

General Characteristics

- ▶ The TurboVent Turbine & TurboVentHead is manufactured in 100% anodized aluminum.
- ▶ Definitely the most economical way to ventilate any space being industrial, commercial, or residential.
- ▶ Comes with two sealed bearings, steel ball bearings, 21 aerodynamically curved blades, and a total of 42 aqua channels.
- ▶ Totally water proof, resists winds up to 144 MPH
- ▶ Built with our own SpiderStrong aluminum frame
- ▶ Base adjustable to a 12/12 grade or 45 degree pitch
- ▶ Zero electrical bills and zero maintenance.
- ▶ Designed with U.S. and international norms
- ▶ Approved by the I.V.S (Industrial Ventilation Society).

Application

- ▶ Removes heat, vapor, gasses, odors, smoke, solvents, and humidity
- ▶ For general ventilation use, such as warehouses, factories, farms, stores, and homes

Warranty

- ▶ Manufacturer's Limited Warranty: 30 Years.

USETE-001 to USETE-003
TurboVent



VentDepot.com

USETE-004 to USETE-006
TurboVentHead



VentDepot.com

Technical Characteristics

Clave	Material	Quantity	Includes:			Weight and Shipping Size	
			Turbine	VariPitch Neck	Flat Base	lbs	In or ft (L,W,H)
USETE-001	Anodized Aluminum	1	Yes	Yes	Yes	9	22,23,23 in
USETE-002	Anodized Aluminum	144 20FT Container	Yes	Yes	Yes	1296	20,8,8 ft
USETE-003	Anodized Aluminum	288 40FT Container	Yes	Yes	Yes	2592	40,8,8 ft
USETE-004	Anodized Aluminum	1	Yes	No	No	7	22,23,12 in
USETE-005	Anodized Aluminum	288 20FT Container	Yes	No	No	2016	20,8,8 ft
USETE-006	Anodized Aluminum	576 40FT Container	Yes	No	No	4032	40,8,8 ft

Construction Characteristics of our Aluminum Sheet Turbine Exhaust Fans

- ▶ Aluminum Alloys of our Aluminum Sheet Turbine Exhaust Fans. Conform to ASTM B209 and ASTM B221.
- ▶ Aluminum Turbine Ventilator Vanes of 0.019" 3105 H-14, Aluminum Coiled Sheet.
- ▶ Aluminum Turbine Ventilator Base of 0.024" 5005 H-32, Aluminum Coiled Sheet.
- ▶ Aluminum Turbine Ventilator Elbow of 0.0305" 3105 H-14, Aluminum Coiled Sheet.
- ▶ Aluminum Turbine Ventilator Dome of 0.032" 5005-0, Aluminum Coiled Sheet.
- ▶ Aluminum Turbine Ventilator C-Brace of 0.125" 6063-T5, Aluminum Extrusion.
- ▶ Aluminum Turbine Ventilator Rotor Bracket of 0.125" 6063-T5, Aluminum Extrusion.
- ▶ Aluminum Turbine Ventilator Shaft of 0.500" 2011, T-3, Aluminum Extrusion.
- ▶ Aluminum Turbine Ventilator Paint is applied baked on Durathane with minimum 0.8mm topcoat and minimum 0.3 washcoat thickness.

Dimensions

Clave	Turbine			VariPitch Neck			Flat Base		
	∅ in A	in B	∅ in C	in D	in E	∅ in F	in G	in H	∅ in I
USETE-001	15"	10"	17"	10"	14"	14"	22"	22"	13"
USETE-002	15"	10"	17"	10"	14"	14"	22"	22"	13"
USETE-003	15"	10"	17"	10"	14"	14"	22"	22"	13"
USETE-004	15"	10"	17"						
USETE-005	15"	10"	17"						
USETE-006	15"	10"	17"						

Dimensions



Functionality

- ▶ Begins working with wind as low as 1.5MPH
- ▶ The TurboVent is so quiet and operates at the slightest breeze. When others barely start to operate the TurboVent already did the job.



- ▶ It also operates with a heat differential of 5°F.
- ▶ It has a super flow effect when other intakes and fan injectors are present.

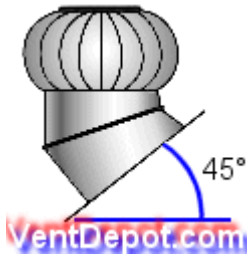
Ball Bearing System



- ▶ As any rotating mechanism, it requires a ball bearing system. We have included 2 of the best in the world ball bearings in each TurboVent to minimize wear and maintain optimal functionality.

- ▶ Bearing concentricity at 0.001 in.
- ▶ Ultrasonic welding for perfect sealing.
- ▶ 9 steel ball bearings per ball bearing withstanding up to 1100 lbs of force.
- ▶ Permanent seal that leaves dust out and lubricant in.

Other Qualities



- ▶ The VariPitch neck allows a roof inclination of 12/12 ft or up to 45° pitch.
- ▶ The light weight of the TurboVent allows for easy installation on critical roof places where needed the most.



- ▶ The TurboVent is designed in 3 sections: Turbine, Neck, and Base. This allows for easy assembly and transportation.
- ▶ The TurboVent is the world's number one selling turbine ventilator because we make strong, silent, fast, and with a Limited Lifetime Warranty.

Simple Roof TurboVents Calculation

▶ Based on Square Footage and an average attic height of 6 to 10 ft. we recommend the following number of TurboVents:

Constructed Square Feet	TurboVents (Home)	TurboVents (Warehouse)	TurboVents (Industry)
1000-4000	1-4	2-8	8-16
4000-8000	4-8	8-16	16-32
8000-16000	8-16	16-32	32-64
16000-32000	16-32	32-64	64-128
32000-64000	32-64	64-128	128-256

CFM Calculation Formula by Wind Velocity and Temperature

CFM (Cubic Feet per Minute of air removal) for the TurboVent **USETE-001**:

$$CFM=0.59[0.818+0.0092(H)][173.5(V)+6.444(Tint-Text)+3.111(Text-32)+121.5]$$

H= Height in feet from the floor where the TurboVent will be located

V= Wind Velocity in MPH (Miles per Hour)

Tint=Temperature in degrees Fahrenheit Inside the attic or place to ventilate

Text=Temperature in degrees Fahrenheit Outside the building, yearly average or average high, which ever is higher

Following are tables with the CFM calculated for typical wind velocities and temperatures

	Tint	80	80	80	80	80	80	80	80	80
	Text	60	65	70	75	80	85	90	95	100
V MPH	2	404*	394	384	374	365	355	345	335	325
	4	609	599	589	579	569	559	550	540	530
	6	813	804	794	784	774	764	754	745	735
	8	1,018	1,008	998	989	979	969	959	949	939
	10	1,223	1,213	1,203	1,193	1,183	1,174	1,164	1,154	1,144
	12	1,428	1,418	1,408	1,398	1,388	1,378	1,369	1,359	1,349
	14	1,632	1,622	1,613	1,603	1,593	1,583	1,573	1,563	1,554

* CFM (Cubic Feet per Minute)

	Tint	90	90	90	90	90	90	90	90	90
	Text	60	65	70	75	80	85	90	95	100
V MPH	2	442*	432	422	412	403	393	383	373	363
	4	647	637	627	617	607	597	588	578	568
	6	851	842	832	822	812	802	792	783	773
	8	1,056	1,046	1,036	1,027	1,017	1,007	997	987	977
	10	1,261	1,251	1,241	1,231	1,221	1,212	1,202	1,192	1,182
	12	1,466	1,456	1,446	1,436	1,426	1,416	1,407	1,397	1,387
	14	1,670	1,660	1,651	1,641	1,631	1,621	1,611	1,601	1,592

* CFM (Cubic Feet per Minute)

	Tint	100	100	100	100	100	100	100	100	100
	Text	60	65	70	75	80	85	90	95	100
V MPH	2	480*	470	460	450	441	431	421	411	401
	4	685	675	665	655	645	635	626	616	606
	6	889	880	870	860	850	840	830	821	811
	8	1,094	1,084	1,074	1,065	1,055	1,045	1,035	1,025	1,015
	10	1,299	1,289	1,279	1,269	1,260	1,250	1,240	1,230	1,220
	12	1,504	1,494	1,484	1,474	1,464	1,454	1,445	1,435	1,425
	14	1,708	1,698	1,689	1,679	1,669	1,659	1,649	1,639	1,630

* CFM (Cubic Feet per Minute)

	Tint	110	110	110	110	110	110	110	110	110
	Text	60	65	70	75	80	85	90	95	100
V MPH	2	518*	508	498	488	479	469	459	449	439
	4	723	713	703	693	683	673	664	654	644
	6	927	918	908	898	888	878	868	859	849
	8	1,132	1,122	1,112	1,103	1,093	1,083	1,073	1,063	1,053
	10	1,337	1,327	1,317	1,307	1,298	1,288	1,278	1,268	1,258
	12	1,542	1,532	1,522	1,512	1,502	1,492	1,483	1,473	1,463
	14	1,746	1,737	1,727	1,717	1,707	1,697	1,687	1,678	1,668

* CFM (Cubic Feet per Minute)

► How to calculate how many TurboVents you need for a home?

First find the Square Feet area of your roof, and then multiply times the height of your attic divided by 2 in feet if your roof is triangular shape. This number is your volume (VOL) of your attic.

► Houses: Now Multiply the VOL x (0.13) / CFM from the chart. This equals the number of TurboVents you need.

► Factories: Multiply the VOL x (0.35) / CFM from the chart. This equals the number of TurboVents you need.

► Warehouses: Multiply the VOL x (0.26) / CFM from the chart. This equals the number of TurboVents you need.

m³/Hr Calculation Formula by Wind Velocity and Temperature in Metric System

► m³/Hr (Cubic Meters per Hour of air removal) for the TurboVent **USETE-001**:

$$m^3/Hr = 0.59[0.818 + 0.0092(H)][173.5(V) + 6.444(Tint - Text) + 3.111(Text - 32) + 121.5]$$

H= Height in feet from the floor where the TurboVent will be located

V= Wind Velocity in Km/h (Kilometers per Hour)

Tint=Temperature in degrees Centigrade Inside the attic or place to ventilate

Text=Temperature in degrees Centigrade Outside the building, yearly average or average high, which ever is higher

► Following are tables with the Km/h calculated for typical wind velocities and temperatures

	Tint	26	26	26	26	26	26	26	26	26
	Text	16	18	21	24	27	29	32	35	38
V Km/Hr	3	686*	669	652	635	620	603	586	569	552
	7	1,035	1,018	1,001	984	967	950	934	917	900
	10	1,381	1,366	1,349	1,332	1,315	1,298	1,281	1,266	1,249
	14	1,730	1,713	1,696	1,680	1,663	1,646	1,629	1,612	1,595
	17	2,078	2,061	2,044	2,027	2,010	1,995	1,978	1,961	1,944
	20	2,426	2,409	2,392	2,375	2,358	2,341	2,326	2,309	2,292
	24	2,773	2,756	2,740	2,723	2,707	2,690	2,673	2,656	2,640

* m³/Hr (Cubic Meters per Hour)

	Tint	32	32	32	32	32	32	32	32	32
	Text	16	18	21	24	27	29	32	35	38
V Km/Hr	3	751*	734	717	700	685	668	651	634	617
	7	1,099	1,082	1,065	1,048	1,031	1,014	999	982	965
	10	1,446	1,431	1,414	1,397	1,380	1,363	1,346	1,330	1,313
	14	1,794	1,777	1,760	1,745	1,728	1,711	1,694	1,677	1,660
	17	2,142	2,125	2,108	2,091	2,074	2,059	2,042	2,025	2,008
	20	2,491	2,474	2,457	2,440	2,423	2,406	2,390	2,374	2,357
	24	2,837	2,820	2,805	2,788	2,771	2,754	2,737	2,720	2,705

* m³/Hr (Cubic Meters per Hour)

	Tint	37	37	37	37	37	37	37	37	37
	Text	60	60	60	60	60	60	60	60	60
V Km/Hr	3	816*	799	782	765	749	732	715	698	681
	7	1,164	1,147	1,130	1,113	1,096	1,079	1,064	1,047	1,030
	10	1,510	1,495	1,478	1,461	1,444	1,427	1,410	1,395	1,378
	14	1,859	1,842	1,825	1,809	1,792	1,775	1,758	1,741	1,724
	17	2,207	2,190	2,173	2,156	2,141	2,124	2,107	2,090	2,073
	20	2,555	2,538	2,521	2,504	2,487	2,470	2,455	2,438	2,421
	24	2,902	2,885	2,870	2,853	2,836	2,819	2,802	2,785	2,769

* m³/Hr (Cubic Meters per Hour)

	Tint	43	43	43	43	43	43	43	43	43
	Text	60	60	60	60	60	60	60	60	60
V Km/Hr	3	880*	863	846	829	814	797	780	763	746
	7	1,228	1,211	1,194	1,177	1,160	1,143	1,128	1,111	1,094
	10	1,575	1,560	1,543	1,526	1,509	1,492	1,475	1,459	1,442
	14	1,923	1,906	1,889	1,874	1,857	1,840	1,823	1,806	1,789
	17	2,272	2,255	2,238	2,221	2,205	2,188	2,171	2,154	2,137
	20	2,620	2,603	2,586	2,569	2,552	2,535	2,520	2,503	2,486
	24	2,966	2,951	2,934	2,917	2,900	2,883	2,866	2,851	2,834

* m³/Hr (Cubic Meters per Hour)

► How to calculate how many TurboVents you need for a home, warehouse, or factory?

First find the Square Meter area of your roof, and then multiply times the height of your attic divided by 2 in meters if your roof is triangular shape. This number is your volume (VOL) of your attic.

► Houses: Now Multiply the VOL x 7.8 / m³/Hr from the chart. This equals the number of TurboVents you need.

► Factories: Multiply the VOL x 21 / m³/Hr from the chart. This equals the number of TurboVents you need.

► Warehouses: Multiply the VOL x 15.6 / m³/Hr from the chart. This equals the number of TurboVents you need.

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)™



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION



NOA No.: 10-0928.05
Expiration Date: 12/22/15
Approval Date: 12/23/10

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 Country) 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)™



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION



NOA No.: 10-0928.05
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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)™



NOA No.: 10-0928.05
Expiration Date: 12/22/15
Approval Date: 12/23/10

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>
USETE-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)™



NOA No.: 10-0928.05
Expiration Date: 12/22/15
Approval Date: 12/23/10

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



NOA No.: 10-0928.05
Expiration Date: 12/22/15
Approval Date: 12/23/10

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: 12/22/15**



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

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.



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Approval Date: 12/23/10
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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



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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"

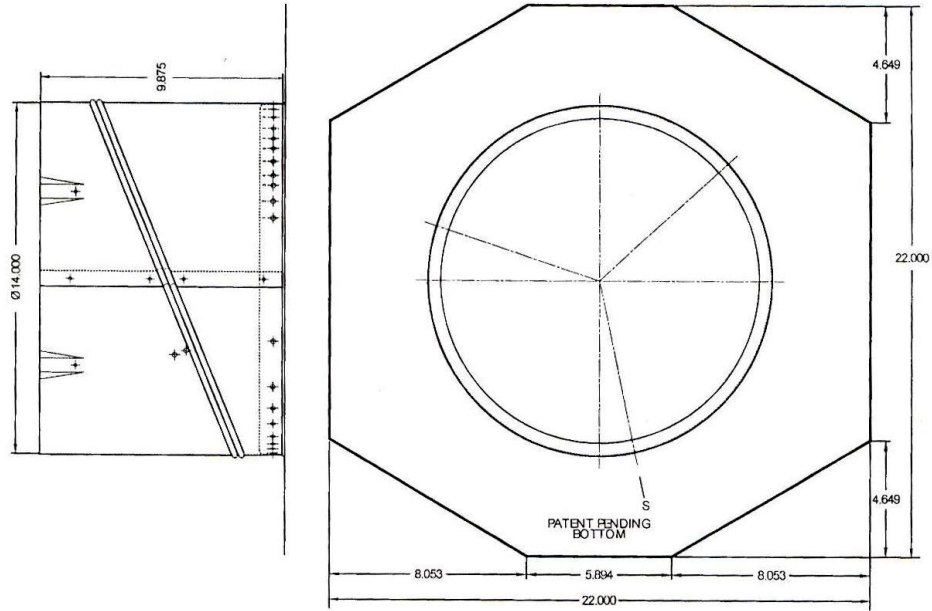
LIMITATIONS:

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



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DETAIL DRAWINGS

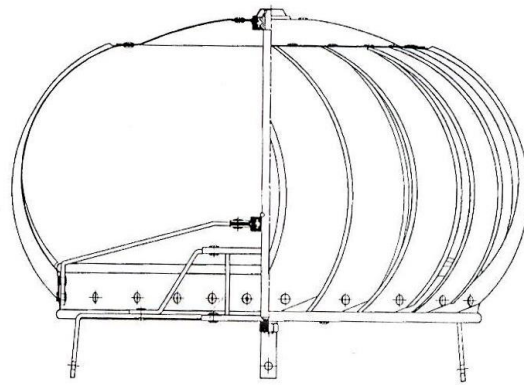
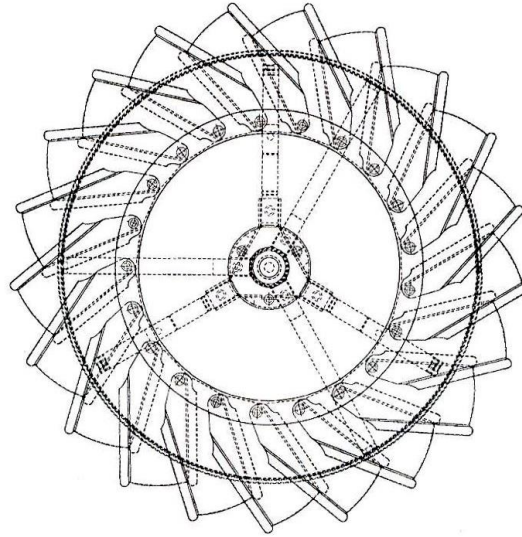


Base



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DETAILED DRAWINGS (CONTINUED)



BIB-14, BEB-14
END OF THIS ACCEPTANCE



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