



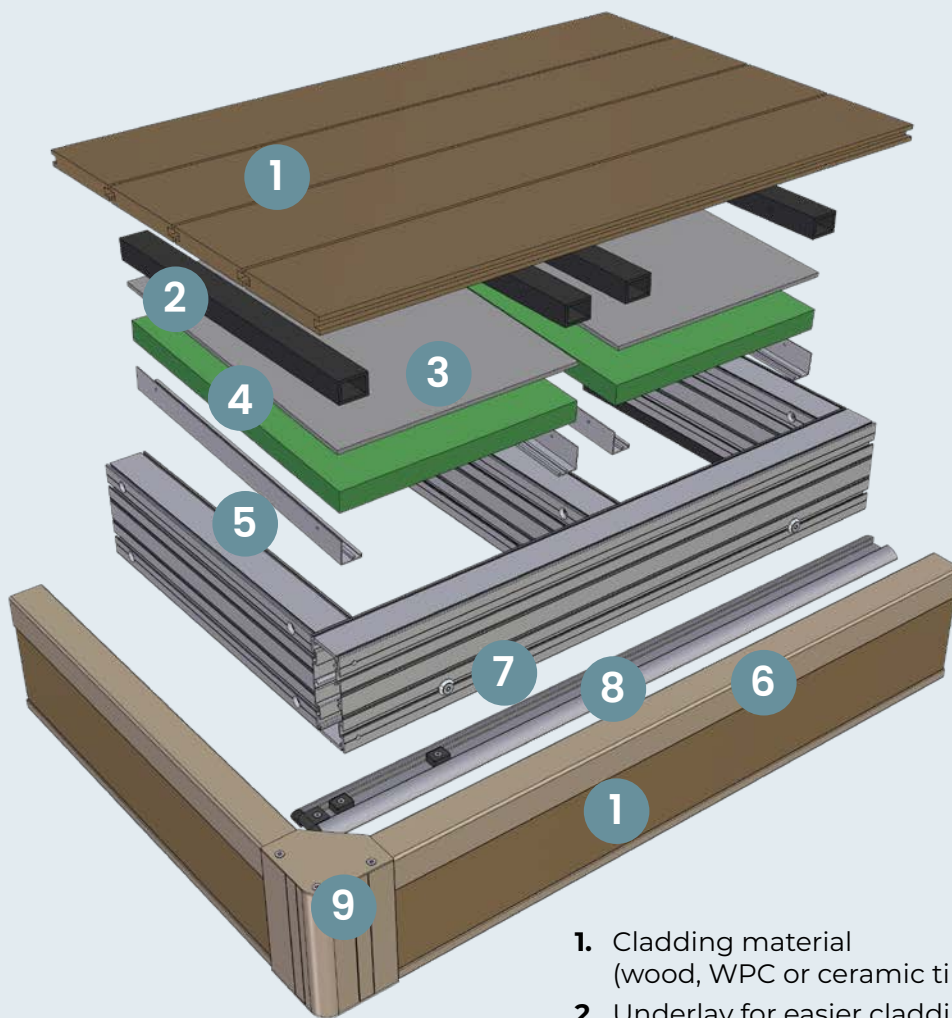
# **Atlas**

**POOL DECK**



# Technical details

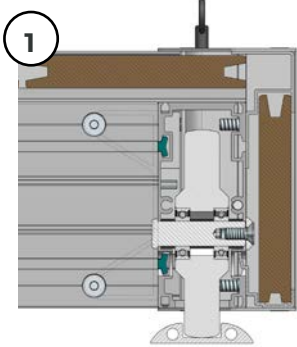
The figure below shows the structural elements of the ATLAS pool deck. Once the delivered items are assembled, we have a movable frame that is ready to support the final cladding. Thermal insulation is available as an option. Another extra is an aesthetic cover frame for the edges that makes cladding installation easier.



1. Cladding material (wood, WPC or ceramic tiles etc.)\*
2. Underlay for easier cladding assembly
3. Polyethylene sheet for water drainage
4. XPS foam insulation
5. Aluminium load bearing beam
6. Powder coated frame profile\*
7. Roller with ball bearings
8. Guiding rail (14x70 mm)
9. Corner profile with locking system

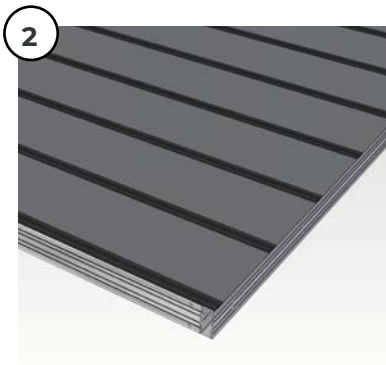
\*optional

# High load-bearing capacity - easy assembly



## Load bearing structure (1)

Hardened, extruded aluminium alloy profile system with high load capacity. The kit contains all parts necessary for assembly, including node elements, bolts and guide rails.

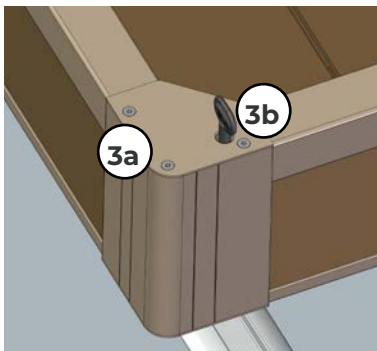


## Water sealing, drainage and protection against contamination (2)

The standard version includes custom-sized, dark-coloured, multi-wall polypropylene insulating sheets of 3 mm thickness and the aluminium profiles necessary for their attachment. The plastic sheets are installed at an angle, ensuring that precipitation does not enter the pool, but is instead directed to the side of the structure.

The space between the bottom of the pool deck and the ground is sealed with a 30 mm brush strip on all 4 sides.

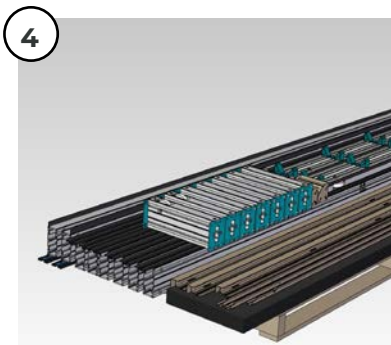
The brush prevents wind from blowing leaves and other garden debris into the pool.



## Aesthetic covering framework to make cladding installation easier (3a)

As an option we provide an aluminium framework for cladding material with a thickness of 20-25 mm on the sides and horizontal surface of the pool deck. The framework fixes and supports cladding materials on perpendicular surfaces and provides high-quality edge sealing.

The framework has a powder-coated finish; standard colours are grey aluminium (RAL 9007), anthracite (RAL 7016), brown (RAL 8025).



## Safety lock (3b)

The locking and safety mechanism of the pool deck, which can be operated with a square key, is located in the corner profiles of the aluminium framework. The locking pin can be fixed in a plastic fitting placed on the track of the pool deck, preventing movement.

## Packaging (4)

The components of the ATLAS pool deck, including the aluminium beams, are bundled, boxed on pallets, and covered with a film wrap for delivery to the site.

# Pool deck movement configurations

The movement configuration of ATLAS is primarily determined by the size and shape of the surface available in the garden near the pool. The first task is to identify the area around the pool where the pool deck can be stored when rolled away.

**The diagrams to the right show the different geometric scenarios for moving, opening, and closing the pool deck.**

ATLAS can be moved crosswise or lengthwise relative to the pool, in 1 or more segments. Even telescopic versions are available, where the deck comes in segments of different heights.

## Type:

T1-C / T1-L

T2

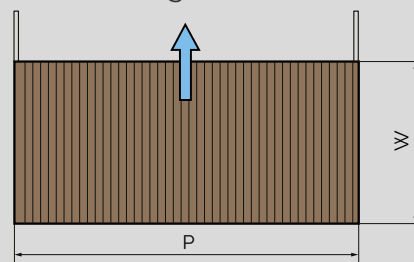
T3

T4

T5

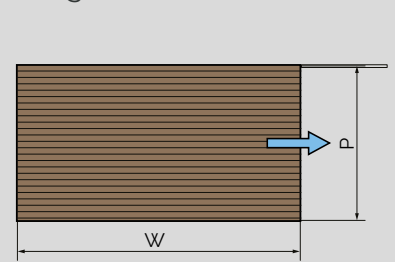
## T1-C

Cross- or lengthwise movement in 1 segment



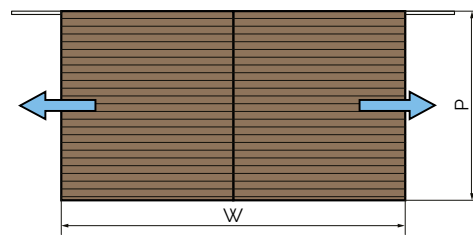
## T1-L

Cross- or lengthwise movement in 1 segment



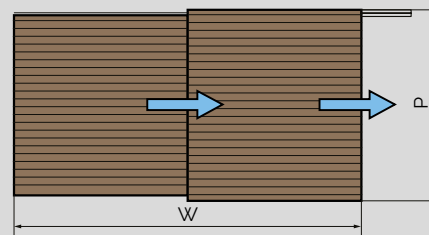
## T2

Lengthwise movement in 2 segments (center opening)



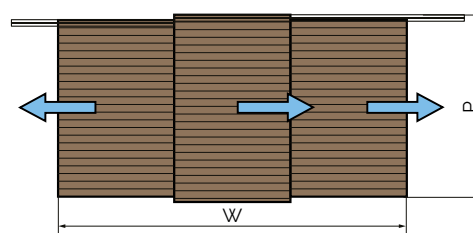
## T3

Lengthwise telescopic movement in 2 segments



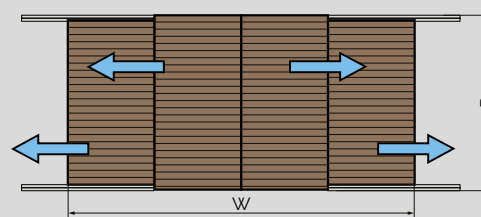
## T4

Lengthwise telescopic movement in 3 segments



## T5

Lengthwise telescopic movement in 4 segments



# Frequently Asked Questions

## Where can I store the pool deck when rolled away off the pool??

The ATLAS pool deck can be stored next to the pool with varying space requirements depending on the type of movement. The rolled-away structure can be temporarily stored over the pavement next to the pool or even on the green area in the garden, such as grass if a suitable load-bearing foundation strip approximately 8-10 cm wide is created for the rails.

## What type of pavement can the pool deck be rolled on?

The ATLAS pool deck can be rolled on a horizontal, smooth pavement with a concrete base that provides adequate compressive strength. When paving, avoid wide and deep gaps, as they impede the easy rolling of the wheels, which can lead to damage or malfunction. If the smooth surface quality of the pavement cannot be ensured, a rail must be installed under the rollers.

## Are the rails always necessary?

The need for rails depends on the technical specifics of the particular project. Factors such as the type of pool deck, the dimensions of the structure, and the surface quality and slope conditions of the pavement all determine whether a rail is required.

## What if there is a protruding pool edge?

The ATLAS pool deck is designed with a 30mm weather-resistant sealing brush. This means the cover cannot roll over a protruding pool edge. In such cases, the structure needs to be elevated, see optional accessories for orders.

## What is the standard height of the ATLAS pool deck

ATLAS is one of the flattest pool deck on the market with a height of only 20-21 cm, depending on the cladding material.

## What if the skimmer(s) is located in the path of the rail?

If the rail crosses the skimmer lid, either a larger or smaller pool deck must be ordered. If the skimmer has a longer neck and the lid is outside the rail track, the track can run over the skimmer neck provided it is installed with adequate stability.

## What happens to the precipitation that falls on the pool deck?

The ATLAS pool deck is delivered with a polyethylene insulating sheet as standard. This sheet drains the water towards the edge of the pool deck. If the ground next to the pool is not sloped towards pool, then the rain water can drain away.

## What cladding materials can be used?

The pool deck can be covered with natural wood, WPC (Wood-Plastic Composite), or ceramic tiles. It's important to note that natural wood or WPC weigh 20kg per square meter, while a 20mm ceramic tile weighs 50kg. Due to the higher weight, tile is only recommended for spans up to a maximum of 4.5 meters (distance between roller sides). The cladding installation techniques are detailed in the installation manual.

## How can I move the pool deck?

The ATLAS pool deck is equipped with ball bearing-mounted rollers that make it extremely easy to move even the largest and heaviest structures. The movement can be done by hand or carefully by foot.

## How long is the warranty for the ATLAS pool deck

Aquacomet provides a 3-year warranty for any manufacturing or material defects in the structure it supplies. This is subject to compliance with the instructions described in the assembly manual and the user's manual. For products and components supplied by third parties, e.g. WPC cladding material, motor drive, the manufacturer's warranty conditions apply. For more information, please see the ATLAS warranty document.

## Is there a safety lock on the pool deck?

We integrate a locking mechanism into the installation frame profile of the pool deck. The locking mechanism is operated with a square key.

## Is motorized movement available?

We offer two types of motorized movements that can be selected based on terrain conditions and the type of pool deck, ensuring ease of use.

## How to interpret load capacity and what does flexible deflection mean?

Understanding load capacity involves familiarizing ourselves with the concept of flexible deflection. Flexible deflection in a structural component, such as a building floor or bridge structure, means that the deformation experienced under load disappears when the load is removed, and the structure returns to its original geometric position.

Thus, the structural element undergoes no permanent deformation. Flexible deflection occurs even under the smallest loads, although it may not be perceptible. In architectural practice, a comfortable level of flexible deformation during use has been introduced, expressed as a fraction of the span length that the structure

can tolerate without exceeding its elastic limits. Typically, this is set at  $L/200$ . What does this mean? Applying the  $L/200$  criterion means that the allowable load specified in the price list allows a 6-meter span pool deck to deflect up to 30mm, and an 8-meter span up to 40mm. This may seem minimal, and in reality, user tolerance is often higher because we're talking about a pool deck, not a bridge structure. By accurately informing potential buyers about the recommended mechanical properties of the structure and stricter load limits, they may still opt for the project despite the slightly greater flexible deflection. Ultimately, the structure can still serve as an excellent, versatile pool deck that meets all requirements, allowing perhaps 7cm deflection at maximum load in a specified span. For further information, please contact our specialists.

## What is the usable load capacity of the ATLAS pool deck?

Assuming wood or WPC cladding, and considering the above  $L/200$  rule (in our case  $P/200$ ), the usable weight bearing load is as follows:

2,5 - 3,5 m-ig	- 400 kg/m <sup>2</sup>
3,5 - 4,0 m-ig	- 330 kg/m <sup>2</sup>
4,0 - 4,5 m-ig	- 220 kg/m <sup>2</sup>
4,5 - 5,0 m-ig	- 150 kg/m <sup>2</sup>
5,0 - 5,5 m-ig	- 100 kg/m <sup>2</sup>
5,5 - 6,0 m-ig	- 70 kg/m <sup>2</sup>
6,0 - 6,5 m-ig	- 46 kg/m <sup>2</sup>

Load test on a pool deck with 8,5 m span

