



Exterior view of Rood House in Lowry Hill, Minneapolis. The house was designed by Winston and Elizabeth Close in 1947.

A look at mid-century modernist homes through the work of Close Associates

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For over twenty years, I worked for and with two pioneering practitioners of mid-century modern architecture in Minnesota—Winston and Elizabeth Close, FAIA. Founded in 1938, Close Associates designed many types of buildings but specialized in houses. I was their student intern in 1968 at the start of my architectural schooling at the University of Minnesota. By the time I was their partner and they retired, I understood and appreciated the tenets that Win and Lisl held dear: compact efficient designs, a strong connection to the site, sustainable practices, and a maximizing use of materials. It is interesting how large and elaborate homes became in the 1980s and

1990s, and how today most clients who call our office want the simple, affordable, energy efficient, innovative houses that the Closes and their colleagues championed for many years.

I own *The 1940 Book of Small Houses* edited by *Architectural Record*. Its contributors include such diverse and famous talents as Prairie architect Frank Lloyd Wright, traditionalist Royal Barry Wills, and a young Ralph Rapson. What is strikingly similar about their designs is how deliberate and compact they are, reflecting perhaps the economic sacrifices of World War II and a lingering sense of frugality. The designs are spare and maximize space in ingenious ways. I remember watching the Closes turn a design over and over to cut a few more square feet from the scheme. They favored built-ins because they saved space and the expense of buying furniture.

Like the architects in the book, the Closes also carried the goal of economy into structural design. A favorite Close solution was chassis framing, where an abutting 2x8 and 2x4 become a four-foot-on-center structural column and also the frame for a fixed window, with only the addition of an outer wood stop. It was simple, clean design with minimum materials. No wonder that one of the Closes' favorite books was *The Elements of Style*, by William Strunk and E.B. White, which preached tight, precise prose.

Builders of the mid-century modern era did not have the power tools the trades work with today, and ripping a plywood sheet, for example, was done by hand with a rip saw. Architects therefore used dimensioned lumber and full-uncut sheets to save on labor. The grid was an essential planning tool. Its use contributed to the modular, boxy look of many mid-century modern homes. The credo was economy and affordability, and there was little waste. That still sounds like a good approach.

Another elegant solution involved the use of concrete plank, concrete slabs with large voids along their centers to lessen their



Photo courtesy of Northwest Architectural Archives.

Living room with floor of structural clay tile in King House.

weight. Early on, the Closes realized that if holes were added to the plank's downward face, the main furnace duct could be placed right below so that the planks could duct tempered air. Holes at the other end or top of the plank let air flow into the space or evenly up to windows. Our office also has this system. In slippers or stocking feet, having a naturally warm floor is a special treat this time of year. And the concrete floor makes up/down acoustics great too. The Closes used this system even if there was no basement with concrete plank above. The one story, slab on grade King House built in 1950 in the Kenwood Neighborhood in Minneapolis appears to have a floor of large tiles. However, they are not a standard tile dimension. Looking further reveals that the tiles are the outer faces of 4-inch structural clay tile, masonry units that for years were used for walls in commercial and manufacturing buildings. With the house drawings is a diagram showing how these hollow units were to be placed on the floor with their openings aligned to form duct runs.

Another characteristic of the times and one still popular in modern designs today is the use of new and in some cases unlikely materials. Plywood, developed during World

War II, was of particular interest to the Closes and like-minded architects. The Closes used plywood as the exterior finish siding/facing material on the 1947 Rood House, a large home for a sculptor and his wife on Mount Curve Parkway in Lowry Hill. Plywood was also used inside many Close homes. It was rotary cut (to show maximum pattern) and dressed up with only a light white stain. Concrete block, cement asbestos board, Masonite, Homasote (pressed cardboard sheets), and vinyl asbestos floor tile were some of the other new, fairly inexpensive, low-maintenance materials mid-century modernists liked to use and that could often be left in their natural state. Redwood was also available and became a popular wall choice inside and out. The Closes trumpeted redwood's natural tendency to weather to a silver tone, so that it didn't have to be finished and required no maintenance. Not all clients agreed with this aesthetic but it was clearly part of the architects' vision.

Honest expression of materials was in fact very important to the mid-century modernists. Concrete block was left exposed, Masonite and Homasote were unpainted and wood was left unfinished whenever possible. The Closes scorned the idea of hiding materials and disliked decoration in

general. Serendipity could also play a role in their designs. One day Lisl noticed that the backside of a 1x4 had been grooved during the milling process. She like the way it looked and told the carpenters to install it wrong side up. The resulting attractive pattern became standard for Close ceilings. In Close homes I visit, many of these ceilings (all redwood and unfortunately, no longer available) have now been painted. The owners may have been trying to cover up condensation stains, since mid-century homes usually had little insulation and sketchy vapor barriers.

The Closes and other mid-century modernists liked flat roofs, partly for reasons of economy and partly for their appearance. Flat roofs offered several advantages: good rainwater management (especially with interior drains), no danger of ice dams, and potential use as decks. Unfortunately, spotty insulation and vapor barriers sometimes caused condensation problems, as mentioned above. Skylights, too, were popular, but early deficiencies in their design and installation gave them an unreliable reputation. Today's skylights are much better.

Mid-century modernists also strove to relate houses to their sites in creative ways. New technologies of the era allowed large glazed openings that made smaller spaces seem larger by leading the eye to the outdoors. Flat roofs were often extended over window walls to protect openings and provide sun shading. Siting was very important, both for passive solar gain and establishing a comfortable relationship to the ground. To limit digging no deeper than the required footing depth, designs were often split leveled with entry at grade; the lower level half in the ground, the upper half out of the ground. This allowed the lower level slab to be right above the footing and provided that level with better light and easier access.

In a time of lingering recession and worry over climate change, the work of the mid-century modernists remains instructive. Today's architects are trying to simplify, reuse, recycle, and incorporate the latest technologies – all practices that the Closes and architects like them first embraced more than half a century ago. Sometimes recent history can suggest smart solutions for today's problems.



Photo courtesy of Northwest Architectural Archives.

Interior hallway in the Rood House. If one looks carefully, you can notice that the shelves/cabinets in the hallway are made of plywood.

Gar Hargens, AIA, is President and Owner of Close Associates Inc., Architects in Minneapolis. Gar is known for designing affordable, contemporary homes, a natural progression from the firm's Mid Century Modernist beginnings. He has also pursued the preservation side of sustainability through renovation of historic properties. Two well known award winners are Pratt School in Minneapolis and 260 Summit Avenue in Saint Paul, the Louis and Maud Hill House. Gar served nine years on the Saint Paul Heritage Preservation Commission, three as its Chair. He is currently on the Board of the Preservation Alliance of Minnesota.

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