



Rebuilding Haiti – 5.33 square feet at a time

Once in awhile the stars align and we get to work with unique organizations and people in our line of work. Because of the strong, energy efficient nature of ICFs, our products are used in rebuilding efforts all over the world as homes are being destroyed by natural forces such as high winds and seismic activity. This year, long time Reward customers, Cam and Lyndon Lee started working with Lyndon Clark in Plainview, MN who got them

connected with Shane Gauthier & Matt McCormick from the Paulos Group to design prototype housing units in Fort-Liberté, Haiti with Reward insulating concrete forms.



Local volunteers finish up the walls and start on the roof.



The Paulos Group is a Christ-centered organization with an outward focus on residential, infrastructure, and economic development in Haiti. Their management team has lived in Haiti for over 5 years, so they know the situations and the response from the local people. Their goal is to build a middle class development of housing units, as a “middle class” is non-existent in Haiti; you are either in a mansion or a hut. It’s rare to find 3-bedroom single bath homes, with proper utilities.

By developing the prototypes the Paulos Group aims to make an inexpensive home for families that will withstand hurricanes and earthquakes,

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What’s New?

New Product Manual CD — New Interface, More Content

We have updated and redesigned our interactive Product Manual CD. Our details, BIM objects, estimating program and all of our famously popular technical sections are included in an easy-to-navigate interface. We have embedded our 3D wall display on the disk, as well as all of our marketing brochures as downloadable .pdfs, so you can see our full array of promotional materials.



Canadian Architect Manual

We have updated and combined sections to create one fully comprehensive Canadian Product Manual, mirroring the US version only with the following major updates:

- All sections from the US version, are now included in this product manual.

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Message From The President



Ed Storm
President, Reward Wall Systems

I believe we are all seeing the effects of inflation in not only our daily lives but in our ICF related businesses. Our daily lives are being negatively impacted by the rising costs related to fuel and food – maybe the two most important things in the modern economy. Of course these rising costs are occurring at a time in the economy in which most of us find it difficult to raise our prices – which of course is

leading all of us to make less money for the same activity than we did in the not too distant past.

Reward Wall Systems is certainly feeling the effects of rising raw material prices. We have incurred significant increases in our input costs over the past 6-9 months. Reward Wall Systems had opted not to raise our prices to keep you our customers in a strong competitive position. In addition, Reward Wall Systems is doing everything it can to improve its value proposition, as I believe now more than ever it is imperative to separate yourself beyond just price. It is important to be competitive in your pricing

– but the determination for success is much deeper than just price – it is your overall value that you bring to the process. However, as you now know, we just could not sustain our present pricing anymore and therefore we passed along a price increase in June.

Reward Wall Systems is enhancing the value to our customers in these difficult times by holding our current price increases to the bare minimum, increasing the number of ancillary products that we carry at our plants (allows you to just add them to your form orders without any extra freight), providing volume discounts for ancillary products, having project energy comparison studies available, giving access to updated current marketing materials, and we are in the midst of aggressive product development research. We are here to help you and want to do everything we can to enhance your opportunities for success. Please do not hesitate to contact us to let us know how we can help.

I know that times are tough – but I have never been more optimistic about the long term future of our industry. The architectural community, in larger numbers, is seeing the benefits of our product for the building envelope structure and this is leading us to new markets on almost a daily basis. Keep the faith – we are getting into a better time for the construction industry and for the ICF industry in particular.

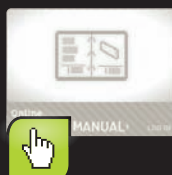
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- Canadian codes, evaluations and testing documents are now included.
- All sections, including the Step by Step, iForm Specs and Engineering sections have been converted to show both imperial and metric measurements and calculations.
- Engineering section pertains exclusively to Canada's requirements.
- CAD Details with specific measurements have been converted to show both metric and imperial measurements.

Version K Product Manual Out Now

We have updated the US version with some of the same changes as the Canadian manual to offer better versatility, along with updated codes and formats. Version K is already available online, and is now available on CD and will be available in print in the near term.

Did you know: The entire printed product manual is hosted on our website, so you do not need to order the hard bound copy. Our online product manual is always up to date and features numerous articles, technical resources and research we have gathered while being the pioneering brand of the ICF industry.



Now Available! Reward ICF Wall Estimator

The NEW Reward ICF Wall Estimator 1.0 is the most comprehensive, straightforward ICF project estimating program in the industry. Created by ICF installation and engineering professionals with a combined 30+ years of experience The Estimator will give a comprehensive look at estimating all aspects of ICF construction, giving you more information on:

- Labor
- ICF bracing
- Waterproofing
- Ancillary Items
- Concrete Pumping
- Buck Material

Plus Much More!

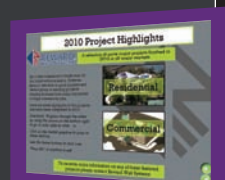
2010 Year In Review Projects

We had a successful and exciting year in 2010. [Click Here](#) to view our 2010 Year in Review showcasing a selection of major projects in major markets.



Have a great project you want to showcase for 2011?

Call into Reward (800)468-6344 and speak with Troy!



Haiti — Continued from page 1

which is why ICFs were chosen for this project. These houses will be fully functional with utilities and will be from 500-1,000 sq feet in size and can retail for as little as \$15,000.

Matt McCormick, partner of The Paulos Group, explained that the government has issued aid to Haiti to build tiny houses that cost around \$5,000 each and they are giving them away. That does not do much to affect the socioeconomic levels of the communities, and in turn properties are not taken care of, and these clusters of homes end up being the same unsafe, poverty stricken homes that were around before the earthquake.

Instead, Matt and his organization have developed the proper home that will be purchased by the Haitians on long-term very low interest loans- as little as \$45 a month. The local communities have expressed a lot of interest in buying homes.

For this particular project, Lyndon Clark led a crew of 20 Haitians for the ICF installation for this development. Shane offered, "It is extremely satisfying to watch these men grow in dignity as they labor and develop skills. In the past, we have participated in feeding programs for women and children around the globe, but there is nothing more satisfying than working with men who are working hard to provide for their families."

The Paulos Group and the new homes will not solve all problems overnight, but they will create a foundation for growth and sense of being for the locals. As the Paulos Group continues this program, in conjunction with the economic programs they are invested in, Reward Wall Systems will continue to keep you up to date on the progress rebuilding the Haitian nation. Thank you to Tri-state ICF for allowing us to be a part of this project.



Over 20 local volunteers investing their time in rebuilding their community.

No 3D Glasses Needed!

See all of our products showcased in an interactive 3D wall online.



ICF Education Resource Center

Two New AIA Courses

With the growing requests for more involved and detailed information on the design and construction with ICFs, we created 2 new presentations to address those needs for the design and construction community. Below are the two courses we have added, in addition to offering our standard Introduction to Insulating Concrete Forms.

Design and Construction using Insulating Concrete Forms (ICF) —

Summary: Become familiar with the basic concepts of using ICFs in the construction and design of a building, including installation techniques, structural performance comparisons, and explaining common details in regards to connections, penetrations, utilities, finishes and waterproofing. AIA: 1 HSW and SD

Building Performance with Insulating Concrete Forms (ICF) —

Summary: Learn how the inclusion of ICFs affects the performance of a facility, with an emphasis on thermal and moisture issues. Topics will cover air quality and condensation principles of ICFs versus traditional construction, introductions on specific energy modeling tools and familiarization of how finishes can affect the performance and life cycle costs of the facility. AIA: 1 HSW and SD

Interested In Having An On-Site Company ICF Presentation?

Email us to schedule it today – reward@rewardwalls.com

ICF Continuing Education Learning Units



Reward's free online course, Introduction to Insulating Concrete Forms, provides an overview of ICFs, including the components, variations and function. Also, the benefits of ICFs are discussed in real-life situations through case studies. This course is AIA (qualifies for HSW and SD credit), CSI, and USGBC approved, along with 13 other organizations for credits.

For more details or to take the course for credit go to: www.aecdaily.com/sponsor/rewardwallsystems



Our AEC Daily Course Now Approved for LUs thru GBCI!

Ancillary Updates:

Waterproofing Solutions

As with all below grade construction, ICFs require below grade waterproofing. Reward provides two waterproofing membrane options to best suit the needs of our customers. Waterproofing orders can be shipped with ICF orders to reduce freight costs.

New Dimple Sheeting Product

We are proud to continue a great partnership with Cosella-Dorken by selling the Delta-MS waterproofing, at a new price that is more competitive than our previous product. Delta-MS offers the highest quality dimple sheeting membranes at a price to keep you competitive.

Deeper Discounts:
Discounted pallet pricing available on request!



The Delta-MS central core consists of 100% recycled material and the two outer layers are virgin materials to ensure sustainability and long life. It is engineered to last over 5 TIMES longer than any competitive dimple sheet. Each Delta-MS roll is 459 sq. ft.



Better Pricing on Resisto

We are continuing to sell the Resisto peel and stick waterproofing, as this product has proven to be of the highest quality due to its superior adhesion and performance characteristics in a wide range of climates. This is a 40 mm thick self-adhesive membrane with a UV resistant, polyethylene top surface and a tough silicone-coated release sheet on the underside. Each Resisto roll is 225 sq. ft. **It's the same great product, with a better square foot price!**



View our full Waterproofing Solutions Brochure

NEW – The Ultimate Screw!

The Ultimate Screw is perfect for general use and ICF construction. This screw's attached washer and 1/4" hex head ensure the reusability of the screw for future use.

These are perfect for:

- Fastening scaffold planks
- Temporary bracing and rails
- Permanent and temporary fastening for wood-to-wood, plastic-to-plastic and wood-to-plastic
- Specialized fastening in dense manufactured wood without pre-drilling

Available in #10 2" & 3" Lengths!
Image not shown to scale



xLerator®

Reward's xLerator® – the only product of its kind in the industry and first one to meet ACI 318 guidelines – is a patented ICF ledge reinforcement system that offers unmatched versatile performance ideal for supporting brick and stone exterior finishes, as well as slabs, floors and other structural features.



tieKey®

Designed by Reward Wall Systems, the tieKey® anchor is the only patented ICF masonry anchor in the market. The easy-to-install cast-in-place, adjustable masonry tie anchor embeds into the concrete wall formed by the Reward ICF.



Wire Hook

The wire hook from Reward is available in two sizes, and can be used to secure forms together either vertically or horizontally. The ideal applications are for securing the bottom course to ensure following courses have a tight base and for locking down ledge forms and the top course before the pour.



Metal Starter Track

The metal starter track provides an efficient method of aligning and holding the first course of Reward ICFs on the footing or slab and helps to bridge any imperfections of the footing or slab to begin proper coursing of the wall.



For a Limited Time Receive a FREE Ancillary Sample Set.

Includes: Wire Hooks, Starter Track, Ultimate Screws, tieKey and Waterproofing samples, as well as, pricing for all the products.

Call Reward 1-800-468-6344 or email tjgibson@rewardwalls.com

Get your Reward Ancillary Sample Set today!

*While quantities last, 1 per company contact.

ICF vs. Conventional Construction Comparisons:

The Andrew Apartments Queens, NY

- Over 50% better than conventional non-energy star building

18.66 kBtu/sf/year to heat

- \$0.23 sf/year to heat
- \$200 per apartment per year to heat versus \$400 to \$600 for conventional construction
- Comparing numbers of the similar building down the street that were built with CMU and steel stud batt, they performed at \$0.44 sf/year to heat using 44.4 kBtus/sf/year

**Helped to reduce
energy use by 58%!**



 Read More About This @ blog.rewardwalls.com



Aaron's Retail Store Southern Indiana/Northern Kentucky

Below is a regional comparison of the energy data of similar Aaron's stores to the new store built with Reward. These stores are all single story, heated and cooled by heat pumps fueled by electricity, similar lighting, similar quantity/size/type of windows and doors and similar roof insulation.

Aaron's Location	Madison, IN	Columbus, IN	Elizabethtown, KY	Frankfurt, KY
Exterior Walls	Reward Wall Systems	CMU	Metal (Additional insulation added in year 2)	Metal
Total Building sq. ft.	8,000	7,500	8,515	8,150
HVAC Type	Natural Gas	Electric	Propane	Natural Gas
Energy Cost per sq.ft.	\$1.01	\$1.77	\$1.52	\$1.29
Average Cost per Month	\$675	\$1,107	\$1,077	\$873

Tech Tips: Adhered Concrete Stone Veneer

By Kelvin Doerr PE, VP of Engineering



A metal lath is fastened directly to the Reward formwork to hold the stone to the wall and withstand the dead weight. The lath is fastened to plastic furring strips that are located every 6 inches on center. The 1 1/4" wide furring strips are embedded into the EPS foam plastic panel and are recessed 1/2" from the foam face. They are marked on the foam panel for location.

Reward recommends a sharp pointed, corrosion resistant course thread screw. Typically a #6 to #10 screw approximately 1 1/4 to 1 1/2 inches in length is common. A screw with a lath washer is recommended to ensure that the lath is fully secured. Nails or staples are not recommended.

Reward has tested different fasteners for both direct withdrawal and also for lateral resistance from the plastic furring flanges. The direct withdrawal value is used to calculate the fastener spacing to withstand lateral loads from wind pressure and seismic loads. The lateral resistance test result is used to calculate the fastener schedule to withstand gravity dead loads such as the self weight of the stone. The 1/2" recess distance was included in the test.

The test results in the Reward test summary report are all shown as ultimate loads. A safety factor must be applied to each of these ultimate values for designing the fastener schedule to withstand the project specific design criteria. The Reward ICC ES evaluation report, ESR-1552, lists a select few of the tested fasteners. The values in the ESR-1552 report are allowable loads and already include the safety factor. Once the screw to be used for attaching the metal lath is determined, the fastener schedule must be determined utilizing the tested direct withdrawal and lateral tests. Consult the design architect or structural engineer for applying these tested values to the project's design criteria.

For example, if the design wind and seismic load is 25 psf and the allowable direct withdrawal of the screw is 50 pounds the fastener spacing should be no greater than 2.0 square feet. Similarly, if the dead weight of the manufactured stone is 15 psf and the allowable lateral value of the screw is 45 pounds, then the maximum fastener spacing is every 3.0 square feet.

The steps beyond the lath attachment to the Reward ICF wall are the same according to the manufactured adhered concrete masonry veneer's manufacturer's requirements. Follow the stone veneer manufacturer's installation procedures.