

## OPTION CHECKLIST NO. 5: AIR CONDITIONING & REFRIGERATION

<ul style="list-style-type: none"> <li>• AC doesn't get overloaded; check the fuse or circuit breaker if it doesn't operate.</li> </ul>
<ul style="list-style-type: none"> <li>• Replace or clean the filter and clean the evaporator and condenser coils regularly, for the air conditioner to cool efficiently.</li> </ul>
<ul style="list-style-type: none"> <li>• Get the thermostat cleaned regularly and replace it if necessary.</li> </ul>
<ul style="list-style-type: none"> <li>• If compressor doesn't work properly, call a service person immediately.</li> </ul>
<ul style="list-style-type: none"> <li>• Any noise that your AC makes, needs to be checked by your mechanic.</li> </ul>
<ul style="list-style-type: none"> <li>• A good air filter will extend the life of your air conditioner because the important parts, like the blower assembly, the cooling coil, and other inner parts will stay cleaner, operate more efficiently and last longer.</li> </ul>
<ul style="list-style-type: none"> <li>• Avoid frequent opening of doors/windows. A door kept open can result in doubling the power consumption of your AC.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure direct sunlight (and heat) do not enter the air-conditioned space, particularly in the afternoons.</li> </ul>
<ul style="list-style-type: none"> <li>• Most people believe that a thermostat set to a lower temperature than desired will force your air-conditioner to cool faster, not really, all it does, is make your air-conditioner operate for longer. Moreover, you will have an unnecessarily chilly room and wasted power. Every degree lower on the temperature setting results in an extra 3-4% of power consumed. Hence, once you've found yourself a comfortable temperature and set the thermostat at that level, avoid touching the thermostat thereafter.</li> </ul>
<ul style="list-style-type: none"> <li>• Once an air-conditioning system has been designed and installed avoid any major change in the heat-load on the AC. This will add to wasted power.</li> </ul>
<ul style="list-style-type: none"> <li>• A clogged drain line is usually caused by algae (the green moss-like stuff!) build-up inside the drain line. The air handler provides a cool, damp environment for development of molds and mildew and if left untreated these growths can spread into your ductwork. Get rid of these molds by using a disinfectant (consult your dealer). Make sure that the face of the cooling or evaporator coil is clean so that air can pass through freely.</li> </ul>
<ul style="list-style-type: none"> <li>• If you have an air return duct in a hot area such as an attic or garage, make sure that this duct is not broken, split, or disconnected and sucking in hot air.</li> </ul>
<ul style="list-style-type: none"> <li>• Window unit should tilt down slightly on the outside. The part that removes humidity [where water accumulates] is the front coil, which is inside your home. Normally, there is a trough and/or a drain tube that lets the water run to the rear of the unit. If the drain gets clogged, water will back up and leak inside. Ask your mechanic to clean the chassis and make sure all screws are tight.</li> </ul>
<ul style="list-style-type: none"> <li>• Heat Load can be reduced by keeping a false ceiling, like in hotels and clubs etc, helps in keeping the heat out, Providing curtains/ blinds /sun film on windows reduces heat input into the room, Insulating the ceiling, which is exposed to the sun with 50-mm thermocole drastically, reduces heat input into the room.</li> </ul>
<ul style="list-style-type: none"> <li>• Check for duct leaks and crushed ductwork. All air leaks should be sealed with a good quality duct sealant (not duct tape).</li> </ul>

<ul style="list-style-type: none"><li>• Inspect the chiller as recommended by the chiller manufacturer. Typically, this should be done at least quarterly.</li></ul>
<ul style="list-style-type: none"><li>• Routinely inspect for refrigerant leaks.</li></ul>
<ul style="list-style-type: none"><li>• Check compressor operating pressures.</li></ul>
<ul style="list-style-type: none"><li>• Check all oil levels and pressures.</li></ul>
<ul style="list-style-type: none"><li>• Examine all motor voltages and amps.</li></ul>
<ul style="list-style-type: none"><li>• Check all electrical starters, contactors, and relays.</li></ul>
<ul style="list-style-type: none"><li>• Check all hot gas and unloader operations.</li></ul>
<ul style="list-style-type: none"><li>• Use superheat and subcooling temperature readings to obtain a chiller's maximum efficiency.</li></ul>
<ul style="list-style-type: none"><li>• Take discharge line temperature readings.</li></ul>