



MULTI-FORM THEATER

SITE LOCATION

16601 LIVERNOIS AVENUE, DETROIT, MICHIGAN



ZONING ORDINANCE

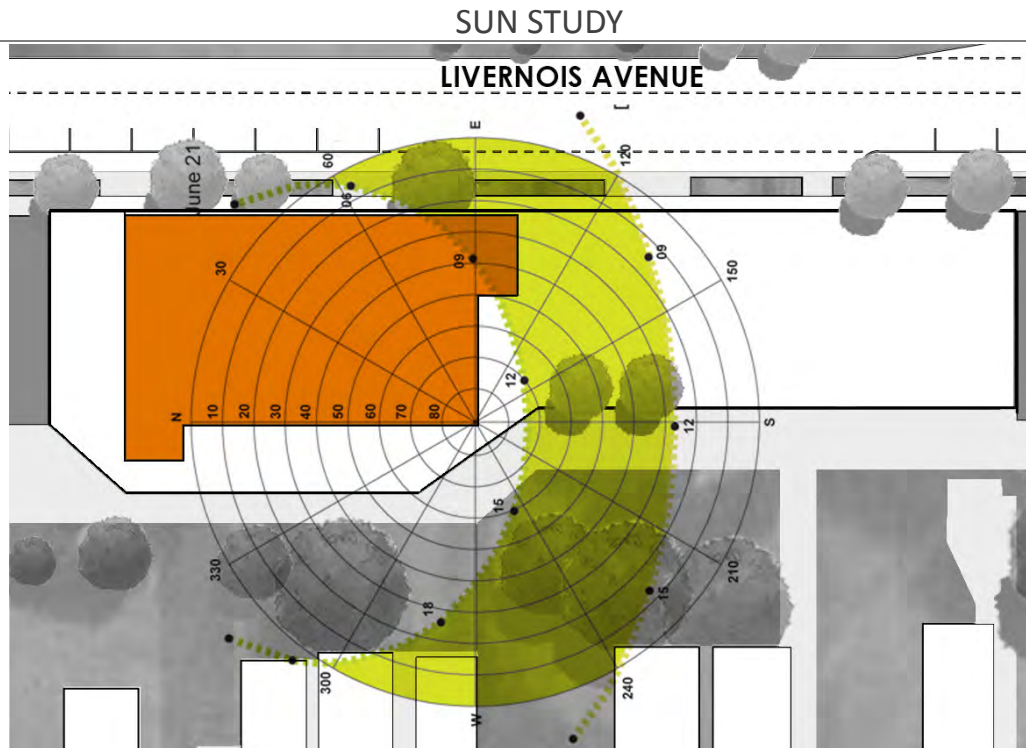
- B4: GENERAL BUSINESS DISTRICT
- FRONT OR SIDE OF BUILDING TO FACE STREET, SET BACK NOT MORE THAN 60'
- ROOF/MECHANICAL/ELECTRICAL ELEMENTS TO BE SCREENED
- FACADE COLOURS: LOW REFLECTANCE, SUBTLE, NEUTRAL EARTH COLOURS
- BUILDING 2 STORIES OR 20' MINIMUM

SURROUNDING CONTEXT

-  LORANGER ARCHITECTURE
-  BED & BATHS/BIKE SHOP
-  VACANT BUILDING
-  FISHER ADMINISTRATION
-  CONNECTION TO FITZGERALD



SITE ANALYSIS



PROPOSED BUILDING MASS

BACK OF HOUSE: SCENE SHOP, COSTUME SHOP, & STORAGE



PROPOSED BUILDING MASS

RETAIL & PERFORMANCE AREA SUPPORT



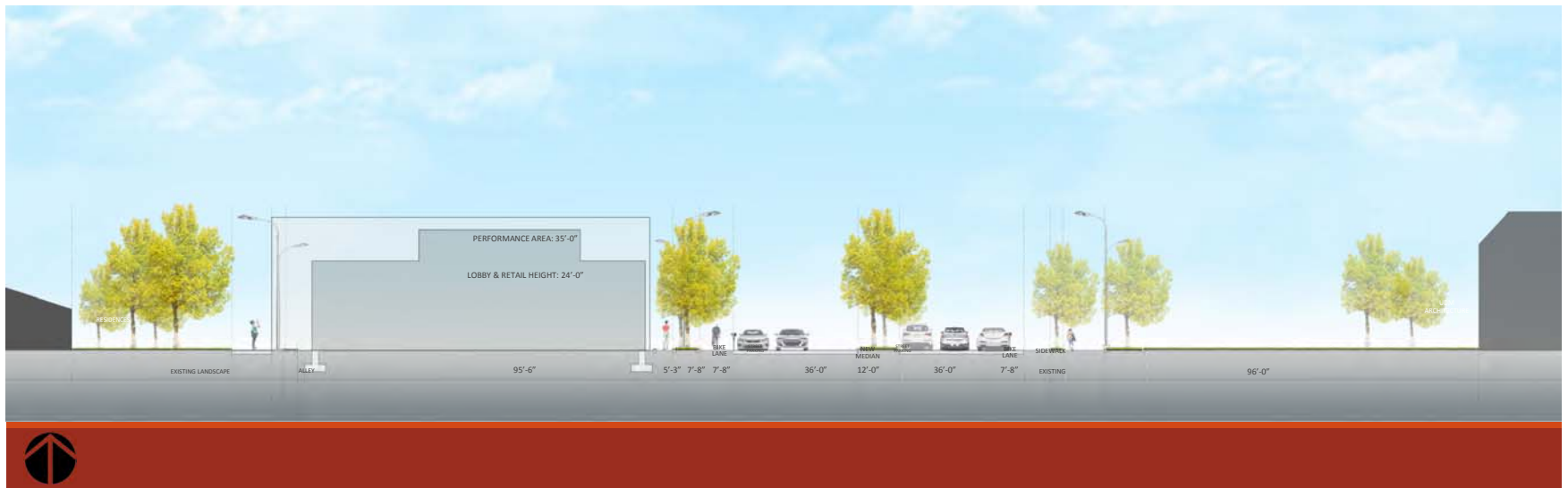
PROPOSED BUILDING MASS

PERFORMANCE AREA



SITE SECTION

SECTION THROUGH LIVERNOIS AVENUE



ENLARGED SITE PLAN





PERSPECTIVE: SITE FEATURES

MORNING RENDERING | 9:00AM



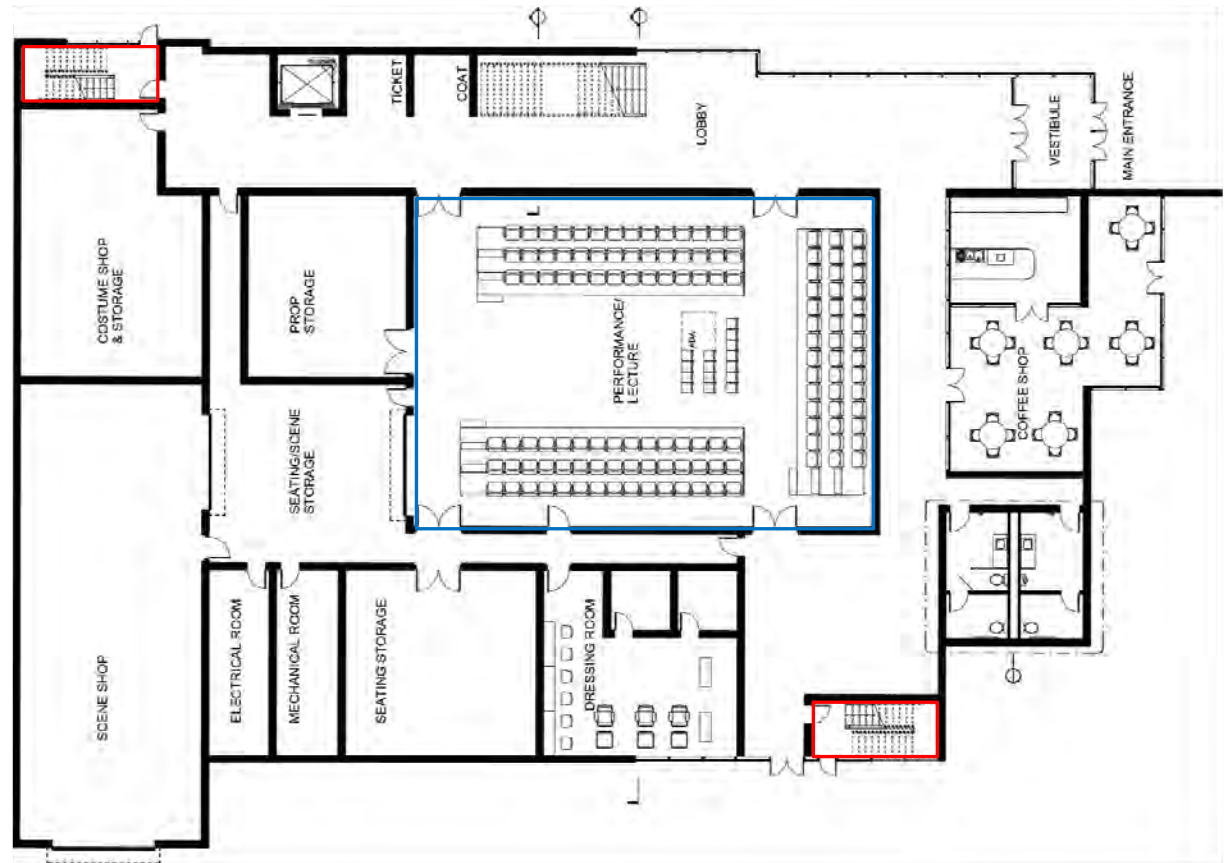
GROUND FLOOR PLAN



FIRE EXITS



PERFORMANCE AREA



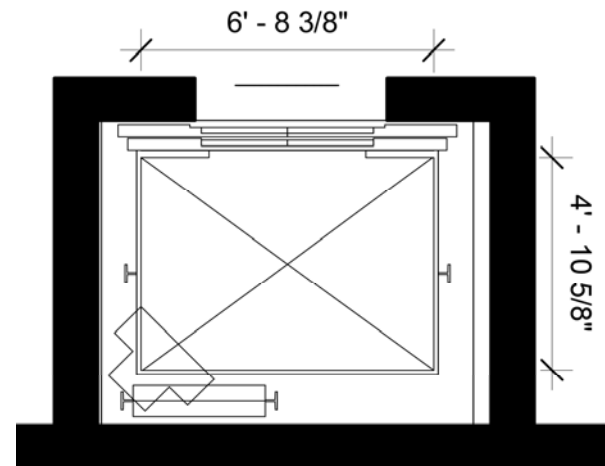
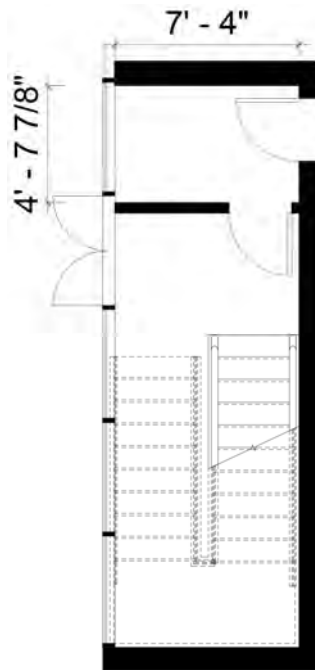
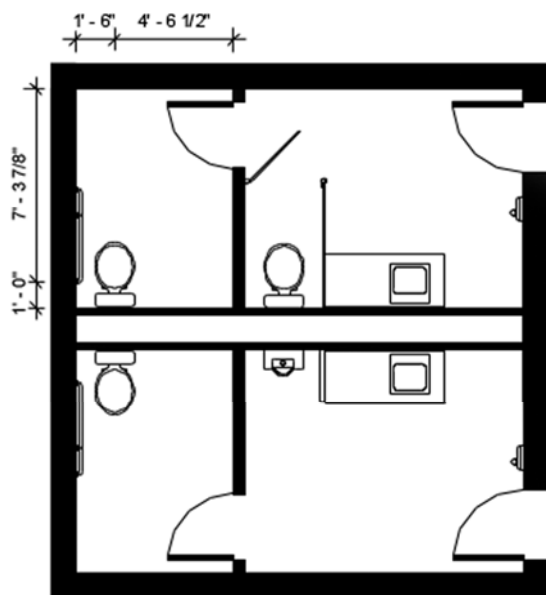
2ND FLOOR PLAN

-  FIRE EXITS
-  PERFORMANCE AREA



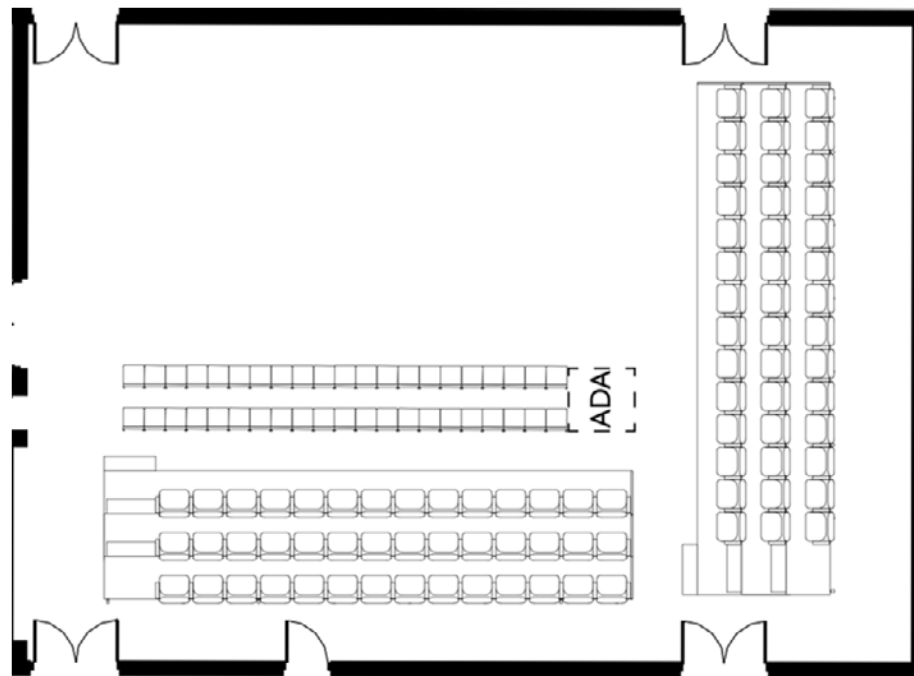
ADA REQUIRMENTS

ENLARGED PLANS: BATHROOMS, EXIT STAIR, ELEVATOR



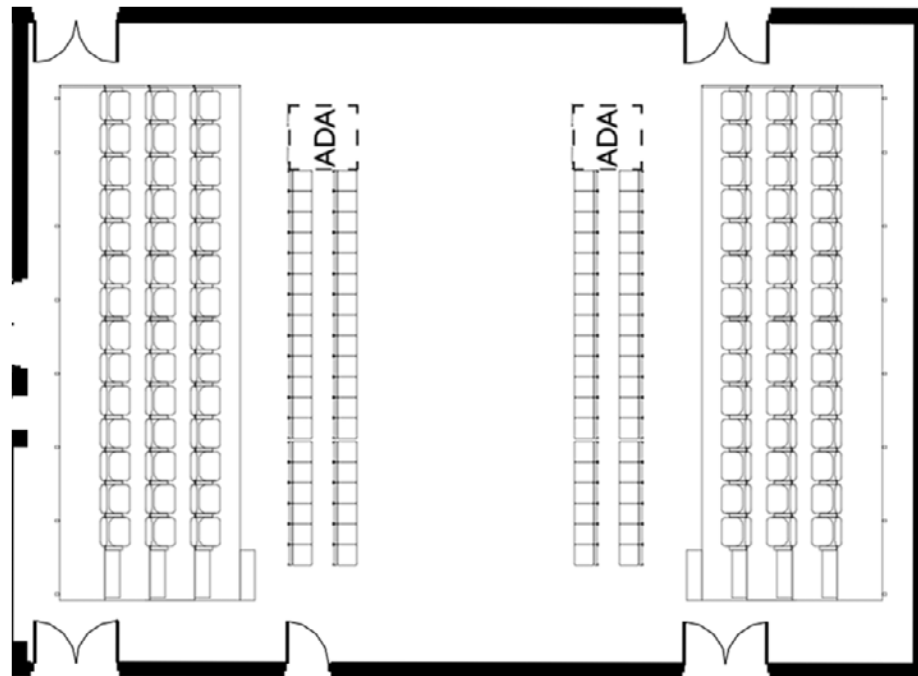
PERFORMANCE SPACE

SCHEME #2



PERFORMANCE SPACE

SCHEME #3

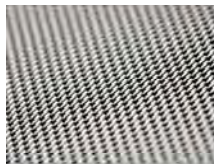


FINISH SCHEDULE

AREA	FLOOR	WALLS	SUSPENDED CEILINGS
PERFORMANCE SPACE	PLYRON	WOOD OVER FIBERGLASS	PLYWOOD PANELS
DRESSING ROOMS	CARPET-FABRIC BLUE	DRYWALL-BIEGE	EXPOSED GRID
LOBBY	SLATE-BLACK	DRYWALL-WHITE	MAHOGANY
BATHROOMS	WHITE PORCELAINE TILES	DRYWALL-WHITE	EXPOSED GRID
COSTUME SHOP	WHITE PORCELAINE TILES	DRYWALL-WHITE	DRYWALL
MECH/ELEC.	POURED CONCRETE	DRYWALL-WHITE	EXPOSED GRID
SCENE SHOP	POURED CONCRETE	DRYWALL-WHITE	EXPOSED GRID
STORAGES	POURED CONCRETE	DRYWALL-WHITE	EXPOSED GRID
GREEN ROOM	CARPET-FABRIC BLUE	DRYWALL-GREEN	EXPOSED GRID
PROJECTION & SOUND	CARPET-FABRIC BLUE	DRYWALL-WHITE	EXPOSED GRID
OFFICES	CARPET-FABRIC BLUE	DRYWALL-WHITE	EXPOSED GRID
CONFERENCE	CARPET-FABRIC BLUE	DRYWALL-WHITE	EXPOSED GRID
BAR CONCESSION	SLATE-BLACK	RECESSED WOOD PANELING	DRYWALL

PERFORMANCE SPACE SECTION

REVERBERATION TIME: 1.4 SABINS



METAL MESH



PERFORATED WOOD
PANELS



PLYON



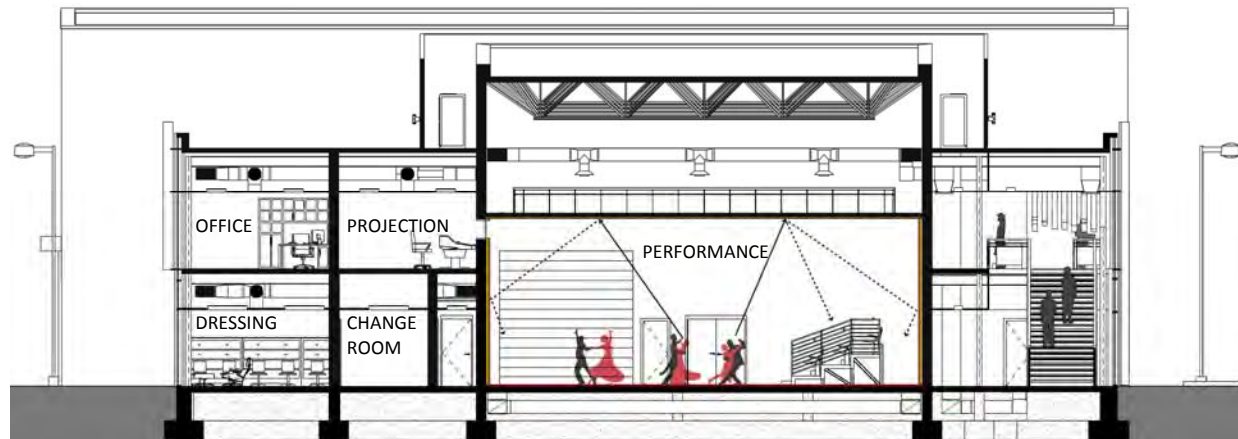
FIBBERGLASS BOARD

④ 4TH LEVEL
38'-6"

③ 3RD LEVEL
24'-0"

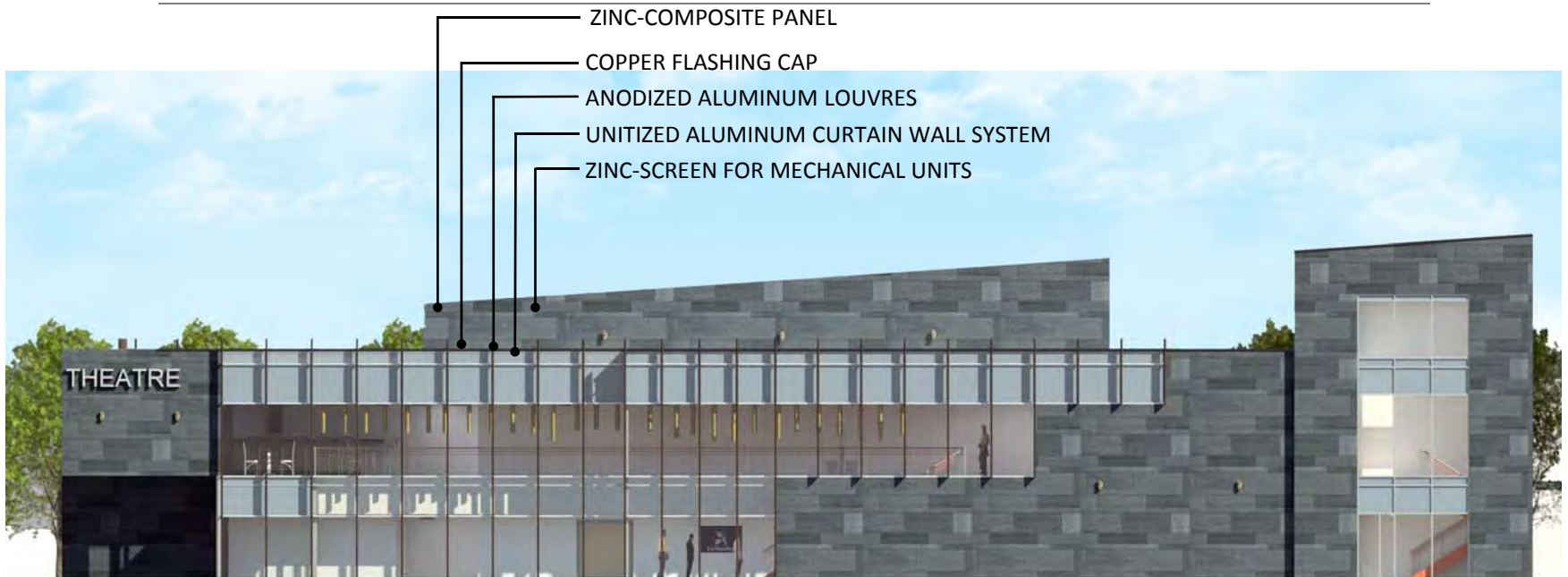
② 2ND LEVEL
12'-0"

① GROUND LEVEL
0'-0"



ELEVATIONS

EAST ELEVATION



ELEVATIONS

WEST ELEVATION



ELEVATIONS

SOUTH ELEVATION



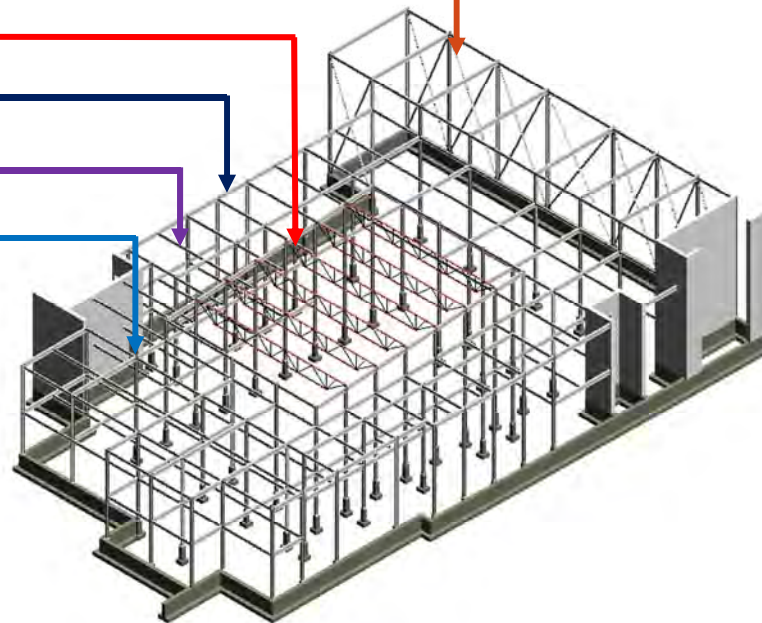
DUSK RENDERING | 5:30PM



STRUCTURAL: 3D MODEL

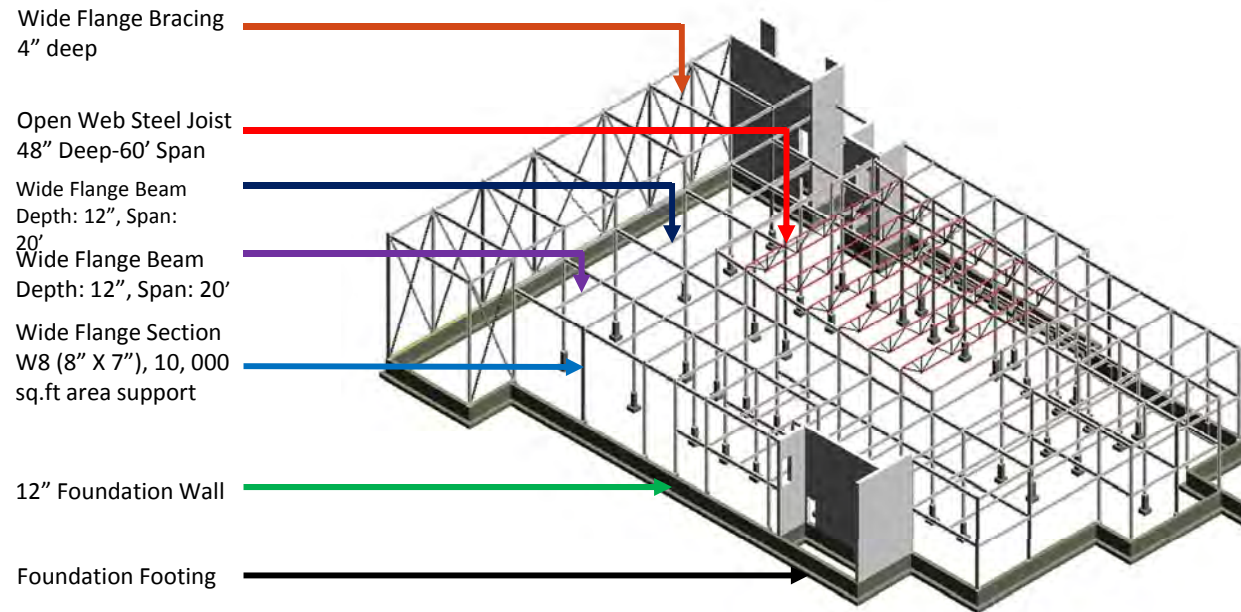
SOUTHEAST PERSPECTIVE

Wide Flange
Bracing 4" deep
Open Web Steel Joist
48" Deep-60' Span
Wide Flange Beam
Depth: 12", Span: 20'
Wide Flange Beam
Depth: 12", Span: 20'
Wide Flange Section
W8 (8" X 7"), 10, 000 sq.ft
area support

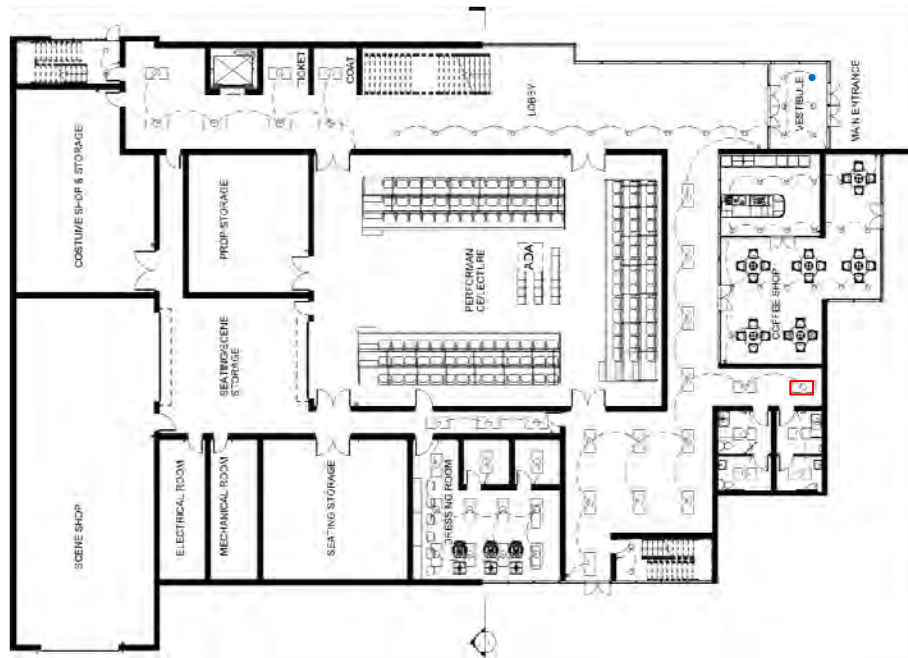


STRUCTURAL: 3D MODEL

SOUTHWEST PERSPECTIVE



FIRST FLOOR PLAN



LED RECESSED FIXTURE- AMERICAS GREEN LINE
LUMENS: 900-3120



- ✓ Adults receive free tuition
- ✓ Classes range from 12 to 100 hours
- ✓ Values training / core value development sessions
- ✓ Multi-ethnic/demographic
- ✓ Proprietary Ethical Spiritual Technology
- ✓ Three party (100% confidence) test
- ✓ Test 1, 140-160 (140-160) (100% test)
- ✓ Test 2, 160-180 (160-180) (100% test)
- ✓ High success (100% success)
- ✓ Light weight device
- ✓ No time / Age / Sex / Race / Religion
- ✓ No cost of the device
- ✓ High Capacity Storage System
- ✓ Advanced device
- ✓ Designed for quick and easy operation

LED SINGLE DOME TROFFER-AMERICAS GREEN LINE
LUMENS:4068

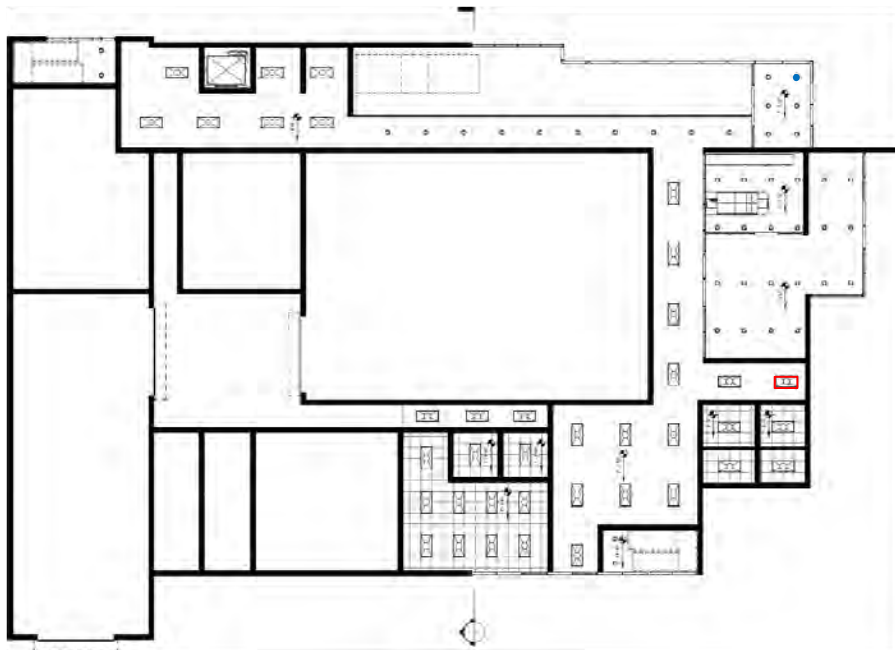


- Accurate, reliable, durable, efficient
- Clean, stylish, contemporary design
- 3 Color Temperature to choose from
- Easy Installation
- LED Ready
- Available in 20 or 40 1/2" LED Ready sizes
- Save an average of 50% energy over 7,0/7,5/8 fluorescent
- No more painful flicking (no warm-up needed)



PLANS

FIRST FLOOR CEILING PLAN



LED RECESSED FIXTURE-AMERICAS GREEN LINE
LUMENS: 900-3120



Features	Advantages	Disadvantages
✓ AGL LED RECESSED FIXTURE ✓ Compact design (L27x 27/35x 35mm) ✓ Warm (2700K) / Cool (4000K) temperature options ✓ 3A-B voltage dimmable driver ✓ Precutting that (optional) Technology ✓ True pure (100%) colorless light beam ✓ 7W-21, 30W-75 (AAG) 3770K-5000K (blue beam) ✓ 120-277 volt AC input voltage option ✓ High thermal spring rate mounting ✓ Light weight design ✓ No dim / No flicker / No hum ✓ No increase of No flicker ✓ High (up to 100%) lumen maintenance ✓ Ultra-thin design ✓ Designed by world top brand companies		

LED SINGLE DOME TROFFER-AMERICAS GREEN LINE
LUMENS: 4068

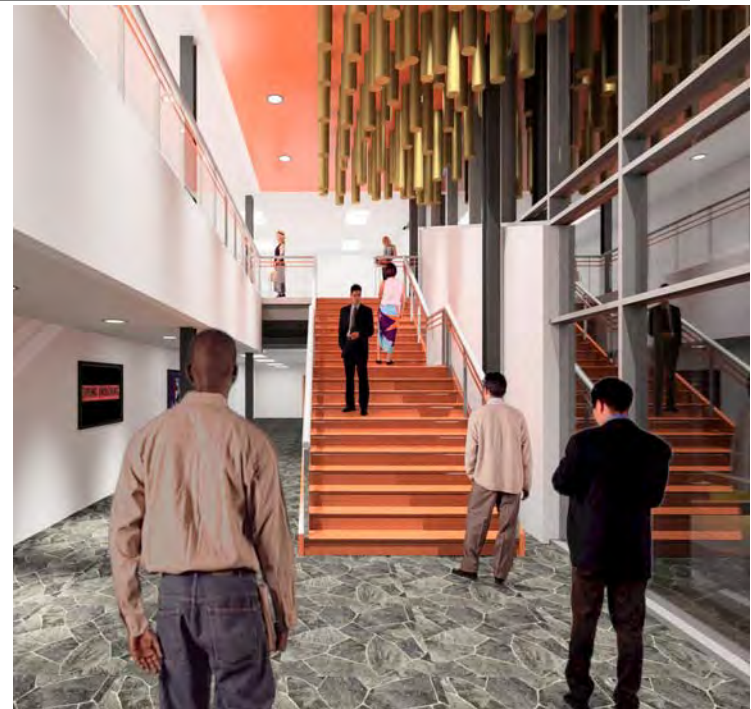


Features	Advantages	Disadvantages
✓ Acc. (100%) Acc. (100%) 2700K-5000K ✓ Clean, Sleek, Contemporary Design ✓ 3 Color Temperature to choose from ✓ Easy Installation ✓ LED beads ✓ Available in 20, 30, 40, 50, 60, 70, 80, 90, 100 (100% beam) ✓ Save an average of 50% energy cost (7A-7.5A Beamwidth) ✓ No more missed lighting (LED eliminates shadow)		



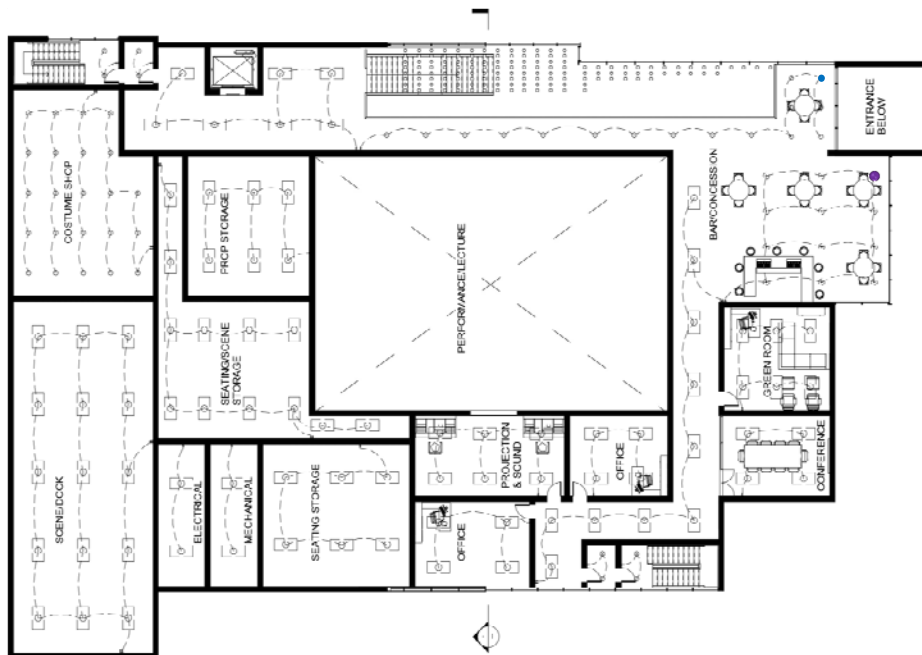
INTERIOR RENDERS

LOBBY DAY & NIGHT



PLANS

SECOND FLOOR PLAN



UPLIGHT HIGH BAY-AMERICAS GREEN LINE
LUMENS: 5203

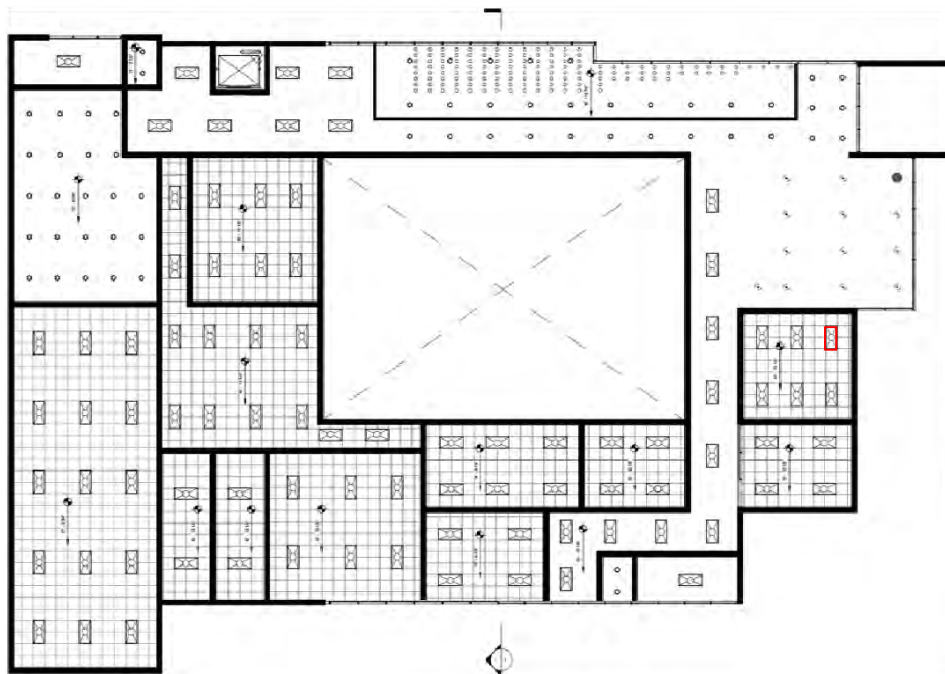


LED RECESSED FIXTURE-AMERICAS GREEN LINE
LUMENS: 900-3120



PLANS

SECOND FLOOR CEILING PLAN



UPLIGHT HIGH BAY-AMERICAS GREEN LINE
LUMENS:5203



LED SINGLE DOME TROFFER-AMERICAS GREEN LINE
LUMENS:4068



Features

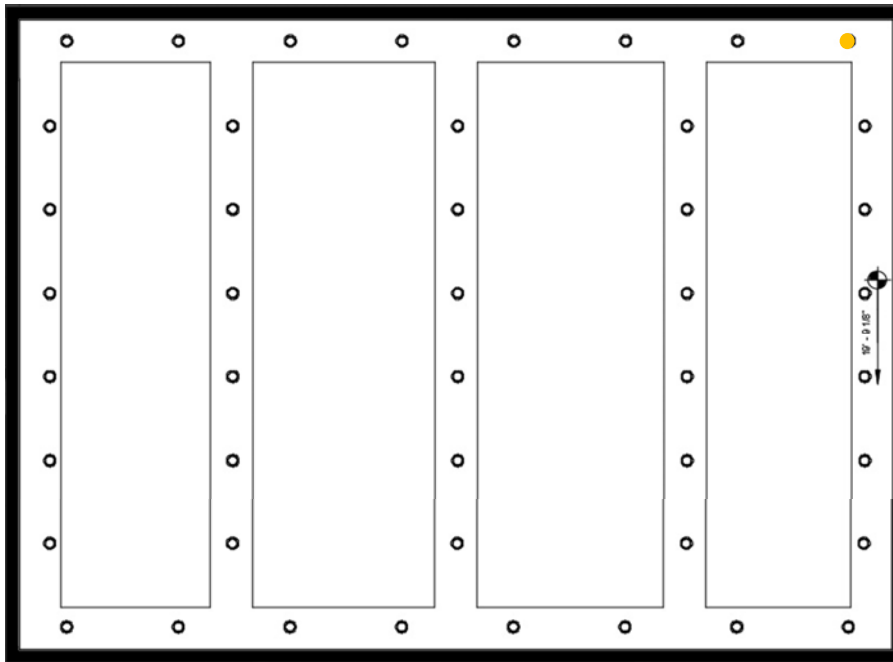
DESCRIPTION

- Non-UV and Anti-Static (UV-Resistant)
- Clean, Stylish, Contemporary Design
- 3 Color Temperature to choose from
- Easy Installation
- LED Technology
- Available in 20, 30, 40, 50, 60, 70, 80, 90, 100, 120, 150, 180, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 5300, 5400, 5500, 5600, 5700, 5800, 5900, 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000
- Save an average of 50% energy cost (vs. T8/T12 fluorescent)
- No more wasted lighting (LED eliminates flicker)



PLANS

THEATRE CEILING PLAN



EATON
4 inch LED cylinder
downlight



EXTERIOR LIGHTING

EXTERIOR LIGHTING POLES, BOLLARDS, & WALL LIGHTS

FOCUS POLE MOUNTED LIGHT

SIMES-95Mmm COLUMN BOLLARD



FOCUS Pole mounted

ATTENTION: This city is representative
and is installed on poles using the pole
shown.

1.2007

60 mm Cylindrical pole 10 to 15 meters
Pole and height adjustment
To be fixed by 10 meters

1.2007

60 mm Cylindrical pole with base
Pole and height adjustment

1.2004

70 mm Cylindrical pole 10 to 15 meters
Pole and height adjustment
To be fixed by 10 meters
Pole and height adjustment

1.2005

70 mm Cylindrical pole with base
Pole and height adjustment
Pole and height adjustment

1.2005

100 mm Cylindrical pole
10 to 15 meters
Pole and height adjustment
To be fixed by 10 meters
Pole and height adjustment

1.2006

100 mm Cylindrical pole
with base
Pole and height adjustment
Pole and height adjustment

1.2006

100 mm Cylindrical pole
with base
Pole and height adjustment
Pole and height adjustment

1.2006

PLANTED POLE FOR 1.2006 (1.2006)
Pole and height adjustment
Pole and height adjustment

1.2006

PLANTED POLE FOR 1.2006 (1.2006)
Pole and height adjustment
Pole and height adjustment

SA. S. S. S. S.



VERTICAL SINGLE EMISSION LIGHT-SIMES LUMINUS FLUX: 75 lm



Vertical 60° angle emission



1.3071W

With 1 and white 3000K CRI90 2.00mm
Rated input power: 1W 130W



1.3071W

PLANTED POLE FOR 1.3071W INSTALLATION
Pole and height adjustment
To be fixed by 10 meters
Pole and height adjustment



1.3071W

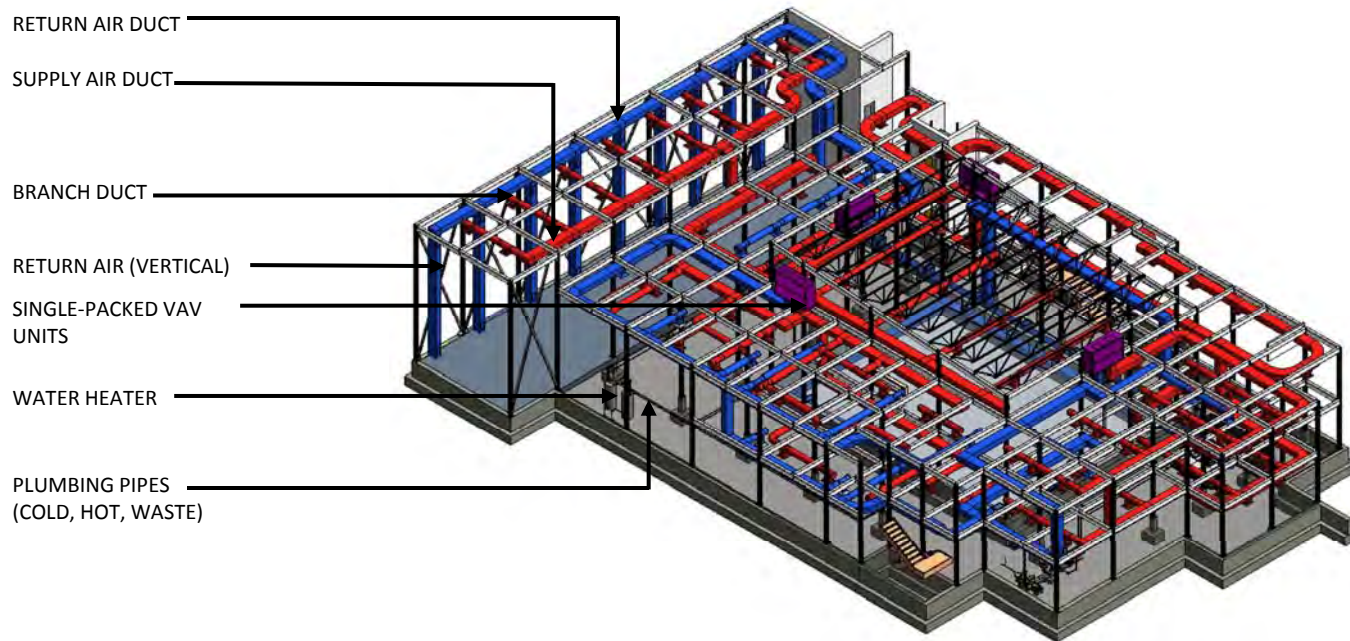
PLANTED POLE FOR 1.3071W INSTALLATION
Pole and height adjustment
To be fixed by 10 meters
Pole and height adjustment

NIGHT RENDERING | 9:00PM



MECHANICAL: 3D MODEL

SOUTHEAST PERSPECTIVE

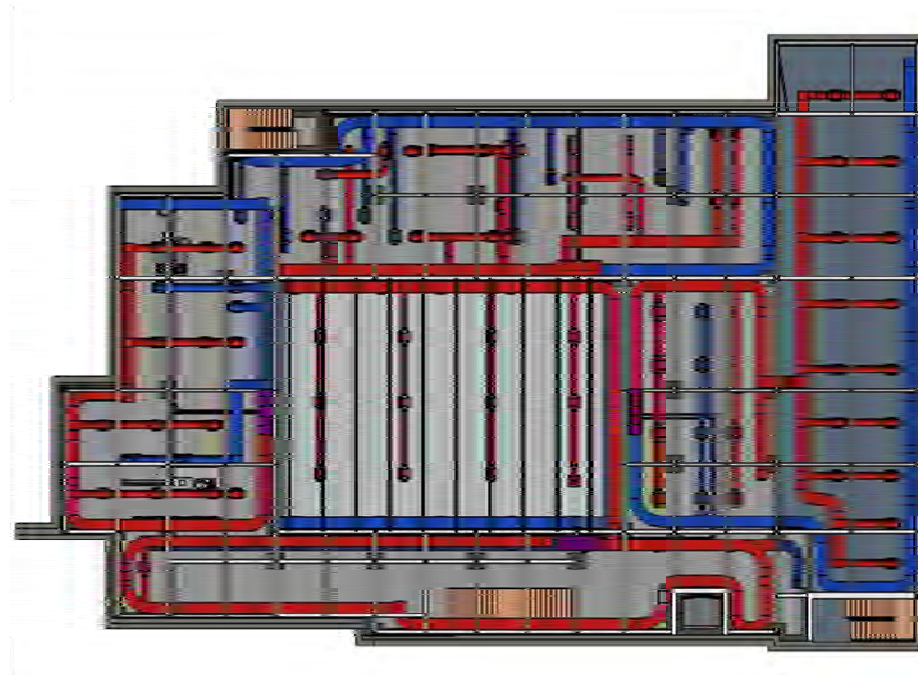


MECHANICAL PLAN

HVAC & PLUMDING

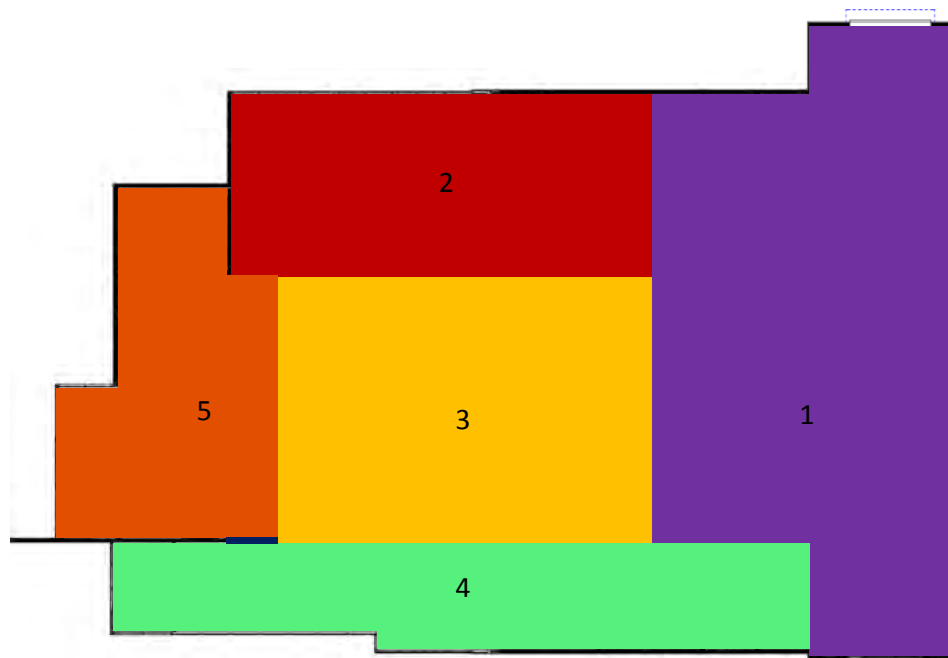
 SUPPLY AIR

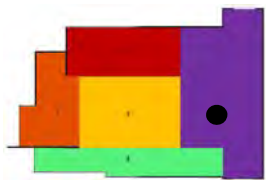
 RETURN AIR



5 SINGLE PACKED UNITS

- ZONE 1
- ZONE 2
- ZONE 3 (2 units)
- ZONE 4
- ZONE 5





UNIT 1

SCENE & COSTUME SHOP

**ZR 037, 049, 061 PREDATOR
MAGNADRY PACKED ROOFTOP UNIT**



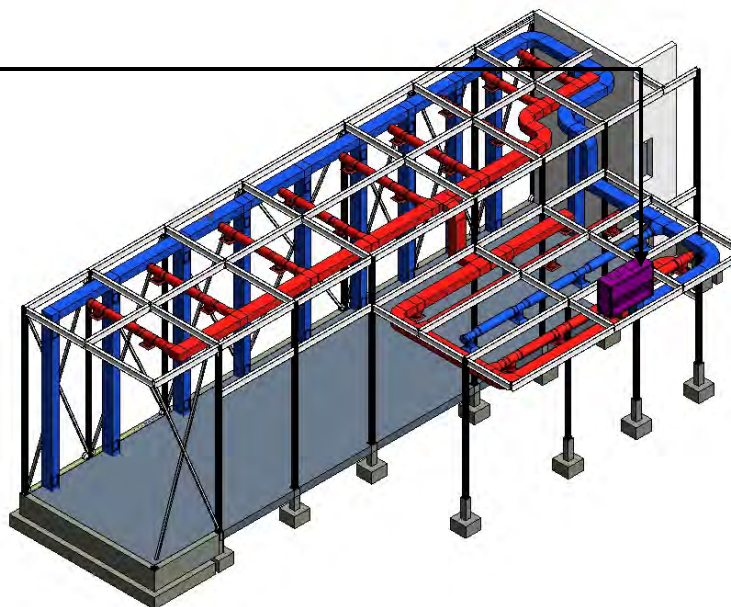
Capacity: 3 - 5 Tons

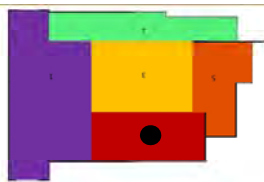
Efficiency: Up to 14.7 SEER / 12.2 EER

PACKED UNIT SIZING:

Floor Area: 13843 sq.ft

5 units serving approximately 2768
sq.ft each per floor





UNIT 2

DRESSING & STORAGE

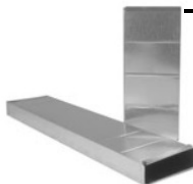
MAIN BRANCH DUCT SIZING:

$$A = ((4.0 \times 2768) / 1300) \times 1.25$$

$$A = 11 \text{ sq. ft}$$

$$\text{Duct width} = 11 / 5 = 1.65 \text{ ft (1' 8")}$$

Used: 24" x 14" duct

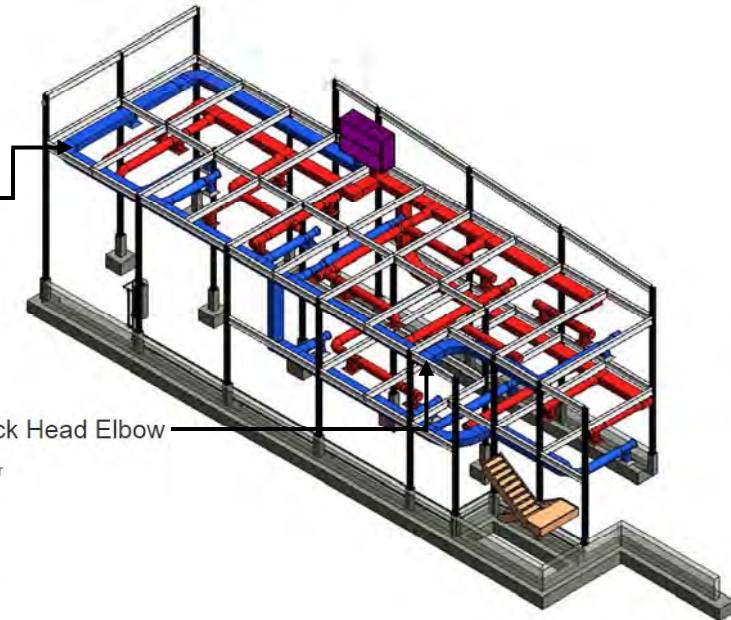


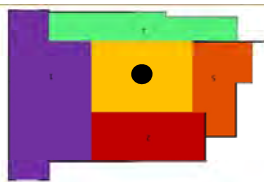
Rectangular Duct Stack Head Elbow

- * Used for transition from rectangular stack duct to register or grille.
- * Fixed at 90° angle.

Sizes (30 ga)

GV1149	3 1/4" x 10" - 4" x 10"
GV1157	3 1/4" x 10" - 6" x 10"





UNIT 3

PERFORMANCE AREA

BRANCH DUCT SIZE:

14" DIAMETER, 1300 CFM
ADJUSTABLE ELBOW: 16" DIAMTER



Adjustable Elbow 90°

- Used to change the direction of airflow in round branch pipe
- Adjustable from 0° to 90°





UNIT 4

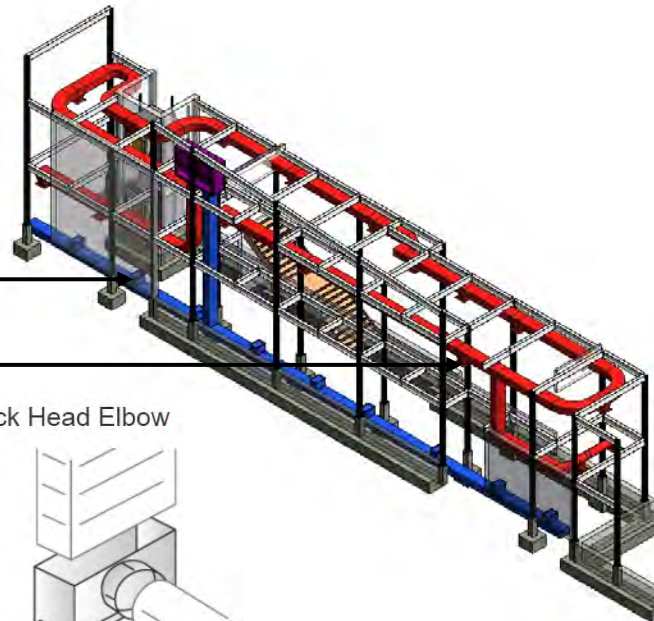
LOBBY AREA



TMS-AS
Aluminized steel, high performance three cone diffuser



23RL
Steel return grille, 45 degree deflection, 3/4" blade spacing, blades parallel to long dimension

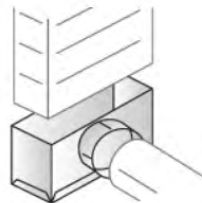


Round to Rectangular Duct Stack Head Elbow

* Used to transition round pipe to a rectangular stack head or to a register or grille.

Sizes (30 ga)

GV1152 3 1/4" x 10" - 4"
GV1153 4" x 10" - 4"





UNIT 5

COFFEE SHOP

Shoe Boot Elbow

Information coming soon...

Sizes

GV2291	14" x 22" - 8" x 22"
GV2270	14" x 22" - 10" x 22"
GV2029	14" x 23" - 8" x 24"
GV2028	14" x 23" - 10" x 22"
GV2027	14" x 23" - 10" x 24"



Tee (Full Flow)

- Used as 90° branch for venting applications including heating and air conditioning.
- Use reducers to modify multiple pipe size connections.



Sizes (30 ga)

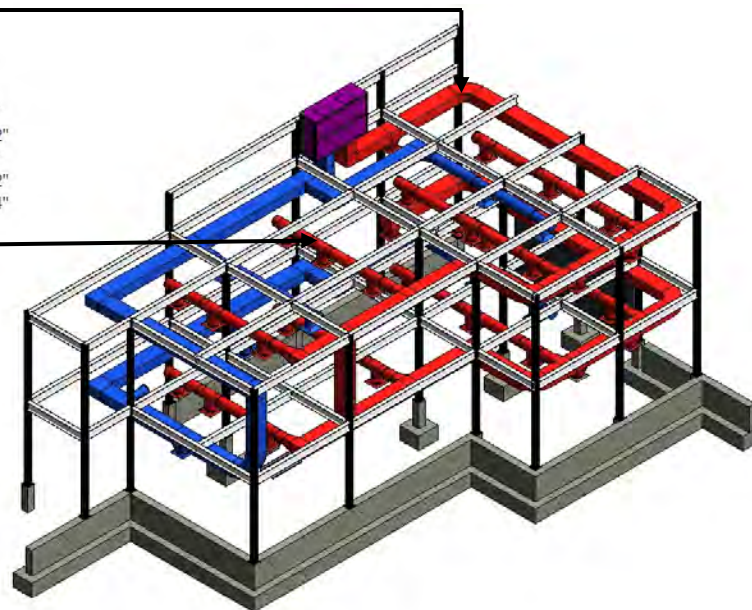
GV0884	4"-4"-4"
GV1594	4"-5"-4"
GV0885	4"-6"-4"
GV0886	5"-5"-4"
GV0888	5"-5"-5"
GV0889	6"-5"-5"
GV0890	6"-6"-4"
GV0891	6"-6"-5"
GV0893	6"-6"-6"

Sizes (28 ga)

GV1932	6"-6"-6"
GV0894	7"-7"-6"
GV0896	7"-7"-7"
GV0897	8"-8"-6"
GV0900	8"-8"-8"

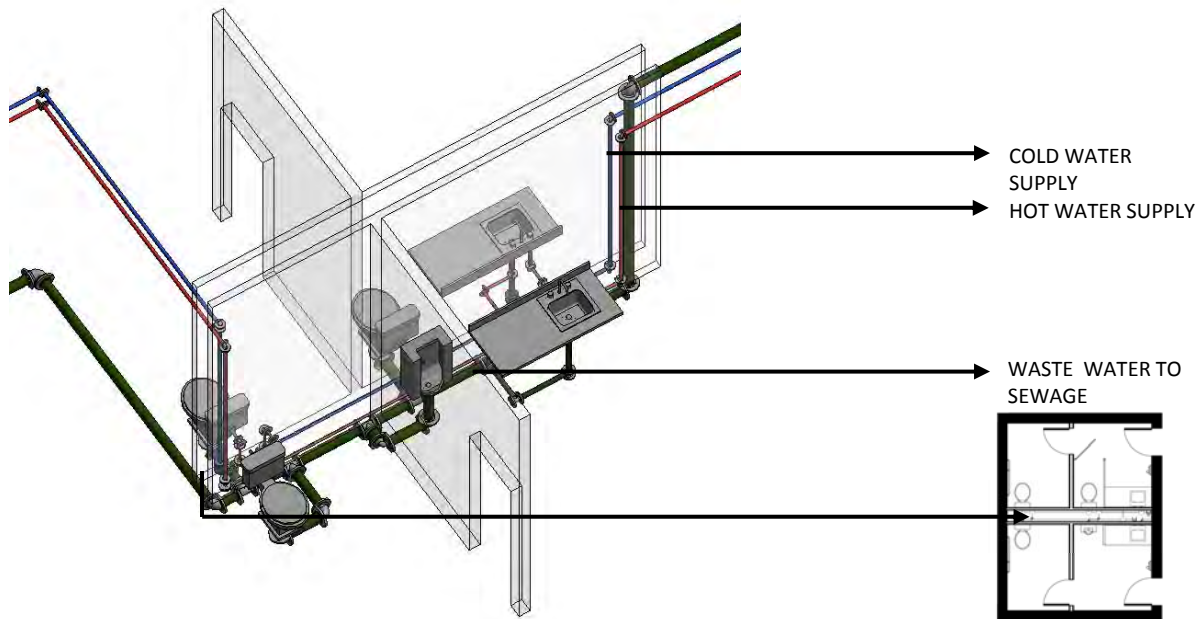
Sizes (26 ga)

GV0883	4"-4"-4"
GV0887	5"-5"-5"
GV0892	6"-6"-6"
GV0895	7"-7"-7"
GV0899	8"-8"-8"

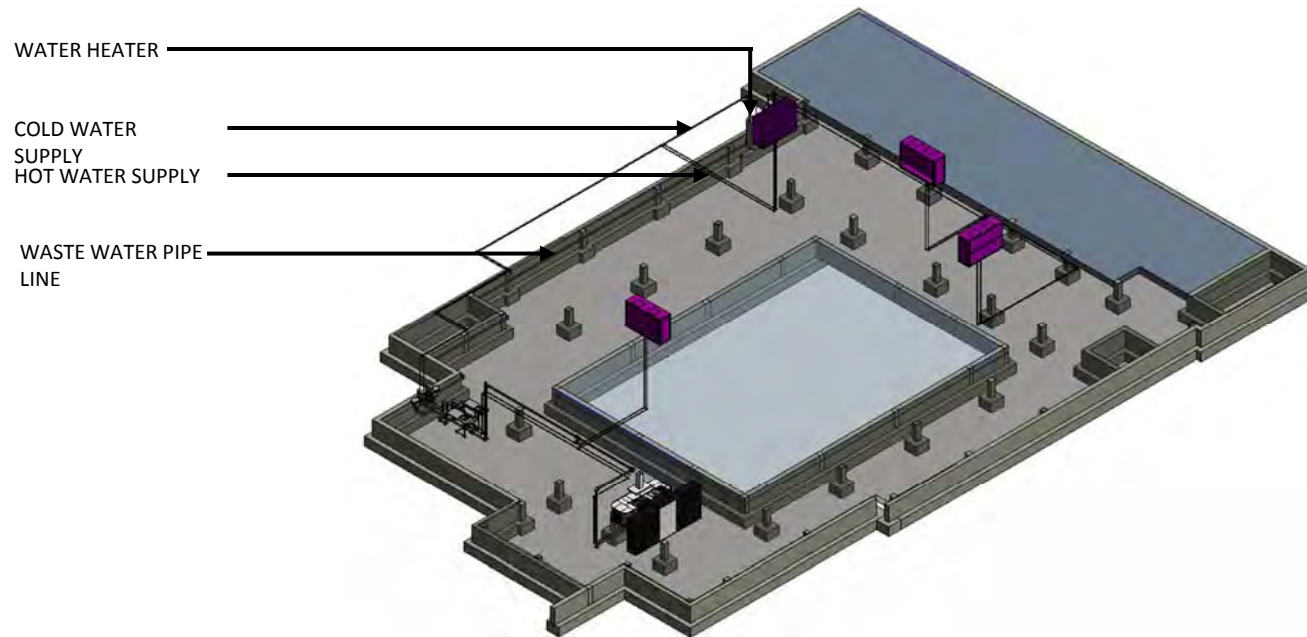


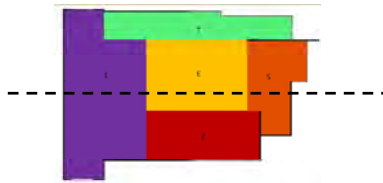
WATER RISER DIAGRAM

BATHROOM



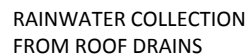
PLUMBING PERSPECTIVE





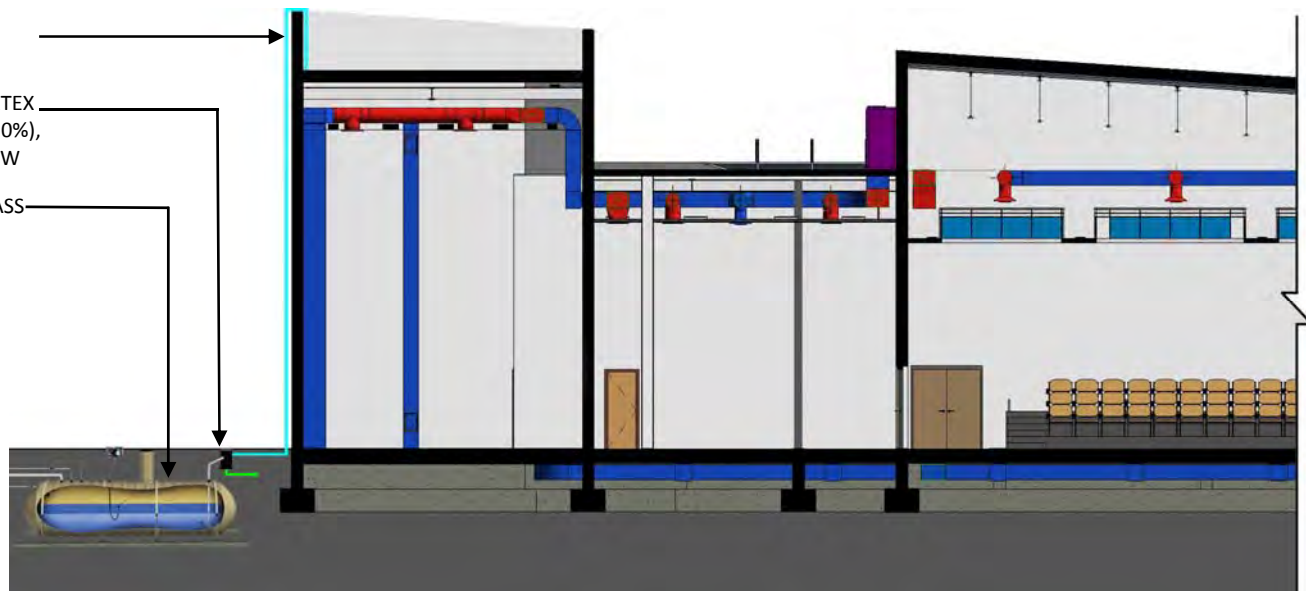
WATER HARVESTING

SECTION



RAINWATER ENTERS VORTEX TANK & IS CONVERTED (90%), REMAINING TO OVERFLOW

WATER ENTERS FIBERGLASS-TANK



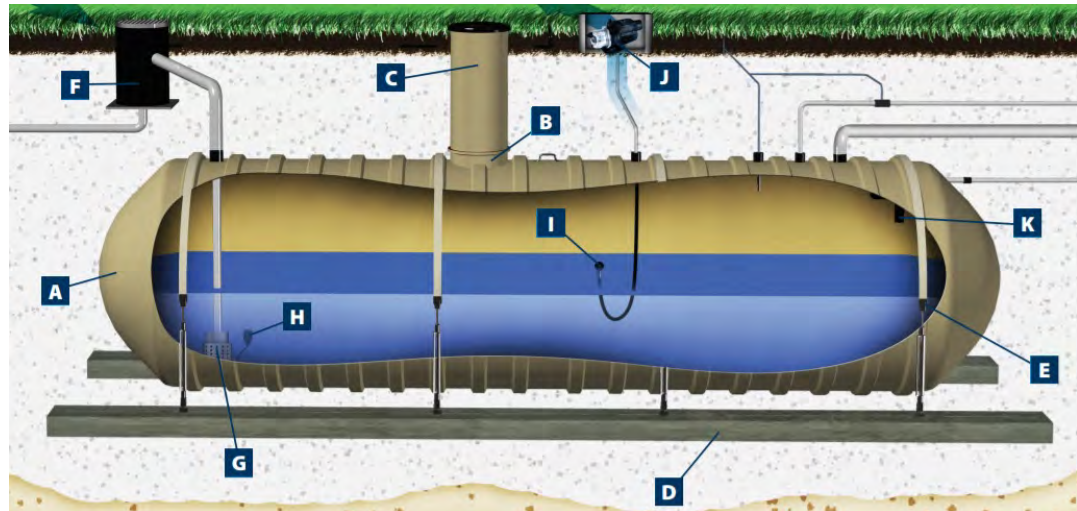
WATER HARVESTING

FIBERGLASS TANK FEATURES

- A): FLOWTITE FIBERGLASS TANK
- B): FIBERGLASS ACCESS COLLAR
- C): WATERTIGHT FIBERGLASS RISER
- D): DEADMAN ANCHORS
- E): FIBERGLASS ANCHORS STRAPS

TYPICAL ACCESSORIES

- F): FIRST FLUSH FILTER
- G): SMOOTHING INLET DIVERTER
- H): PUMP CONTROL SWITCH
- I): FLOATING FILTER
- J): JUNCTION PUMP



AERIAL VIEW

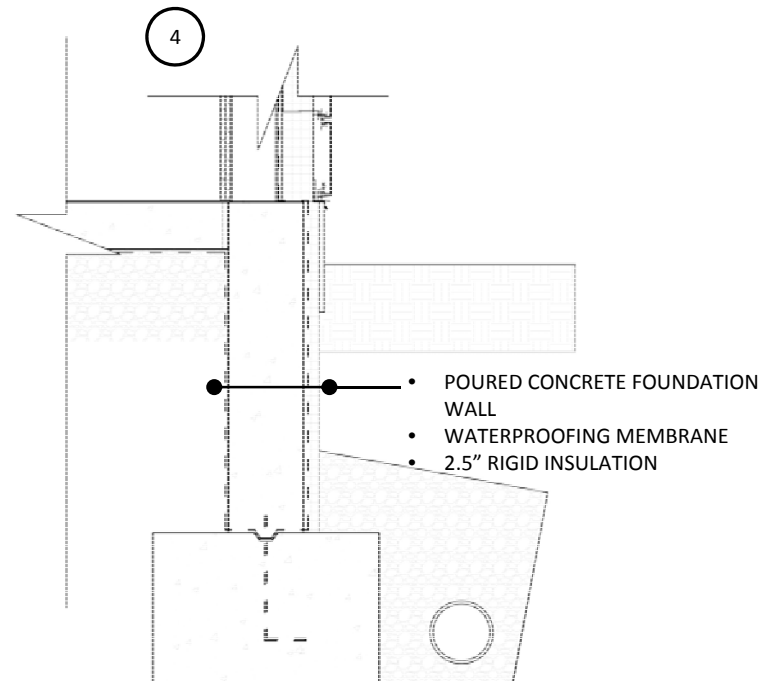
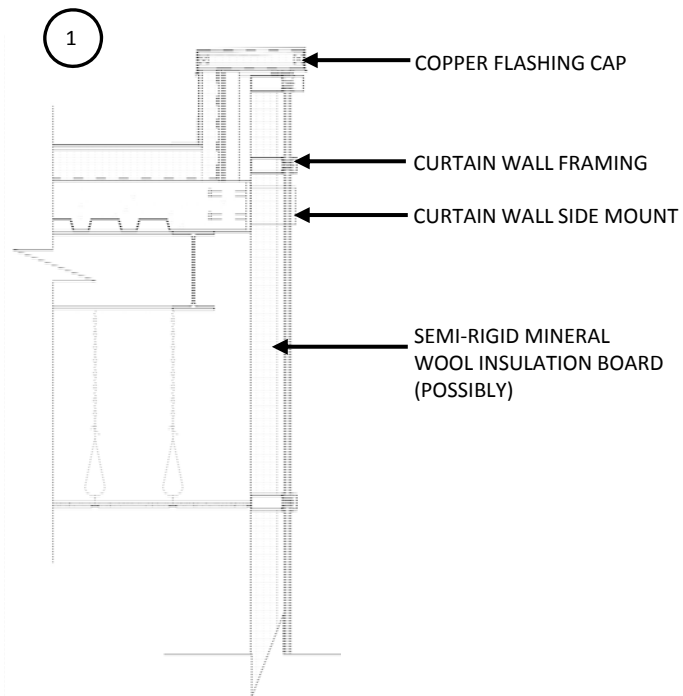


DETAILED ELEVATION



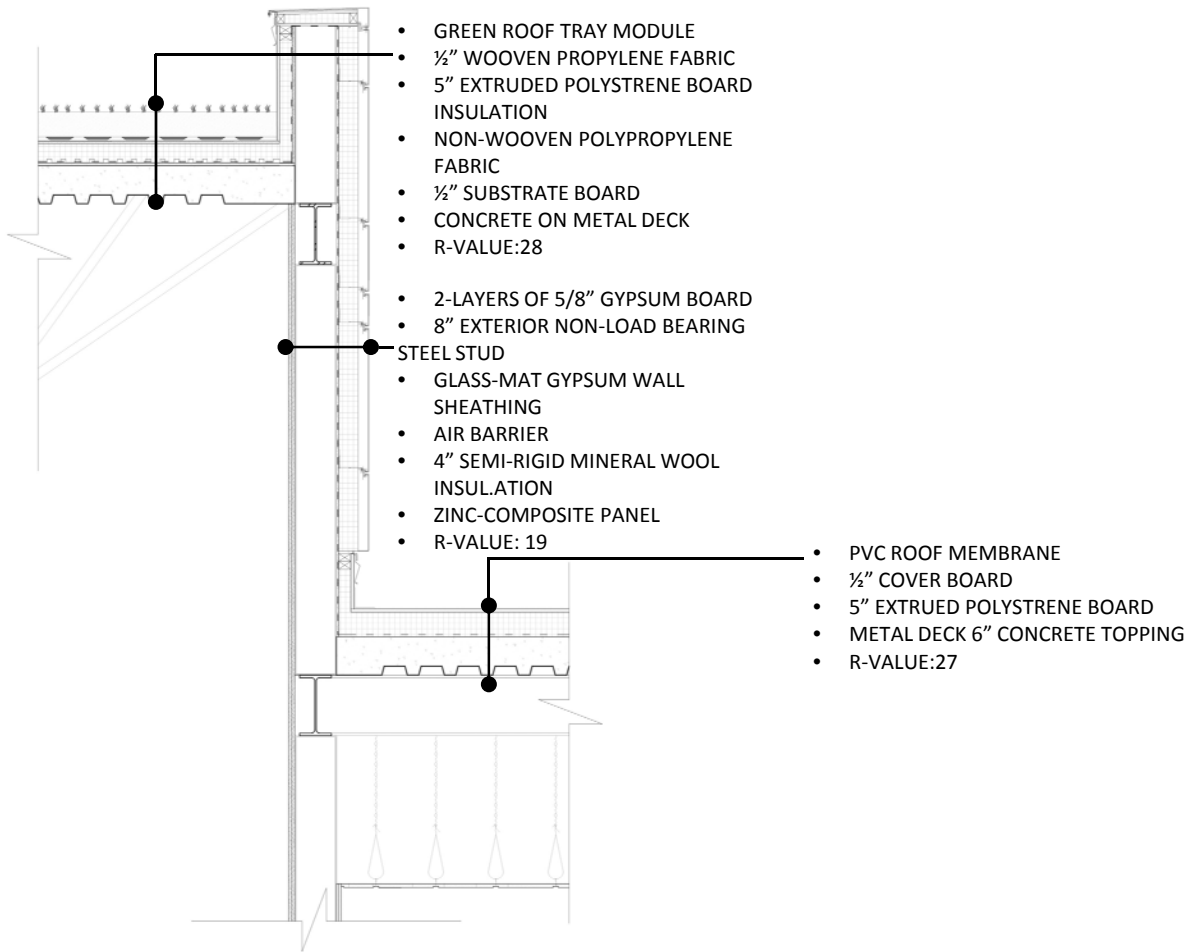
DETAILS

CURTAIN WALL PARAPET & FOUNDATION



R-VALUE:5

R-VALUE FOR FOUNDATION WALL:14



DETAILS

WALL STEP BACK DETAIL

R-VALUE OF ZINC-COMPOSITE WALL

GOERGIA PACIFIC 5/8"
GYPSUM BOARD: 0.67 (2)=1.34

1/2" GLASS-MATT GYPSUM
WALL SHEATHING: 0.56

OWENS CORNING 4" MW-1,
UN-FACED SEMI-RIGID
MINERAL WOOL INSULATION
BOARD: 17.2

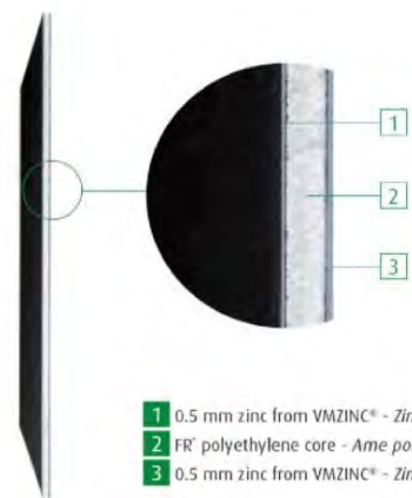
VMZ COMPOSITE ZINC
CLADDING:0.051

TOTAL R-VALUE: 19

ZINC COMPOSITE PANEL

VMZ COMPOSITE

Characteristics of panels	
Maximum width	1000 mm (*)
Standard length	2000 mm – 3000 – 4000 mm
Length on request	Up to 6000 mm
Surface aspects	QUARTZ-ZINC, ANTHRA-ZINC and PIGMENTO
Thickness of zinc	0.5 mm
Core	Mineral-rich polyethylene (FR) (Fire Retardancy)
Total thickness	4 mm
Moment of inertia	0.39 cm 4/m
Density of composite	12 kg/m2
Expansion coefficient	2.2 mm per 100°C

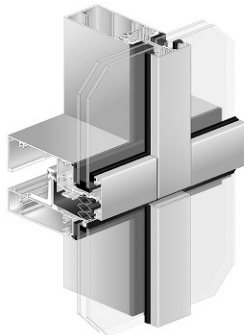


- 1 0.5 mm zinc from VMZINC® - Zinc 0,5 mm de VMZINC®
- 2 FR* polyethylene core - Ame polyéthylène FR*
- 3 0.5 mm zinc from VMZINC® - Zinc 0,5 mm de VMZINC®

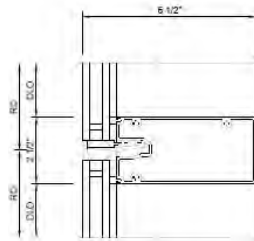
* FR = Fire Retardancy

CURTAIN WALL

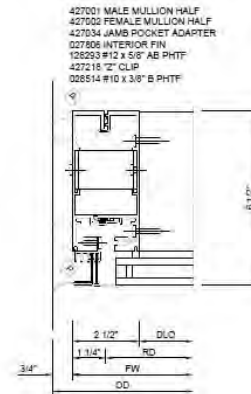
FOUR SIDED STRUCTURAL SEALANT UNITIZED CURTAIN WALL ASSEMBLY



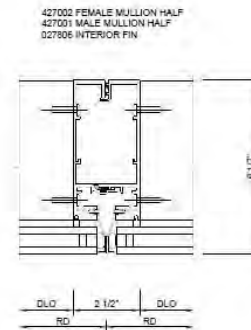
Four-sided captured system
allows for crisp sightlines



427013 HORIZONTAL



DETAIL 5
SSG JAMB
1" INFILL



DETAIL 6
SSG VERTICAL MULLION
1" INFILL

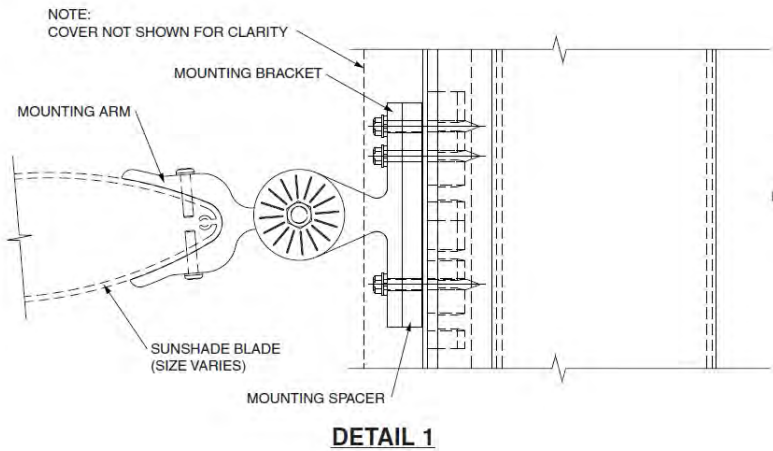
2500 UT Unitwall™

- 2-1/2" (63.5mm) sightline
- 7 1/2" (190.5mm) or 6-1/2" (165.1) depth
- Ultra thermal performance
- Mid to high rise applications

U-FACTOR: 0.36 BTU/sq.ft. x h deg F

EXTERIOR SHADING

VERTICAL EXTERIOR SUNSHINE-VS SERIES



COST ESTIMATE

2-STORY THEATHRE

COST ESTIMATE:

CONSTRUCTION COST OF THEATRE: \$3,252,600

COMPLEX SHAPE FACTOR: 0

SITE CONSTRUCTION (IN LANDSCAPE): \$15,200

SOLAR ALLOWANCE: \$34,928

SPECIAL FEATURES ALLOWANCE: \$12,439

WATER HARVESTING ALLOWANCE: \$20,000

FURNITURE, FIXTURES + ARTWORK: \$44,304

THEATRE LIGHTING + EQUIPMENT: \$100,000

DETROIT METRO AREA MULTIPLIER: \$775,094

GENERAL CONDITIONS/OVERHEAD/PROFIT: \$402,769

CONSTRUCTION CONTINGENCY: \$443,046

TOTAL CONSTRUCTION COSTS + FEES: \$5,899,149

COST OF LAND: \$0

LEGAL + ACCOUNTING FEES: \$30,000

FINANCING FEES (FUND RAISED): \$20,000

UDM FACILITIES: \$97,470

TOTAL SOFT COSTS: \$147,000

TOTAL PROJECT COSTS: \$6,046,619/14,456 sq.ft

COST: \$418 sq.ft



MULTI-FORM THEATER