



solutions holding **your ideas.**

# UMBRA

Keder roof system



[www.catangroup.com](http://www.catangroup.com)

Ensuring a safe and efficient work environment, even in challenging weather conditions, is paramount for the health of workers and productivity at job sites.

Catari UMBRA is a state-of-the-art modular temporary roof system engineered to provide unmatched shield against inclement weather conditions.

Catari UMBRA places protection at its core, while simultaneously prioritizing the incorporation of lightweight components and easily assembled joints to guarantee a rapid and secure setup process, suitable for any site.

Used for

CONSTRUCTION

ROOF REPAIRS

SHIPBUILDING

RENOVATION

INDUSTRY

EVENTS

PROTECTION FOR  
EVERY SITUATION





## Cost Effective

One significant advantage of Catari UMBRA is its effortless installation process. The lightweight aluminium components and smart joints work in tandem to reduce labor requirements, streamlining setup and enhancing efficiency. Components pre-assembled on the ground can be swiftly and accurately installed on the desired location using a crane, saving time and resources.

## Strong and durable

The inherent corrosion resistance of aluminium makes it an excellent choice for outdoor applications, as it does not rust like iron or steel roof systems. Moreover, the stiffer joints and lower self-weight per square meter significantly enhance the structural performance of Catari UMBRA.

This improvement allows for various combinations of spans, wind and snow conditions, all of which are already accounted for in the User Guide, in compliance with EN16508 standards.

**4** types of layouts

**30 m** of maximum span

**50%** quicker to install than steel roof systems

**8.5 kg/m<sup>2</sup>** average self-weight

# Easy to attach

## Self-locking claws

With a quick-fit self-locking claw, bracing components are installed swift and easily without nuts, bolts or wedges, which minimizes downtime and maximizes productivity.

These self-locking claws provide a secure and stiff connection between the Keder beams, reducing the risk of accidents caused by instability or shifting during use.



## Keder beams

The main beams of the roof are equipped with a Keder rail on the top, precisely developed to accommodate the bead insert along the edges of the tarpaulins, creating a gapless and seamless connection between the fabric and the aluminium bearing structure. This smart design ensures a tight and weather-resistant seal, providing optimal protection.

To connect the Keder beams, spigots are used, fastened by pins. These pins feature a conic head-end, enhancing their fitting into the holes of the Keder beams, resulting in a considerable reduction of assembling times.

## #EngineeredByCatari



## Keder tarpaulin

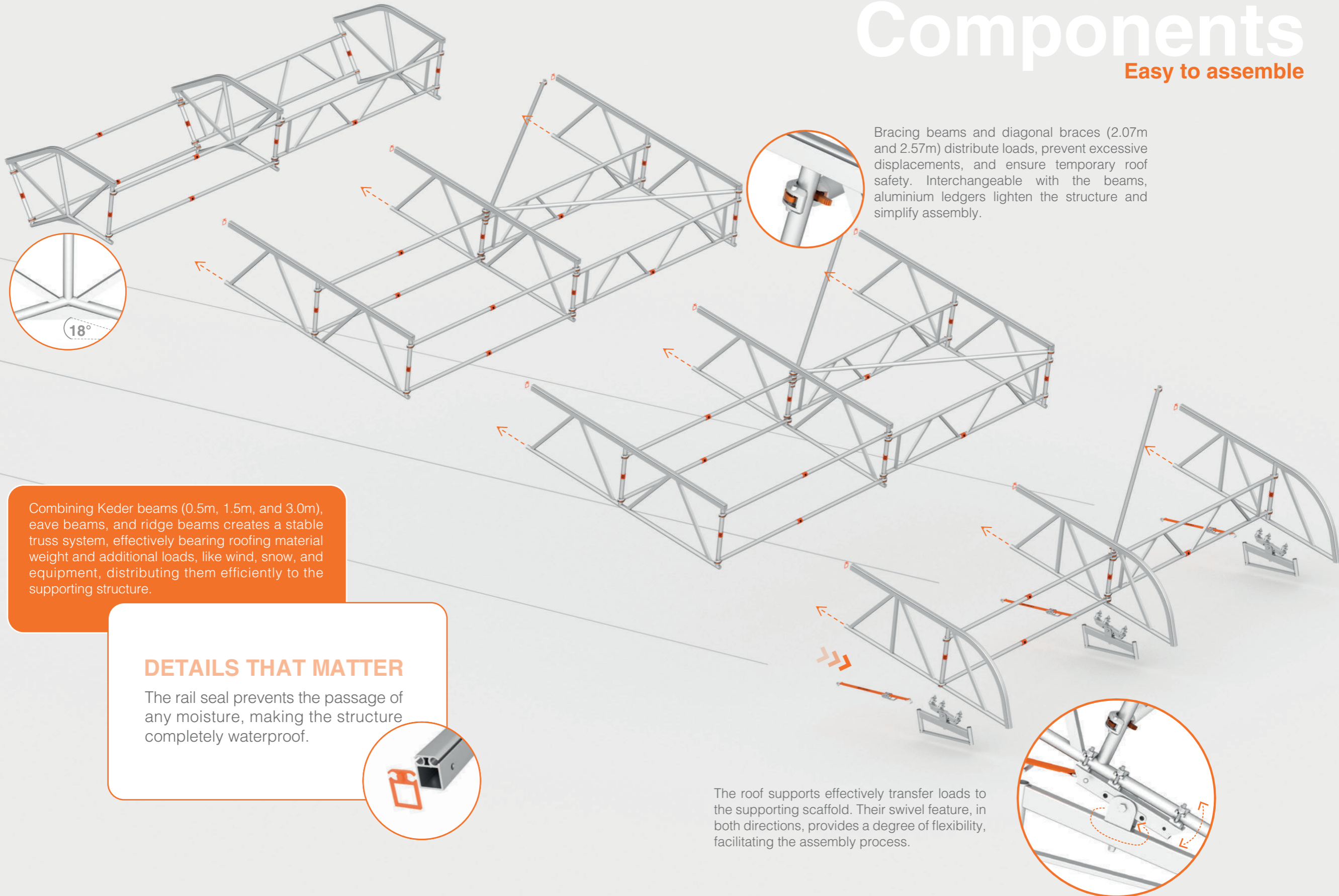
Tarpaulins used in the UMBRA system are designed with a Keder cord along their edges. This Keder cord is a flexible rope-like insert made of PVC, which allows the tarpaulin to be securely attached by sliding it onto the track present on the Keder beams.

These tarpaulins are not only practical but also fire retardant, ensuring safety on the job site. They are available in various sizes to accommodate different project requirements and feature a weight of 650gr/m<sup>2</sup>, offering durability and resistance to withstand various weather conditions. The tarpaulins are certified according to EN13782.

# Components

Easy to assemble

Bracing beams and diagonal braces (2.07m and 2.57m) distribute loads, prevent excessive displacements, and ensure temporary roof safety. Interchangeable with the beams, aluminium ledgers lighten the structure and simplify assembly.



Combining Keder beams (0.5m, 1.5m, and 3.0m), eave beams, and ridge beams creates a stable truss system, effectively bearing roofing material weight and additional loads, like wind, snow, and equipment, distributing them efficiently to the supporting structure.

## DETAILS THAT MATTER

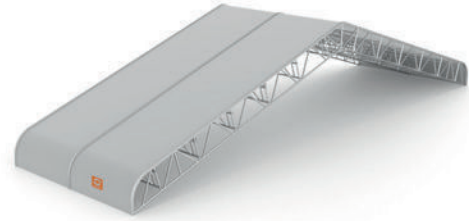
The rail seal prevents the passage of any moisture, making the structure completely waterproof.

The roof supports effectively transfer loads to the supporting scaffold. Their swivel feature, in both directions, provides a degree of flexibility, facilitating the assembly process.

# Versatile

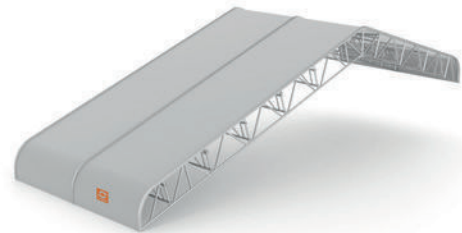
## Symmetric double-pitch roof 18°

With efficient use of interior space due to the high centreline, balanced and aesthetically pleasing appearance and an efficient drainage, it is the most preferred choice in various construction projects, whether it's for residential, commercial or industrial buildings.



## Assymmetric double-pitch roof 18°

The varying slopes offer adaptability to site constraints, efficiently covering specific areas that require protection without wasting space. By adjusting the pitches on each side of the roof, builders can also optimize ventilation and manage the impact of prevailing winds more efficiently.



## Mono-pitch roof 18°

With a single sloping surface, effectively directs rainwater in a specific direction, making it a practical choice for spans up to 16m. This design is particularly well-suited for smaller buildings, extensions, carports, and areas where space constraints or obstructed drainage paths necessitate careful consideration of the drainage requirements.



## Dome roof

With their large spans achieved through the use of a standard ridge beam to create and support all the angles needed for the dome structure, these layouts provide a spacious and visually striking interior, ideal for hosting events and gatherings of different scales.

