

# THE PARKER APARTMENTS

PROJECT ADDRESS 1415 NW 12TH AVENUE PORTLAND, OREGON 97209

LAND USE REVIEW SUBMITTAL LU 12-112033 DZM JUNE 15, 2012



## **PROJECT TEAM**

## **OWNER**

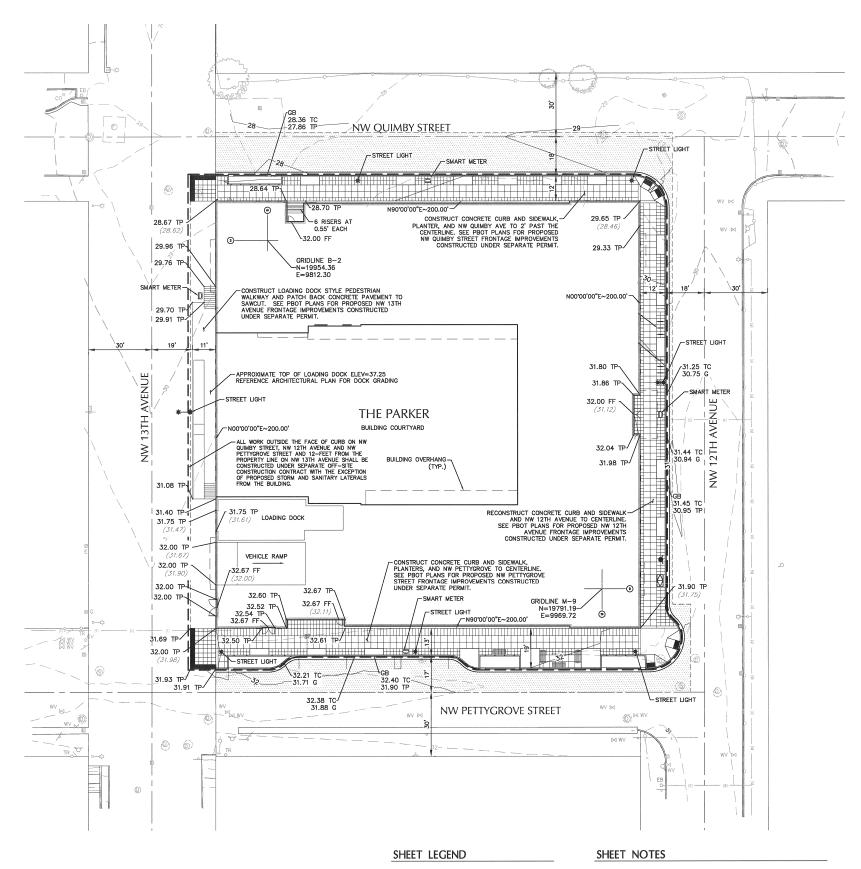
ASTOR PACIFIC LLC 1500 NW 18TH AVE SUITE 111 PORTLAND, OR 97209 PHONE: 503-223-2255 CONTACT: ROBERT BALL

## **ARCHITECT**

FFA ARCHITECTURE + INTERIORS, INC. 520 SW YAMHILL ST, SUITE 900 PORTLAND, OR 97204 PHONE: 503-222-1661 FAX: 503-222-1701

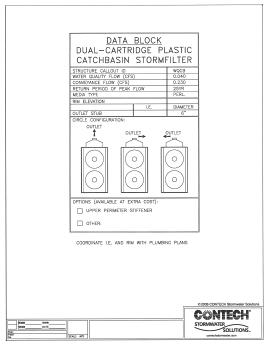
CONTACT: PHILLIP CHUBB



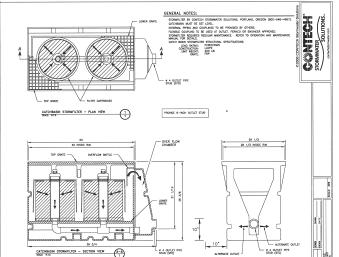


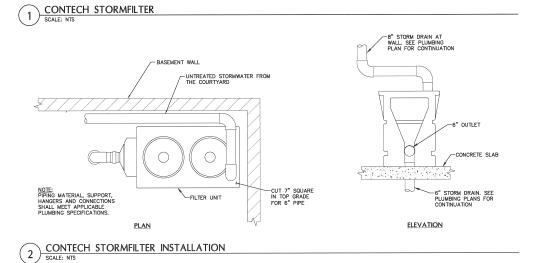
- TP = PROPOSED ELEVATION AT TOP OF PAVEMENT
- TC = PROPOSED ELEVATION AT TOP OF CO
- FF = PROPOSED FINISH FLOOR ELEVATION
- 1. LOCATION OF STREET SIGNS, STREET LIGHTS, AND STREET TREES ALONG WITH FINAL DESIGN AND GRADING OF RIGHT OF WAY SHALL BE DETERMINED DURING CITY OF PORTLAND DEPARTMENT OF TRANSPORTATION FRONTAGE IMPROVEMENT PERMIT PROCESS.
- ALL FRONTAGE AND UTILITY IMPROVEMENTS IN THE RIGHT OF WAY SHALL BE CONSTRUCTED UNDER SEPARATE PUBLIC WORKS PERMIT. SEE PBOT JOB NO. TD5143 AND BES JOB NO. EP9302.

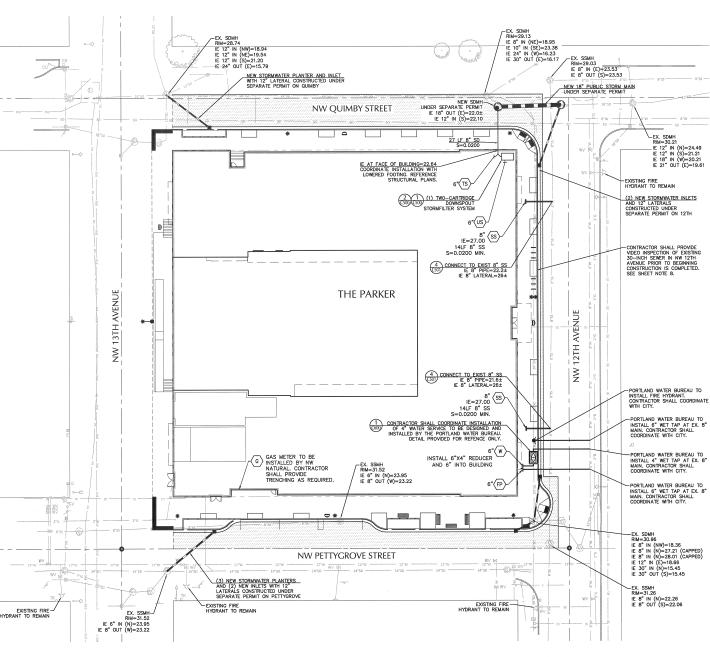












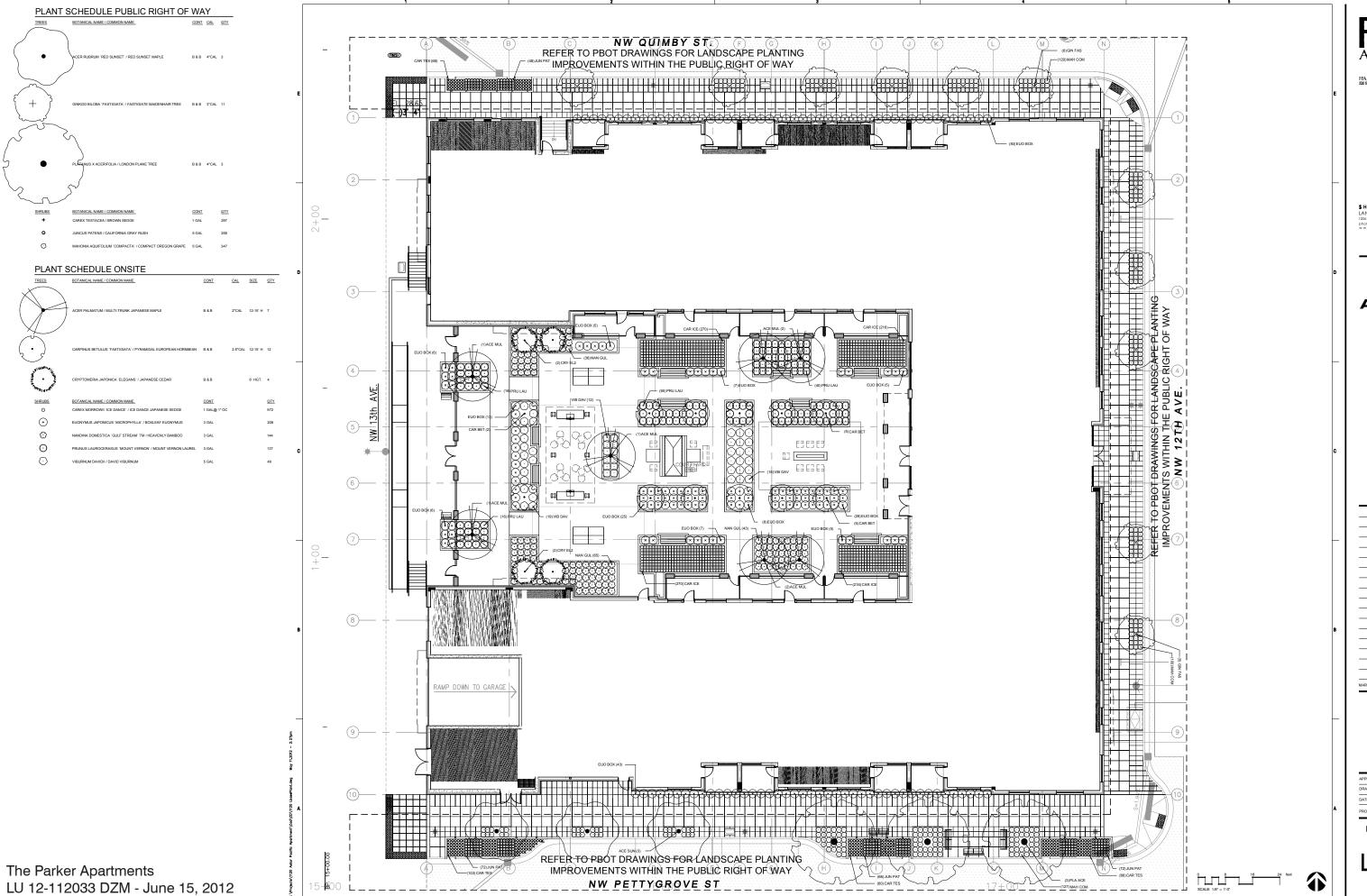
#### SHEET NOTES

- 1. ALL IRENUM BACKFILL SHALL BE PER BES STANDARD DETAIL PETIDO, FLOCUMO TO JETTING THE BACKFILLED TRENCH WITH WATER IS NOT PERMITTED. PIPING SHALL BE BEDDED PER BES STANDARD DETAIL P-101. SAWOUT AND REPLACE ASPHALT PER B STANDARD DETAIL. DETAILS PROVIDED ON SHEET C600.
- ALL UTILITY SERVICE PIPING WITHIN 5' OF ANY BUILDING SHALL BE AN APPROVED MATERIAL OF THE UNIFORM BUILDING CODE.
- 3. ALL STORM DRAIN PIPE MATERIALS AND FITTINGS SHALL CONFORM TO THE OREGON PLUMBING SPECIALTY CODE CURRENT EDITION.
- 4. CONTRACTOR SHALL DESIGN SHORING SYSTEMS FOR TRENCH EXCAVATIONS DEEPE
- CONTECH STORMFILTER AND ALL PIPING INSIDE THE BUILDING SHALL BE INSTALLED A PURCHASED BY THE PLUMBING CONTRACTOR.
- 5. A DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) IS TO BE INSTALLED ON THE FIRE SPRINKLER WATER SERVICE. THE DCDA IS TO BE INSTALLED AT THE POINT WHERE THE WATER SERVICE PRIST ENTERS THE BUILDING IMMEDIATELY ADJACENT TO THE WATER SERVICE AND BE INSTALLED BETWEEN ONE AND FIVE FEET ABOVE THE FINISHED FLOOF ELEVATION, INSTALLATION WIST COMPLY WITH TITLE 21 OF THE CITY CODE.
- A REDUCED YEARTH SUPPLY TO THIS PROPERTY. THE APPA IS TO BE INSTALLED UN THE DOMESTIC WATER SUPPLY TO THIS PROPERTY. THE APPA IS TO BE INSTALLED AT IN POINT WHERE THE WATER SERVICE FIRST ENTERS THE BUILDING IMMEDIATELY ADJACE TO THE WATER SERVICE AND BE INSTALLED BETWEEN ONE AND THE FEET ABOVE THIS THE PROPERTY OF THE CITY CODE.
- CONTRACTOR SHALL COORDINATE SUBMITTAL OF VIDEO INSPECTION WITH THE BUREAU OF ENVIRONMENTAL SERVICES. CONTACT MARC JONES (503) 823-7064.

#### JTILITY KEY NOTES

- CONNECT TREATED STORMWATER FROM COURTYARD
  FLOW-THROUGH PLANTERS. SEE PLUMBING PLANS
  FOR CONTINUATION.
- CONNECTED UNTREATED STORMWATER FROM
  COURTYARD TO STORM FILTER. SEE PLUMBING PL.
- -SS X" CONNECT SEWER TO WASTE LINE. SIZE AND IE A NOTED. SEE PLUMBING PLANS FOR CONTINUATIO
- CONNECT DOMESTIC WATER SYSTEM TO PROPOSED WATER SERVICE. SEE PLUMBING PLANS FOR CONTINUATION AND BACKFLOW ASSEMBLY INSIDE TH
- -{FP}X"

  CONNECT WATER SYSTEM TO PROPOSED FIRE PROTECTION SERVICE. SEE PLUMBING PLANS FOR CONTINUATION AND DOULBE DETECTOR CHECK ASSEMBLY INSIDE THE BUILDING.
- CONTRACTOR SHALL COORDINATE INSTALLATION OF G SERVICE AND METER WITH NW NATURAL GAS. SEE PLUMBING PLANS FOR CONTINUATION.







HAPIRO DIDWAY ANDSCAPE ARCHITECTURE 04 SE WATER AVE. PORTLAND, OR 97214 none 503.232.0520 fox 503.232.0449 www.shapirodidway.com



The Parker
Apartments
——
Astor Pacific, LLC

--1415 NW 12th Ave. Portland, OR 97209

APPROVED: \$8

DRAWN: bd

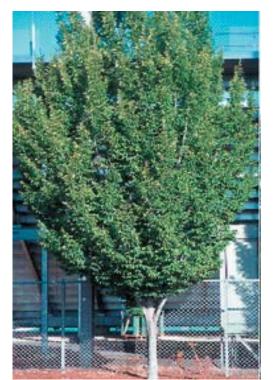
DATE: 05/14/2012

PROJECT NUMBER: 1120

PLANTING PLAN

LP-501

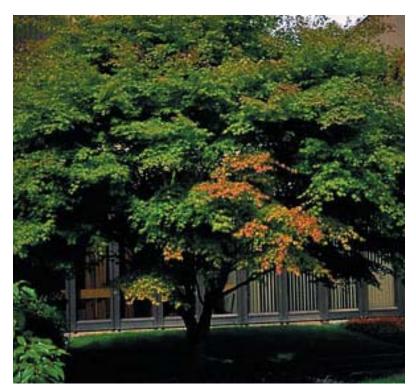
The Parker Plant Material







Red Sunset Maple



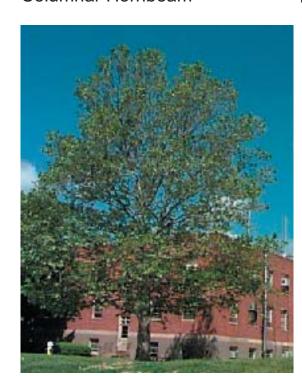
Japanese Maple



Japanese Cedar



Columnar Ginko



London Plane



Euyonomus



CA Gray Sedge



Brown Sedge



Mt. Vernon Laurel









**Dwarf Oregon Grape** 





Carex Ice Dance



Concrete Ping Pong Table

**Decorative Metal Fencing** 



Type A - Acqua Bric 5x10 **Dwarf Nandina** 

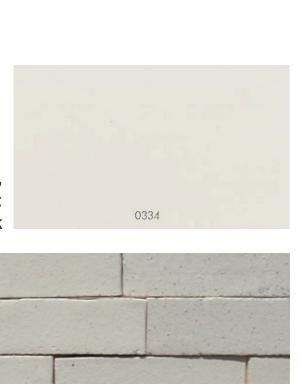


Type B - Acqua Bric 5x10



Bench - Timberform 3' and 6'





Sheet Metal Coping, Entry Canopy Soffit: White to Match Brick



Roof Membrane:

White Thermoplastic Polyolefin

Precast Medallions & Keystone

Stair & Elevator Penthouse: Grey

Fiber-Cement Spandrel Panels & Trim:

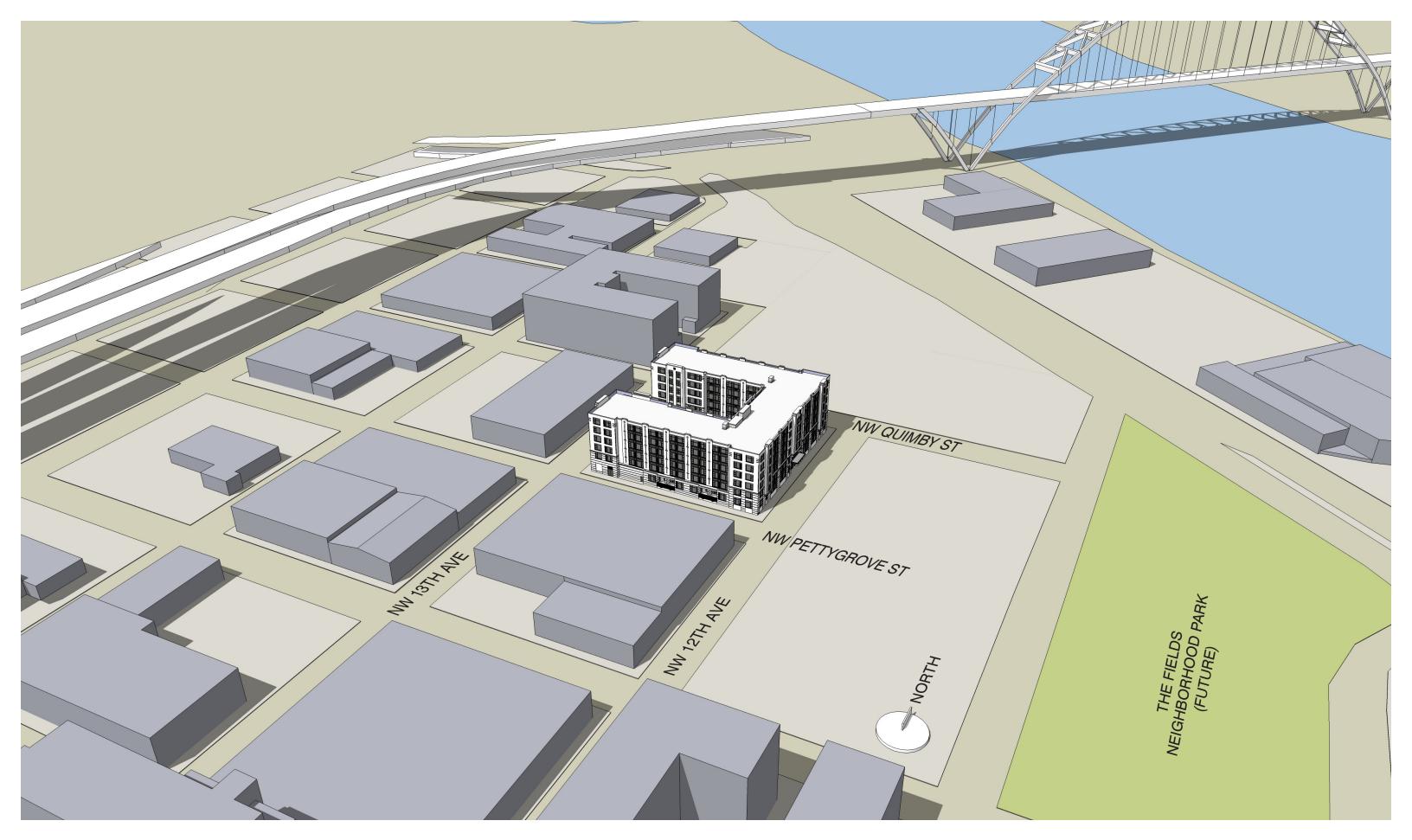
Metal Fencing & Guardrails: Black

Brick Veneer: Mutual Materials, Smooth White & Granite Blend

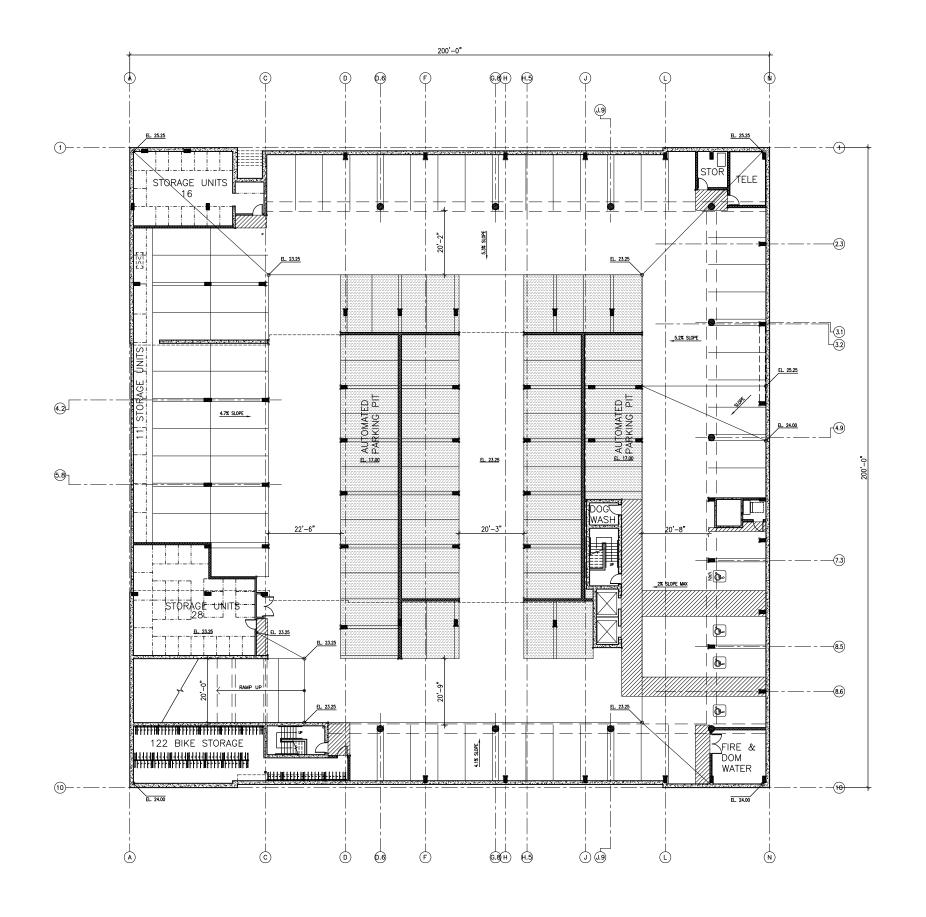
Charcoal





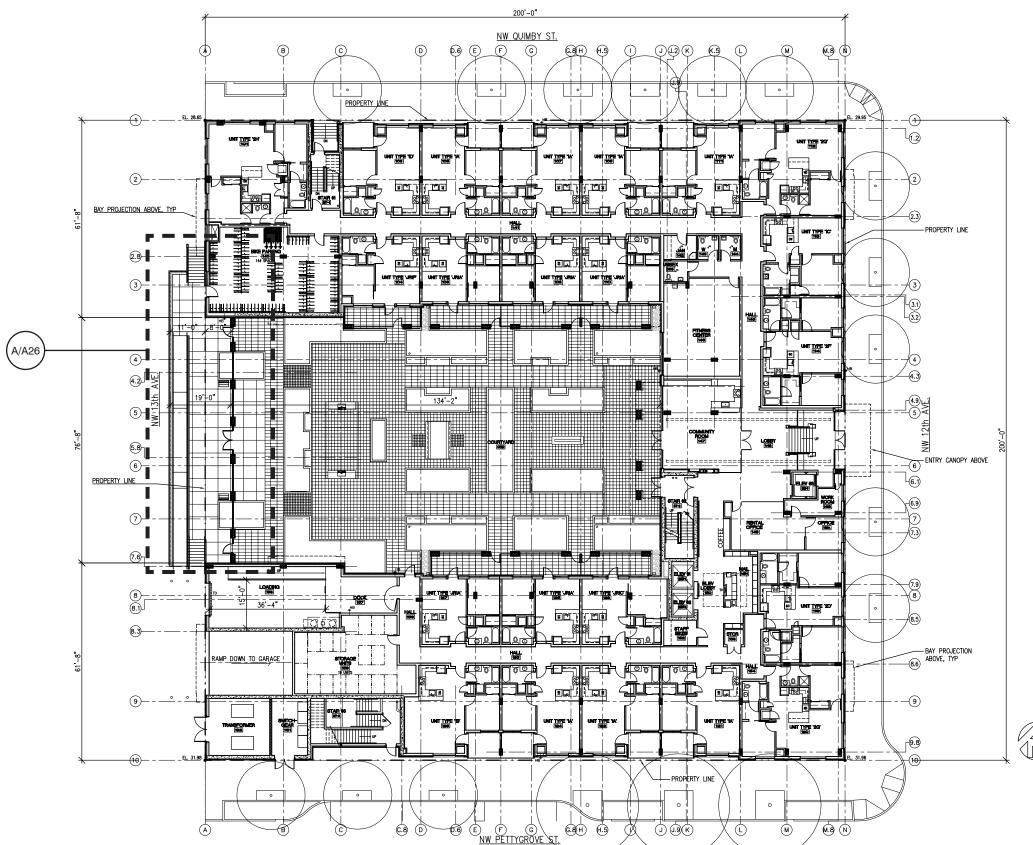






4 HC 22 TANDEM 39 STANDARD 100 AUTOMATED 165 CARS





**ZONING SUMMARY** TITLE 33 - PORTLAND ZONING CODE ZONE: PLAN DISTRICT: CENTRAL CITY - RIVER DISTRICT, NORTH PEARL SUBAREA TYPE III, DESIGN OVERLAY LAND USE REVIEW (LUR): LU 12-112033 DZM LUR APPLICATION: F.A.R. (33.510.210): 6 : 1, ALLOWABLE FLOOR AREA IS 240,000 S.F. 100% ALLOWABLE BUILDING LOT COVERAGE (33.140.220): HEIGHT (33.510.205): 100 FEET, ALLOWABLE SPECIAL HEIGHT REQUIRED (33.510.251): 75 FEET MAX. WITHIN 20 FEET OF NW 13TH AVE. NO MINIMUM REQ'D. 1.7 SPACES PER DWELLING UNIT MAXIMUM. VEHICLE PARKING (33.510.265): LONG TERM — RESIDENTIAL, 1.5 PER UNIT — (266 REQUIRED LONG TERM — OFFICE, 2 OR 1 PER 10,000 S.F. — (2) REQUIRED SHORT TERM — RESIDENDENTIAL, 1.0 PER 20 UNITS — (3) REQ'D SHORT TERM — OFFICE, 2 OR 1 PER 40,000 S.F. — (2) REQ'D TOTAL LONG TERM SPACES — (268) REQUIRED TOTAL SHORT TERM SPACES — (11) REQUIRED BICYCLE PARKING (33.266.210):

### PROJECT AREAS, UNIT, PARKING, AND LOADING SUMMARY

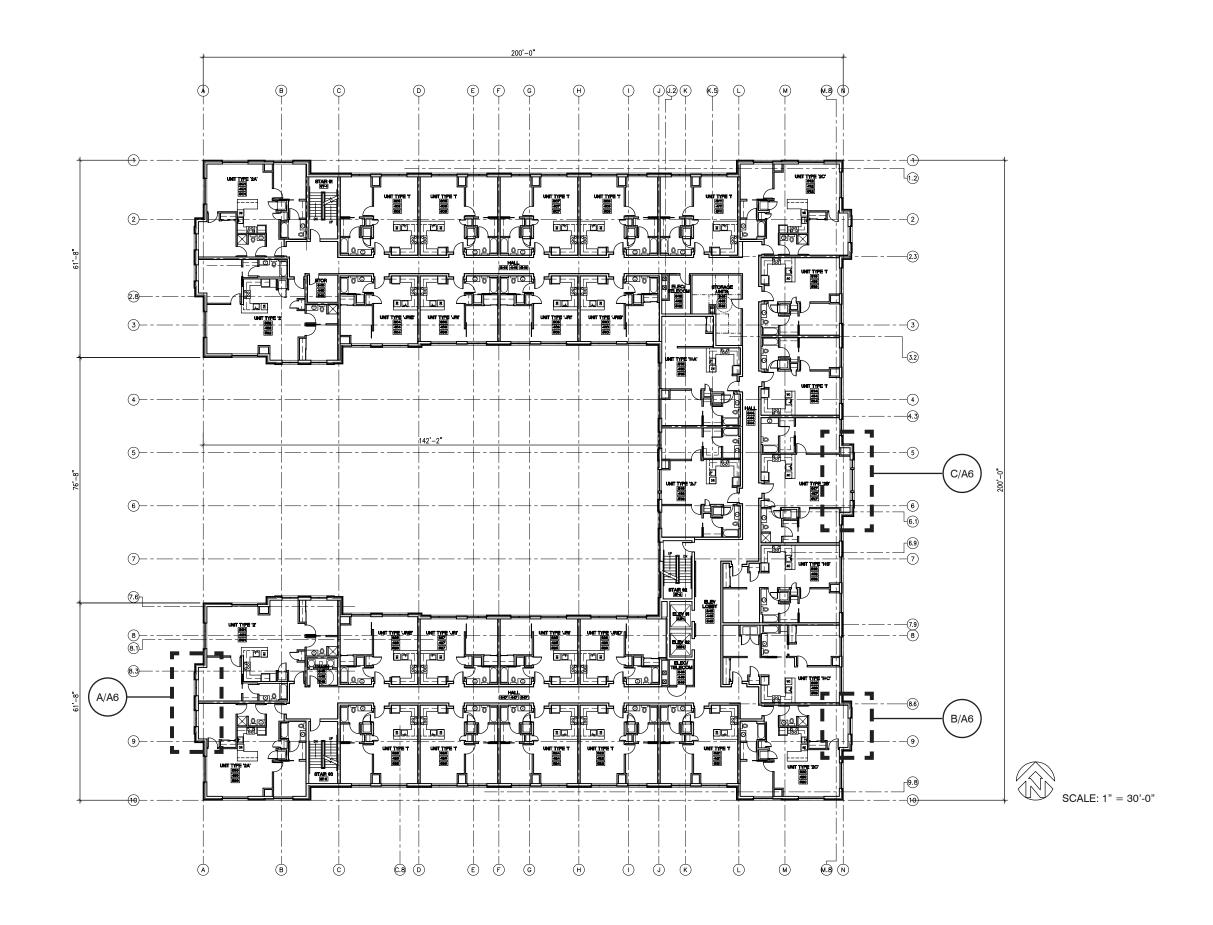
STANDARD A. (1) 35 FT. LONG, 10 FT. WIDE, 13 FT. CLEARANCE.

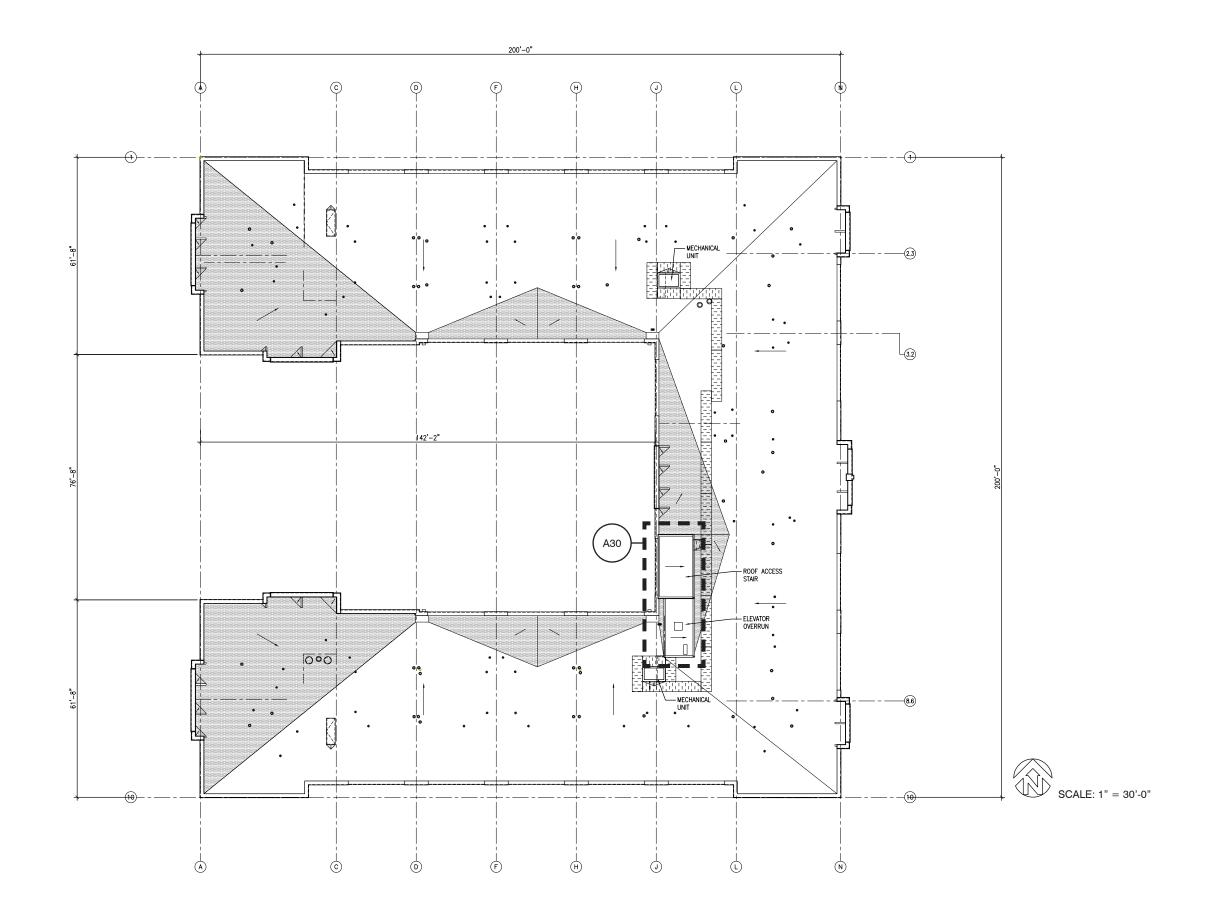
	SITE AREA:	40,000 S.F., .92 ACRES	F.A.R. (EXCLUDES BASEMENT):	4:1
	BASEMENT AREA:	39,667 GROSS S.F.	APARTMENT UNITS:	177
	FIRST FLOOR AREA:	26,715 GROSS S.F.	PARKING STALLS:	165
	SECOND FLOOR AREA:	27,645 GROSS S.F.	ADA PARKING STALLS:	4, (VAN INCL.)
	THIRD FLOOR AREA:	27,724 GROSS S.F.	BIKE STALLS - LONG TERM:	268
	FOURTH FLOOR AREA:	27,724 GROSS S.F.	BIKE STALLS - SHORT TERM:	BY BIKE FUND
	FIFTH FLOOR AREA:	27,724 GROSS S.F.	LOADING STALL - STANDARD A:	1
	SIXTH FLOOR AREA:	27,724 GROSS S.F.	LUADING STALL - STANDARD A:	'
	TOTAL BUILDING FLOOR AREA:	204,923 GROSS S.F.		

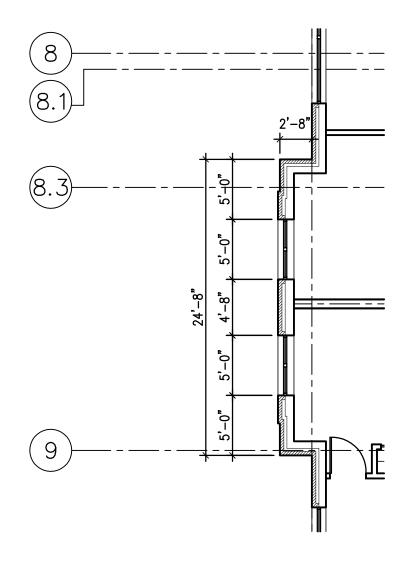
DWE	ELLIN	IG UNIT	TABULAT	ION						
Unit Type	Net SF	Net SF/ Type	Market Gross SF	Gross SF/Type	Floors	# of Units	x # Floors	Unit Type Totals		
JR1	491	9820	540	10800	2 thru 6	4	5	20		
JR1A	490	2450	540	2700	1	5	1	5		
JR1B	497	2485	547	2735	2 thru 6	1	5	5		
JR1C	522	522	576	576	1	1	1	1		
JR1D	528	2640	579	2895	2 thru 6	1	5	5		
JR1E	507	5070	557	5570	2 thru 6	2	5	10		
JR1F	506	506	557	557	1	1	1	1		
1	588	35280	640	38400	2 thru 6	12	5	60		
1A	580	4060	637	4459	1	7	1	7		
1B	684	684	748	748	1	1	1	1		
1C	587	587	640	640	1	1	1	1		
1D	572	572	628	628	1	1	1	1		
1+A	746	3730	806	4030	2 thru 6	1	5	5		
1+B	810	1620	873	1746	2	2	1	2		
1+B	810	3240	873	3492	3 thru 6	1	4	4		
1+C	810	3240	873	3492	3 thru 6	1	4	4		
2	1097	10970	1176	11760	2 thru 6	2	5	10		
2A	891	8910	961	9610	2 thru 6	2	5	10		
2B	1019	3057	1097	3291	3 thru 5	1	3	3		
2C	882	8820	951	9510	2 thru 6	2	5	10		
2D	848	848	917	917	1	1	1	1		
2E	951	951	1023	1023	2	1	1	1		
2F	816	816	894	894	1	1	1	1		
2G	845	1690	911	1822	1	2	1	2		
2H	920	920	985	985	1	1	1	1		
2J	830	4150	899	4495	2 thru 6	1	5	5		
2K	1018	1018	1097	1097	6	1	1	1		
Total Unit			Total Unit Market			Total # of				
Net SF		118,656	Gross SF	128,872		Units		177		
Total Parking Spaces: 165										

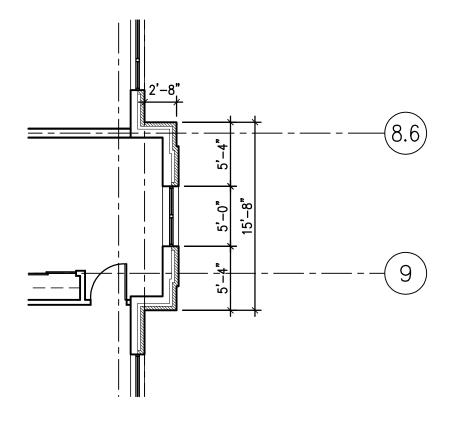
SCALE: 1" = 30'-0"

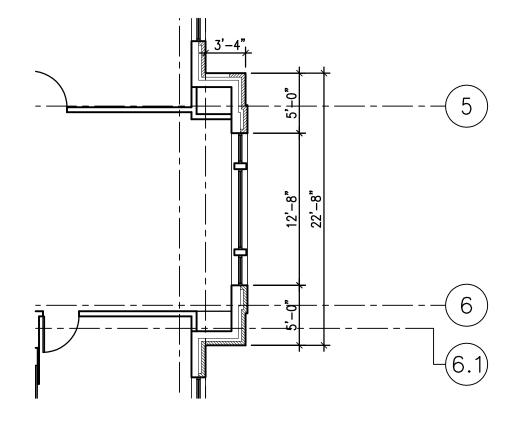
LOADING (33.266.310):











- A PROJECTING BAY @ NW 13TH AVE

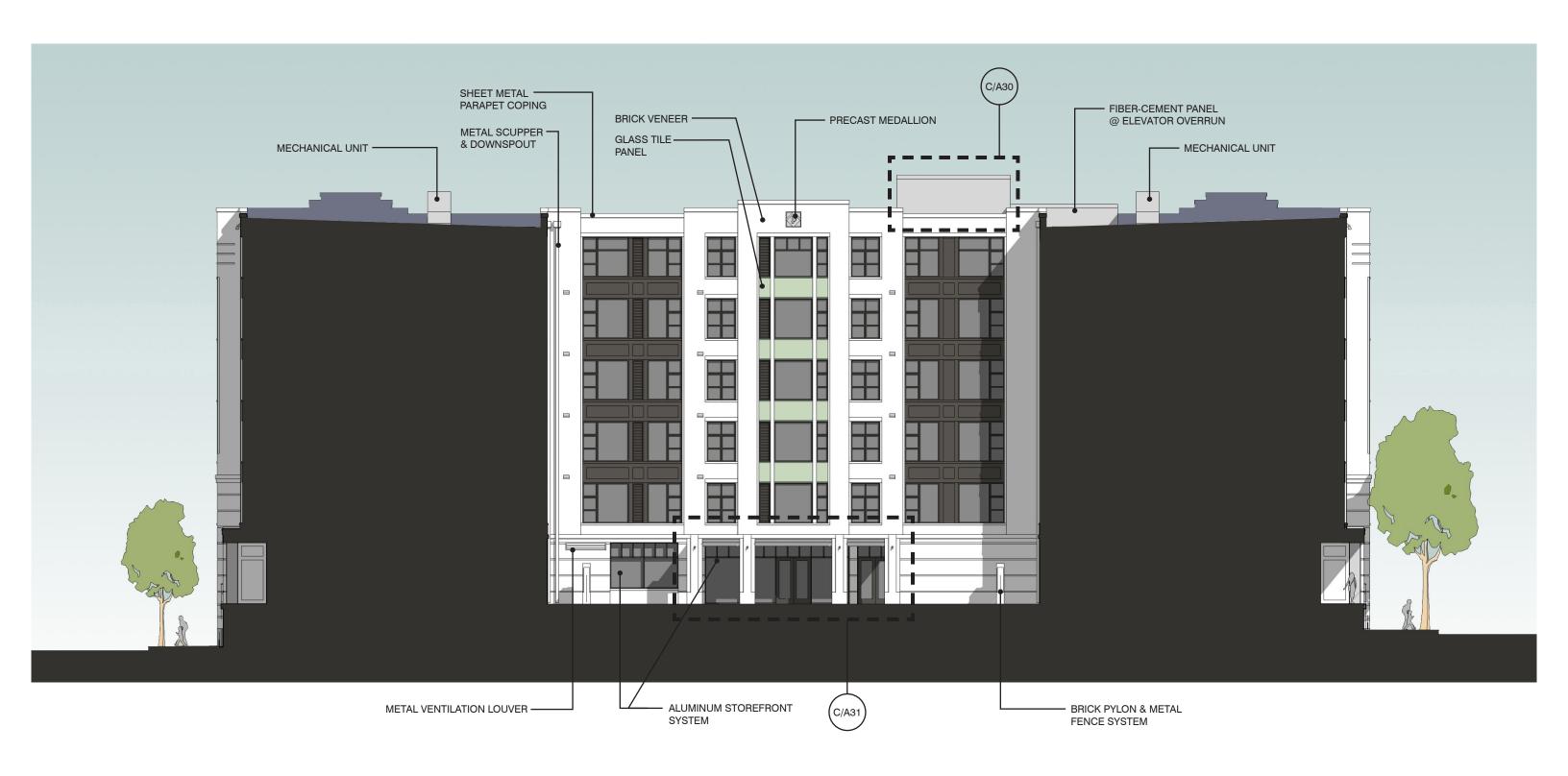
  SCALE: 1/8" = 1'-0"
- B PROJECTING BAY @ NW 12TH AVE SCALE: 1/8" = 1'-0"
- C PROJECTING BAY @ NW 12TH AVE SCALE: 1/8" = 1'-0"





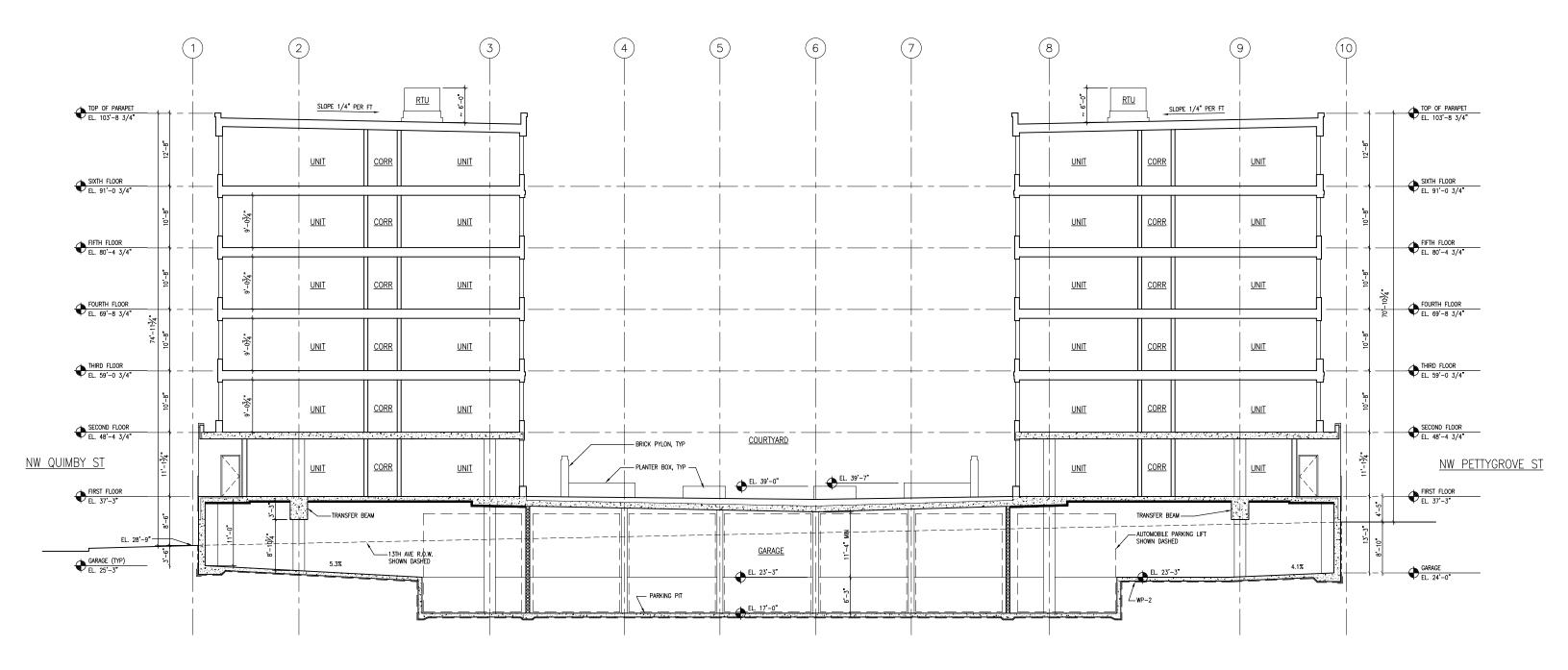




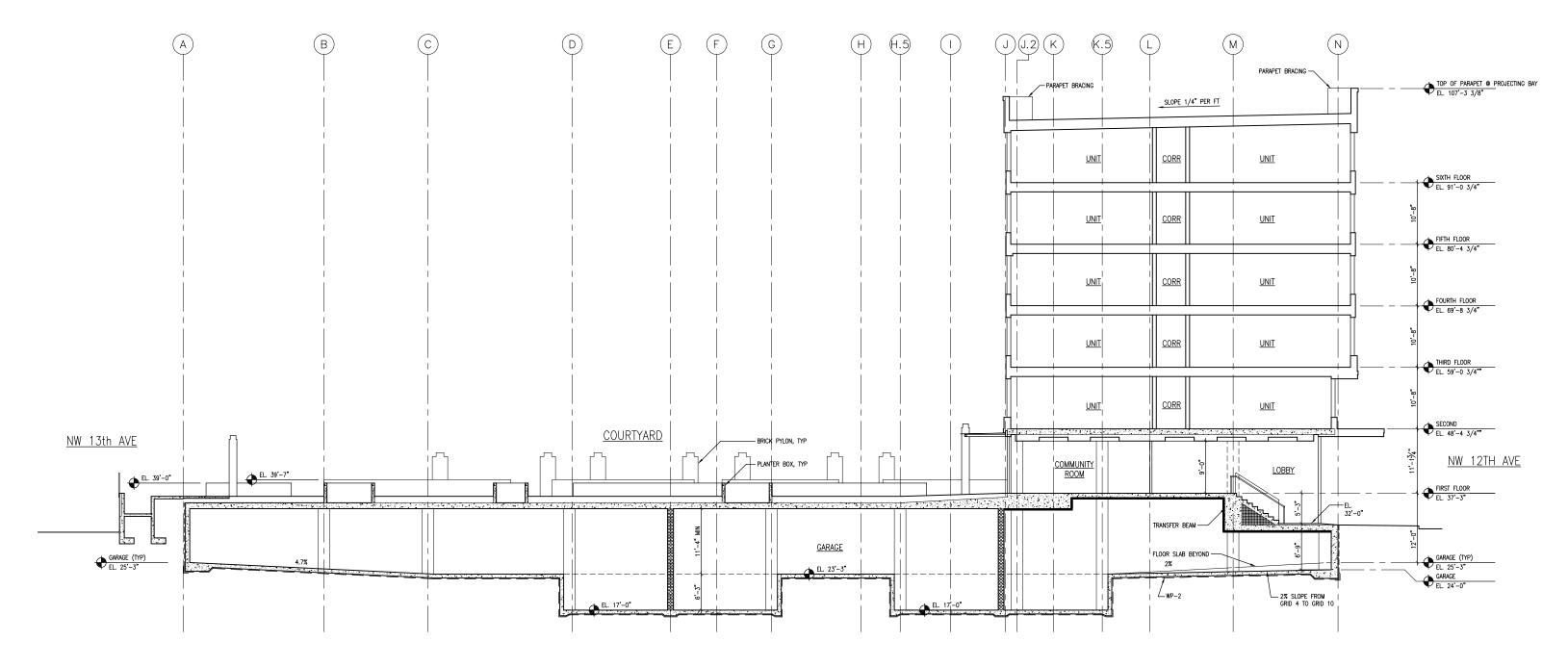








SCALE: 1/16" = 1'-0"



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



NW 12th and Quimby



Courtyard on NW 13th Ave.



Building Entry on NW 12th Avenue



NW Pettygrove Street



Loading Dock on NW 13th Avenue



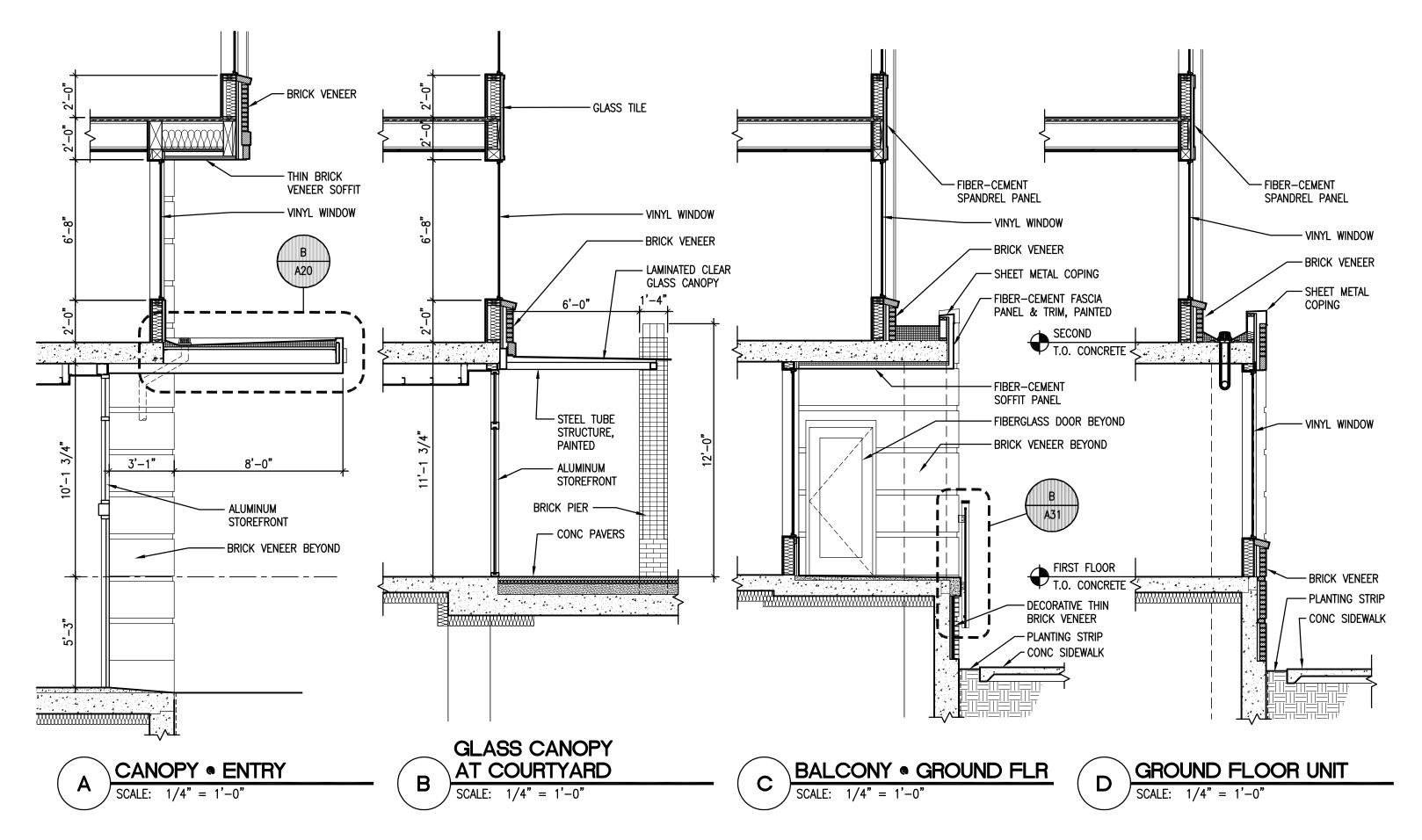
NW 13th and Quimby

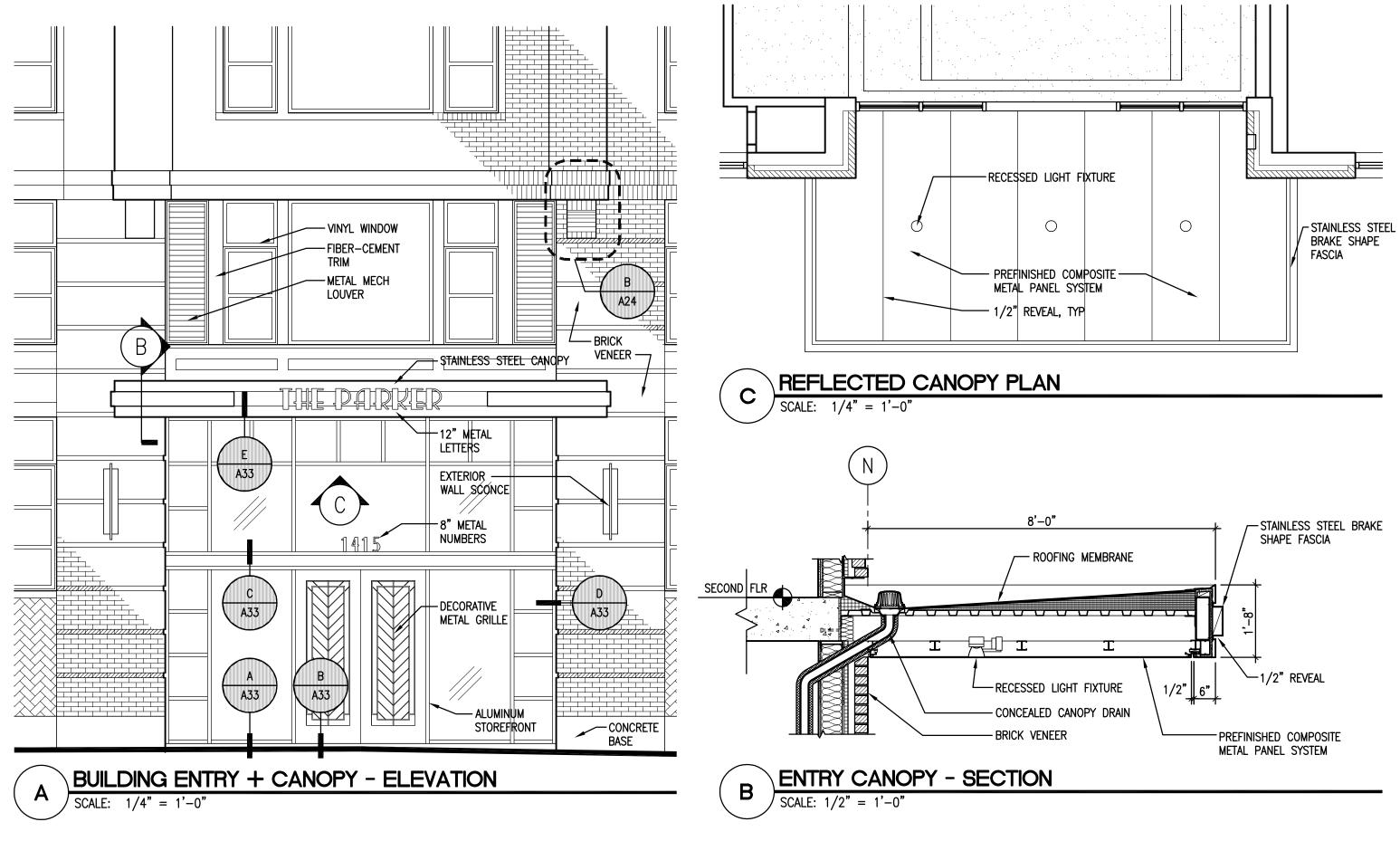


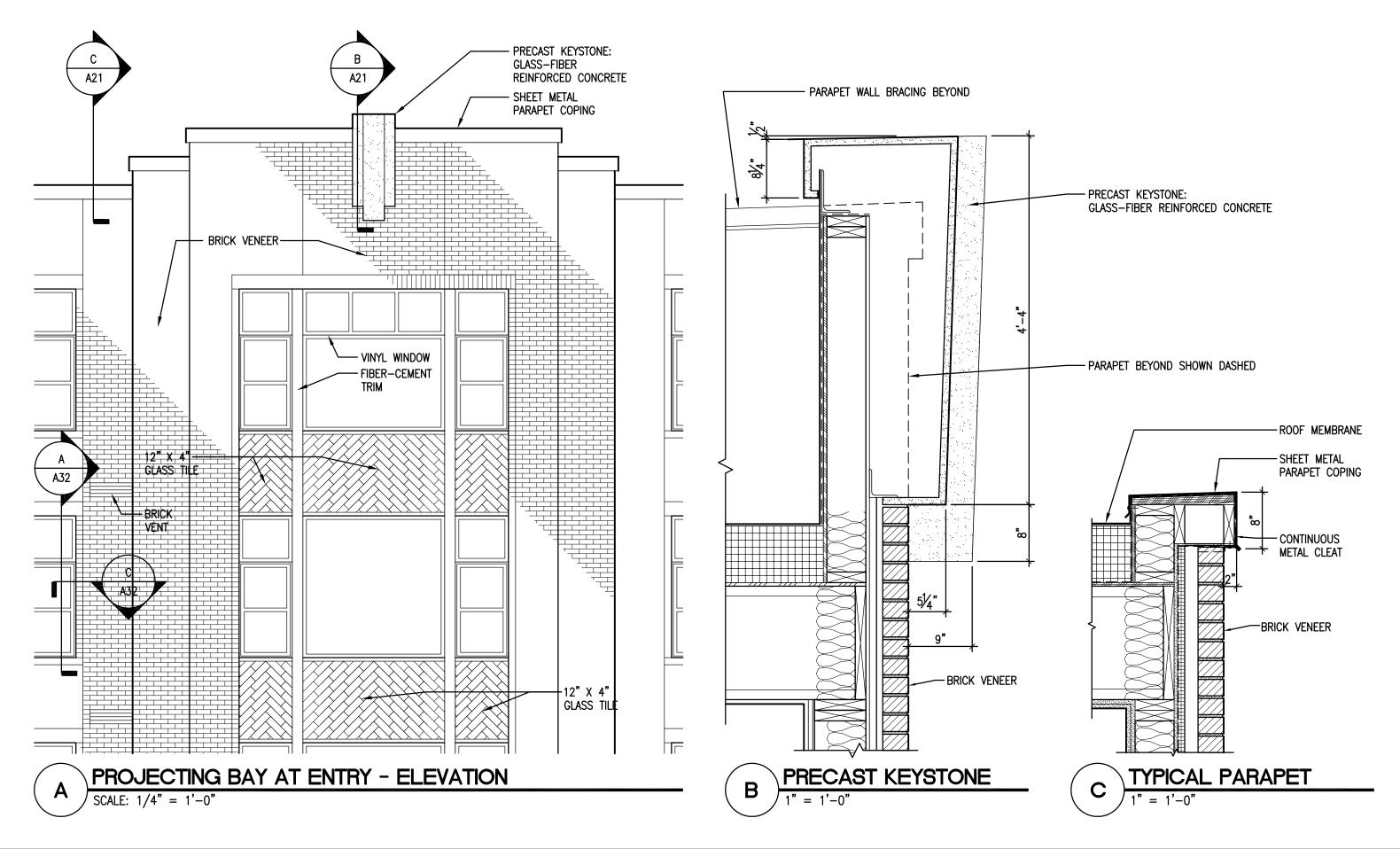
Courtyard Interior



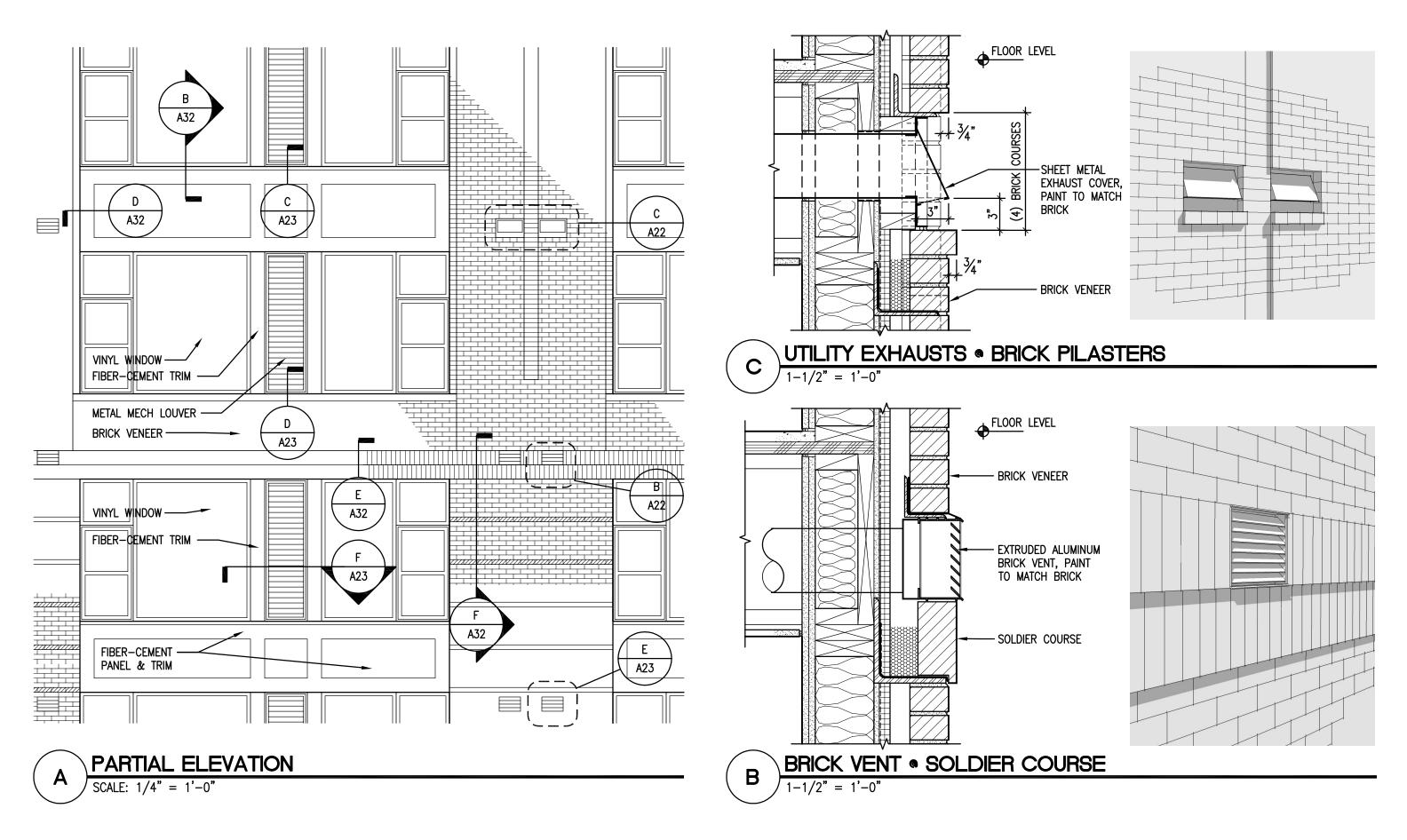
NW 13th and Pettygrove

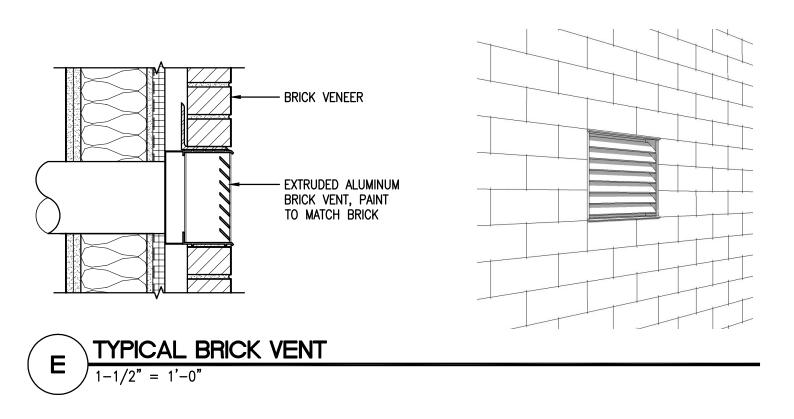


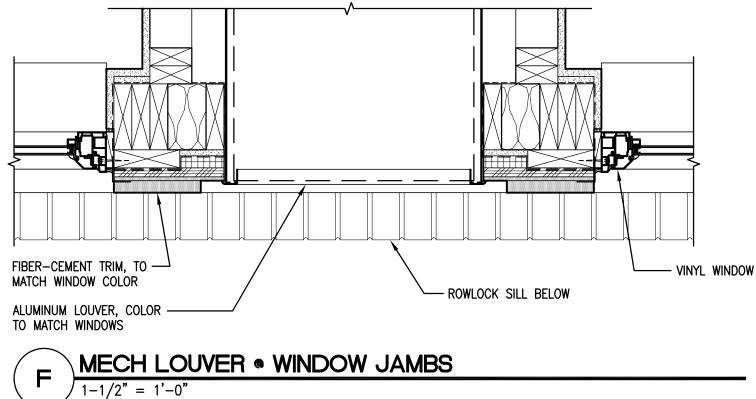


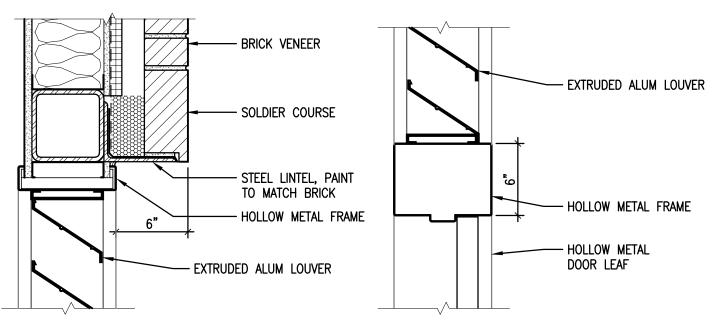


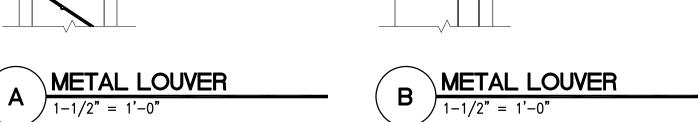


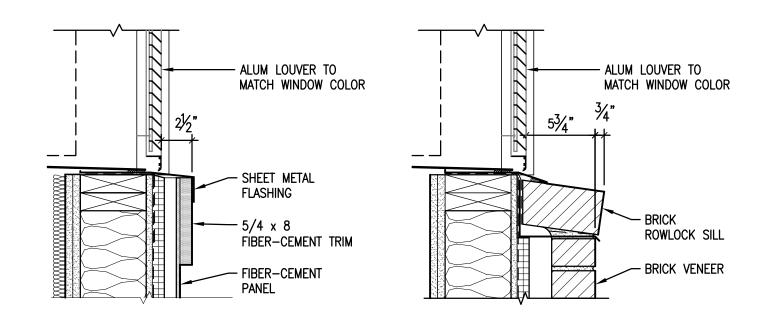












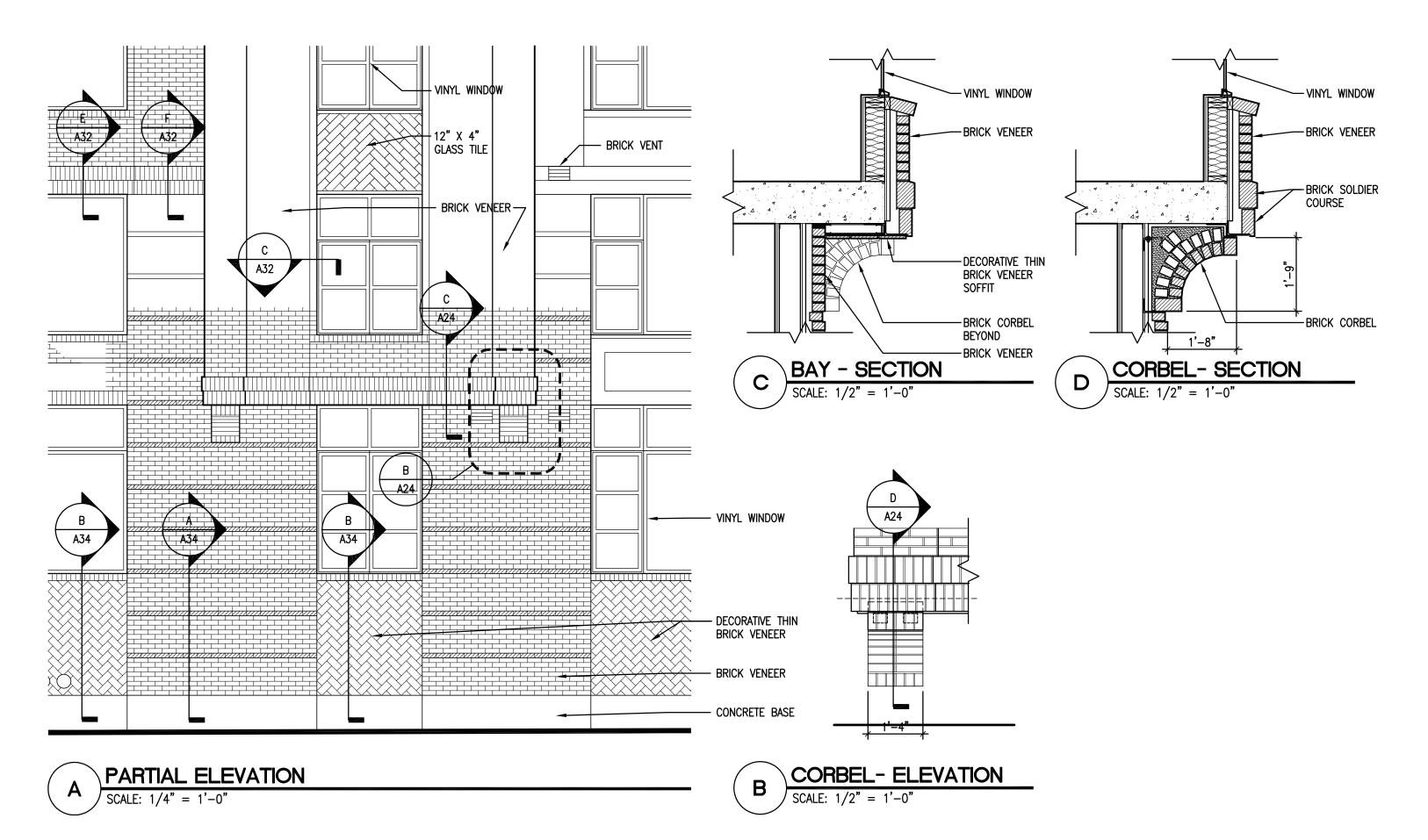


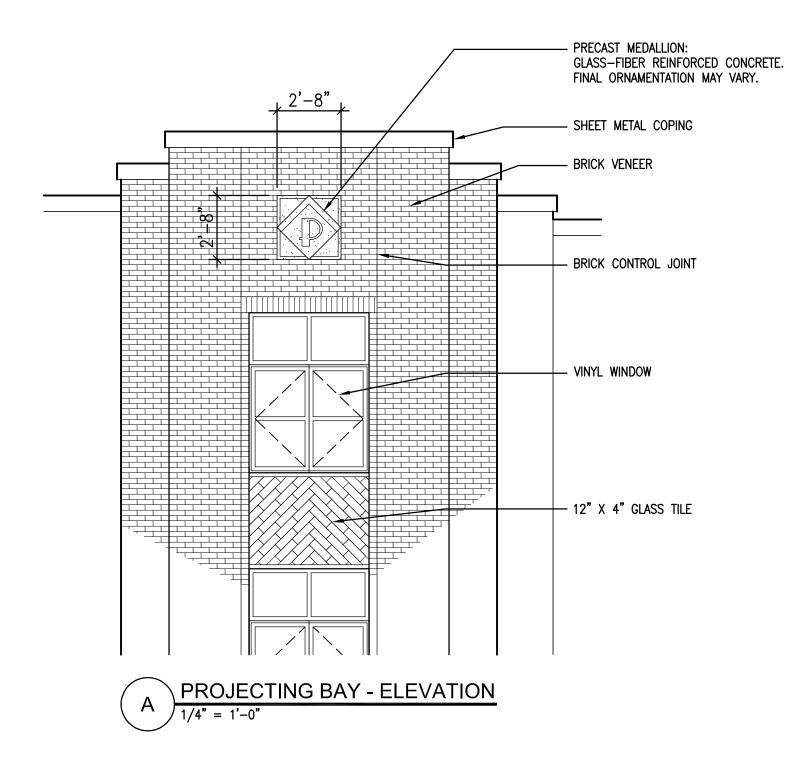
MECH LOUVER • UNITS

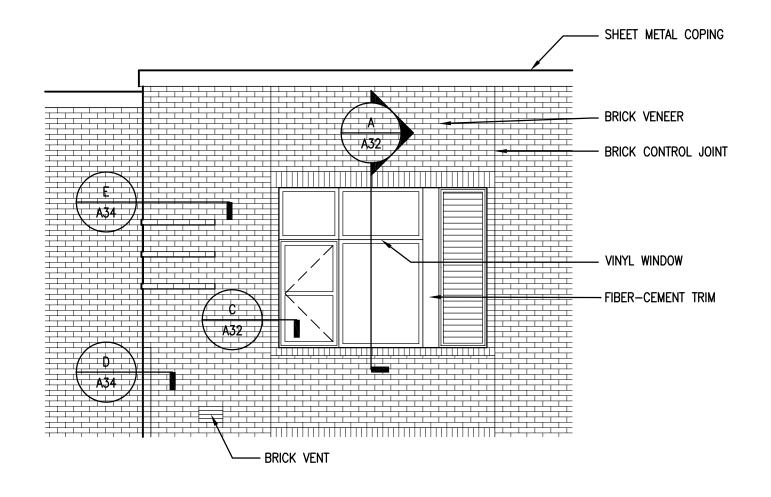
1-1/2" = 1'-0"

MECH LOUVER • UNITS

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

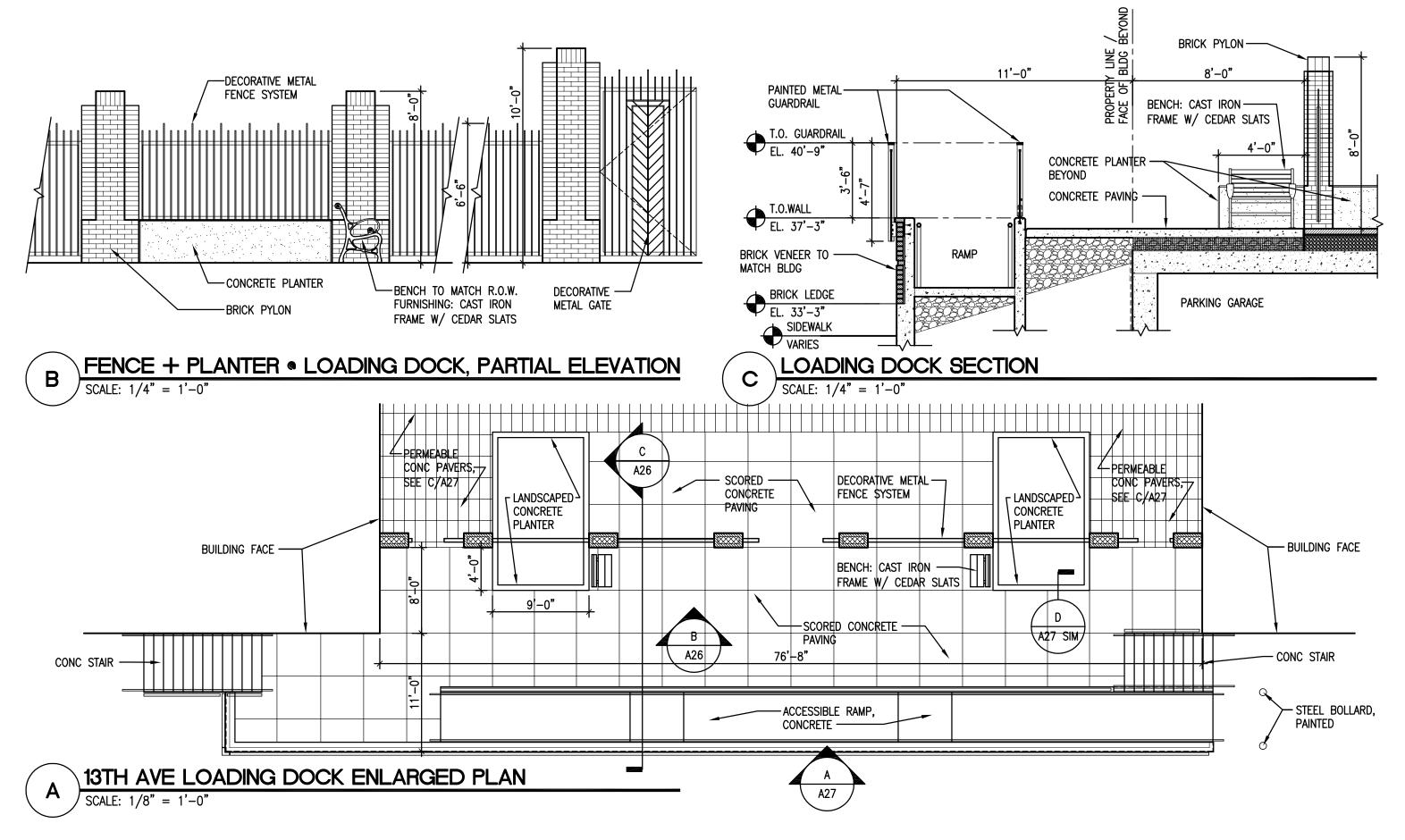




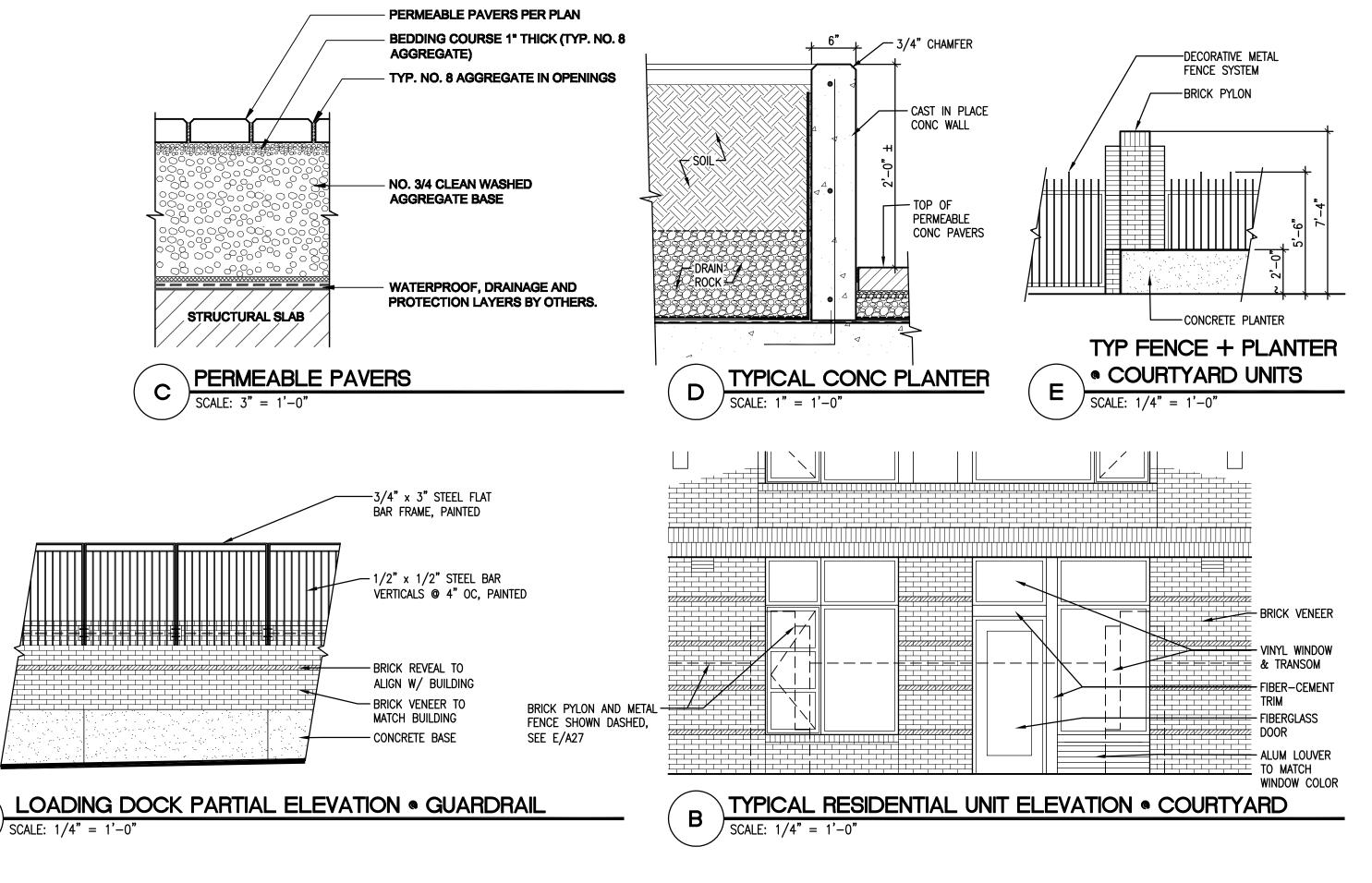


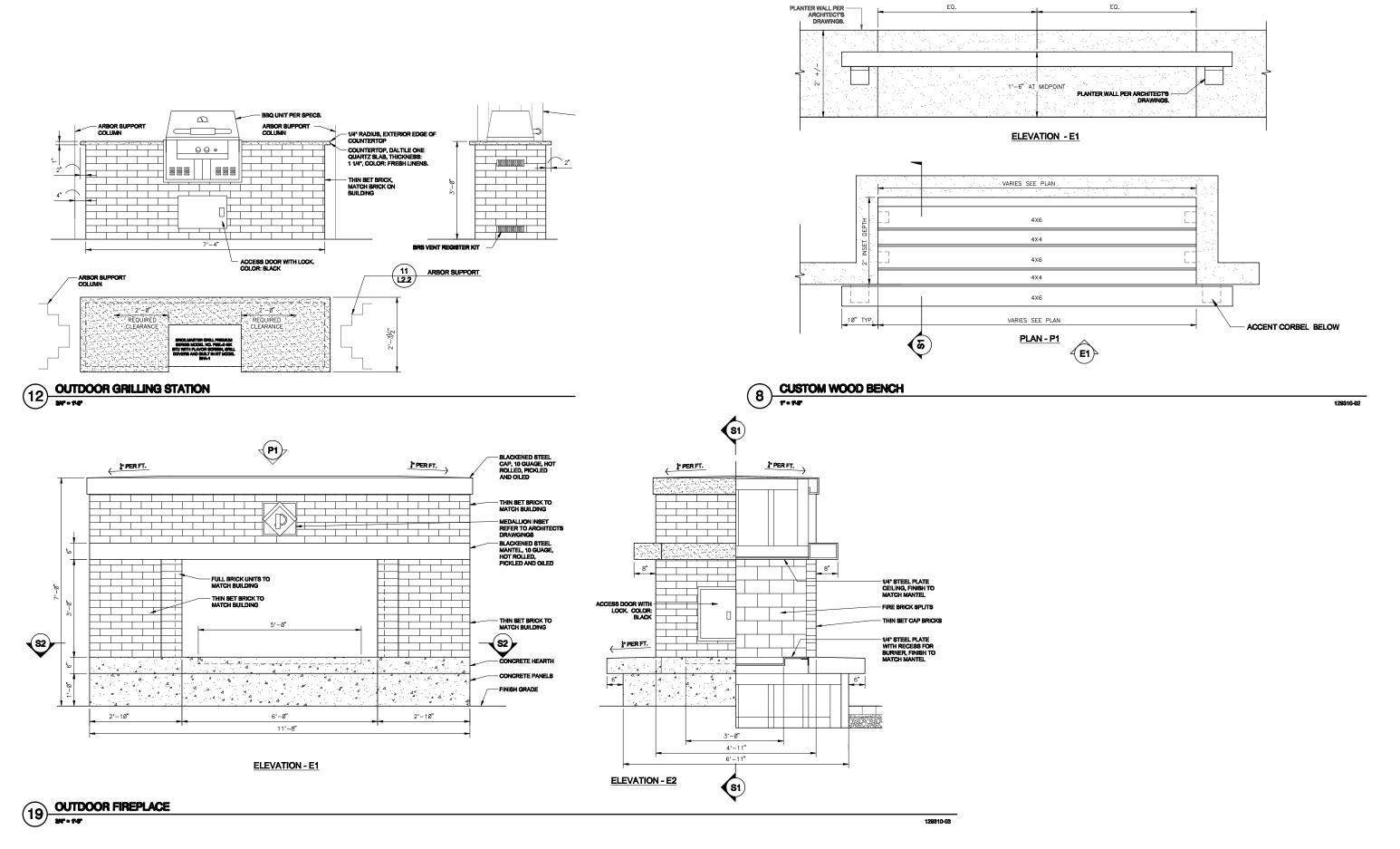
B WINOW W/ LOUVER ELEVATION

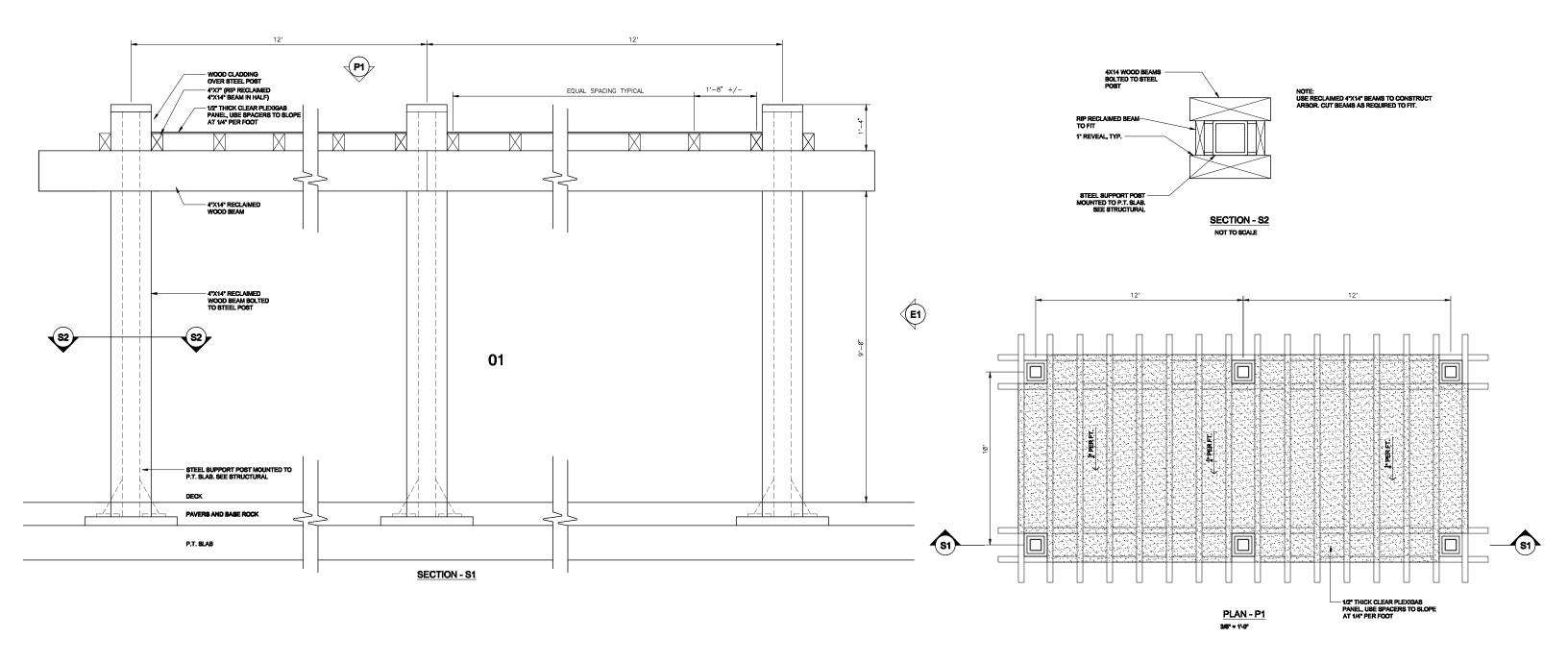
1/4" = 1'-0"

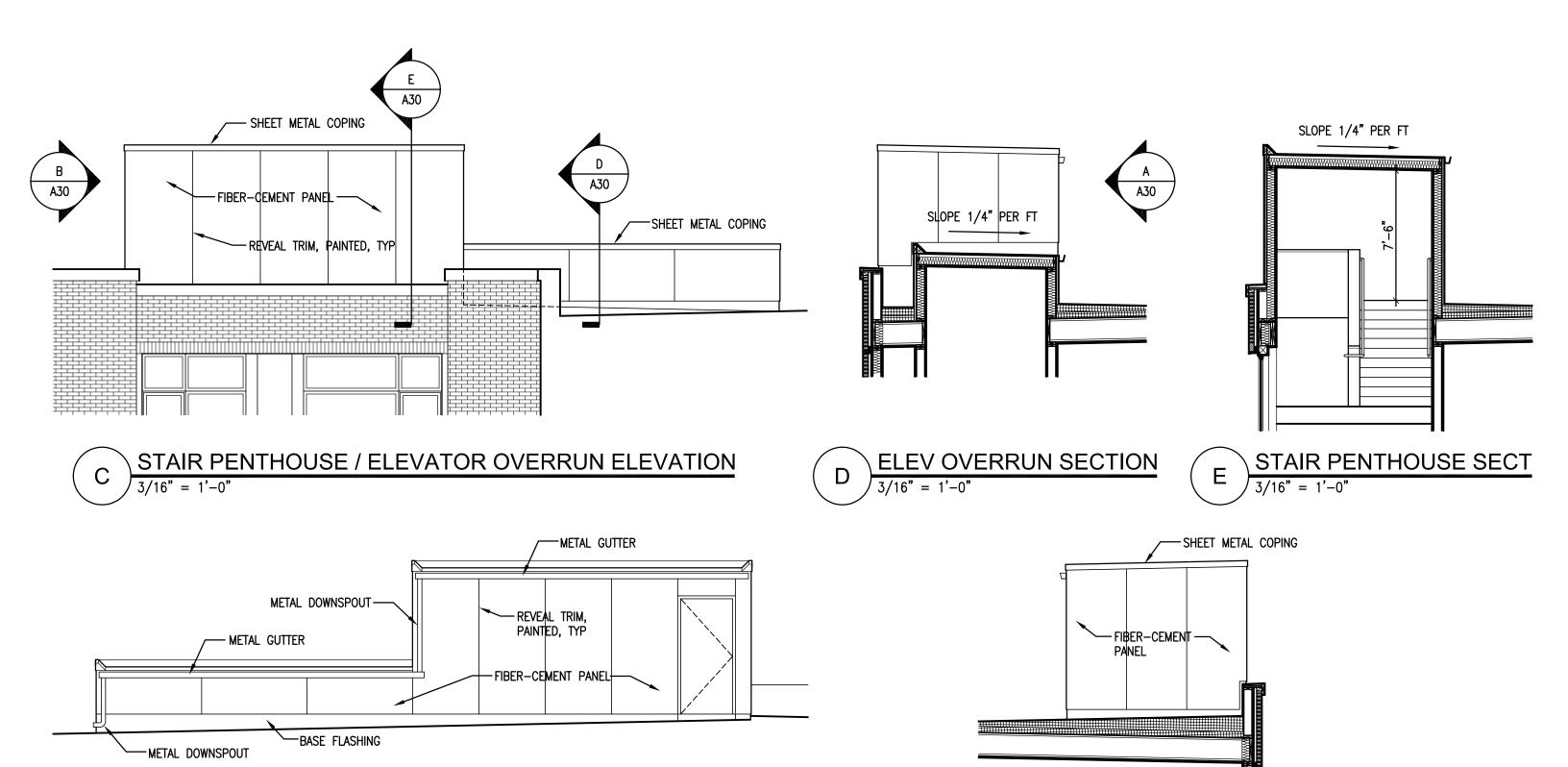






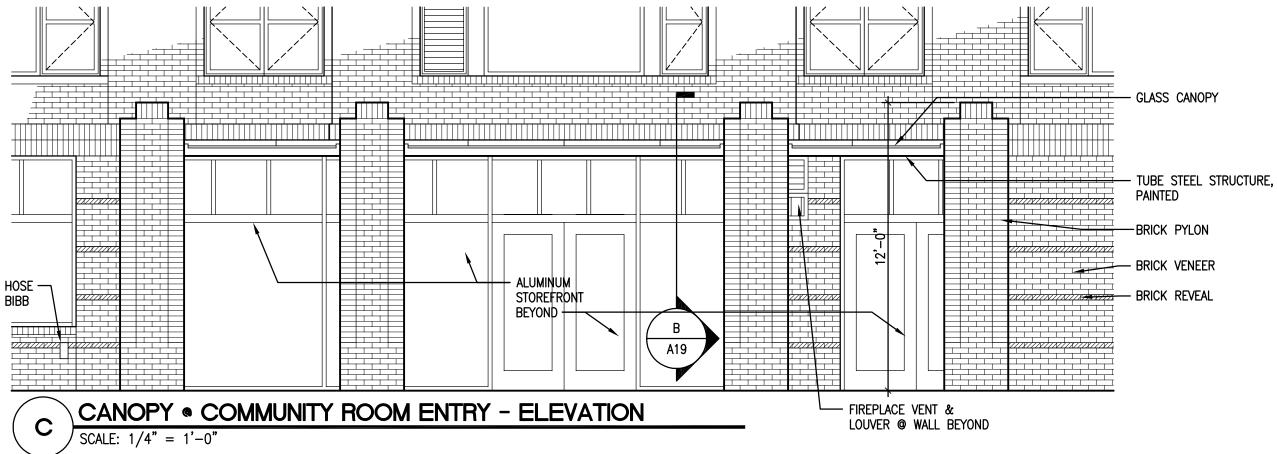


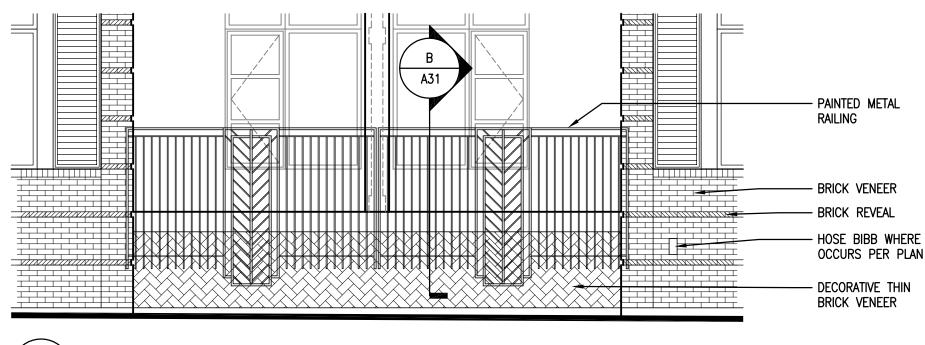




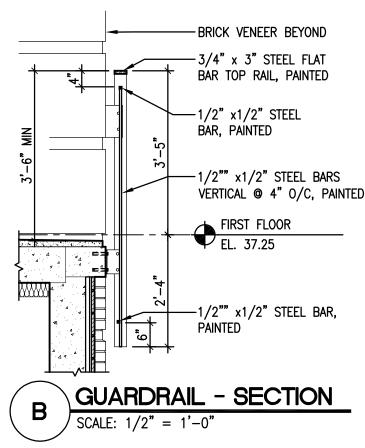
STAIR PENTHOUSE ELEV

STAIR PENTHOUSE / ELEVATOR OVERRUN ELEVATION

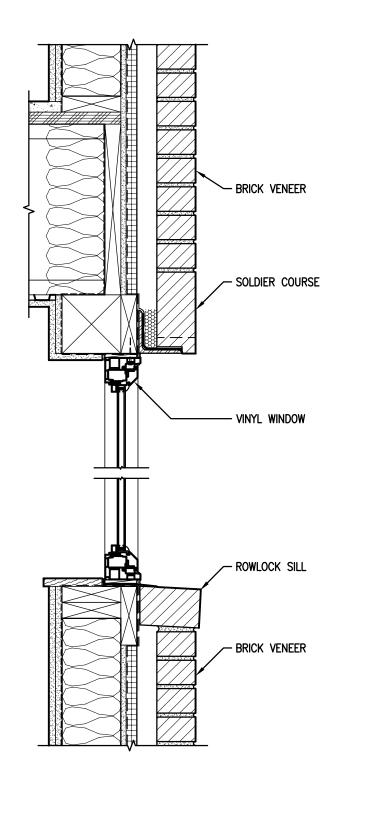


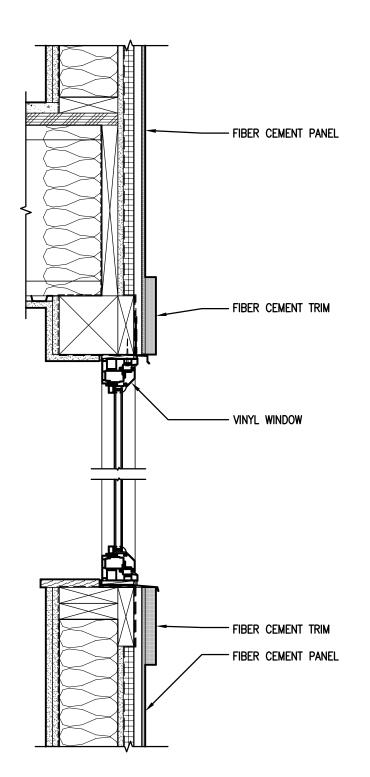


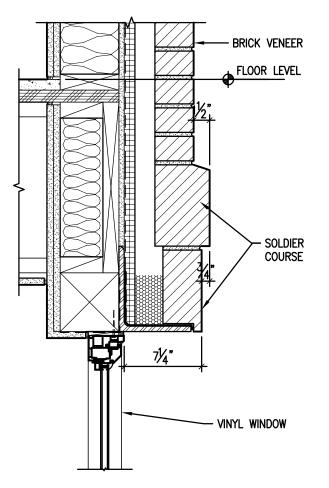


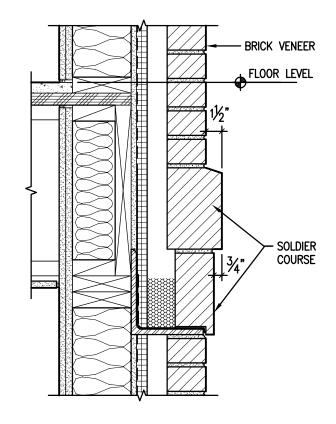






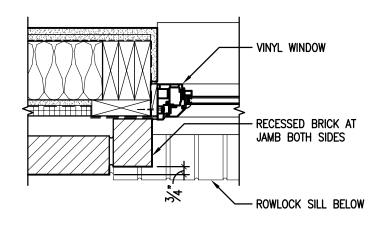


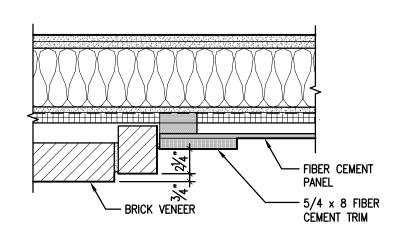












WINDOW SECTION AT BRICK VENEER

B
WINDOW SECT • FIBER CEMENT PNL

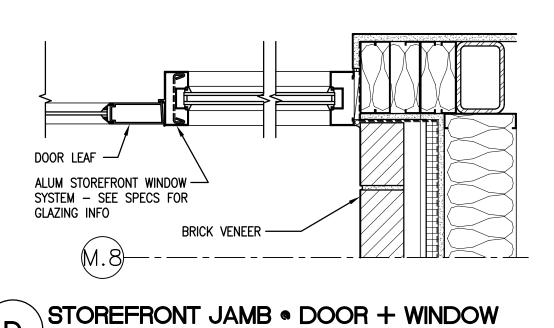
1-1/2" = 1'-0"

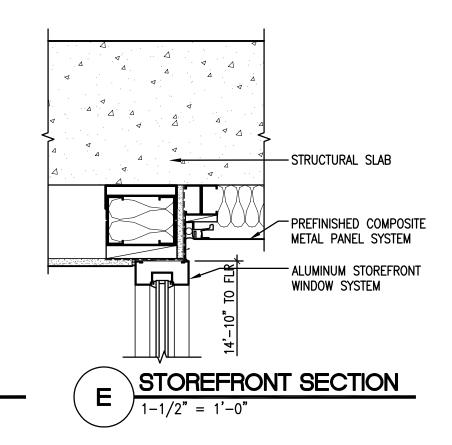
C WINDOW JAMB AT BRICK VENEER WALL

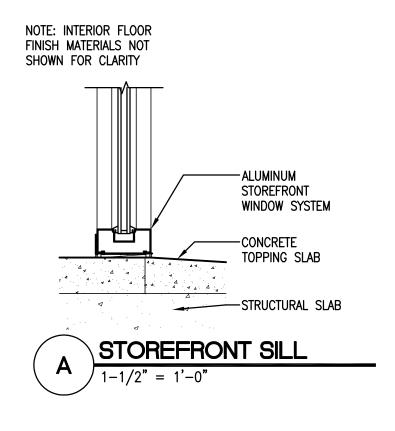
1-1/2" = 1'-0"

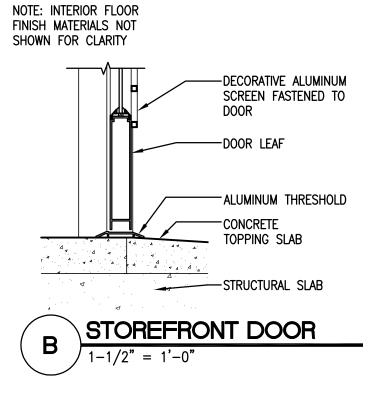
D BRICK JAMB AT CEMENT PANEL

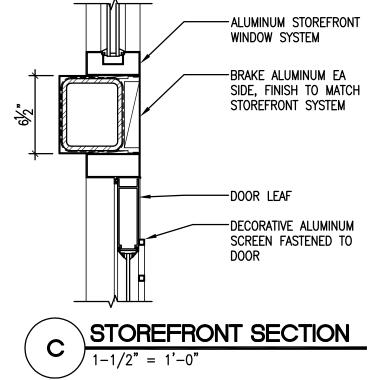
1-1/2" = 1'-0"

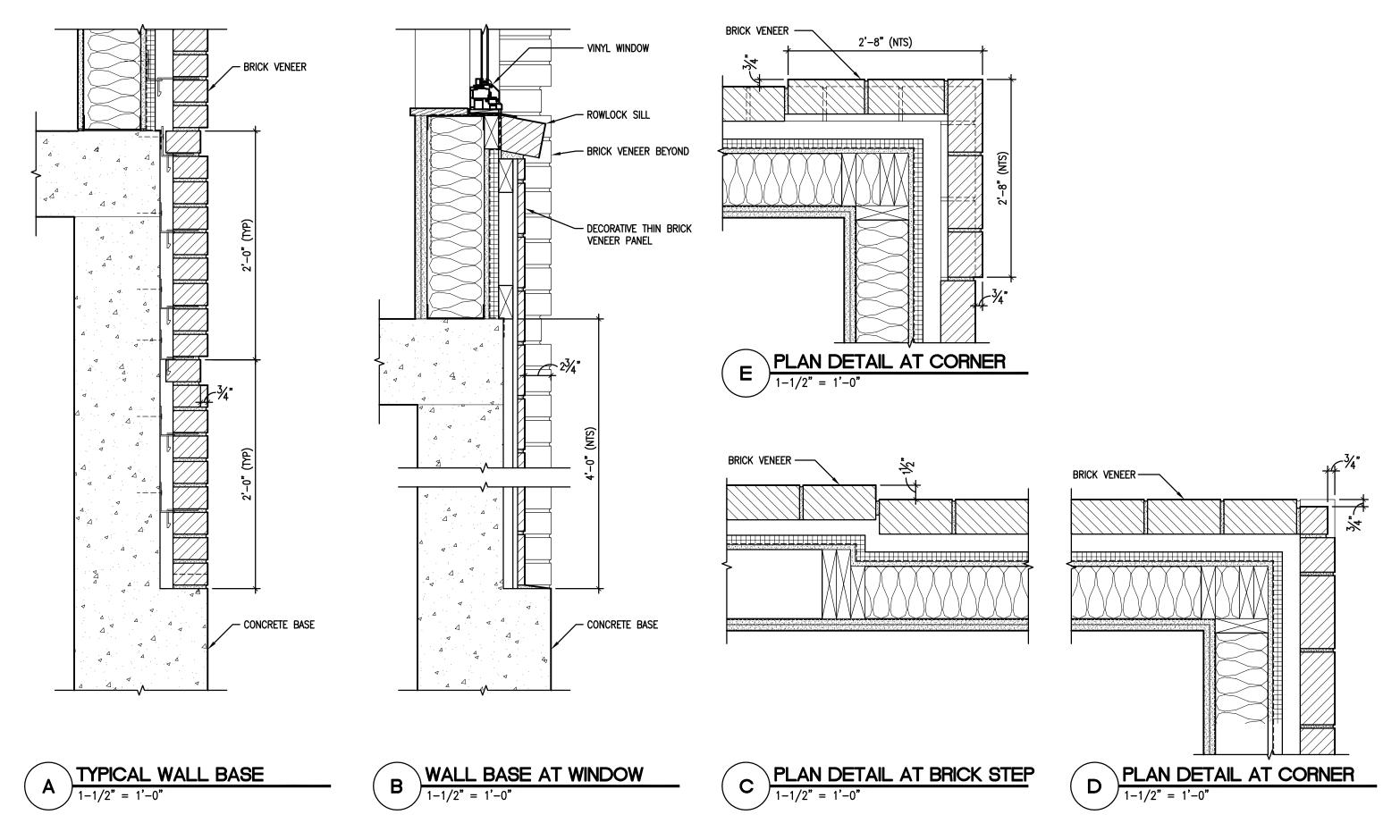










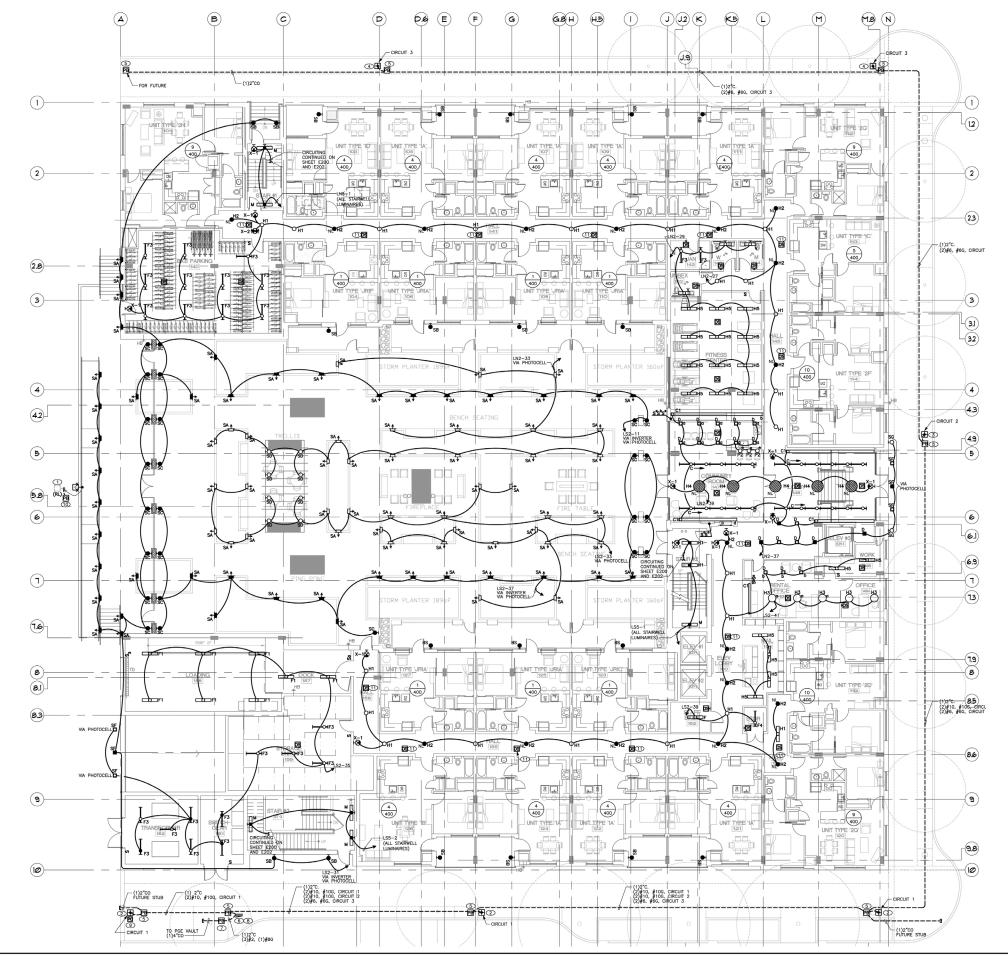












#### DESCRIPTION

674 Luminous Wall Sconce features horizontal trim bars with a vertical fin detail and is ADA compliant. Design options, such as perforated metal, colored acrylic, and different trim bar configurations are available.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

#### SPECIFICATION FEATURES

#### Material

Painted solid aluminum with a matte white acrylic diffuser with a regressed aluminum perf shield. Wet location lamp and ballast housing with 1/8" clear acrylic diffuser.

#### Finish

PremiumTGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear.
Standard: Clear Anodized Aluminum (CAL).
Premium: White (WH), Black (BK), Grey (GY), Silver Metallic (SM), Gold Metallic (GM), Bronze Metallic (BM), Dark Platinum (DP), Graphite Metallic (GRM) or Custom Color (CC)

#### Optics

Refer to www.shaperlighting.com for complete photometrics.

#### Ballast

Integral electronic HPF multi-volt 120/277V (347V Canada), thermally protected with end-of-life circuitry to accommodate the specified lamp wattage.

#### Lamp/Socket

31": Two (2) 14WT5 linear miniature bi-pin fluorescent lamps. 43": Two (2) 21WT5 linear miniature bi-pin fluorescent lamps. 55": Two (2) 28WT5 linear miniature bi-pin fluorescent lamps. Fluorescent socket injection molded plastic. Lamps furnished by others.

#### Installation

Supplied with a mounting back for a standard 4" J-box or stucco ring.

#### Options

Modified Length - Contact factory, Alternative Trim Bars or Perf Accent Design - Contact factory, Green Glass Acrylic (GGA). Energy Star Rating - Contact factory.

#### Labels

U.L. and C.U.L. listed for wet location. ADA compliant.

#### Modifications

Shaper's skilled craftspeople with their depth of experience offer the designer the flexibility to modify standard exterior wall luminaires for project specific solutions.

Contact the factory regarding scale options, unique finishes, mounting, additional materials/colors, or decorative detailing.



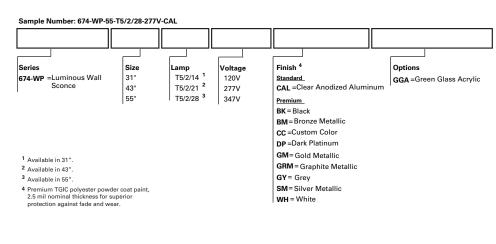
Shaper<sup>™</sup> shaperlighting.com

**674-WP SERIES** 

Exterior Wall Luminaire Luminous Sconce



### ORDERING INFORMATION





Specifications and dimensions subject to change without notice.

Consult your representative for additional options and finishes.



2011-01-07 10:55:17

674-WP SERIES EXTERIOR WALL



MOUNTING TYPE 8-3/8" (21.3 cm) 37" 43" 41" (109.2 cm) (104 cm) (94 cm) 31" 29" 25" (78.7 cm) (73.6 cm) (63.5 cr 674-WP-31 674-WP-43 8-3/8" 53" 49"

ecifications and dimensions subject to change without notice.

Consult your representative for additional options and finishes.

ADS042804 2011-01-07 10:55:17

(139.7 cm) (134.6 cm) (124.4 cm)

**COOPER** Lighting

674-WP-55

### **EXTERIOR ARCHITECTURAL** FACADE LIGHTING

# CERAMIC METAL HALIDE. PULSE START METAL HALIDE



#### **SPECIFICATIONS**

Optical Housing - Constructed of a heavy duty single piece die-cast 360 low copper

Ballast Enclosure - Constructed of a heavy duty single piece die-cast 360 low copper content aluminum. The base plate is attached to the ballast enclosure by a stainless steel

Lens Doorframe - The doorframe is heavy duty single piece die-cast 360 low copper content aluminum. Flush captive stainless steel bolts fasten the doorframe to the optical

Lens - A single piece molded silicone gasket seals the primary and any optional lenses between the doorframe and optical housing. The standard lens is 3/16" tempered glass and covers the optional Dichroic Lens when used. The design of the unique gasket allows the Dichroic Lens option to be easily installed or changed in the field.

Aiming Knuckle - Constructed of die-cast 360 low copper content aluminum. A The aiming knuckle attaches the optical housing to the ballast compartment and allows for a  $\pm\,90^\circ$ vertical adjustment and 350° rotation, flush stainless steel socket head bold, die-cast teeth and silicone gaskets insure solid aiming positions are retained.

Electrical - All ballasts and power supplies are integral to the fixture. All fixtures are ested prior to shipment.

Ceramic Metal Halide ballasts are electronic, high power factor, "A" sound rated and have a THD of less than 10%, available in 120V or 277V.

LED power supplies are available in 120V or 277v with a 24V output.

Pulse Start Metal Halide ballasts are HPF core/coil assemblies available in 120V - 347V.

provide a textured finish with a minimum thickness of 3mil. A multi-stage phosphate pretreatment wash is utilized in our automated in-house dry powder painting system.

Labels - The Masque fixtures are UL/CUL approval for use in wet locations, mounted in

\* DMX Programmable, please see DMX Control spec. sheets

Insight Lighting reserves the right to change specifications without notice due to



















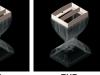




Cross Baffle Shielding in vertical and horizontal







Horizontal Baffle Glare cutoff in the vertical plane.



Adjustable Vertical Raffle Glare cutoff in the







Bam Doors Adjustable Framing Flexible framing of the Snoot Glare control for beam pattern.



Cutoff Visor Shielding for cutoff in front

Page 1 of 4

APPROVAL:



Rio Rancho, NM 87144 www.insightlighting.com

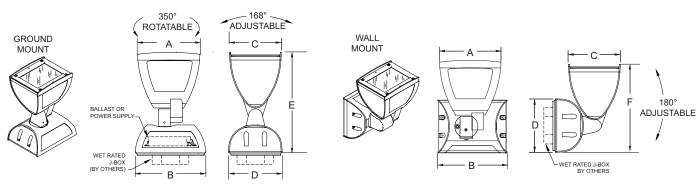
INSIGHT

11/14/11

**EXTERIOR ARCHITECTURAL FACADE LIGHTING** 

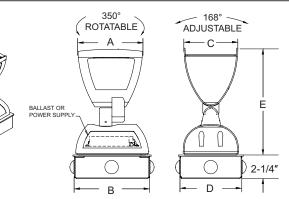


### SM - SURFACE, WALL, GROUND



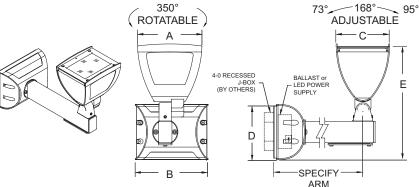
PRODUCT	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F
MASQUE L	6"	6-9/4"	5"	5-1/0"	9-5/8"	8-5/8"
MASQUE II	7-1/4"	9"	6-7/8"	7-1/4"	13-3/4"	12-1/8"
MASQUE III	9"	9"	0-1/2"	7-1/4"	14-1/4"	13-1/8"
MASQUE IV	14-7/8"	13-1/8"	12-3/4"	9-1/2"	21"	18-1/8'

### CM - CONDUIT MOUNT



DIM A	DIM B	DIM C	DIM D	DIM E
6"	7-1/4"	5"	6"	9-5/8"
7-1/4"	9"	6-7/8"	7-1/4"	13-3/4"
9"	9"	8-1/2"	7-1/4"	14-1/4"
14-7/8"	13-3/8"	12-3/4"	9-13/16"	21"
	7-1/4"	7-1/4" 9" 9"	7-1/4" 9" 6-7/8" 9" 9" 8-1/2"	7-1/4" 9" 6-7/8" 7-1/4" 9" 9" 8-1/2" 7-1/4"

### **EX - EXTENDED ARM**



PRODUCT	DIM A	DIM B	DIM C	DIM D	DIM E
MASQUE I	6"	6-3/4"	5"	5-1/8"	10-3/4"
MASQUE II	7-1/4"	9"	6-7/8"	7-1/4"	12-1/8"
MASQUE III	9"	9"	8-1/2"	7-1/4"	13-1/8"
MASQUE IV	14-7/8"	13-1/8"	12-3/4"	9-1/2"	18-1/8"

Specify Arm Length: Masque I: Specify 6", 12", 18" or 24" Masque II: Specify 8", 12", 18" or 24" Masque III & IV: Specify 12", 18" or 24" INSIGHT Rio Rancho, NM 87144 Tel: 505-345-0888 www.insightlighting.com

11/14/11

Architecture

appendix

## **LUMIÈRE®**

#### DESCRIPTION

Cambria 922 is a small dimmable LED or MR16 low voltage sign lighting luminaire. It attaches to a wall mounted straight arm and delivers full vertical adjustment for easy aiming. Optional 24 in., 30 in. or 36 in. straight arms are available in lieu of the standard 14-3/4 in, arm. Various lenses. louvers and color or dichroic filters can be combined - up to three at once to create multiple lighting effects. Lumiere?s exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its

Catalog #	Туре
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Comments	Date
Prepared by	

#### **SPECIFICATION FEATURES**

#### A ... Material

Housing, hood, straight arm and wall mounting plate are precision-machined from corrosion-resistant billet stock 6061-T6 aluminum, C360 brass, C932 bronze, C110 copper or 303/304 stainless steel.

#### B ... Finish

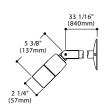
Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant chemical film undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available

#### C ... Brass, Bronze, Copper or **Stainless Steel**

Fixtures constructed from brass, bronze, copper or stainless steel are left unpainted to reveal the natural beauty of the material. Brass, bronze and copper will patina naturally over time.

#### D ... Hood

Hood is removable for easy relamping and accepts up to three internal accessories at once (lenses, louvers, filters) to achieve multiple lighting effects. Weep holes prevent water and mineral stains from collecting on the lens, even in the straight-up position.



#### E ... Gasket

Housing and hood are sealed with a high temperature silicone o-ring gasket to prevent water intrusion.

#### F ... Lens

Tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion and breakage due to thermal shock.

#### G ... Adjustable Mounting Arm Standard 14-3/8" straight arm with

adjustable side swivel provides 340° of vertical adjustment for easy aiming. Center rear swivel also available, providing 195° of vertical adjustment. Optional 24", 30" or 36" straight arms are available in lieu of standard 14-3/8" arm (specify option -SA24, -SA30 or -SA36). Stainless steel aim-locking mechanisms are standard. 4-1/4" diameter wall mounting plate attaches directly to standard J-box with provided screws. Lumiere's exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead wires.

#### H ... Hardware

Stainless steel hardware is standard to provide maximum corrosion-resistance.

#### I ... Socket

Ceramic socket with 250° C Teflon® coated lead wires and GU5.3 bi-pin base.

#### J ... Electrical

Remote 12V transformer required (not included). Available from Lumière as an accessory - see the Accessories & Technical Data section of the catalog for details. NOTE: initial power draw on LED equipped fixtures is 15 watts. When sizing transformer use 15 watts per LED fixture. Nominal power draw after start up is 6 watts or 10 watts respectively.

Halogen lamp not included. Available from Lumière as an accessory. LED modules are included and are available in four color temperatures (2700, 3000, 4000 and 5700) and three distributions (spot, narrow, and flood). Both color temperature and distribution must be specified when ordering - see reverse side for details and catalog logic.

### L ... Labels & Approvals

UL and cUL listed, standard wet label. IP65 rated. Manufactured to ISO 9001-2000 Quality Systems Standard, IBFW union made.

#### M ... Warranty

Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's warranty.

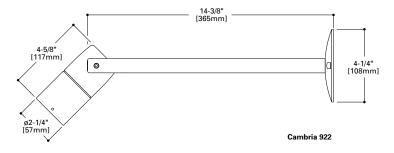


**CAMBRIA** 

922

10W LED **6W LED** 50W (max.) MR16 LED Halogen

Low Voltage Sign Light



COOPER Lighting

Specifications and Dimensions subject to change without notice.

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## **Recessed Lighting, Type SF**

#### DESCRIPTION

4 inch LED recessed medium beam wall wash specially designed for LED technology. Two-stage reflector system combined with gradient kicker, produces high levels of uniform vertical illumination on the wall with minimal source brightness. Lumen packages include 900 and 1300 delivered lumens with color temperatures of 2700K, 3000K, 3500K, 4000K. Suitable for commercial construction and exceeds high efficacy requirements (with designated trims) for IECC-2009.

## PORTFOLIO™

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Project	
Comments	Date
Prepared by	

#### SPECIFICATION FEATURES

#### Lower Wall Wash Reflector

Lower Wall Wash Reflector Spun .050" thick aluminum lower reflector with gradient kicker in combination with a lensed upper optical chamber provides superior lumen output, high level vertical brightness. Available in all Portfolio

#### Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the finished ceiling

#### Plaster Frame / Collar

New Construction Housing: Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2". Remodel Housing: Galvanized steel plaster ring adjusts to accept up to 1" ceiling thickness.

#### **Universal Mounting Bracket** Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling (new construction

#### Junction Box

(4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch

#### Thermal

Extruded aluminum heat sink conducts heat away from the LED module for improved performance and longer life

LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Auto resetting, thermally protected, LED's are turned off when safe operating temperatures are exceeded. Color variation within 3step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from

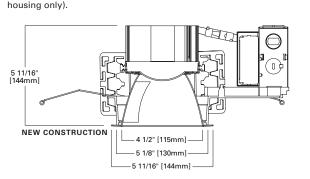
Driver can be serviced from above or through the aperture

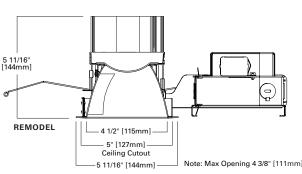
Fixture should not be operated in ambient temperatures above 40° C

#### Code Compliance

Thermally protected and cULus listed for protected damp locations Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 Class B consumer limits. Non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. ARRA Compliant. Photometric testing completed in accordance with IFS I M 79 standards. LED life testing completed in accordance with LM 80 standards.

### Warranty







Specifications and dimensions subject to change without notice.

\_11 11/16" [297mm]\_

**LD409 LD413 LD4R09 LD4R13** 

#### 4LM111

LED

4 Inch Medium Wall Wash

New Construction or Remode



Energ	y Data
Sound Rating: Class A sta	ndards
Operating Temperature: 4	0°C (104°F)
1300 I	umen
(Values at non-din	nming line voltage)
Minimum Starting Temp: -	30°C (-22°F)
EMI/RFI: FCC Title 47 CFR,	Part 18, Class B
Input Voltage: UNV (90V -	305V)
Power Factor: >0.90 (at no 120/230/240/277 VAC & 10	ominal input 0% of Rated Ouput Power)
Input Power: 24.8W	THD: <21%
120V Input Current: .21A	277V Input Current: .09A
Maximum Non-IC A	Ambient Continuous
Input Frequency: 47-63Hz	
Rated Wattage: 24.8W	
900 Lumen	D120 / D010
(Values at non-din	nming line voltage)
Minimum Starting Temp: -	30°C (-22°F)
EMI/RFI: FCC Title 47 CFR, (Consumer)	Part 18, Class B
Input Voltage: 120/120-305	iV
Power Factor: >0.90	
Input Power: 14.3W	THD: <20%
Input Frequency: 50/60Hz	
Rated Wattage: 14.3W/17.	5W
	ADP110788
	2011-08-22

## Step Light, Type SA



Wall, Step, Path Light **EL807** 120 / 277 Volt Die-Cast Aluminum LED revision 4/11/11 • el807.pdf

Type: Approvals: Job: **Fixture Catalog number:** Date: Page: 1 of 1

## **Specifications**

**Housing:** Die-cast low copper alloy (<0.6% Cu) aluminum with clear anodized finish. Two 1/2" NPT in sides. Housing mounts into concrete, brick, or masonry (non-combustible materials). Internal splice area provided behind lamp plate.

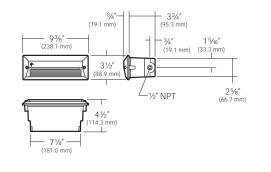
Lens Frame: Die-cast aluminum, with silicone gasket, attaches to housing with two captive 10-32 stainless steel, hex socket cap screws.

Lens: Tempered prismatic glass with silicone gasket, concealed above lens frame opening.

Finish: On lens frame only, Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black (BL), Dark Bronze (DB), and Verde Green (GR).

**Optical System:** A total of 3 or 9 LED emitters are configured together as a module. Available in 3500K and

**Driver:** Universal Voltage from 120 to 277V with a ±10% tolerance. -40° F. starting temperature. All drivers are Underwriters Laboratories recognized.





#### ORDERING INFORMATION

☐ EL807 / 3L3KUV <sup>1</sup> ☐ EL807 / 3L5KUV <sup>1</sup>	3.6W, 3 LED's, 3500K 3.6W, 3 LED's, 5100K
Fixture	Source
Fixture  EL807 / 9L3KUV <sup>1</sup>	<b>Source</b> 10.8W, 9 LED's, 3500K

Source

<sup>1</sup> Universal Voltage from 120 to 277V with a  $\pm 10\%$  tolerance. For 3.6W, Max Amps. are .030 for 120V, .020 for 208V, .015 for 240V, .013 for 277V. For 10.8W, Max Amps. are .090 for 120V, .050 for 208V, .045 for 240V. .040 for 277V..

#### **Finish**

**Fixture** 

BL - Black

**DB** - Dark Bronze **GR** - Verde Green

**Listings and Ratings** UL cUL 15981 IP66 Rated 25C Ambient

<sup>1</sup>Suitable for wet locations

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE

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5642111101

## Wall & Column Sconce, Type SB & SC

## **LUMIÈRE®**

#### DESCRIPTION

Westwood 904 and 904-2 are small dimmable LED or MR16 low-voltage halogen luminaires. Model 904 provides downlight or uplight by way of its 180° rotational fixture head. Model 904-2 provides combination uplight and downlight. A square shroud option (-SQS) is available in both models, offering rectilinear styling instead of cylindrical. Both models mount directly to any wall surface or over a standard 4-inch J-box and require a remote 12-volt step-down transformer (not included). Various lenses. louvers, and color or dichroic filters can be combined - up to three at once to create multiple lighting effects.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

#### SPECIFICATION FEATURES

#### A ... Material

Housing and hood are precision-machined from corrosion-resistant 6061-T6 aluminum billet, brass, bronze o stainless steel. Mounting canopy is constructed from corrosion-resistant silicone aluminum, brass, bronze or stainless steel

#### B ... Finish Painted

Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant chemical film undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available, Brass, Bronze or Stainless Steel Fixtures constructed from brass, bronze or stainless steel are left unpainted to reveal the natural beauty of the material. Brass and bronze will patina naturally over time

#### C ... Hood

Hood is removable for easy relamping and accepts up to three internal accessories at once (lenses, louvers, filters) to achieve multiple lighting effects. Weep the uplight position

### D ... Gasket

Housing and hood are sealed with a high temperature silicone o-ring gasket to prevent water intrusion.

Tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion and breakage due to

#### F ... Mounting

Both models mount directly to wall surface or over a standard 4" J-box and require remote 12V step-down transformer (not included). Model 904 provides downlight or uplight. Model 904-2 provides non-adjustable uplight and downlight. Lumière's exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead

#### G ... Hardware

Stainless steel hardware is standard to provide maximum corrosion-resistance.

Ceramic socket with 250° C Teflon® coated lead wires and GU5.3 bi-pin base.

ø2-1/4"\_ [57mm]

#### I ... Electrical Remote 12V transformer required

(not included). NOTE: initial power draw on LED equipped fixtures is 15 watts. When sizing transformer use 15 watts per LED fixture. Nominal power draw after start up is 10 or 6 watts accordingly. Also, LEDs are more voltage sensative than standard halogen MR16 lamps. The LED module is designed to operate between 10 and 13 volts. Any less or more voltage can cause premature

#### J ... Lamp

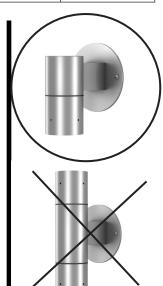
Halogen lamp not included. Available from Lumiere as an accessory - see reverse side for details and catalog logic. LED modules are included and are available in four color temperatures (2700,3000,4000, and 5700) and three distributions (spot. narrow, and flood). Both color temperature and distribution must be specified when ordering - see reverse side for details and catalog

#### K ... Labels & Approvals

UL and cUL listed, standard wet label. IP65 rated. Manufactured to ISO 9001-2000 Quality Systems Standard. IBEW union made.

#### L ... Warrantv

Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's



**WESTWOOD** 

904 904-2

10W | FD **6W LED** 50W (max.) MR16 Low Voltage

Wall

IP65

## Specifications and Dimensions subject to change without notice.

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## Courtyard Trellis, Type SD

#### DESCRIPTION

Cambria 203 is a small, low voltage dimmable LED and halogen MR16 luminaire. It is available with a fully adjustable side swivel stem (203, 203-FL), an adjustable center rear swivel (203-CRS) or a stationary rear flush mount (203-FM). Side swivel models 203 and 203-FL provide 340° tilt and 360° rotation. Center rear swivel model CRS provides 200° tilt and 360° rotation. Center rear swivel model CRS provides 200° tilt and 360° rotation. Various lenses, louvers and color or dichroic filters can be combined - up to three at once - to create multiple lighting effects. The Lumiere exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead wires.

	Solutions
Catalog #	Туре
Project	
Comments	Date
Prepared by	

#### SPECIFICATION FEATURES

#### A ... Material

Housing, hood and mounting stem are precision-machined from corrosion-resistant billet stock 6061-T6 aluminum, C360 brass, C932 bronze, C110 copper or 303/304 stainless steel

#### **B ... Finish Painted**

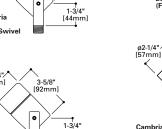
Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant chemical film undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.

#### C ... Brass, Bronze, Copper or **Stainless Steel**

Fixtures constructed from brass, bronze, copper or stainless steel are left unpainted to reveal the natural beauty of the material. Brass, bronze and copper will patina naturally over time.

#### D ... Hood

Hood is removable for easy relamping and accepts up to three internal accessories at once (lenses, louvers, filters) to achieve multiple lighting effects, Model 203, 203-CBS & 203-FM: Ween holes prevent water and mineral stains from collecting on the lens. even in the straight-up position. Model 203-FL: The flush lens design reduces fixture length. minimizes debris collection and prevents water and mineral stains from collecting on the lens.



a high temperature silicone o-ring gasket to prevent water intrusion.

Housing and hood are sealed with

F ... Gasket

Tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion and breakage due to thermal shock

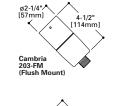
#### G ... Mounting Stem

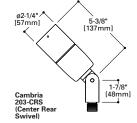
Model 203 and 203-FL include fully adjustable side-mounted swivel stem, providing 340° tilt and 360 rotation for easy aiming. Center rear swivel (203-CRS) or stationary rear flush mount (203-FM) models are also available. All models include 1/2" NPS threaded male fitting. Stainless steel aim-locking mechanisms are standard (not available on 203-FM). Lumière's exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead wires.

#### H ... Hardware

Stainless steel hardware is standard to provide maximum corrosion-resistance. I ... Socket

Ceramic socket with 250° C Teflon® coated lead wires and GU5.3 bi-pin base.





#### J ... Electrical

Remote 12V transformer required (not included). NOTE: initial power draw on LED equipped fixtures is 15 watts. When sizing transformer use 15 watts per LED fixture. Nominal power draw after start up is 6 watts or 10 watts accordingly. Also, LEDs are more voltage sensative than standard halogen MR16 lamps. The LED module is designed to operate between 10 and 13 volts. Any less or more voltage can cause premature

#### K ... Lamp

Halogen lamp not included. Available from Lumière as an accessory, LED modules are included and are available in four color temperatures (2700,3000,4000, and 5700) and three distributions (spot, narrow, and flood). Both color temperature and distribution must be specified when ordering - see reverse side for details and catalog logic.

#### L ... Labels & Approvals

UL and cUL listed, standard wet label. IP65 rated. Manufactured to ISO 9001-2000 Quality Systems Standard. IBEW union made. Approved by New York City Dept. of Buildings, Bureau of Electrical Control for use in NYC, NY.

#### M ... Warranty

Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's



LUMIÈRE® • energy

**CAMBRIA** 

203

10W LED 50W (max.) MR16 Halogen Low Voltage

Accent/Flood



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appendix



Specifications and Dimensions subject to change without notice.

**COOPER** Lighting

**48HC** High Efficiency
Gas Heat/Electric Cooling Packaged Rooftop
3 to 12.5 Nominal Tons



## **Product Data**















C10222

### **CURBS & WEIGHTS DIMENSIONS - 48HC 04-06**

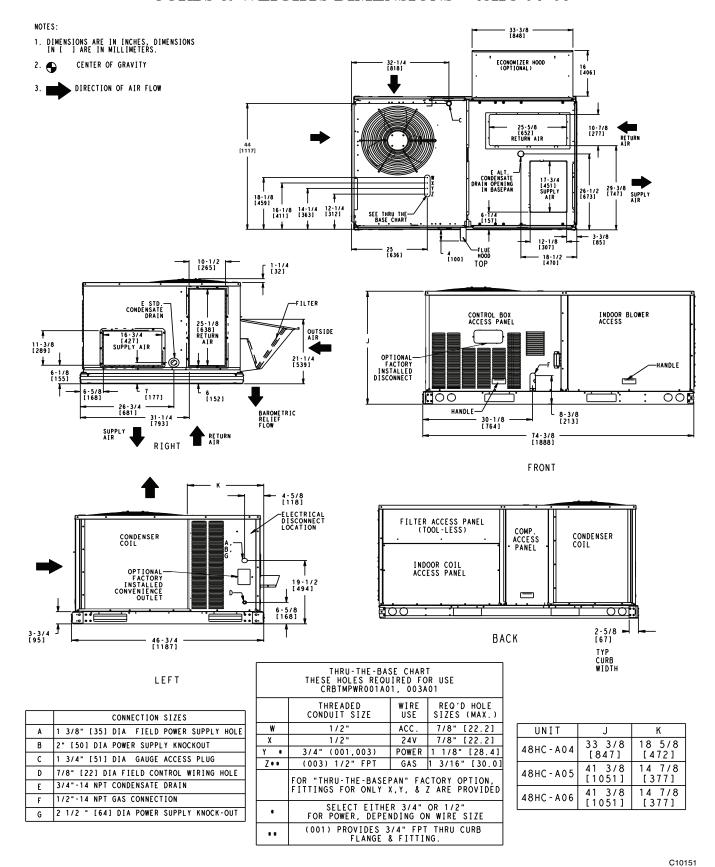


Fig. 1 - Dimensions 48HC 04-06







## **Extruded Aluminum Brick Vent**

### **Application and Design**

Brick vents provide a permanent means of ventilation for crawl spaces, hung ceilings, incinerator rooms, chimney flues, foundations, pipe spaces and corridors. Extruded construction provides a quality finished appearance. A high water stop at the rear and deep overlapping blades with storm stops provide maximum resistance to rain and weather.

### **Standard Construction**

Frame .......Heavy gauge extruded 6063T5 aluminum,

4 in. x 0.125 in. nominal wall thickness

**Blades.....** Heavy gauge extruded 6063T5 aluminum, 0.125 in. nominal wall thickness, positioned at 45° angles

Construction . . . Mechanically fastened

Insect screen ...18 in. x 14 in. aluminum mesh, inside mount (rear)

Finish......204-R1 Clear anodize

Available Sizes .8 1/8 in. W x 2 3/8 in. H

8 1/8 in. W x 4 3/4 in. H

8 1/8 in. W x 7 3/4 in. H 12 in. W x 2 3/8 in. H

12 in. W x 4 3/4 in. H

12 in. W x 7 3/4 in. H

12 in. W x 11 3/4 in. H

15 5/8 in. W x 7 3/4 in. H

15 5/8 in. W x 15 3/4 in. H

16 1/2 in. W x 2 3/8 in. H

16 1/2 in. W x 4 3/4 in. H

16 1/2 in. W x 7 3/4 in. H

16 1/2 in. W x 15 3/4 in. H

24 in. W x 2 3/8 in. H

24 in. W x 4 3/4 in. H

24 in. W x 7 3/4 in. H

32 in. W x 7 3/4 in. H

48 in. W x 7 3/4 in. H

### **Options** (at additional cost)

• Opposed blade damper

• Straight duct

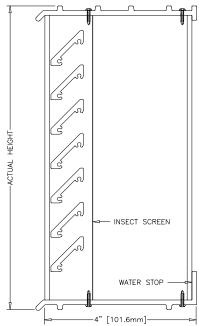
(0.063 in aluminum for up to 18 in. wall thickness)

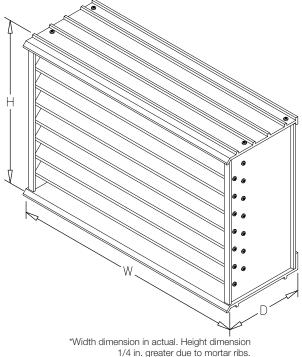
• A variety of architectural finishes including:

Integral color anodize (medium or dark bronze only)

Baked enamel paint

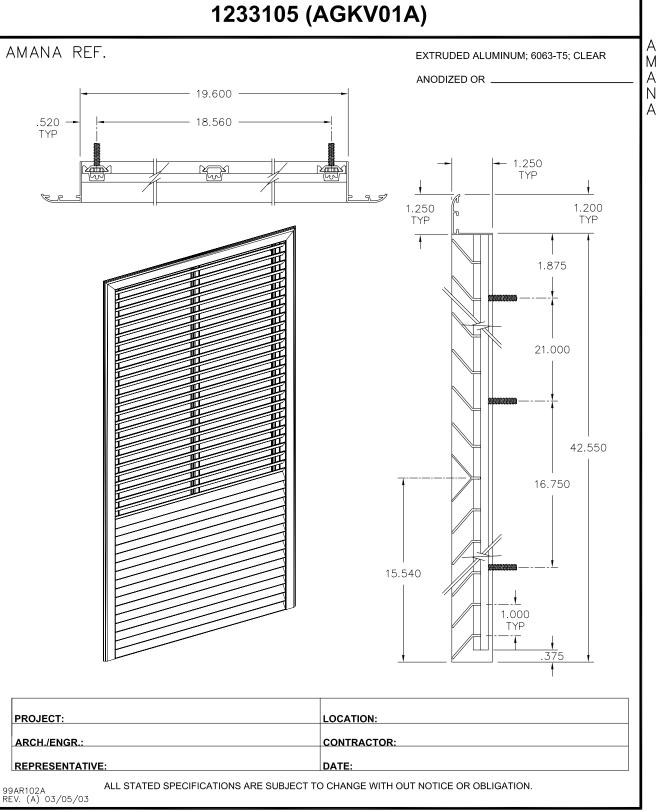
Kynar paint





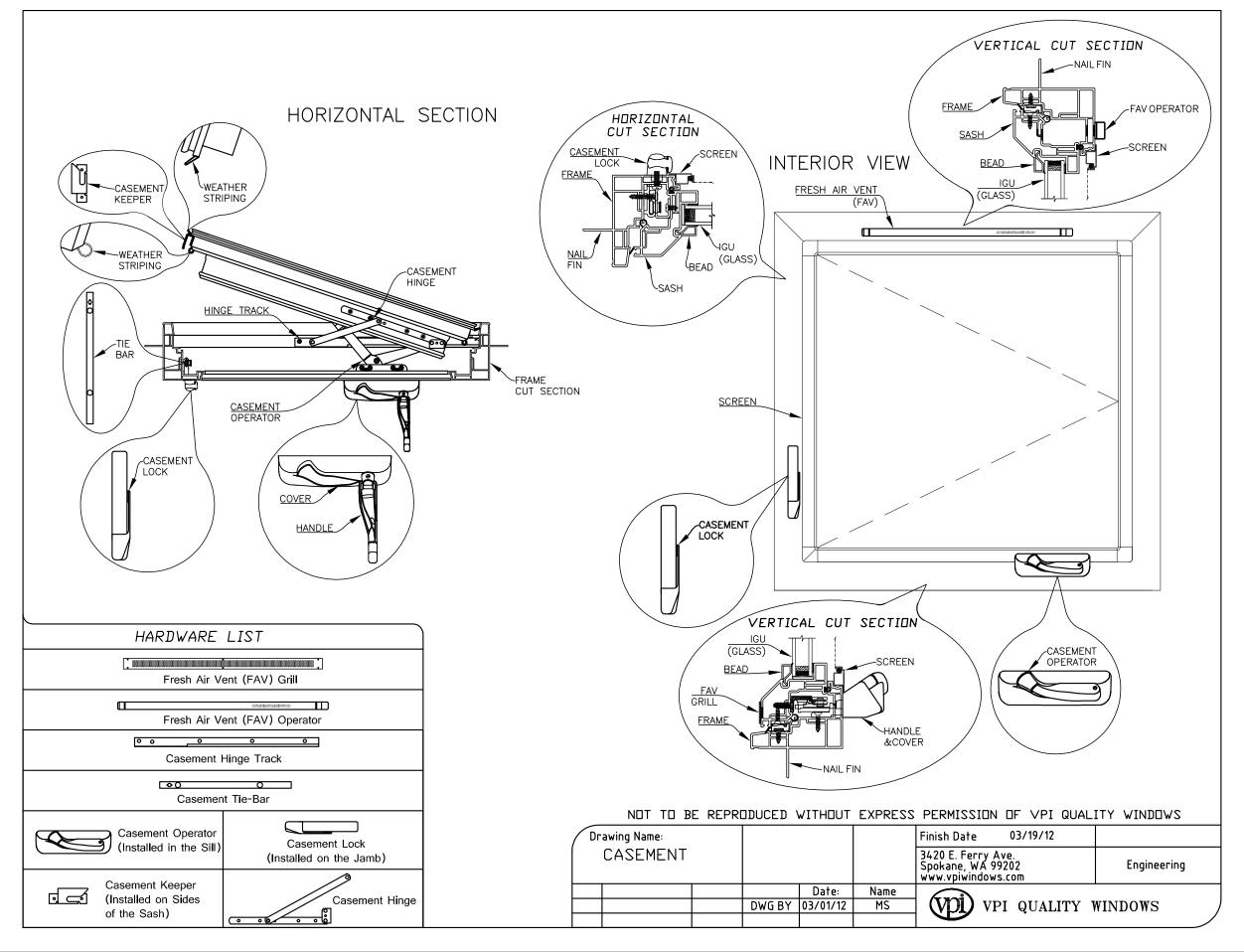


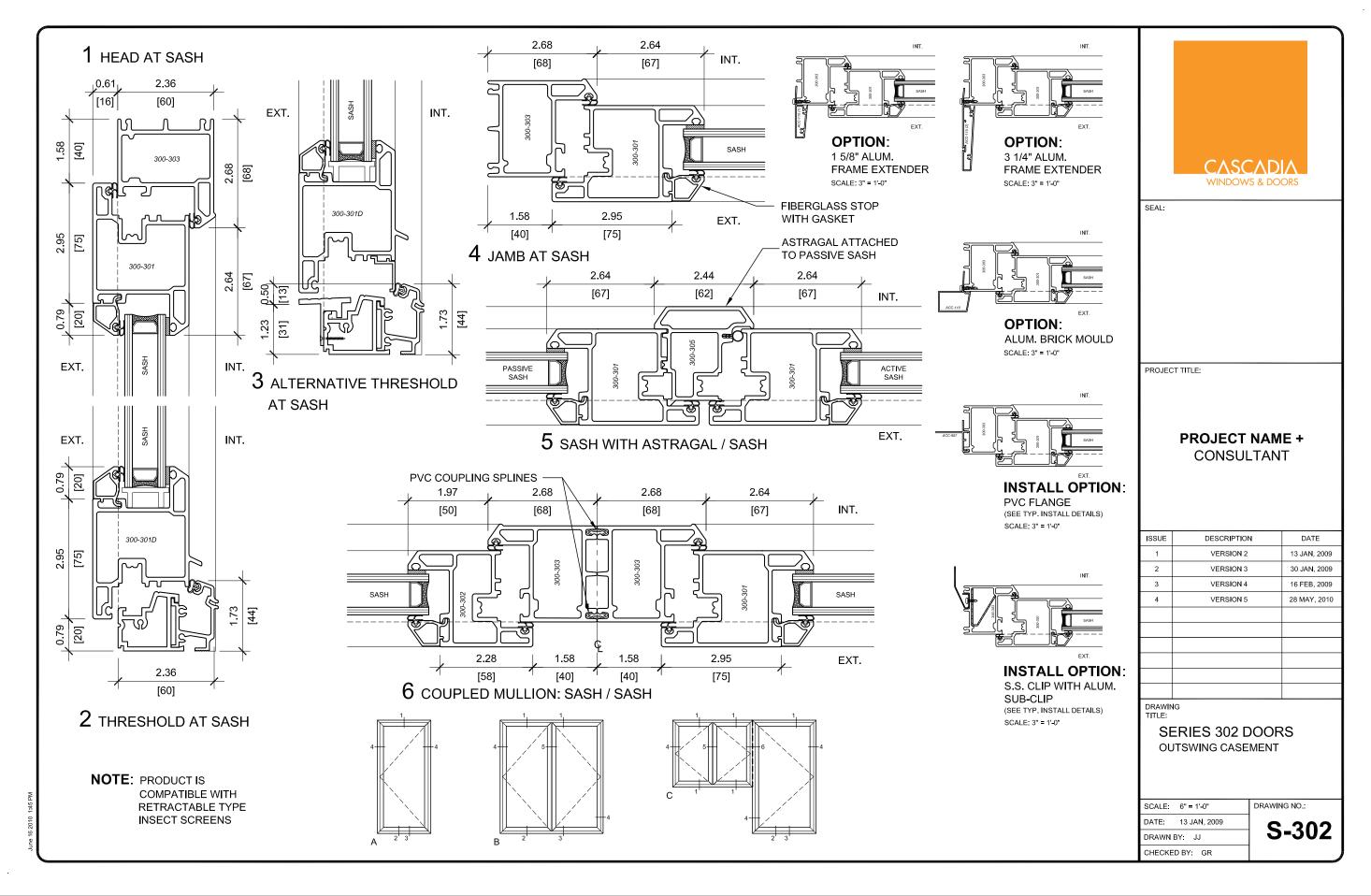
1300 ENTERPRISE ROAD P.O. BOX 580 **GENEVA, ALABAMA 36340-0580** PH 1-800-239-4621 FAX 1-800-508-1469



SEQ# 3701







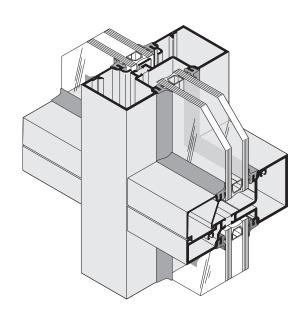


## **STOREFRONTS**

## **Technical Data**

**Thermal Center Glazed** • Series IT451 • Series IT451-S

Series IT451 and IT451-S Thermal Center Glazed Systems offer an outstanding value by combining increased thermal performance with low-cost conventional flush glazing. These systems feature the Poly-Aluminizer<sup>™</sup> and Lancer<sup>™</sup> Thermal Break Technologies with a Two Year Warranty as described in the Warranty for Thermally Broken Framing Systems. They were especially engineered to satisfy the increasing demands for energy conservation. Both series may be glazed from the interior or exterior, and are well suited for storefront applications requiring increased thermal performance. See page 01-B3 for E.P.D.M. gasket options.



SERIES	WIDTH	DEPTH	GLAZING INFILLS	APPLICATION
IT451 IT451-S	2" (50.8)	4-1/2" (114.3)	1" (25)	Storefronts in Geographic Areas Requiring Thermal Performance

GLASS	SIZES*
Glass Width and Glass Height	= Daylight Opening + 7/8" (22.2).

<sup>\*</sup> These formulae do not take into account glass tolerances. Consult glass manufacturer before ordering glass.

Online usalum.com By Phone (800) 262-5151 Online crlaurence.com By Phone (800) 421-6144

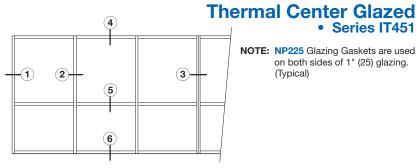
B1

## **STOREFRONTS**



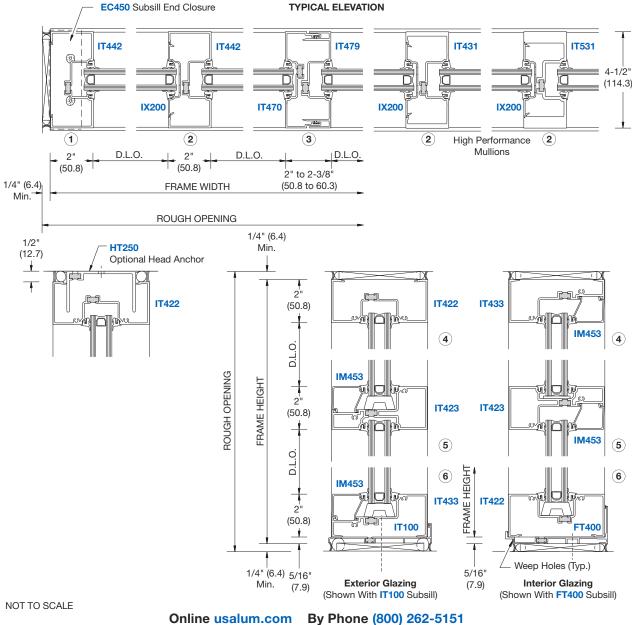
## **Typical Details**

**SCREW RACE JOINERY** FOR 1" (25) GLAZING



• Series IT451

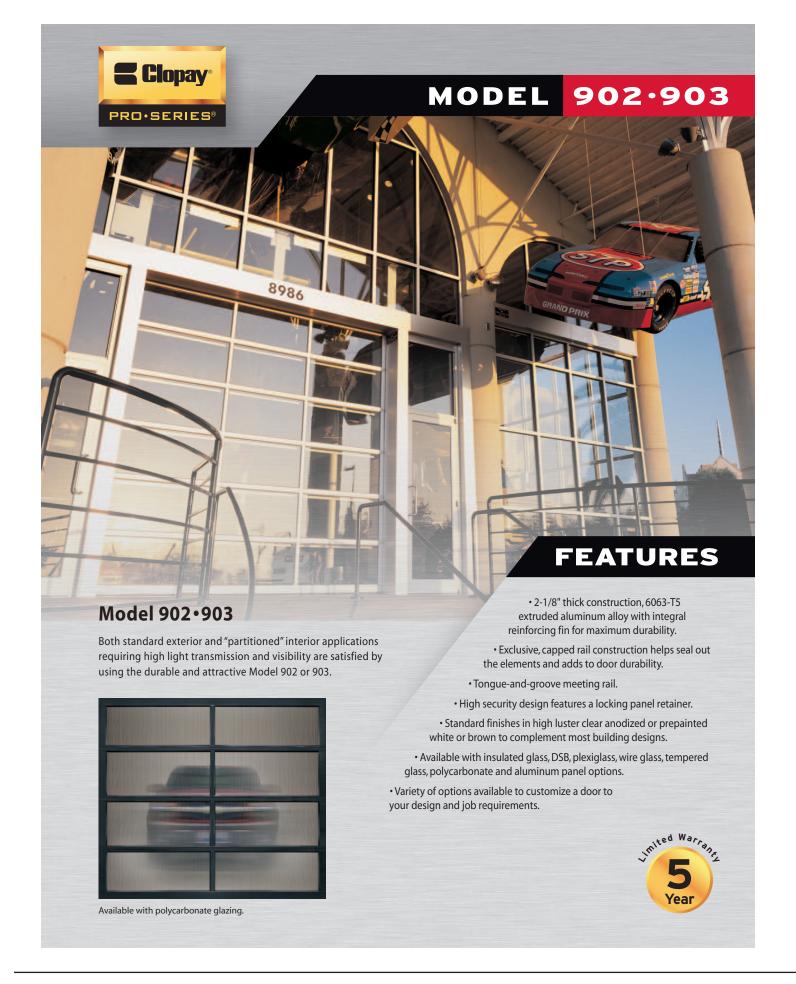
NOTE: NP225 Glazing Gaskets are used on both sides of 1" (25) glazing.

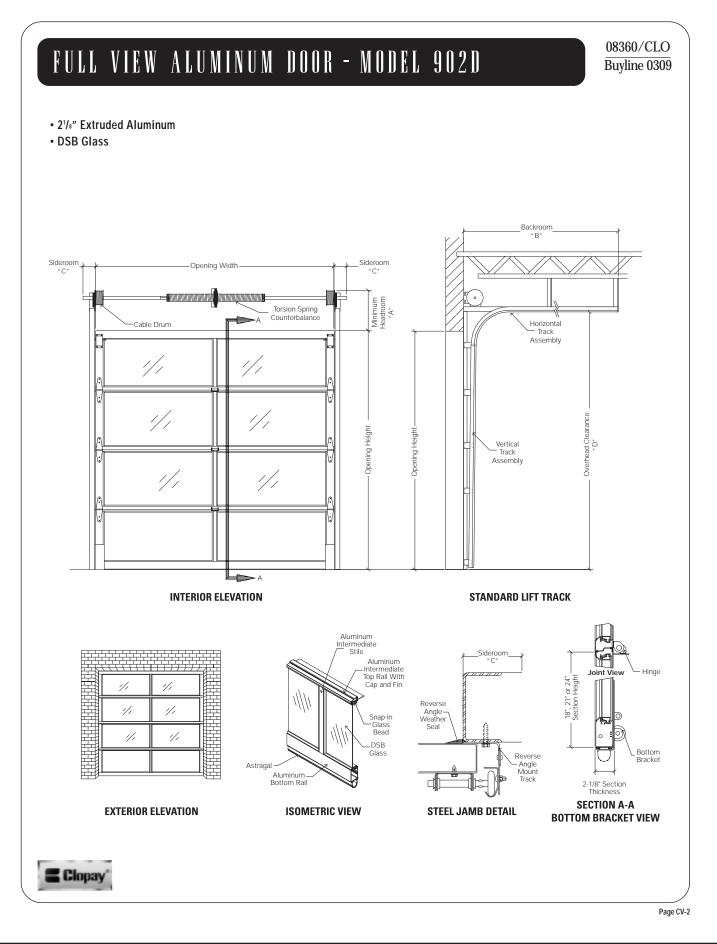


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appendix









CHAT NOW



Installation & Grouting LOFT SPA GREEN POLISHED 4X12 SUBWAY TILES This spa green subway tiles are decorative and durable, making it a great backdrop. The glass tile will reflect the light in your room, giving it a fresh, clean and brighter look. Using a subway tile as a backsplash you will add some color and style to your kitchen decor or any decorated room in your home. It will also give it a more distinct look. Chip Size: 4x12 Color: Spa Green Finish: Polished Sold by the Square Foot (3pieces per square foot) Thickness: 8mm \*This material is the same exact color as the 9x18 Zen Green. You don't need to order samples of both. - Glass Tile



TimberForm Restoration	Model	Length	Width	Height	Seat Height	Mounting
Bench with Armrests	2118-3	3' 0" [915mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*
	2118-6	6' 0" [1830mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*
	2118-8	8' 0" [2440mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*

Material: Frames of black powder-coated cast iron with kiln-dried 6/4 and 8/4 patterned Alaska yellow cedar wood slats.

Options: Frame color, Marine Teak or Purpleheart wood slats and powder-coated metal slats. Can be special ordered with customer's name and/or logo cast in bench ends and/or without decorative

Suggestions: Specify matching litter container 2107 and ash receptacle 2108. Also see complementary litter container 2136 and ash receptacle 2137 (see page 65). Matching planters are available. Notes: \* For permanent or movable applications only (anchoring bolts by others).



118	2118-6

TimberForm Restoration	Model	Length	Width	Height	Seat Height	Mounting
Bench with Intermediate Armrest(s)	2119-7	6' 11" [2110mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*
	2119-8	7' 11" [2415mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*
	2119-10	9' 11" [3025mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*
	2119-12	11' 11" [3630mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*
	2119-14 <sup>2</sup>	13' 11" [4240mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*
	2119-16 <sup>2</sup>	15' 11" [4850mm]	2' 3" [685mm]	2' 10" [865mm]	1' 4" [405mm]	Surface*

Material: Frames of black powder-coated cast iron with kiln-dried 6/4 and 8/4 patterned Alaska yellow cedar

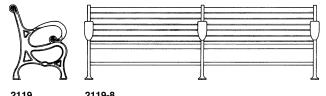
Options: Frame color, Marine Teak or Purpleheart wood slats and powder-coated metal slats.

Can be special ordered with customer's name and/or logo cast in bench ends and/or without decorative

Specify matching litter container 2107 and ash receptacle 2108. Also see complementary litter container 2136 and ash receptacle 2137 (see page 65). Matching planters are available.

\* For permanent or movable applications only (anchoring bolts by others).

<sup>1</sup> Includes one intermediate frame with armrest. <sup>2</sup> Includes two intermediate frames with armrest



All line drawings in this catalog are rendered in the scale of 3/8" = 1' unless otherwise noted.



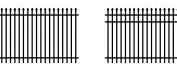
# Montage Plus®

## Styles, Heights, & Panel Options



Available Heights: 3', 31/2', 4', 5' or 6'

Rail Treatment: Extended Picket or Flush Bottom Picket Air-Space: 4" standard or 3" Pet, Pool & Play



Available Heights: 3', 31/2', 4', 5' or 6'

Rail Treatment: Extended Picket or Flush Bottom Picket Air-Space: 4" standard or 3" Pet, Pool & Play









Available Heights: 3', 31/2', 4', 5' or 6'

Rail Treatment: Extended Picket or Flush Bottom Picket Air-Space: 4" standard or 3" Pet, Pool & Play





Available Heights: 3', 31/2', 4', 5' or 6'

Rail Treatment: Extended Picket or Flush Bottom

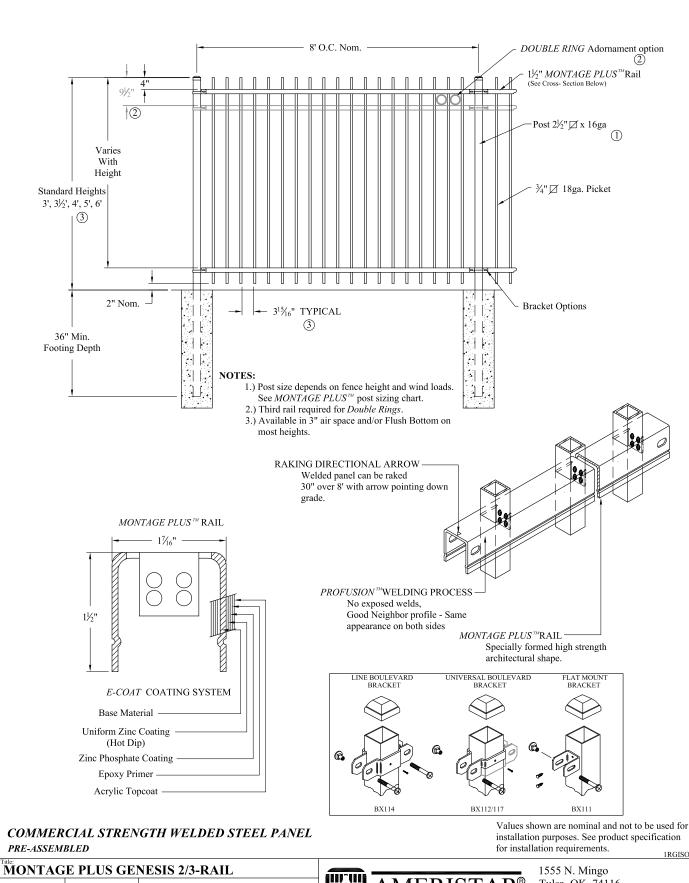
Picket Air-Space: 4" standard

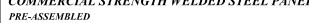






Page 2





DR: CI SH . 1of 1 SCALE: DO NOT SCALE REV: e CK: ME Date 6/28/10



Tulsa, OK 74116 1-888-333-3422 www.ameristarfence.com

## **TECHNICAL INFORMATION SHEET**



# **UltraPly™ TPO**

**TIS #201** 

#### **Description:**

Firestone UltraPly<sup>TM</sup> TPO is a flexible Thermoplastic Polyolefin roofing membrane that is produced with polyester weft-inserted reinforcement. This heat weldable TPO membrane is available in 45 mil (1.1 mm) and 60 mil (1.5 mm) thicknesses in 8′ (2.4 m), 10′ (3 m) and 12′4″ (3.76 m) widths. The colors available are white, tan or gray. This reflective membrane is suitable for a variety of low slope applications.



#### **Preparation of Substrate:**

- 1. Substrates must be clean, dry, smooth, and free of sharp edges, fins, loose or foreign materials, oil, grease, and other materials that may damage the membrane.
- 2. All roughened surfaces that can damage the membrane shall be repaired as specified to offer a smooth substrate.
- 3. All surface voids greater than 1/4" (6.3 mm) wide shall be properly filled with an acceptable fill material.

#### Method of Application:

- 1. Firestone UltraPly TPO membrane is installed as continuous roofing or waterproofing layer on the roof. Rolls are overlapped (side laps and end laps) prior to the heat welding of the seam areas.
- 2. Install the UltraPly TPO Roofing System in accordance with current Firestone UltraPly TPO specifications, details and workmanship requirements.

#### Storage:

- Store away from sources of punctures and physical damage.
- Assure that structural decking will support the loads incurred by material when stored on rooftop. The deck load limitations should be specified by the project designer.
- Store away from ignition sources as membrane will burn when exposed to open flame.

#### Precautions:

- Exercise caution when lifting, moving, transporting, storing or handling membrane rolls to avoid sources of punctures and
  possible physical damage.
- Contact your Technical Coordinator at 1-800-428-4511 for specific recommendations regarding chemical or waste product compatibility with Firestone UltraPly TPO Membrane.
- Refer to Material Safety Data Sheets (MSDS) for safety information

Packaging:	Widths	Lengths	Weight
.045" UltraPly TPO and	5'(1.5 m)	100' (30.5 m)/200'(61 m)	0.23 lb/sf (2.1 kg/m²)
.060" UltraPly TPO	8' (2.4m)	100' (30.5 m)/200'(61 m)	0.31 lb/sf (2.9 kg/m²)
	10' (3.05 m)	100' (30.5 m)/200'(61 m)	
	12'4"' (3.76 m)	100' (30.5 m)/200'(61 m)	

#### Compliance:

Post Consumer Recycled Content: 0%
Pre Consumer Recycled Content: 15%
Manufacturing Location: Wellford, SC
Tuscumbia. Al





CCMC 13348-R



Firestone Building Products • 250 W. 96<sup>th</sup> Street, Indianapolis, IN 46260 • Sales: (800) 428-4442 • Technical (800) 428-4511 • www.firestonebpco.com

S723-RFS-112

12.8.2011

## **TECHNICAL INFORMATION SHEET**



Physical Properties:	ASTM D 6878 Specification	Units	Performance Minimum	Typical Values 45 mil	Typical Values 60 mil
Overall Thickness	D 751	In(mm)	0.039(1)	0.045 (1.14)±10%	0.060(1.15)±10%
Coating over Scrim	D 7635	In(mm)	0.015(1)	0.017(0.44)	0.021(0.54)
Breaking Strength	D 751 Grab	Lb(N)	220(975)	340(1,510)	390(1,730)
	Method		• •	, , ,	
Elongation at Reinforcement Break	D 751 Grab	%	15	25	25
	Method				
Tearing Strength	D 751	Lb(N)	55(245)	120(530)	120(530)
Brittleness Point	D 2137	°F(°C)	-40(-40)	Pass	Pass
Ozone Resistance, No cracks	D 1149		Pass	Pass	Pass
Properties after Heat Aging	D 573	°F(°C)	670 h @ 240°F (116°C)		
Retention of Breaking Strength	D 751 Grab Method	%	90, minimum	> 90	>90
Retention of Elongation at Break	D 751 Grab Method	%	90, minimum	>90	>90
Retention of Tearing Strength	D 751	%	60, minimum	>60	>60
Weight of Change	D 1204, 6h at	%	±1, maximum	<1	<1
	158°F (70°C)	%	±1, maximum	<1	<1
Linear Dimension Change	D 471				
Water Absorption		%	±3, maximum	<3	<3
Weather Resistance, 80°C Black Panel, no cracking, crazing when wrapped around a 3" mandrel and inspected at 7x magnification	G 155,	kJ/m²	10,080, minimum	>20,160	>20,160
Puncture Resistance	FTM 101C, Method 2031			265(1,180)	300(1,300)
Dynamic Puncture Resistance MD	D 5635			Pass (20 J)	Pass (40 J)
Dynamic Puncture Resistance CD	D 5635			Pass (35 J)	Pass (50 J)
Static Puncture Resistance	D 5602			Pass (25 kg)	Pass (25 kg)

Reflectivity:		Initial	Weathered	#
22	Solar Reflectance	0.79	0.68	<del>-</del>
	Thermal Emittance	0.85	0.83	
CRRC COOL ROOF RATING COUNCIL ®	SRI	98	81	
CHARTER	Rated Product ID			0008
MEMBER	Licensed Manufacturer ID			0608
	Classification	Production Line		

Compliance:	Test Method	White	Tan	Gray	Energy Star®	White	Tan
Solar Reflectance	ASTM E903	0.81	0.63	0.37	Initial Solar Reflectance	0.79	0.60
Joidi Nellectance		0.01	0.05	0.57	Aged Solar Reflectance (3 years)	0.78	0.54
Thermal Emittance	ASTM E408	0.95	0.95	0.95	Cleaned prior to aged test?	Yes	No
Solar Reflectance Index (SRI)	ASTM E1980	102	77	43	Initial Emittance	0.85	0.81

 $Please\ Contact\ your\ Firestone\ Technical\ Coordinator\ at\ 1-800-428-4511\ for\ further\ information.$ 

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