

NSPJ Architects | 3515 W 75th St Ste 201 KS 66208 Prairie Village KS 66208 United States

PROJECT:	GFI:Mission Gateway Hotel 617918	DATE SENT:	8/26/2019
		RETURN BY:	
SUBJECT:	Mission Gateway Hotel - Addendum 2	ADDENDUM ID:	ADD-002
TYPE:	Addendum	TRANSMITTAL ID:	00018
PURPOSE:	For Review	VIA:	Email

FROM

NAME	COMPANY	EMAIL	PHONE
Sara Wells	NSPJ Architects	SWells@nspjarch.com	913-831-1415

TO

NAME	COMPANY	EMAIL	PHONE
Gregory Harrelson		gharrelson@fogel-anderson.com	
Dennis O'Grady		dogrady@fogel-anderson.com	
Drew Golden		dgolden@fogel-anderson.com	
Benjamin Paoni		bpaoni@fogel-anderson.com	
David Rosen	GFI Hospitality, LLC	drosen@gficap.com	212.837.4612
Andy Ashwal	GFI Management Services	aashwal@gficap.com	212-837-4692
Charles Patrick	GFI Management Services	cpatrick@gficap.com	800-234-4358

REMARKS: Addendum 2 includes design document clarifications based on RFIs, reviewed substitution requests and responses to RFIs 1-14. A narrative of changes has been included in the supporting documents.

DESCRIPTION OF CONTENTS

QTY	DATED	TITLE	NUMBER	SCALE	SIZE	NOTES
1	8/26/2019	19 0826-MGH Addendum 2.pdf				
1	8/26/2019	Addendum 2 Narrative.pdf				
1	8/26/2019	MI Design				

Addendum Transmittal

DATE: 8/26/2019

ID: 00018

		Standards - Module 14.pdf				
1	8/26/2019	RFIs #1-14 sent 8-22- 2019_nspj.pdf				
1	8/23/2019	061600 - SHEATHING_AD D 2.pdf				
1	8/26/2019	101400 - Signage_ADD 2.pdf				
1	8/23/2019	084229- Automatic Entrances Sub Request_nspj.pd f				
1	8/26/2019	MGH_CPAR_Mes ker_nspj.pdf				
1	8/26/2019	Mission Gateway Element Hotel Air Barrier Subst Request_nspj.pd f				
1	8/23/2019	Mission Gateway Element Hotel Waterproofing Subst Request_NSPJ.p df				
1	8/26/2019	Product Substitution Request Submittal - Tubelite_nspj.pd f				
1	8/23/2019	Substitution Request - Mel Rol LM_nspj.pdf				
1	8/23/2019	Substitution Request - Mel Rol_nspj.pdf				
1	8/23/2019	Substitution Request - Polyflow 18_nspj.pdf				
1	8/23/2019	Substitution Request - Sikalastic 320 SG_nspj.pdf				

COPIES:

Addendum Transmittal

DATE: 8/26/2019

ID: 00018

Theresa Curtis
Tim Homburg

(NSPJ Architects)
(NSPJ Architects)

Mission Gateway Element Hotel
Addendum 2 – Design Clarifications
August 26, 2019

Please utilize the narrative below to understand the clarifications made in this addendum.

BID CLARIFICATIONS/INSTRUCTIONS

- Provide bid alternate for a landscape allowance of \$200,000.
- Responses to RFIs 1-14 have been provided.

DRAWINGS

Architectural

A2.03 – Level 3 Overall Plan

- Guestroom title was corrected. (One bedroom connecting)

A2.14 – Level 4-Segment A Plan

- Guestrooms 432 & 434 labels were corrected.

A2.15 – Level 5-Segment A Plan

- Guestroom 534 label was corrected.

A2.16 – Level 6-Segment A Plan

- Guestrooms 632, 634 & 639 labels were corrected.

Structural

S2.21b – 2nd Floor Layout and Stud Rail Plan – Segment B

- Extents of 16", 12" & 10" slabs were clarified (RFI 10)

Landscape

L101 – Hardscape Plan

- Concrete sidewalk materials were clarified – see RFI 12 response

SPECIFICATIONS

061600 – Sheathing

- "Zip Sheathing" was removed from specification

101400 – Signage

Interior Signage responsibility updated to match Responsibility Matrix

Module 14 – Fire Protection & Life Safety from Marriott Design Standards (RFI 13)

SUBSTITUTION REQUESTS

071000 – Dampproofing & Waterproofing

- Request by Logan Contractors Supply
 - Mel Rol

071416 – Cold Fluid-Applied Waterproofing

- Request by Luna & Associates
 - Carlisle Coating & Waterproofing Miraseal
- Request by Logan Contractors Supply, Inc
 - Mel Rol LM
 - Polyflow 18
 - Sikalastic 320 SG

072715 – Non-Bitumous Self-Adhering Sheet Air Barrier

- Request by Luna & Associates
 - Carlisle Coating & Waterproofing CCQ-705 VP Self-Adhering Air Barrier

081113 – Hollow Metal Doors & Frames

- Request from DormaKaba
 - Mesker Door

084113 – Aluminum Framed Entrances & Storefront

- Request by Tubelite, Inc
 - T14000 I/O Series Storefront
 - E4500 Series Storefront
 - Standard Medium Stile Door

084229 – Automatic Entrances

- Request from Record Automatic Door Systems
 - Record – USA 5100 Sliding Door Operator

ARCH D 24" x 36"

ARCHITECTURE
LANDSCAPE
ARCHITECTURE
INTERIORS
ENERGY SERVICES

NSPJ
ARCHITECTS^{PA}
3515 W. 75TH ST., SUITE 201
PRAIRIE VILLAGE, KS 66208



A NEW ELEMENT BY WESTIN FOR
MISSION GATEWAY
5931 ROELAND DR
MISSION, KANSAS



- DRAWING RELEASE LOG
- 19 0626 - PERMIT SUBMITTAL
 - 19 0814 - BID SET

REVISIONS:

3	19 0820	ADDENDUM 1
4	19 0826	ADDENDUM 2

DATE:
06/26/19
JOB NO.
617918
DRAWN BY:
TSC/SIW
SHEET NO.

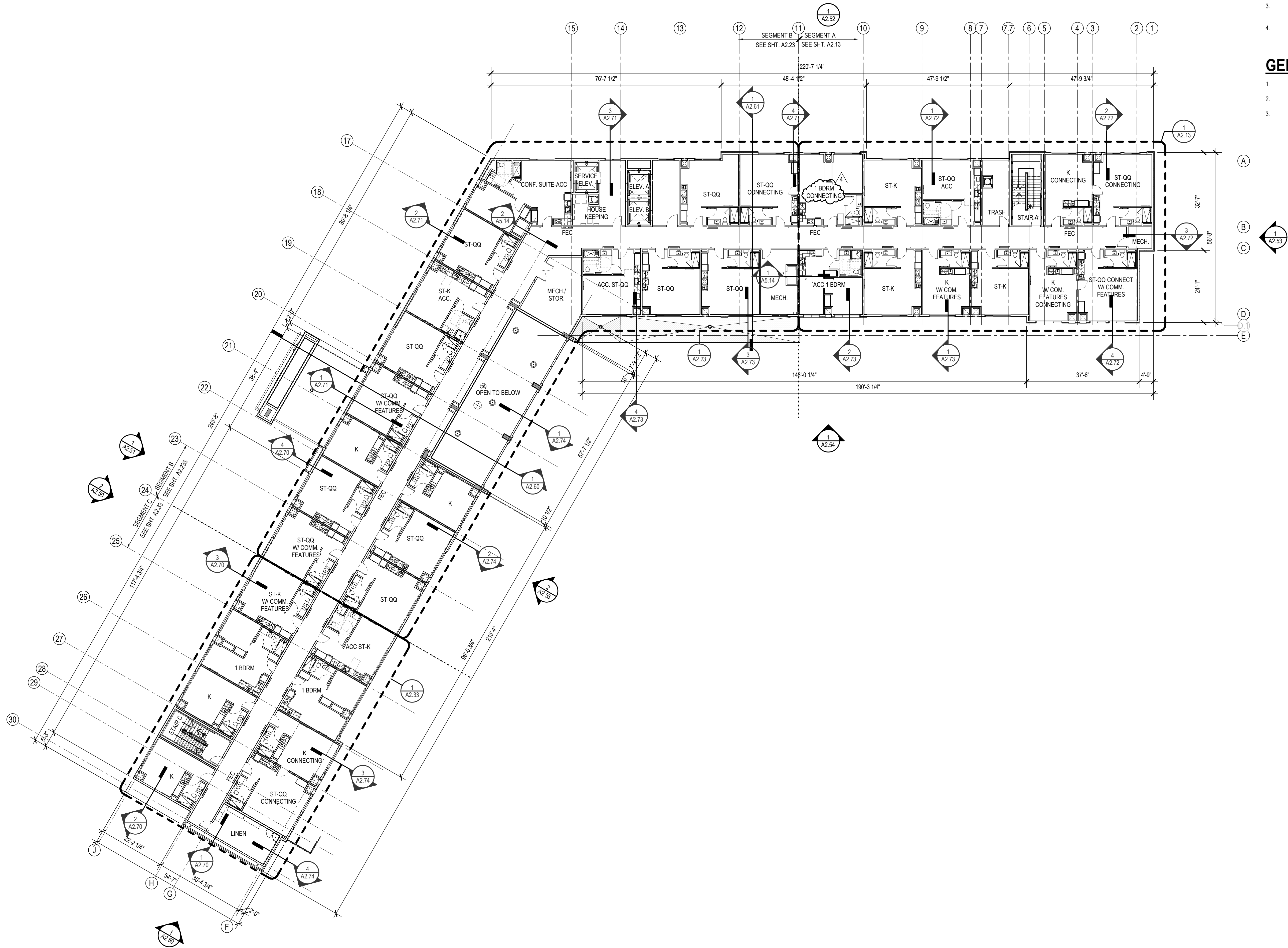
A2.03

REFERENCE NOTES

- REFER TO 300 SERIES DRAWINGS FOR ENLARGED PUBLIC SPACE PLANS AND DETAILS
- REFER TO 500 SERIES FOR GUESTROOM PLANS AND DETAILS
- REFER TO VOLUME 5-BUILDING PRODUCT MANUAL-PUBLIC SPACE FOR INFORMATION RELATED TO ITEMS ON THIS SHEET
- REFER TO VOLUME 7-INTERIOR DESIGN SPECIFICATION MANUAL FOR INFORMATION RELATED TO ITEMS ON THIS SHEET

GENERAL NOTES

- G.C. TO PROVIDE BLOCKING AND/OR STRAPPING FOR ALL ITEMS ATTACHED TO WALLS OR MOUNTED TO CEILING.
- EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING, UNLESS OTHERWISE NOTED.
- INTERIOR DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED.



1 OVERALL LEVEL 3 PLAN
1/16" = 1'-0"

ARCH D 241, 35F
8/23/2019 11:24:19 AM

REFERENCE NOTES

1. REFER TO 300 SERIES DRAWINGS FOR ENLARGED PUBLIC SPACE PLANS AND DETAILS
2. REFER TO 500 SERIES FOR GUESTROOM PLANS AND DETAILS
3. REFER TO VOLUME 5-BUILDING PROUCT MANUAL-PUBLIC SPACE FOR INFORMATION RELATED TO ITEMS ON THIS SHEET.
4. REFER TO VOLUME 7-INTERIOR DESIGN SPECIFICATION MANUAL FOR INFORMATION RELATED TO ITEMS ON THIS SHEET.

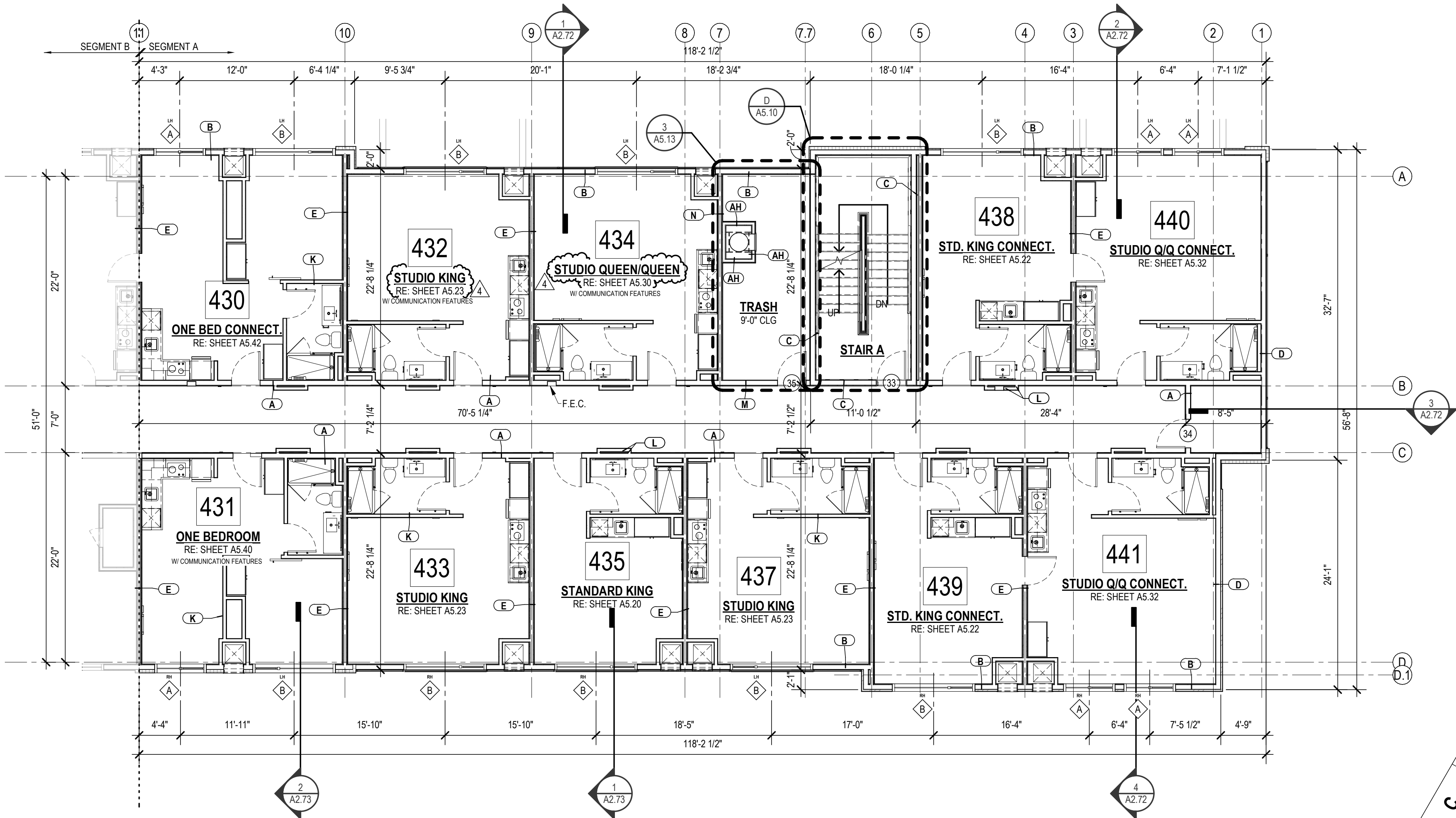
GENERAL NOTES

1. G.C. TO PROVIDE BLOCKING AND/OR STRAPPING FOR ALL ITEMS ATTACHED TO WALLS OR MOUNTED TO CEILING.
2. EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING, UNLESS OTHERWISE NOTED.
3. INTERIOR DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED.

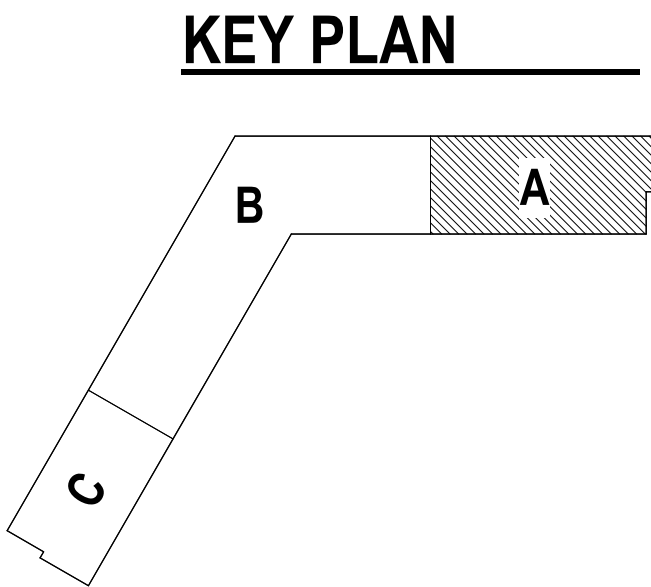
ARCHITECTURE
LANDSCAPE
ARCHITECTURE
INTERIORS
ENERGY SERVICES

NSPJ

ARCHITECTS^{PA}
P. 913.831.1415
F. 913.831.1563
3515 W. 75TH ST., SUITE 201
PRAIRIE VILLAGE, KS 66208



1 SEGMENT A - LEVEL 4
1/8" = 1'-0"



A NEW ELEMENT BY WESTIN FOR
MISSION GATEWAY
5931 ROELAND DR
MISSION, KANSAS

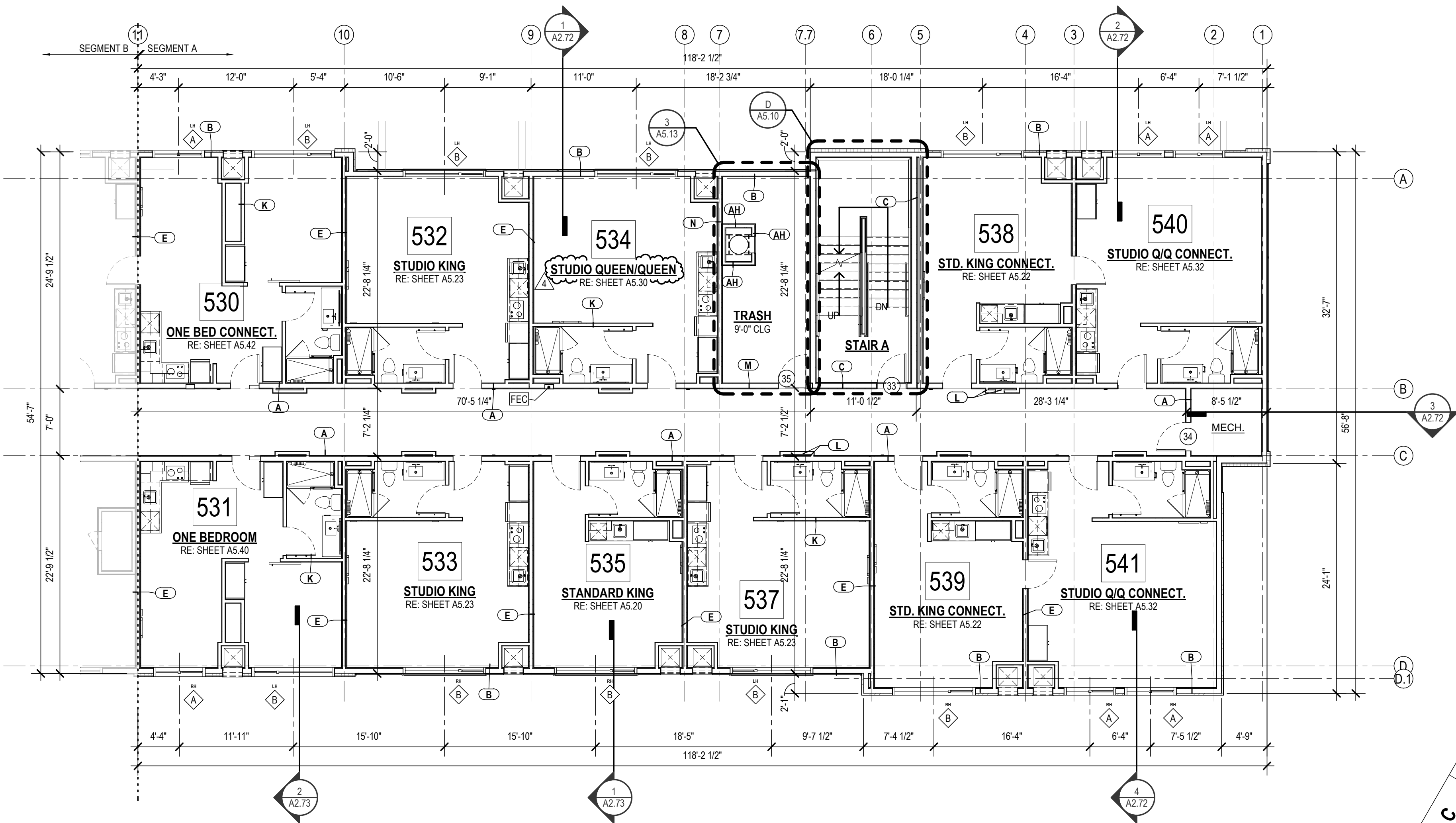


- 19 0626 - PERMIT SUBMITTAL
- 19 0814 - BID SET

REVISIONS:	
2	19 0820 PERMIT REVISION 1
4	19 0826 ADDENDUM 2

DATE:
06/26/19
JOB NO.
617918
DRAWN BY:
TSC/SIW
SHEET NO.

A2.14



1 SEGMENT A - LEVEL 5
1/8" = 1'-0"

REFERENCE NOTES

1. REFER TO 300 SERIES DRAWINGS FOR ENLARGED PUBLIC SPACE PLANS AND DETAILS
2. REFER TO 500 SERIES FOR GUESTROOM PLANS AND DETAILS
3. REFER TO VOLUME 5-BUILDING PROUCT MANUAL-PUBLIC SPACE FOR INFORMATION RELATED TO ITEMS ON THIS SHEET.
4. REFER TO VOLUME 7-INTERIOR DESIGN SPECIFICATION MANUAL FOR INFORMATION RELATED TO ITEMS ON THIS SHEET.

GENERAL NOTES

1. G.C. TO PROVIDE BLOCKING AND/OR STRAPPING FOR ALL ITEMS ATTACHED TO WALLS OR MOUNTED TO CEILING.
2. EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING, UNLESS OTHERWISE NOTED.
3. INTERIOR DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED.

ARCHITECTURE
LANDSCAPE
ARCHITECTURE
INTERIORS
ENERGY SERVICES

NSPJ



ARCHITECTS^{PA}
3515 W. 75TH ST., SUITE 201
PRAIRIE VILLAGE, KS 66208

P. 913.831.1415
F. 913.831.1563
NSPJARCH.COM
© COPYRIGHT 2019

A NEW ELEMENT BY WESTIN FOR

MISSION GATEWAY

5931 ROELAND DR
MISSION, KANSAS

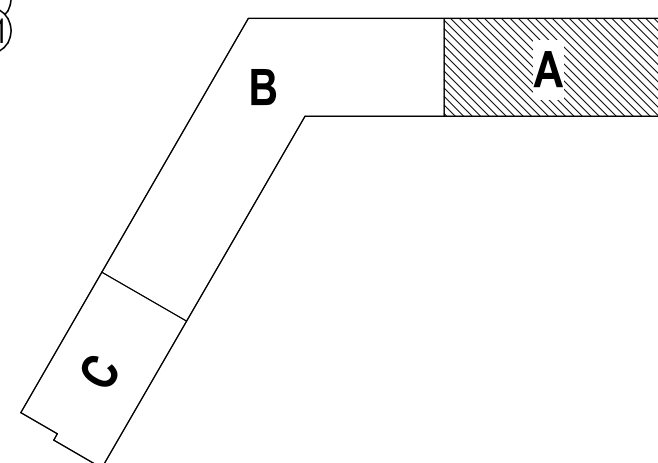
DRAWING RELEASE LOG

- 19 0626 - PERMIT SUBMITTAL
- 19 0814 - BID SET

REVISIONS:

2	19 0820	PERMIT REVISION 1
4	19 0826	ADDENDUM 2

KEY PLAN



DATE:
06/26/19
JOB NO.
617918
DRAWN BY:
TSC/SIW
SHEET NO.

A2.15

ARCH D 24' x 35'

8/23/2019 11:24:21 AM

REFERENCE NOTES

1. REFER TO 300 SERIES DRAWINGS FOR ENLARGED PUBLIC SPACE PLANS AND DETAILS
2. REFER TO 500 SERIES FOR GUESTROOM PLANS AND DETAILS
3. REFER TO VOLUME 5-BUILDING PROUCT MANUAL-PUBLIC SPACE FOR INFORMATION RELATED TO ITEMS ON THIS SHEET.
4. REFER TO VOLUME 7-INTERIOR DESIGN SPECIFICATION MANUAL FOR INFORMATION RELATED TO ITEMS ON THIS SHEET.

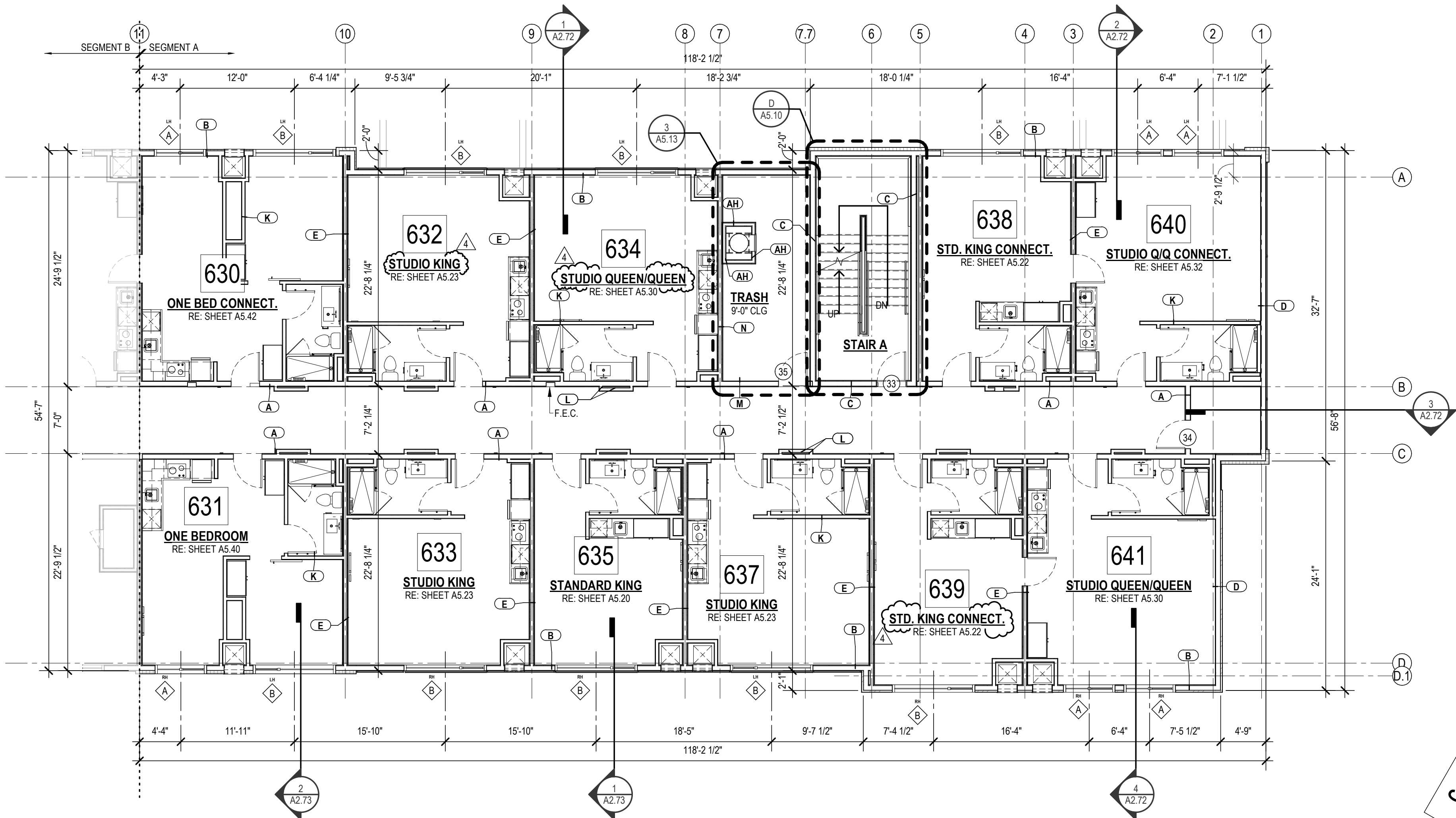
GENERAL NOTES

1. G.C. TO PROVIDE BLOCKING AND/OR STRAPPING FOR ALL ITEMS ATTACHED TO WALLS OR MOUNTED TO CEILING.
2. EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING, UNLESS OTHERWISE NOTED.
3. INTERIOR DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED.

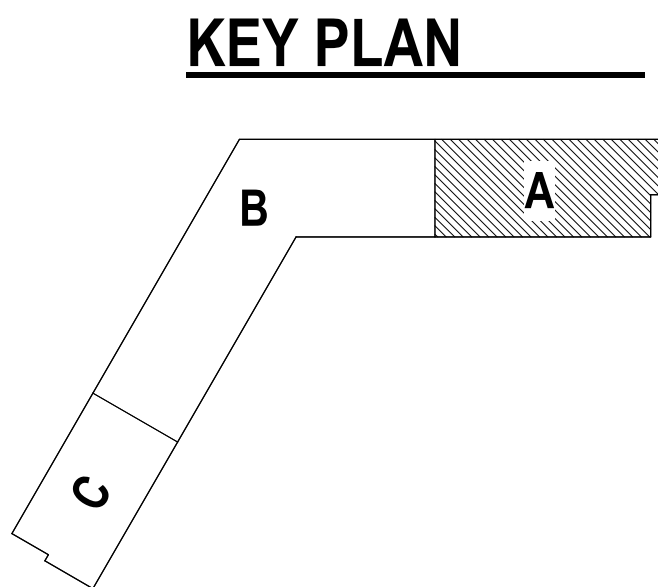
ARCHITECTURE
LANDSCAPE
ARCHITECTURE
INTERIORS
ENERGY SERVICES

NSPJ

ARCHITECTS^{PA}
P. 913.831.1415
F. 913.831.1563
3515 W. 75TH ST., SUITE 201
PRAIRIE VILLAGE, KS 66208
NSPJARCH.COM
© COPYRIGHT 2019



1 SEGMENT A - LEVEL 6
1/8" = 1'-0"



A NEW ELEMENT BY WESTIN FOR
MISSION GATEWAY
5931 ROELAND DR
MISSION, KANSAS



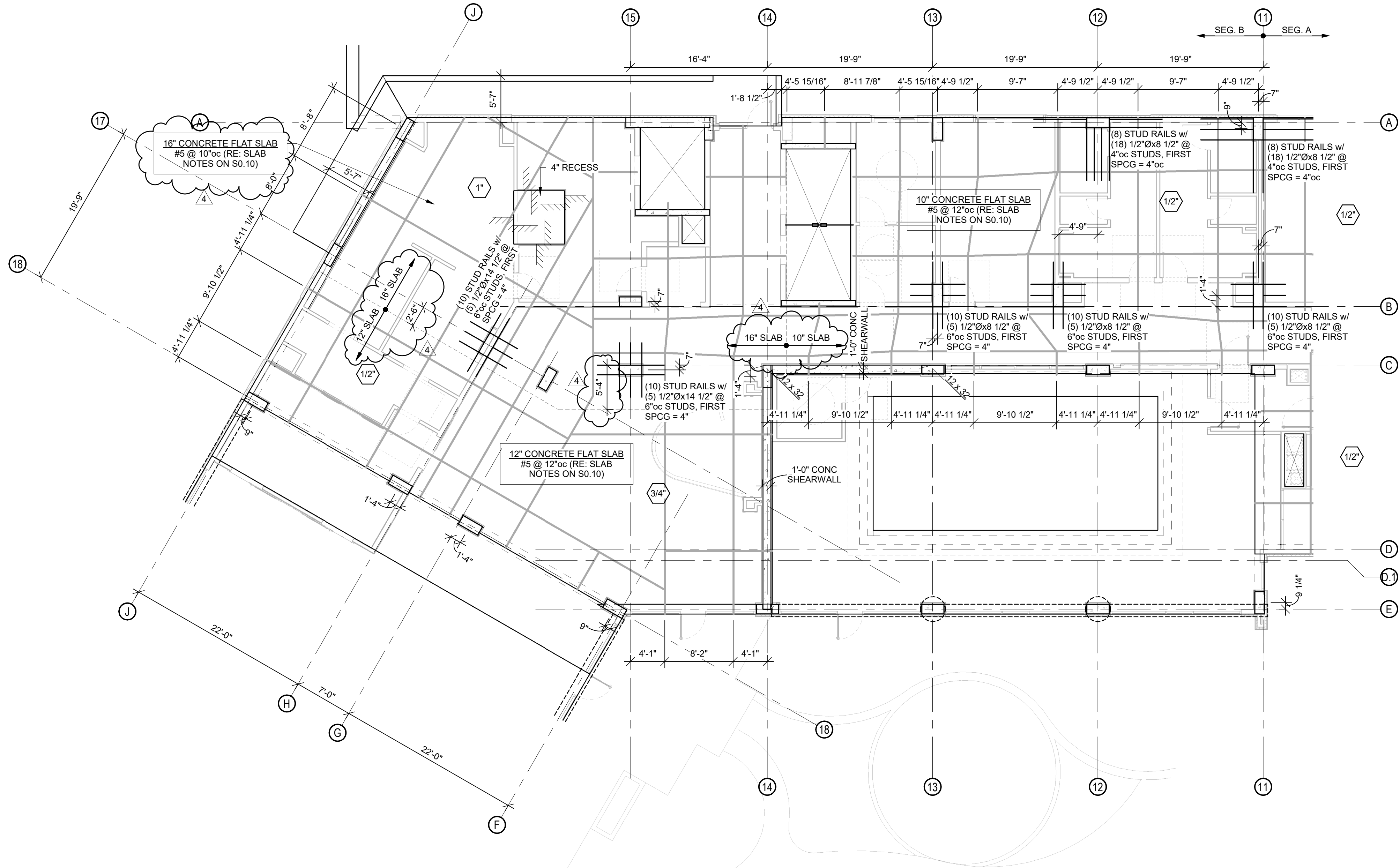
DRAWING RELEASE LOG

- 19 0626 - PERMIT SUBMITTAL
- 19 0814 - BID SET

REVISIONS:	
2	19 0820 PERMIT REVISION 1
4	19 0826 ADDENDUM 2

DATE:
06/26/19
JOB NO.
617918
DRAWN BY:
TSC/SIW
SHEET NO.

A2.16



1 2ND FLOOR LAYOUT & STUD RAIL PLAN - SEGMENT B
1/8" = 1'-0"

FOUNDATION NOTES:

1. REFER TO GENERAL NOTES ON SHEET S0.01.
2. REFER TO CIVIL AND ARCH DRAWING FOR SLAB & FINISH FLOOR ELEVATIONS.
3. TOP OF FOOTING ELEVATIONS = 99'-0"
4. STRUCTURAL ELEVATION 100'-0" EQUALS CIVIL DATUM ELEVATION 930'-0"
5. REFER TO PIER SCHEDULE ON S0.10.
6. REFER TO ARCH AND MEP DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
7. REFER TO CONCRETE COLUMN SCHEDULE ON S0.10.
8. REFER TO S3.00 SERIES DRAWINGS FOR TYPICAL FOUNDATION DETAILS.

CONCRETE FRAMING NOTES:

1. REFER TO GENERAL NOTES ON SHEET S0.01.
2. REFER TO CIVIL AND ARCH DRAWING FOR SLAB & FINISH FLOOR ELEVATIONS.
3. REFER TO ARCH AND MEP DRAWINGS FOR LOCATIONS OF SPOT AND TRENCH DRAINS.
4. REFER TO CONCRETE COLUMN SCHEDULE ON S0.10.
5. REFER TO SLAB NOTES ON S0.10.
6. COLUMNS AT FLAT SLABS TO HAVE SHEAR STUD RAILS (NOT REQ'D AT DROPPED BEAMS). REFERENCE SLAB LAYOUT PLANS FOR LOCATIONS AND SHEET S3.15 FOR TYPICAL DETAILS AND STUD RAIL SCHEDULE.

ARCHITECTURE
LANDSCAPE
ARCHITECTURE
INTERIORS
ENERGY SERVICES

NSPJ



ARCHITECTS^{PA}
P. 913.831.1415
F. 913.831.1563
NSPJARCH.COM
3515 W. 75TH ST., SUITE 201
PRAIRIE VILLAGE, KS 66208
© COPYRIGHT 2019

A NEW ELEMENT BY WESTIN FOR
MISSION GATEWAY
5931 ROELAND DR
MISSION, KANSAS



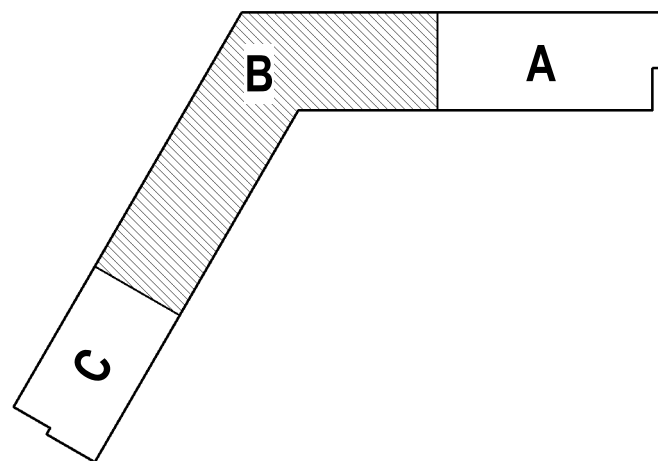
DRAWING RELEASE LOG

- 19 0626 - PERMIT SUBMITTAL
- 19 0814 - BID SET

REVISIONS:

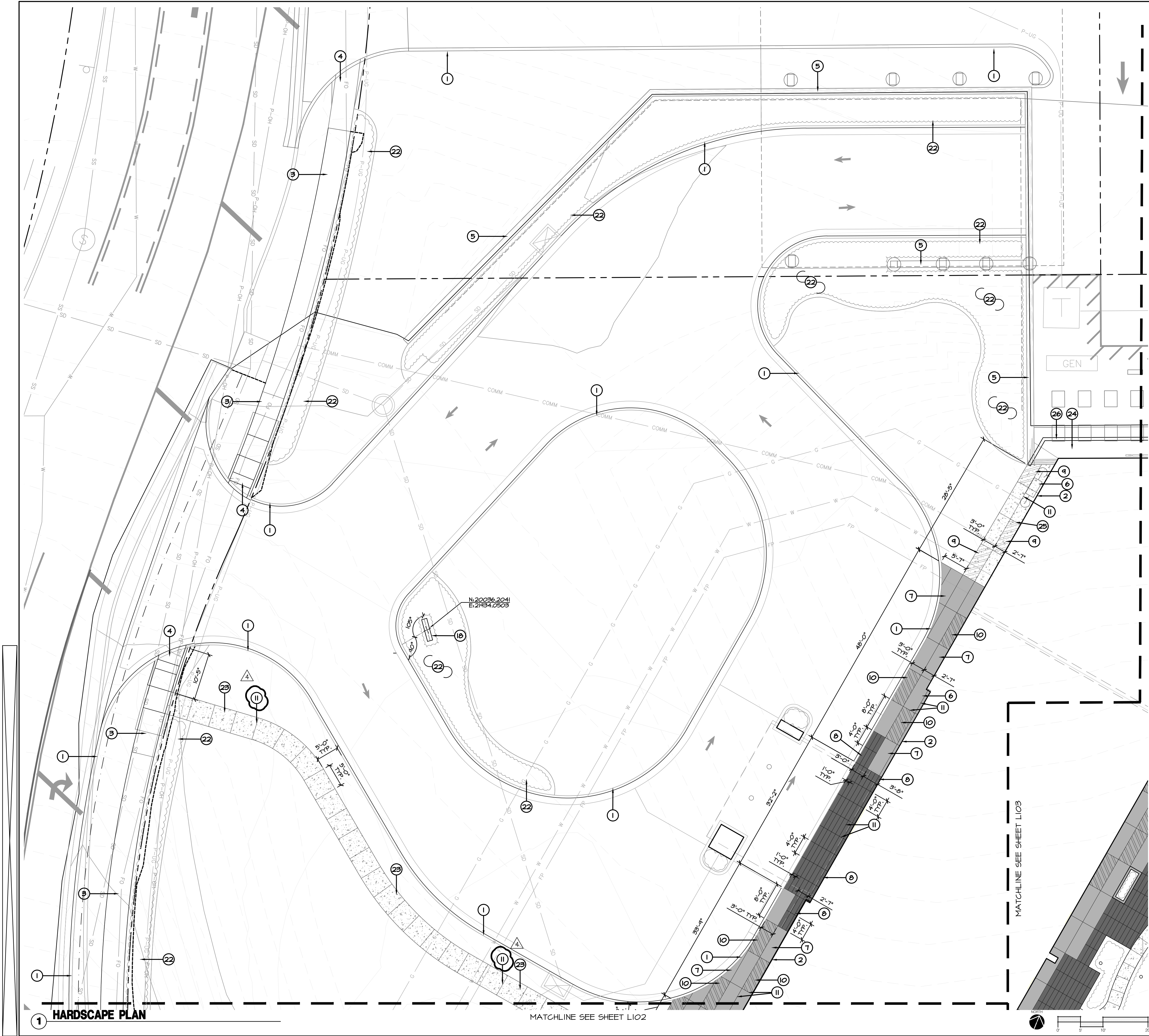
- | | | |
|---|---------|-------------------|
| 2 | 19 0820 | PERMIT REVISION 1 |
| 4 | 19 0826 | ADDENDUM 2 |

KEY PLAN



DATE:
06/26/19
JOB NO.
617918
DRAWN BY:
CAB/JLF
SHEET NO.

S2.21b



HARDSCAPE LEGEND:

- RIGHT OF WAY / PROPERTY LINE
- SHEET MATCHLINE
- CONCRETE PAVEMENT
- COLOR CONCRETE #1
- COLOR CONCRETE #2
- CONCRETE PAVEMENT WITH COLOR STAIN #1 APPLIED
- COLOR CONCRETE #1 WITH COLOR STAIN #2 APPLIED
- SYNTHETIC TURF

HARDSCAPE PLAN NOTES:

- 1 BACK OF CURB; REF. CIVIL PLANS
- 2 BUILDING FACADE; REF. ARCHITECTURAL PLANS
- 3 CONCRETE PAVEMENT; REF. CIVIL PLANS & DETAILS
- 4 CURB RAMP; REF. CIVIL PLANS
- 5 RETAINING WALL WITH BOARD FORM FINISH (M-300.2); REF. STRUCTURAL PLANS
- 6 CONSTRUCT CONCRETE PAVEMENT WITH "V" CUT JOINT; (P-300.1); REF. 1/L200
- 7 CONSTRUCT INTEGRAL COLOR CONCRETE COLOR #1 WITH "V" CUT JOINT (P-300.3); REF. 2/L200
- 8 CONSTRUCT INTEGRAL COLOR CONCRETE COLOR #2 WITH "V" CUT JOINT (P-300.4); REF. 2/L200
- 9 CONSTRUCT CONCRETE PAVEMENT WITH "V" CUT JOINT & COLOR STAIN #1 (P-300.2); REF. 3/L200 & SPECIFICATIONS
- 10 CONSTRUCT INTEGRAL COLOR CONCRETE #1 WITH COLOR #2 STAIN AND "V" CUT JOINT (P-300.5); REF. 2/L200 & 3/L200
- 11 CONTROL JOINT - STRAIGHT CUT, TYP; REF. 5/L200
- 12 EXPANSION JOINT, TYP; REF. 5/L200
- 13 INSTALL INTEGRAL COLOR RAISED CONCRETE PLANTER (M-300.1); REF. 4/L200
- 14 INSTALL SYNTHETIC TURF (P-600.1); REF. 6/L200
- 15 INSTALL SYNTHETIC TURF CONCRETE NAILER (P-600.1); REF. 7/L200
- 16 INSTALL SYNTHETIC TURF PANEL DRAIN (P-600.1); REF. 8/L200
- 17 INSTALL GUARDRAIL; REF. 1/L201
- 18 INSTALL TYPE A11 MONUMENT GROUND SIGN. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION REF. EXTERIOR SIGNAGE STANDARDS 2.0 DATED JULY 2015 AND STRUCTURAL PLANS
- 19 INSTALL BOLLARD LIGHT; REF. LIGHTING PLANS
- 20 INSTALL POLE FOR FESTOON LIGHTING POLE; REF. LIGHTING PLANS
- 21 INSTALL LIMESTONE SEATWALL (P-100.2); REF. 2/L201 & SPECIFICATIONS
- 22 PLANTING BED. CONTRACTOR SHALL LEAVE PLANTING BEDS CLEAN OF GRAVEL & OTHER DEBRIS; REF. LANDSCAPE PLANS
- 23 CONSTRUCT CONCRETE PAVEMENT WITH STRAIGHT CUT JOINT; (P-300.1); REF. 3/L201
- 24 ELEVATED WALKWAY; REF. ARCHITECTURAL PLANS
- 25 TOPPING SLAB ISOLATION JOINT; REF. ARCHITECTURAL PLANS
- 26 BOARD FORMED CONCRETE WALL; REF. ARCHITECTURAL PLANS

ochsner hare + hare

the olsson studio

1814 Main St.
Kansas City, MO 64108

TEL 816.842.8844

www.olsosn.com

REV. NO.	DATE	REVISIONS DESCRIPTION	
		BY	
1	19.08.14	BID SET	
2	19.08.26	ADDENDUM 2	
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			

HARDSCAPE PLAN

SITE DEVELOPMENT PLANS

MISSION GATEWAY HOTEL

SHAWNEE MISSION PKWY & ROELAND DR

MISSION, KS

2019

drawn by: EW/BMT/G

checked by: KT

approved by: KPS

QA/QC by: KT

project no.: C15-2039

drawing no.: HSC C152039.DWG

date: 2019.06.26

SHEET

L101

PART 1 - GENERAL**1.1 SUMMARY**

- A. Section Includes:
 - 1. Wall sheathing.
 - 2. Roof sheathing.
 - 3. Sheathing joint and penetration treatment.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product.

1.3 INFORMATIONAL SUBMITTALS

- A. Evaluation Reports: For the following, from ICC-ES:
 - 1. Wood-preservative-treated plywood.
 - 2. Fire-retardant-treated plywood.

PART 2 - PRODUCTS**2.1 PERFORMANCE REQUIREMENTS**

- A. Fire-Resistance Ratings: As tested according to ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Fire-Resistance Ratings: Indicated by design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

2.2 WOOD PANEL PRODUCTS

- A. Emissions: Products shall meet the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

2.3 PRESERVATIVE-TREATED PLYWOOD

- A. Preservative Treatment by Pressure Process: AWP A U1; Use Category UC2 for interior construction not in contact with ground, Use Category UC3b for exterior construction not in contact with ground, and Use Category UC4a for items in contact with ground.
- B. Mark plywood with appropriate classification marking of an inspection agency acceptable to authorities having jurisdiction.
- C. Application: Treat items indicated on Drawings and plywood in contact with masonry or concrete or used with roofing, flashing, vapor barriers, and waterproofing.

2.4 FIRE-RETARDANT-TREATED PLYWOOD

- A. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article that are acceptable to authorities having jurisdiction and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
- B. Fire-Retardant-Treated Plywood by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet (3.2 m) beyond the centerline of the burners at any time during the test.

1. Exterior Type: Treated materials shall comply with requirements specified above for fire-retardant-treated plywood by pressure process after being subjected to accelerated weathering according to ASTM D 2898. Use for exterior locations and where indicated.
 2. Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201/D 3201M at 92 percent relative humidity. Use where exterior type is not indicated.
 3. Design Value Adjustment Factors: Treated lumber plywood shall be tested according to ASTM D 5516 and design value adjustment factors shall be calculated according to ASTM D 6305. Span ratings after treatment shall be not less than span ratings specified. For roof sheathing and where high-temperature fire-retardant treatment is indicated, span ratings for temperatures up to 170 deg F (76 deg C) shall be not less than span ratings specified.
- C. Kiln-dry material after treatment to a maximum moisture content of 15 percent.
- D. Identify fire-retardant-treated plywood with appropriate classification marking of qualified testing agency.
- E. Application: Treat plywood indicated on Drawings.
- 2.5 WALL SHEATHING
- A. Plywood Sheathing: Either DOC PS 1 or DOC PS 2, Exterior, Structural I, Exposure 1 sheathing.
- B. Oriented-Strand-Board Sheathing: DOC PS 2, Exposure 1, Structural I sheathing.
- C. Glass-Mat Gypsum Sheathing: ASTM C 1177/1177M.
1. Georgia-Pacific, Dens-Glass Gold
 2. Type and Thickness: Type X, 5/8 inch (15.9 mm) thick.
- D. Cementitious Backer Units: ASTM C 1325, Type A.
1. National Gypsum Company.
 2. United States Gypsum Company.
 3. Thickness: 1/2 inch (12.7 mm).
- 2.6 ROOF SHEATHING
- A. Plywood Sheathing: Either DOC PS 1 or DOC PS 2, Exterior, Structural I, Exposure 1 sheathing.
- B. Oriented-Strand-Board Sheathing: DOC PS 2, Exposure 1, Structural sheathing.
- 2.7 FASTENERS
- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
1. For roof, parapet and wall sheathing, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M or of Type 304 stainless steel.
- 2.8 SHEATHING JOINT-AND-PENETRATION TREATMENT MATERIALS
- A. Sealant for Glass-Mat Gypsum Sheathing: Elastomeric, medium-modulus, neutral-curing silicone joint sealant compatible with joint substrates formed by gypsum sheathing and other materials, recommended by sheathing manufacturer for application indicated and complying with requirements for elastomeric sealants specified in Section 079200 "Joint Sealants."
- B. Sealant for Glass-Mat Gypsum Sheathing: Silicone emulsion sealant complying with ASTM C 834, compatible with sheathing tape and sheathing and recommended by tape and

sheathing manufacturers for use with glass-fiber sheathing tape and for covering exposed fasteners.

1. Sheathing Tape: Self-adhering glass-fiber tape, minimum 2 inches (50 mm) wide, 10 by 10 or 10 by 20 threads/inch (390 by 390 or 390 by 780 threads/m), of type recommended by sheathing and tape manufacturers for use with silicone emulsion sealant in sealing joints in glass-mat gypsum sheathing and with a history of successful in-service use.

- C. Sheathing Tape for Foam-Plastic Sheathing: Pressure-sensitive plastic tape recommended by sheathing manufacturer for sealing joints and penetrations in sheathing.

2.9 MISCELLANEOUS MATERIALS

- A. Adhesives for Field Gluing Panels to Wood Framing: Formulation complying with APA AFG-01 or ASTM D 3498 that is approved for use with type of construction panel indicated by manufacturers of both adhesives and panels.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
- B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- C. Securely attach to substrate by fastening as indicated, complying with the following:
 1. Table 2304.9.1, "Fastening Schedule," in the ICC's International Building Code.
 2. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in the ICC's International Residential Code for One- and Two-Family Dwellings.
 3. ICC-ES evaluation report for fastener.
- D. Coordinate wall and roof sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- E. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.

3.2 WOOD STRUCTURAL PANEL INSTALLATION

- A. General: Comply with applicable recommendations in APA Form No. E30, "Engineered Wood Construction Guide," for types of structural-use panels and applications indicated.
- B. Fastening Methods: Fasten panels as indicated below:
 1. Wall and Roof Sheathing:
 - a. Nail to wood framing. Apply a continuous bead of glue to framing members at edges of wall sheathing panels.
 - b. Screw to cold-formed metal framing.
 - c. Space panels 1/8 inch (3 mm) apart at edges and ends.

3.3 GYPSUM SHEATHING INSTALLATION

- A. Comply with GA-253 and with manufacturer's written instructions.
 1. Fasten gypsum sheathing to wood framing with nails or screws.

2. Fasten gypsum sheathing to cold-formed metal framing with screws.
 3. Install panels with a 3/8-inch (9.5-mm) gap where non-load-bearing construction abuts structural elements.
 4. Install panels with a 1/4-inch (6.4-mm) gap where they abut masonry or similar materials that might retain moisture, to prevent wicking.
- B. Seal sheathing joints according to sheathing manufacturer's written instructions.
1. Apply elastomeric sealant to joints and fasteners and trowel flat. Apply sufficient amount of sealant to completely cover joints and fasteners after troweling. Seal other penetrations and openings.
 2. Apply glass-fiber sheathing tape to glass-mat gypsum sheathing joints and apply and trowel sealant to embed entire face of tape in sealant. Apply sealant to exposed fasteners with a trowel so fasteners are completely covered. Seal other penetrations and openings.
- 3.4 CEMENTITIOUS BACKER UNIT INSTALLATION
- A. Install panels and treat joints according to ANSI A108.11 and manufacturer's written instructions for type of application indicated.

END OF SECTION 061600

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Interior and Exterior Graphic Plaques, Characters and Accessories.
 - a. Furnished by Owner, installed by [Owner](#):
 - 1) Directional Signage
 - 2) Identification Signage
 - 3) Projection Mounted Signage
 - 4) Stair and Elevator Signage
 - 5) Informational Signage
 - 6) Letters and Graphics
 - 7) Key Card Signage
 - 8) Porte Cochere Signage
 - 9) Guest Room Signage
 - 10) Exercise Room Signage
 - 11) Pool Signage
 - 12) Fire Pit Emergency Shutoff Signage
 - 13) Fire Pit Warning Plaque Signage
 2. Exterior Signs:
 - a. Furnished by Owner, installed by Contractor:
 - 1) Channel Letter Signs
 - 2) Single-Faced, Wall Mounted Signs
 - 3) Monument Signs
 - 4) Pylon Signs
 - 5) [Parking Lot Signage](#)
 3. Mounting Devices and Fittings.
 4. Preparation of camera-ready artwork needed to produce the complete graphics package, unless otherwise noted.
- B. Related Sections:
1. Sign Manual – Interior Graphics Package
 2. Sign Manual – Exterior Graphics Package
 3. Section 103100 – Manufactured Fireplaces: For Emergency Shut Off and Warning Plaque signage installed at Fire Pit
 4. Section 142100 – Electric Traction Passenger Elevators: For code required elevator signage.

5. Section 265100 – Interior Lighting: For Exit Lighting.
6. Division 26 Sections: For electrical service and connections for illuminated signs.

1.02 REFERENCES

- A. American National Standards Institute, Inc.(ANSI) Publications:
 1. A117.1 “American National Standard for Buildings and Facilities Providing Accessibility and Usability for Physically Handicapped People”
- B. Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- C. ASTM International (ASTM) Publications:
 1. B117 “Standard Practice for Operating Salt Spray (Fog) Apparatus”
 2. D1735 “Standard Practice for Testing Water Resistance of Coatings Using Water Fog Apparatus”
- D. American Welding Society (AWS)

1.03 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 01 Specification Sections.
- B. **Submit “Letter of Conformance” in accordance with Section 013300 indicating specified items selected for use in project with the following supporting data.**
 1. A copy of the manufacturer's printed installation manual shall accompany Bid for review and approval by the Owner's Representative.
 2. Shop Drawings showing sign layout, lettering style, materials, and other pertinent information.
 - a. Post and panel/pylon signage: Include plans, elevations, sections, details, and attachments to other work.
 - b. Show locations of electrical service connections.

1.04 QUALITY ASSURANCE

- A. Graphic signs, including materials, fabrication, mounting and installation, shall conform to state and local code regulations and requirements.
- B. All items shall utilize the highest standards of professional workmanship and practices.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Coordinate delivery of materials comprising the complete graphics package. Store materials upon approval of Owner. Take precautions to protect materials and be responsible for same until installed, inspected and accepted in writing by Owner.

1.06 PROJECT CONDITIONS

- A. Coordinate work with all trades affected by Contractor's work and be fully cognizant of their requirements as pertaining to Contractor's work.

1.07 WARRANTIES

- A. Special Warranty: All materials, finishes and workmanship shall be warranted for a period of two (2) years after final acceptance of the work. If during the warranty period, any defects or faulty materials are found, the Contractor shall immediately proceed at his own expense to replace and/or repair same at not cost to Owner.

PART 2 PRODUCTS

2.01 INTERIOR SIGNAGE MANUFACTURER/FABRICATOR

A. Approved Manufacturers:

1. Graphic Systems Inc.; (316-267-4171)
 - a. Contact: Jackie Diffenbaugh
2. Cornelius Brand Signage, a Forms + Surfaces Company (800-553-7722)
 - a. Contact: Jessica Nagoda (800-451-0410 x 5332; jessica.nagoda@forms-surfaces.com)
3. HOTELSIGNS.com; (888-273-8726)
 - a. Contact: Crystal Simpson (888-273-8726)
 - b. Contact: Kristin Alexin (888-273-8726)
4. Approved Substitution by Marriott International

2.02 MATERIALS – INTERIOR SIGNAGE

- A. Basis of Design: Refer to Architectural Drawings and Volume 8 – TECHNOLOGY PROFILE & SIGNAGE STANDARDS BPM for sign types, designs, and graphic information.
- B. Acrylic: Produced by Rohm and Haas or approved substitution. Acrylic shall be cut straight and true, free of saw marks, burrs, scratches or other imperfections.
- C. Vinyl: Pressure sensitive adhesive backed vinyl with integral color as manufactured by one of the following:
 1. Approved Manufacturers:
 - a. 3M (888-364-3577)
 - b. Approved substitution
- D. Polycarbonate Sheet: Manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating.
- E. Finishes:
 1. Signs: Produced by photographic silk-screen stencils unless otherwise noted. Hand-cut, frisketed, or die-cut images will not be accepted.
 2. Silk-screening inks: As manufactured by one of the following:
 - a. Approved Manufacturers:
 - 1) Naz-Dar Company (800-767-9942)
 - 2) Approved substitution
 3. Ink and paint: Mixed in sufficient quantities to assure consistent coloration throughout project.
- F. Adhesive: Colorless adhesive used in strict accordance with manufacturer's recommendations for conformance to the manufacturer's product warranty, as manufactured by one of the following:
 1. Approved Manufacturers:
 - a. General Electric
 - b. Dow Corning, Inc. (800-248-2481)
 - c. Approved substitution
- G. Fasteners: Non-corrosive, physically compatible with material fastened. Size, shape and type as recommended by the fabricator. Owner maintains the right to review fastening techniques to assure aesthetic conformance to design drawings.

2.03 EXTERIOR BUILDING, MONUMENT AND PYLON SIGNS MANUFACTURER/FABRICATOR

A. Approved Manufacturers:

1. Chandler Signs (214-902-2000)
 - a. Dallas, TX
 - b. Contact: Doug Shirley (dshirley@chandlersigns.com) or Bill Teel (bteel@chandlersigns.com)
2. Persona Inc. (800-843-9888)
 - a. Watertown, SD
 - b. Contact: Mike Peterson (mpeterson@persona-inc.com)
3. Visual Products Corp. dba Transworld Signs –Visual Products Group (888-808-8030)
 - a. US or Canadian Sales Contact: Scott Gabrish (281-812-4987) (sgabrish@transworldsigns.com)
4. Coast Sign Inc. (714-520-9144)
 - a. Anaheim, CA
 - b. Contact: Fred Siavoshi (fred.siavoshi@coastsign.com)
5. Cummings Signs (800-489-7446)
 - a. Nashville, TN
 - b. Contact: Stan Bell (stan.bell@cummingsigns.com)
6. Entera (800-868-0284)
 - a. Panama City, FL
 - b. Contact: John Collins (850-392-0823) (jcollins@enterabranding.com)

2.04 MATERIALS – EXTERIOR SIGNAGE

- A. Basis of Design: Refer to Architectural Drawings and Volume 8 – TECHNOLOGY PROFILE & SIGNAGE STANDARDS BPM.
- B. Standard approved signage. Coordinate mounting with building construction and site layout.

2.05 EXTERIOR ADA PARKING SIGNS

- A. Provide exterior ADA Parking signs where indicated on the Drawings.
- B. Steel Posts: Type II round post shall be manufactured from cold rolled steel, welded and have a minimum yield strength of 50,000 psi given corrosion protection by an exterior triple coating consisting on zinc-applied before or after welding, chromate conversion and a clear polymer overcoat.
 1. The inside surface shall be given corrosion protection. The internal coating shall be applied before or after welding and shall protect the metal from corrosion when subjected to the following:

	<u>ASTM</u>	<u>Exposure Time</u>	<u>End Point</u>
Salt spray (fog)	B117	300 hours	5% Red Rust
 2. The external coating shall meet the following requirements.

	<u>ASTM</u>	<u>Exposure Time</u>	<u>End Point</u>
Salt spray (fog)	B117	12,000 hours	5% Red Rust
Water (fog)	D1735	500 hours	1 st Red Rust
 3. Each steel post shall have an ornamental top of galvanized steel or aluminum alloy designed to fit snugly over the post to exclude moisture. The top shall have a method of securing it to the post to prevent easy removal.

- C. Drive Posts: Drive posts shall meet Local DOT requirements, post size No. 3.
- D. Sign Type: Accessible Parking: Shall meet Local DOT requirements
- E. Mixes:
 - 1. Concrete for Foundations: meet Local DOT requirements.
 - 2. Quantity: Provide ADA signs in locations as shown on the Drawings.

PART 3 EXECUTION

3.01 PREPARATION

- A. Examination:
 - 1. Examine areas for conditions detrimental to completion of the delivery and installation work. Report findings to the Architect immediately. Do not proceed with work until unsatisfactory conditions have been corrected or until advised in writing by the Owner.
 - 2. Starting work constitutes acceptance of conditions under which the work is to be performed. After such acceptance Contractor shall, at his own expense, be responsible for correcting all unsatisfactory and defective work resulting from such unsatisfactory conditions.

3.02 INSTALLATION

- A. Perform all cutting and fitting necessary for installation and completion of the work while accommodating the work of other trades. Immediately repair damage to existing surfaces or finishes caused by work of this Contractor at no cost to Owner.
- B. Site Verification of Conditions: Verify installation conditions previously established under other sections are acceptable for product installation in accordance with manufacturer's instructions
- C. General: Locate sign units and accessories where indicated, using mounting methods of the type described and in compliance with the manufacturer's instructions.
 - 1. Install signs level, plumb, and at the height indicated, with sign surfaces free from distortion or other defects in appearance.
- D. Interior Signage:
 - 1. Install at locations as directed by Owner's Representative.
 - 2. Install in strict accordance to manufacturer's recommended procedures.
 - 3. Signs indicated to be door mounted shall use a combination of vinyl tape and silastic adhesive for a permanent bond.
 - 4. Signs indicated to be installed on the wall adjacent to the latch side of the door shall have a mounting height of 60" above finished floor to centerline of sign. Mounting location shall be so that a person may approach within 3" of signage without encountering protruding objects or standing within the swing of a door.
 - 5. Insure level installation.
- E. Exterior Signage:
 - 1. Install exterior signage and cabinet as indicated on Drawings.
 - 2. Install Accessible Parking signs as indicated on the Drawings. Locations and heights to meet ADA.

3.03 CLEANING AND PROTECTION

- A. After installation, clean soiled sign surfaces according to the manufacturer's instructions. Protect units from damage until acceptance by the Owner.

- B. Provide cleanup and removal of debris resulting from the installation work.

END OF SECTION 101400



 US & CANADA

Element

fire protection & life safety

globaldesign**strategies**
designstandards

June 2019 | franchised



Table of Contents

14.1 Guiding Principles 253

14.2 General Requirements 255

14.3 Principle 1 - Obey the Law 256

14.4 Principle 2 - Fire Containment & Suppression 257

14.5 Principle 3 - Fire Alarm System 261

14.6 Principle 4 - Means of Egress 264

14.7 Principle 5 - Smoke Control 266

14.8 Principle 6 - Standby power 270

14.9 Principle 7 - Elevator Recall 270

14.10 Principle 8 - Building Contents 271

14.11 Principle 9 - Systems Testing 271

key

EI

Expanded Information

BP

Best Practices

R

Reference (Internal)

chapter organization

- This chapter is a part of an integrated series of Chapters.
- Coordination with information from other Chapters is required.

definitions

- Design Standard: a minimum requirement to be fulfilled without exception
- Best Practice: a recommended design guideline, practice or way to execute a design standard
- Expanded Information: an explanation of a design standard or best practice
- Reference (internal): a reference to another document / section within the design standards or to a design strategy / guide within the brand standards

Exception: Fire Protection & Life Safety Design Standards include references to external codes.

Marriott Confidential & Proprietary Information

The contents of the Design Standards are confidential and proprietary to Marriott International, Inc. and may not be reproduced, disclosed, distributed or used without the express permission of an authorized representative of Marriott.

14.1 Guiding Principles

Marriott International (MI) owned, managed and franchised Brand properties must comply with MI Fire Protection & Life Safety (FLS) Guiding Principles, as set forth below, or have a Marriott approved plan in place to be brought into compliance with the principles.

- A. Principle 1: Obey the Law. Comply with governing laws, codes and regulations even if not regularly enforced. Rationale: It's the law.
- B. Principle 2: Provide Effective Fire Containment and Suppression in the Hotel or Residences. Automatic sprinkler and standpipe systems provide effective fire containment and suppression. Alternative fire containment and suppression systems and approaches may also be effective and will be considered. Specialized systems may be necessary for areas susceptible to fuel or grease fires (such as kitchen areas). Consider fire resistance ratings of walls, doors, shafts, stair enclosures and floor / ceiling assemblies. Adequately address fire risks associated with linen and trash chutes. Rationale: Quickly containing and suppressing a fire can largely eliminate loss of life and significantly reduce property damage and resulting business interruption. Grease fires in kitchens are some of the most common and dangerous sources of fires in a hotel. Elements of "firewalls" must resist fire and contain smoke for a minimum period of time to be effective.
- C. Principle 3: Provide Effective Fire Detection and Carbon Monoxide (CO) Detection and Notification. Equip the entire building with a central alarm system to alert occupants. Rationale: If occupants are not promptly notified of a danger, their evacuation may be delayed and they may be harmed as a result.
- D. Principle 4: Provide adequate egress for fire and emergency situations. Consider the following critical items impacting egress; the number of exits, travel distance, dead-end corridors, common path of travel, occupant load, egress capacity, direction of door swing and door hardware. Rationale: Even if occupants are alerted of a danger, they must be able to quickly exit from the building to avoid the danger.
- E. Principle 5: Adequately address the need for effective smoke control to allow occupants to exit the building. In a fire, exit signs in public areas need to be visible and egress stairs need to be usable. Rationale: More people die in fires from inhalation of smoke and toxic vapors than from being burned by flames.

- F. Principle 6: Provide immediate standby power for emergency power and lighting. Provide emergency lighting for the following.
- occupied areas (except guestrooms)
 - egress paths and stairs
 - exterior exit door discharge Rationale: Even with adequate detection, notification and means of egress, occupants need adequate lighting to see their way out of the building (and firefighters need it to see their way inside the building). If power and lights are not restored right away, panic may ensue and evacuation may be hindered.
- G. Principle 7: Provide effective integration of elevator recall functions with fire alarm systems. When smoke is detected in the elevator lobby, elevator machine room or elevator shaft, elevators must automatically return to:
- pre-designated levels (those with areas of egress) or
 - alternative levels (if the pre-designated levels are affected by the fire) This prevents elevators from stopping at floors affected by the fire. Thereafter, control of elevators must be turned over to firefighters for emergency operations. Lastly, the main power to elevators must automatically shut off when there is risk of activation of sprinklers in the elevator hoistway or machine room (which can cause elevators to act erratically). Rationale: In a fire, control of elevators is critical. This gives firefighters additional means to access parts of the building if elevator operation is safe. And it prevents occupants from using elevators if operation is not safe.
- H. Principle 8: Limit fire risks of building contents. Consider flammability ratings of furnishings, carpeting, curtains and wall finishes. Rationale: Building contents can serve as fuel for fires and emit toxic fumes and must be carefully selected.
- I. Principle 9: Conduct performance-based testing. Before occupancy, FLS systems must be fully operational and tested to the satisfaction of Marriott FLS representatives. Rationale: Even the best designed FLS systems do not work if they are installed incorrectly.

14.2 General Requirements

A. Application: United States

1. The FLS Design Standards include design standards, performance criteria, reference standards and life safety process verification that define a comprehensive fire protection program in accordance with FLS Guiding Principles. Any MI owned, managed and franchised Brand property that complies with the FLS Design Standards will meet the MI FLS Guiding Principles (and thus will comply with this Standard). Coordinate requirements with other Chapters and in particular <10>, <12> and <15A>.
2. Application of these Standards to a specific project requires a design analysis.
3. When a MI property is integrated with or interconnected with another building, the building shall provide protection equal to the fire protection and life safety standards required for the MI property, as defined by FLS on a case-by-case evaluation.

B. Definitions

1. High-Rise Building: A building where the floor of an occupiable story is greater than 23 m (75 ft.) above the lowest level of fire department access.
2. Back-of-House (BOH): Includes areas such as employee spaces, employee restrooms, laundry, offices, work areas, commercial kitchens storage areas, workshops, etc.
3. Guestroom: The term “guestroom” includes suites, residences, serviced apartments, interval ownership, hotel villas, etc.

C. Submittals: Prior to system installation or modification, submit one set of drawings, plus accompanying materials and documentation of the following for review and acceptance to:

1. Marriott Fire Protection & Life Safety:
 - a. Drawings Scale: Not less than the following: 6/8 inch = 1 ft. scale.
 - b. Submittal Requirements:
 - Floor Plans: Show floor areas (m² or sq. ft.) and rooms exiting, exit capacity, occupant load diagrams, door hardware and fire resistance ratings.
 - Fire Alarm: System diagrams, shop drawings, equipment product sheets, voltage drop and battery calculations and sequence of operation matrix.

- Automatic Sprinkler & Standpipe: System shop drawings, hydraulic calculations, and equipment product sheets, fire pump test curve, and controller and transfer switch equipment sheet.
- Type 1 Grease Hood & Duct Fire Suppression: Equipment product sheets and drawings (plan and side views) indicating cooking equipment, hood and suppression system. See <10>.
- Emergency Power: Plans for emergency lighting and exit signs, and information on the emergency power provided.
- Smoke Control: System shop drawings, sequence of operations, riser diagrams and calculations (space volumes, air changes, make-up and exhaust, fan and equipment flow capacities, and locations).

C. Zurich Services Corporation:

- Automatic Sprinkler & Standpipe: System shop drawings, hydraulic calculations and equipment product sheets.
- Construction Drawings: Set of construction (contract) drawings.

2. Mailing Addresses:

- a. Marriott International, Inc.: Marriott Fire Protection & Life Safety, Dept. 56/924.36, 10400 Fernwood Road, Bethesda, MD 20817, USA
- b. Zurich Services Corporation, Mr. Dale Seemans, 611 Nemours Ln., Woods of Louviers, Newark, DE 19711, USA

14.3 Principle 1 - Obey the Law

- A. Laws & Governing Regulations: Comply with governing laws, codes and regulations even if not regularly enforced. If governing requirements conflict with MI's Design Standards, contact FLS for resolution.
- B. Application: Current edition of all cited references are the basis for FLS Design Standards and are applicable to all MI managed, owned and franchised properties.
- C. **R** References & Resources:
 - National Fire Protection Association (NFPA) & International Building Code (IBC) Standards: The Life Safety Code - NFPA 101 is the basis for FLS Design Standards. Compliance with the current version of NFPA and IBC is required in addition to the codes required by the governing authority.
 - Elevator & Escalator Safety Code: Current ASME A17.1 edition and supplements.
 - Testing Program: Provide Underwriters Laboratories (UL) listed materials,

appliances and equipment.

14.4 Principle 2 - Fire Containment & Suppression

- A. **R** Standards: IBC, NFPA 13, NFPA 14, NFPA 1142, NFPA 22 and NFPA 20.
- B. Automatic Sprinkler, Water Mist & Standpipe System: Comply with code as written.
 - 1. Provide a complete hydraulically designed combination automatic sprinkler and standpipe system zoned by floor.
- C. Sprinkler System:
 - 1. Sprinkler System Options: Traditional sprinkler system, HI-FOG water mist system or Minimax Minifog EconAqua
 - 2. **R** Building Footprint: Sprinkler building areas within building “footprint”, including canopies required by NFPA 13.
 - 3. **R** Parking Structures: Provide sprinkler protection, unless greater than 50% of perimeter is open to exterior air and not under any portion of the building.
 - 4. **BP** Ballrooms & Exhibit Halls: Design the sprinkler system in compliance with Ordinary Hazard Group 1
 - 5. **R** Utility Spaces: Provide complete sprinkler protection in electrical, mechanical, telephone and computer rooms.
 - 6. **R** Loading Docks and Truck Bays: Provide sprinkler protection. If subject to freezing, provide dry pipe system.
 - 7. **R** Freezer & Cooler Boxes: Protect with dry type sprinklers supplied from area wet pipe sprinkler system.
 - 8. **R** Guestroom Closets & Pantries: Sprinklers are not required in clothes closets, linen closets and pantries within hotel guestrooms where the area does not exceed 2.2 m² (24 sq. ft.) and where the least dimension does not exceed 0.9 m (3 ft.) or within Residences where the area does not exceed 1.1 m² (12 sq. ft.).
 - Closets and pantries with washer, dryer, water heater, mechanical or electrical equipment require sprinklers.
 - 9. **R** Guestroom & Residence Bathrooms: Sprinklers are not required if bathroom is less than 5.10 m² (55 sq. ft.). Regardless of bathroom area, sprinklers are required when combustible tubs, or shower and tub surrounds (plastic / fiberglass) enclosures are provided.

10. **BP** Coastal Areas: Provide exterior galvanized pipe and fittings with corrosion resistant sprinklers for wet pipe and dry pipe sprinkler systems in exterior unconditioned spaces.
11. **BP** In buildings 4 stories or less in height, apply NFPA 13 instead of NFPA 13R.

D. Design Requirements:

1. **R** Water Source: Provide dependable source of water quantity and pressure from municipal water main or from on site cistern or tanks if municipal water is not available.
2. **BP** Safety Factor: Provide a 10% hydraulic safety factor up to a maximum of 0.7 bar (10 psi) for automatic sprinkler system and water mist system.
3. **BP** Pressure Reducing Valves: Design system within maximum pressure of 12 bar (175 psi) without use of pressure reducing valves. If pressure reducing valves are necessary, obtain acceptance and specific design requirements from FLS.
4. Control Valves: Provide the following:
 - a. Supervisory Signal Initiating Device (tamper switch): Provide for each control valve.
 - b. Access: Visible and readily accessible in the back-of-house area or stairwell.
5. **R** Check Valves: Provide check valves at floor control valves as required to eliminate false activation of sprinkler waterflow alarms on other floors.
6. Water Flow Switches: Provide retardant type. Initiate alarm signal between 30 and 60 seconds.
7. **R** CPVC Pipe & Fittings: If provided, install in compliance with manufacturer's specifications. Use chemically compatible materials that contact pipes and fittings.
8. Fire Pumps: Locate fire pump drivers, fire pumps, fire pump controllers and fire pump power supplies (normal and standby) above the 100 year flood elevation and above the maximum anticipated hurricane storm surge elevations.
9. Zoning:
 - a. Zone each floor / story separately at a minimum.
 - b. **BP** High-Rise Buildings: Connect guestroom and residential zone sprinkler piping to 2 risers at each floor interconnected with a control

valve, check valve, flow switch and tamper switch at each riser.

C. Attic Spaces: Provide dedicated zone for attic spaces, separate from floor below.

E. Wet Pipe Sprinkler Systems: Provide for habitable spaces such as guestrooms, guestroom corridors, public and back-of-house areas.

1. **BP** Antifreeze (liquid) systems are not recommended.
2. **BP** Insulation is not considered "freeze protected".

F. Dry Pipe Sprinkler Systems:

1. Design to provide water to the remote inspector test and drain assembly within 60 seconds.
2. Provide system tank mounted compressor with a secured switch.
3. **BP** Use steel schedule 40 pipe. Include grooved fittings with cut grooves with sealing type gaskets. Install piping with a pitch, including heated areas.
4. **BP** Dry type sprinklers supplied from the wet pipe sprinkler system may be provided in small unheated areas.

G. Inspector's Test & Drain Assembly: See example diagrams.

1. Comply with code as written except locate at farthest (remote) end of zone in readily accessible areas.
2. Drain Pipe: Provide continuous hard pipe (steel or CPVC) to exterior at ground level.
3. **BP** Sprinkler zones with dead end mains or more than one remote end, provide inspector's tests and drains at each dead end main and remote end.

H. Sprinklers:

1. Provide .38 lpm / m² (0.10 gpm / sq. ft.) minimum discharge density for light hazard areas.
2. **R** Provide fast response / quick response type in the following:
 - a. **R** Sprinkler Table

Room / Space	Sprinkler Type	Temp. Rating
Guest & Public Areas	Quick Response	57° to 79° C (135° to 175° F)
Balcony (combustible)	Quick Response - corrosion resistant, dry, side wall	100° C (212° F)
Porches	Quick Response - corrosion resistant, dry, side wall	100° C (212° F)
Swimming Pools (indoor)	Quick Response - corrosion resistant	68° to 79° C (155° to 175° F)

3. **BP** Concealed (cover plate) sprinklers are not preferred.
4. **BP** Sprinkler type for a particular application are as follows:
 - a. **BP** Sprinkler Table

Room / Space	Sprinkler Type	Temp. Rating
Attic Systems	Quick Response - ventilated Quick Response - unventilated	100° C (212° F) 141° C (286° F)
Dry Pipe Systems	Quick Response - ventilated (unoccupied spaces) Quick Response - unventilated	100° C (212° F) 141° C (286° F)
Mechanical / Electrical	Quick Response	68° to 79° C (155° to 175° F)
Parking Structures	Quick Response	68° to 79° C (155° to 175° F)
Elevator Machinery	Quick Response	100° C (212° F)
Sauna / Steam Rooms Laundry Dryer Plenum	Quick Response - corrosion resistant	141° C (286° F)
Walk-in Coolers / Freezers	Quick Response - dry pendant	68° to 79° C (155° to 175° F)
Commercial Kitchens	Quick Response	79° to 107° C (175° to 225° F)
Storage	Quick Response	68° to 79° C (155° to 175° F)

5. **BP** Sprinkler Coordination:
 - a. **BP** Install sprinklers with the manufacturer's minimum allowable projection from the wall or ceiling.
 - b. **BP** Coordinate locations of sprinklers at guestrooms and public areas to avoid location conflicts (such as crown moldings, HVAC grilles, ceiling fans).
 - c. **BP** In corridor ceilings, generally, position sprinklers along centerline of corridor width.
 - d. **BP** In ceilings with acoustical tiles, position sprinklers in center of tiles.

- I. Type 1 Grease Hood & Duct Fire Suppression System:
 1. A UL 300 system or equivalent.
 2. **BP** Ansul "Piranha" or "CaptiveAire Core" dual agent suppression system.
 3. **R** Sequence of Operation: The hood and duct fire suppression system control units initiate the following:
 - a. **R** Alarm Signal: Send fire alarm signal to FACP.
 - b. **R** Gas: Automatically activate solenoid to turn off gas to affected cooking lines.
 - c. **R** Power: Automatically turn off power to cooking appliances, lighting and hood makeup air handler, except exhaust fan continues to operate.
- J. **R** Linen & Trash Chutes:
 1. **R** Sprinklers: Install a sprinkler above the top service opening of the chute, above the lowest service opening, and above service openings at alternate levels in buildings over two stories in height.

14.5 Principle 3 - Fire Alarm System

- A. **R** Standards: IBC, NFPA 72
- B. Fire Alarm System: Comply with code as written.
 1. Provide entire building with a point addressable intelligent central fire alarm system from MI's accepted equipment vendors. See the Fire Alarm System Sequence Matrix. Coordinate with <15A>.
 2. Supervising Station Service: Provide a remote supervising station service for Marriott properties that receives and records operation signals of the circuits and devices, and notifies the local fire department when a general alarm is activated.
 3. Campus Style Sites: Provide point addressable intelligent networking that reports to the continuously attended property location or provide other means of notification acceptable to MI.
 4. Testing: Provide the following at the Fire Alarm Control Panel (FACP) for MI Managed Properties only:
 - a. Individual disconnect buttons for testing purposes:
 - Audible appliances and visual strobes (sounder base and guestroom hearing impaired strobe shall function upon guestroom smoke sensor

activation)

- Door hold open mechanisms
- Elevator recall
- Air handlers

5. **BP** Exterior & Unconditioned Areas: Provide NEMA 4X rated devices and appliances (weatherproof, corrosion resistant) listed for exterior exposure.

C. System Smoke Sensors (Detectors): Where smoke exhaust is required in other sections of this chapter, provide system smoke sensors.

1. Guestrooms, Suite Rooms and other Sleeping Units: Provide low voltage photoelectric system smoke sensors with sounder bases.

- a. **R** Sounder Base: Provide minimum audible alarm of 85 dBA at 3 m (10 ft.); minimum of 75 dBA “at the pillow”.

- b. **R** Activation of room system smoke sensor to immediately and automatically sound an alarm within the room of incident and annunciate as a supervisory signal.

- c. **R** System smoke sensor normal and emergency power is provided by the FACP.

- d. **R** In suites and other mixed sleeping spaces, provide the following:
 - System smoke sensors in each separate sleeping room, living rooms convertible to sleeping and areas providing access to the corridor doorway.
 - Simultaneously activate multiple smoke sensor sounder bases located within the same suite or unit.

- e. **BP** To minimize unwanted alarms, avoid locating smoke sensors near the kitchen or bathrooms.

- f. **R** Locate smoke sensors at the highest ceiling area in the room.

2. Public Areas & Corridor Areas: Provide system smoke sensors where smoke exhaust is required in compliance with the other requirements of this document.

- a. **BP** Provide system smoke sensors in assembly areas in high rise buildings.

3. **R** Duct System Smoke Sensors:

- a. **R** Provide remote test switch and indicator light accessible from floor level.

- b. **R** Location: Provide downstream of air handling units over 945 l/s

(2,000 cfm).

- c. **R** Operation: Smoke sensor shuts down AHU upon sensing smoke and annunciates at fire alarm panel, but does not activate smoke exhaust system.
- D. **R** Carbon Monoxide (CO) Detectors: Install CO detectors with sounders. Connect to the FACP and annunciate as a supervisory signal.
 1. **R** General: Provide in rooms and areas containing fuel burning appliances and equipment.
 2. **R** Fireplaces: Provide detector in areas containing fuel burning (including wood) fireplaces.
- E. **R** Manual Pull Stations: In lowrise buildings, provide at Reception Desk only, unless required in other locations by applicable codes.
- F. **R** Firefighter Communication Systems: Comply with governing code requirements.
- G. **R** Alarm Notification Appliances: Provide audible notification appliances (speakers, mini-horns, horns, or sounder bases of system smoke sensors listed for general and local evacuation) and visual notification strobe lights in locations according to the following:
 1. **R** Guestroom, Suite Rooms & other Sleeping Units: Provide audible appliances in each sleeping room. In properties with separate multiple sleeping spaces, such as suites and apartments, provide in each sleeping room.
 2. **R** Hearing Accessible Designated Guestrooms, Suites, or Residential Units: Provide audible alarm appliances and visual alarm strobes.
 - a. **R** Arrange strobes to flash in each room or area, within direct line of sight from bed pillows, and bathroom when the following occurs:
 - System smoke sensors and (CO) detectors in rooms or units activate.
 - Building fire alarm notification alarms activate.
 - b. **R** Strobe Light Rating: 177 candela - within 61 cm (24 inch) from the ceiling; 110 candela - more than 61 cm (24 inch) from the ceiling.
 3. **R** Public Areas, Corridors & BOH: Provide audible and visual notification appliances.
- H. **R** Emergency Occupant Notification:
 1. **R** Automatic alert tone (three pulse temporal pattern).
 2. **R** Assembly Spaces Over 300 Occupants: Continuous cycle alert tone

and automatic prerecorded voice message with manual voice communication override.

3. **R** High-Rise Buildings: Continuous cycle alert tone and automatic prerecorded voice message with manual voice communication override.

- I. Annunciator: Provide point address to indicate floor, specific location, device and type of alarm. Provide annunciators in areas monitored 24 hours by property employees (Security, AYS, PABX room, Reception Desk).
- J. Door Hold Open Mechanism: Automatically release doors in affected zone when an alarm is activated. See "Means of Egress" section in this document.

14.6 Principle 4 - Means of Egress

- A. **R** Standards: IBC, NFPA 101, The Life Safety Code
- B. Application: Comply with code as written except "horizontal exits" are not permitted.
- C. **R** Guestroom Areas Corridors: Comply with the following:
 1. **R** Exits: 2 or more remote exits
 2. **R** Dead-End Corridor Limit: 15.24 m (50 ft.)
 3. **R** Common Path Limit: 15.24 m (50 ft.)
- D. Assembly Spaces: Comply with code as written except "horizontal exits" are not permitted.
 1. **R** Occupant Load Factors:
 - a. **R** Ballrooms, Meeting Rooms & Exhibit Halls: 0.65 m² (7 sq. ft.) per occupant
 - b. **R** Restaurant, Lounges & Boardrooms: 1.4 m² (15 sq. ft.) per occupant
 2. Design Requirements:
 - a. **R** Dead-End Corridor Limit: 6.10 m (20 ft.)
 - b. **R** Common Path Limit: 6.10 m (20 ft.)
 - c. **R** Panic & Fire Exit Hardware: Provide hardware on assembly occupancy doors where occupant loads are greater than 99 persons and on doors in the paths of travel to the exterior exit discharge.

- d. **R** Remote Exits: Occupant loads greater than 49 persons, using the above occupant load factors, requires two or more remote exits. Distance between the nearest edges of remote exits is a minimum of one third the greatest diagonal dimension of the space in sprinklered buildings.
- e. Door Hold Open Mechanism: Required on entry doors from public areas to assembly rooms greater than 65 m² (700 sq. ft.). Provide electro-magnetic door hold open mechanism connected to the fire alarm system and electrical service to hold doors open and to automatically release doors when an alarm is activated. See <15C> and <6>.
- f. Operable Partitions: Doors in operable partitions do not qualify as exits, unless a door opens directly into an exit access corridor.
- g. **R** Commercial Kitchen Areas: Egress paths through Kitchens do not qualify as exits.
- h. **R** Banquet Chairs: Provide a fastening device on banquet chairs to connect chairs to each other in rows to prevent individual chair displacement from blocking rows and aisles during emergency egress from assembly occupancies with more than 200 persons.

E. Egress Capacity:

- 1. Stairways: 7.6 mm (0.3 inch) width per person; a minimum width of 1.12 m.
 - 2. Doors, Level Components & Ramps: 5 mm (0.2 inch) width per person.
 - 3. **R** For stairways wider than 1120 mm (44 inch), the capacity may be increased using the following equation:
 - a. **R** Egress Equation: $C = 146.7 + (W_n - 44 / 0.218)$ C = capacity, in persons W_n = nominal width of the stair
- F. **BP** Multi-Use Exits: Avoid sharing stairs and exit corridors with other properties (office, retail, residence, etc.). If unavoidable, submit and obtain acceptance from FLS of alternate facilities that safeguard the property operational and security integrity. See <1>.
- G. **R** Exterior Exit Path: Provide the required width for the exit capacity but not less than 90 cm (3 ft.), hard surfaced walkway leading to a public way.
- H. **R** Exit Discharge: Discharge one half of all exits directly to the building exterior.
- I. **R** Doors: Do not lock stair doors and exit doors from either side. Doors to the exterior must allow for exit access but may be designed to prevent entry from the exterior.
- J. **R** Stair Handrails: At a minimum, provide handrails on both sides of stairways. See <16>.

K. **R** Signage:

1. **R** Stair Signage: In stairs at each landing, include stair designation, floor level, if roof access is available and direction to exit discharge.
2. **R** Means of Egress Signage: Provide egress and exit sign quantities and locations as follows:
 - a. **R** Provide a minimum of two remote exit signs or directional exit signs, visible from locations in a corridor and in spaces with more than 49 occupants.
 - b. **R** Position exit signs to indicate available exits and exit directions, regardless of the exit distance from the sign to the exit.
 - c. **R** Place exit signs perpendicular to the occupant's line of sight.

14.7 Principle 5 - Smoke Control

A. **R** Standards: IBC, NFPA 92, NFPA 101.

B. Application: Provide an automatic engineered mechanical smoke exhaust system to clear cold smoke in 10 minutes in the following areas.

1. Provide in highrise buildings.
 - a. Provide in public areas that lead from an occupied space to an exit and in guestroom corridors.
2. Coordinate with <15A> and refer to the Fire Alarm Matrix.

C. **BP** Makeup Air: Provide makeup air for each smoke exhaust zone. Provide mechanical supply air no less than 70% of exhaust rate.

D. **BP** Smoke Exhaust System Configurations:

1. **BP** Zones: Each space is treated as an individual fire / smoke zone.
2. **BP** Capacity: In spaces requiring smoke exhaust, provide a minimum of 10 to 12 air changes per hour.
 - a. **BP** In larger spaces such as atriums and exhibit halls, increase the air change rates.
 - b. **BP** Consult with FLS on project specific criteria.
 - c. **BP** Calculate zone volumes using slab to slab heights.
3. **BP** Ducted System: Provide hard ducted smoke exhaust from each smoke

zone. Return air plenums and slot diffusers are not permitted for smoke exhaust systems.

4. **BP** Dampers: Provide motor operated, low leakage, automatic reset, dampers for smoke exhaust systems. Manual reset dampers are not allowed.
 5. **BP** Configuration: Separate supply grill from exhaust grill to promote sweeping of the smoke. Locate supply adjacent to exits so smoke is moving against the direction of egress. Provide adequate make-up air and exhaust points to eliminate dead spots and prevent excessive air velocities.
- E. **BP** Public Area Exit Access: Provide hard ducted, mechanical smoke exhaust from each smoke zone in lobby, atriums, pre-function areas, corridors and other exit access in the front-of-house.
1. **BP** Sequence of Operation - Public Areas:
 - a. **BP** Signal: The smoke exhaust system is initiated automatically by a signal from the fire alarm panel when an area smoke sensor is activated.
 - b. **BP** Smoke Exhaust Fan: Discharge damper fully opens. The fan starts and provides 100% exhaust to exterior.
 - c. **BP** HVAC System - Confined Areas: In zones where makeup air is not readily available (ballroom, meeting room, etc.), the return damper of the HVAC system serving the smoke zone closes and the supply fan reduces to 50% outside air.
 - d. **BP** Other Zones: Supply, return and exhaust fans for HVAC systems in other zones remain in normal operating mode.
- F. **BP** Guestroom Corridors: Centrally locate on each floor a dedicated mechanical smoke exhaust riser with normally closed smoke dampers on each floor.
1. **BP** Capacity: Size each roof mounted smoke exhaust fan to simultaneously serve corridors of one floor.
 2. **BP** Distance: 30 m (100 ft.) maximum horizontal distance between supply and exhaust grilles.
 3. **BP** Zones: If smoke doors divide corridor into two or more sections, provide independent exhaust inlet in each section.
 4. **BP** Sequence of Operation - Guestroom Corridors:
 - a. **BP** Activate automatically by area smoke sensors and by floor water flow switches (independent of each other).
 - b. **BP** Upon activation, normally closed smoke exhaust damper on floor of

incidence opens and dampers are closed on remaining non-incidence floors.

- c. **BP** Discharge damper fully opens and the smoke exhaust fan starts.
- d. **BP** Guest corridor and guestroom Dedicated Outside Air System (DOAS) continues to operate in normal mode.
- e. **BP** If applicable, secondary guest corridor pressurization fans start (sized for a minimum capacity of 6 air changes per hour supply air to each floor) and guest corridor and guestroom DAOS is turned off.
- f. **BP** Guestroom Floors: Exhaust fans, including those serving vending rooms and electrical rooms and guestroom bathrooms, continue to operate in normal mode.

G. **R** Stair Pressurization / Smoke-proof Enclosure: Maintain a smoke free stair through one of the following in compliance with NFPA 101.

- 1. **R** Natural Ventilation:
 - a. **R** Open stairwells
 - b. **R** Open balcony or vestibule
- 2. **R** Mechanical Vestibule Ventilation: Ventilate vestibule with not less than one air change per minute and provide exhaust at 150% of the supply.
- 3. **R** Mechanical Pressurization:
 - a. **R** System Configurations: The following are approximate stair enclosure heights and typical design arrangements for fans and ducts:
 - 10 Stories: Single induction point
 - 10 to 20 Stories: One fan at top and one at bottom
 - 20 or More Stories: One or more supply fans ducted through stair with supply registers located every third floor.
 - b. **R** Fan:
 - Type: Provide fan with variable frequency drive. Determine a single set point during commissioning with all doors closed.
 - Capacity: Size fans to provide a balanced 470 l/s (1,000 cfm) per door.
 - Supply Damper: Motor operated, low leakage
 - c. **R** Design Pressure: Provide pressure differential sensors to measure the difference across doors of not less than 2.5 N m² (0.05 inch w.c.).
- 4. **R** Other Criteria:
 - a. **R** Doors: 13.50 kg (30 lbs.) maximum opening force across doors into egress stairs.

b. **R** Sequence of Operation - Stair Pressurization:

- Initiation: System is initiated by a signal from the fire alarm panel due to activation of either a public space (excluding guestrooms) smoke sensor or sprinkler flow switch.
- Dedicated Smoke Sensor: In areas without full area smoke detection, provide smoke sensor within 3 m (10 ft.) of stair enclosure exit doors to activate system.
- Supply Damper: Upon activation, supply damper fully opens and stairwell pressurization fans start.

H. **R** Smoke Control Panel: Provide a smoke control panel for manual control of equipment that is part of the smoke control system with Hand-Off-Automatic (HOA) and pilot lights (one switch and lights for each zone).

1. **R** Location: Position the smoke control panel at the location of the main fire alarm panel.
2. **R** Power: Provide internal power source for manual operation of all equipment. Provide voltage same as fire alarm system.
3. **R** 'Hand' Position: Manually activates all equipment into smoke control mode.
4. **R** 'Off' Position: Shuts down the equipment and returns all dampers to their normal mode.
5. **R** 'Automatic' Position: Allows system to operate in normal building mode, or in smoke control mode upon receipt of a signal from the fire alarm panel.

14.8 Principle 6 - Standby power

- A. **R** Standards: IBC, NFPA 110, NFPA 70 (NEC), NFPA 101
- B. Application: Comply with code as written.
- C. **R** System Requirements: Provide standby power for emergency power and lighting in the event of loss of normal incoming electrical service.
 - Transfer from one power source to another must take no longer than 10 seconds.
 - See <15C> for backup operational power loads to maintain property operations.
- D. **BP** Emergency Lighting: Provide emergency lighting for code required egress and safety, and in the following:
 - Public toilets
 - Fire Pump / Sprinkler Riser Room

14.9 Principle 7 - Elevator Recall

- A. **R** Standards: IBC, ASME A17.1
- B. Application: Comply with code as written.
- C. **R** System: Provide Elevator Phase 1 Designated Level and Alternate Level Recall, Shunt Trip and Phase 2 Firefighters' In-Car Operations in compliance with ASME A17.1; see <12>.
- D. **R** Central Control Station (Fire Command Room): High-Rise Buildings: Provide at a location acceptable to the governing authority. See <15A>.

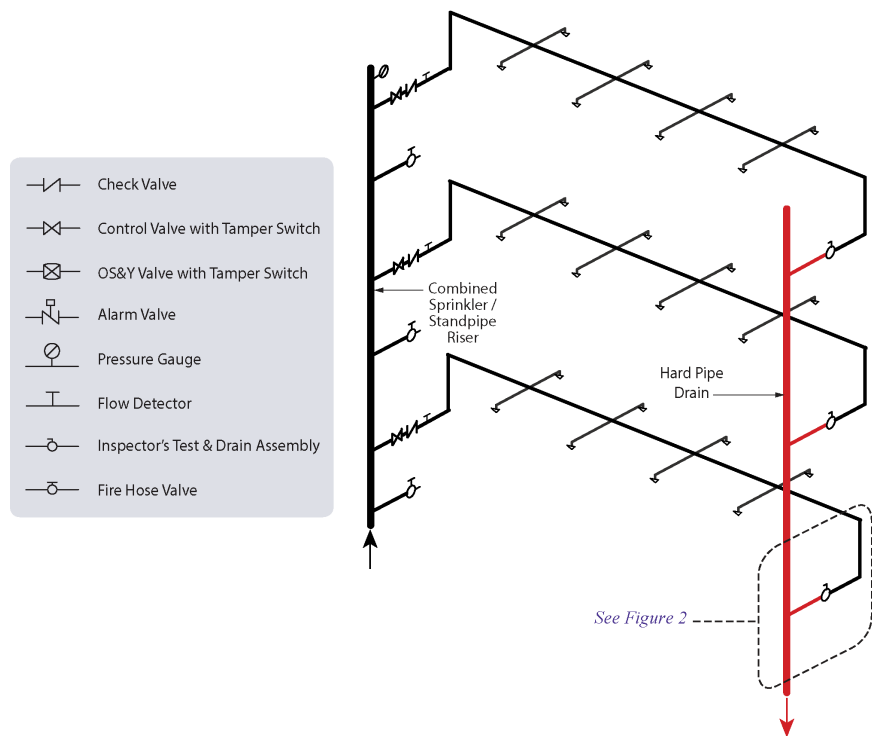
14.10 Principle 8 - Building Contents

- A. **R** Standards: IBC, NFPA 101, NFPA 82, NFPA 13
- B. Application: Comply with code as written. See FF&E criteria.
- C. **R** Fire Resistance Ratings: Fire resistance ratings of walls, doors, shafts, stair enclosures, floor / ceiling assemblies and flammability ratings of furnishing, carpeting, curtains and wall finishes shall comply with IBC. See .
- D. **R** Linen & Trash Chutes:
 - 1. **R** Chute Vent: Extend (full size) a minimum of 90 cm (3 ft.) above the roof line.
 - 2. **R** Construction: Provide metal, prefabricated, manufactured chute within a fire rated shaft.
 - 3. **R** Loading Door: Protect chute openings with a fire rated loading door, located within a service opening room (vestibule).
 - 4. **R** Room Enclosure: Construct the service opening room (vestibule) with fire rated enclosure and door.

14.11 Principle 9 - Systems Testing

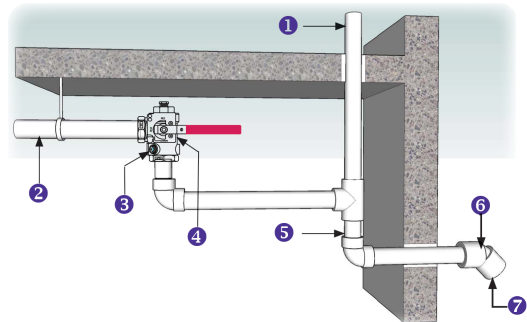
- A. Application: Before a property is occupied, the fire protection and life safety systems shall be fully operational, contractor tested and certified to the satisfaction of a Marriott Representative.
- B. **R** Automatic Sprinkler, Water Mist & Standpipe System:
 - 1. **R** Flush and pressure test system.
 - 2. **R** Fire pump shall be tested and certified by the manufacturer.
 - 3. **R** Underground mains flushed and tested.
 - 4. **R** Perform PRV test.
- C. **R** Fire Alarm: Pretest and operate system without trouble lights exhibited.
- D. **R** Mechanical Smoke Control:
 - 1. **R** Balance Report: Prior to testing smoke control systems, HVAC systems shall be contractor tested and balanced. Test and balance report shall be available.

2. **R** Smoke Exhaust: Public area, atrium and guestroom corridor smoke exhaust systems shall be operational and tested to clear “cold smoke” so that exit signs are visible within 10 minutes of activation without smoke migration to other areas.
 3. **R** Stair Pressurization: Test and operate the system, concurrently with the smoke exhaust system, to confirm design pressures and door opening force.
- E. **R** Type 1 Grease Hood & Duct Fire Suppression: Pretest all coordinated components by activation of hood and duct suppression system control unit.
- F. **R** Emergency Electrical Systems:
1. **R** Generator shall be operational and tested to automatically activate upon loss of normal incoming power and to provide standby and emergency service to operate emergency lighting and specified systems.
 2. **R** Battery standby power and UPS systems providing emergency power and lighting shall be fully operational.
- G. **R** Elevator Recall & Firefighters’ Operation: Elevator Phase 1 Designated Level and Alternate Level Recall and Phase 2 Firefighters’ In-Car Operation Features shall be fully tested in compliance with ASME A17.1.
- H. **R** Central Control Station (Fire Command Room): Panels, indicators, controls and systems shall be operational, tested and accepted.
- I. **R** Means of Egress: Facilities for means of egress shall be operational and unobstructed.
- J. Typical Zoned Sprinkler System

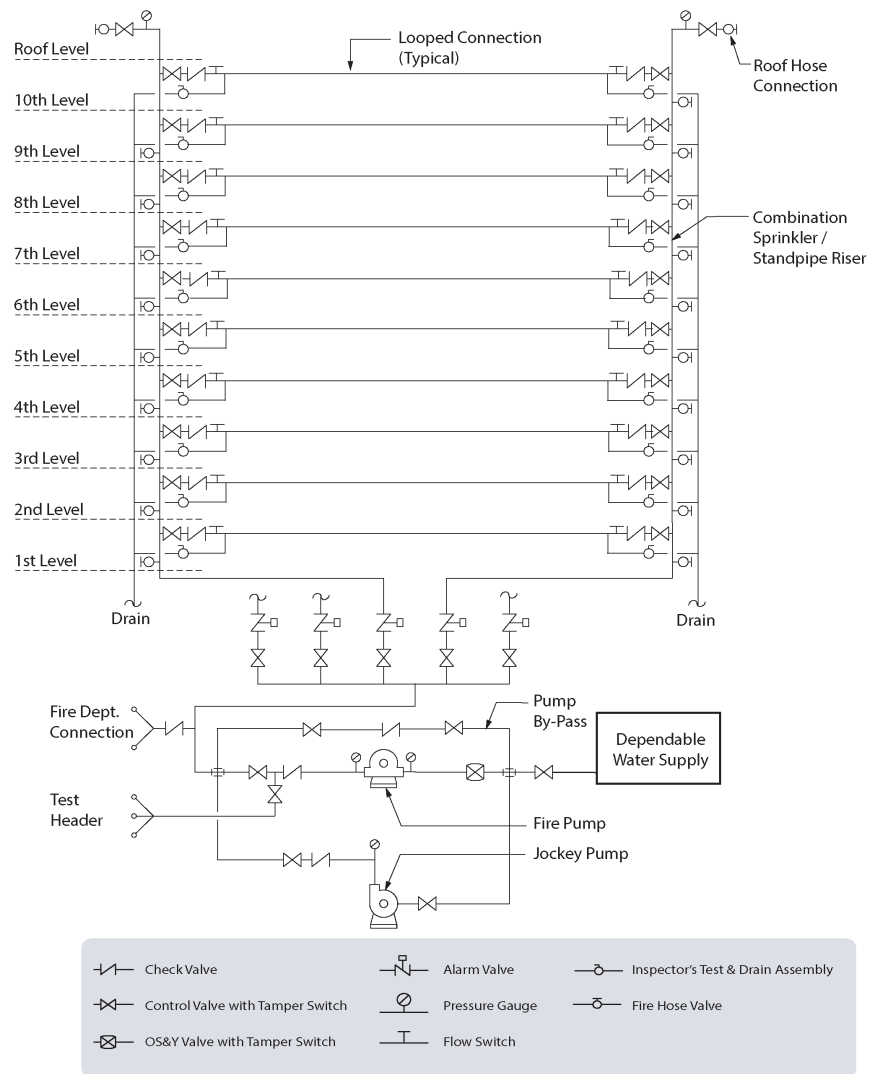


K. Test / Drain Assembly

- ① Hard pipe drain from floor above (steel or CPVC)
 - ② From end of remote branch line for each zone
 - ③ Inspector sightglass
 - ④ Inspector's test and drain assembly with 1.33 mm (1/2 inch) orifice in readily accessible location
- Best Practices:
- ⑤ Continuous hard pipe (steel or CPVC) to exterior
 - ⑥ 45° El
 - ⑦ Smooth bore corrosion resistant outlet



L. **BP** High-rise Sprinkler Riser Diagram



M. Fire Alarm Matrix

General Notes:	System Smoke Sensors (1)	System Heat Detectors (7)	Elevator Lobby smoke detectors (2)	Guestroom System Smoke Sensors (3)	Manual Pull Stations	Waterflow Switches	Dry Sprinkler Pressure Switches	Type 1 - Grease Hood & Duct Fire Suppression	Low / High Air Supply Switches	Duct Smoke Sensors	Sprinkler Valve Tamper Switches	Fire Pump Signals (8)	Emergency Generator Signals (9)	Carbon Monoxide Signals
FACP: Display an audible / visual alarm.	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Remote Annunciator: Display an audible / visual alarm.	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Audible / Visual Alarms: Activate audible / visual strobe appliances on affected floor. (5)	X	X			X	X	X	X						
Assembly Doors and Fire Doors: Release magnetic door holders on affected floor.	X	X				X	X							
Stairwell Pressurization: Automatically activate pressurization.	X	X			X	X	X							
Smoke Exhaust: Automatically activate exhaust system in affected zones.	X	X				X	X	(4)						
Guestroom Audible Alarms: Activate alarms in rooms on affected floor. (5)	X	X			X	X	X	X						
Guestrooms Audible / Visual Signals: Activate both signals in hearing impaired guestrooms on affected floor. (5)	X	X			X	X	X	X						
Local Audible Alarms: Activate audible alarms only in rooms containing alarm.				X										X (6)
Guestroom Local Audible / Visual Signals: Activate both signals only in hearing impaired guestroom containing alarm.				X										X (6)
Air Handlers: Automatically shut off associated air handlers.										X				
Cooking Area Gas / Electric: Automatically shut off associated cooking line gas & electric and makeup air handler.								X						
Elevator Phase 1 Designated Level and Alternate Level Recall, Phase 2 Firefighters' In-Car Operation.			X											
Notes / Notations: (1) System smoke sensors not located in guestrooms. (2) Provide Elevator Phase 1 Designated Level and Alternate Level Recall, Shunt Trip Function and Phase 2 Firefighters' In-Car Operation in compliance with ASME A17.1, Elevator Code. (3) Guestroom Smoke Sensors: Provide photoelectric type, with sounder base (minimum ratings of 85 dBA, with 75 dBA "at the pillow"). In suites, multiple sensors shall activate simultaneously. (4) Except on guestroom floors, water flow alarms shall not activate smoke control exhaust fans where smoke control zones and fire sprinkler zones do not correspond. (5) Fire alarms shall activate only on floor of alarm. Governing authority may require additional zoning. (6) Carbon monoxide detectors in guestrooms, public and BOH areas shall activate an alarm in the guestroom and rooms of incident and at the fire alarm control panel. (7) Heat detectors are not recommended since fire sprinklers serve the same function. (8) Provide "fire pump run" and "fire pump fault" supervisory signals from controller to the FACP, as a minimum. (9) Provide "generator run" and "generator fault" supervisory signals to the FACP.														

CONTRACTOR'S SUBSTITUTION REQUEST

(Use separate form for each request)

Date: 8/20/2019 Request No.: _____

TO: Architect: NSPJ Architects, PA
Phone: 913-831-1415 Fax: _____

PROJECT: Mission Gateway Element Hotel Project No.: 617918
CONTRACTOR TBD

SPECIFIED ITEM: Cold fluid-applied waterproofing
Section: 071416 Page: 4 Paragraph: 2.3 Description: Cold fluid-applied waterproofing
Drawing Number(s): _____ Detail Number(s): _____
The undersigned request consideration of the following:
PROPOSED SUBSTITUTION: Carlisle Coating & Waterproofing Miraseal cold fluid-applied waterproofing

REASON FOR NOT GIVING PRIORITY TO SPECIFIED ITEMS: Similar product by non-listed manufacturer.

SAVINGS or CREDIT to OWNER for ACCEPTING SUBSTITUTE: \$ Competitively priced

Attached data includes description, Specifications, Drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. Proposed substitution has been fully checked and coordinated with the Contract Documents.
2. The proposed substitution does not affect dimensions shown on Drawings.
3. The proposed substitution does not require revisions to mechanical or electrical work.
4. The undersigned will pay for changes to the building design, including architectural and engineering design, detailing, and construction costs caused by the requested substitution.
5. The proposed substitution will have no adverse affect on other trades, the construction schedule, or specified warranty requirements.
6. Maintenance and service parts will be locally available for the proposed substitution.
7. The proposed substitution will have no adverse effect on LEED credits established through the CFRST LEED Volume Program. (Applies to CFRST LEED Volume Program Projects ONLY)

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified item.

Attachments: The attached data is furnished herewith for evaluation of the proposed substitution.

☒ Catalog ☐ Drawings ☐ Samples ☐ Reports ☐ Tests ☐ Other: _____

Submitted by: Luna & Associates

(Firm)

(Authorized Legal Signature)

(Address)

(402) 763-0206

(Telephone)

For use by the Architect: ☒ Accepted ☐ Accepted as Noted ☐ Rejected: Submit Specified Item

BY: Sara Wells
(Authorized Signature)

Date: 8/23/19 Remarks: _____



WATERPROOFING

MiraSEAL™



Description

MiraSEAL is a 100%-solids, fluid-applied, single-component, moisture-reacted, elastomeric, coal-tar and solvent-free, modified polymer that cures to form a flexible, monolithic, waterproof membrane on vertical and horizontal surfaces. Due to the moisture-reactive and non-gassing properties of the membrane, it provides tenacious adhesion to concrete substrates above- and below-grade, preventing lateral water migration, even with moisture present in the concrete. The inherent toughness and resilience of MiraSEAL enables it to bridge structural or shrinkage cracks that may develop in the substrate. MiraSEAL can be applied wet on wet in a horizontal application resulting in reduced installation time.

MiraSEAL is available in a single viscosity for both horizontal and vertical surfaces. Typical applications are between structural slab and wearing course on parking garages, plaza decks, balconies, roof decks, terraces, mechanical equipment rooms, wetrooms, malls, kitchens and shower stalls. MiraSEAL is ideally suited for waterproofing on below-grade foundation walls, tunnels, planters and other areas where a seamless, elastomeric waterproofing is required. MiraSEAL may also be used as a sealant.

Installation

Surface Preparation

New concrete shall be water-cured, trowel-finished, followed by a light, hair broom and in place for 3 days minimum. If curing compounds are required, they shall be 100% Sodium Silicate and shall be approved by CCW. Surfaces shall be structurally sound, dry, and free of oil, grease, dirt, laitance, curing or release agents and other contamination that may harmfully affect the adhesion of the membrane. Mortar joints on block walls shall be struck flush with the block surface.

Remove splatters, fins, ridges or other projections to provide a smooth, level surface. Fill tie rod holes, honey combs, rock pockets, spalls or other voids and indentations with non-shrink grout. Saw-cut moving cracks greater than $\frac{1}{16}$ " to $\frac{1}{4}$ " wide x $\frac{1}{4}$ " deep.

Grind or fill (as required) surface at cold joints where each pour is at a different plane, to provide a smooth and level surface. Clean metal to expose a bright finish. A Concrete Surface Profile (CSP) of 2 or 3 is recommended to promote a mechanical bond between concrete substrate and MiraSEAL.

Detail Work

Clean joints and saw-cut cracks. All moving cracks over $\frac{1}{16}$ " wide and all expansion joints less than 1" wide shall be cleaned, primed, fitted with a backing rod and caulked with Carlisle Polyurethane Sealant as recommended by the data sheet. For larger joints, contact CCW representative.

Apply a one inch, 45° angle cant of CCW-201 sealant at the juncture of all vertical and horizontal surfaces and inside corners, at pipes, vents and other projections.

Apply a 4"-6" wide stripe coat of MiraSEAL Membrane over all sealed cracks, joints and over all hairline cracks less than $\frac{1}{16}$ " and cold joints. Apply a stripe coat of MiraSEAL over sealant cants and up the vertical wall to the height called out on the drawings, (minimum six inches recommended) and onto the horizontal deck 4"-6". Film form or stripe coat shall be 45 +/- 5 mils thick. Allow stripe coats to cure for 1 hour and no longer than 8 hours. If the stripe coats cure for more than 8 hours they must be solvent wiped with Xylene, Toluene, Weathered Membrane Cleaner or VM&P Naptha prior to the application of a second layer.

Priming

Primer is not required for adhesion to dry, non-porous concrete. However, if pinhole and blister problems occur as a result of air and/or moisture vapors being trapped or emitted from the concrete and/or environmental conditions, it is recommended that a thin-mil coat application be applied to remove trapped air/vapor. This is intended to promote and establish an intimate bond with the substrate.

Metal

Mechanically clean to bright finish. Remove dust and debris and solvent wipe with clean cloth. Sawcut $\frac{1}{4}$ " x $\frac{1}{4}$ " between drain flange and substrate. Install CCW-201 sealant struck flush with surface.

Horizontal Application

Apply MiraSEAL over cleaned flange of drains, taking care not to fill weep holes. Drain flange of 3" minimum width recommended. Using a roller, trowel, or brush apply MiraSEAL at 26 sq. ft. per gallon or as required to obtain a 60-mil thickness. Apply MiraSEAL in one coat using a roller, trowel, or squeegee at 26 sq. ft. per gallon or as required to obtain a 60-mil thickness to the entire area to receive waterproofing, including over all detail coats.

WATERPROOFING

MiraSEAL

Vertical Application

Apply MiraSEAL in one coat using a roller, trowel, or squeegee at 26 sq. ft. per gallon or as required to obtain a 60-mil thickness to the entire area to receive waterproofing, including over all detail coats. Wait for material to film form and become stable between each coat.

Reinforced Systems

Apply MiraSEAL in one coat using a roller, trowel, or squeegee at 26 sq. ft. per gallon or as required to obtain a 60-mil thickness to the entire area to receive waterproofing, including over all details coats. Immediately install CCW Reinforcing Fabric into the wet MiraSEAL. Brush or roll the fabric into the wet MiraSEAL, ensuring it is completely saturated into the wet MiraSEAL. Overlap adjoining fabric sheets a minimum of ½". Ensure overlapping fabric is completely saturated in between overlaps. Install carefully to avoid wrinkles. In the event of wrinkles or fishmouths, cut the fabric and overlap the excess to avoid trapped air. Apply an additional coat of MiraSEAL on top of the fabric at 26 sq. ft. per gallon or as required to obtain a 60-mil thickness, extending past the edge of the fabric to completely encapsulate it. The first coat, CCW-500 Reinforcing Fabric, and the second coat will need to all be completed in the same day or working period. Do not apply the first coat and CCW-500 Reinforcing Fabric in an area that can't be coated with the second coat in the same day. Total system dry film thickness shall be 120-mils. Do not leave Reinforcing Fabric exposed overnight.

All fluid-applied product application rates are based on theoretical coverage relative to the percentage of solids in the material. These are minimum application rates to achieve the required dry film thickness for the system and do not account for substrate condition or porosity. A thicker application of the product may be necessary to achieve the required dry film thickness for system relative to the substrate.

Protection

The membrane must be protected from damage caused by future operations and other trades. The applicator shall install protection material applicable to jobsite conditions, to protect the membrane. Protection course must be CCW Protection products that correspond to horizontal or vertical applications.

Install protection course on vertical walls immediately after membrane has cured (24 hrs at 75°F). Install protection course on horizontal application immediately following successful flood testing. If flood test is delayed, install a temporary covering to protect the membrane from other trades.

CCW Protection

Vertical options are Protection Board-V or CCW 200V. Root barrier is the option for Horizontal application.

Flood Test

After membrane has cured 12 hours, plug drains and provide necessary barriers to contain flood water. Flood deck with a 2" head of water and allow to stand for 24 hours. Check for leaks and immediately make repairs if required. Retest after any repairs have been made.

Clean Up

Before material cures, clean adjacent areas to remove stains or spills and clean tools with toluene or xylene. Do not wash off skin with solvents.

Limitations

- Do not apply MiraSEAL to wet or contaminated surfaces.
- Not recommended for exposed or wearing surfaces.
- If metal pan is used for concrete form, the metal pan must be vented.
- Surface temperature must be above 40°F.
- Do not leave exposed for more than 14 days.
- Not compatible with rubberized asphalts. Contact CCW Representative if the MiraSEAL is to come into contact with a rubberized asphalt.

Warnings and Hazards

Combustible liquid and vapor. Keep away from heat and flame. Use only with adequate ventilation. Avoid contact with the eyes or skin, especially open breaks in the skin. In the event of skin contact, remove immediately and wash with warm soapy water. Refer to MSDS for important warnings and product information.

Xylene and toluene are combustible and flammable solvents. Observe all regulations with regards to working with flammable materials. Workmen must wear appropriate protective clothing, eye and skin protection and NIOSH-approved breathing apparatus (organic cartridge recommended).

Packaging

Product	Size
MiraSEAL	5-gallon pails
CCW-500 Reinforcing Fabric	36" x 667' (2,000 sf/roll); 15 rolls/pallet
CCW LiquiFiber	6" x 300' rolls, 8 rolls per case (1,200 sf) and 12" x 300' rolls, 4 rolls per case (1,200 sf)
CCW-201 Sealant	1.5 gallon kit (in 2 gallon pail, plus color pack)

Applicable Standards

ASTM Specification: ASTM C836-06.

Shelf Life

When stored at temperatures below 80°F, shelf life is 6 months in the original, unopened container.

Typical Properties

Property	Method	Typical Value
Composition	—	Modified Polymer
Color	—	Black
Tack-free Time @ 77°F (25°C), 50% RH.	—	60 mins
Solids Content** (Vol.)	ASTM 2697	100%
Low Temp. Flexibility	ASTM C836	No Cracking
Low Temperature. Crack Bridging	ASTM C836	No Cracking
Hardness (Shore A)	ASTM C661	10 (+/- 3)
Elongation	ASTM D2370	350%
Tensile Strength	ASTM D2370	95 psi
Water Vapor Transmission Rate	ASTM E96	0.06 perms inches

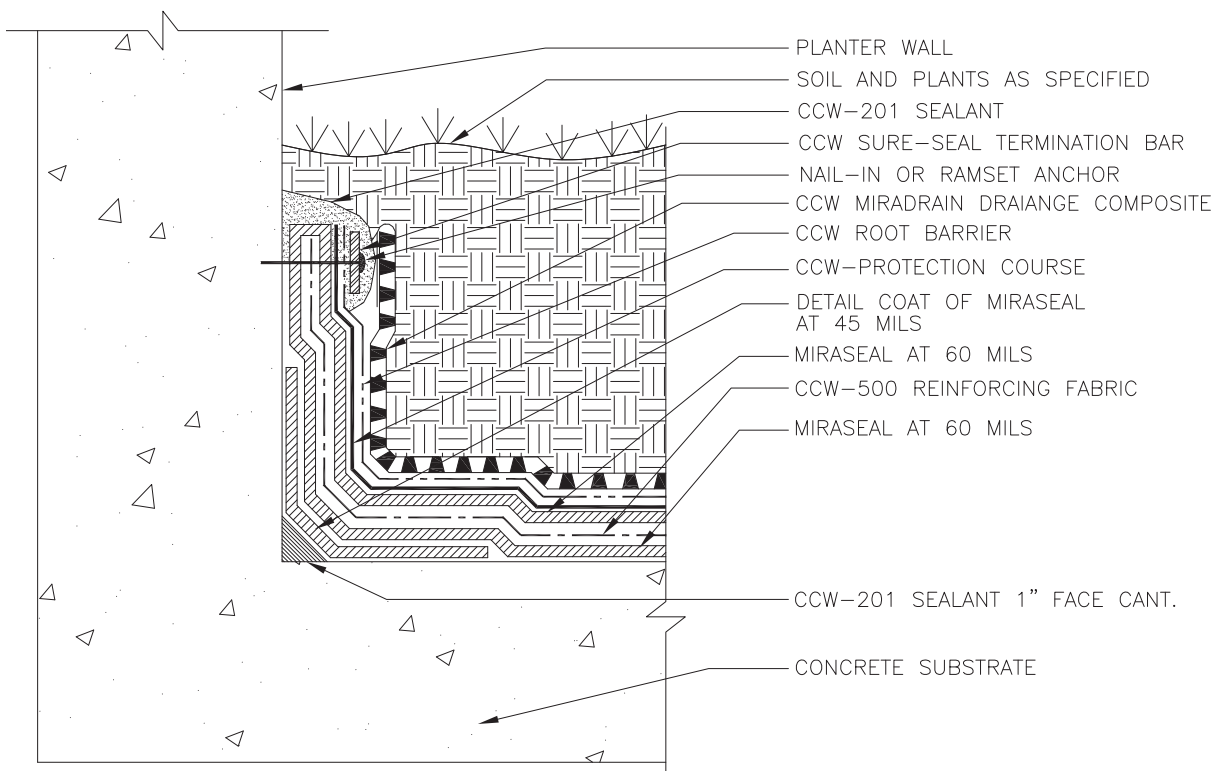
* Unless otherwise indicated, individual lots may vary +/- 10%.

** The 100% solids content may generate a nominal VOC level of 20 g/l when chemical linkage occurs.

Limited Warranty

Carlisle Coatings & Waterproofing Incorporated (Carlisle) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any Carlisle materials prove to contain manufacturing defects that substantially affect their performance, Carlisle will, at its option, replace the materials or refund its purchase price. This limited warranty is the only warranty extended by Carlisle with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. Carlisle specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever. The dollar value of Carlisle's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the Carlisle material in question.

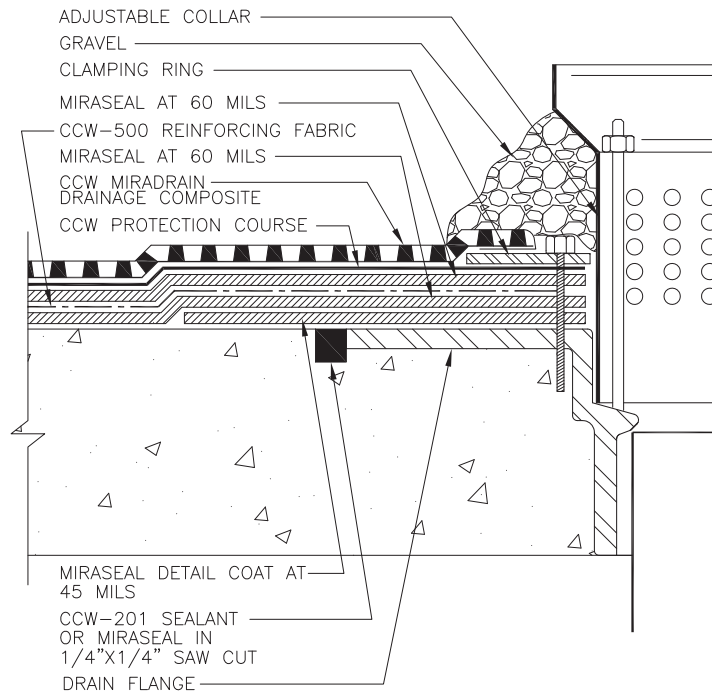
Planter Detail



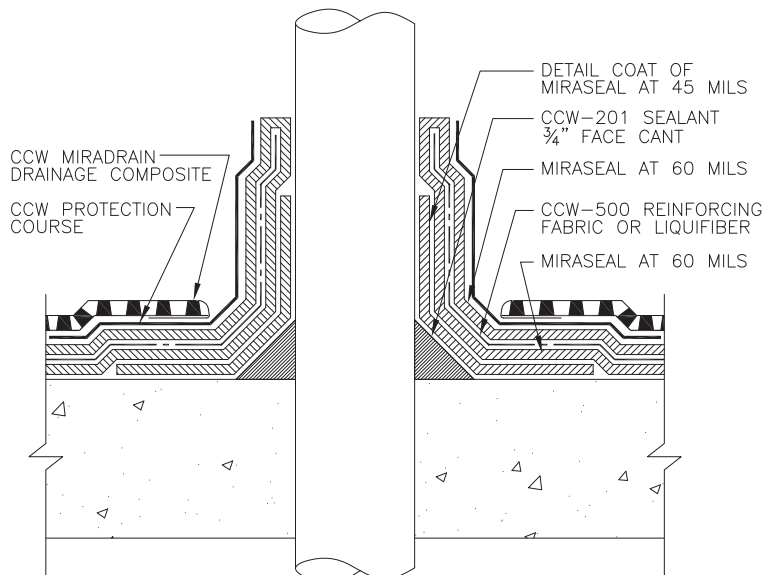
WATERPROOFING

MiraSEAL

Dual Level Drain Detail



Pipe and Penetration Flashing Detail



NOTES:

1. CLEAN METAL TO A BRIGHT FINISH.
2. APPLY CCW-201 SEALANT AND TOOL TO FORM A 3/4" FACE, 45° CANT, ALLOW TO CURE OVERNIGHT.
3. APPLY MIRASEAL DETAIL COAT AT 45 MILS THICK.
4. APPLY MIRASEAL AT 60 MILS THICK.
5. INSTALL CCW-500 REINFORCING FABRIC OR LIQUIFIBER INTO WET MIRASEAL.
6. APPLY MIRASEAL AT 60 MILS THICK.
7. INSTALL CCW PROTECTION COURSE.
8. INSTALL CCW MIRADRAIN DRAINAGE COMPOSITE.



SUBSTITUTION REQUEST

(During the Bidding Phase)

Project: _____ Substitution Request Number _____

To: _____ From: Abbey Strum – Logan Contractors Supply

Re: _____ Date: _____

A/E Project Number: _____
Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____
Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by _____
Signed by: _____
Firm: Logan Contractors Supply, Inc.
Address: 4101 106th Street
Des Moines, IA 50322
Telephone: (515-253-9048)

A/E's REVIEW AND ACTION

- ☒ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Sara Wells

Date: 8/23/19

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ Specs



NO. 714

MasterFormat: 07 13 26



OCTOBER 2013
(Supersedes July 2012)

MEL-ROL®

Rolled, Self-Adhering Waterproofing Membrane

DESCRIPTION

MEL-ROL waterproofing system is a flexible, versatile, dependable, roll-type waterproofing membrane. It is composed of a nominally 56 mil thick layer of polymeric waterproofing membrane on a heavy duty, four-mil thick, cross-laminated polyethylene carrier film. The two components are laminated together under strict quality-controlled production procedures.

A handy overlap guideline is printed 2 ½" (63.5 mm) in from the material edge on each side to assure proper overlap coverage and to assist in maintaining a straight application. Special exposed polymeric membrane strips are provided on both sides for positive membrane-to-membrane adhesion in the overlap area. The membrane strips are protected by a pull-off release strip. All components of the MEL-ROL waterproofing system work together to provide a cost-effective, positive waterproofing system that's quick and easy to apply.

W. R. MEADOWS accessory products included in the MEL-ROL waterproofing system are: BEM, MEL-ROL LIQUID MEMBRANE, MEL-PRIME™ adhesive (solvent-based and water-based), POINTING MASTIC, DETAIL STRIP, CATALYTIC BONDING ASPHALT, TERMINATION BAR, PROTECTION COURSE and MEL-DRAIN™ drainage board.

USES

MEL-ROL waterproofing system provides a cost-effective answer to properly waterproof foundations, vertical walls, and below-grade floors in residential and commercial construction. It is equally effective for use as between-the-slab waterproofing on plaza decks, parking decks, and structural slabs. Use it as a waterproofing membrane to isolate mechanical and electronic rooms, laboratories, kitchens, and bathrooms. MEL-ROL offers positive protection when "wrapped around" major rapid transit, vehicular, utility, and pedestrian tunnel projects. MEL-ROL can also be used on insulated concrete forms (ICF).

Installation of PROTECTION COURSE from W. R. MEADOWS is recommended before backfilling. MEL-ROL can also be used with drainage boards when specified.

FEATURES/BENEFITS

- Provides cost-effective, flexible, versatile, dependable, positive waterproofing protection against damaging moisture migration and the infiltration of free water.
- Offers a quick and easy-to-apply system for maximum productivity.
- Special membrane-to-membrane adhesion provides additional overlap security.
- Meets or exceeds the test requirements of all currently applicable specifications.
- Components work together for positive waterproofing protection.
- Handles with ease on the jobsite.
- Available in a low temperature version for use when air and surface temperatures are between 20° F (-7° C) and 60° F (16° C). An extra-low temp version is also available, ideal for application in extra-low temperatures down to 0° F (-18° C).

PACKAGING

38.5" (977.9 mm) wide x 62.5' (19.1 m) long, one roll per carton.

COVERAGE

Provides 200 ft.² (18.6 m²) per roll. Gross coverage is 200 ft.² (18.6 m²). [Net coverage is 187.5 ft.² (17.4 m²) with overlap of 2 ½" (63.5 mm).]

STORAGE AND HANDLING

Store membrane cartons on pallets and cover if left outside. Keep materials away from sparks and flames. Store where temperature will not exceed 90° F (32° C) for extended periods of time.

SPECIFICATIONS

- A.R.E.M.A.® Specifications Chapter 29, Waterproofing
- ASTM D 570

APPLICATION

Surface Preparation ... Concrete should be cured at least 72 hours, be clean, dry, smooth, and free of voids. Repair spalled areas; fill all voids and remove all sharp protrusions.

CONTINUED ON REVERSE SIDE...

MEL-ROL COMBINES POSITIVE WATERPROOFING PROTECTION WITH EASE OF HANDLING

EXCLUSIVE FEATURES

A handy overlap guideline is printed 2 ½" (63.5 mm) in from the material edge on each side, assuring proper overlap coverage and assisting in maintaining a straight application. The polymeric waterproofing membrane is protected by a special, easy-to-remove release paper. The exposed membrane strips on the material edges are protected by a pull-off release strip. Exposed polymeric membrane strips are provided on both sides of MEL-ROL for positive membrane-to-membrane adhesion in the overlap area ... note the detail, as shown in inset photo.

TECHNICAL DATA		
PROPERTY	TYPICAL VALUE	TEST METHOD
COLOR ... Carrier Film	White	
Polymeric Membrane	Black	
THICKNESS ... Carrier Film	4 mils	
Polymeric Membrane	56 mils	
TENSILE STRENGTH ... Carrier Film	5900 psi min. (40.71 MPa)	ASTM D 412
Membrane	460 psi (3230 KPa)	(Die C)
ELONGATION	971.3%	ASTM D 412
LOW TEMP CRACK BRIDGING		
100 Cycle -25° F (-32° C)	Pass	ASTM C 836
PEEL ADHESION	11.8 lb./in. (2068 N/m)	ASTM D 903
LAP ADHESION	8.62 lbf/in. (1508.5 N/m)	ASTM D 1876
WATER VAPOR PERMEABILITY	0.036 Perms	ASTM E-96, B
WATER ABSORPTION	0.1%, 72 hrs. max.	ASTM D 1970
HYDROSTATIC RESISTANCE	Equiv. to 230.9' (70.38 m) of water	ASTM D 5385
PUNCTURE RESISTANCE	48.24 lbf (214.6 N)	ASTM E 154
EXPOSURE TO FUNGI	Pass, 16 weeks	Soil Test
FLEXIBILITY @ -20° F (-29° C)	Pass	ASTM D 1970

MEL-ROL IS QUICK AND EASY TO APPLY

Temperature ... Apply in dry, fair weather when the air and surface temperatures are above 40° F (4° C). Do not apply to frozen concrete.

MEL-ROL LOW TEMP can be used when air and surface temperatures are between 20° F (-7° C) and 60° F (16° C).

Surface Conditioning ... Apply MEL-PRIME adhesive to surfaces that will be covered within one working day. If left exposed overnight, additional adhesive must be applied. Follow all instructions and precautions on containers.

REMOVE release paper from MEL-ROL from the top edge of the roll and firmly press exposed area to the wall. Remove the release paper from the rolls in a downward direction, pressing MEL-ROL into place on the wall.

Footing Details ... Use DETAIL STRIP for impaction sheet coverage. First, fold strips lengthwise and then cut at the fold. Material is then ready to install as 4 ½" (114.3 mm) strips on either side of the rebar. Any excess can be turned down on the face of the footing. Next, fill the voids around rebars in the keyway with CATALYTIC BONDING ASPHALT. Pour the walls. Install DETAIL STRIP horizontally along the wall where it meets the footing, placing half the material up the wall and the other half onto the footing. Extend the material 4 ½" (114.3 mm) beyond outside corners. Slit extended portion of DETAIL STRIP lengthwise. Place the horizontal flap out onto the footing and bend the vertical flap around the wall. (See Diagram A.) Repeat this procedure in the opposite direction as shown in Diagram B.

MEL-ROL can be applied to concrete, masonry surfaces, wood, insulated wall systems, and metal. All substrates must be clean, dry, and free of all surface irregularities.

DIAGRAM A
Outside Corner

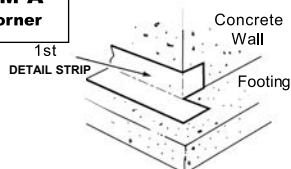
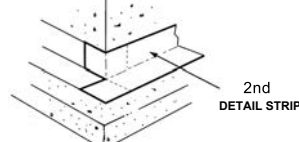
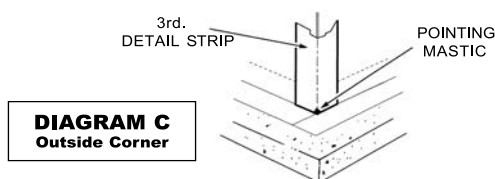


DIAGRAM B
Outside Corner



Horizontal Application ... Remove release paper on edge, then position the MEL-ROL membrane. Pull balance of release paper off, running the roll from low to high points, so all laps will shed water. Stagger end laps and overlap all seams at least 2 ½" (63.5 mm). Apply a double-thickness of the MEL-ROL membrane over construction, control, all expansion joints and over cracks greater than 1/16" (1.59 mm) wide.

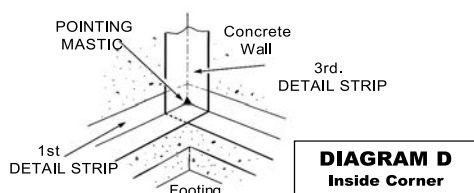
Vertical Wall Application ... Masonry walls may require the application of a cementitious parge-coat. Allow the parge-coat to dry before priming and applying MEL-ROL. When applied, the parge-coat will produce a smooth, uniform, and well-bonded surface. Remove release paper, then apply vertically in lengths approximately 8' (2.44 m) long over the top of the horizontal DETAIL STRIP at the footing. Overlap seams at least 2 1/2" (63.5 mm). Tightly butt edges of membrane and apply POINTING MASTIC in corner applications. (See Diagram C.)



To the top terminations, apply POINTING MASTIC at least 1/8" (3.18 mm) thick and 1" (25.4 mm) wide. As an option, TERMINATION BAR may be used to mechanically fasten the membrane.

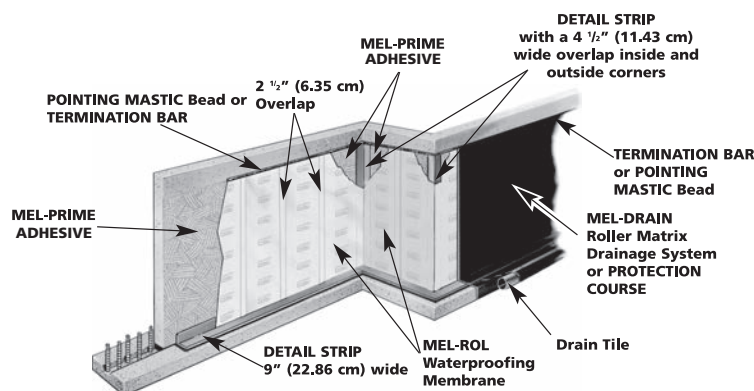
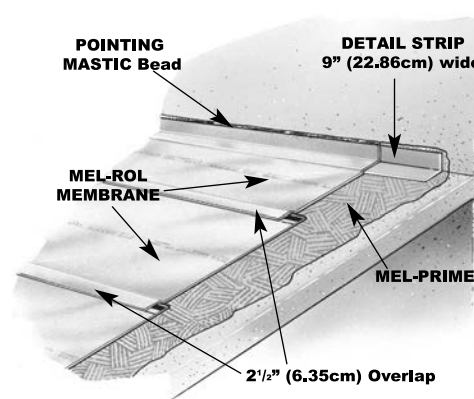
Hand-Rub and Roll Press ... Once positioned, immediately hand-rub the MEL-ROL membrane firmly to the surface, removing any bubbles or wrinkles, then pressure roll the complete surface to assure positive adhesion.

Inside Corners ... Before MEL-ROL is applied, place a vertical DETAIL STRIP on inside corners extending the material 4 1/2" (114.3 mm) beyond each side of the corner. (See Diagram D.) Terminate at the footing and finish the corner with POINTING MASTIC.



Outside Corners ... Bend DETAIL STRIP vertically over the outside corner and extend 4 1/2" (114.3 mm) beyond each side of the corner. Terminate the material at the footing. Finish the corner with POINTING MASTIC. (See Diagram C.)

Drains and Protrusions ... All protrusions should be sealed with two layers of membrane applied at least 6" (152.4 mm) in all directions. Seal all terminations with POINTING MASTIC. Around drains, apply two layers of MEL-ROL and put a bead of POINTING MASTIC between the membrane and clamping rings and at all terminations, drains, and protrusions. See ASTM D 5898.



Inspect and Repair ... A thorough inspection should be made before covering and all necessary repairs made immediately. Tears and inadequate overlaps should be covered with MEL-ROL ... slit fish mouths and patch. Seal edges of all patches with POINTING MASTIC. Where applicable, horizontal applications can be flood-tested for 24 hours. All leaks should be marked and repaired when membrane dries.

Protect the Membrane ... on all vertical and horizontal installations with the immediate application of PROTECTION COURSE if no drainage system is used, or MEL-DRAIN. To secure PROTECTION COURSE, use POINTING MASTIC as an adhesive, and/or physically attach at the top edge using TERMINATION BAR. Backfilling should be done immediately, using care and caution to avoid damaging the waterproofing application.

PRECAUTIONS

Avoid the use of products that contain tars, solvents, pitches, polysulfide polymers, or PVC materials that may come into contact with MEL-ROL. The use of MEL-ROL does not negate the need for relief of hydrostatic heads. A complete drain tile system should be placed around the exterior of footing and under slabs, as required.

ACCESSORIES

MEL-PRIME W/B ... This water-based adhesive prepares concrete surfaces for MEL-ROL application. Arrives ready to use. Requires no additional mixing. MEL-PRIME W/B emits no unpleasant odors and works with all W. R. MEADOWS waterproofing membranes. Applies easily with manual sprayer or roller; VOC-compliant. MEL-PRIME W/B is for use at temperatures of 40° F (4° C) and up.

COVERAGE: 250 to 350 ft.²/gal. (6.14 to 8.59 m²/L)
PACKAGING: 1 Gallon (3.79 Liter) Units (4 units per carton), 5 Gallon (18.93 Liter) Pails

MEL-PRIME ... This solvent-based adhesive is for use at temperatures of 25° F (-4° C) and above. Apply by roller.

COVERAGE: 250-350 ft.²/gal. (6.14 to 8.59 m²/L)
PACKAGING: 5 Gallon (18.93 Liter) Pails

MEL-ROL LIQUID MEMBRANE ... A two-component material used as a flashing to form fillets at corners and at protrusions. May be used as a substitute for POINTING MASTIC. Product can also be used in between walls and footings in lieu of DETAIL STRIP.

COVERAGE: As a fillet, approximately 135 lineal feet per gallon (10.87 m per liter) PACKAGING: 1 Gallon (3.79 Liter) Units, 4 Units per carton.

BEM ... BEM can be used as a fillet to round out 90° angles, such as the wall-footing connection, and can be used as a substitute for MEL-ROL LIQUID MEMBRANE.

COVERAGE: As a fillet, approximately 135 lineal ft./gal. (10.9 m/L). PACKAGING: 28 Oz. (828 mL) Cartridges (12 per Carton)

POINTING MASTIC ... Used as an adhesive and for sealing top edge terminations on DETAIL STRIP and membrane, and to adhere PROTECTION COURSE.

COVERAGE: 1/8" x 1" x 200'/gal. (3.18 mm x 25.4 mm x 16.10 ml). PACKAGING: 5 Gallon (18.93 Liter) Pails, 29 Oz. (857.65 ml) Cartridges, 12/ctn.

CATALYTIC BONDING ASPHALT ... Easy-to-apply, one-component material for sealing around rebar.

COVERAGE: 5 gal./1000 ft.²/gal. (4.9 m²/L) PACKAGING: 5 Gallon (18.93 Liter) Pails.



LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection

with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.

DETAIL STRIP ... Convenient, easy-to-use DETAIL STRIP provides an economical and effective method for sealing vertical and horizontal butt joints, i.e. inside or outside corners and where walls and footings meet.

PACKAGING: 9" x 50' (.23 x 15.24 m) roll, 4 rolls per carton.

PROTECTION COURSE ... Use for vertical and horizontal applications. Adhere with POINTING MASTIC or use mechanical fasteners.

PACKAGING: 4' x 8' (1.22 x 2.44 m) panels.

MEL-DRAIN ... is a dimple-raised molded polystyrene fabric designed to provide high flow capacity to reduce hydrostatic pressure buildup around waterproofing and vaporproofing membranes. Choice of drain types are available for vertical, horizontal, and site applications. Use MEL-PRIME to condition surface prior to application of MEL-DRAIN.

TERMINATION BAR ... is a high strength, pre-formed, multi-purpose, plastic strip designed to support vertical membrane systems and PROTECTION COURSE at their termination point.

PACKAGING: 10' (Holes every 6" o/c, 2" from either end), 25 pieces per carton.

MAINTAIN ENERGY EFFICIENCY

Wet insulating materials lose much of their "R" factor performance characteristics, reducing the energy efficiency of the structure. W. R. MEADOWS thermal and moisture protection products play a key role in *maintaining* the structure's energy efficiency and aiding in the integrity of other structural systems, such as insulation.

LEED INFORMATION

May help contribute to LEED credits:

- EA Credit 1: Optimize Energy Performance
- IEQ Credit 3.1: Construction Indoor Air Quality Management Plan: During Construction
- IEQ Credit 7.1: Thermal Comfort - Design
- MR Credit 2: Construction Waste Management
- MR Credit 5: Regional Materials

For CAD details, most recent data sheet, further LEED information, and MSDS, visit www.wrmeadows.com.



SUBSTITUTION REQUEST

(During the Bidding Phase)

Project: _____ Substitution Request Number _____

To: _____ From: Abbey Strum – Logan Contractors Supply

Re: _____ Date: _____

A/E Project Number: _____
Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____
Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by _____
Signed by: _____
Firm: Logan Contractors Supply, Inc.
Address: 4101 106th Street
Des Moines, IA 50322
Telephone (515-253-9048)

A/E's REVIEW AND ACTION

- ☒ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Sara Wells

Date: 8/23/19

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ Specs



NO. 714-A

MasterFormat: 07 14 16



OCTOBER 2017
(Supersedes November 2013)

MEL-ROL® LM

Single-Component, Water-Based, Polymer-Modified, Cold-Applied,
Waterproofing Membrane

DESCRIPTION

MEL-ROL LM is a single-component, polymer-modified, cold-applied, water-based, liquid waterproofing membrane ideal for below-grade vertical seamless waterproofing applications. We have taken the same high quality rubber polymers found in W. R. MEADOWS' successful MEL-ROL "peel and stick" membrane and converted them into a heavy-bodied, high solids, quick drying liquid membrane.

With MEL-ROL LM, installation time is reduced, utilizing either a spray or roller application. A variety of different protection courses, insulation boards, or drainage boards can be embedded into the membrane to create a superior waterproofing system. With the application of PERMINATOR® vapor barrier over the membrane, a composite system can be created that has the combined advantages of both "peel and stick" and liquid-applied membranes.

USES

MEL-ROL LM can be used on new and remedial waterproofing applications on concrete or masonry block substrates. Since the formula is water-based, MEL-ROL LM can also be used on both ICFs and "green concrete" applications.

FEATURES/BENEFITS

- Waterproof – very low vapor permeability (perm rating).
- Superior elongation – bridges minor cracks; will not become brittle with age.
- Fully bonded – water will not run beneath the membrane.
- High solids, single-component, fast drying formulation – easy to apply; low cost application equipment; eliminates two-component mixing problems.
- Cold-applied/water-based – will not adversely affect insulated forms (ICFs) or various protection board options. Allows for application to damp or "green concrete."

- VOC content is 0.0 g/L. Produces no harmful odors.
- Easy application – no heating necessary. Eliminates fire hazards associated with heating kettles. Apply with roller or airless sprayer.

PACKAGING

5 Gallon (18.93 Liter) Pails

55 Gallon (208.20 Liter) Drums*

*special order only

COVERAGE

20 - 25 ft.²/gal. (0.49 – 0.61 m²/L) @ 60 mils.
Coverage dependent on substrate type, weather, and application conditions.

SHELF LIFE

When stored indoors in original, unopened containers at temperatures between 40 - 90° F (4 - 32° C), shelf life is a minimum of six months from date of manufacture.

SPECIFICATIONS

- Complies with all current federal, state, and local maximum allowable VOC requirements, including National EPA VOC Emission Standard for Architectural Coatings, CARB, LADCO, OTC Phase I and II, and SCAQMD.

CONTINUED ON REVERSE SIDE...

TECHNICAL DATA

Membrane		
Property	Typical Value	Test Method
Color	Black	
Solids	70%	
VOC Content	0 g/L	
Total Cure Time	16 - 24 hours	
Service Temperature	-20° - 140° F (-29° - 60° C)	
Application Temperature	40° F (4.4° C) minimum	
Shore "00" Hardness	Passes	ASTM C836
Stability	Exceeds	ASTM C836
Elongation	1500%	ASTM D412
Water Absorption	0.7%	ASTM D1970
WVT	0.03 Perms	ASTM E96, B
Composite (55 Mil Membrane/10 Mil PERMINATOR)		
Peel Adhesion	7 lb./in. (125 g/mm)	ASTM C794
Tensile Strength (Film)	5000 psi (36 MPa)	ASTM D412 (Die C)
Elongation	900%	ASTM D412 (Die C)
Water Vapor Permeability	0.02 Perms (0.013 g/m ² /24 h)	ASTM E96, B
Water Absorption	0.1%	ASTM D1970
Resistance to Hydrostatic Head	48 psi (0.3 MPa)	ASTM D751
Puncture Resistance	22 lbf. (98 N)	ASTM D4833

APPLICATION

Surface Preparation ... All surfaces must be clean (free of all coatings and curing compounds), free of frost, relatively smooth, and structurally sound. Patch any bug holes, tie holes, large gaps, or cracks with MEADOW-PATCH® 5 or MEADOW-PATCH 20 from W. R. MEADOWS. All loose laitance on the substrates, such as dirt, dust, loose stones, and debris, should be either swept or blown clean. All inside corners should be addressed with a cove of BEM from W. R. MEADOWS prior to application of MEL-ROL LM.

All shrinkage cracks less than 1/16" (1.6 mm) should be pretreated with a 60-mil coat of MEL-ROL LM 6" (152.4 mm) wide. All cracks greater than 1/16" (1.6 mm) should be taped with DETAIL STRIP from W. R. MEADOWS prior to application of the membrane. For specific project recommendations, please contact W. R. MEADOWS technical services.

Mixing ... MEL-ROL LM is designed to be used from the pail or drum with little or no mixing. However, if water appears on the surface, mix thoroughly with a low speed mechanical mixer prior to application.

Priming ... To reduce blistering on concrete surfaces, a thin coat of MEL-ROL LM diluted with water may be required. (Approximate dilution ratio of MEL-ROL LM to water is between 4:1 and 5:1.)

Thoroughly mix primer with a mechanical mixer. Prime the entire concrete surface to be waterproofed by spraying or rolling on a single coat at a coverage rate of 100 - 150 ft.²/gal. (2.45 - 3.68 m²/L). Allow primer to dry (approximately one hour, depending on temperature and conditions).

Detailing ... After surface preparations are complete, detailing should be addressed. The desired thickness of membrane coverage is 120 mils for inside/outside corners and non-moving and hairline cracks, as well as around drains and penetrations. Request and view the W. R. MEADOWS WATERPROOFING CONTRACTORS HANDBOOK for additional information.

Footing Details ... Use DETAIL STRIP from W. R. MEADOWS for impaction sheet coverage. First, fold strips lengthwise and then cut at the fold. Material is then ready to install as 4 ½" (114.3 mm) strips on either side of the rebar. Any excess can be turned down on the face of the footing. Next, fill the voids around rebars in the keyway with BEM. Pour the walls. Install DETAIL STRIP horizontally along the wall where it meets the footing, placing half the material up the wall and the other half onto the footing. Extend the material 4 ½" (114.3 mm) beyond outside corners. Slit extended portion of DETAIL STRIP lengthwise. Place the horizontal flap out onto the footing and bend the vertical flap around the wall. Repeat this procedure in the opposite direction. In high water table applications, install WATERSTOP EC from W. R. MEADOWS directly to the cold joint before application of DETAIL STRIP.

Roller Application ... MEL-ROL LM can be applied directly from the container using a ¾" (19.1 mm) nap roller. Apply in two coats, each 30 mils thick, allowing first coat to reach initial set prior to application of second coat.

Spray Application ... MEL-ROL LM may be sprayed on at a minimum coverage thickness of 60 mils wet (45 mils dry). To obtain 60 mils wet thickness, and to prevent slumping, apply MEL-ROL LM in two coats of 30 wet mils. Apply the second coat after the first coat has dried (approximately one to two hours).

Spraying Equipment ... MEL-ROL LM is most effectively applied by using the Graco HydraMax 350 or the Graco GH833 Big Rig.

The Graco heavy-duty texture gun is recommended for use with the following tips: For best results, use the 0.051" (Graco GHD551) heavy-duty switch tip. For spraying of primer coat, a smaller orifice tip such as the 0.035" (Graco GHD635) can be used. Tips should be reversible types for easy clean out. For more complete spraying equipment information, please view INSTALLATION INSTRUCTIONS: SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES available at www.wrmeadows.com.

Horizontal Application ... For horizontal applications, use HYDRALASTIC 836 from W. R. MEADOWS.

Thickness Control ... Frequently inspect surface area with a wet mil gauge to ensure desired consistent thickness is achieved. Porous substrates or masonry block walls may require additional coats to obtain desired thickness.

Cleanup ... Material should not be left in the pump, lines, or gun when finished spraying. CAUTION: Solvents must not come in contact with MEL-ROL LM in the sprayer, as they will break the emulsion and plug up the entire sprayer system. After spraying, promptly flush water only (no soap) through the system until pump and hose are clear [approx. five gallons (18.9 L)]. Aromatic solvents, such as xylene or toluene [approx. two gallons (7.6 L)], should be used for final flushing after water is flushed through the pump and lines.

Mineral spirits, paint thinner, gasoline, etc., must not be used to flush system. NOTE: Water must be flushed through the machine to remove any solvents prior to spraying of MEL-ROL LM.

Protection ... Cover vertical applications with PROTECTION COURSE, MEL-DRAIN™, or PERMINATOR (10 mil) from W. R. MEADOWS. Surfaces must be covered within 45 days.

Backfilling ... Allow 24 hours for complete cure of membrane prior to backfilling.

PRECAUTIONS

Do not freeze. Do not apply MEL-ROL LM if rainfall is forecast or imminent within 12 hours. For horizontal applications, HYDRALASTIC 836 is recommended. Do not apply MEL-ROL LM or primer when air, material, and surface temperatures are expected to fall below 40° F (4.4° C) within four hours of completed application. Sprayed urethane foams applied over MEL-ROL LM can melt the membrane and cause delamination and failure due to the exothermic reaction that takes place after spraying the foam. These foams should not be sprayed over MEL-ROL LM. The use of MEL-ROL LM does not negate the need for relief of hydrostatic heads. A complete drain tile system should be placed around the exterior of footing and under slabs, as required.

LEED INFORMATION

May help contribute to LEED credits:

- EAp2: Minimum Energy Performance
- EAc2: Optimize Energy Performance
- MRc9: Construction and Demolition Waste Management
- EQc2: Low-Emitting Materials [For Healthcare and Schools (exterior-applied products) ONLY]

For BIM assemblies, CAD details, most recent data sheet, further LEED information, and SDS, visit www.wrmeadows.com.



LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.



SUBSTITUTION REQUEST

(During the Bidding Phase)

Project: _____ Substitution Request Number _____

To: _____ From: Abbey Strum – Logan Contractors Supply

Re: _____ Date: _____

A/E Project Number: _____
Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____
Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by _____
Signed by: _____
Firm: Logan Contractors Supply, Inc.
Address: 4101 106th Street
Des Moines, IA 50322
Telephone: (515-253-9048)

A/E's REVIEW AND ACTION

- ☒ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Sara Wells

Date: **8/23/19**

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ Specs

POLYFLOW® 18

Sheet Molded Drainage

PRODUCT NAME

Polyflow® 18

MANUFACTURER

Polyguard Products, Inc.

Ennis, TX 75119

(214) 515-5000

www.polyguardproducts.com

PRODUCT DESCRIPTION

Polyflow® 18 Drainage Mat is two-part, prefabricated geocomposite drain consisting of a formed polystyrene core covered on one side with woven mono-filament filter fabric. The fabric allows water to pass into the drain core while restricting the movement of soil particles which might clog the core. The core allows the water to flow to designated drainage exits. Polyflow 18 is designed for horizontal applications.

Polyflow 18 Drainage Mat is suitable as a protection layer for Polyguard waterproofing membranes.

BASIC USES

Basic post-applied drainage and protection course uses include the following:

- Split-slab;
- Foot-pavers;
- Planter boxes;
- Plaza decks;
- Horizontal slabs and;
- Ramps

Basic pre-applied drainage, protection course, and venting uses include the following:

- Under slabs and;
- In passive venting systems.

TECHNICAL DATA

See physical properties table.

HORIZONTAL INSTALLATION

Clean horizontal surface of loose debris and unroll Polyflow® 18 fabric side up.

For horizontal deck installation, Polyflow 18 may be loosely laid directly over the waterproofing membrane. Edges of the core with the flange should be at higher side of the deck or plaza, away from any drains.

Attach Polyflow 18 to horizontal substrate surface, to be drained, with an adhesive compatible with waterproofing

membrane substrate, or use temporary ballast to hold drain in place during the placement of the deck surface.

For overlaps, place adjacent panels so the core flange overlaps and shingles in the direction of flow to the drain collection system, scuppers, or daylight.

Butt adjacent panels together and shingle the woven fabric, one fabric over another.

For an underslab installation condition, Polyflow® 18 fabric side should be down or towards the soil.

RECOMMENDED ADHESIVES

650 LT Liquid Adhesive, California Sealant, Quick Grip Adhesive, or low-rise spray adhesive.

NOTE ON ISO 9000

Polyguard drainage mats are not covered by Polyguard's ISO 9001 quality system registration.

SAFETY

MSDS sheets for all Polyguard products can be obtained at our website www.polyguardproducts.com. Call Polyguard Products, Inc. at 214.515.5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace at no charge product proved to be defective within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.

P.O. Box 755, Ennis, TX 75120-0755

Sales: (615) 217-6061 • Tech Support: (214) 515-5000 • Fax: (615) 691-5500

Email: archtech@polyguardproducts.com

Website: www.polyguardproducts.com

PROPERTY	TEST METHOD	TYPICAL VALUE
DRAIN PROPERTIES		
FLOW CAPACITY	D 4716	21 gpm/ft of width
ROLL LENGTH	-	50 ft.
ROLL WIDTH	-	4 ft.
ROLL WEIGHT	-	50 lbs.
CORE PROPERTIES		
MATERIAL	-	Polystyrene
THICKNESS	D 1777	0.44 inch
COMPRESSIVE STRENGTH (+ OR - 5%)	D 1621 Modified	18,000 lbs/ft ²
POLYMERIC FILM LAYER	-	No
FABRIC PROPERTIES		
MATERIAL	-	Polypropylene
GRAB TENSILE STRENGTH	D 4632	410 x 220 lb.
GRAB ELONGATION	D 4632	15%
PUNCTURE STRENGTH	D 4833	105 lbs.
EOS (AOS)	D 4751	45 US Sieve
FLOW RATE, GPM/FT	D 4491	160 gpm/ft ²
UV AT 500 HOURS (STRENGTH RETAINED)	D 4355	90%

PACKAGING DRAINAGE & ACCESSORIES	PART NUMBER	UNIT SIZE
POLYFLOW® 18	POLYFLOW18	4' x 50' roll
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 5 GA	5 gallon pail
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 1 GA	4 - 1 gallon pails/ctn
CALIFORNIA SEALANT	CALSEAL5	5 gallon pail
QUICK GRIP ADHESIVE	PWQGADH30	30# canister



SUBSTITUTION REQUEST

(During the Bidding Phase)

Project: _____ Substitution Request Number _____

To: _____ From: Abbey Strum – Logan Contractors Supply

Re: _____ Date: _____

A/E Project Number: _____
Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____
Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by _____
Signed by: _____
Firm: Logan Contractors Supply, Inc.
Address: 4101 106th Street
Des Moines, IA 50322
Telephone (515-253-9048)

A/E's REVIEW AND ACTION

- ☒ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Sana Wells

Date: **8/23/19**

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ Specs

PRODUCT DATA SHEET

Sikalastic®-320 SG

SINGLE COMPONENT, SPRAYABLE, BITUMEN MODIFIED WATERPROOFING MEMBRANE

PRODUCT DESCRIPTION

Sikalastic® 320 is a single component, liquid applied, bitumen modified, coal tar free, moisture cured polyurethane waterproofing membrane available in self-levelling (SL), sprayable (SG) and non-sag (NS) consistencies.

USES

- Planters
- Between Slabs
- Plazas and Pavers
- Foundation Walls
- Bridges and Tunnels

CHARACTERISTICS / ADVANTAGES

- Easy Application
- Applies on green and damp concrete
- Sprayable
- Alkali Resistant
- Quick Re-coat time
- Ability to catalyze with water
- Faster cure rate
- Reduce chance of pinholes from concrete out-gassing
- Apply at any thickness horizontally
- Meets the requirements of ASTM C 836

PRODUCT INFORMATION

Packaging	5 gallon (18.9 liter) pail. 55 gallon drum, net fill 55 gallons (208 liters)	
Color	Black	
Shelf Life	12 months from date of manufacture in original, factory-sealed containers	
Storage Conditions	Store indoors at temperatures between 65–85 °F (18–30 °C)	
Solid content by weight	88 ± 2 %	(ASTM D-236)
Solid content by volume	88 ± 2 %	(ASTM D-2697)
Volatile organic compound (VOC) content	89.07 g/L	(ASTM D-2369-81)
Viscosity	150 ± 50	(Poise at 80 °F)

TECHNICAL INFORMATION

Shore A Hardness	30 ± 5	(ASTM D-2240) 75 °F (24 °C) 50 % R.H.
Tensile Strength	450 ± 50 pli	(ASTM D-412) 75 °F (24 °C) 50 % R.H.
Elongation at Break	450 ± 50 %	(ASTM D-412) 75 °F (24 °C) 50 % R.H.
Tear Strength	100 ± 15 psi	(Die C, ASTM D-624) 75 °F (24 °C) 50 % R.H.
Permeability to Water Vapor	1 ± 0.2 Perms	(ASTM E-96-15) 75 °F (24 °C) 50 % R.H.
Service Temperature	-25–200 °F (-31.7–93.3 °C)	

APPLICATION INFORMATION

Coverage	50 ft ² /gal results in 30 ± mils DFT 25 ft ² /gal results in 60 ± mils DFT (standard) 18 ft ² /gal results in 90 ± mils DFT 13 ft ² /gal results in 120 ± mils DFT
Waiting / Recoat Times	Application on Green Concrete Horizontal: 48 hours or walkable conditions Vertical: 24 hours after forms removed

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Surfaces may be dry or damp, but must be sound and free of standing water, dust, laitance, grease, curing compounds, impregnations, waxes and any other contaminants. Scratch and remove sheen for metal surfaces before applying primer. Scratch marine grade and high density plywood with sandpaper before applying primer.

MIXING

Before application, Sikalastic®-320 SG should be thoroughly mixed using a mechanical mixer and jiffy style paddle at slow speed for 2 minutes minimum to ensure a homogeneous material. Take care not to allow entrapment of air into the material. Do not mix in an up and down motion.

Using Optional Water Catalyst (only for application by hands) : Before application, mix Sikalastic®-320 SG using a mechanical mixer and jiffy style mixing paddle at a slow speed. At a ratio 1 part of water to no less than 40 parts Sikalastic®-320 SG. For a 5 gal pail, add 1 pint (16 oz) of water (less water may be used to extend working

time). Use care not to allow the entrapment of air into the mixture. Do not mix in an up and down motion. Once water is mixed with Sikalastic®-320 SG apply within 20 minutes. Do not mix Sikalastic®-320 SG with water when using an airless sprayer.

APPLICATION

Sikalastic®-320 SG may applied with an airless sprayer. Apply up to 90 mils vertically and 120 mils horizontally per coat. Mix Sikalastic®-320 SG with water to greatly reduce the chance of pinhole formation from concrete out-gassing and improve cure rate. Cured membrane must be pinhole free after application to validate warranty.

Priming: Some warranties and/or substrates may require the use of a primer. See "Sikalastic® 320 Warranty Guidelines" for more information. Use: Sikalastic® FTP Lo-VOC Primer for green or damp concrete (when required by warranty); Sikaflex® Primer 449 for PVC; Sikalastic® Recoat Primer for Fiberglass; and Sikalastic® PF Lo-VOC Primer for all other surfaces including concrete, EIFS, DensGlass, metal, and marine grade or high density plywood.

Joints, Cracks and Flashing: For all cracks up to 1/16" width apply a 4" wide, 30 mil stripe coat of Sikalastic®-320 SG centered over the crack. All cracks over 1/16" width must be routed to at least ¼" by ¼" sealed with the appropriate Sikaflex® sealant and coated with a 4" wide, 30 mil stripe coat centered on the sealant. When sealing green concrete, use Sikaflex®1a+. Sealant may be overcoated when tack free. Sika Flexitape Heavy reinforcing fabric may be required for metal flashing transitions, plywood seams, and expansion joints by embedding reinforcing in 15 mils of membrane then coating with another 15 mils of membrane.

Reinforcement: Sika® Fleece 120 reinforcing fabric may be required for some warranties. Embed Sika® Fleece 120 into a 60 mil coat of Sikalastic®-320 SG with a ½" to ¾" nap roller. Allow membrane to cure. Then apply another 60 mil coat of Sikalastic® 320 on top of the existing coat. Overlap Sika® Fleece 120 3" along the sides and 6" at the roll ends.

Curing and Recoating: At 75 °F (24 °C) and 50 % relative humidity, allow each coat of Sikalastic®-320 SG to cure 16–24 hours* minimum. When using water as a catalyst: allow Sikalastic®-320 SG to cure a minimum of 2–4 hours* before proceeding to subsequent coats. If more than 48 hours pass between coats the surface must be solvent wiped and primed with Sikalastic Recoat Primer.

Spray Equipment: Use Sikalastic®-320 SG with a Graco GH 833 Big Rig or Titan Hydra Pro IV airless pump. Use a 1.5" Solvent-Resistant Siphon Kit, 1/2" High Pressure Hose (4000 psi), 1/4" x 3' High Pressure Whip (4000 psi), Graco 535 Spray Tip, 15" Tip Extension Wand, and a Graco Flex Plus Gun. Contact Sika Technical Services for more information.

Membrane Protection: As soon as possible after completion of a successful water test, visual inspection and/or repairs, cover membrane with an approved drainage mat or protection board. Sikalastic®-320 SG should not be exposed to sunlight or UV radiation for more than 14 days.

Flood Test: After Sikalastic®-320 SG has cured, plug drains and provide proper means to contain flood water. Flood deck with a 2" head of water and allow to stand for 24 hours. Check for leaks and immediately make repairs if required. Retest after any repairs have been made. If a flood test cannot be completed in within 3 days of application, cover Sikalastic®-320 SG with a protection course to prevent damage from other trade work until a successful flood test is completed.

CLEANING OF TOOLS

Equipment should be immediately cleaned with an environmentally safe solvent, as permitted under local regulations.

LIMITATIONS

- Higher temperatures and/or high humidity will accelerate the cure time. In cold weather conditions, use pail warmers or preconditioning to assist in workability.
- Containers that have been opened must be used as soon as possible.
- Not recommended for light weight concrete, Oriented Strand Board (OSB) or asphalt surfaces.
- Membrane should not be applied under thin set tile. Mortar beds applied above Sikalastic®-320 SG should be at least 2" thick.
- Substrate temperatures should be greater than 40 °F and less than 110 °F.
- Do not apply to porous or damp surfaces where moisture vapor transmission will occur during application and cure. Exposure to direct sunlight can exacerbate vapor transmission during cure. Apply Sikalastic®-320 SG in shaded areas and/or during falling temperatures or contact Sika for use of suitable primer in this situation.
- Do not mix Sikalastic®-320 SG with water when using an airless sprayer.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 201-933-8300.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: 800-933-7452
Fax: 201-933-6225



Sika Sarnafil
100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

Sika Canada Inc.
6915 Davand Drive
Mississauga, ON L5T 1L5
Phone: +1 905-795-3177
Fax: +1 905-795-3192
can.sika.com
marketing.construction@ca.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537

Sikalastic-320SG-en-US-(01-2019)-1-2.pdf

Product Data Sheet
Sikalastic®-320 SG
January 2019, Version 01.02
020915255000000006



CONTRACTOR'S SUBSTITUTION REQUEST

(Use separate form for each request)

Date: 8/20/2019 Request No.: _____

TO: Architect: NSPJ Architects, PA
Phone: 913-831-1415 Fax: _____

PROJECT: Mission Gateway Element Hotel Project No.: 617918
CONTRACTOR TBD

SPECIFIED ITEM: Non-bituminous self-adhering sheet air barrier
Section: 072715 Page: 2 Paragraph: 2.2 Description: Self-adhering air barrier
Drawing Number(s): _____ Detail Number(s): _____

The undersigned request consideration of the following:

PROPOSED SUBSTITUTION: Carlisle Coating & Waterproofing CCW-705 VP self-adhering air barrier

REASON FOR NOT GIVING PRIORITY TO SPECIFIED ITEMS: Similar product by non-listed manufacturer.

SAVINGS or CREDIT to OWNER for ACCEPTING SUBSTITUTE: \$ Competitively priced

Attached data includes description, Specifications, Drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. Proposed substitution has been fully checked and coordinated with the Contract Documents.
2. The proposed substitution does not affect dimensions shown on Drawings.
3. The proposed substitution does not require revisions to mechanical or electrical work.
4. The undersigned will pay for changes to the building design, including architectural and engineering design, detailing, and construction costs caused by the requested substitution.
5. The proposed substitution will have no adverse affect on other trades, the construction schedule, or specified warranty requirements.
6. Maintenance and service parts will be locally available for the proposed substitution.
7. The proposed substitution will have no adverse effect on LEED credits established through the CFRST LEED Volume Program. (Applies to CFRST LEED Volume Program Projects ONLY)

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified item.

Attachments: The attached data is furnished herewith for evaluation of the proposed substitution.

☒ Catalog ☐ Drawings ☐ Samples ☐ Reports ☐ Tests ☐ Other: _____

Submitted by: _____

Luna & Associates

(Firm)

Stephanie Wagoner

(Authorized Legal Signature)

(402) 763-0206

(Telephone)

For use by the Architect: ☐ Accepted ☐ Accepted as Noted ☒ Rejected: Submit Specified Item

BY: _____

Sara Wells

(Authorized Signature)

Date: 8/26/19 Remarks: See notes on pages

What color is this product?

Is it UV stable?

Can it be installed over mineral wood continuous insulation?



AIR & VAPOR BARRIER

Fire Resist 705 VP

Description

Fire Resist 705 VP Air Barrier, manufactured by Carlisle Coatings and Waterproofing, is a composite membrane consisting of a breathable specially engineered film fully coated on one side with a permeable adhesive. The adhesive side of Fire Resist 705 VP has a silicone-coated release film, which is removed and discarded during installation. Fire Resist 705 VP is provided in rolls of various widths and will adhere firmly when pressed against the substrate. Fire Resist 705 VP membrane permits passage of water vapor, yet it performs as a barrier to air and liquid water.

Fire Resist 705 VP is designed for use in above-grade wall assemblies to function as an air- and water-resistive barrier. Fire Resist 705 VP can be applied over many common building materials including gypsum sheathing, foam sheathing, concrete masonry unit (CMU), concrete, wood, structural steel, metal flashings, aluminum extrusions and rigid PVC (i.e. pipe/conduit, window frames). Surface preparation with CCW-702 WB, CAV-GRIP™ or TRAVEL-TACK™ contact adhesive is often required to promote consistent adhesion.

Features and Benefits

- Composition and low fuel contribution enable use in many NFPA 285 Wall Assemblies.
- Immediate rain resistance, including wind-driven rain, after installation
- Printed facer provides easy product identification
- Factory-controlled composition provides uniform coverage
- Self-adhering membrane provides easy, reliable installation
- No spray equipment or mil-thickness measurements required
- Breathable membrane allows passage of water vapor, permitting use in wall assemblies where a vapor barrier is not needed
- Lightweight 4-ft. width rolls allow for fast and easy installation
- Airtightness allows for improved building performance
- Fire Resist 705 VP is a warranted air barrier system from Carlisle Coatings & Waterproofing

Project Conditions

Building codes and project specifications require continuity of the air barrier installation. It is the installer's responsibility to understand the extent and sequencing of air barrier installation on the project. Do not proceed with installation until substrate and project conditions conform to requirements specified in this document. All surfaces accepting Fire Resist 705 VP shall be clean, dry, frost /moisture free and of sound condition. Verify that wall assemblies are dried in, such that water intrusion will not occur from above, behind or around the membrane installation. Manage construction-generated moisture by ventilating and de-humidifying the interior. Gaps and cracks exceeding ¼" in width shall be filled with materials and technique approved by CCW. As Fire Resist 705 VP shall not span any gap in excess of ¼", electrical/mechanical penetrations, structural steel penetrations, columns/beams, expansion/seismic joints, shelf angles, tie-ins to fenestration and transitions to other building assemblies may require extra work and materials to provide suitable surfaces for continuous installation of Fire Resist 705 VP.

Substrate Inspection

Concrete

Shall be cured in place for 7 days minimum. It shall be smooth, with sharp protrusions such as form joints ground flush. Honeycomb and holes/cracks exceeding ¼" across in width shall be filled with grout or mortar.

Concrete Masonry Unit (CMU)

Mortar joints shall be struck flush and shall be free of voids exceeding ¼" across. Mortar droppings shall be removed from brick-ties and all other surfaces accepting Fire Resist 705 VP. Mortar joints shall be allowed to cure 3 days minimum prior to installation of Fire Resist 705 VP.

Gypsum, Wood or Foam Sheathing

Sheathing boards shall be flush at joints, with gaps between boards spaced according to building code and sheathing manufacturer's requirements. Sheathing boards shall also be securely fastened to the structure with proper fastener type, technique and spacing according to building code and sheathing manufacturer's requirements. Sheathing boards shall be repaired or replaced if inspection reveals moisture damage, mechanical

AIR & VAPOR BARRIER

Fire Resist 705 VP

damage or if sheathing boards have exceeded the exposure duration or exposure conditions as required by the sheathing manufacturer. Fill all joints exceeding ¼" in width with approved sealant and strike flush.

When installing CCW sheet membranes and sheet flashings over gyp-sheathing with glass-mat facers, coverage rates for contact adhesives and primers will depend on the porosity and texture of the sheathing and will vary substantially by gypsum sheathing brand and manufacturer. To achieve consistent contact adhesive and/or primer coverage with adequate tack, it may be necessary to decrease the coverage rate (i.e. increase the amount applied) of the contact adhesive and/or primer and/or the application of multiple coats. CCW contact adhesives and primers shall be allowed to dry completely (lower temperatures will extend drying time) before additional coats are applied or membranes installed. Caution should be taken as contact adhesives and/or primers applied to gyp-sheathings with glass-mat facers will take longer to dry than other substrates. Multiple adhesion tests should be performed randomly to verify proper application of primer and ensure a successful application.

OSB, Plywood, Lumber, Pressure-Treated Wood

Wood sheathing inspection carries the same protocol given for gypsum sheathing. In addition, moisture content, measured with a wood moisture meter in the core of the substrate, shall be below 20%. Do not cover any wooden materials with Fire Resist 705 VP if moisture content is 20% or more. Do not encapsulate wood (such as blocking/nailers) with Fire Resist 705 VP, as this will cause premature rot. In most cases fire- and pressure-treated wood must be kiln-dried to accommodate the less-than-20% moisture content requirement.

Surface Preparation

Apply CCW contact adhesive to ALL surfaces accepting Fire Resist 705 VP, except certain exterior sheathing materials as permitted in this document. CCW-702 WB, CAV-GRIP and TRAVEL-TACK are all acceptable for this application. Follow the application instructions on the respective contact adhesive product data sheet. If weather conditions are dry and substrate and ambient temperature is 50°F or higher, preparation with CCW contact adhesive can be omitted on these exterior sheathing surfaces provided they are clean, dry and in like-new condition: glass-mat faced gypsum, plywood, OSB, foil-faced polyiso foam and coated-glass-faced polyiso foam.

Note: CCW-702, CCW-715 and CCW-702 LV solvent-based contact adhesives are generally NOT acceptable for use with Fire Resist 705 VP, because these contact adhesives are impermeable. CCW-702 or CCW-702 LV may be used in applications where the vapor-permeable feature of Fire Resist 705 VP is not necessary, such as installation over R2+ SHEATHE or similar foil-faced polyiso insulation.

Installation

Install Fire Resist 705 VP in horizontal rows or in vertical runs. Wipe dust or debris from film side of product with a clean, dry rag to assist in forming tight laps. Avoid forming wrinkles and air pockets. Press membrane firmly to substrate with a J-roller, especially at laps, corners and terminations. Overlap adjoining pieces of Fire Resist 705 VP a minimum of 3". Use Fire Resist 705 VP strips for detailing. Sequence the installation to provide shingled laps. Membrane shall bear minimum 3" onto each side of transitions such as joints, angle changes and substrate changes. Membrane shall bear 6" minimum onto adjacent membrane systems such as foundation waterproofing or roofing. **Install self-adhered flashing details directly to substrate, not to Fire-Resist 705 VP.** Use CCW self-adhered flashings to wrap window openings, to treat pipe/duct penetrations and to cover expansion joints as shown in Fire Resist 705 VP details. Seal termination of 705 VP onto self-adhered flashings with approved termination sealant. Select self-adhered flashings and termination sealant as follows: Max. 180 Day Exposure on standard substrates: Fire-Resist 705 FR-A and Dow Corning 758. Max. 180 day exposure on R2+ or other approved foam sheathing substrate: AlumaGRIP 701 and Dow Corning 758. Max. 60 day exposure on standard substrates: CCW-705 and LM 800 XL or Greenbond WB. Lower installation temperature and dusty conditions may require prepping laps with CCW-702 WB, TRAVEL-TACK or CAV-GRIP as required. Installation below 40°F requires preparation of substrates and laps with CAV-GRIP or TRAVEL-TACK.

Inspection, Repair And Schedule

Protect membrane from damage by other trades. Do not cover work until it has been inspected according to project requirements. Cover Fire Resist 705 VP with cladding system as soon as schedule permits. Do not exceed maximum recommended exposure time of product and accessories. Repair damage to membrane by removing loosely adhered material and re-covering with Fire Resist 705 VP patch, extending beyond the damage by at least 6" in all directions. Where Fire Resist 705 VP patch or re-cover is installed, clean debris from surfaces of the old Fire Resist 705 VP and prepare with CCW contact adhesive. TRAVEL-TACK, a CCW contact adhesive provided in convenient aerosol cans, can be used for this and similar patch or recover applications. Seal terminations of repair patch with Dow Corning 758 or LM 800 XL. If multiple sheets are used in Fire Resist 705 VP repair/re-cover, offset seams of new installation 12" minimum versus underlying Fire Resist 705 VP.

This product is not compatible with other products spec'd that would come in contact with it.
Provide letter from manufacturer confirming adhesion and compatibility of other specified materials

Limitations

- Do not allow any sealants or liquid membranes to contact 705 VP except LM 800 XL, CCW Greenbond WB, Dow Corning 758 or other product approved by CCW
- Do not proceed with installation unless ambient and substrate temperature are 20°F or above
- Will not perform as a water resistive barrier in negative side applications
- Do not install below grade, or in areas where ponding water is expected
- Do not install in areas expected to exceed 180°F
- Not intended for traffic resistance or as a wearing surface
- Do not install on roofs
- Do not install over un-cured sealants

Packaging

Fire Resist 705 VP Full Rolls

48" X 100' roll, 1 rolls/box

Fire Resist 705 VP Slit Rolls

6" X 100' roll, 4 rolls/carton

18" X 100' roll, 1 roll/carton

24" X 100' roll, 1 roll/carton

Other CCW Products:

Self-Adhered Flashings

CCW-705 (60 day exposure limit), Fire-Resist 705 FR-A or AlumaGRIP 701 (use over R2+ and other foam sheathing). Available in various sizes. Consult product literature.

Sure-Seal Pressure-Sensitive Elastoform Flashing

6" X 100' roll, 2 rolls/carton

9" X 50' roll, 1 roll/carton

12" X 50' roll, 1 roll/carton

CCW Contact Adhesives

CCW-702 WB Water Based

CAV-GRIP #40 Aerosol Cylinder

CAV-GRIP gun

CAV-GRIP 18' hose

CAV-GRIP 12' hose

CAV-GRIP 6' hose

TRAVEL-TACK 12-oz aerosol cans, 12/carton

CCW Sealants

LM 800 XL (60 day exposure limit) 29 fl-oz tubes, 12 per box or 5-gal pail

CCW Greenbond WB (60 day exposure limit), 5-gal pail

Other Approved Sealants

Approved for installation over 705 VP: Dow Corning 758 Weather Barrier Sealant

Storage

Store Fire Resist 705 VP in a protected area below 90°F. In cold weather, condition rolls to 50°F or warmer to facilitate use. Shelf life in original, un-opened packaging is 1 year.

Typical Properties

Property	Method	Results
Color	--	White with black print
Nominal Thickness	ASTM D1177	0.023 inch (23 mils)
Fabric Composition	--	Multi-layer Polyester Composite
Adhesive Composition	--	Pressure-sensitive, permeable acrylic, full coverage of fabric
Tensile Strength	ASTM D882	Minimum 40 lbf/in width
Lap Peel Strength	ASTM D1876	1.0 lbf/in width, minimum
Water Resistance to Hydrostatic Pressure	AATCC-127-03, mod. 22" [55 cm] column of water for 5 hours	No leaking through membrane or 2" bonded lap
	ICC-ES AC-38	Pass
Water Vapor Permeance of membrane	ASTM E96 B (Water Method)	10.53 perms, minimum
	ASTM E96 A (Desiccant Method)	9.05 perms, minimum
Water Vapor Permeance of Contact Adhesive*	ASTM E96B (water method)	15 Perms, minimum
Air Permeance	ASTM E2178	<= 0.001 L/s*m ² @ 75 Pa [0.0002 CFM/ft ² @ 1.57 PSM]
Air Leakage Through Assembly	ASTM E 2357	Maximum 0.017 L/s*m ² @ 75 Pa [0.0034 CFM/ft ² @ 1.57 PSF]
Low Temp Flexibility	ASTM D1970 180° bend over 1" mandrel	No cracking at -20°F

* Applied on exterior side of DensGlass Gold. Bare substrate measured 29.75 Perms.

AIR & VAPOR BARRIER

Fire Resist 705 VP

Property	Method	Results
Peel Adhesion	ASTM D903	5 pli typical value applied over DensGlass with recommended primer
Pull-off Adhesion	ASTM D4541, modified 3.75" wood puck	>16 PSI on CMU DensGlass and OSB (AF from Primer)
Tear Initiation and Propagation	ASTM D4073	>30 lbf
Surface Burning	ASTM E84	Flame Spread Index - 10 Smoke Spread Index - 5
Water Penetration	ASTM E331	Passes 10 PSF after 15 minutes
Heat Release Measured by Cone Calorimeter	ASTM E1354	Effective Heat of Combustion: 16.82 MJ/kg Peak Heat Release Rate: 183 kW/m ² Total Heat Release: 6.1 MJ/m ²

**COMPARABLE PRODUCT APPROVAL REQUEST****(PRIOR TO BID)**

Date: 8/23/2019

Project: Mission Gateway Element Hotel Approval Request Number: _____
Shawnee Mission, KS

To: Nearing Staats Preloger Architects From: Phillip C. Cross, AHC, CSI, CDT
Tim Homburg A/E Project Number: 617918
thomburg@nspjarch.com Contract For: _____

Re: Division 8 - Openings

Specification title: Hollow Metal Doors and Frames Description: Manufacturers

Section: 08 11 13

Page: 4 Article / Paragraph: 2.01

**Proposed Products or
Manufacturer:**MESKER Door, Inc.; dormakaba USA, Inc

Manufacturer: Mesker Door, Inc. Specified Manufacturer: Ceco, Curries, Steelcraft

Address: 3440 Stanwood Blvd NE Specified Product: _____
Huntsville, AL

Phone: (256) 851-6670

Difference Between ☒ NONE ☐ Yes; Explain
Proposed Product and
Specified Product:

Proposed Product ☒ NONE ☐ Yes; Explain
Affects Other Parts of
Work:

Data, including drawings and performance and test data adequate for evaluation of this request are available upon request.

The Undersigned certifies:

- Proposed product has been determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed product as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed product will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed product does not affect dimensions and functional clearances.

Submitted by: Phillip C. Cross, AHC, CSI, CDT
1509 S Scarborough St
Olathe, KS 66062
(913) 222-516
(913) 273-1904
phillip.cross@dormakaba.com

Signed: Phillip C. Cross, AHC, CSI, CDTWeb Site: www.dormakaba.com**Architect Use Only**

Product Approved ☒

Product Approved as Noted ☐

Product Rejected (use specific materials) ☐

Product Rejected Received too late ☐

Name: Sara WellsSigned: Sara Wells

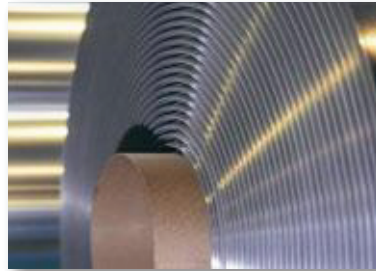
A Quality Door Right Down To The Core

Mesker boasts one of the largest lines of diverse door products, from a single hollow metal manufacturer. We offer an array of door styles to complement some of the most challenging and aesthetically pleasing architectural & design specifications. Here are some critical quality components that have established Mesker doors as the distinguished quality leader in the commercial construction industry:

THE STRONGEST STEEL

- 18 Gauge (Standard)
 - 20, 16, 14 & 12 gauge Available
- CRS (Standard)
 - GALV and G90
 - Primed Available
- 304 & 316 Gauge Stainless (Mesker Stainless)

American Recycled Steel



UNIQUE CLOSER REINFORCEMENT DESIGN

- 14 Gauge (Standard)



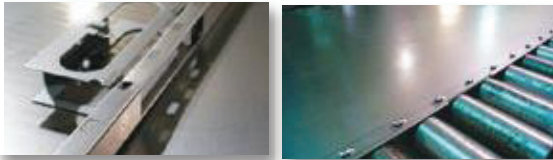
TIGHT EDGE SEAM

- Edge Seam (Standard)
- **ENVSdoor** (Optional)
 - Patent Pending



MECHANICALLY INTERLOCKING DOOR DESIGN

- Pan and Lid Design (Standard)



Pan

Lid

- 4 Corner Projection Welds (Standard)
- Adaptable Nonhanded Design (Standard)
 - Beveled Lock Edge and Beveled Lock and Hinge Edge (Optional)

VERSATILE TOP CHANNEL

- Inverted (Standard) or Flush Top (Optional)



Inverted

Flush Top

DURABLE FINISH

- Mesker Primed Grey (Standard)
 - Water Based, Electrostatic, Baked On Finish.
- Unprimed GALV or G90 Galv. (Optional)



(Optional)
Thousands of
colors Available



(Optional)
6 Standard Grain Options
Available

HIGH FREQUENCY HINGE REINFORCEMENT

- 7 Gauge Hinge Reinforcements (Standard)
- Extra Long Top Hinge Reinforcements (Standard)
 - For the Strongest Applications To Prevent Door Sag

Bottom and Middle Hinge
ReinforcementExtra Long Top Hinge
Reinforcement

- Mesker's Standard Door Hinge Locations are 4-7/8" (from Top of Door to Top of Top Hinge), 9-1/4" (from Bottom of Door to Bottom of Bottom Hinge), and EQUAL (the center hinge is equidistant from top and bottom hinges)
 - FYI: Mesker's Standard Door Strike Location is 39-9/16" (161 Prep C/L) & 39-3/16" (86 Edge Prep C/L)
 - All SDI Manufacturer's Locations, and Custom Locations, are available.

INNOVATIVE CORE DESIGNS

- Treadcore Full Polystyrene (Standard)
- Flatcore Full Polystyrene (Optional)
- HDP Flatcore Polystyrene (Optional - Standard in NVS Doors)

Treadcore
Full PolystyreneFlatcore
Full PolystyreneHDP Flatcore
Polystyrene

Honeycomb

Urethane

Fiberboard

- Hot Melt PUR Glue System for the Strongest Core Bond Available
- Lead Lined



M E M B E R

Through and through, our metal frames stand strong

As the oldest hollow metal fabricator in the United States, Mesker is the nationwide authority for many architects and contractors. We are committed to providing the best hollow metal products for the best value. We listen to our customers' needs and utilize superior engineering knowhow. We use only premium components and we guarantee complete customer satisfaction. Our system is a steadfast strategy which rewards our customers for their investment in Mesker. Much like our doors, we offer a complete line of hollow metal frames which boast the ingenuity and ruggedness you expect. Our frames are quality engineered, resulting in long frame life and best-in-class fit & finish. Mesker's strength not only comes from our premium components, but also in our value. We offer exceptional quality at a price the buyer will appreciate. We offer many styles including communicating, double egress, single rabbet, cased opening, and equal rabbet frames in a variety of stock sizes, profiles and face widths. To ensure superior fit and finish, and maximum product life, every Mesker frame is manufactured as specified:

7 GAUGE HINGE REINFORCEMENTS

- For the Strongest Applications = Maximum Load Strength + Sag Resistance
- Mesker's Standard Frame Hinge Locations are 5" (from Top of Frame Rabbet to Top of Top Hinge), 10" (from Bottom of Frame to Bottom of Bottom Hinge), and EQUAL (the center hinge is equidistant from the top and bottom hinges)
 - Mesker's Standard Frame Strike Location is 40-5/16"
 - All SDI Manufacturer's Locations, and custom locations, are available.



DURABLE FINISH

- Mesker Primed Grey (Standard)
 - Water Based, Flow Coat, Baked On Finish
- Unprimed GALV or G90 Galv. (Optional)



(Optional)
Thousands of Colors Available

TIGHT BEND LINES

- Sharp, Crisp Corners and tight Bend Lines Every Time
- Great Fit Creating Smooth Welding Transitions



4-TAB LOCKING SYSTEM & PERFECT MITERED CORNERS

- Perfect Alignment
- Added Strength



PREMIUM COMPONENTS

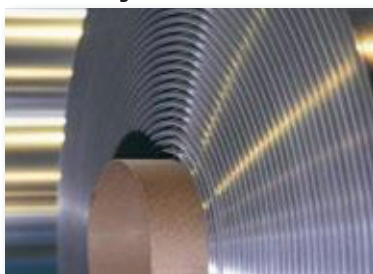
- 14 gauge Projection Welded One Piece Strike Reinforcements to Ensure Optimal Safety and Security
- Factory Installed Plaster Guards Standard on All F Series Hinge Reinforcements
- 16 gauge Floor Anchors Standard on All F Series Hinge and Strike Jambs
- 14 gauge Closer Reinforcement (optional)
- Wide Selection of Anchors Available for a Variety of Installation Applications.



THE STRONGEST STEEL

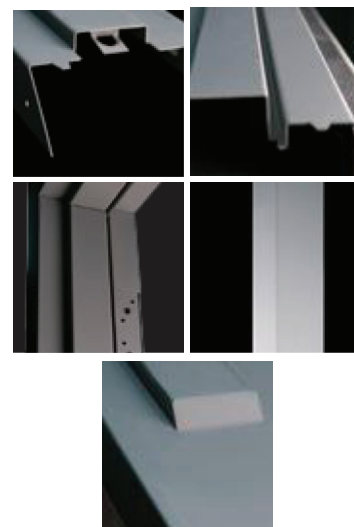
- 16 Gauge (Standard)
 - 14 & 12 gauge Available
- CRS (Standard)
 - GALV and G90
 - Primed Available

American
Recycled Steel



A VARIETY OF FRAME PROFILES AVAILABLE

- Drywall & Masonry Frames
- Pocket, Kerfed, & Thermal Break Frames
- RF - Adjustable Frames, Remodel Frames, & ProHung Frames
- Flush Face, Double Egress, Hospital Stop, & Cased Open Frames
- Unequal and Equal Rabbet, Single and Double Rabbet Frames



WELDED FRAMES AND UNIQUE ELEVATIONS AVAILABLE

- Mullion and Stick
- 3 Sided Welded Frames
- Elevations
- Curved & Arched Top Frames



M E M B E R

TUBELITE®

DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

Date: Monday 26 August 2019
To: NSPJ Architects – Tim Homburg
Phone: 913-831-1415
Email: thomburg@nspjarch.com

From: Tubelite

Subject: Product Substitution Request Submittal
Project: New Element by Westin for Mission Gateway
Bid Date: 09/04/2019

We propose furnishing the following Tubelite materials in lieu of those specified in sections:

T14000 I/O Series Storefront (2" x 4 1/2", outbound, flush glazed, thermal, 1/4" - 1" glazing) in lieu of Kawneer
<https://tubelite.org/spectool-dev/details.php?location=T14000IOOutbound->

E4500 Series Storefront (1 3/4" x 4 1/2", ctr. set, flush glazed, non-thermal, 1/4" glazing) in lieu of Kawneer
<https://tubelite.org/spectool-dev/details.php?location=E4500->

Std. - Medium Stile Door (1 3/4" thick, 4" stiles, top rails, 10" bottom rails) in lieu of Kawneer
<https://tubelite.org/spectool-dev/details.php?location=StandardMediumStileDoor->

Enclosed is the product literature: details, installation instructions, product comparisons, specifications, and test reports for the above listed systems materials. If you require more information, please contact us. Thank you for your consideration of Tubelite products for use in your project.

Sincerely,



Katie Click

Katie's Phone: (616) 264-3966

Cc: Doug Urich
Client Development Manager
Phone: (913) 265-5471
Email: durich@archonfentech.com

Cc: Doug Dietrich
Architectural Representative
Phone: (515) 201-9444
Email: ddietrich@tubeliteinc.com



Advancement
of Construction
Technology

SUBSTITUTION REQUEST

(Before the Bidding Phase)

Project: New Element by Westin for Mission Gateway
Address: 5931 Roeland Dr. Mission, KS 66205
Substitution Request Number: 1 From: Tubelite
To: NSPJ Architects Date: Monday 26 August 2019
- Tim Homburg A/E Project #: 617918
Address: 3515 W. 75th St., Suite 201 Prairie Village, KS 66208
Re: PROJECT SUBSTITUTION REQUEST Project For: Division 8


Specification: Aluminum-Framed Entrances and Storefr Description: Exterior framing
Section: 08 41 13 Page: 3 Article/Paragraph: 2.01 Manufacturers "A-1"

Proposed Substitution: T14000 I/O Outbound
Manufacturer: Tubelite Inc. Address: 3056 Walker Ridge NW, Suite G Phone: 800-866-2227
Trade Name: T14000 I/O Series Storefront (2" x 4 1/2", outbound, flush glazed, thermal, 1/4"-
quot; - 1" glazing)
Model No: T14000 I/O Outbound
Differences between proposed substitution and specified product. Please see side-by-side comparison

☒ Point by point comparative data attached. REQUIRED BY A/E attach appropriate Tubelite literature.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Submitted By: Katie Click
Signed By: 
Firm: Tubelite, Inc.
Address: 3056 Walker Ridge Dr. NW, Suite G
Walker, MI 49544
Telephone: 616-264-3966

A/E REVIEW AND ACTION:

- ☒ Substitution approved - Make submittals in accordance with Specification Section 01330.
- ☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Signed By: 

Date: 8/26/19

Supporting Data Attached: ☒ Drawings ☒ Product Data ☐ Samples (avail. upon request) ☒ Tests Reports ☒ Comparisons

Side by Side Comparison

T14000 I/O Outbound Compared to Specified

Company Profile

Tubelite

Product Name

T14000 I/O Outboard

Siteline

2"

System Depth

4-1/2"

Glass Thickness

1/4" - 1-1/8"

Thermal Break

Single pour and debridge polyurethane

Condensation Resistance Factor AAMA 1503

67 CRFf, 69 CRFg

U Factor NFRC 100

0.35 (1" IGU low E)

Acoustic ASTM E90 ASTM E1332

STC: 32, OITC: 26

Air Infiltration ASTM E283

0.06 cfm/ft² @ 6.24psf

Water static ASTM E331

12 psf

Water dynamic AAMA 501 1

15 psf

Thermal cycling AAMA 501 5

0°F to 180°F

Structural ASTM E330

L/175 @ 30 psf design - 45 psf overload

Interstory horizontal displacement

N/A

Warranty Finish

70% PVDF: 10 yrs. (20 yrs. opt.) 50% PVDF: 5 years std.(10 yrs. opt.)
 Baked Enamel: 1 year (adhesion only) Anodized Class I: 5 yrs. (10 yrs. opt.) Anodized Class II: 2 yrs.

Warranty Product

2-year std., up to 10 years available

Company Profile

Specified

Product Name

Specified

Siteline

Not listed in spec

System Depth

Not listed in spec

Glass Thickness

1"

Thermal Break

Thermal

Condensation Resistance Factor AAMA 1503

Not listed in spec

U Factor NFRC 100

Not listed in spec

Acoustic ASTM E90 ASTM E1332

Not listed in spec

Air Infiltration ASTM E283

0.06 cfm/ft²

Water static ASTM E331

6.24 psf

Water dynamic AAMA 501 1

Not listed in spec

Thermal cycling AAMA 501 5

Not listed in spec

Structural ASTM E330

L/175

Interstory horizontal displacement

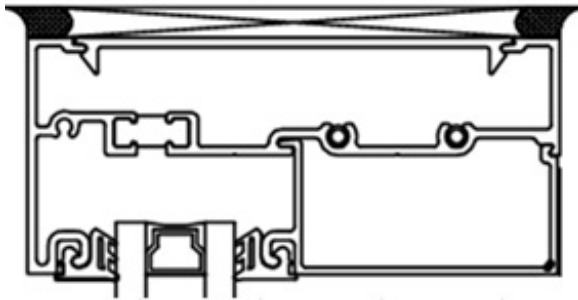
Not listed in spec

Warranty Finish

Not listed in spec

Warranty Product

Five years after the date of Substantial Completion





Advancement
of Construction
Technology

SUBSTITUTION REQUEST

(Before the Bidding Phase)

Project: New Element by Westin for Mission Gateway
Address: 5931 Roeland Dr. Mission, KS 66205
Substitution Request Number: 2 From: Tubelite
To: NSPJ Architects Date: Monday 26 August 2019
- Tim Homburg A/E Project #: 617918
Address: 3515 W. 75th St., Suite 201 Prairie Village, KS 66208
Re: PROJECT SUBSTITUTION REQUEST Project For: Division 8


Specification: Aluminum-Framed Entrances and Storefr Description: 1-3/4" thick, interior framing
Section: 08 41 13 Page: 3 Article/Paragraph: 2.01 Manufacturers "A-2"

Proposed Substitution: E4500
Manufacturer: Tubelite Inc. Address: 3056 Walker Ridge NW, Suite G Phone: 800-866-2227
Trade Name: E4500 Series Storefront (1 3/4" x 4 1/2", ctr. set, flush glazed, non-thermal, 1-
/4" glazing)
Model No: E4500
Differences between proposed substitution and specified product. Please see side-by-side comparison

☒ Point by point comparative data attached. REQUIRED BY A/E attach appropriate Tubelite literature.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Submitted By: Katie Click
Signed By: 
Firm: Tubelite, Inc.
Address: 3056 Walker Ridge Dr. NW, Suite G
Walker, MI 49544
Telephone: 616-264-3966

A/E REVIEW AND ACTION:

- ☒ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed By: 

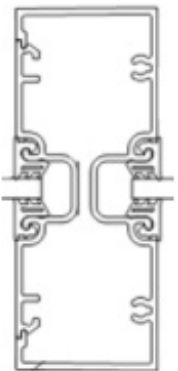
Date: 8/26/19

Supporting Data Attached: ☒ Drawings ☒ Product Data ☐ Samples (avail. upon request) ☒ Tests Reports ☒ Comparisons

Side by Side Comparison

E4500 Compared to Specified

Company Tubelite	Company Specified
Product Name E4500	Product Name Specified
Siteline 1-3/4"	Siteline 1-3/4"
System Depth 4-1/2"	System Depth Not listed in spec
Glass Thickness 1/4" - 3/8"	Glass Thickness 1/4"
Thermal Break No	Thermal Break Not listed in spec
Condensation Resistance Factor AAMA 1503 No	Condensation Resistance Factor AAMA 1503 N/A
U Factor NFRC 100 No	U Factor NFRC 100 N/A
Acoustic ASTM E90 ASTM E1332 No	Acoustic ASTM E90 ASTM E1332 N/A
Air Infiltration ASTM E283 0.06 cfm/ft2 @ 6.24psf	Air Infiltration ASTM E283 0.06 cfm/ft2
Water static ASTM E331 12 psf	Water static ASTM E331 6.24 psf
Water dynamic AAMA 501 1 12 psf	Water dynamic AAMA 501 1 Not listed in spec
Structural ASTM E330 L/175 @ 30 psf design - 45 psf overload	Structural ASTM E330 L/175
Warranty Finish 70% PVDF: 10 yrs. (20 yrs. opt.) 50% PVDF: 5 years std.(10 yrs. opt.) Baked Enamel: 1 year (adhesion only) Anodized Class I: 5 yrs. (10 yrs. opt.) Anodized Class II: 2 yrs.	Warranty Finish Not listed in spec
Warranty Product 2-year std., up to 10 years available	Warranty Product Five years after the date of Substantial Completion





Advancement
of Construction
Technology

SUBSTITUTION REQUEST

(Before the Bidding Phase)

Project: New Element by Westin for Mission Gateway
Address: 5931 Roeland Dr. Mission, KS 66205
Substitution Request Number: 3 From: Tubelite
To: NSPJ Architects Date: Monday 26 August 2019
- Tim Homburg A/E Project #: 617918
Address: 3515 W. 75th St., Suite 201 Prairie Village, KS 66208
Re: PROJECT SUBSTITUTION REQUEST Project For: Division 8

Specification: Aluminum-Framed Entrances and Storefr Description: Medium stile entry door
Section: 08 41 13 Page: 3 Article/Paragraph: 2.01 Manufacturers "A-3"

Proposed Substitution: Standard Medium Stile Door
Manufacturer: Tubelite Inc. Address: 3056 Walker Ridge NW, Suite G Phone: 800-866-2227
Trade Name: Std. - Medium Stile Door (1 3/4" thick, 4" stiles, top rails, 10" bottom rails)
Model No: Standard Medium Stile Door
Differences between proposed substitution and specified product. Please see side-by-side comparison

☒ Point by point comparative data attached. REQUIRED BY A/E attach appropriate Tubelite literature.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Submitted By: Katie Click
Signed By: *Katie Click*
Firm: Tubelite, Inc.
Address: 3056 Walker Ridge Dr. NW, Suite G
Walker, MI 49544
Telephone: 616-264-3966

A/E REVIEW AND ACTION:

- ☒ Substitution approved - Make submittals in accordance with Specification Section 01330.
- ☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Signed By: *Sara Wells*

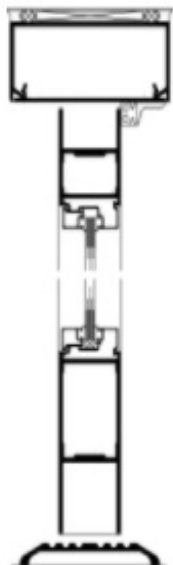
Date: 8/26/19

Supporting Data Attached: ☒ Drawings ☒ Product Data ☐ Samples (avail. upon request) ☒ Tests Reports ☒ Comparisons

Side by Side Comparison

Standard Medium Stile Door Compared to Specified

Company Tubelite	Company Specified
Product Name Standard Medium Stile Doors (DSM)	Product Name Specified
Glass Thicknesses 1/4" Mono. - 1" IGU	Glass Thicknesses Not listed in spec
Stile Thickness 1-3/4"	Stile Thickness Not listed in spec
Stile Width 4"	Stile Width Not listed in spec
Top Rail Width 4"	Top Rail Width Not listed in spec
Bottom Rail Width 10"	Bottom Rail Width 10"
Extrusion Wall Thickness stile rails 0.125" (major structural components)	Extrusion Wall Thickness stile rails Not listed in spec
Corner Construction Tie Rod, or Tie Rod / Weld	Corner Construction Not listed in spec
Thermal No	Thermal Not listed in spec
Threshold ADA Accessible	Threshold ADA Assumed ADA compliant per local codes
Warranty Finish 70% PVDF: 10 yrs. (20 yrs. opt.) 50% PVDF: 5 years std.(10 yrs. opt.) Baked Enamel: 1 year (adhesion only) Anodized Class I: 5 yrs. (10 yrs. opt.) Anodized Class II: 2 yrs.	Warranty Finish Not listed in spec
Warranty Product 2-year std., up to 10 years available	Warranty Product Five years after the date of Substantial Completion



Our Mission

We will meet or exceed the needs of architects, contract glazing companies, general contractors and building owners by consistently providing high-quality pre-engineered storefront, entrance and curtainwall systems on-time, complete and undamaged.

- In business since 1945.

www.tubeliteinc.com/history

- Tubelite is among the top four architectural aluminum manufacturers in the United States.



- Headquartered in Walker, MI with extrusion facilities in Reed City, MI. Tubelite has three extrusions presses ensuring projects are on-time and complete.

- We extrude all of our own products. 70% recycled content is available



- All aluminum finishes are applied by our sister company, Linetec.

www.linetec.com

- Tubelite is part of Apogee Enterprises, a NASDAQ publicly traded company. Other Apogee companies include Viracon Glass, Wausau Windows, Custom Window, Alumicor (Canada) and Linetec.



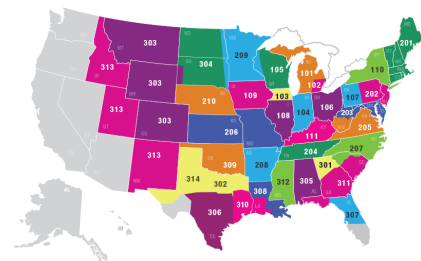
www.apog.com

- All Tubelite details (CAD and BIM), product specifications, installation instructions and test reports are available online.

www.tubeliteinc.com/sce_techdata.html

- Tubelite is represented by a national network of glazing contractors and professional salespeople.

www.tubeliteinc.com/sce_sales.html



- Tubelite has approximately 300 employees who perform functions in: extruding, door fabrication, shipping, engineering, architectural support, new product development, testing, quality control, estimating, customer service and sales.

- Tubelite maintains the best lead times in the industry.

- Tubelite provides weekly deliveries to our customers on our own trucks. On time, complete and damage free.

www.tubeliteinc.com/wp-content/uploads/2014/04/Tubelite_DFG.pdf





PRODUCT SUBSTITUTION REQUEST FORM
(Voluntary Alternative)

Company: NSPJ Architects
Attn: Timothy W. Homburg

Phone: 913.831.1415
Fax: 913.831.1463

We respectfully submit for consideration the following product(s) in lieu of the specified item(s) for the below named project:

Project: The Gateway-Mission Gateway Hotel
5931 Roeland Drive
Mission, KS 66205

Bid Date: 9-4-19

Specification Section(s)
084229-4

Paragraph(s)
2.01.A.1

Specified Item(s)
Besam SLH-500

Proposed Substitution(s): record – USA 5100 Sliding Door Operator

Certification of Equal Performance and Assumption of Liability for Equal Performance

Per instructions, attached is complete information on changes to Drawings and/or Specifications, which proposed substitution will require for its proper installation. Submitted are all necessary details and substantiating data to prove equal quality and performance to that which is specified, as well as clearly marked literature to indicate equality in performance.

The undersigned states that the function, appearance, and quality are equivalent or superior to the specified item.

Submitted By:
Curtis De Jager
Inside Sales/Sales Support

Firm: record automatic door systems
Address: 1300 Metro East Drive Suite 136, Pleasant Hill, IA 50327
Website: www.recorddoors.com
Phone: 515.263.0000
Fax: 515.263.0001
Email: Curtis.dejager@recorddoors.com

For a complete understanding of record automatic door systems and our products, please see the video link: <http://youtu.be/mUn1flb8JUY>



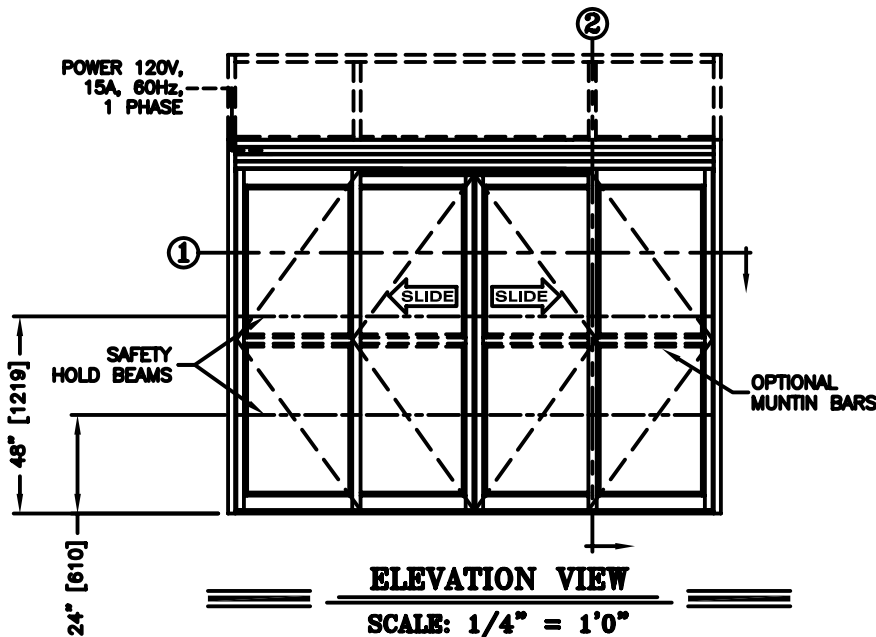
record-usa
4910 STARCREST DR.
MONROE, NC 28110
(704) 289 - 9212

JOB NAME: _____

LOCATION: _____

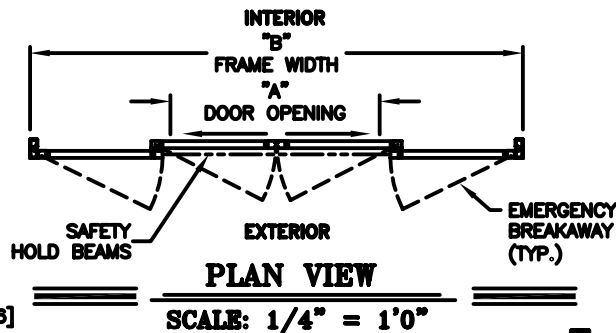
SERIES 5100 AUTOMATIC SLIDING DOORS

TYPE: 5106-1, S0-SX-SX-S0, BI-PART
PAGE 51-2.06



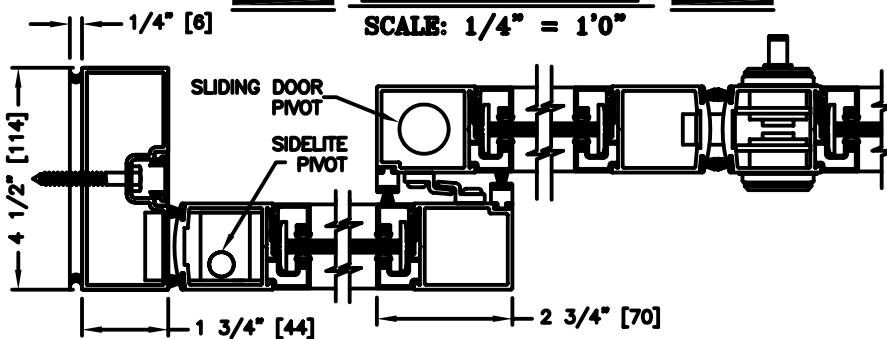
ELEVATION VIEW

SCALE: 1/4" = 1'0"



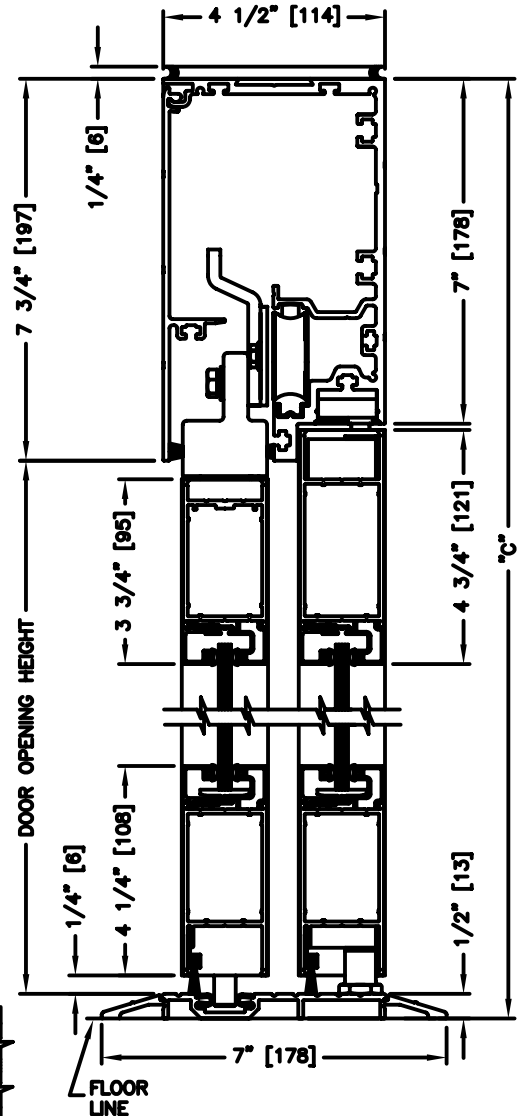
PLAN VIEW

SCALE: 1/4" = 1'0"



SECTION: 1

SCALE: 1/4" SIZE



SECTION: 2

SCALE: 1/4" SIZE

NOTES:

1. See sheets 51-2.86 thru 51-2.91 for optional muntins, bottom rails, transoms, glazing variations, bottom guides & thresholds.
2. See sheet 51-2.92 for additional details of recessed pin guide.

DIMENSIONS FOR STANDARD NARROW STILE PACKAGES

DOOR OPENING "A"	STD. PACKAGE WIDTH "B"	STD. PACKAGE HEIGHT "C" W OR W/O THRESHOLD	DOOR OPENING HEIGHT W/ THRESHOLD	DOOR OPENING HEIGHT W/O THRESHOLD OR W/RECESSED PIN	MAX. OPENING MANUALLY
42-1/2 (1080)	108 (2743)	91 (2311)	82-3/4 (2102)	83-1/4 (2115)	93-5/8 (2378)
48-1/2 (1232)	120 (3048)	91 (2311)	82-3/4 (2102)	83-1/4 (2115)	105-5/8 (2683)
60-1/2 (1537)	144 (3658)	91 (2311)	82-3/4 (2102)	83-1/4 (2115)	129-5/8 (3292)
72-1/2 (1842)	168 (4267)	91 (2311)	82-3/4 (2102)	83-1/4 (2115)	153-5/8 (3902)
84-1/2 (2146)	192 (4877)	91 (2311)	82-3/4 (2102)	83-1/4 (2115)	177-5/8 (4512)

Masonry Opening is 1/4" (6) per side larger and 1/4" taller than package dimensions.
Measurements given in inches (millimeters).

Automatic Sliding Door Comparison Chart

	<u>record</u>	<u>Stanley</u>	<u>Horton 2000</u>	<u>Besam Uni-slide</u>
Standard Warranty (complete unit)	2 years	1 year	1 year	1 year
Roller Track Warranty	Lifetime	1 year	1 year	1 year
Roller Warranty	3 Year	1 year	1 year	1 year
Rollers per panel*	4	2	4	2
Operating Temperature Range	negative 40 to 140 Fahrenheit	negative 30 to 130 Fahrenheit	negative 30 to 130 Fahrenheit	negative 35 to 122 Fahrenheit
Maximum Door Panel Weight	300 lbs.	220 lbs.	250 lbs.	220 lbs.
Header Size*	4-1/2" x 7"	6" x 8"	4" x 6"	7-5/8" x 6-5/8"
Break-out panel control*	Concealed Hydraulic Closer	Limit Arm	Torsion Spring	Hydraulic Dampner (optional)
Door Panel Construction*	Mortise Block	Through-Bolts	Mortise Block	Mortise Block
Diagnostics	Exposed via LCD	Stanley Personnel Only	Horton Personnel Only	Besam Personnel Only
Life cycle counter	Exposed via LCD	Stanley Personnel Only	Not Available	Besam Personnel Only
Safety Adjustments	Software limits to ANSI 156.10	Relies on Service Tech to comply	Relies on Service Tech to comply	Relies on Service Tech to comply
Weather Stripping	Extruded Channel in Door Panels	Adhesive "stick on" weather stripping	Extruded in Door Panels	Extruded Channel in Door Panels
Standard Safety Detection	2 infrared curtains, 2 beams	1 infrared curtain, 2 beams	2 infrared curtains, 2 beams	2 infrared curtains
Uni-Directional Motion Detection	Standard	Standard	Standard	Standard
Bottom Guide Design*	Round Pin=Anti-Friction, Smooth, Quiet	Fork Guide=Friction & Wear	Round Pin	Round Pin
Power Consumption	100 Watts	650 Watts	300 Watts	250 Watts
Motor Size****	1/8 HP	1/4 HP	1/8 HP	1/8 HP

* Rollers per panel : 4 rollers per panel allows weight distribution for smooth, quiet operation, no binding

* Header Size : 4-1/2" wide header sits flush with standard storefront framing

* Break-out Panel Control : Hydraulic closer controls door panel in break-out mode, limit arm creates rigid stopping point causing damage

* Door Panel Construction : Mortise blocks lock the stile and rail in place adding structural integrity

* Bottom Guide Design : Record's bottom pin guide is designed to reduce friction extending the life of the guide and threshold track

**** Motor Size

Please note the discrepancy in motor size, this is critical to explaining the difference between the two manufacturers. The Record 5100 utilizes an 1/8 HP motor compared to the Stanley which uses 1/4 HP motor. Efficient output of a drive train is achieved by gear reduction. Efficient gear reduction increases the amount of RPM, thus requiring less torque of the motors. Inefficient gear ratios require higher torque out of the motor, thus requiring larger motors. Please note the power consumption difference note above. The power consumption difference is quite large as noted above. The difference exists because very little gear reduction is being used by the Stanley drive train requiring more torque out of the motor, consuming six times more power than the meticulously engineered **record** drive train. In addition to the increased power consumption, the motor life is significantly reduced with the exponential amount of torque required due to the lack of gear reduction



Power Consumption



record-usa 5100 series 100W



Besam Unislide 250W



Horton 2000/2003 300W



Stanley Dura-Slide 600W





Our unit offers:

- The exclusive SMART panel display pad (information in the why we are better brochure) which performs a complete diagnostic evaluation of the door during each and every cycle and if it detects an anomaly, it displays such on the screen. This allows the end user to determine if a simple adjustment is required, a reset, or even which part has become problematic. This system alone saves thousands on possible service calls annually.
- Electronics allow for both low wattage consumption and energy efficiency
 - The Standby load has been tested at 25 watts. This is when the door is closed at rest and set on automatic mode, with other peripherals connected such as sensors, locking, etc.
 - The maximum loading (continuously in full operation) has been tested at 100 watts.
 - The nearest competitor is 2 ½ times this draw.
 - The cost to operate our door is less than \$25.00 per year
- Automatic resizing technology provides for adjustments in door opening and closing width after every cycle should the door determine a wider opening is required due to heavy pedestrian traffic or two way traffic. When pedestrian traffic slows, the door *automatically* detects this and reduces its opening to save on air conditioning and heating costs. This is an exclusive feature.
- Standard two year warranty
- Door cycle count standard
- The ability to advise the end user of performing a daily safety check, who to call for service and when their planned maintenance is due- all through the display pad!
- Fluid, smooth and quiet operation- the quietest in the industry bar none.

5100 Series

A Better Sliding Door



5100 Series

www.recorddoors.com



record

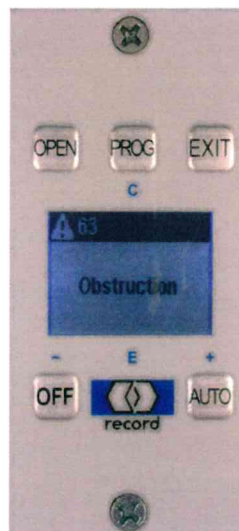
record doors 5100 Series

A Better Sliding Door

Sliding door packages from record doors offer:

- The exclusive SMART panel display pad (information in the why we are better brochure) which performs a complete diagnostic evaluation of the door during each and every cycle. If it detects an anomaly, it displays such on the screen. This allows the end user to determine if a simple adjustment is required, a reset, or even which part has become problematic. This system alone saves thousands of dollars on possible service calls annually.
- Electronics allow for both low wattage consumption and energy efficiency
 - o The Standby load has been tested at 25 watts. This is when the door is closed at rest and set on automatic mode, with other peripherals connected such as sensors, locking, etc.
 - o The maximum loading (continuously in full operation) has been tested at 100 watts.
 - o The nearest competitor is 2½ times this draw.
 - o The cost to operate our door is less than \$25.00 per year
- Automatic resizing technology provides for adjustments in door opening and closing width after every cycle should the door determine a wider opening is required due to heavy pedestrian traffic or two way traffic. When pedestrian traffic slows, the door automatically detects this and reduces its opening to save on air conditioning and heating costs. This is an exclusive feature.
- Standard two year warranty
- Door cycle count standard
- The ability to advise the end user of performing a daily safety check, who to call for service and when their planned maintenance is due-all through the display pad!
- Fluid, smooth and quiet operation-the quietest in the industry bar none.

The S.M.A.R.T. Panel:



- A control panel with an intuitive interface and visual feedback of door status. Selecting the operational mode of the door is a single button press, and the built-in display will provide confirmation.
- Can be manually locked, preventing unauthorized alteration by those who do not have permission to adjust the door.
- Will automatically provide an alert message if an abnormal condition occurs.
- Provides user with the phone number of an authorized service agent.
- Reminds you of your commitment in performing a daily safety check.
- Provides information regarding objects in track that may negatively impact the operation of the door.
- Displays current door setting in regard to traffic selection and egress.

www.recorddoors.com



5100 Series

record door's new 5100 series sliding door offers the very latest in automatic door technology to assure the quietest, smoothest performance in a sleek and elegant design. Offering a variable breadth of configurations and functions, the 5100 series assures the architect and building owner a wide array of capabilities in ensuring the most dependable, secure and attractive entrance-way available by choosing from the following options:

Telescopic Doors

- Door panels open and close in an elegant and noiseless movement and at different, harmoniously coordinated speeds. This interesting motion is not only aesthetically pleasing but also functional. The telescopic sliding door operator is ideal for narrow passages where the opening width obtained with a standard sliding door would not be sufficient. Crowded entrances are no problem as it opens quickly and quietly.

The 5100 series telescopic doors utilize 1 3/4" X 6 3/4" framing and are available in 3 or 6 panel configurations.



Surface Applied Units

- The 5100 series automatic sliding door package may also be specified or ordered for surface mounted applications. This allows for the sliding door system to be mounted to existing structures with little or no modification required. The 5100 series surface mounted package is perfect for retrofit construction and in providing for ADA compliance.



All Glass

- All Glass- Showcasing a building, emphasizing a lobby or creating an illusion of openness, the 5200 series all glass sliding door system allows the beauty and elegance to show through the entrance area with clear line of sight unhindered by vertical stiles. This entrance creates an unobstructed view of either the interior or exterior of a building while providing the same smooth, quiet and reliable operation as the 5100 series.

Suitable for high end design applications as well as every day use, the 5200 series is the perfect compliment for architectural design creativity in entrances.



Tandem

- The Tandem sliding door system by record-usa allows both an identified entry door and an exit door work independent of each other while sharing the same header assembly for aesthetic and design simplicity. Another added feature is that these doors provide a larger clear door opening than the standard 5100 series would allow.



Special Design

- Automatic entranceways should add to the appearance of a building, not detract from it. Through the use of French windows, multiple muntins, specially aligned verticals or horizontal members in doors or transoms, extra sidelites, tall or short bottom rails or a breadth of other varying options the record 5100 series can easily be designed to match most any storefront.



Safety is Our Specialty

- Meets ANSI 156.10, UL325 & IBC 2009
- Dual Safety Beams @ 24" & 48" above the finished floor standard
- Flush mounted exit devices
 - o Full width of opening
 - o Full Breakout or Fixed or Sidelite Packages
- Reversible Fail Safe or Fail Secure Electric Locking
- UPS Battery Backup up to 300 cycles

In addition we offer:

- Exit Devices
- Electronic Locks
- Battery Backup



- record automatic door systems

4324 Phil Hargett Court – Post Office Box 3099 – Monroe, NC 28110

tel. +1 704 289-9212 – e-mail: info@recorddoors.com – www.recorddoors.com

- Headquarters

agta record ltd – Allmendstrasse 24 – 8320 Fehraltorf – Switzerland

tel.: +41 44 954 91 91 – e-mail: info@agta-record.com – www.agta-record.com



www.recorddoors.com



Why we are better?

5100 Series Sliding Doors

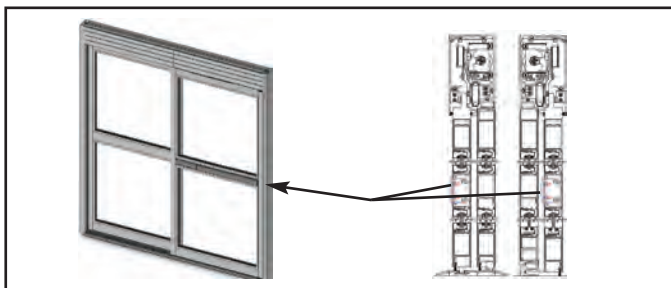
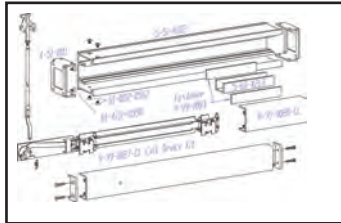
All record-usa Series 5100 automatic sliding entrances allow the sliding doors to break away and swing in the direction of egress when force is applied (similar to a swing door). The doors can be pushed to swing at any point in the door opening or closing cycle (except for Reverse Breakout units), and the force required to break the doors away is mechanically adjustable. On units with exterior swing-out sidelites, breaking the doors away will also cause the sidelites to swing in the same direction as the sliding doors. These units also incorporate mechanical interlocks that lock the sliding doors and sidelites together when the doors are full closed. record-usa utilizes $1\frac{3}{4}" \times 4\frac{1}{2}"$ framing for the side jambs and transom members on all sliding entrances. Where applications require, optional $1" \times 4\frac{1}{2}"$ or $4\frac{1}{2}" \times 4\frac{1}{2}"$ framing may be substituted. On telescope, full pocket, and surface mount units, $1\frac{3}{4}" \times 6\frac{1}{2}"$ framing is standard with optional $1" \times 6\frac{1}{2}"$ framing also available. On surface mounted units, $1\frac{3}{4}" \times 2\frac{3}{4}"$ (narrow stile) or $1\frac{3}{4}" \times 4\frac{1}{4}"$ (medium stile) filler tubes are mounted against the wall or storefront in place of sidelites to provide a weather seal and members to mount the safety beams.

Special Size Extrusions: The Series 5100 narrow stile packages are available with $2\frac{1}{2}"$ top rails, $3\frac{1}{2}"$ bottom rails, 2" stiles, and $1\frac{1}{2}"$ muntin bars. Standard medium stile packages are available with $2\frac{1}{2}"$ rails, 6" bottom rails, $3\frac{1}{2}"$ stiles, and $1\frac{1}{2}"$ muntin bars. The sight line dimensions include $\frac{3}{8}"$ allowance for glass stop on the daylight side of all members (i.e., $1\frac{1}{2}"$ muntins are dimensioned as 3"). Optional special size extrusions are available to allow flexibility in the sight line design to match a certain storefront appearance as required. These extrusions include: RAILS: $5\frac{3}{8}"$, $6\frac{3}{8}"$, $9\frac{3}{8}"$, $10\frac{3}{8}"$ and MUNTINS: 4", 5", $5\frac{1}{2}"$, $6\frac{1}{2}"$, $7\frac{1}{2}"$ (NOTE: All the dimensions given above are sight line dimensions including glass stop.)

Also, glass stop configurations are available to accommodate $1/2"$, $9/16"$, $5/8"$, $3/4"$, and $1"$ glass in doors, sidelites and transoms. Certain size restrictions apply to sliding doors with special size glass, so please contact record-usa for assistance in designing an entrance to fit your needs.

5100 Series Recessed Exit:

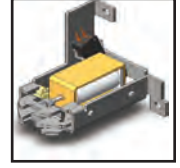
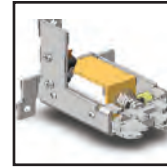
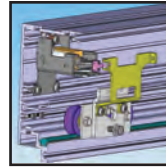
- The new record-usa recessed exit device complies with current egress requirements for size and actuation, extending more than one-half the width of the door and requiring only $1/4"$ of travel.
- Complies with the BOCA requirement for the exit device to have a "projection" from the face of the door.
- Available on full break out (SO-SX) and fixed panel (O-SX) door systems.
- Integrated into the door with a $3\frac{1}{2}"$ tall profile; a matching horizontal is available for sidelites.
- Standard actuation bar color is clear anodized.
- Available now as an alternate to paddle exit devices which may not meet code requirements and surface mount devices that may restrict the travel of a door leaf while at the same time limit design parameters.



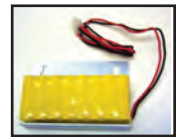
Options:

The record-usa Series 5100 sliding entrance offers a wide variety of options to provide an entrance which functions exactly as the designer requires. These options include:

- **Electric Locking:** Concealed electric locks are available in both fail safe (unlock on loss of power) and fail secure (lock on loss of power) operation. The electric locks are mounted in the header and operate as a carriage lock that automatically locks the door against slide after each open-close cycle, or can be unlocked for daytime use and locked at night.



- **Battery Pack:** A constant charge battery pack is available for use with building alarm and security systems to ensure that entrances are secured in an emergency. The battery pack can be provided to open or close the door upon loss of incoming electrical power or when signaled from the security system. An UPS (uninterruptible power supply) that provides 300 door opening cycles is also available.



- **Partial Open Feature:** A selectable partial opening feature is available for applications that require a full width opening during pleasant weather conditions but a partial opening during harsh weather. The microprocessor-based operator control offers an infinite number of partial opening settings. The partial opening can be constant or automatic depending on traffic volume. In the automatic mode during high traffic conditions, the control will override the reduced opening setting and open the door to the full opening available. Once traffic decreases, the control will return to the reduced opening.
- **Assembly:** Proven composite carrier roller material. Sealed ball bearing construction with an effective anti-derail/anti-rise system. Lifetime roller track system and engineered noise reduction barrier composed of neoprene between track and header.
- **Door Closers:** Doors can be specified on either SX or SO panels that can be concealed in the top rail of door panels. During break out conditions the doors leaves are protected from damage. Doors are assured to close meeting code requirements after break away.

Why we are better?

S.M.A.R.T. Panel:

- The 5100 introduces a new control panel with an intuitive interface and visual feedback of door status. Selecting the operational mode of the door is a single button press, and the built-in display will provide confirmation.
 - The control panel can be manually locked, preventing unauthorized alteration by those who do not have permission to adjust the door.
 - Two control panels can be installed on the same door; one at the unit and one remote.
 - The control panel will automatically provide an alert message if an abnormal condition occurs.
 - Provides user with the phone number of the authorized service agent.
 - Reminds you of your commitment in performing a daily safety check.
 - Provides information regarding objects in track that may negatively impact the operation of the door.
 - Displays current door setting in regard to traffic selection and egress.
 - Indicates when a door has been accidentally broken out.
 - Identifies if a safety beam has failed or been damaged.
 - Notifies user of which part needs replacement due to failure or abuse.
- ### FPC Service and Flash Programmer:
- Highly sophisticated programming and service tool for your certified installer/technician.
 - Identically program and configure multiple sliding door systems throughout your building.
 - Update software in the slider control to ensure the very latest technology is always available to you.
 - Allows certified technician to maintain complete service and repair data over the life of the door.

Basic Functions:

Different Operating Modes:

- Automatic mode with full opening width.
- Automatic mode with reduced opening width.
- Automatic mode in oneway (exit only) for traffic control.
- Adjustable reduced opening mode.
- Continuously open: door opens and remains in open position; either full open or reduced opening width.
- Off mode: door can be easily moved by hand.

Safety Functions

- Safety sensors (self-monitoring holding beams) in the clear opening of the door prevent the door from shutting if persons or objects are in the detection zone.
- Safety automatic reversing mechanism: if the door leaves are inhibited when closing, they are immediately re-opened. If the door leaves are hindered when opening, they are immediately stopped.
- The position of the obstacle is stored and will be slowly approached during the next door movement.
- Even in the case of power failure the emergency fail close or the emergency opening is assured by the optional emergency power options.
- Sidelite Protection – Optional additional sensors located above the opening path of the door will slow the opening if a person or object will inhibit the door opening.

Failure Indication

- Any irregularity or fault is indicated on the control panel display.

Customer-Specific Settings:

Programmable Values

- Independent door speeds for opening and closing.
- Independent time delays according to actuation (automatic mode or key-operated impulse).
- Independent adjustable opening width at the reduced opening.
- Adjustable acceleration.

Additional Functions

- Automatic cancellation of the reduced opening width when traffic is heavy.
- Emergency close with or without automatic locking (option to re-open the door after actuation of the emergency close and close again automatically).



5100 Series



5100 Series Sliding Doors

record-usa's new 5100 series sliding door offers the very latest in automatic door technology to assure the quietest, smoothest performance in a sleek and elegant design. Offering a variable breadth of configurations and functions, the 5100 series assures the architect and building owner a wide array of capabilities in ensuring the most safe, secure and attractive entranceway available by choosing from the following options:

5200 series All Glass

- Clear line of sight unhindered by vertical stiles
- Single slide or bipart packages available
- For use with ½" tempered glass

5300 series Heavy Duty

- Virtually silent operation incorporating dual motor operation
- Available for door panels glazed with ¼" glass up to 10 feet tall; ½" and 1" up to 9" tall
- Each door panel may weigh up to 375 pounds

5400 series Impact Rated Hurricane

- Steel reinforced doors and panels
- No lock required on SO panels
- Complies with Dade County NOA 09-0720.12
- Incorporates ⅞" Old Castle Glazing
- LMI series (Large Missile Impact)

5500 Series Non Impact Rated Hurricane

- Steel reinforced doors and panels
- No lock required on SO panels
- Complies with Dade County NOA 09-0720.13
- Incorporates Glazing from ¼" to 1" (in ¼" increments)
- Wind load Series

5600 Series

- Choose the 5600 series when desiring to automate wood, hollow metal or other door types and still get the reliability, durability and silence of the 5100 series.

Other Options:

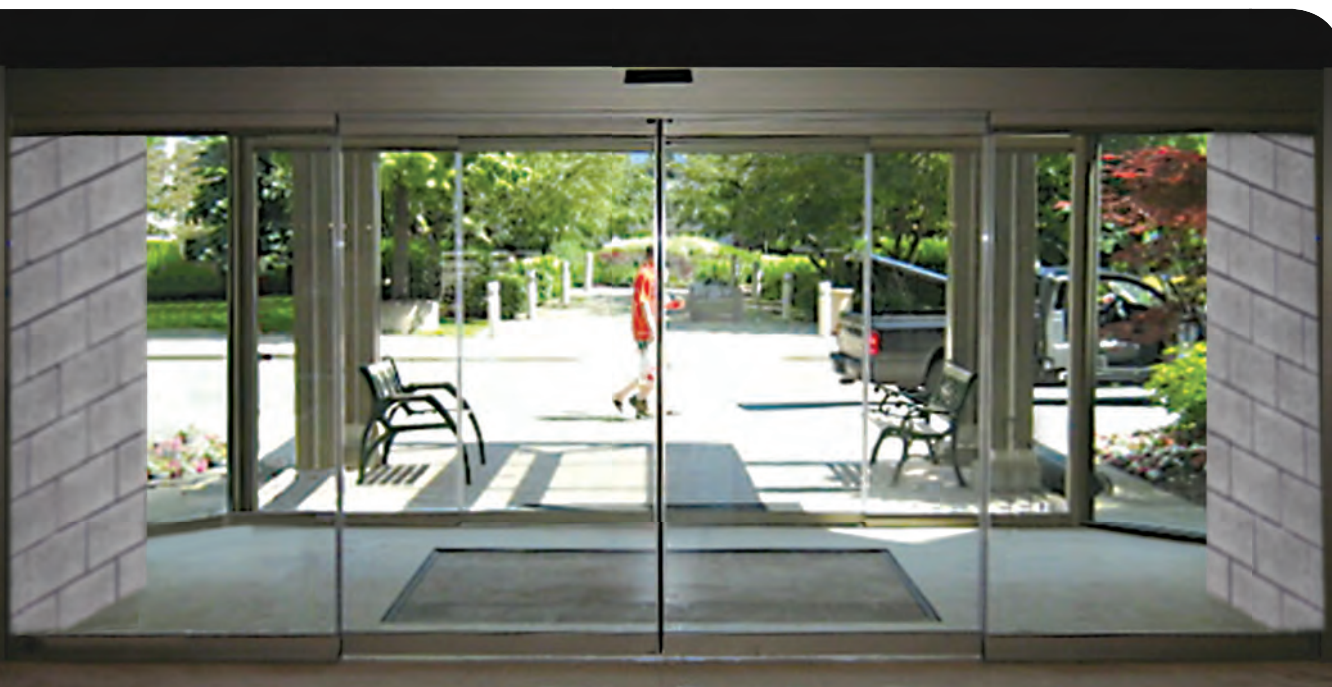
Bullet Resistant Doors:

- Utilizes 1" thick glass laminate UL 753 Level II rated
- Utilizes ⅞" Amortex Composite UL 752 Level III rated (concealed in aluminum extrusions)

All record sliding door series comply with ANSI 156.10; IBC2003; UL325; CUL and NFPA101

Go Green with record Doors

- Lower wattage consumption than competitive products
- Recycled cardboard as opposed to Styrofoam packaging
- By automatically changing the opening and closing width based on pedestrian traffic flow record reduces air loss out of the building



5100 Series



automatic door solutions

Automatic door technology as you've never seen it before!



www.recorddoors.com



record

your global partner for entrance solutions

automatic doors

record automatic sliding doors



Complete Satisfaction and Quality

Our top priority is your complete satisfaction with the quality of our products and services.

By this we mean:

- Individual professional advice in choosing building access solutions for people and goods;
- A wide range of high-tech products to meet the requirements of modern building automation;
- Elegant designs with numerous options, compatible with any architectural style or building plan.

There are 22 record subsidiaries in Europe and the USA, and we have over 50 years' experience in mechanics, sensor technology, electronics and software for automatic door systems and related products.

Talk to us about your needs!

Thank you for your confidence in our company; we look forward to hearing from you.

Our corporate headquarters in Monroe, NC. This state of the art facility allows us to manufacture quality entrances, on time and when you need them. With over 60,000 sq. feet, our facility provides the latest manufacturing techniques and machinery to provide nothing less than your total and complete satisfaction.

www.recorddoors.com



your global partner for entrance solutions

5100 Series Sliding Doors

All record-usa Series 5100 automatic sliding entrances allow the sliding doors to break away and swing in the direction of egress when force is applied (similar to a swing door). The doors can be pushed to swing at any point in the door opening or closing cycle (except for Reverse Breakout units), and the force required to break the doors away is mechanically adjustable. On units with exterior swing-out sidelights, breaking the doors away will also cause the sidelights to swing in the same direction as the sliding doors. These units also incorporate mechanical interlocks that lock the sliding doors and sidelights together when the doors are full closed. record-usa utilizes 1 3/4" x 4 1/2" framing for the side jambs and transom members on all sliding entrances. Where applications require, optional 1" x 4 1/2" or 4 1/2" x 4 1/2" framing may be substituted. On telescope, full pocket, and surface mount units, 1 3/4 x 6 1/2" framing is standard with optional 1' x 6 1/2" framing also available. On surface mounted units, 1 3/4" x 2 3/4" (narrow stile) or 1 3/4" x 4 1/4" (medium stile) filler tubes are mounted against the wall or storefront in place of sidelights to provide a weather seal and members to mount the safely beams.

Options

- ➔ Electric Locking: Concealed electric locks are available in both fail safe (unlock on loss of power) and fail secure (lock on loss of power) operation. The electric locks are mounted in the header and operate as a carriage lock that automatically locks the door against slide after each open-close cycle, or can be unlocked for daytime use and locked at night.
- ➔ Battery Pack: A constant charge battery pack is available for use with building alarm and security systems to ensure that entrances are secured in an emergency. The battery pack can be provided to open or close the door upon loss of incoming electrical power or when signaled from the security system. An UPS (uninterruptible power supply) that provides 300 door opening cycles is also available.
- ➔ Exit Devices: Recessed vertical rod exit devices are available on inside slides as well as outside slides. These devices extend across the full width of the door panel. Exit devices are mounted at the same height as the muntin bar (41-5/8" from the floor or threshold to the centerline of the exit device/muntin bar.)
- ➔ Partial Open Feature: A selectable partial opening feature is available for applications that require a full width opening during pleasant weather conditions but a partial opening during harsh weather. The microprocessor-based operator control offers an infinite number of partial opening settings. The partial opening can be constant or automatic depending on traffic volume. In the automatic mode during high traffic conditions, the control will override the reduced opening setting and open the door to the full opening available. Once traffic decreases, the control will return to the reduced opening.



S.M.A.R.T. Panel:

- ➔ The 5100 introduces a new control panel with an intuitive interface and visual feedback of door status. Selecting the operational mode of the door is a single button press, and the built-in display will provide confirmation.
- ➔ The control panel can be manually locked, preventing unauthorized alteration by those who do not have permission to adjust the door.
- ➔ Two control panels can be installed on the same door; one at the unit and one remote.
- ➔ The control panel will automatically provide an alert message if an abnormal condition occurs.
- ➔ Provides user with the phone number of the authorized service agent.
- ➔ Reminds you of your commitment in performing a daily safety check.
- ➔ Provides information regarding objects in track that may negatively impact the operation of the door.
- ➔ Displays current door setting in regard to traffic selection and egress.
- ➔ Indicates when a door has been accidentally broken out.
- ➔ Identifies if a safety beam has failed or been damaged.
- ➔ Notifies user of which part needs replacement due to failure or abuse.



Available in Telescoping & Surface Applied Packages



record sliding door series comply with ANSI 156.10; IBC2003; UL325; CUL and NFPA101.

5100 Series The Greener Door

record-usa's new 5100 series sliding door offers the very latest in automatic door technology to assure the quietest, smoothest performance in a sleek and elegant design. Offering a variable breadth of configurations and functions, the 5100 series assures the architect and building owner a wide array of capabilities in ensuring the most safe, secure and attractive entranceway available by choosing from the following options:

record-usa recognizes the importance of the Green initiative.

Disposing of items that can be recycled diminishes energy, water and natural resources that could be saved by recycling. Creating an environment of cultural responsibility has been a focus of ours over the past several years and will remain as such for the foreseeable future.

Energy Consumption of record-usa 5100 Series sliding door systems:

The Standby load has been tested at 25 watts. This is when the door is closed at rest and set on automatic mode, with other peripherals connected such as sensors, locking, etc.

The maximum loading (continuously in full operation) has been tested at 100 watts. Most leading competitor's average from 250 W to 600 W. This is when the door is under permanent and maximum operation combined with the maximum door leaf weight of 225 pounds per panel. With the motor voltage at 35VDC, the operator is classified as Class II.

Exclusive Traffic Sensitive "Smart" opening logic reduces air infiltration.

When low traffic is sensed the door operates to a selectable reduced opening. When two-way and/or higher volume is sensed, the door operates at full opening width. This is achieved automatically without the requirement of having to go to the door and adjust the operating mode.

By automatically changing the opening and closing width based on pedestrian traffic flow record reduces air loss out of the building.

Construction Waste Management

Product manufactured by record-usa ships in recycled cardboard that is suited for further recycling or for possible reuse when required. We never use hard to dispose of styrofoam like other manufacturers. This eliminates or greatly reduces extensive re-usable garbage/material being delivered to and or buried in public disposal areas.

- Electronics allow for both low wattage consumption and energy efficiency
- Traffic Sensitive Sensor provides controlled and timed opening and closing cycles
- 1" glazing offers protection from the elements and reduces hot/cold transfer from interior and or exterior
- Rubber seals between panels and extended bottom door sweeps reduce and eliminate air and smoke infiltration
- Door closers assure panel coming closed after breakout reducing loss of building heat or cold
- Extended door sweeps add extra resistance to the elements keeping cold air and snow out and heat in thereby saving on heating and air conditioning costs as well

5200 series All Glass

- Clear line of sight unhindered by vertical stiles
- Single slide or bipart packages available
- For use with 1/2" tempered glass

5300 series Heavy Duty

- Virtually silent operation incorporating dual motor operation
- Available for door panels glazed with 1/4" glass up to 10 feet tall; 1/2" and 1" up to 9 feet
- Each door panel may weigh up to 375 pounds

5400 series Impact Rated Hurricane

- Steel reinforced doors and panels
- No lock required on SO panels
- Complies with Dade County NOA 15-0316.04
- Incorporates 7/16" Old Castle Glazing
- LMI series (Large Missile Impact)

5500 Series Non Impact Rated Hurricane

- Steel reinforced doors and panels
- No lock required on SO panels
- Complies with Dade County NOA 15-0316.05
- Incorporates Glazing from 1/4" to 1" (in 1/4" increments)
- Wind load Series

5600 Series

- Choose the 5600 series when desiring to automate wood, hollow metal or other door types and still get the reliability, durability and silence of the 5100 series.

Other Options:

Bullet Resistant Doors:

- Utilizes 1" thick glass laminate UL 753 Level II rated
- Utilizes 7/16" Amortex Composite UL 752 Level III rated (concealed in aluminum extrusions)

www.recorddoors.com



record

your global partner for entrance solutions

MEETS UL 1784



5900 Series Manual ICU Doors

Health care environments are challenging in that the need for a door way to rapidly provide break out capability in the event of emergency patient care is always evident.

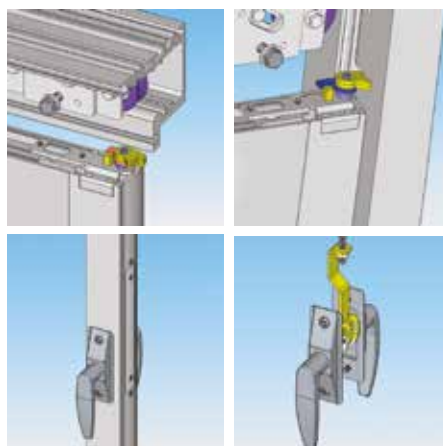
ICU doors are used to provide separation between patient rooms and other areas of the hospital.

ICU doors are specified to eliminate critical life safety situations arising when possible delays may result due to hospital personnel hesitating momentarily when transporting patients due to slow moving doorways.

record-usa's manual sliding ICU door packages are available in multiple configurations that allow the architect total freedom in the design of a patient facility. One may select from two, three or four panel options, both with or without floor tracks. Other possibilities include either three or six panel telescopic designs, again both with and without floor tracks. To satisfy all of the requirements of the healthcare facility, the doors may be specified to breakaway either into the patient room, or out into the hallway—whichever option best allows for quick and unimpeded transportation of patients either in wheelchairs or on gurneys.

Note: With trackless units, breakaway capability may only be achieved for the sidelite assembly and the active sliding door leaf when the doors reach the fully open position. With standard pin guide track units sidelite and sliding door assemblies breakout from any position during the slide travel of the door.

- ➔ PrivacyVue™ Glass
- ➔ Integral Blinds
- ➔ Self Closing
- ➔ Automatic



5900 Series Manual ICU Doors Positive Latching

(exclusive design allows for latching at the top on Bi-Parts)

record-usa's unique positive latching system on their manual ICU doors is different from that of the competition in that it latches inside the header and not on exposed vertical members which is quite common.

Studies have shown that manual ICU doors that incorporate side latching systems offer further complications in crisis situations in that patient IV lines may become entangled and cause injury or slow the required hasty transportation of the patient in an emergency.

Used in tandem with an easy to grasp handle system provided on each side of the door itself, the positive latching system secures the active leaf firmly in place when the door is closed. This prevents the all too common occurrence of the ICU door gently re-opening when softly slid shut by the nursing staff. Since the door remains securely shut, the patient is allowed to rest peacefully without fear of interruption common in active hospital environments.

Once the positive latch handle is depressed, breakaway capability is once again readily achievable.

Regardless of the configuration, whether it be standard single slide, bi-part or telescopic slide, all record-usa series 5900 manual ICU doors have identical header site lines to simplify aesthetic concerns.

Trackless telescopic break away units may be specified to allow quick and easy full egress without the hazards or protruding floor tracks.



4900 Series All-in-One Bi-Fold/Bi-Swing Manual Doors

Introducing the new record-usa ALL-IN-ONE door package. Ideally used to eliminate the possible impedance in a hallway of hospital personnel with patients caused by open door leaves, the dual folding-swinging ALL-IN-ONE door system assures that narrow hallways remain clear of possible obstructions that other door — systems may cause.

In the event of an emergency, standard ICU packages may cause concern by breaking into the hallway to allow quick egress from the patient room. Doors of this type also may rely on a floor track system that slows a patient's travel while on a gurney or may lead to discomfort as they proceed over the track. ICU doors are also usually manufactured with hard to grasp handles that are very difficult to open when the nurse may have his/her hands full. Nurses now may easily back into the swing side of the door system and enter the doorway even when handling food trays, patient charts, etc.

When large doorways are desired to allow the simple transportation of carts, wheelchairs or other equipment, standard ICU doors are provided with a breakout feature to allow the door panels to fold in one direction and stack. This design feature provides a larger than normal clear door way opening than swinging doors may allow. But when choosing record-usa's ALL-IN-ONE door package the requirement of a breakout feature is eliminated simply by opening the bi-fold and bi-swing door quickly and easily. This ingenious three panel door system offers the combination of both a folding door and a double acting swing door system. Inherent to the creativity of the design is the ability to select which side of the unit the folding door panels are on and which side the swinging door unit is on— whichever allows the quickest egress should an emergency situation arise.

4500 Series Automatic Slide/Fold Doors

Elegant-silent-reliable

Where space is at a premium, record's Slide/Fold door allows quick and easy access. Ideally suited to buildings with narrow entrances, it is the perfect solution for restaurants, hotels, business premises, hospitals and homes for the elderly, as well as offices and private buildings. The Slide/Fold doors use record's proven system drive and control units, and have all the features and functions of record's 5100 series standard operator. The Slide/Fold can be either surface applied or mounted between jambs.

Reasons why the record Slide/Fold is vastly superior to standard folding door systems:

- Provides a much larger door opening in even the most restricted doorways (for example a 78" opening provides a 64.625" clear opening as opposed to a 51" clear opening).
- Eliminates the requirement of finger guard at the jamb – a component that consistently fails
- A folding pivot is subject to torsional loads and fatigue failure caused by –
 - a.) location of the pivot point with respect to the alignment of the panels;
 - b.) flexing (twisting) of the door panels during normal operation;
 - c.) jerky operation of the drive mechanism.
 By aligning the pivot with the door panels, the record design will reduce torsional problems associated with the projected pivot used on the current folding door.
- Moving the pivot closer to the jamb provides additional support of the pivot and increases the clear opening of the door. The record bottom pivot is a sealed, precision bearing mounted into a hardened steel ring, which provides protection for the bearing. Being positioned adjacent to the jamb also increases net door opening and abuse protection.



www.recorddoors.com



6100 Series

(for squared header assemblies please specify 6200 series)

record-usa's 6100 series is the ideal choice for interior door ways that demand reliability, durability and silence. The 6100 was designed to meet all requirements of both ANSI A156.19 for power assist and low energy power operated doors as well as applications that must comply within the parameters as defined by the ADA Civil Rights Law.

8100 Series

(for squared header assemblies please specify 8200 series)

The 8100 series as manufactured by record-usa provides the end user with the best solution for interior or exterior entrances. Since the 8100 has complete control of the door throughout its entire opening AND closing cycle and may be programmed for either ANSI A 156.19 or ANSI A 156.10 (power operated pedestrian doors) applications, the 8100 promises to be your choice for heavily used doorways that require a long lasting unit. The 8100 retains the completely silent performance of the 6100 series as well.

8600 Series

The record 8600 overhead concealed package incorporates the 8500 series operator but is supplied complete with a narrow stile, center pivoted aluminum door panel, standard 1 3/4" X 4 1/2" jambs, cylinder and lock; push bar; offset-pull handle; finger guards and threshold (medium and wide stiles also available.)

8700 Series

When the requirement of an overhead concealed unit that can be used on offset or butt hinge applications is evident, the record-usa 8700 series provides attractive aesthetics as well as durable performance. The 8700 series is supplied with a continuous hinge gear only.



	6100 Series	8100 Series
Doors	Interior	Interior/Exterior
Weights	up to 175 lbs.	up to 350 lbs.*
ANSI	156.19	156.19/156.10
Arm	Standard	Standard/Track/Offset
Door Size	36" or 72"	up to 51" Single & 108" Pairs
Warranty	1 Year	2 Year
Non Handed	✓	✓
Overhead Concealed	✓	✓
Inswing Doors	✓	✓
Outswing Doors	✓	✓
Double Egress	✓	✓
On/Off/Hold Open Switch	✓	✓
Microprocessor Control	✓	✓
Surface Applied	✓	✓
Center Hung	✓	✓
Center Pivoted doors Butt/Offset Hung Doors	✓	✓
Deep Reveal Applications	✓	✓
ADA Compliance	✓	✓
Fire Rated Openings	✓	✓
Standard Anodized	✓	✓
Paint	✓	✓
Clad	✓	✓
Electromechanical	✓	✓
Push to Start	✓	✓
Power Boost (Latch Assist)	✓	✓
No Relay Required for Electric Strikes	✓	✓
No Lockout Relay Required for Sensors	✓	✓
Built-in Power Supply for Sensors	✓	✓
Built in Power Supply for Sensors	✓	✓
Optional Remote Digital Control Panel	✓	✓

Features/Options:

- ➔ Available with either squared headers or rounded headers
- ➔ Brake option available to maintain door position at the full open and/or full closed position(s) on the 8100 Series
- ➔ Reveals up to 24" in depth
- ➔ Extended arm adaptors to provide clearance in multiple framing conditions
- ➔ UL listed for both UL325 and UL228
- ➔ Non-handing operator assembly
- ➔ Easily configurable with the record-usa S.M.A.R.T panel
- ➔ One header for simultaneous, independent and double egress pairs
- ➔ Can be prepped for automation on one door leaf and used with manual closers by LCN, Jackson, Ryobi, etc. on the other
- ➔ Two year warranty is standard on the 8100 Series
- ➔ Overhead design (see the 8600 Series on the next page) provides completely concealed application
- ➔ Non handed to maximize all field condition applications
- ➔ The 8100 is adjustable from low energy to high speed operation to meet application needs and ANSI code requirements
- ➔ Unit is capable of either push or pull operation with either standard or track arm configuration
- ➔ The 8100 is able to confidently and safely operate door
- ➔ leaves up to 350 pounds* and 48". The 6100 series may be selected for doors up to 48" and weighing up to 175 pounds.
- ➔ Built in interface for electric locking eliminates the need for additional costly peripherals
- ➔ Push to start operation saves on the installation and expense of additional activation devices
- ➔ Latch assist closing ensures closing to overcome stack and wind conditions (saves heating and/or air conditioning expense) or to overcome applied door hardware such as electric strikes that may otherwise bind, causing a breach of security
- ➔ Obstruction shut down halts the door when an object is detected to provide additional safety throughout the door operation
- ➔ Recycle on obstruction reopens the door upon making contact with an object or individual to provide additional safety throughout the door operation
- ➔ Built in lock out relay provides simplified coordination with safety devices

*Consult Factory



Revolving
Doors



In the Floor
Sliders



In the Floor
Swingers



High Speed
Roll-Up Doors



Thermally
Broken Doors



Exit Lane
Breach Control



Security
Portals

→ record USA

4324 Phil Hargett Court – Post Office Box 3099 – Monroe, NC 2811
tel. +1 704 289-9212 – e-mail: info@recorddoors.com – www.recorddoors.com

→ Headquarters

agta record ltd – Allmendstrasse 24 – 8320 Fehraltorf – Switzerland
tel.: +41 44 954 91 91 – e-mail: info@agta-record.com – www.agta-record.com

www.recorddoors.com



record

your global partner for entrance solutions

SECTION 08 42 29.23 (08460)

ARCHITECTURAL SPECIFICATIONS – record-usa SERIES 5100 AUTOMATIC SLIDING DOOR SYSTEMS

PART 1: GENERAL

1.01 SUMMARY

A. WORK INCLUDED: Furnish and install automatic aluminum door system(s), factory fabricated. Door packages shall be complete and without damage or defect.

B. RELATED WORK:

1. Section 07900 – Joint Sealers
2. Section 08400 – Entrances and Storefronts
3. Section 08700 – Hardware
4. Section 08800 – Glazing
5. Section 16000 – Electrical

1.02 RELATED WORK

The following exclusions are covered in Section(s) _____:

1. Preparation of the plumb and square masonry opening
2. Floor preparation
3. Electrical supply and connection (dedicated 120 VAC, 15 amp circuit to each operator/header)

1.03 SUBMITTALS

- A. PRODUCT DATA: Provide complete product and installation documentation as provided by the manufacturer.
- B. SHOP DRAWINGS: Provide details of door construction including profiles, dimensioned layout, and assembly including finish, glazing, electrical, and anchoring requirements.
- C. Provide manufacturer's Warranty documentation and Owner's Manual.

1.04 QUALITY ASSURANCE

A. Manufacturer must have a minimum of five (5) years experience in the fabrication of aluminum-and-glass door assembly similar to those specified. Door packages shall be warranted against defect in material and workmanship for a period of one year from the date of installation. Installation shall be approved by an AAADM certified inspector.

B. The record-usa 5100 series shall be self certified to meet performance design criteria of the following standards.

1. ANSI/BHMA 156.10
2. NFPA 101
4. UL 325
5. CUL
4. IBC
5. ICBO
6. BOCA

C. Door shall be obtained solely through an authorized trained and factory certified automatic door provider. Consult record-usa (800) 438-1937 for the current listing.

1.05 REFERENCES

- A. UNDERWRITERS LABORATORIES (UL):
 - 1. UL 325 – Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems.
- B. American National Standards Institute (ANSI) / Builders' Hardware Manufacturers Association (BHMA):
 - 1. ANSI/BHMA A156.10: Standard for Power Operated Pedestrian Doors.
- C. American Society for Testing and Materials (ASTM):
 - 1. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- D. American Association of Automatic Door Manufacturers (AAADM):
- E. National Fire Protection Association (NFPA):
 - 1. NFPA 101 – Life Safety Code.
 - 2. NFPA 70 – National Electric Code.
- F. International Code Council (ICC):
 - 1. IBC: International Building
- G. Building Officials and Code Administrators International (BOCA), 1999:
- H. International Conference of Building Officials (ICBO):
 - 1. UBC 1997: Uniform Building Code
- I. National Association of Architectural Metal Manufacturers (NAAMM):
 - 1. Metal Finishes Manual for Architectural and Metal Products.
- J. American Architectural Manufacturers Association (AAMA):
 - 1. AAMA 607.1 - Clear Anodic Finishes for Architectural Aluminum.

1.06 PERFORMANCE REQUIREMENTS

- A. Temperature change suitable:
 - 1. minus 30 degree Fahrenheit (minus 34 degree Celsius) to
 - 2. 130 degree Fahrenheit (54 degree Celsius)
- B. Breakaway door requirements of not more than 50 lbf (222 N) provided power fails and no more than 15 lbf (67 N) to open door to specified minimum required width.
- C. Closing force of no more than 30 lbf (133 N) required preventing the door from closing at all times.

1.07 ON SITE FIELD CONDITIONS REQUIRED PRIOR TO INSTALLATION

- A. Approved Shop drawings must be referenced and confirmed by the General Contractor before fabrication.
- B. Opening must be verified to be plumb, straight and secure.
- C. It is the duty of the General Contractor to make door installer aware of any non-conforming conditions or equipment as indicated on the shop drawings.
- D. General Contractor is required to coordinate the layout and installation of the automatic door equipment connection to power supplies.

1.08 WARRANTY

Door packages shall be warranted against defect in material and workmanship for a period of two years from the date of installation.

PART 2: PRODUCT

2.01 MANUFACTURER

record-usa
Monroe, North Carolina, USA
(800) 438-1937

2.02 AUTOMATIC SLIDING DOOR DESIGN

- A. Sliding door Package: The manufacturer's sliding door package shall consist of the following materials in order to make a complete package installation: framing, flush mounted header (mounted between jambs), sliding door panel(s), stationary panel(s), operators (belt drive only-linear rod not accepted), activation and safety devices, carrier assemblies, noise isolating roller track, threshold, and guide tracks (*to match threshold dimensions on full breakout units*). Traffic patterns to be determined by owner and set by installer using record-usa exclusive S.M.A.R.T. panel per application or desire..

B. Definitions:

- 1. SO panel: stationary sidelite that has the capabilities to swing away in case of emergency egress
- 2. SX panel: sliding panel that has the capabilities to swing away in case of emergency egress
- 3. O panel: stationary sidelite that does NOT have the capability to swing away
- 4. Single slide: package will have one (1) stationary panel and one (1) sliding panel sliding over the stationary panel to create the clear door opening width
- 5. Bi-Parting: package will have two (2) stationary panels and two (2) sliding panels sliding away from one another overlapping stationary panels to create the clear door opening width

C. Configurations:

- 1. Full Breakout: Sliding and stationary sidelite panel(s) ALL swing clear for means of emergency egress
 - a. Possible configurations are as follows (using definition above):

- b. Single slide: SO-SO and SX-SO
 - c. Bi-parting: SO-SX-SX-SO
- 2. Fixed sidelite: Only sliding panel swings away for emergency egress side-lite will NOT.
 - a. Possible configurations are as follows:
 - b. Single slide: O-SX and SX-O
 - c. Bi-parting: O-SX-SX-O

Other configurations available, please consult manufacturer.

D. Materials:

- 1. Framing, header, and door panels made of extruded aluminum by US supplier.
- 2. Mohair pile weather stripping at all vertical surfaces on door panels

2.3 ALUMINUM DOORS AND FRAMES

- A. Aluminum: Alloy and temper recommended by manufacturer for type of use and specified finish.
 - 1. Header, frames, stiles and rails: 6063-T5
 - 2. Extruded bars, rods, profiles and tubes: ASTM B221
 - 3. Sheet and plate: ASTM B209
- B. Framing Members: Shall be manufacturer's standard extruded aluminum
 - 1. 1-3/4" x 4-1/2" (44mm x 114mm), optional framing members include:
 - a. [1" x 4-1/2" (25mm x 114mm)]
 - b. [4-1/2" x 4-1/2" (114mm x 114mm)]
 - c. [1-3/4" x 6" (44mm x 152mm)]
 - d. [1" x 6-1/2" (25mm x 165mm)]
 - 2. Framing Option: Transom of size and type as indicated on drawings
- C. Doors and Sidelites: Shall be 1-3/4" thick extruded aluminum stiles and rails. A minimum wall thickness of .125" is provided as standard. Stiles and rails shall be mechanically fastened with mortise and tenon blocks.
 - 1. Stile Design: Narrow stile, 2" (51mm), optional designs include:
 - a. [Medium stile, 3-1/2" (89mm)]
 - b. [Wide stile, 5" (127mm)]
 - c. Overlapping stiles shall be provided with interlocks to prevent separation of panels. Interlocks to be adjusted to maintain security when door is in the closed and locked position. Notching of interlocking stiles not acceptable.
 - 2. Horizontal Rail Design (Muntin Bar), 1-1/2", optional designs include:
 - a. [2-1/2" (63.5mm)]
 - b. [3" (76.2mm)]
 - c. [3-1/2" (89mm)]
 - d. [4" (102mm)]
 - e. [5" (127mm)]
 - f. [6" (152mm)]
 - 3. Bottom Rail Design: 3-1/2" (89mm), optional designs include:
 - a. [6" (152mm)]
 - b. [10" (mm)]

- D. Glazing Material: ANSI Z97.1
1. Doors and Sidelites: Doors and sidelites shall be capable of accepting the same thickness of glass for fixed sidelite and full break-out units.
 2. Exterior Glass Stop Extrusion: Doors and sidelites shall be provided with non-removable security glass.
 3. Glazing Prep: Standard glazing prep to be for 1/4" glass, optional glazing prep includes:
 - a. 1" glazing prep
 - b. 3/4" glazing prep
 - c. 5/8" glazing prep
 - d. 9/16" glazing prep
 - e. 1/2" glazing prep
 - f. 3/8" glazing prep
- E. Break-out Panels: Panels can swing out 90 degrees at any point in the slide movement to provide instant egress per NFPA 101. Required force shall to "break-out" panels shall not exceed 50lbf (222N) applied to the lock stile. Units with break-out feature are UL Listed as an exit way.
1. Break-out door panels and break-out sidelites shall utilize an spring-load adjustable ball detent. Additional option for break-out panel:
 - a. Concealed Hydraulic Closer: Standard for fixed side-lite door packages, optional for full break-out.
- F. Header: Shall be 4-1/2" wide x 7" tall. Fabricated from extruded aluminum and extending the full width of sliding door unit between jambs. Headers shall have removable access panel for service of door operator and control.
1. Mounting: Header mounts flush with 4-1/2" framing
 2. Capacity: Capable of supporting doors up to 200lbs per leaf spanning up to 16'-0" without intermediate supports.
- G. Overhead Roller Track: Shall be continuous anodized aluminum. Track shall be replaceable.
1. Composition: Anodized aluminum, lined with rubber compound
 2. *Mounting*: Captured within extruded channel in header
 3. *Isolation*: Neoprene isolation member to reduce noise and vibration
 4. Warranty: Lifetime
- H. Overhead Rollers: Shall be manufacturer's standard carriage consisting of four 2" rollers per leaf and two anti-rise rollers. Roller composition is manufactured from robust polymer and self-lubricating steel ball bearings.
1. Minimum number of load bearing rollers per leaf: Four (4)
 2. Minimum diameter of rollers: 2"
 3. Warranty: 3 years.

2.4 MOTOR GEARBOX ASSEMBLY

- A. Door movement: Shall be driven by a sealed, low voltage class II, 1/8 horsepower 24v DC motor and gearbox and nylon reinforced drive belt. The motor shall have a current draw of not more than 100 watts. The sealed motor gearbox assembly shall be capable of driving

door leaves of up to 225 lbs. A second motor gearbox can be utilized on the same application giving a capability of moving door panels weighing up to 450 lbs. The motor gearbox assembly shall be mounted directly to the header extrusion by means of three (3) each M5 x 1/4" threaded standoff bolts.

2.5 DOOR CARRIER ASSEMBLY AND TRACK

A. Each moving door leaf shall be supported by two door carrier assemblies, each carrier having a minimum of two supporting rollers and one adjustable "anti-riser" roller. Each supporting roller shall be 1 3/4" in diameter, made of nylon. Each supporting roller shall be high performance rollers with sealed bearings. The carrier assemblies shall move along a two part, replaceable track assembly. A convex aluminum extruded track allowing the door panels to travel along a horizontal plane shall be mounted on the roller track damper, which will be made of rubber. The primary purpose of the damper, being to reduce the amount of mechanical noise generated. Track shall be warranted for the lifetime of the door.

2.6 MASTER CONTROL

The master control shall be capable of being programmed by either the S.M.A.R.T. panel installed as standard on all 5100 series sliding doors or by a hand held programmer. Both the S.M.A.R.T. panel and the hand held programmer will be capable of programming all swinging, sliding and folding doors within the record product offering. The master control shall have only digitally adjustable parameters (for repeatability purposes, potentiometers as a method of setting parameters shall not be allowed).

The master control shall be a microprocessor capable of being programming, but not limited to control settings:

1. Opening and Closing speeds
2. Acceleration
3. Door open time delay
4. Remote door open time delay
5. Partial opening size
6. Reverse adjust sensitivity
7. Control of Emergency battery back up utilities
8. Fire alarm signals
9. Directional traffic flow
10. Locking
11. Remote volt free input commands.

The microprocessor shall also have the capability of, but not limited to:

Detect faults and deal with them according to method of programming including sending data to the S.M.A.R.T. panel, indicating that there is a fault, what the fault is from one of the 30 stored error screens, it will also provide a user programmed telephone contact on the display. Any updates to the software can be uploaded and updated, using the hand held programmer

2.7 MOTION AND PRESENCE SENSORS

A. The record 5100 sliding door system shall include the following:

1. Combined Activation and Safety Sensor System: Shall be 24 VDC, class II circuits; and shall be adjusted and installed in Accordance with ANSI/BHMA A156.10. The installation shall be performed by an AAADM Certified Technician with a minimum of One (1) year in the service related field.

1. Combined Activation and Presence Sensors: The combined activation and presence sensors shall consist of active infrared or microwave technology. The sensors shall be header-mounted on each side of the door, centrally located in the opening. The sensor heads will be housed in one unit. The adjustments to the detection pattern should be completed by an AAADM certified technician in accordance with ANSI/BHMA 156.10 safety standards and compliance codes.
2. Hold-Open Beams: Two infrared photoelectric beams to be mounted in vertical rails of the sidelite or in the vertical jamb, with the photoelectric beams wired directly to the record 5100 micro processor. The photo eye beams are mounted at 24" and 48" respectively above finished floor. Breaking either emitter beam will cause the door to open, remain open until the path between the emitter and diodes beams are cleared. Once cleared, the signal is reinstated and the door will close and be fully functional.

2.8 HARDWARE

- A. Provide units in sizes and types recommended by automatic entrance door and hardware manufacturers for entrances and uses indicated.
- B. ANSI A156.5, Grade 1, 2-Point Locking provided and installed in the strike rail. Manufacturer's standard hook bolt lock operated by exterior cylinder and interior thumb turn.
 1. Hook Bolt Latch: Laminated steel, latching into jamb or strike rail
 2. Two-Point Locking: Provide locking device that provide locking capability into the adjacent strike rail or jamb and extends a flush bolt into the overhead carriage assembly. Deadbolt locking options include the following:
 - a. Three-Point Locking for bi-parting doors
 - b. Lock indicators
 - c. Adams-Rite 4550
- C. Flush Panic Exit Device, recessed in 5" muntin bar
- D. S.M.A.R.T. Panel (Self Monitoring Accurate Reporting Technology): Provide manufacturer's standard jamb mounted control panel for complete control and reporting of the automatic sliding door. Control panel capabilities include, but are not limited to the following:
 1. Power On/Off
 2. Full Open/Partial Open
 3. Hold Open/Closed/Automatic Operation
 4. Daily Safety Check Reminder
 5. Diagnostic Reporting
 6. Door Cycle Count
 7. Planned Maintenance Reminders
- E. Weather Stripping to be along the perimeter all door panels and side-lites to reduce energy loss. Standard weather stripping includes the following:
 1. Adjustable nylon sweep in the bottom of sliding door(s)
 2. Double pile weather stripping on the strike rail of sliding door(s)
 3. Single pile weather stripping at the following locations:

- a. Between the carriage assembly and header
- b. Lead stile of sidelite(s)
- c. Pivot stile of sidelite(s)

2.9 ELECTRICAL REQUIREMENTS

- A. The Automatic sliding door shall consume no more than 100W of electricity at full load power.
- B. Section 16 Contractor to provide 120V, 1 phase, 5 amp dedicated circuit per automatic sliding entrance
- C. 120V service to be roughed into header of sliding door package.
- D. Electrical rough in to be finished at time of installation
- E. Optional Equipment: Building Management System:
 - 1. Section 16 contractor will provide low voltage wiring from each automatic sliding door entrance in series with homerun to central building management center
 - 2. Owner shall be able to access building management from site location and remote location
 - 3. Service provider will be given dedicated remote IP address in order to assist with service to prevent unnecessary service and to ensure that if a trip is needed what problems are occurring.
 - 4. Each door will also have its own IP address to ensure that the proper door is serviced.

2.10 FABRICATION

Factory builds, fabricates, and assembles automatic door components by design. To comply with all building codes applicable to design standards.

- A. Door miscellaneous hardware: Factory assembled to design specific projects.
- B. Door Closers: Integrated support for hydraulic closers in both SX (slide) panels and SO (sidelite) breakout panels. Built into the top rail, door closers are available when specified, to ensure the door closes and remains operable after emergency breakout egress.
- C. Framing:
- D. Door operator:
- E. Glazing:

2.11 ALUMINUM FINISHES (FOR ALL EXPOSED FINISHES)

- A. Comply with NAAMM Metal Finish Manual for Architectural and Metal Products for applying and designing finishes. Finish designations beginning with AA comply with a system established by Aluminum Associations for designing finishes. Finishes shall be one of the following:
1. Clear: Architectural Class II Clear Anodized Coating (AA-MI2C22A31)
 2. Dark Bronze: Architectural Class I Anodized Coating (AA-MI2C22A44)

Optional Finishes Include the Following:

3. Clear: Architectural Class I Clear Anodized
4. Black: Architectural Class I Anodized Coating
5. Medium Bronze: Architectural Class I Anodized Coating
6. Light Bronze: Architectural Class I Anodized Coating
7. Champagne: Architectural Class I Anodized Coating
8. Paint Coating : Kynar or Powder Coat to match Kynar Colors, standard or custom colors
9. Clad with stainless steel or brass alloy, brushed or polished finish

PART 3: EXECUTION

3.01 INSPECTION

Inspect frame opening for correct size, plumb and square and level floor for safe and reliable performance. Provide written notification to the appropriate personnel of conditions not acceptable to the installer and/or manufacturer. Proceed with installation only after necessary corrections are made by the general contractor to insure a suitable opening.

3.02 INSTALLATION

Install sliding door unit plumb, square, and level in properly prepared and supported opening, using specified fasteners, as required by installation instructions and as detailed on the shop drawings.

3.03 INSTRUCTION

Following the installation and final adjustments, the installer shall fully instruct the facility manager as to correct operating procedure and safety requirements of the sliding door package.

3.04 FINAL CLEANUP

After installation and adjustment for smooth, reliable operation, clean the door package and remove all surplus material, equipment, and debris incidental to this work.

**CONTRACTOR'S REQUEST FOR
INFORMATION - RFI
AND ARCHITECT'S SUPPLEMENTAL
INSTRUCTIONS**

Date 8/20/2019	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 1
 Owner: GFI DEVELOPMENT CO. Date of Request: 8/20/2019
 To: Fogel Anderson Contractor: MW Builders
 (Architect's Representative)
 Project No.: 617918 Contractor's Representative: Josh Ellis
 Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Are the ACM Panels to be a rout and return system, or an exposed fastened system?
 Specification section 074243, 2.3C states that the primary system is to be face fastened, but select corners are to be route and return. Please Clarify

Requested by: MW Builders

**Architect's Supplemental
Instructions:**

The spec states it correctly.
 The overall ACM panel system is to be an exposed fastener system.
 See details at locations such as windows, VTAC grilles & horizontal material transitions
 for rout & return pieces.
 This method/concept was discussed during the design phase with a local
 fabricator/installer as a non-cost prohibitive solution to certain termination/transition
 details.

Attachments:

Reply By: 

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____ Date _____ By: _____ Date _____
 Architect Contractor

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

**CONTRACTOR'S REQUEST FOR
INFORMATION - RFI
AND ARCHITECT'S SUPPLEMENTAL
INSTRUCTIONS**

Date 8/20/2019	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 2
 Owner: GFI DEVELOPMENT CO. Date of Request: 8/20/2019
 To: Fogel Anderson Contractor: MW Builders
 (Architect's Representative)
 Project No.: 617918 Contractor's Representative: Josh Ellis
 Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Specification section 061600 calls for zip panel sheathing to be used, but 072715 calls for a ssefl-adhered sheet air barrier. Please clarify which of these is correct

Requested by: MW Builders

**Architect's Supplemental
Instructions:**

Zip panels have been removed from the specification section. Please continue to adhere to Section 072715 for desired air barriers.

Attachments:

Reply By:

Sana Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____
 Architect Date

By: _____
 Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

**CONTRACTOR'S REQUEST FOR
INFORMATION - RFI
AND ARCHITECT'S SUPPLEMENTAL
INSTRUCTIONS**

Date – 8/20/2019	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. – MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 3
 Owner: GFI DEVELOPMENT CO. Date of Request: 8/20/2019
 To: Fogel Anderson Contractor: MW Builders
 (Architect's Representative)
 Project No.: 617918 Contractor's Representative: Josh Ellis
 Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Will substitution requests be considered for the project? If so, please provide a form or method in which you would like these addressed.

Requested by: MW Builders

Architect's Supplemental
Instructions:

Yes.

Please refer to Volume 1-Divisions 1-14,
Section 013300: Submittal & Substitution Procedures
A form for substitution requests is located at the end of that section.

Attachments:

Reply By:

Sana Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____
Architect Date

By: _____
Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date 8/21/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL **RFI No.:** 4
Owner: GFI DEVELOPMENT CO. **Date of Request:** 8/21/19
To: Fogel Anderson **Contractor:** MW Builders
 (Architect's Representative)
Project No.: 617918 **Contractor's Representative:** Josh Ellis
Architect's Fax No.: 816-842-0946 **Fax No.:** 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Door type 4 - Do the connecting rooms have 2 doors? Or one single? For example on Sheet A2.12, rooms 239 and 241 show a single door between the connecting king and queen. Detail 1 on A5.32 appears to show two door type 4s between the rooms while Detail 3 on the same sheet shows one.

Requested by: MW Builders

Architect's Supplemental Instructions:

Connecting rooms have 2 doors (type 4). One on each side of the wall. Detail 1 on A5.32, that you reference, depicts these correctly.

Attachments:

Reply By: Sana Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____ **By:** _____
 Architect Date Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date 8/21/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 5
 Owner: GFI DEVELOPMENT CO. Date of Request: 8/21/19
 To: Fogel Anderson Contractor: MW Builders
 (Architect's Representative)
 Project No.: 617918 Contractor's Representative: Josh Ellis
 Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Will there be trim strips for the cultured marble surrounds?

Requested by: MW Builders

Architect's Supplemental Instructions:

Yes. Use trim pieces at sides of shower pan and install per manufacturer's
 installation instructions.
 TR-02 - 2"x 96" x 3/4" should work.

Attachments:

Reply By:

Sana Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____
Architect Date

By: _____
Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

**CONTRACTOR'S REQUEST FOR
INFORMATION - RFI
AND ARCHITECT'S SUPPLEMENTAL
INSTRUCTIONS**

Date 8/21/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 6
 Owner: GFI DEVELOPMENT CO. Date of Request: 8/21/19
 To: Fogel Anderson Contractor: MW Builders
 (Architect's Representative)
 Project No.: 617918 Contractor's Representative: Josh Ellis
 Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)
 Please list all, if any, required cultured marble surround accessories (soap dishes, shelves, foot rests). I have not found any listed.

Requested by: MW Builders

**Architect's Supplemental
Instructions:**

There are no cultured marble accessories required.

Attachments:

Reply By:

Sana Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____ Date: _____ By: _____ Date: _____
 Architect Contractor

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

**CONTRACTOR'S REQUEST FOR
INFORMATION - RFI
AND ARCHITECT'S SUPPLEMENTAL
INSTRUCTIONS**

Date 8/21/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 7
Owner: GFI DEVELOPMENT CO. Date of Request: 8/21/19
To: Fogel Anderson Contractor: MW Builders
(Architect's Representative)
Project No.: 617918 Contractor's Representative: Josh Ellis
Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

What is the color of the shower surround panels? Spec says refer to Volume 5 for color, but I did not see a color for the surrounds (shower pans = white).

Requested by: MW Builders

Architect's Supplemental
Instructions:

Use Solid White #2250

Attachments:

Reply By: Sara Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____
Architect Date

By: _____
Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date 8/21/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 8
 Owner: GFI DEVELOPMENT CO. Date of Request: 8/21/19
 To: Fogel Anderson Contractor: MW Builders
 (Architect's Representative)
 Project No.: 617918 Contractor's Representative: Josh Ellis
 Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

The unit counts on the cover sheet A0.00 do not match what we are finding within the plans. Additionally, we ran a count in both the overall floor plans, and the segmented floor plans and they did not align either. Please Clarify which is correct

	Cover Sheet	Per Floor Plans	Per Segmented Floor Plans
Standard King	42	42	44
Studio QQ	89	89	85
Studio King	36	36	38
Conf	4	4	4
ACC Studio QQ	3	3	3
One Bed	21	20	21
ACC One Bed	2	3	2
ACC Studio King	2	2	2
ACC Conf	1	1	1
ACC Standard King	2	2	2
	202	202	202

Requested by: MW Builders

Architect's Supplemental Instructions:

Cover sheet is correct.
 Room 330 was labeled incorrectly on A2.03.
 Room 432 & 434 was labeled incorrectly on A2.14
 Room 534 was labeled incorrectly on A2.15
 Room 632, 634 & 639 was labeled incorrectly on A2.16

Attachments:

Reply By: *Sana Wells*

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____ Date: _____
 Architect Contractor

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date 8/21/2019	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL **RFI No.:** 9
Owner: GFI DEVELOPMENT CO. **Date of Request:** 8/21/2019
To: Fogel Anderson **Contractor:** MW Builders
 (Architect's Representative)
Project No.: 617918 **Contractor's Representative:** Josh Ellis
Architect's Fax No.: 816-842-0946 **Fax No.:** 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Note #9 on C301 shows the block retaining wall to be modular, note #5 on sheet L102 refers to this wall to be cast in place w/board form finish. Please advise which is correct.

Requested by: MW Builders

Architect's Supplemental Instructions:

Retaining walls are to be cast
in place with board formed
finish.

Attachments:

Reply By:

Sana Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____ **By:** _____
 Architect Date Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date 8/21/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL **RFI No.:** 10
Owner: GFI DEVELOPMENT CO. **Date of Request:** 8/21/19
To: Fogel Anderson **Contractor:** MW Builders
 (Architect's Representative)
Project No.: 617918 **Contractor's Representative:** Josh Ellis
Architect's Fax No.: 816-842-0946 **Fax No.:** 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

See sheet S2.21 between gridlines 18 and 14. It appears that there are two thickness of slabs at this location, 12" and 16". There's no indication to where the slab transitions from the 12" to the 16". Sheet S2.21 contradicts itself as a 12" concrete is called out where there's a 16" slab present between gridlines 17 and 15. Please advise.

Requested by: MW Builders

Architect's Supplemental Instructions:

See attached for clarification.

Chris Beverlin-BDC
8.26.19

Attachments:

Reply By: _____

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____ **By:** _____
 Architect Date Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date 08/21/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL **RFI No.:** 11
Owner: GFI DEVELOPMENT CO. **Date of Request:** 08/21/19
To: Fogel Anderson **Contractor:** MW Builders
 (Architect's Representative)
Project No.: 617918 **Contractor's Representative:** Josh Ellis
Architect's Fax No.: 816-842-0946 **Fax No.:** 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Some scopes of work are conflicting on who is to provide and install them. For instance, the signage specification section 101400 says owner furnished contractor installed, but in section 011000a, the responsibility matrix shows this to be owner furnished and installed. Does one of these take precedence over the other? Please clarify

Requested by: _____

Architect's Supplemental Instructions:

Responsibility Matrix in Section 011000a takes precedence.

Attachments:

Reply By:

Sana Wells

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____
 Architect Date

By: _____
 Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

**CONTRACTOR'S REQUEST FOR
INFORMATION - RFI
AND ARCHITECT'S SUPPLEMENTAL
INSTRUCTIONS**

Date 08/22/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 12
 Owner: GFI DEVELOPMENT CO. Date of Request: 08/22/19
 To: Fogel Anderson Contractor: MW Builders
 (Architect's Representative)
 Project No.: 617918 Contractor's Representative: Josh Ellis
 Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

L101 - The sidewalk that meanders out to the west of the site is noted as #9 which is concrete pavement with color stain #1. Is this to be regular gray concrete? On the same sheet, keynote #9 next to the building only refers to the concrete pavement with the "hashmarks".

Requested by: _____

Architect's Supplemental Instructions:

Area is to be gray concrete per plan note #23. Plan notes indicating control joints were mislabeled as #9. Reference revised sheet L101.

Attachments: **L101**

Reply By: **Brandon McBride 08/26/2019**

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued: _____ **Supplemental Instructions Accepted:** _____
 By: _____ By: _____
 Architect Date Contractor Date
 Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

**CONTRACTOR'S REQUEST FOR
INFORMATION - RFI
AND ARCHITECT'S SUPPLEMENTAL
INSTRUCTIONS**

Date 08/22/19	# of Pages
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL RFI No.: 13
Owner: GFI DEVELOPMENT CO. Date of Request: 08/22/19
To: Fogel Anderson Contractor: MW Builders
(Architect's Representative)
Project No.: 617918 Contractor's Representative: Josh Ellis
Architect's Fax No.: 816-842-0946 Fax No.: 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Please provide Marriott's Mod 14 specification for fire protection and life safety.


Requested by: MY Builders

Architect's Supplemental
Instructions:

This has been provided in Addendum #2

Attachments:

Reply By:



The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____
Architect Date

By: _____
Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION

CONTRACTOR'S REQUEST FOR INFORMATION - RFI AND ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

Date	# of Pages - 1
To Fogel Anderson	From Josh Ellis
Co. Fogel Anderson	Co. - MW Builders
Phone # - 816-842-6914	Phone # 913-317-3707
Fax # 816-842-0946	Fax # 913-317-3757

Project: MISSION GATEWAY HOTEL **RFI No.:** 14
Owner: GFI DEVELOPMENT CO. **Date of Request:** 08/22/19
To: Fogel Anderson **Contractor:** MW Builders
 (Architect's Representative)
Project No.: 617918 **Contractor's Representative:** Josh Ellis
Architect's Fax No.: 816-842-0946 **Fax No.:** 913-317-3757

Information Requested: (Re: Specification Section/Drawing/Detail Number)

Are the bike Racks on Sheet C301 Note #10 OFCI, CFCL, or OFOI? If contractor furnished please provide spec.

Requested by: MW Builders

Architect's Supplemental Instructions:

Attachments:

Reply By: _____

The Work shall be carried out in accordance with these supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding with these instructions, indicate acceptance of these instructions below Work as consistent with the Contract Documents and return a copy to the Architect.

Supplemental Instructions Issued:

Supplemental Instructions Accepted:

By: _____ **By:** _____
 Architect Date Contractor Date

Cc: ☐ Owner ☐ Architect ☐ Consultant ☐ Contractor ☐ Field ☐ Other: _____

END OF SECTION