

1 LIFE SAFETY SITE PLAN  
1" = 30'-0" 20,770 SQ. FT. TOTAL BUILDING



Upfit For:  
**Clemson Vape Shop**  
1376 Tiger Boulevard Suite 116,  
Clemson SC, 29621

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GENERAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY PERMITS, INSPECTIONS, AND FEES AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
- THE CONTRACTOR SHALL THROUGHOUT CONSTRUCTION OPERATIONS COMPLY WITH APPLICABLE BUILDING CODES AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: INTERNATIONAL BUILDING CODE 2021 EDITION, OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION TITLE 29, CODE OF FEDERAL REGULATIONS PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION NFPA 101 LIFE SAFETY CODE 2015 EDITION.
- PROTECT EXISTING FACILITIES THAT ARE TO REMAIN IN PLACE THAT ARE TO BE RE-USED, OR THAT REMAIN THE PROPERTY OF THE OWNER USING TEMPORARY COVERS, SHORING, BRACING AND SUPPORTS. REPAIR TO ORIGINAL CONDITION OR REPLACE WITH NEW THOSE ITEMS DESIGNATED TO REMAIN OR TO BE RE-USED THAT ARE DAMAGED DURING THE PERFORMANCE OF THE WORK. PROVIDE NEW SUPPORTS, BRACES, OR REINFORCEMENT FOR FACILITIES WEAKENED DURING REMOVAL WORK.
- WHEN REMOVAL OR ABANDONMENT WORK REQUIRES THE DISRUPTION OR INTERRUPTION OF SERVICE OR DISCONNECTION OF A SERVICE CONNECTION, COORDINATE SUCH WORK WITH THE OWNERS DESIGNATED REPRESENTATIVE TO ENSURE THAT PROPER MEASURES ARE TAKEN TO PROTECT THE UTILITY FROM DAMAGE.
- REMOVE FROM THE PROJECT SITE MATERIALS, RUBBISH AND OTHER DEBRIS RESULTING FROM THE REQUIREMENTS REGARDING HAULING AND DISPOSAL. BURNING DEBRIS AND RUBBISH ON OWNER'S PROPERTY WILL NOT BE PERMITTED. THE BURNING OR INCINERATION OF RUBBISH SUCH AS CONSTRUCTION DEBRIS, BRUSH, OR TREES IS PROHIBITED. THE USE OF THE PROPERTY OWNER'S DUMPSTERS IS PROHIBITED FOR CONSTRUCTION DEBRIS. COORDINATE WITH OWNERS' REP FOR PLACEMENT OF A ROLLOFF CONTAINER.
- DEMOLITION OPERATIONS SHALL BE CONDUCTED TO ENSURE THE SAFE PASSAGE OF THE PERSONS TO AND FROM FACILITIES OCCUPIED AND USED BY THE OTHER TENANTS AND TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES AND OTHER FACILITIES. DEMOLITION OPERATIONS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.
- ALL UNOBSTRUCTED MEANS OF EGRESS IN ACCORDANCE WITH NFPA 101, LIFE SAFETY CODE SHALL BE MAINTAINED AT ALL TIMES FOR USE BY CONSTRUCTION WORKERS.
- THE SUITABILITY, DISTRIBUTION AND MAINTENANCE OF PORTABLE FIRE EXTINGUISHERS SHALL BE IN ACCORDANCE WITH LOCAL CODE OFFICIAL.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS WHICH AFFECT NEW WORK AND NOTIFY THE ARCHITECT IF CONDITIONS ARE DISCOVERED THAT WILL IMPACT THE INSTALLATION AS SHOWN ON DRAWINGS.
- WORKMANSHIP CONTEMPLATED UNDER THIS WORK SHALL BE FIRST CLASS IN EVERY RESPECT. SURFACES, MEMBERS, FRAMES AND UNITS SHALL BE TRUE, EVEN AND IN ALIGNMENT. FINISHES SHALL BE FREE FROM CHIPS, DENTS OR OTHER IMPERFECTIONS.
- CONTRACTOR TO COORDINATE ALL WORK WITH OTHER DISCIPLINE DRAWINGS.

DESCRIPTION OF WORK

- LEVEL 3 ALTERATION:
- CHANGE OF OCCUPANCY (BUSINESS 'B' TO MERCANTILE 'M')
  - NEW 2-HR RATED FIRE BARRIER AT TENANT SPACE
  - NEW 2-HR RATED FIRE WALLS & CEILING ASSEMBLY
  - SELECTIVE DEMOLITION
  - NEW INTERIOR FINISHES
  - NEW & RE-WORK OF EXISTING POWER (EXISTING ELECTRICAL SERVICE)
  - NEW LIGHTING
  - NEW EMERGENCY LIGHTING
  - NEW PLUMBING FIXTURE ON EXISTING PLUMBING LINE
  - REWORK OF EXISTING MECHANICAL DIFFUSERS (EXISTING HVAC UNITS TO REMAIN)

OCCUPANCY GROUP

TENANT  
MERCANTILE "M"  
CHANGE OF USE FROM BUSINESS "B" TO MERCANTILE "M".  
  
SEE LS100 FOR ADDITIONAL INFORMATION

CODE EDITIONS

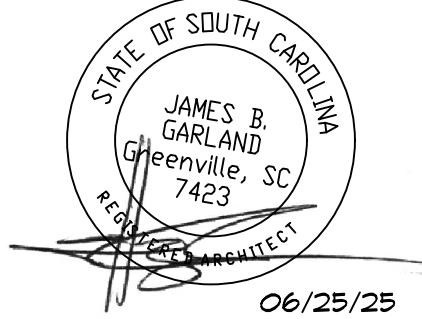
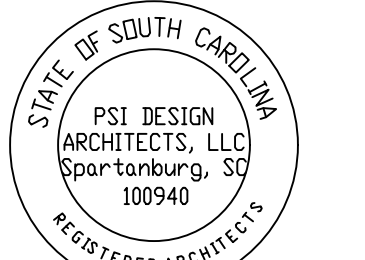
YEAR EDITION OF CODE: 2021 International Existing Building Code - SOUTH CAROLINA EDITION

☐ New Construction  
☒ Alteration ☐ Level 1 ☐ Level 2 ☒ Level 3  
☐ Addition

SOUTH CAROLINA EXISTING BUILDING CODE 2021 EDITION  
SOUTH CAROLINA INTERNATIONAL BUILDING CODE 2021 EDITION  
SOUTH CAROLINA PLUMBING CODE & INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE 2021  
SOUTH CAROLINA MECHANICAL CODE 2021  
SOUTH CAROLINA FUEL GAS CODE 2021  
SOUTH CAROLINA FIRE CODE 2021  
NATIONAL ELECTRICAL CODE, NFPA 70 2020 NATIONAL ELECTRICAL CODE  
ICC/ANSI A117.1 2011 SC BARRIER FREE BUILDING DESIGN STANDARD  
REGULATION 11-400 AS ESTABLISHED BY SC LAM SECTION 10-3-210  
INTERNATIONAL ENERGY CONSERVATION CODE 2009 W/ ASHRAE 90.1 - 2007



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Upfit For:  
**Clemson Vape Shop**  
1376 Tiger Boulevard Suite 116 Clemson,  
SC 29631

DATE 06/25/25  
SCALE AS NOTED  
JOB NO. 25 - 1526  
DRAWN AMS  
CHECK JBG  
REVISIONS  
NO. 0 DATE 06/25/25  
ISSUED FOR CONSTR.  
NO. DATE  
NO. DATE  
NO. DATE

SHEET  
**COVER**

COVER SHEET



CODE REVIEW

Name of Project: CLEMSON VAPE SHOP

Address: 1376 TIGER BOULEVARD, CLEMSON, SC 29601

Proposed Use: MERCANTILE TENANT SPACE

Owner or Authorized Agent: BRYAN TYSON

Phone # 864.940.4015

Code Enforcement Jurisdiction:

☐ City/County

☒ City CLEMSON

☐ County

LEAD DESIGN PROFESSIONAL: James B. Garland, AIA NCARB

DESIGNER

FIRM

NAME

LICENSE #

TELEPHONE #

Architectural: PSI DESIGN

James B. Garland

7423

(864) 423-9003

Civil:

Electrical: BIRCH CONSULTING SERVICES

Randall K. Birch

18298

(864) 576-0339

Fire Protect:

Plumbing:

Mechanical:

Sprinkler-Standpipe:

Structural:

Retaining Walls

75' High:

Other:

YEAR EDITION OF CODE: 2021 South Carolina Building Code

☐ New Construction

☒ Alteration

☐ Level 1

☐ Level 2

☒ Level 3

☐ Addition

BUILDING DATA

Construction Type:

☐ I-A

☐ I-B

☐ II-A

☐ II-B

☐ III-A

☐ III-B

☐ IV

☐ V-A

☒ V-B

Mixed construction:

☐ No

☒ Yes

Sprinklers:

☒ No

☐ Yes

☐ NFPA 13

☐ NFPA 13R

☐ Types

Standpipes:

☒ No

☐ Yes

Class

☐ I

☐ II

☐ III

☐ Wet

☐ NFPA 13D

Dry

☐ NFPA 13D

Fire District:

☒ No

☐ Yes

Dry

☐ NFPA 13D

Building Height:

$\pm$ 11'-6"

Number of Stories 1

☐ Unlimited per

Mezzanine:

☒ No

☐ Yes

Central Reference Sheet # (if provided)

LS100

High Rise:

☒ No

☐ Yes

Central Reference Sheet # (if provided)

LS100

GROSS BUILDING AREA

BUILDING AREA

30,770 SQ. FT.

TENANT AREA

1,955 SQ. FT.

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:

☐ NO

☒ YES

Exit Signs:

☐ NO

☒ YES

Fire Alarm:

☒ NO

☐ YES

MANUAL FIRE ALARM NOT REQUIRED PER 907.2.2 (BUSINESS), 907.2.7 (MERCANTILE)

BOTH "B" & "M" 500 OCCUPANTS.

Smoke Detection Systems:

☒ NO

☐ YES

Panic Hardware:

☐ NO

☒ YES

PROVIDED

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION

MINIMUM NUMBER OF EXITS 12

TRAVEL DISTANCE 23

ARRANGEMENT MEANS OF EGRESS 4

REQUIRED (SECTION 1006)

SHOWN ON PLANS

ALLOWABLE EXIT ACCESS TRAVEL DISTANCE

ACTUAL TRAVEL DISTANCE SHOWN ON PLANS

REQUIRED DISTANCE BETWEEN EXIT DOORS (NOT LESS THAN)

ACTUAL DISTANCE SHOWN ON PLANS

BUILDING

TENANT

1. See Section 1006.2 & Table 1006.2.1 for Number of Exits & Exit Access Doorway Requirements

2. See Table 1006.2.1 for Spaces With Only One Exit Access Doorway Common Path Of Travel Distance Requirements

3. See Table 1017.2 for Allowable Exit Access Travel Distances

4. See Section 1007.1 for Exit Access Doorway Configuration Requirements

USE GROUP OR SPACE DESCRIPTION

(A) AREA 1 SQ. FT.

(B) AREA 1 PER OCCUPANT (TABLE 1004.5)

(C) EGRESS WIDTH PER OCCUPANT (SECTION 1005.3)

EXIT WIDTH (in)

3,456,78

STAIR

LEVEL

STAIR

LEVEL

STAIR

LEVEL

REQUIRED WIDTH (SECTION 1005.3) (a-b)xc

ACTUAL WIDTH SHOWN ON PLANS

BUILDING

TENANT

1. See Table 1004.5 to determine whether net or gross area is applicable. See definition "Area, Gross" and "Area, Net" (Section 1002)

2. Not Used

3. Minimum corridor width (Section 1020.2)

4. Minimum width of exit passageway (Section 1024.2)

5. Minimum door width (Section 1010.1.1)

6. The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.5)

7. See Section 1005.6 for converging exits.

8. See Section 1029 for Assembly Occupancies

BUILDING AND TENANT OCCUPANCY

Primary Occupancy:

☐ Assembly

☐ Educational

☐ Factory-Industrial

☐ High-Hazard

☐ Institutional

☐ Mercantile

☐ Storage

☐ Utility and Miscellaneous

☐ A-1

☐ H-1

☐ I-1

☐ R-1

☐ S-1

☐ S-2

☐ R-2

☐ S-3

☐ R-3

☐ High-piled

☐ Open

☐ Enclosed

☐ A-2

☐ H-2

☐ I-2

☐ R-4

☐ S-4

☐ R-5

☐ Repair

Secondary Occupancy:

☐ Section 420 (Group R-2)

☐ No

☒ Yes

Separation: 2-HOUR

Exception:

☐ Non-Separated Mixed Occupancy (508.3)

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☒ Separated Mixed Occupancy (508.4) See Life Safety Plan & Code Summary for Calculations Related Separate Occupancy Types

For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1. (508.4.2)

PLUMBING FIXTURE REQUIREMENTS (PER TABLE 2402.1)

OCCUPANCY

WATERCLOSETS

LAVATORIES

SHOWERS/ TUBS

DRINKING FOUNTAINS

SERVICE SINK

MALE

FEMALE

MALE

FEMALE

REGULAR

ACCESSIBLE

SERVICE SINK

1 PER 500

1 PER 500

1 PER 750

1 PER 750

1 PER 1000

1

1

REQUIRED

PROVIDED

1

1

1

1

1

1

1 UNISEX

1 UNISEX

\* DUAL HEIGHT SINGLE UNIT

PSI DESIGN

ARCHITECTURE • COLLABORATIVE DESIGN BUILD

7090 HOWARD STREET  
SPARTANBURG, SC  
29903-0138  
864.585.4014  
PSI-DESIGNBUILD.COM

American Institute of Architects

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STATE OF SOUTH CAROLINA  
PSI DESIGN ARCHITECTS, LLC  
Spartanburg, SC 29904  
REGISTERED ARCHITECTS

STATE OF SOUTH CAROLINA  
JAMES B. GARLAND  
Greenville, SC 29633  
REGISTERED ARCHITECT  
06/25/25

Upfit For:

Clemson Vape Shop

1376 Tiger Boulevard Suite 116 Clemson, SC 29631

DATE 06/25/25

SCALE AS NOTED

JOB NO. 25 - 1526

DRAWN AMS

CHECK JBG

REVISIONS

NO. 0 DATE 06/25/25

ISSUED FOR CONSTR.

NO. DATE

NO. DATE

NO. DATE

SHEET

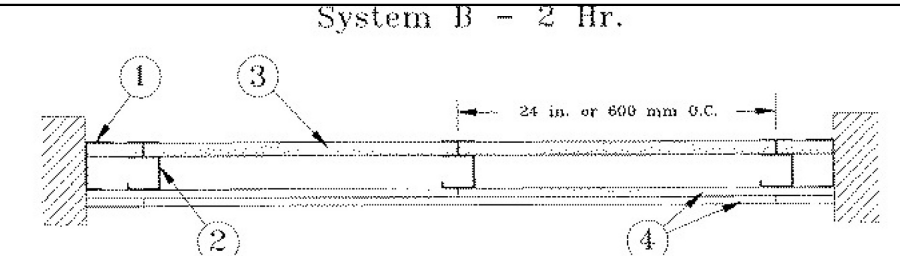
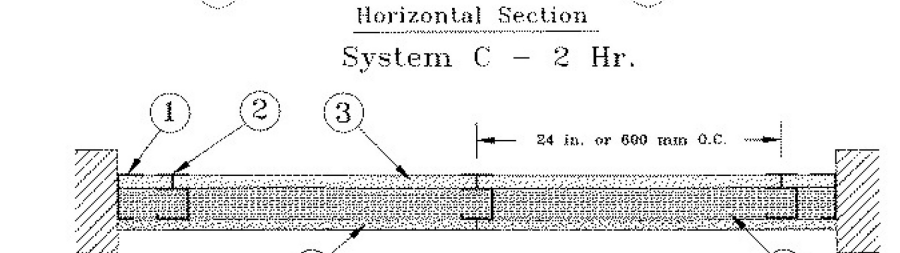
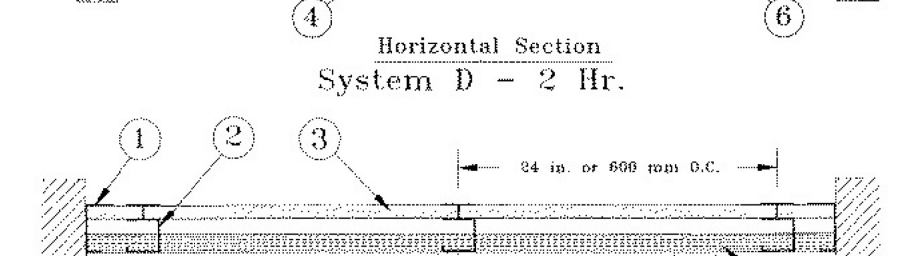
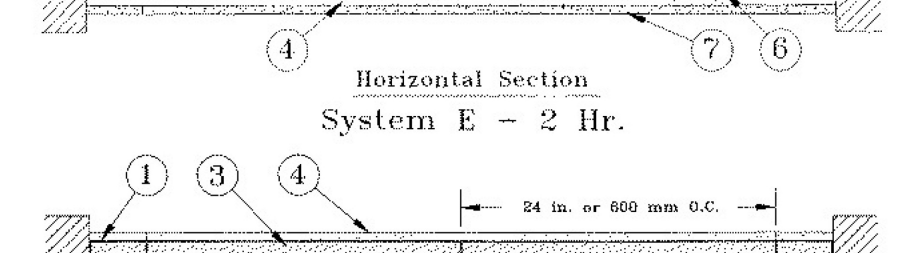
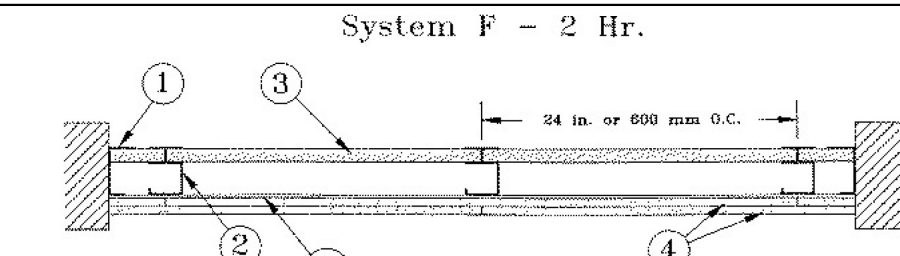
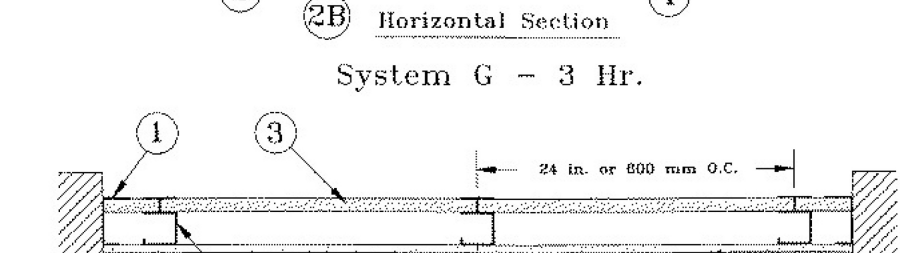
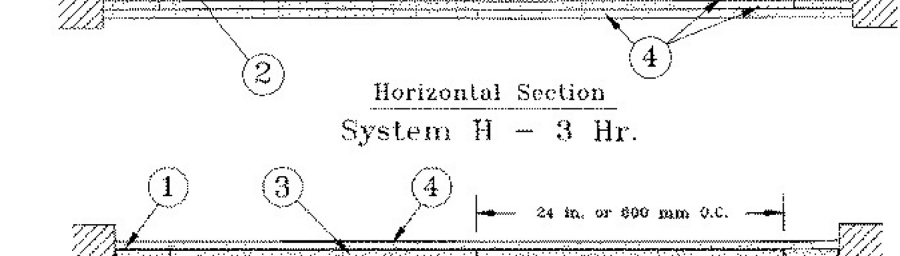
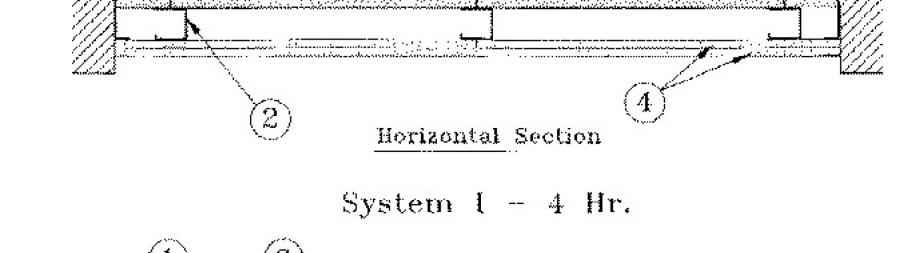
N100

CODE REVIEW

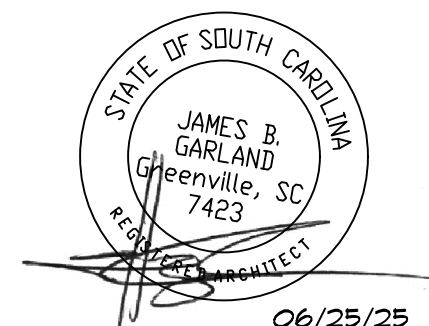
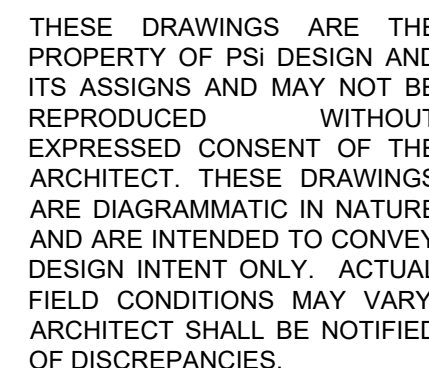
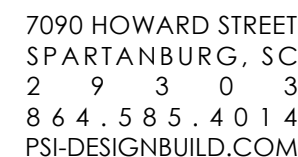






<p><b>UL Product iQ™</b></p> <p><b>BXUV.U415 - Fire-resistance Ratings - ANSI/UL 263</b></p> <p>Design/System/Construction/Assembly Usage Disclaimer</p> <ul style="list-style-type: none"> <li>Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system devices, and materials.</li> <li>Authorities Having Jurisdiction should be consulted before construction.</li> <li>Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.</li> <li>When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specific concerning alternate materials and alternate methods of construction.</li> <li>Only products which bear UL's Mark are considered Certified.</li> </ul>	<p><b>System B — 2 Hr.</b></p>  <p><b>Horizontal Section</b></p> <p><b>System C — 2 Hr.</b></p>  <p><b>Horizontal Section</b></p> <p><b>System D — 2 Hr.</b></p>  <p><b>Horizontal Section</b></p> <p><b>System E — 2 Hr.</b></p>  <p><b>Horizontal Section</b></p>	<p><b>System F — 2 Hr.</b></p>  <p><b>Horizontal Section</b></p> <p><b>System G — 3 Hr.</b></p>  <p><b>Horizontal Section</b></p> <p><b>System H — 3 Hr.</b></p>  <p><b>Horizontal Section</b></p> <p><b>System I — 4 Hr.</b></p>  <p><b>Horizontal Section</b></p>	<p><b>2. Steel Studs</b> — "C-H" - shaped studs, min 2-1/2 in. deep (min 4 in. deep when System C is used); fabricated from min 25 MSG (min 20 MSG when Items 2D, 4A, 4B, 4C, 4D or 7 is used) galv. steel. Cut to lengths 3/8 to 1/2 in. less than floor-to-ceiling height and spaced 24 in. or 600 mm OC (max 16 in. OC when Items 4A, 4B, 4C, 4D or 4E are used).</p> <p><b>2A. Steel Studs</b> — (Not Shown) — "E" - shaped studs installed back in place of "C-H" - shaped studs (Item 2). "E" - shaped studs secured together with steel screws spaced a maximum 12 in. OC. Fabricated from min 25 MSG (min 20 MSG when Item 2D, 4A, 4B, 4C, 4D or 7 is used) galv. steel, min 2-1/2 in. deep (min 4 in. deep when System C is used), with one leg 1 in. long and two legs 3/4 in. long. One leg 1 in. apart to engage gypsum liner panels. Cut to lengths 3/8 to 1/2 in. less than floor to ceiling heights.</p> <p><b>2B. Furring Channels</b> — (Optional, Not Shown) — For use with single or double layer systems. Resilient furring channels fabricated from min 25MSG corrosion protected steel, installed horizontally, and spaced vertically a max 24 in. OC. Flange portion of channel attached to each intersecting "C-H" or "E" stud on side of stud opposite the 1 in. liner panels with 1/2 in. long Type 5 or 5-12 pan-head steel screws. When furring channels are used, wallboard to be installed vertically only. Not to be used with Type FR-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).</p> <p><b>2C. Furring Channels</b> — For use with System 1 — "H" - shaped, 25 MSG galv. steel furring channels attached directly over the inner layers of wallboard to each stud with 2 in. long Type 5 pan head steel screws. Screws alternate from top flange to bottom flange at each stud intersection. Furring channels spaced vertically max 24 in. OC.</p> <p><b>2D. Steel Framing Members</b> — (Optional, Not Shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FR-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).</p> <p><b>a. Furring Channels</b> — Formed of No. 25 MSG galv. steel, 2-9/16 in. wide by 7/8 in. deep, spaced max. 24 in. OC, perpendicular to studs. Channels secured to studs as described in Item 6. Gypsum board installed vertically only and attached to furring channels as described in Item 4.</p> <p><b>b. Steel Framing Members</b> — Used to attach furring channels (Item 2D) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC, and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, 5-12 steel screw through the center grommet. Furring channels are friction fitted into clips.</p> <p><b>c. Furring Channels</b> — Formed of No. 25 MSG galv. steel, 2-9/16 in. wide by 7/8 in. deep, spaced max. 24 in. OC, perpendicular to studs. Channels secured to studs as described in Item 6. Gypsum board installed vertically only and attached to furring channels as described in Item 4.</p> <p><b>PAC INTERNATIONAL L.L.C.</b> — Types RSC-1, RSC-1 (2-75)</p> <p><b>2E. Steel Framing Members</b> — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below. Not to be used with Type FR-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).</p> <p><b>a. Furring Channels</b> — Formed of No. 25 MSG galv. steel, 2-9/16 in. wide by 7/8 in. deep, spaced max. 24 in. OC, perpendicular to studs. Channels secured to studs as described in Item 6. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.</p> <p><b>b. Steel Framing Members</b> — Used to attach furring channels (Item 2D) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC, and secured to studs with 2 in. long Type 5 pan head steel screws. Screws alternate from top flange to bottom flange at each stud intersection. Furring channels are friction fitted into clips.</p> <p><b>2F. Steel Framing Members</b> — (Optional, Not Shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FR-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).</p> <p><b>a. Furring Channels</b> — Formed of No. 25 MSG galv. steel, 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC, perpendicular to studs. Channels secured to studs as described in Item 6. Gypsum board installed vertically only and attached to furring channels as described in Item 3.</p> <p><b>b. Steel Framing Members</b> — Used to attach furring channels (Item 2D) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC, and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, 5-12 steel screw through the center grommet. Furring channels are friction fitted into clips.</p> <p><b>PUTIQ INC.</b> — Type GENICLIP</p>	<p><b>2G. Steel Framing Members</b> — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below. Not to be used with Type FR-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).</p> <p><b>a. Furring Channels</b> — Formed of No. 25 MSG galv. steel, 2-9/16 in. wide by 7/8 in. deep, spaced max. 24 in. OC, perpendicular to studs. Channels secured to studs as described in Item 6. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.</p> <p><b>b. Steel Framing Members</b> — Used to attach furring channels (Item 2D) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC, and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, 5-12 steel screw through the center grommet. Furring channels are friction fitted into clips.</p> <p><b>2H. Steel Framing Members</b> — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below. Not to be used with Type FR-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).</p> <p><b>a. Resilient Channels</b> — Formed of No. 25 MSG galv. steel, 2-9/16 in. wide by 7/8 in. deep, spaced max. 24 in. OC, perpendicular to studs. Channels secured to studs as described in Item 6. Gypsum board attached to resilient channels as described in Item 4.</p> <p><b>b. Steel Framing Members</b> — Used to attach resilient channels (Item 2H) to studs. Clips spaced max. 24 in. OC, and secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1-1/2 in. pan-head self-drilling screw.</p> <p><b>KEENE BUILDING PRODUCTS CO INC.</b> — Type KC - Assurance Clip</p> <p><b>2I. Steel Framing Members</b> — (Optional, Not Shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FR-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).</p> <p><b>a. Furring Channels</b> — Formed of No. 25 MSG galv. steel, 2-9/16 in. wide by 7/8 in. deep, spaced max. 24 in. OC, perpendicular to studs. Channels secured to studs as described in Item 6. Gypsum board installed vertically only and attached to furring channels as described in Item 4.</p> <p><b>b. Steel Framing Members</b> — Used to attach furring channels (Item 2D) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC, and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, 5-12 steel screw through the center grommet. Furring channels are friction fitted into clips.</p> <p><b>CLANDESTINE BUILDING SYSTEMS</b> — Type ClarkDens® Sound Clip</p> <p><b>3. Gypsum Board</b> — Gypsum liner panels, nom 1/2 in. thick, 24 in. or 600 mm (for metric spacing) wide, Panels cut 1 in. less in length than floor to ceiling height. Vertical edges inserted in "T" portion of "C-H" studs or the gap between the two 3/4 in. legs of the "E" studs. Free edge of end panels attached to long leg of vertical "T" - runners with 1-5/8 in. long Type 5 steel screws spaced not greater than 12 in. OC. When wall height exceeds liner panel length, liner panel may be butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing. In System L, butt joints in liner panels are staggered min 36 in. Butt joints backed with 6 in. by 22 in. strips of 3/4 in. thick gypsum wallboard (Item 4). Wallboard strips centered over butt joints and secured to liner panels with six 1-1/2 in. long Type 5 steel screws, three screws along the 22 in. dimension at the top and bottom of the strips.</p> <p><b>CGC INC.</b> — Type SLX</p> <p><b>UNITED STATES GYPSUM CO.</b> — Type SLX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — Type SLX</p> <p><b>USG MEXICO S A DE CV</b> — Type SLX</p> <p><b>4. Gypsum Board</b> —</p> <p><b>System A — 1 Hr.</b></p>
<p>Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type 5 steel screws spaced 12 in. OC when installed vertically or 8 in. OC when installed horizontally. Horizontal joints need not be backed by steel framing.</p> <p><b>CGC INC.</b> — Types AR, C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Types C and SCX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — Types C, SCX, SGX, USGX</p> <p><b>USG MEXICO S A DE CV</b> — Types AR, C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — Types AR, C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG MEXICO S A DE CV</b> — Types AR, C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System B — 2 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type 5 steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base layer screws or 8 in. OC when installed horizontally and staggered 6 in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in.</p> <p><b>CGC INC.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Types C and SCX</p> <p><b>UNITED STATES GYPSUM CO.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG MEXICO S A DE CV</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System C — 2 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type 5 steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base layer screws or 8 in. OC when installed horizontally and staggered 6 in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in.</p> <p><b>CGC INC.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Types C and SCX</p> <p><b>UNITED STATES GYPSUM CO.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG MEXICO S A DE CV</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System D — 2 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, secured with 1-1/4 in. long Type 5 steel screws spaced 12 in. OC along vertical edges and 12 in. OC in the field when installed vertically or 8 in. OC along the vertical edges and in the field when installed horizontally. Horizontal joints need not be backed by steel framing. Screws along side joints offset 4 in. Requires min 4 in. deep flanging per Items 1, 2 and 3. Requires min 1 in. thick mineral wool batts per Item 6.</p> <p><b>CGC INC.</b> — Types AR, C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p>	<p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Types C and SCX</p> <p><b>UNITED STATES GYPSUM CO.</b> — Types AR, C, FRX-G, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SGX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — Types C, SCX, SGX, USGX</p> <p><b>USG MEXICO S A DE CV</b> — Types AR, C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System E — 2 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type 5 steel screws spaced 12 in. OC when installed vertically or 8 in. OC when installed horizontally. Horizontal joints need not be backed by steel framing.</p> <p><b>CGC INC.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Types C and SCX</p> <p><b>UNITED STATES GYPSUM CO.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG MEXICO S A DE CV</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System F — 2 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically in two layers. Inner or base layer attached to studs with 1 in. long Type 5 steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in.</p> <p><b>CGC INC.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Types C and SCX</p> <p><b>UNITED STATES GYPSUM CO.</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG MEXICO S A DE CV</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System G — 3 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in three layers. Inner or base layer attached to studs with 1 in. long Type 5 steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Middle layer attached to studs with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically or 12 in. OC when installed horizontally. Screws offset 6 in. from base layer. Horizontal joints on adjacent layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers.</p> <p><b>CGC INC.</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Type C</p>	<p><b>UNITED STATES GYPSUM CO.</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — Type C</p> <p><b>USG MEXICO S A DE CV</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System H — 3 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, two layers over the flange of the "C" section of the studs, one layer over the flange of the "T" section of the studs. Inner or base layer attached to studs with 1 in. long Type 5 steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Face layer attached to studs with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically or 12 in. OC when installed horizontally. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers.</p> <p><b>CGC INC.</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Type C</p> <p><b>UNITED STATES GYPSUM CO.</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG MEXICO S A DE CV</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>System I — 4 Hr.</b></p> <p>Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, two layers over the flange of the "C" section of the studs, one layer over the flange of the "T" section of the studs. Inner or base layer attached to studs with 1 in. long Type 5 steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Face layer attached to studs with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically or 12 in. OC when installed horizontally. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers.</p> <p><b>CGC INC.</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>THE SIAM GYPSUM INDUSTRY (SONGKHAL) CO.</b> — Type C</p> <p><b>UNITED STATES GYPSUM CO.</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG BORAL DRYWALL SFZ LLC</b> — 1/2 in. Type C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p> <p><b>USG MEXICO S A DE CV</b> — Types C, P-AR, IP-XL, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX</p>	<p><b>NEW ENGLAND LEAD BURNING CO INC, DCA, NIELCO</b> — Type Nitelo</p> <p><b>4C. Gypsum Board</b> — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer. For direct attachment only) — Nom 5/8 in. or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B, and 2D. Wallboard secured to studs with 1-1/4 in. long Type 5-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 9A) or Lead Discs (see Item 10A). Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type 5-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip.</p> <p><b>NAVCO INDUSTRIES INC.</b> — Type K-69 Shielded Gypsum</p> <p><b>4D. Gypsum Board</b> — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer. For direct attachment only) — Nom 5/8 in. or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type 5-12 steel screws, gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.142 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type 5-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead tabs to have a purity of 99.9% meeting the Federal Specification QQ-L-2011, Grade "C".</p> <p><b>RADIATION PROTECTION PRODUCTS INC.</b> — Type R99 - Lead-lined Drywall</p> <p><b>5. Joint Tape and Compound</b> — (Not Shown)</p> <p><b>Systems A, B, C, E, F, G, H, I</b></p> <p>Joints on outer layers of gypsum boards (Item 4) and 4A covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with joint compound.</p> <p><b>6. Batts and Blankets</b> —</p> <p>(Optional) — Mineral wool or glass fiber batts partially or completely filling voids. Any mineral wool or glass fiber batt mineral bearing the UL Classification Markings as to Fire Resistance.</p> <p><b>Systems C &amp; D</b></p> <p>Min 3 in. (System D) and min 1-1/2 in. (System C) thick mineral wool batts, friction fitted between the studs and floor and ceiling runners.</p> <p><b>ROCKWOOL</b> — Type ARI, min density 1.8 pcf / 284 g/m<sup>3</sup></p> <p><b>THERMAFIBER INC.</b> — Type SAFB, SAF F</p> <p><b>7. Cementitious Backer Units</b> — (System D) — Nom 1/2 or 5/8 in. thick panels, square edge, attached to studs over gypsum wallboard with 1-5/8 in. long Type 5-12 corrosion resistant steel screws spaced 8 in. OC and staggered 1 in. from gypsum wall board screws. Joints covered with glass fiber mesh tape. Vertical joints staggered one stud cavity from gypsum wallboard joints. Horizontal joints staggered a min of 12 in. from gypsum wallboard joints.</p> <p><b>UNITED STATES GYPSUM CO.</b> — Type CCB</p> <p><b>8. Laminating Adhesive</b> — (Optional, Not Shown) — Used to bond outer layer of Cementitious Backer Units (Item 7) to inner layers of Gypsum Board (Item 4) in System D. ANSI A336.1 Type 1 organic adhesive applied with 1/4 in. square notched trowel. See Adhesive (PWR) in the Fire Resistance Directory or Adhesives (BLZ) in the Building Materials Directory for names of Classified companies.</p> <p><b>9. Lead Batten Strips</b> — (Not Shown, For Use With Item 4A) — Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type 5-12 pan head</p>	<p>steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-2011, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4A) and optional at remaining stud locations. Required behind vertical joints.</p> <p><b>9A. Lead Batten Strips</b> — (Not Shown, For Use With Item 4A) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type 5-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-2011, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4A) and optional at remaining stud locations.</p> <p><b>10. Lead Discs or Tabs</b> — (Not Shown, For Use With Item 4A) — Used in lieu of or in addition to the lead batten strips (Item 9) or optional at other locations. — Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 4A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-2011, Grade "C".</p> <p><b>10A. Lead Discs</b> — (Not Shown, For Use With Item 4C) — Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.9% meeting the Federal Specification QQ-L-2011, Grades "B, C or D".</p> <p><b>11. Lead Batten Strips</b> — (Not Shown, For Use With Item 4B) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type 5-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type 5-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-2011, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4B) and optional at remaining stud locations.</p> <p><b>12. Lead Tabs</b> — (Not Shown, For Use With Item 4B) — 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs fitted-8" around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw that secures the gypsum boards (Item 4B) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-2011, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.</p> <p><b>* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.</b></p> <p>Last Updated on 2020-12-22</p> <p>The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.</p> <p>UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assembly, Construction, Design, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data or drawings. 2. 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06/25/20

Upfit For:  
**Clemson Vape Shop**  
1376 Tiger Boulevard Suite 116 Clemson,  
SC 29631

Upfit For:

DATE                   ▪ 06/25/25

SCALE               ▪ AS NOTED

JOB NO.           ▪ 25 - 1526

DRAWN             ▪ AMS

CHECK             ▪ JBG

REVISIONS

NO. 0     DATE     06/25/25

ISSUED FOR CONSTR.

NO.               DATE




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# N103

## UL FIRE RATED ASSEMBLIES

<div>  <div> <b>Science.</b>  <b>Applied to Life.™</b> </div> </div> <div> <h1>Fire Protection Products</h1> <h2>3M™ Fire Barrier RC-1 Restricting Collar</h2> </div> <div>  </div>	<div> <h3>3M Fire Protection Products</h3> <h4>3M™ Fire Barrier XYZ</h4> </div> <div> <p>Maintenance</p> <p>No maintenance is expected to be required when installed in accordance with third party tested and listed firestop system. Once installed, if any section of the 3M™ Fire Barrier RC-1 Restricting Collar is damaged, the following procedure will apply: Any damaged product must be removed. The wrap strip material must be inspected to ensure integrity. The open area created must then be filled with how product, installed as detailed in the applicable 3rd party tested and listed system.</p> </div>
<div> <div>Technical Data Sheet</div> <div>July 2019</div> </div> <div> <p><b>Product Description</b></p> <p>3M™ Fire Barrier RC-1 Restricting Collar is a 29-gauge steel collar which works in conjunction with 3M™ Fire Barrier Wrap Strip (FS-105), 3M™ Fire Barrier Extra GS Wrap Strip and 3M™ Fire Barrier Tuck-In Wrap Strip to create an effective Firestop system for combustible through-penetration applications.</p> </div> <div> <p><b>Product Features</b></p> <ul style="list-style-type: none"> <li>• 29-gauge steel</li> <li>• Conformed 25 (7.62 mm) oval</li> <li>• Easy installation</li> <li>• UL Classified for use on PVC, CPVC, ABS, CPVC, CCABS, PVPd, PP and PB plastic pipe</li> </ul> </div>	<div> <p><b>Availability</b></p> <p>Available from 3M Authorized Fire Protection Products Distributors. For additional technical and purchasing information, call 1-800-388-1987 or visit 3M.com/firestop.</p> </div> <div> <p><b>Safe Handling</b></p> <p>Consult Fire Installation Sheet prior to handling and disposing of 3M™ Fire Barrier RC-1 Restricting Collar.</p> </div> <div> <p><b>Technical Information</b></p> <p>The technical information, recommendations and other statements contained in this document are based upon test or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.</p> </div> <div> <p><b>Warranty, Limited Warranty and Disclaimer</b></p> <p>Warranty: 3M warrants that the Product will be free from defects in material and manufacture during the Extended Warranty Period. If the Product does not conform to the warranty during the Extended Warranty Period, then 3M, at its sole and exclusive remedy, provides replacement Product, if replacement material is available, without the Product being subject to the 3M Limited Warranty Period. If replacement material is not available, then the Product will be repaired or replaced, at 3M's option, with any APPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR TRADE.</p> </div>
<div> <p><b>Applications</b></p> <p>3M™ Fire Barrier RC-1 Restricting Collar is ideal for use in conjunction with 3M Intumescent Wrap Strips to close openings left behind by combustible penetrants in the event of a fire when appropriately installed per the corresponding third party tested and listed system.</p> </div> <div> <p><b>Installation Techniques</b></p> <p>Consult 3M Authorized Fire Protection Products Distributor or Sales Representative for applicable UL, CULC, Harsco or other third party fire test and system details.</p> <p>Equipment: 3M™ Fire Barrier RC-1 Restricting Collar is applied using shears, mechanical fasteners and power tools.</p> <p>Installation Details: Tested and listed system details must be followed for each specific application. Install 3M™ Fire Barrier RC-1 Restricting Collar in accordance with system details for orientation and location requirements. Collar to be installed over wrap strips, lightly compressing wrap strips with hand cam and anchored to the substrate using steel mechanical or masonry fasteners having minimum 75 lb. pull out strength in conjunction with 1-1/4 in. (32 mm) diameter steel washers.</p> <p>Limitations: It is recommended that 3M™ Fire Barrier RC-1 Restricting Collar is installed in accordance with system details. Collar must be placed continuously around penetrating item and fastened to the corresponding surface with steel mechanical or masonry fasteners having minimum 75 lb. pull out strength in conjunction with 1-1/4 in. (32 mm) diameter steel washers.</p> </div>	<div> <p><b>Limitation of Liability</b></p> <p>EXCEPT FOR THE LIMITED EXTENDED WARRANTY AND REMEDY STATED ABOVE, AND EXCEPT TO THE EXTENT PROHIBITED BY LAW, 3M WILL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, ARISING FROM OR RELATING TO THIS PRODUCT, WHETHER DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, PUNITIVE, OR OTHERWISE, INCLUDING REASONABLE ATTORNEY'S FEES OR COSTS OF LITIGATION, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE NEGLIGENCE OF 3M, ITS AGENTS, SALES REPRESENTATIVES, OR CONTRACTORS. 3M DISCLAIMS ANY AND ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO, WARRANTY, CONTRACT, NEGLIGENCE, OR STRICT LIABILITY.</p> </div>
<div> <p><b>Product Selection and Use</b></p> <p>Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of the Product. The user is responsible for determining the appropriate application for evaluating the 3M product and determining whether it is appropriate and suitable for customer's intended application. Appropriate application is determined based on applicable regulatory requirements and standards (e.g., OSHA, ANSI, etc.). Failure to properly select, size, and use a 3M product and appropriate safety practices, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.</p> </div>	<div> <div>  <div> <b>Industrial Adhesives and Tapes Division</b>  <b>3M Center, Building 255-36-04</b>  <b>St. Paul, MN 55144-0001</b> </div> </div> <div> <p>Phone: 651-255-1987  Fax: 651-255-2833  Web: 3M.com/Verity</p> </div> <div> <p>3M and the 3M Design, Applied to Life, are trademarks of 3M Company.</p> </div> </div>

3M FIRE BARRIER RC-1 RESTRICTING COLLAR  
2-HOUR THROUGH-FIRESTOP SYSTEM  
N.T.S.

<b>ENGINEERING JUNCTION FIRESTOP DETAIL</b>		THE ENGINEERING JUNCTION REPRESENTS A FIRESTOP SYSTEM THAT WOULD BE EXPECTED TO PASS THE STATED RATINGS IF TESTED	
PROJECT: CLEMON VAPE SHOP ADDRESS: 1376 TRIN BLVD, CLEMON, SC 29631 ISSUED TO: PRECISION SERVICES (Rev1)			
F-RATING = 1HR. OR 2HR. (SEE NOTE NO. 4 BELOW)			
<ol style="list-style-type: none"> <li>1. BUILT UP METAL ROOF DECK ASSEMBLY (NON FIRE-RATED),</li> <li>2. GYPSUM SHANK WALL ASSEMBLY (ULCUL CLASSIFIED) (1-HR. OR 2-HR. FIRE-RATING) (2HR. SHOWN).</li> <li>3. NOMINAL "1/4" THICKNESS HILTI CP 777 SPEED PLUG FRICION FIT TO FILL FLUTES ABOVE CEILING RUNNER. ADDITIONAL HILTI CP 777 SPEED PLUG FRICION FIT TO FILL THE REMAINDER OF THE FLUTES WITH FINISHED SIDE OF WALL.</li> <li>4. NOMINAL "1/4" THICKNESS HILTI CP 767 SPEED STRET OR MINIMUM 1" THICKNESS MINERAL WOOL SAFING (MIN. 4 PC DENSITY) COMPRESSED 50% TO FILL SPACE WITHIN CEILING RUNNER ABOVE GYPSUM LINER.</li> <li>5. MINIMUM 5/8" OR 1/4" THICKNESS HILTI CP 767 SPEED STRET OR MINERAL WOOL SAFING (MIN. 4 PC DENSITY) COMPRESSED 50% FOR 1-HR. OR 2-HR. RATED WALLS RESPECTIVELY. MINERAL WOOL. INSTALLED FLUSH WITH FINISHED SIDE OF WALL.</li> <li>6. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY TO COMPLETELY COVER MINERAL WOOL AND TO OVERLAP A MINIMUM 1/2" ONTO GYPSUM, CEILING RUNNER, AND METAL DECKING.</li> </ol>			
NOTES : <ol style="list-style-type: none"> <li>1. MAXIMUM WIDTH OF JOINT = 1'-1/2".</li> <li>2. STEEL FLOOR UNITS MAY BE SPRAYED WITH A MINIMUM 5/16" TO MAXIMUM 1-3/4" THICKNESS OF ULC DENSITY COMPONETE TYPE MK-691 (MANUFACTURED BY CCP APPLIED TECHNOLOGIES) OR CARFO TYPE 300 (MANUFACTURED BY ISOLATEK, INT.) FIREPROOFING, PRIOR TO AND AFTER INSTALLATION OF CEILING RUNNERS.</li> <li>3. WHEN THE STEEL DECK IS COATED WITH FIREPROOFING, HILTI FIRESTOP JOINT SPRAY SHALL OVERLAP THE WALL, METAL DECKING, AND CEILING RUNNER A MINIMUM 1/2" AND OVERLAP THE FIREPROOFING A MINIMUM 2".</li> <li>4. FIRE-RATING OF ASSEMBLY IS DEPENDENT UPON THE PERFORMANCE OF ROOF DECK ASSEMBLY UNDER FIRE CONDITIONS.</li> <li>5. F-RATING MAY NOT EQUAL F-RATING IN ACCORDANCE WITH APPLICABLE TEST METHOD.</li> </ol>			
Reference/ Tested Systems: UL-TEST: ULCUL SYSTEM HW-D-076 & HW-D-007; UL SYSTEM NO. CQ-004		Project Approval Details CQ304262 Approved/Authorized ASHT E8337	
 <b>Hilti Firestop Systems</b>		HILTI, Inc. Plano, Texas USA (800) 673-8700 Created by: <i>Shree Shahabhi</i> Check by: _____ Date: _____ May 27, 2025	
		Drawing No. <b>679573a</b>	
<i>Saving Lives through Innovation and Education</i>			

U.L. DESIGN No. U415 SYSTEM E FIRESTOP  
2-HOUR FIRESTOP JOINT SYSTEM  
N.T.S. SEE #1/A400 FOR FIRE RATED ENCLOSURE

SEE #1/A400 FOR FIRE RATED ENCLOSURE

<b><u>COLD SMOKE SEAL DETAIL</u></b>		THE COLD SMOKE SEAL DETAIL REPRESENTS A DETAIL THAT WOULD BE EXPECTED TO FOLLOW THE PARAGRAPH OF COLD SMOKE	
PROJECT: CLEMSON VAPE SHOP ADDRESS: 1818 TYLER BLVD CLEMSON, SC 29631 ISSUED TO : PRECISION SERVICES			
Rating: _____ F-RATING: 0-HR.			
1. BUILT UP METAL ROOF DECK ASSEMBLY WITH MIN. 4-1/2" TALL CONTINUOUS STEEL BENT PLATE (NON FIRE-RATED). 2. GYPSUM WALL ASSEMBLY (UL DESIGN NO. U301) (2-HR.FIRE-RATING). 3. MINIMUM 4" THICKNESS MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50%, FLUSH WITH BOTTOM SURFACE AND TO BE RECESSED MAXIMUM 1/2" FROM TOP SURFACE OF STEEL BENT PLATE. 4. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY TO COMPLETELY COVER MINERAL WOOL, OVERLAPPING MINIMUM 1/2" ONTO ADJACENT SURFACES.			
NOTES : 1. MAXIMUM WIDTH OF JOINT = 5". 2. FIRESTOP SPRAY SHALL NOT COME INTO CONTACT WITH ROOFING INSULATION MATERIAL.			
Referenced Tested Systems (REFERENCE : UL/UL SYSTEMNO. PW-0-1037 & PW-D-1013)		Project Application Details CS2004265 Application Test Method N/A	
HILTI Inc Plano, Texas USA (800) 878-8000 (Specify Shingles) <i>Shree Shalabhi</i>		Sheet _____ of 2 of 2 Scale _____ Date _____ <i>June 03, 2025</i>	Drawing No.  <b>680439a</b>
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U.L. DESIGN No. U415 SYSTEM E FIRESTOP  
2-HOUR FIRESTOP JOINT SYSTEM  
N.T.S. SEE #1/A400 FOR FIRE RATED ENCLOSURE

SEE #1/A400 FOR FIRE RATED ENCLOSURE



## LEGEND



EXIT SIGN WITH EMERGENCY LIGHTS



DIRECTIONAL EXIT SIGN



DUAL HEAD LED EMERGENCY LIGHT



FIRE EXTINGUISHER

## CODE SUMMARY

PER IBC 901, ALTERATIONS ARE PERMITTED WITHOUT REQUIRING THE ENTIRE BUILDING TO COMPLY WITH THE ENERGY CODE. NEW CONSTRUCTION ONLY (CEILING ASSEMBLY) SHALL CONFORM WITH ENERGY REQUIREMENTS OF INTERNATIONAL ENERGY CONSERVATION CODE (IECC). THE ALTERATIONS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF INTERNATIONAL ENERGY CONSERVATION CODE (IECC) AS THEY RELATE TO NEW CONSTRUCTION ONLY.

LEVEL 3 ALTERATION  
(CHANGE OF USE BUSINESS "B" TO MERCANTILE "M")

CONSTRUCTION TYPE:

VB

OCCUPANCY TYPE:

MERCANTILE "M"  
(CHANGE FROM BUSINESS "B")

MIXED USE:

BUILDING:

YES, "B" / "M" / "S-1"

TENANT:

NO, "M"

SEPARATED:

2-HR RATED FIRE BARRIERS MAKE  
TENANT SPACE NEW FIRE AREA

SPRINKLED:

NO

ALLOWABLE AREA: -

MERCANTILE "M" = 9,000 SQ. FT.

ALLOWABLE HEIGHT: -

MERCANTILE "M" = 40'-0"

ACTUAL AREA:

MAIN BUILDING  
TENANT SPACE30,712 SQ. FT.  
1,955 SQ. FT.

ACTUAL HEIGHT:

1 STORY @ +/- 11'-6"

OCCUPANT LOAD:

MERCANTILE	1,054 SQ. FT.	@ 60 GROSS	= 18
STOCK ROOM ONE	145 SQ. FT.	@ 300 GROSS	= 1
STOCK ROOM TWO	604 SQ. FT.	@ 300 GROSS	= 3
TOTAL TENANT OCCUPANT LOAD			= 22

ALL DOORS ARE 3/0 UNLESS NOTED OTHERWISE.

INTERIOR WALL AND CEILING FINISH SHALL MEET THE FOLLOWING REQUIREMENTS PER TABLE 803.15 MOST RESTRICTIVE "BUSINESS"

EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES
A	B	C

## LIFE SAFETY NOTES

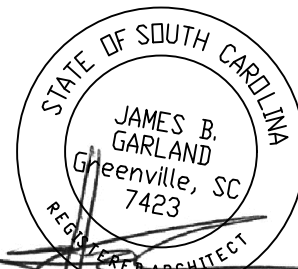
- 1 PRIMARY EXIT = 34/2 = 170 OCCUPANT LOAD
- 2 SECONDARY EXIT = 34/2 = 170 OCCUPANT LOAD
- 3 2-HOUR RATED WALLS IN AREAS DESIGNATED SHALL BE INSTALLED TO CREATE INDEPENDENT FIRE AREA FOR NEW MERCANTILE TENANT; SEE N03.
- 4 5' X 5' MINIMUM CONCRETE PAD AT EXTERIOR DOOR.
- 5 PER 1010.2.4, PANIC HARDWARE IS NOT REQUIRED BUT BEING PROVIDED - EXISTING TO REMAIN.
- 6 ACCESSIBLE ENTRANCE AND ACCESSIBLE ROUTE.
- 7 ACCESSIBLE MEANS OF EGRESS.
- 8 PARKING LOT / ACCESSIBLE PARKING - NO CHANGE.
- 9 PER TABLE 1011.2 (M) MULTIPLE EXITS REQUIRED, THEREFORE EXIT ACCESS TRAVEL DISTANCE SHALL NOT EXCEED 200'-0".
- 10 5'-0" SIDEWALK TO PARKING AREA.
- 11 PER TABLE 1505.1 CONSTRUCTION TYPE, ROOF CONSTRUCTION CLASSIFICATION "C".
- 12 MINIMUM 3' CLEAR FLOOR SPACE IN FRONT OF ELECTRICAL PANEL.
- 13 PER 1015.4, PROVIDE BRAILLE "EXIT" SIGN AT ALL EXIT DOORS.
- 14 EXIT SIGNS - FINAL LOCATIONS OF DIRECTIONAL SIGNAGE SHALL BE DETERMINED IN FIELD.
- 15 PER 1105.1 60% OF PUBLIC ENTRANCES ARE REQUIRED TO BE ACCESSIBLE.
  - IF PUBLIC ENTRANCES ARE ACCESSIBLE, THEREFORE OK.
  - LOADING AND SERVICE ENTRANCES THAT ARE NOT THE ONLY ENTRANCE TO A TENANT SPACE ARE NOT REQUIRED TO BE ACCESSIBLE.
- 16 PER 1105.1.7 AT LEAST ONE ACCESSIBLE ENTRANCE SHALL BE PROVIDED TO EACH TENANT IN A FACILITY.
- 17 EXISTING BATHROOM TO BE UPDATED TO BE ADA COMPLIANT; SEE A500.
- 18 CLEARLY MARKED PATH OF EGRESS THROUGH STOCK ROOM TWO TO BE 44" MINIMUM CLEAR EGRESS WIDTH.
- 19 2-HOUR RATED WALLS AND CEILING TO BE INSTALLED TO CREATE FIRE ENVELOPE; SEE N02.
- 20 DELINEATION OF SHARED PARKING IS NOT REQUIRED BY CITY OF CLEMSON.
- 21 PER 1020.5 DEAD END CORRIDOR NOT TO EXCEED 20'-0" IN LENGTH.
- 22 PER 1010.2.4 PRIMARY ENTRANCE OF BUILDINGS IN OCCUPANCY GROUP "M" PERMITTED TO BE EQUIPPED WITH KEY-OPERATED LOCKING DEVICES FROM EGRESS SIDE PROVIDED THE LOCKING DEVICE IS READILY DISTINGUISHABLE AS LOCKED.
- 3.1 A READILY VISIBLE DURABLE SIGN IS POSTED ON THE EGRESS SIDE ON OR ADJACENT TO THE DOOR STATING: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. THE SIGN LETTERS SHALL BE IN LETTERS 1 INCH (25 MM) HIGH ON A CONTRASTING BACKGROUND.
- 3.2 THE USE OF THE KEY-OPERATED LOCKING DEVICE IS REVOCABLE BY THE BUILDING OFFICIAL FOR DUE CAUSE.
- 23 MERCANTILE FIRE AREA DOES NOT EXCEED 12,000 SQ. FT., THEREFORE FIRE SPRINKLER IS NOT REQUIRED.
- 24 PER 2402.2 EXCEPTION 3, SEPARATE FACILITIES SHALL NOT BE REQUIRED IN MERCANTILE OCCUPANCIES IN WHICH THE MAXIMUM OCCUPANT LOAD IS 100 OR FEWER.
  - OCCUPANT LOAD = 22, THEREFORE OK.
- 25 2-HOUR FIRE BARRIER SHALL TERMINATE AT LIMITS OF ADJACENT TENANT EXTERIOR WALL.
- 26 PROVIDE 2-HOUR RATED BOOT AND REQUIRED FIREPROOFING AT INTERIOR GUTTER SYSTEM DOWNSPOUT. INSTALL 2-HR THROUGH-FIRESTOP SYSTEM; SEE N03.
- 27 90 MINUTE ACCESS PANEL OVERHEAD AT 2-HOUR RATED ENVELOPE.
- 28 PER 710.2, FIREBLOCKING SHALL BE INSTALLED AT THE LOCATIONS SPECIFIED IN SECTIONS 710.2.2 THROUGH 710.2.11 WITH MATERIALS IN COMPLIANCE OF 710.2.1.
- 29 PER 1010.1.2) SIDE-HINGED SWINGING DOORS SHALL SWING IN THE DIRECTION OF EGRESS WHERE SERVING A ROOM OR AREA CONTAINING AN OCCUPANT LOAD OF 50 OR MORE.
  - OCCUPANT LOAD = 22, THEREFORE SWINGING DOOR NOT REQUIRED TO SWING IN THE DIRECTION OF EGRESS.
- FE FIRE EXTINGUISHER - LOCATE AT EACH EXIT. FINAL PLACEMENT TO BE DETERMINED BY FIRE MARSHAL.



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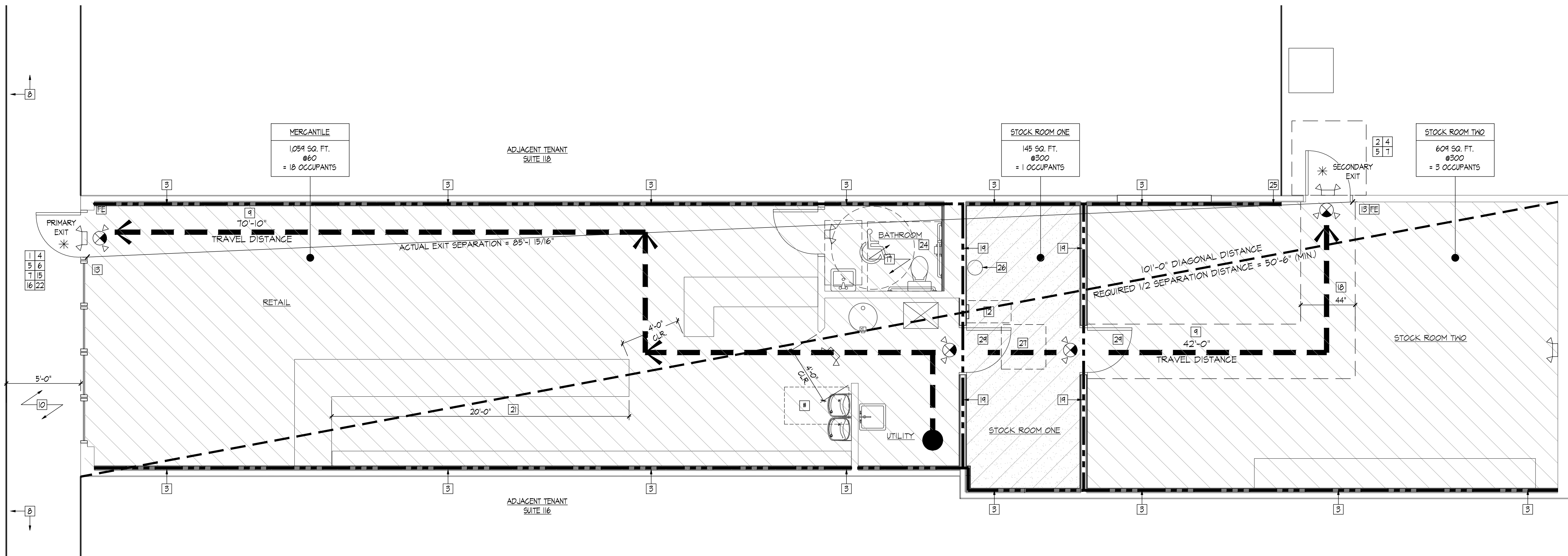
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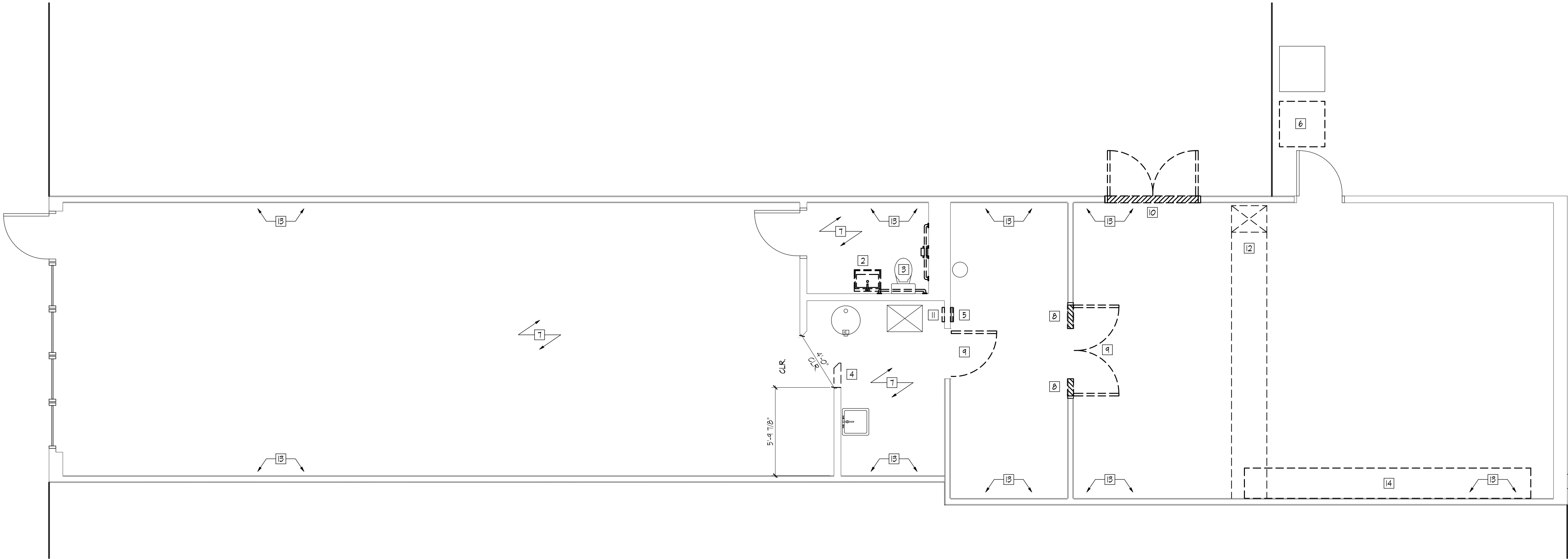
LIFE SAFETY PLAN



1 LIFE SAFETY PLAN  
1/4" = 1'-0"  
1,955 SQ. FT.







1 DEMO PLAN  
1/4" = 1'-0"  
1,955 SQ. FT.



#### DEMO PLAN NOTES

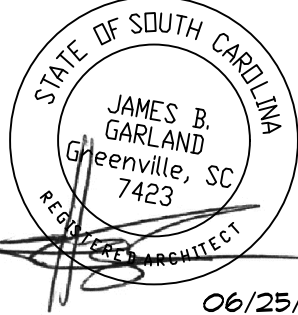
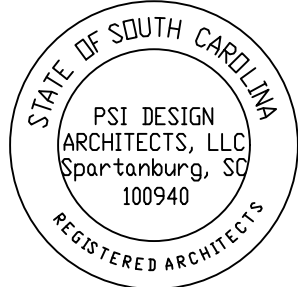
- 1 REMOVE ALL ELECTRICAL & PREPARE FOR NEW ELECTRICAL, SEE ELECTRICAL.
- 2 REMOVE EXISTING SINK AND PREPARE TO RECEIVE NEW ADA COMPLIANT SINK.
- 3 REMOVE GRAB BARS WITH INTENT TO REINSTALL.
- 4 REMOVE PORTION OF EXISTING WALL TO PROVIDE 48" CLEAR OPENING.
- 5 REMOVE ELECTRICAL PANEL CONNECTIONS OF SUITE 114 TO ENSURE FIRE CODE COMPLIANCE.
- 6 RELOCATE EXISTING CONDENSING UNIT FOR ADJACENT TENANT TO PROVIDE REQUIRED CLEAR AREA AT EXIT.
- 7 REMOVE EXISTING CEILING & PREPARE TO RECEIVE FIREPROOFING & NEW CEILING.
- 8 SELECTIVELY INFILL WALL & PREPARE TO RECEIVE NEW DOOR, SEE FIRE RATING REQUIREMENTS.
- 9 EXISTING DOOR & FRAME TO BE REMOVED.
- 10 REMOVE DOOR & INFILL WALL, COORDINATE WITH A100 FOR FIRE RATINGS.
- 11 REMOVE ELECTRICAL SUB-PANEL.
- 12 REMOVE MECHANICAL UNIT & DUCT. SEAL WALL PENETRATION TO ADJACENT TENANT WITH APPROPRIATE FIRE PROTECTION.
- 13 REPAIR ANY PENETRATIONS IN ALL DEMISING WALLS, PREPARE TO RECEIVE FIRE PROOFING AND NEW FINISHES.
- 14 CAREFULLY REMOVE EXISTING CABINETS WITH INTENT TO REINSTALL.
- 15 CARE TO BE TAKEN NOT TO DISTURB ADJACENT WALLS TO WORK BEING DONE.



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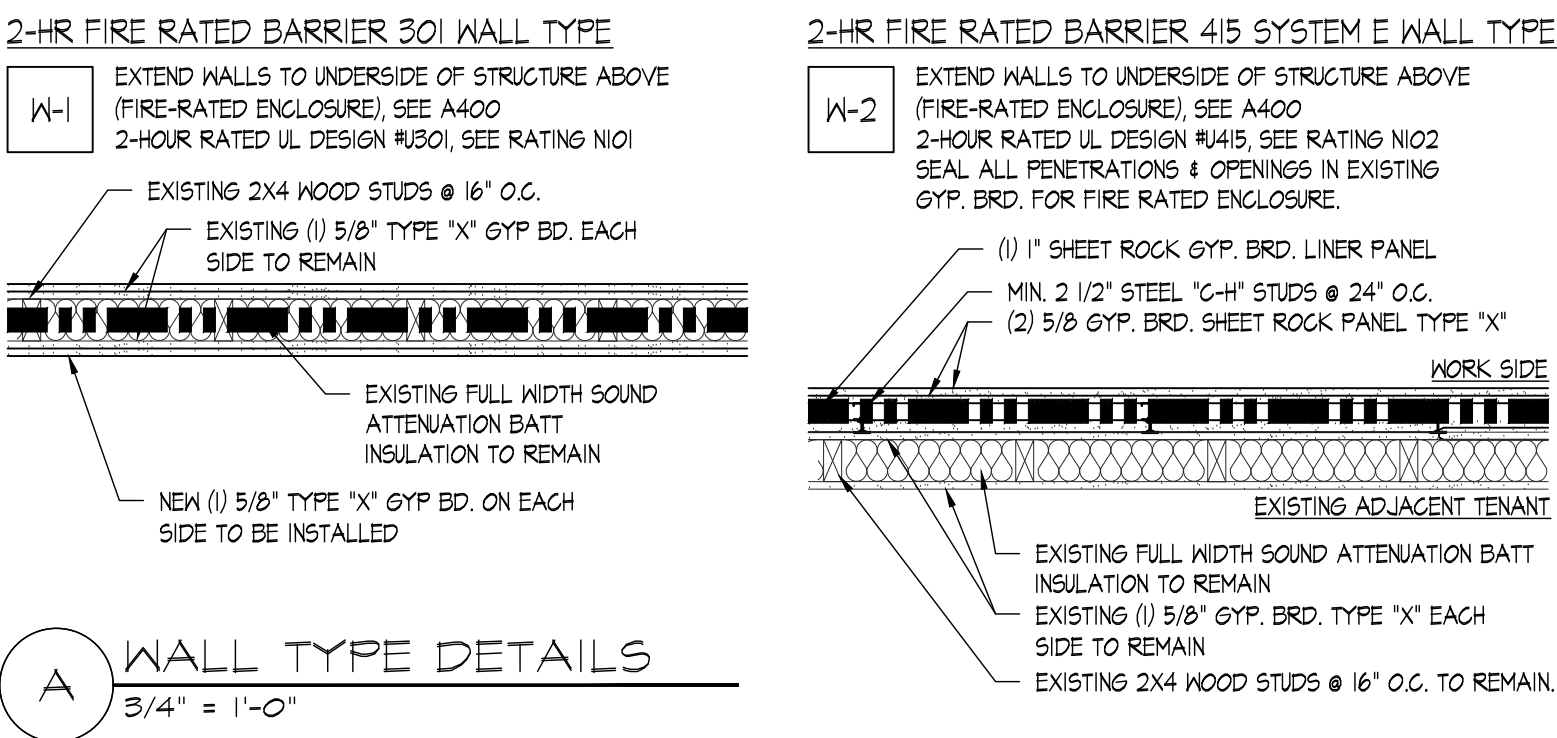
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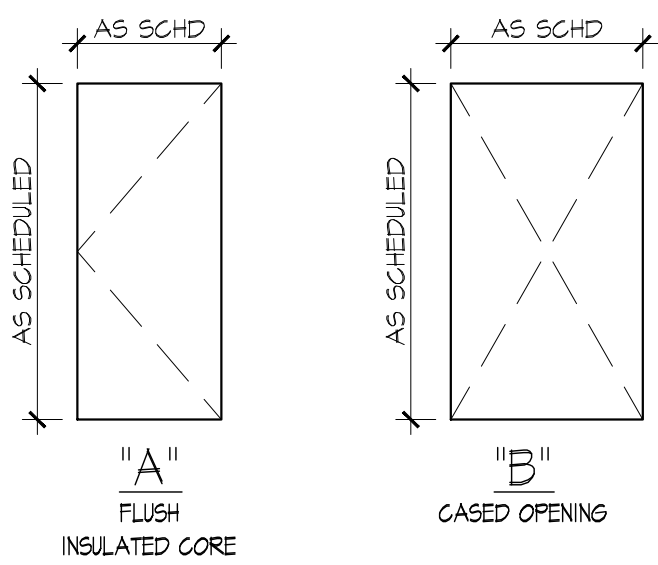
DEMO PLAN



FLOOR PLAN NOTES	
1	ALL WALLS TO REMAIN AS EXISTING CONDITION UNLESS OTHERWISE STATED.
2	REPAIR ALL DAMAGED AREAS WHERE EXISTING WALL OR COMPONENTS WERE REMOVED TO RECEIVE NEW WORK.
3	RELOCATE SINK TO COMPLY WITH ADA CODE.
4	NEW FLOOR TO CEILING DISPLAY SHELVING.
5	NEW COUNTERTOPS @ 34" A.F.F.
6	NEW DUAL HEIGHT WATER FOUNTAIN.
7	NEW FINISHES AND MATERIALS TO BE COORDINATED BY OWNER.
8	FINISH NEW OPENING TO BE 48" CLR.
9	REINSTALL EXISTING CABINETRY.
10	NEW STUDS & SHEET ROCK TO BE INSTALLED AS REQUIRED TO ENSURE WALL FINISH MEASURES 16" TO 18" FROM CENTER LINE OF TOILET.
11	REINSTALL EXISTING GRAB BARS AND INSTALL NEW VERTICAL GRAB BAR ACCORDING TO ADA COMPLIANCE, SEE A500.
12	90 MIN. RATED CEILING ACCESS HATCH ABOVE, SEE A110.
13	EXISTING INTERIOR DOWNSPOUT AND OVERHEAD GUTTER SYSTEM TO REMAIN AND TO RECEIVE 2-HR RATED SLEEVE & APPROPRIATE FIRE PROOFING 2-HR RATED THROUGH FIRE STOP USING 3M FIRE BARRIER RESTRICTING COLLAR.



DOOR SCHEDULE																			
DOOR NUMBER	ROOM	DOOR									HARDWARE SET	FRAME						REMARKS	
		SIZE	TYPE	UL	MATERIAL			FINISH				MATERIAL				FINISH			
					WOOD	METAL	CLAD	ALUMINUM	STAIN	PAINT		BY MFG	UL	METAL	CLAD	ALUMINUM	STAIN		PAINT
		W. X H.																	
1	RETAIL	4'-0" x 7'-0" OPG.	B								●	—						●	GC TO DETERMINE IN FIELD
2	STOCK ROOM ONE	3'-0" x 7'-0"	A	90 MIN		●					●	—	90	●				●	
3	STOCK ROOM TWO	3'-0" x 7'-0"	A	90 MIN		●					●	—	90	●				●	
EX	EXISTING DOOR TO REMAIN																		



GENERAL DOOR NOTES:

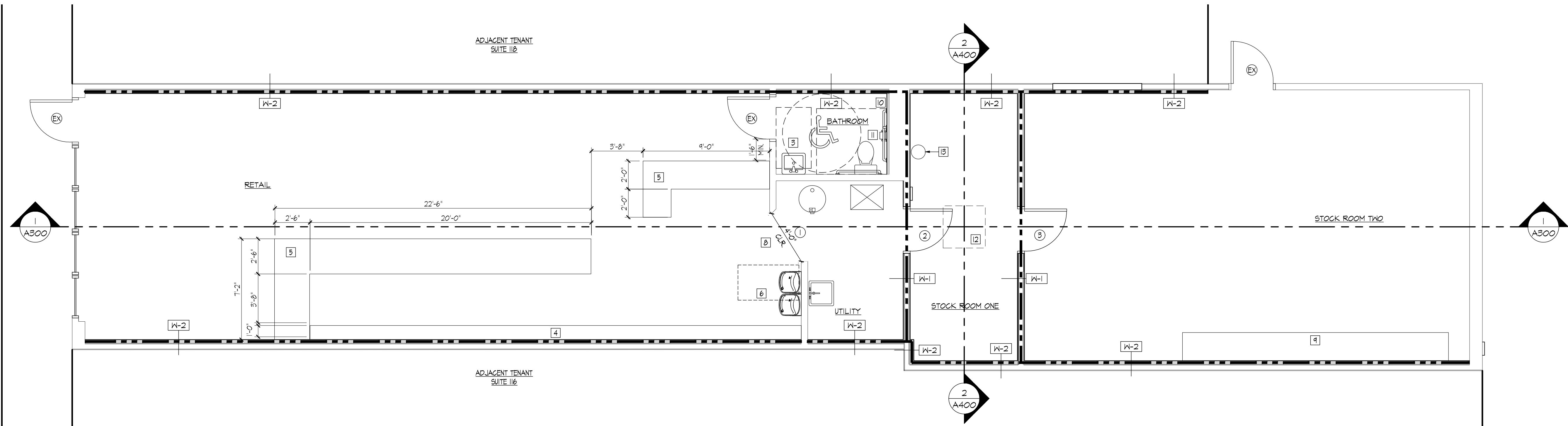
1. ALL DOORS TO HAVE LEVER TYPE ADA APPROVED HANDLES UNLESS NOTED OTHERWISE.

DIAGRAMMATIC HARDWARE SETS:

1. 3 - HINGES  
1 - PASSAGE SET  
1 - LEVER HANDLE SET  
1 - CLOSER  
1 - DOOR SWEEP FOR FIRE RATING

B DOOR ELEVATIONS

1/4" = 1'-0"



1 FLOOR PLAN

1/4" = 1'-0"

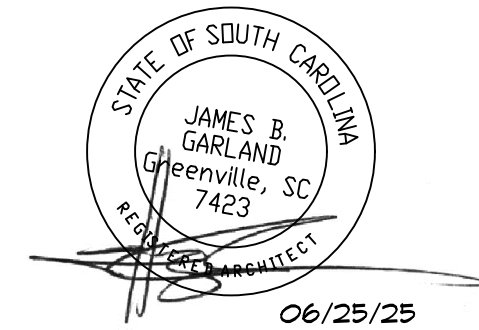
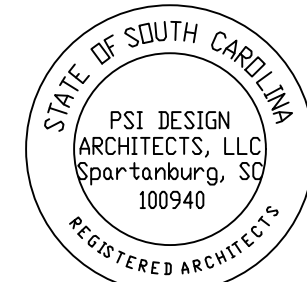
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CHECK	JBG
REVISIONS	
NO.	0
DATE	06/25/25
ISSUED FOR CONSTR.	
NO.	
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SHEET  
**A100**

FLOOR PLAN

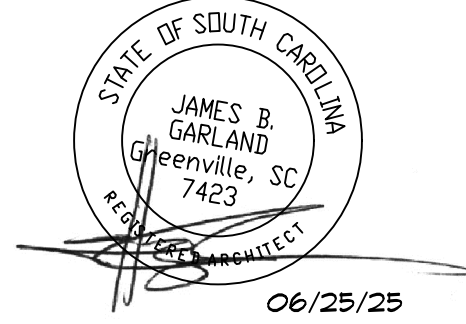
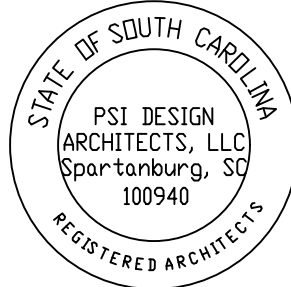




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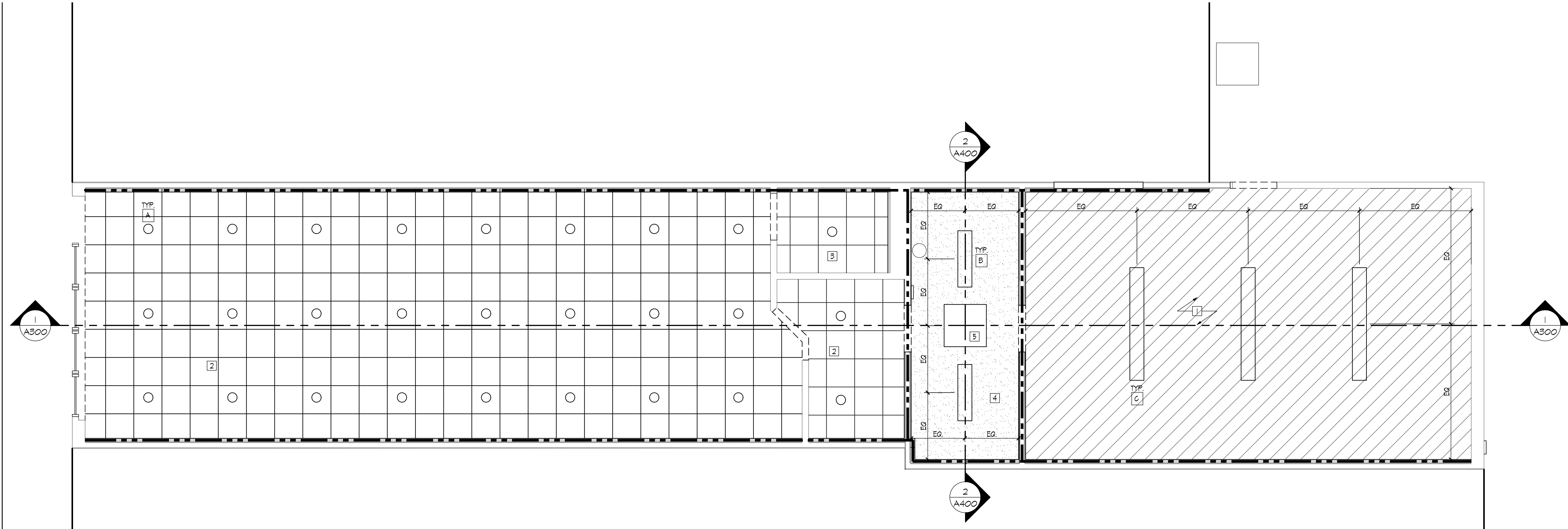
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A110

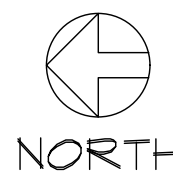
REFLECTED CEILING PLAN

REFLECTED CEILING PLAN NOTES	
1	ALL HATCHED AREAS OPEN TO STRUCTURE ABOVE, REPAIR AS REQUIRED.
2	2x2 ACOUSTICAL TILE/GRID LAY IN CEILING @10'-6" A.F.F.
3	2x2 ACOUSTICAL TILE/GRID LAY IN CEILING @8'-0" A.F.F.
4	CEILING TO BE TWO HOUR FIRE RATED SHAFT WALL @10'-0", SEE N102.
5	90 MIN. FIRE RATED CEILING ACCESS PANEL, BASIS OF DESIGN TO BE "WILLIAMS BROTHER, WB FRU 810 ULTRA SERIES, 36"x36", STEEL, 90 MIN. FIRE RATED ACCESS DOOR, PADDLE LATCH SET, LOCKING, CONTINUOUS PIANO HINGE, INSULATED, SPRING CLOSER" OR SIMILAR.

CEILING LEGEND	
NOTE: LIGHT FIXTURES DEPICTED BELOW ARE FOR LOCATION & REFERENCE PURPOSES ONLY. PROVIDE BLOCKING AS REQUIRED.	
A	LED CAN LIGHT, DETERMINED BY OWNER
B	SURFACE MOUNTED 1X4 STRIP LED LIGHT WITH FIRE RATED JUNCTION BOX
C	1X8 PENDANT STYLE SUSPENDED LED LIGHT



1 REFLECTED CEILING PLAN  
1/4" = 1'-0" 1,455 SQ. FT.



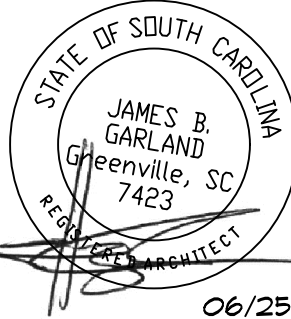
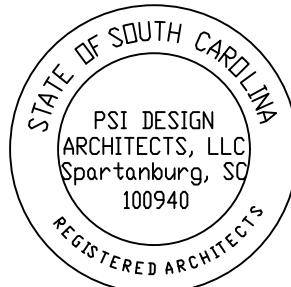




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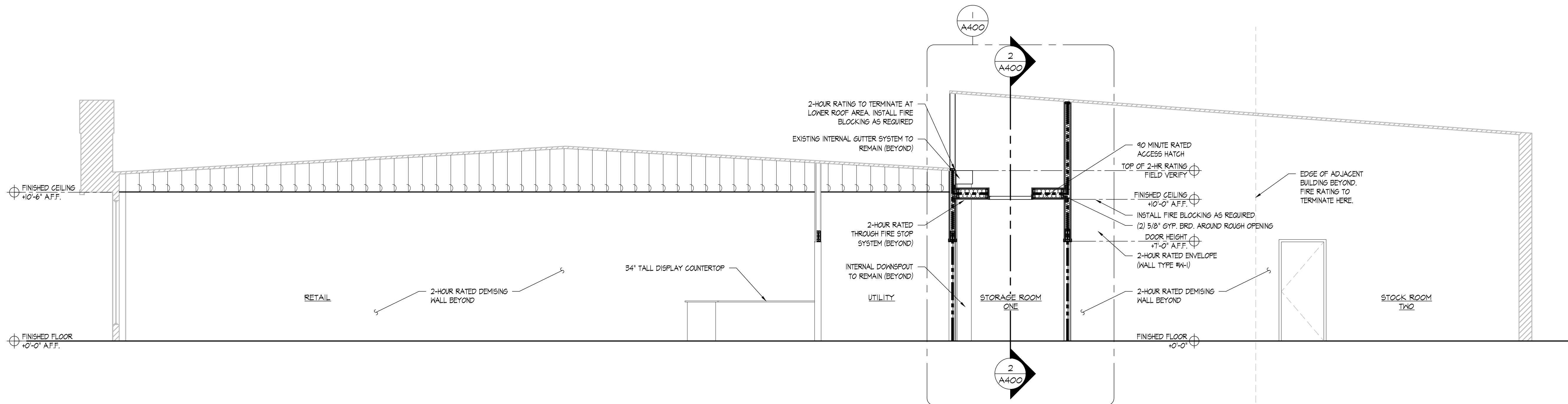
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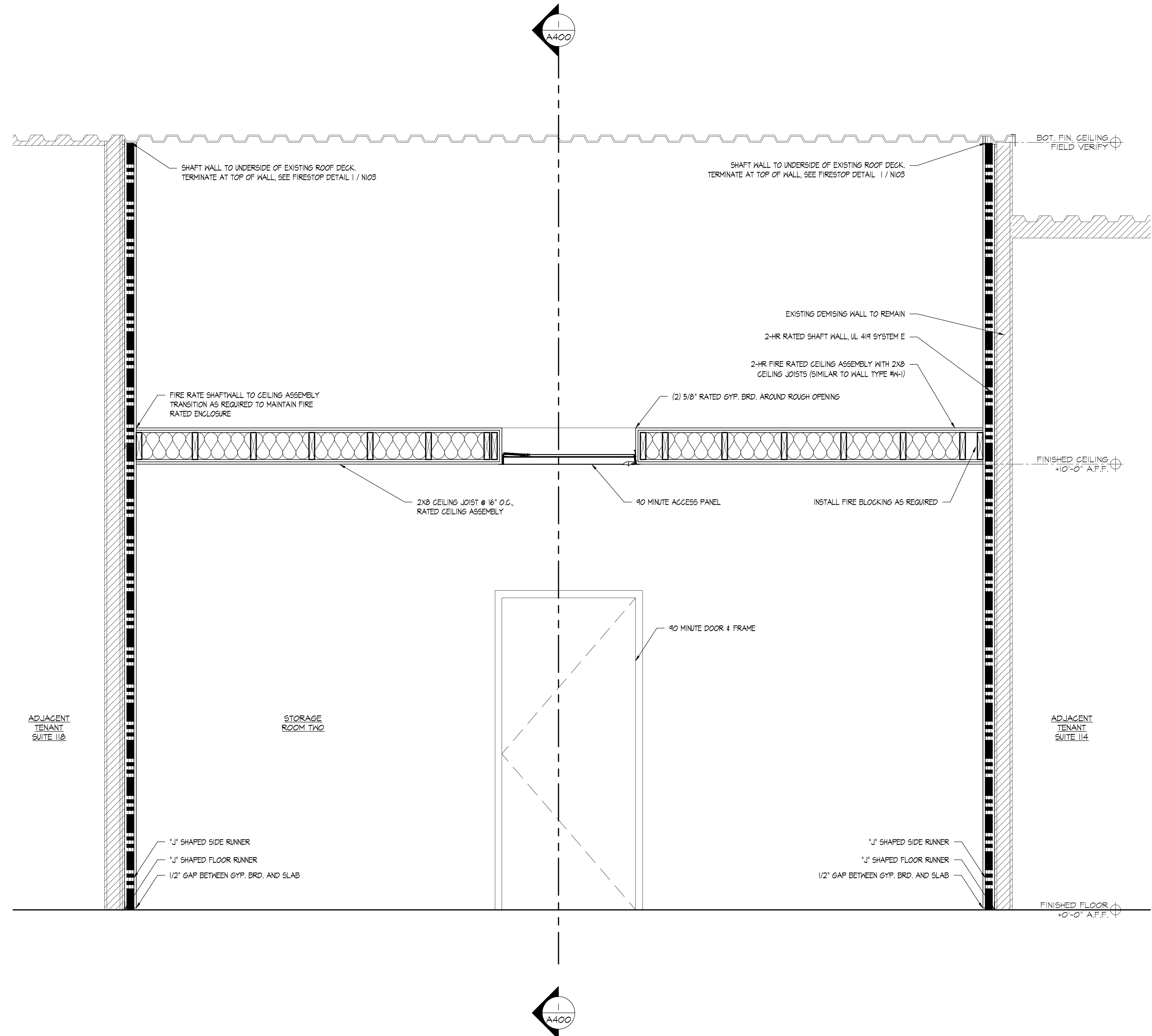
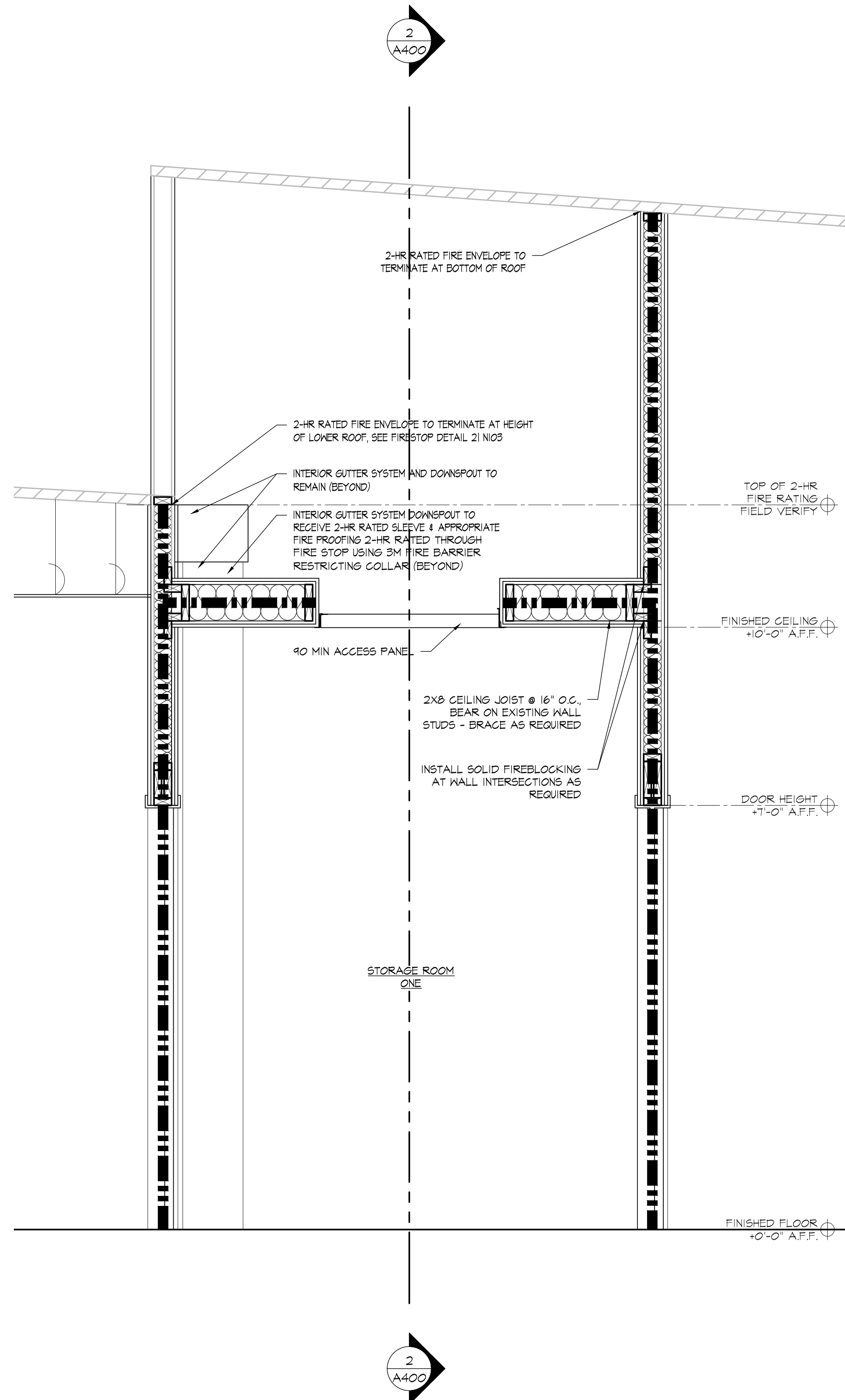
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BUILDING SECTION

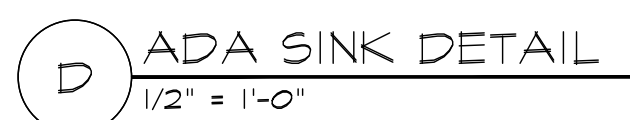
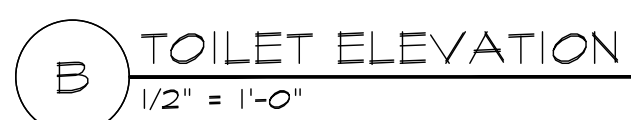


1 BUILDING SECTION  
1/4" = 1'-0"









- 1 STANDARD 30"x48" CLEAR FLOOR SPACE FOR WHEELCHAIR
- 2 56"x60" CLEAR @ WATER CLOSET FREE FROM DOOR SWING
- 3 30"x48" CLEAR FLOOR SPACE @ LAVATORY FOR FORWARD APPROACH
- 4 MINIMUM 52" CLEAR WIDTH PERPENDICULAR TO DOORWAY FOR FRONT APPROACH - PUSH SIDE
- 5 MINIMUM 12" CLEAR WIDTH PARALLEL TO DOORWAY BEYOND LATCH FOR FRONT APPROACH - PUSH SIDE
- 6 MINIMUM 60" CLEAR WIDTH PERPENDICULAR TO DOORWAY FOR FRONT APPROACH - PULL SIDE
- 7 MINIMUM 18" CLEAR WIDTH PARALLEL TO DOORWAY BEYOND LATCH FOR FRONT APPROACH - PULL SIDE
- 8 30"x48" CLEAR FLOOR SPACE @ DRINKING FOUNTAIN FOR FORWARD APPROACH.

TA1 - TOILET TISSUE DISPENSER  
SINGLE ROLL  
SURFACE MOUNTED (NEW)

TA2 - GRAB BAR X 42" (HORIZONTAL) (EXISTING)

TA3 - GRAB BAR X 36" (HORIZONTAL) (EXISTING)

TA4 - GRAB BAR X 18" (VERTICAL) (NEW)

TA5 - PAPER TOWEL DISPENSER  
SURFACE MOUNTED @ +48" AFF. MAX. (NEW)

TA6 - SOAP DISPENSER  
SURFACE MOUNTED @ +44" AFF. MAX. (NEW)

TA7 - ADA MIRROR  
BOTTOM MOUNT EDGE OF REFLECTING  
SURFACE @ +40" AFF. (NEW)

1. SIGNS SHALL COMPLY WITH ADA AND STATE REQUIREMENTS.
  - A. SIGNS SHALL INCLUDE THE FOLLOWING REQUIREMENTS:
    - a. RAISED BRAILLE CHARACTERS / PICTURE GRAPHICS.
    - b. THE CHARACTERS AND BACKGROUND OF SIGNS SHALL BE EGGSHELL, MATTE OR OTHER NON-GLARE FINISH.
    - c. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND.
  - B. LETTERS AND NUMBERS ON SIGNS SHALL HAVE A WIDTH TO HEIGHT RATIO BETWEEN 11 AND 3.5 AND STROKE WIDTH TO HEIGHT RATIO BETWEEN 1.5 AND 1/10.
  - C. SIGN SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR AND LOCATED SO THAT A CLEAR FLOOR AREA 18" (MINIMUM) 18" (MINIMUM), CENTERED ON THE RAISED CHARACTERS IS PROVIDED BEYOND THE ARC OF ANY DOOR SWINGS BETWEEN THE CLOSEST POSITION AND 45 DEGREE OPEN POSITION.
  - D. FINISHING HEIGHT SHALL BE 60" ABOVE THE FINISHED FLOOR TO THE CENTER OF THE SIGN.
  - E. MINIMUM SIZE OF SIGN SHALL BE 6" X 6".
2. PROVIDE SIGNS AT THE RESTROOM ENTRANCES.

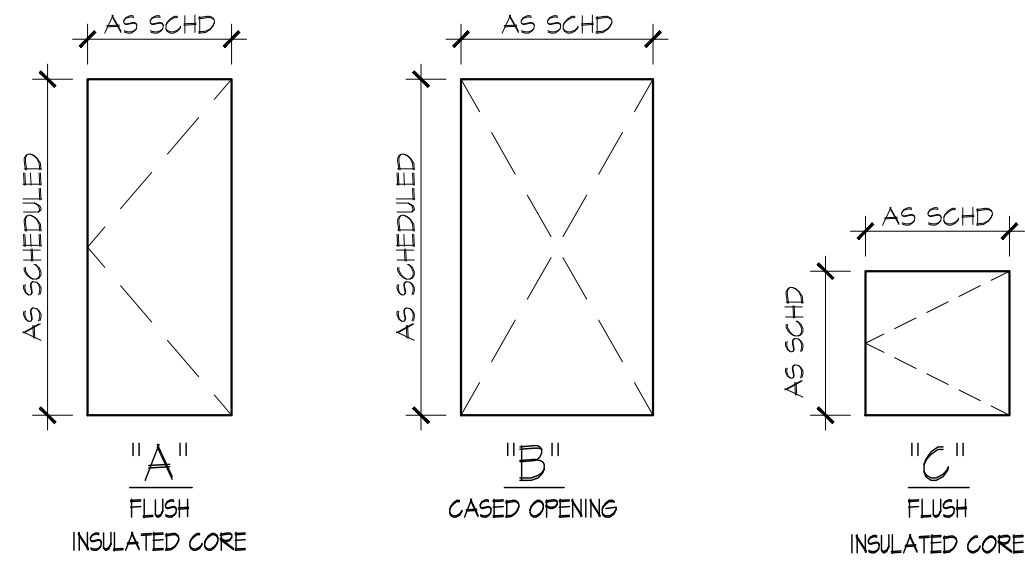
1. ALL PLUMBING FIXTURES TO BE ADA COMPLIANT.
2. ALL FAUCETS SHALL BE LEVER TYPE WRIST BLADES.
3. ALL WATER CLOSETS SHALL HAVE ELONGATED BOWL.
4. ALL BATHROOM PAINT SHALL BE (2) COATS  
SHERWIN-WILLIAMS PRO-INDUSTRIAL PRE CATALYZED  
WATER BASED EPOXY FINISH.
5. COORDINATE ALL SINK, FAUCET, WATER CLOSET, AND  
TOILET ACCESSORY TYPES, MATERIALS, STYLES &  
FINISHES WITH OWNER / INTERIOR DESIGN DRAWINGS.





DOOR SCHEDULE																				
DOOR NUMBER	ROOM	DOOR									HARDWARE SET	FRAME						REMARKS		
		SIZE	TYPE	UL	MATERIAL				FINISH			MATERIAL				FINISH				
					WOOD	METAL	GLAD	ALUMINUM	STAIN	PAINT		BY MFG	UL	METAL	GLAD	ALUMINUM	STAIN		PAINT	BY MFG
1	RETAIL	4'-0" x 7'-0" OPG.	B								●	1							●	GC TO DETERMINE IN FIELD
2	STOCK ROOM ONE	3'-0" x 7'-0"	A	90 MIN		●					●	1	90	●					●	
3	STOCK ROOM TWO	3'-0" x 7'-0"	A	90 MIN		●					●	1	90	●					●	
EX	EXISTING DOOR TO REMAIN																			

6	COORIDOR	3'-0" x 7'-0"	A		●				●		5	●					●	
7	SHIPPING ENT. / EXIT	3'-0" x 8'-0"	B			●				●	1		●				●	
8	GARAGE DOOR	12'-4" x 12'-2"	E			●					4		●				●	INSULATED / ROLL-UP DOOR
9	GARAGE DOOR	24'-0" x 12'-2"	F			●					4		●				●	INSULATED / ROLL-UP DOOR
10	WAREHOUSE BREAKROOM	3'-0" x 7'-0"	A		●				●		2	●					●	
11	DISPLAY AREA BREAKROOM	3'-0" x 7'-0"	A		●				●		2	●					●	
12	OFFICE	3'-0" x 7'-0"	A		●				●		5	●					●	
13	COORIDOR	3'-0" x 7'-0"	A		●				●		3	●					●	
14	OFFICE	3'-0" x 7'-0"	A		●				●		5	●					●	
15	OFFICE	3'-0" x 7'-0"	A		●				●		5	●					●	
16	COORIDOR	3'-0" x 7'-0"	A		●				●		5	●					●	
17	GARAGE DOOR	24'-0" x 12'-2"	F			●					4		●				●	INSULATED / ROLL-UP DOOR
18	GARAGE DOOR	24'-0" x 12'-2"	F			●					4		●				●	INSULATED / ROLL-UP DOOR
19	WAREHOUSE BACK ENT. / EXIT	3'-0" x 7'-0"	C			●				●	1		●				●	



### B DOOR ELEVATIONS

1/4" = 1'-0"

#### GENERAL DOOR NOTES:

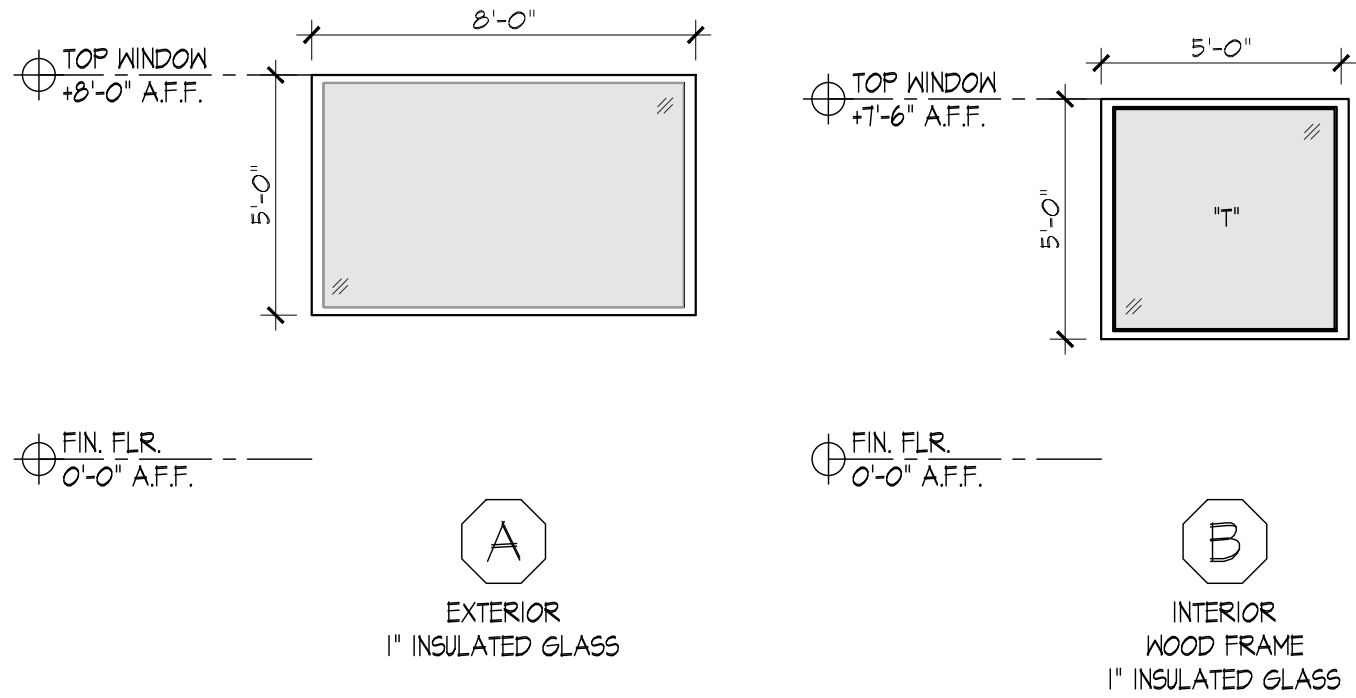
- ALL DOORS TO HAVE LEVER TYPE ADA APPROVED HANDLES UNLESS NOTED OTHERWISE.

#### DIAGRAMMATIC HARDWARE SETS:

- 3 - HINGES  
1 - PASSAGE SET  
1 - LEVER HANDLE SET  
1 - CLOSER  
1 - DOOR SWEEP FOR FIRE RATING
- 1 - GARAGE DOOR SET
- 3 - HINGES  
1 - LOCK SET
- 3 - HINGES  
1 - PRIVACY SET

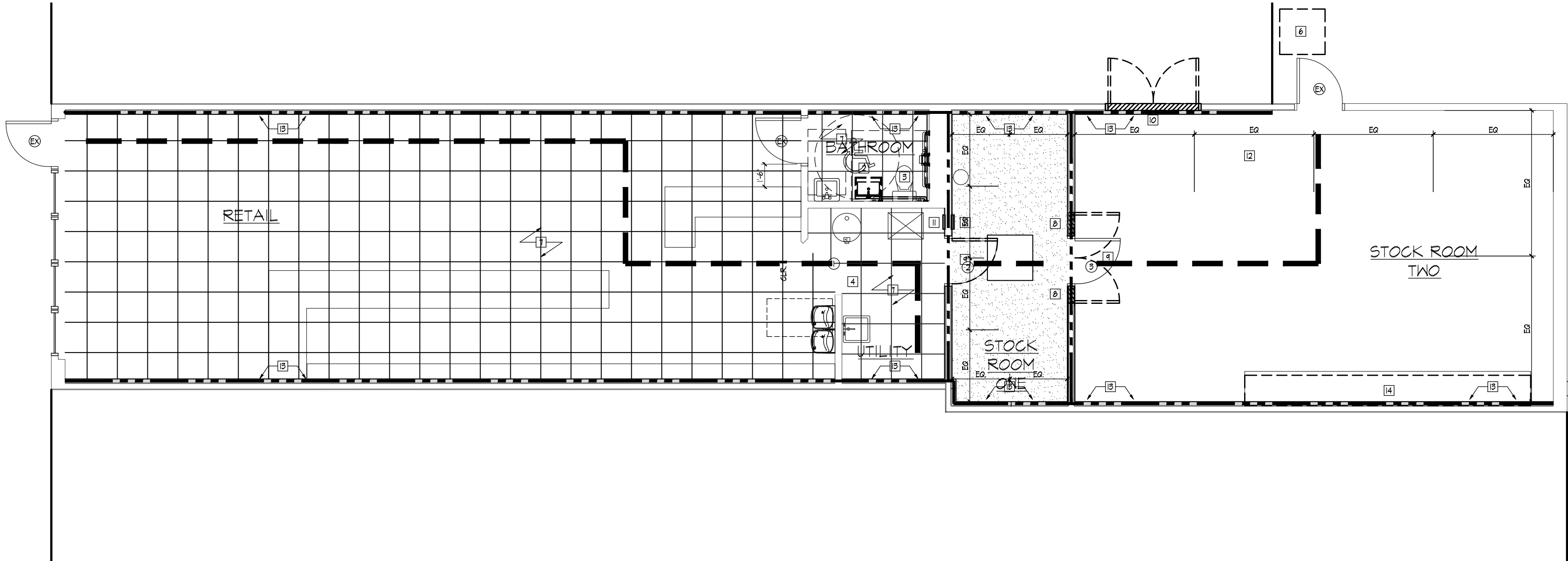
#### GENERAL WINDOW NOTES:

- FRAME WIDTHS & DOOR OPENINGS SHOWN ARE "NOMINAL SIZES", COORDINATE EXTERIOR WINDOWS & DOOR FRAME/SIDELIGHT DIMENSIONS (HEIGHT / WIDTH) WITH SELECTED MANUFACTURER - ADJUST DIMENSIONS ACCORDINGLY.
- "T" - TEMPERED GLASS AS PER CODE REQUIREMENTS.



### A WINDOW ELEVATIONS

1/4" = 1'-0"



### 1 DOOR AND WINDOW REF. PLAN

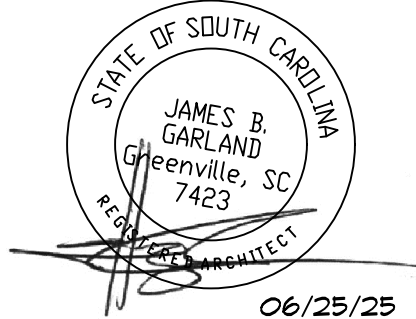
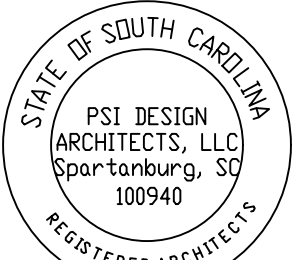
3/16" = 1'-0"



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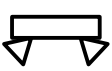
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DOOR & WINDOW SCHEDULE



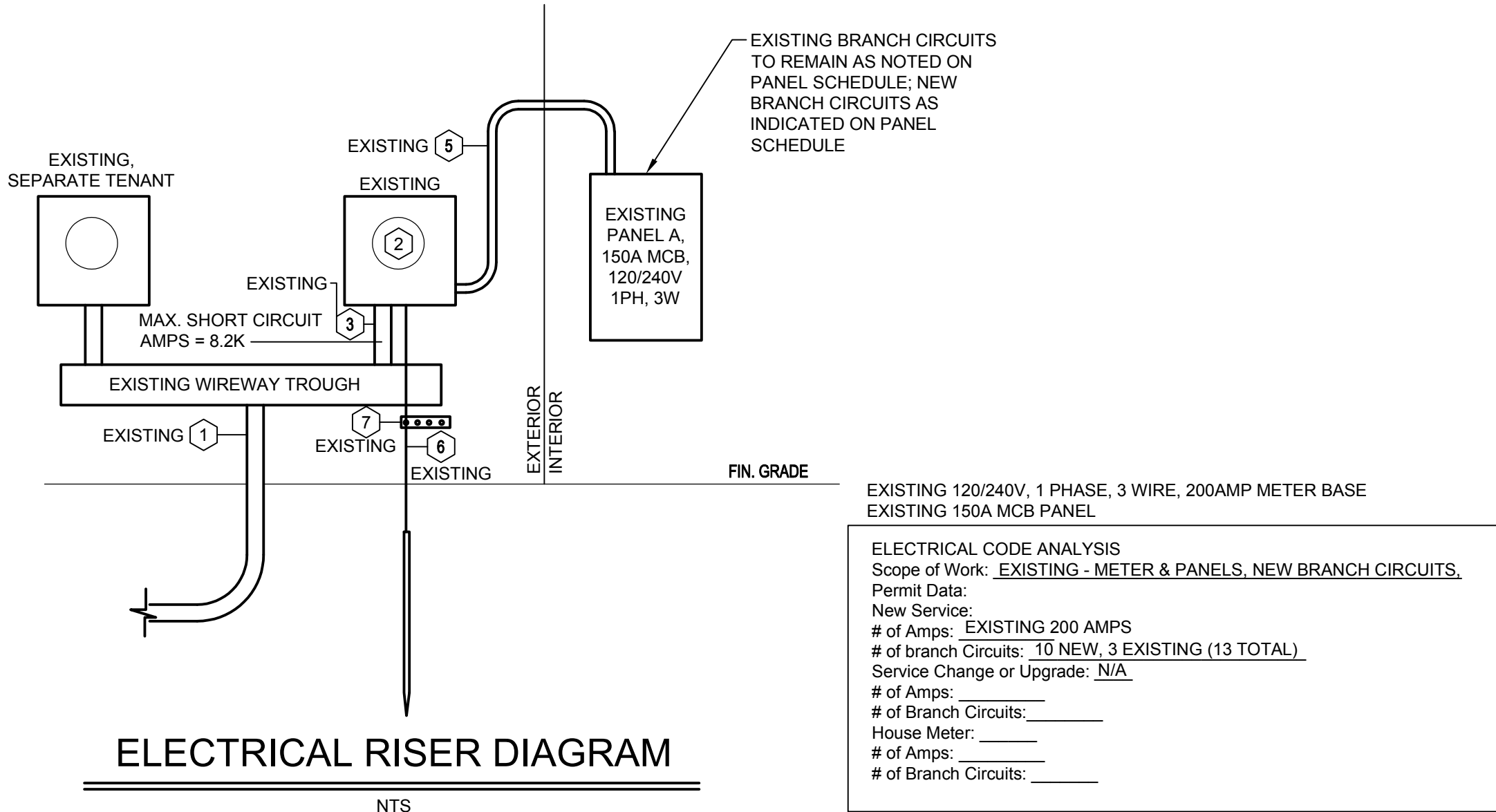
GENERAL SPECIFICATIONS	
1.	ALL ELECTRICAL EQUIPMENT AND FEEDERS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE CODES AND WITH THE EDITION OF THE NEC STATED BELOW.
2.	PROVIDE ADDITIONAL SUPPORT FOR SWITCHES, STARTERS, RACEWAYS AND OTHER ELECTRICAL EQUIPMENT WHEREVER THE BUILDING STRUCTURE IS NOT SUITABLE FOR DIRECT MOUNTING.
3.	DO NOT INSTALL MATERIALS OTHER THAN SPECIFIED EXCEPT FOR ALTERNATES ACCEPTED BY OWNER.
4.	FIRESTOP, DRAFT STOP AND/OR PROTECT THE ANNULAR SPACE AROUND ALL PIPE, TUBE, CONDUIT, WIRE, CABLE, VENT AND DUCT PENETRATION THROUGH WALLS, PARTITIONS, FLOORS, CEILINGS AND ROOFS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (LATEST EDITION) AND UL LISTING REQUIREMENTS.
5.	ALL 600V WIRE SHALL BE STRANDED COPPER SINGLE CONDUCT TYPE THWN INSULATION, AMPACITIES BASED ON NEC TABLE 310.15(5)(16), 60°C FOR CONDUCTORS #1 AND SMALLER, 75°C #10 AND LARGER. METAL CLAD ARMORED CABLE MAY BE USED IN WALL AND ABOVE CEILING FOR #10 AWG CABLE AND SMALLER.
6.	VERIFY CEILING SUSPENSION SYSTEMS IN THE VARIOUS AREAS AND PROVIDE THE PROPER MOUNTING ACCESSORIES, TRIMS, ETC., TO SUIT THE PARTICULAR AREA.
7.	SYMBOLS IN THE LEGENDS ARE APPLICABLE GENERALLY. FOR EXACT REQUIREMENTS REFER TO THE SCHEDULES, LAYOUTS AND DETAILS.
8.	CONFIRM POWER REQUIREMENTS FOR END USER EQUIPMENT BEFORE INSTALLATION. MODIFY BREAKERS/WIRE SIZE AS REQUIRED BEFORE INSTALLATION.
9.	ALL ELECTRICAL DEVICES SHALL BE NEMA 1 INDOORS, NEMA 3R OUTDOORS UNLESS NOTED OTHERWISE.
10.	ALL CONDUIT EXPOSED TO PHYSICAL DAMAGE SHALL BE RIGID GALVANIZED STEEL, ALL OTHER TO BE EMT.
11.	ALL CONDUIT CONCEALED WITHIN INTERIOR METAL-STUD WALLS OR ABOVE SUSPENDED CEILINGS SHALL BE ELECTRICAL METALLIC TUBING (EMT) AND OF A SIZE NO SMALLER THAN 1/2". CONDUIT FILL SHALL BE PER NEC CHAPTER 9 ARTICLE 358 FOR EMT, 40% FILL COLUMN.
12.	PHASE IDENTIFICATION FOR INCOMING FEEDERS TO PANELBOARDS SHALL BE ACCOMPLISHED BY COLOR CODE TAPING AS FOLLOWS: FEEDERS RATED (240V)..... PHASE "A" = BLACK PHASE "B" = RED NEUTRAL = WHITE GROUND = GREEN
13.	ALL POWER CIRCUITS SHALL CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR (BARE OR GREEN COLOR INSULATION) ROUTED IN CONDUIT AND SIZED AS INDICATED ON DRAWINGS.
14.	ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE ENERGY CONSERVATION CODES AS STATED BELOW.
15.	ALL RECESSED FIXTURES SHALL BE TIED OFF TO CEILING STRUCTURE VIA WIRE AT OPPOSITES ENDS TO MEET SEISMIC CRITERIA THIS LOCATION.
16.	SHARING OF NEUTRAL CONDUCTORS IN BRANCH CIRCUITS IS NOT PERMITTED.
17.	ALL PANELBOARDS SHALL BE LABELED BY DESCRIPTIVE TYPE DIRECTORY.
18.	WHERE NOTED, EXHAUST FANS IN TOILETS SHALL BE POWERED VIA LIGHTING CIRCUIT.
19.	WHERE NOTED ON PLANS, PROVIDE TOGGLE SWITCH FOR UC FIXTURES IF REQUIRED.
20.	ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE LABEL-LISTED BY A STATE APPROVED THIRD PARTY LISTING AGENCY.
21.	WHERE NOTED ON PLANS, PROVIDE TOGGLE SWITCH FOR UC FIXTURES IF REQUIRED.
22.	EMERGENCY LIGHTING CIRCUITS SHALL BE CONNECTED TO THE LINE SIDE OF THE CIRCUIT AND SWITCH THAT SERVES THAT PARTICULAR AREA.
23.	ALL RECESSED LUMINAIRES SHALL BE IC RATED AND LABELED AS MEETING ASTM E283. ALL FLUSH OR RECESSED LUMINAIRES SHALL MEET SPECIAL REQUIREMENTS OF NEC 410.110 THRU 410.122.
24.	A TYPE WRITTEN CIRCUIT DIRECTORY SHALL BE PROVIDED FOR EACH PANELBOARD AS TO CLEARLY IDENTIFY ITS SPECIFIC PURPOSE AS REQ'D TO MEET NEC 408.4.
25.	PROVIDE 4'X4'X3/4" PLYWOOD BACKBOARD; PAINTED WHITE WITH NON-FLAMMABLE PAINT, GROUND TO SERVICE; ADJUST REQUIREMENTS PER SYSTEM PROVIDER.
26.	PROVIDE GFI RECEPTACLE AND PROTECTED LED LIGHT SOCKET WITH LED LAMP AT EACH AC UNIT IN ATTIC. LIGHT SWITCH SHALL BE LOCATED NEAR PULL DOWN STAIR IN ATTIC. CONFIRM LOCATION WITH MECHANICAL DRAWINGS.

APPLICABLE CODES
2020 NATIONAL ELECTRICAL CODE
2009 INTERNATIONAL ENERGY CONSERVATION CODE

LUMINAIRE SCHEDULE	
	RECESSED CAN LED LUMINAIRE, 120V, 2500 LUMENS MIN, 30W, DIMMABLE
	SURFACE MOUNT 4' STRIP LED LUMINAIRE WITH INTEGRATED OCCUPANCY SENSOR SWITCH, 120V, 7000 LUMENS MIN, 50W, 4000K CCT, DIMMABLE
	PENDANT MOUNT 8' STRIP LED LUMINAIRE WITH INTEGRATED OCCUPANCY SENSOR SWITCH, 120V, 14000 LUMENS MIN, 90W, 4000K CCT, DIMMABLE
	COMBINATION DUAL HEAD LED EMERGENCY AND EXIT LUMINAIRE WITH BATTERY BACK-UP, ARROW INDICATION AS NOTED ON PLANS; MOUNTED AT 8'-0" AFF; UNSWITCHED LEG OF AREA CIRCUIT, 120V, <5W
	DUAL HEAD REMOTE EXTERIOR EMERGENCY LED LUMINAIRE POWERED & CONTROLLED BY INTERIOR EMERGENCY/EXIT LUMINAIRE (ABOVE FIXTURE WITH BATTERY BACK-UP)
	DUAL HEAD EMERGENCY LED LUMINAIRE WITH BATTERY BACK-UP, MOUNTED AT 8'-0" AFF; UNSWITCHED LEG OF AREA CIRCUIT, 120V, <5W.

ELECTRICAL SYMBOLS	
\$	TOGGLE SWITCH, 120V, FLUSH MOUNTED
\$3	TOGGLE SWITCH, THREE-WAY, 120V
\$4	TOGGLE SWITCH, FOUR-WAY, 120V
\$OS	SWITCH, OCCUPANCY SENSOR, MOTOR RATED FOR EF's, 120V
\$D	DIMMING SWITCH, 120V, 0-10VDC.COMPATIBLE W/FIXTURE; SEPARATE PAIR CABLE FOR CONTROL, LEVITON IP710-LF OR EQUAL
\$DOS	SAME AS AS ABOVE WITH OCCUPANCY SENSOR, 120V
\$3D	SAME BUT 3 WAY
\$FWE	SWITCH FURNISHED WITH EQUIPMENT
\$^	SWITCH LEG - LOWERCASE LETTER
\$F	SWITCH CONTROLLING CEILING FAN, 120V
\$WP	WEATHERPROOF/RESISTANT COVER, EXTRA DUTY, 120V
OS	CEILING MOUNTED OCCUPANCY SENSOR SWITCH, 120V
Ⓡ	INTERMATIC TIMER WITH 20A CONTACTS, QUANTITY AS REQUIRED
Ⓛ	SAFETY DISCONNECT, RATINGS AS INDICATED ON PLANS
ⓁX	MOTOR STARTER/SAFETY DISCONNECT, RATINGS AS INDICATED ON PLANS
#Ⓟ	120V NEMA 5/20R RECEPTACLE, TAMPER RESISTANT TYPE G=GROUND CIRCUIT INTERRUPTER WP=WEATHERPROOF/RESISTANT COVER, EXTRA DUTY Q=QUAD OUTLET WF=WATER FOUNTAIN; COORDINATE W/PLUMBING C=COUNTER; MOUNT ABOVE COUNTER UC=UNDER COUNTER; MOUNT UNDER COUNTER USB=COMBINATION SIMPLEX RECEPT WIHT USB CHARGING PORT GCB=FED FROM GFI CIRCUIT BREAKER TV=FIELD VERIFY MOUNTIGN HEIGHTS WITH OWNER/ARCHITECT
	SAME AS ABOVE, BUT FLOOR MOUNTED VIA FLOOR BOX, JBOX
	240V RECEPTACLE, RATINGS AS SPECIFIED ON PLAN
	JUNCTION BOX
	TELEPHONE/DATA DROP; CAT. 6 CABLE BACK TO TEL. SERVICE; COORDINATE LOCATIONS WITH OWNER, D=DATA, AV
	SAME AS ABOVE BUT FLOOR MOUNTED; MEDIA CONNECTIONS TO TV IN CONFERENCE ROOMS

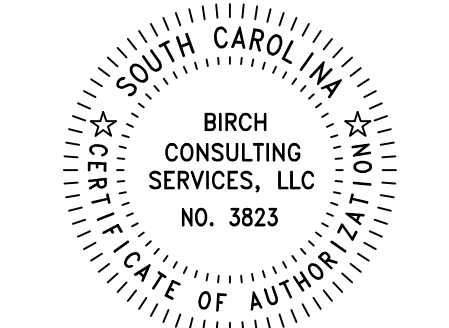
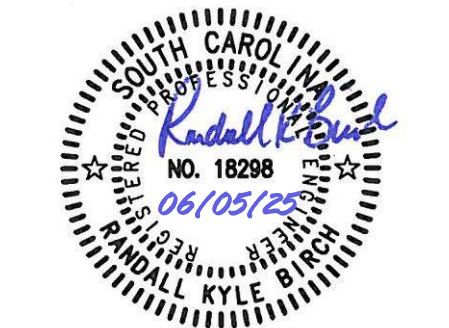
PANELBOARD				SCHEDULE				PANEL "A"			
120/240V				VOLTS				1    3    W			
150				AMP MAINS:				<input type="checkbox"/> LUGS BREAKER    150    AMPS.			
BRANCH BREAKERS											
ITEM	WIRE SIZE	AMP RATING	CR. NO.	PHASE	LOADING (KVA)	CR. NO.	AMP RATING	WIRE SIZE	ITEM		
LIGHTING	2#12,#12G	20	1	1.2	5.0	2	2	60	EXISTING	BLOWER UNIT	
J-BOX - EXTERIOR SIGN VIA TIMER	2#12,#12G	20	1	3	1.0	5.0	4	2	30	EXISTING	CONDENSING UNIT
RECEPTS	2#12,#12G	20	1	5	1.0	2.3	6	2	30	EXISTING	SPARE
RECEPTS	2#12,#12G	20	1	7	1.0	2.3	8	10	1	20	EXISTING
RECEPTS	2#12,#12G	20	1	9	1.0	0.4	10	1	20	EXISTING	WATER HEATER CONTORLS
RECEPTS	2#12,#12G	20	1	11	1.0	0.4	12	1	20	SPARE	SPARE
RECEPTS	2#12,#12G	20	1	13	1.0	0.4	14	1	20	SPARE	SPARE
QUAD RECEPT @ TELEBOARD	2#12,#12G	20	1	15	0.4	0.4	16	1	20	SPARE	SPARE
SPARE		100	2	17	2.5	2.5	18	2	30	2#10,#10G	WATER HEATER D/S
SPACE			1	21			22	1			SPACE
SPACE			1	23			24	1			SPACE
SPACE			1	25			26	1			SPACE
SPACE			1	27			28	1			SPACE
RECEPT - WATER FOUNTAIN	2#12,#12G	20-G	1	29			30	1			SPACE
				31			32				
				33			34				
				35			36				
				37			38				
				39			40				
				41			42				
*G* REPRESENTS GROUND FAULT CIRCUIT BREAKER				4.2	9.8	3.4	10.2	TOTAL CONN. LOAD    27.6    KVA			
				14.0		13.6					
INTEGRATED EQUIPMENT RATING				10,000				AMPS RMS. SYM.			



ELECTRICAL RISER NOTES	
1	EXISTING UTILITY SERVICE; UNDERGROUND FEEDER; NOTE BELOW
2	EXISTING 200 AMP METER BASE, 240/120V, 1 PHASE, 3 WIRE
3	EXISTING 3#1/0, 1.5"
4	PRIMARY DISCONNECT, 200A, NEMA 3R, SE RATED, FUSED AT 200A, NEUTRAL TO GROUND LUG
5	EXISTING 3#1/0, #6GND, 1.5"
6	EXISTING 1#4 TO 2-10" GROUND RODS TO FOUNDATION REBAR, 20' CONT., TO METAL WATER PIPE
7	EXISTING INTERSYSTEM BONDING BAR

EXISTING SERVICE RE-CONNECTION SHALL BE COORDINATED WITH THE LOCAL UTILITY; CONFIRM REQUIREMENTS

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Uplift For:  
**Clemson Vape Shop**  
1376 Tiger Boulevard Suite 116 Clemson,  
SC 29631

DATE 06/05/25  
SCALE AS NOTED  
JOB NO. 25 - 1526  
DRAWN RKB  
CHECK RKB  
REVISIONS  
NO. 0 DATE 06/05/25 FOR PERMIT  
NO. DATE  
NO. DATE  
NO. DATE

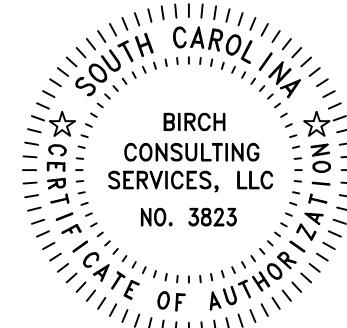




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E1

FLOOR PLAN



COMcheck Software Version 4.1.5.5  
Interior Lighting Compliance Certificate

Section 1: Project Information

Energy Code: 2009 IECC  
Project Title: Clemson Vape Shop  
Project Type: Alteration

Construction Site:  
1376 Tiger Boulevard  
Suite 116  
Clemson, SC 29631

Owner/Agent:

Designer/Contractor:  
Randall Birch  
BCS, LLC  
408 Ashley Oaks Drive  
Moore, SC 29369  
864-621-5868  
rbirch9@gmail.com

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts (B x C)
Retail	1955	1.5	2933
Total Allowed Watts =			2933

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Retail (1955 sq.ft.)				
LED 1: Can LED: Other:	1	27	30	810
LED 2: 4' Strip LED: Other:	1	2	50	100
LED 3: 8' Strip LED: Other:	1	3	90	270
Total Proposed Watts =				1180

Section 4: Requirements Checklist

Interior Lighting PASSES

Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
2933	1180	PASSES

Controls, Switching, and Wiring:

2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.  
3. Daylight zones have individual lighting controls independent from that of the general area lighting.

Exceptions:

- Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.  
Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.

4. Independent controls for each space (switch/occupancy sensor).

Project Title: Clemson Vape Shop  
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Report date: 06/05/25  
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Exceptions:

- Areas designated as security or emergency areas that must be continuously illuminated.  
Lighting in stairways or corridors that are elements of the means of egress.

5. Master switch at entry to hotel/motel guest room.  
6. Individual dwelling units separately metered.  
7. Medical task lighting or arthistory display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting.  
8. Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independently of other lamps, or switching each luminaire or each lamp.

Exceptions:

- Only one luminaire in space.  
An occupant-sensing device controls the area.  
The area is a corridor, storeroom, restroom, public lobby or sleeping unit.  
Areas that use less than 0.8 Watts/sq.ft.  
9. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

Exceptions:

- Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security.  
10. Photocell/astonomical time switch on exterior lights.

Exceptions:

- Lighting intended for 24 hour use.  
11. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

Exceptions:

- Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Section 5: Compliance Statement

Compliance Statement: The proposed lighting alteration project represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting alteration project has been designed to meet the 2009 IECC, Chapter 8, requirements in COMcheck Version 4.1.5.5 and to comply with the mandatory requirements in the Requirements Checklist.

Randall K. Birch - Engineer

Signature

06/05/25

Name - Title

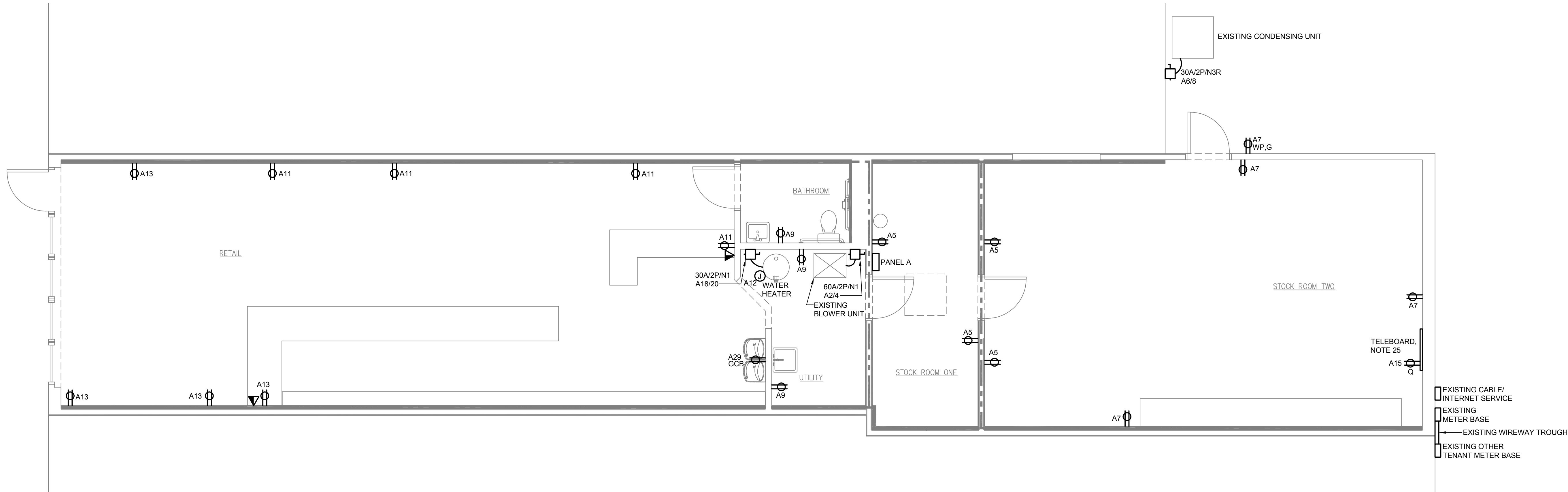
Signature

Date

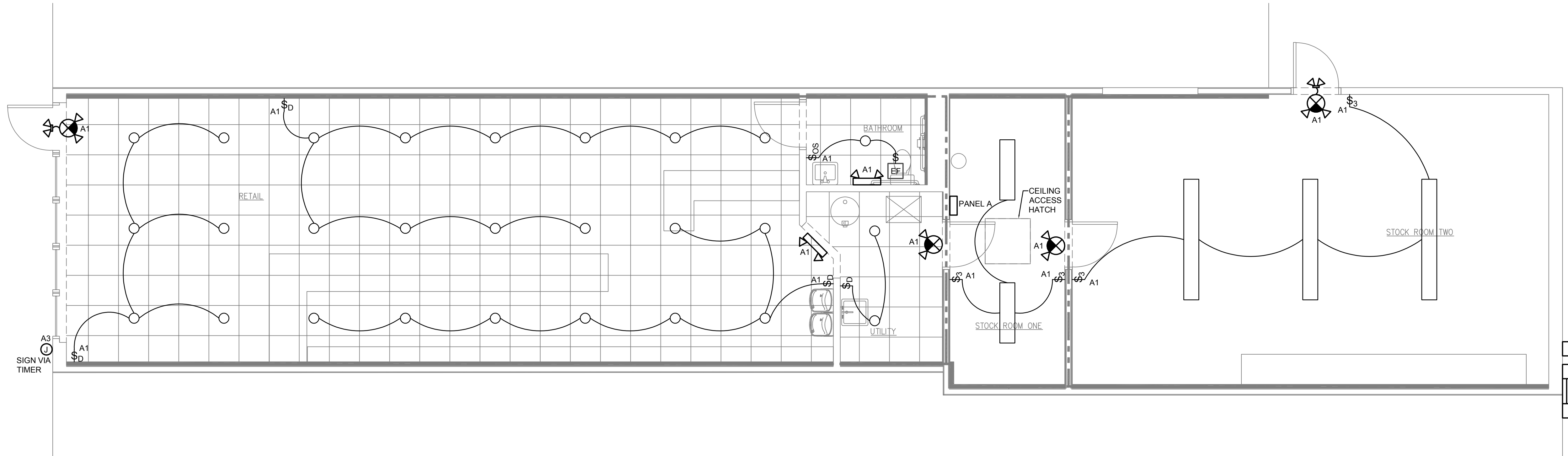
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Data filename: Untitled.cck

Report date: 06/05/25  
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1 POWER & SYSTEMS PLAN  
1/4" = 1'-0" 1,955 SQ. FT.



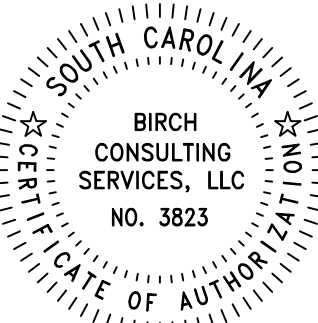
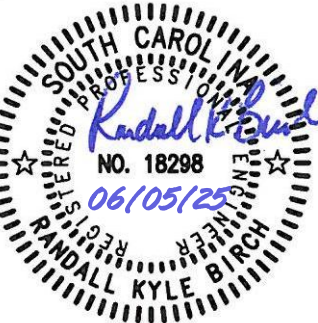
2 LIGHTING PLAN  
1/4" = 1'-0" 1,955 SQ. FT.



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FLOOR PLAN