

Life HEROTile Project – High Energy savings in building cooling by Roof

TILEs shape optimization toward a better above sheathing ventilation (LIFE14 CCA/IT/000939) – aims to innovate construction sector in terms of cooling during summer season, involving partners all around Europe. More info on **www.lifeherotile.eu** 

Life HEROTile Newsletter Project: Latest news!

Dear reader,

Six months before the closure of the project, we have interesting deliverables to share with you!

An article by the scientific partner introduces the first results of the research developed inside the LIFE "Climate Change Adaptation" European project financing. Then, you will see the video interview to the coordinator of project, Mario Cunial, highlighting the good behavior and best performances of the innovative vented pitched roof. In the end, some details about the building where the LIFE #Herotile demonstratives action was held in Zaragoza.

Keep in mind! On Life HEROTile Official Website (<u>www.lifeherotile.eu</u>) you will find all the previous 4 newsletters and the remarkable interviews with the several partners: Prof. Giovanni Zannoni from University of Ferrara, Fernando Cuogo from Terreal, Mario Cunial from Industrie Cotto Possagno, and Christian Pohl from Monier.

To subscribe to the Life HEROTile Newsletter and to be always updated regarding the developments of the project, please visit the **dedicated page of the website of the project**.

The Newsletter is not the only way to communicate and disseminate the results and the status of the project: if you are a fan of Social Networks do not forget to follow us on **Facebook**, **Twitter** and **LinkedIn**!















## Ventilated roof, novel design for traditional tiles



The building construction of a ventilated roof (or above sheathing ventilation) is enough well known to builders but, despite several research, the real benefits are no yet widespread.

The article, by the scientific partner, shows the first results of a research on the topic, developed within the LIFE "Climate Change Adaptation" European project financing. The three years research investigate the behaviour and the performances of the air movement in a vented pitched roof by the construction of four mock ups located two in Ferrara (Italy) and two in Yeruham (Israel) totally monitored, together with the monitoring of two real buildings in Reggio Emilia (Italy) and Zaragoza (Spain).

The purpose is to understand and quantify the benefits of this technical solution in terms of

energy saving for indoor cooling during summer season. At the same time, it aims to re-design the shape of the two more common clay tiles in Europe (Marseillaise and Portuguese) in order to maximize the amount of air passing through the overlap of the tiles without modifying their waterproof. These new "HEROTILE" tiles would increase air ventilation thanks to the opportunity to let the wind enter from several directions rather than only from the gutter line.

(For more information read the article of Cil175)



## The video-interview to Mario Cunial, the coordinator of Life Herotile project

Last July 6<sup>th</sup> in Rome, during ANDIL General Assembly, some video interviews were recorded with the protagonists of the event. Among these, Mario Cunial was interviewed, as the coordinator of the Life Herotile research, illustrating the innovative requirements of the new tiles developed within the project. *<<The Herotile tile -* said Cunial *- in addition to the well-known characteristics of durability and sustainability of the clay products, has been optimized in its shape to obtain, due to a greater ventilation and transpiration, a reduction of energy consumption in summer and increasing the comfort all the year. It should also be underline that clay tile is "environmentally friendly" for its ability to mitigate the heat island effect and thanks to the its high reflectivity is able to break down the temperature of the roof and entailing passive cooling. To summarize, the new tile can reach 300% more transpiration in favor of the comfort of the underlying inhabited space and the environmental quality of the city>>.* 



#### (See the video-interview

<u>https://www.youtube.com/watch?v=N4RiWDB4gU0&list=PLfgxUpRvOkVE\_y</u> <u>QhpiSo16K7igIBgcsa\_&index=9&t=0s</u>



## Real-scale demonstrator with Portuguese tiles in Zaragoza – Spain



The Building is located in Zaragoza, in the North-East of Spain. The fifth city in population with 664.000 inhabitants. As it is located in the Ebro valley, with the Pyrenees at the North and the Iberic mountains in the South, Zaragoza experiments continental climate achieving cold temperatures in winter and very high temperatures at summer.

The building where the Herotile demonstratives action takes part is located in the historical centre in the street las Armas 18.

Property of the Town Hall of Zaragoza but managed by Zaragoza Vivienda, the building was refurbished in 1985 and has 3 social dwellings with 3 storey building.

In the dwellings the installations are all electrical (cooking, DHW and heating trough radiators) what it makes very interesting to achieve energy saving measures to reduce the energy consumption.

(For more information read the <u>report of Zaragoza Vivenda and Acer</u>) (See the installation video <u>www.lifeherotile.eu/installation-of-tiles-zaragoza</u>)

For all other information: **www.lifeherotile.eu**!

# (LIFE14 CCA/IT/000939)

