

HOUSING SOLUTIONS

Local or Onsite Casting Model

Provides **maximum efficiencies for trade coordination**, accelerates the construction schedule, and improves communication throughout the life of the project.

Modules Serve as the Structural Element

Precast Monolithic Modules are the structural envelope of the building - no additional steel frame is necessary. Each precast unit is designed to be self-supporting; and do not rely on adjacent areas in place for support.

Multi-Story Capabilities

Expand potential design options. RW has stacked modules up to 12 stories high.

Highly Sustainable Construction Solutions

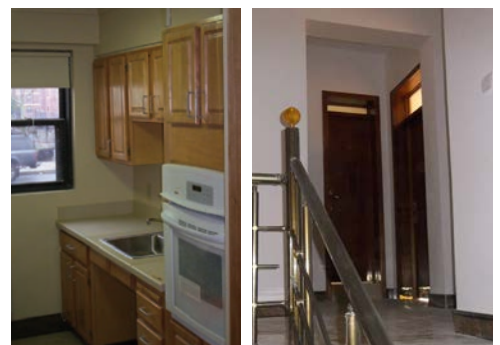
Optimized energy performance, low life cycle costs and low maintenance costs.

Prefinished Housing Modules

Saves valuable time on the overall construction schedule. Modules are fully finished when they are set in place—offering a turn key product.

Multiple Configurations

Individual modules offer an unparalleled design flexibility, multiple configurations for single homes, townhouse complexes and apartment structures.





OUR KEY STAFF HAS HUNDREDS OF CUMULATIVE YEARS' OF EXPERIENCE.

RW's modules are produced at a local or onsite manufacturing facility that is devoted to a singular project and staffed with professionals who are specifically assigned to one project.

The general contractor, architect, and owner have local and immediate access to the RW project team and product.

- Productivity and quality can be viewed and discussed in real time to address any questions immediately.
- Communication between the owner, architect, and general contractor is enhanced, efficiency is maximized, and the product quality is assured.

**MARVIN M. BLACK AWARD
FOR EXCELLENCE IN PARTNERING**



Precast concrete modular construction has become the building method of choice for a variety of owners and developers who seek optimum life-cycle cost results due to:

- **Speed** Construction completion schedules are reduced by months, even years, with modular solutions.
- **Strength** Our monolithically poured modules are ideal for high seismic zones and high weather risk locations.
- **Durability** RW's precast concrete modular solutions are resilient to prevent early deterioration, while withstanding heavy traffic and severe use.
- **Sustainability** RW's products incorporate the core elements of sustainable construction including optimal energy performance plus environmentally effective use of local materials and resources.



BENEFITS OF RW'S ONSITE SETUP

RW's onsite manufacturing model provides an efficient and time saving method of construction.



COMMUNICATION

- Increased collaboration with client.
- Project team can see modules cast and have access to them daily.

DEDICATED FACILITY

- The entire facility and all RW supervisors are dedicated to that one project.

INCREASED COORDINATION

- Ability to partner with other specialty contractors to establish streamlined manufacturing process.
- Work typically done in later stages can be prefabricated on our modules prior to erection drastically reducing your schedule.
- Easy sequencing and shipping during the erection process.

ABILITY TO CAST LARGE PIECES

- Improves efficiency in casting
- Improves schedule
- Faster erection process
- Less joints

NO ON-ROAD TRANSPORTATION

- Decreases the potential for damage during transit

LEED POINTS

- Local content
- Recycled material
- LEED credit - drastic reduction in transportation/ CO₂ emissions

FLEXIBLE TO DESIGN AND SCHEDULE

- Each facility is setup around the needs of the project.



THE PROCESS

1. Typical onsite or local production pad
2. Flexible form
3. Concrete pour
4. Smooth finish
5. Module stripping
6. Module inventory
7. Finishing
8. Local transportation
9. Module erection



POSITIVE LOCAL ECONOMIC IMPACT

RW's unique onsite or local manufacturing of precast modules means that unlike other precast module manufacturers, we provide positive local economic impact.

RW is proud to invest in local communities by hiring a project specific local labor force, utilizing local subcontractors and other services, and purchasing supplies and equipment from local vendors. In addition, RW personnel become integrated and active members of the community during the project construction period, thus further stimulating the local economy.



100% of the utilities and services required to establish and operate the manufacturing facility are local companies.

95% of the required subcontractors are locally owned businesses.

90% of the required staff are hired from local communities.

90% of materials, tools, & equipment are procured locally.



QUALITY CONTROL

The standards of Quality Control put forth by RW, not only allow us to be the leading precast module manufacturer in the United States, but also allow us the ability to be successful on a global level.

Our multi layered Quality Assurance program ensures the highest standards at each step of the manufacturing process. We take great pride in knowing that we produce the highest quality product.



Reinforcement Cage

Inspections are performed on the reinforcement cages to ensure that the rebar and welded wire mesh are properly tied and spaced.



Form Quality

Concrete modules are only as good as the steel forms they are poured into. RW's forms undergo rigorous testing after each pour to ensure they are square, plumb, and true; to produce a perfect module.



Concrete Test

Each batch of concrete is tested to ensure the strength, flow, and air content meet or exceed PCI, ACI, and ASTM standards for modular precast concrete.

Dimensioned

Each casting is inspected and measured to ensure the dimensions are correct. This ensures each module meets or exceeds the strict PCI tolerances, and allows for the modules to stack plumb, straight, and structurally sound.



Finish

Our QC Managers follow strict guidelines through to the finished module. This ensures that furnishings, fixtures, the caulking and paint system, plumbing, and electrical systems are all aesthetically correct, functioning properly, and the modules meet the intended design.



DURABILITY & MAINTENANCE

RW's mission is to provide our clients with the highest quality product for the best value. The performance and durability of our product is cornerstone to meeting the standards our clients expect for their facilities.

Our precast modules provide the highest level of security and functionality within the most efficient time frame and cost parameters.

DURABILITY CHARACTERISTICS

- Withstand harsh weather condition
- Resist deterioration from moisture and extreme temperature variation
- Maintain tolerance for high seismic zone areas
- Stand up to high wind tolerance
- Fire resistant & noncombustible
- Provide the highest level of protection for physical assault
- High grade level results from ASTM F2322 - Physical Assault on Vertical Fixed Barriers for Detention and Correctional Facilities test

MAINTENANCE CHARACTERISTICS

- Less joints = less maintenance
- Joints are sealed with tamper-resistant security caulk with an ultimate hardness of 55, yet can withstand 25% total joint movement
- All walls, floors, and ceilings are constructed of high strength reinforced concrete, which is cast monolithically causing it to inherently be more durable
- Concrete increases in strength over time as opposed to other materials that may deteriorate

STRUCTURAL CHARACTERISTICS

- Precast units are redundant with each precast unit capable of shifting loads away from damaged areas through two-way action in floors and walls, enabling them to stand up to high seismic activity
- Each precast unit is designed to be self supporting that is, they do not rely on adjacent areas in place for support
- High solids epoxy based paint system has a low VOC, is durable, and heat resistant



Reinforced precast wall after 150 impacts



Module being pulled from the mold



Finished module being set in place



SUSTAINABILITY

Sustainable design is on the forefront of every owner's mind. RW understands this, and is proud that our modular building system assists in sustainable design and can help you to reach environmental and energy efficiency goals.

Efficient Design

- RW's entire model is based on local or onsite production facilities, this eliminates environmental impacts and fuel consumption associated with long haul transportation of modules to the jobsite.
- Monolithic walls are used as the interior and exterior surface eliminating additional framing, drywall or interior panels.
- Modules provide the structure, the exterior finish, and the interior finish.
- RW's 5-sided construction eliminates redundancy in the floors and ceilings, conserving materials used in other methods of modular construction.
- Casting molds, form liners, blockouts and other forming components are re-used from project to project.

Raw Materials

- Use of industrial waste products such as fly ash, slag cement, and silica fume reduce the amount of cement used, incorporate pre-consumer materials into final product, and reduce the toxicity of waste materials.
- The majority of reinforcing steel is made from recycled steel.
- Less raw materials are required because precast uses a precise mixture of materials. Material proportions and tighter tolerances are achievable with modular construction.
- Use of precast contributes to a sustainable environment since it does not use scarce resources.
- Reinforcing steel is purchased to exact lengths and dimensions, eliminating waste during fabrication and eliminating waste in the manufacturing plant.
- Material is purchased in full truckload quantities to minimize environmental impacts and fuel consumption associated with transport of raw materials to the manufacturing site.
- Raw material is inventoried and controlled to prevent waste and minimize disruption to the jobsite.

Recycling

- Formwork, scrap steel and waste reinforcing steel is recycled.
- Waste materials from concrete plants and module production process can be recycled into raw materials for future ready-mix or used as fill materials.
- When forms are taken out of operation, the parts are recycled or used to make future form components, conserving materials and eliminating potential products sent to land-fill.



EXTERIOR FINISHES

Aesthetic Quality & Structural Strength—the Best of Both Worlds

We offer a variety of exterior finishes by utilizing formliners, which offer the aesthetic quality that the owner desires while maintaining the structural integrity and quality that the project demands.

