

EcoTon

Características Generales de los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon

Los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon VentDepot, son equipos industriales de alta duración y tienen una capacidad de extracción altísima, ya que cuentan con muchas turbinas muy efectivas al viento, fabricadas en 100% Aluminio.

Incluyen base de extracción, cuello y turbina.

Bases disponibles en Lámina Galvanizada, Lámina Pintro y Aluminio.

Ideales para instalarse en cumbrera a dos aguas, techo plano y a un agua.

Estos equipos ahorran energía eléctrica y están libres de mantenimiento.

Diseñado con las normas internacionales y aprobado por la I.V.S. (Industrial Ventilation Society).

Aplicaciones de los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon

Los Extractores Atmosféricos Gravitatorios + Eólicos EcoTon pueden extraer: Calor, vapor, humo, olores solventes y gases.

Para uso en: Naves industriales talleres, almacenes y/o lugares con alta salinidad o humedad, fabricas, ventilación general en bodegas de grandes dimensiones, entre otros.

Garantía de los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon

Los Extractores Atmosféricos Gravitatorios + Eólicos EcoTon, tienen una garantía de:

Base de Aluminio: 30 años.

Base de Lámina Pintro: 5 años.

Base de Lámina Galvanizada: 3 años.

Sujeto a las cláusulas de garantía de VentDepot.



MXETN-001 al MXETN-006

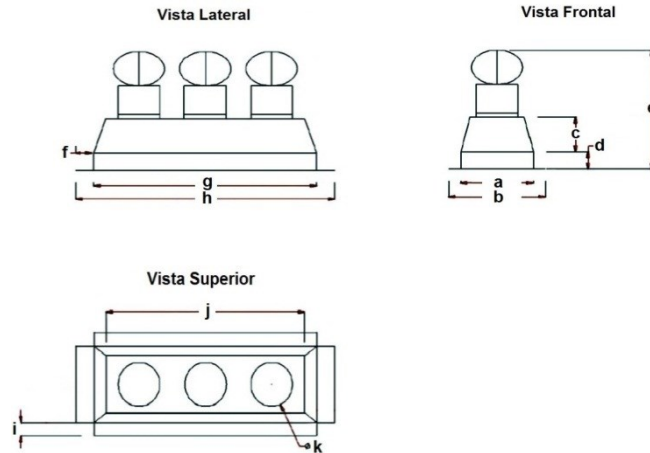


MXETN-007 al MXETN-012

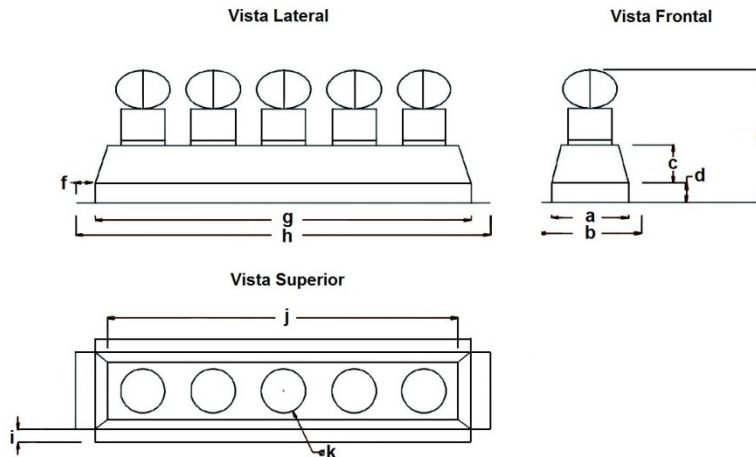
Características Técnicas Específicas de los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon										
Clave	Material de la base	Garganta		Caudal		Tipo de Techo	Calibre	Turbinas	Peso kg	Dimensiones con envoltura de plástico cm
		mm	in	m3/hr	CFM					
MXETN-001	Galvanizado	813x2185	32x86	13500	7941	A 2 aguas y/o cumbrera	22	3	37	82,106,219
MXETN-002	Galvanizado	813x2185	32x86	13500	7941	A 1 agua y/o perpendicular a cumbrera	22	3	37	82,106,219
MXETN-003	Pintro	813x2185	32x86	13500	7941	A 2 aguas y/o cumbrera	22	3	37	82,106,219
MXETN-004	Pintro	813x2185	32x86	13500	7941	A 1 agua y/o perpendicular a cumbrera	22	3	37	82,106,219
MXETN-005	Aluminio	813x2185	32x86	13500	7941	A 2 aguas y/o cumbrera	22	3	24	82,106,219
MXETN-006	Aluminio	813x2185	32x86	13500	7941	A 1 agua y/o perpendicular a cumbrera	22	3	24	82,106,219
MXETN-007	Galvanizado	813x3302	32x130	22500	13235	A 2 aguas y/o cumbrera	22	5	65	82,106,331
MXETN-008	Galvanizado	813x3302	32x130	22500	13235	A 1 agua y/o perpendicular a cumbrera	22	5	65	82,106,331
MXETN-009	Pintro	813x3302	32x130	22500	13235	A 2 aguas y/o cumbrera	22	5	65	82,106,331
MXETN-010	Pintro	813x3302	32x130	22500	13235	A 1 agua y/o perpendicular a cumbrera	22	5	65	82,106,331
MXETN-011	Aluminio	813x3302	32x130	22500	13235	A 2 aguas y/o cumbrera	22	5	40	82,106,331
MXETN-012	Aluminio	813x3302	32x130	22500	13235	A 1 agua y/o perpendicular a cumbrera	22	5	40	82,106,331

Dimensiones de los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon

MXETN-001 al MXETN-006



MXETN-007 al MXETN-012



Dimensiones (mm)

Clave	a	b	c	d	e	f	g	h	i	j	k
MXETN-001	610	813	305	153	1055	153	1880	2185	102	1677	352
MXETN-002	610	813	305	153	1055	153	1880	2185	102	1677	352
MXETN-003	610	813	305	153	1055	153	1880	2185	102	1677	352
MXETN-004	610	813	305	153	1055	153	1880	2185	102	1677	352
MXETN-005	610	813	305	153	1055	153	1880	2185	102	1677	352
MXETN-006	610	813	305	153	1055	153	1880	2185	102	1677	352
MXETN-007	610	813	305	153	1055	153	2998	3303	102	2794	352
MXETN-008	610	813	305	153	1055	153	2998	3303	102	2794	352
MXETN-009	610	813	305	153	1055	153	2998	3303	102	2794	352
MXETN-010	610	813	305	153	1055	153	2998	3303	102	2794	352
MXETN-011	610	813	305	153	1055	153	2998	3303	102	2794	352
MXETN-012	610	813	305	153	1055	153	2998	3303	102	2794	352



Formula para cálculo de Extracción de un EcoTon

De las fórmulas siguientes elegir la fórmula del EcoTon correspondiente.

Capacidad de Extracción para modelo **MXETN-001** al **MXETN-006**

$$\text{Extracción* MXETN-001} = (0.818 + [0.0303 \times A]) \times (121.5 + [103.4 \times V] + [11.6 \times G] + [5.6 \times T]) \times 6.30$$

Capacidad de Extracción para modelo **MXETN-007** al **MXETN-012**

$$\text{Extracción* MXETN-007} = (0.818 + [0.0303 \times A]) \times (121.5 + [103.4 \times V] + [11.6 \times G] + [5.6 \times T]) \times 10.75$$

A = Altura de montaje del EcoTon sobre el piso, en metros.

V = Velocidad del viento media anual, en km/hr.

G = Gradiente Térmico medio anual, en °C, (Temp. Interior. - Temp. Exterior.)

T = Temperatura Regional media anual, en °C. Ver Tabla.

*La capacidad de extracción de aire está dada en m³/hr.

*A continuación hemos elaborado tablas de capacidades de extracción en base a las fórmulas anteriores, facilitando los cálculos.

Formula para el cálculo de extracción para cada EcoTon

En base a la tabla inferior ubicar la región donde se van a instalar los TurboAtmosféricos TurboJoule para obtener la velocidad de viento y temperatura media anual. Ejemplo: **Chiapas = Velocidad del viento (18) Temp. (22).**

Estado	Viento Km/Hr	Temperatura °C	Estado	Viento Km/Hr	Temperatura °C	Estado	Viento Km/Hr	Temperatura °C
Aguascalientes	10	19	Guerrero	11	27	Quintana Roo	13	28
Baja California norte	14	17	Hidalgo	16	15	San Luís Potosí	15	18
Baja California Sur	12	25	Jalisco	8	20	Sinaloa	11	27
Campeche	12	28	México	14	20	Sonora	13	24
Chiapas	18	22	Michoacán	10	24	Tabasco	11	29
Chihuahua	9	20	Morelos	7	20	Tamaulipas	10	26
Coahuila	11	19	Nayarit	10	12	Tlaxcala	11	15
Colima	10	27	Nuevo León	8	22	Veracruz	15	26
Distrito Federal	15	18	Oaxaca	10	21	Yucatán	12	26
Durango	12	13	Puebla	15	17	Zacatecas	11	26
Guanajuato	14	20	Querétaro	7	18	Quintana Roo		

Posteriormente elegir en las tablas de la siguiente hoja, la cantidad de calor que se siente o produce dentro de la nave, evaluando con las siguientes opciones:

Ejemplo: Nave Industrial donde tenemos hornos (Este caso sería un lugar donde se está acumulando mucho calor, entonces la tabla correspondiente sería: "**Área o lugar con Mucho Calor**", y en base a la ubicación regional de Chiapas, la capacidad de extracción de cada EcoTon modelo **MXETN-007** al **MXETN-012** instalado en esa zona es de **26709 m³/Hr**).

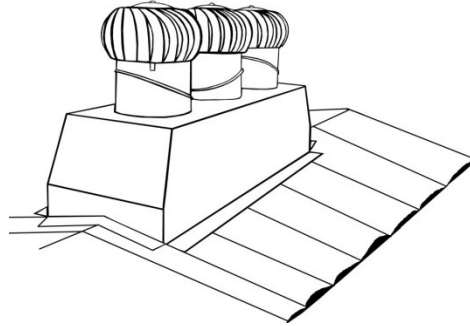
* Capacidad de Extracción de MXTNT-001 al 006								* Capacidad de Extracción de MXTNT-007 al 012							
Área o Lugar con Poco Calor								Área o Lugar con Poco Calor							
Diferencial Térmico (Temp. Interior - Exterior) °C = 15								Diferencial Térmico (Temp. Interior - Exterior) °C = 15							
Temperatura de la región (°C)								Temperatura de la región (°C)							
16 20 22 26 30 35								16 20 22 26 30 35							
Vel.	7	6869	6884	6892	6907	6922	6940	Vel.	7	11721	11747	11760	11785	11811	11843
Viento	9	8251	8266	8273	8288	8303	8322	Viento	9	14079	14104	14117	14143	14168	14200
(Km/Hr)	11	9632	9647	9655	9670	9685	9703	(Km/Hr)	11	16436	16462	16474	16500	16526	16557
	13	11014	11029	11036	11051	11066	11085		13	18794	18819	18832	18857	18883	18915
	15	12395	12410	12418	12433	12448	12467		15	21151	21176	21189	21215	21240	21272
	17	13777	13792	13799	13814	13829	13848		17	23508	23534	23547	23572	23598	23630
	18	14468	14483	14490	14505	14520	14539		18	24687	24713	24725	24751	24776	24808
Área o Lugar con Calor								Área o Lugar con Calor							
Diferencial Térmico (Temp. Interior - Exterior) °C = 23								Diferencial Térmico (Temp. Interior - Exterior) °C = 23							
Temperatura de la región (°C)								Temperatura de la región (°C)							
16 20 22 26 30 35								16 20 22 26 30 35							
Vel.	7	7489	7504	7512	7527	7542	7560	Vel.	7	12779	12805	12818	12843	12869	12901
Viento	9	8871	8886	8893	8908	8923	8942	Viento	9	15137	15162	15175	15201	15226	15258
(Km/Hr)	11	10252	10267	10275	10290	10305	10323	(Km/Hr)	11	17494	17520	17532	17558	17583	17615
	13	11634	11649	11656	11671	11686	11705		13	19851	19877	19890	19915	19941	19973
	15	13015	13030	13038	13053	13068	13086		15	22209	22234	22247	22273	22298	22330
	17	14397	14412	14419	14434	14449	14468		17	24566	24592	24604	24630	24656	24687
	18	15088	15103	15110	15125	15140	15159		18	25745	25770	25783	25809	25834	25866
Área o Lugar con Mucho Calor								Área o Lugar con Mucho Calor							
Diferencial Térmico (Temp. Interior - Exterior) °C = 30								Diferencial Térmico (Temp. Interior - Exterior) °C = 30							
Temperatura de la región (°C)								Temperatura de la región (°C)							
16 20 22 26 30 35								16 20 22 26 30 35							
Vel.	7	8032	8047	8054	8069	8084	8103	Vel.	7	13705	13730	13743	13769	13794	13826
Viento	9	9413	9428	9436	9451	9466	9484	Viento	9	16062	16088	16101	16126	16152	16184
(Km/Hr)	11	10795	10810	10817	10832	10847	10866	(Km/Hr)	11	18420	18445	18458	18484	18509	18541
	13	12176	12191	12199	12214	12229	12247		13	20777	20803	20815	20841	20866	20898
	15	13558	13573	13580	13595	13610	13629		15	23134	23160	23173	23198	23224	23256
	17	14939	14954	14962	14977	14992	15010		17	25492	25517	25530	25556	25581	25613
	18	15630	15645	15653	15668	15683	15701		18	26670	26696	26708 *	26734	26760	26792

*La capacidad de extracción de aire esta dada en **m3/hr**.

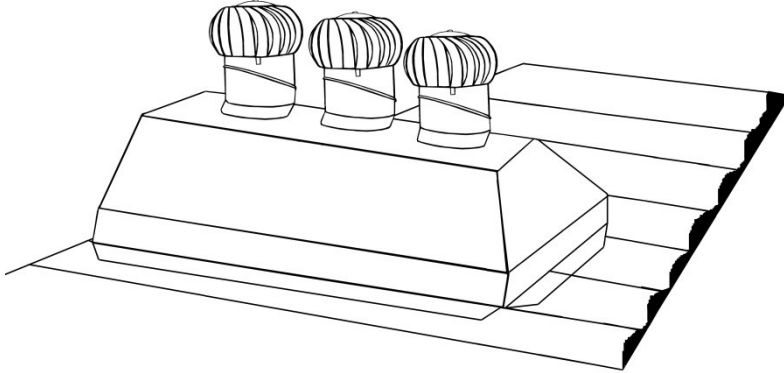
Las capacidades de extracción de aire están medidas a una altura de 8 metros sobre piso

Aplicaciones de los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon

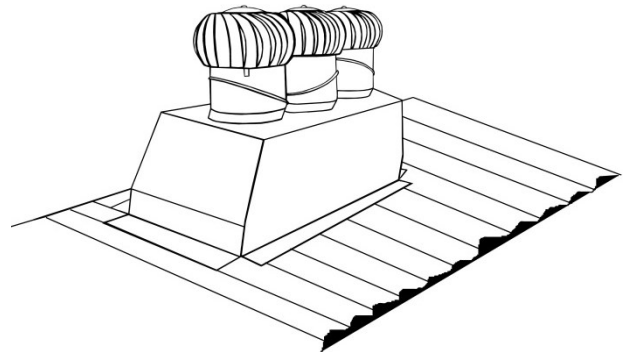
Montaje a dos aguas y/o cumbre



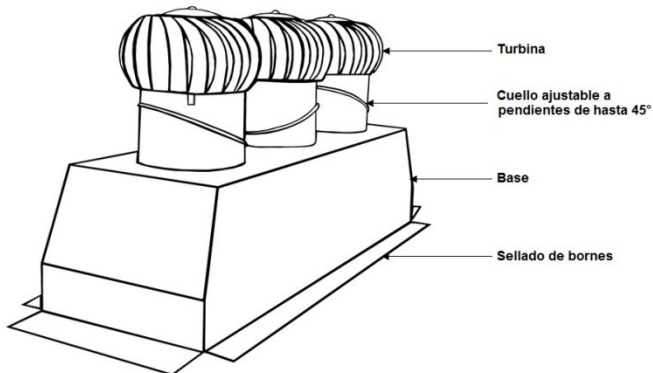
Montaje a un agua y/o perpendicular a cumbre



No recomendable



Galería de Imágenes de los Extractores Atmosféricos Gravitatorios + Eólicos, EcoTon



MXETN-001 al MXETN-006



MXETN-007 al MXETN-012

Componentes del Extractor Atmosférico Gravitatorio + Eólico, EcoTon

VentDepot Inc. APPENDIX for NOTICE OF ACCEPTANCE (NOA) Supported by MIAMI-DADE COUNTY FLORIDA™ to LOMANCO, INC.™ accepted by the BOARD OF RULES AND APPEALS (BORA)™



BUILDING CODE COMPLIANCE OFFICE (BCCO)
 PRODUCT CONTROL DIVISION



NOA No.: 15-0831.08
 Expiration Date: 12/22/20
 Approval Date: 11/05/15

VentDepot, Inc.
 233 S Cerritos Ave.
 Azusa, CA 91702

This Appendix provides information about VentDepot, Inc. products, regarding the NOA issued for Lomanco, Inc. applicable rules and regulations governing the use of construction materials to VentDepot, Inc. official and only company that represents and distributes Lomanco, Inc.™ and its products in Mexico, Central America, South America and the Caribbean.

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.

This product distributed by VentDepot, Inc. in representation for Lomanco, Inc. is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone of the Florida Building Code.

• DESCRIPTION:

- BIB-14/BEB14 WhirlyBird® Wind Turbine.
- VentDepot TurboVent USETE-001
- VentDepot Turbo Extractor MXETE-001
- VentDepot TurboJoule MXTUJ-001, MXTUJ-002, MXTUJ-003
- VentDepot EcoTon MXTNT-001, MXTNT-002, MXTNT-003, MXTNT-004, MXTNT-005, MXTNT-006, MXTNT-007, MXTNT-008, MXTNT-009, MXTNT-010, MXTNT-011, MXTNT-012

Above VentDepot products are the equivalent on Lomanco BIB-14/BEB14 WhirlyBird® Wind Turbine.

Each product shall bear a permanent label with the manufacturer's name, Lomanco logo, state and the



following statement:

VentDepot Inc. APPENDIX for NOTICE OF ACCEPTANCE (NOA) Supported by MIAMI-DADE COUNTY FLORIDA™ to LOMANCO, INC.™ accepted by the BOARD OF RULES AND APPEALS (BORA)™



ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Ventilation
Type: Turbine
Materials: Aluminum
Deck: Wood

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
BIB-14/BEB14 WhirlyBird®	22" wide at base 17-1/8" high Base 0.0253" thick Elbow & Dome 0.032" thick Vanes 0.19" thick Rotr Band 0.0305"thick Extrusions 0.125" thick	TAS 100(A)	14" diameter opening turbine ventilation system



VentDepot Inc. APPENDIX for NOTICE OF ACCEPTANCE (NOA) Supported by MIAMI-DADE COUNTY FLORIDA™ to LOMANCO, INC.™ accepted by the BOARD OF RULES AND APPEALS (BORA)™



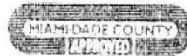
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION



**TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY VentDepot, Inc.
representative of Lomanco, Inc.**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
USETTE-001	22" wide at base 23" high 23" depth, 14"Ø Neck, 2bearings Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXETE-001	22" wide at base 23" high 23" depth, 14"Ø Neck, 2bearings Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXTUJ-001	28" x 22" base 37" high 53" wide 47 depth Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXTUJ-002	36" x 22" base 41" high 61" wide 47 depth Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXTUJ-003	48" x 22" base 41" high 73" wide 47 depth Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-001	32" x 86" base 17" high 13" wide 34" depth 3 Neck 14"Ø, 2 slopes Galvanized	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-002	32" x 86" base 17" high 13" wide 34" depth 3 Neck 14"Ø, 1 slope Galvanized	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-003	32" x 86" base 17" high 13" wide 34" depth 3 Neck 14"Ø, 2 slopes Powder Coated paint	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-004	32" x 86" base 17" high 13" wide	TAS 100(A)	17" diameter opening turbine

VentDepot Inc. APPENDIX for NOTICE OF ACCEPTANCE (NOA) Supported by MIAMI-DADE COUNTY FLORIDA™ to LOMANCO, INC.™ accepted by the BOARD OF RULES AND APPEALS (BORA)™



TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY VentDepot, Inc. representative of Lomanco, Inc.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
MXTNT-005	32" x 86" base 17" high 13" wide 34" depth 3 Neck 14"Ø, 2 slopes Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-006	32" x 86" base 17" high 13" wide 34" depth 3 Neck 14"Ø, 1 slopes Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-007	32" x 130" base 17" high 13" wide 34" depth 5 Neck 14"Ø, 2 slopes Galvanized	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-008	32" x 130" base 17" high 13" wide 34" depth 5 Neck 14"Ø, 1 slopes Galvanized	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-009	32" x 130" base 17" high 13" wide 34" depth 5 Neck 14"Ø, 2 slopes Powder Coated paint	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-010	32" x 130" base 17" high 13" wide 34" depth 5 Neck 14"Ø, 1 slopes Powder Coated paint	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-011	32" x 130" base 17" high 13" wide 34" depth 5 Neck 14"Ø, 2 slopes Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system
MXTNT-012	32" x 130" base 17" high 13" wide 34" depth 5 Neck 14"Ø, 1 slopes Aluminum	TAS 100(A)	17" diameter opening turbine ventilation system

VentDepot Inc. APPENDIX for NOTICE OF ACCEPTANCE (NOA) Supported by MIAMI-DADE COUNTY FLORIDA™ to LOMANCO, INC.™ accepted by the BOARD OF RULES AND APPEALS (BORA)™



BUILDING CODE COMPLIANCE OFFICE (BCCO)
 PRODUCT CONTROL DIVISION



LIMITATIONS:

1. Refer to applicable building codes for required ventilation.
2. This acceptance is for installations over asphaltic shingle or low slope roofing.
3. The BIB-14/BEB14 WhirlyBird[®] Wind Turbine, **VentDepot TurboVent** USETE-001, **VentDepot Turbo Extractor** MXETE-001, **VentDepot TurboJoule** MXTUJ-001, MXTUJ-002, MXTUJ-003, **VentDepot EcoTon** MXTNT-001, MXTNT-002, MXTNT-003, MXTNT-004, MXTNT-005, MXTNT-006, MXTNT-007, MXTNT-008, MXTNT-009, MXTNT-010, MXTNT-011, MXTNT-012 turbine roof ventilators shall not be installed on roof mean heights greater than 33ft.

DETAILED DRAWINGS:

The detailed drawings of BIB-14/BEB14 WhirlyBird[®] Wind Turbine, **VentDepot TurboVent** USETE-001, **VentDepot Turbo Extractor** MXETE-001, **VentDepot TurboJoule** MXTUJ-001, MXTUJ-002, MXTUJ-003, **VentDepot EcoTon** MXTNT-001, MXTNT-002, MXTNT-003, MXTNT-004, MXTNT-005, MXTNT-006, MXTNT-007, MXTNT-008, MXTNT-009, MXTNT-010, MXTNT-011, MXTNT-012 turbine roof ventilators are shown in page 4 to 5 of **NOA No.: 10-0928.05 Expiration Date:**

VentDepot.com

Aire Acondicionado, Ventilación y Calefacción Ecológica
Call Center Nacional: 01 800 999.1516
Call Center México: (55) 5822.1516
Tienda: www.VentDepot.com E-mail: ventas@ventdepot.com



EcoTon



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

NOTICE OF ACCEPTANCE (NOA)

Lomanco, Inc.
2101 W. Main Street
Jacksonville, AR 72076

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 of the Florida Building Code.

DESCRIPTION: BIB-14/ BEB-14 WhirlyBird® Wind Turbine

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 renews NOA # 05-0823.06 consists of pages 1 through 5.
The submitted documentation was reviewed by Alex Tigera.





ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Ventilation
Type: Turbine
Materials: Aluminum
Deck: Wood

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
BIB-14/ BEB-14 WhirlyBird®	22" wide at base 17-1/8" high Base 0.0253" thick Elbow & Dome 0.032" thick Vanes 0.019" thick Rotor Band 0.0305" thick Extrusions 0.125" thick	TAS 100(A)	14" diameter opening turbine ventilation system.

MANUFACTURING LOCATION

1 Jacksonville, AR

EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
PRI Asphalt Technologies, Inc.	LOM-019-02-01	TAS 100(A)	09/01/10





APPROVED ASSEMBLY:

System Type A: Mechanical attachment of turbine vent over composite shingles

Cutout: At chosen location (see Lomanco instructions for proper placement) and centered between two roof rafters, cut a 14" diameter hole through shingles and sheathing boards. Seal around top and sides of hole with approved roofing cement.

Installation Determine roof pitch in compliance with Lomanco instructions and align roof pitch number on elbow with indicator line on flashing. Place three short screws through holes that line up with pre-drilled holes in base.

Place mounting base unit flat on the shingles on its flashing, and coat underside of base flashing with roofing cement. In its pitch-adjusted position, carefully slide upper half of flashing up roof beneath shingles previously rolled back until base is centered over cutout. Rolling back the shingles where necessary, and rechecking pitch setting for vertical alignment, secure the base unit to the roof deck with a minimum of fourteen ring shank roofing nails, equally spaced, approximately 3/4" from edge of base per detail drawing "Base". Nails shall be of sufficient length to penetrate through roof sheathing a minimum of 1/2". Apply roofing cement to underside of shingles overlapping flashing, and press them down onto the flashing.

Rotate top of elbow to level position by turning counterclockwise. Place locking clamp across seam and tighten as shown in Lomanco instructions with approved sheet metal screw. Seal all seams and nails with approved roofing cement.

Position whirlybird on the base. Line up the pre-drilled holes in the brackets and base and fasten with approved long sheet metal screws.

After installation, verify that whirlybird turns freely. If necessary, minor adjustment may be made by gently prying lowest point of turbine upward to remove any wobble.

Net Free Area: Refer to manufacturers published literature.

Slope: Minimum 2" on 12"

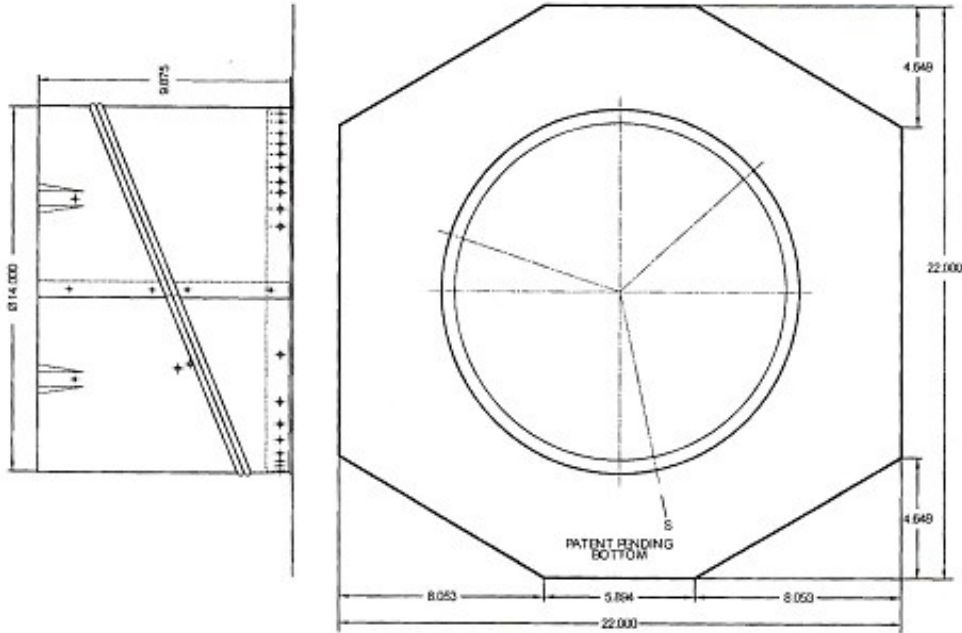
LIMITATIONS:

1. Refer to applicable building codes for required ventilation.
2. This acceptance is for installations over asphaltic shingle or low slope roofing.
3. BIB-14/BEB-14 Whirlybird® turbine roof ventilators shall not be installed on roof mean heights greater than 33 ft



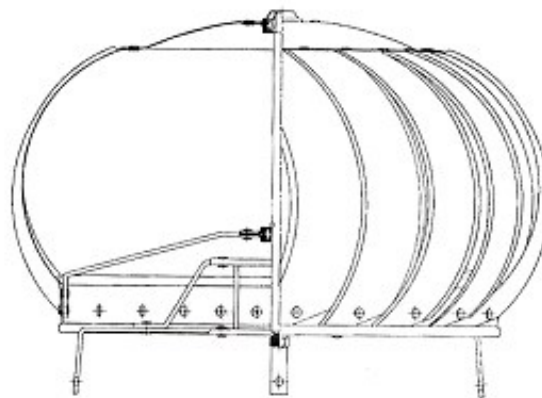
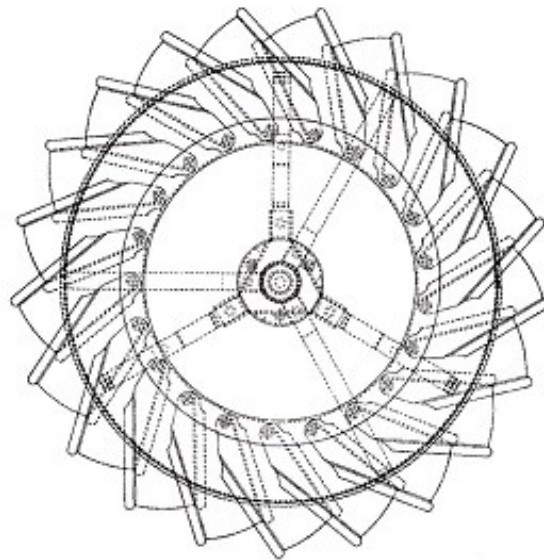


DETAIL DRAWINGS



Base

DETAILED DRAWINGS (CONTINUED)



BIB-14, BEB-14
END OF THIS ACCEPTANCE

