



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

NUDURA Inc.
27 Hooper Road, Unit 10
Barrie, Ontario, Canada L4N 9S3

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: NUDURA Insulated Concrete Form Wall System

APPROVAL DOCUMENT: Drawing No. MD-NUD 0911, titled "NUDURA® Integrated Building Technology Insulated Concrete Forming System", sheet 1 of 1, prepared by NUDURA Integrated Building Technology, dated 06/21/2011, with revision "11092101" dated 04/28/2016, signed and sealed by Hermes F. Norero, P. E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Columbus, GA and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **renews and revises** NOA # 11-0720.02 and consists of this page 1, evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



[Handwritten Signature]
10/20/2016

NOA No 16-0627.01
Expiration Date: July 20, 2021
Approval Date: October 27, 2016
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A. DRAWING

1. Drawing No. **MD-NUD 0911**, titled “**NUDURA®** Integrated Building Technology Insulated Concrete Forming System”, sheet 1 of 1, prepared by NUDURA Integrated Building Technology, dated 06/21/2011, with revision “11092101” dated 04/28/2016, signed and sealed by Hermes F. Norero, P.E.

B. TEST “Submitted under NOA # 05-0330.02”

<u>Laboratory Report</u>	<u>Test</u>	<u>Date</u>	<u>Signature</u>
<u>BASF and NOVA EPS:</u>			
1. SGS 110170	ASTM C 1338	06/29/04	Dale E. Holloway
<u>BASF EPS:</u>			
1. RAD-3561	ASTM C 578(ASTM C303)	01/10/05	Michael L. Zieman, P.E.
2. RAD-3561	ASTM C 578(ASTM D1621)	01/10/05	Michael L. Zieman, P.E.
3. RAD-3561	ASTM C 578(ASTM C203)	01/10/05	Michael L. Zieman, P.E.
4. RAD-3561	ASTM C 578(ASTM D2863)	01/10/05	Michael L. Zieman, P.E.
5. RAD-3561	ASTM C 578(ASTM C518)	01/10/05	Michael L. Zieman, P.E.
6. RAD-3561	ASTM C 578(ASTM E96)	01/10/05	Michael L. Zieman, P.E.
7. RAD-3561	ASTM C 578(ASTM C272)	01/10/05	Michael L. Zieman, P.E.
8. RAD-3561	ASTM C 578(ASTM D2126)	01/10/05	Michael L. Zieman, P.E.
9. UL-01NK44301 (Flame Spread & Smoke Developed)		02/14/02	R.F. Oleck, P.E.
10. SGSUS 092897	ASTM D1929	11/28/88	R.F. Oleck, P.E.
 <u>“Submitted under NOA # 02-0919.09”</u>			
<u>NOVA Chemicals EPS:</u>			
1. RAD-2884	ASTM C 578ASTM C303	09/01/01	J. Donald Waldman
2. RAD-2884	ASTM C 578ASTM C518	09/01/01	J. Donald Waldman
3. RAD-2884	ASTM C 578 ASTM D1621	09/01/01	J. Donald Waldman
4. RAD-2884	ASTM C 578-00 (ASTM C203)	09/01/01	J. Donald Waldman
5. RAD-2884	ASTM C 578-00 (ASTM E96)	09/01/01	J. Donald Waldman.
6. RAD-2884	ASTM C 578-00 (ASTM C272)	09/01/01	J. Donald Waldman
7. RAD-2884	ASTM C 578-00 (ASTM D2863)	09/01/01	J. Donald Waldman
8. RAD-2884	ASTM C 578-00 (ASTM D2126)	09/01/01	J. Donald Waldman
9. UL-016844006 (Flame Spread & Smoke Developed)		02/14/01	R.F. Oleck, P.E.
10. SGSUS 092897	ASTM D1929	11/28/88	R.F. Oleck, P.E.
 <u>NUDURA Reinforcing Web:</u>			
1. ITS-3016348	ASTM D638	03/26/02	Cameron Robison, P.E.
2. ITS-3016348	ASTM D1929	03/26/02	Cameron Robison, P.E.
3. ITS-3016348	ASTM D635	03/26/02	Cameron Robison, P.E.
4. ITS-3016348	ASTM D2843	03/26/02	Cameron Robison, P.E.


10/20/2016

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 16-0627.01
Expiration Date: July 20, 2021
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NOTICE OF ACCEPTANCE: EVIDENCE PAGE

C. CALCULATION

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. UL material Certification # **BRYX2.R4775** per ANSI/UL 723 (ASTM E84) issued to NOVA Chemical Inc. for their foam plastic component.
2. UL material Certification # **BRYX2.R10302** per ANSI/UL 723 (ASTM E84) issued to Styrochem Canada Ltd. for their foam plastic component.

F. STATEMENTS

1. Statement letter of code conformance to the 5th edition (2014) FBC and of no financial interest issued by Building Drops, Inc., dated 04/01/2016, signed and sealed by Hermes F. Norero, P.E.

“Submitted under NOA # 11-0720.02”
2. Distributor agreement dated 01/05/2012.



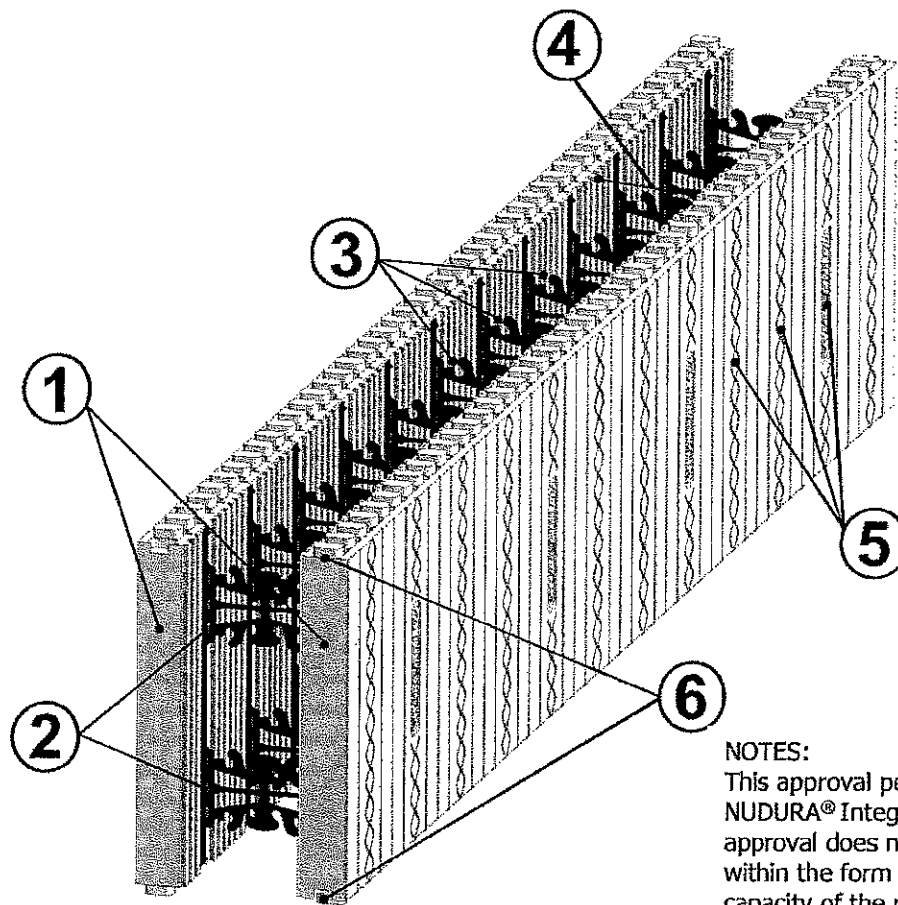
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No 16-0627.01
Expiration Date: July 20, 2021
Approval Date: October 27, 2016

NUDURA® Integrated Building Technology Insulated Concrete Form Wall System

DESCRIPTION

"NUDURA® Integrated Building Technology" is an insulated concrete form system which features 2 parallel wall panels formed of Type II expanded polystyrene foam (as manufactured by NOVA Chemical Corporation or Styrochem) cross linked at 8 inches o/c with foldable high density polypropylene webs with fastening strips embedded in the foam. Each panel measures 8 feet in length, 18 inches in height by 2 5/8" in thickness. Once unfolded and set into position, the units formed by the panels can be stacked together to form nominal wall cavity thicknesses of 4", 6", 8", 10" and 12". The cavity can then be reinforced with steel reinforcing bars and filled with concrete to form a structural monolithic reinforced concrete wall. After the concrete has hardened, the forms remain in place as integral part of the wall to serve as insulation on both the inside and outside of the concrete wall and the embedded fastening strips provide strapping for fastening finishing materials to both inside and outside of the insulation. The system as a concrete forming system shall comply with ACI 347, and the concrete walls shall comply with ACI 318. The properties of the EPS are listed below: (IMPORTANT: SEE INSET NOTES BELOW LEFT)

Form Component Legend



1. Expanded Polystyrene Foam Panels
2. Patented Hinged Folding Polypropylene Webs
3. Reinforcing Steel Capture Lugs
4. Concrete Core
5. Fastening Strip Identifying Marks
6. Reversible Top and Bottom Panel Interlocks

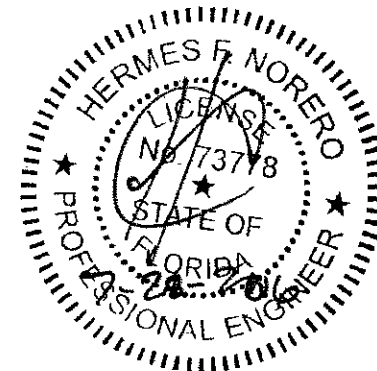
NOTES:
This approval pertains to the insulation properties of NUDURA® Integrated Building Technology only. This approval does not imply approval of the concrete used within the form system or the structural and/or forming capacity of the material and the system. **IMPORTANT: PROTECT PRODUCT FROM UV EXPOSURE BY ENSURING ANY EXTERIOR EXPOSED SURFACE IS EITHER FINAL FINISHED OR CLADDED WITH TEMPORARY UV PROTECTION WITHIN 12 MONTHS OF INSTALLATION.**

Product Characteristics – All EPS Resins & Polypropylene Webs				
Material Property	Standard	Limit	Result	Status
ALL APPROVED EPS RESIN		Max./Min.		
Thermal Transmission	ASTM C518	Min. R4.00/in	Min. R4.16/in	Complies
Flame Spread Rating	ASTM E84	Index <10	5	Complies
Smoke Developed Index	ASTM E84	Index < 450	190	Complies
Water Vapor Permeance	ASTM E96	Max. 3.5 Perms	2.6 Perms	Complies
Water Absorption	ASTM C272	Max. 3%	2.26%	Complies
Density	ASTM C303	1.35 pcf	1.35 pcf	Complies
Compressive Properties	ASTM D1621	Min. 15.0 psi	20.64 psi	Complies
Flexural Strength	ASTM C203	Min. 35.0 psi	42.7 psi	Complies
Limiting Oxygen Index	ASTM D2863	Min. 24%	>24% Passed	Complies
Thermal & Humid Aging	ASTM D2126	2.0 % Max. Variance	0.27% Max	Complies
Fungi Resistance	ASTM C1338	No Growth	No Growth	Complies
Self Ignition Temperature	ASTM D1929	Min. 650°F	896°F	Complies
POLYPROPYLENE WEBS				
Self Ignition Temperature	ASTM D1929	Min. 650°F	734°F	Complies
Smoke Density Rating	ASTM D2843	Max. 75%	25.5%	Complies
Rate of Burning	ASTM D635	Max. 1 1/2"	3/8"	Complies

FOR OFFICE USE ONLY:

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 16-0627.01
Expiration Date 07/20/2021
By [Signature]
Miami-Dade Product Control

VALIDATION STAMP: REGISTERED FLORIDA ENGINEER



REGISTERED FLORIDA ENGINEER OR VALIDATION AGENCY ON BEHALF OF NUDURA INC.

Hermes F. Norero, P.E.
Florida PE No. 73778
Building Drops
398 East Dania Beach, Suite 338
FBPE Cert. of Authorization
No. 29578

TEL: 954.399.8478
FAX: 954.744.4738
EMAIL: contact@buildingdrops.com

MANUFACTURER:



27 Hooper Road, Unit 10
Barrie, Ontario, Canada
L4N 9S3

Phone: (866) 468-6299
Fax: (705) 726-2110
Email: info@nudura.com

Title:

**NUDURA® Integrated Building Technology
Insulated Concrete Forming System**

Revision No.

11092101

Revision Date:

APR 28/2016

Drawing No.

**APPROVAL DOCUMENT
MD-NUD 0911**

Drawn By:

KR/KS

Date: (Original Dwg.)

JUN 21/2011

Sheet No.

1 of 1