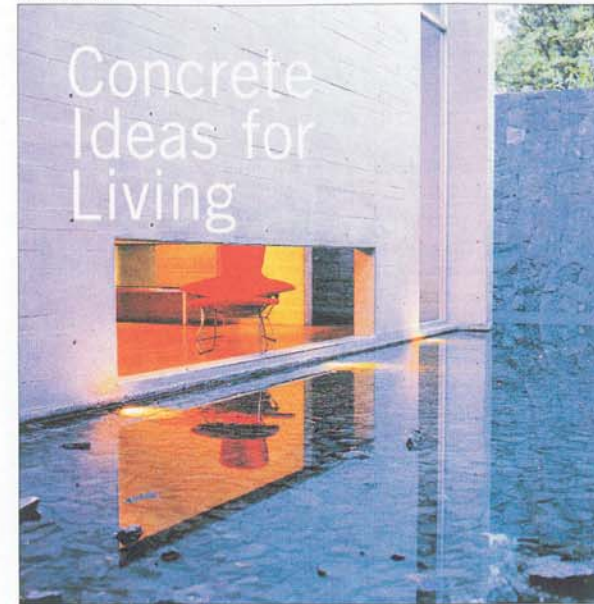


UNDINE PROHL



Ideas that Inspire

By Jeanne Fields "In the beginning, man dreamed of stones bonded to stones. Later, when that dream became reality, the human spirit demanded something more than pure construction" So begins one of the chapters in *Concrete Ideas for Living*. Only a few short years ago, we knew concrete was strong and utilitarian, but it was seldom recognized as attractive or inspiring. But with the recent explosion of concrete into beauty, Cemex, a leading cement and concrete producer, has published a book of striking residential architectural design, construction craftsmanship, and artistic creations in concrete. Chapter by chapter, this book leads the reader from concrete's history into its amazing present and future.

Interiors, exteriors, innovations, and new concrete systems for home building are presented in tantalizing detail. From Roman concrete (a lost art until the mid-seventeenth century), the book leaps forward to its rediscovery and utilitarian use during the Industrial Revolution then moves into residential design with a 1920 Frank Lloyd Wright home.

Each chapter and each photograph illustrate the advantages of building homes with concrete: the security of concrete homes to stand up to hurricane and tornado winds, the energy gain that reduces heating and cooling costs, the ability to resist pest and water damage, and the stability in earthquake zones. The book highlights the quietness and peace of living in a concrete environment, suggesting that there is no better way to keep your family safe than a concrete home.

The editors are especially interested in the marriage of concrete with steel and glass, the effect of light in shadows and reflection, the harmony with the building site, and the addition of water elements, leading concrete surfaces to alternately appear geometric and crisp or soft and quieting. Concrete, a natural material integrates well with stone, wood, glass, and water.

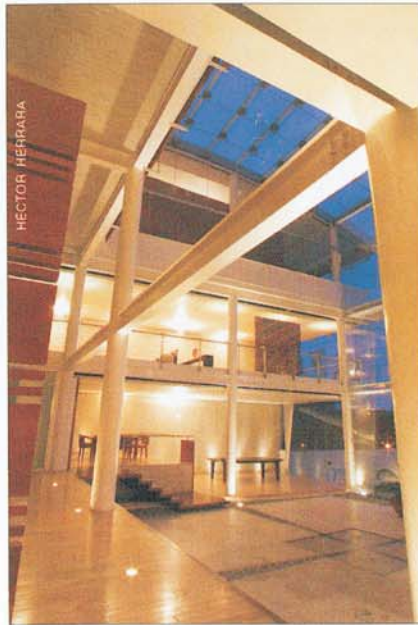
The house featured on the cover of this magazine was designed by Wallace Cunningham, San Diego. Cunningham fuses



Wallace Cunningham is known for his ability to help homeowners realize their vision by marrying the site location with the building design. Facing page: Commemorating its 100-year history, Cemex chose to publish a book about concrete homes; this Mexican home is designed by architects Adria, Broid, and Røjkind.



the building with its site. His design uses long runs of glass that seem to flow along the ocean edge, allowing light to play throughout the structure, filtering, reflecting, and highlighting. The heaviness of the material contrasts with a structure that appears to float above the water.



Above: A large schedule of window light illuminates the atrium court conveying to the interior, the vision and atmosphere of being outdoors—Architect Daniel Pérez Gil, Casa Montaña
Right: innovative ideas find their way to the kitchen—pigmented concrete with fine aggregates polished to a shine, curving shapes and straight block edges create a modern functional environment—by Cheng Design.

This cast-in-place concrete home creates a bridge over a circular terrace with rising spiral entry ramps of concrete. The forming method was standard wood and the concrete incorporated a Type III portland cement and diatomaceous earth to add a warm tone. The finish is smooth. Guy West, a partner in Cunningham's firm, oversaw the construction. The homeowners are building developers for rehabilitated buildings and always wanted a concrete home. Pacific



Southwest Structures, La Mesa, Calif. did the concrete work. "It's a matter of using concrete like a sculptor or a potter," says Cunningham. Concrete is so plastic, he says, that you can get an incredible and permanent expression of character in a form that you cannot obtain any other way. Unlike wood or steel, concrete's structure is its final finish—if used correctly. Cunningham has more to say about building with concrete in a new book, *Materializing the Immaterial*, by Joseph Giovannini, published by Yale University Press.

Land shapes inspire architect Daniel Pérez-Gil's homes—they influence decisions about form. Casa Montaña is a reinforced concrete home built on three stepped levels with two additions following the site's mountainous terrain. The architectural shapes allow for grand balcony views and a large courtyard feature that is an important meeting place within this home's cultural tradition. The courtyard's elevated height is crowned by a schedule of skylights. It includes a suspended canvas with mobile ironwork that allows sunlight filtration and temperature control. The canvas shape curves to reproduce the very same curving rooflines of the home. A circular staircase made of stainless steel and wood links the three levels and includes rooms such as bedrooms at the highest levels, a study and library in the middle, and entertainment spaces below. A design goal for Pérez-Gil is the unity of the exterior with the interior that permeates the entire structure. He uses architectural shapes in cast concrete and materials like glass, marble, wood, and water to accomplish his goal.

Concrete Ideas for Living teaches yet more about the wonders of concrete, including furnishings, countertops, and floors. Through the examples you discover how concrete is a canvas for the artisan—coloring and staining, adding aggregate with exposed or polished surfaces, bush hammered or sandblast effects, molding



the material into sculptural shapes for fireplace fronts or cast-in-place floating staircases. Most recently the urbane materials were considered to be marble, wood, and granite. Today, concrete's sophistication, its one-of-a-kind creations, its structural advantages, and its lower cost offer significant competition. Examples of concrete kitchens, bathrooms, and flooring illustrate the elegance.

The book concludes with pages for each of the primary concrete home building systems, including insulating concrete forms, precast, cast-in-place, and tilt-up. It then goes on to describe recent developments in concrete technology, such as special types of molds, decorative concrete, and fiber reinforcing.

Concrete is the most researched of all building materials. As a result, we now have more durable and stronger concrete. There are concrete surfaces with light-emitting diodes and translucent concrete that light filters through. There are fiberglass-reinforced molds that allow casting concrete without joints, leaving a smooth finish. The transformative life of concrete has just begun. This plastic, moldable, high-strength material sometimes called *liquid stone*, emerges from its utilitarian history to take its place as the ideal home building material: efficient to build with and sustainable.

Adopted as a training reference for the Federation of Architects and Federation of

Engineers in Mexico and a certified continuing AIA education course online, *Concrete Ideas for Living* offers the design community further understanding of how to build with unadorned concrete. Published in commemoration of Cemex's centennial year, the book is available in the World of Concrete Bookstore at the World of Concrete tradeshow in Las Vegas this January. Its artful examples will inspire you and increase your desire to learn more about this exquisite material.



Left: Light, glass, and stone soften the aesthetics of concrete home design at the Amsterdam House.

Above: Geometrically harmonizing concrete walls, natural light, and stone floors characterize the Amsterdam House designed by Architect Teodoro González de León.