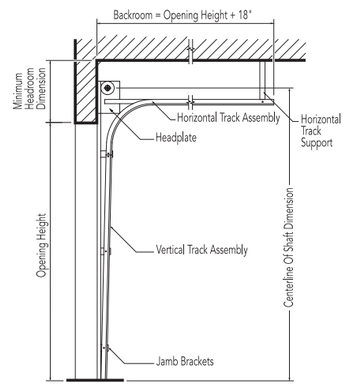
LOADING SECTIONAL OVERHEAD
Pages 3 + 4 of 4

Track detail

Any of the following track configurations can be selected for 511, 521 and 522 Aluminum door models.

O.H.=Opening height L.C.=Lift clearance D.H.=Door height

Standard lift track



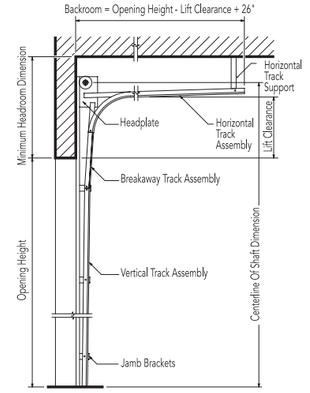
2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	O.H. + 11 5/8" (295 mm)	14 1/4" (362 mm)
Thru 16'0" (4877 mm)	O.H. + 12 5/8" (321 mm)	20 1/2" (521 mm)

3" (76 mm) Track [15" (381 mm) radius]

Thru 18'0" (5486 mm)	O.H. + 14 5/8" (372 mm)	18" (457 mm)
Thru 32'0" (9754 mm)	O.H. + 16 7/8" (429 mm)	21 1/2" (546 mm)

Lift clearance track Standard



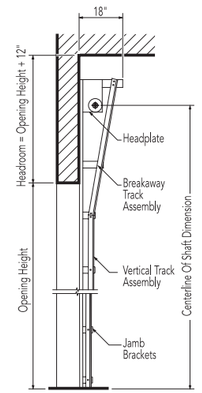
2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	O.H. + L.C. + 5 5/8" (143 mm)	L.C.+ 8 3/4" (222 mm)
Thru 16'0" (4877 mm)	O.H. + L.C. + 5 5/8" (143 mm)	L.C.+ 11 1/4" (286 mm)

3" (76 mm) Track [15" (381 mm) radius]

Thru 22'0" (6706 mm)	O.H. + L.C. + 6 5/8" (168 mm)	L.C.+ 11 1/2" (292 mm)
Thru 32'0" (9754 mm)	O.H. + L.C. + 6 5/8" (168 mm)	L.C.+ 12 1/4" (311 mm)

Full vertical track



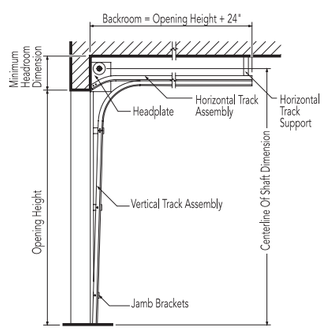
2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 11'0" (3353 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)
Thru 16'0" (4877 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)

3" (76 mm) Track [15" (381 mm) radius]

Thru 18'0" (5486 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)

Low headroom track Springs to front



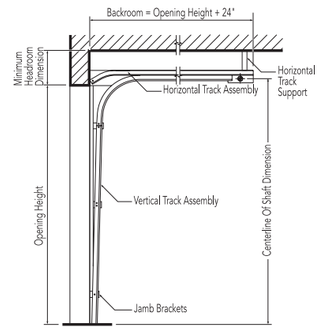
2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	D.H. + 8" (203 mm)	11 3/4" (299 mm)
Thru 16'0" (4877 mm)	D.H. + 8" (203 mm)	12 1/2" (318 mm)

3" (76 mm) Track [15" (381 mm) radius]

Thru 12'0" (3658 mm)	D.H. + 9" (229 mm)	13" (330 mm)
Thru 32'0" (5486 mm)	D.H. + 9" (229 mm)	13 3/4" (349 mm)

Low headroom track Springs to rear



2" (51 mm) Track [15" (381 mm) radius]

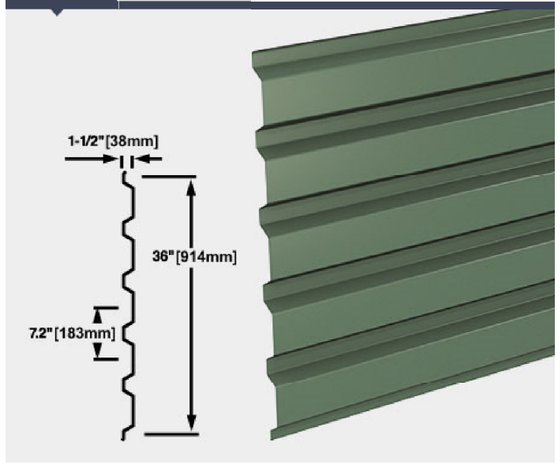
Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	O.H. + 2" (51 mm)	7 1/2" (191 mm)
Thru 16'0" (4866 mm)	O.H. 2" (51 mm)	8" (203 mm)

3" (76 mm) Track [15" (381 mm) radius]

Thru 18'0" (5486 mm)	O.H. 6 3/4" (171 mm)	9 3/4" (248 mm)

CENTRIA

Horizontal | Vertical



NOTE: The documents below are in pdf format. To download the Word document, click here to login to the e-CENTRIA Portal

Product Specifications | Load Span Tables | Green / Sustainability | Product Options | Integrated Options | Coatings | Promo Details | Tech Data Sheets

- Exposed Fastener Series SPECSINTACT
- Exposed Fastener Series- Wall

Profile Series Exposed Fastener Profiles BR5-36

Profile Series Exposed Fastener Panels are extremely versatile panels that can be used as exterior or interior walls, roofs and soffits with ribs that run horizontally or vertically. When used for walls, the panels may be inverted. In addition, the panels may be insulated to add a level of thermal protection.

CONTACT CENTRIA

Features:

- **Substrates:**
  - 18 [1.19mm], 20 [.91mm], 22 [.76mm] & 24 [.60mm] gage G90 galvanized steel, Galvalume & Galvalume Plus
  - Optional .032" [.81mm], .040" [1.02mm] & .050" [1.27mm] aluminum
  - Optional 20 [.91mm], 22 [.76mm] & 24 [.60mm] gage stainless steel
- **Surface Finish:**
  - Smooth – standard
  - Non-directional embossing – optional
- **Panel Depth:**
  - 1 1/2" [38mm]
- **Panel Width:**
  - 36" [914mm]
- **Panel Lengths**
  - 5 ft. [1.52m] to 40 ft. [12.19m] standard. Contact CENTRIA for shorter and longer lengths.

Exposed fastener panels provide ultimate flexibility with panels that can be used as ex roofs or soffits. Exposed fastener panels can be installed in any weather to enable fast

FEATURES & BENEFITS

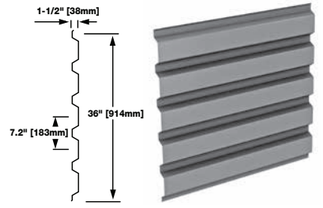
- Extremely versatile panels can be used as exterior or interior walls, roofs and soffits
- Ribs can be run either horizontally or vertically
- May be installed to meet many levels of thermal protection
- Excellent negative wind load properties
- Excellent option for both new construction and retrofit projects
- All-weather installation capability minimizes delays; permits fast-track scheduling
- Panels are available in stucco-embossed or smooth finishes

COMPONENT DESCRIPTION

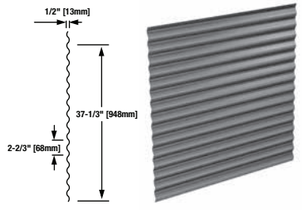
SUBSTRATES	• Standard 24*–18 gage G-90 galvanized steel • Optional aluminum or stainless steel • Smooth or embossed surface textures
EXPOSED FASTENER PROFILES	• Horizontal or vertical wall installation • Wall and roof installation • Lengths up to 40′ [12.2m] for steel panels Consult CENTRIA for more information.
COATINGS & COLORS	Available in a wide range of coil-coated colors and finishes. See charts on Pages 46–51.

*24 gage available only available in certain profiles. Consult CENTRIA.

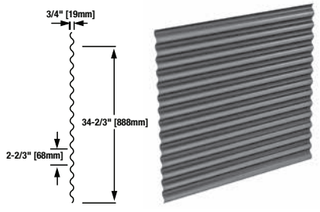
EXPOSED FASTENER PANELS



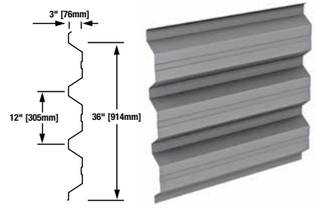
BR5-36



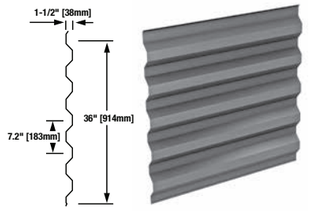
ECONOLAP 1/2"



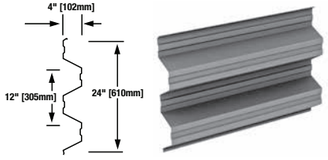
ECONOLAP 3/4"



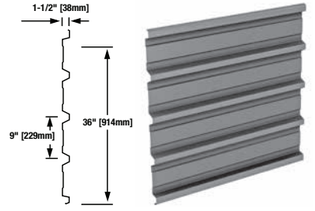
MR3-36



STYLE-RIB



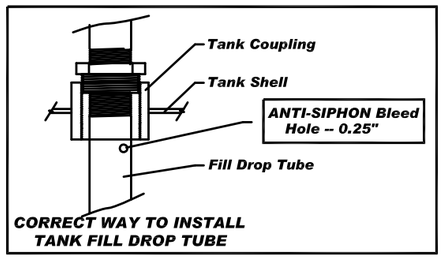
SUPER-RIB



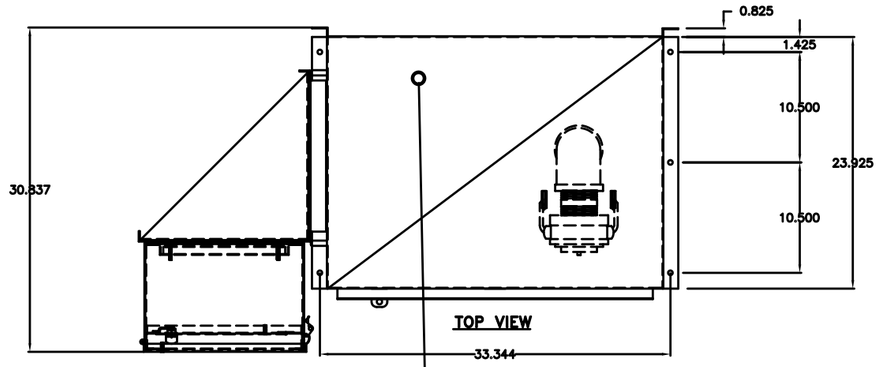
TR4-36

IMPORTANT INSTALLATION NOTE

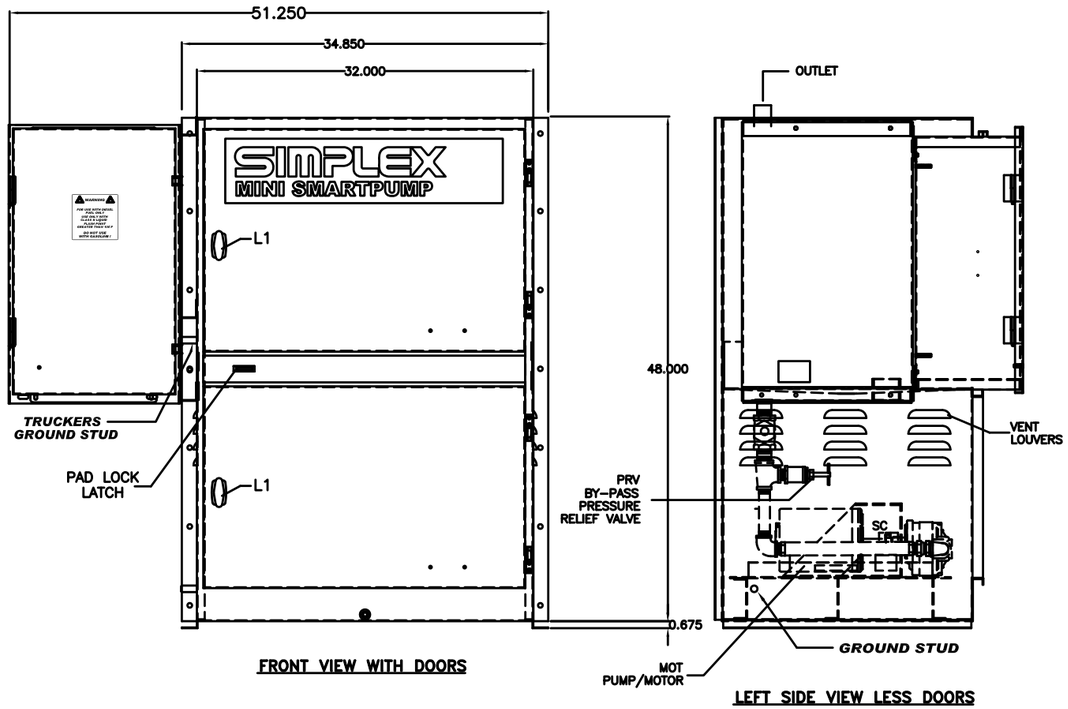
To Prevent Accidental Spill Due To Siphon Backflow, Tank Must Have Drop Tube With ANTI-SIPHON Bleed Hole As Shown Below



DETAIL A

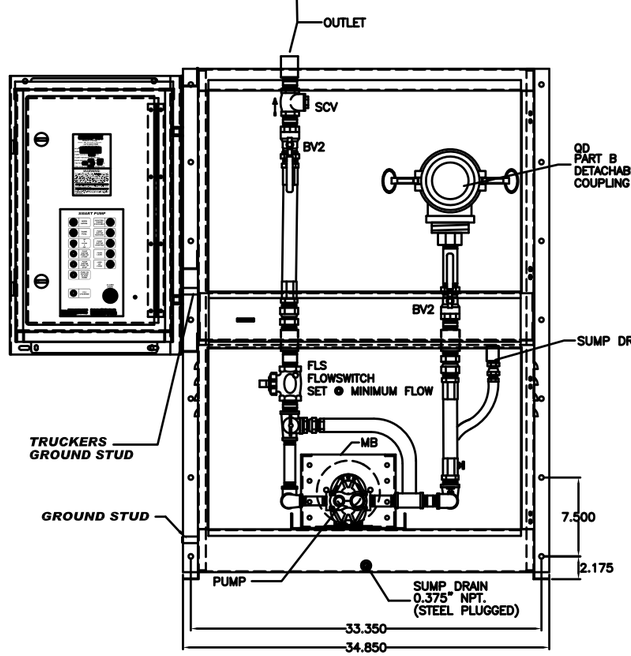


TOP VIEW

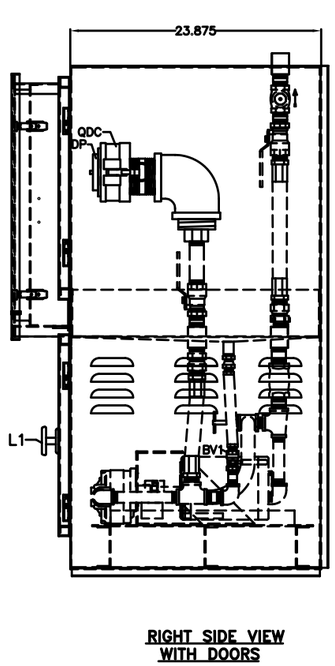


FRONT VIEW WITH DOORS

LEFT SIDE VIEW LESS DOORS



FRONT VIEW LESS DOORS



RIGHT SIDE VIEW WITH DOORS

WARNING

NON EXPLOSION PROOF SYSTEM FOR NON HAZARDOUS LOCATIONS

⚠ WARNING ⚠

For use with class II liquids only: diesel fuel, fuel oil;liquids having a flash point greater than 100°F.

Do not use with gasoline nor with any flammable liquid having a flash point less than 100°F.

NOTES:

1. CONSTRUCTION: FORMED AND WELDED HOT ROLLED STEEL
2. ALL PARTS CLEANED
3. PAINT: POWDER COAT BONE WHITE
4. ALL ALL DIMENSIONS ± .125"
5. FITTING SIZE: 2", 3" OR 4"

SIMPLEX	SPRINGFIELD, ILLINOIS	
SCALE :	APPROVED BY :	DRAWN BY : RER
DATE : 08-10-10		REVISED :
MINI SMARTPUMP PICTORIAL		
UL508A	STANDARD	DRAWING NUMBER 211992

VRV IV
Air-Cooled Heat Recovery

Variable Refrigerant Temperature

OUTDOOR UNITS

Daikin's VRV IV systems integrate advanced technology to provide comfort control with high energy efficiency and reliability. VRV IV provides heating and cooling solutions for multi-family residential to large commercial applications. Daikin VRV IV is the first variable refrigerant flow (VRF) system assembled in North America.

Features and Benefits

- Total comfort solution for heating, cooling, ventilation and controls.
- Redesigned and optimized for low total Life Cycle Cost (LCC).
- Available in large capacity single modules up to 14 tons and systems up to 38 tons allowing for flexible system design.
- Year-round comfort and energy efficiency delivered by combining VRV and VRT technologies.
- Compatible with Daikin DVS series of Dedicated Outdoor Air Systems (DOAS).
- High energy efficiency with IEER values up to 29.3.
- Integrated inverter technology delivers high efficiency during part load conditions and provides precise individual zone control.
- Design flexibility with long piping lengths up to 3,280 ft. total, and up to 100 ft. vertical separation between indoor units.
- Corrosion resistant 1000 hr. salt-spray tested Daikin PE blue fin heat exchanger.

VRV IV

- Single/multiple port branch selector boxes provide compact dimensions and a wide range of product offerings (single, 4, 6, 8, 10 and 12 port options).
- Reduced commissioning time with VRV configuration software and Graphical User Interface (GUI), as compared to VRV III.
- VRV IV takes advantage of Daikin's unique zone and centralized controls that are optimized for the specific needs of North America.
- Outstanding 10-Year Limited Parts Warranty* as standard.

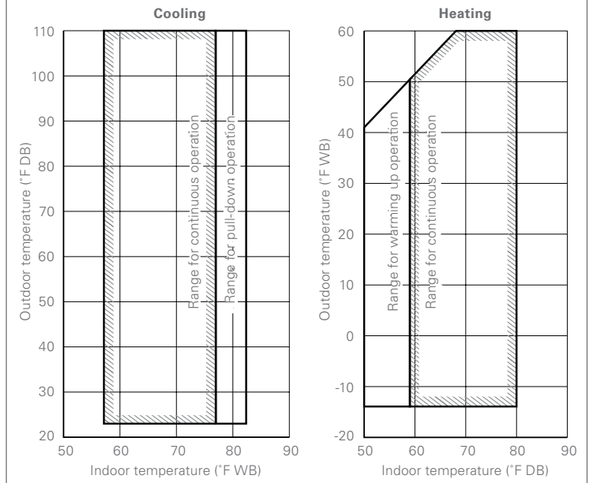
* Complete warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com.

VRV IV CERTIFIED DATA - HEAT RECOVERY, 208-230V/60HZ/3PH AND 460V/60HZ/3PH

Product #	Capacity (Tons)	IEER Non-Ducted	IEER Ducted	IEER Mixed	SCHE Non-Ducted	SCHE Ducted	SCHE Mixed	COP @ 47°F Non-Ducted	COP @ 47°F Ducted	COP @ 47°F Mixed	COP @ 17°F Non-Ducted	COP @ 17°F Ducted	COP @ 17°F Mixed	EER Non-Ducted	EER Ducted	EER Mixed
REYQ72T	6	25.30	20.90	23.10	25.60	21.40	23.50	4.31	3.58	3.95	2.77	2.42	2.60	15.30	12.30	13.80
REYQ96T	8	29.30	23.30	26.30	26.50	23.00	24.70	4.25	3.67	3.96	2.52	2.25	2.39	14.60	12.60	13.60
REYQ120T	10	25.40	22.60	24.0	27.00	25.10	26.00	4.00	3.51	3.76	2.46	2.25	2.36	13.10	12.30	12.70
REYQ144T	12	23.70	21.90	22.80	25.50	23.80	24.60	3.81	3.48	3.65	2.52	2.28	2.40	12.40	11.90	12.15
REYQ168T	14	22.00	20.70	21.30	26.60	24.80	25.70	3.70	3.21	3.46	2.22	2.09	2.16	11.60	11.20	11.40
REYQ192T	16	22.90	21.10	22.00	26.60	23.10	24.80	3.85	3.67	3.76	2.41	2.26	2.34	12.50	12.50	12.50
REYQ216T	18	23.00	20.80	21.90	25.60	22.80	24.20	3.74	3.67	3.71	2.35	2.17	2.26	12.50	12.40	12.45
REYQ240T	20	21.90	19.80	20.80	25.60	22.70	24.10	3.68	3.51	3.60	2.27	2.09	2.18	12.20	11.60	11.90
REYQ264T	22	21.60	18.60	20.10	24.40	22.40	23.40	3.55	3.22	3.39	2.36	2.09	2.23	11.60	10.50	11.15
REYQ288T	24	21.10	17.90	19.50	23.30	21.80	22.50	3.51	3.20	3.36	2.41	2.15	2.28	11.70	10.50	11.10
REYQ312T	26	20.20	18.10	19.10	23.90	20.70	22.30	3.57	3.20	3.39	2.38	2.11	2.25	11.30	10.30	10.80
REYQ336T	28	19.00	17.40	18.20	23.50	20.60	22.00	3.53	3.20	3.37	2.18	2.05	2.12	10.70	9.60	10.15
REYQ360T	30	19.60	18.90	19.20	22.70	20.30	21.50	3.52	3.27	3.40	2.28	2.05	2.17	10.80	10.90	10.85
REYQ384T	32	18.30	18.10	18.20	22.50	18.70	20.60	3.21	3.20	3.21	2.22	2.05	2.14	9.80	9.80	9.80
REYQ408T	34	17.20	17.70	17.40	21.80	18.30	20.00	3.21	3.20	3.21	2.09	2.05	2.07	9.80	9.70	9.75
REYQ432T	36	16.20	17.30	16.70	21.60	18.10	19.80	3.21	3.20	3.21	2.08	2.06	2.07	9.80	9.70	9.75
REYQ456T	38	16.20	16.70	16.40	21.10	17.90	19.50	3.21	3.20	3.21	2.07	2.05	2.06	9.50	9.50	9.50

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2010, "Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air Conditioning and Heat Pump Equipment" for the VRV Series. The VRV IV Series has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2013. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2013.

DETAILED OPERATION RANGES FOR VRV IV REYQ-T HEAT RECOVERY OUTDOOR UNITS

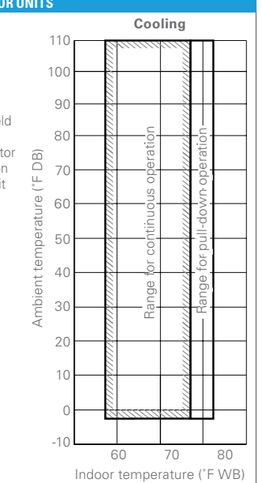


TECHNICAL COOLING FEATURE FOR VRV IV REYQ-T HEAT RECOVERY OUTDOOR UNITS

Technical Cooling - Cooling operation extended from 23°F ambient air temperature down to -4°.

The Technical Cooling feature is engaged by field settings on the outdoor unit and on branch selector boxes. It requires addition of wind covers to the unit and allows operation down to -4° FDB ambient temperature in cooling mode.

See the Engineering Data book for complete application rules and contact your local Daikin representative for wind cover specification requirements.



OUTDOOR UNITS

DLR Group

GRAVES HOSPITALITY
DEVELOPMENT EXPERTISE. MANAGEMENT SAVVY.

VRV IV
Air-Cooled Heat Recovery (cont.)

TECHNICAL DATA FOR VRV IV REYQ-TATJU/TAYDU HEAT RECOVERY OUTDOOR UNITS

			6 Ton	8 Ton	10 Ton	12 Ton	14 Ton	16 Ton	18 Ton	20 Ton
Model	208-230V/3Ph/60Hz		REYQ72TATJU	REYQ96TATJU	REYQ120TATJU	REYQ144TATJU	REYQ168TATJU	REYQ192TATJU	REYQ216TATJU	REYQ240TATJU
	460V/3Ph/60Hz		REYQ72TAYDU	REYQ96TAYDU	REYQ120TAYDU	REYQ144TAYDU	REYQ168TAYDU	REYQ192TAYDU	REYQ216TAYDU	REYQ240TAYDU
	Combination							1 x REYQ120T 1 x REYQ72T	1 x REYQ120T 1 x REYQ96T	1 x REYQ144T 1 x REYQ96T
Performance	Rated Cooling Capacity	BTU/h	67,000	90,000	111,000	134,000	156,000	180,000	200,000	222,000
	Rated Heating Capacity	BTU/h	75,000	100,000	126,000	150,000	176,000	200,000	226,000	250,000
	Sound Pressure	dB(A)	58	61		65		63	64	66
	IEER (Ducted / Non-Ducted)		20.9 / 25.3	23.3 / 29.3	22.6 / 25.4	21.9 / 23.7	20.7 / 22.0	21.1 / 22.9	20.8 / 23.0	19.8 / 21.9
	Airflow	CFM	5,544	5,827	6,286	8,228		5,544 + 6,286	5,827 + 6,286	5,827 + 8,228
	Fan ESP, Standard/Max	in. W.G.	0.12 / 0.32							
Compressor	Compressors, all inverter	Qty	1	2				3	4	
	Revolutions per minute	RPM	3600	3630, 3630	4470, 4470	4440, 4440	5190, 5190	4080, (4290, 4290)	(4170, 4170) x 2	(4050, 4050), (4110, 4110)
	Capacity Control Range	%	15-100	11-100	10-100			5-100		
Refrigerant Piping, Layout	Maximum Vertical Pipe Length Above Unit	ft.	164 (295 With Field Setting)							
	Maximum Vertical Pipe Length Below Unit	ft.	131 (195 With Field Setting)							
	Maximum Vertical Pipe Length Between IDU	ft.	100							
	Maximum Actual Pipe Length	ft.	541							
	Maximum Equivalent Pipe Length	ft.	620							
	Maximum Total Pipe Length	ft.	3,282							
Refrigerant Piping, Connections	Liquid Pipe, Main Line	in.	Ø3/8 (9.5) C1220T (Brazing Connection)		Ø1/2 (12.7) C1220T (Brazing Connection)		Ø5/8 (15.9) C1220T (Brazing Connection)			
	Suction Gas Pipe, Main Line	in.	Ø3/4 (19.1) C1220T (Brazing Connection)	Ø7/8 (22.2) C1220T (Brazing Connection)	Ø1-1/8 (28.6) C1220T (Brazing Connection)					Ø1-3/8 (34.9) C1220T (Brazing Connection)
	Discharge Gas Pipe, Main Line	in.	Ø5/8 (15.9) C1220T (Brazing Connection)	Ø3/4 (19.1) C1220T (Brazing Connection)		Ø7/8 (22.2) C1220T (Brazing Connection)		Ø1-1/8 (28.6) C1220T (Brazing Connection)		
Connection Ratio	Standard Connectable Indoor Unit Ratio	%	50 - 200							
	Maximum Number of Indoor Units	Qty	12	16	20	25	29	33	37	41
Electrical	Maximum Overcurrent Protection, MOP (REYQ-TAT / REYQ-TAY)	A	35/20	45/25	50/25	70/40		35 + 50 / 20 + 25	45 + 50 / 25 + 25	45 + 70 / 25 + 40
	Minimum Circuit Amps, MCA (REYQ-TAT / REYQ-TAY)	A	30.2 / 15.2	38 / 21.1	43 / 21.1	55 / 31.9	61.9 / 36.1	30.2 + 43 / 15.2 + 21.1	38 + 43 / 21.1 + 21.1	38 + 55 / 21.1 + 31.9
	Compressor Rated Load Amps, RLA (REYQ-TAT / REYQ-TAY)	A	20.7 / 9.4	13.7 + 13.7 / 6.2 + 6.2	15 + 15 / 6.8 + 6.8	16.2 + 22.6 / 7.3 + 10.3	17.4 + 24.4 / 7.9 + 11.1	20.7 + (15 + 15) / 9.4 + (6.8 + 6.8)	(13.7 + 13.7) + (15 + 15) / (6.2 + 6.2) + (6.8 + 6.8)	(13.7 + 13.7) + (16.2 + 22.6) / (6.2 + 6.2) + (7.3 + 10.3)
Unit	Factory Refrigerant Charge	lbs.	21.9	25.8				21.9 + 25.8	25.8 + 25.8	
	Weight (REYQ-TAT / REYQ-TAY)	lbs.	507 / 527	703 / 717	703 / 717	780 / 794		507 + 703 / 527 + 717	703 + 703 / 717 + 717	703 + 780 / 717 + 794
	Dimensions (H x W x D)	in.	66-11/16 x 36-11/16x 30-3/16	66-11/16 x 48-7/8 x 30-3/16				(66-11/16 x 48-7/8 x 30-3/16) + (66-11/16 x 36-11/16 x 30-3/16)	(66-11/16 x 48-7/8 x 30-3/16) + (66-11/16 x 48-7/8 x 30-3/16)	

			22 Ton	24 Ton	26 Ton	28 Ton	30 Ton	32 Ton	34 Ton	36 Ton	38 Ton
Model	208-230V/3Ph/60Hz		REYQ264TATJU	REYQ288TATJU	REYQ312TATJU	REYQ336TATJU	REYQ360TATJU	REYQ384TATJU	REYQ408TATJU	REYQ432TATJU	REYQ456TATJU
	460V/3Ph/60Hz		REYQ264TAYDU	REYQ288TAYDU	REYQ312TAYDU	REYQ336TAYDU	REYQ360TAYDU	REYQ384TAYDU	REYQ408TAYDU	REYQ432TAYDU	REYQ456TAYDU
	Combination		1 x REYQ144T 1 x REYQ120T	2 x REYQ144T	1 x REYQ168T 1 x REYQ144T	2 x REYQ168T	3 x REYQ120T	1 x REYQ168T 1 x REYQ120T 1 x REYQ96T	1 x REYQ168T 1 x REYQ144T 1 x REYQ96T	3 x REYQ144T	1 x REYQ168T 2 x REYQ144T
Performance	Rated Cooling Capacity	BTU/h	246,000	268,000	290,000	312,000	334,000	356,000	380,000	400,000	415,000
	Rated Heating Capacity	BTU/h	276,000	294,000	312,000	320,000	376,000	386,000	394,000	398,000	412,000
	Sound Pressure	dB(A)	66	68			66	68	69	70	
	IEER (Ducted / Non-Ducted)		18.6 / 21.6	17.9 / 21.1	18.1 / 20.2	17.4 / 19.0	18.9 / 19.6	18.1 / 18.3	17.7 / 17.2	17.3 / 16.2	16.7 / 16.2
	Airflow	CFM	6,286 + 8,228	8,228 + 8,228	8,228 + 8,228		6,286 + 6,286 + 6,286	5,827 + 6,286 + 8,228	5,827 + 8,228 + 8,228	8,228 + 8,228 + 8,228	
	Fan ESP, Standard/Max	in. W.G.	0.12/0.32								
Compressor	Compressors, all inverter	Qty	4				6				
	Revolutions per minute	RPM	(4710, 4710), (4800, 4800)	(4740, 4740) x 2	(5790, 5790) x 2		(5010, 5010) x 3	(5070, 5070) x 2, (5160, 5160)	(5040, 5040), (5130, 5130) x 2	(5220, 5220) x 3	(5730, 5730) x 3
	Capacity Control Range	%	5-100				3-100				
Refrigerant Piping, Layout	Maximum Vertical Pipe Length Above Unit	ft.	164 (295 With Field Setting)								
	Maximum Vertical Pipe Length Below Unit	ft.	131 (195 With Field Setting)								
	Maximum Vertical Pipe Length Between IDU	ft.	100								
	Maximum Actual Pipe Length	ft.	541								
	Maximum Equivalent Pipe Length	ft.	620								
	Maximum Total Pipe Length	ft.	3,282								
Refrigerant Piping, Connections	Liquid Pipe, Main Line	in.	Ø3/4 (19.1) C1220T (Brazing Connection)								
	Suction Gas Pipe, Main Line	in.	Ø1-3/8 (34.9) C1220T (Brazing Connection)				Ø1-5/8 (41.3) C1220T (Brazing Connection)				
	Discharge Gas Pipe, Main Line	in.	Ø1-1/8 (28.6) C1220T (Brazing Connection)				Ø1-3/8 (34.9) C1220T (Brazing Connection)				
Connection Ratio	Standard Connectable Indoor Unit Ratio	%	50 - 200								
	Maximum Number of Indoor Units	Qty	45	49	54	58	64				
Electrical	Maximum Overcurrent Protection, MOP (REYQ-TAT / REYQ-TAY)	A	50 + 70 / 25 + 40	70 + 70 / 40 + 40			50 + 50 + 50 / 25 + 25 + 25	45 + 50 + 70 / 25 + 25 + 40	45 + 70 + 70 / 25 + 40 + 40	70 + 70 + 70 / 40 + 40 + 40	70 + 70 + 70 / 40 + 40 + 40
	Minimum Circuit Amps, MCA (REYQ-TAT / REYQ-TAY)	A	43 + 55 / 21.1 + 31.9	55 + 55 / 31.9 + 31.9	55 + 61.9 / 31.9 + 36.1	61.9 + 61.9 / 36.1 + 36.1	43 + 43 + 43 / 21.1 + 21.1 + 21.1	38 + 43 + 61.9 / 21.1 + 21.1 + 21.1	38 + 55 + 61.9 / 21.1 + 31.9 + 36.1	55 + 55 + 55 / 31.9 + 31.9 + 31.9	55 + 55 + 61.9 / 31.9 + 31.9 + 36.1
	Compressor Rated Load Amps, RLA (REYQ-TAT / REYQ-TAY)	A	(15 + 15) + (16.2 + 22.6) / (6.8 + 6.8) + (7.3 + 10.3)	(16.2 + 22.6 x 2 / (7.3 + 10.3) x 2	(16.2 + 22.6) + (17.4 + 24.4) / (7.3 + 10.3) + (7.9 + 11.1)	(17.4 + 24.4)x 2 / (7.9 + 11.1) x 2	(15 + 15) x 3 / (6.8 + 6.8) x 3	(13.7 + 13.7) + (16.2 + 22.6) + (17.4 + 24.4) / (6.2 + 6.2) + (6.8 + 6.8) + (7.9 + 11.1)	(13.7 + 13.7) + (16.2 + 22.6) + (17.4 + 24.4) / (6.2 + 6.2) + (7.3 + 10.3) + (7.9 + 11.1)	(16.2 + 22.6) x 3 / (7.3 + 10.3) x 3	(16.2 + 22.6) x 2 + (17.4 + 24.4) / (7.3 + 10.3) x 2 + (7.9 + 11.1)
Unit	Factory Refrigerant Charge	lbs.	25.8 + 25.8				25.8 + 25.8 + 25.8				
	Weight (REYQ-TAT / REYQ-TAY)	lbs.	703 + 780 / 717 + 794	780 + 780 / 794 + 794			703 + 703 + 703 / 717 + 717 + 717	703 + 703 + 780 / 717 + 717 + 794	780 + 780 + 780 / 717 + 794 + 794	780 + 780 + 780 / 794 + 794 + 794	
	Dimensions (H x W x D)	in.	(66-11/16 x 48-7/8 x 30-3/16) + (66-11/16 x 48-7/8 x 30-3/16)				(66-11/16 x 48-7/8 x 30-3/16) + (66-11/16 x 48-7/8 x 30-3/16) + (66-11/16 x 48-7/8 x 30-3/16)				

OPERATION RANGE FOR ALL VRV IV HEAT RECOVERY OUTDOOR UNITS

Cooling °F DB	-4* – 122
Heating °F WB	-13 – 60

*Application rules apply

For additional technical information please refer to specific Engineering Data Books.

VRV IV
Air-Cooled Heat Pump

Variable Refrigerant Temperature

OUTDOOR UNITS

Daikin's VRV IV systems integrate advanced technology to provide comfort control helping to maximize energy efficiency and reliability. VRV IV provides heating and cooling solutions for multi-family residential to large commercial applications. Daikin VRV IV is the first variable refrigerant flow (VRF) system assembled in North America.

Features and Benefits

- Total comfort solution for heating, cooling, ventilation and controls.
- Redesigned and optimized for low total Life Cycle Cost (LCC).
- Available in large capacity single modules up to 14 tons and systems up to 34 tons allowing for a more flexible system design.
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- High energy efficiency with IEER values up to 27.3.
- Integrated inverter technology delivers high efficiency during part load conditions and provides precise individual zone control.
- Design flexibility with long piping lengths up to 3,280 ft. total, and up to 100 ft. vertical separation between indoor units.
- Corrosion resistant 1000 hr. salt-spray tested Daikin PE blue fin heat exchanger.

VRV IV

- Reduced commissioning time with VRV configuration software and Graphical User Interface (GUI), as compared to VRV III.
- VRV IV takes advantage of Daikin's unique zone and centralized controls that are optimized for the specific needs of North America.
- Outstanding 10-year limited parts warranty* as standard.

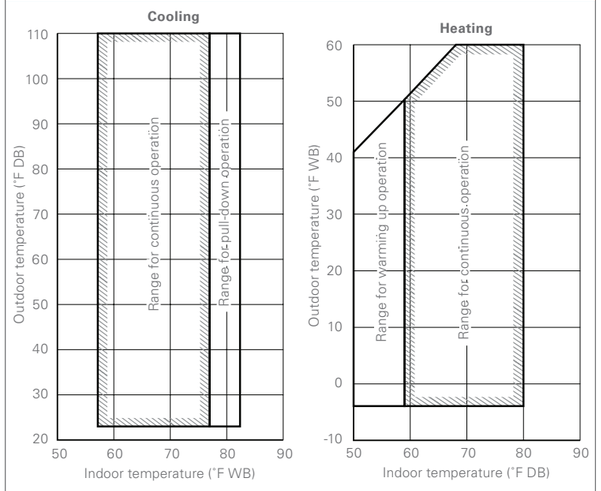
* Complete warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com.

VRV IV CERTIFIED DATA - HEAT PUMP, 208-230V/60HZ/3PH AND 460V/60HZ/3PH

Product #	Capacity (Tons)	IEER Non-Ducted	IEER Ducted	IEER Mixed	COP @ 47°F Non-Ducted	COP @ 47°F Ducted	COP @ 47°F Mixed	COP @ 17°F Non-Ducted	COP @ 17°F Ducted	COP @ 17°F Mixed	EER Non-Ducted	EER Ducted	EER Mixed
RXYQ72T	6	25.90	20.70	23.30	3.88	3.30	3.59	2.49	2.25	2.37	14.80	12.70	13.80
RXYQ96T	8	27.30	22.50	24.90	4.21	3.49	3.85	2.71	2.48	2.60	14.30	12.60	13.50
RXYQ120T	10	25.40	22.00	23.70	3.56	3.30	3.43	2.25	2.37	2.31	12.40	11.60	12.00
RXYQ144T	12	24.80	22.60	23.70	3.67	3.34	3.51	2.33	2.20	2.27	12.30	11.50	11.90
RXYQ168T	14	22.60	19.80	21.20	3.40	3.20	3.30	2.34	2.27	2.31	10.60	10.60	10.60
RXYQ192T	16	22.20	21.20	21.70	3.68	3.29	3.49	2.27	2.23	2.25	11.50	11.60	11.60
RXYQ216T	18	20.50	21.10	20.80	3.83	3.50	3.67	2.60	2.46	2.53	10.70	10.90	10.80
RXYQ240T	20	20.80	20.90	20.80	3.63	3.33	3.48	2.43	2.34	2.39	11.30	11.20	11.30
RXYQ264T	22	20.30	19.60	19.80	3.33	3.27	3.30	2.43	2.30	2.37	10.80	9.90	10.40
RXYQ288T	24	20.10	19.60	19.80	3.25	3.30	3.28	2.07	2.13	2.10	10.50	10.10	10.30
RXYQ312T	26	19.90	18.80	19.30	3.30	3.21	3.26	2.32	2.20	2.26	9.80	9.60	9.70
RXYQ336T	28	20.60	18.50	19.50	3.22	3.20	3.21	2.38	2.27	2.33	9.50	9.50	9.50
RXYQ360T	30	19.40	18.50	18.90	3.46	3.20	3.33	2.47	2.36	2.42	10.30	9.80	10.50
RXYQ384T	32	21.10	18.50	19.80	3.30	3.20	3.25	2.28	2.28	2.28	9.50	9.50	9.50
RXYQ408T	34	21.10	19.00	20.00	3.24	3.20	3.22	2.18	2.10	2.14	9.50	9.50	9.50

Certified efficiency data in accordance with ANSI/AHRI Standard 1230 2010, "Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air Conditioning and Heat Pump Equipment" for the VRV Series. The VRV IV Series has been designed and optimized to meet or exceed the latest minimum efficiency requirements in 10 C.F.R. Part 431 as determined by the U.S. Department of Energy (DOE) and baseline efficiencies as defined by ASHRAE 90.1 2013. Systems under 65MBH are currently certified to AHRI 210/240. IEER ratings are as defined in ASHRAE 90.1 2013.

DETAILED OPERATION RANGES FOR VRV IV RXYQ-T HEAT PUMP OUTDOOR UNITS

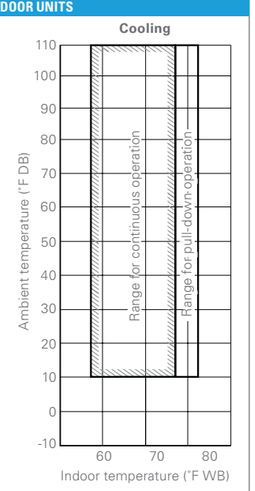


See the Engineering Data book for complete application rules.

LOW AMBIENT COOLING OPERATION FOR VRV IV RXYQ-T SINGLE MODULE HEAT PUMP OUTDOOR UNITS

Cooling operation may be extended from 23°F ambient air temperature down to 10°F.

Cooling operation may be extended for single module heat pump systems under certain conditions. See the Engineering Data book for complete application rules, or contact your local Daikin representative for more information.



OUTDOOR UNITS

VRV IV
Air-Cooled Heat Pump (cont.)

TECHNICAL DATA FOR VRV IV RXYQ-TATJU/TAYDU HEAT PUMP OUTDOOR UNITS

			6 Ton	8 Ton	10 Ton	12 Ton	14 Ton	16 Ton	18 Ton	20 Ton	22 Ton	24 Ton	26 Ton	28 Ton	30 Ton	32 Ton	34 Ton
Model	208-230V/3Ph/60Hz		RXYQ72TATJU	RXYQ96TATJU	RXYQ120TATJU	RXYQ144TATJU	RXYQ168TATJU	RXYQ192TATJU	RXYQ216TATJU	RXYQ240TATJU	RXYQ264TATJU	RXYQ288TATJU	RXYQ312TATJU	RXYQ336TATJU	RXYQ360TATJU	RXYQ384TATJU	RXYQ408TATJU
	460V/3Ph/60Hz		RXYQ72TAYDU	RXYQ96TAYDU	RXYQ120TAYDU	RXYQ144TAYDU	RXYQ168TAYDU	RXYQ192TAYDU	RXYQ216TAYDU	RXYQ240TAYDU	RXYQ264TAYDU	RXYQ288TAYDU	RXYQ312TAYDU	RXYQ336TAYDU	RXYQ360TAYDU	RXYQ384TAYDU	RXYQ408TAYDU
	Combination							1 x RXYQ120T 1 x RXYQ72T	1 x RXYQ120T 1 x RXYQ96T	2 x RXYQ120T	1 x RXYQ144T 1 x RXYQ120T	2 x RXYQ144T	1 x RXYQ168T 1 x RXYQ144T	2 x RXYQ168T	3 x RXYQ120T	1 x RXYQ168T 1 x RXYQ120T 1 x RXYQ96T	1 x RXYQ168T 1 x RXYQ144T 1 x RXYQ96T
Performance	Rated Cooling Capacity	BTU/h	69,000	92,000	114,000	138,000	160,000	184,000	206,000	228,000	250,000	274,000	296,000	312,000	334,000	352,000	372,000
	Rated Heating Capacity	BTU/h	73,000	103,000	129,000	154,000	176,000	206,000	230,000	256,000	282,000	308,000	334,000	344,000	372,000	400,000	435,000
	Sound Pressure	dB(A)	58	61		64	65	63	64		66	67	68		66	68	
	IEER (Ducted / Non-Ducted)		20.7 / 25.9	22.5 / 27.3	22 / 25.4	22.6 / 24.8	19.8 / 22.6	21.2 / 22.2	21.1 / 20.5	20.9 / 20.8	19.6 / 20.3	19.6 / 20.1	18.8 / 19.9	18.5 / 20.6	18.5 / 19.4	18.5 / 21.1	19.0 / 21.1
	Airflow	CFM	5,544	5,827	6286	8,228		5544 + 6286	5827 + 6286	6286 + 6286	6286 + 8228	8228 + 8228			6286 + 6286 + 6286	5827 + 6286 + 8228	6286 + 6286 + 8228
	Fan ESP, Standard/Max	in. W.G.	0.12 / 0.32								0.12 / 0.32						
Compressor	Compressors, all inverter	Qty	1			2					3	4			3	4	5
	Revolutions per minute	RPM	7668	7650	7746	7008 + 7608	7680 + 8280	7668, 7746	7650, 7746	7746, 7746	7746, (7008, 7608)	(7008, 7608), (7008, 7608)	(7008, 7608), (7680, 8280)	(7680, 8280), (7680, 8280)	7746, 7746, 7746	7650, 7746, (7680, 8280)	7650, (7008, 7608), (7680, 8280)
	Capacity Control Range	%	20-100	16-100	15-100	11-100	10-100	17-100	15-100		13-100	11-100	10-100		15-100	13-100	12-100
Refrigerant Piping, Layout	Maximum Vertical Pipe Length Above Unit	ft.	164 (295 With Field Setting)								164 (295 With Field Setting)						
	Maximum Vertical Pipe Length Below Unit	ft.	130 (295 With Field Setting)								131 (295 With Field Setting)						
	Maximum Vertical Pipe Length Between IDU	ft.	100								100						
	Maximum Actual Pipe Length	ft.	540								541						
	Maximum Equivalent Pipe Length	ft.	620								620						
	Maximum Total Pipe Length	ft.	3,280								3,280						
Refrigerant Piping, Connections	Liquid Pipe, Main Line	in.	Ø3/8 (9.5) C1220T (Brazing Connection)		Ø1/2 (12.7) C1220T (Brazing Connection)		Ø5/8 (15.9) C1220T (Brazing Connection)				Ø3/4 (19.1) C1220T (Brazing Connection)						
	Suction Gas Pipe, Main Line	in.	Ø3/4 (19.1) C1220T (Brazing Connection)	Ø7/8 (22.2) C1220T (Brazing Connection)	Ø1-1/8 (28.6) C1220T (Brazing Connection)					Ø1-3/8 (34.9) C1220T (Brazing Connection)	Ø1-3/8 (34.9) C1220T (Brazing Connection)				Ø1-5/8 (41.3) C1220T (Brazing Connection)		
Connection Ratio	Standard Connectable Indoor Unit Ratio	%	50 - 200								50 - 200						
	Maximum Number of Indoor Units	Qty	12	16	20	25	29	33	37	41	45	49	54	58	62	64	
Electrical	Maximum Overcurrent Protection, MOP (RXYQ-TAT / RXYQ-TAY)	A	35 / 20	45 / 25		60 / 35	60 / 35	35 + 45 / 20 + 25	45 + 45 / 25+25	45 + 45 / 25 + 25	45 + 60 / 25 + 35	60 + 60 / 35 + 35			45 + 45 + 45 / 25 + 25 + 25	45 + 45 + 60 / 25 + 25 + 35	45 + 60 + 60 / 25 + 35 + 35
	Minimum Circuit Amps, MCA (RXYQ-TAT / RXYQ-TAY)	A	27.6 / 12.3	36.3 / 20.6	36.3 / 20.6	55.1 / 25.9	55.1 / 25.9	27.6 + 36.3 / 12.3 + 20.6	36.3 + 36.3 / 20.6 + 20.6	36.3 + 36.3 / 20.6 + 20.6	36.3 + 55.1 / 20.6 + 25.9	55.1 + 55.1 / 25.9 + 25.9			36.3 + 36.3 + 36.3 / 20.6 + 20.6 + 20.6	36.3 + 36.3 + 55.1 / 20.6 + 20.6 + 25.9	36.3 + 55.1 + 55.1 / 20.6 + 25.9 + 25.9
	Compressor Rated Load Amps, RLA (RXYQ-TAT / RXYQ-TAY)	A	15.7 / 7.1	23.8 / 10.2	26.2 / 11.7	16.7 + 16.7 / 7.6 + 7.6	18.8 + 18.8 / 8.5 + 8.5	15.7 + 26.2 / 7.1 + 11.7	23.8 + 26.2 / 10.2 + 11.7	26.2 + 26.2 / 11.7 + 11.7	26.2 + (16.7 + 16.7) / 11.7 + (7.6 + 7.6)	(16.7 + 16.7) x 2 / (7.6 + 7.6) x 2	(16.7 + 16.7) + (18.8 + 18.8) / (7.6 + 7.6) + (8.5 + 8.5)	(18.8 + 18.8) x 2 / (8.5 + 8.5) x 2	26.2 + 26.2 + 26.2 / 11.7 + 11.7 + 11.7	23.8 + 26.2 + (18.8 + 18.8) / 10.2 + 11.7 + (8.5 + 8.5)	23.8 + (16.7 + 16.37) + (18.8 + 18.8) / 10.2 + (7.6 + 7.6) + (8.5 + 8.5)
Unit	Factory Refrigerant Charge	lbs.	13	22.7	22.9	18.1	17.2	13.0 + 22.9	22.7 + 22.9	22.9 + 22.9	22.9 + 18.1	18.1 + 18.1	18.1 + 17.2	17.2 + 17.2	22.9 + 22.9 + 22.9	22.7 + 22.9 + 17.2	22.7 + 18.1 + 17.2
	Weight (RXYQ-TAT / RXYQ-TAY)	lbs.	435 / 451	525 / 553	528 / 556	695 / 709		435 + 528 / 451 + 556	525 + 528 / 553 + 556	528 + 528 / 556 + 556	528 + 695 / 556 + 709	695 + 695 / 709 + 709			528 + 528 + 528 / 525 + 528 + 695	525 + 528 + 695 / 553 + 556 + 709	525 + 695 + 695 / 553 + 709 + 709
	Dimensions (H x W x D)	in.	66-11/16 × 36-11/16 × 30-3/16	66-11/16 × 48-7/8 × 30-3/16				66-11/16 × 48-7/8 × 30-3/16 + 66-11/16 × 36-11/16 × 30-3/16	(66-11/16 × 48-7/8 × 30-3/16) x 2		(66-11/16 x 48-7/8 x 30-3/16) x 2				(66-11/16 x 48-7/8 x 30-3/16) x 3		

OPERATION RANGE FOR ALL VRV IV HEAT PUMP OUTDOOR UNITS

Cooling °F DB	10* – 122
Heating °F WB	-4 – 60

*Application rules apply

For additional technical information please refer to specific Engineering Data Books.

OUTDOOR UNITS

OUTDOOR UNITS

Picture shown may not reflect actual package.

C9 SOUND ATTENUATED ENCLOSURES

These sound attenuated, factory installed enclosures incorporate internally mounted super critical level silencers, designed for safety and aesthetic value on fabricated steel skid bases. Optional UL listed tanks are available. These enclosures are of extremely rugged construction to withstand exposure to the elements of weather, and provides weather protection.

FEATURES

ROBUST/HIGHLY CORROSION RESISTANT CONSTRUCTION

- Approved for use with UL 2200 listed generator set packages
- Environmentally friendly, polyester powder baked paint
- 14 gauge steel
- Zinc plated or stainless steel fasteners
- Internally mounted super critical exhaust silencing system
- Factory installed

EXCELLENT ACCESS

- Large cable entry area for installation ease
- Accommodates optional rear-mounted breaker
- Double doors on both sides
- Vertically hinged doors allow 180° opening rotation
- Lube oil and coolant drains pipes to exterior of enclosure and terminated with drain valves
- Radiator fill cover

SECURITY AND SAFETY

- Lockable access doors with standard key utilization
- Cooling fan and battery charging alternator fully guarded
- Fuel fill, oil fill, coolant and battery can only be reached via lockable access
- Stub-up cover sheets for “rodent proofing”
- Externally mounted emergency stop button
- Insulation has UL 94-HFI flame rating
- Designed for spreader-bar lifting to ensure safety
- Control panel viewing window

OPTIONS

- Yellow or white paint
- Interior lighting system
- Skid base with dragging points
- UL listed integral fuel tank
- UL listed sub-base fuel tank
- Dual breakers (second breaker mounted right hand side)
- Seismic Certification per Applicable Building Codes: IBC 2000, IBC 2003, IBC 2006, IBC 2009, CBC 2007
- Tested and Analyzed in Accordance with: ASCE 7-98, ASCE 7-02, ASCE 7-05, ICC-ES AC-156
- Special Seismic Certification OSHPD Pre-Approval OSP-0084-10
- IBC certifiable for 90 mph wind loading
- Anchoring details are site specific, and are dependent on many factors such as generator set size, weight, and concrete strength. IBC Certification requires that the anchoring system used is reviewed and approved by a Professional Engineer.

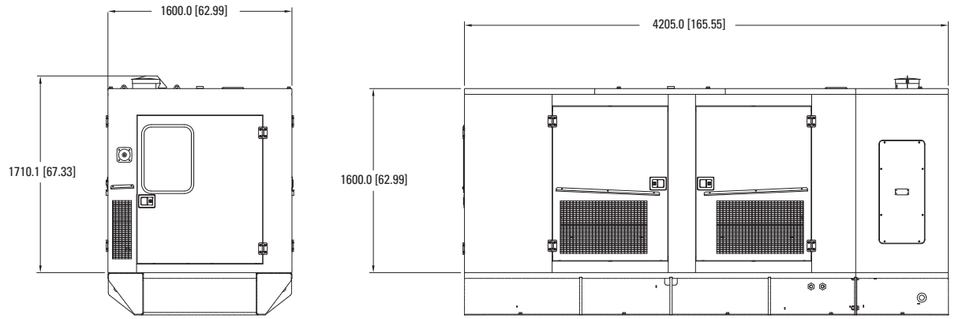
LEHE5419-09

ENCLOSURES

ENCLOSURE OPERATING CHARACTERISTICS

60 Hz Certified SA Enclosure			Ambient Capability*		Airflow Rate		Sound Pressure Levels dBA @ Full Load			Exhaust Back Pressure	
ekW	kVA	PP/SB	°C	°F	m^3/s	CFM	3.3 ft	23.0 ft	49.2 ft	in/H_2O	kPa
300	375	SB	45	113.0	6.0	12,636	83.3	72.0	66.0	9.9	2.46
275	344	PP	43	109.4	6.0	12,636	83.0	71.4	65.4	9.7	2.42
250	313	SB	51	124.0	6.0	12,636	82.7	71.0	65.0	9.4	2.33
225	282	PP	49	120.0	6.0	12,636	82.4	70.5	64.5	8.8	2.20
200	250	SB	51	124.0	6.0	12,636	82.2	70.2	64.2	9.4	2.33
180	225	PP	49	120.0	6.0	12,636	82.2	70.2	64.2	8.8	2.20

*Ambient measured with Cat® Extended Life Coolant



Approximate weight of enclosure package: 3380 kg (7,452 lb)*
Enclosure weight includes: Sound Attenuated enclosure, exhaust system and extended base.

*Dependant on options.

Generator set enclosure also available in white. (Caterpillar yellow is standard color.)

LEHE5419-09 (03-12)

www.Cat-ElectricPower.com

RoofPak Applied Packaged Rooftop Systems

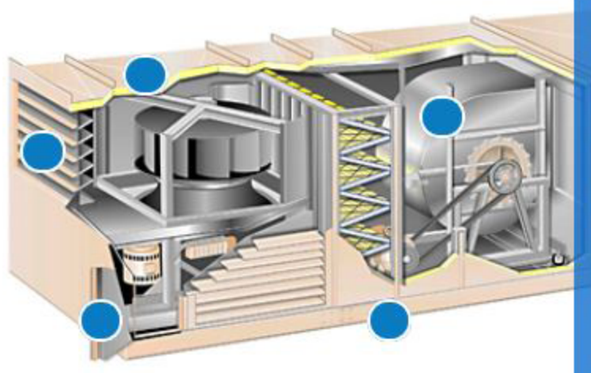
High efficiency and low cost operation for increased profit margins

Overview | Specifications | Resources

Design flexibility, energy efficiency, system performance and reliability make Daikin RoofPak applied rooftop systems the ideal solution for your one to eight-story building projects. Available in air-cooled and evaporative-cooled models, with capacities from 15 to 150 tons, they combine the lower installation costs and interior space savings of a roof-mounted system with the operating and maintenance efficiencies of central heating and cooling systems.

With their unique, modular design, RoofPak applied rooftop systems can be customized to fit your building as if they were made for it. The result is superior energy efficiency and indoor air quality. Applications range from offices, schools and libraries, to airport terminals, manufacturing facilities, shopping malls, casinos and condominiums. Arriving at your job site as a complete package, RoofPak applied rooftop systems maximize your design and installed cost savings. They also can add to your building's profit margins year after year with efficient, reliable performance.

- Flexible, modular construction with walk-in access
- Energy recovery wheel for reduced energy costs
- 100% dedicated outdoor air, dehumidification, VAV, or constant volume operation
- Multiple factory-integrated options for customized flexibility such as return/exhaust fans, draw-through/blow-through final filters, walk-in access to any section, blenders, face and bypass dampers and sound attenuators
- Controls flexibility—MicroTech® III controls with our Open Choices® feature for easy integration with the BAS of your choice
- Heavy duty construction and independent certification, complies with IBC seismic requirements



Durable construction

Pre-painted exterior cabinet panels pass ASTM B 117 Salt Spray Test for durability

Capped seams prevent water leaks into the cabinet

Cross-broken top panels eliminate standing water

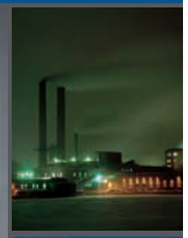
Double-wall construction protects R-6.5 insulation and provides wipe clean surface

Stainless steel, sloped drain pans eliminate standing water

More Features >

Centrifugal Fans
Models SWD, USF and CSW

- Backward-Inclined and Airfoil Wheels
- Single-Width



BUILDING VALUE IN AIR.

Commercial & Industrial Applications

GREENHECK
Building Value in Air.

February 2017

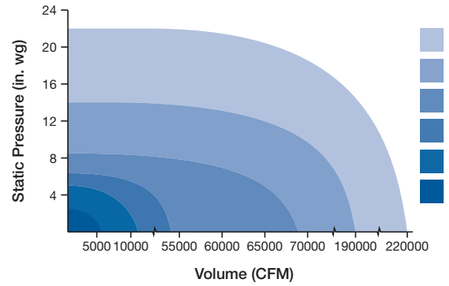
Centrifugal Fans

Greenheck's centrifugal products are specified to handle a variety of commercial and industrial projects.

- General supply, return or exhaust systems
- Emergency smoke exhaust (buildings, car parks, etc.)
- Restaurant grease exhaust
- Stairwell pressurization
- Process heat exhaust
- Filter houses and dust collectors
- Built-up or custom air handlers
- Spark-resistant fume exhaust
- Corrosive fume exhaust
- Grain drying

Benefits of Greenheck's centrifugal fans

- Designed, engineered and tested prior to shipment to provide years of smooth, vibration-free operation with minimal maintenance.
- Centrifugal fans are more efficient at higher static pressures and quieter than propeller fans
- Housing changes airflow direction efficiently without adding static pressure from duct turns
- Flexible installation locations, inside or outside
- Inlet cone reduces system effects when fitting into tight spaces
- Serviceable components at the same level as the technician



Greenheck's tiered product offering

Greenheck's tiered model approach gives you flexibility in size, performance and construction matching the appropriate model to your application. Our centrifugal product line offers a variety of options in construction features, materials and performance by model.

- Quick and easy selection options along with AutoCAD® and Revit™ models available for download and integration into plan drawings, custom equipment schedules and specifications.
- Multiple motor and control options for energy efficiency savings and exact control.
- eCAPS®, an easy to use cloud based cross-model selection program quickly ranks the tiered centrifugal models based on performance, and providing detailed estimated first cost, operating costs, weights, and dimensions. Enhanced construction requirements show only models matching project requirements.
- CAPS™ selection software leads the industry in providing selection details, options accessories and full submittal packages. The centrifugal product filter quickly guides the user to available models meeting criteria and offering full range of available options and accessories.


SWD


USF-200


USF-300


USF-400


CSW

MODEL/SIZE	CAPACITIES CFM (m^3/hr)	STATIC PRESSURE in. wg (kPa)	Drive		Frame		Scroll Materials			
			Belt	Direct	Bolted	Welded	Galvanized	Coated Steel	Aluminum	Stainless
SWD	5,500 (*9340*)	2.5 (*.62*)		✓	✓		✓	✓	✓	
USF-200	10,000 (*16990*)	5.5 (*1.4*)	✓		✓		✓			
USF-300	53,000 (*90050*)	5.5 (*1.4*)	✓		✓			✓		
USF-400	66,000 (*112130*)	9 (*2.2*)	✓			✓		✓		
CSW-BI (7-73)	231,000 (*392470*)	21 (*5.2*)	✓	✓		✓		✓	✓	✓
CSW-AF (18-73)	195,000 (*331300*)	14 (*3.5*)	✓	✓		✓		✓	✓	

Centrifugal Fan Applications

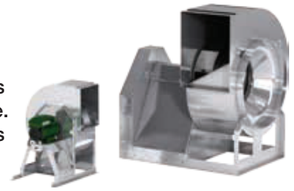
GREENHECK
Building Value in Air.

Light Duty Commercial and Institutional:

General ventilation, office space, retail space, cafeterias, break rooms, conference rooms

Building or room with relatively clean air found in a normal work place environment. Air volumes are typically below 8,000 cfm with static pressures less than 3 in. wg (747 Ps). Application needs a basic fan model providing good value. Galvanized housing and bolted construction are appropriate for the requirements of this application.

Models: SWD, USF-200



Commercial and Institutional:

Warehouse, hotels, atriums, theaters, gyms, library

Larger volumes of air up to 20,000 cfm with low to moderate static pressures to 5 in. wg (1245 Pa). Air quality is relatively clean; used for supply or exhaust. Fan coating available for cosmetic appearance or improved weather protection. Instances may require fan certified for use in emergency conditions.

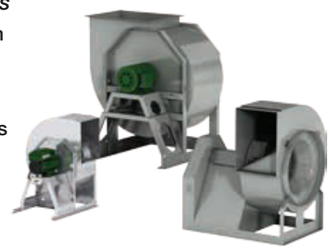
Models: SWD, USF-200, USF-300

Light Industrial and Specialty Commercial:

Waste water treatment, garage exhaust, restaurants, mechanical rooms, manufacturing space, dedicated exhaust hoods, emergency smoke, natatoriums, cleanrooms

Category involves a wide range of airflow volume from very low to 60,000 cfm with moderate pressures below 8 in. wg (1990 Pa). Fans applied to dedicated exhaust systems or combined between process and clean air. Applications requiring higher efficiency can use airfoil wheel. Fans may be subjected to increased level of chemicals or particulates in the air. Additional contaminates such as grease exhaust or light dusts are possible. Specialized coatings are available when needed. Fans may also have need for dual use in emergency conditions or spark resistance.

Models: SWD, USF-300, USF-400, CSW

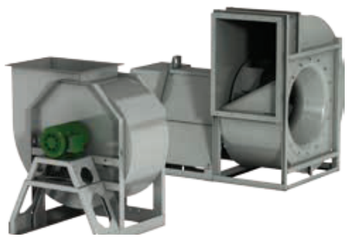


Industrial:

Process exhaust, fume exhaust, chemical processing, high temperatures, high humidity, vibration sensitive areas

Systems having a broad airflow performance range from low to high volumes and pressures for supply or exhaust from different processes. Application often requiring additional strength and rigidity to the unit through welded scroll housings and frames. Application of specialized coatings or construction materials for spark resistance, extra protection to resist corrosion or high temperatures. High degree of durability in the fan is critical for process operation or for safety concern. Components required are of the highest quality, durability and longest life.

Models: USF-400, CSW



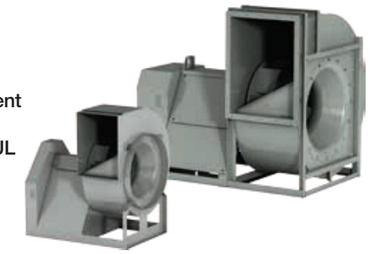
Centrifugal Fan Applications

Emergency Smoke (UL/cUL Listed):

Atriums, libraries, multi-story buildings

Fan installed for emergency use on a dedicated emergency system or dual application use with the primary function of the fan being general air movement but built to withstand operation seen in emergency smoke situations. Greenheck models USF-300, USF-400, and CSW are available with the UL/cUL Power Ventilators for Smoke Control Systems. Listing indicates the model is designed and tested to exhaust heat and smoke in an emergency situation.

Models: USF-300, USF-400, CSW



The emergency high temperature option is suitable for the following temperatures:

Operating Temperature	Time Duration
500ºF (260ºC)	4 hours
572ºF (300ºC)	2 hours
752ºF (400ºC)	2 hours
1000ºF (538ºC)	15 minutes

c UL US LISTED

UL/cUL 705 Listed Power Ventilator
UL/cUL File E40001(SWD, USF-200, -300, -400, CSW)
UL/cUL 762 Power Ventilators for Restaurant Exhaust Appliances
UL/cUL File MH11745 (USF-300, -400, CSW)
UL/cUL Power Ventilator for Smoke Control Systems
UL/cUL File MH17511 (USF-300, -400, CSW)

High Temperature Process Exhaust:

Kilns, Dryers, Furnaces

Application involving elevated temperatures above 250°F (121°C) continuously or extended periods of time. Material and arrangement choices are limited to components suitable for this application and located to minimize effects. Fans are manufactured with high temperature process package that includes high temperature shaft seal, heat slinger, high temperature fan bearing grease, and high temperature coating on steel fans. Heat slinger dissipates heat being transferred down fan shaft preventing bearing grease evaporation.

Model: CSW

Temperature Option	Wheel Type	Arrangement	Material
251–500ºF (121–260ºC)	BI, AF	1, 8, 9, 10	Steel, 316 Stainless Steel*
501–750ºF (261–400ºC)	BI	1, 8	316 Stainless Steel
751–1000ºF (401–538ºC)	BI	1	316 Stainless Steel

Note: Aluminum construction is suitable up to 250ºF (121ºC)
* AF wheels are steel construction only.

Chemical and Hazardous Exhaust:

Petrochemical, Mills, Fertilizer, Poultry Barns

Specialized type of HVAC industrial application with air containing high concentration levels of hazardous chemicals from process exhaust or other sources. Application dictates utilizing a higher performance coating or use of corrosion-resistant materials (stainless steel or aluminum). Systems may also combine with high temperatures.

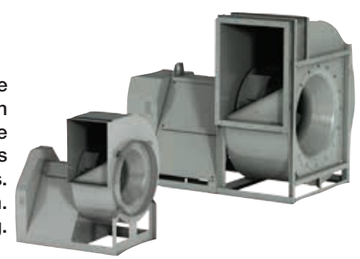
Model: CSW

Restaurant Grease Exhaust (UL/cUL 762 Listed):

Restaurants

The centrifugal scroll fans are designed for high pressure restaurant grease exhaust applications. Either Permalock™ or welded housing are available with UL/cUL Listing of Power Ventilators for Restaurant Exhaust Appliances. The welded housing is suitable for indoor or outdoor mounting locations, whereas the Permalock housing is suitable for outdoor kitchen ventilation installations. Listing tests exceed duct temperatures of 400°F (204°C) continuous operation. UL/cUL762 selections require a drain connection and access door for cleaning.

Models: USF-300, USF-400, CSW



Model Comparison

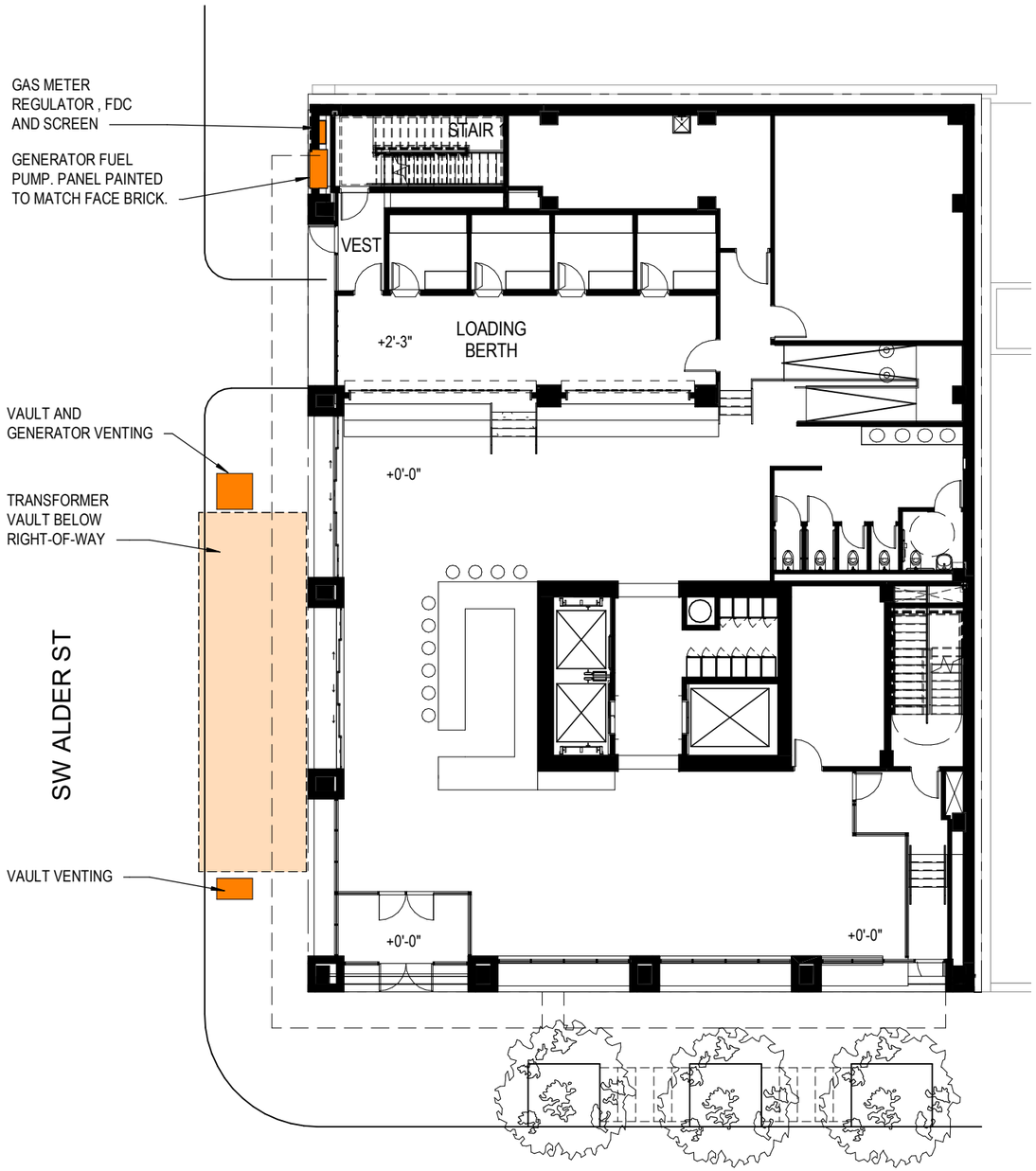
GREENHECK
Building Value in Air.



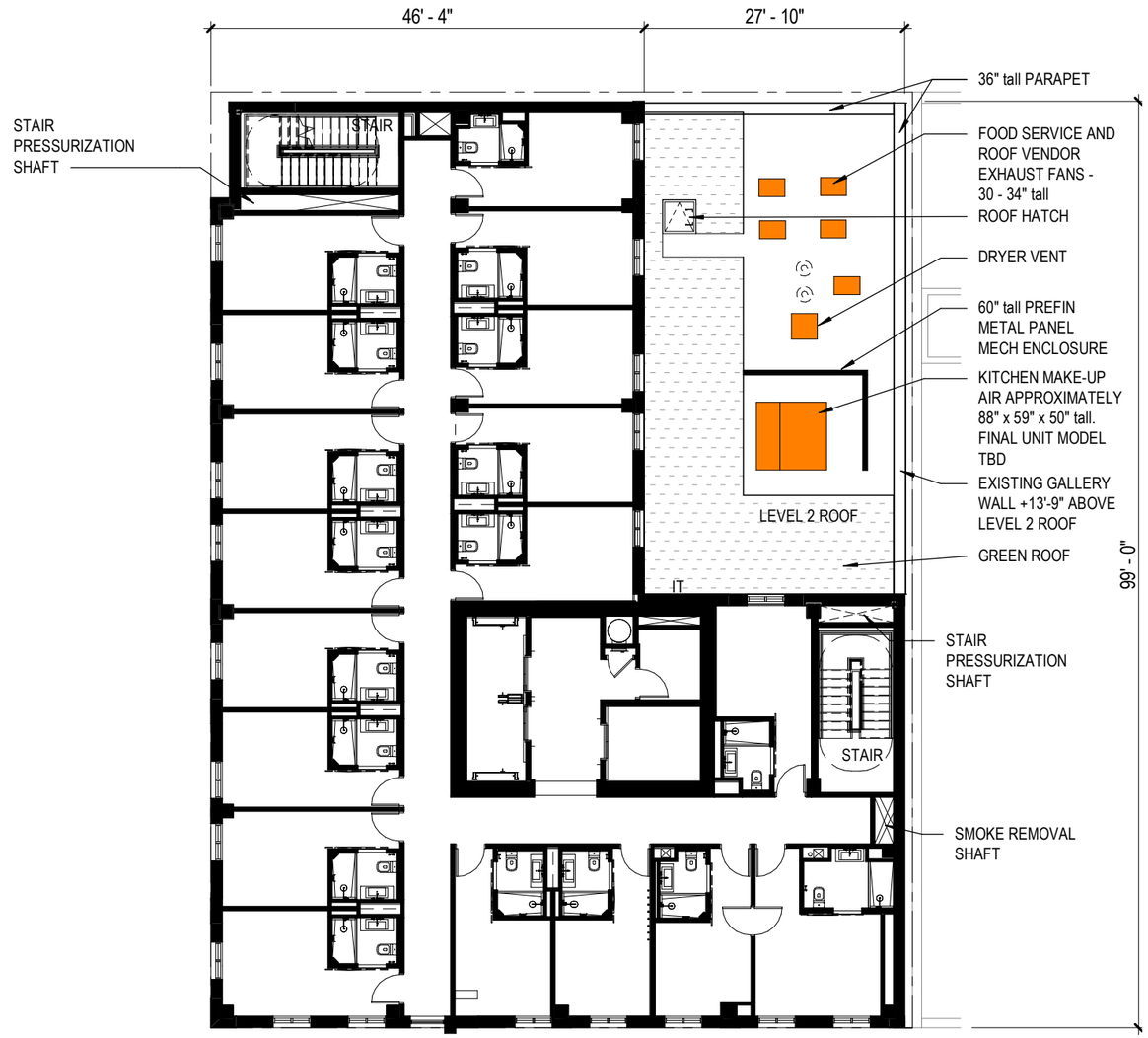



MODEL COMPARISON		SWD	USF-200		USF-300	USF-400	CSW	MODEL COMPARISON
Performance	Volume (CFM max *(m³/hr)*)	5,500 *(9340)*	10,000 *(16990)*		53,000 ***(90050)***	66,000 ***(112130)***	231,000 ***(392470)***	Volume (CFM max ***(m³/hr)***)
	Static Pressure (Ps max)	2.5 in. wg *(623 Pa)*	5.5 in. wg *(1370 Pa)*		5.5 in. wg *(1370 Pa)*	9 in. wg *(2240 Pa)*	21 in. wg *(5230 Pa)*	Static Pressure (Ps max)
	Sizes	7-18	6-22		6-49	7-49	7-73	Sizes
	Class	–	–		–	0, I	0, I, II, III (BI IV)	Class
Standard Construction	Wheel Type	BI	BI		BI	BI & AF	BI & AF	Wheel Type
	Drive Type	Direct	Belt		Belt	Belt	Belt / Direct	Drive Type
	Scroll Material	Galvanized	Galvanized		Coated Steel	Coated Steel	Coated Steel	Scroll Material
	Scroll Construction	Permalock™	Permalock™		Permalock™	Permalock™	Permalock™ on Class 0, I, II & <54 Welded on Class III, IV & >=54	Scroll Construction
	Discharges	TH, UB, BH, TAU, BAU, DB, TAD, BAD	TH, UB		TH, UB, BH, TAU, BAU	TH, UB, BH, TAU, BAU	TH, UB, BH, TAU, BAU, DB	Discharges
	Arrangements	4	10		10	10	1, 3, 4, 8, 9 & 10	Arrangements
	Wheel Construction	Riveted	Riveted		Size 6-24 Riveted Size 27-49 Welded	Welded	Welded	Wheel Construction
	Wheel Material	Aluminum	Size 6-10 Aluminum Size 12-22 Coated Steel		Size 6-10 Aluminum Size 12-49 Coated Steel	Coated Steel	Coated Steel	Wheel Material
	Frame Construction	Bolted	Bolted		Bolted	Welded	Welded	Frame Construction
	Frame Material	Galvanized, Coated Steel	Galvanized		Coated Steel	Coated Steel	Coated Steel	Frame Material
	Inlet Cone Material	Aluminum	Coated Steel		Coated Steel	Coated Steel	Coated Steel	Inlet Cone Material
	Inlet / Outlet Connection	Slip Fit / Slip Fit	Slip Fit / Slip Fit		Slip Fit / Flange	Slip Fit / Flange	Slip Fit / Flange	Inlet / Outlet Connection
	Bearings	–	Set Screw		Set Screw	Concentric Locking	Concentric Locking	Bearings
	Bearing Life	–	L_{10} 80,000 Hours		L_{10} 80,000 Hours	L_{10} 80,000 Hours	L_{10} 80,000 Hours,	Bearing Life
	Factory Vibration Test	–	–		–	–	Yes	Factory Vibration Test
Options	Welded Scroll	Yes	–		–	Yes	Yes	Welded Scroll
	High Temperature Limit (Continuous)	250°F (121°C)	250°F (121°C)		400°F (204°C)	400°F (204°C)	1000°F (538°C)	High Temperature Limit (Continuous)
	Stainless Airstream	–	–		–	–	Yes	Stainless Airstream
	Aluminum Construction	Airstream	–		–	–	Airstream or Entire Unit	Aluminum Construction
	Spark Resistant	AMCA Spark B & C	–		AMCA Spark B & C	AMCA Spark B & C	AMCA Spark A, B & C	Spark Resistant
	UL/cUL 705 (Electrical) Listed	Yes	Yes		Yes	Yes	Yes	UL/cUL 705 (Electrical) Listed
	UL/cUL 762 (Grease Exhaust) Listed	–	–		Yes	Yes	Yes	UL/cUL 762 (Grease Exhaust) Listed
	HT-UL/cUL (Emergency Smoke) Listed	–	–		Yes (excludes size 6-10")	Yes	Yes	HT-UL/cUL (Emergency Smoke) Listed
	Extended Life Bearings	–	–		–	–	L_{10} 200,000 Hours	Extended Life Bearings
	Quad Split Housing	–	–		–	–	Yes	Quad Split Housing
	Stainless Shaft	–	–		–	–	Yes	Stainless Shaft
Accessories	Isolation	Direct Mount / Rails	Direct Mount		Direct Mount / Rails	Direct Mount	Direct Mount / Bases / Inertia	Isolation
	Access Door - Hinged / Bolted	Bolted	Bolted		Hinged / Bolted	Hinged / Bolted	Hinged / Bolted	Access Door - Hinged / Bolted
	Inlet/Outlet Guards	Yes	Yes		Yes	Yes	Yes	Inlet / Outlet Guards
	Motor Cover (Arr, 1, 3, 4, 8, 9) / Weatherhood (Arr 1 X/Y, 10)	Yes	Yes		Yes	Yes	Yes	Motor Cover (Arr, 1, 3, 4, 8, 9) / Weatherhood (Arr 1 X/Y, 10)
	Sure-Aire Airflow Measurement	–	–		–	Yes	Yes	Sure-Aire Airflow Measurement
	Backdraft / Volume Control Damper	WD, HB, HCD	WD		WD, HCD	HB, HCD	HB, HCD	Backdraft / Volume Control Damper
	Inlet / Outlet Flange	Yes	Yes		Yes	Yes	Yes	Inlet / Outlet Flange
	Heat Slinger / Shaft Seal	–	–		Yes	Yes / Yes	Yes / Yes	Heat Slinger / Shaft Seal
	Coating Options	Yes	–		Yes	Yes	Yes	Coating Options
	Disconnect Switch	NEMA 1, 3R, 4, 4X, 12	NEMA 3R		NEMA 3R	NEMA 3R	NEMA 3R, 4, 4X, 7/9, 12	Disconnect Switch

MECHANICAL EQUIPMENT LOCATIONS



LEVEL 1 (GROUND FLOOR)
MECHANICAL EQUIP. LOCATIONS



LEVEL 2
MECHANICAL EQUIP. LOCATIONS

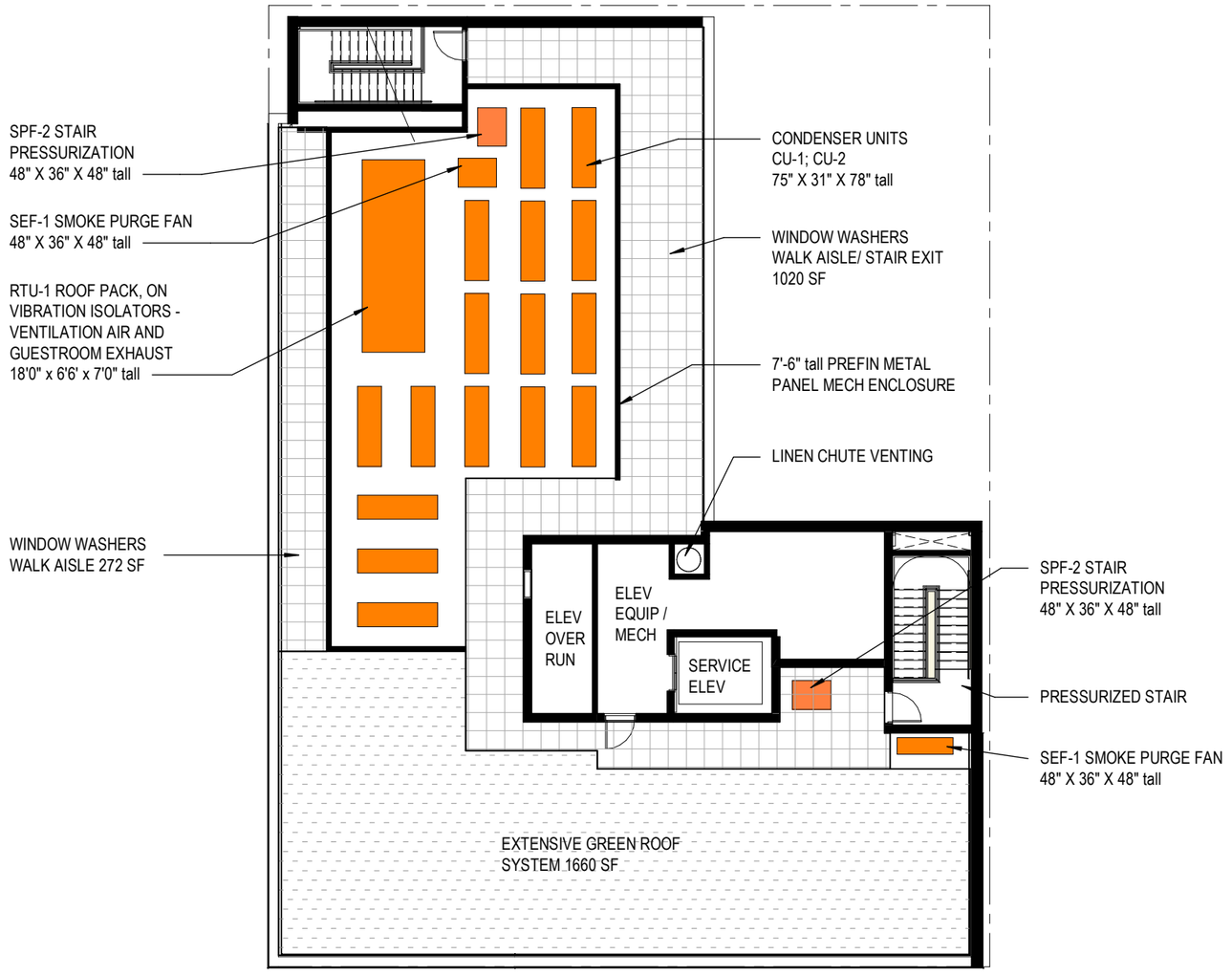
SCALE: 1/16" = 1'-0"

DLR Group

GRAVES HOSPITALITY
DEVELOPMENT EXPERTISE. MANAGEMENT SAVY.

EXHIBIT C.9.19
LAND USE HEARING # (LU 17-264667 DZM)

MECHANICAL EQUIPMENT LOCATIONS



ROOF PLAN
MECHANICAL EQUIP. LOCATIONS

SCALE: 1/16" = 1'-0"

DLR Group

GRAVES HOSPITALITY
DEVELOPMENT EXPERTISE. MANAGEMENT SAVVY.

EXHIBIT C.9.20
LAND USE HEARING # (LU 17-264667 DZM)

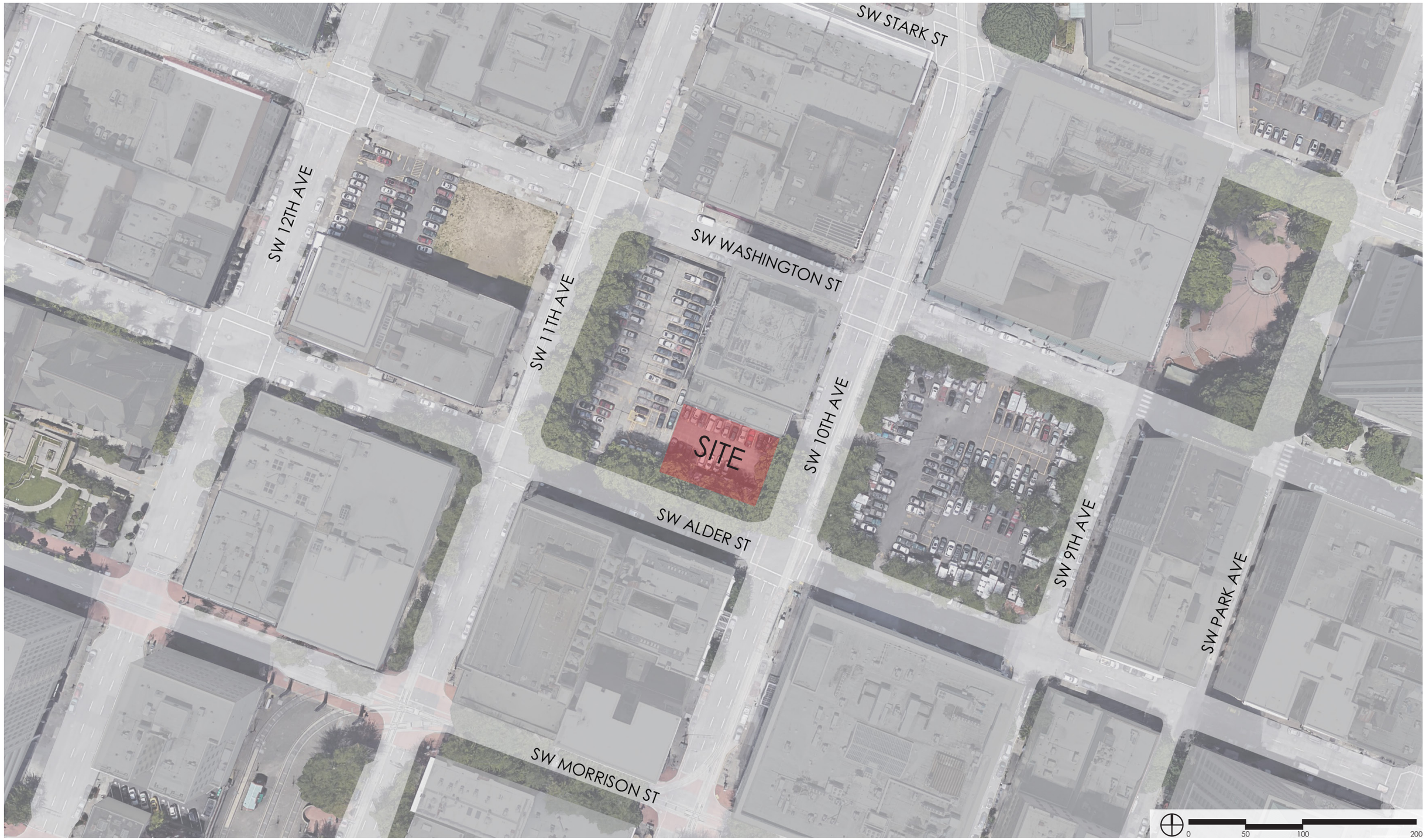
APPENDIX

BUILDING RENDERINGS

BUILDING RENDERINGS

BUILDING RENDERINGS

SITE VICINITY PLAN



SURROUNDING BLOCK ENTRIES

SITE CONTEXT

1 SENTINEL HOTEL / JAKE'S GRILL

2 SANTOS GALLERY

3 The 511 Building

4 FOOD TRUCKS / SURFACE PARKING

5 GALLERIA / CITY TARGET

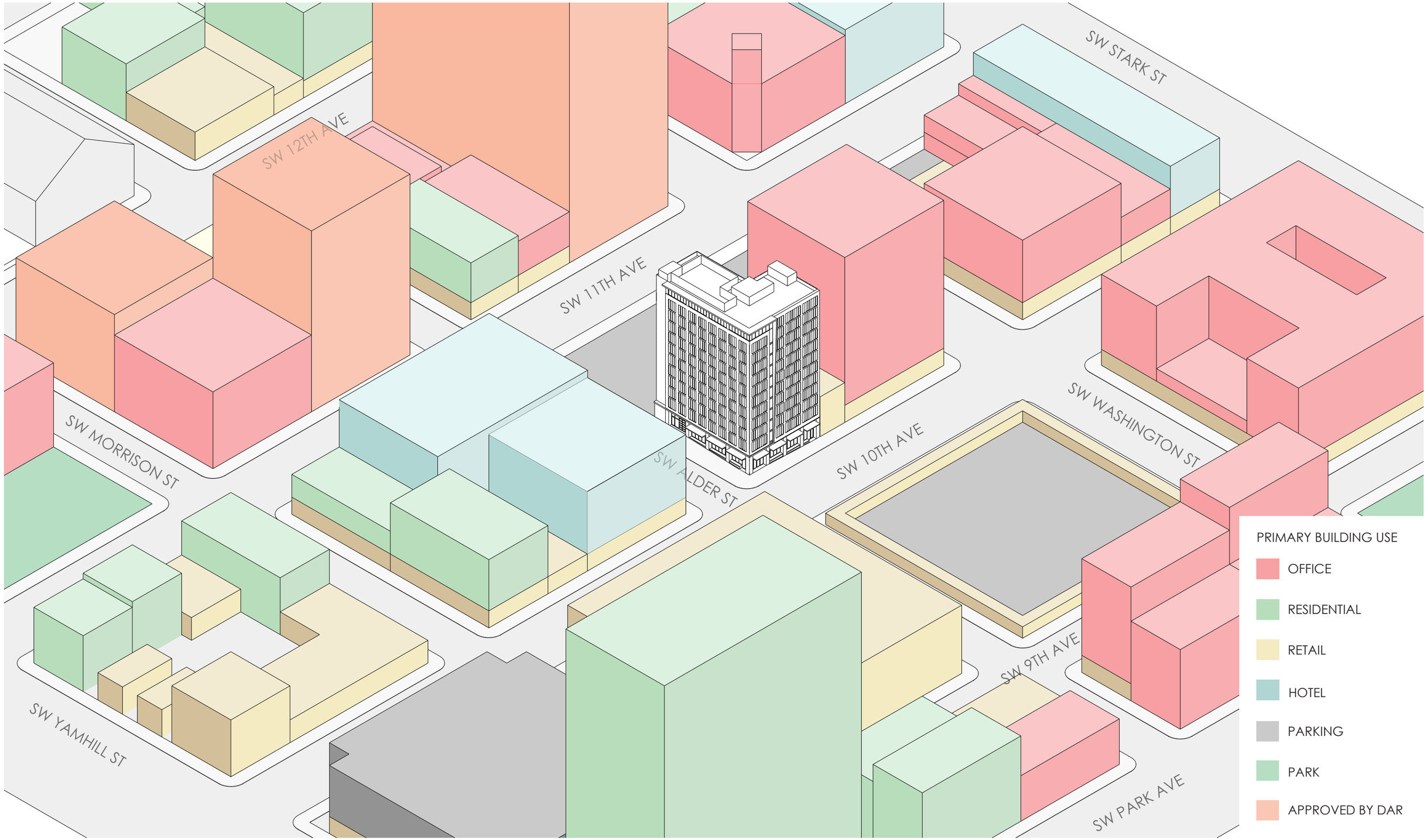
UNBUILT SITE CONTEXT

1 1127 SW MORRISON STREET

2 11TH AND SW ALDER ST

3 ELEVEN WEST

COMMUNITY MASSING



GOOGLE EARTH VIEWS

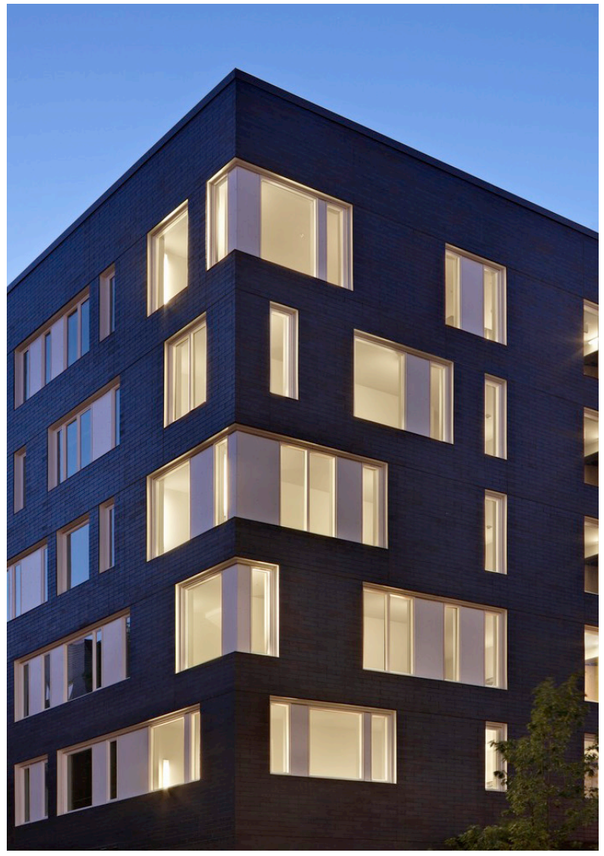
SOUTHEAST

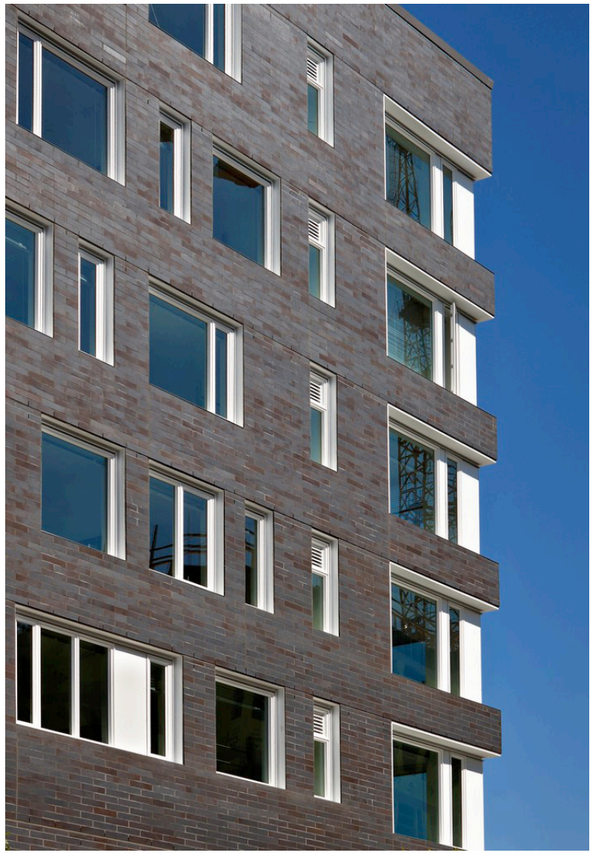
SOUTHWEST

NORTHEAST

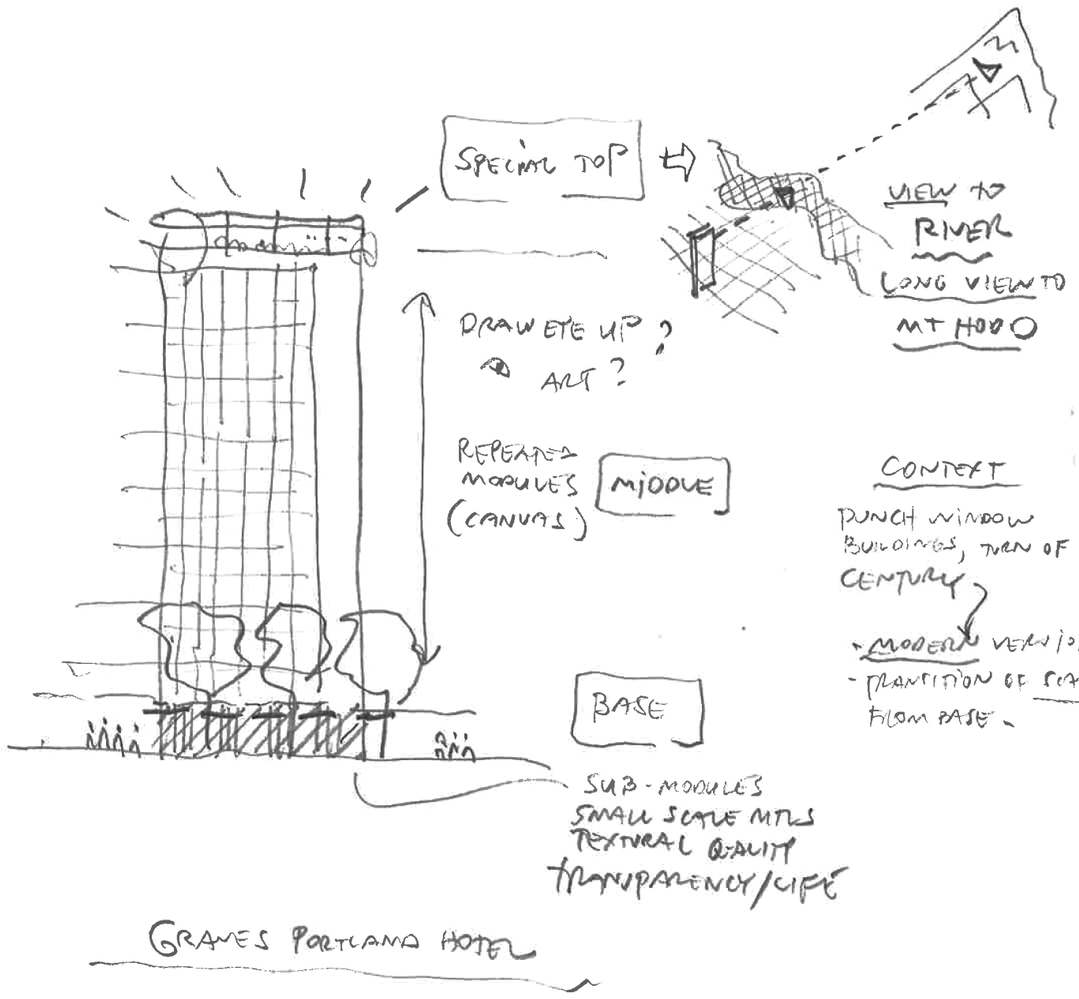
NORTHWEST

MATERIAL PHOTOS + EXAMPLES

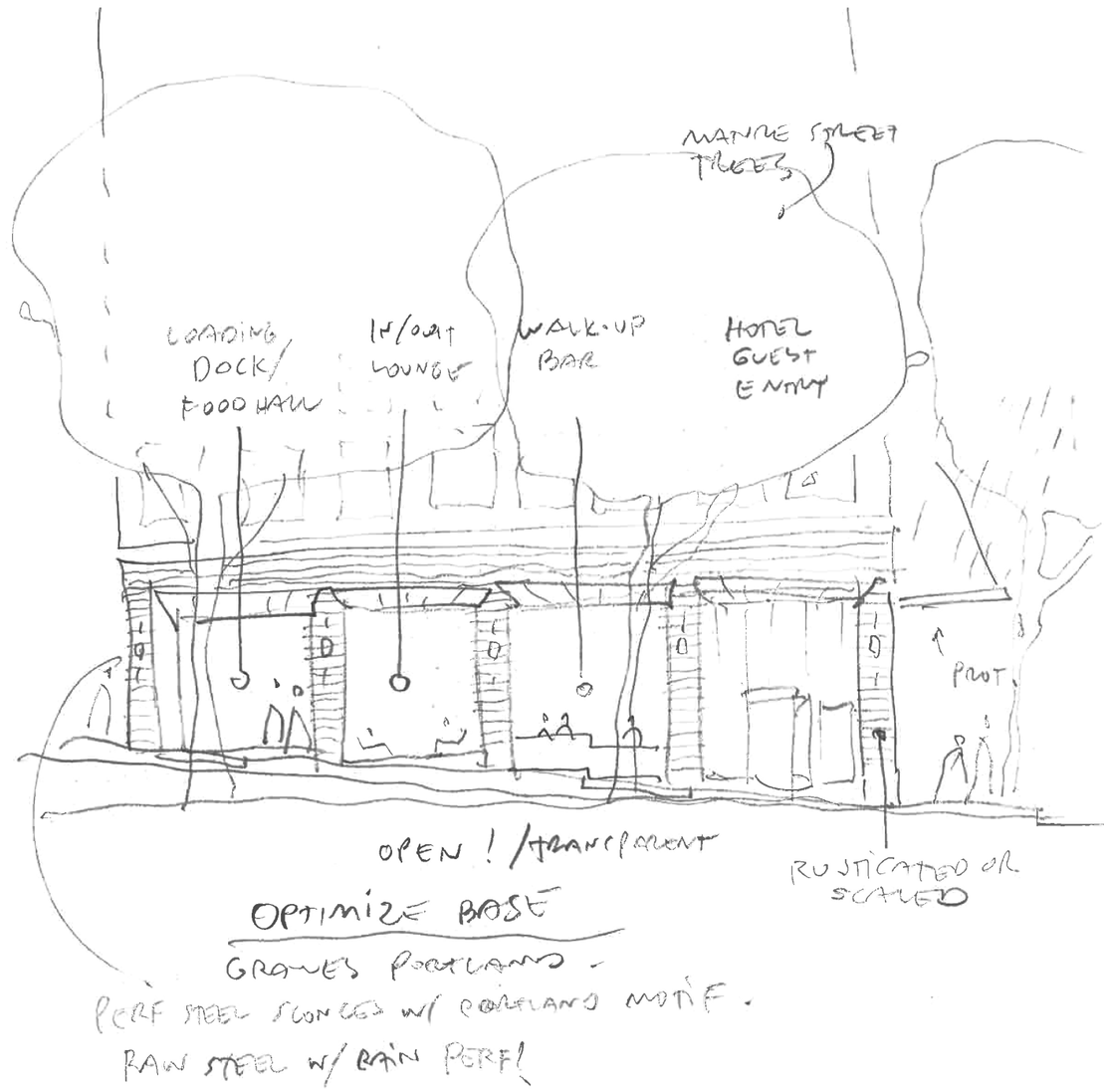




Pacific Clay Dark Iron Spot Brick - Smooth / Velour
Project: West Campus Student Housing
Architect: Mahlum
Location: University of Washington Plaza, Seattle, WA

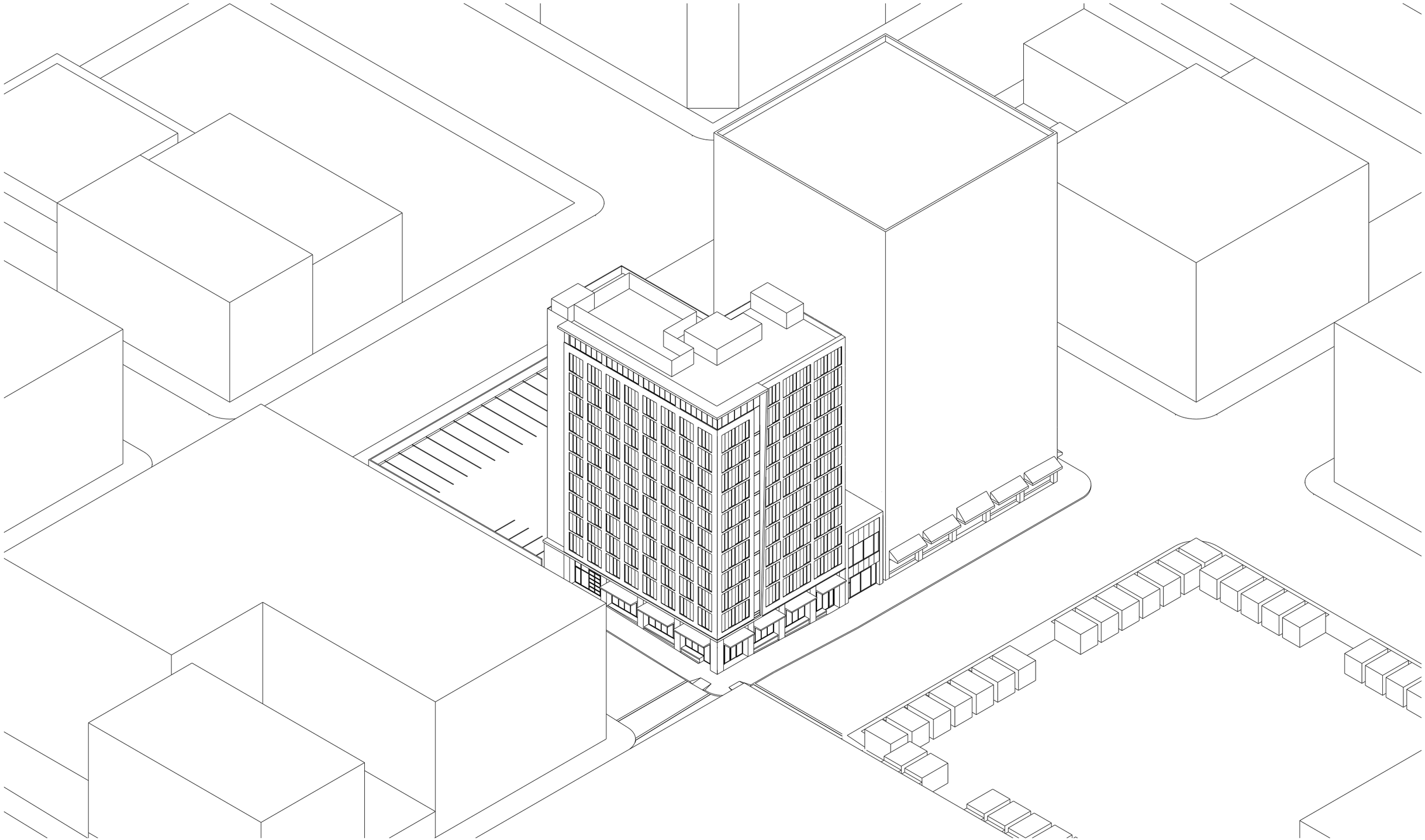


BASE-MIDDLE-TOP

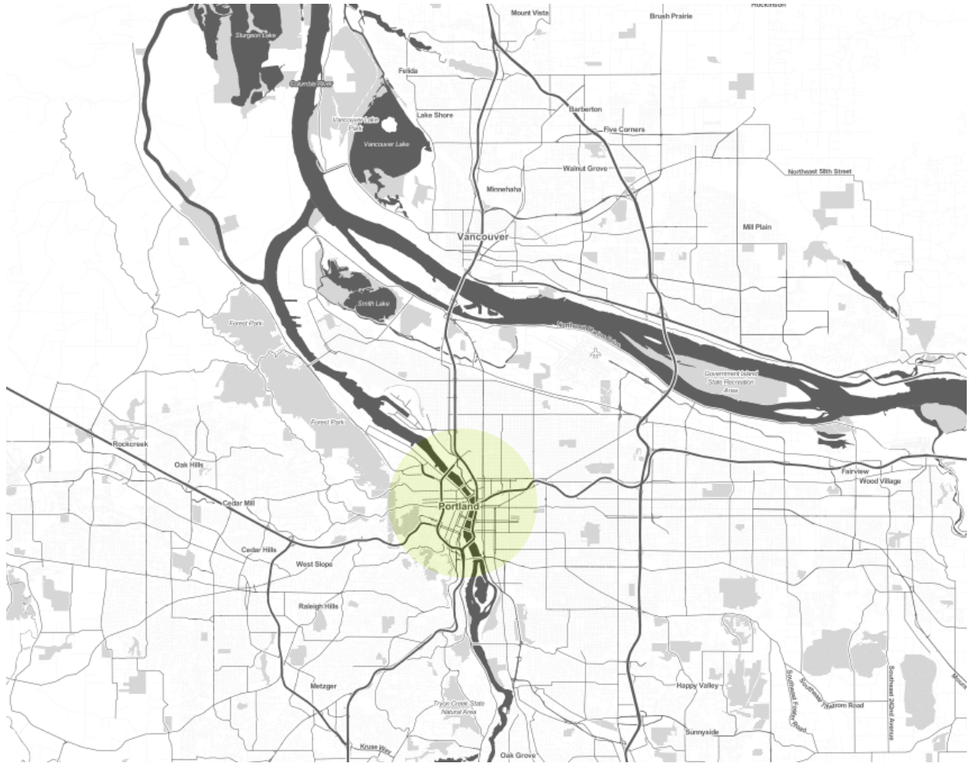


PEDESTRIAN EXPERIENCE

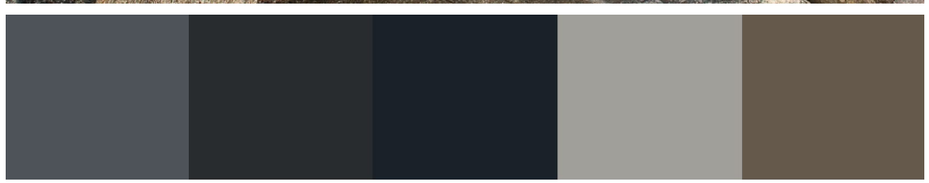
MASSING + DESIGN CONCEPT



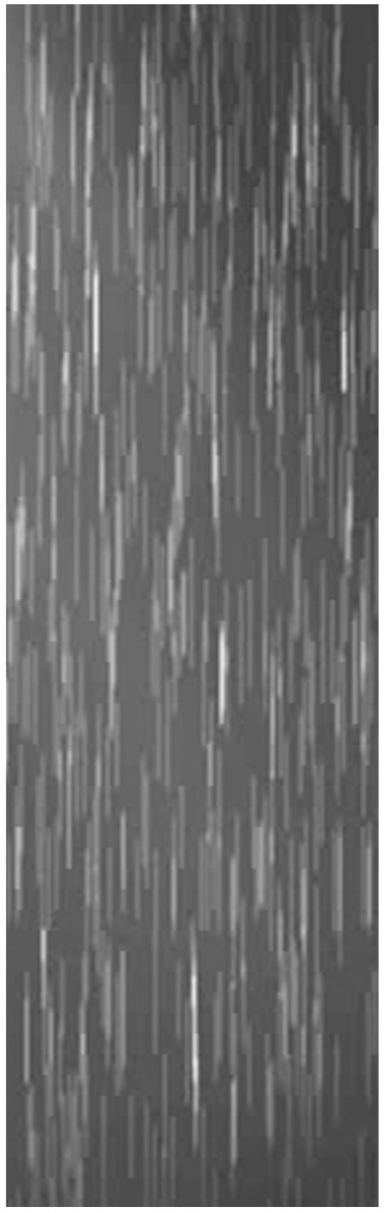
FACADE COLOR INSPIRATION

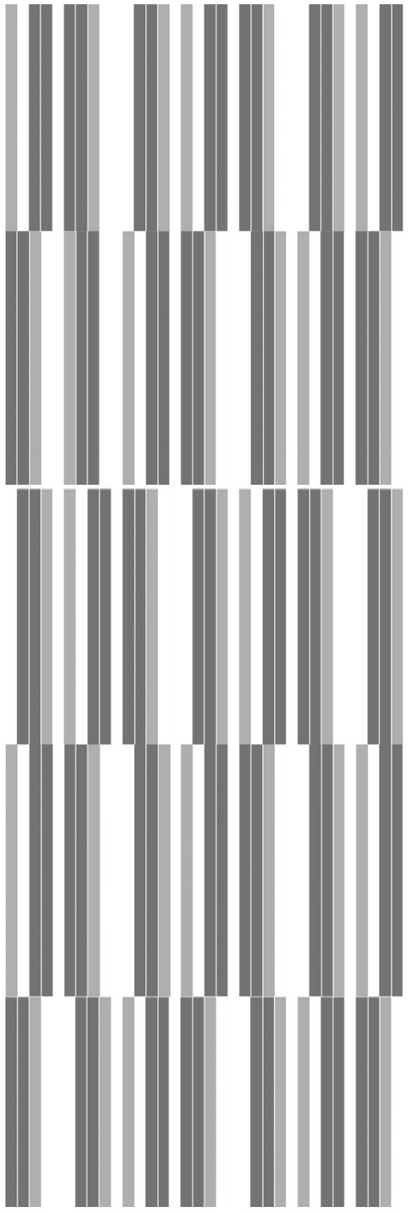


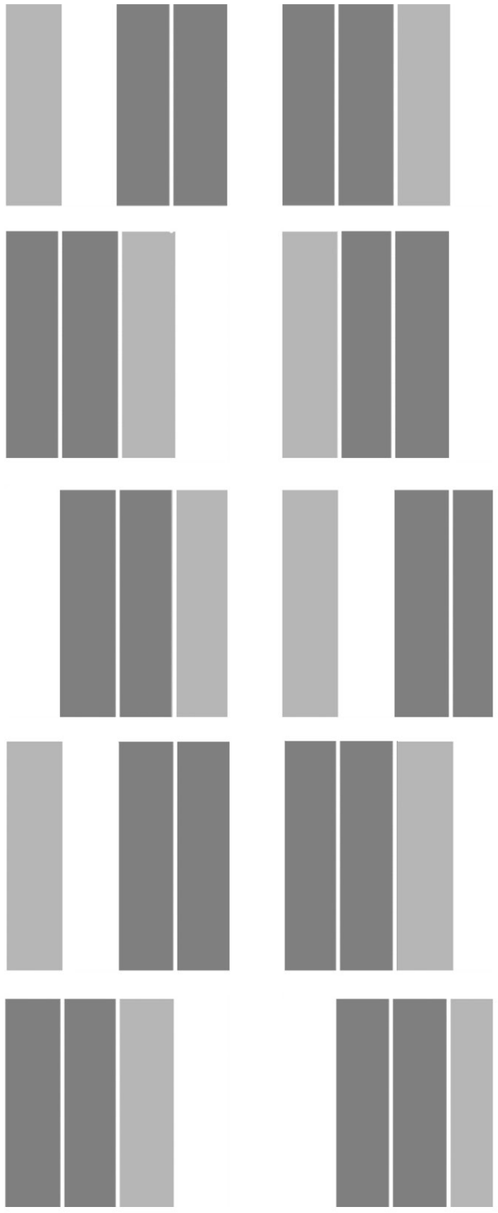
FACADE COLOR INSPIRATION

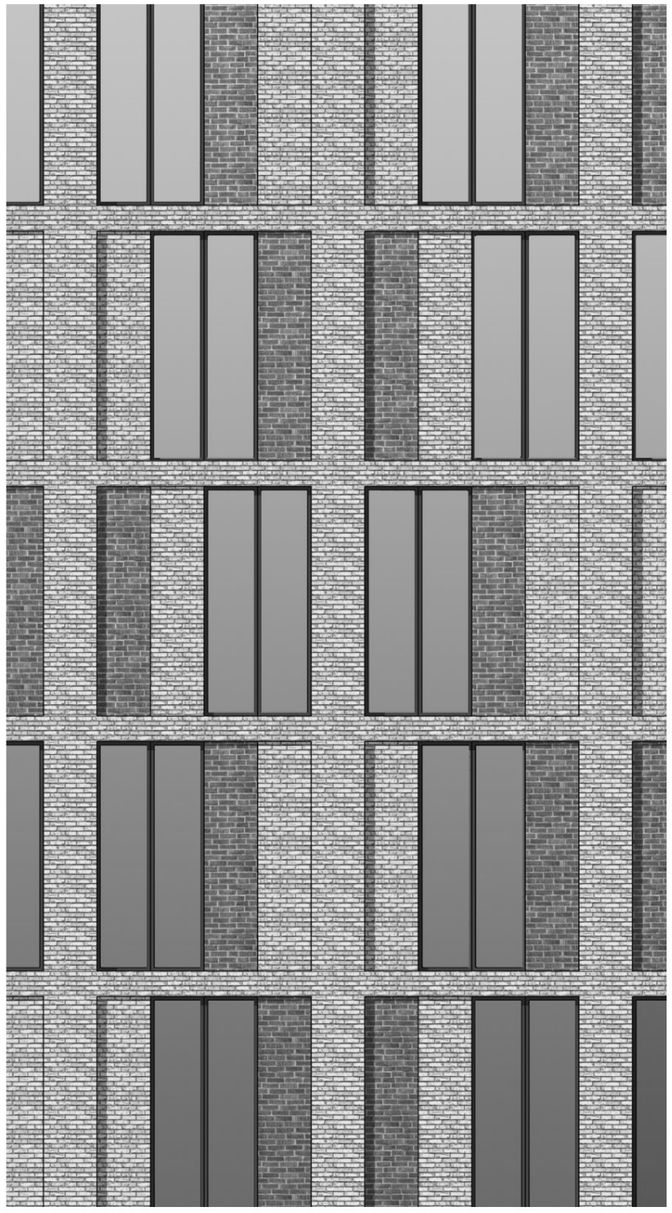


FACADE DESIGN INSPIRATION

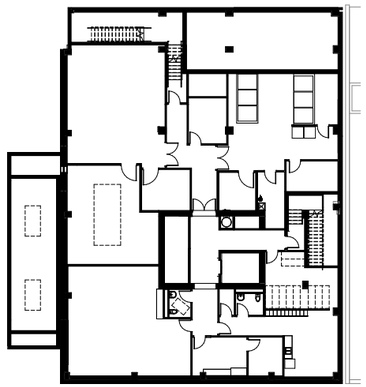






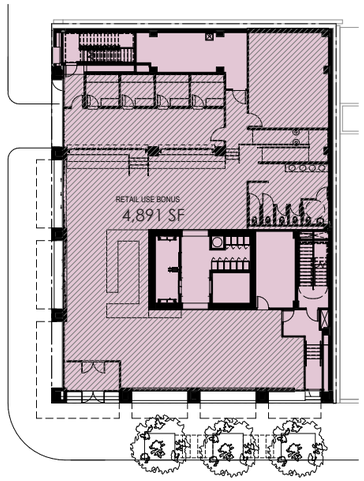


FLOOR AREA RATIO CALCULATION



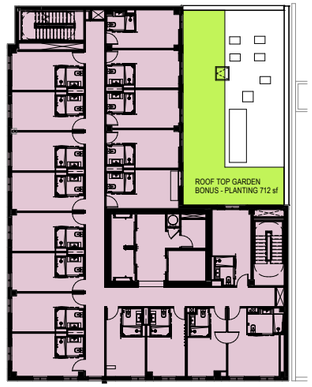
BASEMENT

ACTUAL : 7,117 SF
COUNTED TOWARD FAR : 0 SF
(AREA INCLUDES WATER TANK)



GROUND LEVEL

ACTUAL : 6,984 SF
COUNTED TOWARD FAR : 5,843 SF
RETAIL USE BONUS APPLIED 1,141 SF

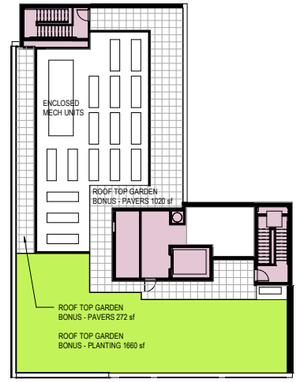


LEVEL 2

ACTUAL : 5,832 SF
COUNTED TOWARD FAR : 5,832 SF
ROOFTOP GARDEN BONUS APPLIED (1,180 SF)

LEVEL 3-12

ACTUAL : 5,832 SF
COUNTED TOWARD FAR : 5,832 SF



ROOF TOP

ACTUAL : 1,144 SF
COUNTED TOWARD FAR : 1,144 SF
ROOFTOP GARDEN BONUS APPLIED (1,180 SF)

ASSUMPTIONS:

Floor area is defined as per 33.910 the total floor area of the portion of a building that is above ground. Floor area is measured from the exterior faces of a building or structure. Floor area includes the area devoted to structured parking that is above ground level. Floor area does not include the following:

- Areas where the elevation of the floor is 4 feet or more below the lowest elevation of an adjacent right-of way;
- Roof area, including roof top parking;
- Roof top mechanical equipment; and:
- Roofed porches, exterior balconies, or other similar areas, unless they are enclosed by walls that are more than 42 inches in height, for 50 percent or more of their perimeter.

Bonus Target Area #1 *- Retail Use, 33.510.210.C.4, Map 510-4. In the retail use bonus target area, shown on Map 510-4, projects providing retail uses receive bonus floor area. To qualify for this bonus option, floor area equal to at least 1/2 of the site area must be committed to retail space. For each square foot of retail space over this amount, one additional square foot of floor area is earned. [...] (Hotel is classified as a retail use). For a 7,500 site, a minimum of retail space over 3,750 SF is required to earn bonus floor area. The proposed retail is 4,891 SF, earning 1,180 sf of bonus area. It, therefore, reduces Level 1 square footage counted towards FAR from 7,326 sf down to 5,843 sf.*

Bonus Target Area #2 *- Rooftop gardens option. In CX, EX, and RX zones outside of the South Waterfront Subdistrict, developments with rooftop gardens receive bonus floor area. For each square foot of rooftop garden area, a bonus of one square foot of additional floor area is earned. To qualify for this bonus option, rooftop gardens must meet all of the following requirements: The rooftop garden must cover at least 50 percent of the roof area of the building and at least 30 percent of the garden must contain plants. The property owner must execute a covenant with the City ensuring continuation and maintenance of the rooftop garden by the property owner. The covenant must comply with the requirements of 33.700.060.*
The hotel combined roof area at Level 2, Level 12, and Penthouse is 7,326 sf, therefore, the rooftop garden must be greater than 3,663 sf distributed between single or all roofs to utilize this bonus. 1,110 sf minimum (30% of 3,664 sf) of the garden area must be planted. The bonus area reduces the overall building area applied to FAR.

FLOOR AREA CALCULATIONS

Level	SF Towards FAR
B	0
L1	5,843 (retail bonus)
L2	5,832
L3	5,832
L4	5,832
L5	5,832
L6	5,832
L7	5,832
L8	5,832
L9	5,832
L10	5,832
L11	5,832
L12	5,832
ROOF	1,144
BONUS	-3,664 (rooftop bonus applied to total area)

TOTAL FAR = 67,475 SF/7,500 SF =
8.997 < 9.000

BUILDING AREA TABULATION

GUESTROOM BREAKDOWN

King Guestrooms	152
Queen Guestrooms	36
Accessible Guestrooms	8
Guest Hospitality Suite	1
TOTAL ROOM COUNT	**197**

PROJECT GROSS SQUARE FOOT BREAKDOWN

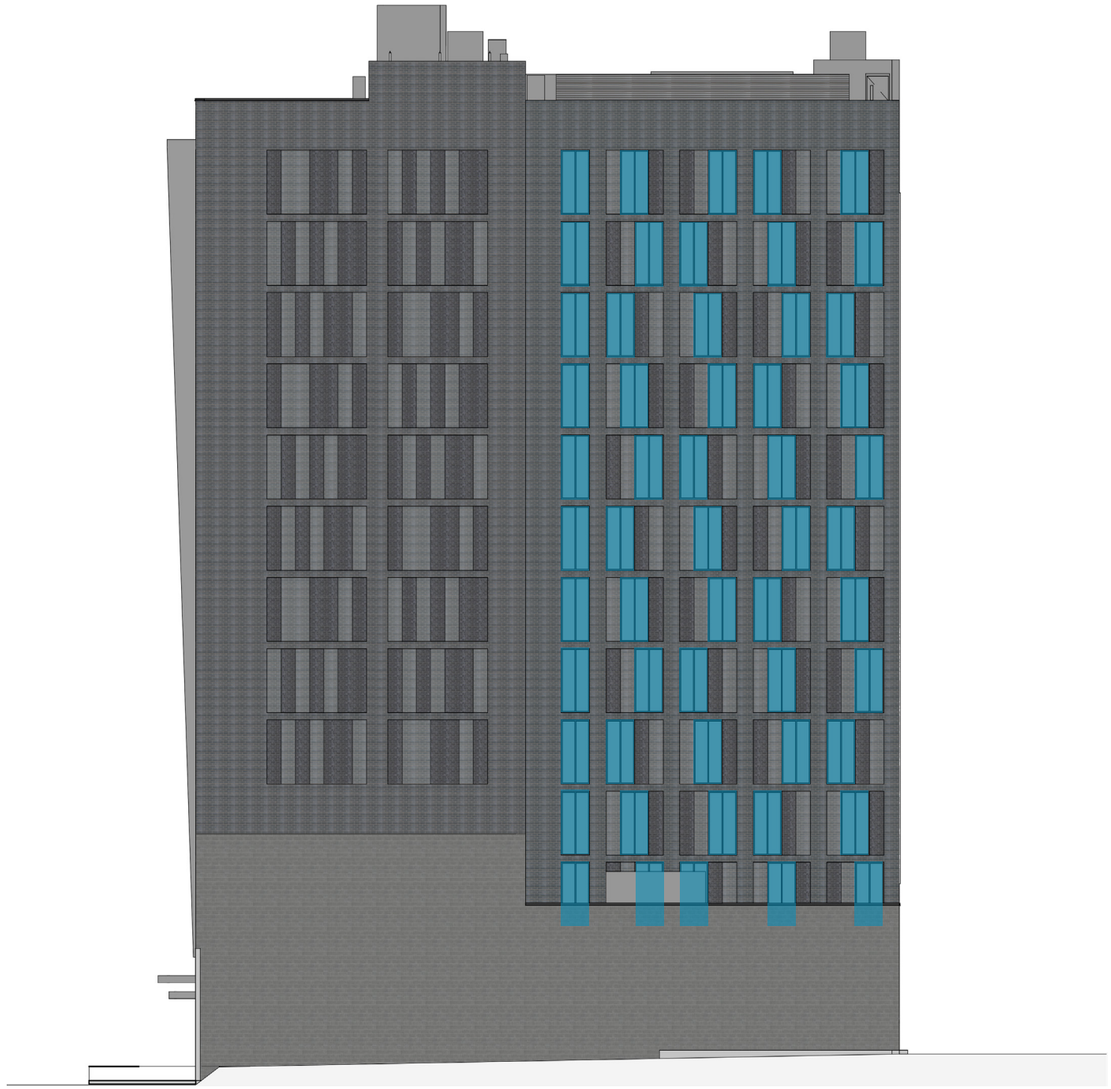
	GSF/SPACE	TOTAL GSF
BASEMENT		**7,117**
(excludes transformer)		
Mechanical / Electrical	1020	
Generator	510	
Water Tank	500	
Laundry	984	
Fitness	700	
Admin & Employee Area	582	
LEVEL 1		**6,984**
(includes shafts and exterior opening alcoves)		
Loading Berth (Standard A)	448	
Trash	317	
Food Service	528	
Food Stalls	321	
Checkin-Lounge	2707	
Restrooms	350	
Fire Control Room	209	
TYPICAL GUEST ROOM LEVELS (11 floors)		**5,832 (X 11)**
(includes shafts and exterior opening alcoves)		
King Guest room (Qty 14 + 13 @ L12)	195 each	
Queen Guest room (Qty 3)	184.5 each	
Accessible Guest room (Qty 1)	288 each	
Hospitality Suite (L12)	425 each	
MECHANICAL PENTHOUSE		**1,144**
Stair	448	
Elevator Equipment & Overrun	450	

79,397 TOTAL GSF

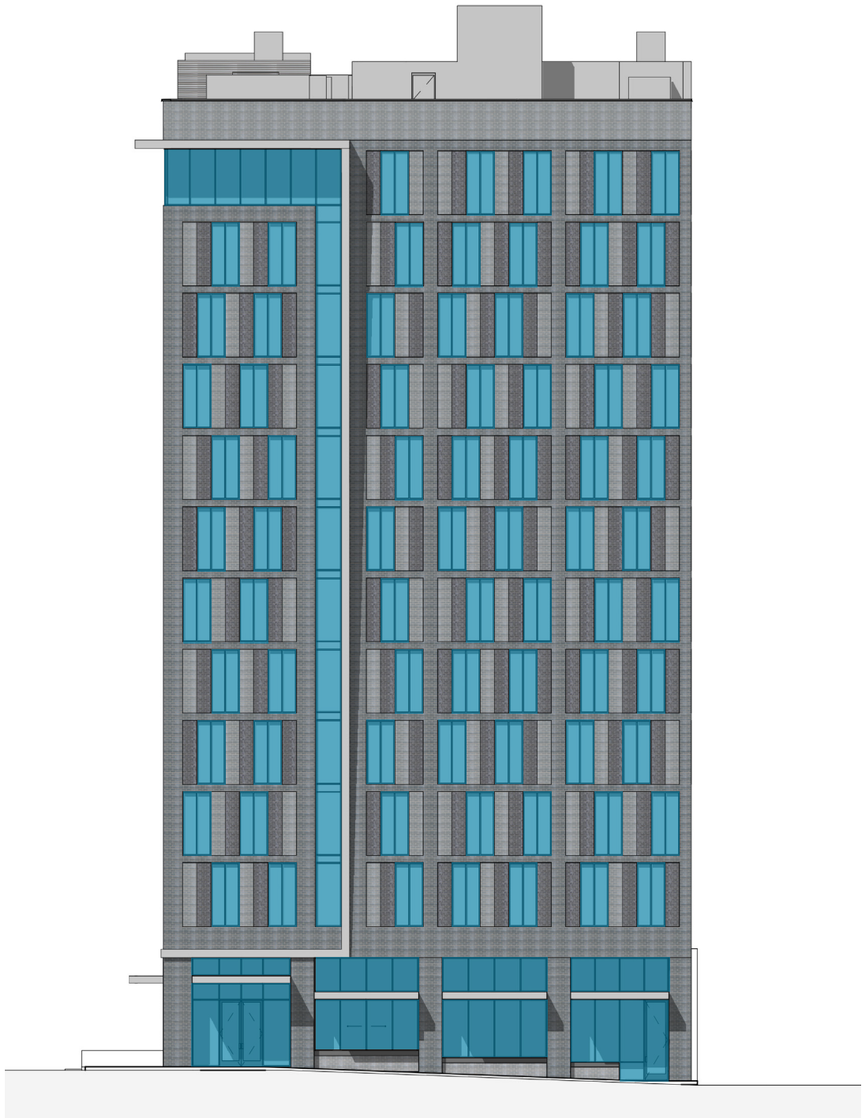
ZONING SUMMARY

	REQUIREMENTS	PROJECT CONDITIONS
ZONING DISTRICT	Base Zone CX-d Central Commercial - Design Overlay	
PLAN DISTRICT	Plan District CC - Central City Plan - West End Suburbea	
LOT AREA		7,500 square feet
MAXIMUM FLOOR AREA RATIO	9.0 allowed (Central City Plan District)	8.997 actual
TOTAL BUILDING AREA	67,500 sf maximum (base FAR)	79,397 total SF, 67,475 SF towards FAR
BUILDING HEIGHT - NUMBER OF FLOORS	460' maximum height	140'-4"
REQUIRED YARDS (SETBACKS)	Minimum setback = 0', Maximum set back = 10' - building extends to street lot at least 75% of lot line	0' set back
OFF STREET PARKING REQUIREMENTS	No minimum (DT2 parking sector)	None provided
OFF STREET LOADING REQUIREMENTS	(2) loading spaces 10' wide by 35' long by 13' clear height	(1) loading space provided 10' wide by 35' long by 13' clear height
LANDSCAPING	No minimum landscaping area	Majority of street trees to be removed (one to remain at SW 10th Ave), extensive planting on roofs
GLAZING	Minimum 50% must be active uses at ground floor 15% minimum glazing above ground floor on street facing facades	Ground floor Glazing = South Elevation 58.8% / East Elevation 59.3% Above ground floor glazing: South Elevation = 31.8% , East Elevation = 36.95%
MECHANICAL SCREENING	required	Mechanical units are screened at roof
BIKE PARKING	Short term 2 or 1 per 20 rentable rooms; Long term 2 or 1 per 20 rentable rooms	10 long term parking spots provided at basement, 10 short term parking spots (2 exterior bike racks at public right of way by contributing to the bicycle parking fund)
MINIMUM REQUIRED AND MAXIMUM ALLOWED PARKING SPACES	minimum - None maximum - 1.5 per rentable room	None provided

GLAZING DIAGRAM



NORTH ELEVATION



EAST ELEVATION

SCALE: 3/64" = 1'-0"

Above Ground Floor	
Glazing	3,577 SF
Overall	12,202 SF
% Glazing	29.3%

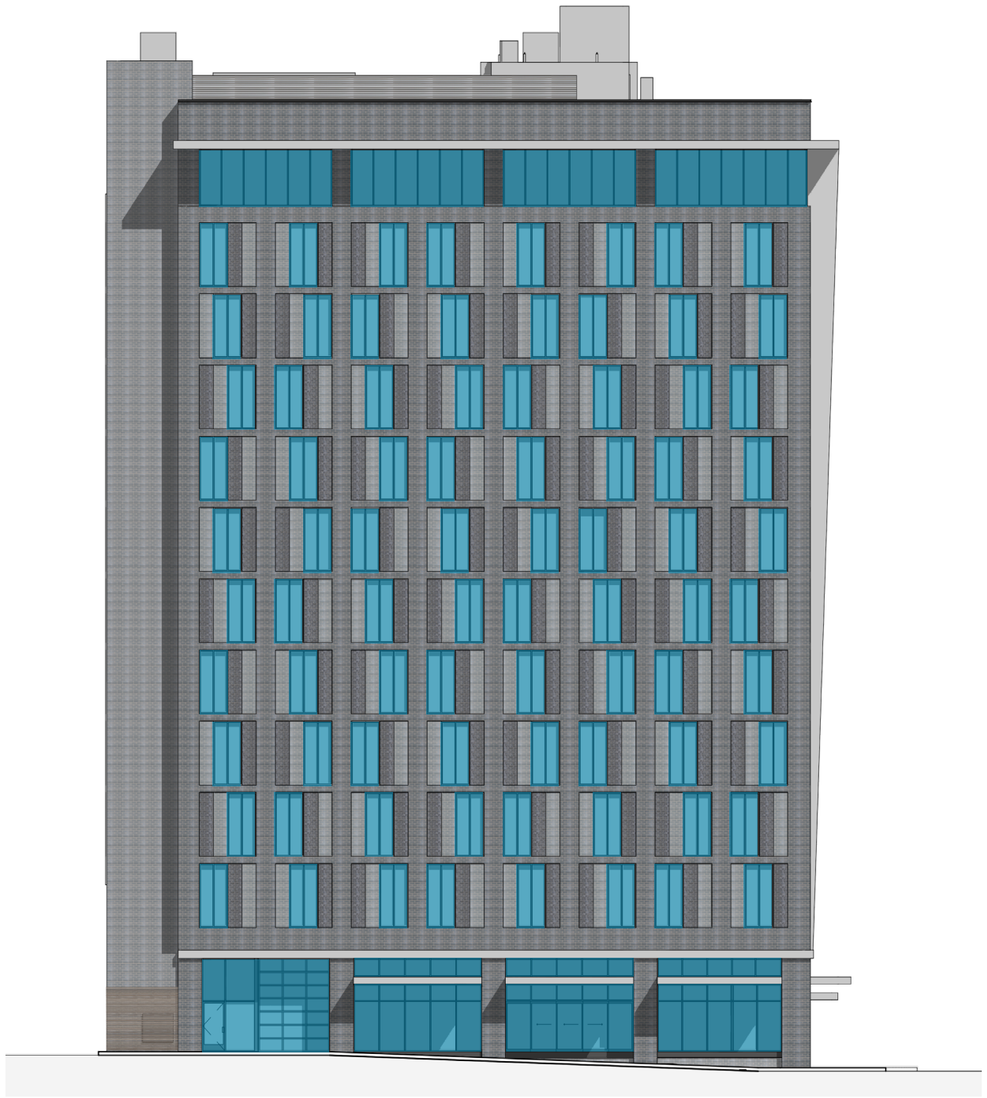
Minimum required > 15% above Ground Floor

Minimum required > 50% at Ground Floor

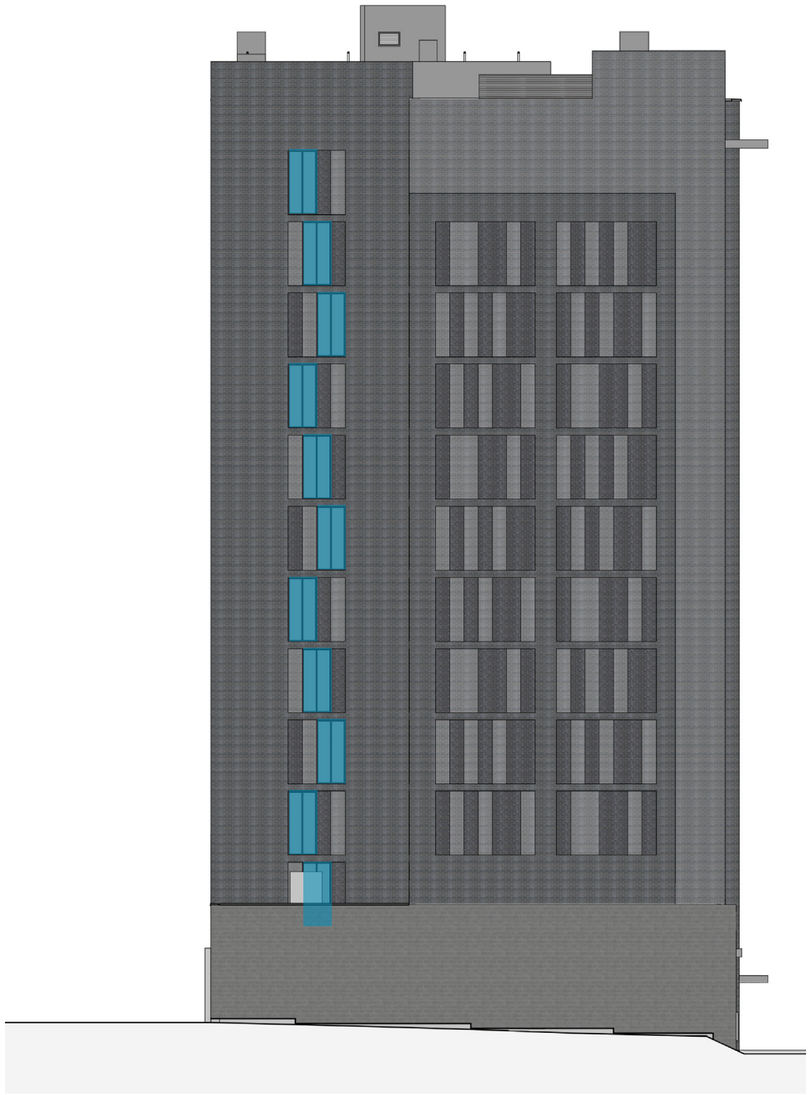
Ground Floor	
Glazing	770 SF
Overall	1298 SF
% Glazing	59.3%

Above Ground Floor	
Glazing	3,278 SF
Overall	8,870 SF
% Glazing	36.9%

GLAZING DIAGRAM



SOUTH ELEVATION



WEST ELEVATION

SCALE: 3/64" = 1'-0"

Ground Floor	
Glazing	882 SF
Overall	1,500 SF
% Glazing	58.8%

Above Ground Floor	
Glazing	4,002 SF
Overall	12,562 SF
% Glazing	31.9%

Minimum required > 15% above Ground Floor

Minimum required > 50% at Ground Floor

Above Ground Floor	
Glazing	360 SF
Overall	9,914 SF
% Glazing	3.6%

SPECIAL CONSIDERATIONS

INTERIOR BIKE RACKS

Modification Request #1

Standard:

Bike parking racks must meet the standards of subsection 33.266.220.C. Standard 3.c. requires a space of 2 feet by 6 feet be provided for each required bicycle space.

Request:

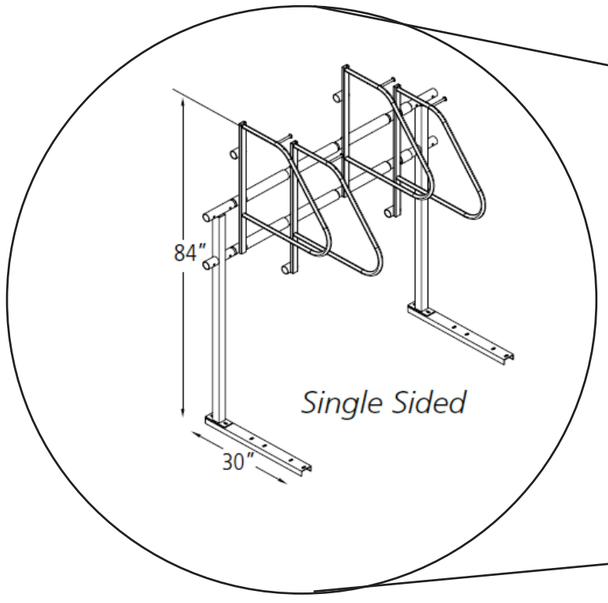
We request installation of a wall-mounted vertical compact bike rack system reducing space per bicycle from 24 inches to 18" inches minimum utilizing bike rack system preapproved from the PBOT Handbook of Approved Bicycle Racks: American Bicycle Ultra Space Saver or HuntCo Hawthorne. See APP.5.6.B.

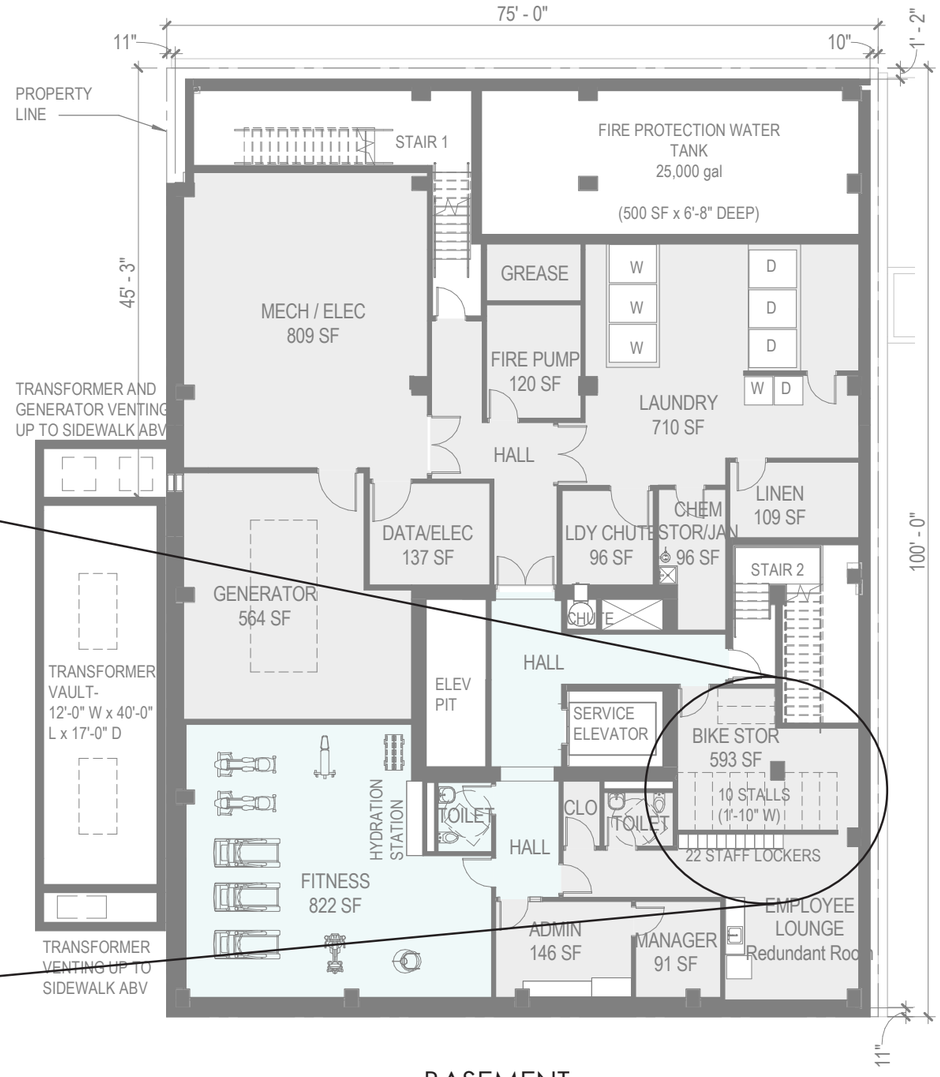
Bicycle Parking Code Requirement:
Short Term: 2 or 1 per 20 rentable rooms
Long Term: 2 or 1 per 20 rentable rooms

197 RENTABLE ROOMS TOTAL

10 SHORT TERM SPACES PROVIDED AT EXTERIOR BY PURCHASING FROM THE CITY

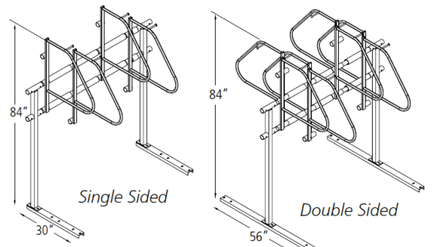
10 LONG TERM SPACES PROVIDED TO EMPLOYEES AND GUESTS ON THE SECOND FLOOR

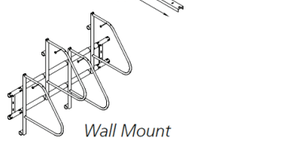


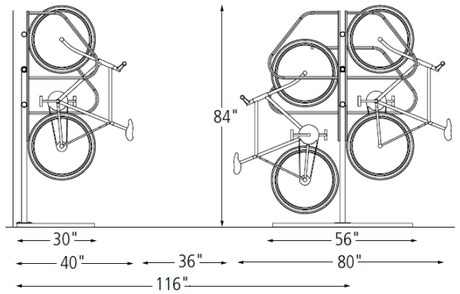


BASEMENT

Ultra Space Saver







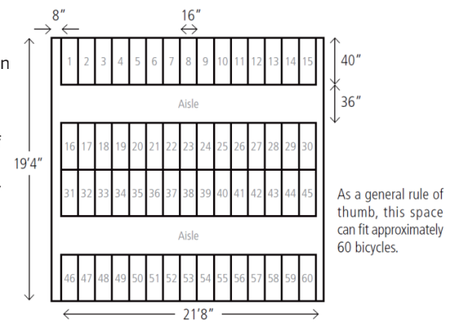
Height Requirement: 87"

Product	Ultra Space Saver
Capacity	Modular Construction 1 Bike per arm
Materials	Hanger is 1" diameter tube with 1/2" steel rod and retaining disk at each end. Upright is 2" square tube. Feet are AISI C3 x 4.1 galvanized steel channel. Crossbeams are 1.25" sched. 40 galvanized pipe (1.660" OD) Spacers are 2.375" OD plastic tubes with .218" wall thickness.
Finishes	Black powder coat Cross bars: hot dipped galvanized Hanger rods: rubber coated Spacers: plastic
Installation Methods	**Floor mounted** Ultra Space Savers have steel channel feet (30" for single sided and 56" for double sided units) which must be anchored to the floor. A **wall mounted** unit which contains special brackets is also available.
Space Use & Setbacks	See Diagram
Estimating your Bicycle Capacity	Estimating the maximum number of bikes you can park using an Ultra Space Saver in a typical rectangular space is usually fairly straight forward. The Ultra Space Saver parks one bike every 16" with a typical bike extending out 40" from the wall. Imagine a 16"x40" block of floor space as representing each bike that can be parked. Arrange the blocks in rows, leaving a 36" aisle between rows. If you have a large space, you may be able to fit in double rows of Ultra Space Savers. In this case you could fit 2 bikes in a 16"x80" space.

Example of rack in use

***Let us Help!**

As a free service, American Bicycle Security will provide a complete CAD layout of your space. Just send us the dimensions of your room, being sure to note the location of doors, columns, etc. and let us maximize your bike storage capacity.



As a general rule of thumb, this space can fit approximately 60 bicycles.

American Bicycle Security Company
P.O. Box 7359
Ventura, CA 93006
Ph: (800) 245-3723 or (805) 933-3688
Fax: (805) 933-1865
www.ameribike.com
Email: turtle@ameribike.com

×3, 5, 7

HAWTHORNE LINE

SINGLE-SIDED FLOOR MOUNT

The freestanding, customizable single-sided Hawthorne rack is the next level in vertical bike parking.

CONSTRUCTION/MATERIAL

Hooks: 1.0" Square Mild Steel Tubing

Hook Cushions: Santoprene TPV

Anti-sag Truss Bar: Galvanized Steel Tubing

Mounting Feet: Anodized Aluminum

DIMENSION/CAPACITY OPTIONS

- 32.6" Width
- 84" Height
- ☐ 3 Bike 56.8" Length (shown)
- ☐ 5 Bike 88.8" Length
- ☐ 7 Bike 120.8" Length

Based on 16" spacing, wider spacing available.

MOUNTING

(4) .63" Mounting Holes

FINISH

Charcoal Powder Coat

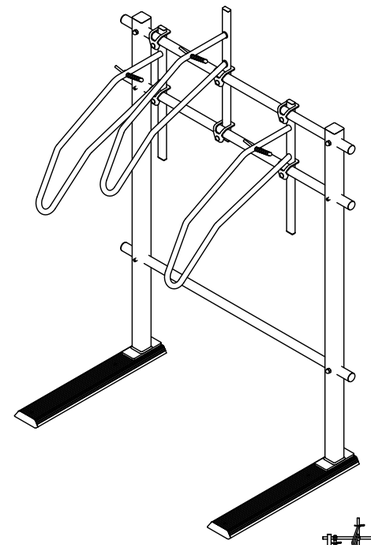
FEATURES

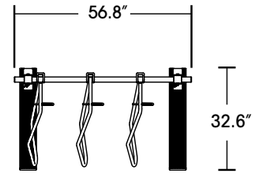
- U-Lock Compatible
- Site-specific Custom Bike Room Layouts Available

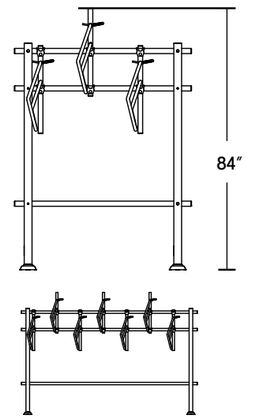
ADDITIONAL OPTIONS

- ☐ Vinyl Covered Security Chain
- ☐ No-Scratch Version (Not Shown)

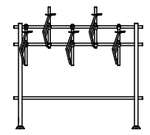
Manufactured in the







5 Bike

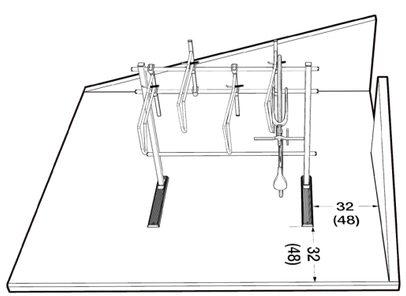


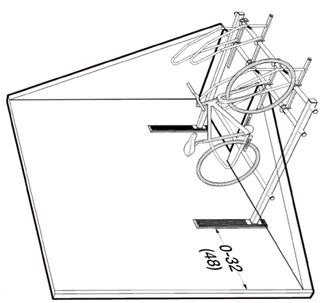
7 Bike

RECOMMENDED LAYOUT

NOTES

"Bike" is 70"
Minimum Spacing
(#) Recommended Spacing
Minimum required ceiling height 84"





CONTRACTOR:

JOB:

NOTES:

Adjustment #1

Standard:
Size of loading is described in 33.266.310D. (2) Standard A loading spaces are a minimum 35 feet long, 10 feet wide and have minimum 13 foot vertical clearance. Standard B loading spaces are a minimum 18 feet long, 9 feet wide, and have minimum 10 foot vertical clearance.

Request:
We request reduction of the required (2) Standard A loading spaces to (1) Standard A loading space.

Weekly Delivery Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00 AM	Garbage Pick-up		Garbage Pick-up		Garbage Pick-up		
7:00 AM	Sysco/US Foods			Sysco/US Foods			
8:00 AM	Liquor/Beer/Wine		Liquor/Beer/Wine		Liquor/Beer/Wine		
9:00 AM			Pepsi				
10:00 AM							
11:00 AM							
12:00 PM							
1:00 PM							
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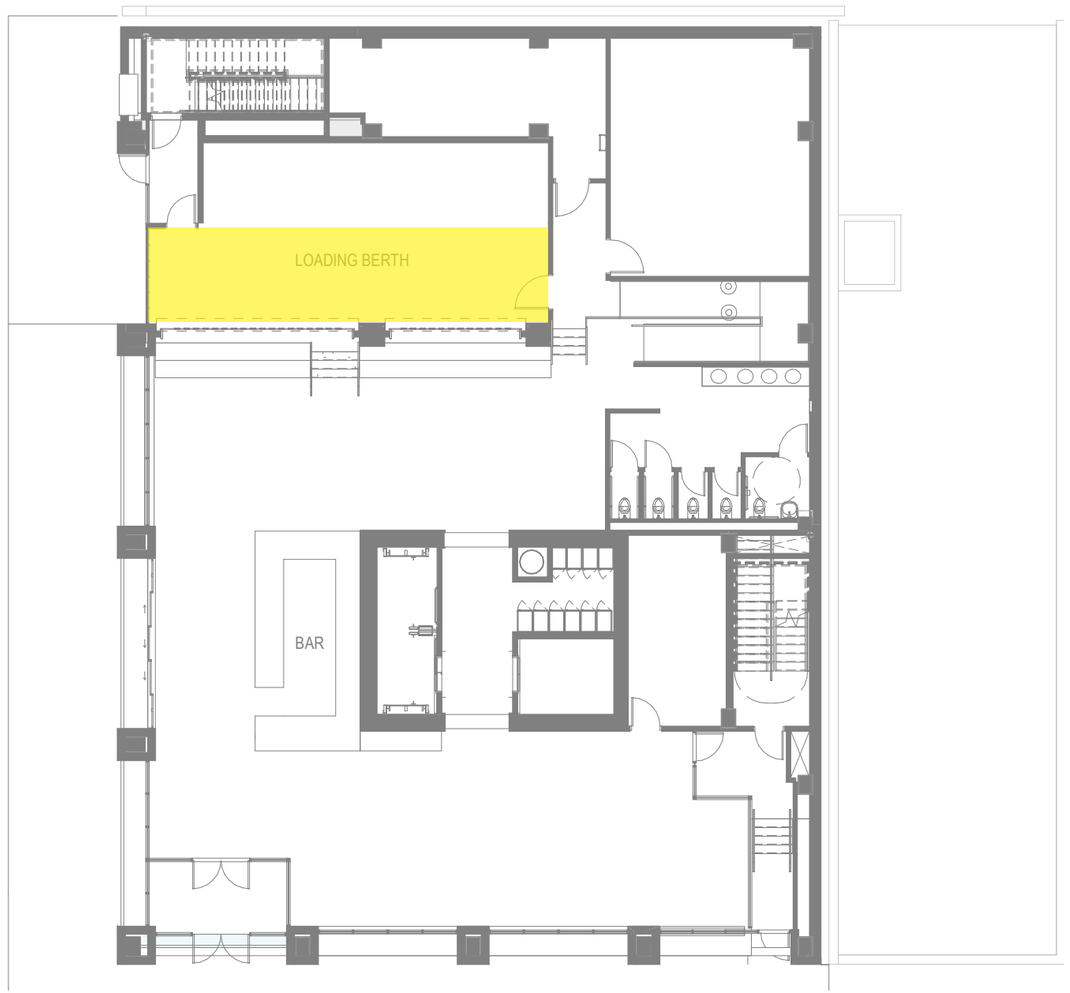

GROUND LEVEL