

General Information on needs of hot water

Example:

An installation of agrotourism is maintained by a family of 4 persons, that live in the residence. During the period between May and August the average occupancy is 15 clients per day. For the occupants 2 meals are prepared per day and the dishwasher washes 5 times per day.

Needs of family:	4 x 60 lt = 240 litres / day
Needs of the clients :	15 x 50 lt = 750 litres / day
Kitchen:	30 x 10 lt = 300 litres / day
Dishwasher:	5 x 20 lt = 100 litres / day
Total:	1.390 litres / day

3) OTHER APPLICATIONS

In the next table we present the daily consumption for other applications:

Hospitals and clinics :	80 litres / bed
University residences:	80 litres / bed
Dressing rooms, public showers:	20 litres / person
Schools:	5 litres / student
Restaurants :	8 to 15 litres / meal
Bars:	2 litres / client
Prisons:	30 litres / person
Factories :	20 litres / persona
Offices :	5 litres / employee
Gymnasiums :	30 litres / user

The information of the above table can also be used in combinations so that in every case the average daily consumption can be properly calculated.

FACTORS OF INCREASED NEEDS

In the case that a recirculation system exists for the hot water usage, you will also have to take this into account for the needs. The calculation will have to be made every time individually from the above tables and depends on the dimensions of the circuit and it's thermal insulation. Additionally, in the determination of the total needs, the thermal losses of the total distribution circuit from the point of storage to the points of final consumption must be taken into consideration.

REAL NEEDS

In every case, the real needs for hot water are related to the personal attitude, the possible special characteristics and habits of every place and application and also the way each application functions.

For this reason, a specific calculation can be made by using the information on the gas/petrol or electric bill. A flow meter installed on the hot water pipes could also be used.