

Exactly with the use of this system, it is provision that the amount of available water for renew the use is not enough, compelling always to be complemented with another water source. It is necessary to have always in the precaution that both the nets must perfectly be distinct, of form to prevent eventual contaminations. Having these systems to be white of constant visits and periodic maintenance.

It can have resource to a method that it makes possible, the use of the water in a building in well-taken care of way, with the use:

- Constructive choice of materials or systems that use little water;
- Rank of thermal isolation in the net of hot water distribution of form to reduce the current water wastefulness;
- Equipment installation of detention of escapes;
- Installation of reducing valves of pressure whenever the available pressure is extreme;
- Use of taps with liberating device (they add air, producing in the use the sensation of volume proceeding from a conventional tap), mixer monocommand, thermostatic, automatic or half-automatic (with infra-red ray or timers);
- Preference the bases of shower in detriment of bathtubs;
- Use of accessory of house of bath for retraction of human dejections that appeal the reduced amounts of water;

Aspects indicated for the exterior:

- Use of the vegetation most appropriate to the place, that is, that it requires little water;
- Accomplishment of irrigation of gardens with resource the moistness sensors;

7 - Natural illumination:

The natural illumination (derived from the solar system), **functions as the guide of the natural heating**, allowing to get a series of energy profits, as the direct profit, profit indirect and separate profit:

--- The direct profit, of heating, occurs through environed of the buildings being the dependent profit of the dimension of these and the solar exposition. To obtain to get greater advantage, the construction will have to have the following characteristics: The orientation of the windows preferential the South, therefore in the Winter the level of radiation on the exterior surface of wall. This and West is low (reason that made to implement, the form of I circulate in all the floors in order to allow each unit of habitation, with direction windows and accessible exterior flagstone for an exterior forecourt, in form of U, the direction of any direction that if finds the origin the entrance of the solar luminous rays, to be able to get the maximum of its incidence - figure 2 - A); Double glass adoption exterior and protections that allow to control the transference of heat of the interior for the exterior; And use of clear colors in the interior vertical surfaces for better reflective the solar radiation and in this way to distribute the heat and of dark colors in the floors for storing the heat in a lower level contributing for a bigger comfort (figure 6, 6 - A and 6 -B);

--- The profit indirect is obtained through the captains of the solar radiation on the part of a thermal mass that actually as accumulative element of heat - the heat is yielded to the interior of controlled form delaying and cushioning the oscillations of the interior temperatures. Obtaining to get these effect in the use of "floors type trombe" (similar to functioning of walls of trombe).

The "floors type trombe" are constituted, in the compartments that receive illumination direct from the Sun, with an exterior surface in glass and an interior floor of hardened, with good capacity of thermal storage or another material with good capacity of thermal storage, constituted in its interior with a box-of-air. These ventilated floors of trombe are formulated by orifices of term-circulation in the upper/lower part allowing as soon as these contribute in such a way for the heating as for the cooling, consonant the necessities.

--> **In the Winter, as much of night as of day, the openings in the glass must be remained closed for the minimization of the thermal losses.** The existing orifices of ventilation in the floor, that functions as accumulative element, must be open during the day so that the existing heat in box-of-air if not only transmits to the interior of the habitation for conduction as well as for convection (figure 6 - B).

The convection process consists of the ticket of the hot air of box-of-air for the interior of the habitation for the superior opening of the floor, heating it, and in the cold air inlet proceeding from the compartment for the inferior opening. From the moment where the solar radiation is little significant the orifices of ventilation of the element of thermal storage must be locked up of form to prevent losses of heat for inversion of the circulation of air.

--> **In the Summer, beyond if foreseeing the shade of the glass, the floor contributes for the cooling through the existence of a upper/lower orifice in the accumulative element that favors the ventilation** (figure 6 - B). During the night, in the Summer, the orifices of ventilation of the glass must be open (upper/lower) so that the cooling in box-of-air and in the floor occurs consequent.

--- The separate profit has this denomination for the fact of the solar profits if to give in attached zones to the inhabitable area normally, as in the common areas of the building. With the use profit of greenhouses (figure 6 -A and 6 - B).

--> Influence of the natural illumination in the Winter (figure 6 - B):

--> Influence of the natural illumination in the Summer (figure 6 - A):

--- Another source of this building, **that removes advantage of the natural illumination is the use of the active system as the Sun, whose energy can as well as be transformed not alone into thermal energy in electric energy.** Using photovoltaic panels that direct transform the solar energy into electricity (figure 2). It is evident that it could also appeal to the installation of thermal solar collectors for the sanitary hot water heating, being this solution as option, but the previous system allows a bigger valence of use.