

Airdome3S powered by TILEA Poland technology



MODERN AIR DOME STRUCTURES



+48 570 30 50 30



info@airdome3s.com

ABOUT US



AIRDOME 3S powered by TILEA Poland technology, is an innovative company specializing in the construction of an air domes and light-weight steel arch structures for sports, military, logistics, and industrial facilities.

We offer:

- Comprehensive technical and regulatory consulting
- Obtaining building and usage permits
- Fire safety expertise assistance and consultation
- Complete project documentation
- Production / Installation / Commissioning / Service



GENERAL INFORMATION

We offer the supply and assembly of an air dome structures utilizing double-layer, lineless, high-frequency welded membrane technology for all shell components. We handle the complete scope of works, including: electrical installations, main and emergency lighting fixtures, inflation and heating units, revolving and emergency exit doors, as well as technical and transport/evacuation airlocks.

Our goal is to provide high-quality products and services, ensuring year-round use regardless of weather conditions. We collaborate with TILEA Poland, the largest producer of an air dome structures in Poland. TILEA designs, manufactures, assembles, and services an air dome structures worldwide.

TILEA_{POLAND}

TECHNICAL INFORMATION

1. Implementation Capabilities: Custom solutions tailored to your needs – sizes ranging from 200 to 24 000 m².

2. Applications:

- Sports halls and training facilities
- Warehouses for logistics, industry, and agriculture
- Halls for trade fairs and exhibitions
- Relocatable (mobile) repair bases
- Relocatable (mobile) logistics bases
- Relocatable (mobile) temporary hospitals
- Relocatable (mobile) accommodation facilities

3. Our production process utilizes cutting-edge membrane joining technologies, including self-propelled welding machines from FIAB 960. We use premium PVC membranes from leading European manufacturers (Serge Ferrari, Verseedag, Sioen, Heytex).



TECHNICAL INFORMATION

4. Minimum Membrane Specifications:

- Outer membrane – min. 900 g/m²
- Inner membrane – min. 650 g/m²
- Perimeter membrane – min. 1300 g/m²

5. The membrane material can be partially transparent, allowing for natural daylight use. All membranes are certified for fire resistance (EN 13501-1, class B-s2-d0 or equivalent) and are protected against biological, chemical, and UV factors.

6. Production time for the membrane shell depends on the air dome size and site conditions. The production cycle for a 9000 m² air dome takes 6-8 weeks, while a 1000-2000 m² air dome takes up to one week. We approach each project individually and can significantly increase production capacity as needed. Production of heating/ventilation units, entrance doors, emergency exits, and airlocks for specialized transport takes 6-8 weeks.



TECHNICAL INFORMATION

7. Installation takes place on-site on a pre-prepared foundation or existing playing field.

8. Construction work includes:

- Geotechnical work, concluding with a report – 3-5 days
- Anchoring using specialized ground anchors – 3-5 days
- Installation of the membrane shell, doors, airlocks, lighting, and heating/ventilation systems – 3-7 days (depending on weather conditions).

9. Ventilation and Heating: We use high-quality heating/ventilation units with airflows ranging from 18,000 m³/h to 38,300 m³/h (at 300 Pa pressure), fueled by natural gas or LPG, along with backup units powered by diesel engines.

10. Lighting: We design and install energy-efficient LED fixtures (150-200 W, 201 lm/W per lamp).

WARRANTY

We offer:

- Up to 15 years warranty on membrane material and welds
- 8 years warranty on lamps and electrical installations
- 2 years warranty on other equipment (extendable to 5 years – optional)

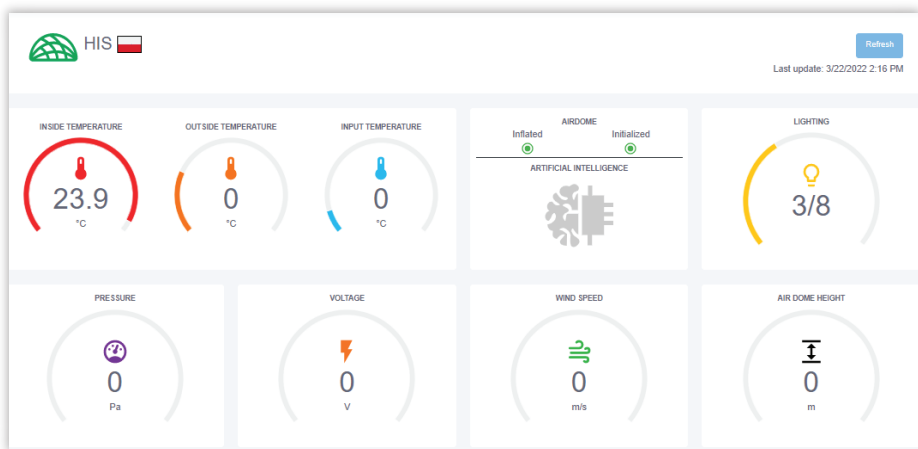


SYSTEMS FOR AIR DOME

Each air dome structure includes a dedicated Automation and Control System. This integrated system uses PLC controllers, microprocessors, and AI to manage and control all installed equipment and systems. It analyzes, predicts, and prevents potential damage to key components, ensuring safe and energy-efficient operation.

This system can reduce operating costs by up to 30% and provides full control via a computer or smartphone app.

We also offer the WES3 system, a mobile wireless evacuation and fire detection system. Visual and audible alarms facilitate rapid evacuation. WES3 uses radio communication and includes wireless smoke detectors, temperature sensors, and manual fire alarms.



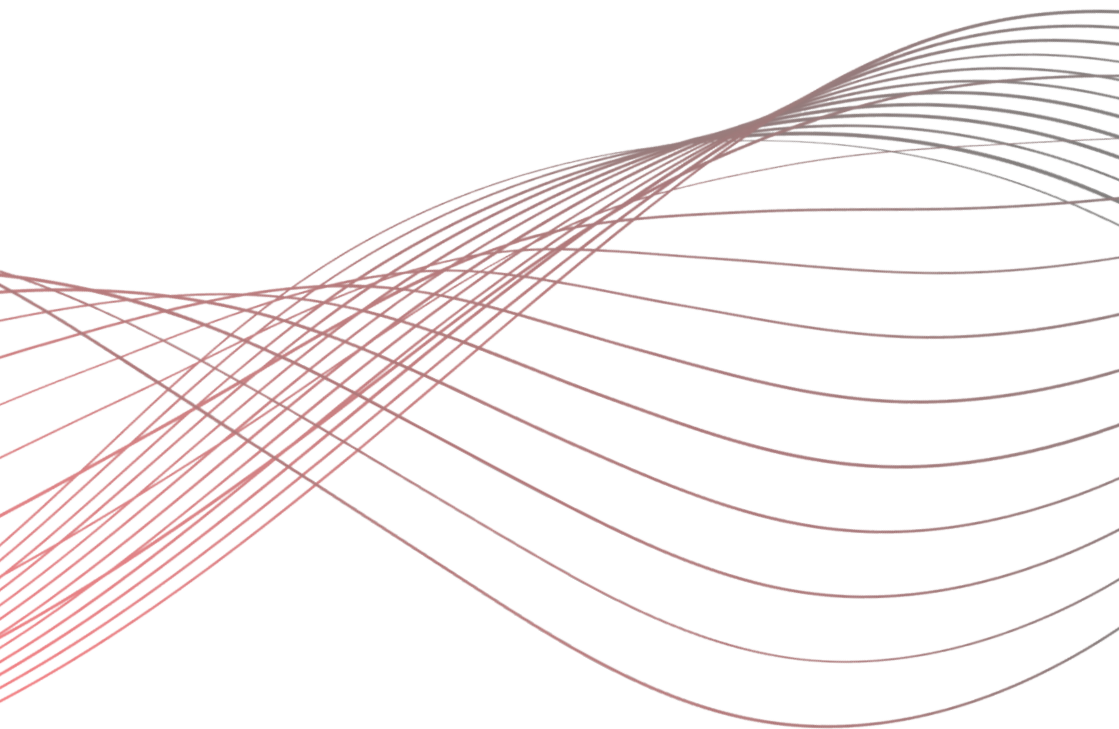


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Contact us to learn more about our offerings.



TILEA POLAND

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