

## Tips to maintain your AC this summer

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India's economic growth has empowered the average middle-class family to afford a comfortable and healthy lifestyle. Air conditioners, once considered a mark of luxury have now become easily accessible to middle-class. They are found in every Indian household, in both metro and non-metro cities.

With the introduction of new technology, health benefits and energy efficiency, consumers have become aware of the need for an AC. Today they have a wide-range of brands and product offerings to select from.

It is essential to keep in mind some important points, while installing air conditioners at your home:

- Air conditioners should be installed where there is enough space for maintenance. If it is installed in a cramped space, the maintenance would be difficult which would eventually hike the electricity bills.
- It is necessary to install the unit under a shaded area as it will prevent direct sunlight on the air conditioner.

With rising mercury levels and increasing electricity tariffs, an energy efficient model of air conditioner is a must-buy. Air conditioners come with star rated energy efficiency ratings; also called EER, which has been standardised by the Bureau of Energy Efficiency (BEE). Therefore, any AC with more stars will consume lesser electricity than one with a lower star rating.

Simply installing the air conditioner will not serve the purpose unless you follow these tips which would help save energy:

- The ideal thermostat range for comfort cooling is between 24 degree Celsius and 26 degree Celsius. Change of 1 degree Celsius in the thermostat setting can impact your energy bill by 3% to 5%.
- Make sure to clean the air conditioner filter regularly. This will improve cooling, reduce compressor running time and consume less energy. Dusty filters impact the inflow of air into the air conditioner thereby making it work harder (consume more electricity).
- Ensure to not allow cold air escape your room by keeping all windows and doors closed. This will help in minimizing energy consumption of room air conditioners.
- Do not place lights, computers, televisions and other light-producing devices near the air conditioner thermostat, as it will impact the proper functioning of the thermostat and thereby make the air conditioner condenser work longer and consume more electricity.
- Using a ceiling fan with air conditioner helps in reducing air conditioner load.
- Nowadays, AC is not just used for cooling, but as a multi seasonal product which can also be used in winter for heating. These hot and cold air conditioners also save up to 35% more energy than heaters.
- It is important to understand the benefits of having a 100% Copper Advantage ACs. 100% Copper Advantage ACs means that the indoor unit's evaporator, outdoor unit's condenser as well as the connecting tube is made of copper. Such ACs are easy to maintain, does not develop gas leakages easily, and gives continuous and hassel-free cooling in the longer run.

Make a smart investment this summer by choosing an air conditioner that meets your requirements. Also, maintaining and operating an air conditioner correctly can help you save a lot of electricity and reduce your electricity bills. So do make sure that you get your AC in right condition before the summer starts.

### **Does star ratings in ACs help in bringing down the electricity bills?**

Since early 2016, The Bureau of Energy Efficiency (BEE) has introduced a new star rating methodology called Indian Seasonal Energy Efficiency Ratio (ISEER) for air conditioners. This evolved rating methodology factors in variance in higher temperature in India and rates air conditioners accordingly. Keeping the performance of air conditioners during higher temperature in mind, ISEER will address the different climatic zones in India and higher temperature. ISEER measures energy efficiency of air conditioners based on a weighted average of the performance at outside temperatures between 24 and 43 degree C based on Indian weather data.

Since the introduction of Star Labelling for ACs in India, BEE continuously tightens the standards such that, the Star 5 in 2010 became Star 3 in 2015 and will become Star 1 in 2018 as per new ISEER methodology. The weighted average Energy Efficiency Ratio (EER) of AC has increased from 2.6 in 2006 to 3.26 in 2015, which is an increase of 25% in efficiency due to tightening of standards.

Since 2010 Bureau of Energy Efficiency has mandated air conditioners as a mandatory-labelled appliance under Energy Conservation Act and since then air conditioners cannot be sold without star label. Now as per latest notification, from January 2016, Star 2 is the least efficiency level to be sold in the market, hence variation in power consumption is compared between Star 5 (most efficient) and Star 2 (least efficient) air conditioners.

### **Indicative annual energy bill and power consumption of various star labelled ACs:**

AC Capacity in tons	Power Consumption in Whr					Annual Energy Cost (Rs)				
	1 Star	2 Star	3 Star	4 Star	5 Star	1 Star	2 Star	3 Star	4 Star	5 Star
0.75	943	880	825	776	733	9693	9046	8480	7980	7536
1.00	1257	1173	1100	1035	977	12926	12063	11308	10642	10050
1.50	1886	1760	1650	1553	1466	19390	18095	16962	15963	15075
2.00	2514	2347	2200	2070	1955	25853	24127	22616	21284	20100
2.50	3143	2933	2750	2588	2444	32316	30158	28270	26605	25125
3.00	3772	3520	3300	3105	2932	38779	36190	33924	31926	30150

\* Residential Electricity Tariff Charges : Rs 6.80 per KWhr  
Energy bill calculation is based on assumption that AC is used for 8 hours a day for 252 days in a year and compressor runs at 75% capacity

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