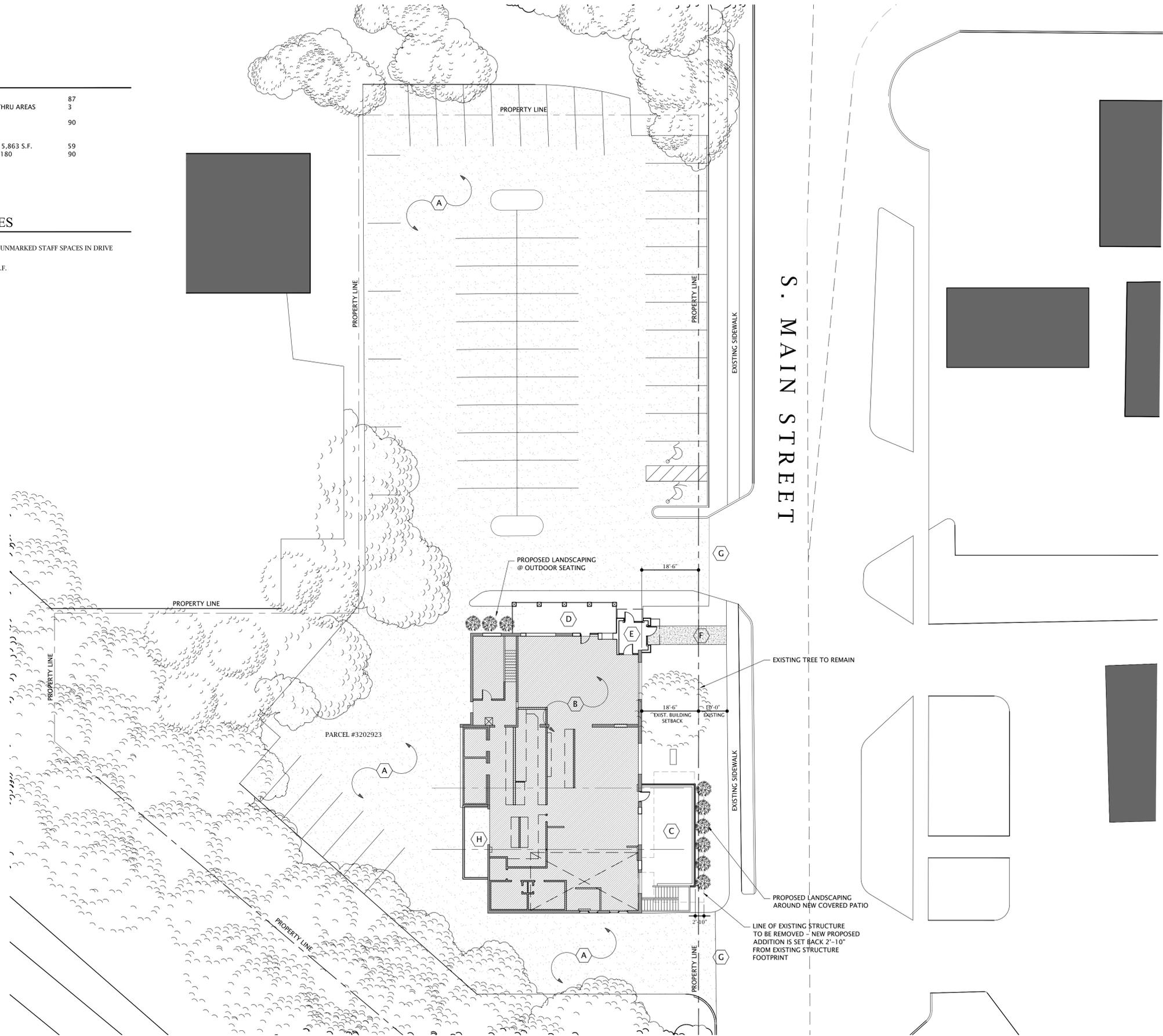


**PARKING NOTES**

EXISTING MARKED PARKING SPACES	87
AVAILABLE SPACES IN EXISTING UN-USED DRIVE THRU AREAS	3
<b>TOTAL AVAILABLE PARKING</b>	<b>90</b>
1288.02 / 2T1	
PARKING REQUIRED BY AREA (1/100 S.F.) @ 5,863 S.F.	59
PARKING REQUIRED BY SEAT (1/2 SEATS) @ 180	90

**SITE PLAN KEYED NOTES**

- A** EXISTING PARKING LOT - 87 SPACES (+ 3 UNMARKED STAFF SPACES IN DRIVE THRU LANES)
- B** EXISTING BUILDING FOOTPRINT - 4,422 S.F.
- C** COVERED PATIO ADDITION - 599 S.F.
- D** FENCED OUTDOOR AREA - 842 S.F.
- E** NEW ENTRY
- F** NEW SIDEWALK
- G** EXISTING DRIVE
- H** STORE ROOM ADDITION - 175 S.F.



01

**SITE PLAN**  
SCALE: 1/16" = 1'



**MAISON<sup>A+D</sup>**  
ARCHITECTURE & DESIGN | CLEVELAND, OH  
2153 PROFESSOR AVE.  
TREMONT, OHIO 44113  
PHONE: 216.832.3434



DAVID J. MAISON  
LICENSE #13098  
EXP. DATE 12/31/2019

**YOURS TRULY RESTAURANT**  
EXISTING RESTAURANT RENOVATION  
36 SOUTH MAIN STREET  
HUDSON, OHIO 44236

DEMO PERMIT PROJECT: MARCH 2020 Y7002

**A**  
**0.1**

SITE PLAN



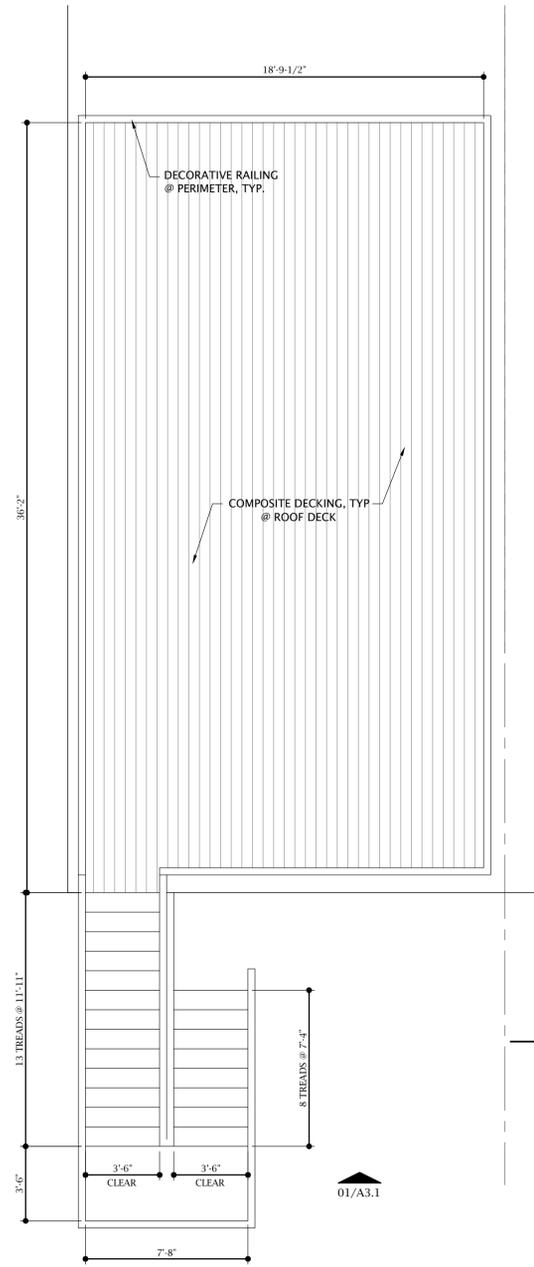
DAVID J. MAISON  
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 EXISTING RESTAURANT RENOVATION  
 36 SOUTH MAIN STREET  
 HUDSON, OHIO 44236

DEMO PERMIT PROJECT: MARCH 2020 YT002

**A  
3.1**

ELEVATIONS



**PROPOSED ROOF DECK PLAN**  
 SCALE: 1/4" = 1' 2' 1' 0' 2'

**GENERAL NOTES**

DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS.  
 ALL EXTERIOR DIMENSIONS ARE FROM EXTERIOR FACE OF MASONRY OR EXTERIOR SHEATHING, AND INTERIOR DIMENSIONS ARE FROM FACE OF STUD. -- DO NOT SCALE.  
 ALL WINDOW ROUGH OPENINGS MUST BE FIELD VERIFIED BEFORE PRICING, FABRICATION & INSTALLATION.  
 COORDINATE WITH CLIENT FOR ALL EXTERIOR DOOR TYPES & SPECIFICATIONS  
 ALL EXTERIOR WALL CONSTRUCTION TO BE 7/16" ZIP SHEATHING OVER 2x6 NOM. WOOD STUD FRAMING @ 16" O.C. MAX SPACING. ALL WALL COMPONENTS TO BE AS FOLLOWS, - TYPICAL U.O.N.:  
 - EXTERIOR CLADDING AS NOTED  
 - CAVITY INSULATION: FIBER GLASS INSULATION (6" THICK, R-19 MIN.) FIT INTO STUD SPACE  
 - VAPOR BARRIER @ INTERIOR FACE OF FRAMING: CONTINUOUS REINFORCED POLYETHYLENE SHEET (6 MIL. MIN.) WITH ALL JOINTS TAPED & SEALED OR AS INTEGRAL FACING OF BATT INSULATION  
 ALL DRAWINGS, DETAILS & NOTES SHOWN HERE WITHIN DESCRIBE & ILLUSTRATE A DESIGN INTENT ADDRESSING PERFORMANCE & AESTHETIC CRITERIA OF THE EXTERIOR ENVELOPE ASSEMBLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE DETAILED SHOP DRAWINGS THAT MEET OR EXCEED THAT DESIGN INTENT PRIOR TO INSTALLATION.

**ELEVATION KEY LEGEND**

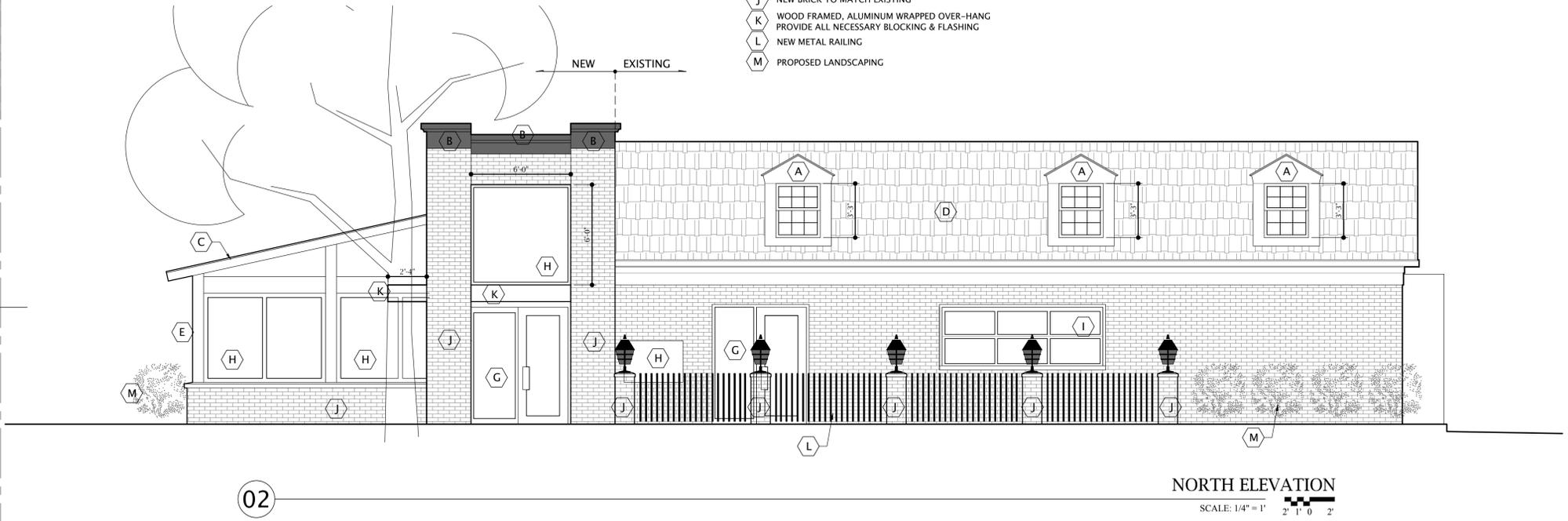
- A PRE-FINISHED VINYL PANEL SIDING - MATCH EXISTING
- B PRE-FINISHED HARDI FASCIA
- C NEW STANDING SEAM METAL ROOF - COLOR TBD
- D EXISTING ASPHALT SHINGLE ROOF
- E NEW ENCLOSED PATIO ADDITION- REFER TO FLOOR PLAN
- F NEW MTL. EXT. DOOR PAINTED TO MATCH
- G NEW STOREFRONT ENTRY SYSTEM
- H TWO-WAY FIREPLACE
- I NEW FIXED WINDOW
- J NEW GLASS OVER HEAD ROLLING DOOR @ BAR
- K NEW BRICK TO MATCH EXISTING
- L WOOD FRAMED, ALUMINUM WRAPPED OVER-HANG PROVIDE ALL NECESSARY BLOCKING & FLASHING
- M NEW METAL RAILING
- N PROPOSED LANDSCAPING

**GENERAL WINDOW NOTES**

ALL WINDOWS TO BE ALUMINUM CLAD PREFINISHED AS MANUFACTURED BY PELLA 400 SERIES OR APPROVED EQUAL. ALL OPERABLE WINDOWS ARE TO INCLUDE A REMOVABLE SCREEN ON THE INTERIOR SIDE. ALL GLAZING TO BE STANDARD CLEAR INSULATED GLAZING, LOW EMISSIVITY COATING ON EXTERIOR LITE W/ ARGON FILLED CAVITY.  
 ALL WINDOW ROUGH OPENINGS SHOULD BE FIELD VERIFIED PRIOR TO FABRICATION & INSULATION. ALSO REFER TO TYPICAL WINDOW HEAD, JAMB & SILL DETAILS IN WALL SECTIONS

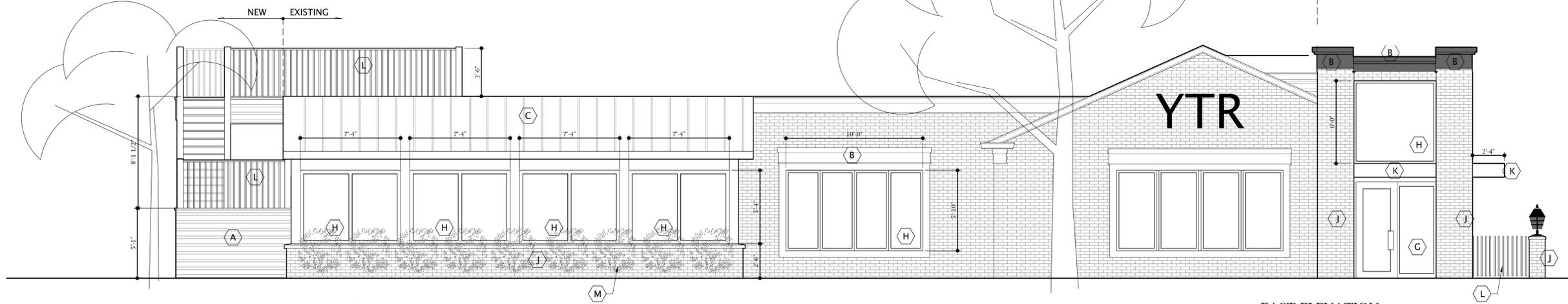
**EXTERIOR PAINT COLORS**

PAINT ANY EQUIPMENT / ACCESSORIES / GRILLES ETC. WHITE U.N.O.  
 PT #1 - BENJAMIN MOORE / TBD  
 PT #2 - BENJAMIN MOORE / TBD



**NORTH ELEVATION**  
 SCALE: 1/4" = 1' 2' 1' 0' 2'

**03**



**EAST ELEVATION**  
 SCALE: 1/4" = 1' 2' 1' 0' 2'

**01**

## GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER DRAWINGS.
- ALL EXTERIOR DIMENSIONS ARE FROM EXTERIOR FACE OF MASONRY OR EXTERIOR SHEATHING, AND INTERIOR DIMENSIONS ARE FROM FACE OF STUD. - DO NOT SCALE.
- ALL WINDOW ROUGH OPENINGS MUST BE FIELD VERIFIED BEFORE PRICING, FABRICATION & INSTALLATION.
- COORDINATE WITH CLIENT FOR ALL EXTERIOR DOOR TYPES & SPECIFICATIONS
- ALL EXTERIOR WALL CONSTRUCTION TO BE 7/16" ZIP SHEATHING OVER 2x6 NOM. WOOD STUD FRAMING @ 16" O.C. MAX SPACING. ALL WALL COMPONENTS TO BE AS FOLLOWS, - TYPICAL U.O.N.:
- EXTERIOR CLADDING AS NOTED
  - CAVITY INSULATION: FIBER GLASS INSULATION (6" THICK, R-19 MIN.) FIT INTO STUD SPACE
  - VAPOR BARRIER @ INTERIOR FACE OF FRAMING: CONTINUOUS REINFORCED POLYETHYLENE SHEET (6 MIL. MIN.) WITH ALL JOINTS TAPED & SEALED OR AS INTEGRAL FACING OF BATT INSULATION
- ALL DRAWINGS, DETAILS & NOTES SHOWN HERE WITHIN DESCRIBE & ILLUSTRATE A DESIGN INTENT ADDRESSING PERFORMANCE & AESTHETIC CRITERIA OF THE EXTERIOR ENVELOPE ASSEMBLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE DETAILED SHOP DRAWINGS THAT MEET OR EXCEED THAT DESIGN INTENT PRIOR TO INSTALLATION.

## ELEVATION KEY LEGEND

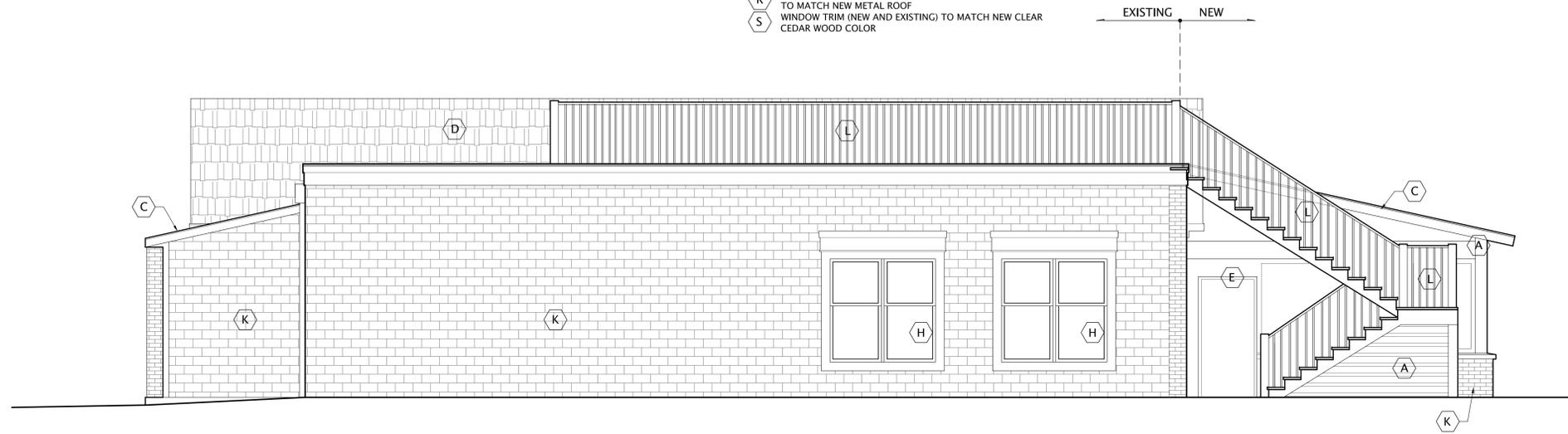
- A CLEAR STAINED CEDAR SIDING
- B LIMESTONE CORNICE
- C NEW STANDING SEAM METAL ROOF - DARK GREY
- D EXISTING ASPHALT SHINGLE ROOF
- E NEW ENCLOSED PATIO ADDITION- REFER TO FLOOR PLAN
- F NEW MTL. EXT. DOOR PAINTED TO MATCH BUILDING
- G NEW STOREFRONT ENTRY SYSTEM - KAWNEER OR EQUAL
- H NEW WINDOW - KAWNEER STOREFRONT OR EQUAL
- I NEW GLASS OVER HEAD ROLLING DOOR @ BAR
- J NEW PAINTED BRICK W/ LIMESTONE CAP
- K PAINT NEW AND EXISTING MASONRY TO MATCH NEW EXTERIOR WALL PAINT COLOR
- L NEW BLACK METAL RAILING
- M PROPOSED LANDSCAPING
- N NEW WINDOW - ANDERSEN OR EQUAL (BLACK FRAME)
- O TWO-WAY FIREPLACE
- P CLEAR VINYL REMOVABLE WINDOW PANELS WITH BLACK SUNBRELLA TRIM
- R PREFINISHED KYNAR METAL WRAPPED ENTRY COVER - COLOR TO MATCH NEW METAL ROOF
- S WINDOW TRIM (NEW AND EXISTING) TO MATCH NEW CLEAR CEDAR WOOD COLOR

## GENERAL WINDOW NOTES

- ALL WINDOWS TO BE ALUMINUM CLAD PREFINISHED AS MANUFACTURED BY PELLA 400 SERIES OR APPROVED EQUAL. ALL OPERABLE WINDOWS ARE TO INCLUDE A REMOVABLE SCREEN ON THE INTERIOR SIDE. ALL GLAZING TO BE STANDARD CLEAR INSULATED GLAZING, LOW EMISSIVITY COATING ON EXTERIOR LITE W/ ARGON FILLED CAVITY.
- ALL WINDOW ROUGH OPENINGS SHOULD BE FIELD VERIFIED PRIOR TO FABRICATION & INSULATION. ALSO REFER TO TYPICAL WINDOW HEAD, JAMB & SILL DETAILS IN WALL SECTIONS

## EXTERIOR PAINT COLORS

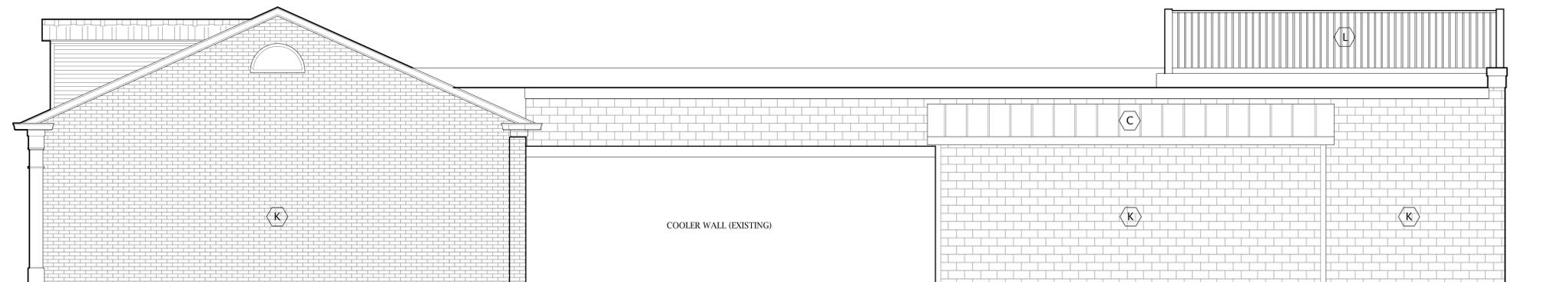
- PAINT ANY EQUIPMENT / ACCESSORIES / GRILLES ETC. WHITE U.N.O.
- PT #1 - SHERWIN WILLIAMS / MATCH EXISTING
- PT #2 - SHERWIN WILLIAMS / MATCH EXISTING



02

### SOUTH ELEVATION

SCALE: 1/4" = 1' 2" 1' 0" 2"



01

### EXISTING WEST ELEVATION

SCALE: 1/4" = 1' 2" 1' 0" 2"



DAVID J. MAISON  
LICENSE #13098  
EXP. DATE 12/31/2019

**PLAN KEYED NOTES**

- A** WRAP NEW AND EXISTING COLUMNS WITH GYPSUM BOARD TO 6" ABOVE FINISHED CEILING
- B** ELECTRICAL SERVICE ENTRANCE
- C** ICE MACHINE - EXISTING TO REMAIN
- D** FURR OUT EXISTING MASONRY WALL WITH 3 5/8" METAL STUDS @ 16" O.C. TO 6" ABOVE FINISHED CEILING
- E** FURR OUT EXISTING MASONRY WALL WITH 1 7/8" HAT CHANNEL @ 16" O.C. TO 6" ABOVE FINISHED CEILING
- F** SEAL & PRIME EXISTING MASONRY WALL
- G** EXISTING WALK-IN FREEZER/COOLER
- H** NEW TWO WAY FIREPLACE
- I** EXISTING WINDOW TO REMAIN
- J** NEW WINDOW - REFER TO ELEVATIONS
- K** PASS THROUGH WINDOW TO REMAIN
- L** NEW ALUMINUM STOREFRONT ENTRY

**PLAN GENERAL NOTES**

FIRE EXTINGUISHERS TO BE WALL MOUNTED AND PLACED THROUGHOUT SUITE AS PER LOCAL FIRE MARSHALS RECOMMENDATION. PROVIDE ALLOWANCE FOR 4.

**WALL LEGEND**

- 01** EXISTING MASONRY WALL TO REMAIN
- 02** EXISTING INTERIOR WALL TO REMAIN
- 03** NEW CMU MASONRY WALL WITH INSULATION FILLED CORES AND 3 5/8" METAL STUD WALL @ 16" O.C. W/ BATT INSULATION AND 5/8" GWB ON INTERIOR SIDE
- 04** NEW 3 5/8" METAL STUD WALL @ 16" O.C. W/ 5/8" GWB ON EACH SIDE TO DECK ABOVE
- 05** NEW 3 5/8" METAL STUD WALL @ 16" O.C. W/ 5/8" GWB ON EACH SIDE TO 6" ABOVE FINISHED CEILING
- 06** NEW CMU MASONRY INFILL AT EXISTING STOREFRONT WITH INSULATION FILLED CORES AND METAL FURRING ABOVE @ 16" ATTACHED TO EXISTING MASONRY AND SHEATHED IN 1/2" OSB PLYWOOD
- 07** NEW 5 1/2" METAL STUD WALL @ 16" O.C. WITH BATT INSULATION AND 5/8" GWB ON INTERIOR SIDE AND 3/4" EXT. SHEATHING AND VINYL SIDING (TBD) ON EXTERIOR
- 08** NEW 3 5/8" METAL STUD LOW-WALL @ 16" O.C. W/ 5/8" GWB ON EACH SIDE TO 42" A.F.F.

**DIMENSION NOTES**

THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS TO VERIFY FIELD CONDITIONS AND SHALL CAREFULLY COMPARE SUCH FIELD MEASUREMENTS, CONDITIONS, AND OTHER INFORMATION KNOWN TO THE CONTRACTOR WITH THE CONTRACT DOCUMENTS BEFORE COMMENCING ACTIVITIES. ERRORS, INCONSISTENCIES OR OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ARCHITECT AT ONCE.

THE CONTRACTOR SHALL NOT SCALE THE DRAWINGS. DIMENSIONS ARE NOT ADJUSTABLE UNLESS NOTED WITH A PLUS/MINUS (±) TOLERANCE.

"ALIGN" MEANS ALIGNMENT OF SIMILAR COMPONENTS OF CONSTRUCTION (I.E. WALLS, JAMBS, ETC.) WHICH ARE ADJACENT OR IN LINE WITH EACH OTHER ACROSS VOIDS.

DIMENSIONS ARE INDICATED AS FOLLOWS UNLESS OTHERWISE NOTED ON THE DRAWING.

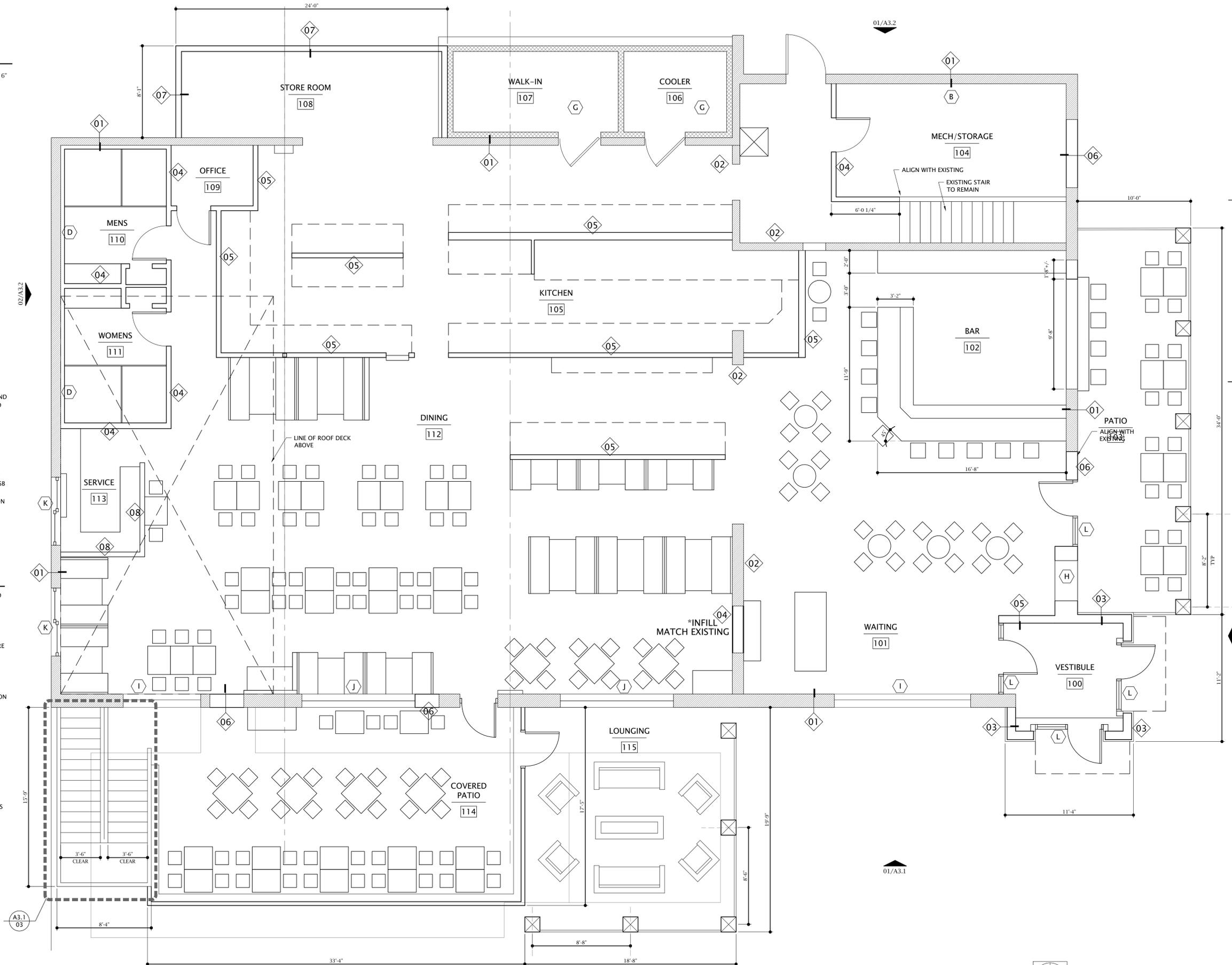
COLUMNS - FROM CENTERLINE TO CENTERLINE  
METAL STUD PARTITIONS - FROM FACE OF FINISH TO FACE OF FINISH

CONCRETE - FROM FACE OF CONCRETE TO FACE OF CONCRETE  
MASONRY - FROM FACE OF MASONRY TO FACE OF MASONRY  
EXTERIOR WALL - FROM EXT. FACE OF WALL TO INTERIOR FACE OF FINISH  
INTERIOR ELEVATION - FROM FINISHED FLOOR TO FINISHED CEILING

ALL FLOOR TO FLOOR AND CEILING HEIGHTS ARE DIMENSIONED FROM FINISHED FLOOR.

WALLS ARE TO BE CONSTRUCTED WITH PERPENDICULAR INTERSECTIONS U.N.O.

DOORS ARE TO BE INSTALLED 6" FROM HINGE EDGE TO NEAREST INTERSECTING WALL - TYPICAL U.N.O.



DAVID J. MAISON  
 LICENSE #13098  
 EXP. DATE 12/31/2019

**YOURS TRULY RESTAURANT**  
 EXISTING RESTAURANT RENOVATION  
 36 SOUTH MAIN STREET  
 HUDSON, OHIO 44236

DEMO PERMIT MARCH 2020  
 PROJECT: Y7002







CURB SIDE  
CAR HO  
DINE IN  
OPEN

CURB SIDE  
→





CURB SIDE  
CAR HO  
DINE IN  
OPEN

CURB SIDE  
→



**Superior**

# Architectural Aluminum Railing



SERIES  
**9100**

Meets OSHA, ADA and ICC Safety Criteria



*Embracing form and function in a sleek, modern design.*

[www.superioraluminum.com](http://www.superioraluminum.com)



# Architectural Aluminum Railing

*Embracing form and function in a sleek, modern design.*

Superior Series 9100 Architectural Aluminum Railing embraces both form and function with its high-style, modern aesthetics and innovative, sensible design.

The sophisticated and refined railing system features a sleek, continuous top rail, concealed fasteners and seamless transitions around corners, creating a high-end, custom look.

Whether your preference is for the bold, dramatic lines or the practicality of an uninterrupted graspable handrail, Series 9100 is an excellent choice for both residential and commercial applications, alike.

Series 9100 Railing utilizes all the advantages of aluminum, where strength, durability and no-paint maintenance are key. In addition, the highest quality aluminum alloy extrusions are used to provide maximum strength and support where it's need most – in your installation.

Series 9100 Railing is available in any height. Standard heights include 42" for commercial railing and 36" for residential railing.

Series 9100 Railing can be embedded in concrete, surface mounted or side-mounted, and is factory assembled in lengths up to 18', making for easy, no-hassle installations.



### Finishes

Whether PPG Duracron paint, anodized or duranodic, the smart decorative finishes are guaranteed to endure for years of continued service and maintenance-free



## Series 9100 Architectural Railing



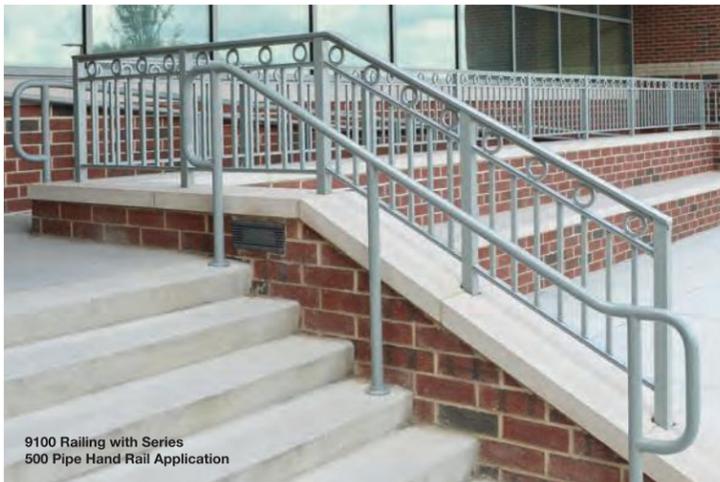
Standard 9100 Railing utilizes 901 top rail (2 1/2" w x 1 5/8" h), 903 bottom rail (1 5/8" w x 3/4" h), 2" square posts and 3/4" square pickets. 904 bottom rail with rectangular holes is used for ramp or step railing.

### Interchangeable Pickets

To customize your look, standard 3/4" pickets can be substituted with 3/4" x 1 1/2" pickets.



*Series 9100 Railing meets OSHA, ICC and ADA criteria.*



## Railing Style Systems

### Standard Top Rail



### Open Double Top Rail



### Double Top Rail with Through Pickets



### Double Top Rail with Inserts



Pickets can be spaced according to your preference – every picket, every 2nd, 3rd, 4th, etc.

Ring or diamond inserts can be used with double top rail.

## Hand Rail Applications

Superior Series 500 Pipe Railing is used for Series 9100 hand rail applications. Pipe rail can be mounted separately (as shown in photo to left) or it can be mounted directly to the railing with brackets and a through bolt (see photo inset).



## Series 9100 Features

### Continuous Top Rail

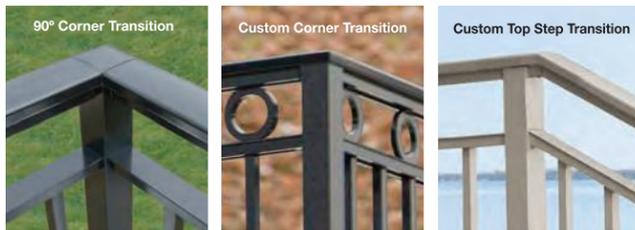
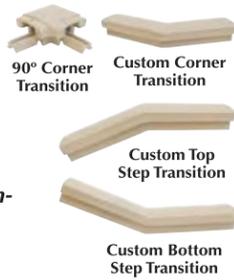
Series 9100 Railing features a sleek, continuous top rail, ingeniously designed with concealed fasteners to create a continuous graspable handrail and clean, dramatic lines.



### Seamless Rail Transitions

Series 9100 Railing seamlessly transitions around corners and from horizontal to ramp or step railing with no interruption to the top rail surface for continuous smooth lines and a modern, upscale look.

*Note: Custom transition parts can be manufactured in any custom angle to meet your requirements.*



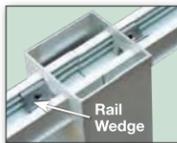
*Series 9100 Railing seamlessly transitions around corners and from horizontal to ramp or step railing.*

### Machined Post Openings

Machined post openings receive center and bottom rails, eliminating the need for brackets, which results in a clean, rigid design with added strength.

Rail wedges, located in the underside of the rails will ensure proper insertion of 1" inside the post.

*Note: If railing is angled horizontally or vertically, the angle must be specified so the proper openings can be machined into the post.*

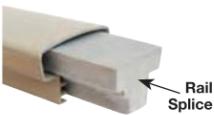
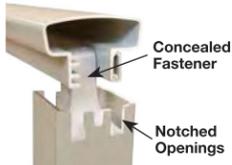


### Concealed Hardware

Series 9100 Railing is assembled using concealed fasteners that attach to the inside of the top rail. The fasteners slide inside the posts until the top rail rests in the notched openings.

A railing splice can also be used to connect top rails more than 18' in length.

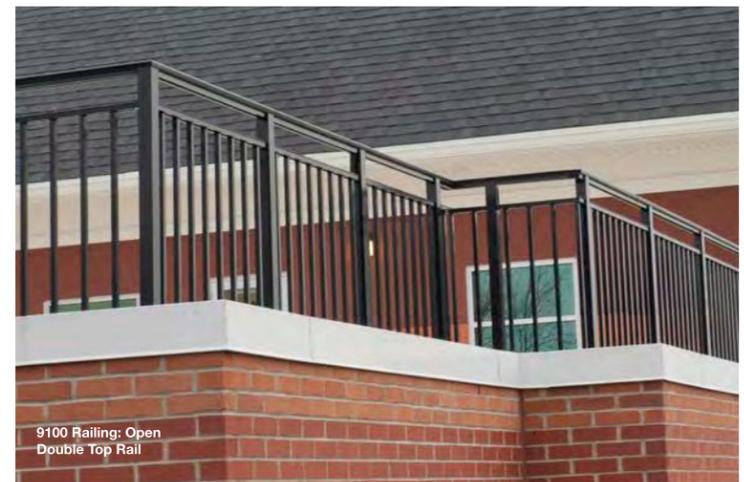
Series 9100 Railing is also equipped with screw covers, used to conceal picket screws on top and bottom rail assemblies for a clean, streamlined look.



9100 Railing: Double Top Rail with Ring Inserts Side Mounted on a Rooftop



9100 Railing: Double Top Rail with Ring Inserts



9100 Railing: Open Double Top Rail



9100 Railing: Double Top Rail with Ring Inserts Embedded in Concrete



## Custom Aluminum Gates

Attractive aluminum gates with standard or custom security locks are available for Series 9100 Railing. The durable, welded gates can be designed in any size or configuration and arrive completely assembled for easy installation. Please call Superior Aluminum to discuss your needs.

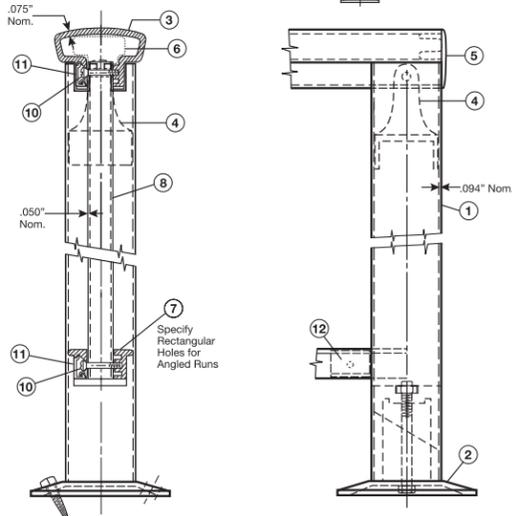
## Mounting Options

A variety of mounting options are available to fit any installation requirements. Series 9100 Railing can be base mounted with wedge-type or heavy-duty bases, side mounted with brackets or embedded into concrete using an elongated post. End fittings for the top and bottom rail are also available for applications where the railing system meets a wall.



## Assembly Identification

### SERIES 9100



- |                                     |                       |
|-------------------------------------|-----------------------|
| 1. 377 2" Tube .094" Wall           | 7. 903 Bottom Rail    |
| 2. 968 Base Assembly                | 8. 3/4" Square Picket |
| 3. 901 Top Rail 2 1/2" w x 1 5/8" h | 9. Section Post       |
| 4. 960X Internal Attachment         | 10. 911 Picket Screws |
| 5. 980X End Cap                     | 11. 907 Screw Cover   |
| 6. 913X Internal Splice             | 12. Rail Wedge        |

### MATERIALS -

All rails, posts and pickets shall be formed from 6063-T5 & 6063-T6 extruded aluminum alloys. All railing accessories shall be cast from ANSI 713 alloy. All fasteners used in the system shall be aluminum or stainless steel.

### INSTALLATION -

The railing system can be either base mounted, side mounted or embedded into concrete. Pickets shall run between the top and bottom rail. Pickets shall be 3/4" square on 4 1/2" centers or 1 1/2" x 3/4" on 5 1/4" centers.

The railing system will adapt to step railing requirements by providing the riser and tread dimensions of the steps and specifying a rectangular hole in the bottom rail.

### SCOPE OF WORK -

Aluminum railings as shown on drawings shall be Superior Series 9100 Architectural Aluminum Railings, as manufactured and supplied by Superior Aluminum Products, Inc., Russia, Ohio 45363.

Series 9100 Railing meets federal safety requirements as determined by an independent testing laboratory. Test results available upon request. Superior Series 9100 Railing is protected by US Patent #3707276.

**Superior** Aluminum Products, Inc.

555 East Main St. • P.O. Box 430 • Russia, OH 45363  
Ph: 937-526-4065 • Fax: 937-526-3904  
info@superioraluminum.com  
www.superioraluminum.com

Form No. 9100A  
October 2014

## Series 9200 New Herringbone Aluminum Railing

Call Superior Aluminum for details about this exciting new product!





# SW 7661 Reflection

Interior / Exterior  
Location Number: 233-C1

### COORDINATING COLORS

[View All Neutral Paint Colors →](#)

**R:** 211 **G:** 213 **B:** 211  
**Hex Value:** #d3d5d3  
**LRV:** 66

**Color Collections:** Minimalist

### SIMILAR COLORS

### DETAILS



[FIND INTERIOR PAINT →](#)

[FIND EXTERIOR PAINT →](#)

[Save to mySW +](#)

[Add to my Project List +](#)

Actual color may vary from on-screen representation. To confirm your color choices prior to purchase, please view a physical color chip, color card, or painted sample.

Introducing online ordering

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**SHOW YOUR #SWCOLORLOVE SO THAT WE CAN SHARE IT WITH THE WORLD.**

Tag your most inspiring and colorful Twitter and Instagram posts with #SWCOLORLOVE or upload a photo.

[Terms of Use](#)



Upload a Photo

Paint Projects

Color Inspiration

**Get Ideas From Customer-Submitted Projects**



SHERWIN-WILLIAMS.

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OK

**MINWAX® Technical Data Sheet**  
**MINWAX® Water Based Helmsman® 275 VOC Compliant Formula**  
**for Gloss, Semi, and Satin**

---

**DESCRIPTION:**

Minwax® Water Based Helmsman® Spar Urethane is specially formulated to protect wood against nature's toughest conditions. Water Based Helmsman® forms a protective barrier against rain and moisture and its special oils allow the finish to expand and contract with the wood as seasons, temperatures, and humidity change. The enhanced ultraviolet absorbers found in Water Based Helmsman® reduce the graying and fading effects of the sun and its superior formula allows for a rapid recoat.

---

**RECOMMENDED USE:**

Minwax® Ideal For: Doors, Windows, Trim, Bathroom Cabinets, Bar Tops, Kitchen Countertops and Outdoor Furniture.

Note: Water Based Helmsman® is not recommended for use on floors. To protect floors, use Minwax Water Based Oil-Modified Polyurethane or Minwax Water Based Polyurethane for Floors.

---

**SURFACE PREPARATION:**

- Surface must be dry and free of paint, wax, grease, polish, old finishes in poor condition or any foreign matter.
- Sand to obtain a smooth, uniform surface. Do not use steel wool. Remove all dust with a damp cloth.
- If desired, apply stain, such as Minwax® Wood Finish®, to unfinished interior wood surfaces. Follow directions for application instructions and dry times.

**WARNING!** Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

---

**APPLICATION NOTES:**

**Product Preparation**

- Stir well before and occasionally during use. Do not thin.

**Application**

- Apply a thin coat of Water Based Helmsman® using a high quality bristle brush appropriate for use with water based finishes.  
On unfinished wood, apply sufficient material to seal open joints, edges and end-grain.
- Let dry at least two hours, then sand entire surface lightly with very fine sandpaper (220 grit) to ensure an even finish and proper adhesion of additional coats.
- Apply second coat. Water Based Helmsman® requires a third coat - repeat above step before application. Note: For exterior surfaces or for previously unfinished wood, four coats are recommended.

**MINWAX® Technical Data Sheet**  
**MINWAX® Water Based Helmsman® 275 VOC Compliant Formula**  
**for Gloss, Semi, and Satin**

---

**DRY TIME:**

- After final coat, allow 24 hours before normal use. If applied to countertops, allow 72 hours before normal use.

Note: Dry times are based on good ventilation, temperature of 77 F and 50% relative humidity. Lower temperature, higher humidity, lack of air movement or application of thick coats will extend drying times. Always test surface for tackiness between coats. When used for exterior applications, maintain by lightly sanding and adding an additional coat(s) as conditions require. Water Based Helmsman® is not recommended for large exterior surfaces where maintenance would be difficult, such as decks and siding. Slight ambering may be experienced when Water Based Helmsman® is applied over light-colored stains or wood surfaces.

Always spot test on an inconspicuous area to ensure satisfactory results.

---

**MAINTENANCE:**

Damp wiping with Minwax® Wood Cleaner is recommended. Mild detergent and water may also be used. Do not use abrasive pads.

---

**CLEANUP/STORAGE:**

Clean application tools with warm water immediately after use.

---

**SAFETY:**

**CAUTIONS: CONTAINS 1-METHYL-2-PYRROLIDINE.**

**Contains material that may cause adverse reproductive effects and may adversely affect the developing fetus based on animal data. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

**MINWAX® Technical Data Sheet**  
**MINWAX® Water Based Helmsman® 275 VOC Compliant Formula**  
**for Gloss, Semi, and Satin**

**PHYSICAL PROPERTIES:**

---

		<u>Testing Method</u>
Resin type:	Oil-modified urethane	
Solvent:	Water	
Luster:	Gloss, Semi and Satin	ASTM D523
No. of Coats:	3 recommended (Abrade between coats)	
Dry-time:	Recoat: 2 hours	Gardner circular
Sheen:	Gloss 87% minimum	
	Semi: 50 to 64%	
	Satin: 18 to 32%	
Dry film thickness:	2 mil	
Flash point:	Greater than 206 F	ASTM D 3828
Applicator:	synthetic bristle brush	
VOC (grams/liter)	275 Maximum	EPA Method 24
Coverage (sq. ft./qt.):	Approximately 500 sq. ft. per gallon	
% Solids:	28.5 – 31.5	
Pounds/Gallon:	8.59-8.82	ASTM D 2369
Viscosity(Centipoise):	140-230	

# Black



Sunbrella Shade

SKU: 4608-0000

\$4.00 / sample

IN STOCK

## Recommended Application

**Best For:** Awnings / Pergolas, Marine Tops and Covers

**Width \***

**Qty \***

Choose an Option...

1

Available in these colors

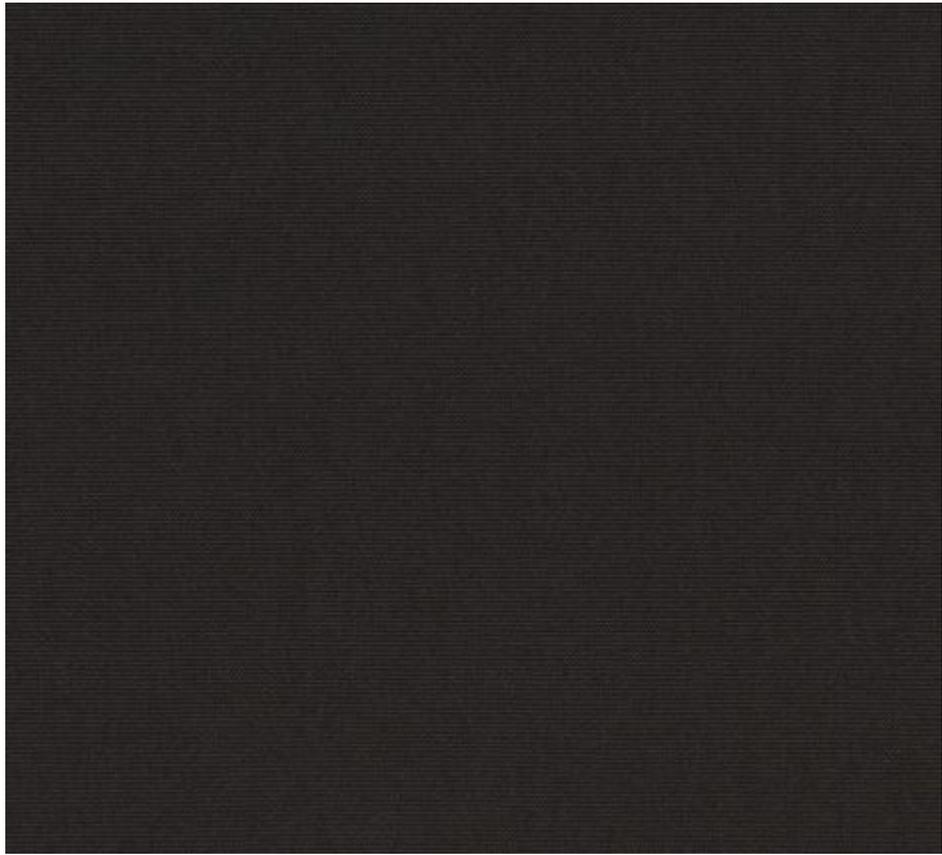
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**Coordinating Upholstery Fabrics**

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**Coordinating Shade Fabrics**

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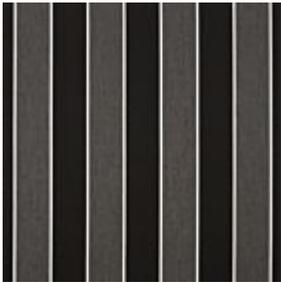
Blend Coal

SKU 16001-0008



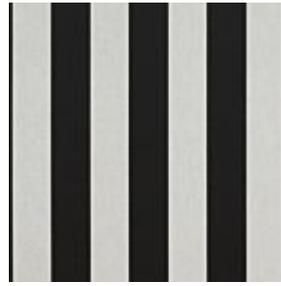
Linen Silver

SKU 8351-0000



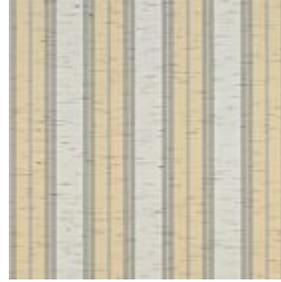
Peyton Granite

SKU 56075-0000



Beaufort Black/White 6 Bar

SKU 5704-0000



Grey/Beige Chip Fancy.

SKU 4777-0000

## Technical Information



### YARN CONTENT

100% Sunbrella Acrylic

### FINISH

Water Repellent

### CONSTRUCTION

Woven

### WEATHER PROTECTION

Water Repellent

### SELVEDGE

Right / Left

### WEIGHT OZ. SQ. YD.

9.00

EIGHT OZ. LY. YD.

RECYCLABLE

COLLECTION

.68

Yes, through the [Recycle My Sunbrella](#) program.

[Sunbrella Shade](#)

APPLICATION

awnings / Pergolas, Marine Tops and Covers

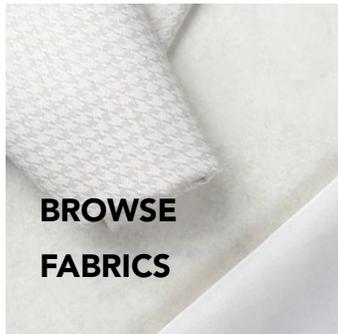
Warranty



Environmental



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CALL NOW: 419.483.3558



# Sills

Home – Products – Veneer – Sills

Berkshire



Vanderbilt



Rockford



Sills



## CONTACT



419.483.3558



419.483.5441



sales@northernohiocutstone.com



16222 County Road 34  
Flat Rock, OH 44828

# BROCHURES

[↓ Download Brochures](#)

## Sills

Homeowners and architects alike are fans of Northern Ohio Cut Stone Veneer sills. Sills are more than just a part of a window. They can be used for landscaping wall accents, interior wall accents, or door frames.

Northern Ohio Cut Stone Veneer sills and thin sills offer a durable measure of protection from the elements for both natural and cast stone projects. An aspirational material, Northern Ohio Cut Stone Veneer sills and thin sills have endless potential.





## Available Colors



### **Gray**

Light to medium shades of gray with some veining and grain movement visible in the face and fine to medium grained stone.



### **Full Color Blend**

A natural compilation of the full range of buff to medium gray shades with the same great subtle veining in a standard grade.



Serving the midwest for over 25+ years. Northern Ohio Cut Stone takes great pride in providing the best quality natural stone products available in the stone industry.

## Contact Us

Tel: 419.483.3558

Email: [sales@northernohiocutstone.com](mailto:sales@northernohiocutstone.com)

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# MAXIMA



# MAXIMA

## Standing Seam Roof System



### UNPARALLELED PERFORMANCE

McElroy Metal's family of vertical leg standing seam systems offers specifiers and contractors two distinct products:

#### MAXIMA and MAXIMA ADV

With unprecedented versatility and design flexibility, McElroy Metal's Maxima systems are an ideal choice for any project requiring a blend of strength, aesthetics, and variety of options including:

- 1.5", 2", and 3" Tall Seams
- Widths from 12" - 24"
- 90° and 180° Seaming Options
- Available Flat or Curved
- Panel Configurations Composed of Striated, Ribbed or Flat Pan.

### MECHANICALLY SEAMED

Utilizing electric seamers, McElroy's Maxima standing seam roofing products are mechanically seamed on the jobsite. The end result is an aesthetically pleasing roof system with excellent load and wind resistance capabilities. To rent a seamer to install Maxima panel systems, please visit:

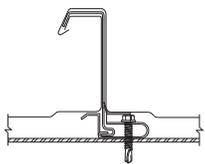
[www.mcelroyseamers.com](http://www.mcelroyseamers.com)



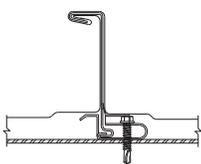
MECHANICAL SEAMER

### Seaming Details

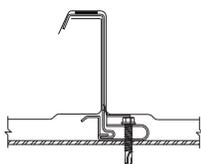
MAXIMA BEFORE SEAMING



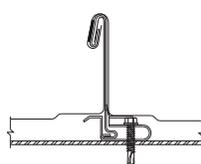
MAXIMA 90° FOLD



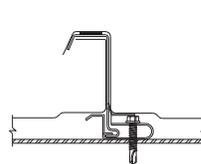
MAXIMA ADV BEFORE SEAMING



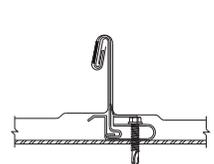
MAXIMA ADV 180° FOLD



MAXIMA 1.5 BEFORE SEAMING



MAXIMA 1.5 180° FOLD





### MAXIMA CURVED

For enhanced architectural styling, Maxima ADV and Maxima 1.5 panels are also available curved. To improve accuracy and customer satisfaction, Maxima curved panels are fabricated to the required radius on the job site by a McElroy Metal factory representative. Modified Maxima seamers are required for curved panels.

Sealant is field applied on curved applications.



#### MAXIMA ADV - For Curved Applications

- Panel Height/Width: 2:12, 2:16, 2:18.
- Minimum Radius: 25' for 22/24 GA. Steel
- 180 ° Seam Required

#### MAXIMA 1.5" - For Curved Applications

- Panel Height/Width: 1.5:12, 1.5:16, 1.5:18.
- Minimum Radius: 12' for 22/24 GA. Steel
- 180 ° Seam Required

### PANEL OPTIONS

MAXIMA PROFILES	WIDTH	PAN CONDITIONS			FACTORY NOTCHING		SEAM				
	WIDTH IN INCHES	STRIATED	SINGLE PENCIL RIB MINOR RIBS	DOUBLE PENCIL RIB	FLAT PAN	CURVED	LAP	EAVE	NONE	90 DEGREE SEAM	180 DEGREE SEAM
MAXIMA 1.5" SHOWN AS STRIATED	12	■	■	■	■	■	■	■	■	■	■
MAXIMA 1.5" SHOWN AS STRIATED	16, 18	■	■	■	■	■	■	■	■	■	■
MAXIMA 2" SHOWN AS FLAT PAN (OPT.) (SINGLE PENCIL RIB AVAILABLE IN 12" ONLY)	12	■	■	■	■	■	■	■	■	■	■
MAXIMA 2" SHOWN AS BEAD (PENCIL) RIB (OPT.)	16, 18	■	■	■	■	■	■	■	■	■	■
MAXIMA ADV 2" SHOWN AS STRIATED	12	■	■	■	■	■	■	■	■	■	■
MAXIMA ADV 2" SHOWN AS STRIATED	16, 18	■	■	■	■	■	■	■	■	■	■
MAXIMA 3" SHOWN AS MINOR RIB (STD.) (18" PANEL ONLY AVAILABLE WITH ONE MINOR RIB)	18, 24	■	■	■	■	■	■	■	■	■	■

### FACTORY NOTCHING

For enhanced aesthetics and improved installation efficiency, Maxima panels are available with factory fabricated notching. Notching enables installers to bend the panel ends and eliminate unsightly fasteners along the building eave. And, factory notching eliminates the need for cumbersome and error-prone hand-notching on the job site. Lap notching also available.



Note: Maxima 2" and 3" panels feature a return leg on both the male and female seams. These return legs help create greater strength and uplift capabilities. Maxima 1.5" and ADV do not have the return legs, which enables the panels to be curved as well as seamed to 180 degrees. Maxima ADV is also available without shoulders.

# MAXIMA

## Standing Seam Roof System



### MAXIMA DETAILS:

- Mechanically Seamed Profile
- Factory Applied Sealant (on Non-Curved Panels Only)
- Coating : Kynar 500®
- 1:12 Minimum slope for 1.5"
- 1/2:12 Minimum slope for 2"
- 1/4:12 Minimum slope for 3"
- Can be installed over solid deck or open framing
- Maxima 2" and ADV also available jobsite formed for longer lengths
- Patented clip provides 3 1/8" of roof panel thermal movement

### MAXIMA TESTING DATA :

- Class A - Fire Rating
- UL 580 Class 90 - Uplift Test
- FM 4471 (1-90 Rated) - Uplift Test (2" Only)
- ASTM E1592 - Uplift Test (1.5" (16" only), 2", and 3")
- ASTM E1680 - Air Infiltration (2" & 3")
- ASTM E1646 - Water Infiltration (2" & 3")
- UL 2218 - Class 4 Impact Resistance
- Florida State Approval: 1747.3 (2" & 3"), 1832.4 (2" & 3")
- UL 263 Fire Resistance (2" & 3")
- Miami-Dade Approved (216 Only) NOA 11-1228.02 & 12-0831.02
- All Testing Conducted with Galvalume® Substrate

### MAXIMA ADV & 1.5" TESTING DATA:

- Class A - Fire Rating
- ASTM E1592
- UL 580 Class 90 - Uplift Test
- Florida State Approval: 1747.4 (ADV) 8051.2 (1.5")
- ASTM E1680 - Air Infiltration
- ASTM E1646 - Water Infiltration
- UL 2218 Class 4 Impact Resistance
- UL 263 Fire Resistance
- All Testing Conducted with Galvalume® Substrate

Panel	Seam Height	Panel Width	Seam Bend	Radius Capability	ASTM E1646	ASTM E1680	ASTM E1592	UL 580 Class 90	FM	Surface Options	Steel Substrate	Aluminum Substrate
Maxima 2:12	2"	12"	90°	No	√	√		√	√	Striated, Bead, Flat Pan	22, 24, Ga.	.032
Maxima 2:16	2"	16"	90°	No	√	√	√	√	√	Striated, Bead, Flat Pan	22, 24, Ga.	.032
Maxima 2:18	2"	18"	90°	No	√	√	√	√	√	Striated, Bead, Flat Pan	22, 24, Ga.	.032
Maxima 3:18	3"	18"	90°	No	√	√	√	√	√	Minor Ribbed	22, 24, Ga.	.032
Maxima 3:24	3"	24"	90°	No	√	√	√	√		Minor Ribbed	22, 24, Ga.	.032
Maxima ADV 2:16	2"	16"	180°	25' Min. for Steel 20' Min. for Alum.	√	√	√	√		Striated, Bead, Flat Pan	22, 24, Ga.	.032
Maxima ADV 2:18	2"	18"	180°	25' Min. for Steel 20' Min. for Alum.	√	√	√	√		Striated, Bead, Flat Pan	22, 24, Ga.	.032
Maxima 1.5	1.5"	16"	180°	12' Min. for Steel 10' Min. for Alum.	√	√	√	√		Striated, Flat Pan	22, 24, Ga.	.032

Note: Oil canning is a natural occurrence in metal panels and is not a cause for panel rejection. Striated surface recommended to reduce appearance of oil canning.



For more information:  
**800-562-3576**

CORPORATE OFFICE • 1500 HAMILTON RD. • BOSSIER CITY, LA 71111

**511/521/522**

# ALUMINUM DOOR SYSTEMS



ALUMINUM SECTIONAL DOORS



**VISUAL ACCESS.  
LIGHT INFILTRATION.  
CONTEMPORARY LOOK.**



INDUSTRY LEADING  
COMMERCIAL & INDUSTRIAL SOLUTIONS



Model 511, Brown powder coat finish, Clear glass

---

### General features and benefits – Models 511/521

---

- 1 3/4" (45 mm) thick, corrosion-resistant 6063-T6 aluminum sections with galvanized fixtures and hinges promotes durability and trouble-free operation
- 1/4" (6 mm) diameter through-rods on all stiles and rails enhances strength and sturdiness
- Top-quality materials, excellent field service and optional maintenance program contribute to extended door life, low maintenance costs and maximum productivity
- Glazing choices include DSB glass, acrylic, tempered glass, clear polycarbonate, multi-wall polycarbonate, wire glass, Low E, Lexan and laminate
- Standard clear anodized finish for low-maintenance and corrosion-resistance
- Optional finishes include a wide range of powder coat colors offering an attractive and durable finish
- Manual pull rope operation with optional chain hoist or electric motor operator
- Available in approximately 200 RAL powder coat colors to match the aesthetic and design of your project. This color optional upgrade includes a hardening additive that provides an attractive and durable finish and easy-to-clean surface.

**Cover image:** Model 521, Clear anodized finish with Clear glass.



Model 522, Mirrored Gray glass

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## General features and benefits – Model 522

---

- **Frameless design** – the ultimate sleek and modern aluminum full-view door
- **Vinyl seals** between the sections and the flexible bottom seal help to minimize air flow
- **Large glass panels**, mounted to the front of the door, allow maximum light and visibility
- **1 3/8" thick aluminum section** with patent pending design for long life and durability
- **2 1/4" integrated reinforcing rib** on upper intermediate rail for doors 10'3" wide and over
- **Meets ASHRAE 90.1 and IECC® air infiltration requirements** with a third-party tested value of less than 0.4 cfm/ft<sup>2</sup>
- **Meets California Code of Regulation, Title 24 air infiltration requirements** with a third-party tested value of less than 0.3 cfm/ft<sup>2</sup>



**ALUMINUM DOOR SYSTEMS**

**MODELS 511/521/522** offer an attractive solution for commercial and industrial applications where visual access, light infiltration and aesthetics are key design considerations.

*Model 521, Clear anodized finish with Clear glass*



**Glass options for Models 511/521**

**Specialty Glass**

- Laminated White – privacy
- Low E Glass\*\* – thermal efficiency
- Tempered Glass – enhanced safety
- Tinted Glass\*\* – color options:  
Green, Gray, Bronze

**Glass alternatives**

- Clear Lexan® Polycarbonate\*\* – shatter resistant
- Multi Wall Polycarbonate – superior strength with UV protection; color options: Clear, White, Bronze
- Plexiglas® Acrylic\*\* – shatter resistant
- Impact Clear and Frosted Polycarbonate - 0.250" minimum



Double Strength DSB\*\* (Standard)



Obscure



Satin Etched



Gray Tint



Green Tint



Bronze Tint



Impact Frosted Polycarbonate

Actual glass may vary from brochure photos due to fluctuations in the printing process. Check with your Overhead Door™ Distributor to view a glass sample.

\*\* Insulated options available.



Model 511, Clear Anodized finish with Clear glass

**ALUMINUM DOOR SYSTEMS MODEL 511**

doors are designed in sizes up to 16'2" wide and 16'1" high (4928 mm and 4902 mm). Featuring a narrow center stile width of 21/32" (17 mm), these doors are sleek, attractive and permit maximum visibility. An array of glazing choices, top and bottom rail widths, finishes and special options customizes the 511 Model to satisfy nearly any project requirement.

*Model 511, Black powder coat finish, Clear glass.*



### Standard features at a glance

Panel thickness	1 3/4" (45 mm)
Maximum standard height	16'1" (4902 mm)
Maximum standard width	16'2" (6147 mm)
Material	6063-T6 aluminum
Standard finish	204R-1 clear anodized
Center stile width	2 1/32" (17 mm)
End stile width	2 3/4" (70 mm)
Top rail width	2 3/8" (60 mm) or 3 3/4" (95 mm)
Top intermediate rail width	3/4" (19 mm)
Bottom intermediate rail width	5/8" (16 mm)
Bottom rail width	2 3/8" (60 mm) or 3 3/4" (95 mm) or 4 1/2" (114 mm)
Weatherseals	Bottom, flexible PVC
Standard springs	10,000 cycle
Track	2" (51 mm)
Mounting	Angle
Operation	Manual pull rope
Hinges and fixtures	Galvanized steel
Lock	Galvanized, interior-mounted single unit
Warranty	1-Year Limited; 3-Year Limited powder coat finish

### Options

<b>Glazing options*:</b> 1/8" (3 mm) DSB; 1/8" (3 mm) or 1/4" (6 mm) acrylic; 1/8" (3 mm) or 1/4" (6 mm) tempered; 1/8" (3 mm) or 1/4" (6 mm) clear polycarbonate; 1/4" (6mm) and 3/8" twin-wall polycarbonate, 5/8" triple-wall polycarbonate; 1/4" (6 mm) 3/8" (10 mm) and 5/8" (16 mm) twin-wall polycarbonate, triple-wall polycarbonate 1/4" (6 mm) wire glass; 1/2" (12 mm) insulated glass
Electric operator or chain hoist
Bottom sensing edge
3" track
Bracket mounting (not available on full vertical door tracks)
Higher-cycle springs in 25k, 50k, 75k, 100k cycles
Chain hoist
Posi-tension drums

\*Contact your local Overhead Door™ Distributor for special glazing requirements. Verify 1/4" (6 mm) glass applications with factory.

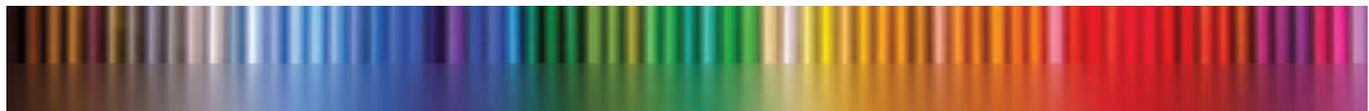
### Structure options

#### Anodized finishes



#### Powder coat finishes

Select from approximately 200 RAL powder coat color options to best match your home.



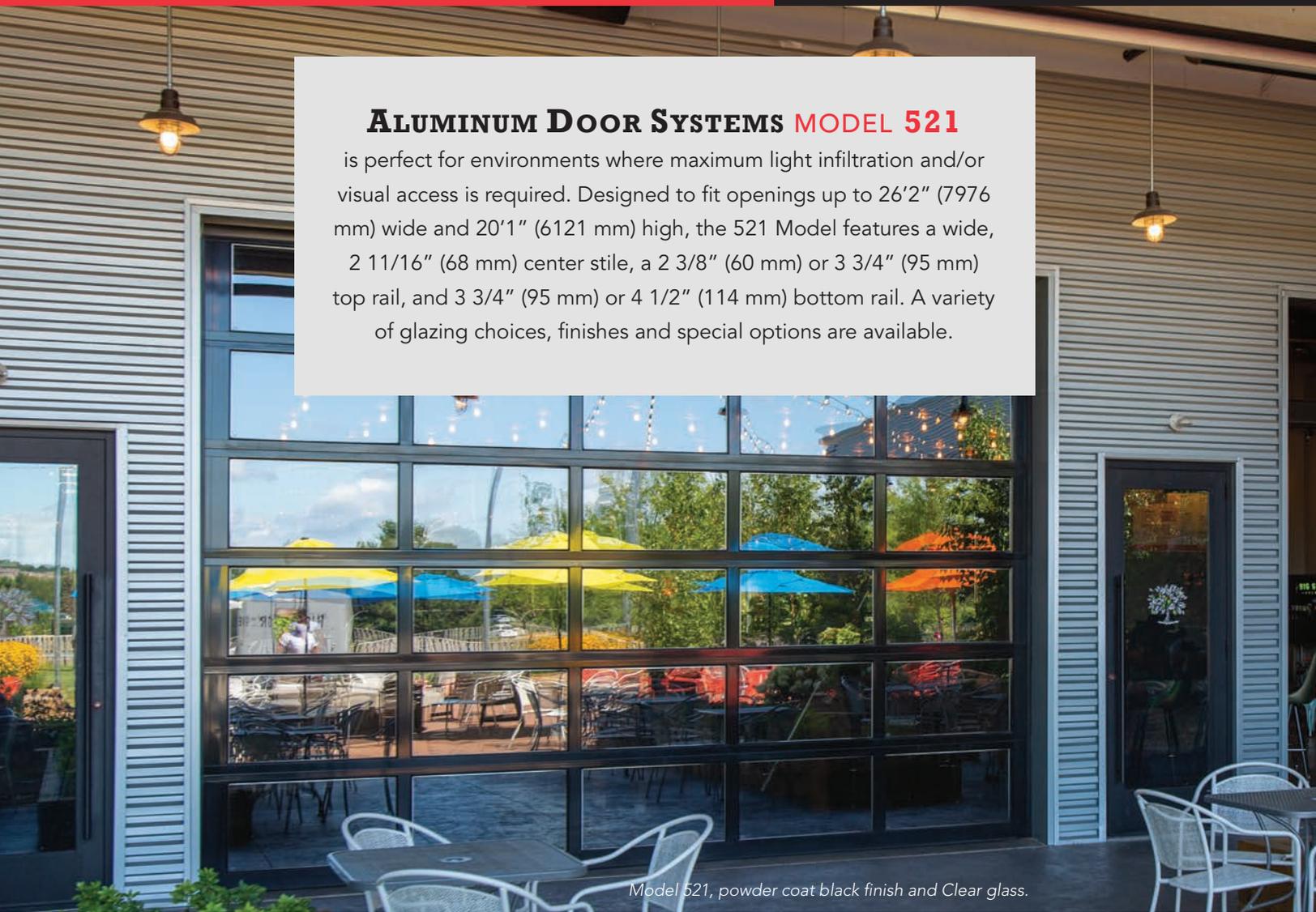
Actual door colors may vary from brochure photos due to fluctuations in the printing process. Always request a color sample from your Overhead Door™ Distributor for accurate color matching.

Panel layout	
Door width	Number of panels
to 11'11" (3632 mm)	3
12'0" to 14'11" (3658 mm to 4547 mm)	4
15'0" to 16'2" (4572 mm to 4928 mm)	5

Section stack	
Door height	Number of sections
to 8'6" (2591 mm)	4
8'7" to 10'1" (2616 mm to 3073 mm)	5
10'2" to 12'1" (3099 mm to 3683 mm)	6
12'2" to 14'1" (3708 mm to 4293 mm)	7
14'2" to 16'1" (4318 mm to 4902 mm)	8

**ALUMINUM DOOR SYSTEMS MODEL 521**

is perfect for environments where maximum light infiltration and/or visual access is required. Designed to fit openings up to 26'2" (7976 mm) wide and 20'1" (6121 mm) high, the 521 Model features a wide, 2 11/16" (68 mm) center stile, a 2 3/8" (60 mm) or 3 3/4" (95 mm) top rail, and 3 3/4" (95 mm) or 4 1/2" (114 mm) bottom rail. A variety of glazing choices, finishes and special options are available.



*Model 521, powder coat black finish and Clear glass.*

**Optional polyurethane insulation for stiles and rails up to 18'2" wide**

<b>1/2" insulated glazing unit</b>	<b>Door R-value (K m<sup>2</sup>/W)</b>
DSB- clear, tempered, obscure	2.87
Clear polycarbonate	2.93
DSB - Solar Bronze	3.17
DSB - Low E coating	3.43
SolarBan 70XL argon filled	4.09
<b>Multi-wall polycarbonate</b>	<b>Door R-value (K m<sup>2</sup>/W)</b>
1/4" thick unit	2.75
3/8" thick unit	3.21
5/8" thick unit	3.48
<b>Insulated panels</b>	<b>Door R-value (K m<sup>2</sup>/W)</b>
3/8" EPS solid panels	2.60



Polyurethane filled rails and stiles

\*R-value: Overhead Door Corporation uses a calculated door section R-value for our insulated doors.



## Standard features at a glance

Section thickness	1 3/4" (45 mm)
Maximum standard height	20'1" (6121 mm)
Maximum standard width	26'2" (7976 mm)
Material	Extruded 6061-T6 aluminum
Standard finish	204R-1 clear anodized (painted white at no charge)
Center stile width	2 11/16" (68 mm)
End stile width	3 5/16" (85 mm)
Top rail width	2 3/8" (60 mm) or 3 3/4" (95 mm)
Top intermediate rail width	2 1/8" (54 mm)
Bottom intermediate rail width	1 19/32" (40 mm)
Bottom rail width	3 3/4" (95 mm) or 4 1/2" (114 mm)
Weatherseals	Bottom, flexible PVC
Standard springs	10,000 cycle
Track	2" (51 mm)
Mounting	Angle
Operation	Manual pull rope
Hinges and fixtures	Galvanized steel
Lock	Galvanized, interior-mounted single unit
Warranty	1-Year Limited; 3-Year Limited on powder coat finish

## Options

Glazing options <sup>†</sup> : 1/8" (3 mm) DSB; 1/8" (3 mm) or 1/4" (6 mm) acrylic; 1/8" (3 mm) or 1/4" (6 mm) tempered; 1/8" (3 mm) or 1/4" (6 mm) clear polycarbonate; 1/4" (6mm) and 3/8" twin-wall polycarbonate, 5/8" triple-wall polycarbonate; 1/4" (6 mm) 3/8" (10 mm) and 5/8" (16 mm) twin-wall polycarbonate, triple-wall polycarbonate 1/4" (6 mm) wire glass; 1/2" (12 mm) insulated glass
Electric operator or chain hoist
Bottom sensing edge
3" track
Bracket mounting (not available on full vertical door tracks)
Higher-cycle springs in 25k, 50k, 75k, 100k cycles
Exhaust ports
Four-section pass door
Wind load and impact rated door available
Posi-tension drums
Bronze anodization
Powder coat finish
Pass door

<sup>†</sup>Contact your local Overhead Door™ Distributor for special glazing requirements. Verify 1/4" (6 mm) glass applications with factory.

## Structure options

### Anodized finishes



Clear (standard)



Light Bronze



Medium Bronze



Dark Bronze

### Wood grain powder coat finishes



Knotty Pine



Cherry



Cherry with Flame



Dark Walnut

### Powder coat finishes

Select from approximately 200 RAL powder coat color options to best match your home.



Actual door colors may vary from brochure photos due to fluctuations in the printing process. Always request a color sample from your Overhead Door™ Distributor for accurate color matching.

Panel layout	
Door width	Number of panels
to 9'2" (to 2794 mm)	2 or 3 (standard)
9'3" to 12'2" (2819 mm to 3708 mm)	3
12'3" to 16'2" (3734 mm to 4953 mm)	4
16'3" to 18'2" (4978 mm to 5537 mm)	4 or 5 (standard)
18'3" to 19'2" (5562 mm to 5842 mm)	5
19'3" to 20'11" (5867 mm to 6375 mm)	6**
21'0" to 23'11" (6401 mm to 7290 mm)	8**
24'0" to 26'2" (7315 mm to 7976 mm)	10**

Section stack	
Door height	Number of sections
to 8'6" (2591 mm)	4
8'7" to 10'1" (2616 mm to 3073 mm)	5
10'2" to 12'1" (3099 mm to 3683 mm)	6
12'2" to 14'1" (3708 mm to 4293 mm)	7
14'2" to 16'1" (4318 mm to 4902 mm)	8
16'2" to 18'1" (4928 mm to 5512 mm)	9
18'2" to 20'1" (5537 mm to 6121 mm)	10

\*\*Special construction. Consult your local Overhead™ Door Distributor for additional information.

**ALUMINUM DOOR SYSTEMS MODEL 522**

This aluminum full-view door is ideal for restaurants, auto dealerships and any application where the door needs to integrate seamlessly with the aesthetics of the building.

*Model 522, Mirrored Bronze glass*



### Standard features at a glance

Section thickness	1 3/8" (35 mm)
Maximum standard height	14'1" (4318 mm)
Maximum standard width	18'2" (5486 mm)
Material	6063-T6 aluminum
Standard finish	White, Black or Bronze Powder Coat
Center stile width	3" (76 mm)
End stile width	3 1/2" (89 mm)
Top rail width	3 1/2" (89 mm)
Top intermediate rail width	1 5/8" (41 mm)
Bottom intermediate rail width	1 3/8" (35 mm)
Bottom rail width	3 1/2" (89 mm)
Standard springs	10,000 cycle
Track	Provide track as recommended by manufacturer to suit loading required and clearances available
Mounting	Angle
Operation	Manual pull rope
Hinges and fixtures	Galvanized steel
Lock	Galvanized, interior-mounted single unit
Warranty	1-Year Limited

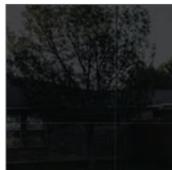
### Options

- Springs: 25,000, 50,000, 75,000 or 100,000 cycles
- Weather stripping: jamb and header seals
- White or Black powder coat track

### Glass options



Opaque White



Opaque Black



Mirrored Gray



Mirrored Bronze



Translucent Black

### Structure options

#### Powder Coat Finishes



White



Black



Bronze

#### Anodized Finishes



Black



Bronze

Actual colors may vary from brochure due to fluctuations in the printing process. Always request a color sample from your Overhead Door™ Distributor for accurate color matching.

### Aluminum and glass pairing

#### Aluminum options

White Powder Coat

Black Powder Coat / Bronze Powder Coat /  
Black Anodized / Bronze Anodized

#### Glass color

Opaque White

Opaque Black / Mirrored Gray / Mirrored Bronze /  
Translucent Black

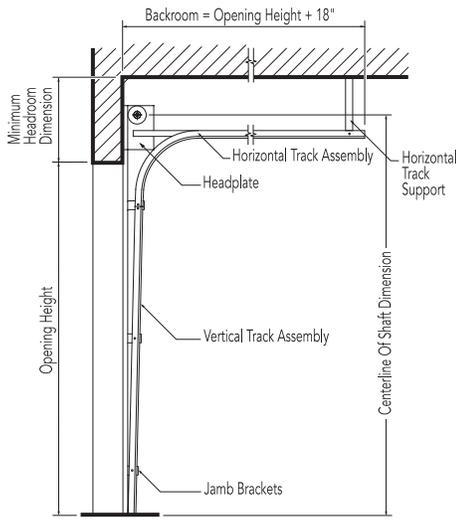
Each door is unique and built to order, therefore a slight deviation in glass alignment is possible. These doors may become hot to the touch in sustained hot weather. See website for door sizes, section selection and other details.

## Track detail

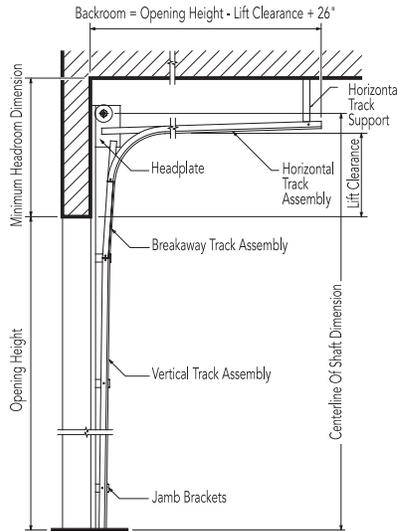
Any of the following track configurations can be selected for 511, 521 and 522 Aluminum door models.

O.H.=Opening height L.C.=Lift clearance D.H.=Door height

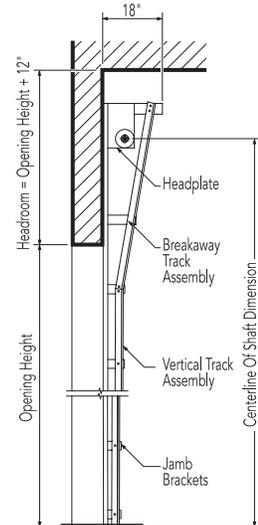
### Standard lift track



### Lift clearance track Standard



### Full vertical track



#### 2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	O.H. + 11 5/8" (295 mm)	14 1/4" (362 mm)
Thru 16'0" (4877 mm)	O.H. + 12 5/8" (321 mm)	20 1/2" (521 mm)

#### 2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	O.H. + L.C. + 5 5/8" (143 mm)	L.C. + 8 3/4" (222 mm)
Thru 16'0" (4877 mm)	O.H. + L.C. + 5 5/8" (143 mm)	L.C. + 11 1/4" (286 mm)

#### 2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 11'0" (3353 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)
Thru 16'0" (4877 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)

#### 3" (76 mm) Track [15" (381 mm) radius]

Thru 18'0" (5486 mm)	O.H. + 14 5/8" (372 mm)	18" (457 mm)
Thru 32'0" (9754 mm)	O.H. + 16 7/8" (429 mm)	21 1/2" (546 mm)

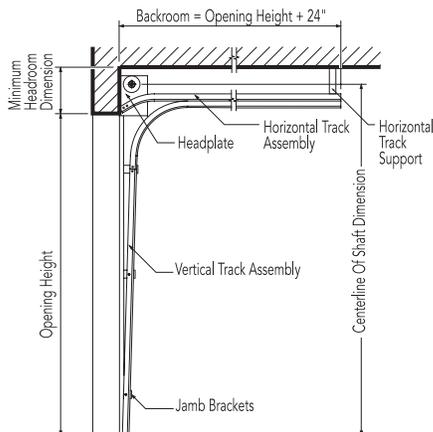
#### 3" (76 mm) Track [15" (381 mm) radius]

Thru 22'0" (6706 mm)	O.H. + L.C. + 6 5/8" (168 mm)	L.C. + 11 1/2" (292 mm)
Thru 32'0" (9754 mm)	O.H. + L.C. + 6 5/8" (168 mm)	L.C. + 12 1/4" (311 mm)

#### 3" (76 mm) Track [15" (381 mm) radius]

Thru 18'0" (5486 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)
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### Low headroom track Springs to front



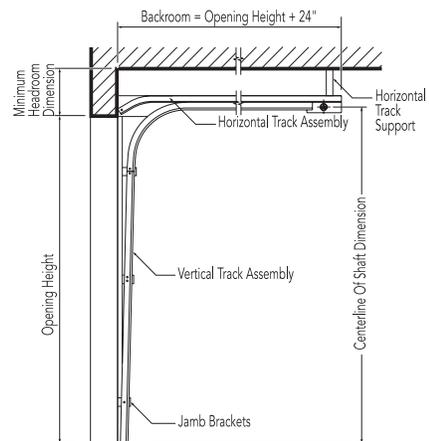
#### 2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	D.H. + 8" (203 mm)	11 3/4" (299 mm)
Thru 16'0" (4877 mm)	D.H. + 8" (203 mm)	12 1/2" (318 mm)

#### 3" (76 mm) Track [15" (381 mm) radius]

Thru 12'0" (3658 mm)	D.H. + 9" (229 mm)	13" (330 mm)
Thru 32'0" (5486 mm)	D.H. + 9" (229 mm)	13 3/4" (349 mm)

### Low headroom track Springs to rear



#### 2" (51 mm) Track [15" (381 mm) radius]

Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	O.H. + 2" (51 mm)	7 1/2" (191 mm)
Thru 16'0" (4866 mm)	O.H. 2" (51 mm)	8" (203 mm)

#### 3" (76 mm) Track [15" (381 mm) radius]

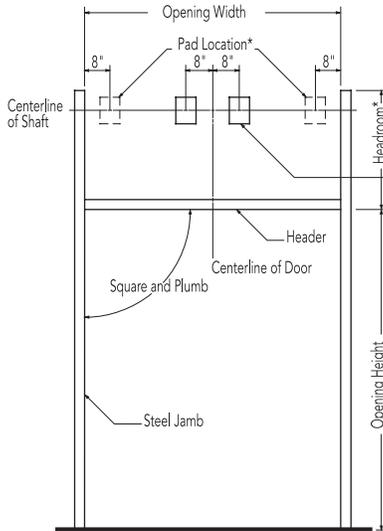
Thru 18'0" (5486 mm)	O.H. 6 3/4" (171 mm)	9 3/4" (248 mm)
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## Framing and pad detail

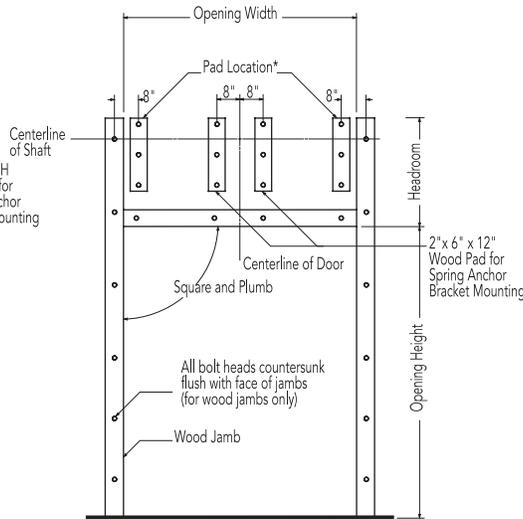
Framing and pad details for common installation of Aluminum doors in steel, wood, concrete and masonry jambs are provided here. If you require additional information or have special project requirements, refer to the Architectural Design Manual, ([www.overheaddoor.com/ADM/base.html](http://www.overheaddoor.com/ADM/base.html)) or consult with the Applications Engineering Group or your local Overhead Door™ Distributor.

### Steel jambs



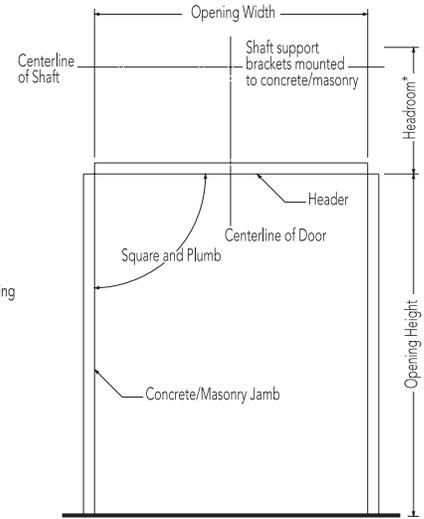
\* Pad Location for additional shaft support brackets for doors over 18'3" wide

### Wood jambs

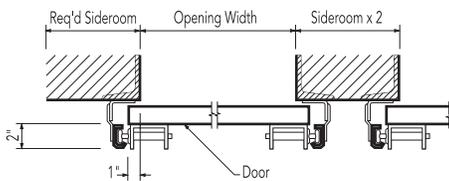


\* Pad Location for additional shaft support brackets for doors over 18'3" wide

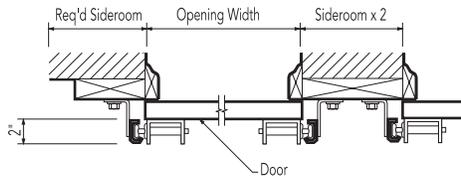
### Concrete/masonry jambs



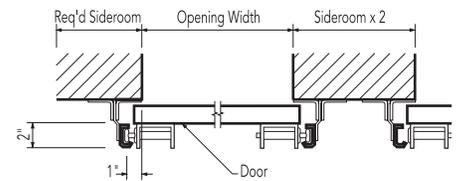
### 2" (51 mm) track



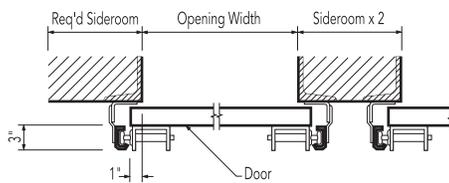
### 2" (51 mm) track



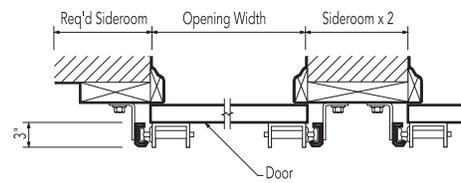
### 2" (51 mm) track



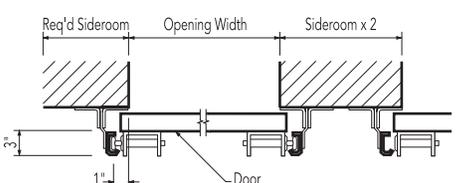
### 3" (76 mm) track



### 3" (76 mm) track



### 3" (76 mm) track



#### Minimum required sideroom

Track type	2" Track (51 mm)	3" Track (76 mm)
Standard lift	4 1/2" (114 mm)	6 1/2" (165 mm)
Low headroom	9" (229 mm)	10" (254 mm)
Lift clearance	4 1/2" (114 mm)	6 1/2" (165 mm)
Full vertical	4 1/2" (114 mm)	6 1/2" (165 mm)

#### Minimum required sideroom

Track type	2" Track (51 mm)	3" Track (76 mm)
Standard lift	3 1/2" (89 mm)	5 1/2" (140 mm)
Low headroom	8" (203 mm)	9" (229 mm)
Lift clearance	3 1/2" (89 mm)	5 1/2" (140 mm)
Full vertical	3 1/2" (89 mm)	5 1/2" (140 mm)

#### Minimum required sideroom

Track type	2" Track (51 mm)	3" Track (76 mm)
Standard lift	4 1/2" (114 mm)	6 1/2" (165 mm)
Low headroom	9" (229 mm)	10" (254 mm)
Lift clearance	4 1/2" (114 mm)	5 1/2" (140 mm)
Full vertical	4 1/2" (114 mm)	5 1/2" (140 mm)

**Electric operators**

We offer a broad line of electric operators to suit new construction and retrofit applications, as well as unusual or special requirements. In order to improve safety and enhance door and motor life, industry quality assurance guidelines recommend the choice of a single manufacturer for both door and operator applications.

We are one of the only national manufacturers to offer a full line of commercial and industrial doors and operators specifically designed for integral applications.

**Model RHX®**

Model RHX® is a heavy duty commercial operator designed to operate doors up to 24' (7315 mm) in height and 3696 pounds (1676 kg). Available as either a trolley, sidemount or centermount.



**Model RMX®**

Model RMX® is our most advanced medium-duty operator. It is designed for quicker installation and hassle-free operation and operates doors up to 14' (4267 mm) in height and 620 pounds (282 kg). It is available as a trolley-type or side-mounted unit.



**Model RSX®**

Model RSX® is a standard duty commercial operator designed to operate doors up to 24' (7315 mm) in height and 1620 pounds (735 kg). It offers unique features like LimitLock®, SuperBelt™ and 16 digit menu setup.



**Operator control options**

- Push-button, key or combination stations; surface- or flush-mounted for interior and/or exterior locations
- Vehicle detectors, key card reader, photocell and door timer controls
- Treadle or pull switch stations
- Telephone entry and coded keyboard stations
- Universal programmable door timer
- Radio control systems (24 VAC or 120 VAC)
- Explosion and dust ignition-proof systems

Electric operator selection guide										
	Horsepower/ Newtons	Max. height of door	Max. weight of door	Super Belt™/ Polybelt	Worm gear	Adjustable clutch	Totally enclosed	Continuous duty	Explosion proof	Mounting type
RHX®	1/2 HP, 3/4 HP 1 HP, 3 HP	24' (7315 mm)	3696 lbs (1676 kg)		•	•		•	•	T, S, C
RSX®	1/2 HP, 3/4 HP 1 HP	24' (7315 mm)	1620 (735 kg)	•		•	•	•		T, S, C
RMX®	1/2 HP	14' (4267 mm)	620 (281 kg)	•						T, S

Mounting options:  
T=Trolley S=Side mount C= Center mount

**Safety recommendations**

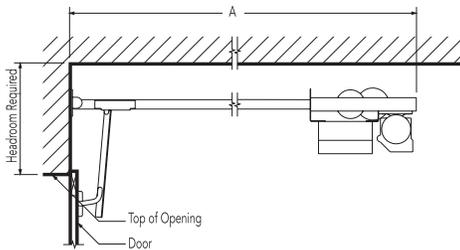
We strongly recommend the use of a primary safety device as defined by UL325 2010. A primary safety device can be approved monitored photo-eyes or an approved monitored sensing edge. If a primary safety device is not installed, a constant contact control switch must be used to close the door. Contact your Overhead Door™ Distributor for more information.



## Mounting details

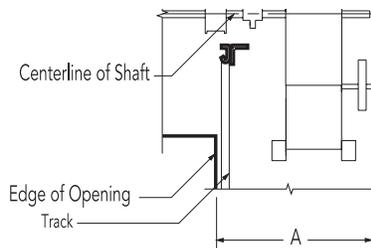
### Trolley-type (Drawbar) RMX®, RSX®, RHX®

Trolley-type (Drawbar) operators feature a power unit mounted between, above and to the rear of the horizontal tracks. The drawbar drive provides positive control of the door at all times, making this operator the preferred choice whenever possible. Maximum door width is 20' per drawbar. Door width over 20' requires dual drawbar installation. Available on Models RMX®, RSX® and RHX®.



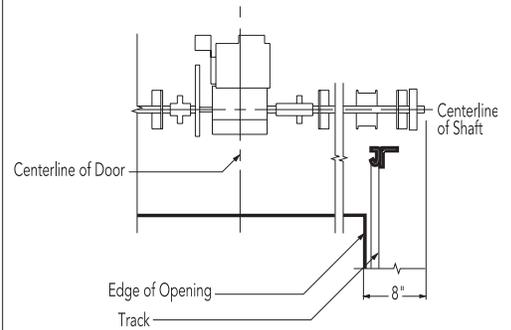
### Side mount type (Jackshaft) RMX®, RSX®, RHX®

Side-mounted (Jackshaft) RMX®, RSX®, and RHX® operators feature a power unit mounted on the inside front wall and connected to the crosshead shaft, with an adjustable coupling or drive chain and sprockets.



### Center mount type/Jackshaft RSX®, RHX®

Center-mounted (Jackshaft) operators feature a power unit on the front wall above the door opening. No additional backroom is required. Available on models RSX® and RHX®.



Minimum headroom requirements		"A" dimension - minimum (sideroom)		Minimum headroom requirements	
RMX®	Track requirements +4 1/2" (114 mm)	<b>2" track (51 mm)</b>	<b>3" track (76 mm)</b>	RSX®	Track requirements +14" (356 mm)
RSX®	Track requirements +5" (127 mm)	RMX®	18 1/2" (470 mm)    19 1/2" (495 mm)	RHX®	Track requirements +23 5/8" (600 mm)
RHX®	Track requirements +5" (127 mm)	RSX®	21" (533 mm)    22" (559 mm)		
		RHX®	21" (533 mm)    22" (559 mm)		
Depth requirements - "A" dimension (backroom)					
RMX®	Door height +4' 0" (1219 mm)				
RSX®	Door height +4' 0" (1219 mm)				
RHX®	Door height +4' 10" (1219 mm)				



Model 521, solid panel, custom powder coat finish

Tools to help you  
get the job done.



## Architect's Corner

A resource for architects, containing comprehensive technical and resource materials to support your project, including drawings and specifications for commercial doors.

[www.overhaddoor.com](http://www.overhaddoor.com)

**The original, innovative choice for unequalled quality and service.**

Overhead Door Corporation pioneered the sectional garage door industry, inventing the first sectional garage door in 1921 and the first electric door operator in 1926. Today, we continue to be the industry leader through the strength of our product innovation, superior craftsmanship and outstanding customer support, underscoring a legacy of quality, expertise and integrity. That's why design and construction professionals specify Overhead Door™ products more often than any other brand. Our family of over 400 Overhead Door™ Distributors across the U.S. and Canada not only share our name and logo, but also our commitment to excellence.



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[overhaddoor.com](http://overhaddoor.com)

## SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

This suggested guide specification has been developed using the current edition of the Construction Specifications Institute (CSI) "Manual of Practice", including the recommendations for the CSI 3 Part Section Format and the CSI Page Format. Additionally, the development concept and organizational arrangement of the American Institute of Architects (AIA) MASTERSPEC Program has been recognized in the preparation of this guide specification. Neither CSI, AIA, USGBC nor ILFI endorse specific manufacturers and products. The preparation of the guide specification assumes the use of standard contract documents and forms, including the "Conditions of the Contract", published by the AIA.

### PART 1 - GENERAL

#### 1.1 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 Summary

*EDITOR NOTE: CHOOSE DOOR TYPE (MEDIUM, WIDE) BASED ON PROJECT REQUIREMENTS.*

- A. This Section includes Kawneer Aluminum Entrances, glass and glazing, and door hardware and components.
  - 1. Types of Kawneer Aluminum Entrances include:
    - a. 350 Tuffline™ Swing Door; Medium stile, 3-1/2" (89 mm) vertical face dimension, 2" (51mm) depth, 3/16" (5mm) wall thickness, high traffic and high abuse applications.
    - b. 500 Tuffline™ Swing Door; Wide stile, 5" (127 mm) vertical face dimension, 2" (51mm) depth, 3/16" (5mm) wall thickness, high traffic and high abuse applications.

*EDITOR NOTE: BELOW RELATED SECTIONS ARE SPECIFIED ELSEWHERE HOWEVER KAWNEER RECOMMENDS SINGLE SOURCE RESPONSIBILITY FOR ALL OF THESE SECTIONS AS INDICATED IN PART 1.6 QUALITY ASSURANCE.*

- B. Related Sections:
  - 1. 072700 "Air Barriers"
  - 2. 079200 "Joint Sealants"
  - 3. 083213 "Sliding Aluminum-Framed Glass Doors"
  - 4. 084313 "Aluminum-Framed Storefronts"
  - 5. 084329 "Sliding Storefronts"
  - 6. 084413 "Glazed Aluminum Curtain Walls"
  - 7. 084433 "Sloped Glazing Assemblies"
  - 8. 085113 "Aluminum Windows"
  - 9. 086300 "Metal-Framed Skylights"
  - 10. 087000 "Hardware"
  - 11. 088000 "Glazing"
  - 12. 280000 "Electronic Safety and Security"

#### 1.3 Definitions

- A. Definitions: For fenestration industry standard terminology and definitions refer to American Architectural Manufacturers Association (AAMA) – AAMA Glossary (AAMA AG).

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.  
© Kawneer Company, Inc., 2011

**1.4 Performance Requirements**

- A. General Performance: Aluminum-framed entrance system shall withstand the effects of the following performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction:
- B. Aluminum Framed Entrance Performance Requirements:

**EDITOR NOTE: PROVIDE WIND LOAD DESIGN PRESSURES IN PSF AND INCLUDE APPLICABLE BUILDING CODE AND YEAR EDITION.**

1. Wind loads: Provide aluminum-framed entrance system; include anchorage, capable of withstanding wind load design pressures of (\_\_\_\_) lbs./sq. ft. inward and (\_\_\_\_) lbs./sq. ft. outward. The design pressures are based on the (\_\_\_\_) Building Code; (\_\_\_\_) Edition.
  2. Air Infiltration: For single acting offset pivot or butt hung entrances in the closed and locked position, the test specimen shall be tested in accordance with ASTM E 283 at a pressure differential of 1.57 psf (75 Pa) for single doors and pairs of doors. A single 3'0" x 7'0" (915 mm x 2134 mm) entrance door and frame shall not exceed 1.0 cfm/ft<sup>2</sup>. A pair of 6'0" x 7'0" (1830 mm x 2134 mm) entrance doors and frame shall not exceed 1.0 cfm/ft<sup>2</sup>.
  3. Structural Performance: Corner strength shall be tested per the Kawneer dual moment load test procedure and certified by an independent testing laboratory to ensure weld compliance and corner integrity [Testing procedure and certified test results available upon request].
- C. Environmental Product Declarations (EPD): Shall have a Type III EPD.

**1.5 Submittals**

**EDITOR NOTE: ADD RECYCLED CONTENT SECTION IF REQUIRED TO MEET PROJECT REQUIREMENTS AND/OR GREEN BUILDING CERTIFICATIONS SUCH AS LEED, LIVING BUILDING CHALLENGE (LBC), ETC. ARE REQUIRED.**

**\* IF RECYCLED CONTENT REQUIREMENTS ARE NOT SPECIFIED - PRIME (ZERO RECYCLED CONTENT) ALUMINUM COULD BE SUPPLIED.**

- A. Product Data: Include construction details, material descriptions, and fabrication methods, dimensions of individual components and profiles, hardware, finishes, and installation instructions for each type of aluminum-framed entrance door indicated.
1. Recycled Content:
    - a. Provide documentation that aluminum has a minimum of 50% mixed pre- and post-consumer recycled content with a sample document illustrating project specific information that will be provided after product shipment.
    - b. Once product has shipped, provide project specific recycled content information, including:
      - 1) Indicate recycled content; indicate percentage of pre- and post-consumer recycled content per unit of product.
      - 2) Indicate relative dollar value of recycled content product to total dollar value of product included in project.
      - 3) Indicate location recovery of recycled content.
      - 4) Indicate location of manufacturing facility.
  2. Environmental Product Declaration (EPD).
    - a. Include a Type III Product-Specific EPD.
- B. Shop Drawings: Include plans, elevations, sections, details, hardware, and attachments to other work, operational clearances and installation details.
- C. Samples for Initial Selection: For units with factory-applied color finishes including samples of hardware and accessories involving color selection.
- D. Samples for Verification: For aluminum-framed entrance doors and components required.
- E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency for each type of aluminum-framed entrance doors.
- F. Fabrication Sample: Corner sample consisting of a door stile and rail, of full-size components and showing details of the following:
  1. Joinery, including welds.
  2. Glazing.
- G. Other Action Submittals:
  1. Entrance Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of entrance door hardware, as well as procedures and diagrams. Coordinate final entrance door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of entrance door hardware.

**1.6 Quality Assurance**

- A. Installer Qualifications: An installer which has had successful experience with installation of the same or similar units required for the project and other projects of similar size and scope.
- B. Manufacturer Qualifications: A manufacturer capable of fabricating aluminum-framed entrance doors and storefronts that meet or exceed performance requirements indicated and of documenting this performance by inclusion of test reports, and calculations.
- C. Source Limitations: Obtain aluminum-framed entrance doors through one source from a single manufacturer.

- D. Product Options: Drawings indicate size, profiles, and dimensional requirements of aluminum-framed entrance doors and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements". Do not modify size and dimensional requirements.
  - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- E. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Build mockup for type(s) of swing entrance door(s) indicated, in location(s) shown on Drawings.
- F. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination".

**1.7 Project Conditions**

- A. Field Measurements: Verify actual dimensions of aluminum-framed entrance door openings by field measurements before fabrication and indicate field measurements on Shop Drawings.

**1.8 Warranty**

- A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty.
  - 1. Warranty Period: Two (2) years from Date of Substantial Completion of the project provided however that the Limited Warranty shall begin in no event later than six months from date of shipment by manufacturer.

**PART 2 - PRODUCTS**

**2.1 Manufacturers**

*EDITOR NOTE: CHOOSE DOOR TYPE (NARROW, MEDIUM, WIDE) BASED ON PROJECT REQUIREMENTS.*

- A. Basis-of-Design Product:
  - 1. Kawneer Company Inc.
  - 2. The door stile and rail face dimensions of the [ \_\_\_\_\_ ] (choose one: 350 Tuffline™ or 500 Tuffline™) entrance door will be as follows:
 

Door	Vertical Stile	Top Rail	Bottom Rail	Optional Bottom Rail
350 Tuffline™	3-1/2" (89 mm)	3-1/2" (89 mm)	6-1/2" (166 mm)	10" (254 mm)
500 Tuffline™	5" (127 mm)	5" (127 mm)	6-1/2" (166 mm)	10" (254 mm)
  - 3. Major portions of the door members to be 0.188" (4.8mm) nominal in thickness and glazing molding to be 0.05" (1.5mm) thick.
  - 4. Glazing gaskets shall be either EPDM elastomeric extrusions or a thermoplastic elastomer.
  - 5. Provide adjustable glass jacks to help center the glass in the door opening.

*EDITOR NOTE: PROVIDE INFORMATION BELOW INDICATING APPROVED ALTERNATIVES TO THE BASIS-OF-DESIGN PRODUCT.*

- B. Subject to compliance with requirements, provide a comparable product by the following:
  - 1. Manufacturer: ( \_\_\_\_\_ )
  - 2. Series: ( \_\_\_\_\_ )
  - 3. Profile dimension: ( \_\_\_\_\_ )
  - 4. Performance Grade: ( \_\_\_\_\_ )
- C. Substitutions: Refer to Substitutions Section for procedures and submission requirements
  - 1. Pre-Contract (Bidding Period) Substitutions: Submit written requests ten (10) days prior to bid date.
  - 2. Post-Contract (Construction Period) Substitutions: Submit written request in order to avoid aluminum-framed entrance door installation and construction delays.
  - 3. Product Literature and Drawings: Submit product literature and drawings modified to suit specific project requirements and job conditions.
  - 4. Certificates: Submit certificate(s) certifying substitute manufacturer (1) attesting to adherence to specification requirements for storefront system performance criteria, and (2) has been engaged in the design, manufacturer and fabrication of aluminum-framed entrance doors for a period of not less than ten (10) years. (Company Name)
  - 5. Test Reports: Submit test reports verifying compliance with each test requirement required by the project.
  - 6. Samples: Provide samples of typical product sections and finish samples in manufacturer's standard sizes.
- D. Substitution Acceptance: Acceptance will be in written form, either as an addendum or modification, and documented by a formal change order signed by the Owner and Contractor.

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.  
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**2.2 Materials**

- A. Aluminum Extrusions: Alloy and temper recommended by sliding aluminum-framed entrance door manufacturer for strength, corrosion resistance, and application of required finish and not less than 0.090" (2.3 mm) wall thickness at any location for the main frame and door leaf members.

**EDITOR NOTE: ADD RECYCLED CONTENT SECTION IF REQUIRED TO MEET PROJECT REQUIREMENTS AND/OR GREEN BUILDING CERTIFICATIONS SUCH AS LEED, LIVING BUILDING CHALLENGE (LBC), ETC. ARE REQUIRED.**

**\* IF RECYCLED CONTENT REQUIREMENTS ARE NOT SPECIFIED - PRIME (ZERO RECYCLED CONTENT) ALUMINUM COULD BE SUPPLIED.**

1. Recycled Content: Shall have a minimum of 50% mixed pre- and post-consumer recycled content.
  - a. Indicate recycled content; indicate percentage of pre-consumer and post-consumer recycled content per unit of product.
  - b. Indicate relative dollar value of recycled content product to total dollar value of product included in project.
  - c. Indicate location recovery of recycled content.
  - d. Indicate location of manufacturing facility.
- B. Fasteners: Aluminum, nonmagnetic stainless steel or other materials to be non-corrosive and compatible with sliding aluminum-framed glass door members, trim hardware, anchors, and other components.
- C. Anchors, Clips, and Accessories: Aluminum, nonmagnetic stainless steel, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating; provide sufficient strength to withstand design pressure indicated.
- D. Reinforcing Members: Aluminum, nonmagnetic stainless steel, or nickel/chrome-plated steel complying with ASTM B 456 for Type SC 3 severe service conditions, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating; provide sufficient strength to withstand design pressure indicated.
  1. Weather Seals: Provide weather stripping with integral barrier fin or fins of semi-rigid, polypropylene sheet or polypropylene-coated material. Comply with AAMA 701/702.

**2.3 Storefront Framing System**

- A. Storefront Entrance Framing: Entrance framing to be 2" x 4-1/2" (50.8 mm x 114.3 mm) heavy duty framing.
- B. Non-Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.
- C. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials. Where exposed shall be stainless steel.
- D. Perimeter Anchors: When steel anchors are used, provide insulation between steel material and aluminum material to prevent galvanic action
- E. Packing, Shipping, Handling and Unloading: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- F. Storage and Protection: Store materials protected from exposure to harmful weather conditions. Handle storefront material and components to avoid damage. Protect storefront material against damage from elements, construction activities, and other hazards before, during and after storefront installation.

**2.4 Glazing**

- A. Glazing: As specified in Division 08 Section "Glazing".
- B. Glazing Gaskets: Manufacturer's standard compression types; replaceable, extruded EPDM rubber.
- C. Spacers and Setting Blocks: Manufacturer's standard elastomeric type.

**2.5 Hardware**

- A. General: Provide manufacturer's standard hardware fabricated from aluminum, stainless steel, or other corrosion-resistant material compatible with aluminum; designed to smoothly operate, tightly close, and securely lock aluminum-framed entrance doors.
- B. Standard Tuffline™ Entrance Hardware:
  1. Weather-stripping:
    - a. Meeting stiles on pairs of doors shall be equipped with an adjustable astragal utilizing wool pile with polymeric fin.
    - b. The door weathering on a single acting offset pivot or butt hung door and frame (single or pairs) shall be comprised of a thermoplastic elastomer weathering on a tubular shape with a semi-rigid polymeric backing.
  2. Sill Sweep Strips: EPDM blade gasket sweep strip in an aluminum extrusion applied to the interior exposed surface of the bottom rail with concealed fasteners (Necessary to meet specified performance tests).
  3. Threshold: Extruded aluminum, one piece per door opening, with ribbed surface.

4. Heavy Duty Offset Pivots.
5. Butt Hinge: Full mortised 5" x 4-1/2" (127 mm x 115 mm) ball bearing type.
6. Continuous Hinge: [\_\_\_\_\_].
7. Push/Pull: [\_\_\_\_\_] style.
8. Exit Device: [\_\_\_\_\_].
9. Closer: [\_\_\_\_\_].
10. Security Lock/Dead Lock: Active Leaf [\_\_\_\_\_]; Inactive Leaf [\_\_\_\_\_].
11. Latch Handle: [\_\_\_\_\_].
12. Cylinder(s)/Thumbturn: [\_\_\_\_\_].
13. Electric Strike/Strike Keeper: [\_\_\_\_\_].

**EDITOR NOTE: BELOW HARDWARE SCHEDULE TO BE USED WHEN SPECIFYING PANELINE® MEL CONCEALED ROD EXIT DEVICE OR OTHER ELECTRONIC SECURITY ITEMS.**

- C. Access Control Entrance Hardware:
1. Stand alone Key Pad: AC-G43 Key Pad System – Kawneer Standard.
  2. Stand alone Key Pad (with Optional Proximity Card Reader): AC-G44 Key Pad/ Reader (Note: Proximity Cards not included).
  3. Proximity Cards.
  4. Power supply for Exit Device: SP-2000 (One per pair. Max of 2 doors per power supply) **Required for Paneline™ MEL.**
  5. Exit Device: Kawneer Paneline™ EL, DOM 1690 and DOM 1790.
  6. Power Transfer [\_\_\_\_\_]. One per EL Exit Device required for access control:
    - a. EPT (Electric Power Transfer) Note: EPT used for continuous geared hinge applications.
    - b. EL Intermediate Pivot.
    - c. EL Butt Hinge.
  7. Interior push button release.
  8. Point to Point wiring diagram.

## 2.6 Fabrication

- A. Fabricate aluminum-framed entrance doors in sizes indicated. Include a complete system for assembling components and anchoring doors.
- B. Fabricate aluminum-framed entrance doors that are reglazable without dismantling perimeter framing.
1. Door corner construction shall consist of mechanical clip fastening, SIGMA deep penetration plug welds and 1-1/8" (29 mm) long fillet welds inside and outside of all four corners. Glazing stops shall be hook-in type with EPDM glazing gaskets reinforced with non-stretchable cord.
  2. Accurately fit and secure joints and corners. Make joints hairline in appearance.
  3. Prepare components with internal reinforcement for door hardware.
  4. Arrange fasteners and attachments to conceal from view.
- C. Weather-stripping: Provide weather-stripping locked into extruded grooves in door panels or frames as indicated on manufactures drawings and details.

## 2.7 Aluminum Finishes

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Factory Finishing:
1. Kawneer Permanodic™ AA-M10C21A44 / AA-M45C22A44, AAMA 611, Architectural Class I Color Anodic Coating (Color \_\_\_\_\_).
  2. Kawneer Permanodic™ AA-M10C21A41 / AA-M45C22A41, AAMA 611, Architectural Class I Clear Anodic Coating (Color #14 Clear) (Optional).
  3. Kawneer Permanodic™ AA-M10C21A31, AAMA 611, Architectural Class II Clear Anodic Coating (Color #17 Clear) (Standard).
  4. Kawneer Permafluor™ (70% PVDF), AAMA 2605, Fluoropolymer Coating (Color \_\_\_\_\_).
  5. Kawneer Permادize™ (50% PVDF), AAMA 2604, Fluoropolymer Coating (Color \_\_\_\_\_).
  6. Kawneer Permacoat™ AAMA 2604, Powder Coating (Color \_\_\_\_\_)
  7. Other: Manufacturer \_\_\_\_\_ Type \_\_\_\_\_ Color \_\_\_\_\_.

**PART 3 - EXECUTION****3.1 Examination**

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work. Verify rough opening dimensions, levelness of sill plate and operational clearances. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure a coordinated installation.
  - 1. Masonry Surfaces: Visibly dry and free of excess mortar, sand, and other construction debris.
  - 2. Wood Frame Walls: Dry, clean, sound, well nailed, free of voids, and without offsets at joints. Ensure that nail heads are driven flush with surfaces in opening and within 3 inches (76.2 mm) of opening.
  - 3. Metal Surfaces: Dry; clean; free of grease, oil, dirt, rust, corrosion, and welding slag; without sharp edges or offsets at joints.
  - 4. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 Installation**

- A. Comply with Drawings, Shop Drawings, and manufacturer's written instructions for installing aluminum-framed entrance doors, hardware, accessories, and other components.
- B. Install aluminum-framed entrance doors level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.
- C. Set sill threshold in bed of sealant, as indicated, for weather tight construction.
- D. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

**3.3 Field Quality Control**

- A. Manufacturer's Field Services: Upon Owner's written request, provide periodic site visit by manufacturer's field service representative.

**3.4 Adjusting, Cleaning, and Protection**

- A. Clean aluminum surfaces immediately after installing aluminum-framed entrance doors. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
- B. Clean glass immediately after installation. Comply with glass manufacturer's written recommendations for final cleaning and maintenance. Remove nonpermanent labels, and clean surfaces.
- C. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

**DISCLAIMER STATEMENT**

This guide specification is intended to be used by a qualified construction specifier. The guide specification is not intended to be verbatim as project specification without appropriate modifications for the specific use intended. The guide specification must be used and coordinated with the procedures of each design firm, and the particular requirements of a specific construction project.

**END OF SECTION 084113**