



## TILT-TURN WINDOW DESIGNS

REHAU SYSTEM 4500

# REHAU SYSTEM 4500

## FOR THOSE WHO WANT THE BEST

The dominant window style in Europe, tilt-turns are gaining popularity in North America as more stringent energy performance targets become the norm.



The System 4500 design produces some of North America's highest performing window and door units. This versatile design can be configured into tilt-turn and fixed windows as well as inward and outward opening single entry, French and atrium doors.

Tilt-turn hardware allows the sash to tilt inward at the top for secure ventilation or turn inward providing a wide opening for ease of cleaning the glass

surface and for emergency egress. When closed, this compression-seal design provides outstanding thermal and acoustical performance.

System 4500 windows have also passed Miami-Dade County hurricane protocol tests, allowing them to be specified for projects that reference this standard in all coastal regions, from Texas and Florida all the way to Long Island, NY.

Types	Fixed, tilt-turn (dual action), hopper and awning windows; hinged and sliding doors
Material	Cadmium- and lead-free RAU-PVC
Sealing System	Twin compression seals
System Depth	3 1/4 in (82.5 mm) typical residential; 2 3/8 in (60 mm) commercial applications
Frame / Sash Overlap	5/16 in (8 mm)
Seal Gap	1/8 in (3 mm) nominal
Hardware Axis	1/2 in (13 mm)
Max. Glass Thickness	1 3/8 in (35 mm)
Sightlines Frame / Sash	4.724 to 6.535 in (120 to 166 mm)
Colors	White, beige and clay + solid color and woodgrain foils
STC	Up to 41 dB
U-values	Down to 0.18*
Structural Tests	Tilt-turn: up to CW-PG90
	Fixed: up to CW-PG75
	Hopper: up to LC-PG75

\*) based on simulation

Testing on our window and door systems is ongoing. Contact your REHAU representative for the latest test results.

### Performance Summary

Performance Summary

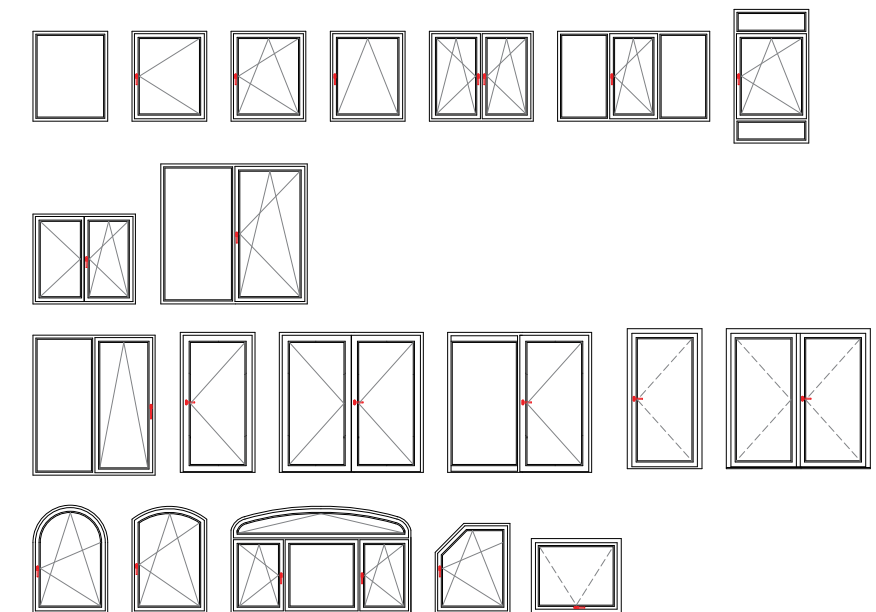
NAFS: up to Class CW-PG75

ASTM E90 Acoustical (STC): up to 41 dB

U-factor down to 0.18\*

ASTM + TAS: Impact Resistant DP-65 (HVHZ)

\* based on simulation



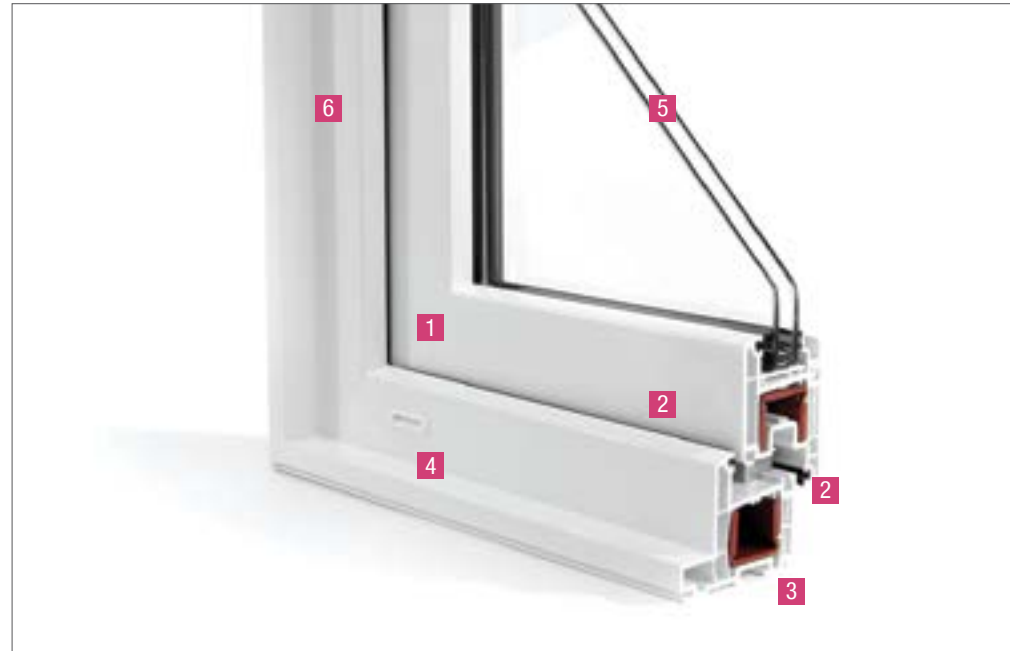
### Available Colors

- White
- Beige
- Clay

Ask about solid color and woodgrain foil options.

# REHAU SYSTEM 4500

REACHING TOP PERFORMANCE  
WITH OPERATING AND FIXED DESIGNS



- 1 Unique tilt-turn hardware** operates in both top-venting and inward-swinging positions
- 2 Multiple locking points and dual weather seals** provide optimal air and water tightness
- 3 Large chambers** accommodate reinforcements required for large openings in heavy commercial applications
- 4 Accessory groove** accepts a variety of accessories such as brickmolds, extension jambs and for profiles to couple window elements
- 5 Up to 1 3/8 in (35 mm) glass** increases energy efficiency and acoustical properties
- 6 3 1/4 in (83 mm) North American frame depth** allows for hassle-free replacement installation; we also offer the 2 3/8 in (60 mm) European frame

Tilt-turn designs are three window styles in one: a secure top venting hopper in the tilt position, an inward opening casement in the turn position and a tightly-sealed fixed window when closed.



## A uPVC window that can achieve a DP-100 rating – impossible! Or is it?

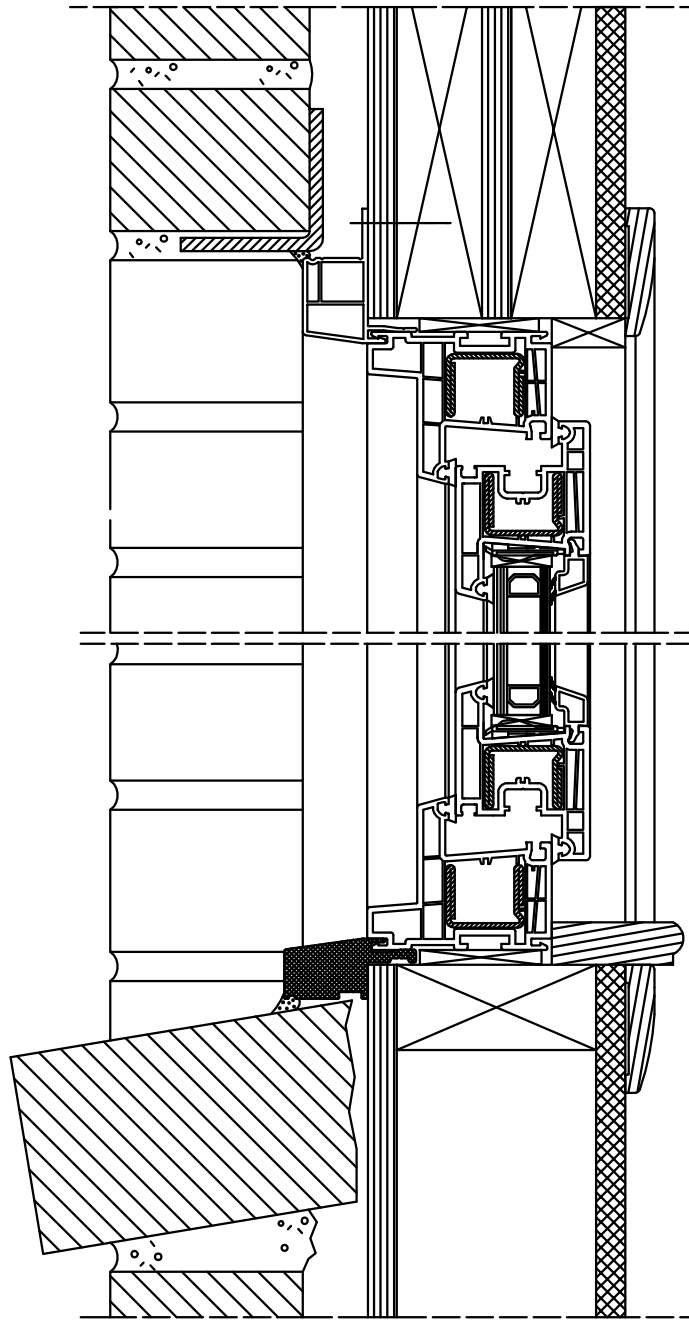
The outstanding performance of the System 4500 window design is one of North America's best-kept fenestration secrets. uPVC windows not only far exceed aluminum on thermal performance; they can also meet the highest available structural standards.

- Fusion-welded corners enhance structural strength and offer a cleaner finish
- Dual overlapping compression seals resist air and water infiltration
- Specific chambers on main profiles (frames, sashes and mullions) accept galvanized steel reinforcement
- Insulated glass up to 1 3/8 in (35 mm) thick achieves U-factors down to 0.18
- Multi-point locking system increases security
- ADA-compliant hardware solutions achieve disability design goals

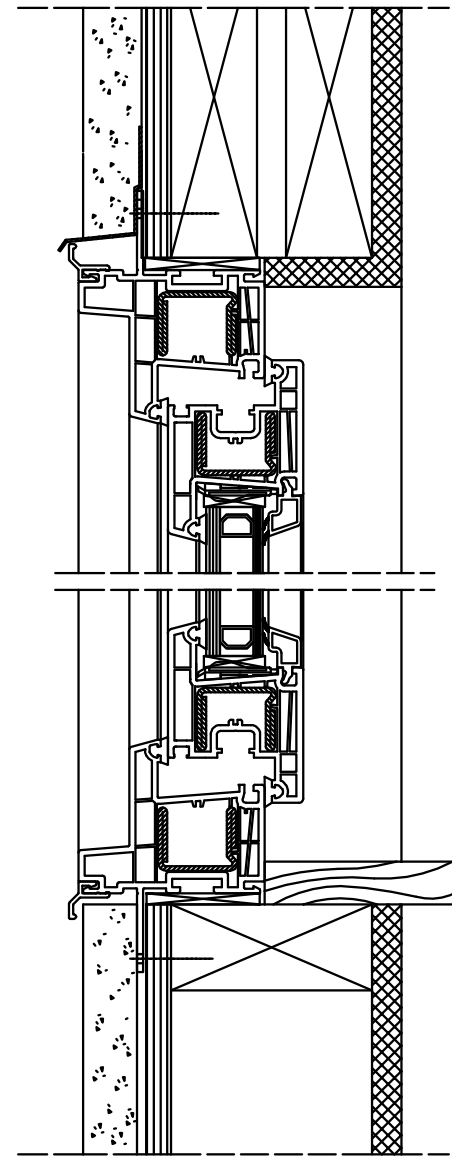
# REHAU SYSTEM 4500

## INSTALLATION DRAWINGS

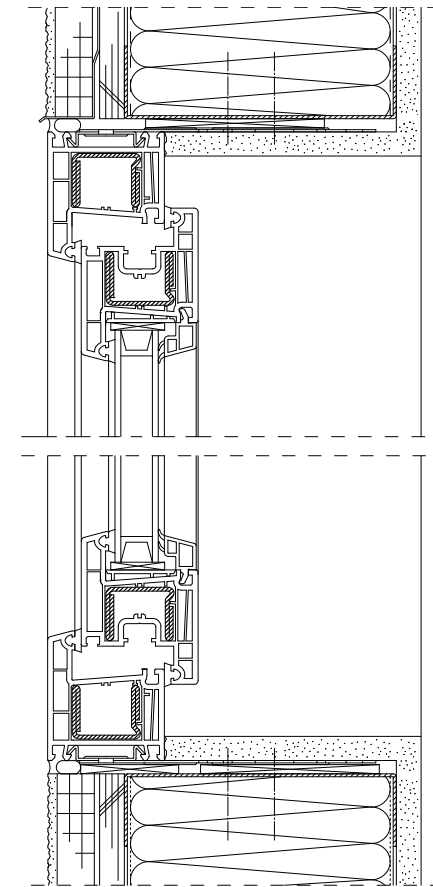
2 x 4" Wall with Brick New Construction (NA Frame)



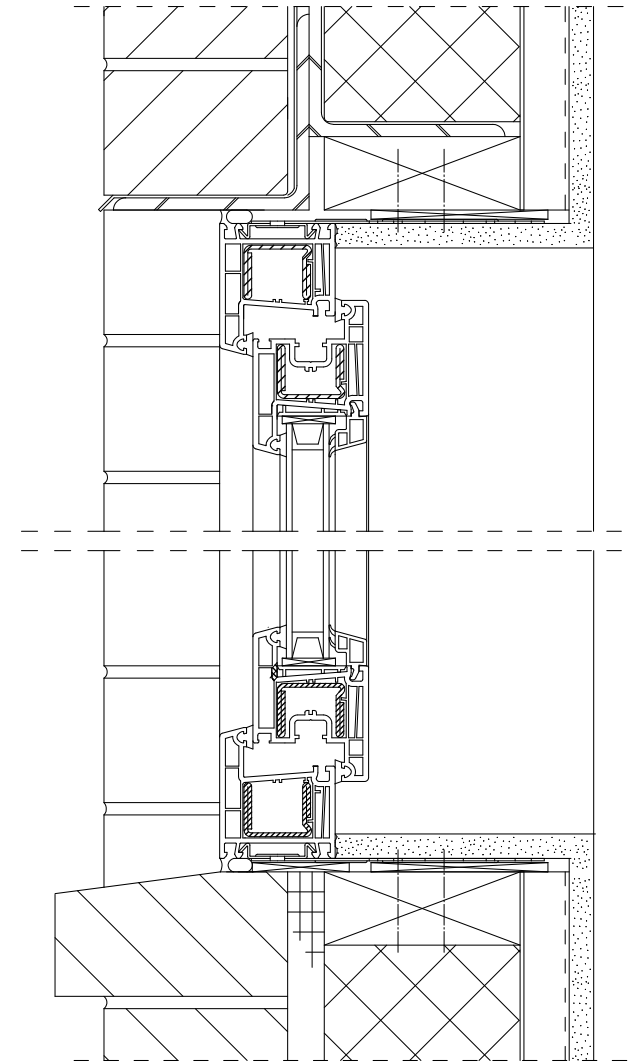
2 x 4" New Construction (NA Frame)



2 x 6" Wall with Stucco New Construction (Euro Frame)



Brick and Block Construction (Euro Frame)



---

For updates to this publication, visit [na.rehau.com/resourcecenter](http://na.rehau.com/resourcecenter)

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith.

© 2014 REHAU