



**BUILDING AND NEIGHBORHOOD COMPLIANCE
DEPARTMENT (BNC)
BOARD AND CODE ADMINISTRATION DIVISION**

**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/building

NOTICE OF ACCEPTANCE (NOA)

**Canadian General-Tower Limited
52 Middleton Street
Cambridge, Ontario
Canada N1R 5T6**

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 BNC -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. BNC 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 and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Tower Single Ply PVC Roof Systems over Steel Decks

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 renews NOA No. 04-0113.03 and consists of pages 1 through 4.
The submitted documentation was reviewed by Jorge L. Acebo.



**NOA No.: 11-0214.03
Expiration Date: 05/06/14
Approval Date: 04/21/11
Page 1 of 4**

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: PVC
Deck Type: Steel
Maximum Design Pressure -60 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Tower PVC		ASTM D 4434	Polyester reinforced PVC membrane.

APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
ACFoam II, ACFoam III	Polyisocyanurate Insulation	Atlas Roofing Corp.
ENRGY 3	Polyisocyanurate Insulation	Johns Manville

APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Dekfast Fasteners	Insulation and membrane fastener	Various	Construction Fasteners, Inc.
2.	Extra Load Fastener	Insulation fastener for use in wood and steel decks	Various	SFS Intec, Inc.
3.	Dekfast HS Plate	Galvalume stress plate.	2 1/2" round	Construction Fasteners, Inc.
4.	Olympic XHD Fasteners		Various	Olympic Mfg. Group
5.	Olympic XHD Plate	Galvalume AZ55 stress plate	2-3/8" round	Olympic Mfg. Group

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp.	FMRC 4470	3005937 3005938	11/23/99
Underwriters Laboratories, Inc.	UL 790	97NK38018	07/22/98
	CGSB-37.54-95	02NK18635	11/12/03
Trinity ERD	ASTM D4434	C35830.03.11	03/28/11



NOA No.: 11-0214.03
 Expiration Date: 05/06/14
 Approval Date: 04/21/11
 Page 2 of 4

APPROVED ASSEMBLIES

Membrane Type: Single Ply, Thermoplastic PVC, Insulated

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga., type B, Grade 80 steel decking secured to minimum 0.25 in. thick structural steel supports spaced a maximum of 6 ft o.c. with ITW Buildex Traxx/5 fasteners as maximum of 6" o.c. at each structural steel support. The deck side laps are secured with ITW Buildex Traxx/I fasteners a maximum of 24" o.c.

System Type D: Membrane mechanically attached over preliminary fastened insulation.

One or more layers of the following.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
AC Foam II, AC Foam III Minimum 1.3" thick	N/A	N/A
ENRGY 3 Minimum 1.4" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the membrane sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See membrane sheet below for fasteners and density.

Vapor Retarder: Any UL or FMRC approved vapor retarder may be installed on the deck or over the layer of insulation.

Barrier: None.

Membrane: Tower PVC mechanically fastened through the insulation as specified below:

Fastening #1: Install maximum 72" wide sheets with a 5" overlap fastened 12" o.c. using Olympic XHD Fasteners and XHD Plates or Dekfast #15 Fasteners, SFS Extra Load Fasteners and HS Plates. The roof cover outer 1-1/2" side lap is heat welded.
Maximum Design Pressure –45 psf (See General Limitation #7)

Fastening #2: Install maximum 72" wide sheets with a 5" overlap fastened 6" o.c. using Olympic XHD Fasteners and XHD Plates or Dekfast #15 Fasteners, SFS Extra Load Fasteners and HS Plates. The roof cover outer 1-1/2" side lap is heat welded.
Maximum Design Pressure –60 psf (See General Limitation #7)

Maximum Design Pressure: See Fastening Options Above



STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 11-0214.03
Expiration Date: 05/06/14
Approval Date: 04/21/11
Page 4 of 4