

# WILLOW WORKS

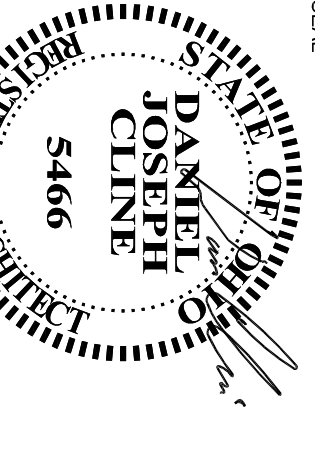
PROJECT NO.  
**40687.00**

ISSUE  
**DATE**

REVIEW SET  
**03.23.2017**

BID / PERMIT SET  
**04.07.2017**

REV #1  
**08.09.2017**



SHEET TITLE  
**COVER SHEET**

SHEET NO.  
**G100**

# WILLOW WORKS AUDUBON PARK OFFICE CENTER

528 MAIER PLACE  
COLUMBUS, OH, 43215

### ABBREVIATIONS

A.D.A.	- AMERICAN DISABILITY ACT	M.D.S.	- MEDIUM DENSITY FIBERBOARD
A.F.F.	- ARCHITECT FINISH FLOOR	M.F.C.	- MEDIUM DENSITY OVERLAY
ALUM.	- ALUMINUM	M.F.	- MANUFACTURER
APROX.	- APPROXIMATE	MAX.	- MAXIMUM
BATT.	- BATTERY	MISC.	- MISCELLANEOUS
BD.	- BOARD	M.O.	- MASONRY OPENING
B.O.	- BOTTOM	M.P.	- MECHANICAL PART
BTM.	- BOTTOM	M.T.	- METAL
C.A.	- CEILING	N.T.S.	- NOT TO SCALE
CONC.	- CONCRETE	O.C.	- ON CENTER
CONC.	- CONSTRUCTION REPRESENTATIVE	P.C.	- PLUMBING CONTRACTOR
CONC.	- CONSTRUCTION REPRESENTATIVE	P.L.	- PLASTER
DEC.	- DEGRESS	PL.	- PLUMBING
DIA.	- DIAMETER	P.W.	- PLUMBING
E.A.	- EACH	R.	- RADIUS
E.C.	- ELECTRICAL CONTRACTOR	REQ.	- REQUIRED
ELEV.	- ELEVATION	R.O.	- ROUND OPENING
EQUIP.	- EQUIPMENT	SECT.	- SECTION
EXST.	- EXISTING	SQ.FT.	- SQUARE FEET
EXT.	- EXTENSION	SH.	- SHEATHING
FIN.	- FINISHED	SH.	- SHEATHING
F.L.	- FLOOR	SH.	- SHEATHING
F.P.	- FIBERGLASS REINFORCED PANEL	S.S.	- STAINLESS STEEL
F.R.T.	- FIRE RESISTANT TREATED	STL.	- STEEL
FTG.	- FOOTING	TEMP.	- TEMPERED
G.A.V.	- GALVANIZED	T&G	- TONGUE AND GROOVE
GEN.	- GENERAL CONTRACTOR	T.P.	- TUBE
G.P.	- GYPSUM	T.S.	- TUBES
H.C.	- HANDICAP	U.N.O.	- UNLESS NOTED OTHERWISE
HGT.	- HEIGHT	V.C.T.	- VERIFY IN FIELD
H.M.	- HARDWARE	V.F.	- VERIFY IN FIELD
INSUL.	- INSULATION	W/O	- WITHOUT
LAM.	- LAMINATE	W/O	- WITHOUT
LAV.	- LAVATORY	W/O	- WITHOUT

### SYMBOLS

- ① - CODED NOTE
- ② - EQUIPMENT NOTE
- ③ - DOOR NUMBER
- ④ - WALL TYPE
- P-1 - FINISH TAG
- ▲ - ELEVATION
- ▲ - SECTION
- ▲ - DETAIL

### PROJECT DATA

- APPLICABLE CODES:  
2011 OHIO BUILDING CODE WITH LATEST AMENDMENTS  
2011 OHIO PLUMBING CODE  
2011 OHIO MECHANICAL CODE  
2014 NATIONAL ELECTRICAL CODE  
2009 INTERNATIONAL FUEL GAS CODE  
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN  
2009 INTERNATIONAL ENERGY CONSERVATION CODE
- GENERAL DESCRIPTION OF WORK:  
THE PROJECT CONSISTS OF A TENANT BUILD-OUT OF MEZZANINE IN AN EXISTING 200,512 SF OFFICE/ WAREHOUSE BUILDING. NEW HVAC, LIGHTING, DRYWALL, AND PAINTING SERVICES WILL BE PROVIDED BY THE TENANT.
- USE AND OCCUPANCY CLASSIFICATION (CHAPTER 3):  
1. EXISTING CLASSIFICATION: B & S1 OFFICE WAREHOUSE (NO CHANGE)
- CONSTRUCTION TYPES (CHAPTER 6):  
1. EXISTING BUILDING: ONE STORY UNLIMITED AREA TYPE II B FULLY SPRINKLERED (NO CHANGE)
- MEANS OF EGRESS:  
1. MAXIMUM FIRST FLOOR AREA: 7,750/100 = 78  
A. 2,250 SF S-1 BUSINESS  
2. MAXIMUM MEZZANINE FLOOR AREA: 2,250/300 = 8  
C. 2,250 SF S-7 BUSINESS  
TOTAL = 111 OCCUPANTS
3. EGRESS PER OCCUPANT SERVED IN INCHES:  
EXIT DOORS REQUIRED = 111 x 2 = 22 2/4 = 1  
EMITS PROVIDED = 2 (MIN.)  
EMITS PROVIDED = 2 (MIN.)
4. REAR EXIT- EXTENDING EXISTING 1-HOUR FULLY SPRINKLER CORRIDOR APPROXIMATELY 45' TO CONNECT WITH NEW SPACE
- ACCESS: TRAVEL DISTANCE  
W/O 1.1: ASSESS WITH MINIMUM CLEAR WIDTH OF EXIT DOORS = 32"
- PLUMBING CODE DATA:  
SEPARATE FACILITIES ARE REQUIRED: 111 OCCUPANTS = 1 MEN - 1 WOMEN  
WATER COSETS: 1 WOMEN / 1 MEN  
DRINKING FOUNTAINS: BOTTLED WATER BY TENANT SERVICE SINK.

### CONTACT LIST

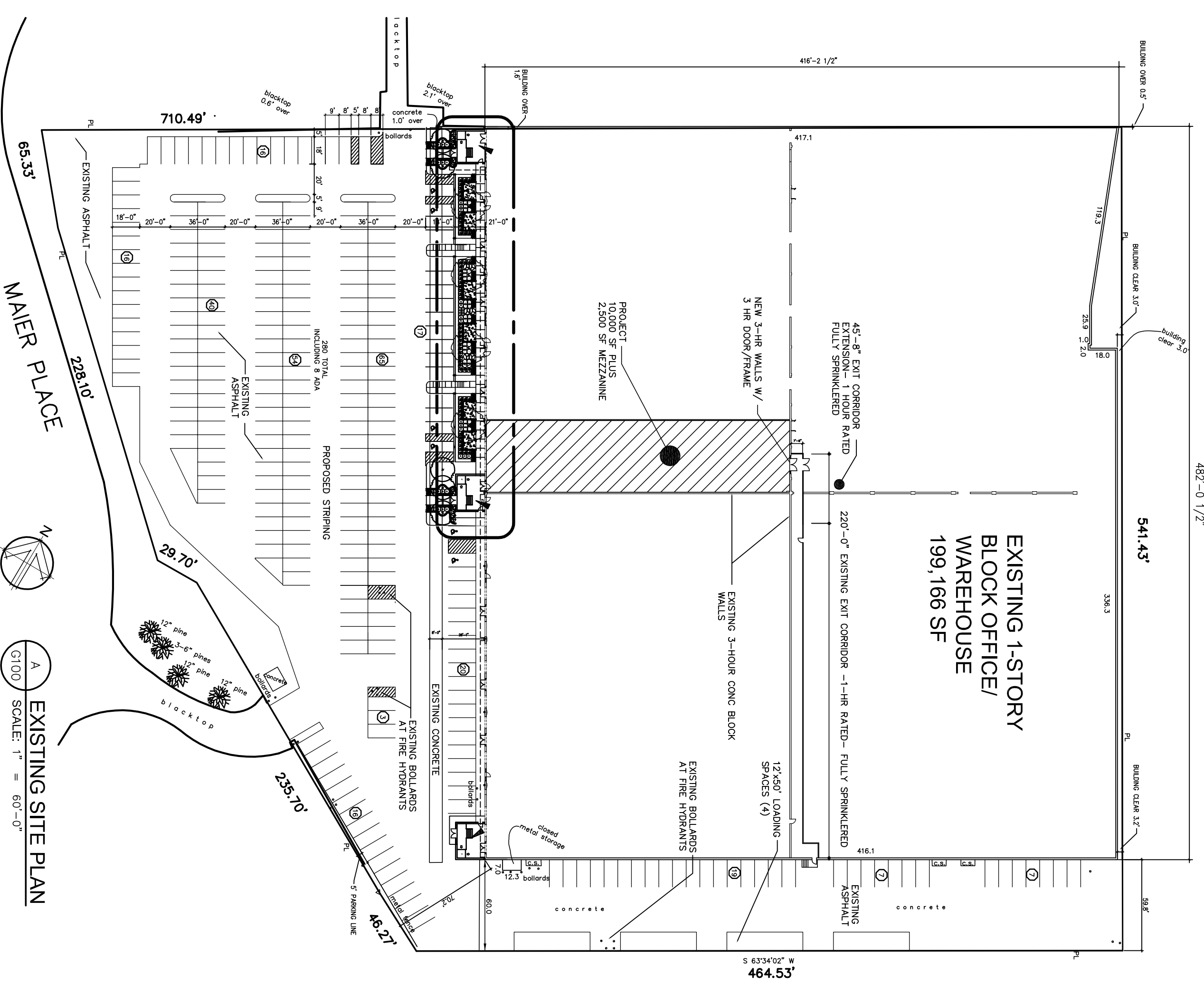
<b>LANDLORD</b>	<b>ARCHITECT</b>
EVY RAINOFF COMPANY 53 NORTH THIRD STREET COLUMBUS, OHIO 43215 PHONE: 614.462.7288 FAX: 614.462.7289 CONTACT: DAVID BRIDGEMAN	DANIEL CLINE AND ASSOCIATES 1125 PARKVIEW AVENUE COLUMBUS, OHIO 43209 PHONE: 614.465.9400 FAX: 614.461.1305 CONTACT: JOHN CHOP
<b>MEP ENGINEERING</b>	
EM ENGINEERING GROUP 625 EAST NORTH BROADWAY COLUMBUS, OHIO 43214 PHONE: 614.461.1305 FAX: 614.461.1305 CONTACT: DAVID W. MULLEN	
<b>TENANT</b>	
OHIO WILLOW WOOD 1541 SCOTO DRIVE ROAD MOUNT STERLING, OHIO 43143 PHONE: 614.461.1305 CONTACT: JOHN CHOP	

### GENERAL NOTES

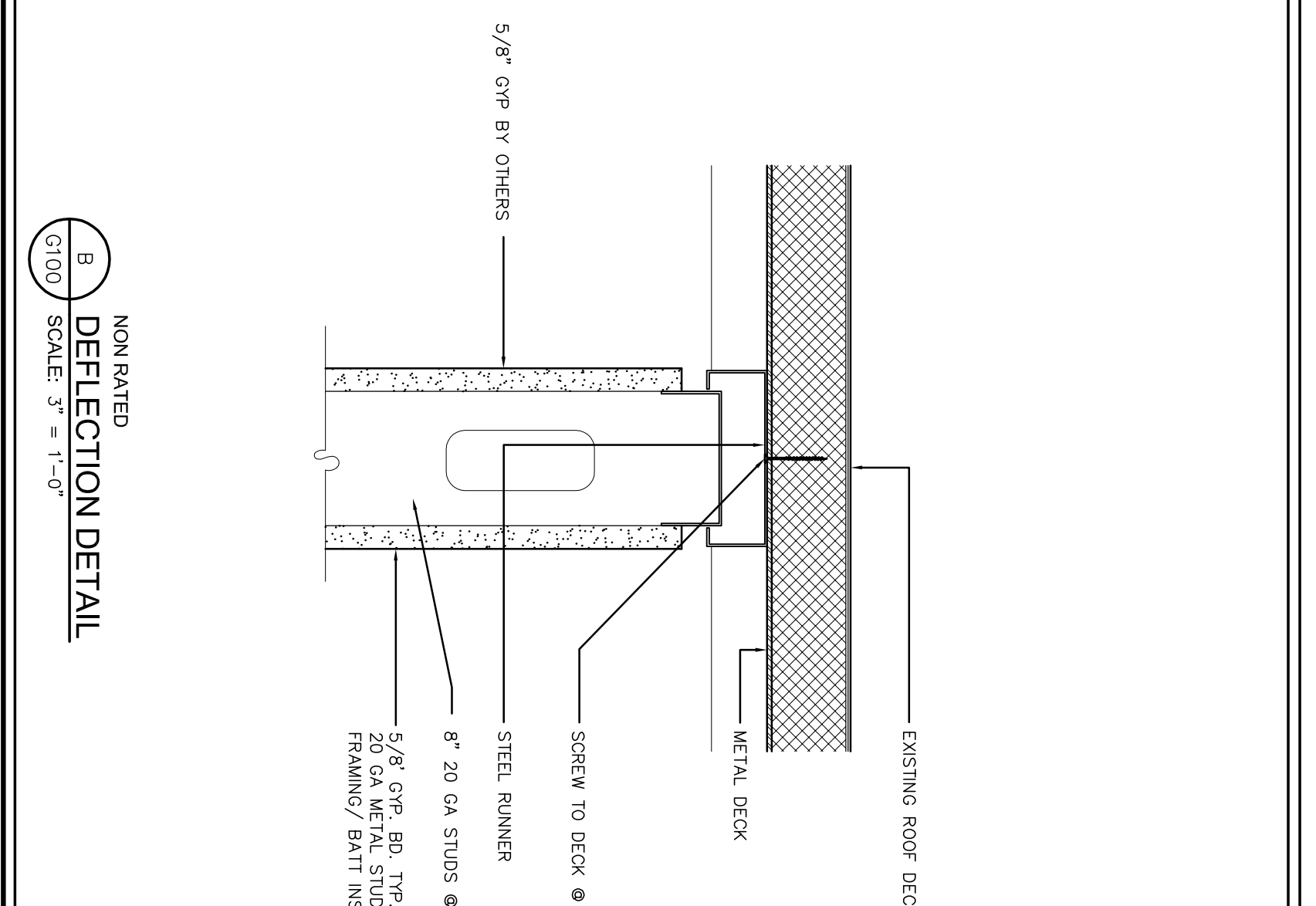
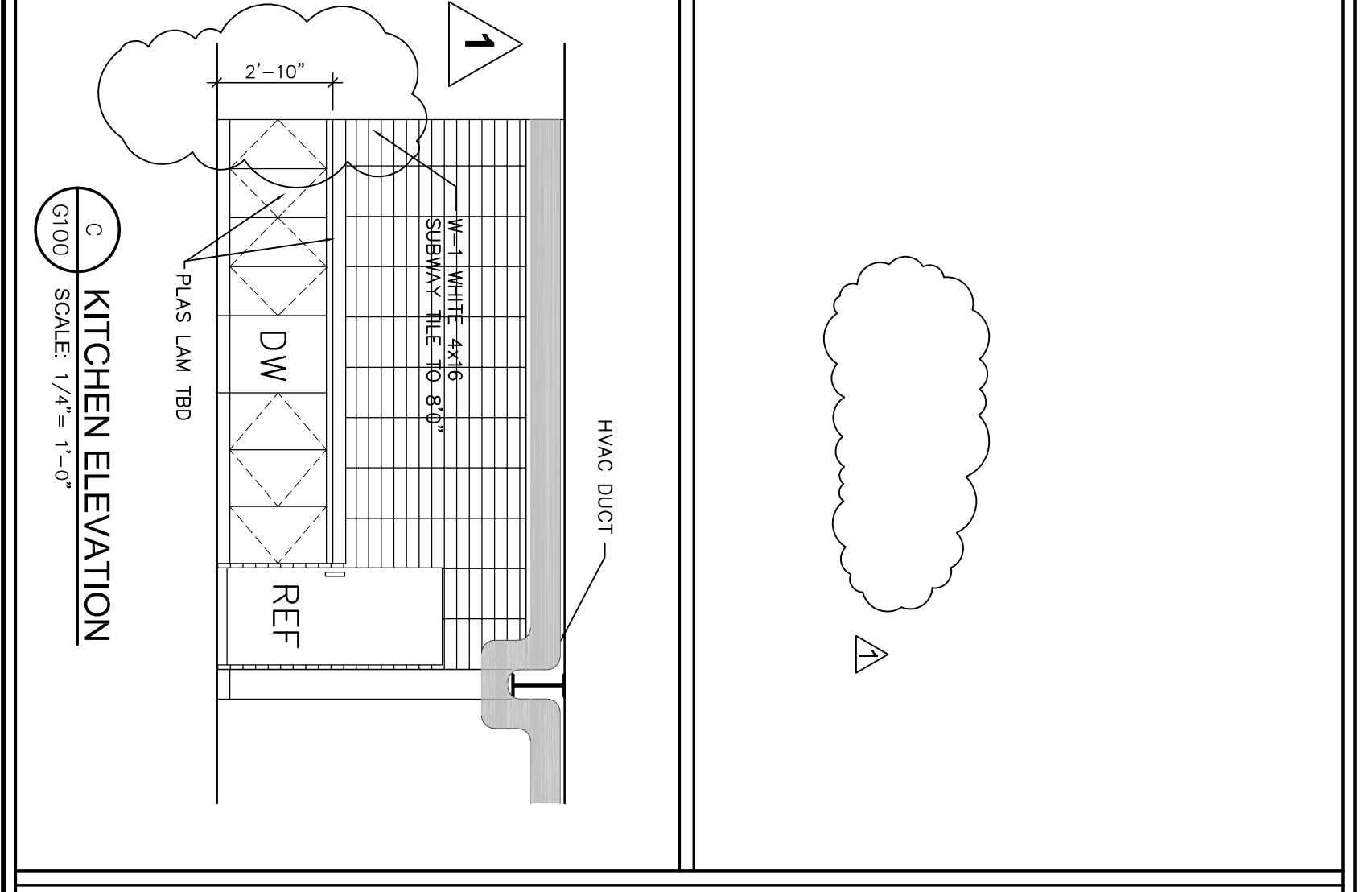
- ALL BUILDING AND CONSTRUCTION IS ADMINISTERED BY OWNERS CONSTRUCTION REPRESENTATIVE.
- ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE BUILDING AND LOCAL REQUIREMENTS OF ALL GOVERNING AUTHORITIES. ALL REQUIRED CITY / COUNTY / STATE PERMITS SHALL BE ACQUIRED AND PAID FOR BY THE OWNER.
- APPROVED PLANS SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED FOR ANY OTHER PROJECT. ALL PERMITS SHALL BE OBTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDUMS AND CHANGE ORDERS IN GOOD CONDITION ON THE PREMISES AT ALL TIMES.
- THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO ANY WORK AND SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS INCLUDING THOSE FURNISHED BY SUBCONTRACTORS AND OWNER. DISCREPANCIES BETWEEN PORTIONS OF THE CONTRACT DOCUMENTS ARE NOT TO BE CONSIDERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS INCLUDING THOSE FURNISHED BY SUBCONTRACTORS AND OWNER. ANY SUCH DISCREPANCIES PRIOR TO COMMENCING WORK.
- STARTED DIMENSIONS, TIME DIFFERENCES, OVER SPANS, DO NOT SCALE DRAWINGS TO DETERMINE LOCATIONS. THE ARCHITECT SHALL BE NOTIFIED IF ANY DISCREPANCIES OCCUR PRIOR TO COMMENCING WORK.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS TO LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIR OR CONSTRUCTION WITH THE EXECUTION OF THE WORK.
- REPAIRS WHICH ARE NOT PERMITTED TO ACCOMPANY THE WORKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL REPAIRS SHALL BE MADE TO ORIGINAL CONDITION.
- ALL FRAMING LUBBERS, PLYWOOD, AND CONCEALED WOOD SHALL BE FIRE RETARDANT TREATED (F.R.T.) AND PAINTED IN GREEN TREATMENT.

### DRAWING INDEX

- ARCHITECTURAL**
- G100 COVER SHEET
  - G200 SPECIFICATIONS CONSTRUCTION PLAN
  - A100 MECHANICAL CONSTRUCTION PLAN
  - A101 RESTROOM ELEVATIONS
  - A102 RESTROOM ELEVATIONS
  - A103 STAIR SECTIONS
  - A104 STAIR WALLS
  - A105 UTILITY WALLS
- ENGINEERING**
- S1.0 STRUCTURAL PLANS
  - S1.1 STRUCTURAL NOTES
  - E1.0 ELECTRICAL POWER PLAN
  - E1.1 ELECTRICAL POWER PLANS
  - E3.0 ELECTRICAL PANELS
  - H1.0 HVAC PLANS
  - H2.0 HVAC SCHEDULES & DETAILS
  - P1.0 SANITARY PLUMBING PLAN
  - P2.0 WATER & GAS PLUMBING PLAN
- SPRINKLER**
- SPRINKLER DRAWINGS SUBMITTED UNDER SEPARATE COVER



EXISTING SITE PLAN  
SCALE: 1" = 60'-0"

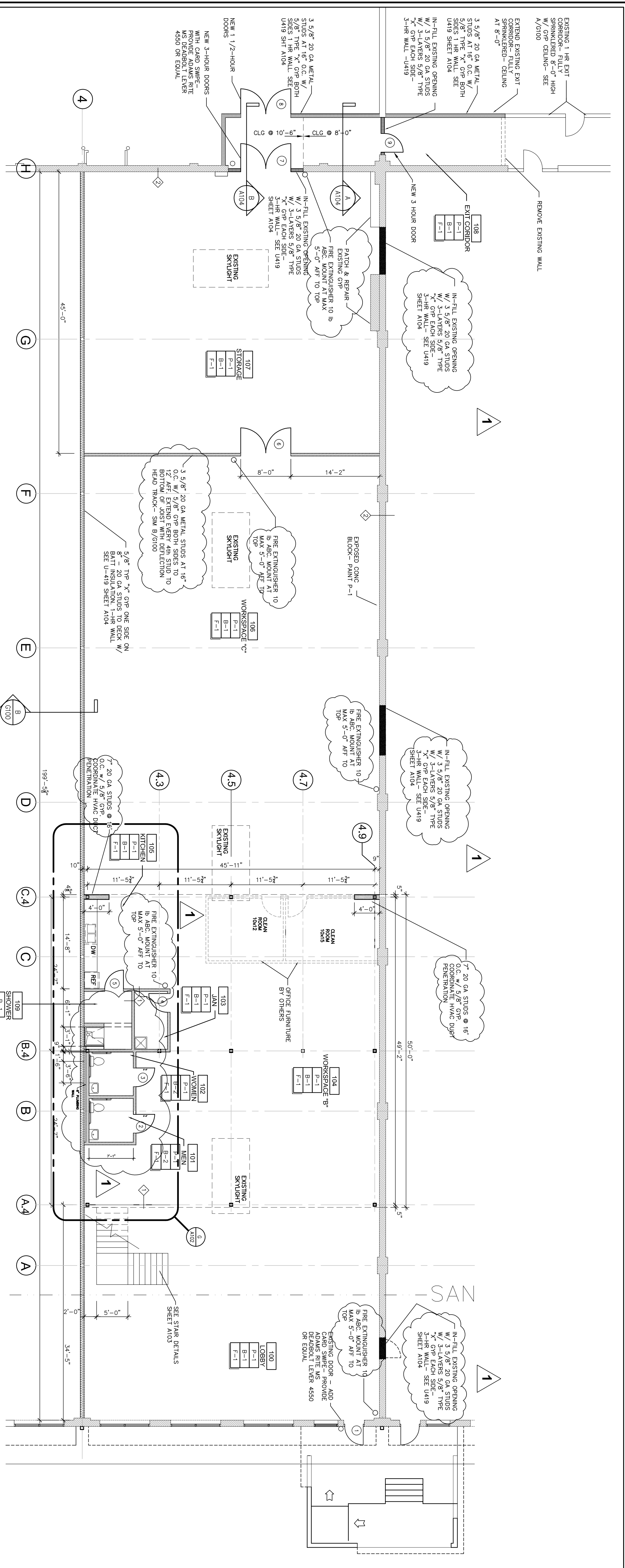


NON RATED DEFLECTION DETAIL  
SCALE: 3" = 1'-0"



# WILLOW WORKS

**CONSTRUCTION PLAN**  
SCALE: 1/8" = 1'-0"



### CONSTRUCTION PLAN GENERAL NOTES

- G.C. IS TO MAINTAIN REQUIRED FIRE RATINGS AROUND ALL COLUMNS PER LOCAL CODE.
- TYPICAL DIMENSIONS ARE FROM FACE OF GYPSUM BOARD TO FACE OF GYPSUM BOARD. EXISTING WALL, NOTED OTHERWISE.
- EGRESS DOOR IS NOT SUBJECT TO LOCKING.
- FLOORS OF CORRIDORS AND EXIT PATHS MUST HAVE A SLIP-RESISTANT SURFACE W/ STATIC COEFFICIENT OF FRICTION GREATER THAN .50.
- ALL METAL DOORS ARE TO BE 5" FROM EDGE OF WALL TO ROUGH OPENING UNLESS NOTED OTHERWISE.
- MEASURED ANGLES OF TYPICAL NEW TENANT INTERIOR WALLS ARE 45° OR 90° EXCEPT WHERE NOTED OTHERWISE.
- SPRINKL. CONTRACTION IS TO PROVIDE AND INSTALL ALL SUPPLEMENTAL AND FIRE-RESISTANT TREATED WOOD BLOCKING FOR ALL TRIM, HOOKS, AND OTHER FIXTURES AS REQUIRED.
- PREPARE FLOORS FOR SEALING.

### INTERIOR WALL TYPE LEGEND

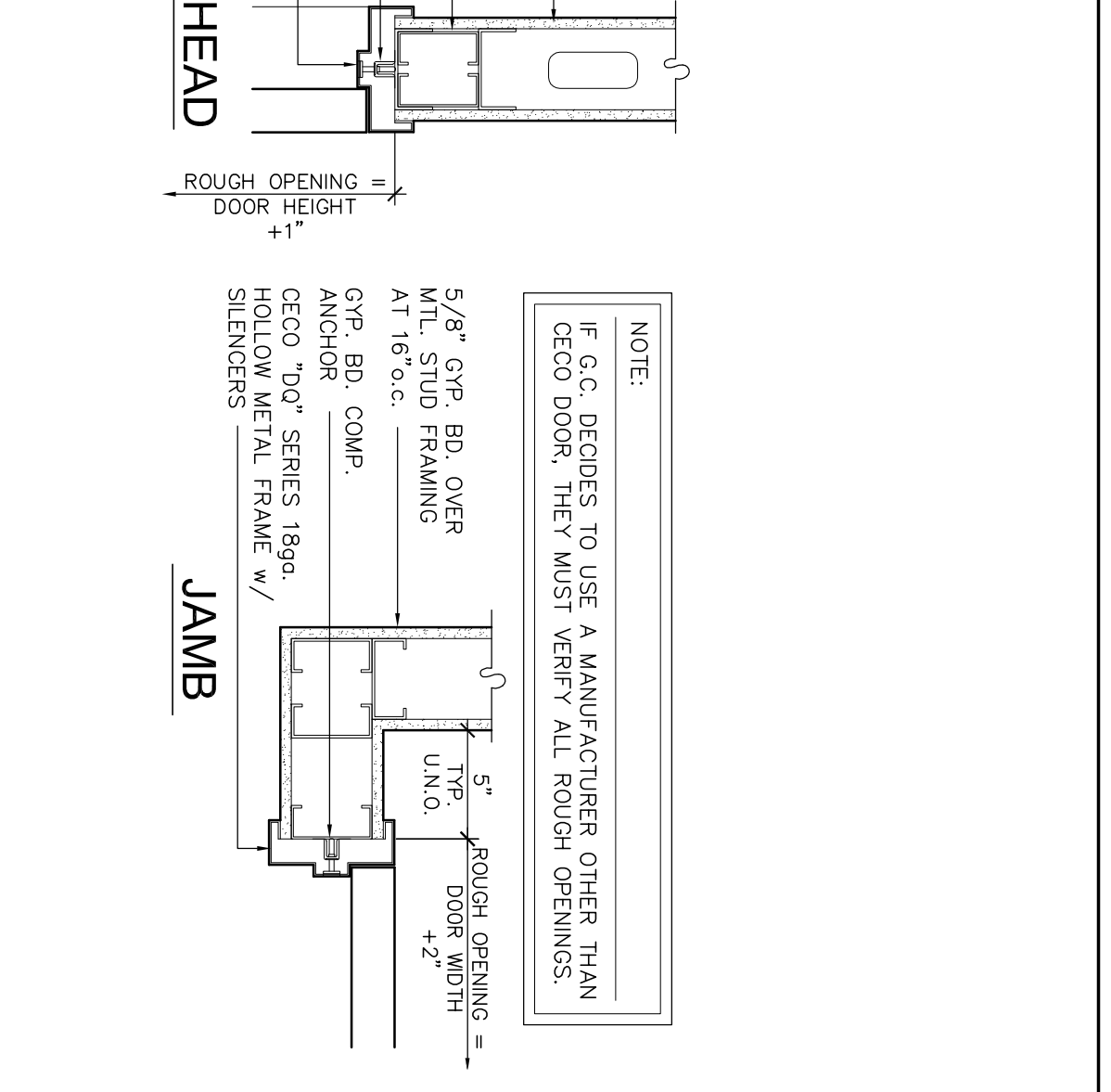
- ◇ TYPICAL PARTITION - (1) LAYER EA. SIDE 5/8" GYP. BD. OVER 3/8" 20ga. MTL. STUDS.
- ◇ PATCH AND REPAIR EXISTING WALLS TO LIKE NEW CONDITION.
- ◇

### FINISH SCHEDULE

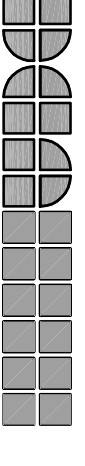
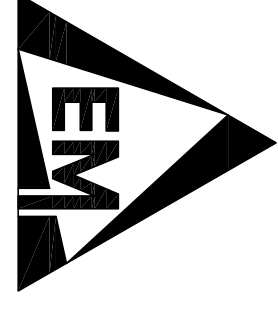
MATERIAL	MANUFACTURER & DESCRIPTION	NOTES
PAINT	PAINT	WALLS - EGGSHELL - DOOR FRAMES, WOOD TRIM - SEMI GLOSS
PAINT	SHERWIN WILLIAMS SW 7014 ELDER WHITE	TOUCH-UP DISCOLORED AREAS ON BEAMS/ JOIST/ DECK
PAINT	SHERWIN WILLIAMS SW - MATCH EXISTING GRAY ON BEAMS	
FLOOR	MATERIAL	MANUFACTURER & DESCRIPTION
F-1	SCALED CONC.	SPONNERBY/SONGCRETE ROBE-IN-SCALE WB 2-COATS
F-2		USE MANUF. RECOMMENDED STRIPPERS TO REMOVE EXISTING COATINGS. PATCH ANY CRACKS/ HOLES
F-3		
F-4		
BASE	MATERIAL	MANUFACTURER & DESCRIPTION
B-1	WALL BASE	ADAMSON/BLACK 4" VINYL WALL BASE
B-2	WALL BASE	ADAMSON/BLACK 6" VINYL WALL BASE
WALLS	MATERIAL	MANUFACTURER & DESCRIPTION
W-1	4x6 WHITE SUBWAY TILE	ANATOLA 5090 WHITE GLOSS
FRZ	FRZ	WHITE SEE PLANS

### DOOR SCHEDULE

HARDWARE	G.C. TO DETERMINE PROPER LATCH AND STRIKE FOR DOOR AND FRAME
BUTT HINGE - (3) IVES - #58BHW 4.5x4.5 6.50-NRP	FINISH: US 320
HANDLE - (1) SCHLAGE - "D" SERIES, RHODES, PRIVACY LOCK+1, STRIKE AND LATCH, FINISH: US260	CLOSER - (2) DOOR-O-MATIC - SC61-HO/DS W/ COVER, FULL SIDE MOUNT, FINISH: ALUM.
SILENCERS - (1) IVES - 5864, 27x294, FINISH: GREY	FLOOR STOP - (1) IVES - H17, FINISH: US260 -
NOTE:	DOORS (2) (3) TO HAVE PASSAGE SETS
NOTE:	DOOR (9) 3 HR METAL DOOR/FRAME W/ PASSAGE SET
NOTE:	DOOR (2) (3) TO HAVE PASSAGE SETS
NOTE:	DOOR (7) 3-HR DOOR/FRAME W/ CABD SWIPE ACCESS
NOTE:	DOOR (8) 1 1/2 HR DOOR/FRAME W/ PASSAGE SETS



**DOOR FRAME DETAIL**  
SCALE: 1/2" = 1'-0"



# WILLOW WORKS

PROJECT NO.

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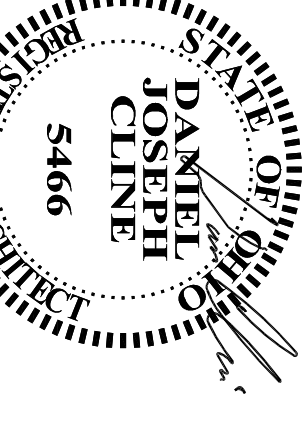
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SEAL

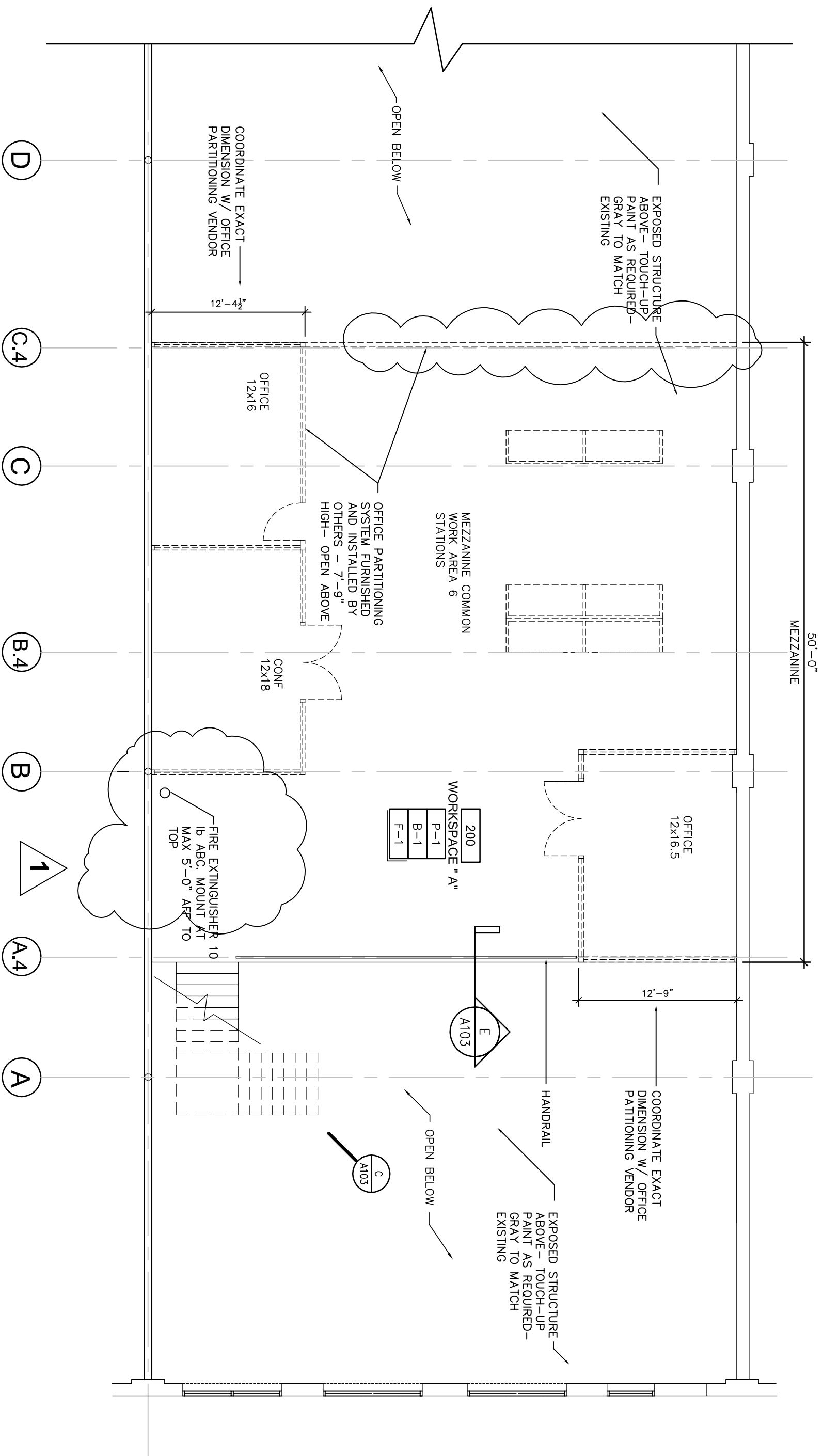


DANIEL CLINE LICENSE # 5466  
EXPIRATION DATE 12/31/2017

SHEET TITLE  
MEZZANINE PLAN

SHEET NO.

A101



MEZZANINE PLAN  
SCALE: 1/8" = 1'-0"

### FINISH SCHEDULE

PAINT	MATERIAL	MANUFACTURER & DESCRIPTION	NOTES
P-1	PAINT	SHERWIN WILLIAMS SW 7014 ELDER WHITE	WALLS - EGGSHELL. DOOR FRAMES, WOOD TRIM - SEMI GLOSS
P-2	PAINT	SHERWIN WILLIAMS SW - MATCH EXISTING GRAY ON BEAMS/ JOIST/ DECK	TOUCH-UP DISCOLORED AREAS ON BEAMS/ JOIST/ DECK
FLOOR	MATERIAL	MANUFACTURER & DESCRIPTION	NOTES
F-1	SEALED CONC.	SONNEBERG/SONGCRETE KURE-N-SEAL WB-2-COATS	USE MANUF. RECOMMENDED STRIPPERS TO REMOVE EXISTING COATINGS. PATCH ANY CRACKS/ HOLES
F-2			
F-3			
F-4			
BASE	MATERIAL	MANUFACTURER & DESCRIPTION	NOTES
B-1	WALL BASE	AMSTERDAM CONCRETE 4" VINYL WALL BASE	PROVIDE MANUFACTURER'S RECOMMENDED ADHESIVE
B-2	WALL BASE	AMSTERDAM CONCRETE 6" VINYL WALL BASE	PROVIDE MANUFACTURER'S RECOMMENDED ADHESIVE
WALLS	MATERIAL	MANUFACTURER & DESCRIPTION	NOTES
W-1	4x6 WHITE SUBWAY TILE	ANATOLA 30x40 WHITE GLOSS AVAILABLE AT HAMILTON PARKER	PROVIDE MANUFACTURER'S RECOMMENDED ADHESIVE
FRZ	FRZ	FRZ SEE PLANS	PROVIDE MANUFACTURER'S RECOMMENDED ADHESIVE

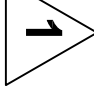
### CONSTRUCTION PLAN GENERAL NOTES

- G.C. IS TO MAINTAIN REQUIRED FIRE RATINGS AROUND ALL COLUMNS PER LOCAL CODE.
- TYPICAL DIMENSIONS ARE FROM FACE OF GYPSUM BOARD TO FACE OF GYPSUM BOARD, EXISTING WALL, UNLESS OTHERWISE NOTED.
- EGRESS DOOR IS NOT SUBJECT TO LOCKING.
- FLOORS OF CORRIDORS AND EXIT PATHS MUST HAVE A SLIP-RESISTANT SURFACE W/ STATIC COEFFICIENT OF FRICTION GREATER THAN .50.
- ALL METAL DOORS ARE TO BE 5" FROM EDGE OF WALL TO ROUGH OPENING UNLESS NOTED OTHERWISE.
- MEASURED ANGLES OF TYPICAL NEW TENANT INTERIOR WALLS ARE 45° OR 90° EXCEPT WHERE NOTED OTHERWISE.
- SPRINKLER CONTRACTION IS TO PRODUCE AND INSTALL ALL SUPPLEMENTAL AND FIRE-RESISTANT TREATED WOOD BLOOMING FOR ALL TRIM, HOOKS, AND OTHER FIXTURES AS REQUIRED.
- PREPARE FLOORS FOR NEW FLOOR CONCRETE/ SEALING.

### INTERIOR WALL TYPE LEGEND

- TYPICAL PARTITION - (1) LAYER EA. SIZE 5/8" GR. BD. OVER 3/8" 2x4s, MTL. STUDS.
- PATCH AND REPAIR EXISTING WALLS TO LIKE NEW CONDITION.
- 

1



1





**Design No. U419**

**BXUV.U419**

**Fire Resistance Ratings - ANSI/UL 263**

"Reprinted from the Online Certifications Directory with permission from UL."

**Design/System/Construction/Assembly Usage Disclaimer**

Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of certified products, equipment, system, devices, and materials.  
 Authorities Having Jurisdiction should be consulted before construction.  
 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. 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 a product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.  
 Only products which bear UL's Mark are considered Certified.

**BXUV - Fire Resistance Ratings - ANSI/UL 263**

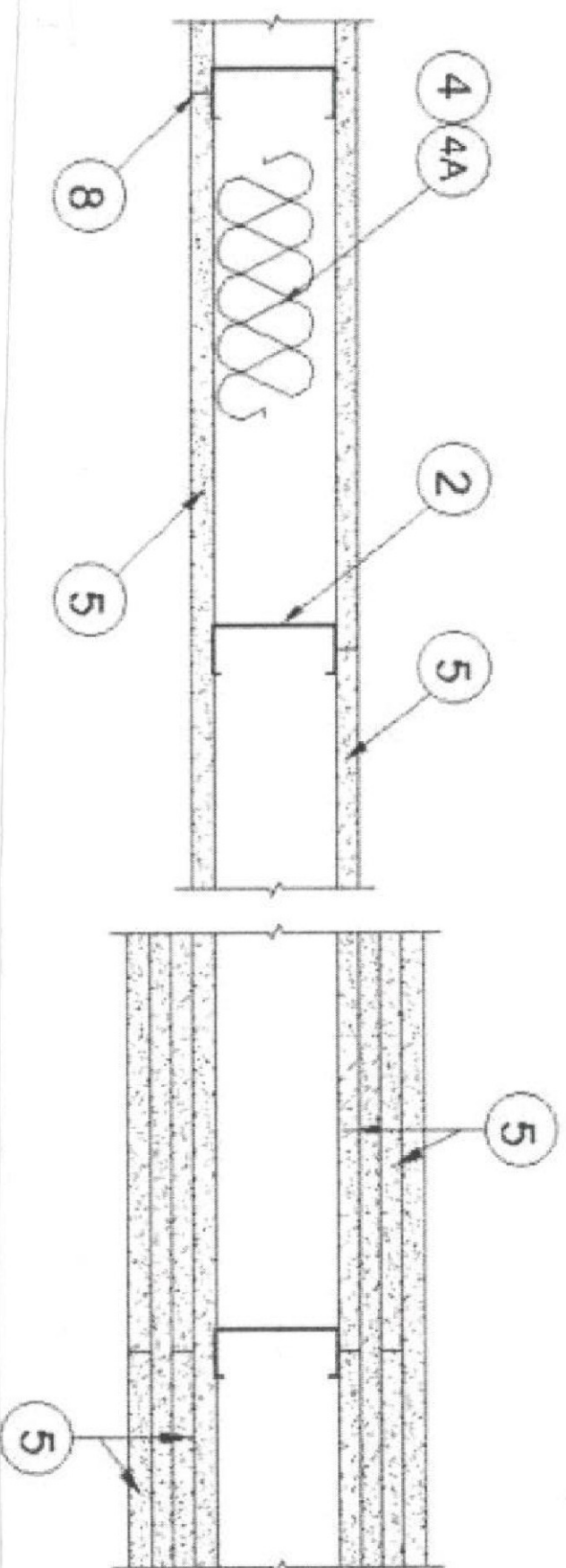
**BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada**

**Design No. U419**

April 12, 2016

Nonbearing Wall Ratings - 1, 2, 3 or 4 Hr. (See Items 4 & 5 through 5K)

Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification as Canada), respectively.



1. **Floor and Ceiling Runners** - (Not Shown) - For use with Item 2 - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.

1A. **Framing Members\*** - **Floor and Ceiling Runner** - Not Shown - In lieu of Item 1 - For use with Item 2B, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max.

**CALIFORNIA EXPANDED METAL PRODUCTS CO** - Viper25™ Track

**CRACO MFG INC** - SmartTrack25™

**MARINO /WARE, DIV OF WARE INDUSTRIES INC** - Viper25™ Track

1A. **Framing Members\*** - **Floor and Ceiling Runners** - Not Shown - As an alternate to Item 1 - For use with Item 20, proprietary channel shaped runners, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.  
**RONDO BUILDING SERVICES PTY LTD** - Rondo Wall Track

2. **Steel Studs** - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2A. **Steel Studs** - (As an alternate to Item 2, For use with Items 5B, 5E, 5H, 5I and 5K) Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.

2B. **Framing Members\*** - **Steel Studs** - (As an alternate to Item 2, For use with Items 5C, 5I or 5K) - Proprietary channel shaped studs, 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than the assembly height and installed with a 1/2 in. gap between the end of the stud and track at the bottom of the wall. For direct attachment of gypsum board only.

**CALIFORNIA EXPANDED METAL PRODUCTS CO** - Viper25™

**CRACO MFG INC** - SmartStuds™

**MARINO /WARE, DIV OF WARE INDUSTRIES INC** - Viper25™

4. **Batts and Blankets\*** - (Required as indicated under Item 5) - Mineral wool batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 5. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

4A. **Batts and Blankets\*** - (Optional) - Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

4B. **Batts and Blankets\*** - For use with Item 5K. Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

5. **Gypsum Board\*** - Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 Hr, 2 Hr, 3 Hr and 4 Hr ratings are as follows:

Rating, Hr	Min Stud Depth, in.	No. of Layers & Thickness of Panel	Min Thickness of Insulation (Item 4)
1	3-1/2	1 layer, 5/8 in. thick	Optional
1	2-1/2	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
2	3-1/2	1 layer, 3/4 in. thick	3 in.
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	2 layers, 3/4 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 1/2 in. thick	Optional
4	2-1/2	2 layers, 3/4 in. thick	2 in.

**Gypsum Board Protection on Each Side of Wall**

**CGC INC** - 1/2 in. thick Type C, JP-X2 or JPC-AR; WRC, 5/8 in. thick Type AR, C, JP-AR, JP-X1, JP-X2, JPC-AR, SCX, SHX, WRX or WRC; 3/4 in. thick Types JP-X3 or ULTRACODE  
**UNITED STATES GYPSUM CO** - 1/2 in. thick Type C, JP-X2, JPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, WRX, JP-X1, AR, C, WRC, FRX-G, JP-AR, JP-X2, JPC-AR ; 3/4 in. thick Types JP-X3 or ULTRACODE

6. **Fasteners** - (Not Shown) - For use with Items 2 and 2A - Type S or S-12 steel screws used to attach panels to Item 2 or furring channels (Item 7). **Single layer systems:** 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. **Two layer systems:** First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC, second layer- 1 in. long for 1/2 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with 24 in. OC, second layer- 1-5/8 in. long for 1/2 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with 24 in. OC, second layer- 1-5/8 in. long for 1/2 in. thick panels, spaced 24 in. OC, screws offset min 6 in. from layer below. **Three-layer systems:** First layer- 1 in. long for 1/2 in. thick panels, spaced 16 in. OC, second layer- 1-5/8 in. long for 1/2 in. thick panels, spaced 24 in. OC, screws offset min 6 in. from layer below. **Four-layer systems:** First layer- 1 in. long for 1/2 in. thick panels, spaced 24 in. OC, second layer- 1-5/8 in. long for 1/2 in. thick panels, spaced 24 in. OC, third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC, fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.

6A. **Fasteners** - (Not Shown) - For use with Item 5K - Type S or S-12 steel screws used to attach panels to studs or furring channels (Item 7). Single layer systems: 1 in. long screws, spaced 8 in. OC when panels are applied vertically, horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field- 1-5/8 in. screws, spaced 8 in. OC, two layer systems: First layer- 1 in. long screws, spaced 16 in. OC, second layer- 1 in. long screws, spaced 24 in. OC, second layer- 1-5/8 in. long screws, spaced 24 in. OC, second layer- 1-5/8 in. long screws, spaced 24 in. OC, screws offset min 6 in. from layer below. **Three-layer systems:** First layer- 1 in. long screws, spaced 16 in. OC, second layer- 1-5/8 in. long screws, spaced 24 in. OC, third layer- 2-5/8 in. long screws, spaced 24 in. OC, screws offset min 6 in. from layer below. **Four-layer systems:** First layer- 1 in. long screws, spaced 24 in. OC, second layer- 2-5/8 in. long screws, spaced 24 in. OC, third layer- 2-5/8 in. long screws, spaced 24 in. OC, fourth layer- 3 in. long screws, spaced 8 in. OC. Screws offset min 6 in. from layer below.

7. **Furring Channels** - (Optional, Not Shown, for single or double layer systems) - Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Single portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 5A and 5E.

7A. **Framing Members\*** - (Optional on one or both sides, not shown, for single or double layer systems) - As an alternate to Item 7, furring channels and Steel Framing Members as described below:

a. **Furring Channels** - Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use with Item 5A and 5E.

b. **Steel Framing Members\*** - Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. RSTC-1 and RSTC-1 (2.75) clips secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. RSTC-V and RSTC-V (2.75) clips secured to studs with No. 8 x 9/16 in. minimum self-drilling, S-12 steel screw through the center hole. Furring channels are friction fitted into clips. RSTC-1 and RSTC-V clips for use with 2-9/16 in. wide furring channels. RSTC-1 (2.75) and RSTC-V (2.75) clips for use with 2-23/32 in. wide furring channels.

**PAC INTERNATIONAL L.L.C** - Types RSTC-1, RSTC-V, RSTC-1 (2.75), RSTC-V (2.75).

8. **Joint Tape and Compound** - Vinyl or cashin, dry or premixed joint compound applied in two coats to joints and screw heads of outer layer of gypsum board. Joint tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge.

