

## Parc Tauli

Corporació Sanitaria Parc Taulí (CSPT) is a healthcare public entity located in Sabadell, placed 20km north-west of Barcelona. This institution aims to provide high quality healthcare to the eastern Catalan region. Hospital of Sabadell Tauli (yellow in the graphic below) has been selected as one of the demo sites for the RESSEEPE project.



Figure 1

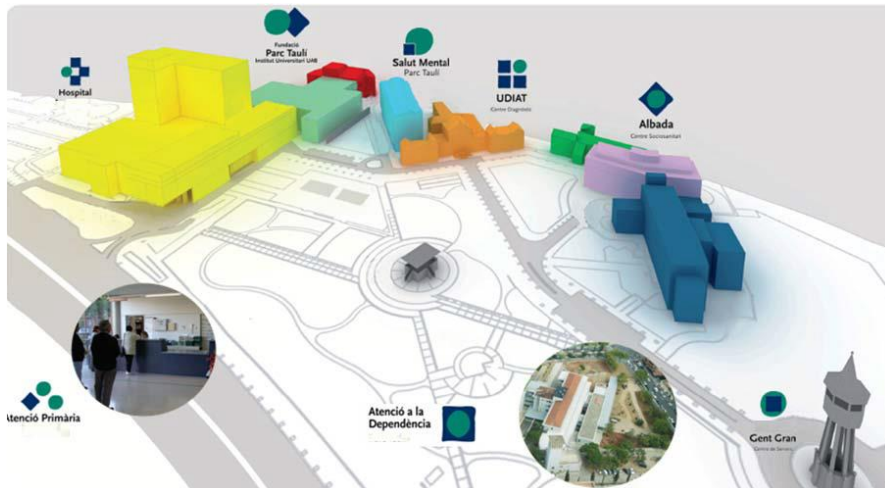


Figure 2

Hospital of Sabadell Tauli aims to reduce the energy consumption in the building without losing the comfort levels for the occupants. The projects aims to retrofit the centre by implementing efficient strategies to areas which are not energy efficient. Passive design strategies, heating & cooling sources and integration of renewables for building envelope is being examined.

### Current Status

The Hospital of Sabadell Tauli site has been thoroughly analysed and the appropriate selection of technologies has been selected for the weak areas of the demo site.

One of the main issues with the Demo site was the building envelope not being efficient. Therefore, the building is implemented an envelope retrofit on the 6<sup>th</sup> floor of the building (see figure.3).



**Parc Tauli  
(6th Floor)**

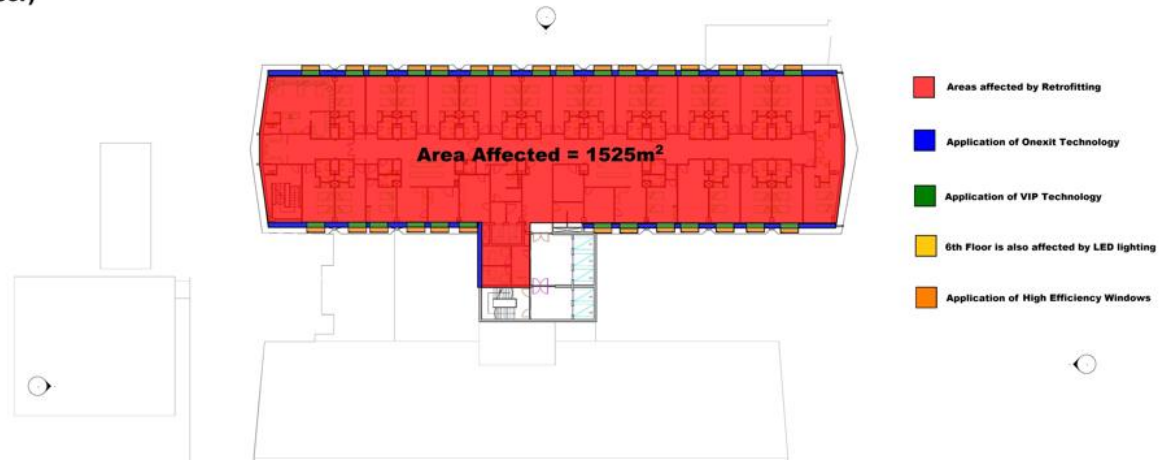


Figure 3

The envelope will incorporate Aerogel based insulating-mortar in combination with the replacements of windows with High Efficiency windows. The frame panels above and below the window will have an extra insulation affixed in the form of Vacuum Insulated Panels. The installation arrangement of the technologies can be seen in graphic figure.4. By implementing these technologies, the floor area of 1,525m<sup>2</sup> will be affected and therefore improving the standard on the floor significantly.

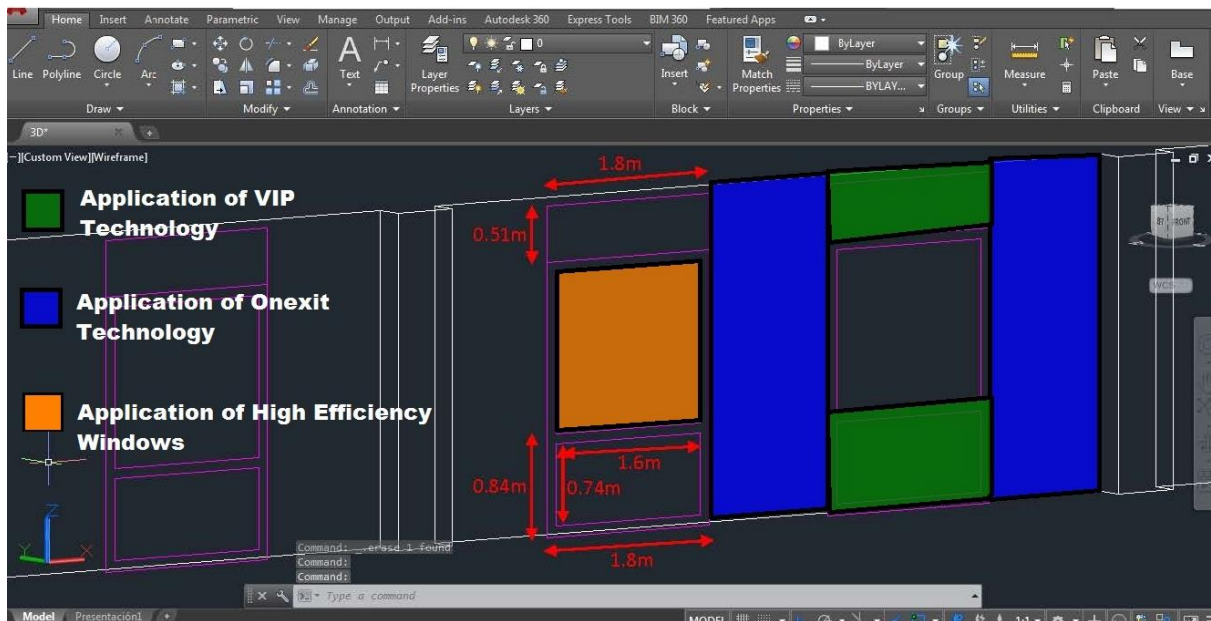


Figure 4

Additionally, another building has been selected for a retrofit as part of Hospital of Sabadell Tauli. The La Albada site will incorporate Solar Collectors on the roof of the building along with 3 new and innovative solar collectors from Polytechnic University of Catalonia (UPC). These solar collectors are more efficient than the standard commercial products (see figure.5 for planned area).

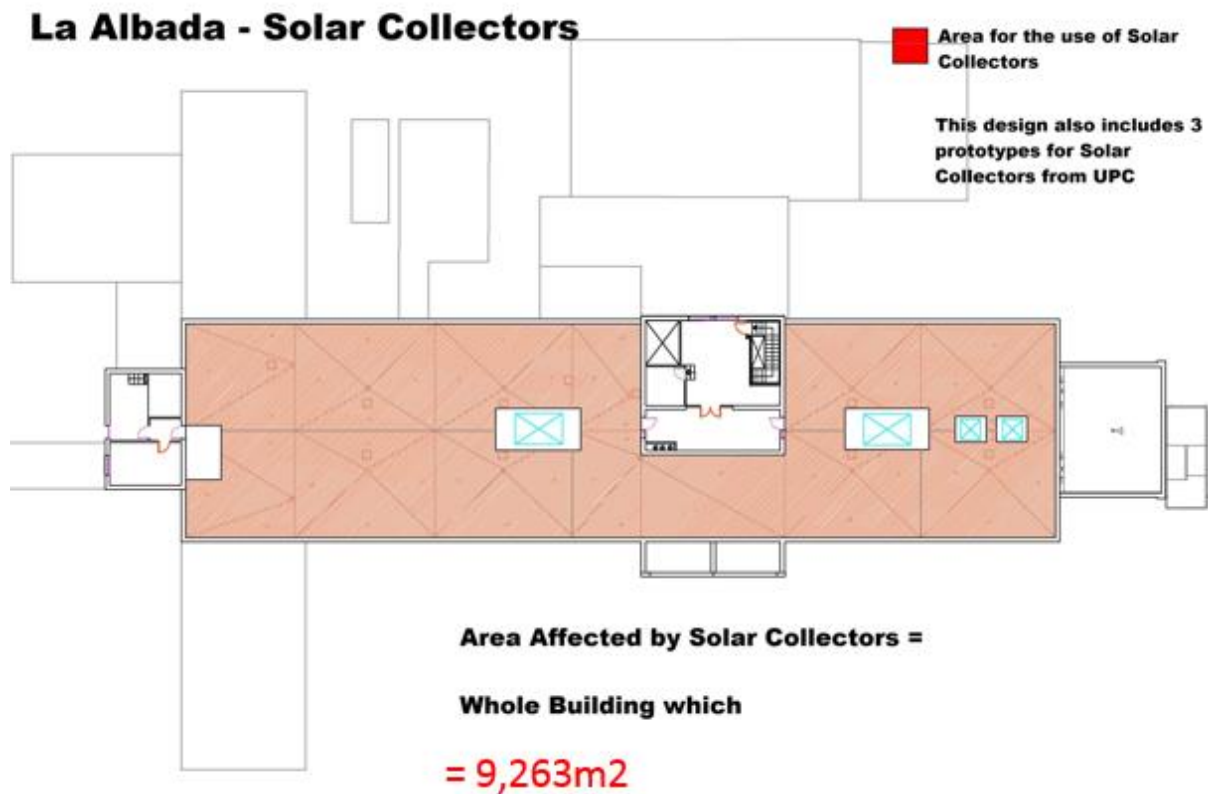


Figure 5

Another retrofit technology that is going to be implemented at the Tauli Demo site is LED lighting. This will be installed in the car park, affecting an area of 30,198m<sup>2</sup>.

## Parc Tauli, Barcelona



Affected Area of LED Lighting

= 30,198m2

Figure 6



Figure 7 Image of Parc Tauli, Sabadell

Demo-site Technology (m2)	Parc Tauli, Barcelona
Super-insulating Mortar	1,525
Vacuum Insulated Panels	1,525
Solar PV	x
Seasonal Thermal Energy Storage (Water and PCM)	x
EC Windows	x
Ventilated Façade	x
LED Lighting	7,725
High Efficiency Windows	1,525
BIPV	x
Solar Thermal Collectors - UPC	1,510
Solar Thermal Collectors	30,198
<b>Total Area of Site Affected</b>	<b>37,923</b>

