



HISTORIC DISTRICT REVIEW BOARD WORK SESSION AGENDA

Town Council Chambers Building
765 Lynn Street, Herndon, VA 20170

Wednesday, June 4, 2025 | 7:00 PM

- 1. Call to Order**
- 2. Public Hearings**
 - a. APPLICATION FOR AN ALTERATION TO AN EXISTING STRUCTURE, HDRB #25-002, to consider an application for a Certificate of Appropriateness for alterations to a civic building located at 777 Lynn Street, Herndon, Virginia.
- 3. Comments**
 - a. Comments from the Staff Members
 - b. Comments from the Board Members
- 4. Adjournment**

Agenda Item: APPLICATION FOR AN ALTERATION TO AN EXISTING STRUCTURE, HDRB #25-002, to consider an application for a Certificate of Appropriateness for alterations to a civic building located at 777 Lynn Street, Herndon, Virginia.

Meeting Date: June 4, 2025

Category: Public Hearings

Prepared by: Angelina Jones, Lead Planner / Design and Development

Description:

The subject application proposes to change the storefront framing and glass system at the east and west elevations of the Herndon Municipal Center (777 Lynn Street). The current system is designed to appear frameless. The east entrance features a central, revolving door flanked by two pairs of hinged glass doors. The west entrance features a single pair of hinged glass doors, also set within a frameless storefront system. The proposed design eliminates the central revolving door on the east elevation and introduces a visible aluminum framing system for both entrances. For additional information, please see the staff report.

Background:

The Herndon Municipal Center features a multi-story civic building constructed in 1995 that hosts offices and services of the Town of Herndon's government. The building is situated on a 2.4-acre site shared with the Fortnightly Library, which is managed by Fairfax County. For additional information, please see the staff report.

Fiscal Impact:

N/A

Staff Recommendation/Next Steps:

Staff is withholding a recommendation, pending discussion by the board at the work session.

Attachments:

1. Staff Report
2. Site Photos
3. Proposed Drawings
4. Material Catalog Sheets

STAFF REPORT

Agenda Item: APPLICATION FOR AN ALTERATION TO AN EXISTING STRUCTURE, HDRB #25-002, to consider an application for a Certificate of Appropriateness for alterations to a civic building located at 777 Lynn Street, Herndon, Virginia.

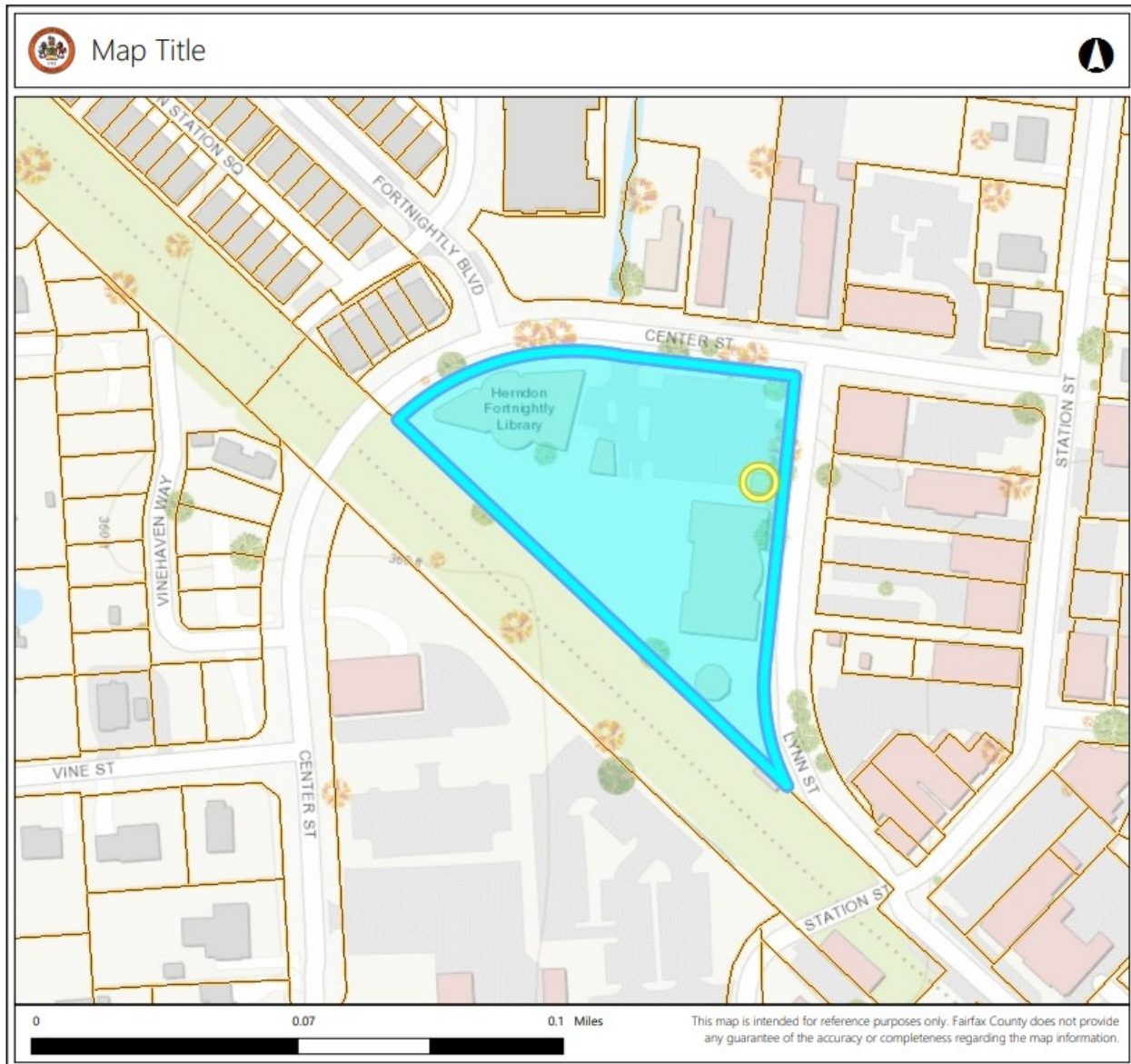
Meeting Date: June 4, 2025

Staff Contact: Angelina R. Jones, Lead Planner – Design & Development

Summary Information:

Proposed Modification	Replace storefront framing and glass system on east and west elevations		
Address	777 Lynn Street		
Fairfax County Tax Map Number	0162 02 0301A		
Owners	The Town of Herndon		
Applicant	The Town of Herndon		
Business/Organization	The Town of Herndon		
Property Use	Civic		
Zoning District	PD-D Planned Development - Downtown		
HDO Designation	Non-Contributing		
Adjacent Zoning	North: CC – Central Commercial District South: PD-TD – Planned Development – Traditional Downtown	East: CC – Central Commercial District West: PD-TD – Planned Development – Traditional Downtown	
Building Type(s)	Multi-story civic	Date of Construction:	1995
Architectural Style(s)	Post-Modern		
Exterior Material(s)	Primary material: brick in stretcher bond and coursed treatment; Secondary material: Concrete; Roof: asphalt shingle (3-tab); Window material: aluminum		
Neighborhood Design Profile	Existing commercial and office uses with some recreation along the W&OD Trail		
Comprehensive Plan Land Use Designation	Community Facilities		

Location Map:



Background & Site Description:

Site Description The property at 777 Lynn Street, known as the Herndon Municipal Center, features a multi-story civic building constructed in 1995 that hosts offices and services of the Town of Herndon’s government. The building is located on a 2.4-acre site, shared with the Fortnightly Library, which is managed by Fairfax County.

Architectural Style The Herndon Municipal Center is an example of Postmodern architecture (late 1960s-Present), a style that is characterized by the imitation or adaptation of traditional building styles and elements while employing new materials, forms, and/or combinations. The building at 777 Lynn Street draws on elements typical of Greek Revival buildings, such as entry portico supported by prominent columns, cornice emphasized by wide banding pattern, square cupola, and a symmetrically arranged façade. However, these characteristic elements are simplified and exaggerated, creating a familiar yet new form as is typical of the Postmodern style.



Storefront on the east elevation. Note the visual connection through the front of the building to the town green west of the building. Please see attachments for additional photographs. Source: Google Maps.

Case Details & Proposal:

The subject application proposes to change the storefront framing and glass system at the east and west elevations of the Herndon Municipal Center. The current system is designed to appear frameless. The east entrance features a central, revolving door flanked by two pairs of hinged glass doors. The west entrance features a single pair of hinged glass doors, also set within a frameless storefront system.

The proposed design eliminates the central revolving door on the east elevation and introduces a visible aluminum framing system. The proposed redesigned storefront uses components manufactured by Kawneer. The current design features framing that

is 2” in width and in Kawneer’s clear anodized finish (a cutsheet with a list of available finishes is included in the attachments).

Staff Analysis:

Zoning Ordinance Compliance

- Zoning Ordinance 78-60.3(f)(1) - Standards for Alterations
- Historic District Overlay Guidelines - Chapter 8, Windows and Doors

Staff has found that the proposed alterations meet the applicable standards and requirements of the Town of Herndon Zoning Ordinance.

Design Considerations

Staff recommend the following changes to the current design proposal:

- The new storefront design will introduce a visible framing system on the east and west elevations, a departure from the current frameless storefront design. The frameless storefront is meant to convey a sense of openness to the Herndon Municipal Center that represents the municipal government as transparent and open to participation of the Town’s residents. Staff therefore recommend that the framing finish be changed from clear anodized to black. This will cause the framing system to recede visually into the shadow of the entry porticos on either side of the building. This treatment is also consistent with the tinted window systems that flank each portico. The applicant’s architect has indicated that there are two different depth options for the Kawneer framing system in the black finish. Maintaining a narrow frame is important and all possible options for narrow frames should be explored.
- The proposed design features an etched band in the glazing at about halfway through the height of the doors. This design detail is carried over from the current storefront design, which includes an etched band at the height of the door handle. Staff recommend removing this etched band detail from the proposed design. The proposed visible framing system creates new visual divisions along the storefront that are not present in the current system. The etched band further breaks up an area of glazing that could be open, thereby increasing the overall feeling openness of the storefront.

- The glass used in the storefront will need to be as transparent as possible. Staff are requesting that the applicant submit a sample for staff review prior to procuring the material for installation.

- The doorframe and associated hardware should match the black finish of the framing system.

Historic District Review Board Alternatives:

The following alternatives are available to the HDRB for its decision on HDRB #25-002.

1. Approval as proposed
2. Approval with conditions
3. Denial on specific stated grounds
4. Continuance of the application to a future public hearing

Staff Recommendation:

Staff is withholding a recommendation, pending discussion of the above comments at the work session.









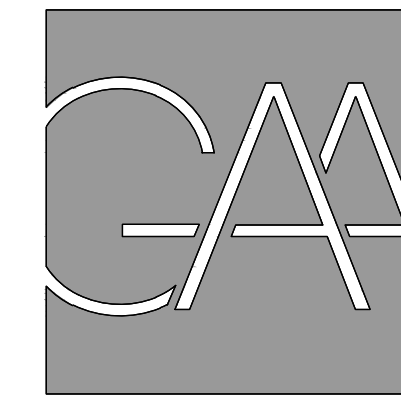
West Elevation - Interior Storefront System and Details, May 2025

TOWN OF HERNDON DEPARTMENT OF PUBLIC WORKS

HERNDON MUNICIPAL CENTER - STOREFRONT REPLACEMENT

777 LYNN ST, HERNDON, VA 20170
50% SET

04-10-2025



GAUTHIER
ALVARADO
ASSOCIATES

ARCHITECTURE | ENGINEERING | PLANNING
10201 FAIRFAX BOULEVARD, SUITE 225, FAIRFAX, VIRGINIA
703-241-2202 WWW.GAA-AE.COM

ABBREVIATIONS

ACS PNL ACCESS PANEL	MFR MANUFACTURER
ACST ACOUSTIC (AL)	MIN MINIMUM; MINUTE
ADJ ADJACENT; ADJUSTABLE	MISC MISCELLANEOUS
ADDL ADDITIONAL	MOUNTED
ADDM ADDENDUM	MTG MOUNTING
AFF ABOVE FINISH FLOOR	
AL ALUMINUM	N NORTH
ALT ALTERNATE	NIC NOT IN CONTRACT
ANSI AMERICAN NATIONAL STANDARDS	NO NUMBER
INSTITUTE	NOM NOMINAL
APPROX APPROXIMATE	NTS NOT TO SCALE
ARCH ARCHITECT (URAL)	
ASC ABOVE SUSPENDED CEILING	OC ON CENTER
ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS	OD OUTSIDE DIAMETER
	OPNG OPENING
	OPP OPPOSITE
	OVHD OVERHEAD
BAL BALANCE	
BD BOARD	
BITUM BITUMINOUS	PART PARTIAL
BLDG BUILDING	PL PLATE
BLKG BLOCKING	PLAM PLASTIC LAMINATE
BOT BOTTOM	PLBG PLUMBING
BRDG BRIDGING	PLYWD PLYWOOD
BS BOTH SIDES	PNL PANEL
BTWN BETWEEN	PTD PAINTED
	PTN PARTITION
CAB CABINET	QT QUARRY TILE
CAP CAPACITY	
CJ CONTROL JOINT	
CLG CEILING	R RADIUS; RISER
CLO CLOSET	REINF REINFORCEMENT
CLR CLEAR	REQD REQUIRED
CO CASED OPENING	RESIL RESILIENT
COL COLUMN	REV REVISION
CONC CONCRETE	RM ROOM
CONN CONNECTION	RO ROUGH OPENING
CONSTR CONSTRUCTION	
CONT CONTINUOUS	S SOUTH
CONTR CONTRACTOR	SAPC SUSPENDED ACOUSTICAL PANEL CEILING
COORD COORDINATE	SCHED SCHEDULE (D)
CPT CARPET (ED)	SCW SOLID CORE WOOD
CSK COUNTER SUNK	SECT SECTION
CT CERAMIC TILE	SF STOREFRONT; SQUARE FOOT
CJ COPPER	SIM SIMILAR
CW COLD WATER	SQ SQUARE
	SST STAINLESS STEEL
D DEPTH; DEEP	ST STREET
DBL DOUBLE	STD STANDARD
DET DETAIL	STL STEEL
DIA DIAMETER	STOR STORAGE
DIM DIMENSION	STRUCT STRUCTURE (AL)
DN DOWN	SUSP SUSPENDED
DR DOOR	SYMM SYMMETRY (ICAL)
DWG DRAWING	
	T/O TOP OF
E EAST	TEMP TEMPERATURE; TEMPORARY
EA EACH	THK THICK (NESS)
EE EACH END	THRU THROUGH
EF EACH FACE	TOW TOP OF WALL
EJ EXPANSION JOINT	TRTD TREATED
EI ELEVATION	TYP TYPICAL
ELEC ELECTRIC (AL)	
ELEV ELEVATOR	UL UNDERWRITER'S LABORATORIES
EMER EMERGENCY	UON UNLESS OTHERWISE NOTED
ENCL ENCLOSE (URE)	
EQ EQUAL	VCT VINYL COMPOSITION TILE
EQUIP EQUIPMENT	VERT VERTICAL
EW EACH WAY	
EWC ELECTRIC WATER COOLER	W WIDTH; WASTE; WEST; WIRE
EXH EXHAUST	W/ WITH
EXIST EXISTING	W/O WITHOUT
EXP EXPOSED; EXPANSION	WD WOOD
EXT EXTERIOR; EXTINGUISHER	WDW WINDOW
	WP WATERPROOF (ING); WORK POINT
F FAHRENHEIT	WT WEIGHT
F/O FACE OF	
FA FIRE ALARM	
FD FLOOR DRAIN	
FDTN FOUNDATION	
FE FIRE EXTINGUISHER	
FH FIRE HYDRANT	
FIN FINISH (ED)	
FLR FLOOR	
FLUOR FLUORESCENT	
FR FIRE RESISTANT	
FRTW FIRE RETARDANT TREATED WOOD	
FT FOOT, FEET	
FTG FOOTING	
FLRG FLURRING (ED)	
GA GAGE	
GALV GALVANIZED	
GL GLASS	
GYP GYPSUM	
HC HANDICAP	
HCW HOLLOW CORE WOOD	
HDW HARDWARE	
HM HOLLOW METAL	
HORIZ HORIZONTAL	
HPT HIGH POINT	
HT HEIGHT	
HVAC HEATING/VENTILATING/AIR CONDITIONING	
HW HOT WATER	
ID INSIDE DIAMETER	
INCL INCLUDE (D), (ING)	
INFO INFORMATION	
INSUL INSULATION; INSULATED	
INT INTERIOR	
JAN JANITOR	
JST JOIST	
JT JOINT	
L LONG; LENGTH	
LAB LABORATORY	
LAM LAMINATE (D)	
LBS POUNDS	
LF LINEAR FEET	
MACH MACHINE	
MATL MATERIAL	
MAX MAXIMUM	
MDF MEDIUM DENSITY FIBERBOARD	
MECH MECHANICAL	
MED MEDIUM	
MTL METAL	

GENERAL NOTES

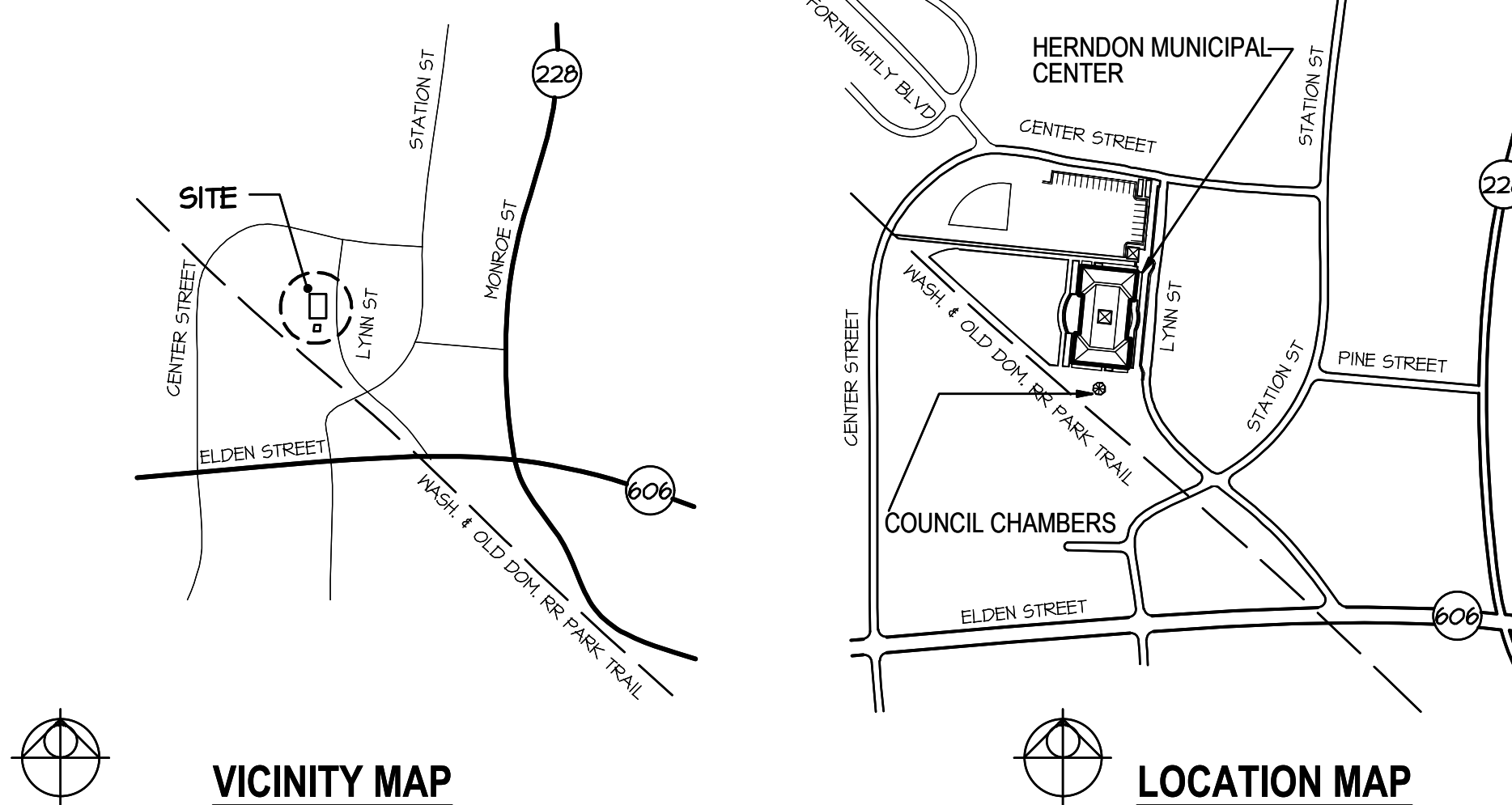
- WORK SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL GOVERNING ORDINANCES, CODES AND REGULATIONS. ALL MATERIALS SHALL COMPLY WITH APPLICABLE CODES, ORDINANCES AND REGULATIONS.
- VISIT AND BECOME FAMILIAR WITH THE SITE AND BUILDING PRIOR TO BID. INCLUDE THE COST OF ALL WORK DESCRIBED IN THE CONTRACT DOCUMENTS AND THAT IS REQUIRED OF REASONABLY IMPLIED TO ACHIEVE THE DESIGN INTENT OF THE CONTRACT DOCUMENTS.
- NOTIFY THE ARCHITECT OF ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND THE NEW WORK, OF ANY OMISSIONS OR CONFLICTS IN THE DRAWINGS AND ANY RESTRICTIONS RELATED TO THE EXECUTION OF THE WORK INCLUDING THE COORDINATION WITH OTHER TRADES.
- COORDINATE AND WORK WITH ALL TRADES ON THE PROJECT NOT UNDER CONTRACT TO THE CONTRACTOR. ANY CHANGES OR DELAYS ARISING FROM CONFLICTS BETWEEN TRADES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- FIELD VERIFY ALL CONDITIONS AND DIMENSIONS INDICATED AND NOTIFY THE ARCHITECT OF ANY VARIATION PRIOR TO THE PURCHASING OF MATERIALS, FABRICATION OR CONSTRUCTION OF ANY ITEM.
- ALL REASONABLY INFERRED CONDITIONS, NOT OTHERWISE INDICATED IN THESE CONDITIONS DOCUMENTS SHALL BE INTERPRETED AS HAVING THE SAME MEANING AS THOSE MOST SIMILARLY DETAILED AND MORE FULLY DEFINED ELSEWHERE WITHIN THESE DOCUMENTS. NOTIFY THE ARCHITECT IN CLARIFICATIONS ARE REQUIRED. THE CONTRACTOR SHALL BE LIABLE IF INAPPROPRIATE INTERPRETATIONS CONFLICT WITH OTHER ELEMENTS OF THE WORK.
- PROTECT EXISTING ADJACENT AREAS FROM DAMAGE DURING EXECUTION OF THE WORK. ALL ITEMS DAMAGED DURING THE WORK SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ADJACENT AREAS OF THE EXISTING FACILITY WILL REMAIN IN OPERATION WHILE WORK IS BEING DONE. ALL WORK SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE, AND SHALL BE SEQUENCED AND PERFORMED IN A MANNER TO MINIMIZE ANY IMPACTS ON EXISTING FACILITY OPERATIONS.

POINTS OF CONTACT

ARCHITECT:
GAUTHIER, ALVARADO & ASSOCIATES
10201 FAIRFAX BLVD, SUITE 225, FAIRFAX, VA 22030
TELEPHONE: 703-241-2202

ARCHITECT OF RECORD:
STEPHANIE STEIN 703-241-2202

MAPS



INDEX OF DRAWINGS

T001	COVER SHEET
T002	GENERAL NOTES & SPECIFICATIONS
ARCHITECTURAL	
A101	DEMOLITION FLOOR PLAN
A102	FLOOR PLAN
A201	EXTERIOR ELEVATIONS
A501	DOOR SCHEDULE AND DETAILS

SYMBOLS

LOBBY	ROOM DESIGNATION	BUILDING SECTION LETTER
101	ROOM NUMBER	A101 A501
1	KEY NOTE	SHEET WHERE DRAWN
1	REVISION NUMBER	SHEET WHERE CUT
A	COLUMN DESIGNATION	SECTION NUMBER
		A101 A501
		DETAIL NUMBER
		1 A101 A501

MATERIALS

EARTH	METAL (LARGE SCALE)	INSULATION (BATT OR LOOSE)
GRAVEL	METAL (SMALL SCALE)	INSULATION (RIGID)
CONCRETE	PLYWOOD	GYPSUM BOARD, CEMENT, GROUT
BRICK	WOOD (FINISHED)	CERAMIC TILE, ACOUSTICAL TILE
CONCRETE MASONRY UNIT	WOOD (ROUGH)	

BUILDING DATA

EXISTING BUILDING INFORMATION
OCCUPANT LOAD: REMAINS UNCHANGED

USE GROUP CLASSIFICATION
GROUP B-BUSINESS

CONSTRUCTION CLASSIFICATION
TYPE 2B, NON-COMBUSTIBLE
BUILDING IS AUTOMATIC SPRINKLERED THROUGHOUT

APPLICABLE CODES

2021 VIRGINIA UNIFORM STATEWIDE BUILDING CODE
2021 VIRGINIA EXISTING BUILDING CODE, LEVEL 2 ALTERATIONS PER SECTION 601
2021 VIRGINIA FIRE PREVENTION CODE
2021 VIRGINIA PLUMBING CODE
2021 VIRGINIA ENERGY CONSERVATION CODE
2021 VIRGINIA MECHANICAL CODE
2020 NFPA 70 NATIONAL ELECTRIC CODE
2017 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES (ICC/ANSI A117.1)

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GAUTHIER, ALVARADO AND ASSOCIATES

DRAWING NUMBER

T001

GENERAL NOTES

- SUBSTITUTIONS: NO SUBSTITUTIONS OF MATERIALS WILL BE ALLOWED WHERE A MANUFACTURER IS SPECIFIED. WHERE THE TERM "OR APPROVED EQUAL" IS USED, THE ARCHITECT, TENANT AND TENANT'S REPRESENTATIVE ALONE SHALL DETERMINE QUALITY BASED UPON COMPLETE INFORMATION SUBMITTED BY THE CONTRACTOR. SUBSTITUTIONS SHALL NOT BE MADE UNLESS DRAWINGS AND/OR CUT SHEETS ARE SUBMITTED TO THE ARCHITECT FOR APPROVAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE PROPOSED SUBSTITUTIONS COMPLY WITH ALL SPECIFICATIONS.
- ALL PROPOSED SUBSTITUTIONS SHALL BE REVIEWED BY THE ARCHITECT AND HE/SHE SHALL HAVE THE FINAL AUTHORITY TO ACCEPT OR REJECT SUBSTITUTIONS AS "EQUAL" TO THE SPECIFIED ITEM OR ASSEMBLY. IF THE GENERAL CONTRACTOR DOES NOT IDENTIFY AND RECEIVE APPROVAL FOR SUBSTITUTIONS, THEN THE ARCHITECT RETAINS THE RIGHT TO DEMAND THAT THE PRODUCT OR CONSTRUCTION METHOD ORIGINALLY SPECIFIED BE INSTALLED WITHOUT ADDITIONAL COST TO THE TENANT.
- THE GENERAL CONTRACTOR SHALL PROVIDE A PROPOSED CONSTRUCTION SCHEDULE SHOWING THE PHASING OF THE WORK AND THE TIME REQUIRED FOR EACH ELEMENT OF EACH PHASE WITH THE BID. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY LONG LEAD ITEMS THAT WILL AFFECT THE DATE OF SUBSTANTIAL COMPLETION AND PROVIDE ALTERNATE SOURCES PRIOR TO BEGINNING WORK.

SELECTIVE DEMOLITION NOTES:

- MAINTAIN AND PROTECT EXISTING UTILITIES TO REMAIN IN SERVICE BEFORE PROCEEDING WITH DEMOLITION, PROVIDING BYPASS CONNECTION TO OTHER PARTS OF THE BUILDING.
- LOCATE, IDENTIFY, SHUTOFF, DISCONNECT AND CAP OFF UTILITY SERVICES TO BE DEMOLISHED.
- CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO PREVENT INJURY TO PEOPLE AND DAMAGE ADJACENT BUILDINGS AND SITE IMPROVEMENTS.
- PROTECT REMAINING WALLS, CEILINGS, FLOORS AND EXPOSED FINISHES. ERECT AND MAINTAIN DUSTPROOF PARTITIONS, COVER AND PROTECT REMAINING FURNITURE, FURNISHINGS AND EQUIPMENT.
- PROMPTLY PATCH AND REPAIR HOLES AND DAMAGED SURFACES OF BUILDING CAUSED BY DEMOLITION. RESTORE EXPOSED FINISHES OF PATCHED AREAS AND EXTEND FINISH RESTORATION INTO REMAINING ADJOINING CONSTRUCTION.

SEALANT NOTES:

- PROVIDE JOINT SEALANTS, BACKINGS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY JOINT-SEALANT MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.
- DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS UNDER THE FOLLOWING CONDITIONS: WHEN AMBIENT AND SEALANT TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT-SEALANT MANUFACTURER OR ARE BELOW 40 DEG F WHEN JOINT SUBSTRATES ARE WET, WHERE JOINT WIDTHS ARE LESS THAN THOSE ALLOWED BY JOINT-SEALANT MANUFACTURER FOR APPLICATIONS INDICATED, WHERE CONTAMINANTS CAPABLE OF INTERFERING WITH ADHESION HAVE NOT YET BEEN REMOVED FROM JOINT SUBSTRATES.
- COLORS OF EXPOSED JOINT SEALANTS: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
- SILICONE, NONSTAINING, S, NS, 50, NT, NONSTAINING, SINGLE-COMPONENT, NONSAG, PLUS 50 PERCENT AND MINUS 50 PERCENT MOVEMENT CAPABILITY, NONTRAFFIC-USE, NEUTRAL-CURING SILICONE JOINT SEALANT; ASTM C920, TYPE S, GRADE NS, CLASS 50, USE NT.
- CYLINDRICAL SEALANT BACKINGS: ASTM C1330, TYPE C (CLOSED-CELL MATERIAL WITH A SURFACE SKIN), AND OF SIZE AND DENSITY TO CONTROL SEALANT DEPTH AND OTHERWISE CONTRIBUTE TO PRODUCING OPTIMUM SEALANT PERFORMANCE.
- BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MANUFACTURER FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT. PROVIDE SELF-ADHESIVE TAPE WHERE APPLICABLE.
- PRIMER: MATERIAL RECOMMENDED BY JOINT-SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS AND FIELD TESTS.
- CLEANERS FOR NONPOROUS SURFACES: CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR HARMING JOINT SUBSTRATES AND ADJACENT NONPOROUS SURFACES IN ANY WAY, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS TO JOINT SUBSTRATES.
- MASKING TAPE: NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS.
- PROTECT JOINT SEALANTS DURING AND AFTER CURING PERIOD FROM CONTACT WITH CONTAMINATING SUBSTANCES AND FROM DAMAGE RESULTING FROM CONSTRUCTION OPERATIONS OR OTHER CAUSES SO SEALANTS ARE WITHOUT DETERIORATION OR DAMAGE AT TIME OF SUBSTANTIAL COMPLETION. IF, DESPITE SUCH PROTECTION, DAMAGE OR DETERIORATION OCCURS, CUT OUT, REMOVE, AND REPAIR DAMAGED OR DETERIORATED JOINT SEALANTS IMMEDIATELY SO INSTALLATIONS WITH REPAIRED AREAS ARE INDISTINGUISHABLE FROM ORIGINAL WORK.

ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS NOTES:

- OBTAIN ALL COMPONENTS OF ALUMINUM-FRAMED ENTRANCE AND STOREFRONT SYSTEM, INCLUDING FRAMING AND ACCESSORIES, FROM SINGLE MANUFACTURER.
- MANUFACTURER AND INSTALLER AGREE TO REPAIR OR REPLACE COMPONENTS OF ALUMINUM-FRAMED ENTRANCE AND STOREFRONT SYSTEMS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: STRUCTURAL FAILURES, INCLUDING FAULTY OPERATION OF DOORS AND DOOR HARDWARE, DETERIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL WEATHERING AND/OR USE. WARRANTY PERIOD: TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
- COMPLY WITH PERFORMANCE REQUIREMENTS SPECIFIED, AS DETERMINED BY TESTING OF ALUMINUM-FRAMED ENTRANCE AND STOREFRONT SYSTEMS REPRESENTING THOSE INDICATED FOR THIS PROJECT WITHOUT FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION.
- ALUMINUM-FRAMED ENTRANCE AND STOREFRONT SYSTEMS TO WITHSTAND MOVEMENTS OF SUPPORTING STRUCTURE, INCLUDING, BUT NOT LIMITED TO, TWIST, COLUMN SHORTENING, LONG-TERM CREEP, AND DEFLECTION FROM UNIFORMLY DISTRIBUTED AND CONCENTRATED LIVE LOADS. FAILURE ALSO INCLUDES THE FOLLOWING: THERMAL STRESSES TRANSFERRING TO BUILDING STRUCTURE, GLASS BREAKAGE, NOISE OR VIBRATION CREATED BY WIND AND THERMAL AND STRUCTURAL MOVEMENTS, LOOSENING OR WEAKENING OF FASTENERS, ATTACHMENTS, AND OTHER COMPONENTS, FAILURE OF OPERATING UNITS.
- ENTRANCE DOOR HARDWARE SCHEDULE: PREPARED BY OR UNDER 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.
- STRUCTURAL LOADS: WIND LOADS: 30 PSF
- DEFLECTION OF FRAMING MEMBERS SUPPORTING GLASS: AT DESIGN WIND LOAD, AS FOLLOWS: DEFLECTION NORMAL TO WALL PLANE: LIMITED TO 1/175 OF CLEAR SPAN FOR SPANS OF UP TO 13 FEET 6 INCHES.
- DEFLECTION PARALLEL TO GLAZING PLANE: LIMITED TO AMOUNT NOT EXCEEDING THAT WHICH REDUCES GLAZING BITE TO LESS THAN 75 PERCENT OF DESIGN DIMENSION AND THAT WHICH REDUCES EDGE CLEARANCE BETWEEN FRAMING MEMBERS AND GLAZING OR OTHER FIXED COMPONENTS TO LESS THAN 1/8 INCH.
- WATER PENETRATION UNDER STATIC PRESSURE: TEST IN ACCORDANCE WITH ASTM E331 AS FOLLOWS: NO EVIDENCE OF WATER PENETRATION THROUGH FIXED GLAZING AND FRAMING AREAS, INCLUDING ENTRANCE DOORS, WHEN TESTED IN ACCORDANCE WITH A MINIMUM STATIC-AIR-PRESSURE DIFFERENTIAL OF 20 PERCENT OF POSITIVE WIND-LOAD DESIGN PRESSURE, BUT NOT LESS THAN 6.24 LBF/SQ. FT.
- WATER PENETRATION UNDER DYNAMIC PRESSURE: TEST IN ACCORDANCE WITH AAMA 501.1 AS FOLLOWS: NO EVIDENCE OF WATER PENETRATION THROUGH FIXED GLAZING AND FRAMING AREAS WHEN TESTED AT DYNAMIC PRESSURE EQUAL TO 20 PERCENT OF POSITIVE WIND-LOAD DESIGN PRESSURE, BUT NOT LESS THAN 6.24 LBF/SQ. FT.

ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS NOTES CONTINUED

- MAXIMUM WATER LEAKAGE: IN ACCORDANCE WITH AAMA 501.1. WATER LEAKAGE DOES NOT INCLUDE WATER CONTROLLED BY FLASHING AND GUTTERS, OR WATER THAT IS DRAINED TO EXTERIOR.
- THERMAL TRANSMITTANCE (U-FACTOR): FIXED GLAZING AND FRAMING AREAS: U-FACTOR FOR THE SYSTEM OF NOT MORE THAN 0.36 BTU/SQ. FT. X H X DEG F AS DETERMINED IN ACCORDANCE WITH NFRC 100. ENTRANCE DOORS: U-FACTOR OF NOT MORE THAN 0.63 BTU/SQ. FT. X H X DEG F AS DETERMINED IN ACCORDANCE WITH NFRC 100.
- SOLAR HEAT-GAIN COEFFICIENT (SHGC): FIXED GLAZING AND FRAMING AREAS: SHGC FOR THE SYSTEM OF NOT MORE THAN 0.58 AS DETERMINED IN ACCORDANCE WITH NFRC 200. ENTRANCE DOORS: SHGC OF NOT MORE THAN 0.53 AS DETERMINED IN ACCORDANCE WITH NFRC 200.
- AIR LEAKAGE: FIXED GLAZING AND FRAMING AREAS: AIR LEAKAGE FOR THE SYSTEM OF NOT MORE THAN 0.06 CFM/SQ. FT. AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 1.57 LBF/SQ. FT. WHEN TESTED IN ACCORDANCE WITH ASTM E283. ENTRANCE DOORS: AIR LEAKAGE OF NOT MORE THAN 1.0 CFM/SQ. FT. AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 1.57 LBF/SQ. FT.
- CONDENSATION RESISTANCE FACTOR (CRF): FIXED GLAZING AND FRAMING AREAS: CRF FOR THE SYSTEM OF NOT LESS THAN 55 AS DETERMINED IN ACCORDANCE WITH AAMA 1503. ENTRANCE DOORS: CRF OF NOT LESS THAN 57 AS DETERMINED IN ACCORDANCE WITH AAMA 1503.
- THERMAL MOVEMENTS: ALLOW FOR THERMAL MOVEMENTS RESULTING FROM AMBIENT AND SURFACE TEMPERATURE CHANGES. TEMPERATURE CHANGE: 120 DEG F, AMBIENT; 180 DEG F, MATERIAL SURFACES.
- MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY THE FOLLOWING: KAWNEER COMPANY, INC.; ARCONIC CORPORATION. BASIS OF DESIGN: TRIFAB VERSAGLAZE 601UT.
- FRAMING MEMBERS: MANUFACTURER'S EXTRUDED- OR FORMED-ALUMINUM FRAMING MEMBERS OF THICKNESS REQUIRED AND REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS.
- EXTERIOR FRAMING CONSTRUCTION: THERMALLY BROKEN AND THERMALLY IMPROVED. FABRICATION METHOD: SCREW-SPLINE.
- GLAZING SYSTEM: RETAINED MECHANICALLY WITH GASKETS ON FOUR SIDES. GLAZING PLANE: CENTER.
- FINISH: CLEAR ANODIC FINISH. AAMA 611, AA-M12C22A41, CLASS 1, 0.018 MM OR THICKER.
- ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED.
- STEEL REINFORCEMENT: AS REQUIRED BY MANUFACTURER.
- BACKER PLATES: MANUFACTURER'S STANDARD, CONTINUOUS BACKER PLATES FOR FRAMING MEMBERS, IF NOT INTEGRAL, WHERE FRAMING ABUTS ADJACENT CONSTRUCTION.
- BRACKETS AND REINFORCEMENTS: MANUFACTURER'S STANDARD HIGH-STRENGTH ALUMINUM WITH NONSTAINING, NONFERROUS SHIMS FOR ALIGNING SYSTEM COMPONENTS.
- DOOR CONSTRUCTION: BASIS OF DESIGN: 250T INSULPOUR THERMAL ENTRANCE. 2 TO 2-1/4-INCH OVERALL THICKNESS, WITH MINIMUM 0.125-INCH- THICK, EXTRUDED-ALUMINUM TUBULAR RAIL AND STILE MEMBERS, MECHANICALLY FASTEN CORNERS WITH REINFORCING BRACKETS THAT ARE DEEPLY PENETRATED AND FILLET WELDED OR THAT INCORPORATE CONCEALED TIE RODS, NARROW STILE: 2-1/2-INCH NOMINAL WIDTH.
- THERMAL CONSTRUCTION: HIGH-PERFORMANCE PLASTIC CONNECTORS SEPARATE ALUMINUM MEMBERS EXPOSED TO THE EXTERIOR FROM MEMBERS EXPOSED TO THE INTERIOR.
- GLAZING STOPS AND GASKETS: BEVELED, SNAP-ON, EXTRUDED-ALUMINUM STOPS AND PREFORMED GASKETS. PROVIDE NONREMOVABLE GLAZING STOPS ON OUTSIDE OF DOOR.
- DOOR FINISH: MATCH ADJACENT STOREFRONT FRAMING FINISH.
- ENTRANCE DOOR HARDWARE SETS: PROVIDE QUANTITY, ITEM, SIZE, FINISH OR COLOR INDICATED, AND PRODUCTS EQUIVALENT IN FUNCTION AND COMPARABLE IN QUALITY TO NAMED PRODUCTS.
- SEQUENCE OF OPERATION: PROVIDE ELECTRIFIED DOOR HARDWARE FUNCTION, SEQUENCE OF OPERATION, AND INTERFACE WITH OTHER BUILDING CONTROL SYSTEMS INDICATED.
- OPENING-FORCE REQUIREMENTS: EGRESS DOORS: NOT MORE THAN 15 LBF TO RELEASE THE LATCH AND NOT MORE THAN 30 LBF TO SET THE DOOR IN MOTION.
- CONTINUOUS-GEAR HINGES: BHMA A156.26.
- NARROW-STILE AUXILIARY LOCKS: ANSIBHMA A156.36, GRADE 1, WITH STRIKE THAT SUITS NARROW STILE FRAME.
- ELECTROMAGNETIC LOCKS: ANSIBHMA A156.23; ELECTRICALLY POWERED; WITH ELECTROMAGNET ATTACHED TO FRAME AND ARMATURE PLATE ATTACHED TO DOOR; FULL-EXTERIOR OR FULL-INTERIOR TYPE, AS REQUIRED BY APPLICATION INDICATED.
- CYLINDERS: BHMA A156.5, GRADE 1. KEYING: MASTER KEY OR GRAND MASTER KEY LOCKS TO OWNER'S EXISTING SYSTEM.
- STRIKES: PROVIDE STRIKE WITH BLACK-PLASTIC DUST BOX FOR EACH LATCH OR LOCK BOLT; FABRICATED FOR ALUMINUM FRAMING.
- OPERATING TRIM: BHMA A156.6.
- CLOSERS: BHMA A156.4, GRADE 1, WITH ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION, SIZED AS REQUIRED BY DOOR SIZE, EXPOSURE TO WEATHER, AND ANTICIPATED FREQUENCY OF USE; ADJUSTABLE TO COMPLY WITH FIELD CONDITIONS AND REQUIREMENTS FOR OPENING FORCE.
- WEATHER STRIPPING: MANUFACTURER'S STANDARD REPLACEABLE COMPONENTS. COMPRESSION TYPE: MADE OF ASTM D2000 MOLDED NEOPRENE OR ASTM D2287 MOLDED PVC.
- WEATHER SWEEPS: MANUFACTURER'S STANDARD EXTERIOR-DOOR BOTTOM SWEEP WITH CONCEALED FASTENERS ON MOUNTING STRIP.
- THRESHOLDS: BHMA A156.21 RAISED THRESHOLDS BEVELED WITH A SLOPE OF NOT MORE THAN 1:2, WITH MAXIMUM HEIGHT OF 1/2 INCH.
- SHEET AND PLATE: ASTM B209.
- EXTRUDED BARS, RODS, PROFILES, AND TUBES: ASTM B221.
- STRUCTURAL PROFILES: ASTM B308/B308M.
- STEEL REINFORCEMENT: STRUCTURAL SHAPES, PLATES, AND BARS: ASTM A36/A36M. COLD-ROLLED SHEET AND STRIP: ASTM A1008/A1008M. HOT-ROLLED SHEET AND STRIP: ASTM A1011/A1011M.
- MANUFACTURER'S STANDARD ZINC-RICH, CORROSION-RESISTANT PRIMER COMPLYING WITH SSPC-PS GUIDE NO. 12.00; APPLIED IMMEDIATELY AFTER SURFACE PREPARATION AND PRETREATMENT. SELECT SURFACE PREPARATION METHODS IN ACCORDANCE WITH RECOMMENDATIONS IN SSPC-SP COM, AND PREPARE SURFACES IN ACCORDANCE WITH APPLICABLE SSPC STANDARD.
- MANUFACTURER'S STANDARD CORROSION-RESISTANT, NONSTAINING, NONBLEEDING FASTENERS AND ACCESSORIES COMPATIBLE WITH ADJACENT MATERIALS. USE SELF-LOCKING DEVICES WHERE FASTENERS ARE SUBJECT TO LOOSENING OR TURNING OUT FROM THERMAL AND STRUCTURAL MOVEMENTS, WIND LOADS, OR VIBRATION. REINFORCE MEMBERS AS REQUIRED TO RECEIVE FASTENER THREADS.

ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS NOTES CONTINUED

- PROVIDE THREE-WAY ADJUSTABLE ANCHORS WITH MINIMUM ADJUSTMENT OF 1 INCH THAT ACCOMMODATE FABRICATION AND INSTALLATION TOLERANCES IN MATERIAL AND FINISH COMPATIBLE WITH ADJOINING MATERIALS AND RECOMMENDED BY MANUFACTURER.
- CONCEALED FLASHING: MANUFACTURER'S STANDARD CORROSION-RESISTANT, NONSTAINING, NONBLEEDING FLASHING COMPATIBLE WITH ADJACENT MATERIALS.
- BITUMINOUS PAINT: COLD-APPLIED ASPHALT-MASTIC PAINT CONTAINING NO ASBESTOS, FORMULATED FOR 30-MIL THICKNESS PER COAT.
- RIGID PVC FILLER.
- FORM OR EXTRUDE ALUMINUM SHAPES BEFORE FINISHING.
- FABRICATE COMPONENTS THAT, WHEN ASSEMBLED, HAVE THE FOLLOWING CHARACTERISTICS: PROFILES THAT ARE SHARP, STRAIGHT, AND FREE OF DEFECTS OR DEFORMATIONS, ACCURATELY FITTED JOINTS WITH ENDS COPEDED OR MITERED, PHYSICAL AND THERMAL ISOLATION OF GLAZING FROM FRAMING MEMBERS, ACCOMMODATIONS FOR THERMAL AND MECHANICAL MOVEMENTS OF GLAZING AND FRAMING TO MAINTAIN REQUIRED GLAZING EDGE CLEARANCES, PROVISIONS FOR FIELD REPLACEMENT OF GLAZING FROM EXTERIOR, FASTENERS, ANCHORS, AND CONNECTION DEVICES THAT ARE CONCEALED FROM VIEW TO GREATEST EXTENT POSSIBLE.
- MECHANICALLY GLAZED FRAMING MEMBERS: FABRICATE FOR FLUSH GLAZING WITHOUT PROJECTING STOPS.
- STOREFRONT FRAMING: FABRICATE COMPONENTS FOR ASSEMBLY USING HEAD-AND-SILL-RECEPTOR SYSTEM.
- ENTRANCE DOOR FRAMES: REINFORCE AS REQUIRED TO SUPPORT LOADS IMPOSED BY DOOR OPERATION AND FOR INSTALLING ENTRANCE DOOR HARDWARE. AT EXTERIOR DOORS, PROVIDE COMPRESSION WEATHER STRIPPING AT FIXED STOPS.
- ENTRANCE DOORS: REINFORCE DOORS AS REQUIRED FOR INSTALLING ENTRANCE DOOR HARDWARE. AT PAIRS OF EXTERIOR DOORS, PROVIDE SLIDING-TYPE WEATHER STRIPPING RETAINED IN ADJUSTABLE STRIP AND MORTISED INTO DOOR EDGE, AT EXTERIOR DOORS, PROVIDE WEATHER SWEEPS APPLIED TO DOOR BOTTOMS.
- ENTRANCE DOOR HARDWARE INSTALLATION: FACTORY INSTALL ENTRANCE DOOR HARDWARE TO THE GREATEST EXTENT POSSIBLE. CUT, DRILL, AND TAP FOR FACTORY-INSTALLED ENTRANCE DOOR HARDWARE BEFORE APPLYING FINISHES. AFTER FABRICATION, CLEARLY MARK COMPONENTS TO IDENTIFY THEIR LOCATIONS IN PROJECT IN ACCORDANCE WITH SHOP DRAWINGS.
- EXAMINE AREAS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLATION.
- DO NOT INSTALL DAMAGED COMPONENTS.
- FIT JOINTS TO PRODUCE HAIRLINE JOINTS FREE OF BURRS AND DISTORTION, RIGIDLY SECURE NONMOVEMENT JOINTS.
- INSTALL ANCHORS WITH SEPARATORS AND ISOLATORS TO PREVENT METAL CORROSION AND ELECTROLYTIC DETERIORATION AND TO PREVENT IMPEDING MOVEMENT OF MOVING JOINTS.
- SEAL PERIMETER AND OTHER JOINTS WATERTIGHT UNLESS OTHERWISE INDICATED.
- METAL PROTECTION: WHERE ALUMINUM IS IN CONTACT WITH DISSIMILAR METALS, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH MATERIALS RECOMMENDED BY MANUFACTURER FOR THIS PURPOSE OR BY INSTALLING NONCONDUCTIVE SPACERS. WHERE ALUMINUM IS IN CONTACT WITH CONCRETE OR MASONRY, PROTECT AGAINST CORROSION BY PAINTING CONTACT SURFACES WITH BITUMINOUS PAINT.
- SET CONTINUOUS SILL MEMBERS AND FLASHING IN FULL SEALANT BED TO PRODUCE WEATHERTIGHT INSTALLATION.
- INSTALL JOINT FILLER BEHIND SEALANT AS RECOMMENDED BY SEALANT MANUFACTURER.
- INSTALL COMPONENTS PLUMB AND TRUE IN ALIGNMENT WITH ESTABLISHED LINES AND GRADES. INSTALL OPERABLE UNITS LEVEL AND PLUMB, SECURELY ANCHORED, AND WITHOUT DISTORTION. ADJUST WEATHER-STRIPPING CONTACT AND HARDWARE MOVEMENT TO PRODUCE PROPER OPERATION.
- INSTALL ENTRANCE DOORS TO PRODUCE SMOOTH OPERATION AND TIGHT FIT AT CONTACT POINTS. INSTALL EXTERIOR DOORS TO PRODUCE WEATHERTIGHT ENCLOSURE AND TIGHT FIT AT WEATHER STRIPPING.
- INSTALL ALUMINUM-FRAMED ENTRANCE AND STOREFRONT SYSTEMS TO COMPLY WITH THE FOLLOWING MAXIMUM TOLERANCES: PLUMB: 1/8 INCH IN 10 FEET; 1/4 INCH IN 40 FEET. LEVEL: 1/8 INCH IN 20 FEET; 1/4 INCH IN 40 FEET.
- WHERE SURFACES ABUT IN LINE OR ARE SEPARATED BY REVEAL OR PROTRUDING ELEMENT UP TO 1/2 INCH WIDE, LIMIT OFFSET FROM TRUE ALIGNMENT TO 1/16 INCH. WHERE SURFACES ARE SEPARATED BY REVEAL OR PROTRUDING ELEMENT FROM 1/2 TO 1 INCH WIDE, LIMIT OFFSET FROM TRUE ALIGNMENT TO 1/8 INCH. WHERE SURFACES ARE SEPARATED BY REVEAL OR PROTRUDING ELEMENT OF 1 INCH WIDE OR MORE, LIMIT OFFSET FROM TRUE ALIGNMENT TO 1/4 INCH.
- LIMIT VARIATION FROM PLANE TO 1/8 INCH IN 12 FEET; 1/2 INCH OVER TOTAL LENGTH.

SWINGING AUTOMATIC ENTRANCES NOTES:

- POWER-ASSIST AND LOW-ENERGY DOOR STANDARD: BHMA A156.19.
- WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF AUTOMATIC ENTRANCES THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: STRUCTURAL FAILURES INCLUDING, BUT NOT LIMITED TO, EXCESSIVE DEFLECTION, FAULTY OPERATION OF OPERATORS, CONTROLS, AND HARDWARE, DETERIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL WEATHERING AND USE.
- OPENING FORCE: NOT MORE THAN 15 LBF REQUIRED TO RELEASE A LATCH IF PROVIDED, NOT MORE THAN 30 LBF REQUIRED TO MANUALLY SET DOOR IN MOTION, AND NOT MORE THAN 15 LBF REQUIRED TO FULLY OPEN DOOR IF POWER FAILS.
- ENTRAPMENT-PREVENTION FORCE: NOT MORE THAN 15 LBF REQUIRED TO PREVENT STOPPED DOOR FROM CLOSING OR OPENING.
- PROVIDE MANUFACTURER'S STANDARD SWINGING, POWER-ASSIST AND LOW-ENERGY, POWER-OPERATED AUTOMATIC ENTRANCES, INCLUDING DOORS, FRAMING, HEADERS, DOOR OPERATORS, CONTROLS, AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
- OPERATION: LOW-ENERGY, POWER OPERATED.
- CONFIGURATION, PAIR: PAIR OF SWINGING DOORS WITH TRANSOM.
- TRAFFIC PATTERN: TWO WAY.
- OPERATOR FEATURES: POWER OPENING AND POWER-ASSIST SPRING CLOSING. ADJUSTABLE OPENING AND CLOSING SPEEDS. ADJUSTABLE HOLD-OPEN TIME BETWEEN ZERO AND 30 SECONDS. ADJUSTABLE BACKCHECK AND LATCHING. OBSTRUCTION RECYCLE. AUTOMATIC DOOR RE-OPEN IF STOPPED WHILE CLOSING. ON-OFF/HOLD-OPEN SWITCH TO CONTROL ELECTRIC POWER TO OPERATOR, KEY OPERATED.
- PROVIDE SIGNAGE AS REQUIRED BY CITED BHMA STANDARD. PROVIDE SIGN MATERIALS WITH INSTRUCTIONS FOR FIELD APPLICATION AFTER GLAZING IS INSTALLED. APPLY SIGNAGE ON BOTH SIDES OF EACH DOOR, AS REQUIRED BY CITED BHMA STANDARD FOR DIRECTION OF PEDESTRIAN TRAVEL.

SWINGING AUTOMATIC ENTRANCES NOTES CONTINUED

- PROVIDE OPERATORS AND CONTROLS, WHICH INCLUDE ACTIVATION AND SAFETY DEVICES, IN ACCORDANCE WITH BHMA STANDARDS, FOR CONDITION OF EXPOSURE, AND FOR LONG-TERM, MAINTENANCE-FREE OPERATION UNDER NORMAL TRAFFIC LOAD FOR TYPE OF OCCUPANCY INDICATED.
- PROVIDE DOOR OPERATORS OF SIZE RECOMMENDED BY MANUFACTURER FOR DOOR SIZE, WEIGHT, AND MOVEMENT.
- DOOR OPERATOR PERFORMANCE: DOOR OPERATORS OPEN AND CLOSE DOORS AND MAINTAIN THEM IN FULLY CLOSED POSITION WHEN SUBJECTED TO PROJECT'S DESIGN WIND LOADS.
- ELECTROMECHANICAL OPERATORS: CONCEALED, SELF-CONTAINED, OVERHEAD UNITS POWERED BY FRACTIONAL-HORSEPOWER, PERMANENT-MAGNET DC MOTOR, WITH CLOSING SPEED CONTROLLED MECHANICALLY BY GEAR TRAIN AND DYNAMICALLY BY BRAKING ACTION OF ELECTRIC MOTOR; WITH SOLID-STATE MICROPROCESSOR CONTROLLER; COMPLYING WITH UL 325; AND WITH MANUAL OPERATION WITH POWER OFF.
- WIRING WITHIN AUTOMATIC ENTRANCE ENCLOSURES: BUNDLE, LACE, AND TRAIN CONDUCTORS TO TERMINAL POINTS WITH NO EXCESS AND WITHOUT EXCEEDING MANUFACTURER'S WRITTEN LIMITATIONS ON BENDING RADII. PROVIDE AND USE LACING BARS AND DISTRIBUTION SPOOLS.
- ADJUST HARDWARE, MOVING PARTS, DOOR OPERATORS, AND CONTROLS TO FUNCTION SMOOTHLY, AND LUBRICATE AS RECOMMENDED BY MANUFACTURER, COMPLY WITH REQUIREMENTS OF APPLICABLE BHMA STANDARDS. ADJUST EXTERIOR DOORS FOR TIGHT CLOSURE.
- READJUST DOOR OPERATORS AND CONTROLS AFTER REPEATED OPERATION OF COMPLETED INSTALLATION EQUIVALENT TO THREE DAYS' USE BY NORMAL TRAFFIC (100 TO 300 CYCLES).
- OCCUPANCY ADJUSTMENTS: WHEN REQUESTED WITHIN 12 MONTHS OF DATE OF SUBSTANTIAL COMPLETION, PROVIDE ON-SITE ASSISTANCE IN ADJUSTING SYSTEM TO SUIT ACTUAL OCCUPIED CONDITIONS. PROVIDE UP TO TWO VISITS TO PROJECT DURING OTHER-THAN-NORMAL OCCUPANCY HOURS FOR THIS PURPOSE.

GLAZING NOTES:

- COMPLY WITH PUBLISHED RECOMMENDATIONS OF GLASS PRODUCT MANUFACTURERS AND ORGANIZATIONS BELOW UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED. SEE THESE PUBLICATIONS FOR GLAZING TERMS NOT OTHERWISE DEFINED IN THIS SECTION OR IN REFERENCED STANDARDS.
- MANUFACTURER'S SPECIAL WARRANTY FOR INSULATING GLASS: MANUFACTURER AGREES TO REPLACE INSULATING-GLASS UNITS THAT DETERIORATE WITHIN SPECIFIED WARRANTY PERIOD. DETERIORATION OF INSULATING GLASS IS DEFINED AS FAILURE OF HERMETIC SEAL UNDER NORMAL USE THAT IS NOT ATTRIBUTED TO GLASS BREAKAGE OR TO MAINTAINING AND CLEANING INSULATING GLASS CONTRARY TO MANUFACTURER'S WRITTEN INSTRUCTIONS. EVIDENCE OF FAILURE IS OBSTRUCTION OF VISION BY DUST, MOISTURE, OR FILM ON INTERIOR SURFACES OF GLASS. WARRANTY PERIOD: 10 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
- INSTALLED GLAZING SYSTEMS SHALL WITHSTAND NORMAL THERMAL MOVEMENT AND WIND AND IMPACT LOADS (WHERE APPLICABLE) WITHOUT FAILURE, INCLUDING LOSS OR GLASS BREAKAGE ATTRIBUTABLE TO DEFECTIVE MANUFACTURE, FABRICATION, OR INSTALLATION, FAILURE OF SEALANTS OR GASKETS TO REMAIN WATERTIGHT AND AIRTIGHT; DETERIORATION OF GLAZING MATERIALS; OR OTHER DEFECTS IN CONSTRUCTION.
- WHERE SAFETY GLAZING IS INDICATED, PERMANENTLY MARK GLAZING WITH CERTIFICATION LABEL OF THE SGCC. LABEL SHALL INDICATE MANUFACTURER'S NAME, TYPE OF GLASS, THICKNESS, AND SAFETY GLAZING STANDARD WITH WHICH GLASS COMPLIES.
- PERMANENTLY MARKED EITHER ON SPACERS OR ON AT LEAST ONE COMPONENT LITE OF UNITS WITH APPROPRIATE CERTIFICATION LABEL OF THE IGCC.
- PROVIDE GLAZING THAT COMPLIES WITH 16 CFR 1201, CATEGORY II.
- PROVIDE GLASS WITH PERFORMANCE PROPERTIES SPECIFIED, AS INDICATED IN MANUFACTURER'S PUBLISHED TEST DATA, BASED ON PROCEDURES INDICATED BELOW: FOR INSULATING-GLASS UNITS, PROPERTIES ARE BASED ON UNITS OF THICKNESS INDICATED FOR OVERALL UNIT AND FOR EACH LITE. U-FACTORS: CENTER-OF-GLAZING VALUES, IN ACCORDANCE WITH NFRC 100 AND BASED ON MOST CURRENT NON-BETA VERSION OF LBL'S WINDOW COMPUTER PROGRAM, EXPRESSED AS BTU/SQ. FT. X H X DEG F. SHGC AND VISIBLE TRANSMITTANCE: CENTER-OF-GLAZING VALUES, IN ACCORDANCE WITH NFRC 200 AND BASED ON MOST CURRENT NON-BETA VERSION OF LBL'S WINDOW COMPUTER PROGRAM. VISIBLE REFLECTANCE: CENTER-OF-GLAZING VALUES, IN ACCORDANCE WITH NFRC 300.
- FULLY TEMPERED FLOAT GLASS: ASTM C1048, KIND FT (FULLY TEMPERED), CONDITION A (UNCOATED) UNLESS OTHERWISE INDICATED, TYPE I, CLASS 1 (CLEAR) AS INDICATED, QUALITY-Q3.
- INSULATING-GLASS UNITS: FACTORY-ASSEMBLED UNITS CONSISTING OF SEALED LITES OF GLASS SEPARATED BY A DEHYDRATED INTERSPACE, QUALIFIED IN ACCORDANCE WITH ASTM E2190, 1-INCH WIDTH.
- PROVIDE SEALANT COMPATIBLE WITH ONE ANOTHER AND WITH OTHER MATERIALS THEY CONTACT, INCLUDING GLASS PRODUCTS, SEALS OF INSULATING-GLASS UNITS, AND GLAZING CHANNEL SUBSTRATES, UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY SEALANT MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
- BACK-BEDDING MASTIC GLAZING TAPES: PREFORMED, BUTYL-BASED, 100 PERCENT SOLIDS ELASTOMERIC TAPE; NONSTAINING AND NONMIGRATING IN CONTACT WITH NONPOROUS SURFACES; WITH OR WITHOUT SPACER ROD AS RECOMMENDED IN WRITING BY TAPE AND GLASS MANUFACTURERS FOR APPLICATION INDICATED; AND COMPLYING WITH ASTM C1281 AND AAMA 800 FOR PRODUCTS.
- PROVIDE PRODUCTS OF MATERIAL, SIZE, AND SHAPE COMPLYING WITH REFERENCED GLAZING STANDARD, RECOMMENDED IN WRITING BY MANUFACTURERS OF GLASS AND OTHER GLAZING MATERIALS FOR APPLICATION INDICATED, AND WITH A PROVEN RECORD OF COMPATIBILITY WITH SURFACES CONTACTED IN INSTALLATION.
- CLEANERS, PRIMERS, AND SEALERS: TYPES RECOMMENDED BY SEALANT OR GASKET MANUFACTURER.
- SETTING BLOCKS: TYPE RECOMMENDED IN WRITING BY SEALANT OR GLASS MANUFACTURER.
- SPACERS: WARM-EDGE TYPE SPACER RECOMMENDED IN WRITING BY SEALANT OR GLASS MANUFACTURER TO MEET PERFORMANCE REQUIREMENTS.
- EDGE BLOCKS: TYPE RECOMMENDED IN WRITING BY SEALANT OR GLASS MANUFACTURER.
- COMPLY WITH COMBINED WRITTEN INSTRUCTIONS OF MANUFACTURERS OF GLASS, SEALANTS, GASKETS, AND OTHER GLAZING MATERIALS, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED, INCLUDING THOSE IN REFERENCED PUBLICATIONS.
- PROTECT GLASS EDGES FROM DAMAGE DURING HANDLING AND INSTALLATION. REMOVE DAMAGED GLASS FROM PROJECT SITE AND LEGALLY DISPOSE OF OFF PROJECT SITE. DAMAGED GLASS INCLUDES GLASS WITH EDGE DAMAGE OR OTHER IMPERFECTIONS THAT, WHEN INSTALLED, COULD WEAKEN GLASS, IMPAIR PERFORMANCE, OR IMPAIR APPEARANCE.
- BASIS-OF-DESIGN PRODUCT FOR GL-1: PILKINGTON ENERGY ADVANTAGE ON #2 SURFACE, PILKINGTON ENERGY ADVANTAGE ON THE #4 SURFACE. OVERALL UNIT THICKNESS IS 1 INCH. MINIMUM THICKNESS OF EACH GLASS LITE IS 1/4 INCH.
- OUTDOOR AND INDOOR LITE: LOW-IRON FULLY TEMPERED FLOAT GLASS.
- INTERSPACE CONTENT: AIR.
- LOW-E COATING: PYROLYTIC ON SECOND AND FOURTH SURFACES.
- PERFORMANCE REQUIREMENTS: WINTER NIGHTTIME U-FACTOR 0.26 MAXIMUM. SUMMER DAYTIME U-FACTOR 0.24 MAXIMUM. VISIBLE LIGHT TRANSMITTANCE 88 PERCENT MINIMUM. SHGC 0.58 MAXIMUM.



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PROJECT TITLE

TOWN OF
HERNDON

HERNDON, VA

MUNICIPAL
CENTER -
STOREFRONT
REPLACEMENT

REVISIONS

NO.	DATE	DESCRIPTION

GAA PROJECT NO. 785 E4

DRAWN BY AAW

CHECKED BY KS

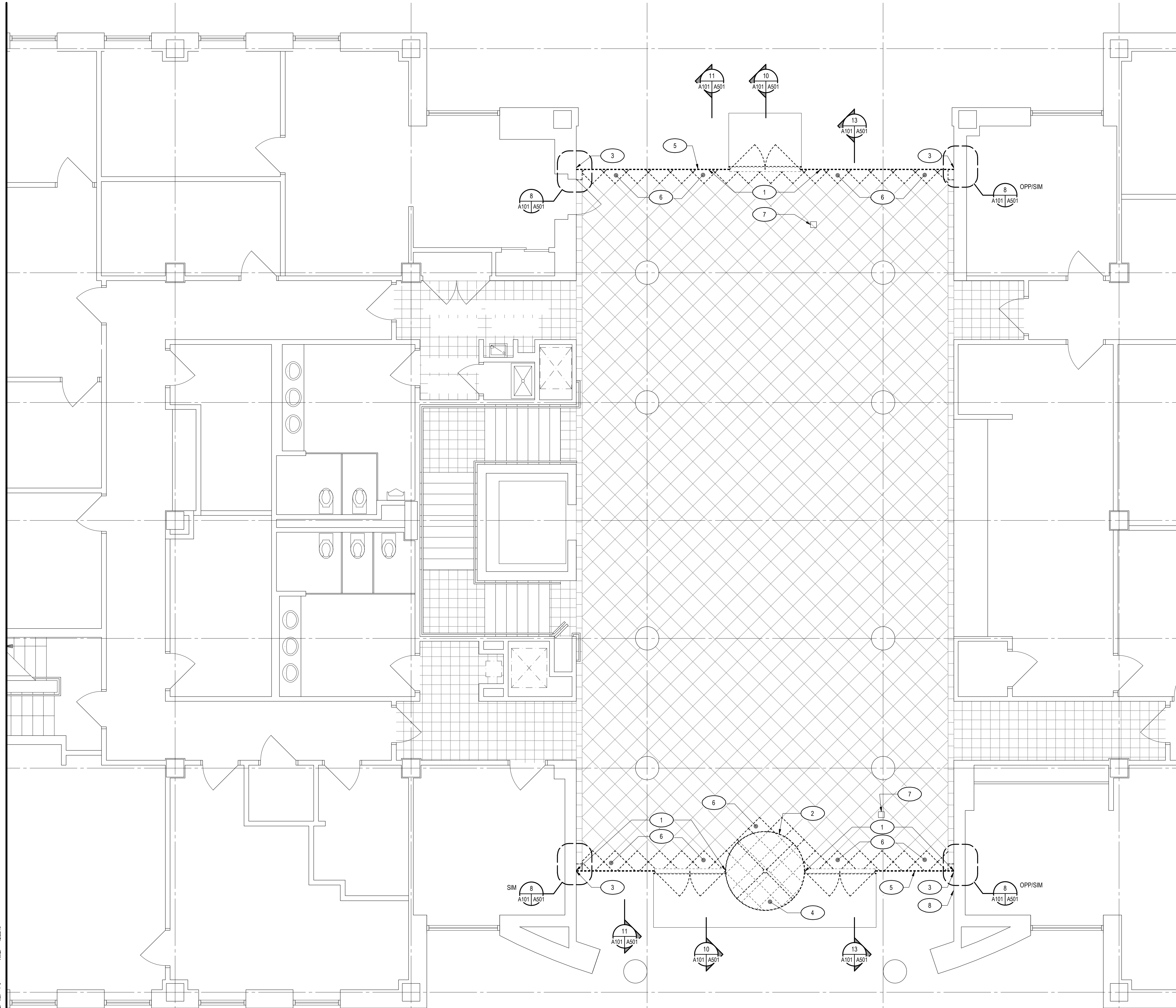
DATE FEBRUARY 28, 2025

DRAWING TITLE

PROJECT STATUS

50% SET

DRAWING NUMBER



GENERAL DEMOLITION NOTES

1. THIS PLAN IS NOT A COMPLETE REPRESENTATION OF ALL THE EXISTING CONDITIONS. THIS PLAN IS SCHEMATIC IN NATURE AND INTENDS TO SHOW THE GENERAL EXTENT AND LAYOUT OF THE EXISTING FACILITY.
2. REMOVE EXISTING CONSTRUCTION CLEANLY AND LEAVE EXISTING CONSTRUCTION TO REMAIN READY TO RECEIVE NEW WORK.
3. REMOVE EXISTING CONSTRUCTION, INCLUDING MECHANICAL, PLUMBING, ELECTRICAL WORK ETC., AS NECESSARY AND WHEREVER NECESSARY TO PROVIDE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

LEGEND:

- PARTITION / CONSTRUCTION TO REMAIN
- DOOR AND FRAME TO REMAIN
- REMOVE PARTITION / CONSTRUCTION
- REMOVE DOOR AND FRAME
- REMOVE PARTITION, DOOR AND FRAME

NEW WORK KEY NOTES

- 1. REMOVE STOREFRONT SYSTEM, INCLUDING BUT NOT LIMITED TO MULLIONS, RECESSED CHANNELS, GLAZING, DOORS, DOOR HARDWARE, VERTICAL GLASS FIN SUPPORTS AND ASSOCIATED ITEMS.
- 2. REMOVE REVOLVING DOOR, RECESSED CHANNELS, DOOR HARDWARE AND ASSOCIATED ITEMS
- 3. REMOVE EXTERIOR PLASTER AS REQUIRED TO ACCESS RECESSED METAL CHANNEL
- 4. REMOVE TILE SET WITHIN THE REVOLVING DOOR FRAME
- 5. REMOVE AND SALVAGE SIGNAGE ADHERED TO GLAZING. DOCUMENT LOCATION WHERE SIGNAGE WAS REMOVED.
- 6. REMOVE (1) ROW OF TILE, SAWCUT JOINT
- 7. EXISTING BOLLARD WITH REQUEST TO EXIT BUTTON TO REMAIN, PROTECT IN PLACE DURING CONSTRUCTION
- 8. EXISTING CARD READER TO REMAIN, PROTECT IN PLACE DURING CONSTRUCTION



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PROJECT TITLE

**TOWN OF
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HERNDON, VA

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REPLACEMENT**

REVISIONS

NO.	DATE	DESCRIPTION

GAA PROJECT NO. 785 E4

DRAWN BY AAW

CHECKED BY KS

DATE APRIL 10, 2025

DRAWING TITLE

**ARCHITECTURAL
DEMOLITION FLOOR PLAN**

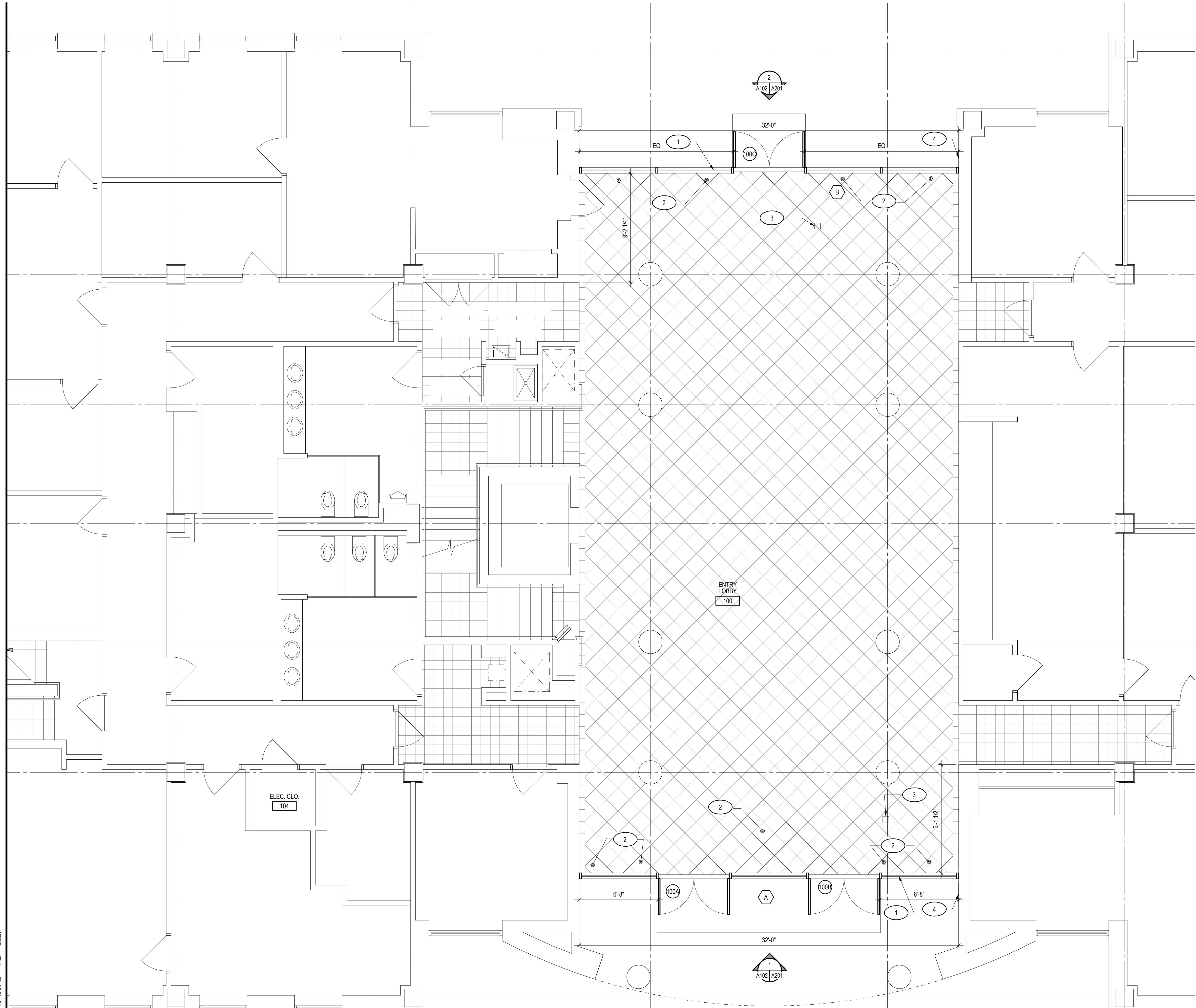
PROJECT STATUS

50% SET

DRAWING NUMBER

A101

DATE 08/20/25
 TIME 12:48:40
 DRAWN BY AAW
 SCALE 1/8" = 1'-0"



FLOOR PLAN
1/4" = 1'-0"

GENERAL PLAN NOTES

- 1. REFER TO A501 FOR STOREFRONT TYPES

LEGEND:

- LOBBY ROOM DESIGNATION
- 101 ROOM NUMBER
- 1 DOOR WITH DOOR NUMBER
- 1 PARTITION TYPE
- 1 KEY NOTE NUMBER
- T-1 FLOOR TRANSITION DESIGNATION
- WALL ELEVATION NUMBER
- 4 3 2 1 A401 SHEET WHERE DRAWN (IF NOT THE SAME)

NEW WORK KEY NOTES

- 1 REINSTALL SALVAGED SIGNAGE IN THE SAME LOCATION WHERE IT WAS REMOVED
- 2 INSTALL TILE, FINISH TO MATCH EXISTING, TOOTH TILE INTO EXISTING JOINT PATTERN.
- 3 EXISTING BOLLARD WITH REQUEST TO EXIT BUTTON TO REMAIN, PROTECT IN PLACE DURING CONSTRUCTION
- 4 EXISTING CARD READER TO REMAIN, PROTECT IN PLACE DURING CONSTRUCTION



**GAUTHIER
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GAUTHIER, ALVARADO AND ASSOCIATES

PROJECT TITLE

**TOWN OF
HERNDON
HERNDON, VA**

**MUNICIPAL
CENTER -
STOREFRONT
REPLACEMENT**

REVISIONS

NO.	DATE	DESCRIPTION

GAA PROJECT NO. 785 E4
DRAWN BY AAW
CHECKED BY KS
DATE FEBRUARY 28, 2025

DRAWING TITLE

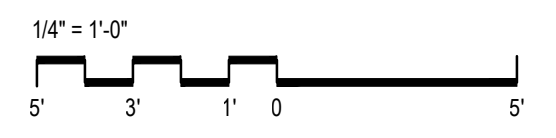
**ARCHITECTURAL
FLOOR PLAN**

PROJECT STATUS

50% SET

DRAWING NUMBER

A102



DRAWN BY: AAW
 DATE: 02/28/25
 TIME: 12:48:46
 SCALE: 1/4" = 1'-0"



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PROJECT TITLE

TOWN OF
HERNDON

HERNDON, VA

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REVISIONS

NO.	DATE	DESCRIPTION

GAA PROJECT NO. 785 E4

DRAWN BY AAW

CHECKED BY KS

DATE FEBRUARY 28, 2025

DRAWING TITLE

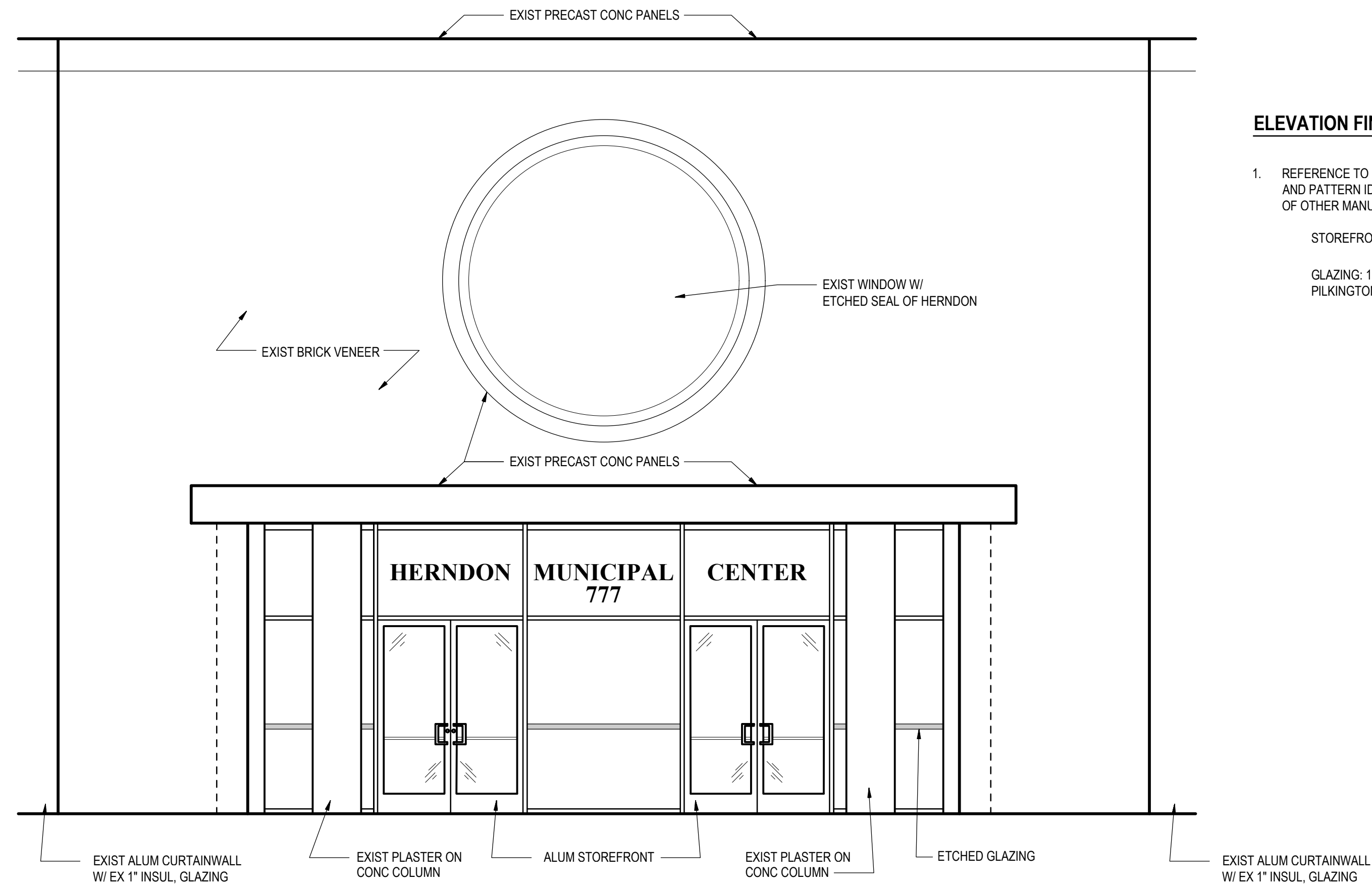
**ARCHITECTURAL
EXTERIOR ELEVATIONS**

PROJECT STATUS

50% SET

DRAWING NUMBER

A201



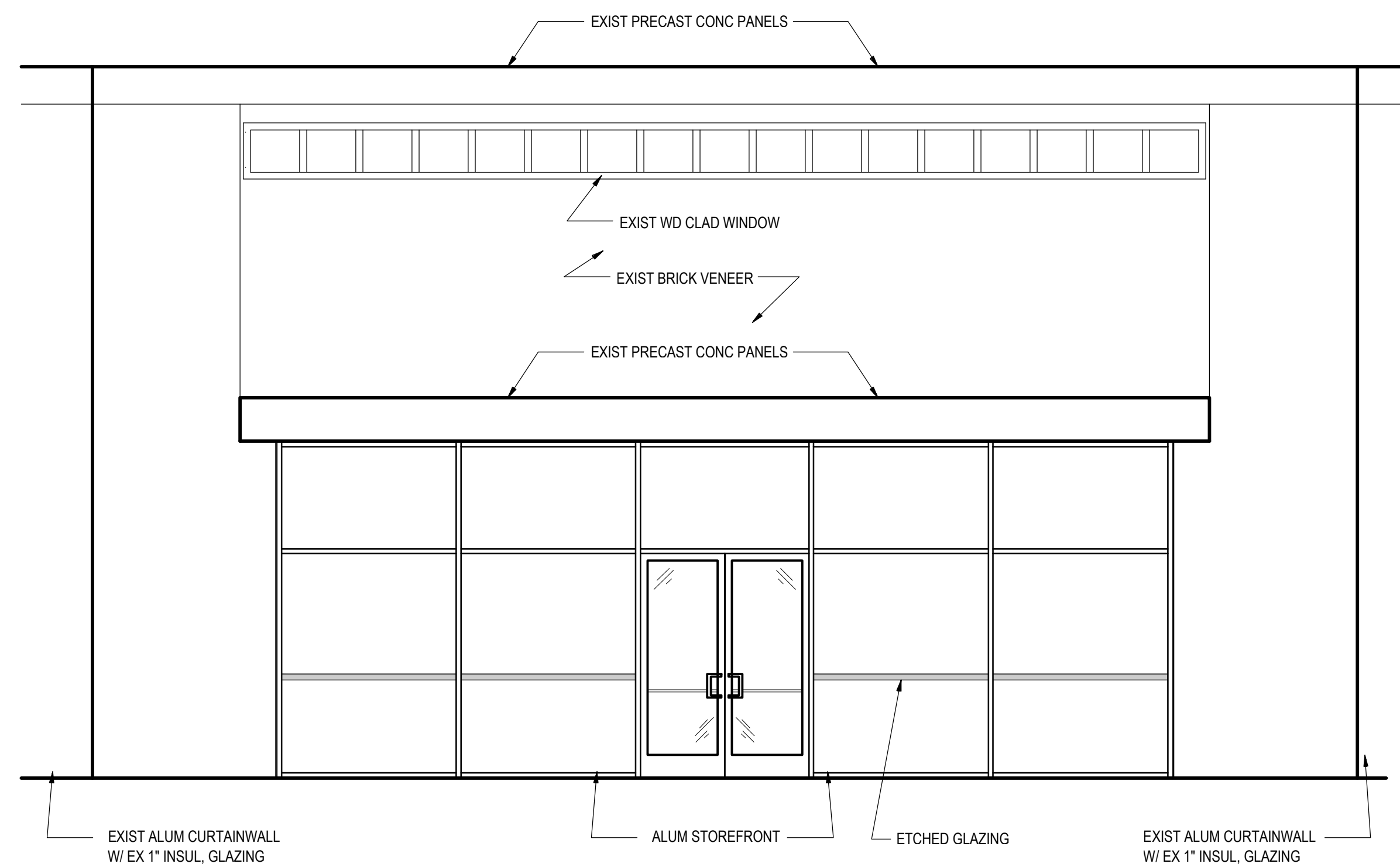
ELEVATION FINISH NOTES

- REFERENCE TO MANUFACTURER'S NAME AND DESIGNATIONS ARE FOR COLOR AND PATTERN IDENTIFICATION ONLY AND ARE NOT INTENDED TO LIMIT SELECTION OF OTHER MANUFACTURER'S PRODUCTS.

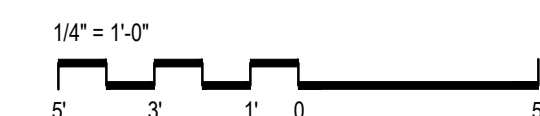
STOREFRONT FRAMING: CLEAR ANODIZED

GLAZING: 1" INSULATING GLASS UNIT, 2 LOW-IRON CLEAR GLASS LITES WITH PILKINGTON ENERGY ADVANTAGE ON #2 AND #4 SURFACES

1 PARTIAL EAST ELEVATION
1/4" = 1'-0"



2 PARTIAL WEST ELEVATION
1/4" = 1'-0"





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PROJECT TITLE

TOWN OF HERNDON

HERNDON, VA

MUNICIPAL CENTER - STOREFRONT REPLACEMENT

REVISIONS

Table with columns: NO., DATE, DESCRIPTION

GAA PROJECT NO. 785 E4

DRAWN BY AAW

CHECKED BY KS

DATE APRIL 10, 2025

DRAWING TITLE

ARCHITECTURAL DOOR SCHEDULE AND DETAILS

PROJECT STATUS

50% SET

DRAWING NUMBER

A501

FILE NAME: AH01-D

DOOR SCHEDULE

Table with columns: NO, SIZE, DOOR TYPE, DOOR MATL, FRAME MATL, JAMB DET, HEAD DET, LABEL, HOW SET NO, THR DET, LOUVER, REMARKS

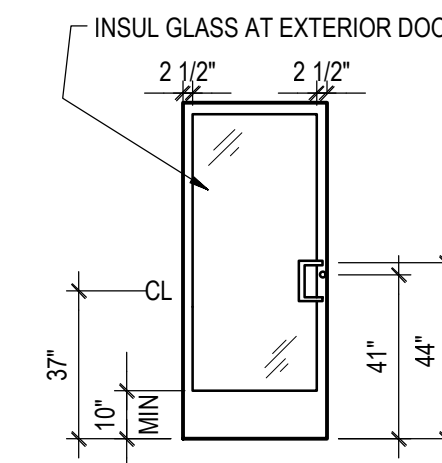
EXTERIOR

HARDWARE SET 01 - PAIR

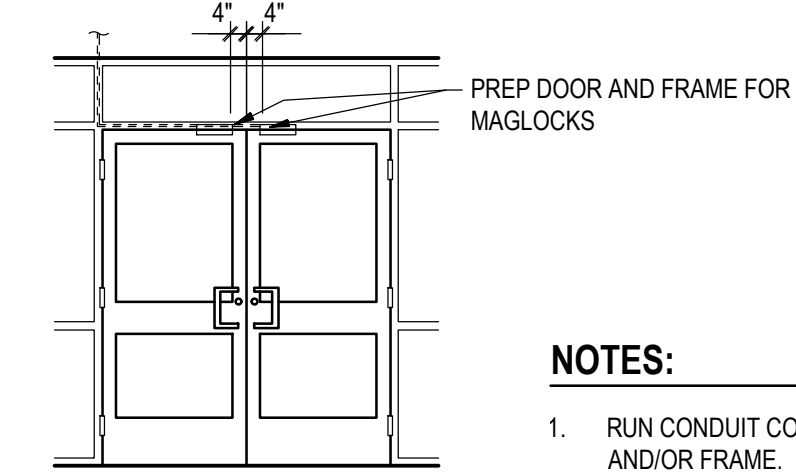
Table listing hardware items for Set 01: CONTINUOUS GEARED HINGES, PULLS, PUSH, KEYED CYLINDER, DEADBOLT, LOW ENERGY OPERATORS, WEATHERSTRIPPING, DOOR SWEEP, THRESHOLD.

HARDWARE SET 02 - PAIR, ACCESS CONTROL

Table listing hardware items for Set 02: CONTINUOUS GEARED HINGES, PULLS, PUSH, KEYED CYLINDER, LOW ENERGY OPERATORS, WEATHERSTRIPPING, DOOR SWEEP, THRESHOLD, REQUEST TO EXIT PUSH BUTTON, CARD READER.



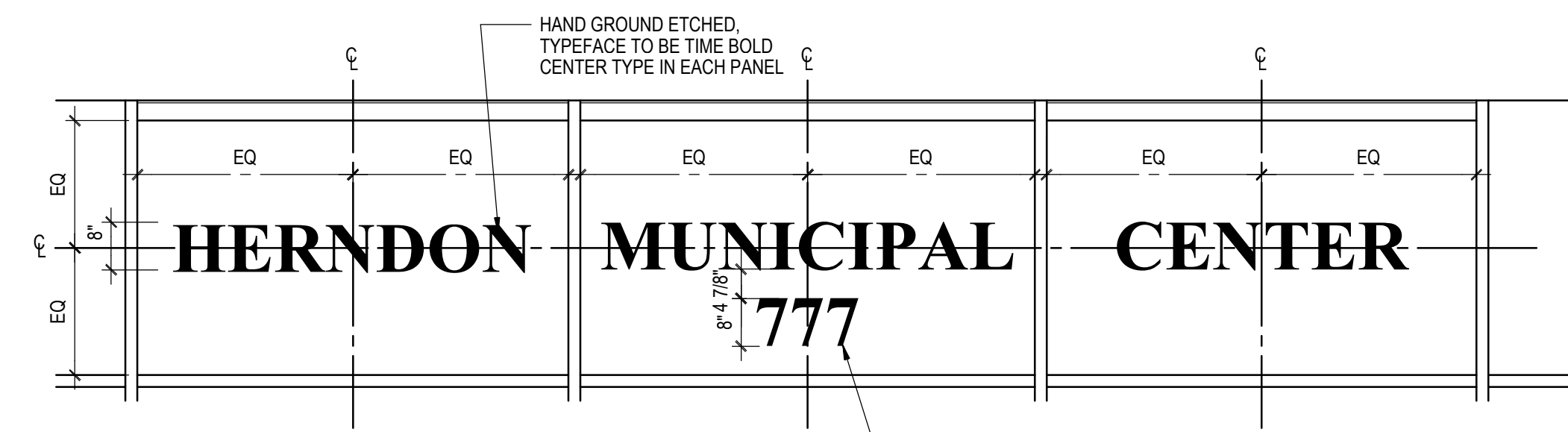
DOOR TYPES



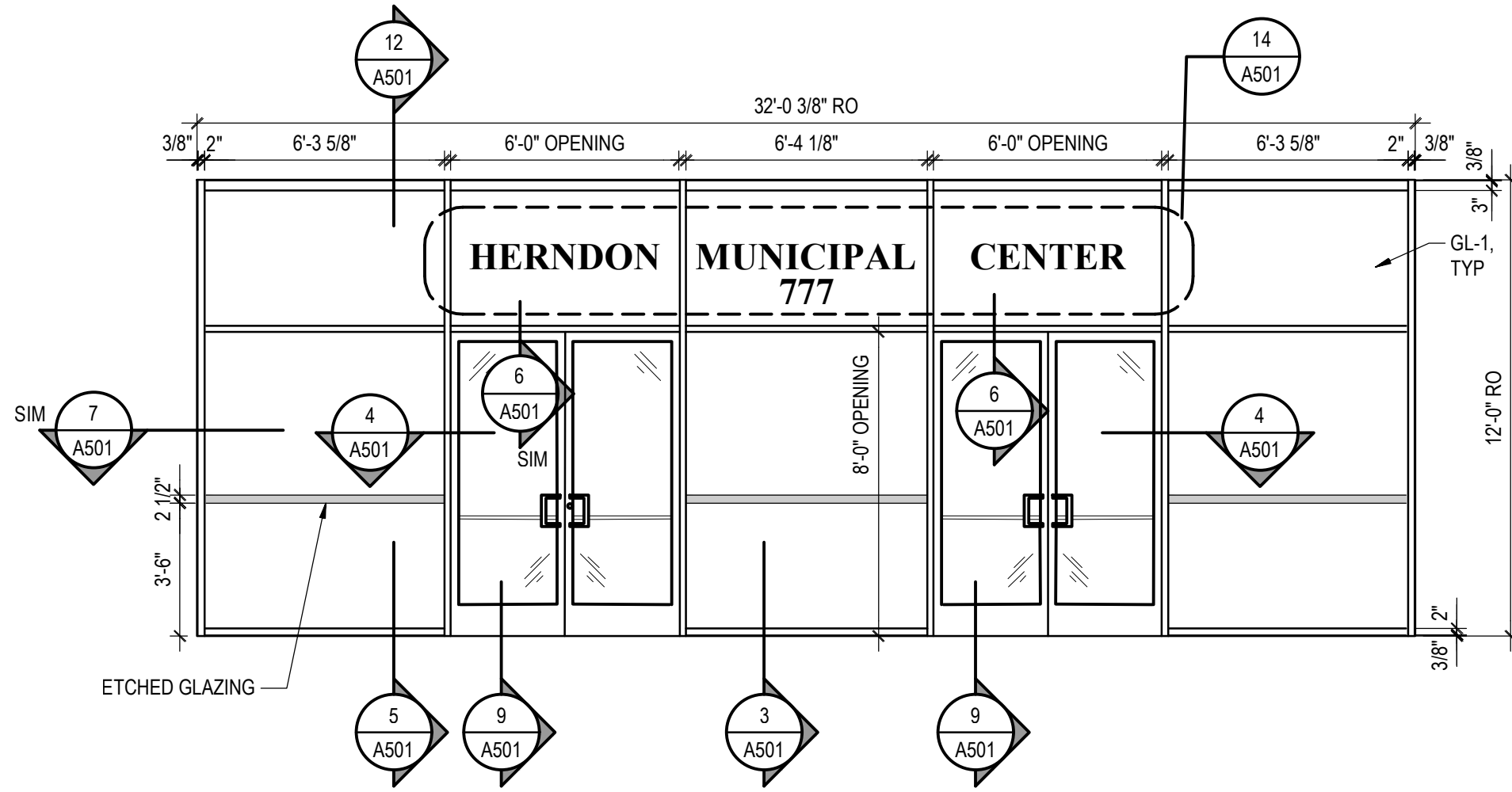
ACCESS CONTROL MOUNTING DETAILS

NOTES:

- 1. RUN CONDUIT CONCEALED IN WALL AND/OR FRAME.

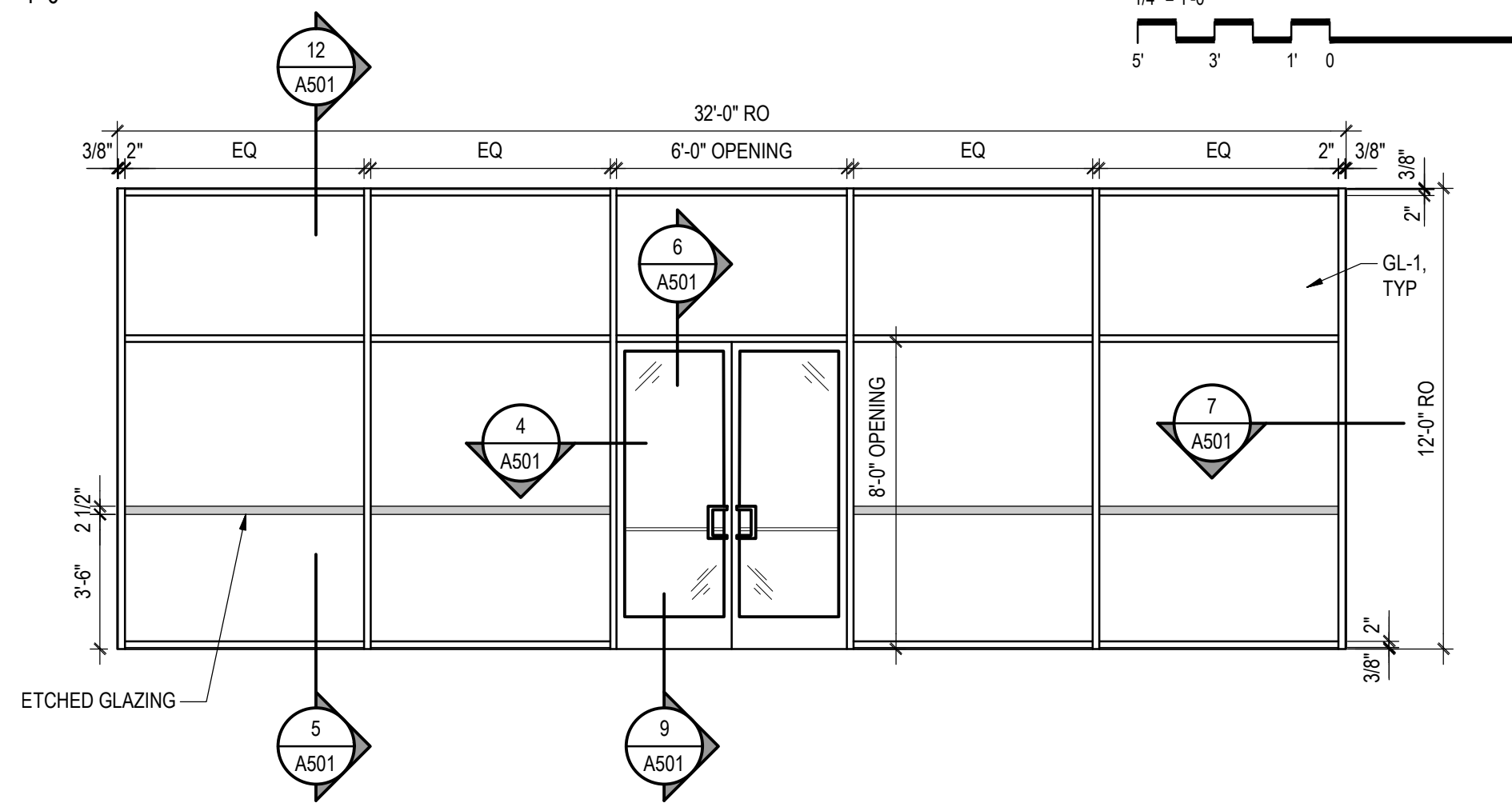


SIGNAGE ELEVATION



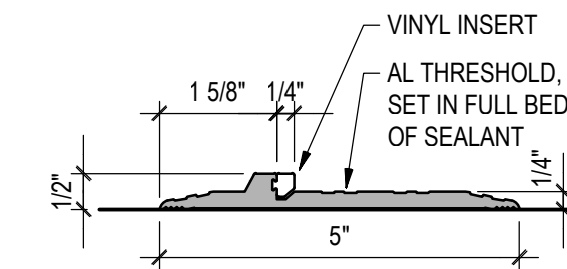
STOREFRONT ELEVATION - TYPE A

1/4" = 1'-0"



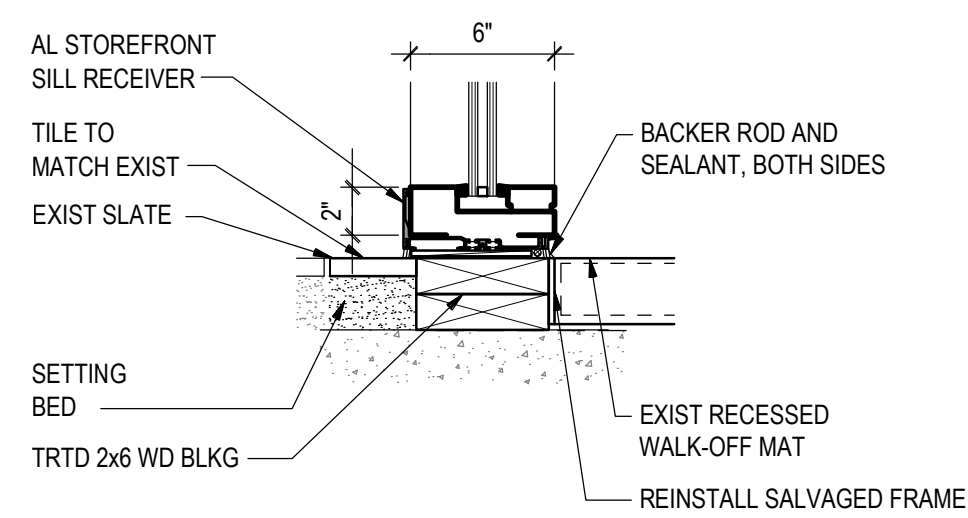
STOREFRONT ELEVATION - TYPE B

1/4" = 1'-0"



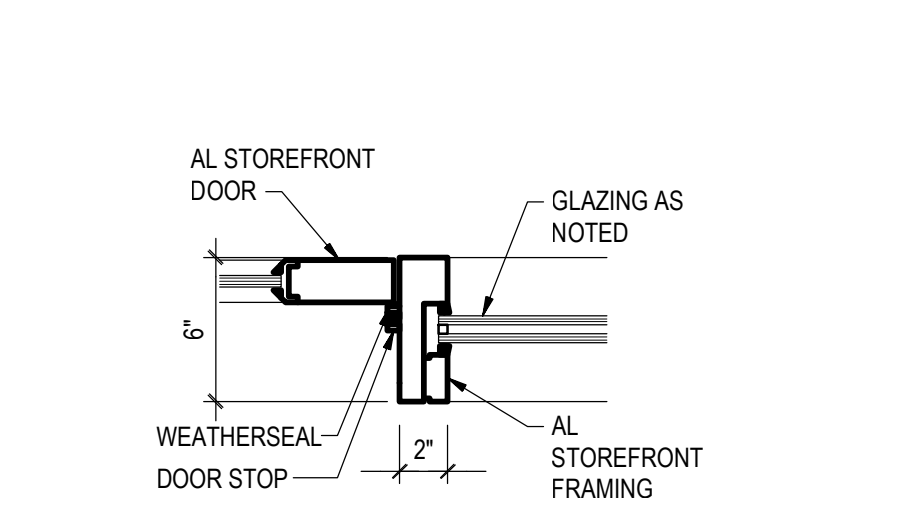
THRESHOLD DETAILS

NOT TO SCALE



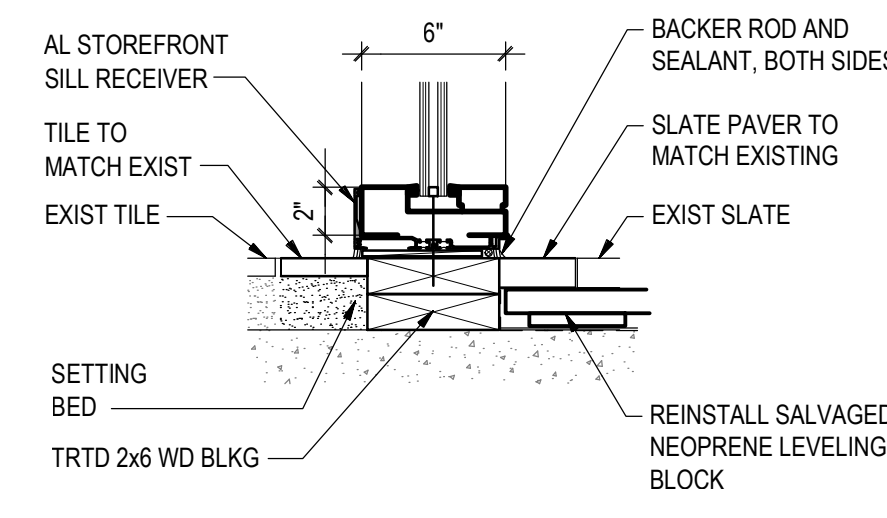
SF SILL DETAIL AT WALK-OFF MAT

1-1/2" = 1'-0"



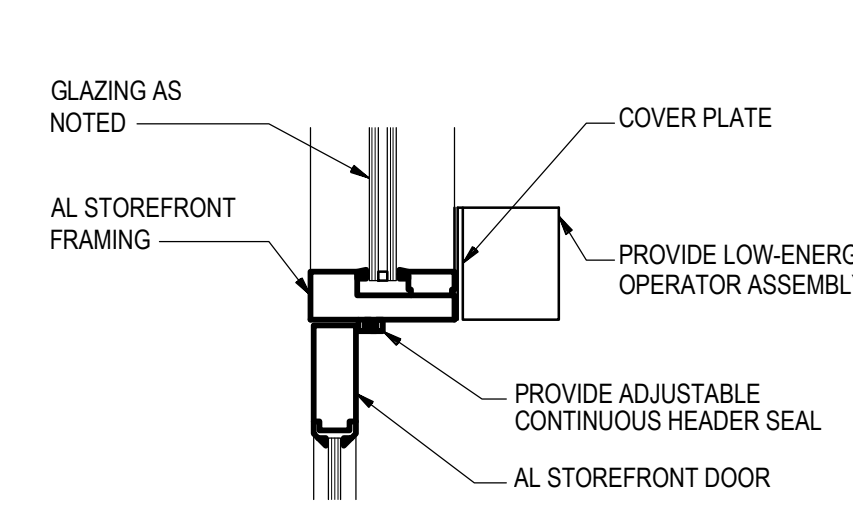
SF DOOR JAMB DETAIL

1-1/2" = 1'-0"



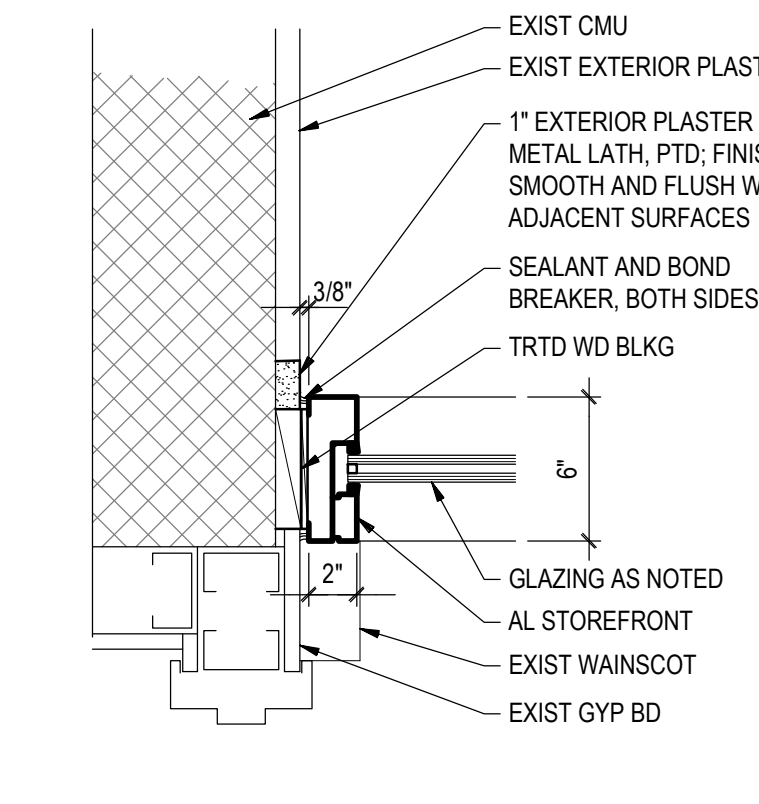
SF SILL DETAIL

1-1/2" = 1'-0"



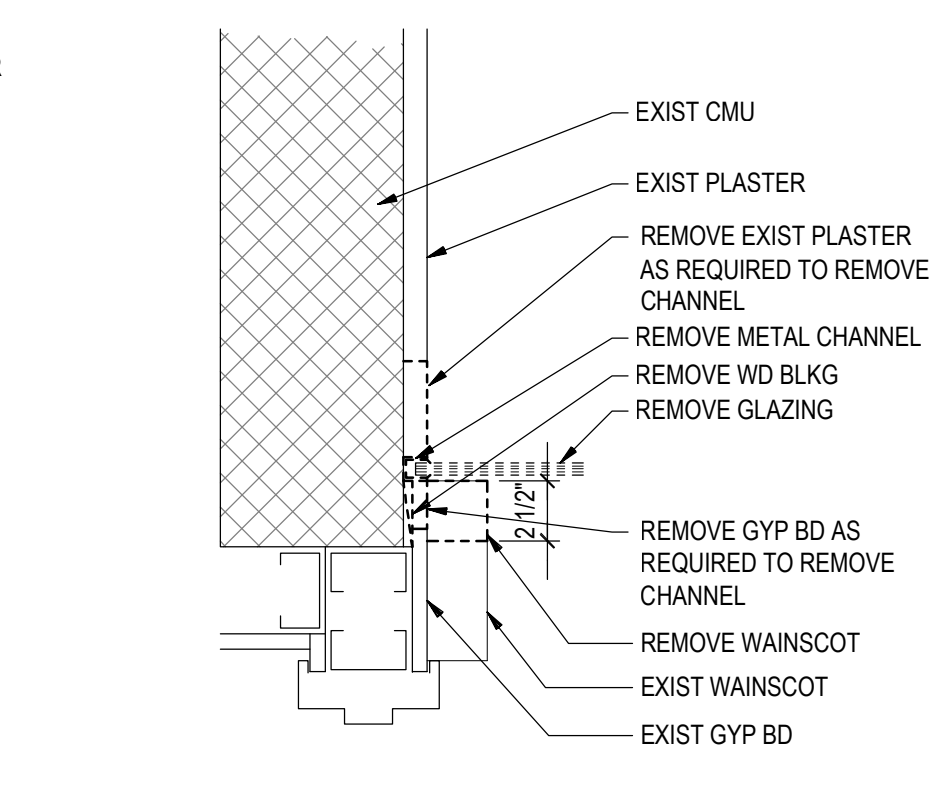
SF DOOR HEAD DETAIL

1-1/2" = 1'-0"



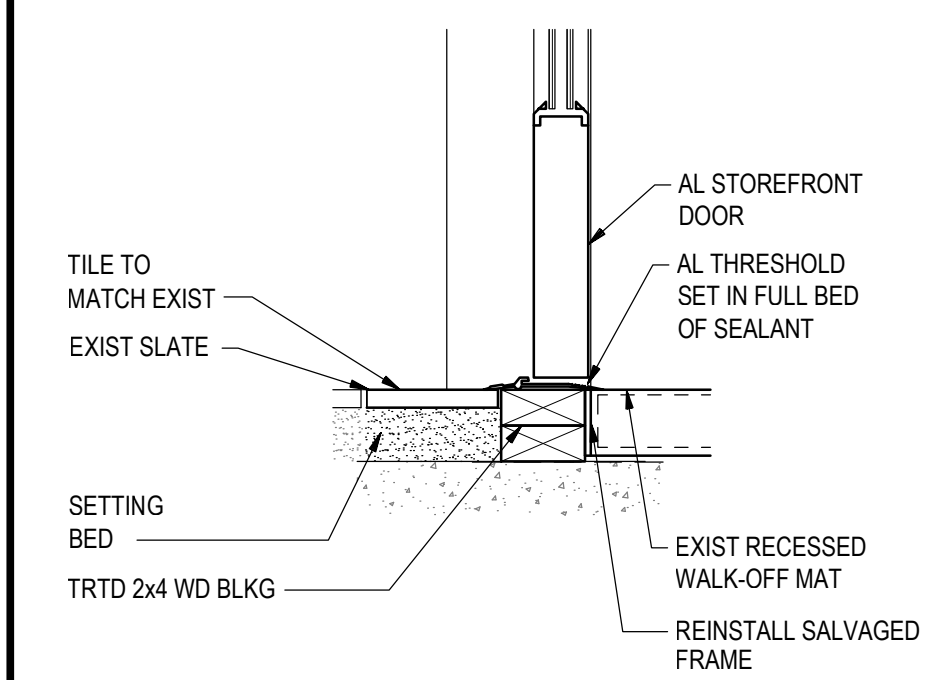
SF JAMB DETAIL

1-1/2" = 1'-0"



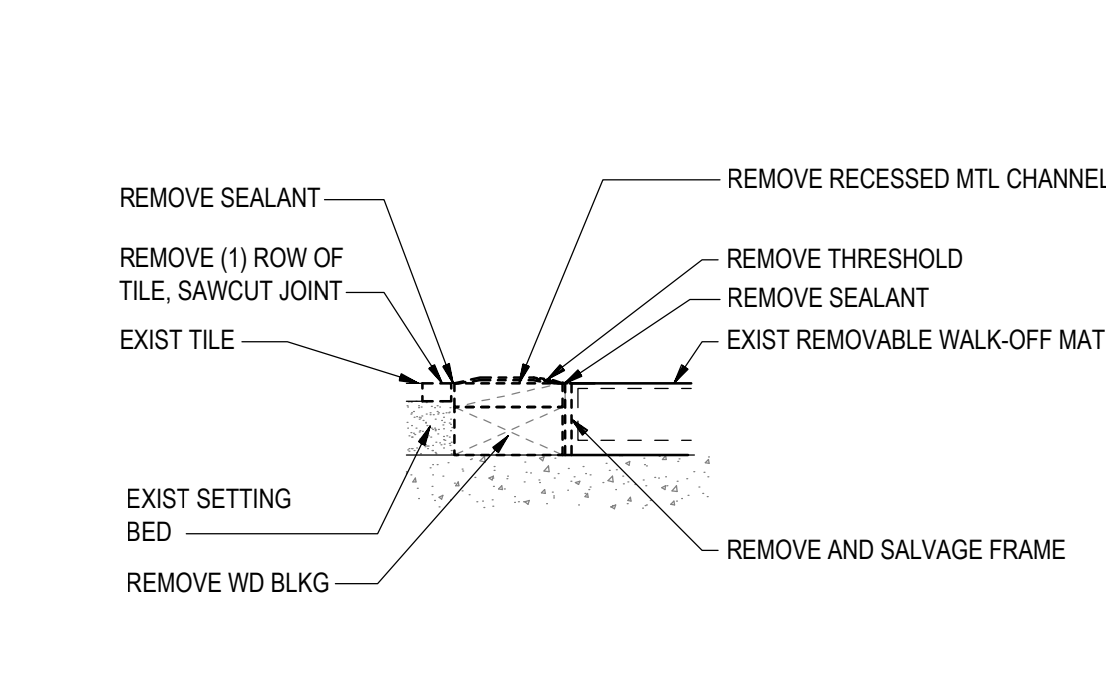
DEMO SF JAMB DETAIL

1-1/2" = 1'-0"



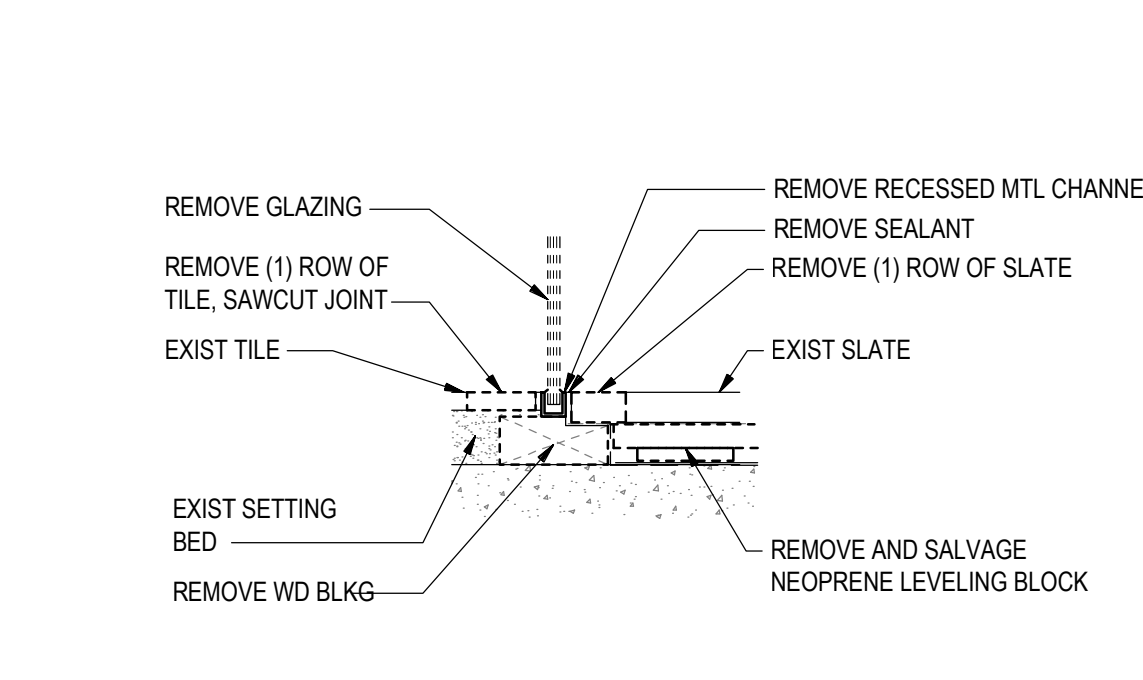
SF DR THRESHOLD DETAIL

1-1/2" = 1'-0"



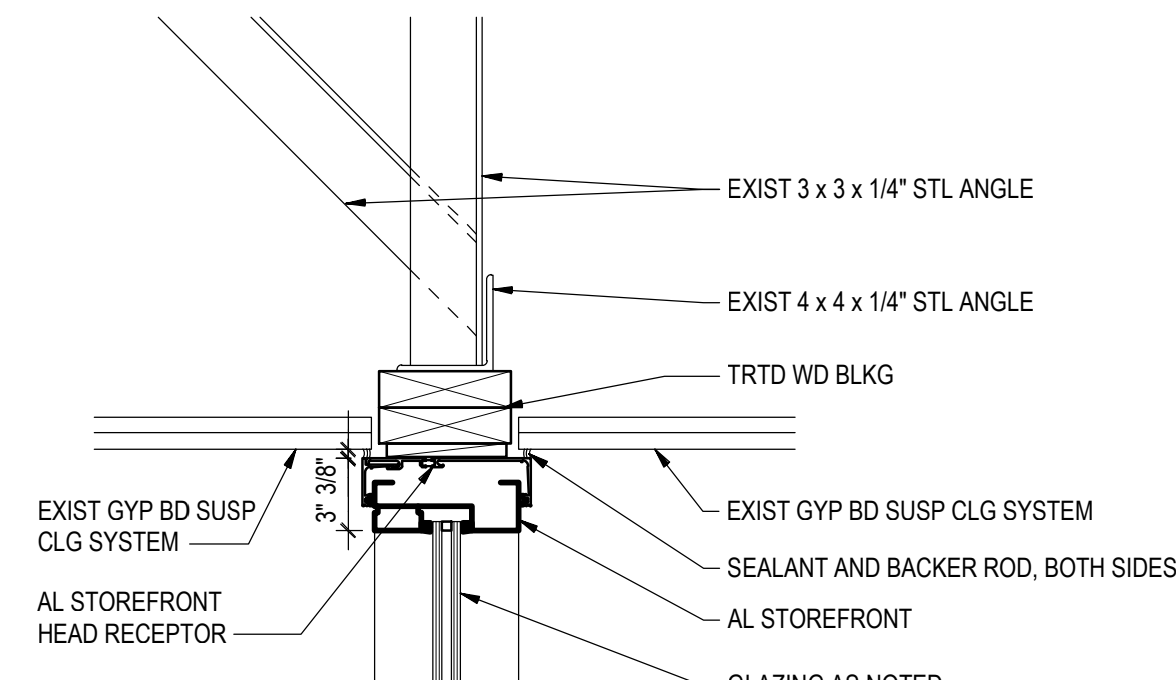
DEMO SF SILL DET AT WALK-OFF MAT

1-1/2" = 1'-0"



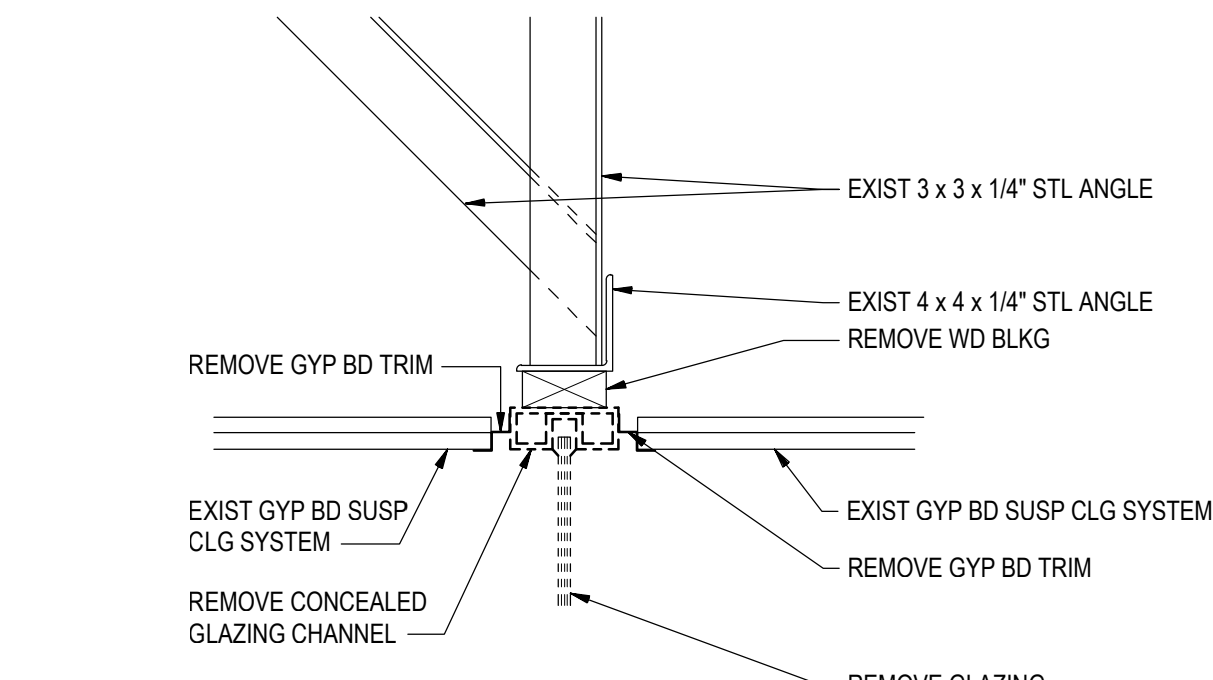
DEMO SF SILL DETAIL

1-1/2" = 1'-0"



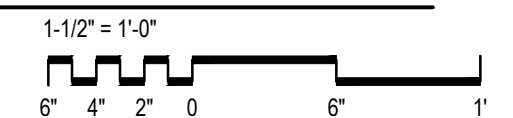
SF HEAD DETAIL

1-1/2" = 1'-0"



DEMO SF HEAD DETAIL

1-1/2" = 1'-0"



VERSATILITY, ULTRA-THERMAL PERFORMANCE AND MORE DESIGN POSSIBILITIES FRONT AND CENTER

TRIFAB® VERSAGLAZE® 601/601T/601UT FRAMING SYSTEM



Kawneer's Trifab® VersaGlaze® 601/601T/601UT Framing System touts the first front set, ultra-thermal 6" storefront system available. By expanding on a proven platform, Trifab® VersaGlaze® 601 offers a choice of front and center plane glass applications in non-thermal, thermal and ultra-thermal configurations. Structural silicone glazing (SSG) options allow for an even greater range of design possibilities for specific project requirements and architectural styles.

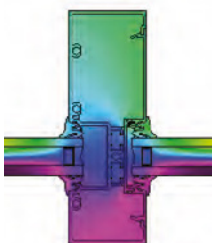
PERFORMANCE

Flexible enough for a wide range of building projects, the Trifab® VersaGlaze® 601/601T/601UT Framing System has a 6" depth, which accommodates higher spans than conventional 4-1/2" storefront framing systems. The 3-in-1 series includes the non-thermal Trifab® 601, the single thermal break Trifab® 601T and the dual thermal break Trifab® 601UT. The greater system depth combined with three thermal performance options and two glass plane options make this one of the most versatile framing systems available. By combining the greater 6" depth with superior thermal performance and versatility, Kawneer is able to bridge the gap between traditional framing systems

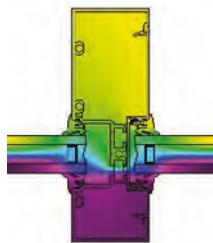
and low-rise curtain walls. The Trifab® 601/601T/601UT Framing System is perfect for projects where an economical alternative to a low-rise curtain wall is desired. These systems meet the same high standards for air and water infiltration and thermal performance that are traditionally found in Kawneer products. The Trifab® 601/601T/601UT Framing System also has a high-performance sill design. The sill attaches to the sill flashing by way of a raceway and eliminates the troublesome blind seal method used on many flashing systems. The sill includes a screw-applied end dam, which ensures positive and tight joints between the sill flashing and end dam.

PERFORMANCE TEST STANDARDS

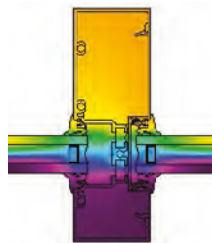
Air Performance	ASTM E283
Water Performance	ASTM E331
Uniform Static Structural	ASTM E330
Sound Transmission Class (STC)	AAMA 1801 and in accordance with ASTM E1425
Condensation Resistance (CRF)	AAMA 1503 and CAN/CSA-A440
Thermal Transmittance (U-Value)	AAMA 1503.1
U-Value Simulations for Other Glazing Options	AAMA 507, NFRC 100, NFRS 200, NFRC 500 and CAN/CSA-A440.2



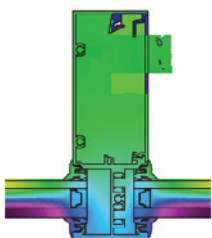
Trifab® 601
Center Set



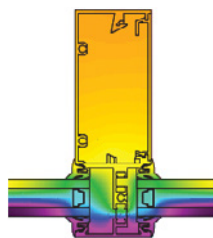
Trifab® 601T
Center Set



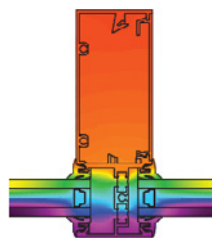
Trifab® 601UT
Center Set



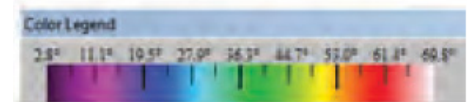
Trifab® 601
Front Set



Trifab® 601T
Front Set



Trifab® 601UT
Front Set



Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.

DIVERSE FABRICATION AND INSTALLATION METHODS

The Trifab® 601/601T/601UT Framing System employs various joinery construction types for efficient fabrication and installation.

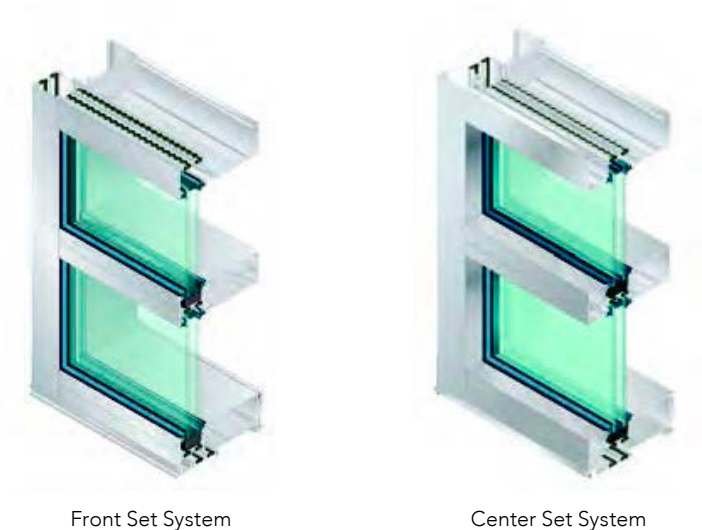
Glass Plane	Center Set			Front Set		
	601	601T	601UT	601	601T	601UT
Framing Type	601	601T	601UT	601	601T	601UT
Thermal Level	Non-Thermal	Thermal	Ultra-Thermal	Non-Thermal	Thermal	Ultra-Thermal
Screw Spline Fabrication	•	•	•	•	•	•
Shear Block Fabrication	–	–	–	•	•	•
Stick Fabrication	–	–	–	•	•	•
Stick Fabrication SSG	–	–	–	•	•	•

The framing can be specified for glazing from either the inside or outside. Inside glazing can help reduce field labor costs by eliminating the need for exterior scaffolding or swing stages for installation on floors above the ground level. In addition, the frames have a two-piece receptor option that easily accommodates attachment of air-barrier systems.

AESTHETICS AND VERSATILITY

The Trifab® 601/601T/601UT Framing System is designed with cost and flexibility in mind. With a 2" x 6" frame profile, the sightline is consistent with current framing systems and the glass pockets are aligned to 4-1/2"-deep Trifab® framing systems. This allows for a shallow horizontal member that not only lowers overall metal costs, but also provides flexibility to accommodate interior finishes, such as blinds, that can span the full uninterrupted elevation height. The flexibility of the 3-in-1 series provides a pre-designed

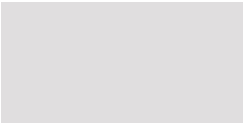
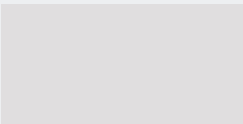


solution for non-thermal as well as thermal entrances. Framing options include non-thermal and thermally broken door framing members to accommodate 1-3/4"-deep and 2-1/4"-deep entrance doors, an expansion mullion and a two-piece head and jamb receptor. The 6" depth accommodates higher spans than conventional 4-1/2" storefront framing systems, and an optional 2-1/4" wide vertical mullion allows for internal steel reinforcement for projects with greater structural performance requirements.



KAWNEER ANODIZED FINISHES

Kawneer gives you a wide variety of anodized finishes with attractive alternatives. The benefit of a durable, anodized finish is married to the beauty of some very dynamic and exciting colors.

At the start of every design, there's a choice of how you want to finish. Contact your Kawneer sales rep for the information on these and other finishes available from Kawneer.

	KAWNEER FINISH NO.	COLOR	ALUMINUM ASSOCIATION SPECIFICATION	OTHER COMMENTS
	#14	CLEAR	AA-M10C21A41	Architectural Class I (0.7 mils minimum)
	#17	CLEAR	AA-M10C21A31	Architectural Class II (0.4 mils minimum)
	#40	DARK BRONZE	AA-M10C21A44	Architectural Class I (0.7 mils minimum)
	#29	BLACK	AA-M10C21A44	Architectural Class I (0.7 mils minimum)

Features

- Trifab® VersaGlaze® 601/601T/601UT Framing System is 6" (152.4) deep with a 2" (50.8) sightline
- Center Plane glass applications
- Flush glazed from either the inside or outside
- Screw Spline fabrication
- Dual IsoLock® lanced and debridged thermal break
- Infill options up to 1-1/8" (28.6) thickness
- High performance sill flashing
- Permanodic® anodized finishes option
- Painted finishes in standard and custom choices

Optional Features

- Acoustical rating per AAMA 1801 and ASTM E 1425
- Project specific U-factors (See Thermal Charts)
- Integrates with Versoleil® SunShade Outrigger System and Horizontal Single Blade System
- Profit\$Maker® Plus die sets

Product Applications

- Storefront, Ribbon Window or Punched Openings
- Single-span
- Integrated entrance framing allowing Kawneer standard entrances or other specialty entrances to be incorporated
- Kawneer windows, or GLASSvent® Windows for Storefront Framing, or GLASSvent® UT Windows are easily incorporated

For specific product applications,
consult your Kawneer representative.

Laws and building and safety codes governing the design and use of Kawneer products, such as 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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BASIC FRAMING DETAILS (Outside Glazed).....4
BASIC FRAMING DETAILS (Inside Glazed).....5
MISCELLANEOUS FRAMING (Center).....6
CURVING7
CORNERS.....8
AA®250/425 THERMAL ENTRANCE DETAILS9
350 STANDARD ENTRANCE DETAILS10
350 STANDARD ENTRANCE DETAILS
WITH CRIPPLE JAMBS 11
GLASSvent® FOR STOREFRONT FRAMING12
8225TL THERMAL WINDOW DETAILS13
GLASSvent® UT WINDOW DETAILS 14-15
WIND LOAD / DEADLOAD CHARTS 16-24
THERMAL CHARTS 25-40

Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses () are millimeters unless otherwise noted.

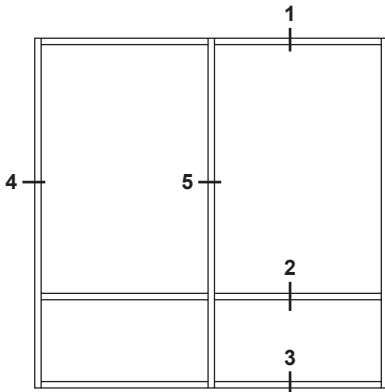
The following metric (SI) units are found in these details:

- m – meter
- cm – centimeter
- mm – millimeter
- s – second
- Pa – pascal
- MPa – megapascal

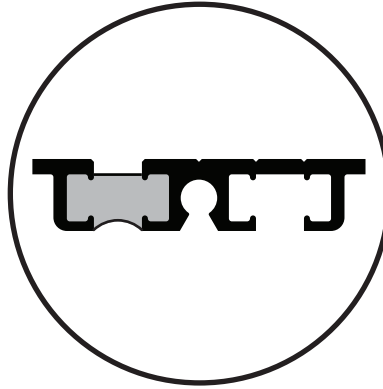
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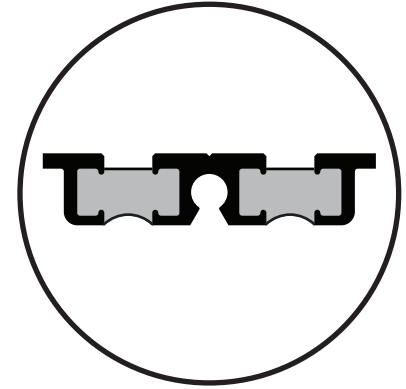
Additional information and CAD details are available at www.kawneer.com



ELEVATION IS NUMBER KEYED TO DETAILS

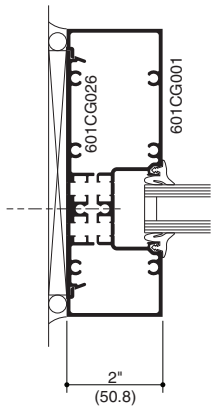


Trifab® VG 601T IsoLock® THERMAL BREAK

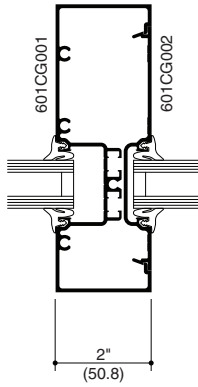


Trifab® VG 601UT DUAL IsoLock® THERMAL BREAK

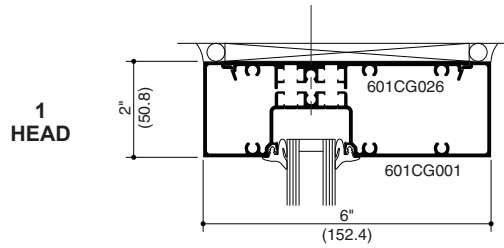
SCREW SPLINE



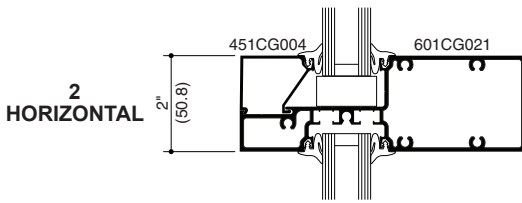
4 JAMB



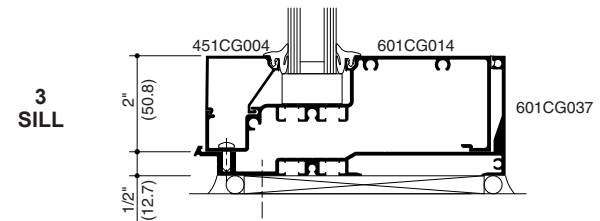
5 VERTICAL



1 HEAD



2 HORIZONTAL

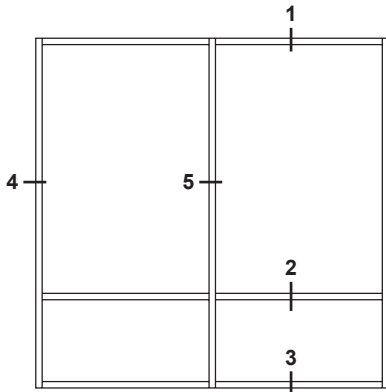


3 SILL

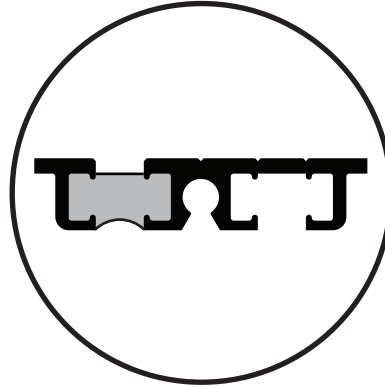
Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.
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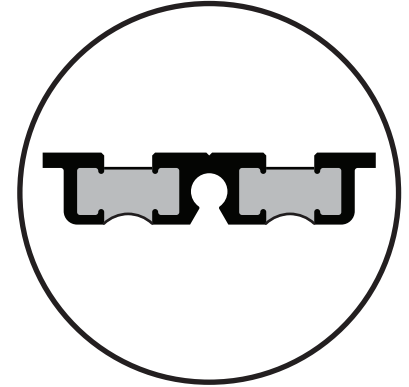
Additional information and CAD details are available at www.kawneer.com



ELEVATION IS NUMBER KEYED TO DETAILS

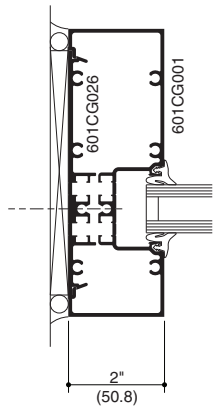


Trifab® VG 601T IsoLock®
THERMAL BREAK

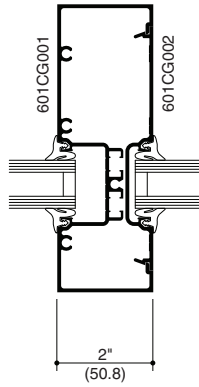


Trifab® VG 601UT DUAL IsoLock®
THERMAL BREAK

SCREW SPLINE

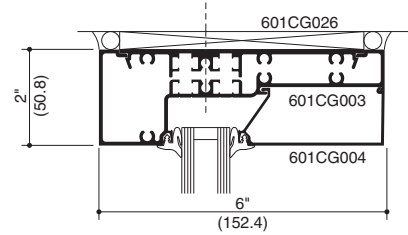


4
JAMB

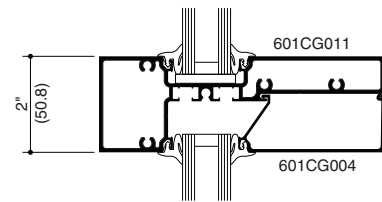


5
VERTICAL

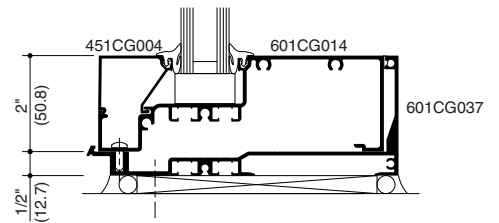
1
HEAD



2
HORIZONTAL



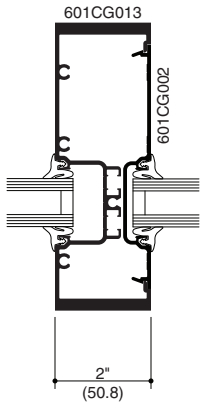
3
SILL



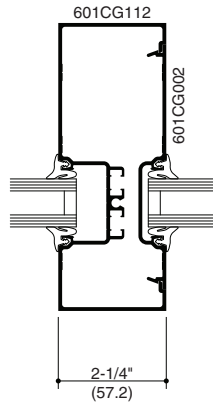
Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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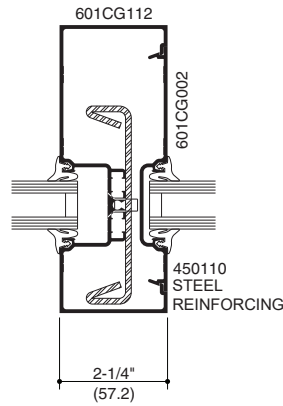
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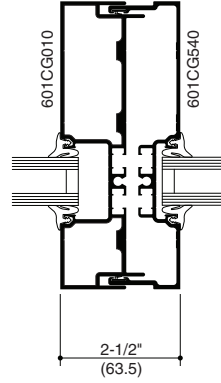
2" (50.8) HEAVY WALL MULLION



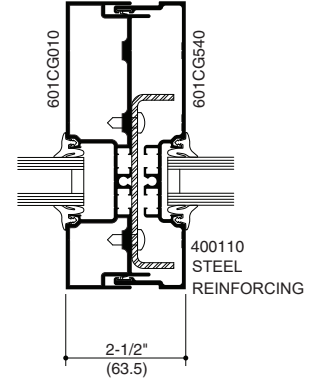
2-1/4" (57.2) MULLION



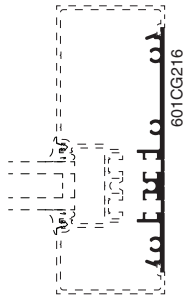
2-1/4" (57.2) MULLION WITH STEEL



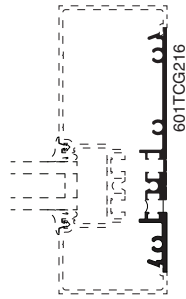
TUBULAR EXPANSION MULLION



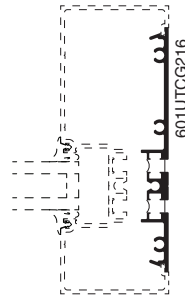
TUBULAR EXPANSION MULLION WITH OPTIONAL STEEL



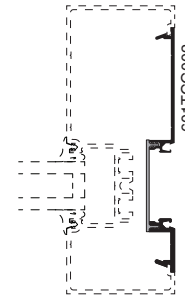
FLAT FILLER



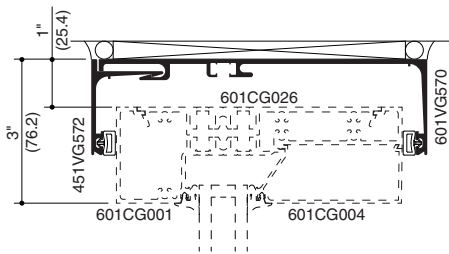
THERMAL FLAT FILLER



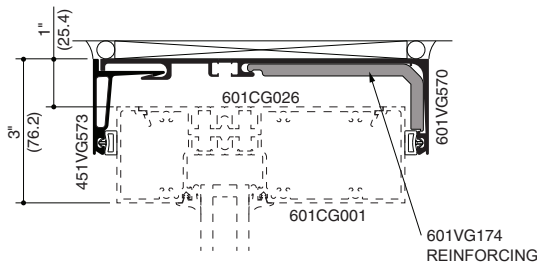
ULTRA THERMAL FLAT FILLER



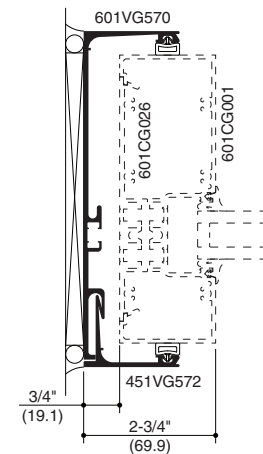
THERMAL POCKET FILLER



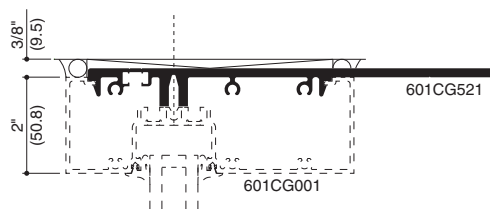
STANDARD HEAD RECEPTOR (EXTERIOR INSTALLED)



HEAVY WEIGHT HEAD RECEPTOR (EXTERIOR INSTALLED)



JAMB RECEPTOR (EXTERIOR INSTALLED)



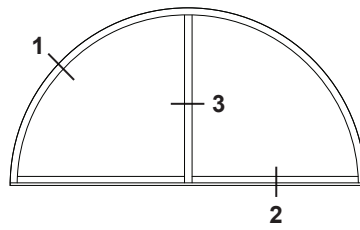
STRAP ANCHOR

ADMC070EN

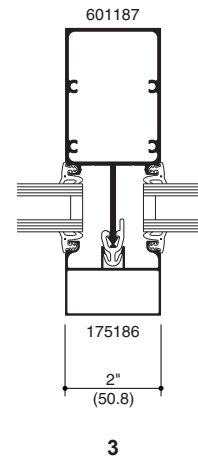
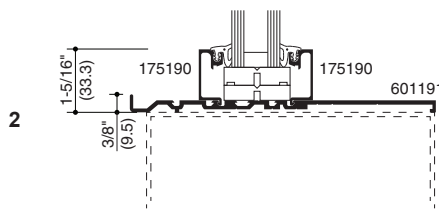
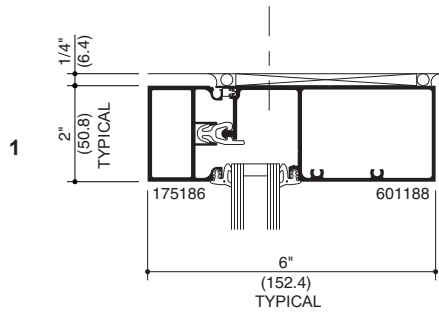
Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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CURVING DETAILS

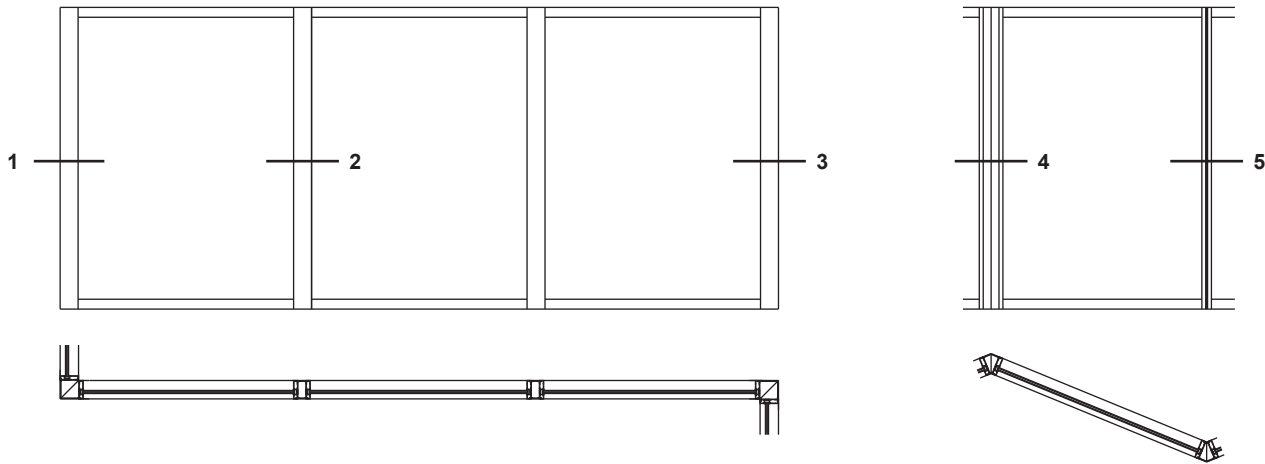


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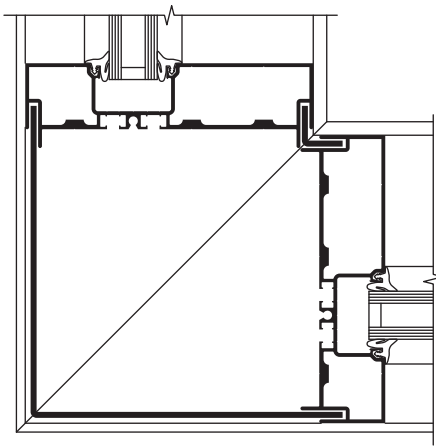
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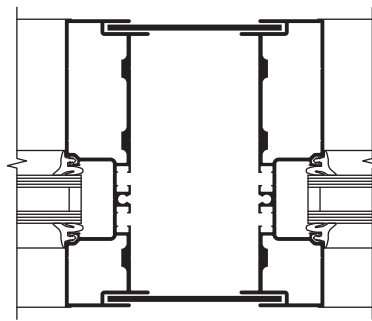
THESE DETAILS ARE TYPICAL FOR ALL 601, 601T, AND 601UT CONDITIONS.



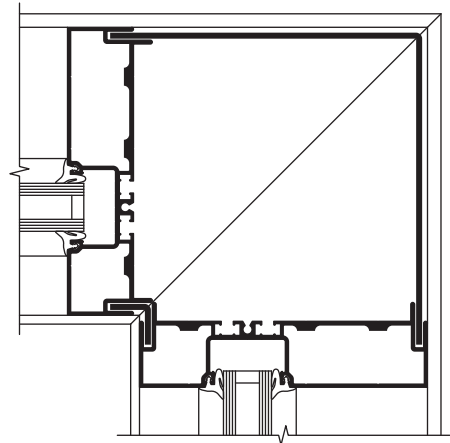
NOTE: 1" (25.4) infill shown.



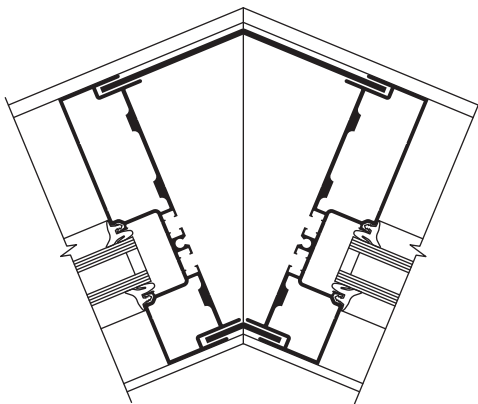
1
OUTSIDE 90°
CORNER



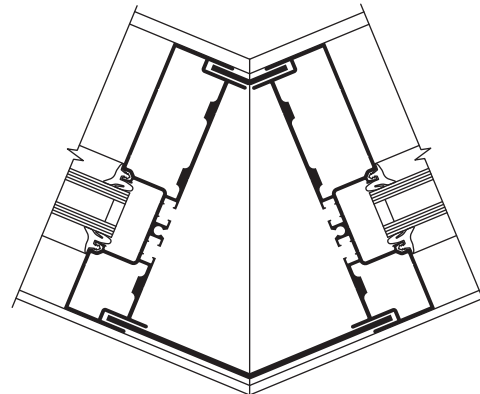
2
6" (152.4)
MULLION POST



3
INSIDE 90°
CORNER



4
INSIDE 135°
CORNER



5
OUTSIDE 135°
CORNER

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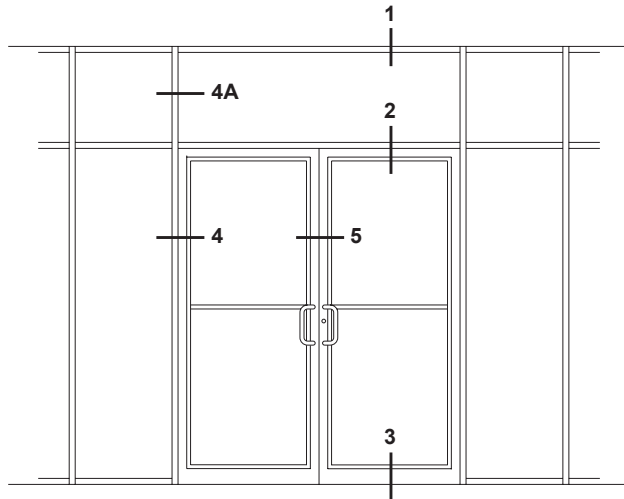
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Trifab® VersaGlaze® 601T FRAMING INCORPORATING KAWNEER "AA®250" DOORS.

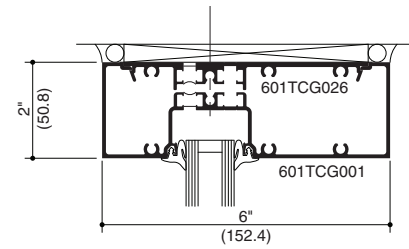
NOTE: OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM.

SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

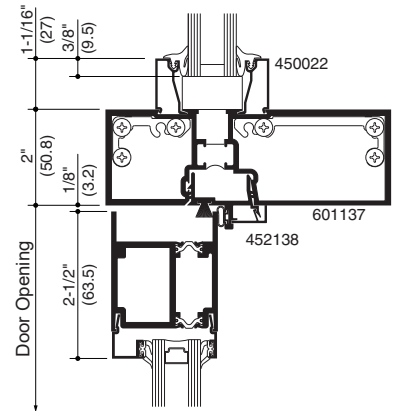


ELEVATION IS NUMBER KEYED TO DETAILS.

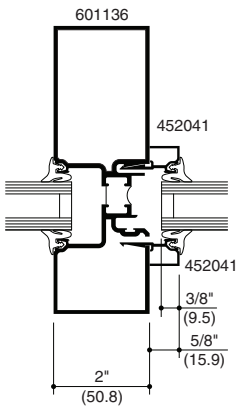
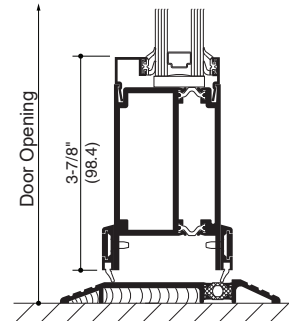
1 HEAD



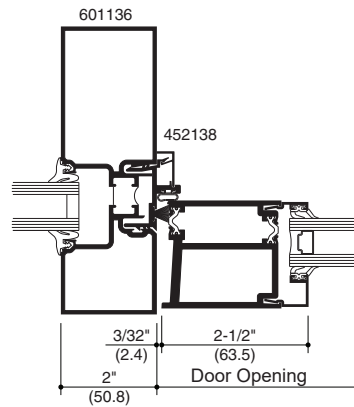
2 TRANSOM BAR



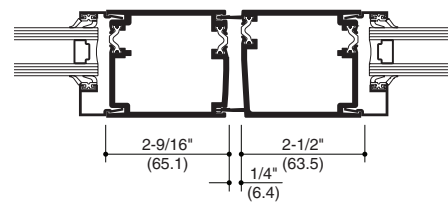
3 BOTTOM RAIL



4A TRANSOM JAMB



4 DOOR JAMB



5 MEETING STILES

AA® 250/425 THERMAL DOOR

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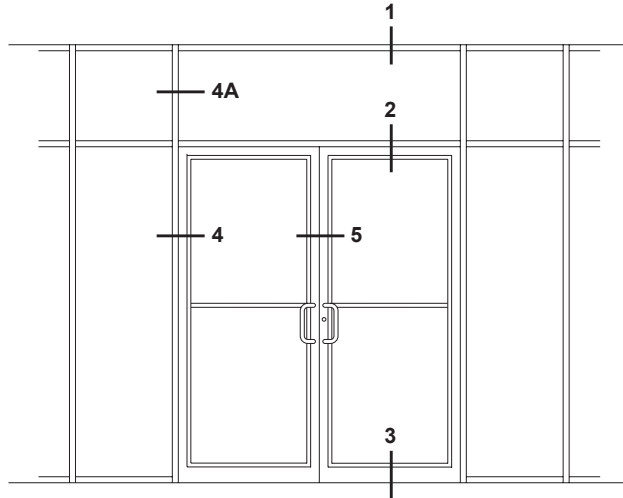
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Trifab® VersaGlaze® 601 FRAMING INCORPORATING KAWNEER "350" DOORS.

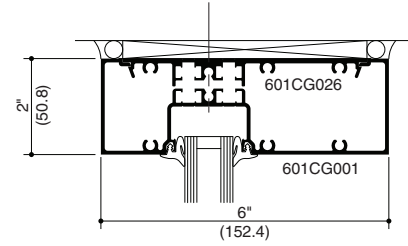
NOTE: OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM.

SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

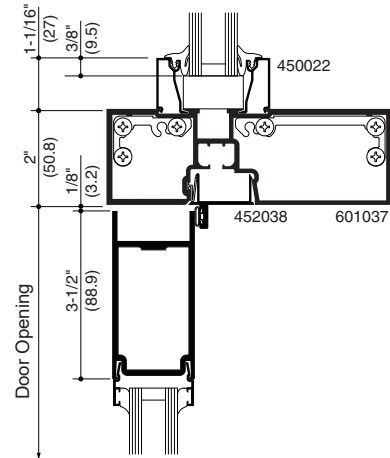


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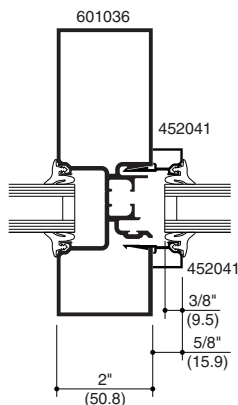
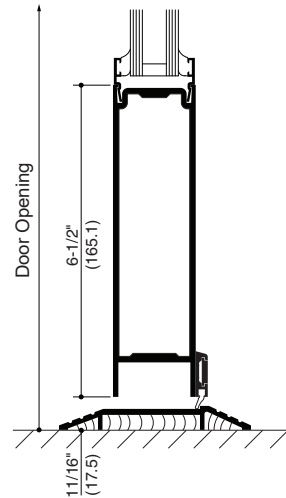
1 HEAD



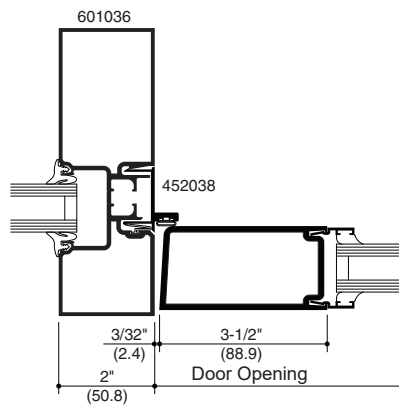
2 TRANSOM BAR



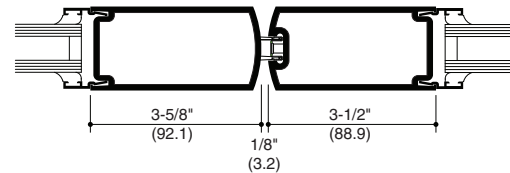
3 BOTTOM RAIL



4A DOOR JAMB



4 DOOR JAMB



5 MEETING STILES

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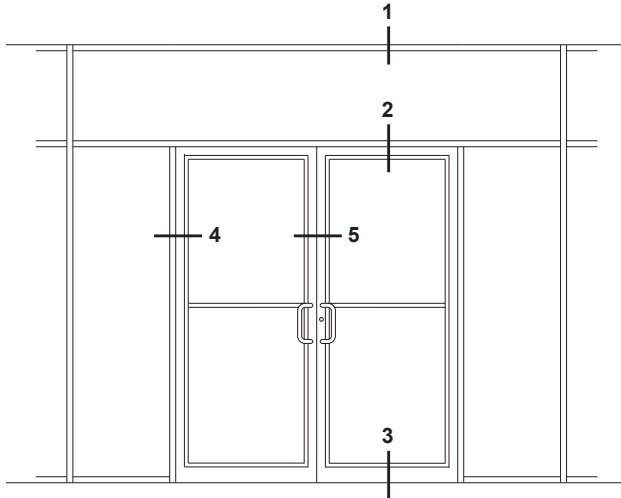
350 MEDIUM STILE DOOR

Additional information and CAD details are available at www.kawneer.com

Trifab® VersaGlaze® 601 FRAMING INCORPORATING KAWNEER "350" DOORS.

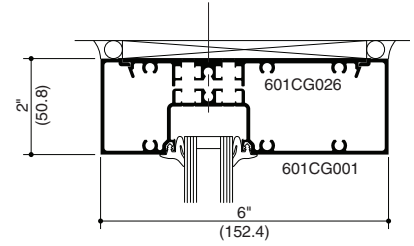
NOTE: OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM.

SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

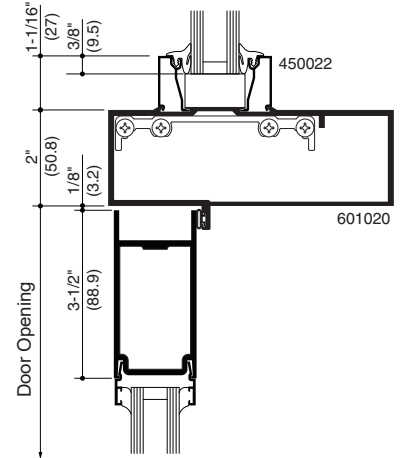


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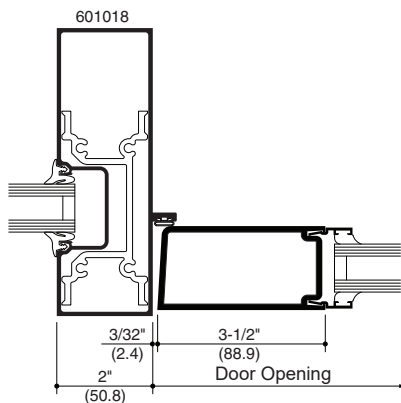
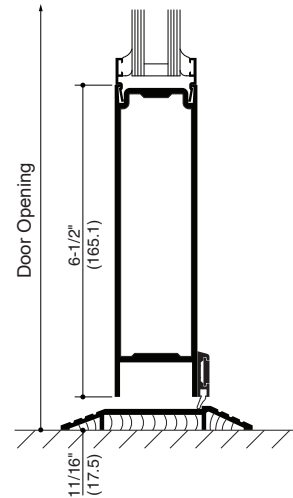
1 HEAD



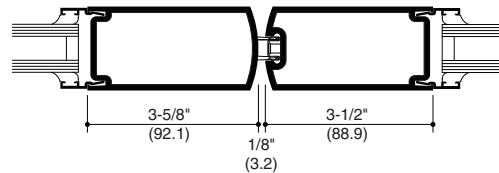
2 TRANSOM BAR



3 BOTTOM RAIL



4 DOOR JAMB



5 MEETING STILES

350 MEDIUM STILE DOOR

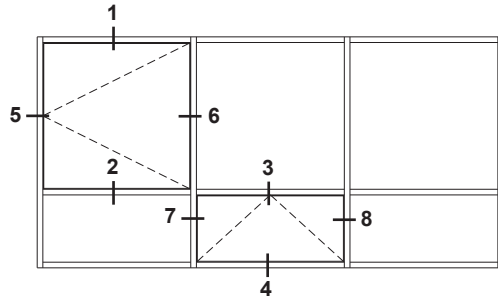
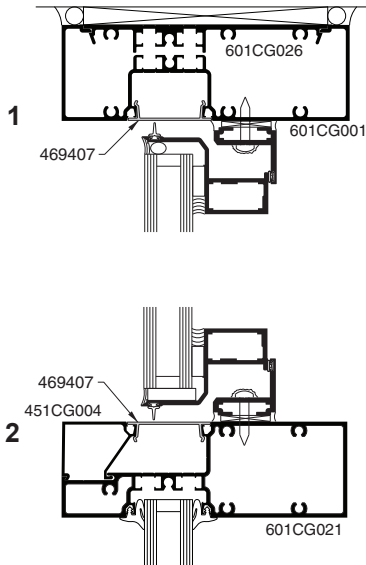
Vertical text on the left side: Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and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

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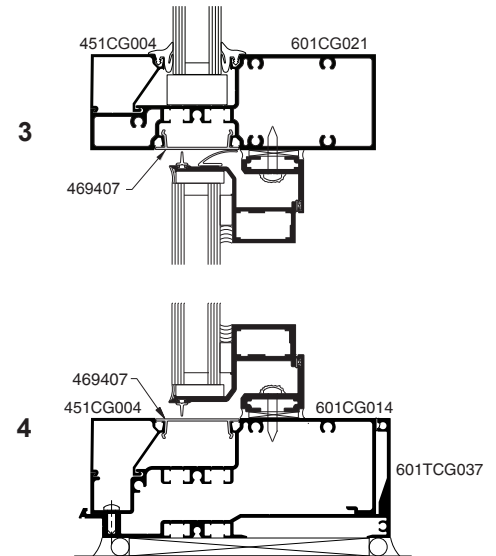
Trifab® VersaGlaze® 601 FRAMING SHOWN.
OTHER FRAMING OPTIONS AVAILABLE.
CONSULT YOUR KAWNEER REPRESENTATIVE.

**OUTSWING CASEMENT
VERTICAL SECTION**

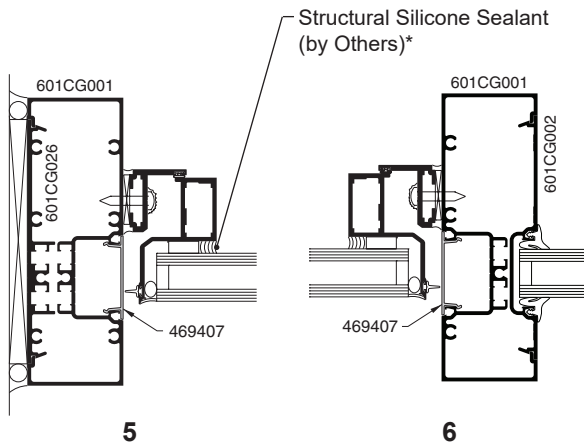


ELEVATION IS NUMBER KEYED TO DETAILS

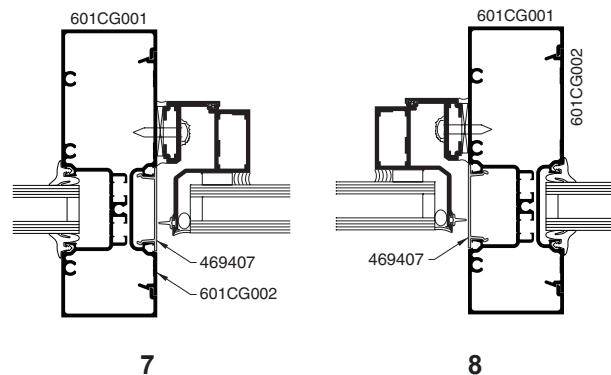
**PROJECT-OUT
VERTICAL SECTION**



**OUTSWING CASEMENT
HORIZONTAL SECTION**



**PROJECT-OUT
HORIZONTAL SECTION**



NOTE: Black spacer is recommended when 1" (25.4) insulating glass is used.

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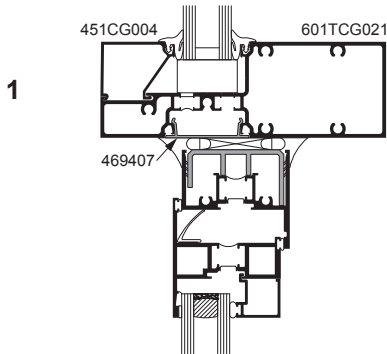
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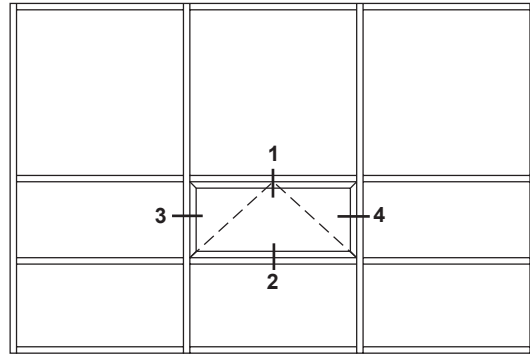
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Trifab® VersaGlaze® 601T FRAMING SHOWN.
OTHER FRAMING OPTIONS AVAILABLE.
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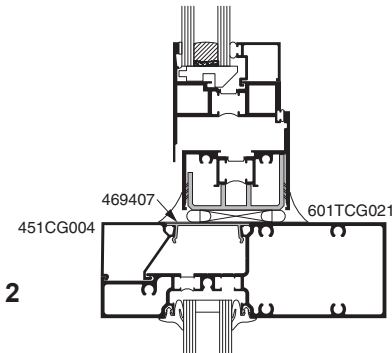
**PROJECT-OUT
VERTICAL SECTION**



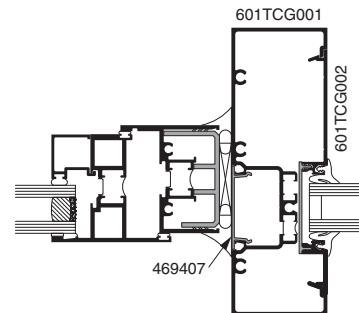
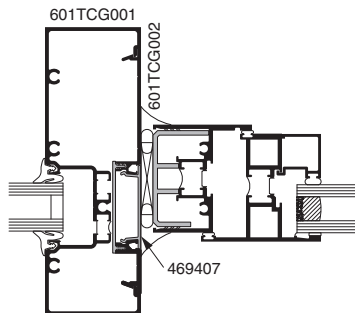
8225TL THERMAL WINDOWS SHOWN
NOTE: OTHER VENT TYPES CAN BE
ACCOMMODATED, CONSULT YOUR KAWNEER
REPRESENTATIVE FOR OTHER OPTIONS



ELEVATION IS NUMBER KEYED TO DETAILS



**PROJECT-OUT
HORIZONTAL SECTION**



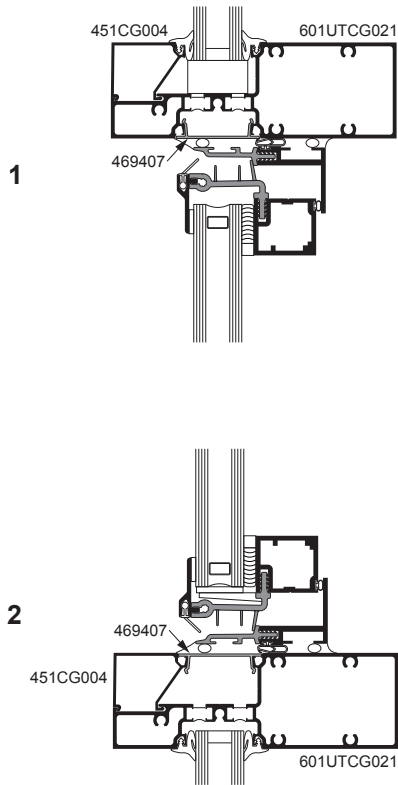
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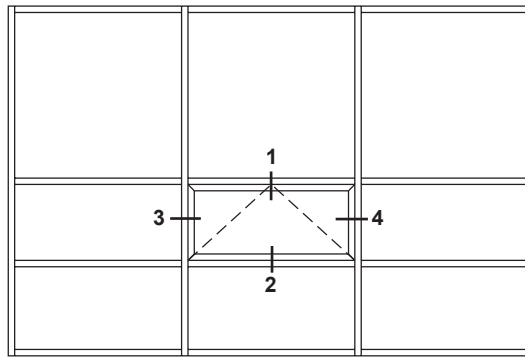
Additional information and CAD details are available at www.kawneer.com

Trifab® VersaGlaze® 601UT FRAMING SHOWN.
OTHER FRAMING OPTIONS AVAILABLE.
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**PROJECT-OUT
VERTICAL SECTION**



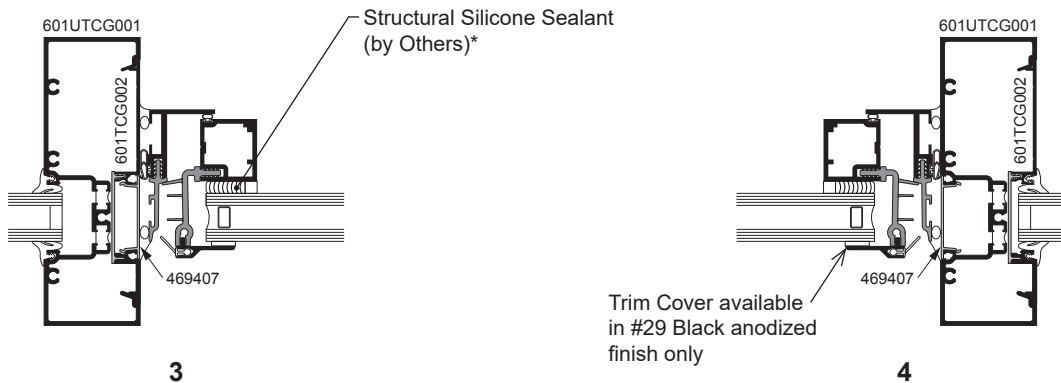
GLASSvent® UT WINDOWS SHOWN
NOTE: OTHER VENT TYPES CAN BE
ACCOMMODATED, CONSULT YOUR KAWNEER
REPRESENTATIVE FOR OTHER OPTIONS



ELEVATION IS NUMBER KEYED TO DETAILS

NOTE: Black spacer is recommended when
1" (25.4) insulating glass is used.

**PROJECT-OUT
HORIZONTAL SECTION**



* **INSTALLER NOTE:** Installer is responsible for all required compatibility review and approvals with the Structural Silicone Manufacturer and the Insulating Glass Unit Manufacturer.

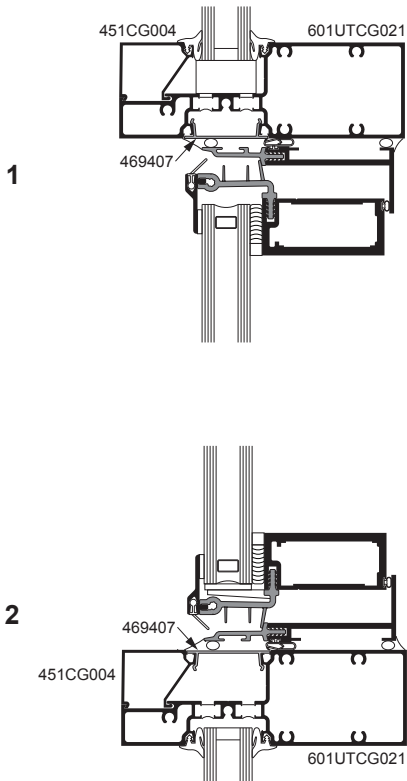
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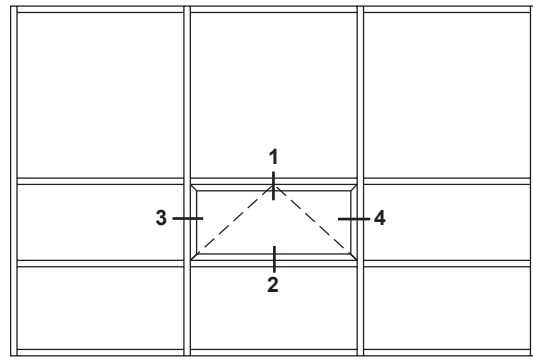
Additional information and CAD details are available at www.kawneer.com

Trifab® VersaGlaze® 601UT FRAMING SHOWN.
OTHER FRAMING OPTIONS AVAILABLE.
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**PROJECT-OUT
VERTICAL SECTION**



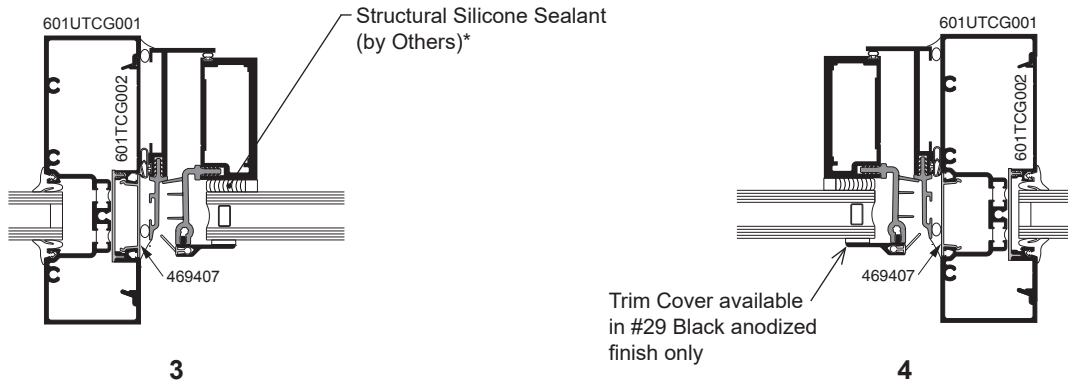
GLASSvent® UT WINDOWS SHOWN
**NOTE: OTHER VENT TYPES CAN BE
ACCOMMODATED, CONSULT YOUR KAWNEER
REPRESENTATIVE FOR OTHER OPTIONS**



ELEVATION IS NUMBER KEYED TO DETAILS

**NOTE: Black spacer is recommended when
1" (25.4) insulating glass is used.**

**PROJECT-OUT
HORIZONTAL SECTION**



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WIND LOAD CHARTS

Mullions are designed for deflection limitations in accordance with AAMA TIR-A11 of L/175 up to 13' 6" and L/240 +1/4" above 13' 6". These curves are for mullions WITH HORIZONTALS and are based on engineering calculations for stress and deflection. Allowable wind load stress for ALUMINUM 15,152 psi (104 MPa), STEEL 30,000 psi (207 MPa). Charted curves, in all cases are for the limiting value. Wind load charts contained herein are based upon nominal wind load utilized in allowable stress design. A conversion from Load Resistance Factor Design (LRFD) is provided. To convert ultimate wind loads to nominal loads, multiply ultimate wind loads by a factor of 0.6 per ASCE/SEI 7. A 4/3 increase in allowable stress has not been used to develop these curves. For special situations not covered by these curves, contact your Kawneer representative for additional information.

If the end reaction of the mullion [mullion spacing (ft.) times height (ft.) times specified wind load (psf) divided by two] is more than 500 lbs., the optional Mullion Anchors must be used. Consult Application Engineering. (*Mullion Anchor not used with Lightweight Receptor.*)

DEADLOAD CHARTS

Horizontal or deadload limitations are based upon 1/8" (3.2), maximum allowable deflection at the center of an intermediate horizontal member. The accompanying charts are calculated for 1" (25.4) thick insulating glass or 1/4" (6.35) thick glass supported on two setting blocks placed at the loading points shown.

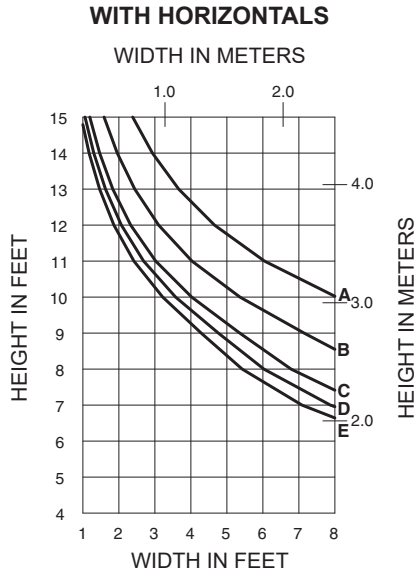
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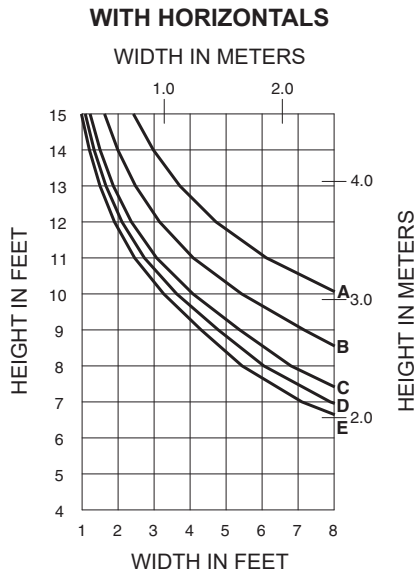
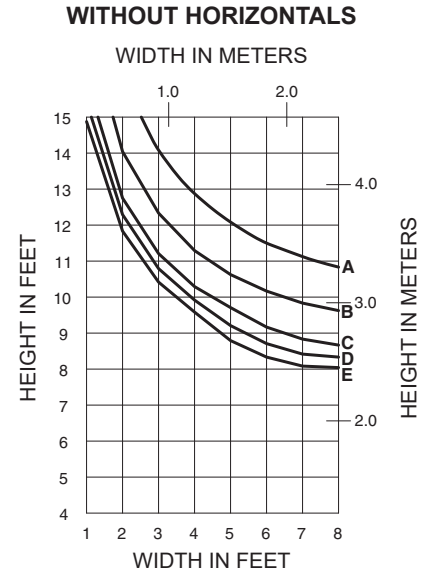
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	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)
F =	60 PSF (2880)	100 PSF (4790)



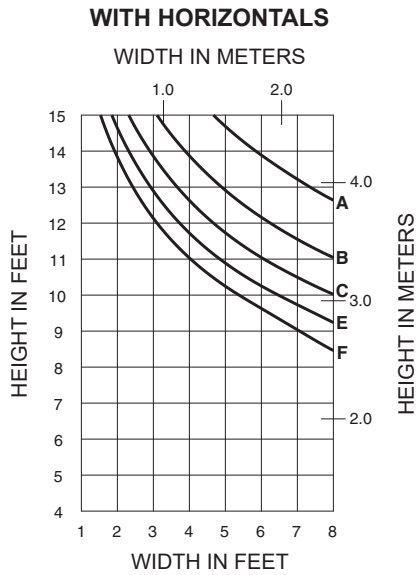
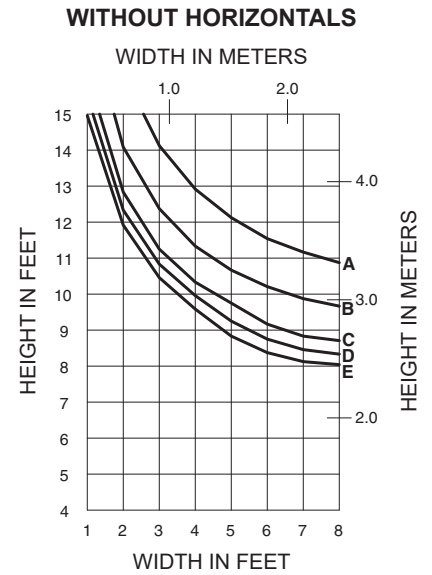
601CG001

$I = 5.431 (226.05 \times 10^4)$
 $S = 1.717 (28.14 \times 10^3)$



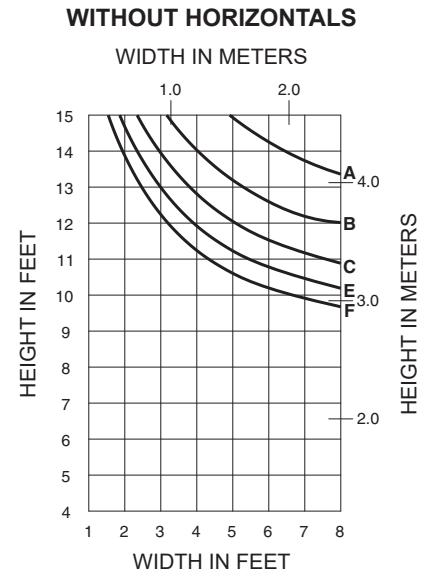
601CG112

$I = 5.495 (228.72 \times 10^4)$
 $S = 1.727 (28.30 \times 10^3)$

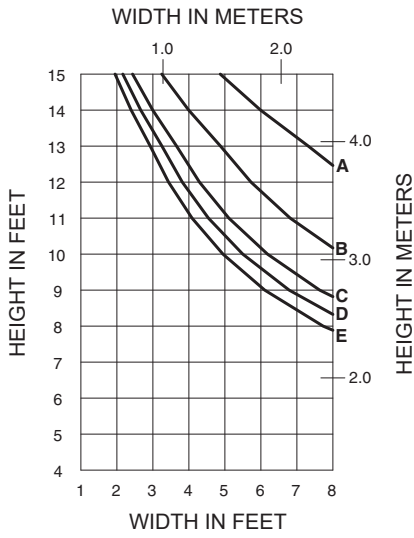


601CG013

$I_A = 10.593 (440.91 \times 10^4)$
 $S_A = 3.411 (55.90 \times 10^3)$



WITH HORIZONTALS



	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)



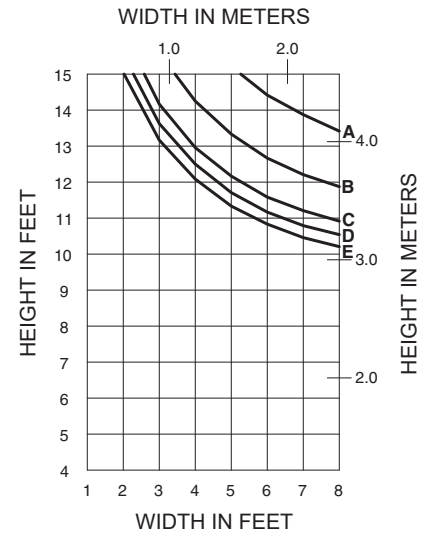
601CG112

WITH 450110 STEEL

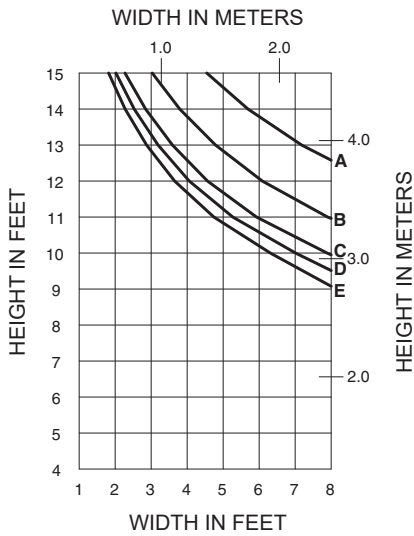
$I_A = 5.495 (228.72 \times 10^4)$
 $S_A = 1.727 (28.30 \times 10^3)$

$I_S = 1.929 (80.29 \times 10^4)$
 $S_S = 0.935 (15.32 \times 10^3)$

WITHOUT HORIZONTALS



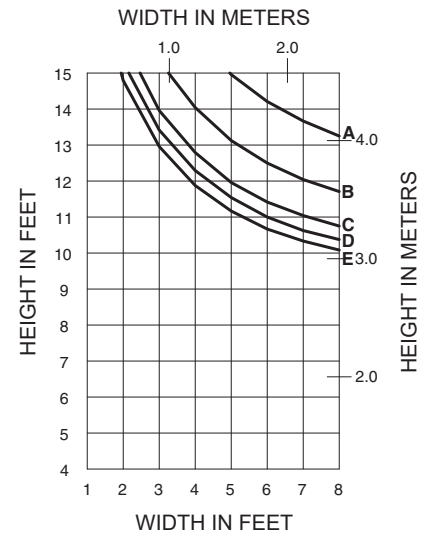
WITH HORIZONTALS



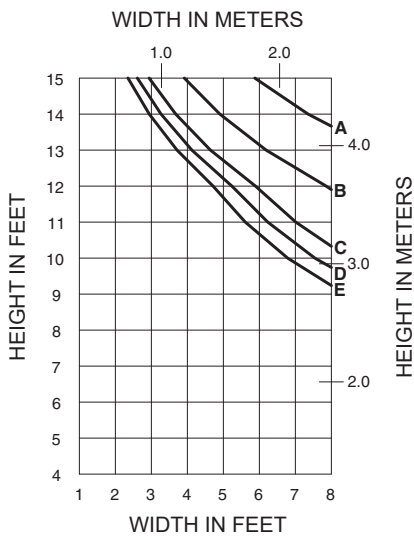
601CG010

$I = 10.570 (439.95 \times 10^4)$
 $S = 3.406 (55.81 \times 10^3)$

WITHOUT HORIZONTALS



WITH HORIZONTALS



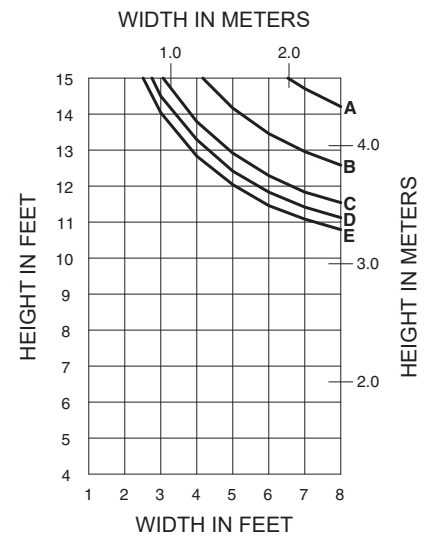
601CG010

WITH 400110 STEEL

$I_A = 10.570 (439.95 \times 10^4)$
 $S_A = 3.406 (55.81 \times 10^3)$

$I_S = 0.970 (40.37 \times 10^4)$
 $S_S = 0.535 (8.77 \times 10^3)$

WITHOUT HORIZONTALS



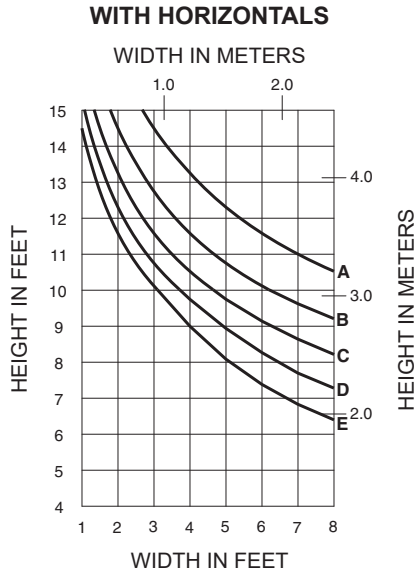
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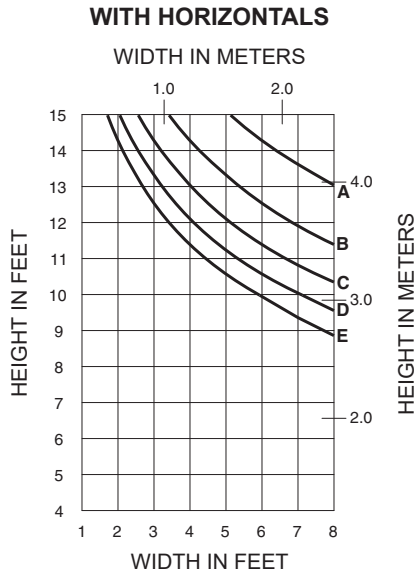
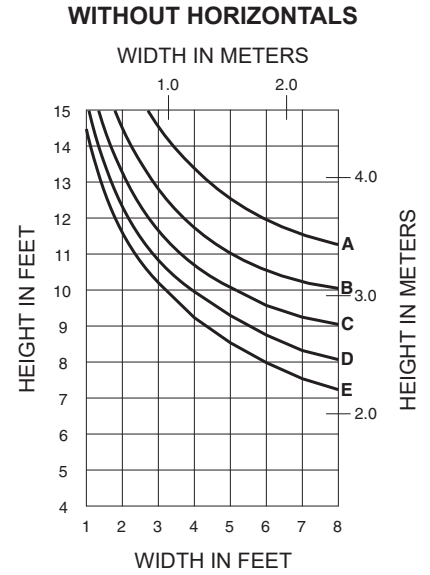


	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	50 PSF (2400)	83 PSF (4000)
E =	60 PSF (2880)	100 PSF (4790)



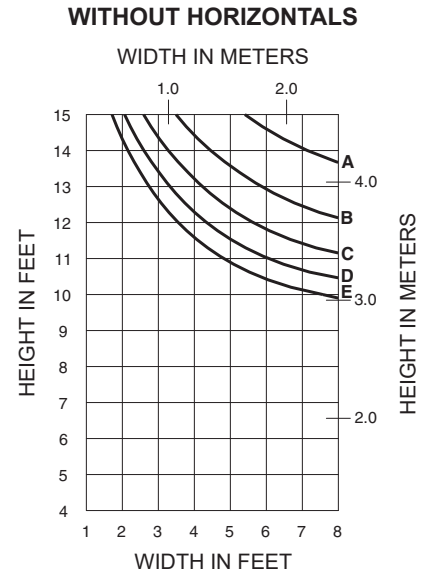
601CG005

$I = 6.092 (253.57 \times 10^4)$
 $S = 1.944 (31.86 \times 10^3)$

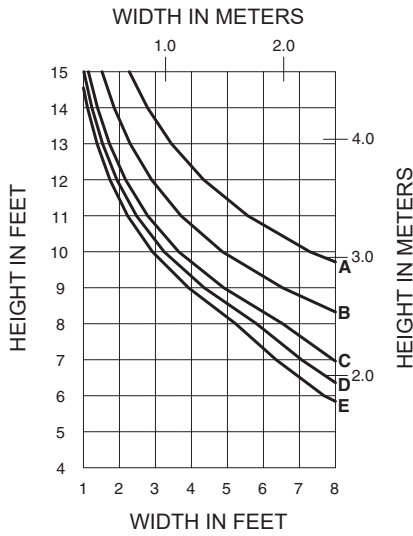


601CG005 WITH 450110 STEEL

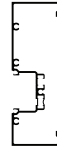
$I_A = 6.092 (253.57 \times 10^4)$
 $S_A = 1.944 (31.86 \times 10^3)$
 $I_S = 1.929 (80.29 \times 10^4)$
 $S_S = 0.935 (15.32 \times 10^3)$



WITH HORIZONTALS



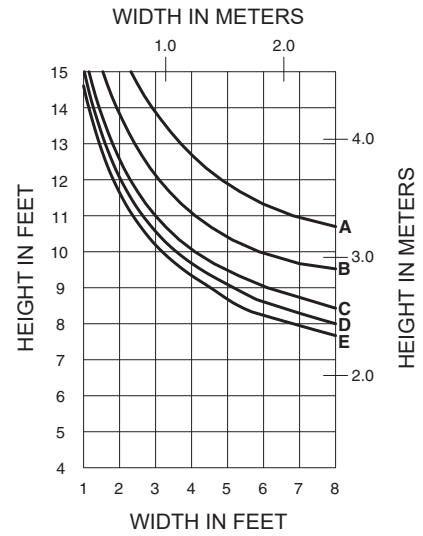
	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)
F =	60 PSF (2880)	100 PSF (4790)



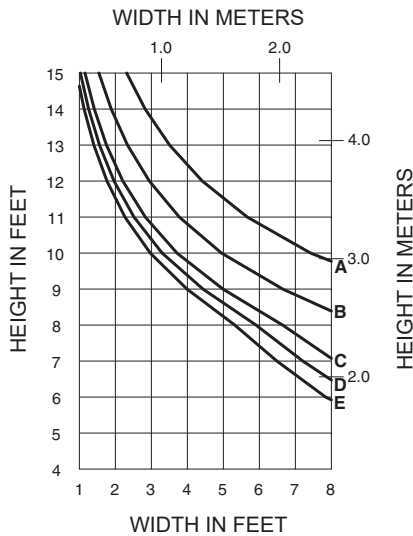
601TCG001

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

WITHOUT HORIZONTALS



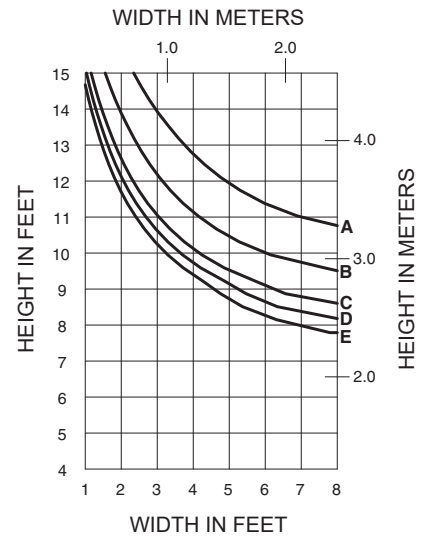
WITH HORIZONTALS



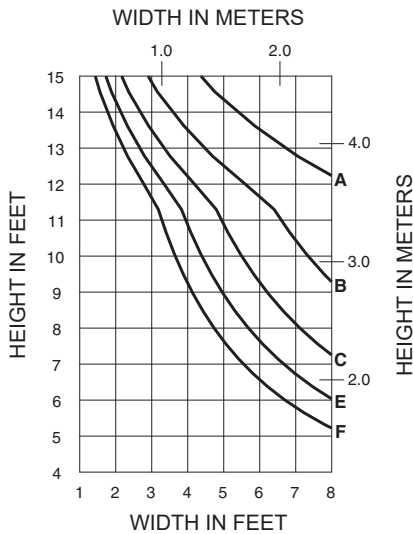
601TCG112

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

WITHOUT HORIZONTALS



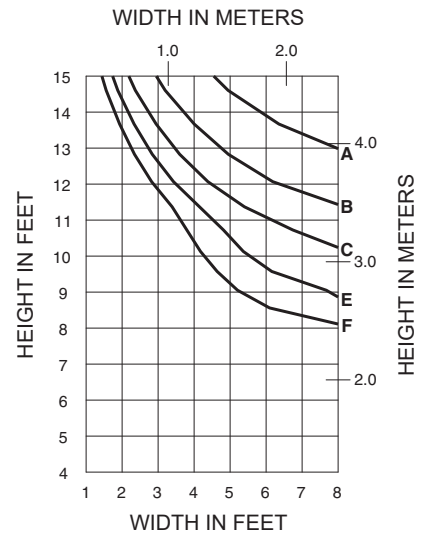
WITH HORIZONTALS



601TCG013

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

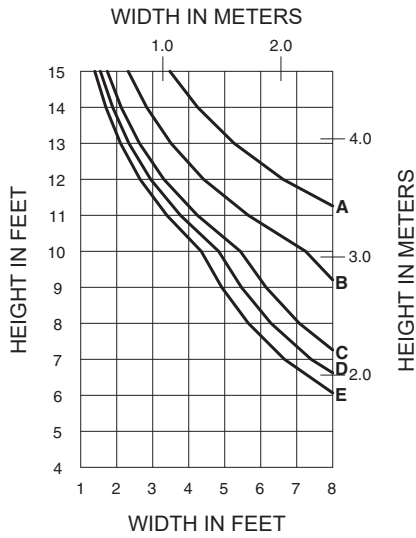
WITHOUT HORIZONTALS



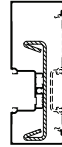
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WITH HORIZONTALS



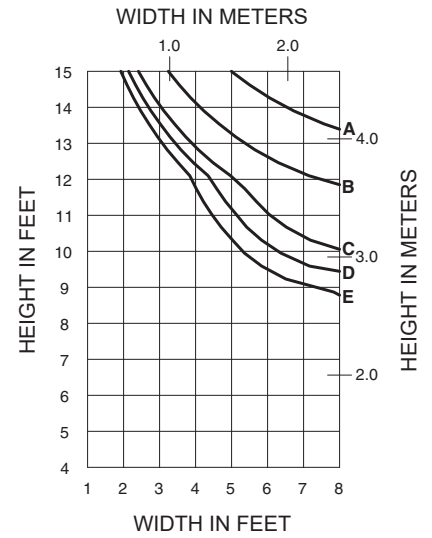
	Allowable Stress Design Load	LFRD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)



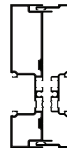
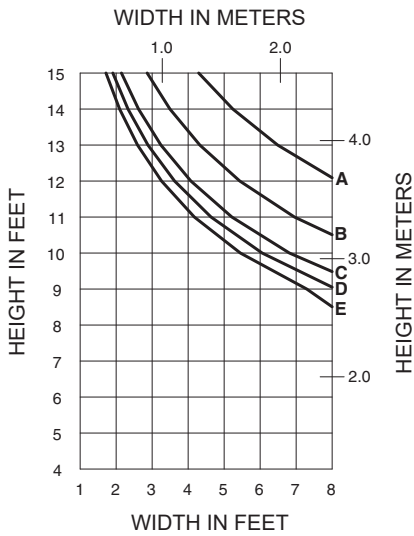
**601TCG112
WITH 450110 STEEL**

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

WITHOUT HORIZONTALS



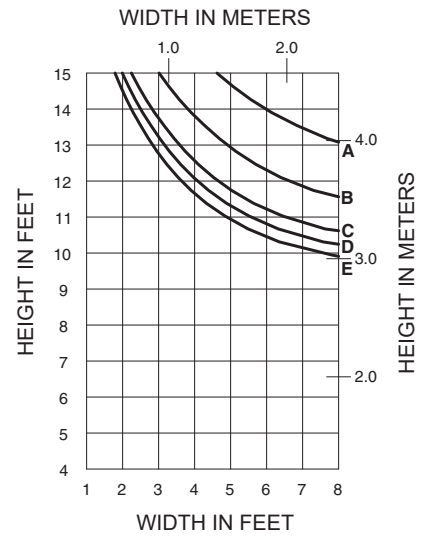
WITH HORIZONTALS



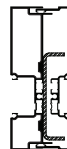
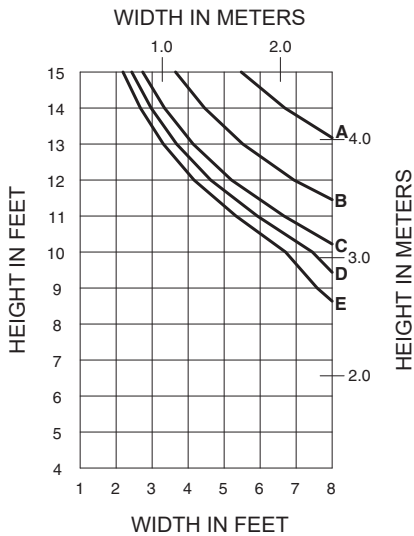
601TCG010

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

WITHOUT HORIZONTALS



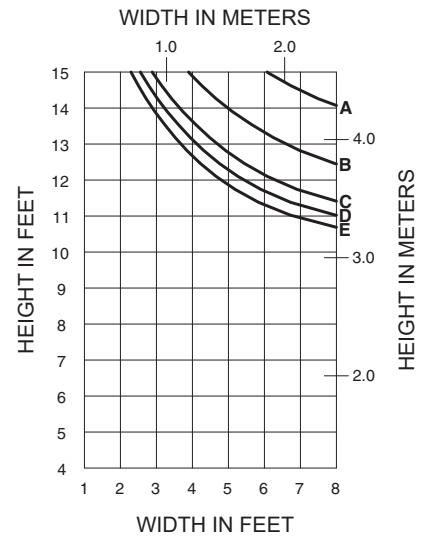
WITH HORIZONTALS



**601TCG010
WITH 400110 STEEL**

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

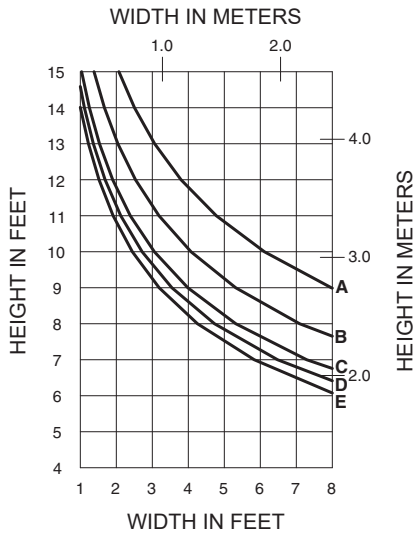
WITHOUT HORIZONTALS



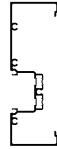
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WITH HORIZONTALS



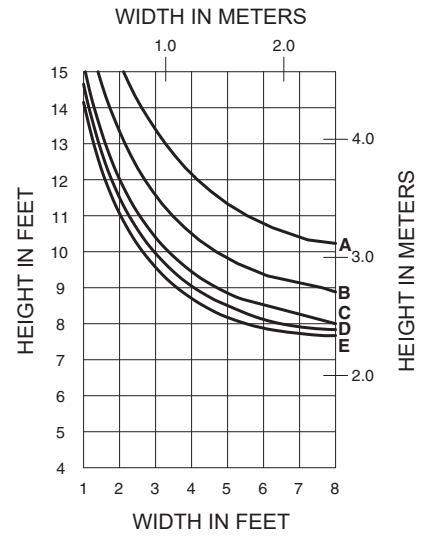
	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)
F =	60 PSF (2880)	100 PSF (4790)



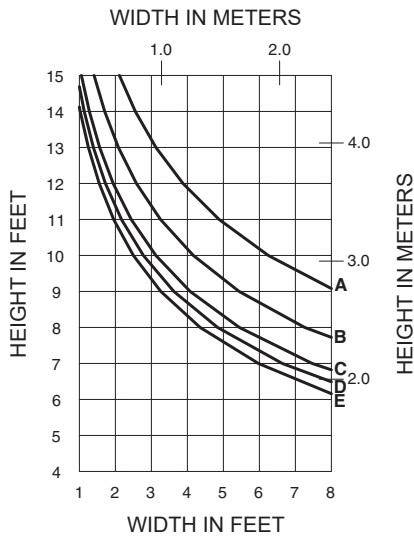
601UTCG001

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

WITHOUT HORIZONTALS



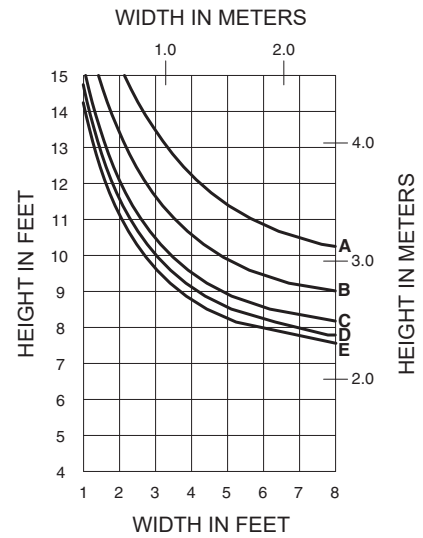
WITH HORIZONTALS



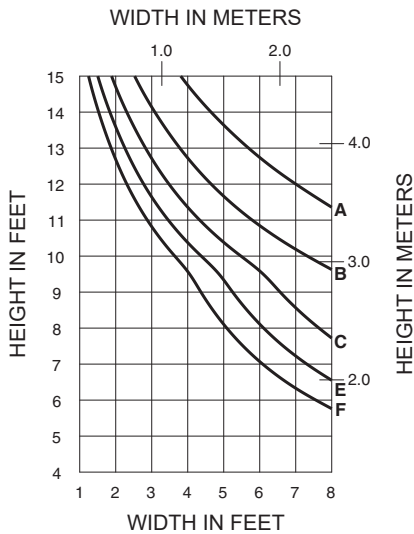
601UTCG112

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

WITHOUT HORIZONTALS



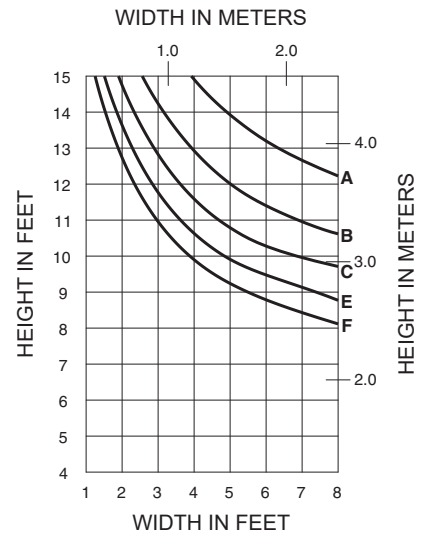
WITH HORIZONTALS



601UTCG013

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

WITHOUT HORIZONTALS

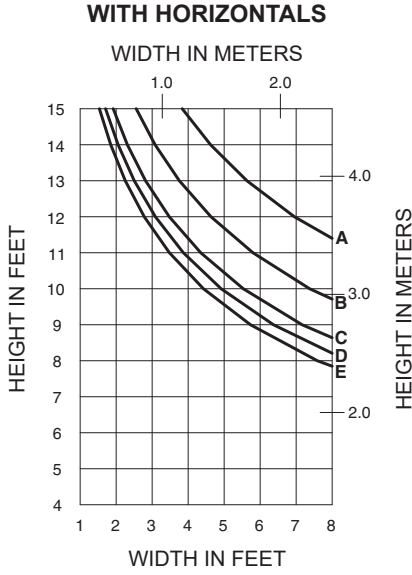


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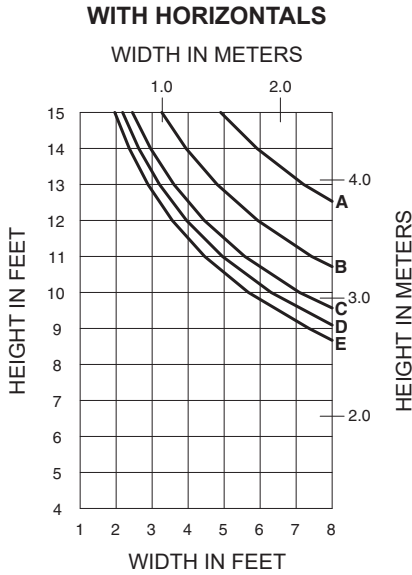
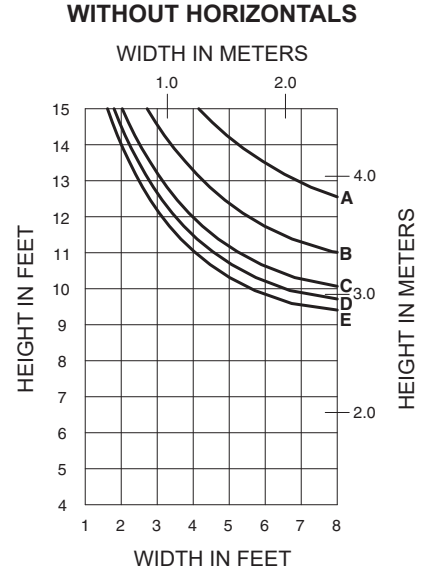


	Allowable Stress Design Load	LRFD Ultimate Design Load
A =	20 PSF (960)	33 PSF (1580)
B =	30 PSF (1440)	50 PSF (2400)
C =	40 PSF (1920)	67 PSF (3200)
D =	45 PSF (2160)	75 PSF (3600)
E =	50 PSF (2400)	83 PSF (4000)



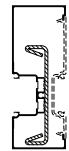
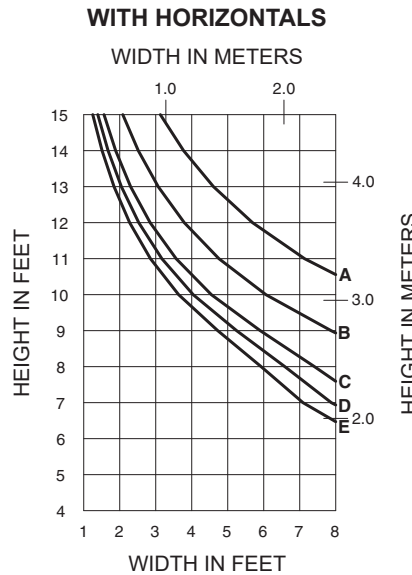
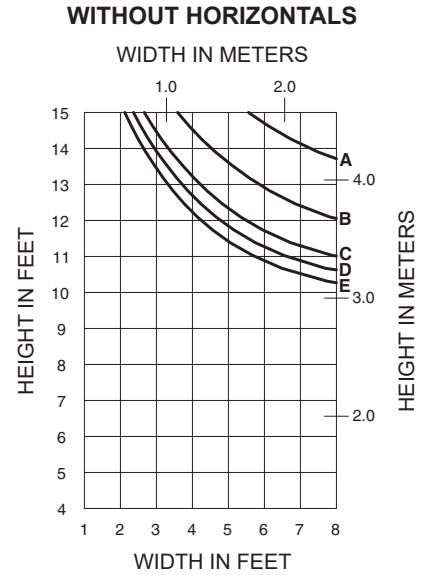
601UTCG010

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505



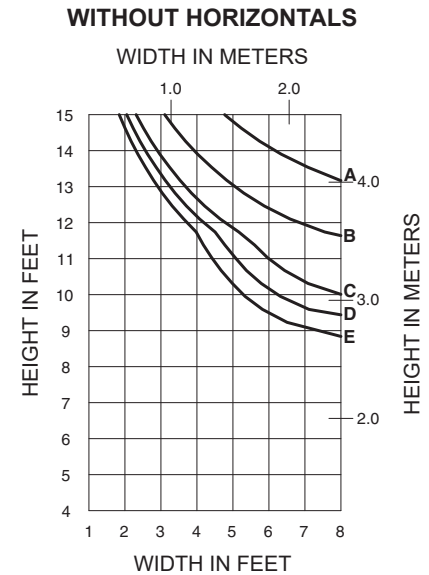
601UTCG010 WITH 400110 STEEL

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505

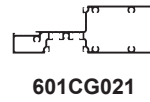
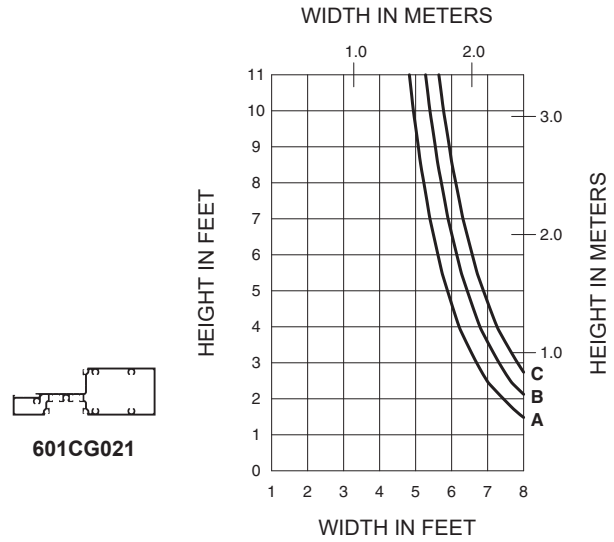
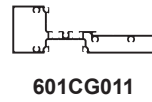
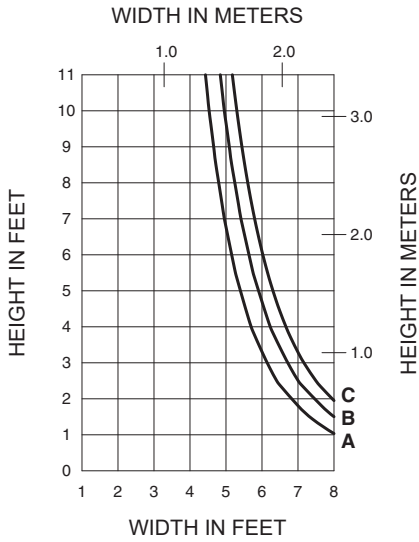


601UTCG112 WITH 450110 STEEL

WIND LOAD CHARTS ARE BASED ON COMPOSITE PROPERTIES WHICH ARE CALCULATED IN ACCORDANCE WITH AAMA TIR-8 AND AAMA 505



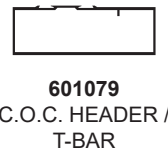
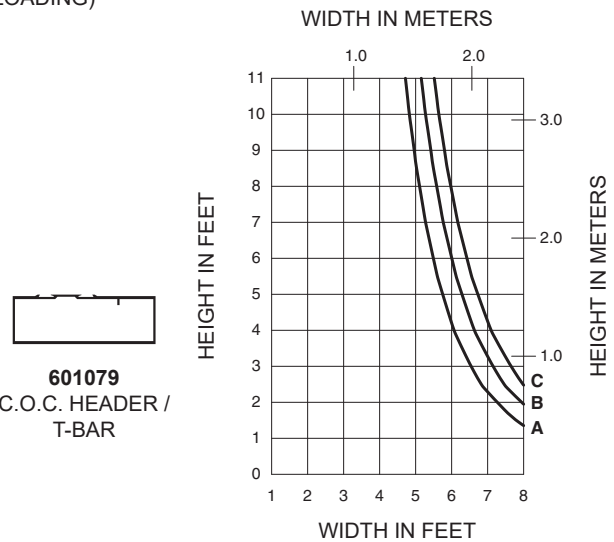
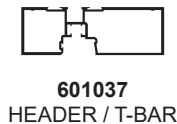
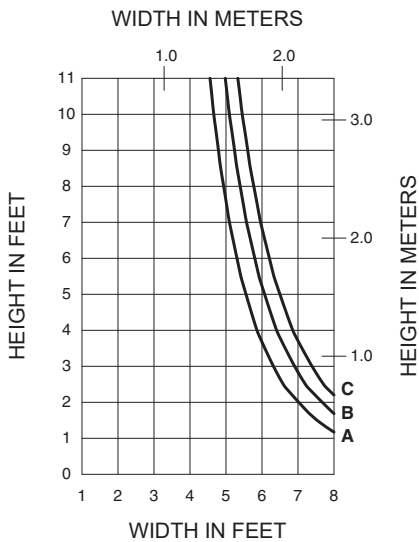
A = (1/4 POINT LOADING)
 B = (1/6 POINT LOADING)
 C = (1/8 POINT LOADING)



DEADLOAD ON TRANSOM BAR

Height limitations for transom glass over a doorway are based on a 1/16" (1.6) maximum allowable deflection at the mid-point of a transom bar. The accompanying charts are calculated for 1" (25.4) thick insulating glass supported on two setting blocks placed at the loading points shown.

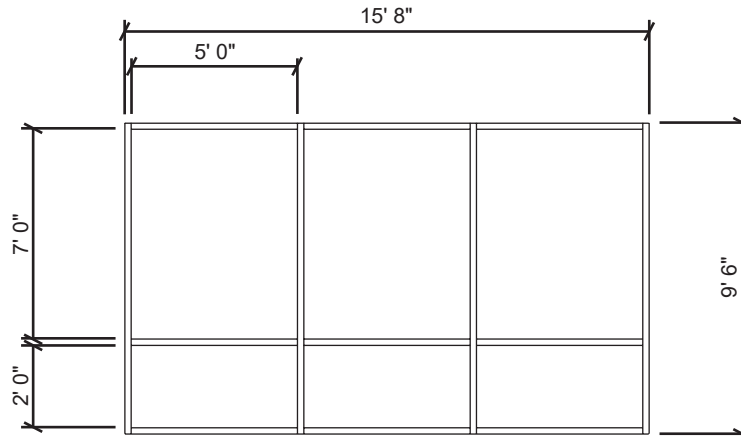
A = (1/4 POINT LOADING)
 B = (1/6 POINT LOADING)
 C = (1/8 POINT LOADING)



Laws and building and safety codes governing the design and use of Kawneer products, such as 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.

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Generic Project Specific U-factor Example Calculation
 (Percent of Glass will vary on specific products depending on sitemlines)



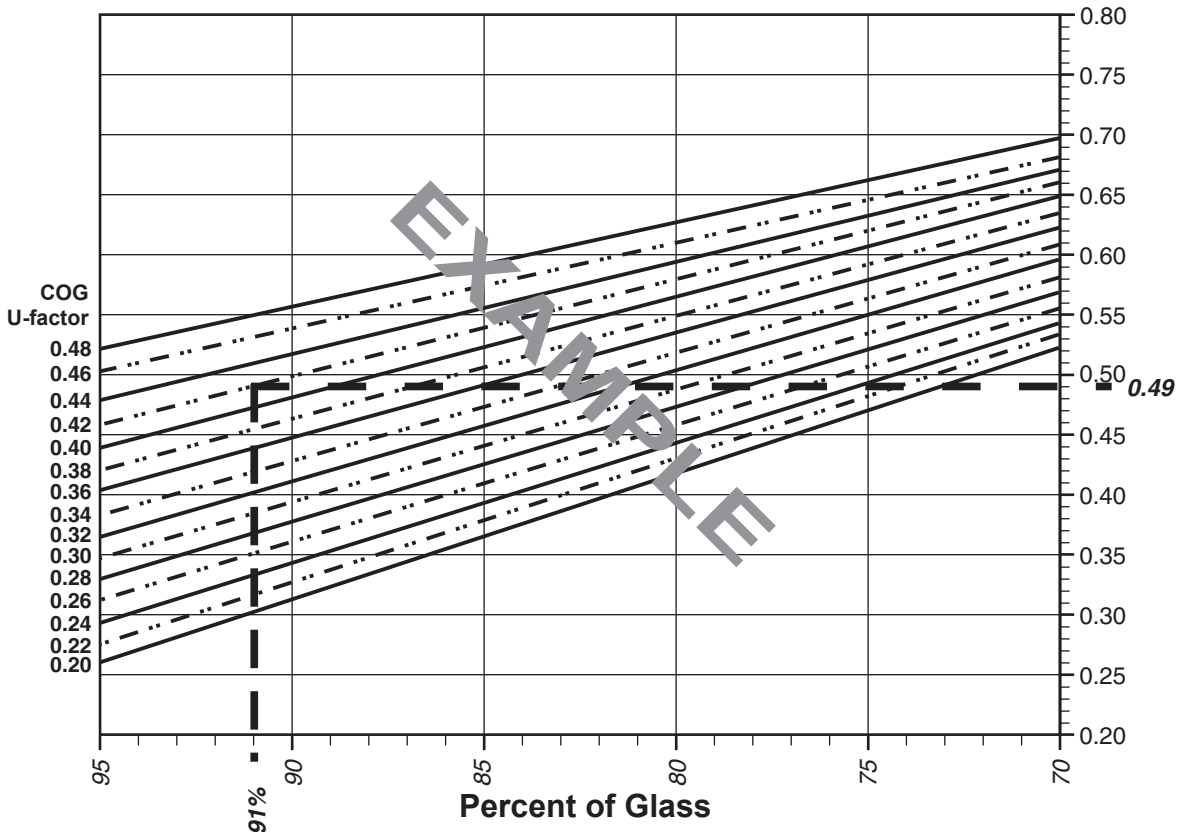
Example Glass U-factor = 0.42 Btu/hr·ft²·°F

Total Daylight Opening = 3(5' x 7') + 3(5' x 2') = 135ft²

Total Projected Area = (Total Daylight Opening + Total Area of Framing System)
 = 15' 8" x 9' 6" = 148.83ft²

Percent of Glass = (Total Daylight Opening ÷ Total Projected Area)
 = (135 ÷ 148.83)100 = 91%

System U-factor vs Percent of Glass Area



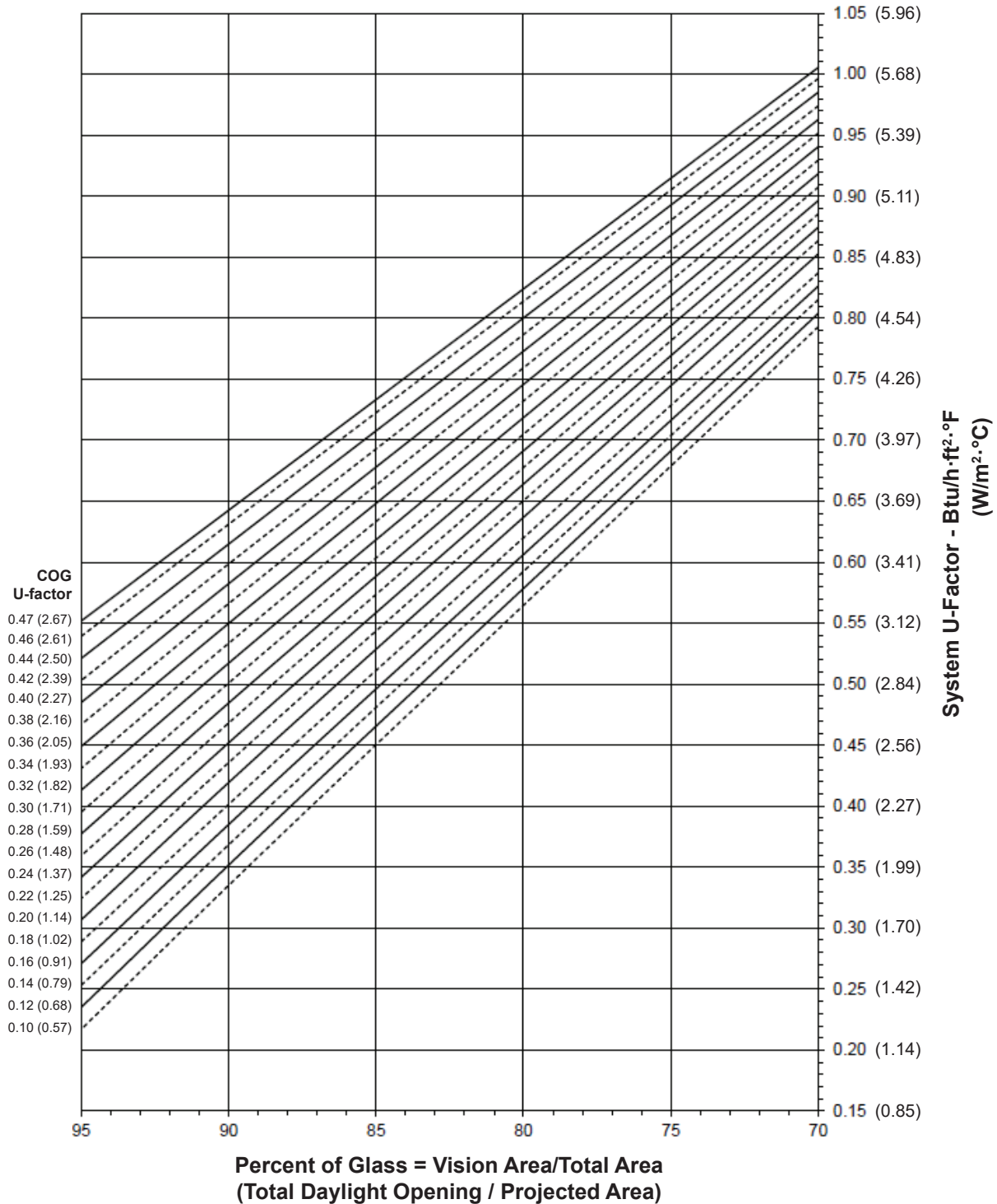
Based on 91% glass and center of glass (COG) U-factor of 0.42
System U-factor is equal to 0.49 Btu/hr x ft² x °F

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Note:
 Values in parentheses are metric.
 COG=Center of Glass.
 Charts are generated per AAMA 507.

Trifab® VersaGlaze® 601
1" Double Glazed - Aluminum Glazing Spacer
System U-Factor for Vision Glass



Notes for System U-factor, SHGC and VT charts:

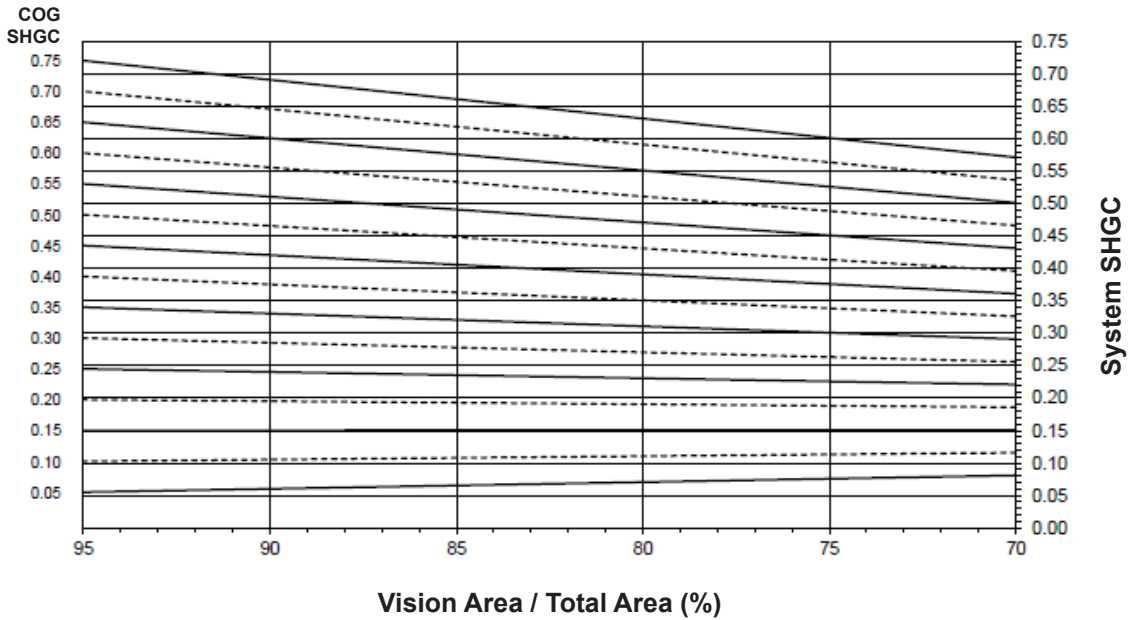
For glass values that are not listed, linear interpolation is permitted.
 Glass properties are based on center of glass values and are obtained from your glass supplier.

Laws and building and safety codes governing the design and use of Kawneer products, such as 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.

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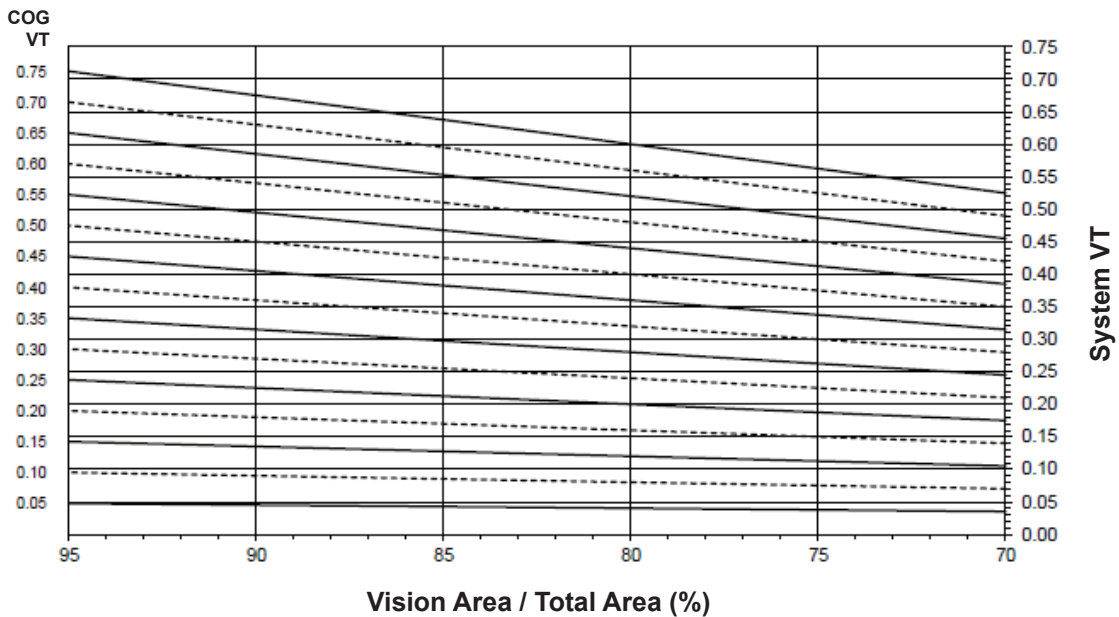
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Trifab® VersaGlaze® 601
1" Double Glazed - Aluminum Glazing Spacer
 System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



Charts are generated per AAMA 507.

System Visible Transmittance (VT) vs Percent of Vision Area



Charts are generated per AAMA 507.

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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.68
0.46	0.67
0.44	0.66
0.42	0.64
0.40	0.63
0.38	0.61
0.36	0.59
0.34	0.58
0.32	0.56
0.30	0.55
0.28	0.53
0.26	0.52
0.24	0.50
0.22	0.48
0.20	0.47
0.18	0.45
0.16	0.44
0.14	0.42
0.12	0.40
0.10	0.39

Trifab® VersaGlaze® 601
1" Double Glazed
Aluminum Glazing Spacer

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.68
0.70	0.63
0.65	0.59
0.60	0.55
0.55	0.50
0.50	0.46
0.45	0.41
0.40	0.37
0.35	0.33
0.30	0.28
0.25	0.24
0.20	0.19
0.15	0.15
0.10	0.11
0.05	0.06

Visible Transmittance ²

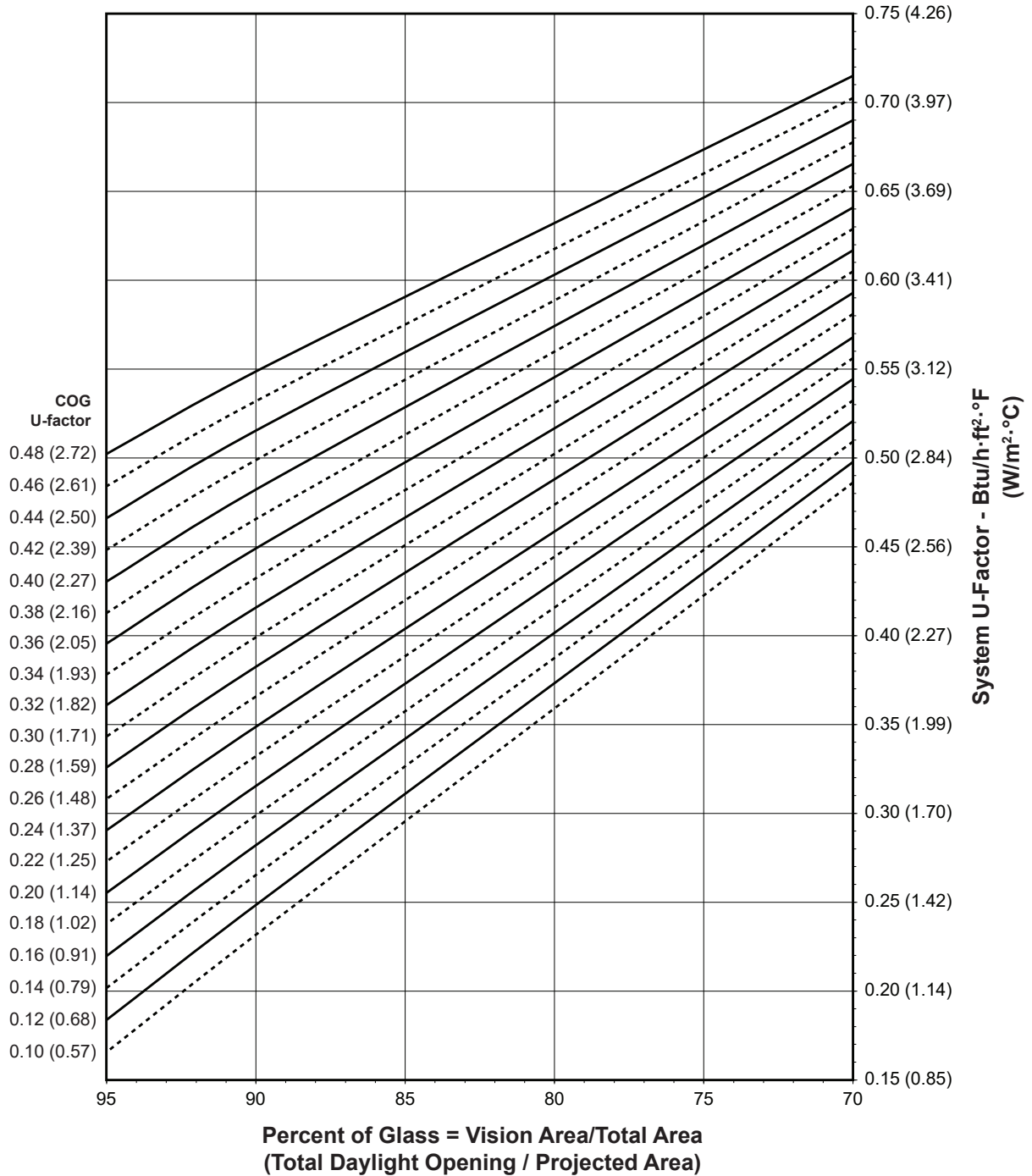
Glass VT ³	Overall VT ⁴
0.75	0.66
0.70	0.61
0.65	0.57
0.60	0.53
0.55	0.48
0.50	0.44
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

Laws and building and safety codes governing the design and use of Kawneer products, such as 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.

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Note: Values in parentheses are metric. COG=Center of Glass. Charts are generated per AAMA 507.

Trifab® VersaGlaze® 601T 1" Double Glazed - Warm-Edge Glazing Spacer System U-Factor for Vision Glass

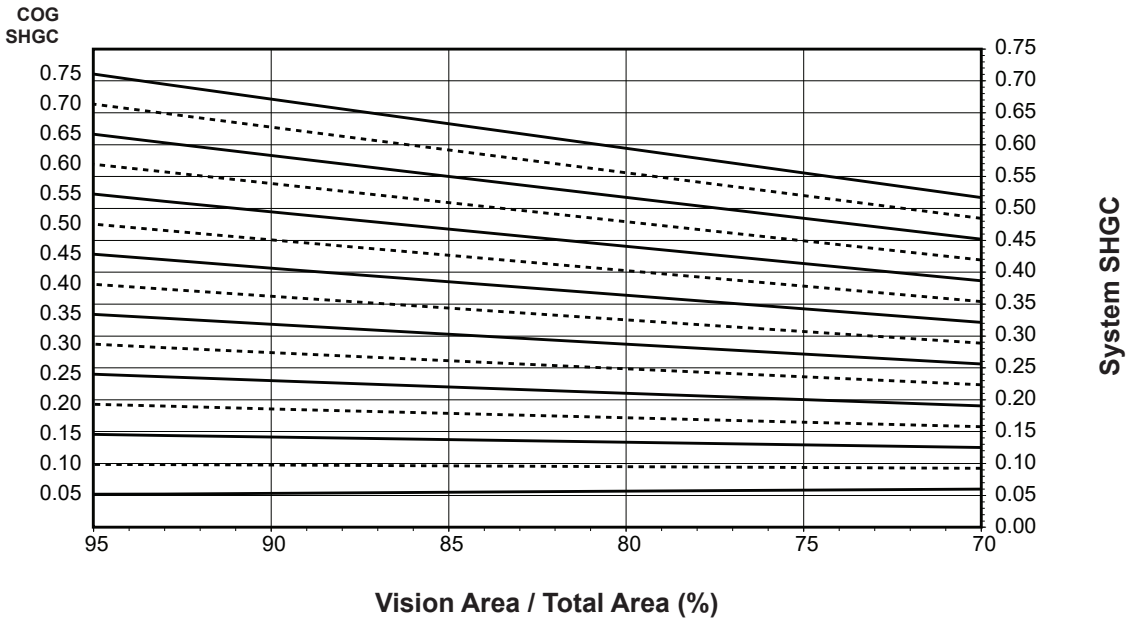


Notes for System U-factor, SHGC and VT charts: For glass values that are not listed, linear interpolation is permitted. Glass properties are based on center of glass values and are obtained from your glass supplier.

Laws and building and safety codes governing the design and use of Kawneer products, such as 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.

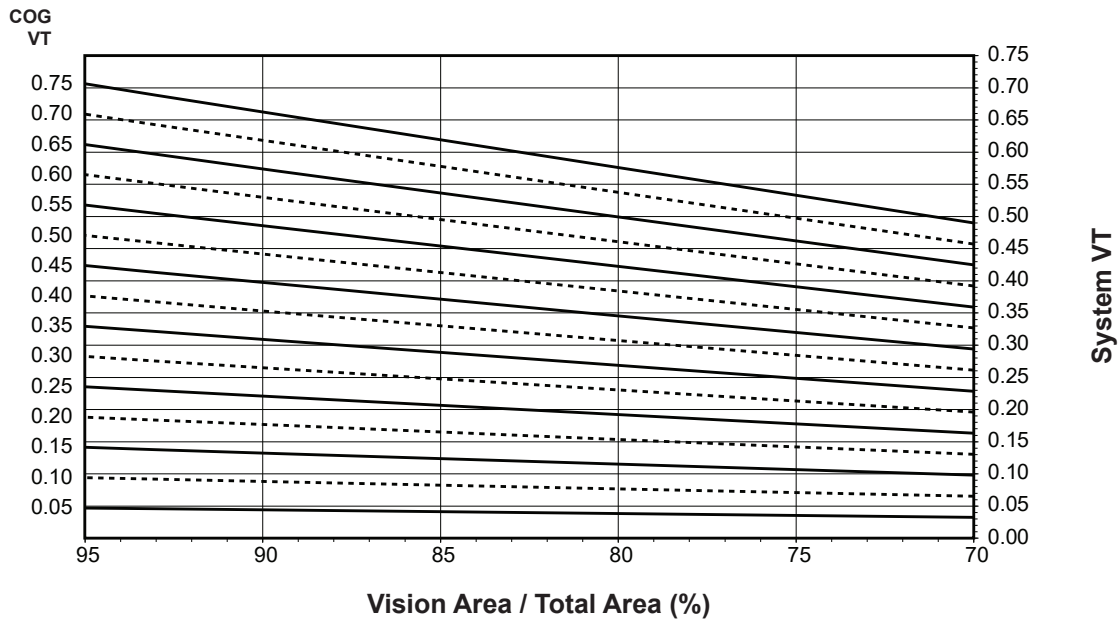
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Trifab® VersaGlaze® 601T
1" Double Glazed - Warm-Edge Glazing Spacer
System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



Charts are generated per AAMA 507.

System Visible Transmittance (VT) vs Percent of Vision Area



Charts are generated per AAMA 507.

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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.55
0.46	0.54
0.44	0.52
0.42	0.50
0.40	0.49
0.38	0.47
0.36	0.45
0.34	0.44
0.32	0.42
0.30	0.40
0.28	0.39
0.26	0.37
0.24	0.35
0.22	0.34
0.20	0.32
0.18	0.30
0.16	0.29
0.14	0.27
0.12	0.25
0.10	0.24

**Trifab® VersaGlaze® 601T
1" Double Glazed
Warm-Edge Glazing Spacer**

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.67
0.70	0.62
0.65	0.58
0.60	0.54
0.55	0.49
0.50	0.45
0.45	0.40
0.40	0.36
0.35	0.32
0.30	0.27
0.25	0.23
0.20	0.19
0.15	0.14
0.10	0.10
0.05	0.05

Visible Transmittance ²

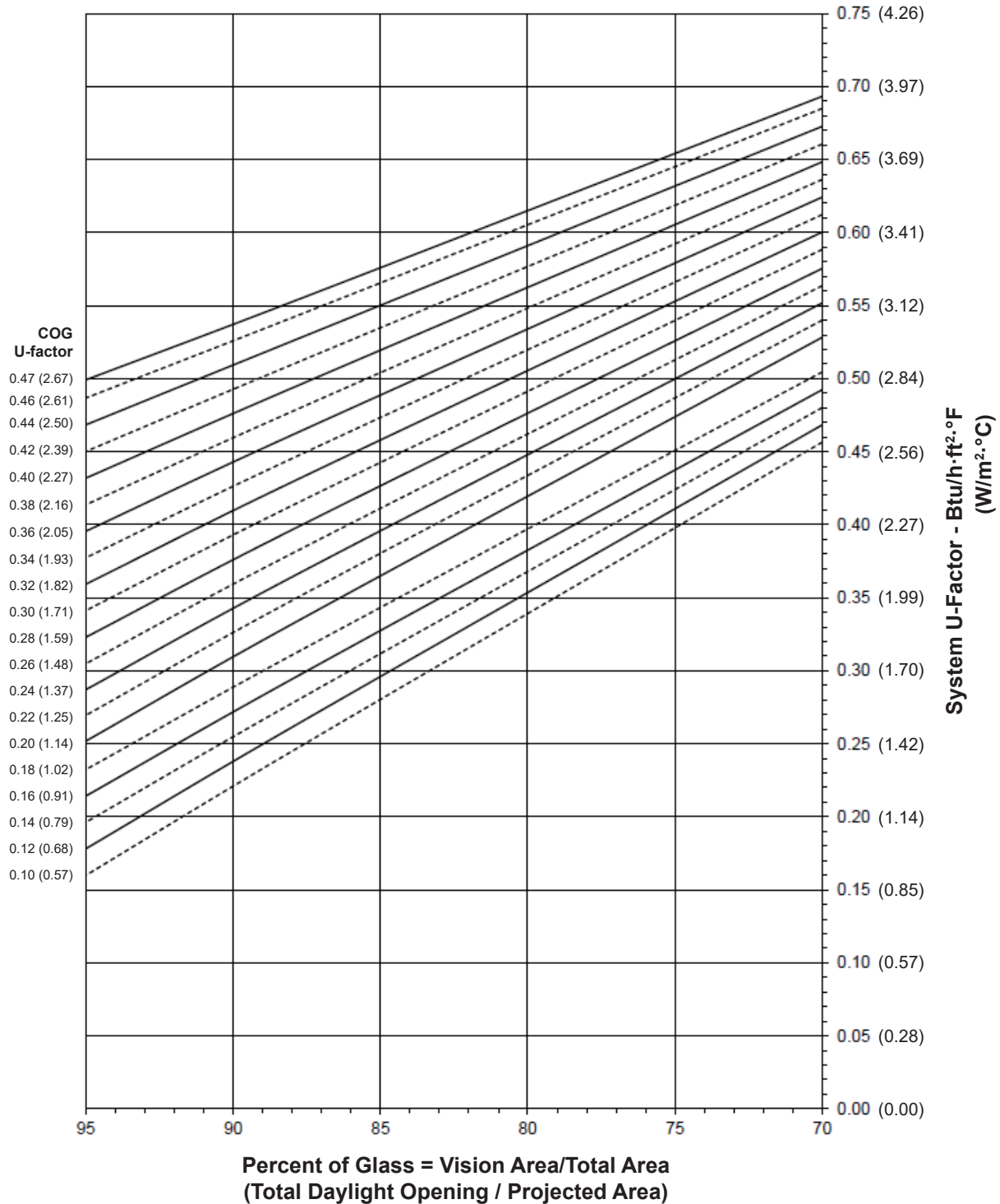
Glass VT ³	Overall VT ⁴
0.75	0.66
0.70	0.61
0.65	0.57
0.60	0.53
0.55	0.48
0.50	0.44
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

Laws and building and safety codes governing the design and use of Kawneer products, such as 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.

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Note:
 Values in parentheses are metric.
 COG=Center of Glass.
 Charts are generated per AAMA 507.

Trifab® VersaGlaze® 601T
1" Double Glazed - Aluminum Glazing Spacer
System U-Factor for Vision Glass



Notes for System U-factor, SHGC and VT charts:

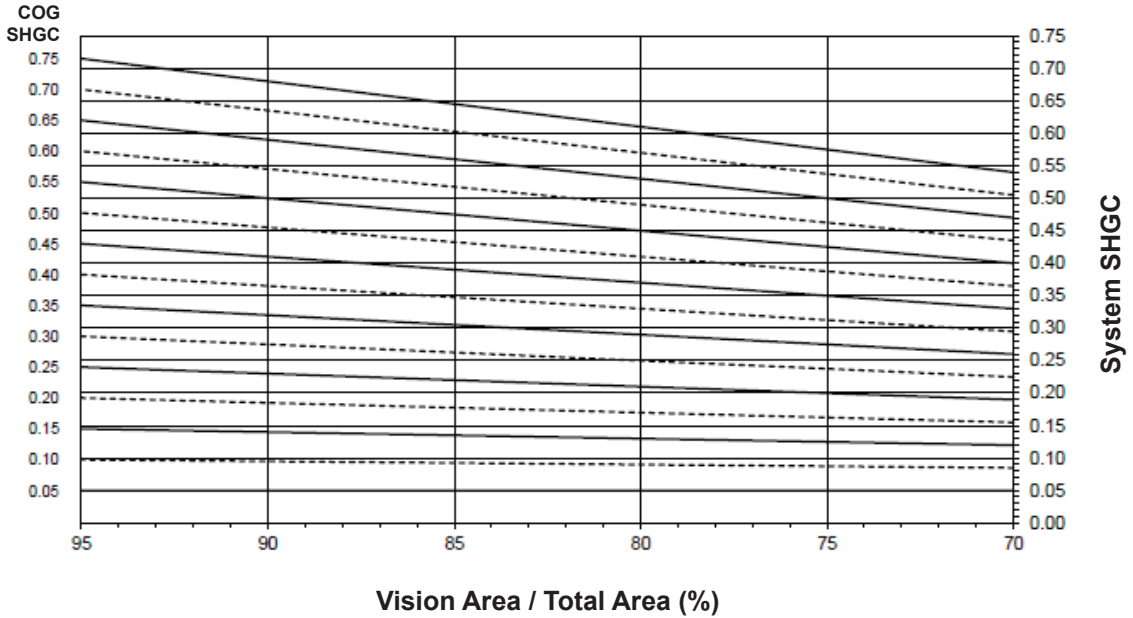
For glass values that are not listed, linear interpolation is permitted.
 Glass properties are based on center of glass values and are obtained from your glass supplier.

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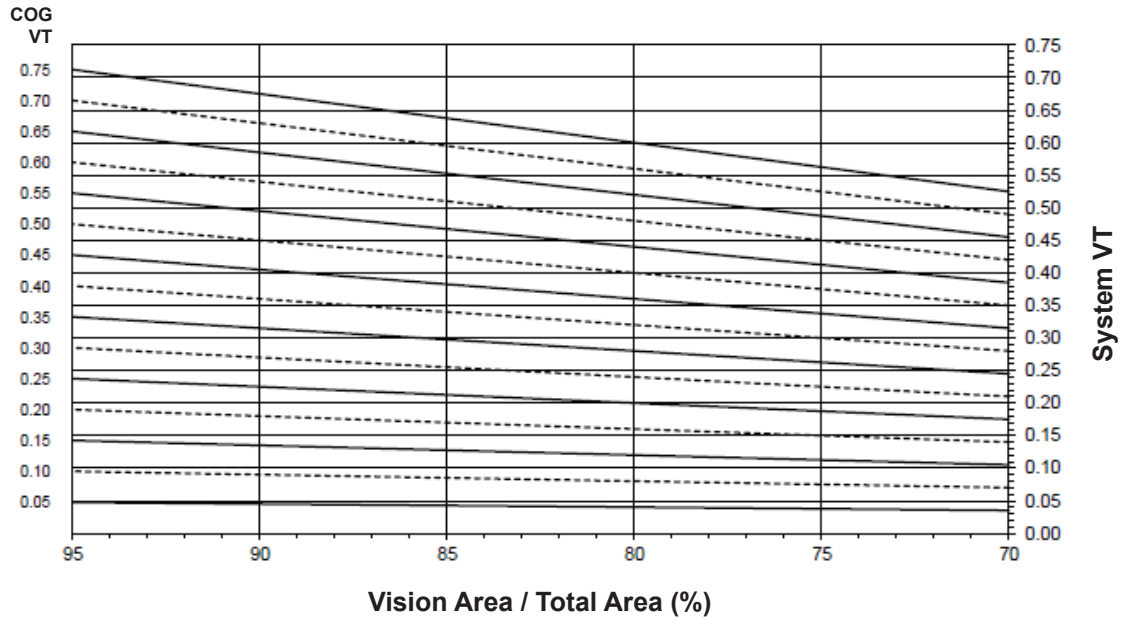
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Trifab® VersaGlaze® 601T
1" Double Glazed - Aluminum Glazing Spacer
System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



Charts are generated per AAMA 507.

System Visible Transmittance (VT) vs Percent of Vision Area



Charts are generated per AAMA 507.

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Thermal Transmittance¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.55
0.46	0.54
0.44	0.53
0.42	0.51
0.40	0.50
0.38	0.48
0.36	0.46
0.34	0.45
0.32	0.43
0.30	0.42
0.28	0.40
0.26	0.38
0.24	0.37
0.22	0.35
0.20	0.34
0.18	0.31
0.16	0.30
0.14	0.28
0.12	0.26
0.10	0.25

Trifab® VersaGlaze® 601T
1" Double Glazed
Aluminum Glazing Spacer

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.66
0.70	0.62
0.65	0.58
0.60	0.53
0.55	0.49
0.50	0.44
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.23
0.20	0.18
0.15	0.14
0.10	0.09
0.05	0.05

Visible Transmittance²

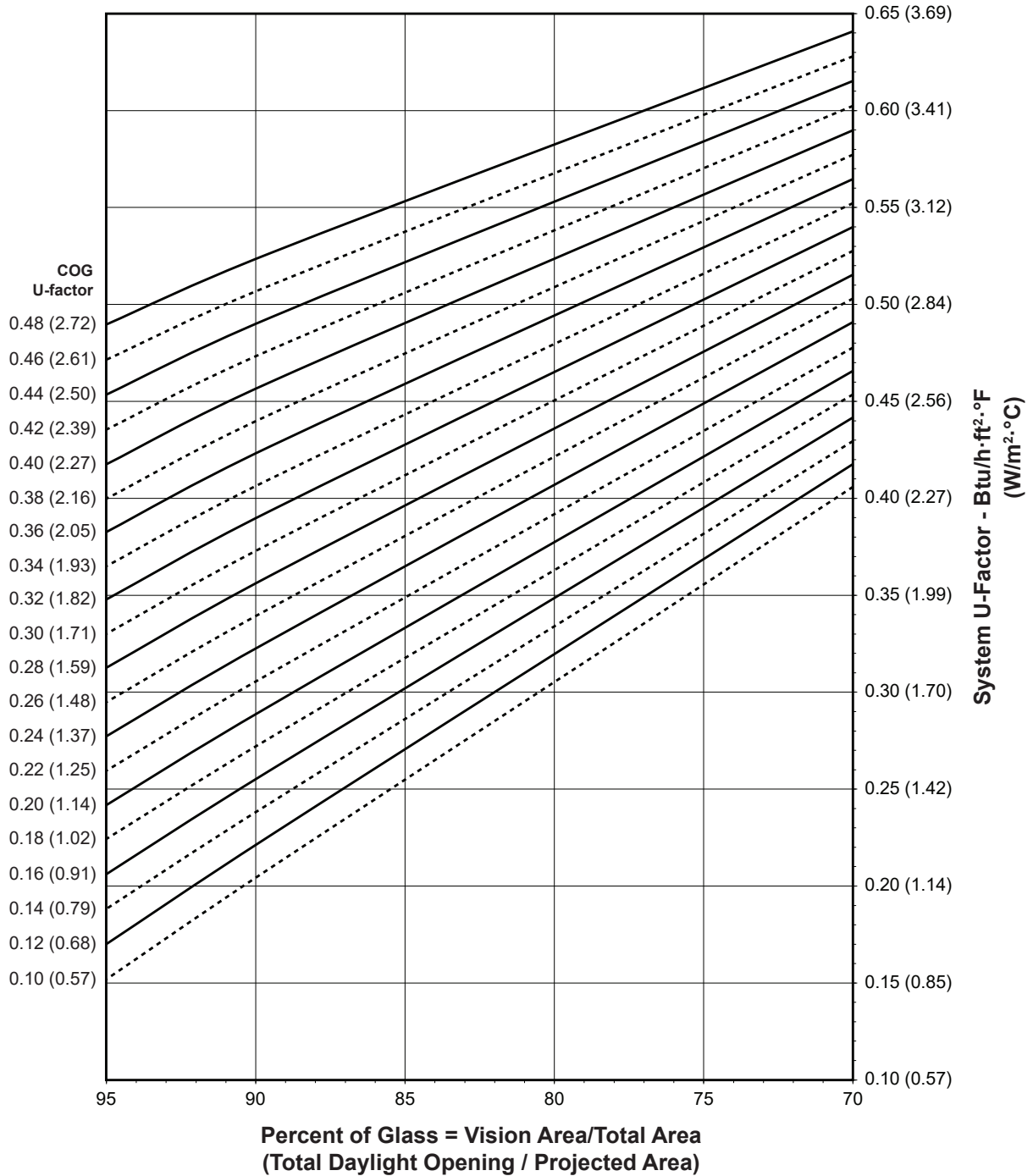
Glass VT ³	Overall VT ⁴
0.75	0.66
0.70	0.61
0.65	0.57
0.60	0.53
0.55	0.48
0.50	0.44
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

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Note: Values in parentheses are metric. COG=Center of Glass. Charts are generated per AAMA 507.

Trifab® VersaGlaze® 601UT 1" Double Glazed - Warm-Edge Glazing Spacer System U-Factor for Vision Glass



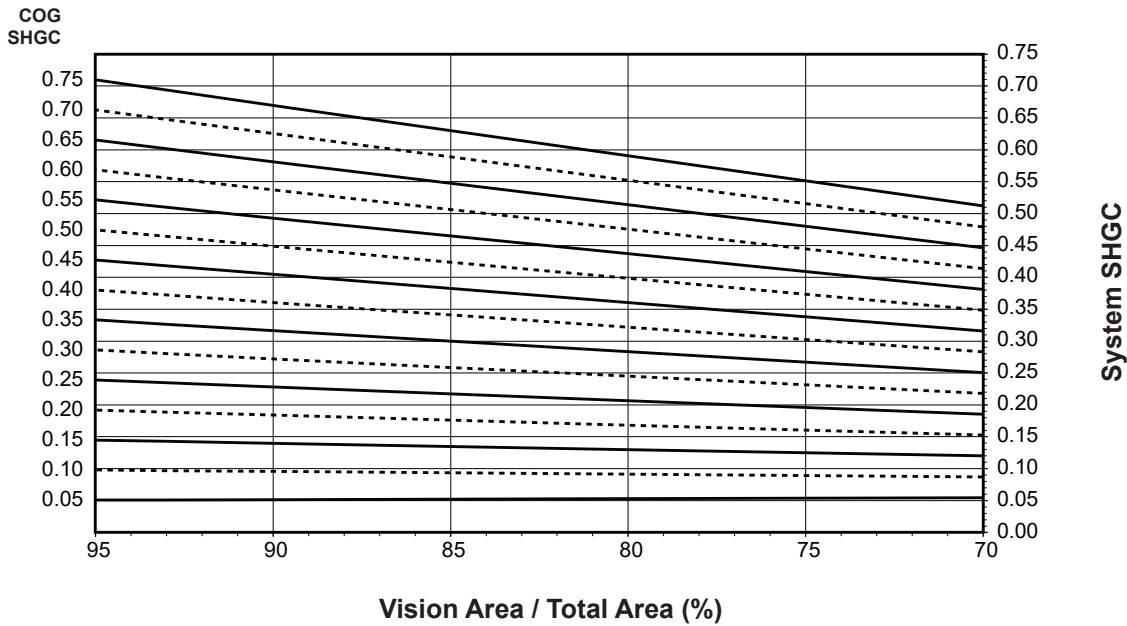
Notes for System U-factor, SHGC and VT charts:

For glass values that are not listed, linear interpolation is permitted. Glass properties are based on center of glass values and are obtained from your glass supplier.

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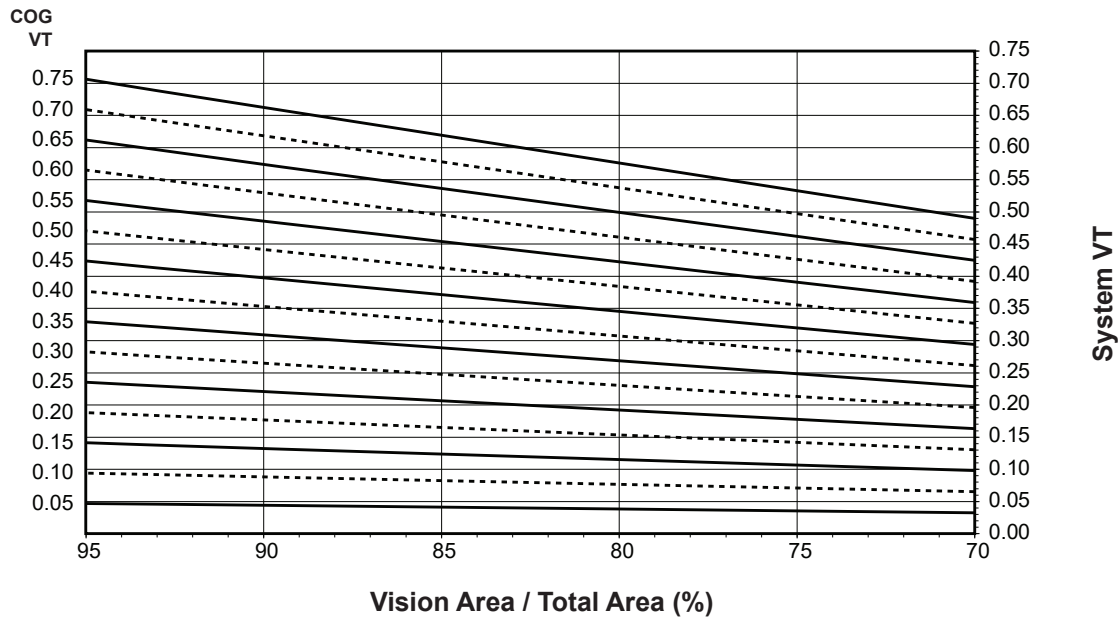
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Trifab® VersaGlaze® 601UT
1" Double Glazed - Warm-Edge Glazing Spacer
System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



Charts are generated per AAMA 507.

System Visible Transmittance (VT) vs Percent of Vision Area



Charts are generated per AAMA 507.

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Thermal Transmittance ¹ (BTU/hr • ft ² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.51
0.44	0.49
0.42	0.48
0.40	0.46
0.38	0.44
0.36	0.43
0.34	0.41
0.32	0.39
0.30	0.38
0.28	0.36
0.26	0.34
0.24	0.33
0.22	0.31
0.20	0.29
0.18	0.28
0.16	0.26
0.14	0.24
0.12	0.23
0.10	0.21

**Trifab® VersaGlaze® 601UT
1" Double Glazed
Warm-Edge Glazing Spacer**

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.67
0.70	0.62
0.65	0.58
0.60	0.53
0.55	0.49
0.50	0.45
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.23
0.20	0.18
0.15	0.14
0.10	0.10
0.05	0.05

Visible Transmittance ²

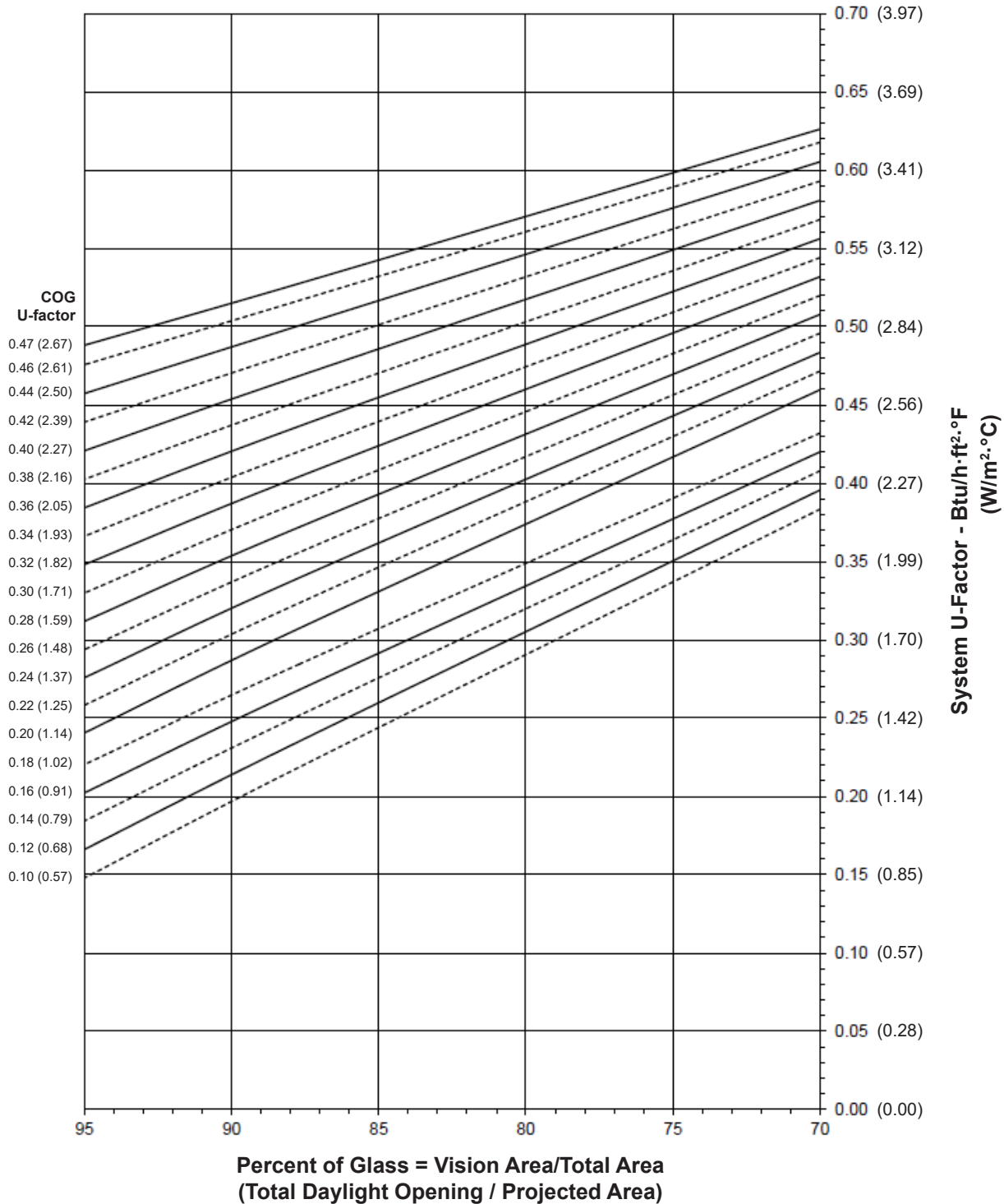
Glass VT ³	Overall VT ⁴
0.75	0.66
0.70	0.61
0.65	0.57
0.60	0.53
0.55	0.48
0.50	0.44
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

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Note:
 Values in parentheses are metric.
 COG=Center of Glass.
 Charts are generated per AAMA 507.

**Trifab® VersaGlaze® 601UT
 1" Double Glazed - Aluminum Glazing Spacer
 System U-Factor for Vision Glass**



Notes for System U-factor, SHGC and VT charts:

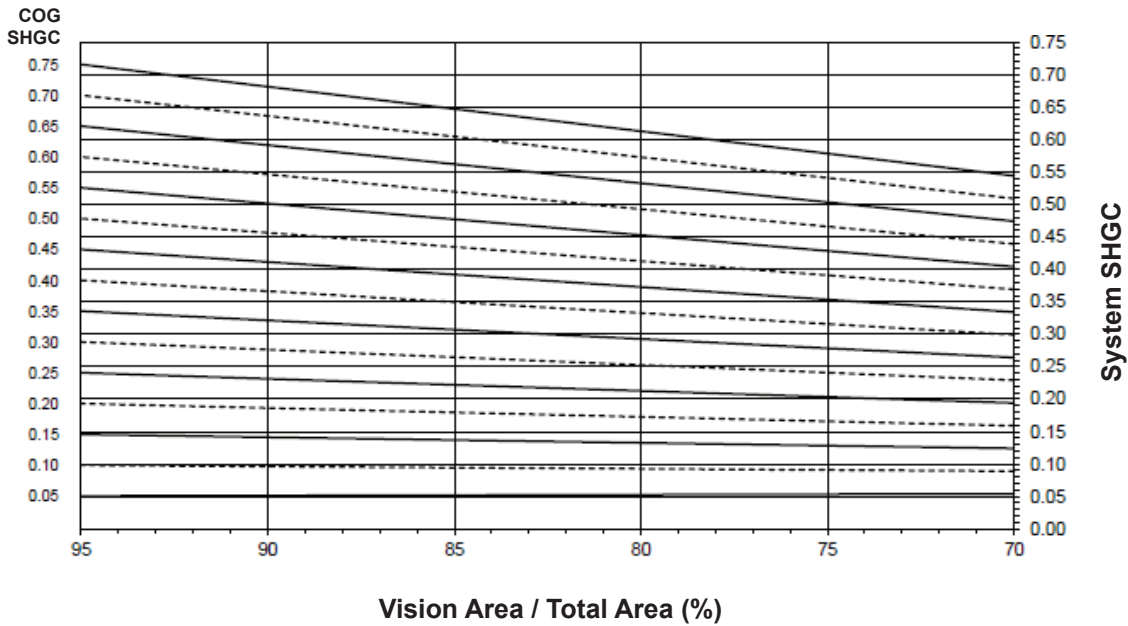
For glass values that are not listed, linear interpolation is permitted.
 Glass properties are based on center of glass values and are obtained from your glass supplier.

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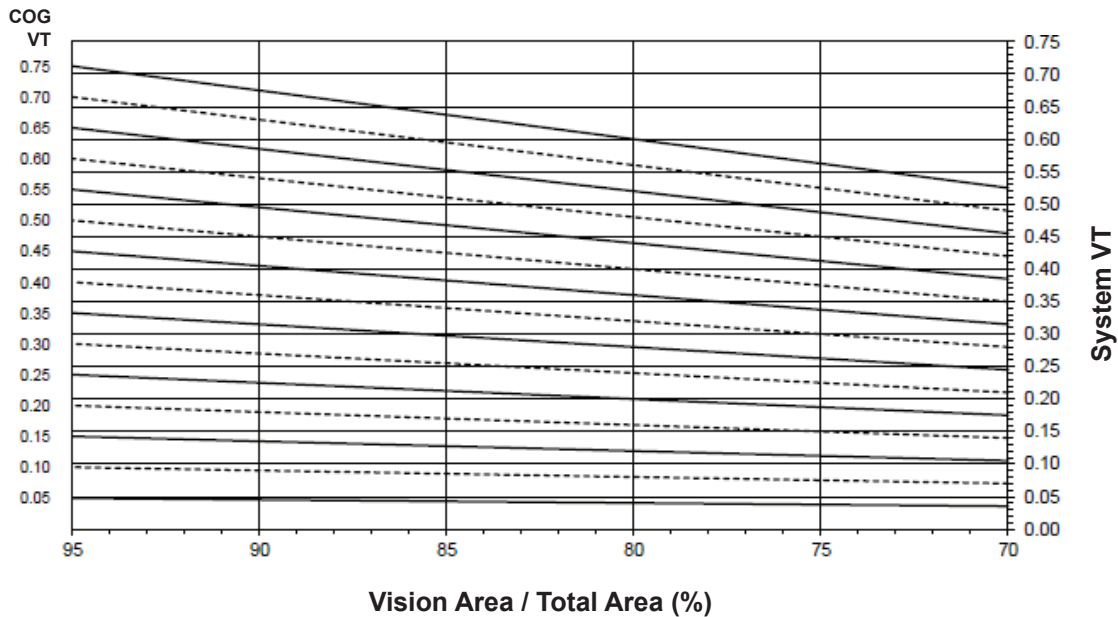
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Trifab® VersaGlaze® 601UT
1" Double Glazed - Aluminum Glazing Spacer
System Solar Heat Gain Coefficient (SHGC) vs Percent of Vision Area



Charts are generated per AAMA 507.

System Visible Transmittance (VT) vs Percent of Vision Area



Charts are generated per AAMA 507.

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Thermal Transmittance ¹ (BTU/hr • ft² • °F)

Glass U-Factor ³	Overall U-Factor ⁴
0.48	0.53
0.46	0.52
0.44	0.50
0.42	0.48
0.40	0.47
0.38	0.45
0.36	0.44
0.34	0.42
0.32	0.40
0.30	0.39
0.28	0.37
0.26	0.36
0.24	0.34
0.22	0.32
0.20	0.31
0.18	0.28
0.16	0.27
0.14	0.25
0.12	0.24
0.10	0.22

Trifab® VersaGlaze® 601UT 1" Double Glazed Aluminum Glazing Spacer

NOTE: For glass values that are not listed, linear interpolation is permitted.

1. U-Factors are determined in accordance with NFRC 100.
2. SHGC and VT values are determined in accordance with NFRC 200.
3. Glass properties are based on center of glass values and are obtained from your glass supplier.
4. Overall U-Factor, SHGC, and VT Matricies are based on the standard NFRC specimen size of 2,000 mm wide by 2,000 mm high (78-3/4" by 78-3/4").

SHGC Matrix ²

Glass SHGC ³	Overall SHGC ⁴
0.75	0.67
0.70	0.62
0.65	0.58
0.60	0.53
0.55	0.49
0.50	0.45
0.45	0.40
0.40	0.36
0.35	0.31
0.30	0.27
0.25	0.23
0.20	0.18
0.15	0.14
0.10	0.10
0.05	0.05

Visible Transmittance ²

Glass VT ³	Overall VT ⁴
0.75	0.66
0.70	0.61
0.65	0.57
0.60	0.53
0.55	0.48
0.50	0.44
0.45	0.39
0.40	0.35
0.35	0.31
0.30	0.26
0.25	0.22
0.20	0.18
0.15	0.13
0.10	0.09
0.05	0.04

Laws and building and safety codes governing the design and use of Kawneer products, such as 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.

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Redefining Thermal Entrances with IsoPour™ Technology



Ask more from your door, and get it all with Kawneer's new Insulpour® Thermal Entrances, featuring IsoPour™ technology. This innovative product offering gives architects, developers, owners, and glazing contractors the ability to create a true thermally broken entrance system. It's an ideal solution for high-end commercial and multifamily facilities looking to improve thermal control in common areas with moderate to high traffic.

By merging industry-proven pour and debridge and polymer isolator technologies, Kawneer's IsoPour™ Thermal Break technology creates thermally broken assemblies for enhanced building energy efficiencies with higher structural performance. Insulpour® Thermal Entrances simultaneously provide additional design flexibility through multiple door cross-rail and bottom rail choices along with dual finish capabilities for the door and door frame.

PERFORMANCE, STRENGTH & SECURITY

The door and frame both leverage IsoPour™ Thermal Break technology, enabling high thermal performance. Specifically aimed at quelling concerns about cold spots and thermal bridging from architects and specifiers, Insulpour® Thermal Entrances feature a true thermally broken door header, which significantly mitigates the formation of condensation when used with a concealed overhead closer. Insulating glass unit options of double pane 1" (25.4 mm) or triple pane 1-1/2" (38.1 mm) improve thermal and sound reduction performance.

For added strength, the 2-1/4" (57.2 mm) deep door has a stout 1/8" (3.2 mm) wall thickness, and the dual-welded corner construction of Insulpour® Thermal Entrances adds long-term performance. Each door corner comes with a limited lifetime warranty, good for the life of the door under normal use operation. It is transferable from building owner to owner and is provided in addition to the standard two-year warranty covering material and workmanship of each Kawneer door.

Insulpour® Thermal Entrances meet ASTM E1996 hurricane impact resistant requirements up to Zone 4 and Level D, and have undergone shock tube testing for blast mitigation. Contact your local Kawneer sales representative for limitations and specific application requirements.

AESTHETICS & DESIGN FLEXIBILITY

With sightlines that match standard, non-thermally broken entrances, Insulpour® Thermal Entrances offer 250T narrow, 350T medium and 500T wide stile options.

	VERTICAL STILE	TOP	BOTTOM RAIL
250T Narrow Stile	2-1/2" (63.5 mm)	2-15/16" (74.6 mm)	3-7/8" (98.4 mm)
350T Medium Stile	3-1/2" (88.9 mm)	3-1/2" (88.9 mm)	6-1/2" (165.1 mm)
500T Wide Stile	5" (127 mm)	5" (127 mm)	6-1/2" (165.1 mm)

The unique thermal break design allows for a wider choice of locking option hardware than previous thermal entrance designs. Coupled with various cross-rail sizes and multiple bottom rail heights of 7-1/2" (190.5 mm), 10" (254 mm) and 12" (304.8 mm), Insulpour® Thermal Entrances give architects, designers and building owners more opportunities to bring their vision to life.

