

Arch Buildings

in fiber-reinforced composite



Arch buildings

Functional and elegant with optimal properties for protection against harsh weather

With these unique and innovative arch buildings you will not achieve just an elegant design, but also a number of optimal benefits and protections against harsh weather conditions and operating environments

Arch buildings have many uses, e.g. such as loose housing, pig and cattle stables, chicken farms, machine halls, garages and many other options.

Arch buildings are spacious halls with a large utilization area, as there is no need for annoying middle posts and therefore also usable as storage halls, packing halls, growth halls with more.

Arch buildings can be delivered in several sizes and the area can be adapted as needed by adding more modules. The buildings are delivered as assembly kits and can be expanded with several modules, also after installation and commissioning.

In the roof construction/top cover there room for hidden cables e.g. for lights, surveillance and alarms. The largest models can also be provided with translucent panels in the construction, which provide good lighting during the day. Front and rear walls can be fitted with gates and doors according to the customer's wishes and needs.

The Tunetanken arch buildings are made of a strong fiber-reinforced composite material that has unique properties such as chemical resistance, corrosion resistance, thermal and electrical insulating, high hygiene, high wear resistance and requires minimal maintenance. The Tunetanken arch building therefore stay neat even after many years in operation.

The Tunetanken arch buildings are well thought out with regard to establishment – operation – maintenance – service life – environment.

Advantage

1. Modules

Adjustable modules with option for area adjustments as needed.

2. Skylights

Translucent fields embedded in arc modules.

3. Top cover

With space for hidden cables.

4. Depotrum

When installing gates and door modules, a storage room can be established.

5. Gables

Can be mounted with gates and doors as needed or it can be closed completely for protection against severe weather such as strong winds, rain and hail.





Model 5.6. Width 5,680 mm. The model shown is 3 modules, this gives approx. 39 $\,\mathrm{m}^2$.



Model 16. Width 16,000 mm. The model shown is 4 modules, this gives approx. 230 m².

Advantages of the Tunetanken arch buildings

- > Great strength and density.
- > Long service life.
- > Corrosion resistant.
- > Chemical resistance.
- > Minimal maintenance.
- Insulating properties (minimizes risk of condensation).
- > Resistant to climatic influences.
- > Low weight.
- > Hygienic surfaces.

Construction

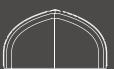
Tunetanken arch buildings are offered in 3 standard widths models 5.6, 11 and 16. A minimum of 3 modules is recommended.

	Width	Height	Module width	Area per. module
Model 5.6	5,680	3,220	2,400	13.0 m²
Model 11	11,000	6,230	3,000	33.0 m²
Model 16	16,000	9,062	3,600	57.6 m²

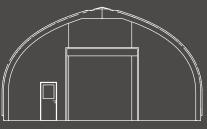
Foundation

Round arch halls can be mounted on a solid foundation or mounted in a cast gutter, depending on the function of the arch building.

The Tunetanken arch buildings are available in three widths as a starting point.



Model 5.6. Model 11.



Doors, windows and gates

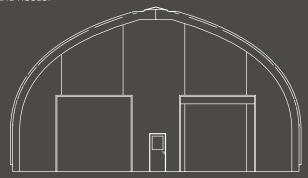
Translucent fields embedded in the arc modules are mounted as required. Cut-outs for doors and gates are made at the construction site or at our factory, which makes the customer have a say in which and how many.

Room division

Room division can be built into the design as needed.

Ventilation

Natural, solar cell controlled or electrically controlled ventilation can be offered depending on the building function and needs.



Model 16.





Tunetanken

With more than 50 years of experience working with fiber-reinforced composite materials, their unique advantages and a large standard product programme we have developed our market position as the leading Danish manufacturer of storage tanks, industry systems and silos in composite materials.

Tunetanken markets a large and varied programme of products and facilities for various purposes as well as supplies a large range of industries including agriculture, industry, wastewater and water treatment for energy sector. We produce all our solutions in fiberreinforced composite materials – the same materials that are used in the manufacturing of space shuttles, air planes and wind mills. With benefits as strength, corrosion resistance and long life cycle, composites are among the popular materials of the future.

Agro

Tunetanken offers a broad programme of products, facilities and systems for agriculture. We produce silos, tanks, airtight silos, grain handling systems, hay and grain drying systems, carcass covers, slurry systems, shelters, buildings, irrigation systems, barn inventory et al.

Most of our products are made with the incorporation of fiberreinforced composite materials, which with their unique properties are extremely suitable for the demanding agricultural environment.

Modern composite materials are materials of the future. The innovative and unmatched technical material properties contribute greatly to the development of new sustainable products and solutions, which are necessary for a sustainable future.

Composit

Composite is derived from the Latin word »componere«.

Composite materials are made by combining two or more materials (physically not chemically), thereby creating a new material with specially intended and superior properties.

Technical properties of composite materials derive from the initial qualities and properties of the combined materials, the combination of the fabrics (matrix, reinforcement, hardener, additives), as well as, the production processes and conditions.

Possibilities are endless!