MIAMI-DADE COUNTY

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908
www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

NUDURA Corporation
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 by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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: Insulated Concrete Form Wall Systems
APPROVAL DOCUMENT: Drawing **No. MD-NUD 0506**, titled "Nudura Integrated Building Technology Insulated Concrete Forming System" sheet 1 of 1, prepared by Nudura Integrated Building Technology, dated 05/05/06, with revision No.06050501, signed and sealed by Robert F. Oleck, P. E., bearing the Miami-Dade County Product Control Approval Stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.
MISSILE IMPACT RATING: None
LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 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 **Jaime D. Gascon, P.E.**

PRODUCT CONTROL ACCEPTED

J. Gascon
7/20/06

NUDURA Corporation

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A. DRAWING

1. Drawing **No. MD-NUD 0506**, titled "Nudura Integrated Building Technology Insulated Concrete Forming System" sheet 1 of 1, prepared by Nudura Integrated Building Technology, dated 05/05/06, with revision "06050501", signed and sealed by Robert F. Oleck, P.E.

B. TEST

Laboratory Report	Test	Date	Signature
BASF and NOVA EPS:			
1. SGS 110170	ASTM C 1338-2000	06/29/04	Dale E. Holloway
BASF EPS:			
1. RAD-3561	ASTM C 578-01(Sec.11.2 ASTM C303)	01/10/05	Michael L. Zieman, P.E.
2. RAD-3561	ASTM C 578-01(Sec.11.5 ASTM D1621)	01/10/05	Michael L. Zieman, P.E.
3. RAD-3561	ASTM C 578-01 (Sec. 11.6 ASTM C203)	01/10/05	Michael L. Zieman, P.E.
4. RAD-3561	ASTM C 578-01 (Sec. 11.10 ASTM D2863)	01/10/05	Michael L. Zieman, P.E.
5. RAD-3561	ASTM C 578-01 (Sec. 11.4 ASTM C518)	01/10/05	Michael L. Zieman, P.E.
6. RAD-3561	ASTM C 578-01 (Sec. 11.7 ASTM E96)	01/10/05	Michael L. Zieman, P.E.
7. RAD-3561	ASTM C 578-01 (Sec. 11.8 ASTM C272)	01/10/05	Michael L. Zieman, P.E.
8. RAD-3561	ASTM C 578-01 (Sec. 11.9 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.
NOVA Chemicals EPS:			
1. RAD-2884	ASTM C 578-00(Sec.11.2 ASTM C303)	09/01/01	J. Donald Waldman
2. RAD-2884	ASTM C 578-00(Sec.11.4 ASTM C518)	09/01/01	J. Donald Waldman
3. RAD-2884	ASTM C 578-00 (Sec. 11.5 ASTM D1621)	09/01/01	J. Donald Waldman
4. RAD-2884	ASTM C 578-00 (Sec. 11.6 ASTM C203)	09/01/01	J. Donald Waldman
5. RAD-2884	ASTM C 578-00 (Sec. 11.7ASTM E96)	09/01/01	J. Donald Waldman.
6. RAD-2884	ASTM C 578-00 (Sec. 11.8 ASTM C272)	09/01/01	J. Donald Waldman
7. RAD-2884	ASTM C 578-00 (Sec. 11.10 ASTM D2863)	09/01/01	J. Donald Waldman
8. RAD-2884	ASTM C 578-00 (Sec. 11.9 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.
NUDURA Reinforcing Web:			
1. ITS-3016348	ASTM D638-01	03/26/02	Cameron Robison, P.E.
2. ITS-3016348	ASTM D1929-75	03/26/02	Cameron Robison, P.E.
3. ITS-3016348	ASTM D635-98	03/26/02	Cameron Robison, P.E.
4. ITS-3016348	ASTM D2843-93	03/26/02	Cameron Robison, P.E.

C. CALCULATION

N/A

Jaime D. Gascon, P.E.
Chief, Product Control Division
NOA No 05-0330.02
Expiration Date: July 20, 2011
Approval Date: July 20, 2006

NUDURA Corporation

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

D. QUALITY ASSURANCE

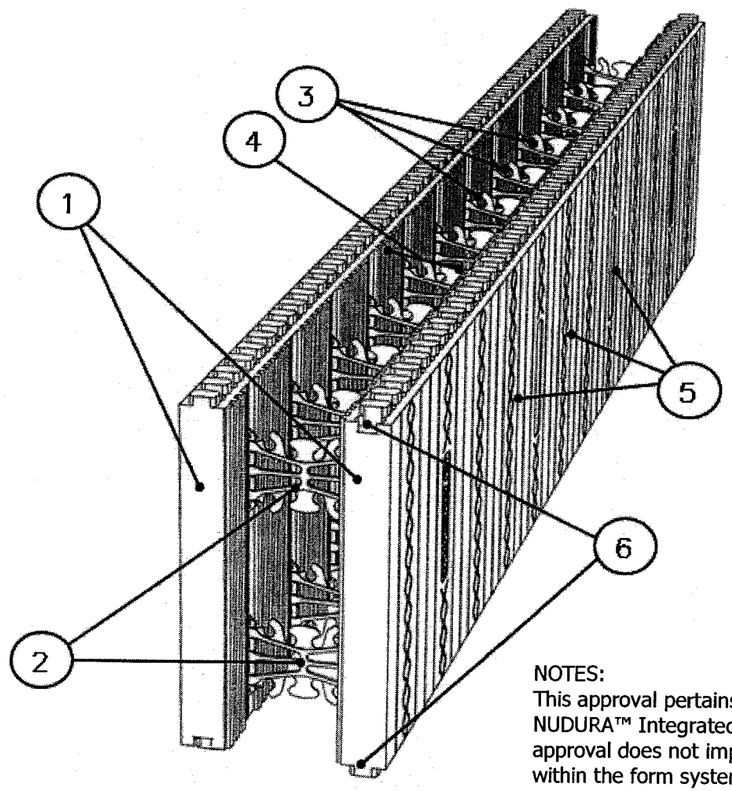
1. Miami-Dade County BCCO.

E. STATEMENTS

1. Letter of Code Compliance, issued by Robert F. Oleck, P.E., dated 02/10/05 and signed and sealed by Robert F. Oleck, P.E.
2. Letter of No Financial Interest, issued by Robert F. Oleck, P.E., dated 02/10/05 and signed by Robert F. Oleck, P.E.

Jaime D. Gascon, P.E.
Chief, Product Control Division
NOA No 05-0330.02
Expiration Date: July 20, 2011
Approval Date: July 20, 2006

NUDURA™ Integrated Building Technology
Insulated Concrete Form Wall System



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.

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 BASF or NOVA) cross linked at 8 inches o/c with foldable high density polypropylene webs (manufactured by NUDURA Corporation) with fastening strips embedded in the foam. Each panel measures 8 feet in length, 18 inches in height by 2½" 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)

Product Properties – BASF or NOVA EPS Resins & NUDURA Polypropylene Webs

Material Property	Standard	Limit	Result	Status
ALL APPROVED EPS RESIN		**Max./Min.**		
Thermal Transmission	ASTM C518-98	Min. R4.00/in	**Min. R4.16/in**	**Complies**
Flame Spread Rating	ASTM E84-04	Index <10	**5**	**Complies**
Smoke Developed Index	ASTM E84-04	Index < 450	**190**	**Complies**
Water Vapor Permeance	ASTM E96-00e1	Max. 3.5 Perms	**2.6 Perms**	**Complies**
Water Absorption	ASTM 272-01	Max. 3%	**2.26%**	**Complies**
Density	ASTM C303-92	1.35 pcf	**1.35 pcf**	**Complies**
Compressive Properties	ASTM D1621-04a	Min. 15.0 psi	**20.64 psi**	**Complies**
Flexural Strength	ASTM C203-99	Min. 35.0 psi	**42.7 psi**	**Complies**
Limiting Oxygen Index	ASTM D2863-00	Min. 24%	**>24% Passed**	**Complies**
Thermal & Humid Aging	ASTM D2126-04	2.0 % Max. Variance	**.27% Max**	**Complies**
Fungi Resistance	ASTM C1338-00	No Growth	**No Growth**	**Complies**
Self Ignition Temperature	ASTM D1929-96(01)e1	Min. 650°F	**896°F**	**Complies**
POLYPROPYLENE WEBS				
Self Ignition Temperature	ASTM D1929-96(01)	Min. 650°F	**734°F**	**Complies**
Smoke Density Rating	ASTM D2843-93	Max. 75%	**25.5%**	**Complies**
Rate of Burning	ASTM D635-98	Max. 1 ½"	**3/8"**	**Complies**

B

FOR OFFICE USE ONLY:

Approved as complying with the Florida Building Code
Date 07/20/06
NOA# 05-0330.02
Miami-Dade Product Control Division
By

VALIDATION STAMP:
REGISTERED FLORIDA ENGINEER

R. F. Oleck
FL P.E. #52514

REGISTERED FLORIDA ENGINEER:

Mr. Rob Oleck, P. Eng.

Consulting Engineer,
M.G. McLaren Engineering Group
5728 Major Blvd
Suite 603
Orlando, FL 32819

Phone: (407) 354-5411
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Email: roleck@mgmclaren.com

MANUFACTURER:

NUDURA
INTEGRATED BUILDING TECHNOLOGY
Building Value.

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

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

Title:
NUDURA™ Integrated Building Technology Insulated Concrete Forming System

Revision No.	Drawing No.	
06050501	**APPROVAL DOCUMENT MD-NUD 0506**	
Revision Date: **MAY 05/06**		
Drawn By: **KR/JS**	**Date:** **MAY 05/06**	**Sheet No.** **1 of 1**