

REHAU Windows and Doors Help Architect Achieve Form and Function in New Connecticut Home

Most people who see Rainer Schrom's home in Fairfield, Connecticut, will be struck by its modern design and expansive outdoor entertainment space with ample use of floor-to-ceiling windows and sliding glass doors that let in loads of natural light and make the outdoors feel closer.

Schrom sees all of that and more — features that are invisible to the untrained eye. A licensed architect and co-founder of Partners for Architecture in Stamford, Connecticut, Schrom looks at his home and sees a four-story structure using a wide assortment of technological capabilities that achieve goals not often met in residential construction. Schrom explains that his main design criteria involved sustainability, energy efficiency and low maintenance, all in a modern design.

Construction on the home began in October 2015 and was completed about one year later. With so much glass incorporated into the design — more than 40 windows and doors total — Schrom had to put a great deal of thought into what was used. The REHAU System 4500 fixed and tilt-turn windows, tilt-slide doors and System 2500 lift-slide doors fit the bill perfectly, Schrom says. Constructed by Starr Windows & Doors of Yonkers, New York, the true-color vinyl of the windows and doors means they will never need painting or retouching.

Why the European tilt-turn design? As Schrom explains it, "double-hung or single-hung windows have an advantage in terms of the limited space they need to operate, but you can only open half the size of the window. Tilt-turn allows you to open the full size of the window. And the tilt-turn window has gasketed compression seals to allow it to close like a door as opposed to brush seals, which are not airtight."

The specially engineered System 2500 lift-slide doors, which Schrom used on the second- and third-floor entryways to patios, are capable of filling much larger openings than the typical American-designed sliding patio door. The doors' unique hardware operation offers an almost effortless sash operation and allows them, when lowered, to seat securely within the gasketing system. In addition, the System 2500 design uses European hardware that offers the advantage that the operating door panel slides entirely over the fixed door panel. It's the sort of form and function that defines the philosophy of the entire Schrom house.

Most people focus on glass when they think energy-efficient windows

and doors. Schrom certainly did that, ordering his from a Canadian supplier and incorporating high-efficiency glazing that prevents heat from escaping. But he stresses that the full window must be factored into the equation. "You can always go with good glass or not-so-good glass, but these vinyl windows are high-performance when it comes to heat loss through the frame," he says.



Project: Modern, high-performance residence, Fairfield, Connecticut

Type of Construction: Single-family home, built in 2016

Scope of Project: 41 windows and 11 doors

Manufacturer: Starr Windows & Doors

REHAU Systems Used: System 4500 tilt-turn windows, hinged doors, tilt-slide doors and System 2500 lift-slide doors