EUROPEAN-STYLE WINDOWS & DOORS
REHAU System 4500
SYSTEM 4500: THE ALL-ROUND TALENT

Top Performance, Intelligent Design, Timeless Style: Hallmark of the System 4500 window and door designs by REHAU. They are engineered to perform. They are beautiful, durable, energy efficient and available in an extensive variety of styles, colors and configurations.

Fusion-welded corners
In addition to the benefits of uPVC’s thermal properties, REHAU’s fusion-welded corners greatly reduce leakage potential and the need for costly sill pans/pans flashing systems.

Steel reinforcement
REHAU’s sophisticated multi-chambered designs accommodate steel reinforcement and allow for big window elements. This, in turn, provides greater daylight openings and brighter interior designs.

Compression-seal technology
When the wind is blowing strong and rain is pouring down, compression seals are optimizing the air and water performance of REHAU windows and doors.

Multiple locking points
Multi-point locking hardware assures consistent compression on the seals all around the perimeter of the sash and frame for further performance enhancements and improved security.

High-definition finish
Only occasional cleaning with soap and water is needed to keep the surfaces looking like new, even years after installation.
TILT-TURN WINDOWS
Unique operation and unmatched performance

System 4500 window designs offer a very unique product for large openings in both residential and commercial markets. The versatile design is three windows in one: A secure top-venting hopper in the tilt position, an inward opening casement in the turn position and a tightly sealed picture window when closed for outstanding thermal and acoustical performance.

With the System 4500, tilt-turn, awning, hopper and fixed configurations are possible. Matching doors in a variety of configurations are available.

Some of North America’s highest performing window units are produced using the REHAU System 4500.
SYSTEM 4500: TILT-TURN WINDOWS
Unique operation & unmatched performance

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 profiles to couple window elements
5. Up to 1 3/8” (35 mm) glass
   - Increases energy efficiency and acoustical properties
6. 3 1/4” (83 mm) North American frame depth
   - Allows for hassle-free replacement installation; we also offer the 2 3/8” (60 mm) European frame

System 4500 comes in a variety of different colors: Whether you are looking for a change from white with a different core profile color or something totally unique such as modern solid foil on the window exterior with a wood look on the interior, our color options offer something for every taste.

Performance Summary

NAFS: up to Class CW-PG95
STC: up to 41 dB
U-factor: down to 0.18°

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
- a tightly sealed fixed window when closed.

* based on simulation
SWING DOORS
Total flexibility and classic beauty

Few designs are more classic or have as many different uses as swing doors. System 4500 swing doors are offered as a single sash creating a beautiful main entrance or as dual sash, also referred to as French doors that elegantly connect the indoors with the outdoors. These versatile doors can be used for patio, deck or balcony access as well as entry doors.

The System 4500 swing door design offers an attractive solution for both residential and commercial applications. Matching fixed and operable windows can be paired with this door as top and side lites allowing for the greatest design flexibility.

With the System 4500 swing door design, single inswing and outswing as well as double inswing and outswing configurations are possible.
**SYSTEM 4500: SWING DOORS**

Total flexibility & classic beauty

Unique PVC corner blocks connect steel reinforcement keeping hinged door corners in-square for long-term, trouble-free operation. Outward opening (left) and inward opening (right) styles meet a variety of design requirements.

1. **Frame profiles with different depths**
   - Provide flexibility for new construction and replacement applications

2. **Multiple locking points and compression seals all around the sash perimeter**
   - Provide high water performance, minimal air infiltration, security and good sound insulation

3. **Large reinforcement chambers in the sash**
   - Allow for sash sizes as large as 8 ft (2.4 m) high and 3.5 ft (1.1 m) wide for single doors and 3 ft (0.9 m) wide for French doors

4. **High quality hardware**
   - Operates quietly and effortlessly

5. **Large glazing capacity, including special high-performance glass of 1 3/8” (35 mm) in thickness**
   - Improves energy efficiency and acoustical properties

6. **Weldable corner joints in the sash profiles**
   - Strengthen the door panel against distortion and provide long-term, smooth operation

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**Performance Summary**

- **Outward Opening – Single Door**
  - NAFS: up to LC-PG80
  - STC: up to 38 dB
  - U-factor: down to 0.24*

- **Outward Opening – French Door**
  - NAFS: up to LC-PG35
  - STC: up to 38 dB
  - U-factor: down to 0.24*

- **Inward Opening – Single Door**
  - NAFS: up to LC-PG40
  - STC: up to 40 dB
  - U-factor: down to 0.24*

- **Inward Opening – French Door**
  - NAFS: up to LC-PG40
  - STC: up to 40 dB
  - U-factor: down to 0.24*

* based on simulation

Design flexibility: Hinged doors can be built as single as well as French doors, either inward or outward opening. They can easily be combined with top and side lites or even operable windows, providing the utmost design flexibility.
TILT-SLIDE DOORS
Contemporary style and versatile functionality

REHAU System 4500 tilt-slide doors are an innovative door solution for spaces that do not allow for traditional in-swing doors.

With just a simple turn of a handle, the door sash can be tilted providing secure ventilation. With another turn, the sash slides open parallel to the fixed unit, not into the room, for space-saving functionality. The high-quality European hardware system operates quietly and easily.

Optimal profile design and compression-seal technology contribute to outstanding performance.

Matching fixed and operable windows can be paired with this door as top and side lites allowing for the greatest design flexibility.
SYSTEM 4500: TILT-SLIDE DOORS
Contemporary style & versatile functionality

Large chambers accommodate robust reinforcements required in heavy commercial applications. Innovative runner mechanism provides smooth projection of the sash which easily and precisely slides to any desired position.

1. Large glazing capacity, including special high-performance glass up to 1 3/8" (35 mm) in thickness
   - Improves energy efficiency and acoustical properties
2. Four-chambered sashes and frames
   - Provide high energy efficiency
3. Large reinforcement chambers in the sash
   - Allow for sash sizes as large as 8 ft (2.4 m) high and 5 ft (1.5 m) wide up to a weight of 260 lbs (120 kg)
4. High quality hardware
   - Operates effortlessly and quietly
5. Multiple locking points and compression seals all around the sash perimeter
   - Provide high water performance, minimal air infiltration, security and good sound insulation
6. Frame profiles with different depths
   - Provide flexibility for new construction and replacement applications

Tilt Sash Function for Ventilation in a Secured Position: High-quality tilt-slide hardware allows a vent position, where the top of the sash tilts toward the inside of the room, but cannot be opened from the outside, providing security on the inside.

Performance Summary
NAF: up to CW-PG55
STC: up to 40 dB
U-factor: down to 0.20*  
* based on simulation
BI-FOLD DOORS
Impressive extravagance and uninterrupted living

System 4500 bi-fold doors are a luxurious solution for spaces that need a wide, unobstructed opening. They can be an alternative to hinged and sliding patio doors, but can also be used to accentuate open-plan living.

Whether for residential or commercial applications, this unique door design allows sash panels to fold to either side, creating a wide opening without any interruption.

This beautiful door design uses compression-seal technology for superior sound, air and water performance.

System 4500 bi-fold doors can easily be matched with a variety of window configurations.
SYSTEM 4500: BI-FOLD DOORS
Impressive extravagance & uninterrupted living

1. Large glazing capacity of up to 1 3/8" (35 mm) in thickness
   Improves energy efficiency and acoustical properties

2. Large reinforcement chambers in the sash
   Allow for sash sizes as large as 7 3/4 ft (2.3 m) high and 3 ft (0.9 m) wide, weighing up to 175 lbs (80 kg)

3. Four-chambered sashes and frames
   Provide high energy efficiency

4. High-quality hardware
   Operates quietly and effortlessly

5. Lever-locking mechanism
   Securely closes the end panel of the bi-folding sashes

6. Multiple locking points and compression seals all around the sash perimeter
   Provide water tightness, minimal air infiltration, security and good sound insulation

Performance Summary
NAFS: up to LC-PG25

Structural T-mullions: Allow doors to be configured with up to five panels and an overall width of 15 ft (4.5 m).
THE SECRET IS THE FORMULATION
Better formulation = better durability

REHAU’s proprietary uPVC formulation and extrusion process produces superior window systems that outlast and outperform alternative materials like aluminum and wood-clad products. Those corrode and rot from exposure to weather and pollution.

REHAU’s formula includes above-average quantities of TiO₂ stabilizers and impact modifiers to protect against fading from solar radiation. When put through five years of weather testing in Arizona, this formula showed its strength; REHAU uPVC performed better than standard vinyl.

Our unique uPVC formula also results in a higher than average surface gloss level. This enhanced the ability of REHAU window systems to repel dirt and retain their color.
SYSTEM 4500: THE ALL-ROUND TALENT
DESIGN. VERSATILITY. PERFORMANCE.

Save energy easily: With **better thermal performance.**

Reducing energy usage is important. Not just for the occupant’s wallet but also on a larger scale when it comes to sustainable building. **Lower energy consumption with a good conscience** – whether it’s cold or hot outside.

<table>
<thead>
<tr>
<th></th>
<th>System 4500 Windows</th>
<th>System 4500 Doors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U-value</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard (dual pane, low-E)</td>
<td>0.28</td>
<td>0.30</td>
</tr>
<tr>
<td>Advanced (triple pane, low-E)</td>
<td>0.20</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Minimize maintenance: With **ease of operation, ease of cleaning.**

Thanks to a high-quality, high-definition finish (HDF), smudges can be quickly and easily removed using conventional detergents. As far as maintenance, the occasional application of a quality lubricant to the moving parts, such as hinges and lock mechanisms, is all that is needed. The newly developed sealing technology assures optimal closing pressure. Due to advanced engineering and close cooperation with hardware suppliers, window and door operation is smooth and easy. **Reduce maintenance and cleaning effort to a minimum.**

Ensure peace and quiet: With **a view on mute.**

Noise is disturbing and over time, it is even unhealthy. **Increase occupants' feeling of well-being with the previously unattained values in noise protection.**

<table>
<thead>
<tr>
<th></th>
<th>System 4500</th>
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<tbody>
<tr>
<td>85 dB loud street noise</td>
<td>System 4500</td>
</tr>
<tr>
<td>42 dB quiet interior</td>
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</tbody>
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Trust high levels of safety: With **superior security features.**

In combination with the appropriate hardware, System 4500 windows and doors enhance security with multiple locking points, fusion-welded corners and steel-reinforced, multi-chambered design. **Enjoy the security you are looking for.**

Experience creative freedom: With **countless shapes and colors.**

System 4500 allows for a wide choice of customized shapes, e.g., round, half-round, triangular, rake-top, ellipsoidal windows. In addition, extensive design variations with brilliant colors and patterns will liven up any building interior and exterior. **Get creative with countless design options.**

<table>
<thead>
<tr>
<th>Wood</th>
<th>Solid</th>
<th>Profile</th>
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</thead>
<tbody>
<tr>
<td>Light Oak</td>
<td>Furniture</td>
<td>White</td>
</tr>
<tr>
<td>Mahogany</td>
<td>Silver</td>
<td>Beige</td>
</tr>
<tr>
<td>Golden Oak</td>
<td>Midnight</td>
<td>Clay</td>
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<tr>
<td>Iron Oak</td>
<td>Choco Brown</td>
<td></td>
</tr>
<tr>
<td>Soft Cherry</td>
<td>Burnt Almond</td>
<td></td>
</tr>
<tr>
<td>Douglas Fir</td>
<td>Medium Brown</td>
<td></td>
</tr>
</tbody>
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