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.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

Innovida Holdings, LLC
560 Lincoln Road, Suite 303
Miami Beach, Florida 33129

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: **Innovida Fiber Composite Beams**

APPROVAL DOCUMENT: Drawing No. 09-100, titled "Innovida Fiber Composite Beams", sheets 1 through 4 of 4, prepared by Eastern Engineering Group, dated December 17, 2009, signed and sealed by Raissa R. Lopez, P.E., on May 17, 2010 and July 21, 2010, all bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and the approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: **None**

LABELING: Each beam shall bear a permanent label with the manufacturer's name or logo, city, state and the 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 submitted page E-1 as well as approval document mentioned above. The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**

MIAMI-DADE COUNTY APPROVED

Helmy A. Makar
08/18/2010

NOA No. 09-1228.03
Expiration Date: 08/18/2015
Approval Date: 08/18/2010

Innovida Holdings, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 09-100, titled "Innovida Fiber Composite Beams", sheets 1 through 4 of 4, prepared by Eastern Engineering Group, dated December 17, 2009, signed and sealed by Raissa R. Lopez, P.E., on May 17, 2010 and July 21, 2010.*

B. TESTS

1. *Test report on flexural testing on 3 3/8" W x 16 1/2" H, Composite Beams, per ASTM E-529-04, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-09-4011, dated 12/16/2009, signed and sealed by Rafael E. Droz Seda, P.E.*
2. *Test report on flexural testing on 3 3/8" W x 10 1/2" H, Composite Beams, per ASTM E-529-04, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-09-4012, dated 12/16/2009, signed and sealed by Rafael E. Droz Seda, P.E.*
3. *Test report on flexural testing on 4 7/8" W x 20 1/2" H, Composite Beams, per ASTM E-529-04, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-09-4016, dated 12/16/2009, signed and sealed by Rafael E. Droz Seda, P.E.*

C. CALCULATIONS

1. *Calculations for Innovida Fiber composite Beams, dated 04/01/10, 22 pages, prepared by Eastern Engineering Group, signed and sealed by Raissa Lopez, P.E.*
2. *Calculations for Innovida Fiber composite Beams, dated 07/21/10, 22 pages, prepared by Eastern Engineering Group, signed and sealed by Raissa Lopez, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATION:

1. *Test report on Tensile testing on Skin Material for Composite Beams, per ASTM D-638-03 & 08, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-09-T147, dated 12/16/2009, signed and sealed by Rafael E. Droz Seda, P.E.*
2. *Test report on Tensile testing on Skin Material for Composite Structural Wall Panels, per ASTM D-638-08, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-08-T184, dated 12/30/2008, signed and sealed by Candido F. Font, P.E.*
3. *Test report on Tensile testing on Skin Material for Composite Structural Wall Panels, per ASTM D-638-08, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-08-T185, dated 12/30/2008, signed and sealed by Candido F. Font, P.E.*
4. *Test report on Accelerated weathering testing on Skin Material for Composite Structural Wall Panels, per ASTM G 155-04, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-08-A101, dated 12/30/2008, signed and sealed by Candido F. Font, P.E.*

Helmy A. Makar

Helmy A. Makar, P.E., M.S.
Senior Product Control Examiner
NOA No. 09-1228.03
Expiration Date: 08/18/2015
Approval Date: 08/18/2010

GENERAL NOTES:

1- THESE FIBER COMPOSITE BEAMS SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAVE BEEN STRUCTURALLY TESTED IN ACCORDANCE WITH THE 2007 EDITION OF THE FLORIDA BUILDING CODE. IN ADDITION, BEAM TO WALL CONNECTION FOR POSSITIVE AND NEGATIVE LOADS HAVE BEEN ALSO TESTED AS PART OF THIS P.A.D.

DESIGN WIND LOADS AND LIVE LOADS SHALL BE DETERMINED AS PER SECTION 1620 AND 1616 RESPECTIVELY OF THE ABOVE MENTIONED CODE, FOR A BASIC WIND SPEED OF 146 MPH. EXPOSURE C AND IN ACCORDANCE WITH ASCE 7-05 STANDARD.

BEAMS ADEQUACY FOR WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1625 OF THE ABOVE MENTIONED CODE AS PER HETI LAB REPORT # HETI-09-4011, HETI-09-4012, HETI-09-4016, HETI-09-T147, HETI-08-T184, HETI-08-T185, HETI-08-A101

2- DEFLECTION FOR BEAMS SHALL COMPLY WITH SECTION 1613-1 FOR HVHZ (HIGH VELOCITY HURRICANE ZONE) OF THE ABOVE MENTIONED CODE.

3- ALL FACING MATERIAL TO BE SIXTY PER CENT (60%) BY WEIGHT E-GLASS TRIAXIAL FABRICS (FIBERGLASS) AND FORTY PER CENT (40%) OF EPOXY RESIN. E-GLASS TRIAXIAL SHALL HAVE A NOMINAL AREA WEIGHT OF 686 g/m2. EPOXY RESIN TO BE INNOVIDA 110 (RESIN) AND INNOCURE 210 (HARDENER).

4- THE THICKNESS OF ALL FACING MATERIAL SHALL BE AS SHOWN ON THESE DRAWINGS. MINIMUM THICKNESS SHALL BE 0.08" FOR BEAM SIDES WITH STANDARD TOLERANCE OF ±0.01".

5- CORE MATERIAL TO BE RIGID POLYURETHANE FOAM TYPE 1 COMPRESSIVE STRENGTH PARALLEL TO RISE = 26 PSi, PERPENDICULAR TO RISE = 29 PSi AS PER ASTM D1621, TENSILE STRENGTH PARALLEL AND PERPENDICULAR TO RISE = 33 PSi AS PER ASTM D1623, SHEAR STRENGTH PARALLEL AND PERPENDICULAR TO RISE = 27 PSi AS PER ASTM C273, DENSITY = 2.16 LB./CU.FT. AS PER ASTM D1622.

6- CONNECTIONS: BEAM TO WALL CONNECTION SHALL BE AS SHOWN ON THESE DRAWINGS. THE WALL ELEMENTS SHALL BE INNOVIDA WALLS, 2.5" THICK WALL OR 4" THICK WALL. BEAM TO WALL CONNECTION SHALL BE BY GLUING AS SHOWN ON THESE DRAWINGS. THE BONDING AGENT (GLUE) SHALL BE AN EPOXY SYSTEM: INNOPOX 210 (RESIN), INNOCURE 210 (HARDENER).

7- THE BEAMS SHALL BE CONSTRUCTED AS PART OF THE INNOVIDA SYSTEM WHICH ALSO INCLUDE COLUMNS, WALL PANELS AND ROOF PANELS.

8-THE STRUCTURAL DESIGN OF A RESIDENCE SHALL BE PERFORMED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER AND REVIEWED BY THE STRUCTURAL PLAN EXAMINER OF THE CORRESPONDING BUILDING DEPARTMENT IN ORDER TO ISSUE A PERMIT FOR CONSTRUCTION STRUCTURAL DESIGN SHALL INCLUDE PROVISIONS FOR ALL LOADS DEVELOPED AT THE JOINT BETWEEN ELEMENTS.

9- THE ENGINEER OF RECORD OF A SPECIFIC PROJECT, NOR THE STRUCTURAL ENGINEER SIGNING THESE DOCUMENTS ARE NOT RESPONSIBLE FOR CONSTRUCTION SAFETY AT SITE, WHICH IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR OF THE PROJECT.

10- THE MAXIMUM ALLOWABLE LOADS SHOWN ON THESE DRAWINGS (SHEET 03) HAVE BEEN OBTAINED THROUGHOUT TESTING PERFORMED AS PER ASTM E-529.

11- a- THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC: i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.

b- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS PRODUCT APPROVAL PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

c- THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.

d- THE SPECIFIC PROJECT SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME PROFESSIONAL ON RECORD (P.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D.

e- THIS P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT.

12- BEAM MANUFACTURER'S LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF THE ELEMENT APPROXIMATELY 12" FROM THE EDGE OF SUCH ELEMENT. LABEL SHALL BE AS FOLLOW: INNOVIDA HOLDINGS, INC. MIAMI BEACH, FLORIDA MIAMI-DADE COUNTY PRODUCT APPROVED.

13- LIMITATIONS AND CONDITIONS.
a- WALL PANELS, ROOF PANELS AND COLUMNS WHICH ALSO ARE ELEMENTS OF THE INNOVIDA SYSTEM ARE NOT PART OF THIS PRODUCT APPROVAL, ONLY BEAMS .

b- ALL SUPPORTING HOIST STRUCTURES SHALL BE DESIGNED TO RESIST ALL SUPERIMPOSED LOADS PER F.B.C.

c- SIZE AND SPAN LIMITATIONS OF BEAMS SHALL BE LIMITED TO THOSE SPECIFIC LISTED ON THESE DRAWINGS.

Approved as complying with the
Florida Building Code
Date 08/18/2010
NOA# 09-1228.03
Miami Dade Product Control
Division
By

EASTERN ENGINEERING GROUP
3401 NW 82nd AVENUE, SUITE 370
Miami, Florida 33122
Tel. (305) 599-8133
Fax. (305) 599-8076
www.easternegr.com

NO.	DESCRIPTION	DATE	APP'D

DATE : 12-17-2009
PM : IRASSA R. LOPEZ, P.E.
DRAWN BY : R.L.
DESIGNED BY : R.L.
CHECKED BY : R.L.
JOB No. : 09-284
SCALE : AS SHOWN

INNOVIDA HOLDINGS INC.

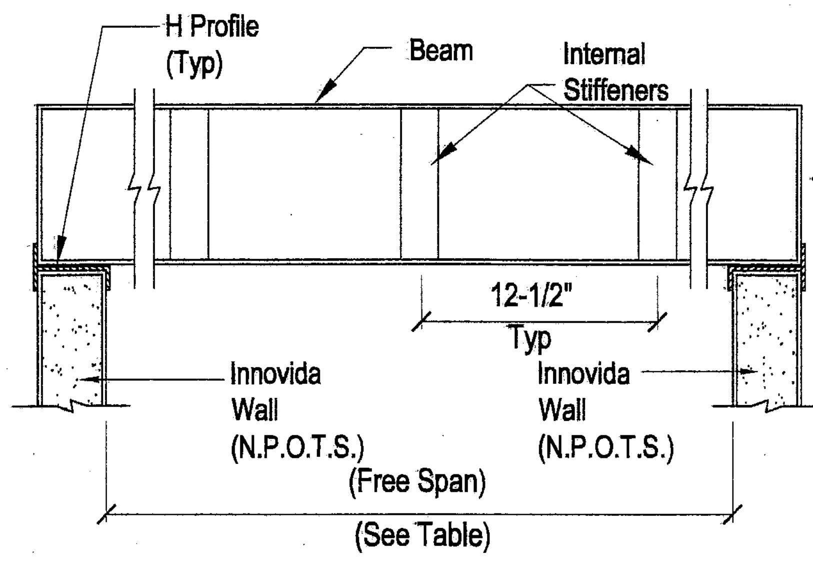
INNOVIDA FIBER COMPOSITE BEAMS

CLIENT ADDRESS: INNOVIDA HOLDINGS INC.
6950 LINCOLN ROAD, SUITE 303, MIAM BEACH FL 33139
PROJECT LOCATION: N/A

IRASSA R. LOPEZ, PE (Lic No-59990)
RONZALO A. PAZ, PE (Lic No-60754)
CERT. OF AUTHORIZATION No. 28055

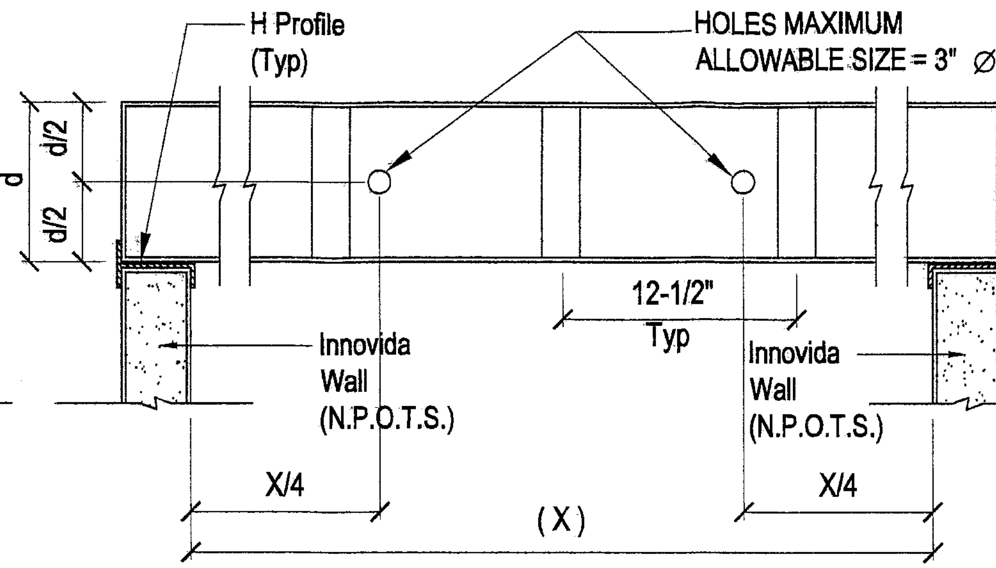
5/13/10

DRAWING NO.
09-100
DRAWING 01 of 04

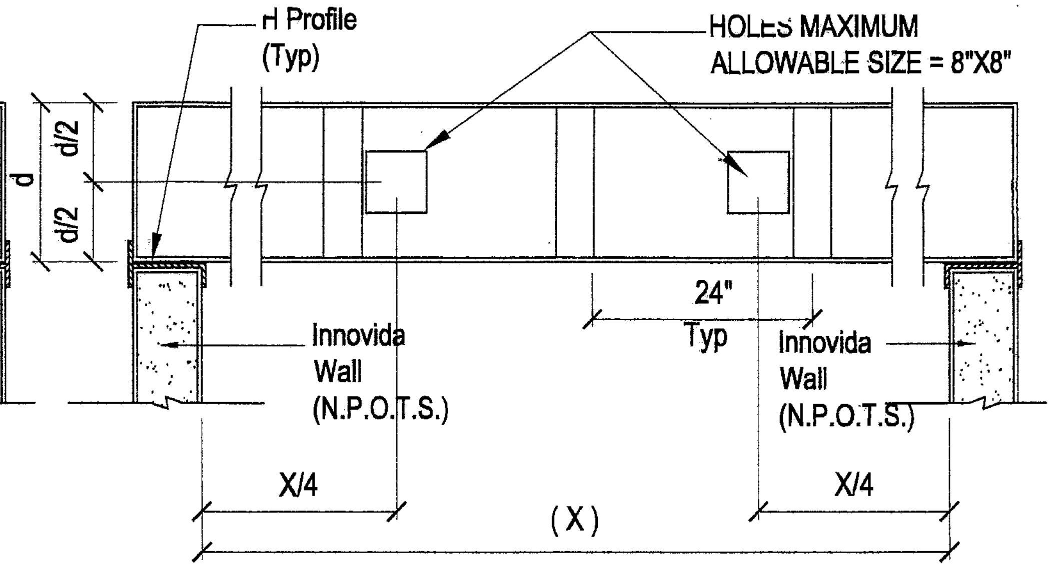


BEAM ELEVATION

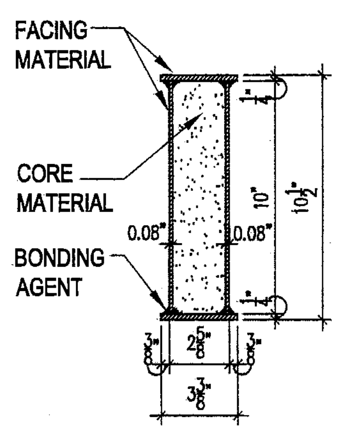
(N.P.O.T.S.) DENOTES "NOT PART OF THIS SUBMITTAL"



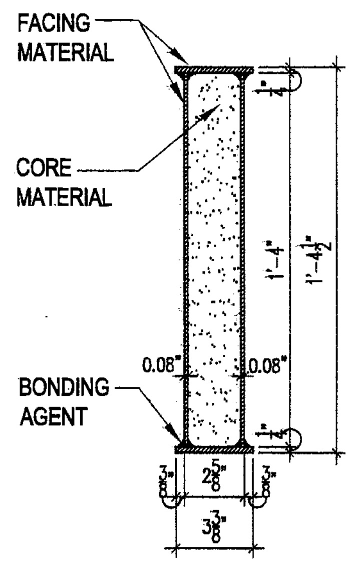
ALLOWABLE BEAM PENETRATIONS
BEAM TYPE 1 & 2



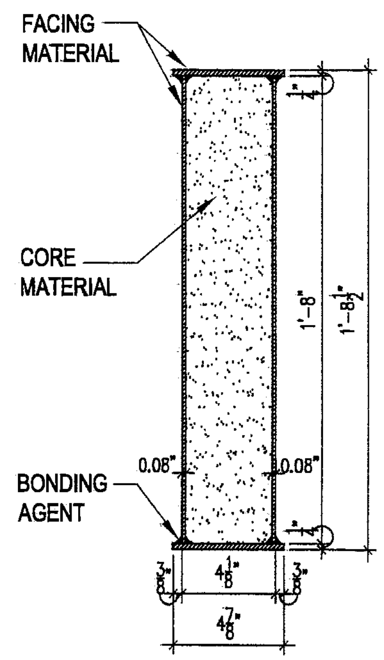
ALLOWABLE BEAM PENETRATIONS
BEAM TYPE 3



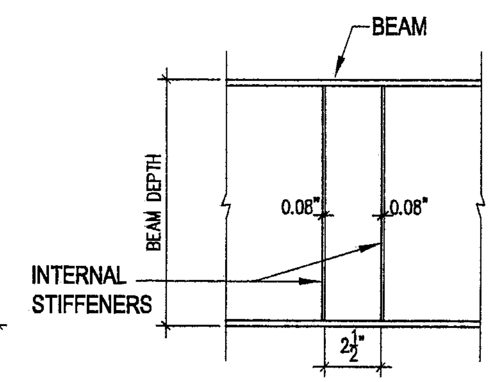
TYPICAL SECTION
BEAM TYPE 1



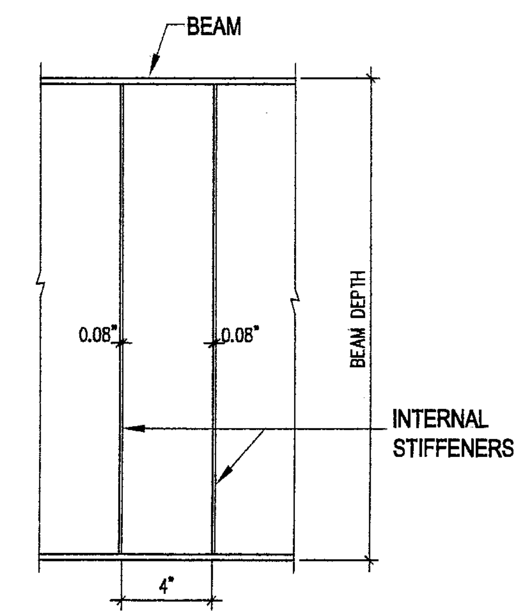
TYPICAL SECTION
BEAM TYPE 2



TYPICAL SECTION
BEAM TYPE 3



INTERNAL STIFFENERS DETAIL
BEAM TYPE - 1 & 2



INTERNAL STIFFENERS DETAIL
BEAM TYPE - 3

BEAM PENETRATION NOTES:

- HOLES SHOWN ON THIS DRAWING ARE MAXIMUM ALLOWABLE SIZE.

- HOLES TO BE PLACED BETWEEN INTERNAL STIFFENERS. INTERNAL STIFFENERS MUST NOT BE CUT.

MAXIMUM BEAM FREE SPAN	
BEAM Type	Max Span (ft)
1	12'-0"
2	16'-0"
3	20'-0"

Approved as complying with the Florida Building Code
Date 08/18/2010
NOA# 09-1228.03
Miami Dade Product Control Division
By [signature]

EASTERN ENGINEERING GROUP
3401 NW 82nd AVENUE, SUITE 370
Miami, Florida 33122
Tel. (305) 599-8133
Fax. (305) 599-8076
www.easterneg.com

NO.	DESCRIPTION	DATE	APP'D

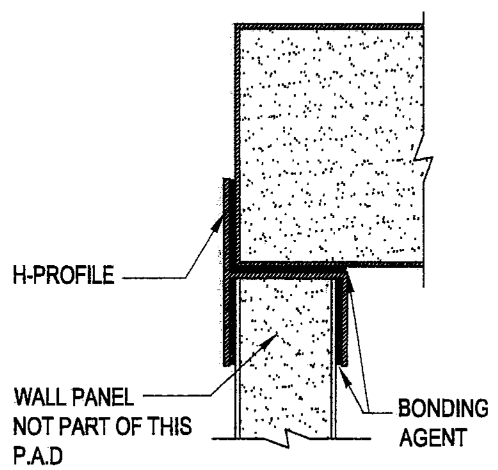
DATE : 12-17-2009
PM : RAISSA R. LOPEZ, P.E.
DRAWN BY : R.L.
DESIGNED BY : R.L.
CHECKED BY : R.L.
JOB NO. : 09-284
SCALE : AS SHOWN

INNOVIDA HOLDINGS INC.
INNOVIDA FIBER COMPOSITE BEAMS
INNOVIDA HOLDINGS INC.
CLIENT ADDRESS: 550 LINCOLN ROAD, SUITE 303, MIAMI BEACH FL 33139
PROJECT LOCATION: N/A

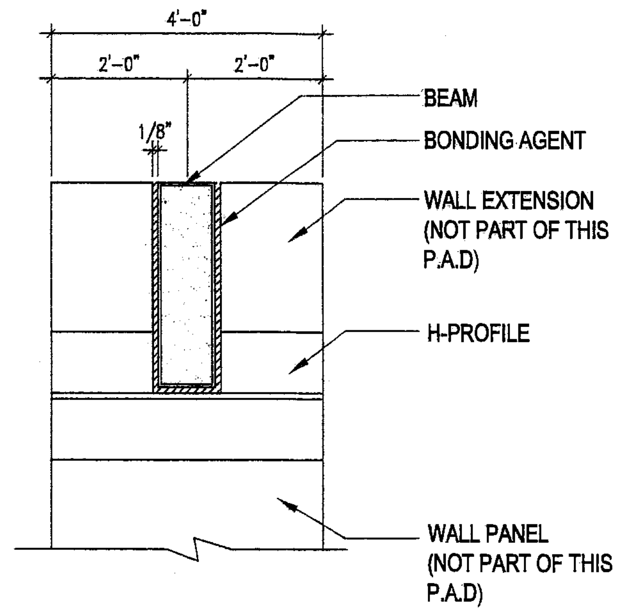
RAISSA R. LOPEZ, PE
GONZALO A. PAZ, PE
CERT. OF AUTHORIZATION No. 26855

[signature] 5/17/10

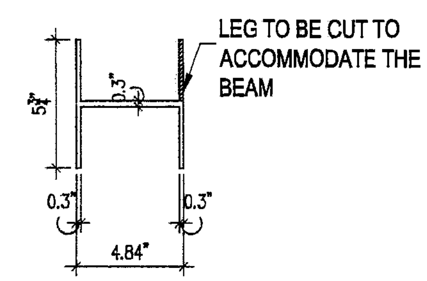
DRAWING NO.
09-100
DRAWING 02of 04



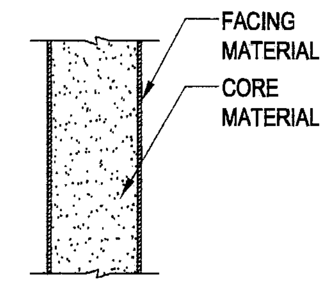
BEAM TO WALL CONNECTION
TYPICAL DETAIL



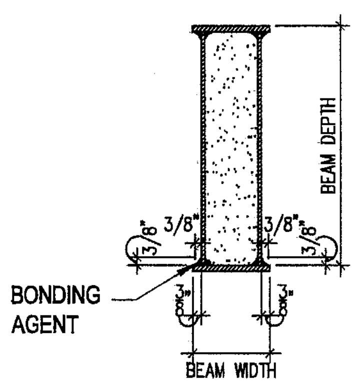
BEAM TO WALL CONNECTION
FRONT ELEVATION



H-PROFILES



WALL PANEL AND
WALL EXTENSION
(NOT PART OF P.A.D.)



BEAM DETAILS
(BONDING AGENT)

BILL OF MATERIALS:

- FACING MATERIAL: 60% BY WEIGHT E-GLASS TRIAXAL FABRICS (FIBERGLASS) AND 40% OF EPOXY RESIN.

- CORE MATERIAL: RIGID POLYURETHANE FOAM TYPE - 1.

-BONDING AGENT : EPOXY SYSTEM, INNOPOX 110 (RESIN), INNOCURE 210 (HARDENER)

-H-PROFILE: SAME MATERIAL AS FACING MATERIAL.

Approved as complying with the
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Date 08/18/2010
NOA# 09-1228.03
Miami Dade Product Control
Division
By

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DATE : 12-17-2009
PM : RAISSA R. LOPEZ, P.E.
DRAWN BY : R.L
DESIGNED BY : R.L
CHECKED BY : R.L
JOB NO. : 09-284
SCALE : AS SHOWN

INNOVIDA HOLDINGS INC.
INNOVIDA FIBER COMPOSITE BEAMS
INNOVIDA HOLDINGS INC.
CLIENT ADDRESS: 560 LINCOLN ROAD, SUITE 303, MIAMI BEACH FL 33139
PROJECT LOCATION: N/A

RAISSA R. LOPEZ, PE
GONZALO A. PAZ, PE
CERT. OF AUTHORIZATION No. 26655

DRAWING NO.
09-100
DRAWING 03 of 04

BEAM ALLOWABLE LINEAL LOAD FOR GRAVITY(PLF)

BEAM TYPE	SECTION SIZE (IN)	FREE SPAN (FT)	DEFLECTION L/180	DEFLECTION L/240	DEFLECTION L/360
1	3 3/8" X 10 1/2"	12'-0"	125	93	58
		11'-0"	136	102	64
		10'-0"	159	112	70
		9'-0"	167	124	78
2	3 3/8" X 16 1/2"	16'-0"	129	97	63
		15'-0"	138	103	67
		14'-0"	148	111	71
		13'-0"	159	119	77
3	4 7/8" X 20 1/2"	20'-0"	94	94	61
		19'-0"	99	99	65
		18'-0"	104	104	68
		17'-0"	110	110	72

BEAM ALLOWABLE LINEAL LOAD FOR UPLIFT (PLF)

BEAM TYPE	SECTION SIZE (IN)	FREE SPAN (FT)	DEFLECTION L/180	DEFLECTION L/240	DEFLECTION L/360
1	3 3/8" X 10 1/2"	12'-0"	102	80	56
		11'-0"	112	87	61
		10'-0"	123	96	67
		9'-0"	137	107	74
2	3 3/8" X 16 1/2"	16'-0"	114	86	56
		15'-0"	122	91	60
		14'-0"	131	98	65
		13'-0"	141	105	70
3	4 7/8" X 20 1/2"	20'-0"	105	89	59
		19'-0"	110	94	62
		18'-0"	117	99	65
		17'-0"	123	105	69

(*)
- A SAFETY FACTOR OF 3.0 HAS BEEN APPLIED FOR ALLOWABLE BENDING AND SHEAR CAPACITY BASED ON ULTIMATE BENDING FAILURE LOAD.
- ALLOWABLE BEAM CAPACITIES SHOWN ON THIS DWG ARE FOR THE BEAM STRONGEST INERTIA.

SPECIFICATION FOR BEAMS:

-INNOVIDA FIBER COMPOSITE BEAMS ARE BASED ON COMPOSITE SANDWICH BEAMS. THE SANDWICH CORE IS MADE OF INSULATION MATERIAL: RIGID POLYURETHANE FOAM TYPE - 1. FACING MATERIAL ARE MADE OF COMPOSITE MATERIALS, 60 % BY WEIGHT E-GLASS TRIAXIAL FABRICS (FIBER GLASS) AND 40% OF EPOXY RESIN. TOP AND BOTTOM FACING MATERIAL HAS A THICKNESS OF 1/4" (7 LAYERS) AND SIDES FACING MATERIAL HAS A THICKNESS OF 0.08" (2 LAYERS). THE STIFFENERS OF THE BEAM IS INCREASED BY MATERIAL INSIDE THE BEAM CORE

-INNOVIDA FIBER COMPOSITE BEAMS BEAR AN EVALUATION REPORT BASED ON THE FOLLOWING TESTING PERFORMED ON THIS PRODUCT:

		REPORT No.
ASTM E 529	FLEXURAL TEST	HETI - 09 -4012 (BEAM TYPE 1)
ASTM E 529	FLEXURAL TEST	HETI - 09 -4011 (BEAM TYPE 2)
ASTM E 529	FLEXURAL TEST	HETI - 09 -4016 (BEAM TYPE 3)
ASTM D 635	RATE OF BURNING	ETC - 08-1024-20732.0
ASTM D 1929	TEST FOR SELF IGNITION TEMP.	ETC - 08-1024-20732.0
ASTM D 2843	TEST FOR SMOKE DENSITY	ETC - 08-1024-20732.0
ASTM G 155	UV TEST	HETI-08-A101, HETI-08-T184 & HETI-08-T185
ASTM D 638	TENSILE TEST	HETI - 09 -T147

Approved as complying with the Florida Building Code
Date 08/18/2010
NOA# 09-1228.03
Miami Dade Product Control Division
By [signature]

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PM : RAISSA R. LOPEZ, P.E.
DRAWN BY : R.L.
DESIGNED BY : R.L.
CHECKED BY : R.L.
JOB NO. : 09-284
SCALE : AS SHOWN

INNOVIDA HOLDINGS INC.
INNOVIDA FIBER COMPOSITE BEAMS
CLIENT: INNOVIDA HOLDINGS INC.
ADDRESS: 560 LINCOLN ROAD, SUITE 303, MIAMI BEACH FL 33139
PROJECT LOCATION: N/A

[illegible]

7/21/10

DRAWING NO.
09-100
DRAWING 04 of 04