CURTAINWALL & WINDOW WALL



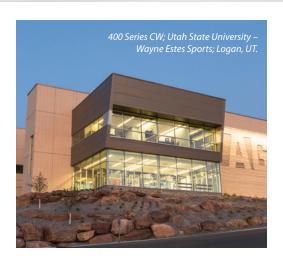




Tubelite® 400CW Curtainwall

Designed for low- and mid-rise applications, the durable framework of the 400 Series Curtainwall provides exceptional structural performance reducing the need for steel reinforcing. This system has a sight line of 2-1/2" and the strength of variable-depth backmembers from 3-3/8" to 8". An exterior screw-applied pressure bar secures the glass.

Snap-on covers, available in a wide range of colors, allow for different finishes on interior and exterior exposed surfaces. Silicone-glazed verticals are available for a seamless appearance.

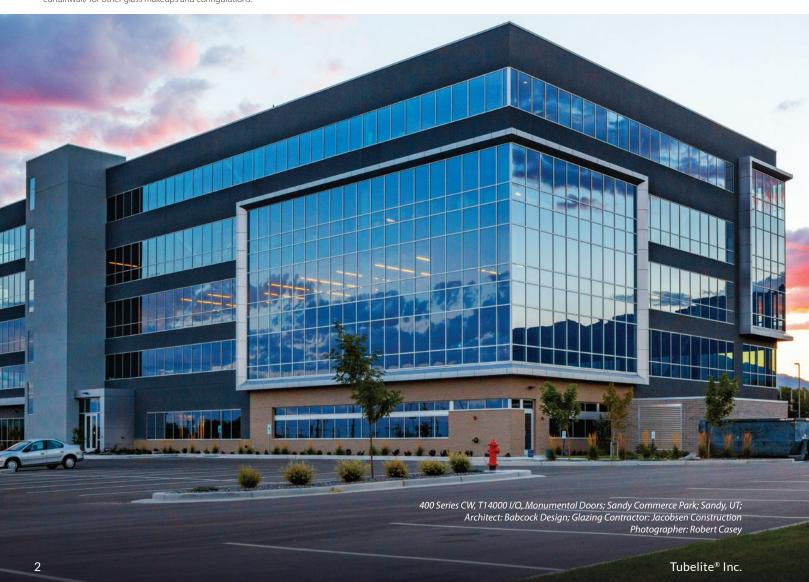


Tubelite® 400 Curtainwall Product Specifications

Application: Low and mid-rise Commercial buildings including retail, office, healthcare, schools, etc. **Description:** 2-1/2" x (5-5/8" to 10") field glazed, shear block construction curtainwall

Face Width:	System Depth:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	CRF:	U-Factor**:	Acoustic:
2-1/2"	6" to 10"	1" std (1/4" – 1-1/8")	0.06 CFM/Ft.2 @ 6.24 PSF	15 PSF – Static 15 PSF – Dynamic	60 PSF – Design 90 PSF – Overload	$66_F 66_G$ – Aluminum PP $79_F 76_G$ – Thermal PP $72_F 69_G$ – 4 Sided SSG	0.39 – Aluminum PP 0.34 – Thermal PP 0.31 – SSG	STC 32 OITC 26

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/curtainwall/400-series-curtainwall/ for other glass makeups and configurations.







Tubelite® 400T Thermal Curtainwall

Tubelite's thermally broken curtainwall product has been designed to meet or exceed today's stringent energy codes. The 400T Series has a 2-1/2" face, with system depths from 6-1/4" to 10-1/4" and optional thermal pressure plates. The shear block system can be stick fabricated for field glazing.

The expanded thermal break and thicker gasketing improves U-Factors and CRF over Tubelite's current 400CW thermal barrier system when using the same size and type of insulated glass. Glass is positioned to the system exterior for enhanced resistance to rainwater. Seven anodized finishes and 20 standard paint colors are available on this framing system to complement any project

with warranteed protection, as well as street appeal. The 400T also accepts Tubelite's Operable Windows, Therml=Block® Doors and Maxblock® Sunshades.

400T Series Curtainwall is recommended for use on medium- and low-rise applications. The 1/2" bite securely grips insulated glass or panels of 1" thickness. Infill thicknesses from 1/8" to 1-5/16" also can be accommodated. Verticals can be steel-reinforced for high performance against strong windloads. An improved horizontal member allows for expansion/contraction clearances to minimize splice requirements.

Tubelite® 400T Product Specifications

 $\textbf{Application:} \ \mathsf{Low} \ \mathsf{and} \ \mathsf{mid}\text{-}rise\ \mathsf{commercial} \ \mathsf{buildings} \ \mathsf{including} \ \mathsf{retail}, \mathsf{office}, \mathsf{healthcare}, \mathsf{schools}, \mathsf{etc.}$

Description: 2-1/2" x (6-1/4" to 10-1/4") field glazed, shear block construction curtainwall.

Face Width:	Overall Depths:	Glass Thickness:	Air Infiltration:	Water Infiltration:	Structural:	U-Factor**:	CRF:	Acoustic:
2-1/2"	6-1/4" to 10-1/4"	1" (1/8" to 1-5/16")	0.06 CFM/FT.2 @ 6.24 PSF	15 PSF — Stactic 15 PSF — Dynamic	40 PSF — Design 60 PSF — Overload	0.38 - Aluminum PP 0.32 - Thermal PP	73 — Aluminum PP 80 — Thermal PP	32 STC 26 OITC

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/curtainwall/400t-thermal-curtainwall/ for other glass makeups and configurations.

Tubelite® 400SS Screw Spline Curtainwall

Tubelite's 400SS thermally broken curtainwall product has been designed to reduce fabrication and installation labor while meeting or exceeding today's stringent energy codes. The 400SS Screw Spline Curtainwall has a 2-1/2" sight line, with system depths from 6" to 10" and optional thermal pressure plates. This screw spline system can be pre-assembled, pre-sealed (i.e. water dams) and pre-glazed in the shop, or stick fabricated for field glazing.

The thermal isolator and thick gasketing provide excellent U-Factors and CRF when using high-performance insulated glass. Glass is positioned to the system exterior for enhanced resistance to rainwater. Seven anodized finishes and 20 standard paint colors

are available on this framing system to complement any project with warranteed protection, as well as street appeal. The 400SS also accepts Tubelite's Operable Windows, Therml=Block® Doors and Maxblock® Sunshades.

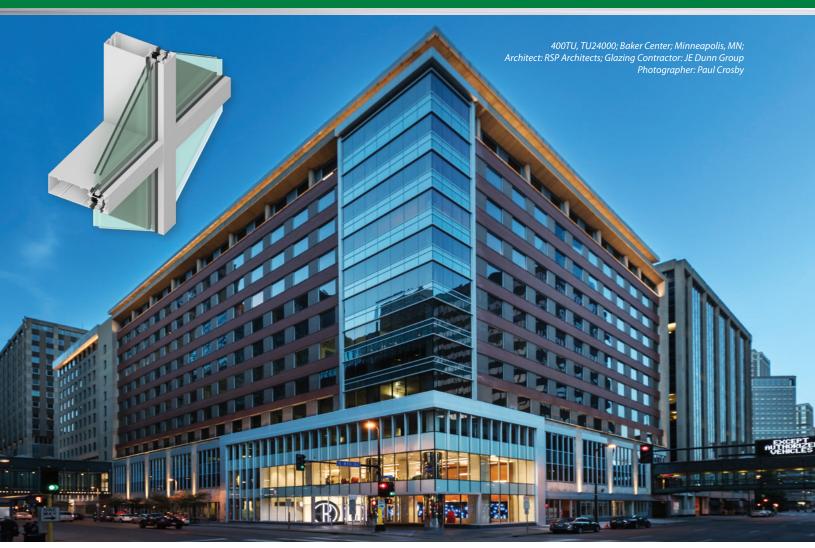
400SS Screw Spline Curtainwall is recommended for use on medium- and low-rise applications. The 1/2" bite securely grips insulated glass or panels of 1" thickness. Infill thicknesses from 1/8" to 1-5/16" also can be accommodated. An improved horizontal member allows for expansion/contraction clearances to minimize splice requirements.

Tubelite® 400SS Screw Spline Curtainwall

Application: Low and mid-rise commercial buildings including retail, office, healthcare, schools, etc **Description:** 2-1/2" x (6", 7-1/2", and 10") field or shop glazed, screw spline construction curtainwall

Face Width:	Overall Depths:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	U-Factor**:	CRF _(F) :	Acoustic:
2-1/2"	6", 7-1/2" & 10"	1" std (1/4" to 1-5/16")	0.06 CFM/Ft.2 @ 6.24 PSF	15 PSF – Static 15 PSF – Dynamic	40 PSF — Design 60 PSF — Overload	0.38 - Aluminum PP 0.33 - Thermal PP	68 – Aluminum PP 79 – Thermal PP	STC 32 OITC 27

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/curtainwall/400ss-screw-spline-curtainwall/ for other glass makeups and configurations.





Tubelite® 400TU High Performance Thermal Curtainwall

Tubelite's highest thermally broken curtainwall product has been designed to meet or exceed today's stringent energy codes. The 400TU Series has a 2-1/2" face, and offers screw-spline or shear clip assembly. The pressure bar system can be stick fabricated, or assembled into "ladders" at your shop for field glazing.

The dual thermal strut decreases U-Factors and increases CRF significantly over many current thermal barrier systems. Glass is positioned to the system exterior for enhanced resistance to rainwater. 400TU also accepts accessories like Tubelite Operable

Windows, Therml=Block® Doors and Maxblock Sunshades.

The 1/2" bite securely grips insulating glass or panels of 1" or 1-3/4" thickness. Verticals can be steel-reinforced for high performance against strong windloads.

Thorough testing by an independent laboratory ensures that 400TU is the highest quality curtainwall framing product that the industry has to offer.

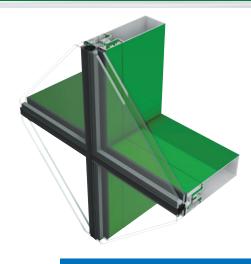
Tubelite® 400TU Product Specifications

Application: Low and mid-rise commercial buildings including retail, office, healthcare, schools, etc. **Description:** 2-1/2" x (6" to 10") field glazed, screw spline or shear block high performance curtainwall

Face Width:	Overall Depths:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	U-Factor** Pressure Plate: [NFRC 100]	CRF Pressure Plate: [AAMA 1503]	Acoustic:
2-1/2"	6" to 10"	1" (1/4" to 1-3/4")	0.06 CFM/Ft.2 @ 6.24 PSF	15 PSF – Static 15 PSF – Dynamic	40 PSF — Design 60 PSF — Overload	Dual glazed: 0.31 - Aluminum PP 0.29 - Thermal PP	Dual glazed: 80 Aluminum 82 Thermal Triple glazed: 83 Aluminum	Dual Glazed: 38 STC, 32 OITC Triple Glazed: 41 STC, 30 OITC

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/curtainwall/thermlblock-400tu/for other glass makeups and configurations.

4 Tubelite® Inc.



Tubelite® 400 Cassette System

Designed for low- and mid-rise applications, the Cassette system is designed to be used with most variations of 400 Series Curtainwall – CW, T, SS & TU framing for SSG exterior face of 1" glass thickness. This system has no exterior exposed metal, and adapts to an interior sight line of 2-1/2" using the strength of variable-depth backmembers. Tubelite's unique glass-to-edge design allows an all glass exterior appearance. Pivot and slide anchor system allows ease of installation.

A patent is pending on a number of features on this system.

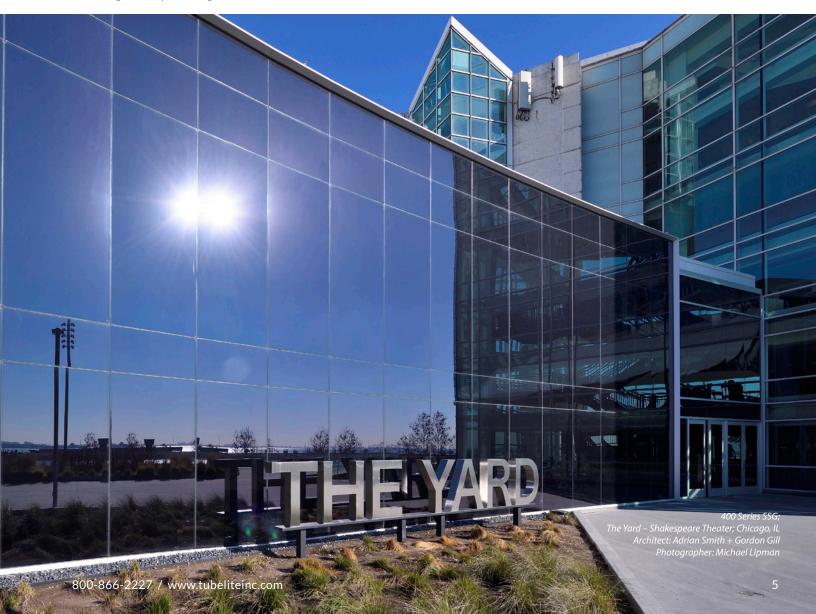


Tubelite® 400 4-Side SSG Cassette Product Specifications

Application: Low and mid-rise Commercial buildings including retail, office, healthcare, schools, etc. **Description:** 2-1/2" x (5-5/8" to 10") shop glazed, screw spline construction cassette framing

Interior Face Width:	System Depth:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	U-Factor**:	CRF (Frame):	Acoustic:
2-1/2"	up to 11-1/4"	1" std (1/4" – 1-5/16")	0.06 CFM/Ft.2 @ 6.24 PSF	15 PSF — Static 15 PSF — Dynamic	40 PSF – Design 60 PSF – Overload	0.32 - 400CW-SSG 0.31 - 400SS-SSG	400 CW/T - 85 400 SS - 84	32 STC 26 OITC

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/curtainwall/400-cassette/ for other glass makeups and configurations.





Tubelite® 400IG Curtainwall

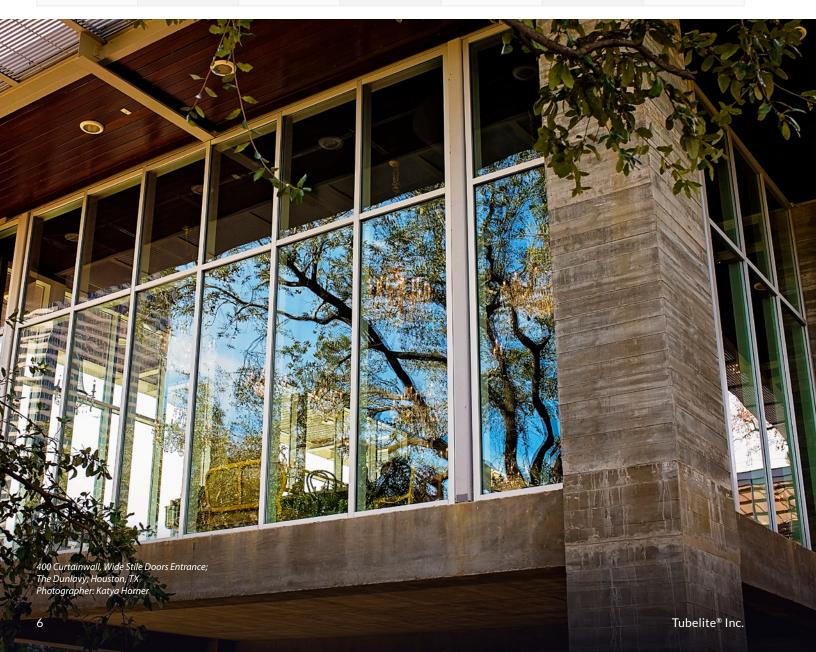
Tubelite 400IG Series (Inside Glazed) Curtainwall Framing for low and medium rise applications has been redesigned for installation labor savings and design flexibility. Offset glass pockets and removable glass stops allow glazing or re-glazing from both the exterior and interior of the building.

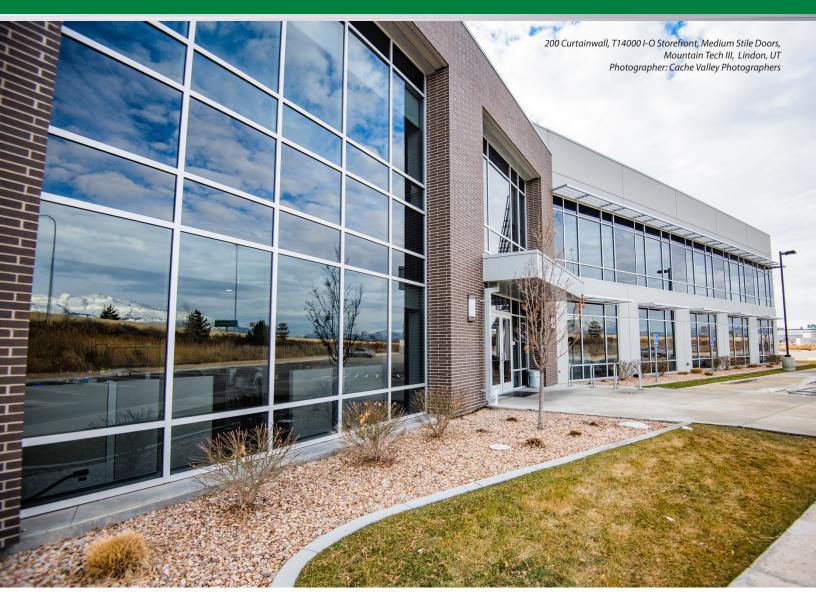
Broken lites can be replaced without removing the vertical pressure plates or snap covers. The new roll-over horizontal member permits erection of all the verticals first, to reduce installation time and cost. Open back head and jamb members provide economical alternatives to the previous hollow tube perimeters.

Tubelite® 400IG Curtainwall Product Specifications

Application: Low and mid-rise commercial buildings including retail, office, healthcare, schools, etc. **Description:** 2-1/2" x 5-3/4" or 7-3/8" field glazed, inside glazed, shear block construction curtainwall

Face Width:	Overall Depths:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	CRF:
2-1/2"	5-3/4"	1"	0.06 CFM/Ft.2	15 PSF – Static	30 PSF – Design	63 _F
	7-3/8"	(1/8" to 1-5/16")	@ 6.24 PSF	12 PSF – Dynamic	45 PSF – Overload	56 _G







Tubelite® 200CW Curtainwall

The 200 Series Curtainwall is an economical system with a wide range of low- to mid-rise applications including atriums and clerestory. This exterior-glazed pressure bar system with 2" face dimension (that matches many Tubelite Storefront systems), is ideal for curving and compatible with all Tubelite entrances.

Snap-on cover finishes, available in a variety of colors, allow for contrasting interior and exterior finishes on exposed framing. Silicone-glazed verticals can be selected to provide a sleek uninterrupted surface.

Both our 200 and 400 Series Curtainwall systems are subjected to rigorous testing by an independent agency, ensuring that you get the highest quality curtainwall products that the industry has to offer.



Tubelite® 200 Curtainwall Product Specifications

 $\textbf{Application:} \ \mathsf{Low} \ \mathsf{and} \ \mathsf{mid-rise} \ \mathsf{commercial} \ \mathsf{buildings} \ \mathsf{including} \ \mathsf{retail}, \mathsf{office}, \mathsf{healthcare}, \mathsf{schools}, \mathsf{etc}.$

Description: 2" x 4-1/4" to 7-3/4" field glazed, shear block construction curtainwall

Face Width:	Overall Depths:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	U-Factor**:	CRF:	Acoustic:
2"	4-1/4" to 7-3/4"	1" (1/8" to 1")	0.06 CFM/Ft.2 @ 6.24 PSF	15 PSF – Static 15 PSF – Dynamic	60 PSF – Design 90 PSF – Overload	0.39 – Captured 0.32 – SSG	68	32 STC 26 OITC

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/curtainwall/ 200-series-curtainwall/ for other glass makeups and configurations.





Tubelite® 900RW Series Thermal Ribbon Window

Tubelite's 900RW Series offers solutions for between slab strip window applications. The 2-1/4" wide system is available in 4-1/2" and 6" depths. Glazing options include all captured, silicone glazed verticals, and exterior glazing for spandrel areas. Optional integrated slab edge finishes off the building's exterior, and head and sill starters enable complete installation from the inside of the building. The single or dual thermal break option help ensure project energy compliance at the best value.

Labor Savings with Thermal Performance

The dual thermal break with Azon's Lancer™ Mechanical lock improves performance where more stringent energy codes apply Therml=Block Curtainwall, Storefronts and Entrances compliment the system providing a complete package that's easy to fabricate and install. The 900RW Window system is available with environmentally friendly paint and anodized finishes from Linetec.

Tubelite® 900RW Ribbon Window Product Specifications

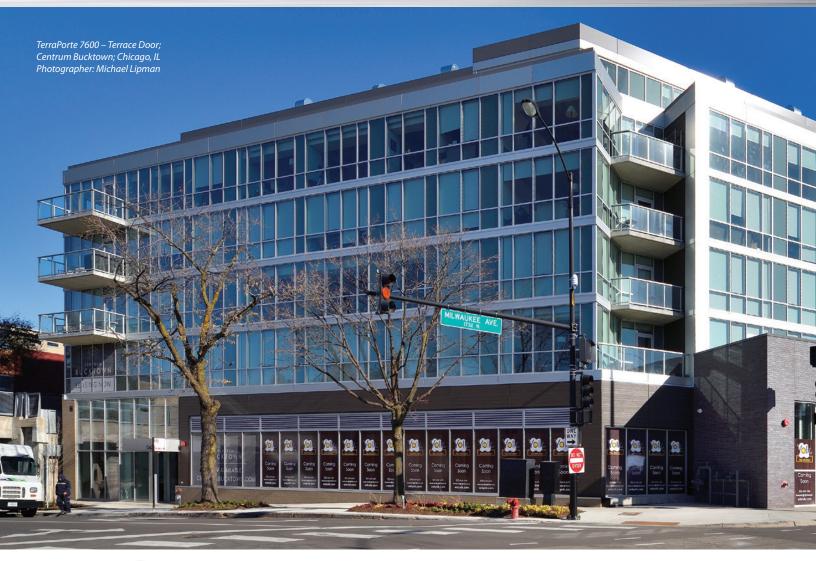
Application: Office, mixed use, healthcare, education, between slab system, interior and exterior glazing.

Description: 2-1/4" x 4-1/2" or 6" exterior set, screw spline construction, thermal or dual thermal, field or shop glazed window wall.

Face Width:	Overall Depths:	Glass Thickness:	Air Infiltration:	Static & Dynamic Water:	Structural:	CRF:	U -Factor**:	Sound Transmission:	Interstory Liveload:	Product Approval: (non-impact)
2-1/4"	4-1/2" & 6"	1"	0.06 CFM/FT.2 @ 6.24 PSF	15 PSF	40 PSF — Design 60 PSF — Overload	Single – 68 Dual – 72	Single – 0.35 Dual – 0.33 NFRC 100	31 STC [36 STC] 25 OITC [32 OITC]	+/- 1/2"	FL21062-R1 (FPA) CWSF-55 (TDI)

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/window-wall/ for other glass makeups and configurations.







Therm#Block.

Tubelite® TerraPorte 7600 - Terrace Door

The TerraPorte 7600 Series Out-swing and In-swing architectural terrace doors are ideal for mid-rise residential projects, condominiums, and hotels. The 3-1/4" deep thermal system can be installed as a standalone product or easily integrated into Tubelite's curtainwall, ribbon window, and storefront systems.



Tubelite® TerraPorte 7600 Product Specifications

Application: Mid-rise residential projects, condominiums, and hotels

Description: Out-swing and In-swing thermally broken architectural terrace door

Performance Class:	System Depth:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	U-Factor**:	CRF*:	Acoustic (STC):	Acoustic (OITC):	Max. Sizes:
AW70-ATD	3-1/4"	1"	0.1 CFM / Ft.2 @ 6.24 PSF	15 PSF Standard 12 PSF accessABLE™	70 PSF Design 105 PSF Overload	Out-swing 0.40 In-swing 0.41	Out-swing $56_{\rm F}70_{\rm G}$ In-swing $60_{\rm F}71_{\rm G}$	Out-swing 35 In-swing 35	Out-swing 29 In-swing 30	Single: 4'0" x 8'0" or: 2'10" x 12'0"

^{***} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: https://www.tubeliteinc.com/products/entrances/terraporte-7600/ for other glass makeups and configurations.





Tubelite® Phantom 5000 Awning and Casement Insert Vent Windows

Let fresh air into your building with these zero sight line windows that install easily into Tubelite's curtainwall and window wall products.

Available in awning and casement configurations and large sizes, the Architectural Grade (AW) Phantom windows provide excellent thermal, structural, air, and water performance.

The concealed frame design is virtually invisible for the exterior of the building providing a consistent appearance of fixed lites. Hinging options allow opening from the bottom or side of the window. Screens are available with frames to match the window.

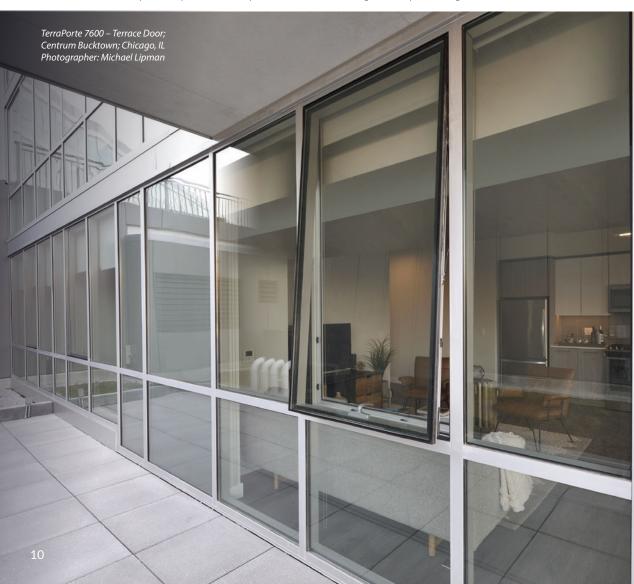
Tubelite® Phantom 5000 Vent Window Product Specifications

Application: Mid-rise residential projects, condominiums, hotels, offices, and schools

Description: Awning and Casement Out-swing Zero Sight Line vents

Performance Class:	System Depth:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	CRF:	U-Factor**:	Acoustic:	Max. Sizes:
Awning: AW-PG85 Casement: AW-PG90	4-1/4"	1"	0.1 CFM / Ft.2 @ 6.24 PSF	15 PSF	Awning: 85 PSF / 127.5 PSF Casement: 90 PSF / 135 PSF)	Awning 77 SSG CW Awning 79 Captured CW Casement 76 SSG CW Casement 78 Captured CW	Awning 0.35 SSG CW Awning 0.43 Captured CW Casement 0.34 SSG CW Casement 0.41 Captured CW	STC 33 OITC 26	Awning: 49"H x 78"W 78"H x 37"W Casement: 27"H x 84"W 35"H x 64"W

^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame. Refer to the U-Factor table at: www.tubeliteinc.com/products/operable-windows/phantom-vent-5000/ for other glass makeups and configurations.







Visit www.tubeliteinc.com/finishes for all the latest finishes.

Painted and Anodized Finishes

In addition to our stocked Clear and Bronze anodized, and White painted finishes Tubelite offers a wide variety of additional standard anodized and painted colors. Blended custom colors are also available, providing you with an infinite variety of options. More than a palette of pretty colors, our finishes are tough and backed by some of the best warranties in the industry.





Visit www.tubeliteinc.com/finishes for all the latest finishes.

Wood Grain Finishes

When your design requires more than a stock color, our wood grain textures are ready to dazzle. Wood Grain Finishes by Tubelite have the look and feel of natural wood with the durability and recyclability of aluminum. No more refinishing due to salt, dirt and UV exposure. Our Wood Grain finishes are designed for the toughest environment and clean easily with mild soap and water.

Wood Grain Finishes by Tubelite can be applied to the interior and exterior of Tubelite's storefront, entrance, curtainwall and sunshades. Practically everything we manufacture in the Tubelite family of products.

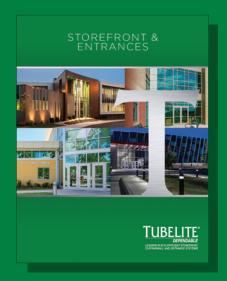
Tubelite offers the look and feel of natural wood with 16 Wood Grain Finishes. These finishes are backed with a 5 year warranty (project review required.)

* Finishes may vary in tone and color within the same wood grain.



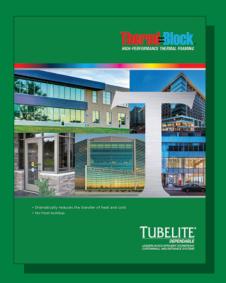


Visit us online to download other Tubelite® literature at www.tubeliteinc.com/products/literature/



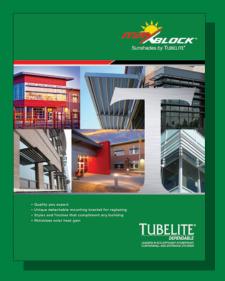
Tubelite® Storefront and Entrances Product Brochure

This brochure contains our Narrow, Medium and Wide Entrances. Our 4500, 14000, 14000 I/O, 14650 and VersaTherm™ framing along with our operable windows and Finishes.



Tubelite® ThermI=Block Product Brochure

This brochure contains our high performance thermally broken doors, storefronts, and curtainwall systems.



Tubelite® MaxBlock® Sunshades Product Brochure

MaxBlock brochure includes Tubelite's three sun shade designs, Airfoil, "Z" Blade and Tubular, along with Highlighting the benefits of these sun shades.



LEADERS IN ECO-EFFICIENT STOREFRONT, CURTAINWALL AND ENTRANCE SYSTEMS

3056 Walker Ridge Dr. NW, Suite G Walker, Michigan 49544

800-866-2227 www.tubeliteinc.com



