

Aim: To Cool the Room of approx. 10ft x 10ft during the **night times** .(LOW COST GREEN SOLUTION)

Back Ground:

The following was done because of necessity. My son was of 2-1/2 years old. He was always having dry cough. The typical thing was he would cough a lot in the nights in sleep. We use to close the windows and sleep. Doctor had prescribed asthmatic treatment and with a heavy heart I decided to start the treatment. But a good friend was against it as he new that the dose required to nullify it would increase by age and then the child would be dependent on the doses of asthmatic treatment for entire life.

I also was very sure that my child would not be asthmatic as we do not have any past ancestral records for generations. I decided to take the risk

I though if only I can have fresh air in my room?
The following is the rest..

Applicability: This is applicable to people

- Who cannot afford a Window or a Split AC.
- Who think green for the earth
- Who are ready to experiment for natural air
- Believe that Natural Air is best
- Who want them and their family to sleep in cool natural air
- May be want to try fresh air for young asthmatics children.

Procedure: The procedure for implementing the device is as follows:-

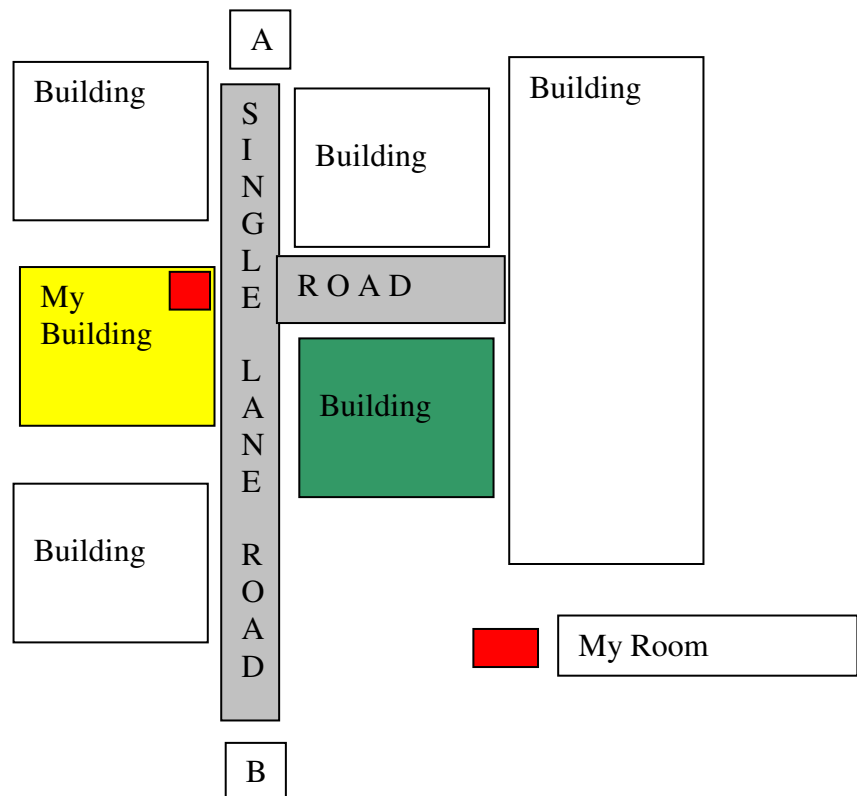
- The requirement of this cooling device is necessary during the season changes from end of winter to starting of rising ambient temperature or after the monsoon when the climate is entering September or October.
- The Device does not effectively work in peak summer but still is good for a comfortable sleep.
- The qualification for the device to be installed in you room is as follows
 - I have been using successfully in my room for two years with excellent results, which is also weighted by friends and relatives
 - My room size where we sleep is 11ft x 9.5 ft. So we can safely say that it will work in 10ft x 10ft rooms
 - You need to have a window and a parapet for installing the device in the room
 - I had my apprehension for how effective it will work. But I did my home work before implementing it. I strongly feel that you also do the exercise before you implement.
 - I live in Mira Road, Thane, Mumbai. INDIA. (Near Sea Shore)

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- The following is my location details (Courtesy www.wikimapia.org)



- I live here. It's a fairly a city place.



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- The details above is given for you to understand things better
- First I studied the air flow just out side my room window. Every morning I used to get up and feel the grill by my fingers. They used to be pretty cool.
- That means there was a great difference in the room were we use to sleep and feel hot and just out side the room one brick wall thick distance the air temperature is substantially comfortable.
- Then I studied the air flow with crape paper in hand and found that the air flow was from A to B and the air was not entering my house (even though I have a 100 sq. ft balcony) and entering the rooms in the rooms of building in green.
- After ensuring that the air is cooler outside and that there was no way that cool air was coming in I decided to install the device.
- I decide to install exhaust fan (the device) in opposite way such that it will throw the out side air in.
- For that also there was lot of thinking. My window of the room is 6ft x 4ft standard with 3 sliding panes of 4ft x 2 ft.
- The following page (Annex) gives the details of the installation.
- The fan is just installed outside the pane on the parapet
- The fan is a standard exhaust fan square plastic fan of about Rs 900/- (US\$ 25)

Working:

- The fan is very effective. Just start it 1h before you go to sleep and keep the other two panes closed.
- Keep the Ceiling fan inside of the room also ON.
- The cooling difference of other rooms and this room goes up to 4deg. C
- As per our observations and as we are using from last two years we get a max. low temperatures Of 23-24 degC .In winter we do not need the fan. Else we can achieve lower levels in winter.
- In peak summer we get the results late in nights at 1:00 am as the city is hot and all the concrete jungle takes time to cool off.

Affordability and efficiency

- I think it is obviously affordable. Only the cost of fan plus Installation (Mechanical and Electrical).
- The other is the fresh air and the excellent sleep.
- The other is the benefits for young children from asthmatic attacks.
- The electricity overhead for running cost is very little.
- The maintenance only requires cleaning the dust accumulated on the net.

Hope you feel this is useful to you and practically use it. Please forward this to your friends. Please send feed back and questions to jayantskathe@gmail.com

-Please see Annex

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Annex:

