

# Energy pre-diagnosis sheet of the building: "the locker room"

## General information about the building

### Historical data:

**2008:** building construction

### Type of occupation:

Weekly occupancy between 30 and 75% (4 to 5 days / week).  
Capacity : 3-12 people.



### Size:

49 m<sup>2</sup> changing area (heated) and 49 m<sup>2</sup> workshop area (not heated), for a total of 98 m<sup>2</sup>.

## Strengths and weaknesses

### Present situation

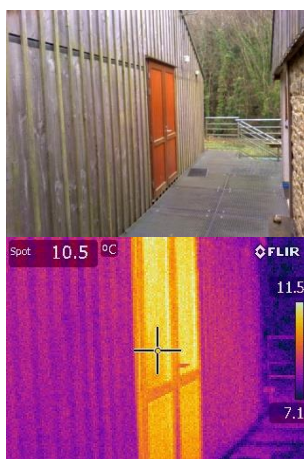


	Wall	Glazing	Roofing	Low floor
<b>Envelope</b>	wood frame + external cladding + OSB slab inside (thickness of wall 23 cm), low insulation.	Double skin translucent panel with no peripheral sealing	Steel deck with 6 cm synthetic insulation	Timber frame floor with no insulation, OSB slab and flexible coating
<b>Heating</b>	Output Power installed 3000 W (61 W/m <sup>2</sup> )	Distribution Convection heater	Regulation No regulation / stop or start	Emission Steel convection heater with no thermostat
<b>Domestic hot water</b>	Output electrical resistance 2200 W, year 2012	Distribution not insulated	Storage 15 liter not insulated	Tapping point 10 liters/min no water-saving equipment

## Infrared thermography extract



Defects:  
Door and windows  
Nothing to report on the roof!  
(beware of reflection)



Defects :  
Door and wall insulation



Defects : no low-floor insulation

## Specific electricity

### Electrical appliances:

- 1 fridge:** 69 W (*to check*),
- 1 micro-wave:** 1250 W,
- 1 coffee maker:** 900 W,
- 1 oven:** 1500 W,
- 1 kettle:** 2000 à 2400 W,
- 2 hotplates:** 2500 W.

### Lighting:

- Natural light illuminance (centre of room): 7 lux,
- Artificial light illuminance level (centre of room): 545 lux.
- 12 neon lights of 58 Watts**, total: 696 W.

## Recommendations

### Management:

- Redefine the building uses (locker room but not only, rest room, meals, workshop?),
- Give the building a new "name"
- To support change (including the integration of work in the multi-year plan and making sure improvements are consistent with expectations).

### Buildings:

- Achieve or complete existing insulation (envelope being a "sieve"), Interior Thermal Insulation (ITI), box in the box, in order not to modify aesthetics and materials of facades,
- Insulate low-floor between frame and underside (depending on access ...),
- Prefer non-opaque glass surfaces (visual comfort ...), which lose less heat and are better oriented,
- Conflict of use (meals / dressing room); add an airlock adapted to different uses.

### Equipment:

- Old and dilapidated electric convection heaters, prefer low inertia radiant heaters, with hour programming (8:00/9:00 and 12:00/1:30 p.m.) given the short occupancy of the building,
- Insulate the hot water tank,
- Adjust the hot water temperature of the hot water tank,
- Install an aerator on the sink (if possible)
- There is no ventilation. It is recommended to install a ventilation system adapted to future uses (meals, rest room, cloakroom and workshop).
- Type of lighting adapted to a changing room / workshop but not to a rest room / meal area. Change lamps depending on future uses. Reduce installed power.