



EXPAND YOUR VIEW OF THE WORLD
BEAUTIFUL, HIGH-PERFORMANCE, LONG-LASTING DOORS



Top Performance, Intelligent Design, Timeless Style

These are 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.

uPVC Delivers Where Others Fail

A REHAU-designed door resists fading or corrosion. Our proprietary unplasticized polyvinyl chloride (uPVC) formulation and extrusion process result in superior profiles that outlast and outperform materials like aluminum or wood. Plus, uPVC is a natural insulator. It resists heat loss in winter and heat gain in summer.

Less Stress on the Environment

Our doors offer long service life and excellent thermal performance that minimizes energy use. We can point to installations now exceeding 50 years in Europe and 30 years in North America – still performing strong. This conserves raw materials and prevents pollution associated with manufacturing and disposing of other, shorter-life alternatives.

Welcome to the world of doors designed by REHAU.

SLIDING PATIO DOOR DESIGN

REHAU SYSTEM 2200



The REHAU System 2200 sliding patio door design offers the same quality and durability you have come to trust in our other window and door products. This door system also offers true high performance, superior operation and thermal efficiency, making it the perfect choice for residential remodeling, new construction and light commercial projects.

Advanced Design Features

The System 2200 incorporates multiple chambers for increased thermal performance and is robust enough to accommodate triple glazing. These features enable this door to meet today's stringent energy code requirements as well as the stricter codes being considered for the future.

Available in Popular Sizes

This door can be ordered as a knock-down kit in popular US and Canadian sizes or custom fabricated to your requirements. Configurations include two-, three- and four-panel operating units with optional side lites and transoms.

SLIDING PATIO DOOR 2200

MORE THAN YOU IMAGINED

Advanced design and engineering make the System 2200 everything you imagine a sliding patio door could be and more. Perfect for modern living, it opens up your space with classic looks and a large glass area for maximized daylight.



Quiet and Energy Efficient

With multiple chambers made of naturally insulating uPVC and the latest in sealing technology, this door provides excellent thermal performance while keeping sound transmission to a minimum.

Security

Galvanized steel-reinforced sash profiles are engineered to withstand windloads and to provide strength for hardware fasteners. Internally glazed sashes make it extremely difficult to remove the glass from the outside. Hardware components feature multi-locking and “anti-lift” technology.

Style Options

Customize your look with a modern white, beige or blue white finish, or choose a solid color or wood-grain foil. Choose two, three or four panels. You can even specify the thickness of the insulated glass unit, ranging from 1 in (25 mm) up to 1 3/8 in (35 mm) and choose from a range of accessories.

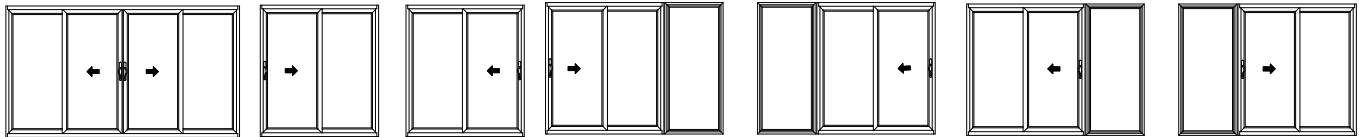
Low Maintenance

Our doors withstand even the toughest conditions with minimal maintenance. Only an occasional cleaning with mild detergent is required to keep the frames looking great and only occasional oil maintenance for the locks. The aluminum running track enables continuously smooth, trouble-free operation.

SLIDING PATIO DOOR 2200

VERSATILITY IN FUNCTION AND DESIGN:
KEY FEATURES AND BENEFITS

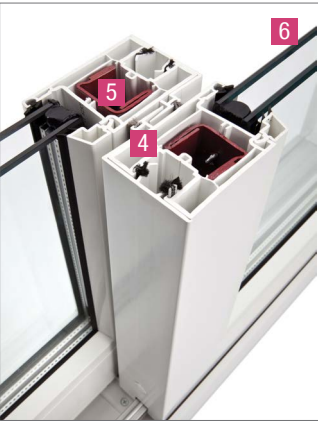
This steel-reinforced uPVC door is designed to maximize your glass-to-frame ratio while offering superior durability, sound abatement and energy efficiency. Sash versatility allows multiple configurations to meet your needs.



- 1 European saddle-rail sash design** provides exceptionally smooth, low-friction operation and is easier to clean
- 2 Low-profile, aluminum-capped sloped sill** offers unobstructed building entry with the durability of an anodized aluminum finish
- 3 Engineered drainage system** achieves superior resistance to water leakage
- 4 Interlocking sash** enhances structural integrity and resistance to air infiltration
- 5 Steel sash reinforcement** creates superior structural rigidity, allowing for installation in light-commercial applications
- 6 Glazing channel up to 1 3/8 in (35 mm)** accommodates triple glazing, increasing both energy efficiency and acoustical properties
- 7 Multi-point stainless steel locking bar** increases security and product performance



The saddle-rail sash design provides exceptionally smooth operation. Utilizing precision bearing rollers, the operation of the sash requires little effort and provides long-lasting, trouble-free operation. The attractive anodized sill tread complements the aesthetics of the door while providing a durable low-profile entry. The sloped design provides effective water run-off.



The reinforcement is confined between two walls within the sash profile allowing for maximum thermal performance.

- Available Colors**
- White
 - Beige
 - Blue White
- Ask about solid color and wood-grain foil options.



A multi-point stainless steel locking bar provides high performance ratings, added security and resistance to air and water infiltration.

Photo courtesy of TRUTH Hardware

SLIDING PATIO DOOR 2200

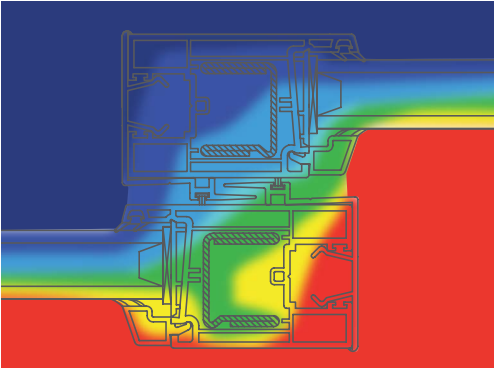
REACHING TOP THERMAL PERFORMANCE



With insulated glass unit (IGU) thickness from 1 in (25 mm) to 1 3/8 in (35 mm), the System 2200 is suitable for all Energy Star zones in the United States and Canada.

Thermal Performance Simulations

To ensure that the REHAU 2200 sliding patio door design meets the most stringent energy codes in the United States and Canada, we have conducted thermal engineering simulations using different glazing, coating and spacer configurations as shown on the table.



Thermal image of REHAU System 2200 sliding patio door demonstrates how effectively this design separates warmer air and cooler air to achieve optimal energy efficiency.

Glass Option	IGU Thickness	U-factor ¹	R-value	SHGC
Cardinal E272	1 in (25 mm)	0.28	3.6	0.30
Cardinal E366	1 in (25 mm)	0.28	3.6	0.20
Solar Ban 70 XL	1 in (25 mm)	0.26	3.8	0.20
Solar Ban 70 XL	1 3/8 in (35 mm)	0.17	5.9	0.15

For more detail on thermal performance including gap fills and widths, contact your REHAU sales representative.

¹U-factors (and R-values) measure the rate of heat transfer and tell how well the window or door insulates. U-factors (and R-values) generally range from 0.20 (R-5) to 1.20 (R-0.8). The lower the value, the better the window/door insulates.

Performance Summary

NAFS: up to LC-PG65

ASTM E90 Acoustical (STC): up to 38 dB

U-factor down to 0.16*

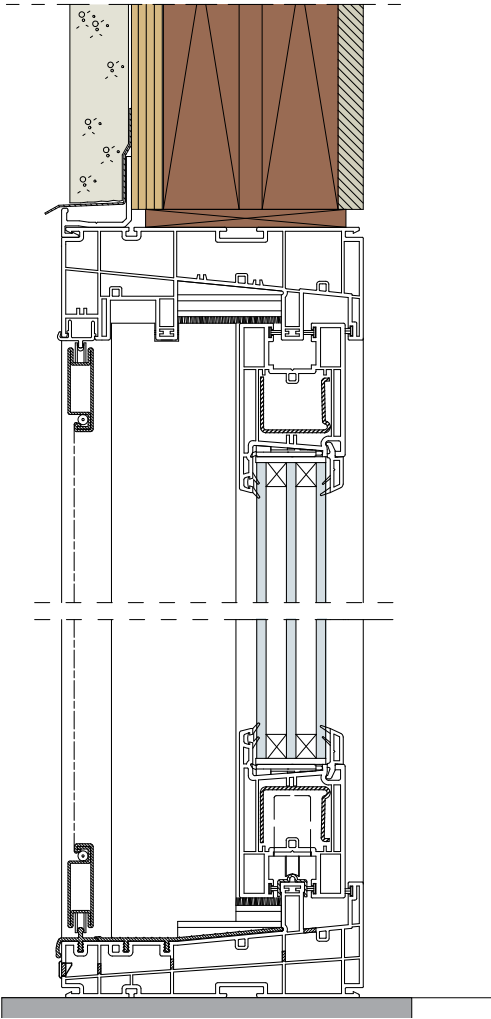
* based on simulation

Testing is ongoing; contact your REHAU sales representative for the latest test reports.

SLIDING PATIO DOOR 2200

INSTALLATION DRAWINGS

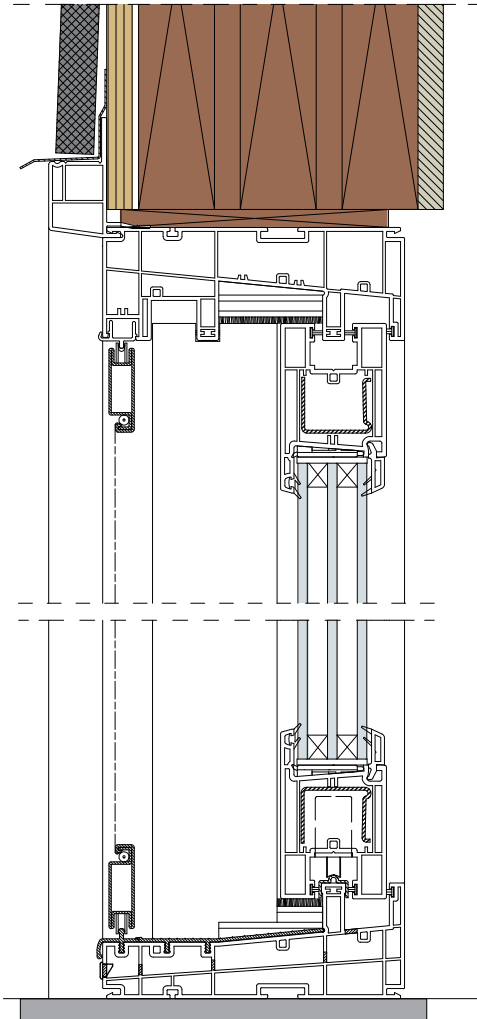
2 x 4 Sill Section



These illustrations depict suggested installations of REHAU System 2200 patio door design.

The 2 x 4 vertical section shows a wood frame wall with stucco exterior and a snap-on nailing fin specially designed for stucco applications.

2 x 6 Sill Section



Not to scale

The 2 x 6 vertical section shows a wood frame wall with siding on the exterior and a 1 1/2 in (38.1 mm) brickmold profile. This brickmold profile is available with integral nailing fin (as shown) or without nailing fin. *System 9000 Supplementary Profiles* brochure contains more than 30 REHAU accessory profiles that are available for use with this system.



LIFT-SLIDE DOOR DESIGN

REHAU SYSTEM 2500



The REHAU System 2500 lift-slide door design is an impressive option for creating unique and inspiring living spaces. In contrast to conventional sliding doors, this specially engineered door system can be built to fill significantly larger than normal openings while offering an almost effortless sash operation and instant architectural appeal. Superior sealing properties provide outstanding performance and comfort.

LIFT-SLIDE DOOR 2500

FOUR-CHAMBER DESIGN ACHIEVES EXCELLENT THERMAL
AND SOUND INSULATION

The exceptional four-chamber design of the door sashes accommodates steel reinforcements and hardware components needed for large openings without compromising security.



Stands the Test of Tough Weather While Lowering Energy Cost

A door like the System 2500 lift-slide should not only look great, but also perform great. Design details like four-chamber profiles, a thermally broken threshold design and compression-seal technology protect from air, dust and water infiltration. Added benefits include outstanding energy efficiency and sound abatement. The unique hardware operation allows the door, when lowered, to sit securely within the gasketing system. Combined with multi-point locking, the System 2500 is ready for the harshest of environments.

A Lifetime of Low Maintenance

Lift-slide door profiles are made using REHAU's proprietary uPVC formula for many years of enjoyment without the headache of regular maintenance. REHAU uPVC is extremely resistant to weathering, and its smooth surface quality makes our profiles less susceptible to dirt.

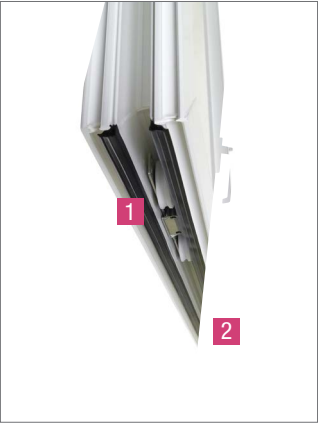
LIFT-SLIDE DOOR 2500

DECEPTIVELY EASY TO OPERATE YET INCREDIBLY SECURE:
KEY FEATURES AND BENEFITS

This steel-reinforced uPVC door is designed to maximize your glass-to-frame ratio while offering superior durability, sound abatement and energy efficiency.



- 1 Supreme quality hardware and precision rollers** ensure smooth operation of up to 550 lbs (250 kg) of sash weight over the lifetime of the door
- 2 Compression seals all around the sash perimeter** assure high water performance, less air infiltration and good sound insulation
- 3 Robust, thermally broken frame** allows four-panel configurations up to a size of 32 ft (10 m)
- 4 Large reinforcement chambers in the sash** allow for wide openings and heavy glass weights
- 5 Four-chambered sash and thermally broken frame** provide high energy efficiency
- 6 Sash has large glazing capacity**, accomodating special high-performance glass up to 1 3/4 in (44 mm) in thickness



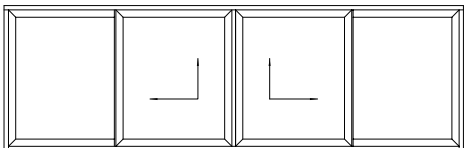
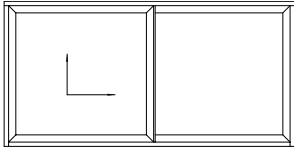
Seals on the bottom of the sash compress once the sash is lowered in the closed position.



Thermally broken frame and threshold reduce heat losses and the risk of condensation.

Available Colors

- White
- Ask about solid color and wood-grain foil options.



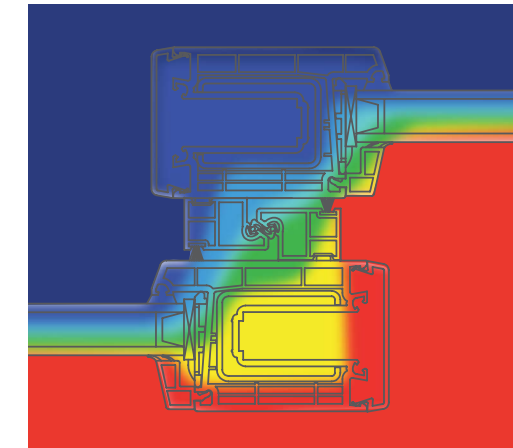
LIFT-SLIDE DOOR 2500

PROVIDING MAXIMUM DAYLIGHT WITHOUT SACRIFICING
SECURITY AND ENERGY PERFORMANCE



The secure lift-slide door design resists intrusion attempts with a design requiring it to open with a lifting action that can only be performed from the inside. Interlocks at the meeting rail provide further security.

With insulated glass unit (IGU) thickness of 1 in (25 mm) to 1 3/4 in (44 mm), the System 2500 is suitable for all Energy Star zones in the United States and Canada.



Thermal image of REHAU System 2500 demonstrates how effectively this design separates warmer air and cooler air to achieve optimal energy efficiency.

Performance Summary

NAFS: up to LC-PG55

ASTM E90 Acoustical STC: up to 40 dB

U-factor down to 0.20*

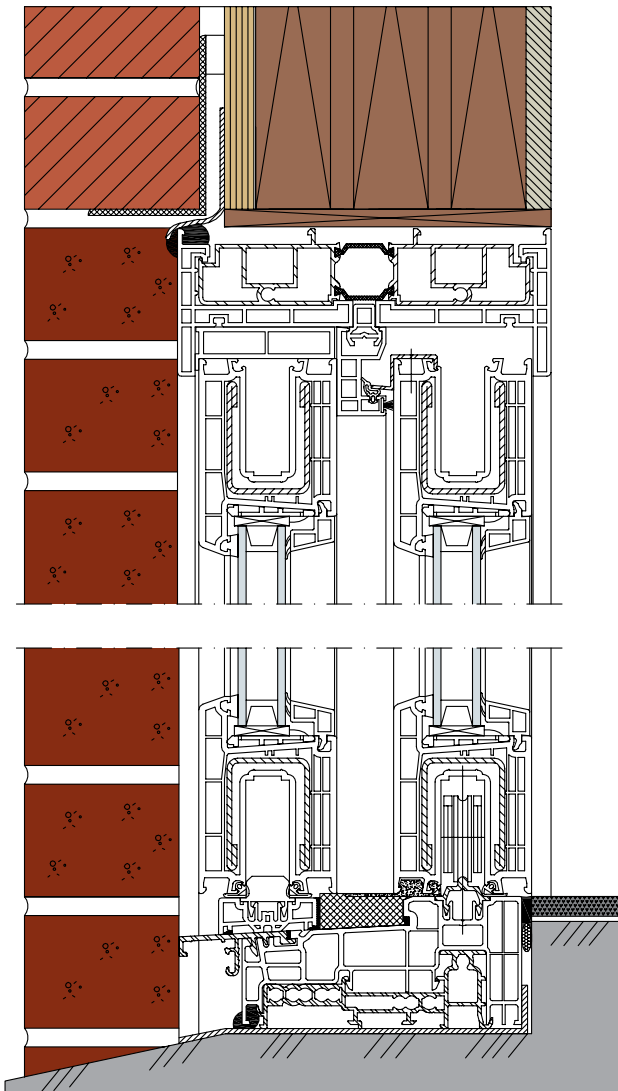
* based on simulation

Testing is ongoing; contact your REHAU sales representative for the latest test reports.

LIFT-SLIDE DOOR 2500

INSTALLATION DRAWING

2 x 6 Sill Section

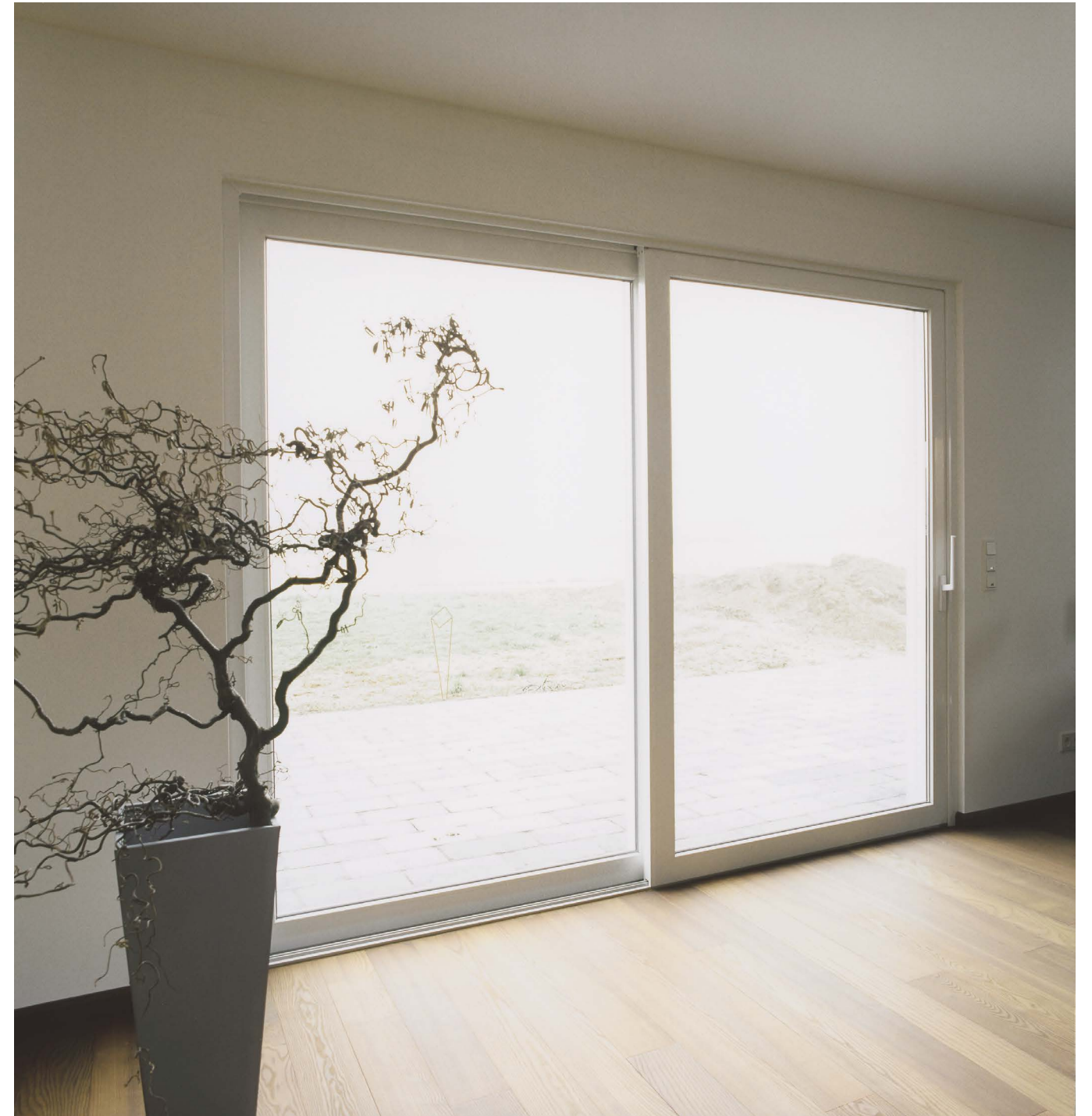


Not to scale

This illustration shows suggested installation of REHAU System 2500 lift-slide patio door design.

The 2 x 6 vertical section shows a wood frame wall with a brick veneer exterior finish. The threshold is sitting in a panning system with the inside floor

running to the top of the threshold to minimize the step-over. On the outside, the threshold is stepped down to guarantee optimized drainage for high-water performance ratings.



TILT-SLIDE DOOR DESIGN

REHAU SYSTEM 4500



The REHAU System 4500 tilt-slide door design provides secure ventilation with space-saving functionality – a perfect solution in spaces where traditional in-swing doors are less than ideal or not desired.

The design allows the operable sash of the door to easily tilt and smoothly slide parallel in front of the fixed side unit, not into the room. Optimal profile design and compression-seal technology contribute to outstanding performance.

TILT-SLIDE DOOR 4500

MAXIMIZE PERFORMANCE OF YOUR PATIO DOOR

Several different sash designs optimize performance and maximize the daylight opening.



Compression-seal Technology

This door utilizes special hardware, which actually compresses rubber seals between the frame and the sash, when the operating panel is being closed. As locking points all around the sash perimeter are engaged, an exceptional barrier to air, water and sound is created.

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.

TILT-SLIDE DOOR 4500

UNCOMPROMISING PERFORMANCE:
KEY FEATURES AND BENEFITS

Special hardware allows the sash to slide parallel in front of a fixed panel. Structural T-mullions allow doors to be configured with up to four panels and an overall width of 15 ft (4.5 m).



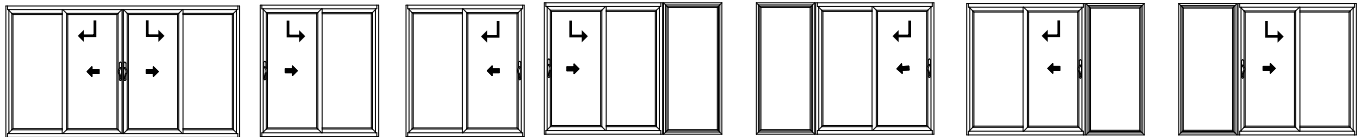
- 1 Large glazing capacity, including special high performance glass up to 1 3/8 in (35 mm) in thickness** improves energy efficiency and acoustical properties
- 2 Four-chambered sashes and frames** provide high energy efficiency
- 3 Large reinforcement chambers in the sash** allow for sash sizes as 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



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.



- Available Colors**
- White
 - Beige
 - Clay
- Ask about solid color and wood-grain foil options.

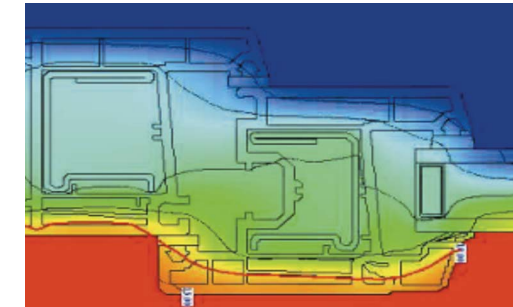
TILT-SLIDE DOOR 4500

OFFERING SECURED VENTILATION



Robust uPVC profiles combined with special hardware allow you to safely ventilate or close out severe weather.

With insulated glass unit (IGU) thickness of 3/4 in (19 mm) to 1 3/8 in (35 mm), this system accommodates special glass packages to achieve your thermal as well as your acoustical requirements.



Thermal image of REHAU System 4500 tilt-slide door demonstrates how effectively this design separates warmer air and cooler air to achieve optimal energy efficiency.

Performance Summary

NAFS: up to CW-PG55

U-factor down to 0.20*

ASTM E90 Acoustical (STC): up to 40 dB

ASTM + TAS: Impact Resistant DP-80

* based on simulation

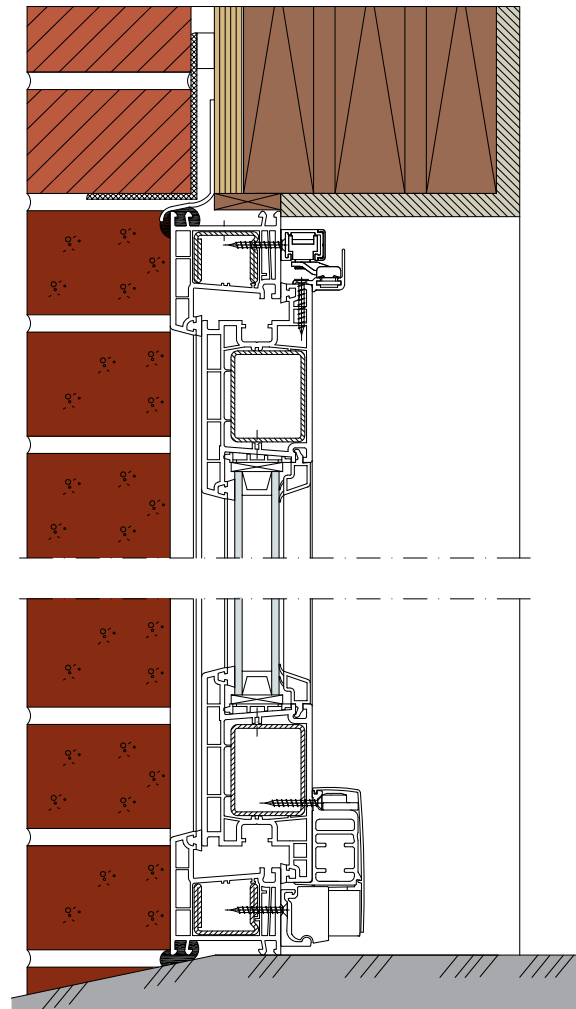
Testing is ongoing; contact your REHAU sales representative for the latest test reports.

*estimated

TILT-SLIDE DOOR 4500

INSTALLATION DRAWING

2 x 6 Sill Section



This illustration depicts suggested installation of the System 4500 tilt-slide door design.

The 2 x 6 vertical section shows a wood frame wall with brick on the exterior and a 2 3/8 in (60 mm) European frame.

System 9000 Supplementary Profiles brochure contains more than 30 REHAU accessory profiles that are available for use with this system when using a 3 1/4 in (83 mm) North American frame.

Not to scale



BI-FOLD DOOR DESIGN

REHAU SYSTEM 4500



The REHAU System 4500 bi-fold door design is a premium solution for spaces that need a wide, unobstructed opening. This unique door design allows up to four sash panels to fold to either side, creating a wide opening without any interruption. This design can be easily matched with a variety of window and door configurations.

BI-FOLD DOOR 4500

STEP-BY-STEP, FOLDING SASHES MAXIMIZE OPENING WIDTH

Special hardware allows the sash panels to be folded one-by-one to the side of the opening, leaving no post in the middle, to create a full opening to the outdoors.



Design a Door to Your Own Specifications

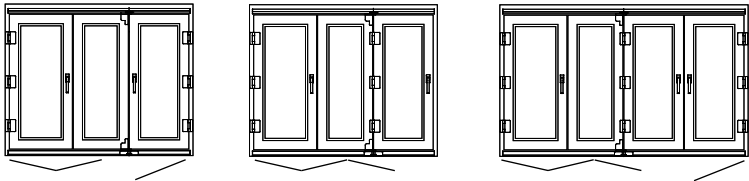
Choose the opening width of your patio door with a configuration of up to four separate sash panels. All panels can be folded to one side, or they can be divided in any combination and stacked up against both sides of the opening.

Compression-seal Technology

Compression seals on frame and sashes in combination with multi-point locking hardware keep dust and dirt out and assure optimal water and air tightness.

BI-FOLD DOOR 4500

BOASTS SUPERIOR DESIGN AND ENGINEERING:
KEY FEATURES AND BENEFITS



- 1 Large glazing capacity of up to 1 3/8 in (35 mm) in thickness** improves energy efficiency and acoustical properties
- 2 Large reinforcement chambers in the sash** allow for sash sizes as large as 7.5 ft (2.4 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



Robust profiles handle the weight of wide openings and triple glazing option.



Load bearing rolling gear mounts through steel reinforcement for long-lasting, smooth operation.



- Available Colors
- White
 - Beige
 - Clay

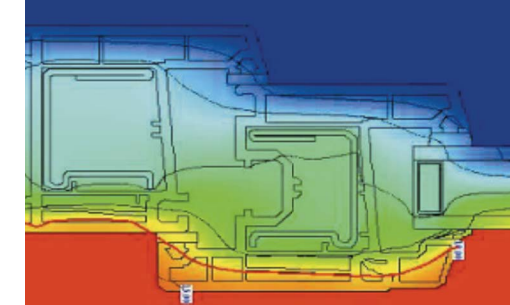
BI-FOLD DOOR 4500

OFFERING EXCELLENT SECURITY FOR YOUR PROPERTY



Multi-locking mechanisms on the folding sash panels and smooth riding rollers on the top and bottom running tracks protect against intrusion while still allowing for complete clearance when sash panels are opened to the side.

Allowing glass thicknesses from 3/4 in (19 mm) to 1 3/8 in (35 mm), the System 4500 bi-fold door can accept a broad range of specialty glazing options to fulfill energy saving needs, including Energy Star requirements.



Thermal image of REHAU System 4500 bi-fold door demonstrates how effectively this design separates warmer air and cooler air to achieve optimal energy efficiency.

Performance Summary

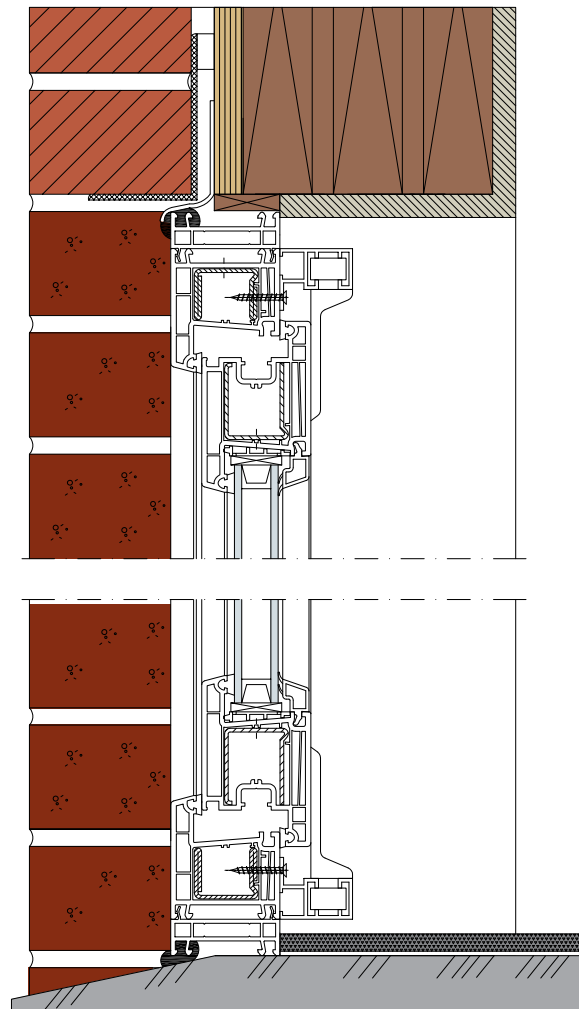
NAFS: up to LC-PG25

Testing is ongoing; contact your REHAU sales representative for the latest test reports.

BI-FOLD DOOR 4500

INSTALLATION DRAWING

2 x 6 Sill Section



Not to scale

This illustration shows suggested installation of the REHAU System 4500 bi-fold door design.

The 2 x 6 vertical section shows a wood frame wall with a brick veneer exterior finish. The threshold

shows the load bearing running tracks, which are supporting the weight of the door sashes, and the head view shows the guide track for the roller/pivot mechanisms.



HINGED DOOR DESIGN

REHAU SYSTEM 4500



The REHAU System 4500 hinged door design is offered as a single sash creating a beautiful main entrance or as a dual sash, also referred to as French doors, connecting the indoors with the outdoors. This versatile door system can be used for patio, deck or balcony access and is a popular choice among designers as an attractive alternative to sliding doors.

HINGED DOOR 4500

MAXIMIZE INTERIOR SPACE

Out-swinging sashes leave all the room you need to best utilize the interior space.



Compression-seal Technology

When the wind is blowing strong, the sash is pushed against the compression seals optimizing the air and water performance of the door. This door qualifies for coastal applications even in hurricane-prone areas. Multi-point locking hardware assures consistent compression on the seals all around the perimeter of the sash and frame.

Style Options

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.

Low Maintenance

Only occasional cleaning with soap and water is needed to keep the surfaces looking like new, even years after installation. Heavy-duty hinges have passed cycle testing of up to 100,000 opening and closing cycles without any need for adjustments.

HINGED DOOR 4500

A VERSATILE, HIGH-PERFORMANCE STYLE:
KEY FEATURES AND BENEFITS

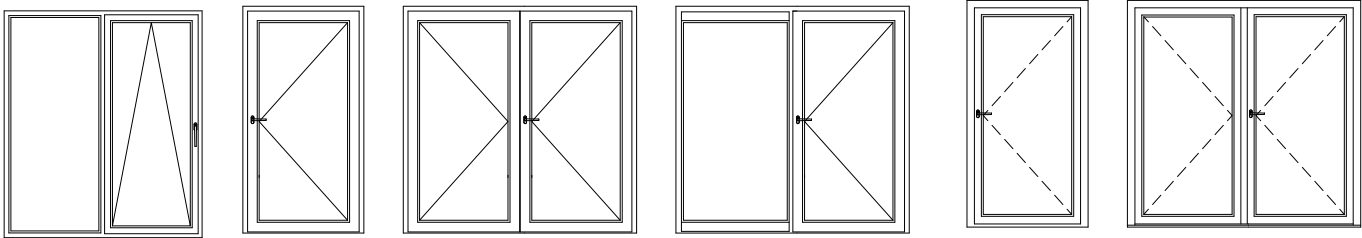
Compression-seal technology contributes to the outstanding performance of this door. Matching fixed and operable windows can be paired with this door as top and side lites.



- 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 in (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



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.



- Available Colors**
- White
 - Beige
 - Clay
- Ask about solid color and wood-grain foil options.

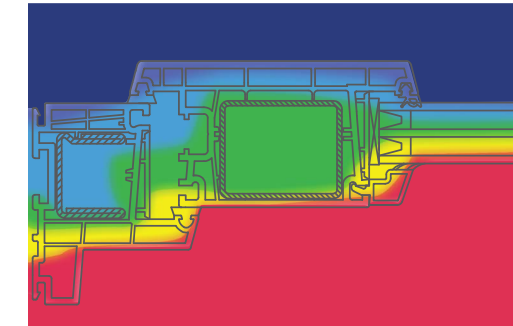
HINGED DOOR 4500

ACHIEVING OPTIMAL ENERGY EFFICIENCY



Multi-point locking hardware and heavy duty hinges provide the longevity and security you want.

With insulated glass unit (IGU) thickness of 3/4 in (19 mm) to 1 3/8 in (35 mm), the System 4500 hinged door is suitable for all Energy Star zones in the United States and Canada.



Thermal image of REHAU System 4500 hinged door demonstrates how effectively this design separates warmer air and cooler air to achieve optimal energy efficiency.

Performance Summary⁶

Outward Opening – Single Door

NAFS: up to LC-PG80
ASTM E90 Acoustical (STC): up to 38 dB
U-factor down to 0.24*

Outward Opening – French Door

NAFS: up to LC-PG35
ASTM + TAS: Impact Resistant DP-65 HVHZ
ASTM E90 Acoustical (STC): up to 38 dB
U-factor down to 0.23*

Inward Opening – Single Door

NAFS: up to LC-PG40
ASTM E90 Acoustical (STC): up to 40 dB
U-factor down to 0.23*

Inward Opening – French Door

NAFS: up to LC-PG40
ASTM E90 Acoustical (STC): up to 40 dB
U-factor down to 0.23*

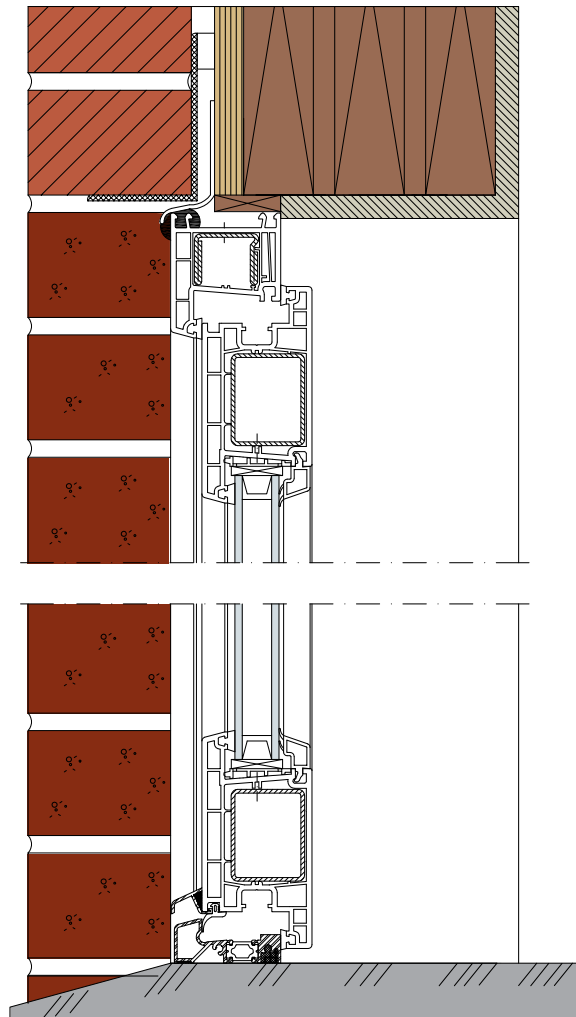
* based on simulation

⁶Testing is ongoing; contact your REHAU sales representative for the latest test reports.

HINGED DOOR 4500

INSTALLATION DRAWING

2 x 6 Sill Section



Not to scale

This illustration depicts suggested installation of the REHAU System 4500 hinged door design, inward opening style, using a 2 3/8 in (60 mm) European frame.

The 2 x 6 vertical section shows a low profile thermally broken aluminum threshold to minimize step-over.

System 9000 Supplementary Profiles brochure contains more than 30 REHAU accessory profiles that are available for use with this system when using a 3 1/4 in (83 mm) North American frame.





Doors and More: A Whole-building Design Approach

Maximum energy efficiency is realized when all of a building's systems are working in concert with each other, from hybrid HVAC systems to smart controls to high-performance windows and doors that seal in sustainability.

Unlike other companies, REHAU can support your whole-building design effort with premium quality fenestration solutions, building technology and renewable energy systems. Ask your sales representative to help you explore this progressive approach with our expert staff.

Architectural Freedom

Available in either solid or wood-grain patterns, decorative film wrapping of REHAU vinyl profiles offers a durable and aesthetically appealing way to differentiate otherwise typical white profiles. This opens a world of design freedom for architects and gives homeowners new options for customizing their homes.

Contact Us

For more information about our construction products and services, visit our website at www.na.rehau.com



REHAU, the Montana State University CRLab and an expanding team of experts are collaborating to build a sustainable Montana home, optimize its systems and share cutting-edge research and technology with green building pioneers. Follow our progress at www.montanaecosmart.com

REHAU's contribution to the construction and renovation of high-efficiency buildings is unmatched in its quality and breadth.

From generating renewable energy using geothermal probes to distributing it efficiently through radiant heating and cooling pipes, our building technology solutions deliver sustainable comfort. By using our high-performance uPVC window and door designs, you can create thermally efficient walls of glass that seal in this sustainability.

With a product range that encompasses the building envelope and HVAC systems, we are uniquely qualified to help design teams optimize building performance. Invite us to the dialog early in the planning phase of your building project and we will help you achieve sustainable whole-building design.

For updates to this publication, visit na.rehau.com/resourcecenter

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