

DESIGN AND PERFORMANCE VERSATILITY WITH UNMATCHED FABRICATION FLEXIBILITY



TRIFAB® VERSAGLAZE® 450, 451 & 451T (THERMAL) FRAMING SYSTEMS & TRIFAB® 451UT (ULTRA THERMAL) FRAMING SYSTEM

Trifab® VersaGlaze® is built on the proven and successful Trifab® platform – with all the versatility its name implies. There are enough framing system choices, fabrication methods, design options and performance levels to please the most discerning building owner, architect and installer. The 4.5" depth Trifab® VersaGlaze® Framing System family is available with non-thermal, thermal and ultra-thermal performance levels. The ultra-thermal Trifab® 451UT Framing System, is designed for the most demanding thermal performance and employs actual Isolock® thermal break.

AESTHETICS

Trifab® VersaGlaze® Framing Systems offer designers a choice of front-, center-, back- or multi-plane glass applications. Structural silicone glazing (SSG) and weatherseal glazing options further expand designers' choice, allowing for a greater range of possibilities for specific project requirements and architectural styles. All systems have a 4-1/2" frame depth; Trifab® VersaGlaze® 450 has 1-3/4" sightlines, while Trifab® VersaGlaze® 451/451T and Trifab® 451UT have 2" sightlines.

With seamless incorporation of Kawneer entrances or windows, including GLASSvent® visually frameless ventilators, Trifab® framing can be used on almost any project. These framing systems can also be packaged with Kawneer curtain walls and overhead glazing, thereby providing a full range of proven, and tested, quality products for the owner, architect and installer from a single-source supplier.

ECONOMY

Trifab® VersaGlaze® 450/451/451T/451UT Framing Systems offer a variety of fabrication choices to suit your project:

- **Screw Spline** – for economical continuous runs utilizing two-piece vertical members that provide the option to pre-assemble units for efficient handling and installation. (available for all Trifab systems)
- **Shear Block** – for punched openings or continuous runs using tubular verticals with shear blocks to connect horizontal members. (available for 450/451/451T systems)
- **Stick** – for fast, easy field fabrication. Continuous sill and head receptors are installed with horizontals connected to tubular verticals with shear blocks. (available for 450/451/451T systems)
- **Pre-glazed** – The combination of screw spline construction with pre-glazing in the shop accelerates installation and reduces field labor time while minimizing disruption to the surrounding area or existing tenants. Making it an exceptional choice for new or retrofit applications, particularly in urban areas or where space is limited. (available for 451/451T/451UT framing)

Photography: © Ben Gancsos



All systems can be flush glazed from either the inside or outside. The weatherseal option provides an alternative to SSG vertical mullions for Trifab® VersaGlaze® 450/451/451T. This ABS/ASA rigid polymer extrusion allows complete inside glazing and creates a flush glass appearance on the building exterior without the added labor of scaffolding or swing stages. Additionally, high-performance flashing options are engineered to eliminate perimeter sill fasteners and associated blind seals.

FOR THE FINISHING TOUCH

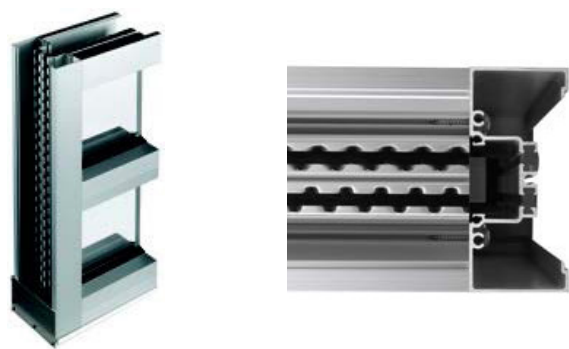
Architectural Class I anodized aluminum and painted finishes in fluoropolymer (AAMA 2605) and solvent-free powder coatings (AAMA 2604) offer a variety of color choices.

PERFORMANCE

Kawneer’s Isolock® thermal break technology creates a composite section, prevents dry shrinkage and is available on Trifab® VersaGlaze® 451T. For even greater thermal performance, a dual Isolock® thermal break is used on Trifab® 451UT.

U-factor, CRF values and STC ratings for Trifab® framing systems vary depending upon the glass plane application. Project-specific U-factors can be determined for each individual project.

(See the Kawneer Architectural Manual or Kawneer.com for additional information.)

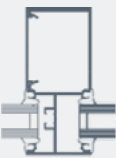
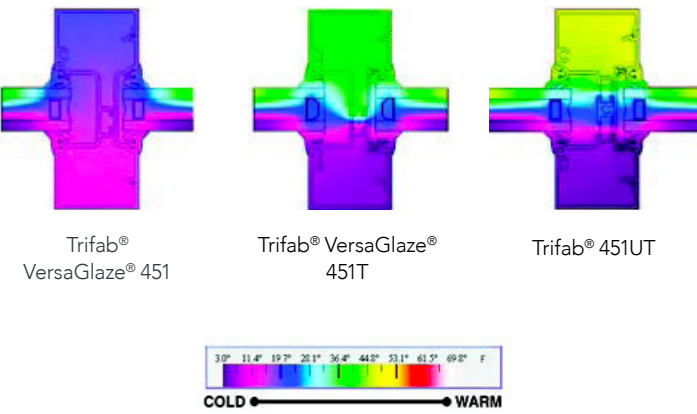


Trifab® 451UT uses a dual Isolock® thermal break (right) and features a new high performance sill design, which incorporates a screw-applied end dam (left), ensuring positive engagement and tight joints between the sill flashing and end dam.

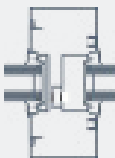
PERFORMANCE TEST STANDARDS

Air Infiltration	ASTM E283
Water	AAMA 501, ASTM E331
Structural	ASTM E330
Thermal	AAMA 1503
Thermal Break	AAMA 505, AAMA TIR-A8
Acoustical	AAMA 1801, ASTM E1425

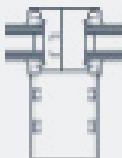
Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.



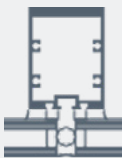
Front



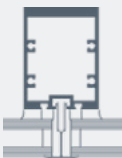
Center



Back



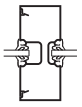
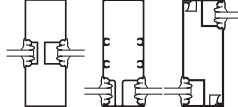
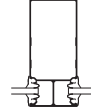
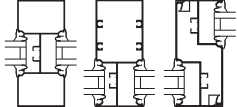
SSG



Weatherseal

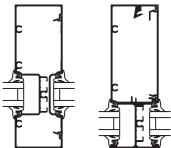
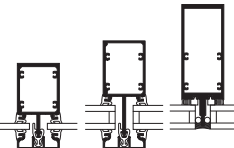


Multi-Plane

Product	Trifab® 400 Framing (1-3/4" x 4")	Trifab® VersaGlaze® 450 Framing System 1-3/4" sightline (1-3/4" x 4-1/2")	Trifab® VersaGlaze® 450 Framing System 2" sightline (2" x 4-1/2") (2" x 2-1/4" Veneer)	Trifab® VersaGlaze® 451 Framing System (2" x 4-1/2")
Catalog Section	Framing	Framing	Framing	Framing
Typical Detail				
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings
Glass Plane Options	Center	Center Front Back Multi-Plane	Front	Center Front Back Multi-Plane
Infill Options	1/8", 1/4" & 3/8"	1/8", 1/4" & 3/8"	1/8", 1/4" & 3/8"	Up to 1-1/8"
Glazing Options	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed
Thermal	No	No	No	No
SSG	No	Optional	Optional	Optional
Weatherseal	No	Optional	Optional	Optional
2 Color Option	No	No	No	Yes with Front Stick
Integrated Entrance Framing	Yes	Yes	Yes	Yes
Windows Integration	Yes	Yes	Yes	Yes
GLASSvent® Integration	Yes	Yes	Yes	Yes
Fabrication Method	Screw Spline, Shear Block, Stick	Screw Spline, Shear Block, Stick, Continuous Head and Sill	Stick	Screw Spline, Shear Block, Stick, Continuous Head and Sill
Product Description	A 1-3/4" x 4" flush glazed system for 1/4" glass. Designed for quick installation on low rise buildings. It offers design economy with flexibility.	A 1-3/4" x 4-1/2" flush glazed system for 1/4" glass. VersaGlaze® is engineered for design and fabrication versatility with variable glass plane choices, SSG or Weatherseal options and four types of fabrication.	A 2" x 2-1/4" Veneer and a 2" x 4-1/2" Captured, flush glazed system for 1/4" glass with SSG and Weatherseal options. Designed for quick installation on low to mid-rise buildings.	A 2" x 4-1/2" flush glazed system for 1" glass. VersaGlaze® is engineered for design and fabrication versatility with variable glass plane choices, SSG or Weatherseal options, and four types of fabrication.
Testing for Protective Glazing	—	—	—	—
Performance Test Standards	AAMA 501 ASTM E283 ASTM E330 ASTM E331	AAMA 501 ASTM E283 ASTM E330 ASTM E331	AAMA 501 ASTM E283 ASTM E330 ASTM E331	AAMA 501, AAMA 507, AAMA1801, ASTM E283, ASTM E330, ASTM E331, ASTM E1425, NFRC 100/200/500

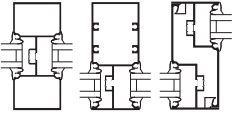
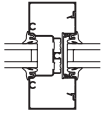
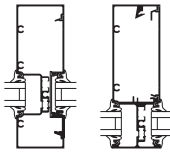
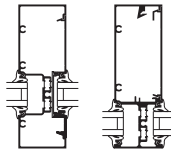
Laws and building and safety codes governing the design and use of Kawneer products, such as glazed entrance, window, and curtain wall products, vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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Product	Trifab® VersaGlaze® 601 Framing System (2" x 6")	EnCORE® Framing System (1-3/4" x Variable)		
Catalog Section	Framing	Framing		
Typical Detail				
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings		
Glass Plane Options	Center Front	Center Front		
Infill Options	Up to 1-1/8"	Up to 1-1/8"		
Glazing Options	Inside Glazed Outside Glazed	Outside Glazed		
Thermal	Dual IsoLock® Pour and Debridge	Polymer Glazing Clip		
SSG	Yes (Front)	Optional		
Weatherseal	No	No		
2 Color Option	No	Yes		
Integrated Entrance Framing	Yes	Yes		
Windows Integration	Yes	Yes		
GLASSvent® Integration	Yes	Yes		
Versoleil® Sunshade Integration	Yes (Center Only)	No		
Fabrication Method	Screw Spline, Shear Block, Stick	Screw Spline Shear Block Continuous Head and Sill		
Product Description	A versatile 2" x 6" flush glazed system for 1" glass available in Center Set and Front Set options. Engineered to perform to current energy code requirements using a dual IsoLock® thermal break.	A versatile two-piece face and gutter system that incorporates an engineered polymer glazing clip for thermal performance. It offers a variety of depth combinations to meet various design possibilities including SSG and curved applications.		
Testing for Protective Glazing	—	—		
Performance Test Standards	AAMA 501, AAMA 505, AAMA 507, AAMA 1503, AAMA 1801, AAMA TIR-A8, ASTM E283, ASTM E330, ASTM E331, ASTM E1425, CSA-A440, NFRC 100/200/500	AAMA 150 AAMA 501 AAMA 507 ASTM E283 ASTM E330 ASTM E331 NFRC 100/200/500		

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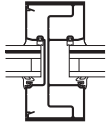
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Product	Trifab® VersaGlaze® 451T Framing System (2" x 4-1/2")	Trifab® 451UT Framing (2" x 4-1/2")	Trifab® VersaGlaze® 601T Framing System (2" x 6")	Trifab® VersaGlaze® 601UT Framing System (2" x 6")
Catalog Section	Framing	Framing	Framing	Framing
Typical Detail				
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings
Glass Plane Options	Center, Front, Back, Multi-Plane	Center	Center Front	Center Front
Infill Options	Up to 1-1/8"	Up to 1-1/8"	Up to 1-1/8"	Up to 1-1/8"
Glazing Options	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed	Inside Glazed Outside Glazed
Thermal	IsoLock® Pour and Debridge	Dual IsoLock® Pour and Debridge	Dual IsoLock® Pour and Debridge	Dual IsoLock® Pour and Debridge
SSG	Optional	No	Yes (Front)	Yes (Front)
Weatherseal	Optional	No	No	No
2 Color Option	Yes with Front Stick	No	No	No
Integrated Entrance Framing	Yes	Yes	Yes	Yes
Windows Integration	Yes	Yes	Yes	Yes
GLASSvent® Integration	Yes	Yes	Yes	Yes
Versoleil® Sunshade Integration	Yes	Yes	Yes (Center Only)	Yes (Center Only)
Fabrication Method	Screw Spline, Shear Block, Stick, Continuous Head and Sill	Screw Spline	Screw Spline, Shear Block, Stick	Screw Spline, Shear Block, Stick
Product Description	A 2" x 4-1/2" flush glazed system for 1" glass. VersaGlaze® is engineered for design and fabrication versatility with variable glass planes choices, SSG or Weatherseal options, IsoLock® thermal break option and four types of fabrication.	A 2" x 4-1/2" flush glazed system for 1" glass. Engineered to perform to current energy code requirements using a dual IsoLock® thermal break.	A 2" x 6" flush glazed system for 1" glass. Engineered to perform to current energy code requirements using a dual IsoLock® thermal break.	A 2" x 6" flush glazed system for 1" glass. Engineered to perform to current energy code requirements using a dual IsoLock® thermal break.
Testing for Protective Glazing	—	—	—	—
Performance Test Standards	AAMA 501.1, AAMA 507, AAMA 501, AAMA 505, AAMA 1503, AAMA 1801, AAMA TIR-A8, ASTM E283, ASTM E330, ASTM E331, ASTM E1425, NFRC 100/200/500	AAMA 501, AAMA 505, AAMA 1503, AAMA 507, AAMA 1801, AAMA TIR-A8, ASTM E283, ASTM E330, ASTM E331, ASTM E1425, CSA-A440, NFRC 100/200/500	AAMA 501, AAMA 505, AAMA 507, AAMA 1503, AAMA 1801, AAMA TIR-A8, ASTM E283, ASTM E330, ASTM E331, ASTM E1425, CSA-A440, NFRC 100/200/500	AAMA 501, AAMA 505, AAMA 507, AAMA 1503, AAMA 1801, AAMA TIR-A8, ASTM E283, ASTM E330, ASTM E331, ASTM E1425, CSA-A440, NFRC 100/200/500

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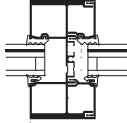
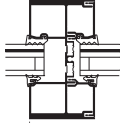
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Product	IR 500 Framing 2-1/2" x 5" (Wind-borne Debris)	IR 501 Framing 2-1/2" x 5" (Wind-borne Debris)		
Catalog Section	Framing	Framing		
Typical Detail				
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings		
Glass Plane Options	Center	Center		
Infill Options	9/16", 5/8" (Impact) 1/4" (Non-Impact)	1-5/16" (Impact) 1" (Non-Impact)		
Glazing Options	Outside Glazed	Outside Glazed		
Thermal	No	No		
SSG	No	No		
Weatherseal	No	No		
2 Color Option	No	No		
Integrated Entrance Framing	Yes	Yes		
Windows Integration	No	No		
GLASSvent® Integration	No	No		
Versoleil® Sunshade Integration	No	No		
Fabrication Method	Screw Spline	Screw Spline		
Product Description	A 2-1/2" x 5" framing system for wind-borne debris applications. It offers a center flush glazed look with either a interior structural silicone seal (wet glazed) or EPDM gasket (dry glazed) for large missile applications.	A 2-1/2" x 5" framing system for wind-borne debris applications. It offers a center flush glazed look with either a interior structural silicone seal (wet glazed) or EPDM gasket (dry glazed) for large missile applications.		
Testing for Protective Glazing	Large Missile	Small Missile Large Missile		
Performance Test Standards	AAMA 501 ASTM E283 ASTM E330 ASTM E331 ASTM E1886 ASTM E1996 TAS 201, 202, 203	AAMA 501 ASTM E283 ASTM E330 ASTM E331 ASTM E1886 ASTM E1996 TAS 201, 202, 203		

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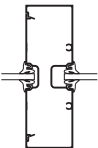
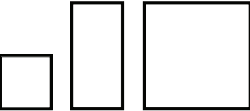
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Product	IR 501T Framing 2-3/4" x 5" (Wind-borne Debris)	IR 501UT Framing 2-3/4" x 5" (Wind-borne Debris)		
Catalog Section	Framing	Framing		
Typical Detail				
Applications	Storefront Ribbon Windows Punched Openings	Storefront Ribbon Windows Punched Openings		
Glass Plane Options	Center	Center		
Infill Options	1-5/16" (Impact)	1-5/16" (Impact)		
Glazing Options	Outside Glazed	Outside Glazed		
Thermal	Yes	Yes		
SSG	No	No		
Weatherseal	No	No		
2 Color Option	No	No		
Integrated Entrance Framing	Yes	Yes		
Windows Integration	No	No		
GLASSvent® Integration	No	No		
Versoleil® Sunshade Integration	Yes	Yes		
Fabrication Method	Screw Spline	Screw Spline		
Product Description	A 2-3/4" x 5" thermal framing system for wind-borne debris applications. It offers a center flush glazed look with either a interior structural silicone seal (wet glazed) or EPDM gasket (dry glazed) for large missile applications.	A 2-3/4" x 5" thermal framing system for wind-borne debris applications. It offers a center flush glazed look with either a interior structural silicone seal (wet glazed) or EPDM gasket (dry glazed) for large missile applications.		
Testing for Protective Glazing	Small Missile Large Missile	Small Missile Large Missile		
Performance Test Standards	AAMA 501, ASTM E283, ASTM E330, ASTM E331, ASTM E1886, ASTM E1996, TAS 201, 202, 203	AAMA 501, AAMA 1503, AAMA 1801, ASTM E283, ASTM E330, ASTM E331, ASTM E1886, ASTM E1996, CAN/CSAA440, TAS 201, 202, 203		

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
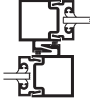

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Product	InFrame® Interior Framing System (2" x 6")	Miscellaneous Framing		
Catalog Section	Framing	Framing		
Typical Detail				
Applications	Interior Framing for Partitions	Safety Rails Glazing Moldings Tubes		
Glass Plane Options	Center	—		
Infill Options	1/8", 1/4" & 3/8"	—		
Glazing Options	Inside Glazed	—		
Thermal	No	—		
SSG	No	—		
Weatherseal	No	—		
2 Color Option	No	—		
Integrated Entrance Framing	Yes	—		
Windows Integration	No	—		
GLASSvent® Integration	No	—		
Versoleil® Sunshade Integration	No	—		
Fabrication Method	Screw Spline	—		
Product Description	A 2" x 6" flush glazed system for 1/4" glass. Two-piece perimeter profiles for interior framing partitions that capture drywall to simplify and speed the installation process.	Safety Rails, Glazing Moldings and Tubes.		
Testing for Protective Glazing	—	—		
Performance Test Standards				

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Product	1010 Sliding Mall Front	1010C Sliding Mall Front	1040 Sliding Mall Front	
Catalog Section	Sliding Doors	Sliding Doors	Sliding Doors	
Typical Detail				
Sightline	1", 1-3/4", 3-7/16", 5-1/8"	1-3/4", 2-5/16", 2-15/16"	2-1/8", 4"	
Depth	Varies by # of panels	Varies by # of panels	1-3/4"	
Applications	Interior	Interior	Interior or Exterior	
Infill Options	Up to 1"	3/16" & 1/4"	1/4" & 1"	
Cross Rails/Muntins	Yes	Yes	Yes	
Product Description	The 1010 sliding mall front is a floor supported, multi-track (surface or recessed), sliding door offering parallel in-line stacking. The 1010 sliding mall front is intended to be used primarily as an interior unit. It may be used as an exterior unit when optimum weathering performance is not required.	The 1010C sliding mall front is a floor supported, multi-track (surface or recessed), sliding door offering parallel in-line stacking. The 1010C sliding mall front is intended to be used primarily as an interior unit. It may be used as an exterior unit when optimum weathering performance is not required. It accepts a swinging entrance door within the sliding panels.	The 1040 sliding mall front is a floor supported, single track (surface or recessed), sliding door offering three separate stacking options (parallel staggered, parallel even and 90° stacking). The 1040 sliding mall front is intended to be used primarily as an interior unit. It may be used as an exterior unit when optimum weathering performance is not required.	
Testing for Protective Glazing	—	—	—	
Performance Class/Rating	—	—	—	
Performance Test Standards	—	—	—	

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