



Company Profile

W h a t W e D o

Services

- Consultation and feasibility studies
- Site analysis and passive solar design
- Full architectural service schematic design to construction documents
- Project management
- Helping client navigate the permitting process
- Bidding and negotiations
- Alternative building methods and natural building consulting
- Education through presentations and classes/workshops
- Project development
- Community building
- Budget analysis



Design Principles

- Highly functional layouts;
- Budget-driven design;
- Energy efficiency; and
- Passive solar and cooling techniques

Core Values

- Focus on high-performance, responsible design;
- Create low-carbon and regenerative building solutions;
- Build holistic architecture systems; and
- Advance natural building and permaculture through architectural design, education and construction

Licensing and honors

- [South Carolina Department of Licensing, Labor and Regulation](#): April Magill, architect #8216; Root Down Designs, LLC, #100879
- April Magill is an adjunct professor with the [American College of Building Arts](#) and an advisory board member for [TERRA Collaborative](#), a 501(c)3.

E m p l o y e e s

APRIL MAGILL: Principal and Architect

Magill graduated with a bachelor's degree from Virginia Tech. During her studies in Europe, she became inspired by the organic architecture of Gaudi and of the ancient world. Her desire to be surrounded by old, well-kept architecture led her to live and create in Charleston, S.C. During the past 13 years, she has worked for three of Charleston's architecture firms and became a licensed architect and project manager. In 2011, she embarked on her adventure by starting Root Down Designs.

Recognizing that an architect can not exist only in the world of theory, she began to explore materials with her hands. As she continued to experiment with building materials in the Carolinas, she also began traveling the world in search of ancient, earthen



worked with multiple building jurisdictions to help clients obtain building permits for alternative materials.

Magill's conventional background allows her to excel in project management, and she has led large teams through the conception of an idea through the end of a project, always with the client's budget at the forefront of her mind. Her diversity of project types extend from backyard yoga huts, small homes, custom residential to large commercial eco-resorts.

building techniques, still in use today, and learn the principles of permaculture.

Magill is a leading voice in the advancements of alternative, natural and healthy building methods and has been a pioneer in the advancement of alternative building methods in the Southeast. She has

Whether the materials are conventional or alternative, Magill helps clients define their true project goals and deliver a project based on their individual needs.



GINA IACOVELLI: Design Associate and Interiors

Iacovelli attended Marywood University, receiving a degree in interior architecture. Afterward, she worked with Amish wood shops to design artisanal furniture and cabinetry. In Charleston, S.C., she worked for local firms on high-end homes and has been featured in Charleston Magazine and Charleston Home + Design. Iacovelli has since joined forces with April Magill to re-introduce natural building to the Lowcountry.



I n t h e n e w s

Local media

The Post and Courier

[“Old building method becoming new again,”](#) May 22, 2015

[“Old is new again: Ancient rammed earth construction gets a modern twist on Johns Island,”](#) April 15, 2016

[“Building from the past to the future: American College of Building Arts students learn ancient techniques,”](#) Nov. 5, 2017

Charleston City Paper

[“Controversy heats up over clay oven in Cross, SC,”](#)
Feb. 29, 2012

[“Charleston’s permaculture movement arrives at the drafting table,”](#) April 12, 2016

[“COAST Brewing announces expansion,”](#) Oct. 30, 2017

Natural Awakenings

[“Putting the Earth back in Earth](#)

[Day,”](#) April

2018, p.

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Other media

The Last Straw (journal)

[“A South Carolina Architect’s Journey to Natural Building and Rammed Earth,”](#) May 21, 2015

Abundant Edge (podcast)

[“Reviving rammed earth and hybrid natural buildings with April Magill of Root Down Designs,”](#) Oct. 12, 2018

Buildings Are Cool (blog)

[“Architects in a cafe getting beer: April Magill,”](#) Oct. 16, 2016

[“Rammed Earth Architecture with April Magill,”](#) Oct. 16, 2016

Pecha Kucha (video)

[“Charleston Pecha Kucha: 13 - April Magill,”](#) March 2012



Completed projects

Completed projects



Sharp residence

Location: Pawley's Island, S.C.

This 2,400-square-foot home has a contemporary style with earthy architecture elements. The challenge was to design a custom residence to fit on a tight, uneven lot among the gorgeous live oak trees and to provide plenty of ocean views. The primary focus was to maximize efficiency and aim toward a low carbon footprint within the owners' budget. To achieve these goals, the home was zoned into three separate spaces for energy efficiency, passive solar and cooling designs and a green vegetated roof. Local materials such as reclaimed heart pine and charred wood were incorporated and shaped by craftsmen to achieve an authentic look that fit the owners' aesthetic and values.



Completed projects



Completed projects



Walters residence

Location: Johns Island, S.C. | **Builder:** Joe Faust

This 800-square-foot home is the epitome of local materials and chemical-free design. The walls are stabilized rammed earth with a lime plaster finish on the interior. No drywall or typical wood trim were used. The earthen walls were formed with beveled details at the openings to celebrate the structure. The design incorporates two covered porches to enjoy the surrounding land, a 200-square-foot loft, reclaimed heart-pine woodwork, and a passive solar/cooling design.

Completed projects





Projects under way

Projects under way



Hottenstein Residence

April 12 - sketch

Creekside residence

Location: Ravenel, S.C. | **Builder:** New Generation Craftsmen | **General Contractor:** Brenton Rueger
This traditional Lowcountry home sits adjacent to the Rantowless Creek and takes full advantage of the vast views and cool breezes. Root Down Designs was able to practice one of our most valuable skills: designing and delivering a successful project under a very modest budget. This home is handicapped accessible.



Projects under way

Dragonfly Eco-Resort

Location: Berkeley County, S.C.

This commercial project is located on 22 acres and includes three buildings and infrastructure. The focus is on a holistic master site, which includes permaculture principles and wetland preservation. Low-carbon building solutions include rammed earth,



compressed earth blocks, natural finishes, captured rain water, plant filtration septic system, vegetated roof systems, net-zero solar power, and passive solar and cooling approaches.



Credit: Aaron Ede

Eco-Resort at Charleston Woodlands

Location: Charleston, S.C.

An upscale, lakeside event space and resort at Charleston Woodlands.



Projects under way

COAST Brewing Company

Location: North Charleston, S.C.

This commercial project includes a 5,000-square-foot brewery expansion that includes a taproom with a stage, a kitchen, brewery and factory space and outdoor dining.



Marshside residence

Location: Folly Beach, S.C.

This is a modern 3,500-square-foot marshside residence that is designed to take full advantage of the sun's location and cool breezes off the water.

Projects under way

Rammed earth residence

Location: Charleston, S.C.
This high-performing home is constructed of rammed earth. With just 700 square feet on the first floor and 550 square feet on the second, the open plan and efficient use of space makes for the perfect-sized home for this family of four. It has a healthy indoor air quality with no chemicals or VOCs.



Projects under way

Small home

Location: Berkeley County, S.C.

This small home is an efficient, low-carbon footprint structure for those concerned about sustainability. It is 700 square feet, with a 1,000-square-foot wrap-around porch that has been custom-designed for the southeastern U.S. climate zone.

The plan consists of two or three bedrooms, one bathroom and an open living/kitchen design. The 10-foot-high ceilings make this compact space feel roomy and enhances natural cooling. The wrap-around porch adds to the living space.



Yoga Hut

Location: Charleston, S.C.

This hut is an efficient, high performing, low-carbon footprint accessory structure for those concerned about sustainability. This little gem is the perfect solution for the yogi homeowner; the plan can also be altered for an artist who needs a studio or office in their backyard, or for those who pine for a sleeping cabin or a “she-shed.”

This 200-square-foot floor plan with a covered porch has been designed for the southeastern U.S.



climate zones. The plan consists of an open flex space designed with built-in storage, a flip-up “Murphy bed,” and an option for vaulted ceilings. The high ceilings make this compact space feel roomy and enhances natural cooling.



Renovations

Renovations



McQueen residence

Location: Charleston, S.C. | **Builder:**
Handcrafted LLC

This is a renovation of a 1950s brick ranch home, creating an open floor plan and a custom kitchen.



Renovations



BEFORE
AFTER



Midcentury update

Location: Charleston, S.C.

This classic 1950s ranch was in need of a modern update. New landscaping with large wooden planters and privacy walls and oversized concrete pavers combine with a fresh earth-tone palette and dark trim. All will breathe new life into this well-built gem.