



Building has evolved.™



home owner

Building the perfect home starts with NUDURA.



# building has evolved.™

## the principle is simple.

NUDURA Insulated Concrete Forms are stay-in-place forms that offer you a variety of superior benefits when building your new home. NUDURA Forms consist of two panels of Expanded Polystyrene (EPS) that are 2 3/8" in thickness and connected together with our patented web system that is made of 100% recycled material. NUDURA Forms are stacked, then steel reinforced and filled with concrete, which completes the building envelope of your home in one building step. NUDURA Forms are available in a variety of shapes and sizes to accommodate all types of building requirements and designs.

## eco-friendly homes.

With the rising fuel costs and energy requirements we need to make the most of building technology so we can better heat and cool our homes. NUDURA Insulated concrete forms provide maximum comfort and energy solutions for your entire home providing Performance Values up to R-50 resulting in energy savings of up to 70%, when compared to traditional wood building methods. The superior Performance Value of NUDURA comes from the stable thermal mass that the concrete provides. NUDURA offers form sizes that provide a solid concrete core of up to 12", providing you maximum energy efficiency, strength and comfort.

## what you can expect from NUDURA.

NUDURA has an extensive Authorized Distributor network worldwide that can provide you with assistance from concept to completion of installation with a NUDURA Trained Installer. Consult with your local distributor for contractors or builders that have taken the NUDURA Basic Installation Training Course. NUDURA prides itself on providing you the best support from strong, reputable businesses within your local geographic areas to represent our products. For more information on finding an Authorized NUDURA Distributor visit [Nudura.com](http://Nudura.com)



When choosing NUDURA Insulated Concrete Forms to build your next home you can ensure that you are using the best building solution available today. Building with NUDURA allows you the freedom and versatility to design and build your home the way you want, without any limitations. Our Insulated Concrete Forms provide substantial benefits over traditional building methods so that your family can enjoy greater comfort, safety, and energy efficiency in a healthier, more durable home.

NUDURA is committed to leading the industry in product innovation and is unmatched by any other insulated concrete form. NUDURA is also strongly committed to improving the building process to support environmental issues, reduce energy consumption, and to save our valuable environmental resources for future generations.

*"We sourced out many building alternatives when we started looking into building our new home. When we came across NUDURA we knew we had found the right product. Energy efficiency, comfort and safety were the biggest attributes that we looked for and we have not been disappointed.*

*Our distributor was very helpful in explaining the product and the things we had to think about while building, and the service was excellent. We definitely made the right choice."*

*- Linda Perry, NUDURA Home Owner*



[nudura.com](http://nudura.com)



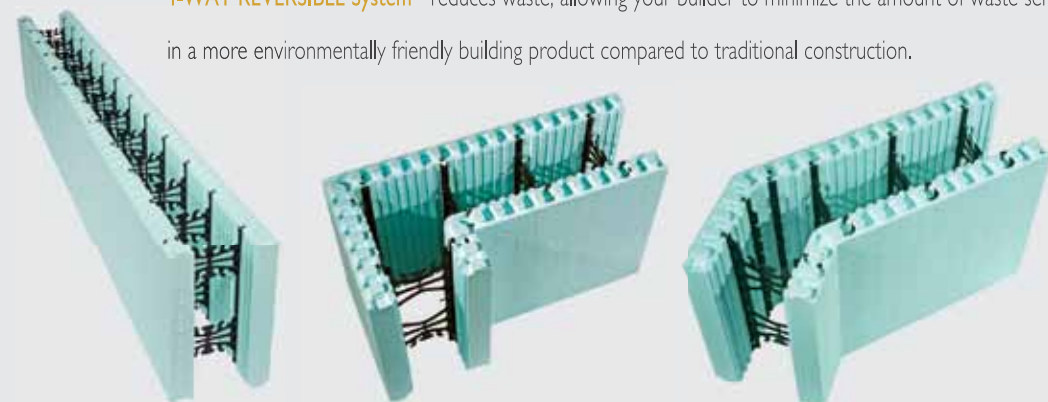


## thinking outside the block.

NUDURA Forms are manufactured with industry leading patented technologies that are exclusive to NUDURA, offering you more than just a home. Our full line of products are designed to complement each other to make your home eco-friendly and to provide superior energy efficiency, greater comfort and safety. Our Building envelope provides an affordable building solution that offers substantial benefits over traditional construction.

### What makes NUDURA different?

- **DURALOK Technology™** - securely locks forms into place with a triple tooth interlock and continuous full height-fastening strips. Once the forms are stacked together the wall becomes one unit, making it the strongest in the industry. The result is greater installation efficiencies during concrete placement.
- **DURAFOLD Technology™** - allows the entire NUDURA form line up to be shipped flat, saving up to 40% of the shipping cost, and is packaged securely to protect the transport of product to the site. Once on-site, contractors simply unfold and stack.
- **DURAMAX Technology™** - largest standard form on the market (8' x 18"). This technology creates 60% less joints in the wall compared to other wall systems.
- **4-WAY REVERSIBLE System** - reduces waste, allowing your builder to minimize the amount of waste sent to our landfills after construction is complete. Resulting in a more environmentally friendly building product compared to traditional construction.



"During the design and construction process, Nudura's technical support team enabled us to optimize the design, perform enhancements and save on costs."  
- Dan, NUDURA Home Owner

### the NUDURA building envelope.

At NUDURA we understand the importance of a fully integrated building envelope. When you combine our Ceiling and Floor Technology with our reinforced concrete Wall System you can increase your home's energy efficiency and comfort, while providing a beautiful living environment.

#### WALL SYSTEM

The NUDURA® Wall System completes six building steps with one product:

1. Form system
2. Wall structure
3. Insulation
4. Air barrier
5. Vapor barrier
6. Interior & exterior finish anchorage

NUDURA offers a form line up that includes 90°, 45°, T Forms, Radius forms, Straight (standard) forms, Brick Ledges along with a variety of other form combinations to meet the requirements of any design. To meet any building requirement NUDURA Forms are offered in 4, 6, 8, 10, and 12-inch concrete core widths.

#### CEILING TECHNOLOGY

- Reduces air filtration efficiently so that no other vapor barrier is required.
- Used in a double layer, it further reduces thermal bridging, increasing energy efficiency and comfort.
- EPS Foam does not contain CFC's or HCFC's.

#### FLOOR TECHNOLOGY

The floor of a building is often the most ignored surface when it comes to insulation. The floor of your home, when insulated with NUDURA® Floor Technology, completes the building envelope and increases your home's comfort and energy efficiency. NUDURA® Floor Technology provides:

- A cost effective layer of protection against transference from the ground.
- An effective base for radiant floor heating.

#### EXTERIOR FINISHES

NUDURA concrete home finish options are virtually limitless. NUDURA can have a variety of wall finishes applied to your desired look and style. When it comes to the interior of your home, comfort and style are key. Interior finishes of a NUDURA home are no different than traditional stick frame homes. Drywall or Gypsum board can be easily attached directly to NUDURA wall system using our unique fastening strip located on 8" centers, versus traditional stick frame methods that are on 16" centers.

#### Exterior Finishes Example



# building value into your home.



## maximum energy efficiency.

A NUDURA home can provide Performance Values as high as R-50, saving you up to 70% in annual energy costs. The energy performance of a NUDURA home is the combination of thermal mass and airtightness. Building with NUDURA reduces your homes operational energy demands, and as a result, your carbon footprint on the environment.

## greater home comfort & sound resistance.

NUDURA offers superior performance when it comes to thermal bridging, resulting in even temperatures throughout your home with reduced drafts and cold spots, ensuring you are comfortable no matter what the temperature is outside. NUDURA also acts as an effective sound barrier by dampening sound vibrations from unwanted outside noise, such as traffic, trains, and neighbors providing STC (Sound Transmission Class) ratings as high as \*STC 50.



## safety for your family.

The strength of NUDURA comes from the solid concrete core. NUDURA walls are built with steel reinforced concrete and a non-toxic fire retardant expanded polystyrene foam, providing a fire protection rating of up to 4 hours (\*4 times that of a typical wood frame home). NUDURA also provides greater impact resistance and will withstand winds of up to 402 kph (250 mph) ensuring that your family and home are safe and secure in almost any situation.

## long-term value.

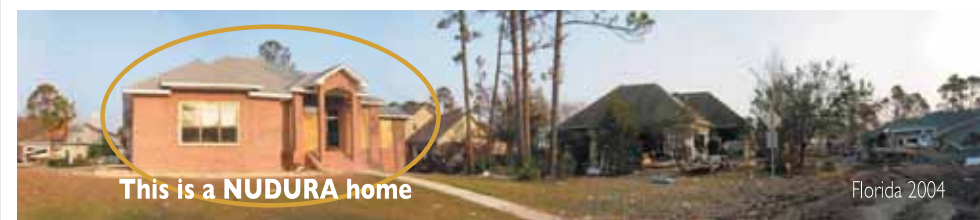
A NUDURA home is built to last and retains its value longer. The main structural element in a NUDURA home is reinforced concrete, which offers substantially better durability and requires less maintenance and repair over its lifetime compared to wood structures.

\* To achieve a sound resistance rating of STC 50 a NUDURA 6" form or higher must be used.



	NUDURA Wall System	Traditional Wood Frame
<b>Energy Efficiency</b>	<ul style="list-style-type: none"> <li>No thermal bridging</li> <li>Energy savings up to 70%</li> <li>Thermal concrete mass</li> </ul>	<ul style="list-style-type: none"> <li>Thermal bridging</li> <li>Provides lower efficiency in energy performance ***</li> <li>Hollow cavity (Batt insulation)</li> </ul>
<b>The Environment</b>	<ul style="list-style-type: none"> <li>Reduces greenhouse gases</li> <li>Saves environmental resources</li> <li>Lifetime value</li> </ul>	<ul style="list-style-type: none"> <li>Minimal greenhouse gas reduction</li> <li>Uses Environmental resources</li> </ul>
<b>Safety &amp; Strength</b>	<ul style="list-style-type: none"> <li>Withstand winds up to 250 mph &amp; 115 mph debris impact</li> <li>4 hour fire protection</li> <li>Solid concrete core</li> </ul>	<ul style="list-style-type: none"> <li>Minimal or no resistance to wind born debris damage</li> <li>Cavity walls invite insects &amp; rodents</li> <li>45 minute fire rating only</li> <li>Batt insulation/wood subject to sagging, dry rot, moisture</li> </ul>
<b>Living Space</b>	<ul style="list-style-type: none"> <li>NUDURA Forms are non-toxic &amp; do not emit CFC's or HCFC's</li> <li>Does not support mold growth</li> <li>STC Rating varies from 50-55** depending on core thickness</li> </ul>	<ul style="list-style-type: none"> <li>Manufactured wood products can contain adhesives and formaldehyde</li> <li>Wood walls can retain moisture; allowing mold to grow</li> <li>Sound easily travels through wood walls (typically STC 33****)</li> </ul>

\* Based on actual In-field comparisons of ICF versus traditional frame constructed buildings of similar size.  
 \*\* NUDURA STC Rating based on 6" core wall and above.  
 \*\*\* Based on wood frame buildings constructed to meet minimum national or state building code requirements.  
 \*\*\*\* Frame wall STC Rating based on standard code constructed frame wall for both US and Canada.



This is a NUDURA home

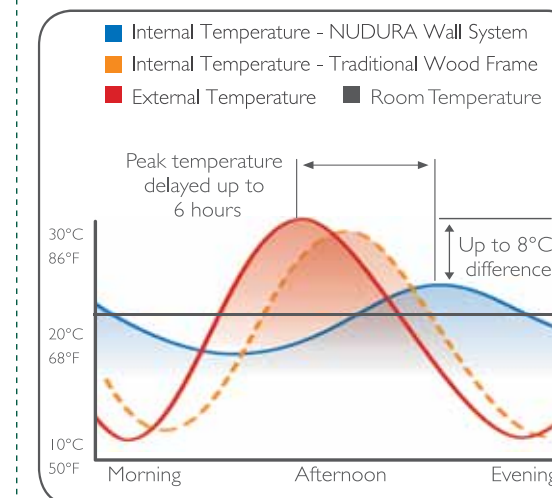
Florida 2004

## thermal mass

NUDURA Performance Values meet and exceed 2012 Building Codes.

The solid mass of the NUDURA wall has some very unique qualities. The monolithic concrete is sandwiched between two continuous layers of EPS, which isolates the concrete and significantly reduces the flow of heat through the wall.

Since NUDURA walls have a high storage capacity with low thermal conductivity, it provides the most useful level of Thermal Mass. This helps to stabilize the internal temperature from day to night temperature fluctuations and provides a largely self-regulating environment. The result is less energy consumption, reducing the need for mechanical heating and cooling, and greater cost savings throughout the year.



## Stabilizing effect of thermal mass on internal temperature.

Based on no additional mechanical heating or cooling. For more information on thermal mass visit [nudura.com](http://nudura.com)

## extreme weather

The performance of a NUDURA Wall System is designed to withstand some of Mother Nature's worst and have been used for commercial and residential structures throughout North America, saving building owners from having to rebuild their homes and businesses. With NUDURA you can be sure that your home will withstand high winds, fire, seasonal elements and the test of time. The strength of NUDURA comes from the steel reinforced solid concrete core, resulting in greater impact resistance. NUDURA structures can withstand winds up to 402 kph (250 mph) ensuring that your family and home are safe and secure in almost any situation.

In 2004, a NUDURA home, built with insulated concrete wall systems, survived the severe storm in Florida while other wood-frame built homes in the neighborhood did not.



## eco-friendly homes for future generations.

### better homes. healthier living.

- **RECYCLED MATERIALS** - NUDURA® Forms are manufactured from EPS. NUDURA's unique folding web design is manufactured from 100% recycled polypropylene and steel.
- **BUILDING DURABILITY** - NUDURA® Forms offer a structure built out of Concrete, one of the most durable building materials which result in buildings that stand the test of time. Building with NUDURA also offers maximum safety in high wind areas due to its high impact resistance.
- **WASTE REDUCTION** - NUDURA Insulated Concrete Form technology and design creates less waste during the construction process, sending less waste to our landfills. \*All waste is 100% recyclable.
- **MOLD RESISTANT** - NUDURA Forms have been laboratory tested and will not support mold growth unlike traditional wood frame structures.
- **ENERGY PERFORMANCE** - NUDURA® Forms combined with other energy efficient construction methods significantly reduce the amount of carbon emissions, due to the structures high energy efficiency levels, reducing the amount of fossil fuels needed for heating and cooling reducing your carbon footprint.
- **IMPROVED INDOOR AIR QUALITY** - The end result is an airtight structure that enables building mechanical systems to heat, cool and ventilate the structure more efficiently, creating a healthier living environment. NUDURA® forms emit no CFC or HCFC's thereby improving indoor air quality.

#### NUDURA Energy Efficient Construction Materials Contribute to LEED®

If you are thinking about building to LEED® Standard, NUDURA can contribute greatly to a high level of LEED® Points. Visit [Nudura.com](http://Nudura.com) for more information on our contribution to LEED®

\*Subject to local recycling programs.

The combination of rising energy requirements and fuel costs means that we need to make the most of building technology to heat and cool our homes. This requires a whole building approach to design, which doesn't have to be complicated. NUDURA Insulated concrete forms are energy efficient construction materials that provide maximum comfort and energy solutions for your entire home. NUDURA energy efficient construction materials provide up to 70% energy savings compared to traditional building methods using wood.

*"We took additional steps to lower the carbon footprint through the design of the heating system including the in-floor heating for which Nudura products provided the insulation. Having lived in the home for over two and a half years, the benefits continue to materialize. Our energy conservation goal has been surpassed and we have reduced our consumption of Natural Gas by more than 50%." - Roz, NUDURA Home Owner*



# service is our foundation for customer satisfaction.



The next step to building your NUDURA home is to find a NUDURA trained installer (contractor). You can contact a local distributor who can provide you with the information you need on NUDURA and a list of installers. If you need any assistance locating a distributor please contact NUDURA at **866-468-6299** or at [nudura.com](http://nudura.com). NUDURA also offers a Basic Installation Course for contractors who can become a trained installer.

## quality assurance.

NUDURA forms are manufactured in house to allow full control over the manufacturing process, ensuring our forms are manufactured to the highest standards. NUDURA is audited quarterly by Warnock/Hersey which conducts regular plant inspections to ensure all aspects of NUDURA® products are consistent. Our forms undergo rigorous testing everyday to ensure the quality is the same for every NUDURA® product.

## code approvals and evaluation.

NUDURA distributors provide the information needed to make sure your home is built with proven installation methods and provide necessary information about local, provincial and state building codes. In various tests NUDURA® walls have met and exceeded building codes around the globe. NUDURA has a wide variety of code approvals for North America and Europe and is tested to the highest standards, providing you the safest, most comfortable home possible.

NUDURA Products (when installed per Code requirements) have been designed, tested and approved to comply (i.e. meet or exceed minimum compliance benchmarks) by all the following applicable Codes Standards and Evaluation Criteria for the use in both combustible and non-combustible construction for ALL types of building occupancies and construction types:

Please visit our [Technical Centre at Nudura.com](http://Technical Centre at Nudura.com) for Testing Standards Compliance and Code Compliance Evaluations.

*Our distributor was very helpful in explaining the product and the things we had to think about while building, and the service was excellent.."*

- Linda Perry, NUDURA Home Owner



## professional online tools and resources.

NUDURA makes the design process with the NUDURA Wall System as easy and efficient as possible. Our website provides valuable design tools and resources for homeowners, contractors, architects, and other design professionals. We have a full BIM Object Library, Design Specification Guides, Installation Manuals and videos, a vast project photo gallery, and much more. Have access to industry leading technical and informational support from NUDURA and our Authorized Distributors.



*"Knowing that the NUDURA system is designed to accommodate curves and 45-degree angles, I was free to play with those shapes without worrying that I was dramatically increasing the cost."*

- James Plagmann, AIA, Human Nature Architecture





Over 50 years of building experience.

*By using NUDURA Insulated Concrete Forms to build your next home you can ensure you are choosing the best building solution available today.*



The performance claims referred to in this Brochure are based on a comparison between a typical 8' high NUDURA wall with a 6" core, properly built to the National Building Code of Canada (NBC) and installed in accordance with NUDURA Corporation's specifications and a typical 8' high 2"x 6" wood-framed wall insulated with R20 batt insulation, properly built to NBC and with regard to "fire resistance" on ratings listed in the NBC, with regard to "sound resistance" on ratings listed in the NBC and in the study "Insulating Concrete Forms, with regard to "durable" and "comfort" on an independent analysis and with regards to "energy efficiency" in the study "Energy Consumption of Concrete Homes Versus Wood Frame Homes" published by the Portland Cement Association. Such performance claims may vary depending on certain atmospheric conditions and geographic locations. STC Ratings are based on a 6" (152mm) core form and greater. Note: 4" (102mm) form is not to be used as a suite or corridor separation wall, except as specified by NUDURA. For further details or questions please contact NUDURA.