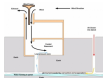


Project

Wind Towers Catch the Breezes (Mid East)

credit: solaripedia

A windcatcher is an architectural device used for many centuries to create natural ventilation in buildings. The function of this tower is to catch cooler breezes that prevail at a higher level above the ground and to direct it into the interior of the building. It is not known who first invented the windcatcher, although some claim it originated in Iran and it can be seen in windcatchers some in various designs, such as the sun, directional, bi-directional, and multi-directional. Examples of windcatchers can be found in traditional Persian influenced architecture throughout the Middle East, Pakistan and Afghanistan. Central Iran has a very large day-night temperature difference, ranging from cool to extremely hot, and the air tends to be very dry all day long. Rural buildings are constructed of very thick ceramic with extremely high insulation values. Furthermore, farms centered on desert oases tend to be packed very closely together with high walls and ceilings relative to Western architecture, maximizing shade at ground level. The heat of direct sunlight is removed with small windows that do not face the sun.



"Windcatcher" is a simple air conditioner that captures the cool, fresh air with clean, dry, constant, constant pressure. It is a wind tower with four openings that draw in the air from the wind and direct it into the building. (Source: Solaripedia)



Barjeel

United Arab Emirates

A traditional Arabic windcatcher that uses a tower with four openings to capture and direct cool air into a building.

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