

TILEA® made in Slovakia (EU)

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HOSPITAL AIR-DOME

7700m² self-supporting dome with thermal membrane

PROJECT

The subject of this turnkey offer is a **movable** hospital Air-Dome designed for **temporary or year-round use**. It has a flexible use for the **treatment of patients, a protected quarantine space or a store of medical and other supplies**. It is a self-supporting (inflatable), double-layered Air-Dome with a thermal membrane of 110 x 70 x height up to 19 m.

The assembly of the dome with chemical anchors to the concrete takes about 1-2 weeks.

Turnkey offer includes complete hall **accessories** * including **transportation, installation and service**.

*anchoring with chemical anchors (L-shaped profiles connected to the concrete foundation), rotating / emergency doors, entrance & exit cargo airlock chamber for ambulance, ventilation / heating / recuperation system with back-up generators, LED lights.

HALL DIMENSIONS:

110 x 70 x height up to 19 m (any dimensions possible, standard up to 11 000m²)

USEFUL AREA:

7700 m²

DELIVERY TIME:

7-8 weeks + installation



UV resistant membranes



material for year-round use



anti-freeze coating of material



energy savings up to 60%



easy to disinfect



extreme temperature tolerance



AIRLOCK CHAMBER FOR AMBULANCE
AND TRUCKS

HEIGHT UP TO 25 METERS



TENS OF THOUSANDS OF CUBIC METERS OF SPACE

VENTILATION / HEAT RECOVERY / BACKUP
POWER SUPPLY

TILEA®

COMPARISON

**TILEA® Self-supporting
double skin inflatable air-dome
with a thermal membrane**

**Hall with solid supporting
structure and sheathing**

LOW PURCHASE PRICE
(APPROX. 25-30% OF THE VALUE OF A
SOLID STRUCTURE)

HIGH PURCHASE PRICE

**CONSTRUCTION TIME
IN A FEW DAYS**

CONSTRUCTION TIME IN MONTHS

**LIFETIME OF CONSTRUCTION
30+ YEARS**

**LIFETIME OF CONSTRUCTION
30+ YEARS**

**MAX. CONSTRUCTION WIDTH
UP TO 120 METERS**

**STANDARD CONSTRUCTION WIDTH
UP TO 40-50 METERS**

YEAR - ROUND USE

YEAR - ROUND USE

IT IS NOT NECESSARY TO TURN LIGHT ON DURING THE DAY

NECESSARY TO LIGHT DURING THE DAY

**HEAT RECOVERY HELPS PREVENT DEW
AND INCREASED HUMIDITY IN THE HALL**

HEAT RECOVERY FOR EXTRA CHARGE

LOW HEAT LOSS
(AIR MEMBRANE DIAMETER 50CM)

LOW HEAT LOSS
("SANDWICH SYSTEM")

**VERY HIGH CEILING HEIGHT
(UP TO APPROX. 25 METERS)**

**STANDARD HIGH CEILING
(UP TO APPROX. 15-17 METERS)**

**MAXIMUM USABLE AREA = COLUMNLESS
DESIGN OF THE STRUCTURE**

SUPPORTING COLUMN CONSTRUCTION

**HIGH SAFETY OF SELF-
SUPPORTING CONSTRUCTION
(SLOW PRESSURE LOSS)**

**HIGH SAFETY OF SOLID
SUPPORTING STRUCTURE**

**EASY DISASSEMBLY AND
RELOCATION OF THE DOME**

**NOT POSSIBLE DISASSEMBLY AND
RELOCATION OF THE HALL**

**HEATING + HEAT RECOVERY +
LIGHTING INCLUDED**

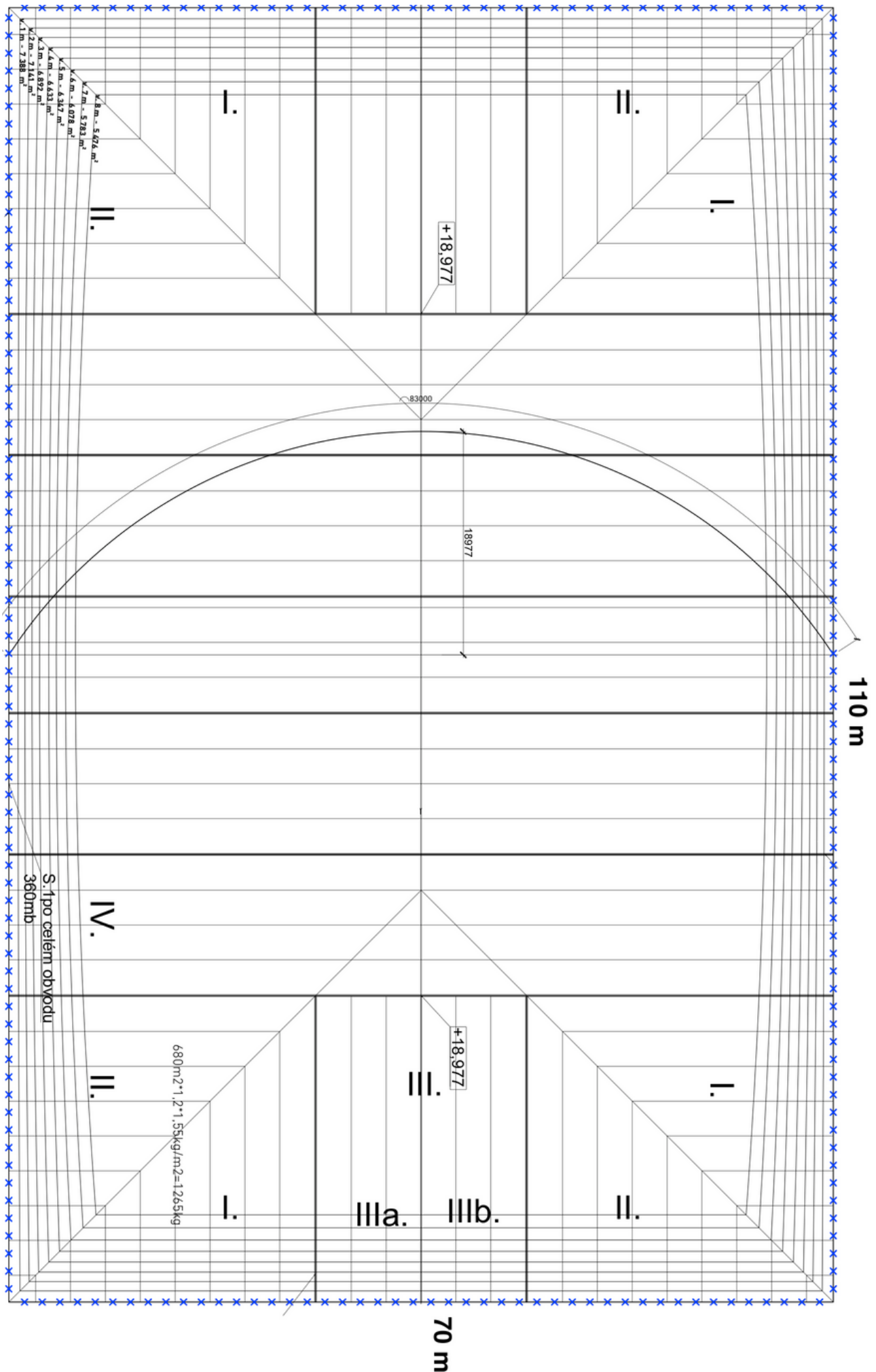
**HEATING + HEAT RECOVERY + LIGHTING
INCLUDED FOR EXTRA CHARGE**

5 YEAR WARRANTY

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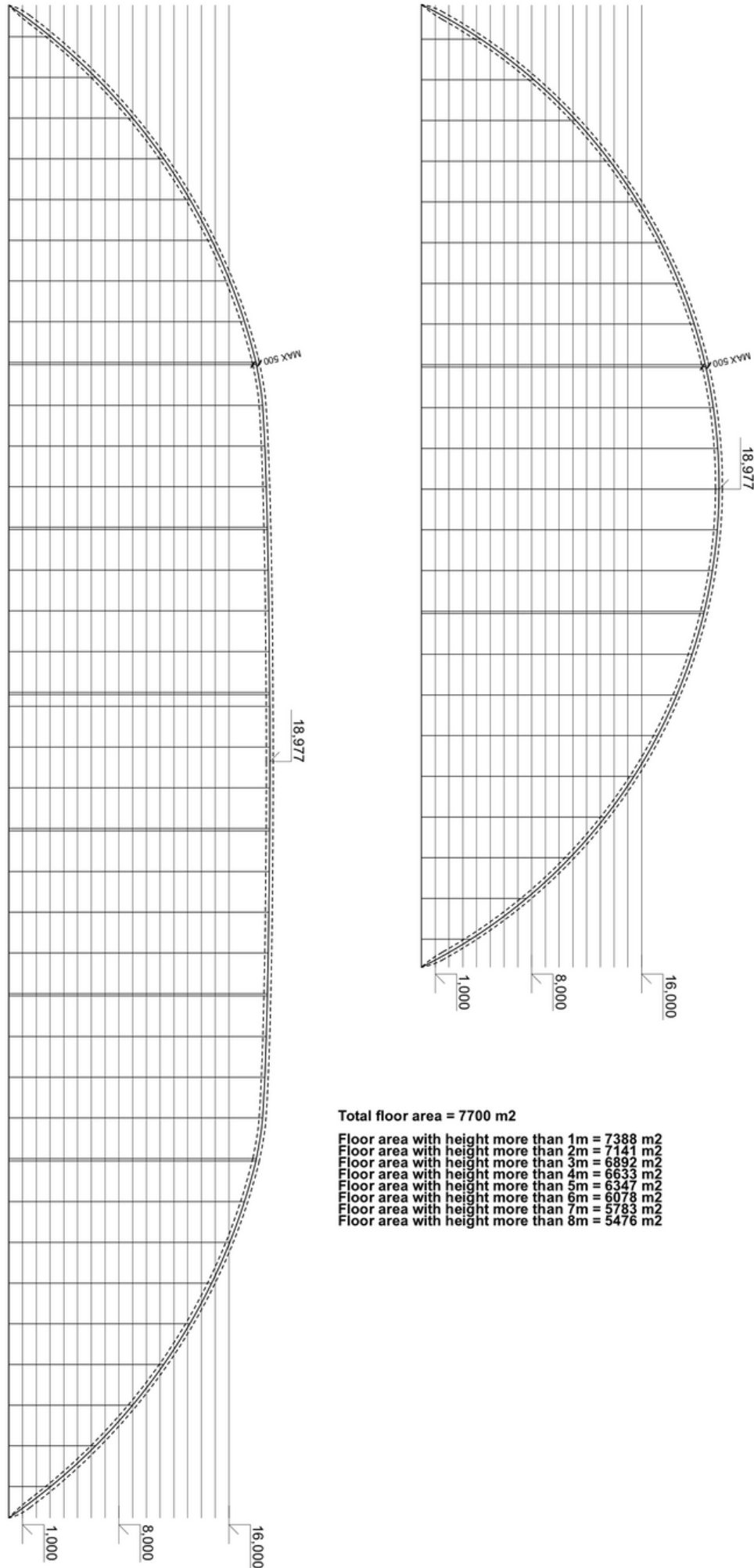
FLOOR PLAN AND VIEWS

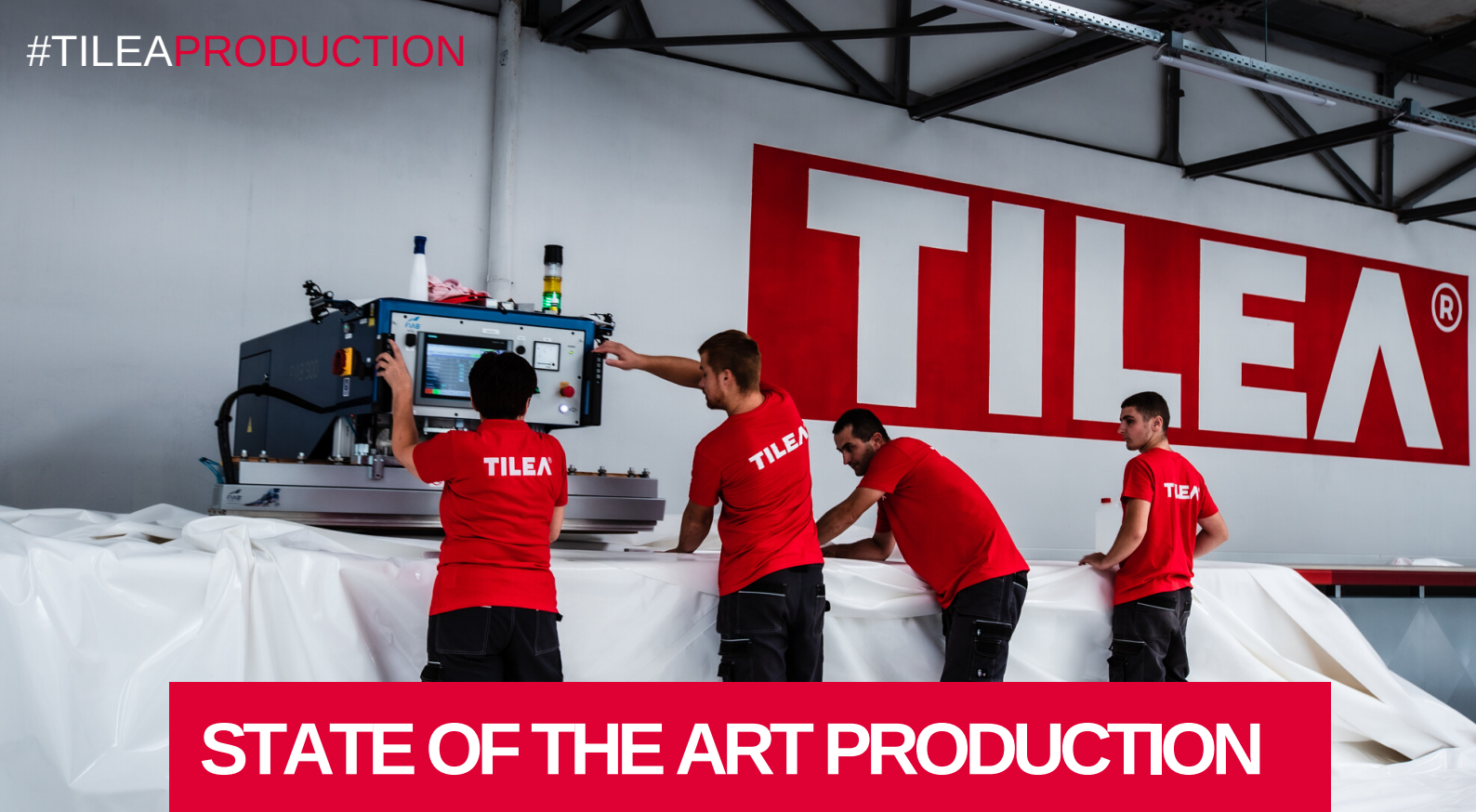
Air-Dome 110 x 70 x up to 19 m



FLOOR PLAN AND VIEWS

Air-Dome 110 x 70 x up to 19 m





STATE OF THE ART PRODUCTION

FOR YOUR SUCCESSFUL PROJECTS

TILEA[®] AIR-DOME PARAMETERS

MEMBRANE PARAMETERS

Outer membrane:	900g-1050g / m ² - white color	4300/4200 N / 50 mm
Inner membrane:	680g-900g / m ² - white color	2700/2900 N / 50 mm
Fire resistance:	DIN 4102:1:B1 PVDF Coating	

VENTILATION SYSTEM + DIESEL GENERATOR (BACK-UP POWER SUPPLY)

System performance: 26 kW x 0,75* = **19,50 kWh** Air volume: **52.000 m³/h** Heat output: **750 kW**
*the system output is set to 75% of the total output during normal operation

COSTS FOR OPERATION OF VENTILATION SYSTEM + HEAT RECOVERY

19,50 (system performance) x **0,12 EUR / kWh** x **24 hours** = **56,20 EUR / day / 7700m²**

DOORS

Revolving doors (main entrance): 1x
Emergency doors: 3x
Airlock chamber for trucks / service entrance: 1x

ANCHORING (FOUNDATION OF THE HALL)

The price includes fixing the hall with chemical anchors to the concrete foundation.
Concrete foundation must be built in advance at client's expenses.

LED LIGHTING

The number of lights will be specified according to the lighting project. Complete lighting is included in the price of the project.

Power: **100 W / 0,1 kW / ks** Lighting intensity: **300 lx** Number of pieces: **130**



MAIN BENEFITS

Recap of main benefits:

- Turnkey price compared to conventional construction 25-30%
- Fast turnkey delivery in 7-8 weeks
- Assembly speed approx. 1-2 weeks
- Flexible use (sleeping area, protected quarantine zone, warehouse ...)
- Year-round use (summer / winter) with heating included
- Lifetime of construction 30+ years
- Relocation / disassembly of the Dome and its re-use (also for other purposes, eg sport, warehouse ...)
- High safety of self-supporting construction (with backup units included)
- Fast air recuperation in 30-45min
- Without column construction = maximum utilization of useful area
- Possibility to deliver the Dome including modular removable floor
- Local service provided by our company, the only manufacturer of the latest generation of big double-layered Air-Domes in Central Europe
- service twice a year included

The offer includes* chemical anchoring with L-shaped profiles to the concrete foundation, complete Dome's accessories, ventilation / heating / air-recuperation / back-up system, LED lighting, entrance and emergency doors, cargo air-lock chamber for ambulance and trucks, transport, installation and service.

* indoor medical equipment and floor are not included in the price of the Dome. **We can supply a modular removable panel floor.**

BEST INFLATE WITH US ...





TERMS OF DELIVERY

INSTALLATION TIME

Anchoring: up to 14 days
Dome (Warehouse): 2-3 days
Lighting: up to 10 days

DELIVERY DATE

7-8 weeks + installation (within about 14 days)

WARRANTY

Membrane: 5 years
LED lighting: 5 years
Other: 2 years

CONSTRUCTION READINESS

Standard variant:

- connection to el. network
- gas connection (heating)

Alternative variant:

- connection to el. network
- oil heating with tank

Temporary variant:

- connection to the generator
- oil heating with tank

BEST INFLATE WITH US ...



REFERENCE PROJECT

Wroclaw / PL - useful area 7700m²





TILEA® SERVICE

24 HOURS / 7 DAYS A WEEK

ALWAYS AVAILABLE SERVICE

As the only manufacturer of large-scale inflatable self-supporting double-layered Air-Domes of the latest generation in Central Europe, we provide for our clients service visit twice a year. In case of a serious repair of the Dome, we will take it directly to our production and replace the relevant segment.

If the Dome is not permanently built in one place, our service team will provide disassembly / storage and possible re-installation.



SERVIS HOTLINE

COME AND VISIT US

We invite all our clients and partners to one of the most modern air-dome productions worldwide. We will gladly guide our clients to our production and answer all questions. We are looking forward to our cooperation...