

## PIGSTIES

FOR OVER THIRTY YEARS, PAVER PREFABRICATED PIGSTIES HAVE BEEN APPRECIATED BY BREEDERS AND TECHNICIANS. PAVER STANDS FOR EXPERIENCE, FUNCTIONALITY, DURABILITY, AND VERSATILITY, TO CREATE EVERY POSSIBLE STRUCTURAL TYPOLOGY AND MEET THE SPECIFIC NEEDS OF EVERY LIVESTOCK FARM. PIGSTIES DESIGNED TO MAXIMIZE PRODUCTION PERFORMANCE WHILE RESPECTING THE WELFARE OF THE PIGS.





THE PIGSTY, LIKE ALL LIVESTOCK STRUCTURES, IS INTENDED TO LAST A LONG TIME, AND THE INABILITY TO ADAPT IT OVER TIME TO THE NEEDS OF NEW TECHNOLOGIES CAN OFTEN BECOME A SIGNIFICANT CONSTRAINT ON IMPROVING THE ECONOMIC RESULTS OF FARMING. THAT'S WHY THE STRUCTURE MUST BE THE BEST POSSIBLE FROM THE BEGINNING.

The characteristics of a pigsty influence the quality of air and internal microclimate, increasingly important to ensure the essential welfare conditions for successfully raising "new" animals (highly productive but relatively less "robust" than those of the past) made available through genetic improvement. Paver structures have been designed to ensure excellent performance concerning microclimate, durability of materials, resistance to aggressive environments, environmental compatibility requirements, landscape integration, and management rationality. They are the result of extensive research and experimentation conducted by a qualified team of engineers and animal husbandry experts who share a great passion for animal husbandry and agriculture, which is a family tradition at Paver. Paver's specialized prefabrication not only ensures the realization of structures best suited to different farm realities but, thanks to the flexibility of its construction solutions, is often able to adapt them over time as livestock technologies progress.

THE PAVER PRODUCTION ALLOWS FOR THE CONSTRUCTION OF SHELTERS FOR ALL STAGES OF LIVESTOCK FARMING.



THE CORRECT RATIO "TOTAL VOLUME/HOST ANIMALS" ACHIEVED ALSO THANKS TO THE ROOF SLOPE (30% - 40%) AND THE HIGH INSULATION OF THE STRUCTURE ENSURE THE BEST MICROCLIMATIC CONDITIONS





# THE CONSTRUCTION OF PIG SHELTERS

The continuous evolution of livestock farming technologies and the achievement of previously unimaginable productivity results demand the availability of suitable structures, specific, and with high levels of flexibility.

**The PN system** developed by the PAVER team has been expressly designed to meet these specific needs and, at the same time, allow for an economical and rational construction of pig shelters.

## KEY FEATURES OF THE SYSTEM INCLUDE:



The system allows for the construction of pig shelters in various dimensional variations, suitable for all stages of pig production, including piglet rearing, growing, and fattening.



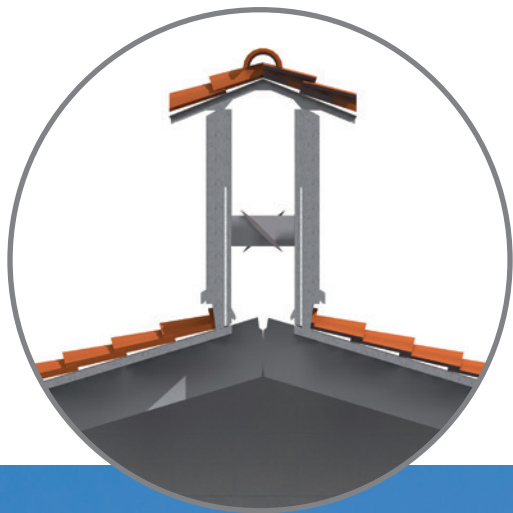
The effective adoption of both forced and natural ventilation, thanks to the considerable roof slope of approximately 30%-40%.



The remarkable execution speed enables the construction of a 1,000 square meter pig shelter in just two days. The self-stabilizing elements do not require foundations.



The high level of insulation in every part of the structure, combined with its significant thermal capacity, ensures the best environmental conditions both in summer and winter and maximum energy savings.



## “THERMAL CUTTING” DOME

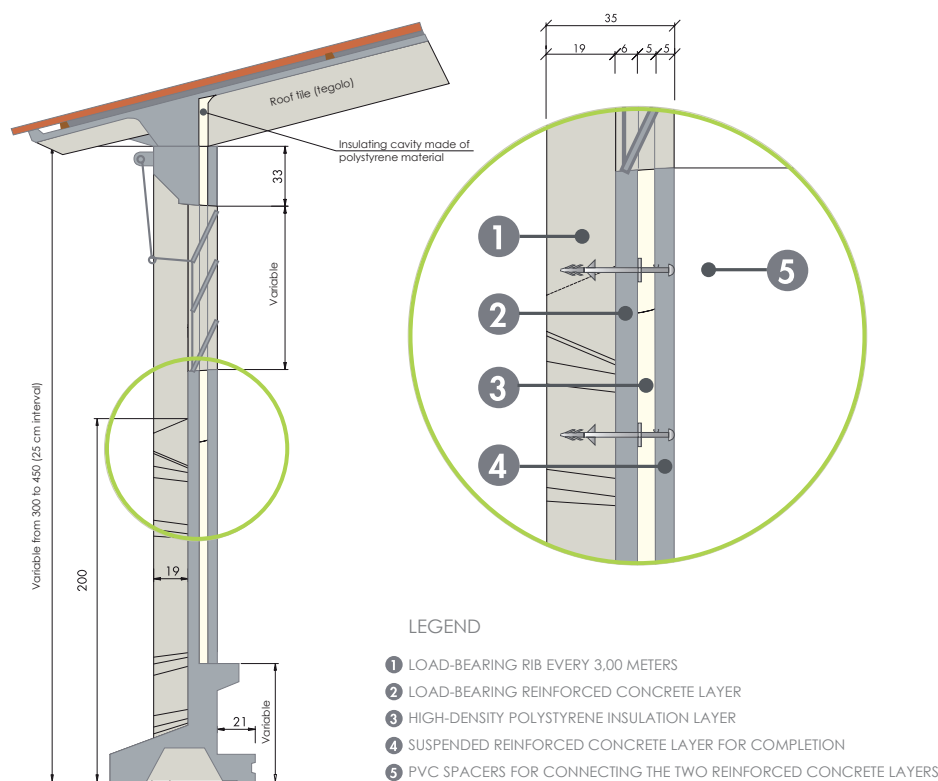
It involves regulating the airflow through a butterfly valve inserted into the duct. When it is desired to change the “natural-artificial” ventilation scheme during different periods of the year, extractor fans can be installed.



## THE WINDOWS

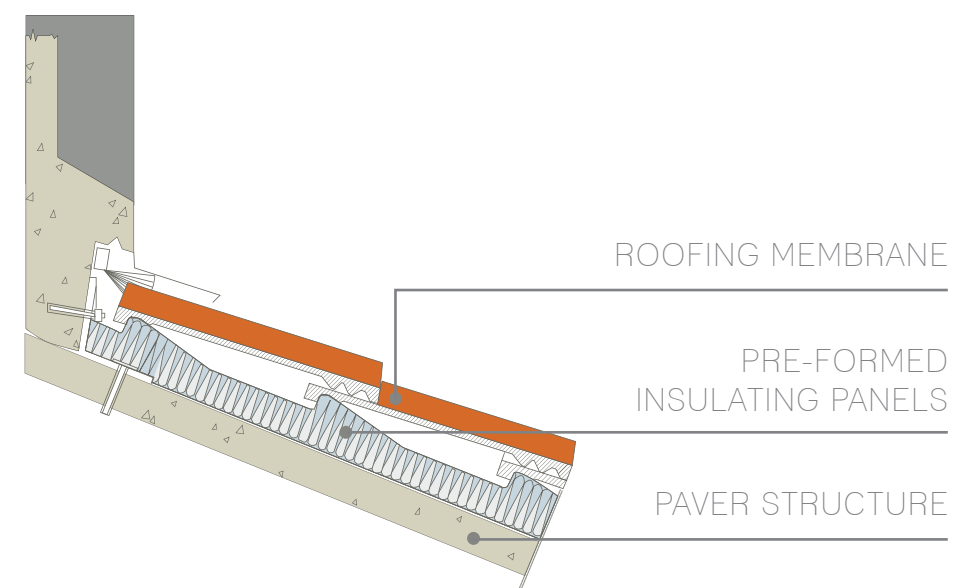
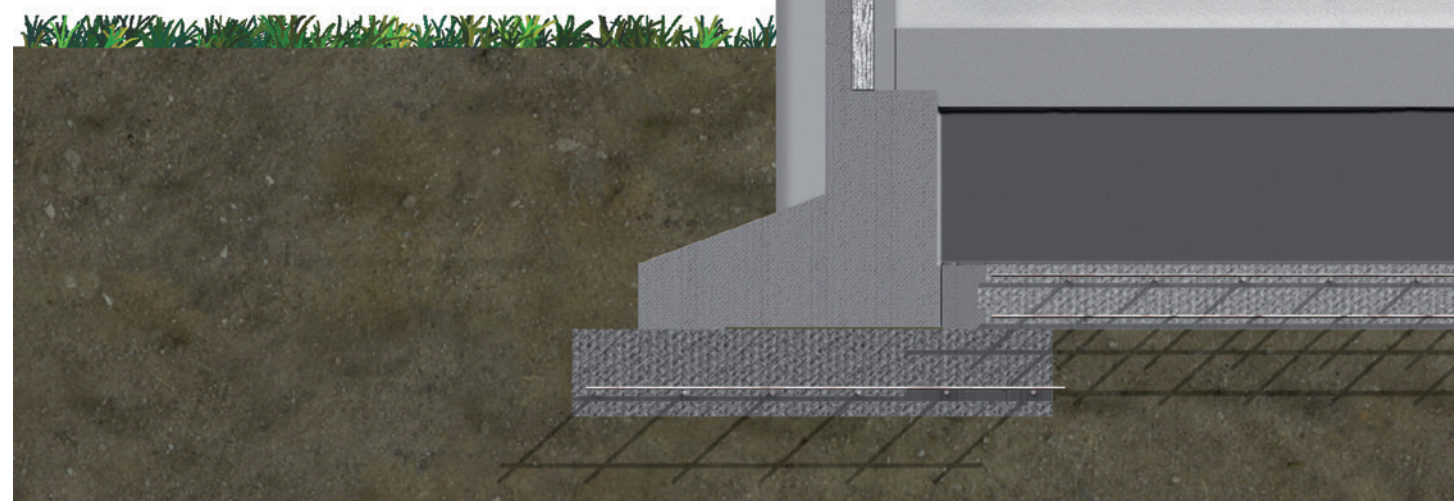
They consist of an anodized aluminum frame with multiple polycarbonate slats. Their movement, thanks to electronic control and temperature sensors, allows for “micrometric” regulation of air exchange even with natural ventilation.





## THE BIOCLIMATE PANEL

Insulating is not just about inserting an insulating layer into the structure, but ensuring its continuity, avoiding any possible “thermal bridge,” and stability over time by using appropriate materials. The **BIOCLIMATE** wall, thanks to its special construction technology that utilizes the connection action of special stainless steel “forks” and the use of high-density extruded polystyrene with closed cells, fully meets these requirements.



## VENTILATED ROOF

The waterproofing and insulation of the roof are ensured by a special “package” specifically designed to optimize efficiency. This package, consisting of special pre-formed polystyrene panels and a layer of cement tiles, allows for ventilation of the space beneath the roof with significant advantages in both cold and hot weather. During the winter season, it eliminates the accumulation of water vapor in the space beneath the roof, reducing the risk of condensation, and dries any water infiltration due to exceptional precipitation. In the summer season, it significantly reduces the flow of heat entering the shelter from the roof.



ENVIRONMENTAL CONTROL

THE TOOLS AVAILABLE TO THE BREEDER TO MAINTAIN THE LEVEL OF ENVIRONMENTAL PARAMETERS WITHIN THE “WELL-BEING ZONE” ARE:



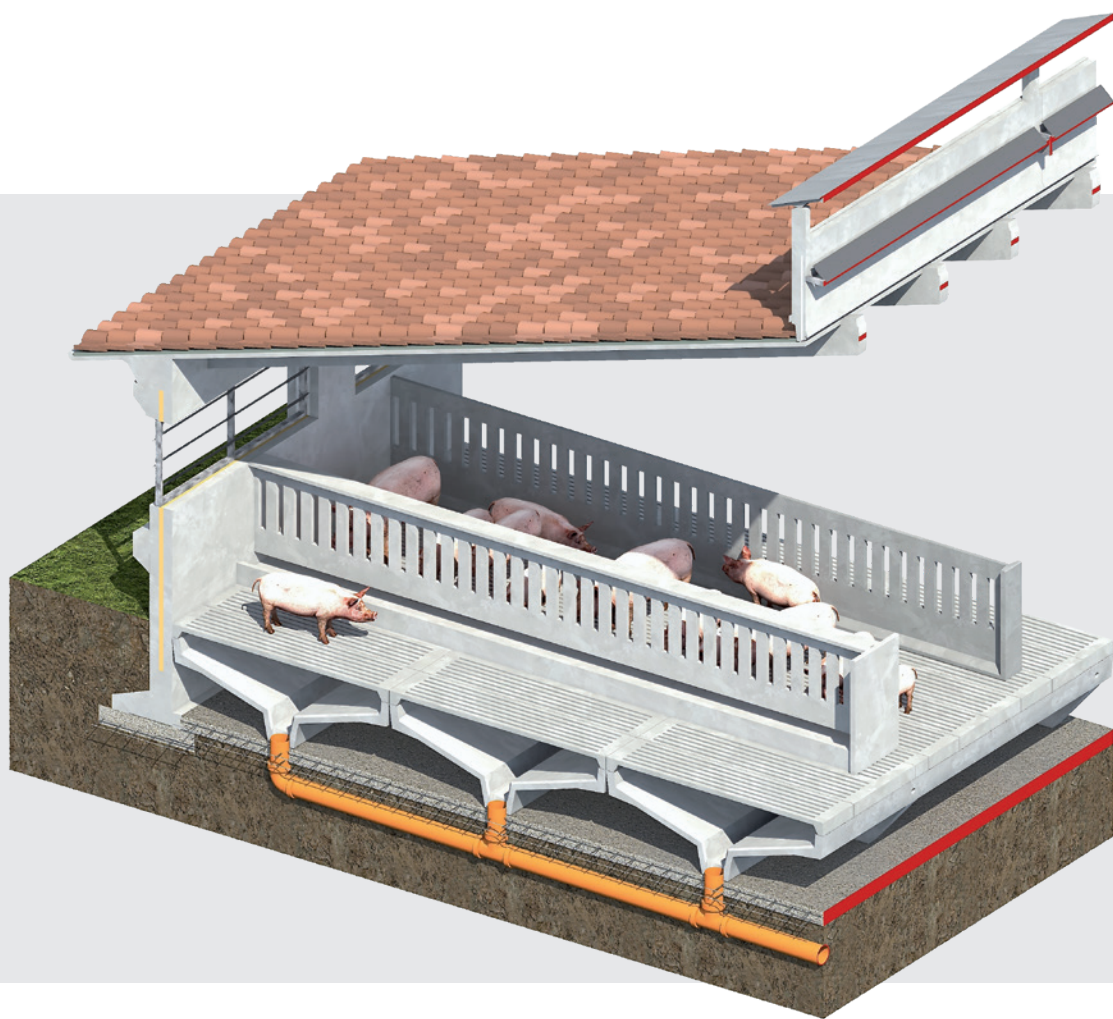
THERMAL INSULATION



VENTILATION



AIR TREATMENT  
(heating or cooling)



An aspect closely related to insulation is **thermal capacity**, or thermal inertia of the structure, i.e., the ability of the walls to store heat at a certain temperature and release it at a lower temperature. All this is achieved by constructing “heavy” and well-insulated shelters. Paver structures, with their high level of insulation throughout ( $K = 0.43 \text{ W/m}^2 \text{ }^{\circ}\text{C}$ ), along with significant thermal capacity (the weight of the structure is approximately 300 Kg/m<sup>2</sup>), ensure the best environmental conditions and maximum energy savings.

THE COLLECTION OF WASTE

The management of livestock waste in the shelter is closely related to the quality of the indoor environment, especially when using slatted flooring solutions. It is evident that the presence of liquid waste inside the shelter leads to the dispersion of gases generated by fermentation processes into the environment. PAVER has developed a solution that reduces storage time inside the pits and ensures, even without the addition of water, the complete removal of waste, optimizing the “**Vacuum**” system. This is a matter of great importance with positive implications both in terms of hygiene and health and towards the surrounding environment and air quality. It falls under the Best Available Techniques (BAT) according to the IPPC Directive (Integrated Pollution Prevention and Control), now even more stringent after the application of the European Commission’s Conclusions of February 15, 2017.

GOL  
(Gas and Odour Less)

is the system for the collection and rapid removal of waste, which allows for a drastic reduction in the emission of gases and odors, minimizing environmental impact.

