

CURVENT INTERNATIONAL (PTY) LTD

# PINNACLE TURBINE



Natural ventilation for all roof types.

EASY  
**DO IT YOURSELF**  
INSTALLATION  
GUIDE



# PINNACLE TURBINE

The best wind  
ventilator on the  
market...

We are very proud of our Curvent Pinnacle Turbine that has been on the market for the past 9 years. We believe that our product is the best wind ventilator product on the market.

The flat dome on top is designed to be robust against any extreme weather conditions, especially against hail damages that will cause water leaks.

The central axle is designed to be well balanced at the centre of the shaft. Each Curvent Pinnacle Turbine has a double sealed bearing on the central shaft for effective spinning and air extraction.

Our product is easy to install with an installation video. We offer a 5 year product guarantee to our clients, because we know that it will last in the long run.

The curved blades are designed for maximum extraction caused by the hot air pressure from the inside and the wind picking up on the vanes at the outside. Each Curvent Pinnacle

Turbine comes standard with a trimmer plate to be fitted from underneath for aesthetic purposes.

## **Tools, tips and products required to do a DIY installation:**

- |                                      |                                  |
|--------------------------------------|----------------------------------|
| 1. Class 3 tech screws.              | 7. Spirit level.                 |
| 2. Grinder.                          | 8. Safety gloves.                |
| 3. Drill.                            | 9. Marking pen.                  |
| 4. Flat nose plier.                  | 10. Safety glasses.              |
| 5. G-Clamps.                         | 11. Ruler.                       |
| 6. Den Braven silicone 1001 sealant. | 12. Measure, twice and cut once. |



# PINNACLE TURBINE MODEL TYPES

Model Type	CPT 250	CPT 300	CPT 350	CPT 400	CPT 500	CPT 610
Throat Dimension (A) in mm	250	300	350	400	500	610
Overall Height (B) in mm	440	470	480	530	610	640
Head Dimensions	370	440	520	560	670	810
Base Plate Dimensions (C) in mm	400	500	550	600	750	850
Minimum Installation Angle	45°	45°	45°	45°	45°	40°
Mild Steel Mass (Kg)	5	8	10	12	18	21
Box Dimensions (mm)	500W x 500L x 500H	500W x 500L x 500H	620W x 620L x 650H	620W x 620L x 650H	880W x 880L x 670H	880W x 880L x 670H
Estimated extraction Capacity at 15 km/h	1265m³/h	1495m³/h	1874m³/h	3596m³/h	4498m³/h	6815m³/h
Floor area coverage per unit	32m²	38m²	50m²	96m²	120m²	180m²

## SPECIFICATION PROCEDURE:

The volume of space to be ventilated is estimated and multiplied by the number of air changes per hour and divided by the extraction rates of the roof turbine.

The table gives a guide to the number of air changes generally recommended taking into consideration greater air changes due to the nature of the application.

1. Select the Model in accordance with the ventilation requirements.
2. Select the ventilator material type. (i.e. Aluminium, Chromadek or Galvanised)
3. Select any accessories required (Trimmers etc.)
4. EXAMPLE:

A specification for a 260m² room with a roof height of 6m with 10 air changes per hour natural ventilation required, manufactured in Aluminium material with Trimmers would be:

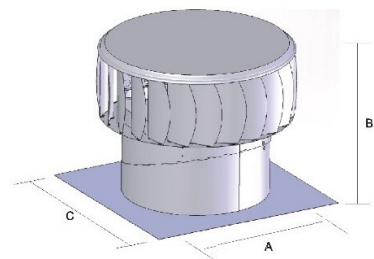
### 5. CALCULATION:

Area x Roof Height x Air Changes per Hour / Extraction Rate  
 $260\text{m}^2 \times 6\text{m} \times 10 / 3900$  (Extraction rate of the Curvent Pinnacle CPT400) = 4 x Curvent Pinnacle type CPT400 Roof Turbine Ventilators.

### 6. SPECIFICATION DESCRIPTION:

4 X Curvent Pinnacle type CPT400 roof turbine ventilators. Aluminium material with Trimmers, installed in accordance with the manufacturers detailed instructions.

Typical Situation	Air Changes
Residences, Churches, Storage Areas	1-2
Libraries, Banks, Classrooms	2-4
Offices, Assembly Halls, Laboratories	4-6
Hospital Wards, Treatment Rooms, WC's, Bars	6-8
Cafes, Canteens, Dance Halls	8-12
Restaurants, Domestic Kitchens, Laundries	10-15
Bakeries, Boiler Houses, Engine Rooms	15-30
Paint Shops, Foundries, Furnace Rooms	30-60



## Product Features:

- Ridge or Slope Mounted Units Available
- Reduce Building Structural Fatigue
- Extremely Robust Construction
- Material Finish Alternatives
- Increase Indoor Air Quality
- **5 Year Product Guarantee**
- Cost-effective Ventilation
- Continuous Extraction
- Superior Aesthetics
- No Operating Cost



# Installation guidelines:



## STEP 1:

Remove the Curvent Pinnacle Turbine, trimmer plate and base plate from the box.

## STEP 2:

Mark off the base plate placement 50mm underneath the ridge cap or back flashing sheet. Cut a square opening through the sheeting the size of the Curvent Pinnacle Turbine's throat. (250mm, 300mm, 350mm, 400mm, 500mm or 610mm)



## STEP 3:

Bend the lower bottom flutes up with flat nose pliers for a water tight installation. This will prevent water ingress to enter from the lower area openings underneath the base plate.



## STEP 4:

Insert the trimmer plate through the square opening and fix the trimmer plate underneath the roof sheeting with class 3 tech screws.

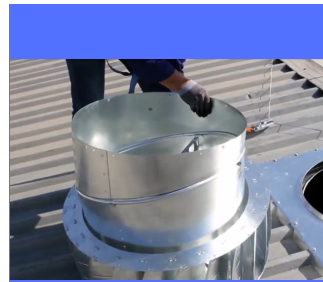


**STEP 5:** Align the base plate 50mm underneath the ridge cap over the opening. Apply water sealant underneath the ridge cap and the base plate's edges for a water tight installation.



## STEP 6:

Fix the base plate underneath the ridge cap onto the roof sheeting with class 3 tech screws all around the edges of the base plate 200mm evenly spaced.



## STEP 7:

Place the Curvent Pinnacle Turbine upside down on the roof to get the required angle of the roof. Adjust the middle section of the adjustable neck/throat with protective gloves until the throat is water level.



## STEP 8:

Turn the Curvent Pinnacle Turbine the right way up and place the throat of the Turbine over the base plate position.



## STEP 9:

Adjust and turn the bottom section of the throat to get the top of the Curvent Pinnacle Turbine water level to make sure that the head of the Curvent Pinnacle Turbine is well balanced.

## STEP 10:

Fix the throat/neck of the Curvent Pinnacle Turbine through the open holes through the base plate ring with the class 3 tech screws. Also fix the adjustable neck/throat with tech screws through the attached brackets to keep the neck/throat in the level position.



## STEP 11:

Apply the Curvent sticker on the Curvent Pinnacle Turbine's throat in a straight position for everybody to see.



Check out our easy installation video on our website for more detailed guidance on how to install a Curvent Pinnacle Turbine.

Tel: +27 (11) 826 5959, [www.curvent.co.za](http://www.curvent.co.za), [www.curventpinnacle.co.za](http://www.curventpinnacle.co.za)