

COMPOTEK *AEROSHELL*

TS 9000



NOTE Render
illustration
aesthetics*
Facades (Sides)
and Gables (Ends)
designed in Mesh
versus solid PVC



STRUCTURE



MEMBRANE

EXCELLENCE

- COMPOSIT POLYMER
- PURLIN / SS CABLE BRACE
- SS FASTENERS
- BASES SET ON CONCRETE
- SS ANCHOR RODS
- WIND FORCE RATED

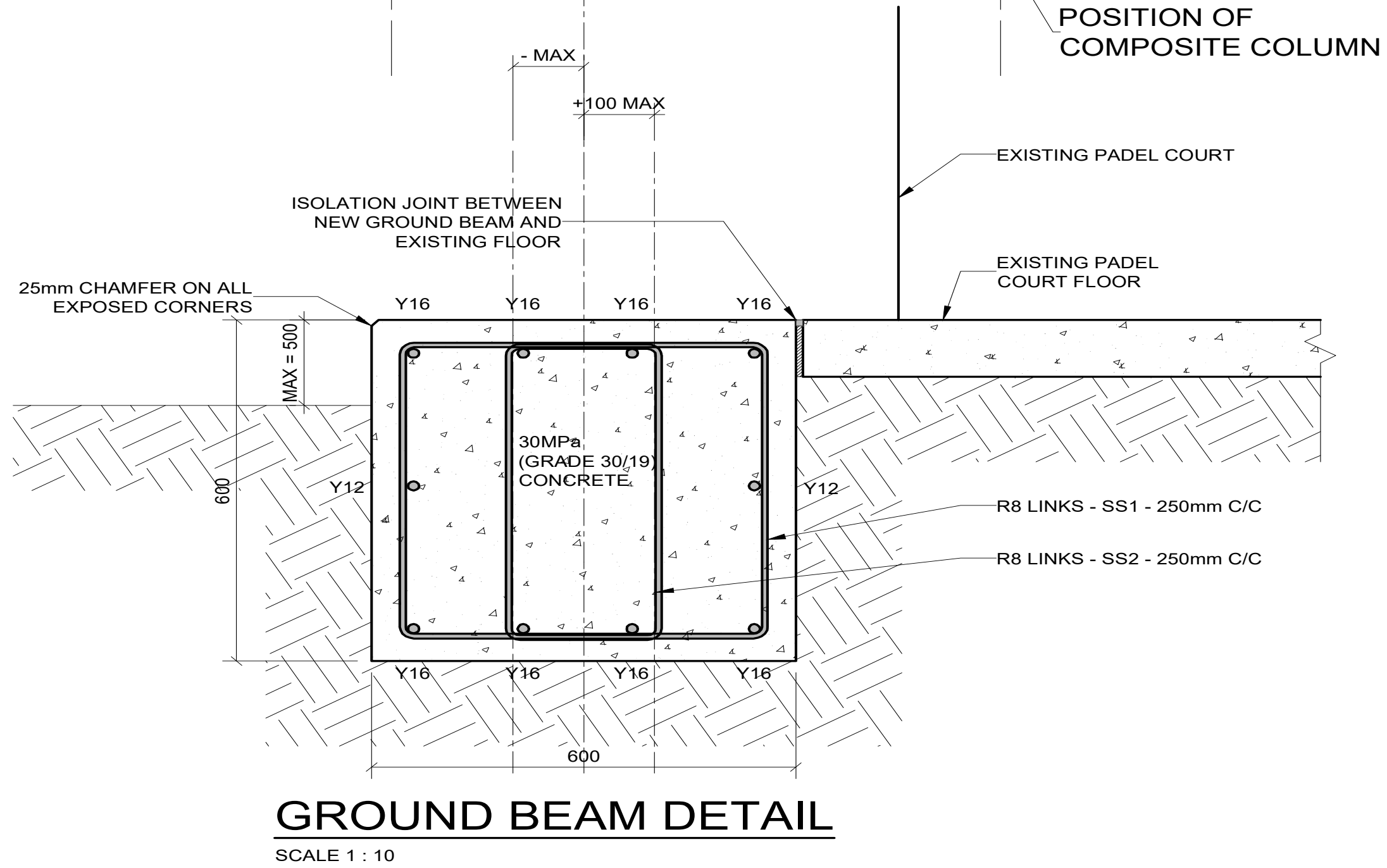
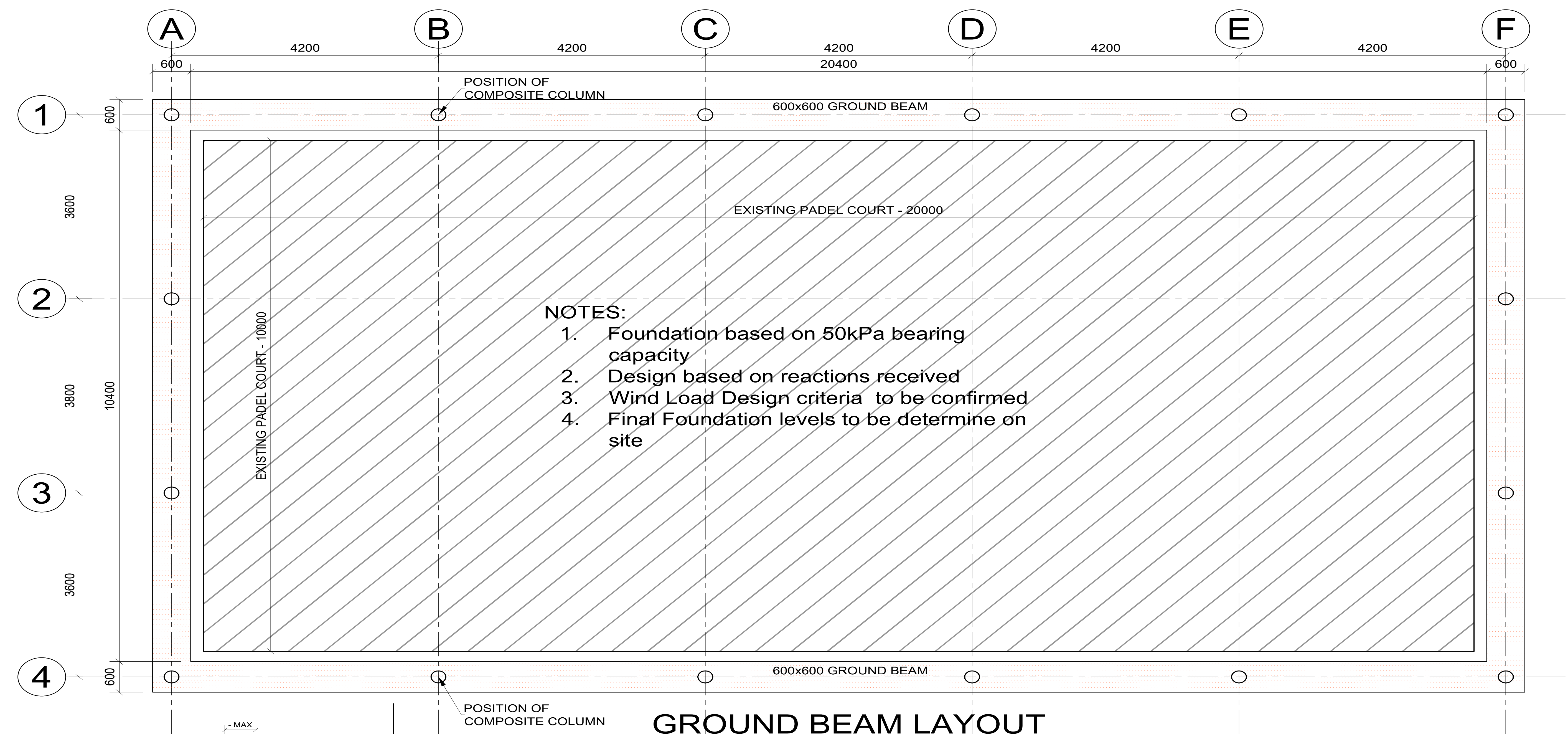
INNOVATION

- POLYESTER + PVC
- TRANSLUCENT PANELS
- INSTALL BETWEEN BEAMS
- TENSION SURFACE
- MASS: 650 g/m²
- COLOUR: WHITE (GLOSS)

LIGHTWEIGHT

- SINGLE ROOF MEMBRANE
- INFLATED INSULATION ROOF MEMBRANE
- POLYESTER + PVC SOLID FACADE
- POLYESTER + PVC MESH FACADE
- ROOF & FACADE BRANDING
- STRUCTURE BRANDING

COMPOTEK AEROSHELL OFFERS UNPARALLELED ADVANTAGES IN STRUCTURAL PERFORMANCE



GROUND BEAM LAYOUT
SCALE 1 : 75

FOUNDATIONS WORK
Client to action and hand over to
Compotek to install the TS 9000

DATE	REF	DESCRIPTION
11/12/2023	A	ISSUED FOR APPROVAL
CLIENT		
COMPOTEK		
CLIENT SIGNATURE		
PROJECT DESCRIPTION		
COMPOSITE ROOF FOR PADEL COURT		
DRAWING DESCRIPTION		
STANDARD FOUNDATION FOR COMPOSITE PADEL COURT ROOF		
L&B CONSULTING ENGINEERING STRUCTURAL ENGINEERING CIVIL ENGINEERING PROJECT MANAGEMENT		
Mr. O.C Lombard 80 Amandel ave Val de grace Pretoria 0184 C: 082 661 1428 E: christo@lbeng.co.za		
O.C. LOMBARD		PR Eng Tech 2019300426
ENGINEER		REG. NO.
DRAWN	O.C. LOMBARD	
DESIGN	O.C. LOMBARD	
CHECKED		
SCALE	AS SHOWN	
PAPER SIZE	A3	
CONCEPT DRAWINGS	FOR SUBMISSION	FOR COSTING
FOR CONSTR.		
REV NO.		DATE ISSUED
A		SEPTEMBER 2023
DRAWING NUMBER		
L2360-01-S-01		





The Compotek Aeroshell creates a beautiful playing environment providing all weather protection for Padel enthusiasts.

Our state of the art composite structures ensure uninterrupted matches enhancing your playing experience.

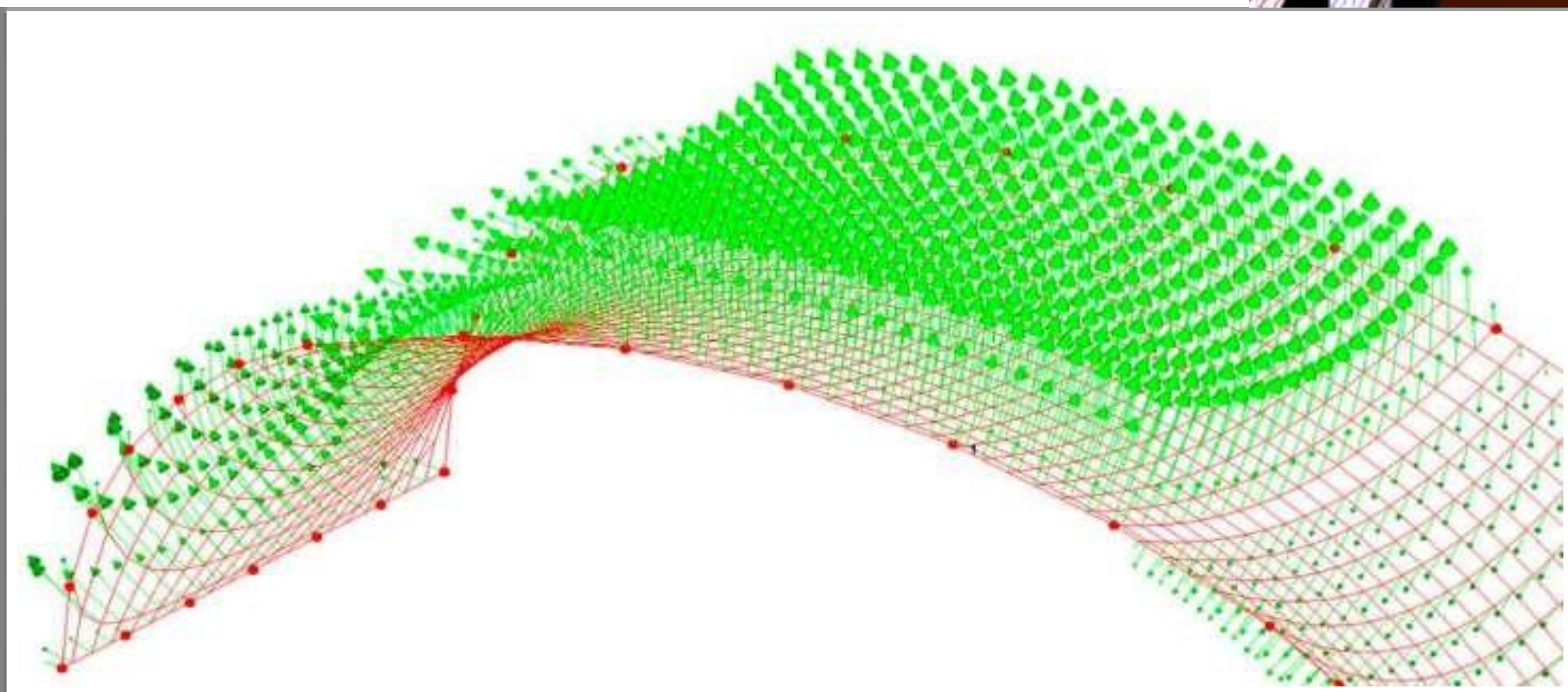
No more limitations resulting from direct rain, sun and radiant heat.

COMPOTEK AEROSHELL OFFERS UNPARALLELED ADVANTAGES IN STRUCTURAL PERFORMANCE,

LIGHTWEIGHT TO STRENGTH TECHNOLOGY □ CORROSION RESISTANCE □ EASY INSTALL FEWER COMPONENTS □ EFFICIENT STRUCTURAL FORMS □ UNLIMITED FINISHES

Aeroshell tensile membrane surface forms an integral part of the structure strength and unique aesthetics.

Aeroshell facade materials offer flexible **length options** to control rain, solar gain, glare and noise reduction.

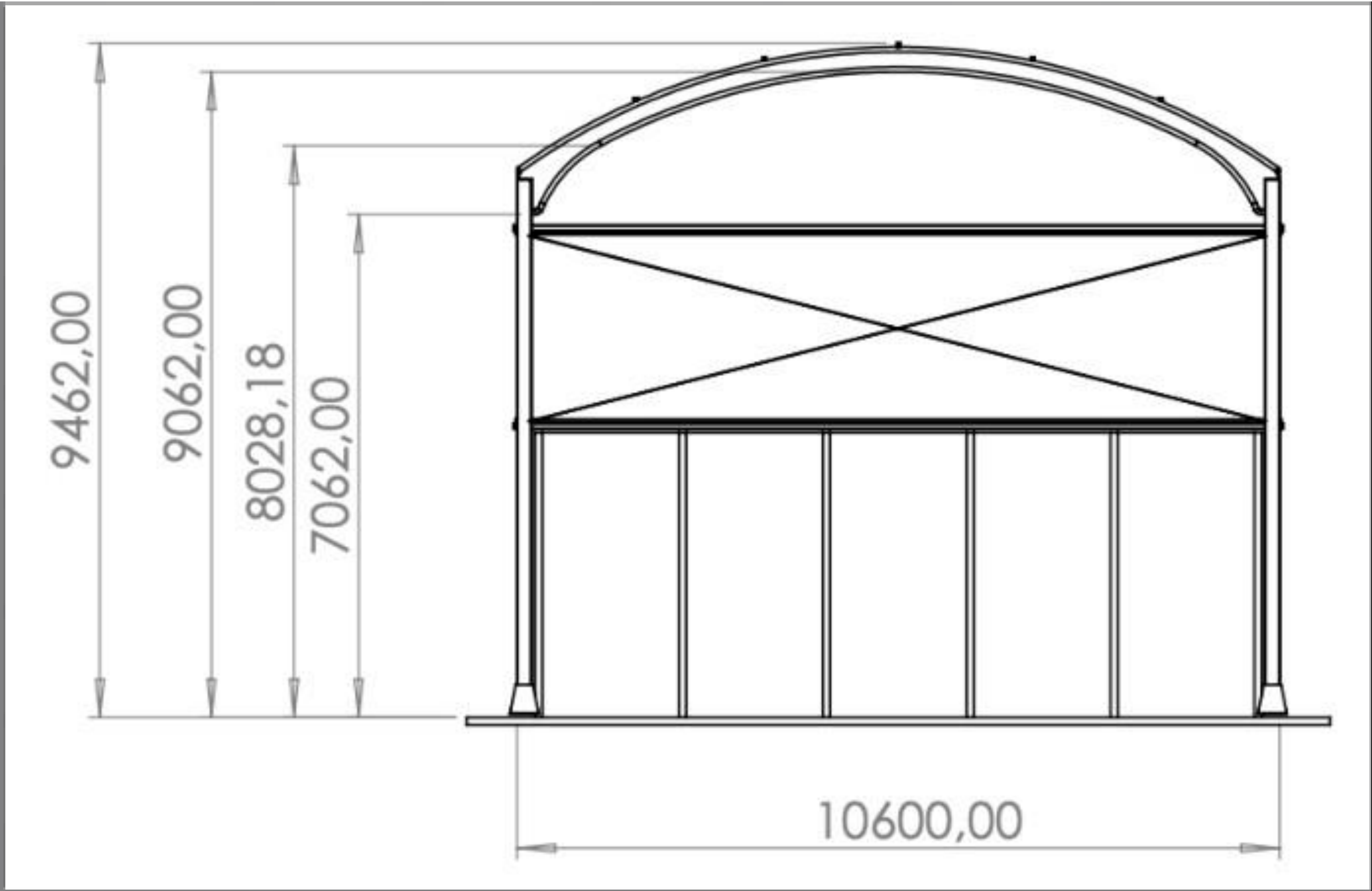


Aeroshell engineered tensile membrane surface with double curvature patterning manufactured from high tensile European translucent PVC coated Polyester.

COMPOTEK *AEROSHELL*

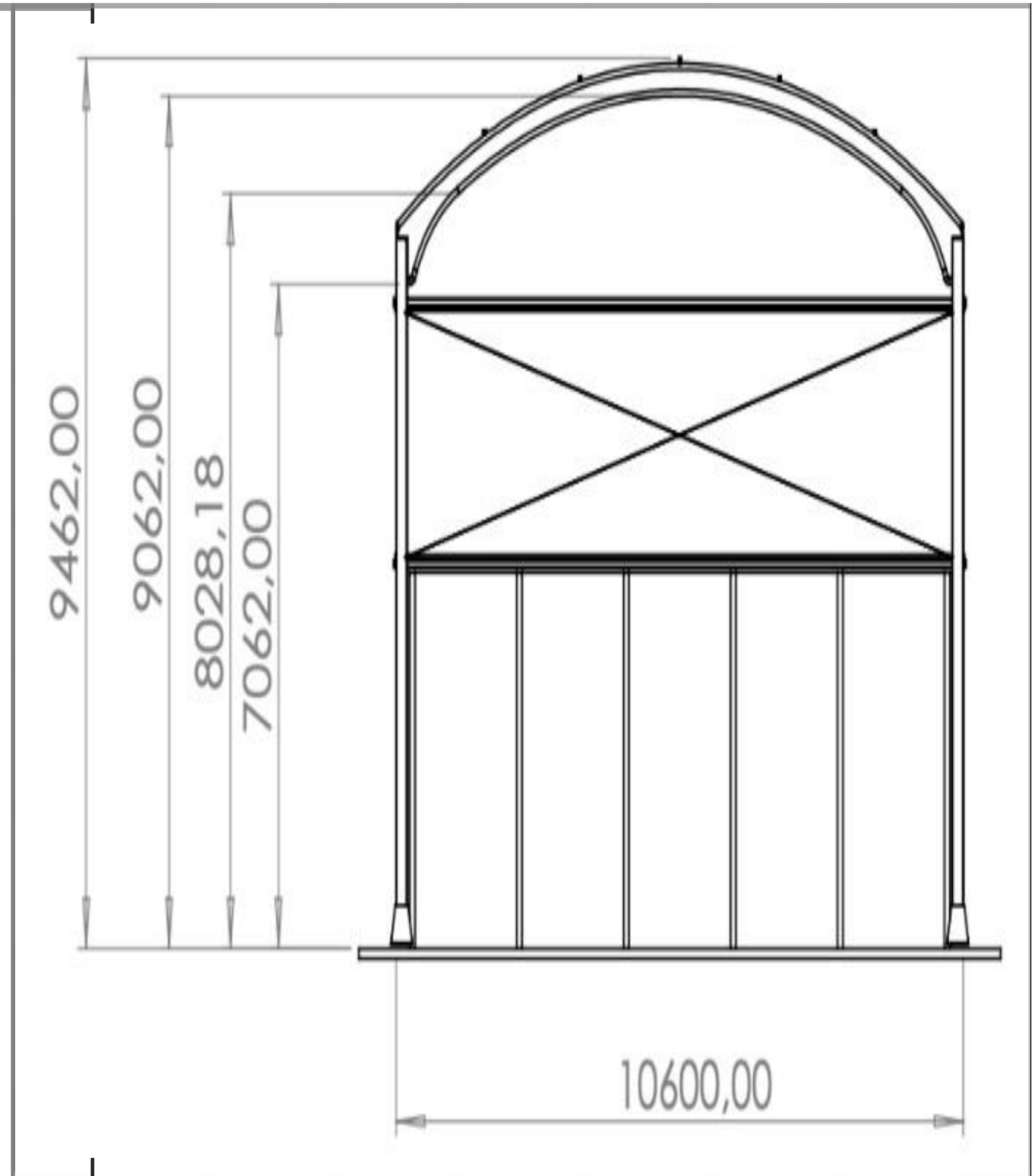
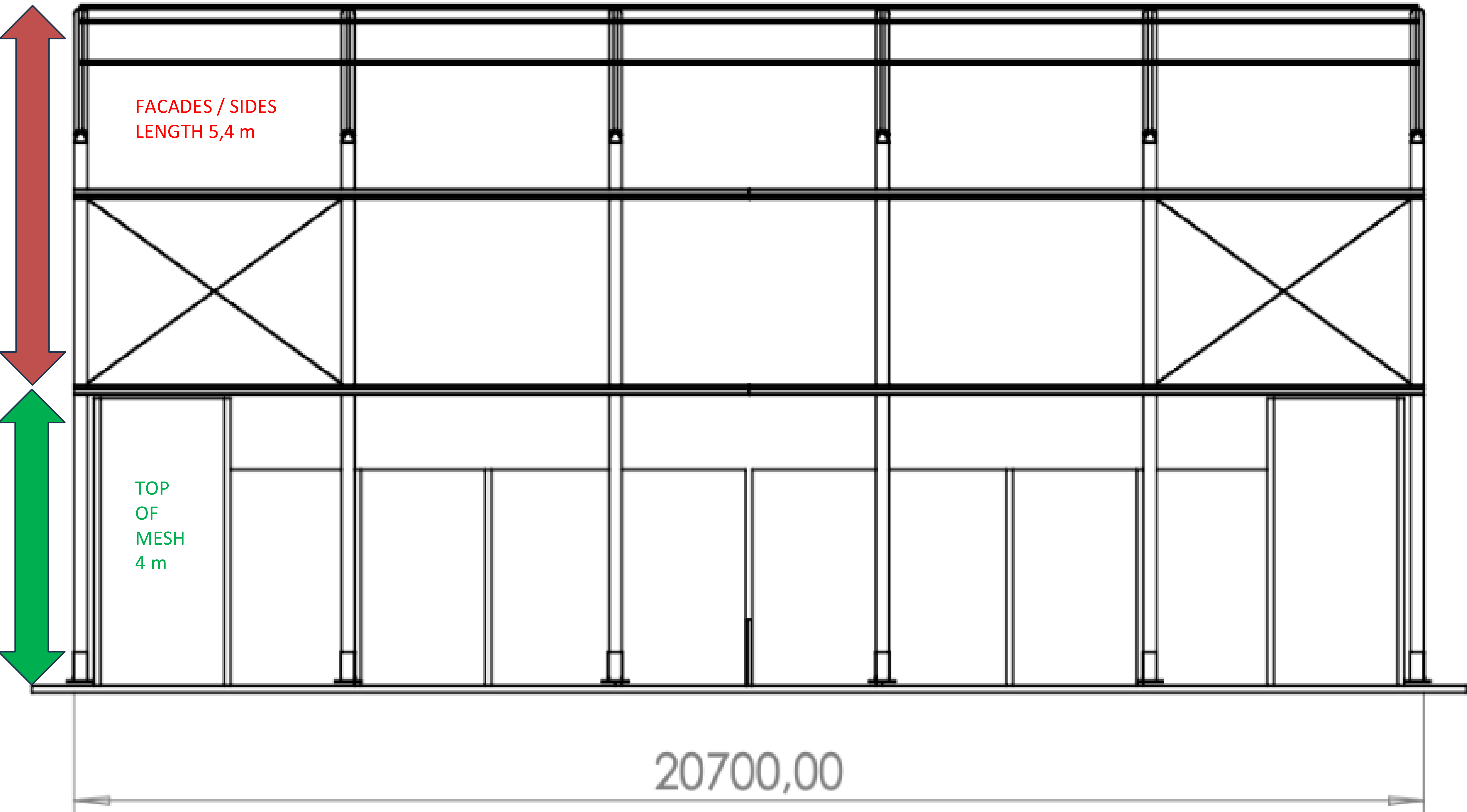
TS 9000

The load-baring structure consists of moulded composite beams interlinked with composite purlins, Vertical composite H columns braced with purlins and Cables and Fasteners manufactured from 316 grade stainless steel



DIMENSIONS

- GANTRY WIDTH: 11.00 m
- INTERNAL WIDTH: 10.60 m
- LENGTH: 20.70 m
- INTERNAL LENGTH: 20.30 m
- OVERALL HEIGHT APEX: 9.40 m
- INTERNAL HEIGHT APEX: 9.00 m
- INTERNAL HEIGHT SIDE: 7.50 m
- TOTAL AREA: 227.70 m²

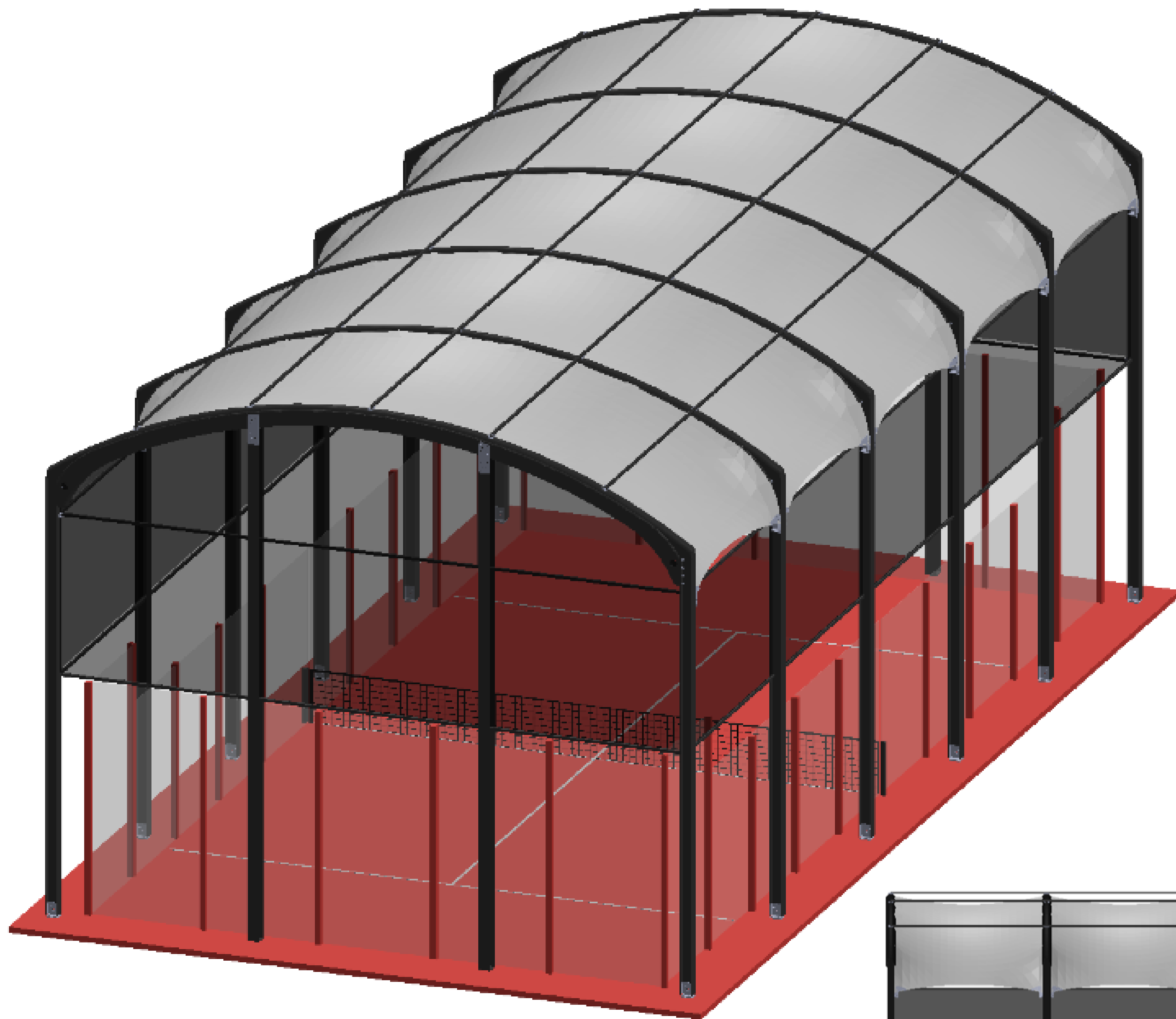


***Optional extras for
ADDITIONAL RAIN COVER***

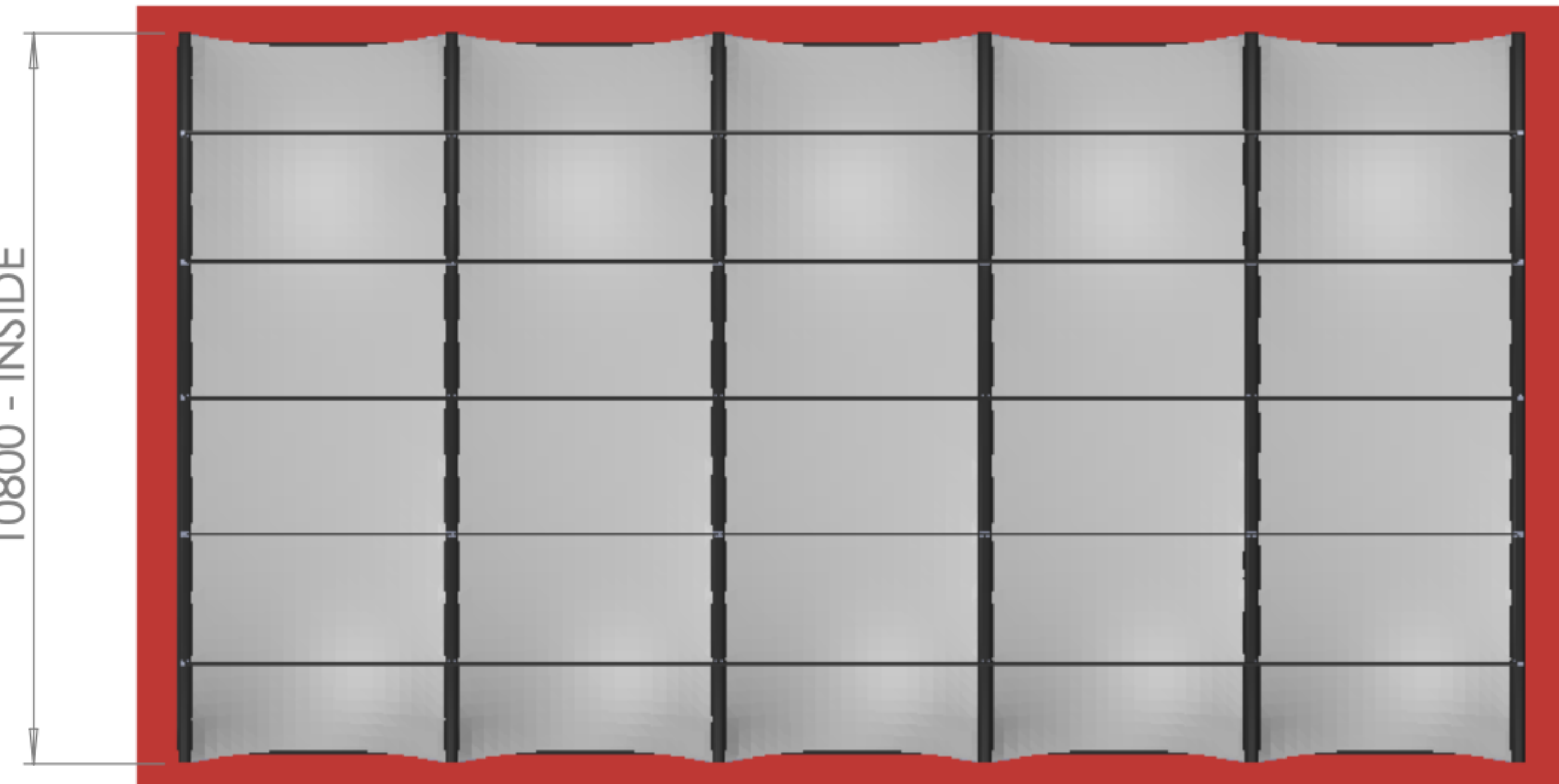
**Longer End Gables and
Side Facades lengths to
cover Court Mesh areas.**

Additional costs will apply.

COMPOTEK AEROSHELL



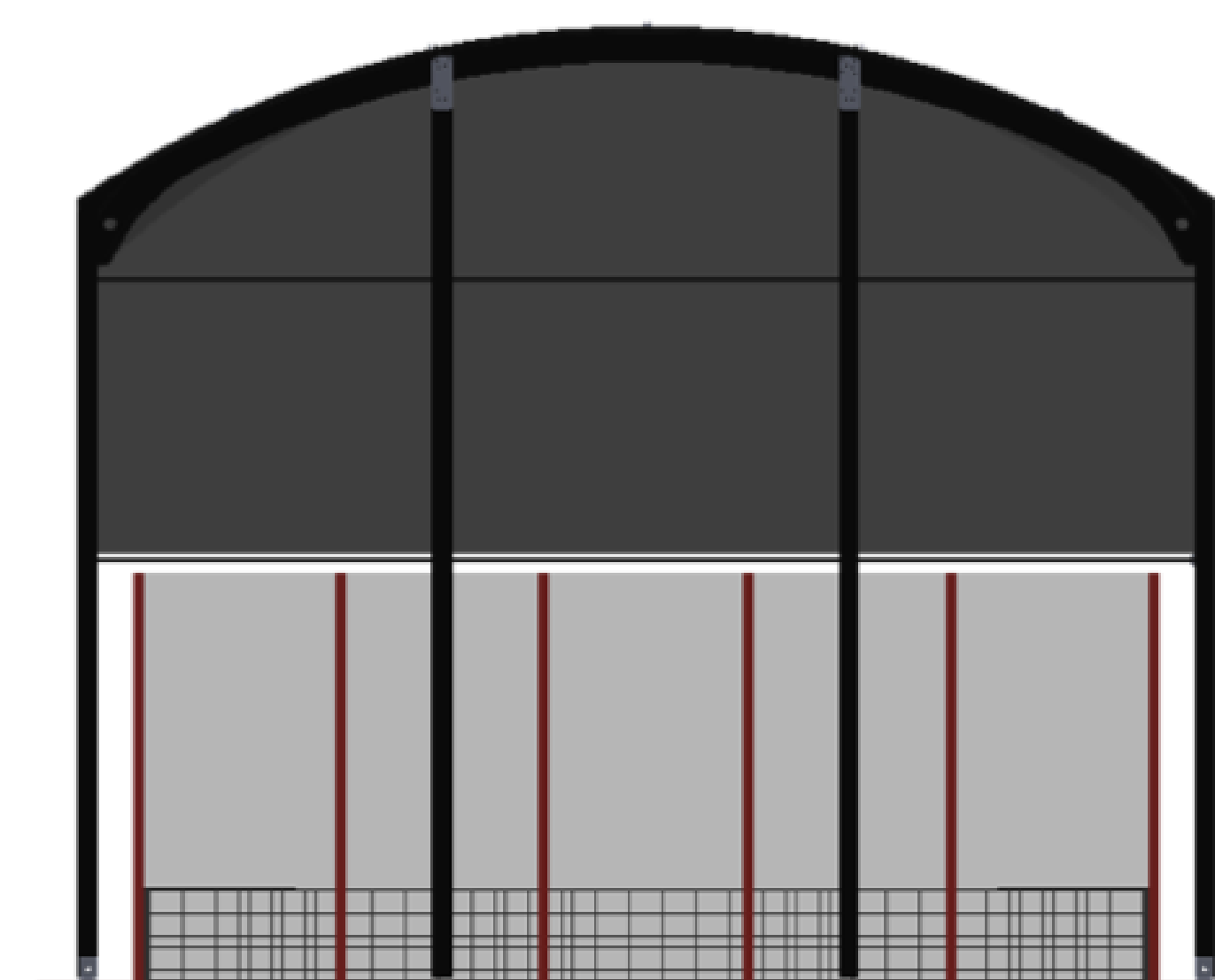
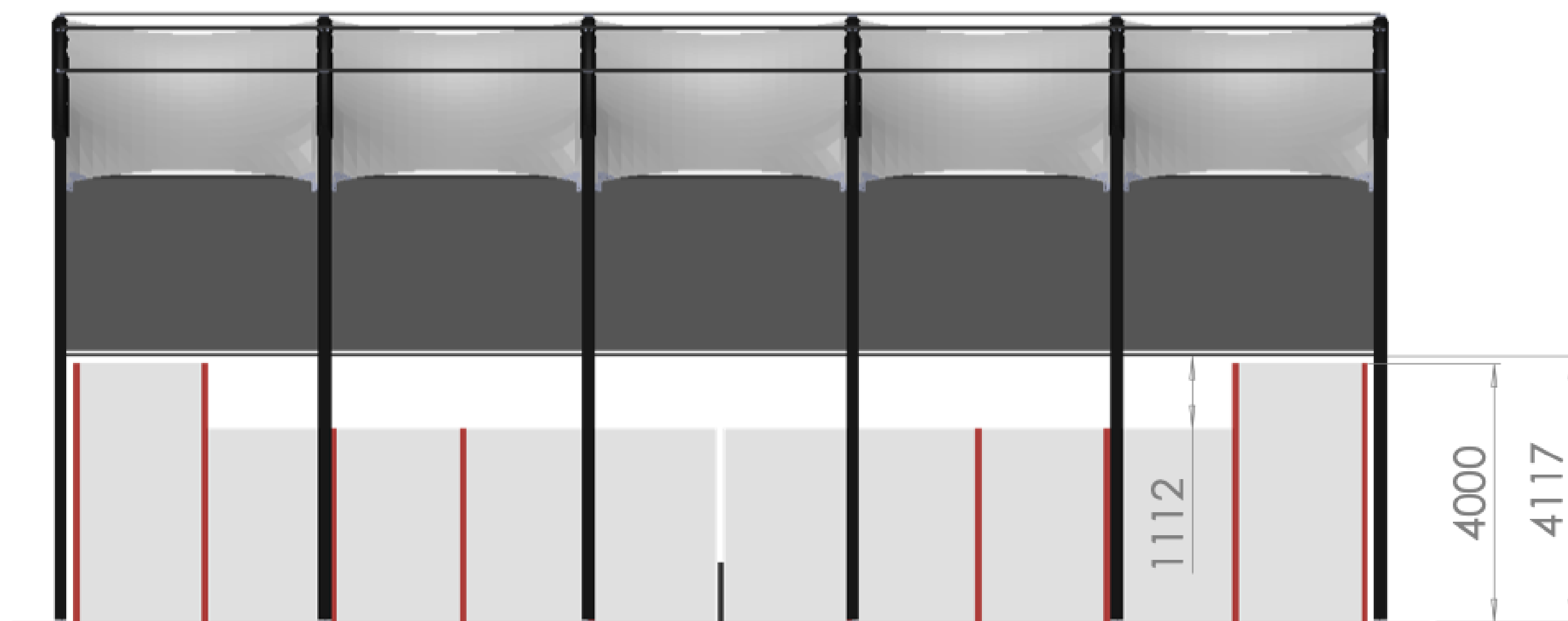
11200 - OUTSIDE
10800 - INSIDE



Optional extras

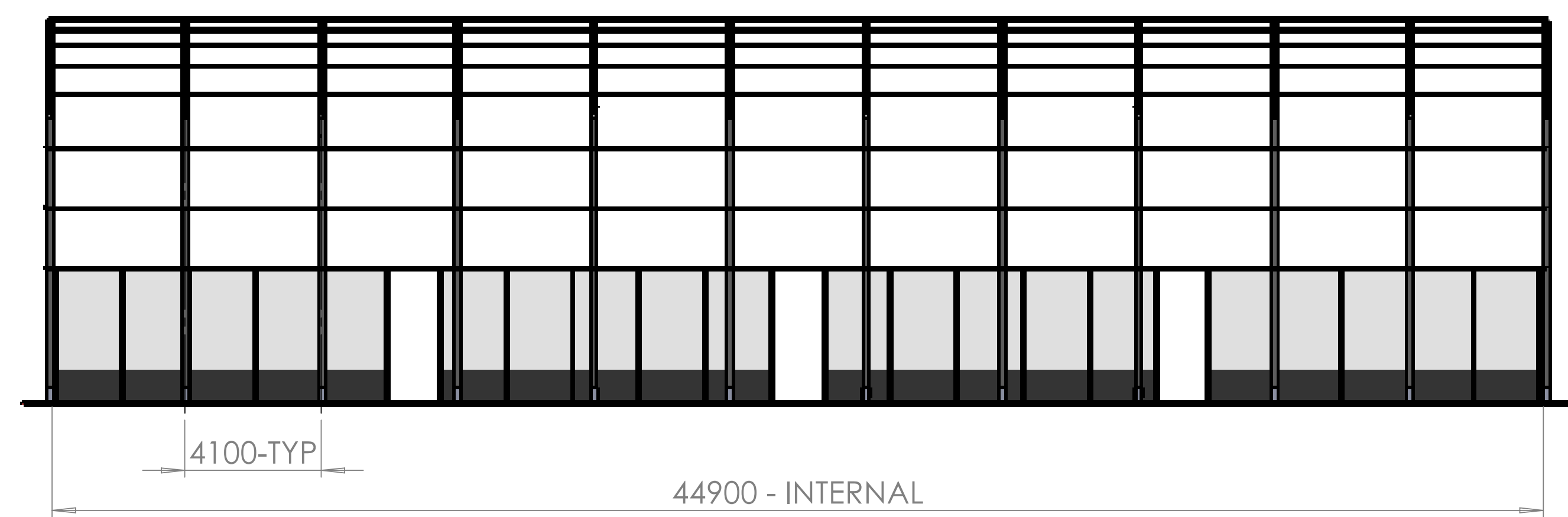
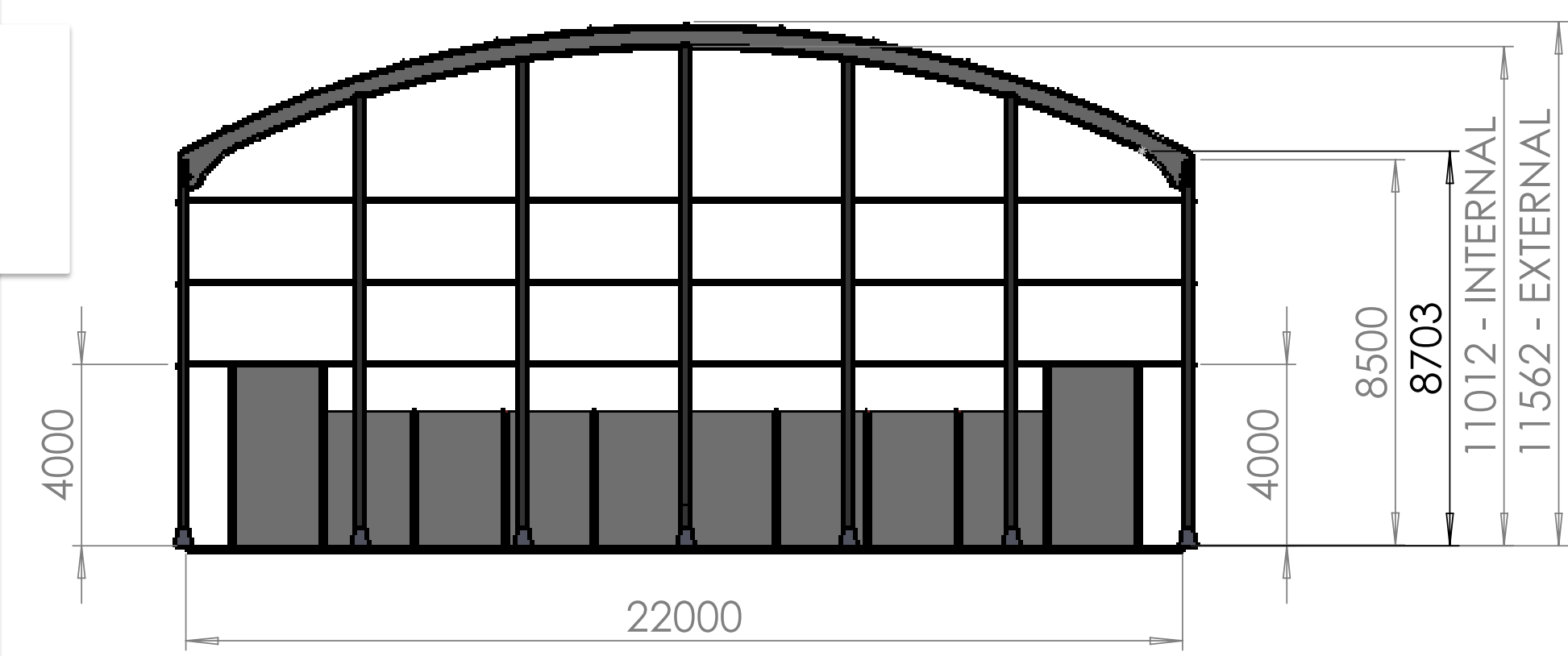
Longer Gables and
Facades lengths

COMPOTEK AEROSHELL



Compotek Long Span Roof

Unit covers 4 Courts and Walkways.



FRAME

Lightweight, durable composite with fibres in binding matrix

Profile arch beams with external purlin support

H-section vertical columns

Finish: Gelcoat

Colour: client specification

Lightweight (superior strength-to-weight ratios)

Corrosion resistant

Base plates anchored to ground by way of rods with chemical seal

Wind rating 148 km/h

MEMBRANE ROOF

PVC coated Polyester

Colour: white translucent

Construction: high frequency welded

Attach: kedar slide in rope mould section

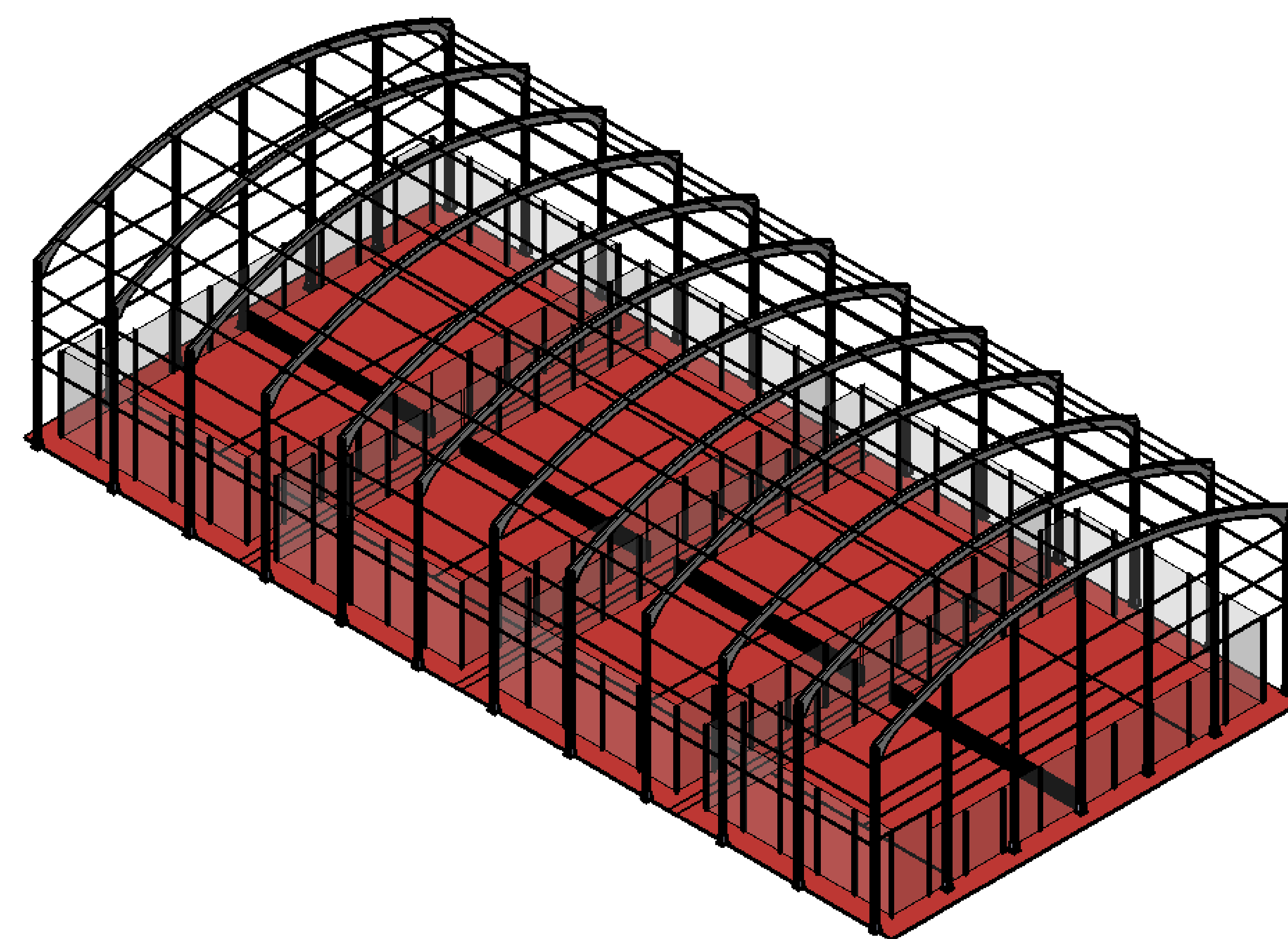
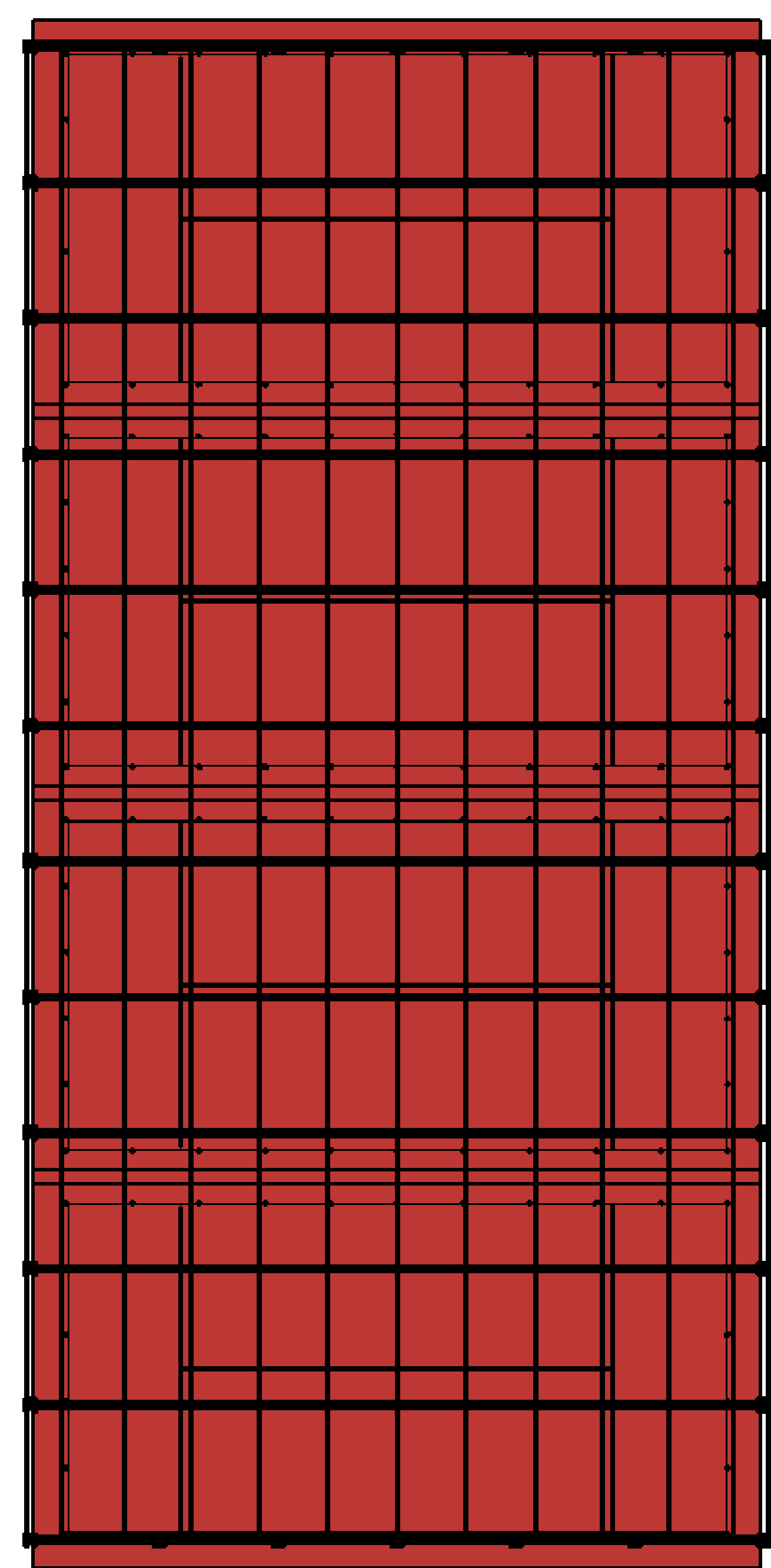
Mass: 650 gsm/m²

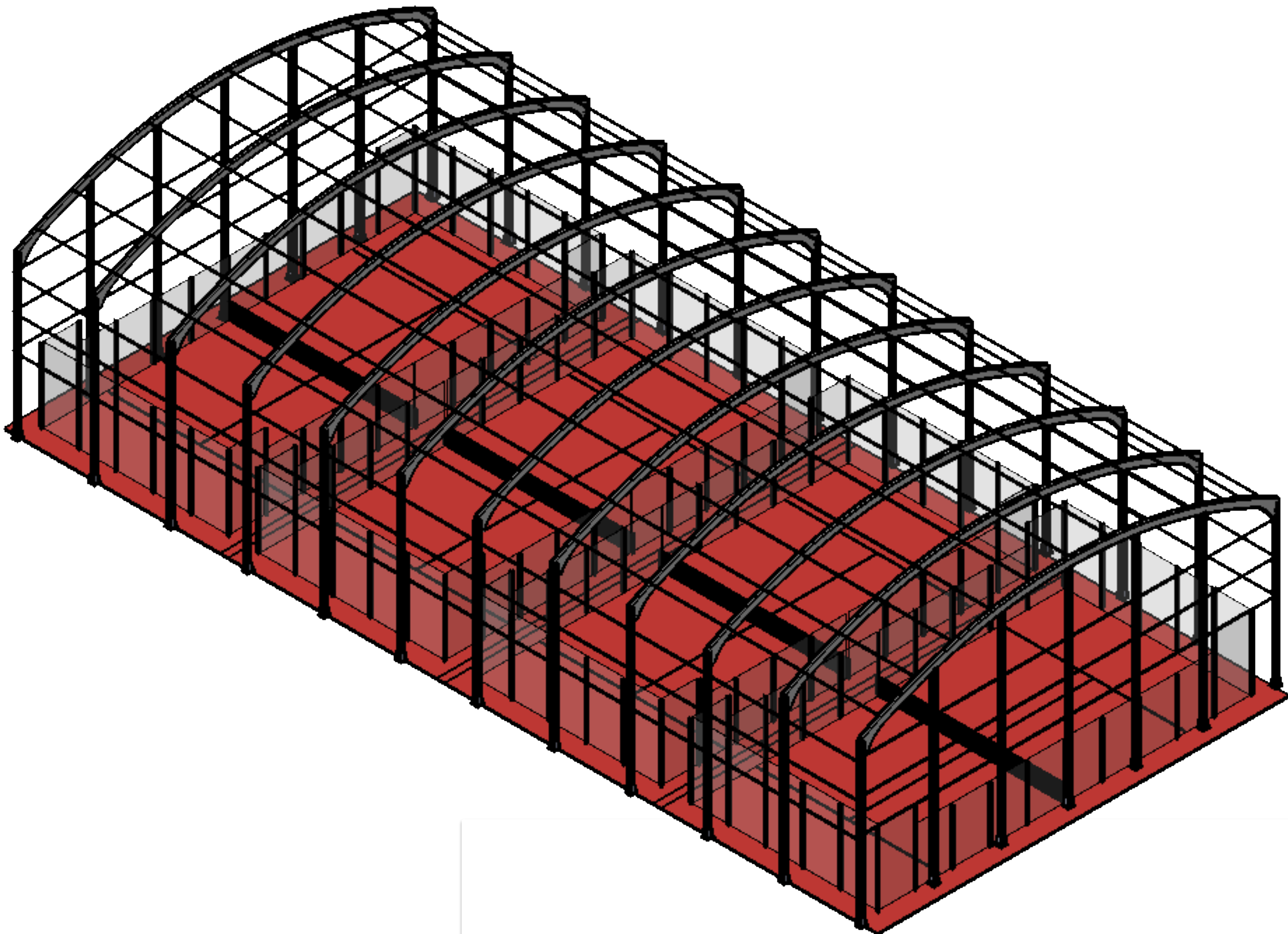
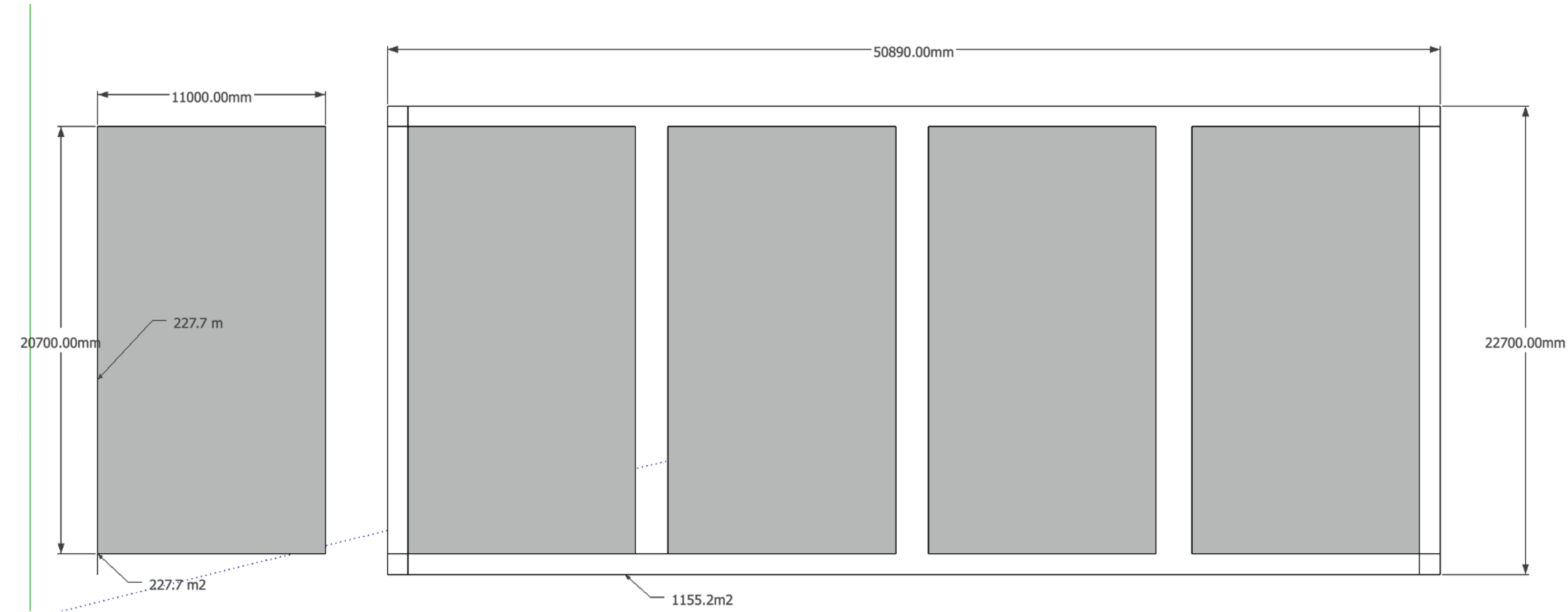
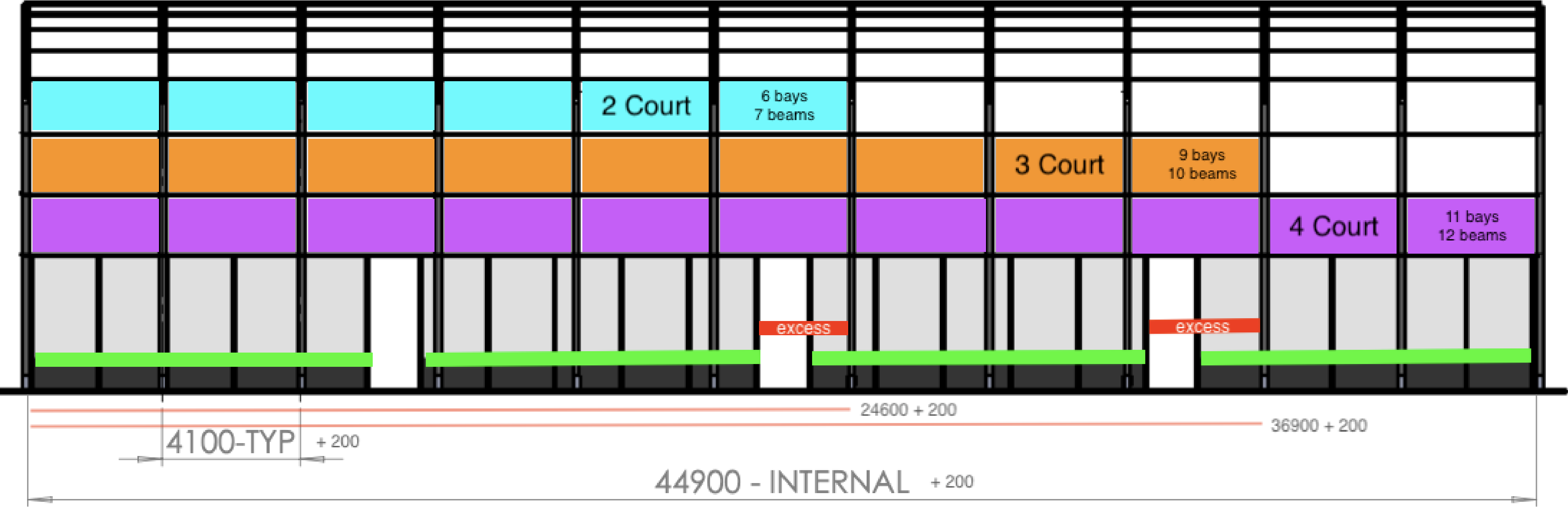
SIDES

PVC coated Polyester Mesh (5% openness factor) / PVC coated Polyester

Colour: charcoal / white (pvc)

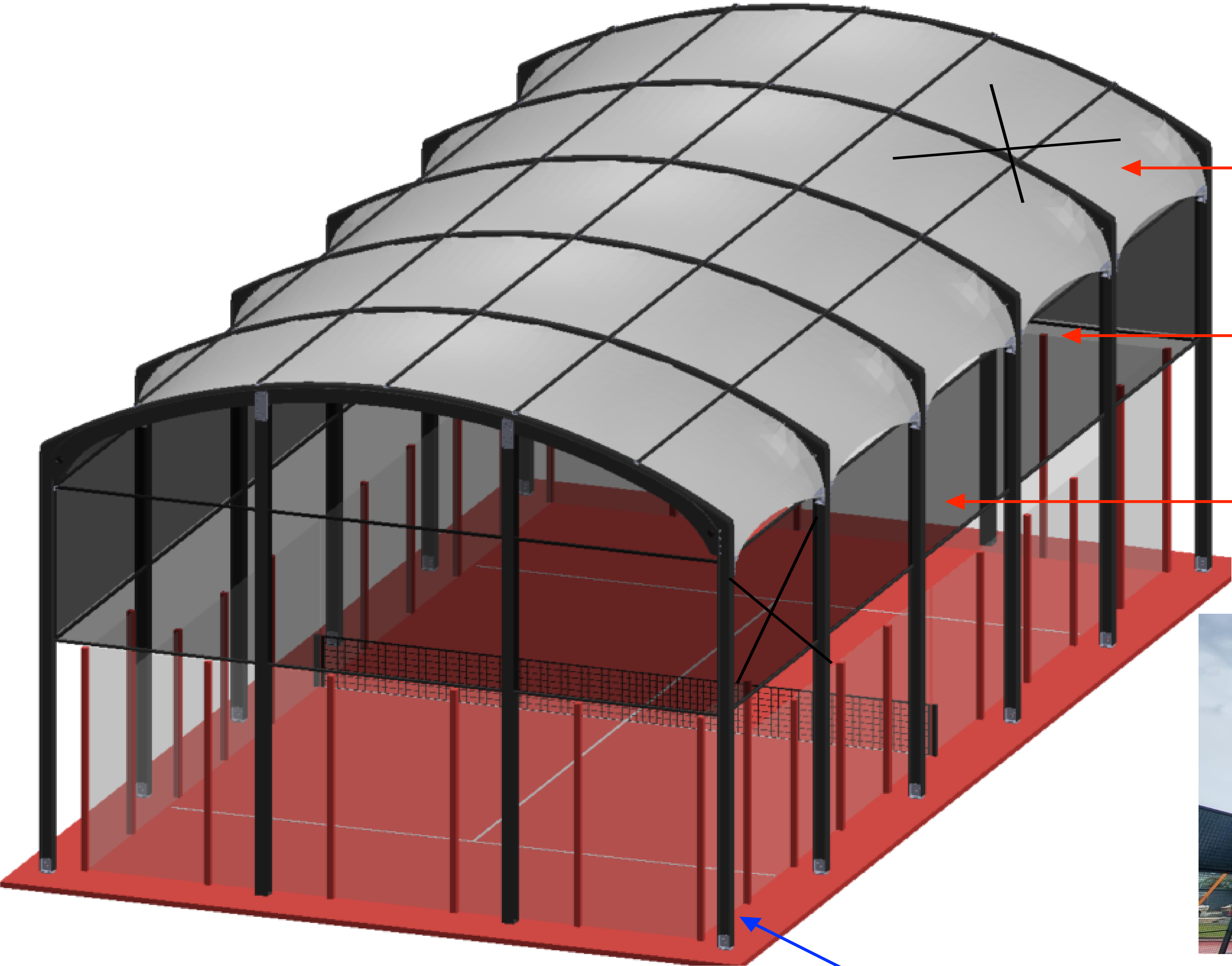
Mass: 488 gsm/m²





	Length	Width	m ²	m ² per court	Extra M2 covered with walkways and outer perimeter
Single court	20,70	11,00	227,70	227,70	
Four court complex	50,89	22,70	1155,20	288,80	61,10

Aeroshell Unique Advantages



- Marine grade 316 stainless steel used for bracket components and bracing cables
- Individual panels engineered & patterned forms structural element
- double curvature tension membrane, eliminates flutter for longevity
- Ventilation gap to eliminate hot air build-up reduces risk of condensation & excess humidity
- Individual facade panels can be exchanged to adapt to weather & branding requirements



Single court roof snug fit to limit ingress in walkways between courts

Design

- aesthetically superior
- architectural design vs marquee tent appearance

Lightweight Composite Structure

- no corrosion
- very low maintenance
- light weight structure components allows alternative installation methods where cranes not accessible
- fewer structure components
- not conductor for lightning

PVC Roof Membrane

- low heat emissivity from membrane
- low rain impact noise
- no roof insulation required (vs metal)

Facade

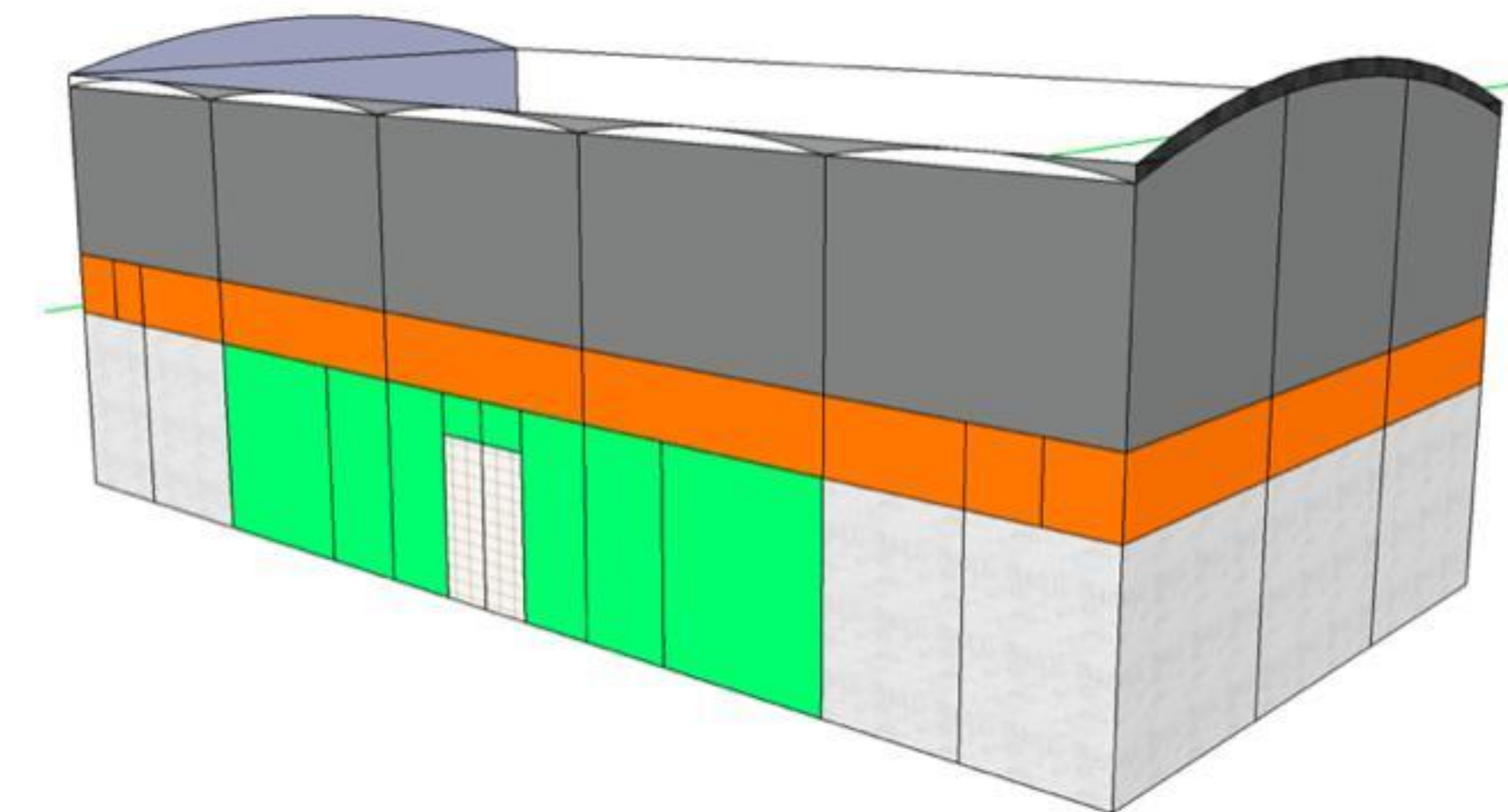
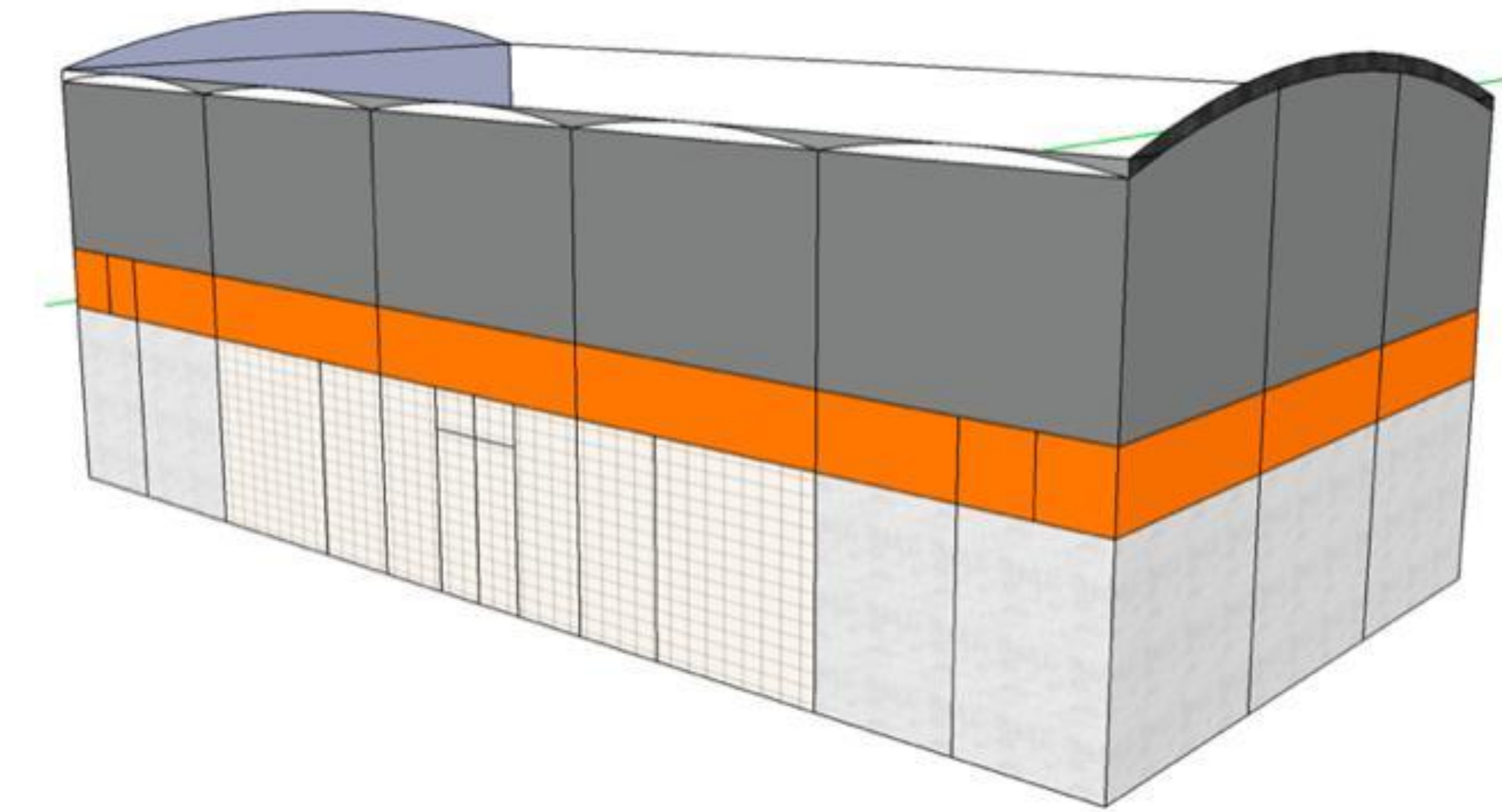
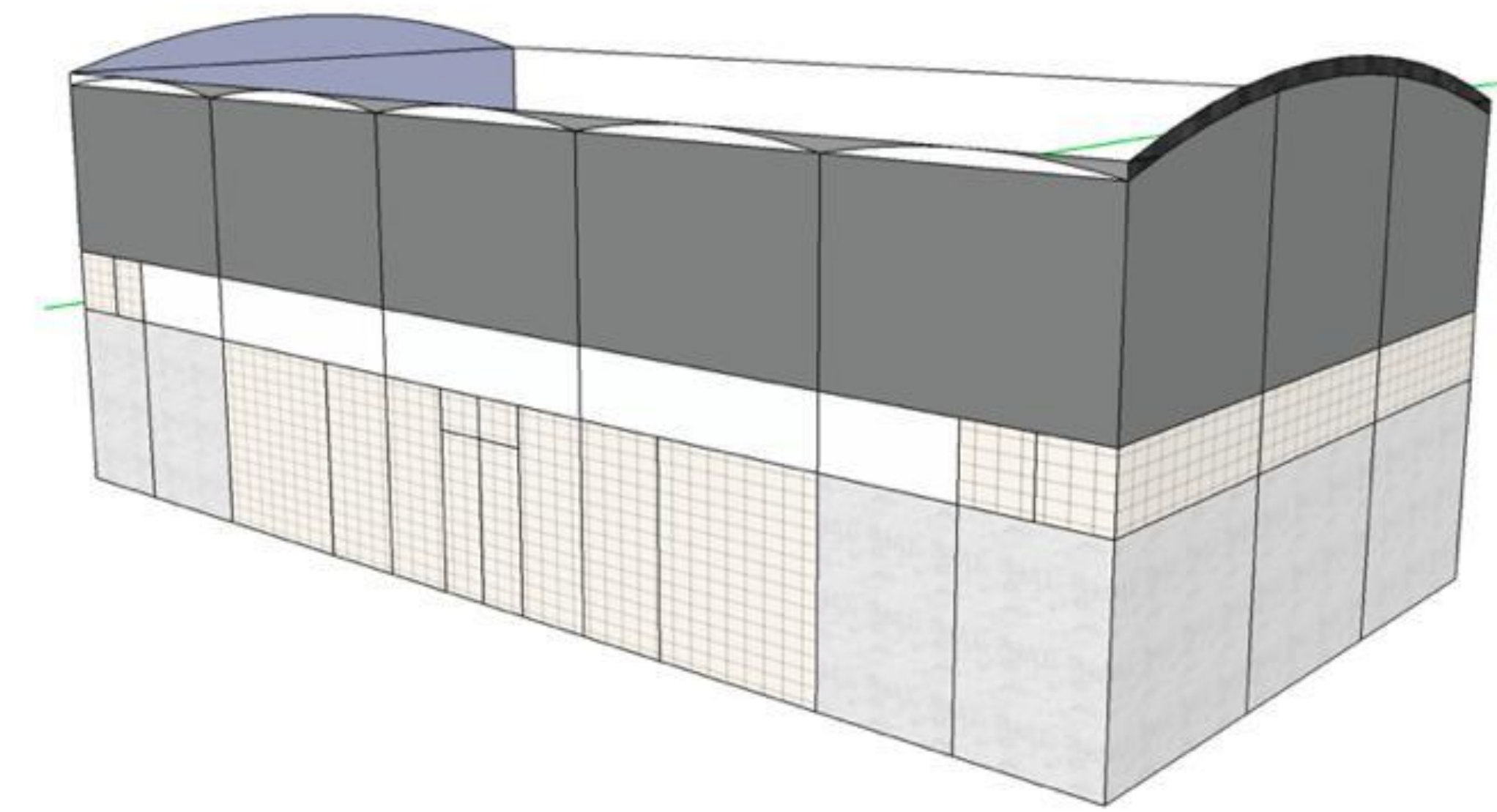
- choice of materials for complete rain seal or radiant heat barrier
- easily removable should dry season require more open environment
- easily removable should there be a request for branded panels
- dimension of individual panels allow for large format printing

Warranty on Product

Installation - 2 Years

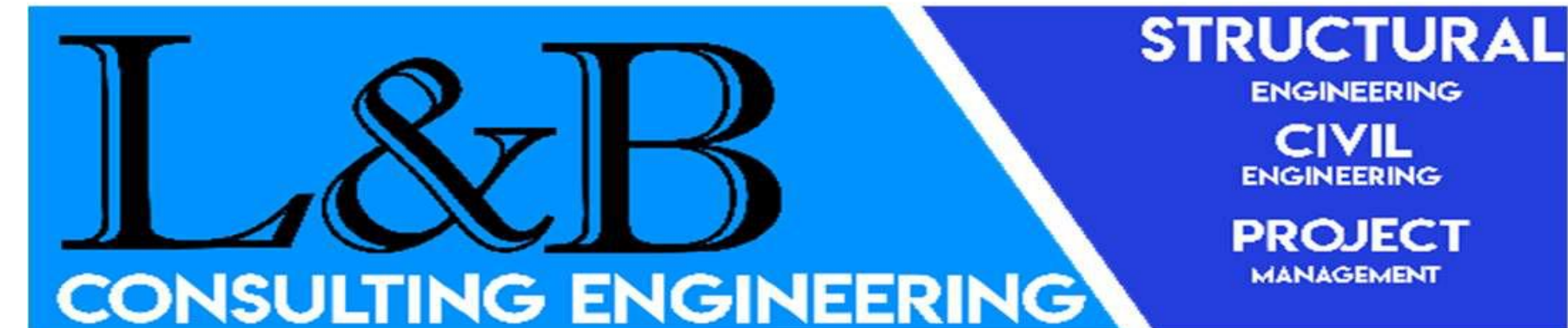
Membrane by manufacturer -5 years – Life expectancy 10

Facades by manufacturer - 5 years – Life expectancy 10





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t/a



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L&B Consulting Engineers have been appointed by Compotek to review the design of the composite roof structure and design a foundation solution.

The roof structure consists of a 10m wide domed roof structure with composite columns, rafters, and purlins. The roof support a tensile material covering intended to provide covering to a standard Padel court.

A detailed finite element analysis (FEA) was done by Advance Material Solutions and each individual members have been checked for bending and shear. L&B Consulting Engineers agrees with the methodology and application of the wind loading on the structure. L&B further relies on the expertise and experience of AMS to confirm the suitability of the composite members.

A foundation drawing (L2360-01-S-02 Rev A) have been compiled based on the reactions and loadings received from the AMS FEA report and must be implemented as per the drawings. This foundation solution will not affect the structural integrity of the existing slab and all work done to and integrated to the slab will form part of the final sign-off.

The installation of the foundations has been completed by Africa Padel around September 2024 and accepted while the erection of the structure with the tensile membrane and bracing cables have been completed and inspected on the 5th of May 2025. The installation has been accepted as complete, and a reasonable visual inspection have confirmed that all elements have been installed and tightened as required.

Director: O.C Lombard
Lombard Bakkes Pty (Ltd)
Trading as L & B Consulting Engineering





COMPOTEK PADEL ROOFS

AEROSHELL

TS 9000



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