

# Introduction

Nuform Building Technologies Inc. (NUFORM®) is creating a better way to deliver affordable housing - the NUFORM® HOUSE KIT - is a solution for creating neighborhoods where people live with pride and prosperity.



# About Us

NUFORM® is a Canadian company with experience in the innovation, research and development of PVC stay in place formwork for concrete walls. Our international customers recognize NUFORM® as a supplier of quality construction products that deliver on speed of construction, energy efficiency, reduced overall construction costs, and are environmentally-friendly. Over the years places such as Brazil, the Dominican Republic and the Philippines have used NUFORM® products to create sustainable residential housing.

Since acquiring Royal Building System (RBS), a division of Royal Group Technologies Inc., NUFORM®'S facilities have grown to include a state-of-the-art 125,000 square feet manufacturing facility in Vaughan, Ontario. Continuing to be financially strong, NUFORM® is proud to be 100% Canadian owned.



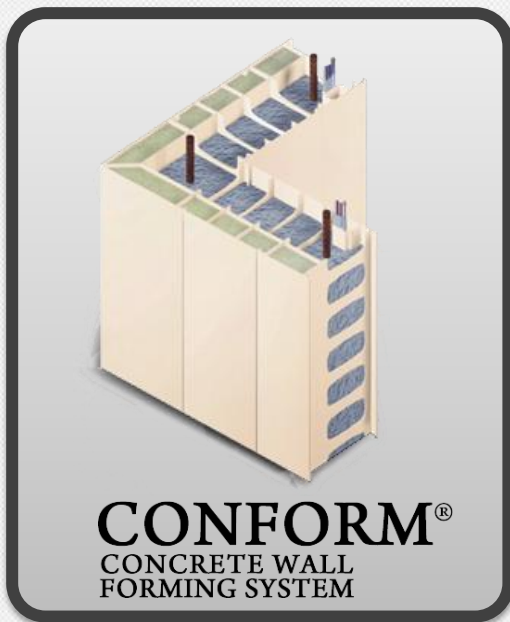
# What is NUFORM® HOUSE KIT?

NUFORM® HOUSE KIT is a complete house shell based on our CONFORM® building system accompanied with a roof, windows and doors. We pack in a single container all the parts necessary to complete two to three houses, depending on the model, including the pre-finished surface CONFORM® wall system, RELINE® ceiling, an integrated high quality roof system, and weather proof windows and doors. A trained crew can assemble the entire house shell and complete the interior and exterior surfaces in just a few days.

Going beyond providing construction solutions, the HOUSE KIT helps the community to effectively and conveniently construct an entire neighborhood. The complete package is a solution designed to create a large volume of housing in areas where quality housing is really needed. Government agencies, organizations, and independent contractors, will find a solution to carry out a large-scale housing project on-time and on-budget. We have collected all the components necessary for you, providing a superior solution that lets you focus on what matters - creating prosperity and improving the lives of those in local communities.

# What is Included in the NUFORM® HOUSE KIT?

Included in your NUFORM® HOUSE KIT are the following components:



## CONFORM® walls:

CONFORM® is a revolutionary stay-in place concrete wall forming system that offers a cost-effective construction system. CONFORM® is easy to install; the CONFORM® panels are erected and poured with concrete leaving a finished interior and exterior surface. The finished CONFORM® surface requires no additional labour such as painting, stucco or any other cladding.



# What is Included in the NUFORM® HOUSE KIT?

Included in your NUFORM® HOUSE KIT are the following components:



- ✓ **RELINE® ceiling:**  
RELINE® is lightweight and easy-to-install prefinished PVC interior wall panels.
- ✓ **Windows:** maintenance-free profiles, large size frames single side slider windows, with high performance tempered and UV resistant glass.
- ✓ **Doors -** Steel insulated door with steel frame for safety, energy efficiency and durability.
- ✓ **Roof system:** pre-fabricated cold-formed steel roof system.

# What Nuform Will Supply

## 1 Material Delivery:

NUFORM® delivers to your international destination all the products and materials required for a complete house shell. All materials will arrive in good condition and ready to use right out of the container.

## 2 Pre-Construction Engagement:

NUFORM® will instruct and support a local installer, who will supervise the installation crew on-site for the entire duration of the project. The local installer will meet with our advisor prior to delivery of the HOUSE KIT, to coordinate delivery and protection of the components in accordance with our Construction Guide.



# What Nuform Will Supply

3

## Site Preparation and Delivery:

NUFORM® will advise on site preparation, project and equipment requirements.

- PVC panels will be handled ready for assembly.
- The roof system will include anchors to polymer encased concrete walls, designed to effectively sustain all types of weather conditions, including strong wind.
- All openings prefabricated for supplied Windows and Doors.

# What Nuform Will Supply

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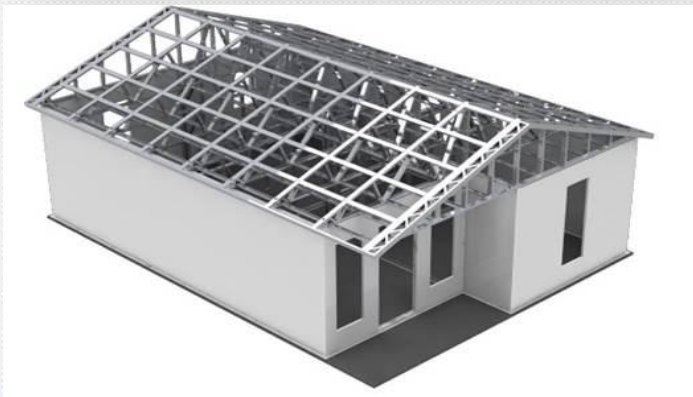
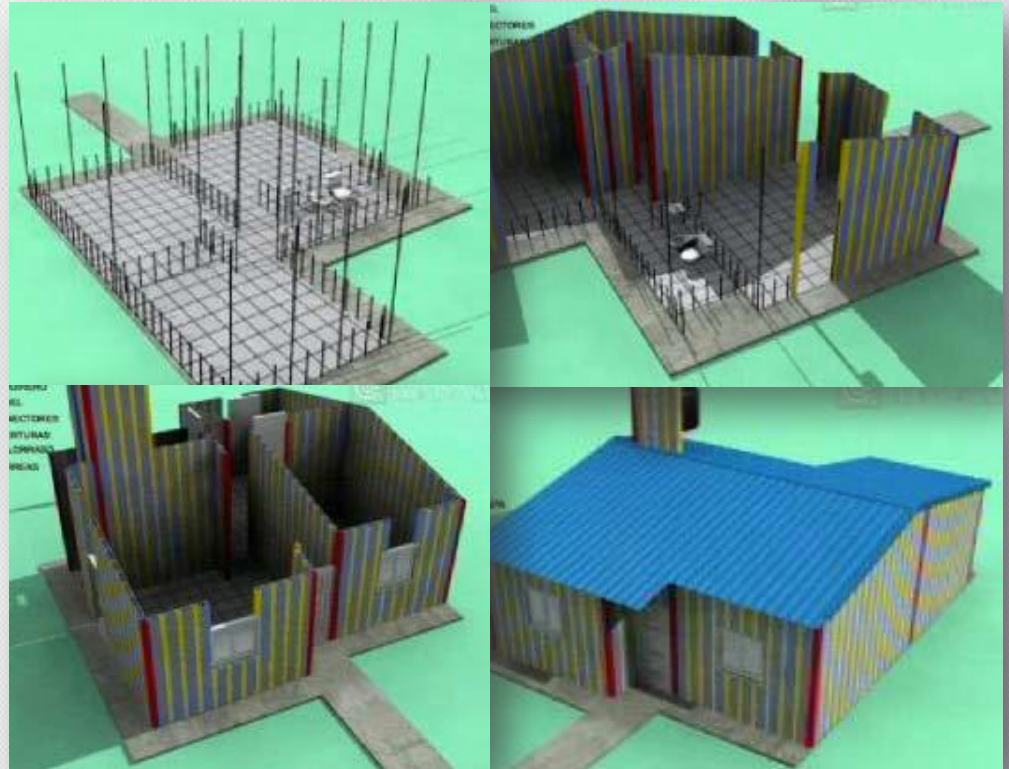
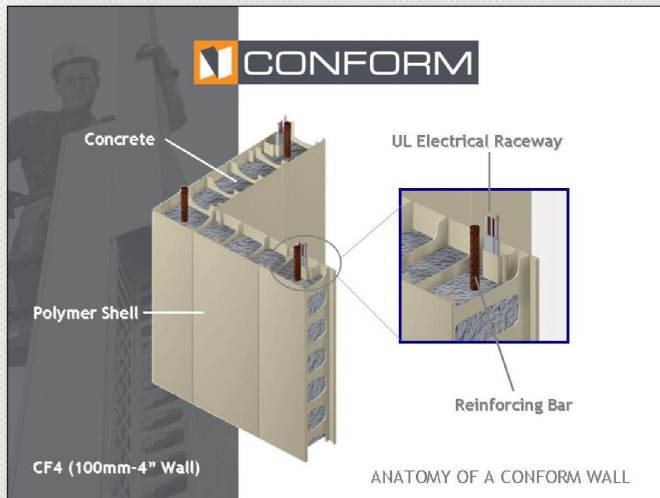
### Consultancy:

Instructions to local installer

- Wall erection: NUFORM® will supervise the PVC panel installation and erection.
- Reinforcing/bracing: NUFORM® will ensure proper placement of the steel reinforcing bars (if required).
- Concrete placing: before concrete is poured, all anchors, formwork and bracing are correctly placed .
- Roof System Installation: train the local professional installer with the roof system installation.
- Finishing: completion of the HOUSE KIT includes openings, and interior and exterior cleanup.



# Construction Components



# Construction Phases

As a consultant, NUFORM® offers an option to directly supervise the construction of your house.



Brazil



Australia



Jamaica

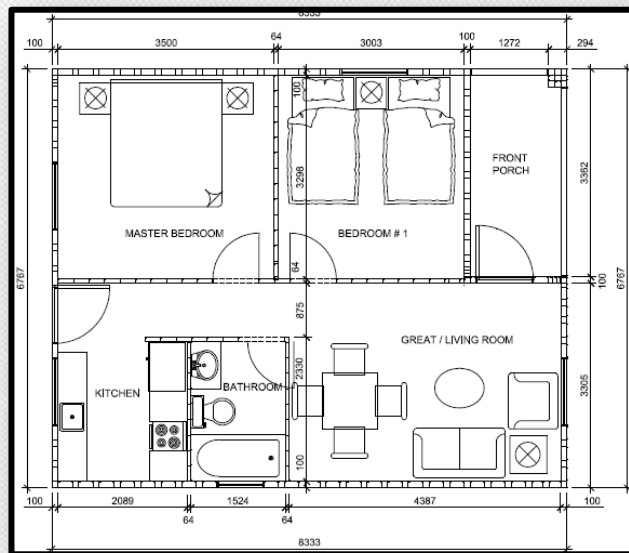


Afghanistan

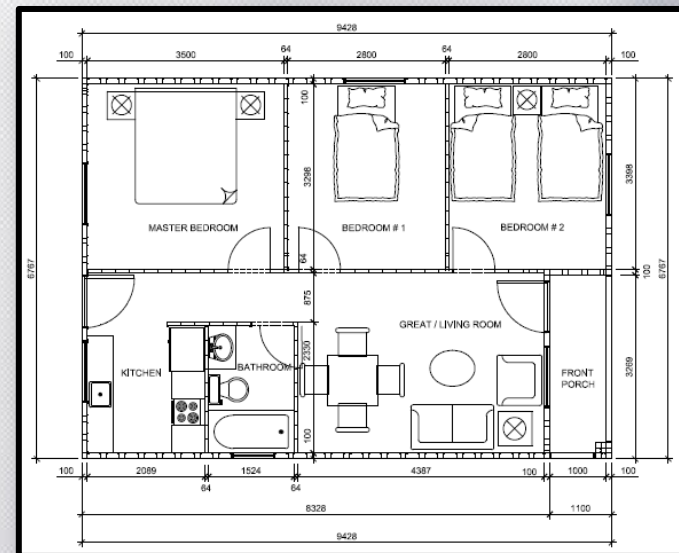


# Floor Plans Samples

Our HOUSE KIT models range in size from 26 square metres to over 90 square metres; we can assemble a HOUSE KIT based on your floor plan design.



Two bedrooms, total living area: 50 square metres



Three bedrooms, total living area: 60 square metres

# Housing Models

**NUFORM® HOUSE KIT**  
have all the components  
for a complete shell of a  
single family home,  
including:

- ✓ **TWO TO FOUR BEDROOMS**
- ✓ **ONE FULL BATHROOM**
- ✓ **SPACIOUS KITCHEN**
- ✓ **DINING AREA**
- ✓ **LIVING SPACE**



Total living area: 99 square  
metres - Antigua



Total living area: 60.2 square  
metres - Cuba



Total living area: 70.62 square  
metres - Brazil



Total living area: 93.92 square  
metres - Philippines



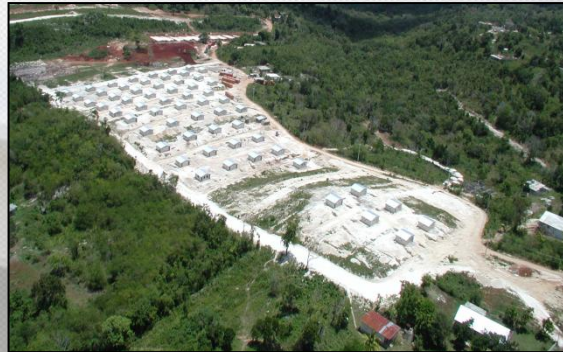
# Past Projects and Successes

NUFORM® is proud to partner with local communities across the globe to create housing that is sustainable and capable of improving the lives of those living in the area.

Social Housing Projects: Philippines, Brazil, Jamaica, Mexico



BRAZIL



JAMAICA



ANTIGUA

# Benefits

NUFORM® HOUSE KIT is an all-in-one solution that combines social support and sustainable products, with clean energy and economic advancement.

1. **Single Story Home:** easily blending into the local community, each and every house will help with cultural acceptance and identity, ensuring everyone has a place to call home.
2. **Optimized Layout:** the HOUSE KIT's layout is designed to provide for pleasant living. Use our designs to optimize your use of interior space so the resources used in constructing a house are kept to a minimum. The floor plans feature room layouts, a common area and a social area to accommodate six to eight people.
3. **Culture:** consider the culture of your surroundings when selecting the HOUSE KIT; easily create a local community by applying different finishes to the HOUSE KIT models.
4. **Roof System:** the roof is very important, which is why NUFORM® took the time to research and find the best products to include with the HOUSE KIT. Improve the efficiency of each house with the following elements:
  - Gable roof: the pitched roofs are sloped to maximize solar exposure for an optional solar water heating system. Roof slope also functions to collect rainwater for toilets and irrigation. The roof design will help with cross ventilation.
  - Pre-fabricated cold-formed steel trusses: to speed construction, increased durability and value.



# Benefits

NUFORM® HOUSE KIT is an all-in-one solution that combines social support and sustainable products, with clean energy and economic advancement.

5. **Passive Cooling/Ventilation:** cooling achieved with breeze and shade. No need for an air conditioner. Window placement is designed for cross-ventilation.
6. **Wall Insulation:** CONFORM® creates a sealed envelope to provide an increased insulation R-value.
7. **Lower operating costs:** energy efficiency will reduce operating and utility cost.
8. **Increased comfort:** homes will be cooler during the day and warmer at night.
9. **Wall finish:** the innovative design reduces labour and finishing expenses - walls and ceilings require no additional painting. As an option, the walls can be finished with any cladding to suit taste and budget.
10. **Virtually Maintenance Free:** the unique design of the HOUSE KIT includes CONFORM® walls that are designed to handle extreme conditions, including earthquakes and hurricanes. The entire house is easy to maintain as its solid concrete construction is rodent and pest-resistant, and will not rust, corrode, flake, peel or rot.

# Benefits

NUFORM® HOUSE KIT is an all-in-one solution that combines social support and sustainable products, with clean energy and economic advancement.

11. **Easy Installation:** CONFORM® delivers absolute value enhancing durability and your initial construction costs. The rigid polymer forms easily slide together, creating durable pre-finished walls that look amazing and last a lifetime.
12. **Longer lasting durable budging:** materials and components are designed for durability “built to last a whole life!” The whole house will reduce maintenance and repair costs.



# Sustainable Construction System

The NUFORM® HOUSE KIT 's components were chosen after many variables were studied, including quality, durability, performance, efficiency, sustainability, environmentally-friendly, low maintenance and the final cost.

Recycled PVC formwork for concrete: The HOUSE KIT's components are composed of recycled rigid PVC Polymer engineering, serving as the formwork for concrete. NUFORM® is committed to building more environmentally friendly structures that use **R3 - REUSE - RECYCLE - REPURPOSE**, sustainable technology, which forms the core of our manufacturing process. NUFORM® R3 technology is highly mold and mildew resistant (as per ASTM G21), along with low VOC emissions, which leads to healthier interior environments. Excellent thermal properties and light reflectivity promotes lower building energy costs, increased durability, longer lifecycle and low maintenance.

# Sustainable Construction System

- **Reuse:** reusing materials and products as much as possible before replacing them or sending them to the landfill. The environmentally-friendly CONFORM® pre-finished wall system contributes towards a possible 15 Leadership in Energy and Environmental Design (LEED) points.
- **Recycle:** CONFORM® is manufactured from at least 55% pre-consumer recycled material that is waste from other vinyl manufactured products to save on natural resources. Other recycled materials could include rebar for reinforcing the walls, or recycled concrete aggregate from construction waste materials.
- **Repurpose:** using spare parts to create a new product, for example, we repurpose PVC window frames to manufacture RELINE® and CONFORM®.





# Sustainable Construction System

## Other sustainable features include:

- Key operational benefits that LEED-certified buildings enjoy include lower operating costs, reduction in waste sent to landfills, conservation of energy and water, reduction of harmful greenhouse gas emissions, tax rebates and zoning allowances.
- Modern technology is applied in the manufacturing of the PVC panels, which are specially formulated to assemble formwork for high and variable-width panels. Each panel is interconnected and filled with concrete walls, and can achieve high load capacity and great isolation thermo acoustic.



# Sustainable Construction System

## Other sustainable features include:

- Three people can build a house of 50 square metres in approximately three days. All components are pre-cut and labeled for easy on-site assembly. Less skilled labour is required on-site, creating a cleaner overall work site and reduced construction schedule.
- By training local people to work with the HOUSE KIT, technical and specialty construction skills are developed, enabling quick-completion of the walls and generating job opportunities for local people. Education is also provided to the construction crew about recycling procedures and the environmental impacts of buildings, and how these impacts can be minimized.



# Technical Details

- ✓ Industrial process follows most stringent standards of environmental safety.
- ✓ Automatic system for recovery and recycling of waste and surplus production.
- ✓ Environmentally-friendly, lead free and recyclable.
- ✓ Light and fast in assembly process, lowering time of work.
- ✓ System has already been tested in different social emergencies.
- ✓ Virtually maintenance-free
- ✓ Cost-effective and competitive, as compared with quality CMU construction and other building systems.
- ✓ Houses can be delivered at a low cost while maintaining quality and performance.
- ✓ Sealed envelope to protect from weather elements
- ✓ UV resistant, fire and smoke-safe
- ✓ Exceptional seismic performance - safe solution for regions prone to earthquakes.
- ✓ An integrated house system with the best environmental performance.
- ✓ Can be personalized by adding interior or exterior architecture finishing.

# Delivery

Each NUFORM® HOUSE KIT is delivered in 40-foot HC containers, to your site - worldwide.

## Additional information:

- ✓ Multiple houses per container (between 3-5 houses)
- ✓ Immediate delivery within 30 days of placing an order
- ✓ North American and international code certifications
- ✓ Training on-site available
- ✓ Extended product warranties





## Contact

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