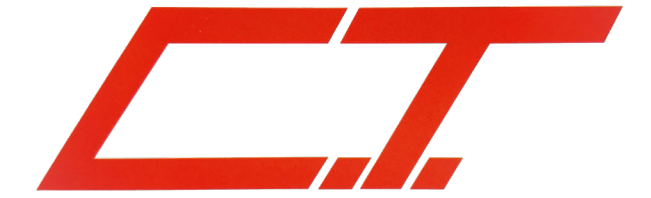




GEALAN-LINEAR®

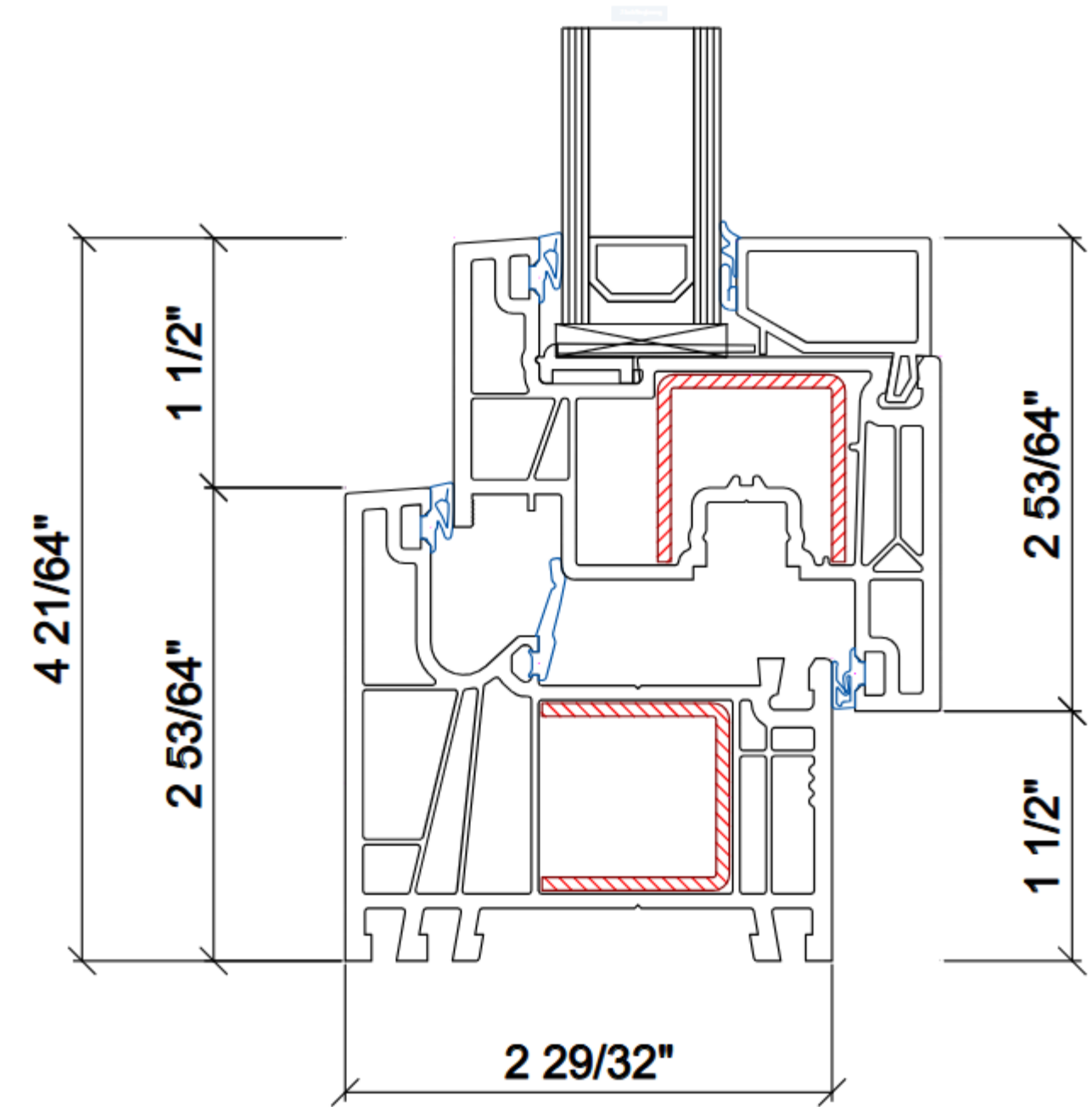
A contemporary uPVC window platform. Built for great performance.



A contemporary uPVC platform

GEALAN-LINEAR® is GEALAN's newest square-edge tilt & turn platform — a clean, modern face with aluminum-like sightlines, delivered in a high-performance uPVC profile.

FRAME DEPTH	3 in	GASKETS	3 seals
NUMBER OF CHAMBERS	6	GLAZING	Up to 2 in
REINFORCEMENT	Galv. steel	OPENINGS	Fixed, Tilt & Turn





The modern aluminum look in thermally superior uPVC

GEALAN-LINEAR®'s flat, square outer faces and crisp mitered corners match the visual language architects specify in aluminum windows and storefront — with the thermal performance and cost profile of a premium uPVC system.

Square outer face

Narrow sightlines

Multiple color options





Three independent seals — tested to AW-class air and water tightness

01

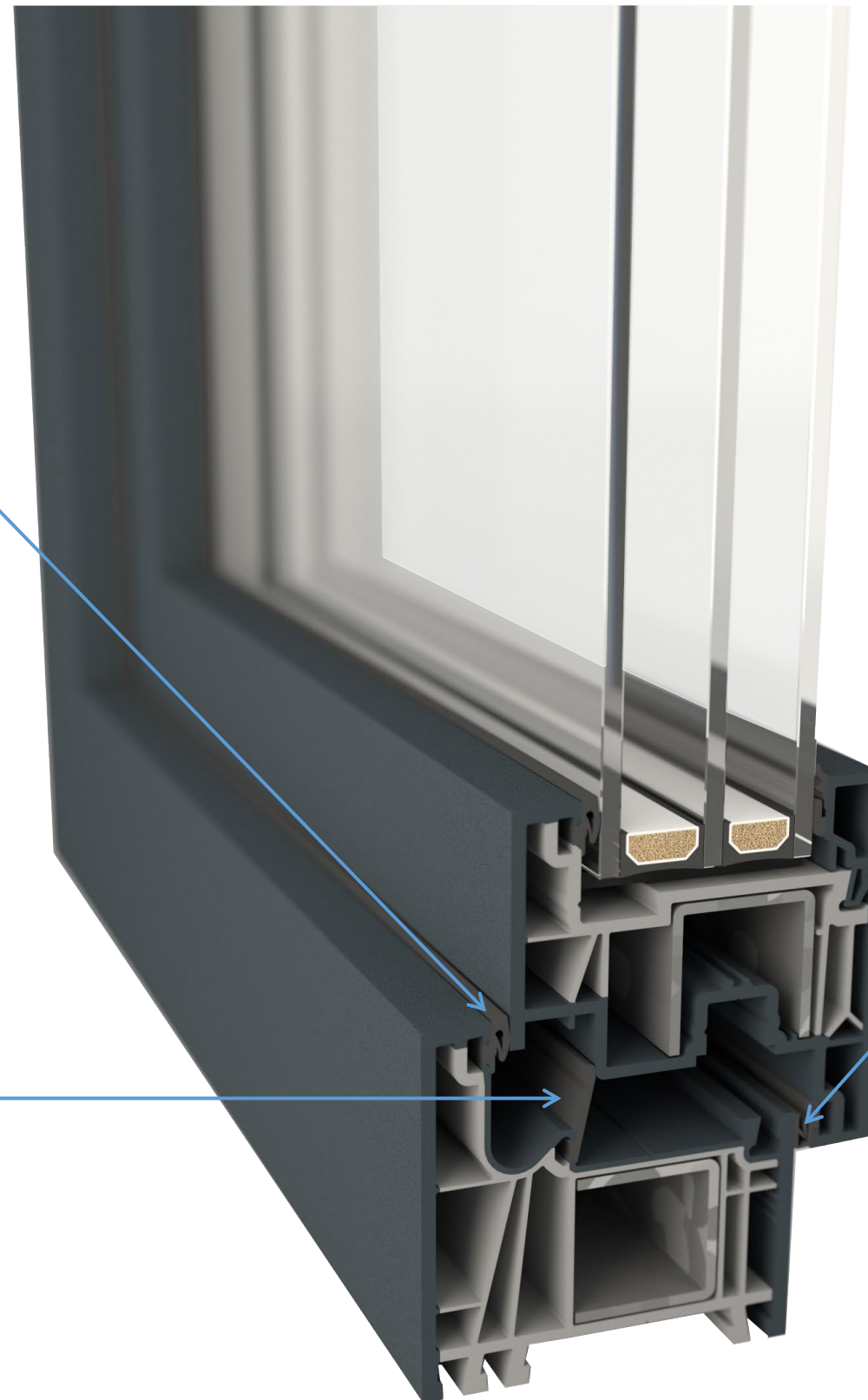
Exterior gasket

Outer weather seal at the sash-to-frame line — the first barrier against wind-driven rain and airborne moisture.

02

Center gasket

Middle seal creates a pressure-equalized drainage chamber, isolating the outer weather zone from the warm interior.



03

Interior gasket

Inner air-tightness seal — protects indoor comfort and condensation performance.



Bigger openings, single elements — up to 137"

Galvanized steel inserts carry the structural load, allowing a single linear element to span widths and heights that would otherwise require mullions or splits, giving architects the glass area of aluminum within a uPVC system.

FIXED WINDOW WIDTH

up to **137** in

MAX AREA — FIXED WINDOW

up to **75** ft²

FIXED WINDOW HEIGHT

up to **137** in

MAX AREA — TILT & TURN WINDOW

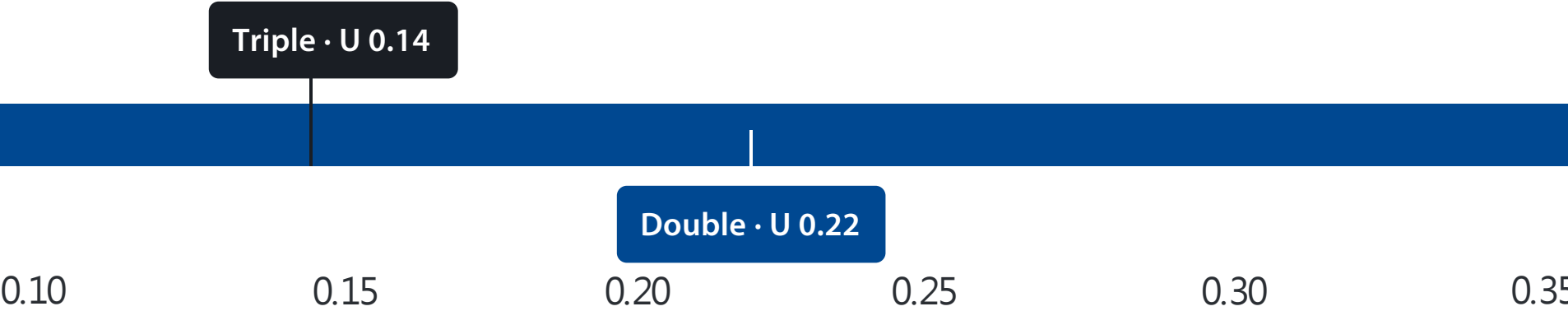
up to **26** ft²





U-factor across the full NFRC scale

U-FACTOR · BTU/(h·ft²·°F) · LOWER IS BETTER



BEST DOUBLE-PANE

0.22 BTU/(h·ft²·°F)

3 mm LoE³-366 / 18 mm Argon 90% / 3 mm LoE-i89 on Clear.

BEST TRIPLE-PANE

0.14 BTU/(h·ft²·°F)

3 mm LoE³-366 / 17.5 mm Argon 90% / 5 mm LoE-180 / 17.5 mm Argon 90% / 5 mm LoE-i89 on Clear.

NFRC METRIC	LINEAR
U-Factor (whole window)	0.14 – 0.32 BTU / (h · ft² · °F)
SHGC (whole window)	0.16 – 0.51
Visible transmittance	0.36 – 0.62
Condensation Resistance	45 – 74
Air leakage (NFRC 400)	<0.01 cfm/ft²



PHIUS-recommended performance through Climate Zones 5A/5B

Tested with a triple-pane low-e build, GEALAN-LINEAR® lands well inside the PHIUS recommended band from climate zones 0 through 5A/5B.

FIXED U-FACTOR up to 0.14 BTU/(h·ft²·°F)	TILT & TURN U-FACTOR up to 0.15 BTU/(h·ft²·°F)
FIXED SHGC up to 0.24	TILT & TURN SHGC up to 0.21

PHIUS CLIMATE-ZONE COVERAGE

0-2	3	4C/5C	4A/4B	5A/5B	6	7 / 8
✓	✓	✓	✓	✓	—	—

PHIUS-recommended performance band for Climate Zones 0 through 5A/5B at the standard NFRC model size.



Tested across the full performance class range

AW-PG70

Tilt-Turn Window

48" × 84"

DESIGN PRESSURE	± 70.18 psf
WATER RESISTANCE	15.04 psf
AIR INFILTRATION	0.10 cfm/ft ²

AW-PG55

Fixed Window

59½" × 98½"

DESIGN PRESSURE	± 55 psf
WATER RESISTANCE	15.04 psf
AIR INFILTRATION	< 0.10 cfm/ft ²

CW-PG105

Tilt-Turn Window

48" × 72"

DESIGN PRESSURE	± 105 psf
WATER RESISTANCE	15.04 psf
AIR INFILTRATION	< 0.05 cfm/ft ²

AW and CW are the top NAFS durability classes; PG (psf) is the design pressure rating—higher PG means higher wind-load capacity.



Performance above premium vinyl windows

AIR LEAKAGE

3× tighter envelope

< 0.10 cfm/ft²

3× tighter

Typical vinyl windows: 0.20–0.30 cfm/ft² (NFRC default)

DESIGN PRESSURE

Above the aluminum range

± 105 psf

3.5× builder-grade

Builder-grade vinyl windows: ±15–30 psf

Premium vinyl windows: ±30–40 psf

Thermally-broken aluminum windows: ± 50 – 90 psf

WATER PENETRATION

Tested to the NAFS ceiling

15.04 psf

Max NAFS test pressure

Builder-grade vinyl windows: 2.86 – 6 psf

2.5–5× higher water-test pressure



Acoustic performance that keeps the noise outside

Tested per ASTM E90 across different IG build-ups, the GEALAN-LINEAR® Tilt & Turn scales acoustically with the glass package — from standard double-pane to premium laminated triple-pane.

SOUND TRANSMISSION CLASS

up to **47**STC

Reduces typical traffic and conversation noise to a low murmur.

OUTDOOR-INDOOR TRANSMISSION

up to **37**OITC

Targets the low-frequency content of trucks, trains and aircraft.

STANDARD GLAZING EXAMPLES	STC	OITC
15/16" IG — 1/8" + 11/16" air + 1/8"	29	24
1-3/8" IG — 1/8" + 1/2" air + 1/8" + 1/2" air + 1/8"	30	23
1-3/8" IG — 1/4" + 3/8" air + 1/8" + 3/8" air + 1/4"	33	25
1-3/8" IG — 1/4" laminated + 5/16" air + 1/4" + 5/16" air + 1/4" laminated	34	28
1-3/8" IG — 1/4" + 3/8" air + 1/8" + 3/8" air + 1/4" laminated	37	27
15/16" IG — 1/4" + 3/8" air + 5/16" laminated	38	31



For mid-rise, multi-family, and institutional.

NAFS AW-PG70 and CW-PG105 ratings open GEALAN-LINEAR® to the full commercial spec sheet — multi-family residential, hospitality, education, and mid-rise buildings

AW-class and CW-class performance — tested, not just rated
Air leakage down to 0.03 cfm/ft² for tight envelope targets
137" single-element fixed frames for generous daylighting





Five colors. Three finish options.

Specify the profile three ways: **pure white**, **one-side lamination** (color outside, white inside), or **two-side lamination** — which unlocks a **grey base profile** so the cross-section matches the finish at every cut and joint.



White



Sandstone



Anthracite Grey



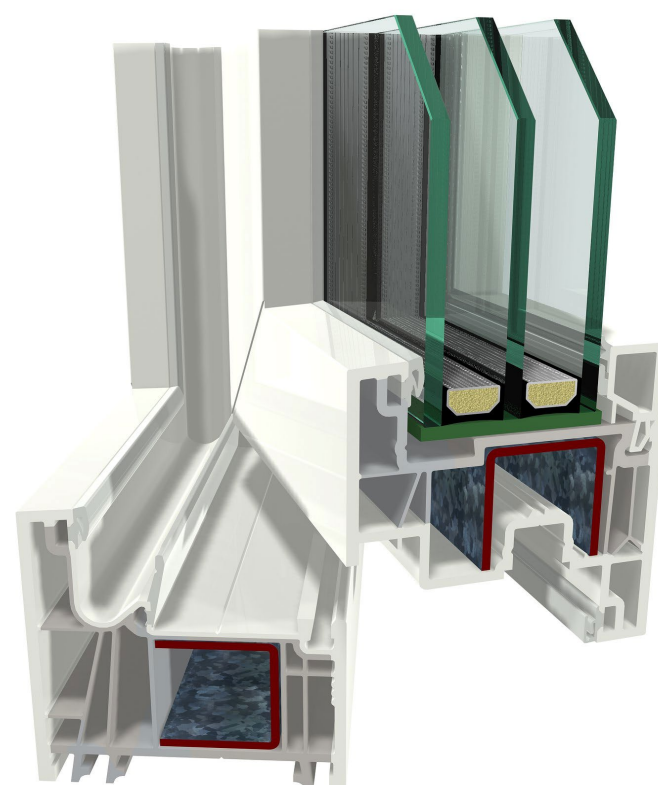
Dark Bronze



Black Smooth

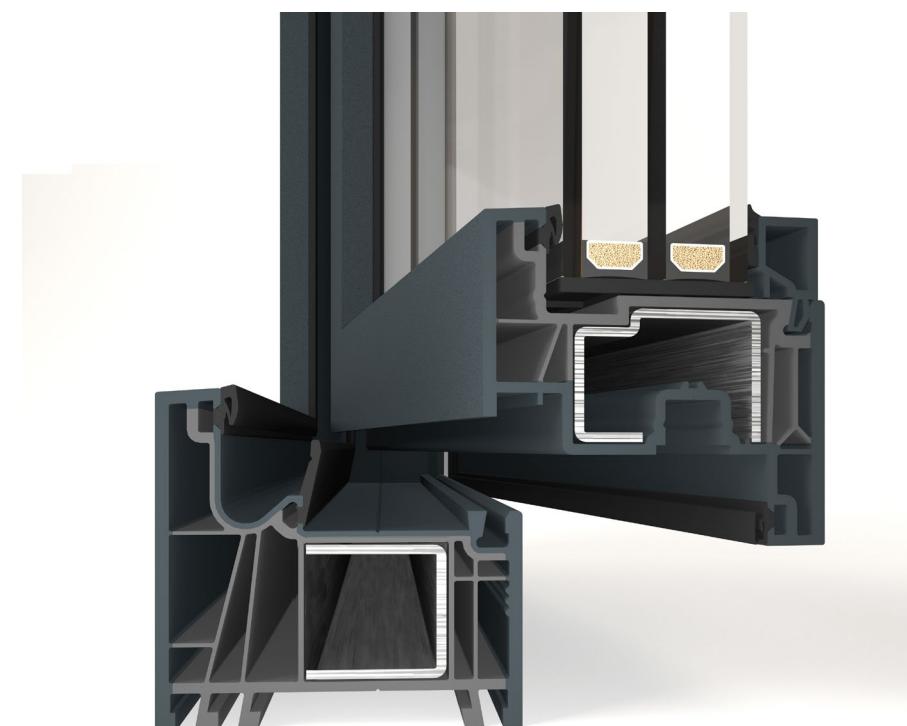
FINISH
White
One-side laminated

BASE PROFILE
White



FINISH
Two-side laminated

BASE PROFILE
Grey





Aluminum looks. Passive House performance.



01

Looks like aluminum

Square edges, a flush sash, and narrow sightlines create the contemporary look North American architects are specifying today.



02

Sized like aluminum

Steel-reinforced frames are available up to 137" in width and 137" in height—suitable for windows, storefronts, and full-height residential elevations.



03

Performs like Passive House

Three-gasket sealing with U-factors as low as 0.14 — PHIUS-recommended for cold climates (Climate Zones 5A/5B).