

STOREFRONTS AND ENTRANCES



012014



More recycled content, eco-efficient finishes

TUBELITE®
DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS

Tubelite® has been in the business of fabricating and distributing architectural aluminum products for the glass and glazing industry since 1945. Storefront, entrance and curtainwall systems are available directly from Tubelite® and from a network of independent distributors. Tubelite's corporate office is located in Walker (Grand Rapids), Michigan, and our extrusion plant is in Reed City, Michigan. Fabrication, warehouse, and shipping operations are located in Walker, Michigan and Dallas, Texas. Tubelite's corporate office, fabrication, warehouse, and shipping operations are located in our Walker (Grand Rapids), Michigan facility, and the extrusion plant is in Reed City, Michigan.

Our promise to you is quality in everything we do; fast, reliable and consistent delivery; and responsible, courteous service with a personal touch.

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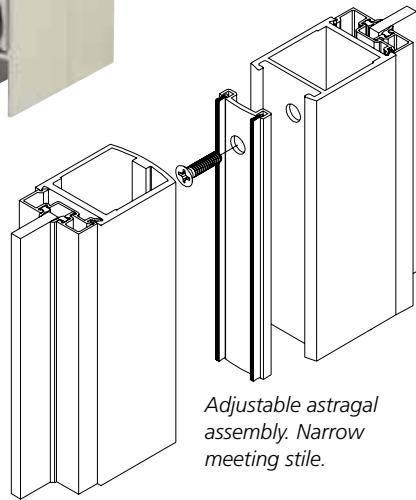
LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS



14000 Series Center Glazed Storefront,
0A Clear Anodized; Owner: Nuway
Construction Headquarters, Elkhart, IN;
Tubelite Dealer: Quality Glass

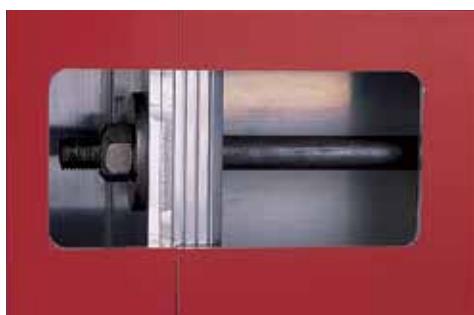


Standard Narrow Stile
1-3/4" x 2-1/8" Door with
10" Bottom Rail; OA Clear
Anodized Finish; 1/4" Glass



STANDARD ENTRANCES

Our Narrow Stile Doors are designed for light to medium use in commercial and retail applications. Standard doors have exterior installation of glass or panels, with 2-1/8" width stiles and top rails, and the option of 4", 7-1/2" or 10" bottom rails for ADA compliance. The smooth design of Tubelite's door hardware features a convenient pull handle and push bar with lock location 36" above the finished floor. Stock doors and frames are anodized with clear or dark bronze finishes, and readily available for quick delivery.



DURABLE TIE-ROD CONSTRUCTION

The strength and flexibility of steel tie-rod construction is what holds it all together and makes our doors endure. Tie-rod assembly is as durable as welded corner construction, but superior in many ways. Tubelite doors can be modified, disassembled or resized right in the field. No other door offers you this much strength and flexibility.

WE LISTEN

Members of our management staff personally visit our glazing contractor clients regularly. We learn what works and what doesn't — from their perspective, not ours. The result is solutions that work — solutions tailored for the field — so jobs get done right the first time.

STANDARD & MODIFIED DOORS (1/8" WALL)	NARROW STILE	MEDIUM STILE	WIDE STILE
Application	Average traffic, offices, strip centers	Moderate traffic, retail stores	Heavy traffic, public buildings
Vertical Stile 1-3/4" x	2-1/8"	4"	5"
Top Rail 1-3/4" x	2-1/8"	4"	5"
Bottom Rail 1-3/4" x	4", 7-1/2", 10"	6-1/2", 7-1/2", 10"	6-1/2", 7-1/2", 10"
Glass Sizes	3/16", 1/4", 3/8", 1"	3/16", 1/4", 3/8", 1"	3/16", 1/4", 3/8", 1"

Note: Dimensions do not include 1/2" glass stops.

MODIFIED ENTRANCES

Narrow, Medium and Wide Stile Doors can be anodized or painted in any of our standard finishes plus an infinite number of blendable standard and custom colors. A wide variety of specialized hardware can be applied, including butt hinges, offset or center pivots, push bars, pull handles, locks and cylinders. The simple addition of a snap-in glazing pocket in the doorframe allows you to easily incorporate sidelights. Horizontal or vertical mid-rails are available in widths from $\frac{1}{2}$ " to 10".



Modified Narrow Stile
1-3/4" x 2-1/8" Door with
4" Bottom Rail; BP Beige
Painted Finish, 1/4" Glass

Modified Entrance, Military Blue
Painted Finish; Owner: RiverTown
Crossings Mall, Grandville, MI;
Tubelite Dealer: Storefronts Inc.

THERMAL ENTRANCES

Thermi-Block™

Tubelite Thermal Entrances are designed using the same durable components as our Standard Entrances for outstanding craftsmanship and strength, with the additional benefit of maximum insulating properties. The Medium Stile 4" and Wide Stile 5" face dimensions are designed for typical commercial use with a greater variety of hardware options. Bottom rail height is 10" for accessibility requirements. Snap-in glass stops provide for 1" glazing thicknesses.

Thermal Entrances are furnished with mortised butt hinges, offset pivots or continuous hinges as specified. Standard deadbolt locks, and concealed vertical rod or rim panic exit devices may also be selected. Standard pull handles have been designed for ADA access and have matching push bars.

The Tubelite Thermal Door frame has snap-in door stops to conceal frame anchors and provide an excellent weatherseal. Open-back vertical door jambs allow easy, fast assembly with the screw-spline head member. Snap-in vertical frame closures easily accommodate addition of sidelights and incorporation with thermal storefront framing.



Thermi-Block provides superior insulation through increased aluminum separation and air space, while also increasing strength and reducing stress.



Thermi-Block Thermal Entrances,
Choice One Bank, Newaygo MI

CUSTOM ENTRANCES



Custom Entrance, Clear Anodized; Owner: Karmann Manufacturing, Plymouth, MI; Architect: DeMattia Group; Tubelite Dealer: Calvin & Company



Custom Entrance, Green Painted Finish; Project: Andrews Student Recreation & Wellness Center, Youngstown State University, Youngstown, OH; Architects: Strollo & Associates; General Contractor: Hively Construction; Tubelite Dealer: Warren Glass

When you need to create a dramatic point of entry, or match the architectural detail of a great design. Tubelite craftsmen can produce Narrow, Medium or Wide Stile doors built and finished to your specifications.

MONUMENTAL DOORS



Custom Entrance, OA Clear Anodized; Big Rapids High School, Big Rapids, Michigan; Architect: GMB Architects; Tubelite Dealer: Valley Glass

Designed to withstand heavy use in high-traffic areas, Tubelite Monumental Doors feature a section depth of 2" and minimum wall thickness of 3/16", increased at critical points to 1/4" for added strength. Doors stiles are available in 3", 4-1/2" and 6" widths; top rails in 3-1/2", 4-1/2" and 6" heights; and bottom rails in 6" or 10" heights. Sightlines complement the bold features of institutional applications and heavy-duty hardware. Framing may be reinforced with steel and used with a continuous hinge for maximum strength and dependability.



Monumental Door, 3K Bronze Anodized Finish, 6" Wide Stile with 10" Bottom Rail.

THE SOLUTION
Our goal is simple — to be the most dependable supplier in the architectural aluminum industry. This means quality products; fast, reliable delivery; and ease of fabrication and installation. Tubelite has built its business around this goal.

4500 SERIES STOREFRONT

Our 4500 Series Storefront framing is ideal for a wide variety of interior or low-rise exterior applications. Profiles of 1-3/4" x 4-1/2" are designed for 1/4" to 3/8" exterior glazing, and can be assembled by screw spline or clip joinery. The roll-in gasket is easy to install at the interior and exterior of the glass. The 1-3/4" framing is compatible with Tubelite Narrow, Medium and Wide Stile Doors.

*4500 Series Storefront, Red Painted Finish;
Owner: Michigan Chamber of Commerce,
Lansing, MI; Architect: Smith Group;
Tubelite Dealer: Glass Design*



RESULTS

Tubelite provides clear specification resources, personalized customer service and products you can trust, delivered complete, correct and on time.

*4500 Series Storefront,
0A Clear Anodized; Owner:
The Factory – Bldg. 11;
Architect: Edward Hotchkiss;
Tubelite Dealer: Baker Glass*



14000 SERIES STOREFRONT



14000 Series Storefront, Bronze Anodized; Project: Downtown Parking Garage, Traverse City, MI; General Contractor: Christman Co.; Tubelite Dealer: Northern Michigan Glass

For optimal strength and thermal performance, use Tubelite's 14000 Series Storefront, a flush glazed system for use on storefront and low-rise applications. Framing is available in standard thermally-improved or non-thermal members with 2" x 4-1/2" profiles, and a 1/2" bite for use with glass or panels up to 1" thick. Extra-heavy intermediate verticals are available for high performance against strong windloads.

Reduce project labor costs with the flexibility of inside or outside glazing. Members can be assembled using screw spline or clip joinery, and framing is compatible with Tubelite Narrow, Medium and Wide Stile Doors.

Our 14000 Series Storefront products are subjected to thorough testing by an independent laboratory, ensuring that you get the highest quality storefront framing products that the industry has to offer.



14000 Series Storefront, 1P White Painted Finish; Owner: Gates Rubber Inc., Jefferson City, NC; Architect: Fisher Architects, PA; Tubelite Dealer: Keller Glasco

DEPEND ON US

Comprehensive product information resources make specification easy. Integrated order/production systems ensure accuracy and enable us to provide delivery dates at the time of order. Synchronous manufacturing means that glaziers get their orders on time — complete — and correct.

DOOR SELECTION CHART	STANDARD DOORS: 1-3/4" STILES & RAILS			MONUMENTAL DOORS: 2" STILES & RAILS		
	NARROW 2-1/8"	MEDIUM 4"	WIDE 5"	NARROW 3"	MEDIUM 4-1/2"	WIDE 6"
Daily Traffic	Commercial	Light 0-500 Cycles	Moderate 500-1000 Cycles			
	Retail		Light 0-500 Cycles	Moderate 500-1000 Cycles	Heavy 1000-1500 Cycles	
	Institutional/ School			Light 0-500 Cycles	Moderate 500-1000 Cycles	Heavy 1000-1500 Cycles
Abusive 1500+ Cycles						

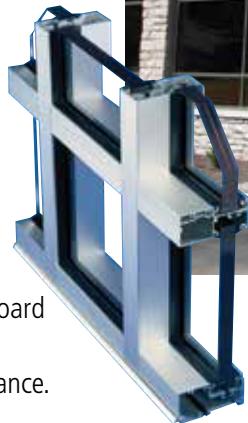
Note: Dimensions do not include 1/2" glass stops.

T14000 SERIES I/O STOREFRONT

The I/O means more design options! Glass or panels can be positioned to the inboard (I) or outboard (O) side of the 4-1/2" depth frame to achieve the look you imagine. Typical glass thickness is 1", and can be installed from the outside or inside of the building. Special glazing pocket reducers allow the use of 1/4" infill thicknesses too.

14000 I/O Series thermal barrier insulates exterior surfaces from the interior to minimize temperature transfer. This provides industry accepted performance for CRF (condensation resistance) and Uc (conduction).

Using the same design, assembly, and accessories as the 14000 center glazed system allows combining inboard, outboard and center planes of glass in the same elevation, with the same great performance.

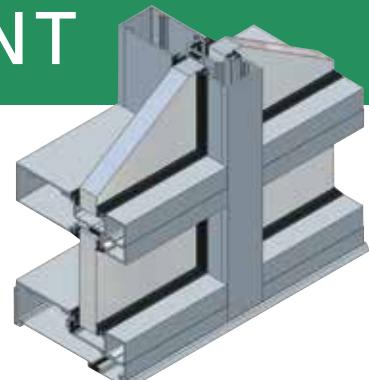


14000 I/O Series Storefront, 4K Champagne Anodized; Owner/Developer: Arlington Falls LLC, Columbus, OH; Architect: Collaborative Design Ltd.; General Contractor: The Bedrock Group; Tubelite Dealer: Advanced Glass Systems

T14650 SERIES STOREFRONT



A new look for a timeless design. 14650 Series has the same design, assembly, and accessories as the 14000 center glazed system's 2" face with a 6-1/2" depth. This additional 2" depth on the interior side of the frame provides greater structural properties and allows taller first floor openings. The wider profile also cuts a distinctive image for a storefront that stands out from the crowd.



14650 Series provides industry accepted performance for CRF (condensation resistance) and Uc (conduction), using the same thermal barrier as the 14000 and 14000 I/O systems.

14650 Series Storefront, 0A Clear Anodized; Owner: HH Gregg/Fine Lines Appliances, Columbus, OH; Architect: Herschman; General Contractor: Corra Kokosing; Tubelite Dealer: Richardson Glass

VERSATHERM™ FRAMING

VersaTherm is our most versatile and economical framing system. The flexible design allows for on-site fabrication in applications ranging from punched openings to mall fronts. VersaTherm is available in a large selection of profiles. Snap-on covers and backmembers, available in a variety of colors, allow for contrasting interior and exterior finishes. Finish options and glass positioning from frame exterior to center meet a wide range of aesthetic requirements.

Snap-on covers and back members are "locked" together by a unique thermal barrier clip. This clip ensures that interior and exterior metal members remain separate while firmly connected, virtually eliminating the transference of frost and condensation. High performance verticals, and compatibility with Tubelite Stock Doors create a complete and truly versatile system.



VersaTherm Storefront, OA Clear Anodized; Owner: Karmann Manufacturing, Plymouth, MI; Architect: DeMattia Group; Tubelite Dealer: Calvin & Company



PRODUCT	T14000 SERIES	T14000 I/O SERIES	T14650 SERIES	4500 SERIES	VERSATHERM™ SERIES
Application	Low-Rise storefront, center set glass, inside/outside glazed	Low-Rise storefront, front or rear set glass, inside/outside glazed	Medium-Rise storefront, front set glass, outside glazed	Low-Rise storefront, center set glass, outside glazed	Low-Rise storefront, front or center set glass, outside glazed
Face Width	2", 4-1/2"	2"	2"	1-3/4"	1-3/4"
Backmember Depths	--	--	--	--	1-15/16", 2-9/16", 2-15/16", 4-1/16"
Face Depths	--	--	--	--	3/16", 9/16", 15/16", 1-3/16"
Overall Depths	4-1/2"	4-1/2"	6-1/2"	4-1/2"	3-1/2" to 6-5/8"
Glass Thickness	1"	1"	1"	3/16", 7/32", 1/4", 5/16", 3/8"	1/4", 1"
Air Infiltration	0.01 CFM/Ft.2	0.047 CFM/Ft.2	0.04 CFM/Ft2	Simlar to T14000	0.01 CFM/Ft.2
Dynamic Water	Controlled @ 12 PSF	Controlled @ 12 PSF	Controlled @ 10 PSF	Simlar to T14000	12 PSF (Static)
Structural Overload	+/-45 PSF	+/-45 PSF	+/-45 PSF	Simlar to T14000	(Uniform Load Deflection) 30 PSF
CRF* [AAMA1503]	54 - OS 54 - IS	52 - IS Inboard 61 - IS Outboard	55 - OS	--	64
U Value* [NFRC]	0.43 - OS 0.43 - IS	0.40 - IS Inboard 0.43 - IS Outboard	0.51 - OS	--	0.56
Sound Transmission	32 STC	Similar to T14000	36 STC*	--	--

* See Tubelite's Test Reports for mock up sizes and test conditions.

3700 SERIES WINDOWS

Let fresh air into the building through a storefront or curtainwall. 3700 Series windows can be easily incorporated with Tubelite's other framing systems. Special glazing pocket adapters make installation a breeze.

These AW60 / HC60 rated windows have a frame depth of 2" with a maximum size of 3'0" x 5'0" and mitred corners epoxied and crimped on an "L" shaped clip.

Standard [VW] and concealed project-out vent [CVW] design, standard project-in [HW] and casement [CW] options are available. The concealed vent design is virtually invisible from the outside of the building, with no visible frame.

CW 3700



HW 3700



3700 SERIES WINDOWS	VW3700	CVW3700 SERIES	CW3700 SERIES	HW3700
Application	Conventional Frame	Concealed Vent	Casement Type	Project-in Hopper
Frame Joints	Screw-spline	Screw-spline	Screw-spline	Screw-spline
Window Joints	Mitered-clip, Epoxy & Stake	Mitered-clip, Epoxy & Stake	Mitered-clip, Epoxy & Stake	Mitered-clip, Epoxy & Stake
Glass Thickness	1/4" & 1"	1"	1/4" & 1"	1/4" & 1"
Face Width	2-3/8"	-	2-3/8"	2-3/8"
Frame Depth	2"	3-1/2"	2"	2"
Hardware	4-bar hinges, Cam lock	4-bar hinges, Cam lock	Casement hinges, Cam lock, optional roto operator, 2-point egress lock, opening restrictor, egress pull-ring	4-bar hinges, Cam lock
Air Infiltration	0.01CFM/Ft2	0.03CFM/Ft2	0.01CFM/Ft2	0.04CFM/Ft2
Dynamic Water	12 PSF	12 PSF	12 PSF	6.06 PSF
ANSI/AAMA Testing	CW-PG75 [60x36]-AP	CW-PG75 [61x38]-AP	CW-PG60 [36x60]-AP	CW-PG40 [60x36]-AP
Life Cycle Tested	1250 Cycles	1250 Cycles	1250 Cycles	NA

STANDARD AND CUSTOM FINISHES



Custom Entrance/400 Series Curtainwall, Wild Grape 70% premium painted finish; Sun Healthcare, Albuquerque, NM; Architect: Flatow-Moore-Shaffer-McCabe Inc.; Tubelite Dealer: Southwest Glass & Glazing

In addition to our standard Clear and Bronze anodized, and White painted colors, we offer five more anodized finishes and nineteen more standard painted colors. Blended standard and custom colors are also available, providing you with an infinite variety. More than a palette of pretty colors, our finishes are tough and backed by some of the best warranties in the industry.

See Tubelite's Standard Finish Color Guide for detailed information on the exceptional performance, integrity and weatherability of our durable anodized finishes. This guide also gives specifications for color retention, erosion resistance and gloss retention of our high-quality, painted finishes.

THE DIFFERENCE

We're confident that once you experience the benefits of doing business with Tubelite, you'll look to us for all of your storefront and entrance needs. Put us to the test! You'll find us to be the fastest, most **DEPENDABLE** supplier in the industry.



AAMA 2605 10 YEAR FINISH WARRANTY

70% Kynar premium painted finishes are guaranteed for 10 years against fading, chalking, and gloss reduction.

TUBELITE® INFORMATION

Look to any of the following resources and learn more about how Tubelite can be the dependable supplier for all your storefront, entrance and curtainwall needs.

www.tubeliteinc.com

Visit our home page for in-depth information about how Tubelite's products and people can benefit you.

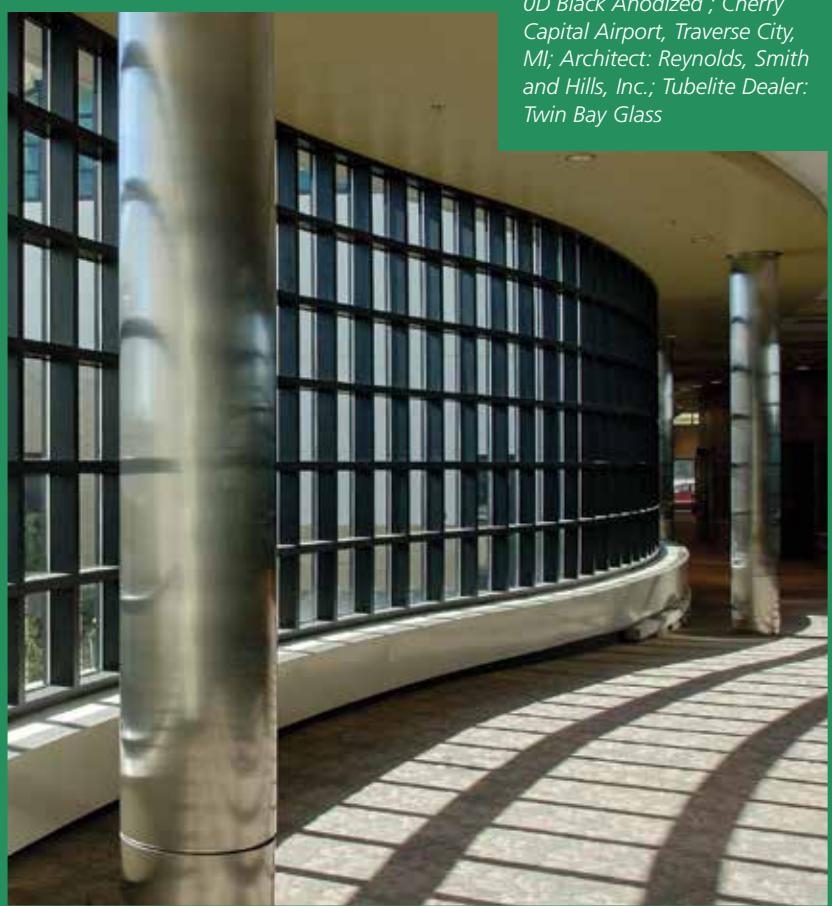
800-866-2227

Glazing contractors get quick, correct answers from our Front Line customer service team — cross-trained personnel with expertise in all areas of Tubelite's operation.

Design Manual

See our design manual for test reports from independent certification laboratories, full and quarter size details, guide specifications, recommended applications, hardware and other information describing the full line of Tubelite products.

TUBELITE CURTAINWALL



200 Series Curtainwall,
OD Black Anodized ; Cherry
Capital Airport, Traverse City,
MI; Architect: Reynolds, Smith
and Hills, Inc.; Tubelite Dealer:
Twin Bay Glass

EcoLuminum™ by TUBELITE

More recycled content, eco-efficient finishes

TUBELITE MAXBLOCK SUNSHADES

Tubelite has 3
Maxblock Sunshade
Designs; Airfoil,
"Z" Blade, & Tubular.



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CURTAINWALL AND ENTRANCE SYSTEMS

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