

**Engineering progress
Enhancing lives**

GLOBAL 80™ Series

Go big. Usher in a new era with GLOBAL 80™ tilt-turn windows and doors. Material advancements provide unbound performance framed with refinement to bring your views to new heights



SEEMRAY
YOUR HOME YOUR WAY



Bonds matter.

We think in generations: for products and partners. Our windows and doors are not here today, gone tomorrow. Neither are we. We pioneer formulations that build on our innovative roots to surpass market quality requirements. We design with purpose, insist on knowing the details, tackle unique engineering problems and team-up for stable relationships that bond.



ART

Timeless, modern and meticulous design makes it a contemporary classic.

EVOLUTION

Pushing profile technology forward: the culmination of our best work yet.

High-performance design

Based on the REHAU ARTEVO™ window and door system, GLOBAL 80™ offers manufacturers and specifiers powerful strength and stability for creating sweeping views with exceptional performance in commercial and residential buildings. Developed to meet Passive House certification, this undeniably versatile design provides tilt-turn, turn, hopper and fixed windows as well as balcony doors for new construction and remodeling. Choose from several color options to make it your own.

Sweeping views without steel.

Whether seeking refuge or escaping to the outdoors, ARTEVO allows for the artful expansion of all your spaces. Exclusive and world-renowned, RAU-FIPRO® hybrid PVC technology provides all the strength needed to support your most lofty design without the sting of a lofty price tag. Embrace the power of glass-fiber reinforced PVC and break your dependency on steel reinforcement to experience insulation and longevity in full force.

Boldly innovative for highest performance.

Take thermal insulation to a higher plateau with our new RAU-FLECT™ Low-E insert technology. Featuring a highly reflective coating, this V-shaped PVC component makes efficiency certifications easier to reach. To increase the structural stability in larger units, the ARTEVO glazing design is optimized for adhesive bonding precision. Show off the best of our advancements and reach peak thermal, acoustical and structural performance.

Undeniably versatile design.

Stunning from all angles, the cubic contouring and deliberate lines of ARTEVO lend a distinguished look to modern construction. A true engineering masterpiece with phenomenal performance, ARTEVO meets the most demanding architectural plans of today while adding strokes of beauty from sash to frame. Choose from its portfolio of styles, spanning tilt-turn windows to balcony doors, and its range of assembly options to give a tailored touch to each project.

Be a force to be reckoned with.

1 RAU-FIPRO® glass-fiber reinforced PVC profile

Delivers powerful stability and torsional rigidity from floor to ceiling, supporting openings of up to 9.2 ft (2.8 m) in height without metal reinforcement

2 RAU-FLECT™ Low-E insert technology

Provides unmatched thermal insulation, making it possible to meet U.S. Department of Energy R-7 window program requirements and achieve Passive House cool, temperate climate certification

3 Compression-seal technology

Increases thermal and acoustical performance while significantly reducing closing pressure, which makes window operation easy and extends the service life

4 Multiple locking points surrounding the sash

Provide extra security, tighter sealing and greater comfort

5 Integrated reinforcement zones in frame and sash

Offer superior structural stability while making hardware fastening more secure

6 Up to 2-3/16 in (56 mm) glazing capability

Accommodates triple glazing, increasing energy efficiency and acoustical properties





7 Co-extruded glazing, compression, convection and center seals

Enhance protection against heat loss, air infiltration and water penetration while increasing manufacturing efficiencies and reducing SKUs

8 Seven (7) chambers in frame and sash

Provide excellent thermal, water and sound insulation

9 3-5/32 in (80 mm) frame depth

Offers installation flexibility while delivering superior structural and thermal performance

10 4-19/32 in (117 mm) total frame and sash height

Provides more expansive daylight opening

Performance summary:

AAMA/NAFS 2022: up to CW-PG100

ASTM E90 Acoustical (STC): up to STC 44 dB, OITC 37

Solar Heat Gain Coefficient (SHGC): down to 0.14

U-value: down to 0.14

The RAU-FIPRO[®] scale up.

Inspired by materials found in aeronautics and Formula 1 race cars, in 2008 we set out to create a new material that would strengthen our window profiles in a way never before seen. Fusing short-strand glass fibers and PVC, RAU-FIPRO was born. This game-changing technology made it possible to build 33% larger windows and doors that didn't require steel reinforcement. Without steel weighing them down, our window designs unleashed the superior natural acoustic and thermal insulating properties of PVC. This achievement might have been good enough for some, but for us, the challenge was on. Leap forward through more than a decade of installations around the world: This award-winning material pairs with window development artistry to reach its fullest potential in ARTEVO. Now you can scale up to panoramic views with unmatched thermal performance.



Areas highlighted in green illustrate use of RAU-FIPRO material.



RAU-FLECT™ Low-E insert.

We were determined to design a system that would be more eco-conscious, cleaner to process and easier to weld. We studied available solutions from the lens of our vast material knowledge to maximize ARTEVO's thermal qualities. Expanding foam and polystyrene foam have been the "go-to" insulators, but these materials get in the way of weld plates and pose health concerns due to particulate inhalation. We zeroed in on developing a new material technology, RAU-FLECT Low-E insert. This V-shaped weldable PVC component has a highly reflective coating to eliminate convection in profile chambers, strongly reduce heat radiation and provides reliability in the most punishing temperatures. When pairing RAU-FLECT with ARTEVO, a fully recyclable system is possible, paving the way for you, and us, to commit to a greener future for generations to come.

Crafted with methodic precision.

Achieve high thermal, acoustical and structural performance in sizes never reached before by PVC

ARTEVO windows and balcony doors feature a sleek look and our most vigorous material innovations. Built with RAU-FIPRO glass-fiber reinforced PVC, this system makes steel reinforcement virtually a thing of the past. This proprietary hybrid technology delivers powerful strength and stability from floor to ceiling, supporting openings of up to 9.2 feet (2.8 meters) in height. Impervious to weather, with calcium-zinc fortified PVC, glazing capacity up to triple pane and new RAU-FLECT Low-E insert, these windows and doors are key contributors to passive house and zero-energy building. Profiles and inserts are weldable and fully recyclable. From tilt-turn, turn, hopper and fixed windows to balcony doors, this system can be configured to meet high-performance thermal, acoustical and structural targets – cost effectively. Choose the modern lines and material strength of ARTEVO and become a force to be reckoned with.


Cubic contouring and deliberate lines lend a distinguished look to modern construction.



Details that pack a punch

Reinforced outer walls on the sash provide additional stability and torsional rigidity for bigger, stronger windows.





Up to 9 ft
(2.8 m) high



**Go bigger than before with
floor to ceiling openings.**

ARTEVO allows for the artful
expansion of all your spaces.

Artistry meets alchemy.

The art of mixing the perfect bond is built into who we are. For more than 50 years, our roots in fenestration have been nurtured by our love of chemistry. When traditional materials dominated the window profile scene in the 1960s, we broke away by piloting a vinyl compound unlike any other...fortified at the molecular level to resist warping, fading and chalking. We further defied expectations in 1976 by introducing the first welded vinyl window to North America, paving the way for the bigger, better PVC windows of today. By exploring new materials, mixing formulations and testing rigorously, we continue to push profile technology forward. ARTEVO is the culmination of our best work yet, exceeding the standard, eliminating double work and taking worry off your shoulders.







**ARTEVO was created
with you in mind.**



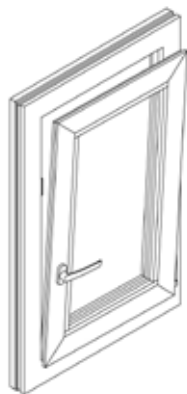
This original system is everything you envision for a place you call home. The experience isn't just about comfort; it's about immersing yourself in the painting of life. Take in strokes of color through skillfully framed expanses of glass. Between inside and out, ARTEVO delivers: whether you're hosting a family celebration against the rich backdrop of nature, sheltering a baby from noise that disrupts a good night's sleep or inviting travelers to put up their feet and rest. Get lost in your surroundings and usher in a new era of window and door design that measures up to challenging environments and efficiency needs, reaching the pinnacle of sanctuary.



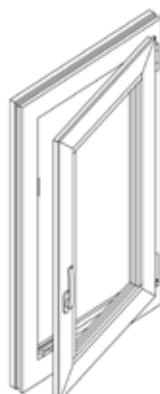
Craft your own sensory experience with a simple turn of the handle.

Whether you're looking for the quiet stillness of afternoon meditation or the fragrance of blooming roses sailing through your living room, ARTEVO tilt-turn windows allow you to choose your ambiance. This state-of-the-art system keeps unwanted environmental factors out, giving you respite when you need it most. A simple tilt can amplify or silence sounds, extinguish or heighten smells and warm or cool you down. Spring, summer, autumn or winter: Everything you want to place on life's stage is available at your fingertips.

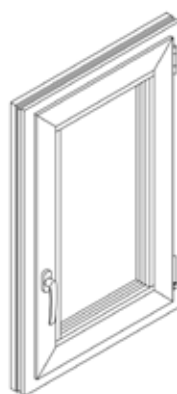
3-in-1 styling



Tilt



Turn



Closed

Mix or match

Combine different colors inside and outside with ease.

ARTEVO tilt-turn windows and doors are made to match, bringing cohesive design, ventilation and security to large openings in residential and commercial buildings. Simple movements of the handle reveal three styles: A secure top-venting hopper in the tilt position, an inward opening casement or hinged balcony door in the turn position and a tightly sealed picture window when closed. You can't have it all, the saying goes, but tilt-turn designs transcend this saying.



Stunning shapes and sizes



Eye-catching shapes for dramatic flair

Panoramic, oval, trapezoid or diamond, ARTEVO opens possibilities to create views with intriguing character you could only once dream of.

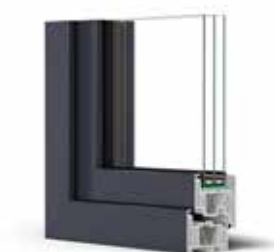






Colors for modern living

Available in popular colors and styles that enable you to frame life at any scale and blend performance features in strokes unique to your needs.



Anthracite Grey



Bronze NA



Silver D



Midnight Brown



White

Solid and metallic finishes

ARTEVO is offered in white core profile color that can be laminated with popular colors of RENOLIT EXOFOL FX film. Specially formulated for North American climates, REHAU's calcium-zinc fortified PVC provides superb color retention and resists weathering.

Elegant and secure handles

The minimalistic styling of REHAU handles harmonizes perfectly with the cubic contours of ARTEVO. A patented locking mechanism provides additional safety, making it harder for intruders to open from outside.



ARTEVO in detail.

The unbeatable specifications of a premium system.

Technical data

Frame material: top layer	RAU-PVC cadmium- and lead-free formulation
Frame material core	RAU-FIPRO glass fiber-reinforced PVC
Sealing system	Center seal
Construction depth	3-5/32 in (80 mm)
Number of chambers	Frame profiles: 7, sashes: 5 to 7
Seal overlap	Outside: 3.5 mm, inside: 8 mm
Seal gap	Outside: 5mm, inside: 4 mm
Hinge axis	12 mm
Maximum lg. thickness sash Z/T	2-3/16 in (56 mm)
Profile sightlines frame sash	117 mm to 138 mm
Heat transfer coefficient U_f	Up to 0.97 W/(m ² K)
Heat transfer coefficient U_f ARTEVO with Low-E insert	Up to 0.81 W/(m ² K)
Heat transfer coefficient U_w ARTEVO with Low-E insert	0.80 W/(m ² K) from Passive House Institute
Structural	Up to CW-PG100
Watertightness	Up to DP 100
Acoustic insulation	Up to 44 db, OITC 37
Solar Heat Gain Coefficient	Down to 0.14
Thermal insulation	Down to 0.14

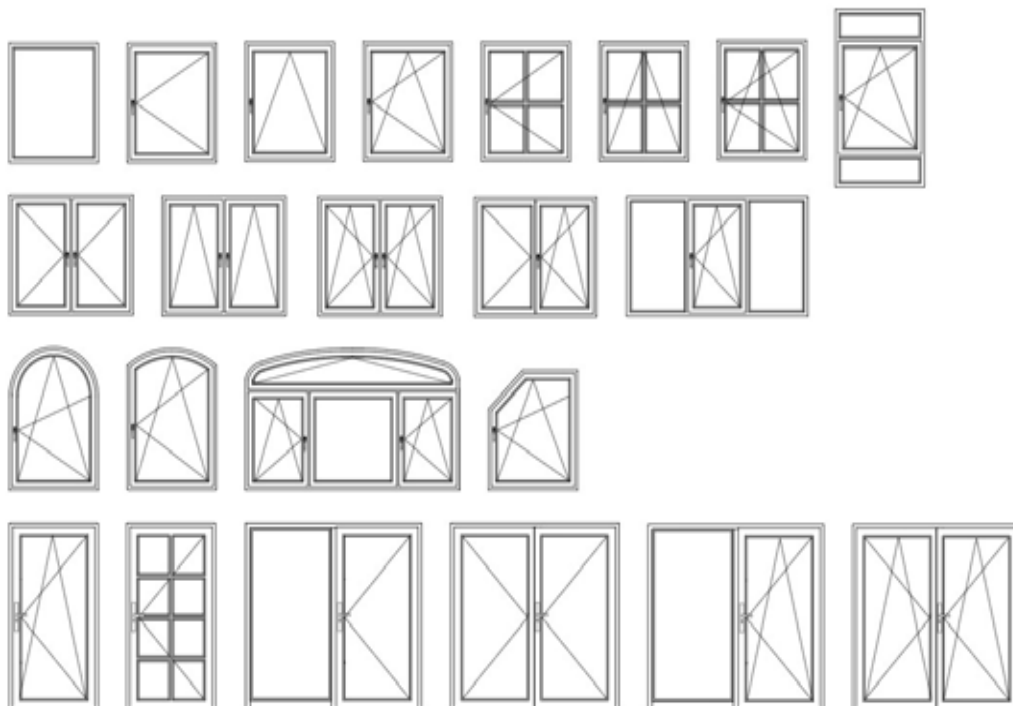




Put life on display
with ARTEVO™



Large selection of configurations





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