



TECHNICAL RIDER

Gate 1:1

V1.0 - 10/02/2025



SUMMARY

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RECEPTION OF THE GATE

Preamble

It is important to consider certain technical requirements and safety rules. We remain available to clarify anything that may be necessary.

This document is an integral part of the agreement between the user and the association *Les Enfants de MacGyver* (EMG). All the elements presented here should be discussed with the technical reception staff whenever possible.

The Gate is currently not available for an exhibition unless it is suspended.

Access to the assembly area is **STRICTLY FORBIDDEN** to anyone not affiliated with the association, from the beginning of unloading until our technician grants permission for access.

The Gate is provided in a fixed configuration, as the ring rotation is not yet operational.

Summary of technical requirements

Our on-site team consists of 7 volunteers.

| Equipment provided <u>by the EMG</u> | | |
|--------------------------------------|--------------------------------|--|
| Qty | Description | Comment |
| 9 | Set "Gate" in 9 sections | Sections of 2m on trolleys |
| 4 | Ballast weights | 70kg each |
| 1 | Electrical cabinet | Containing the entire management system for the Gate |
| Set | Wiring | From the cabinet to the Gate |
| 8 | Construction helmets and vests | For safety |
| Set | Tools and accessories | |

| To be provided <u>by the User</u> | | |
|-----------------------------------|---|--|
| Qty | Description | Comment |
| 2 | Chain hoists with a capacity of 1t each | Installed on points resistant to 1t |
| (1) | If hoists are not available, a lifting device with a capacity of 2t could be used | To be discussed with us |
| 2 | Slings | Installed on points resistant to 1t |
| 1 | Electrical supply 230V 2P+GND 16A single-phase | Can be located on a shared panel if our socket has a separate 30mA RCD circuit breaker |
| 1 | Access to the mounting area with a truck | Up to a maximum of 50m without stairs or elevator between them |
| 5 / 6 | Tables | For the control interfaces of the Door and exhibition of the Association's work |

Technical description and measurements

- Weight of the ring : 900kg
- Required ground resistance per square meter : 120kg
- Footprint of the ring : 6.10m x 6.10m
- Minimum mounting area size : 8m x 8m
- Distance between the two attachment points : 3,84m
- SWL lifting rings, shackles, slings : 1t
- Capacity of attachment points : 1 tonne each
- Capacity of hoists : 1 tonne each
- Capacity of the lifting device (if used) : 2 tonnes
- Footprint of a conventional lifting device : 4,5m x 2,2m
- Required lifting height : 7m (8m with lifting device)
- Power supply : 230V 16A single-phase
- DMX inputs : 3 pins
- Ring structure classification : OS2
If it is secured by ballast weights, the set must not be more than 20cm above the ground, otherwise it will be classified as OS3.
- Structural base in circular triangulated aluminum truss with the point facing inward

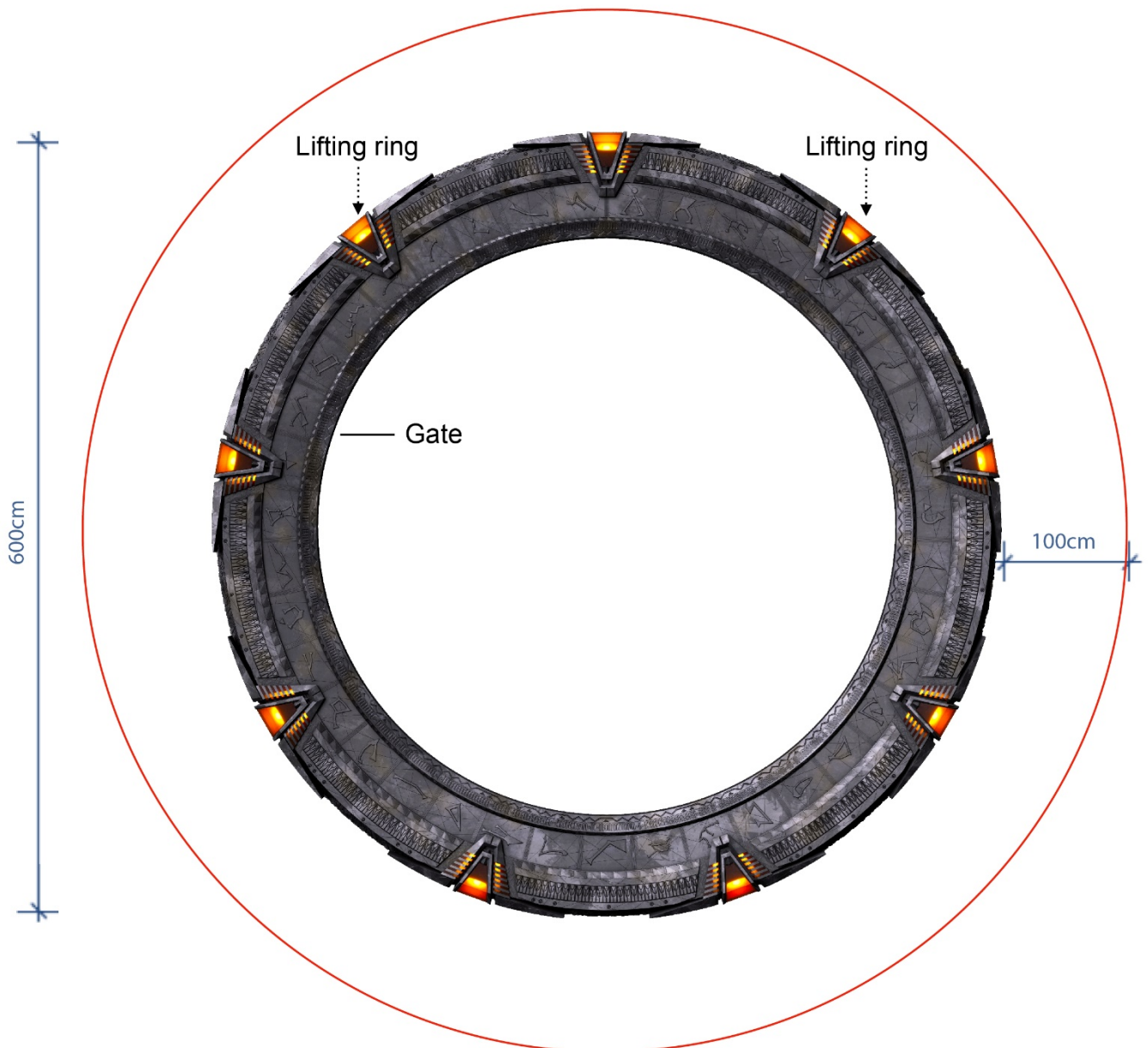
Provisional schedule

The days listed here are indicative of the minimum time required for the entire logistics. They should be adjusted based on the event dates and access possibilities to the venue for the installation and dismantling of the booth.

| Day | Time | Activity | Note | Vol. | Tech. |
|-----------------------------------|-----------------|--------------------------------|--|------|-------|
| D-2 Loading and Transport | 2 hours | Loading | EMG workshop located in Savoie (France) | 4 | 0 |
| | - | Outbound transport | With a lunch break and regular stops | | |
| D-1 Assembly | 8 - 8h15 | Team reception | Verification and distribution of PPE | 6 | 1 |
| | 8h15 - 9 | Unloading and general briefing | Material preparation | | |
| | 9 - 11 | Ring assembly | Briefing at this point and before each stage | | |
| | 11 - 12 | Chevrons assembly | Internal electrical connection and testing | | |
| | 12 - 13 | Break | | | |
| | 13 - 14 | Lifting and Ballasting | Testing of all systems | | |
| D0 Operation | <i>X day(s)</i> | Event | The presence of the team is not required if the user is briefed on how to use the Gate | | |
| | | | | | |
| D0 Dismantling | 3 hours | Dismantling | After the event ends | | |
| | 1 hours | Loading | | | |
| D+1 Transport and Unloading | - | Return transport and unloading | With a lunch break and regular stops | 4 | 0 |

PLANS

Layout after ground assembly of the ring



The 6-meter ring is assembled on the ground.

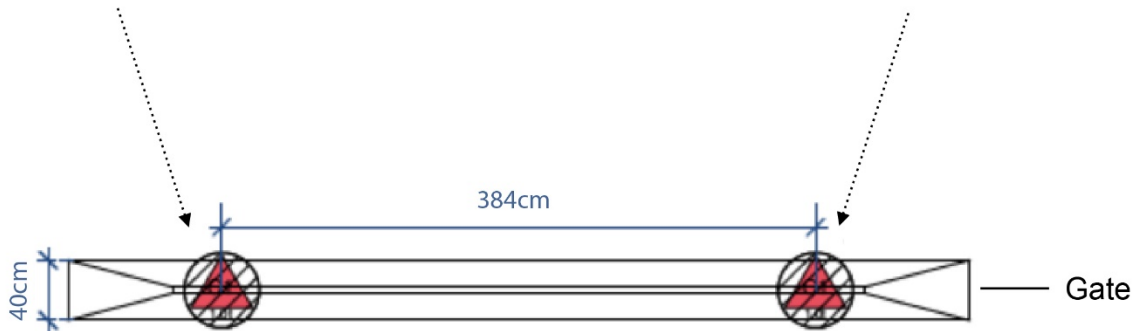
We need at least 1 meter of clearance around this area at all times for assembly, making it an 8-meter diameter zone.

Ideally, our lifting rings should be positioned directly under the hoists or at a maximum distance of 1 meter from them.

Top view of the Gate once upright

The hoists must support 1 tonne, the rigging points as well. Our rigging hardware is designed for this load.

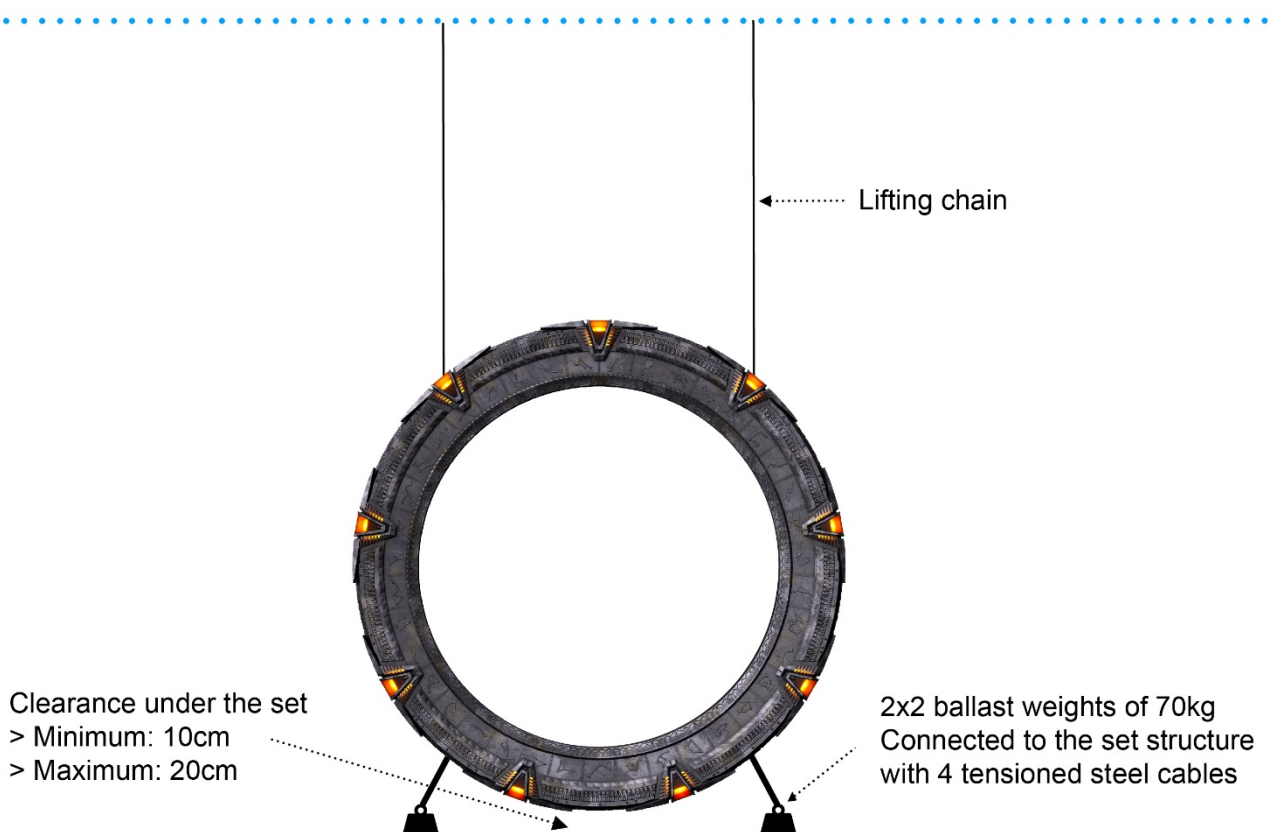
Depending on the type of hoist, a shock absorber or other secure attachment system will need to be added.



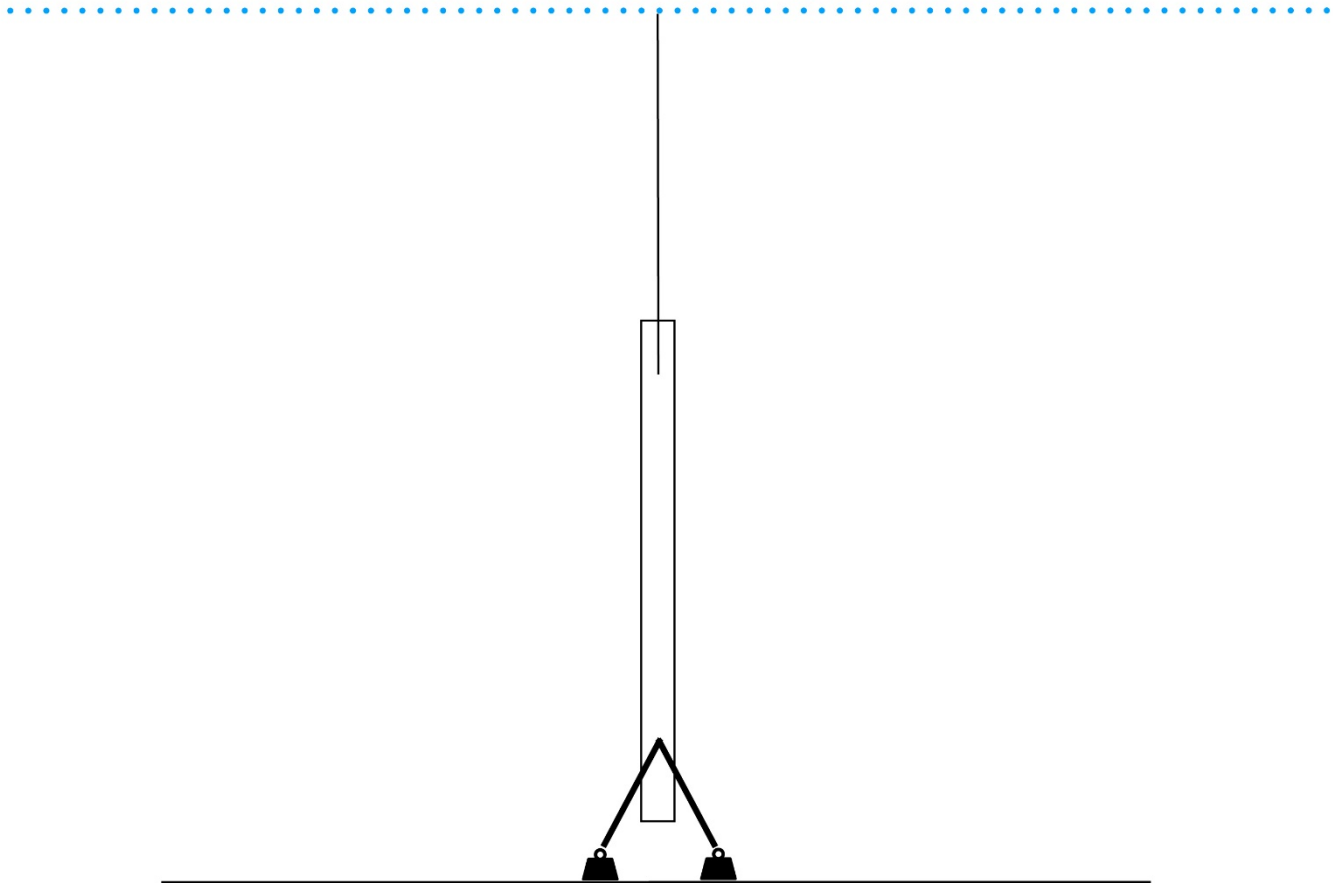
Total weight of the ring: 900kg

Capacity of each attachment point: 1 tonne (safety factor x2)

Front view of the Gate once upright



Side view of the Gate once upright



Lifting equipment details



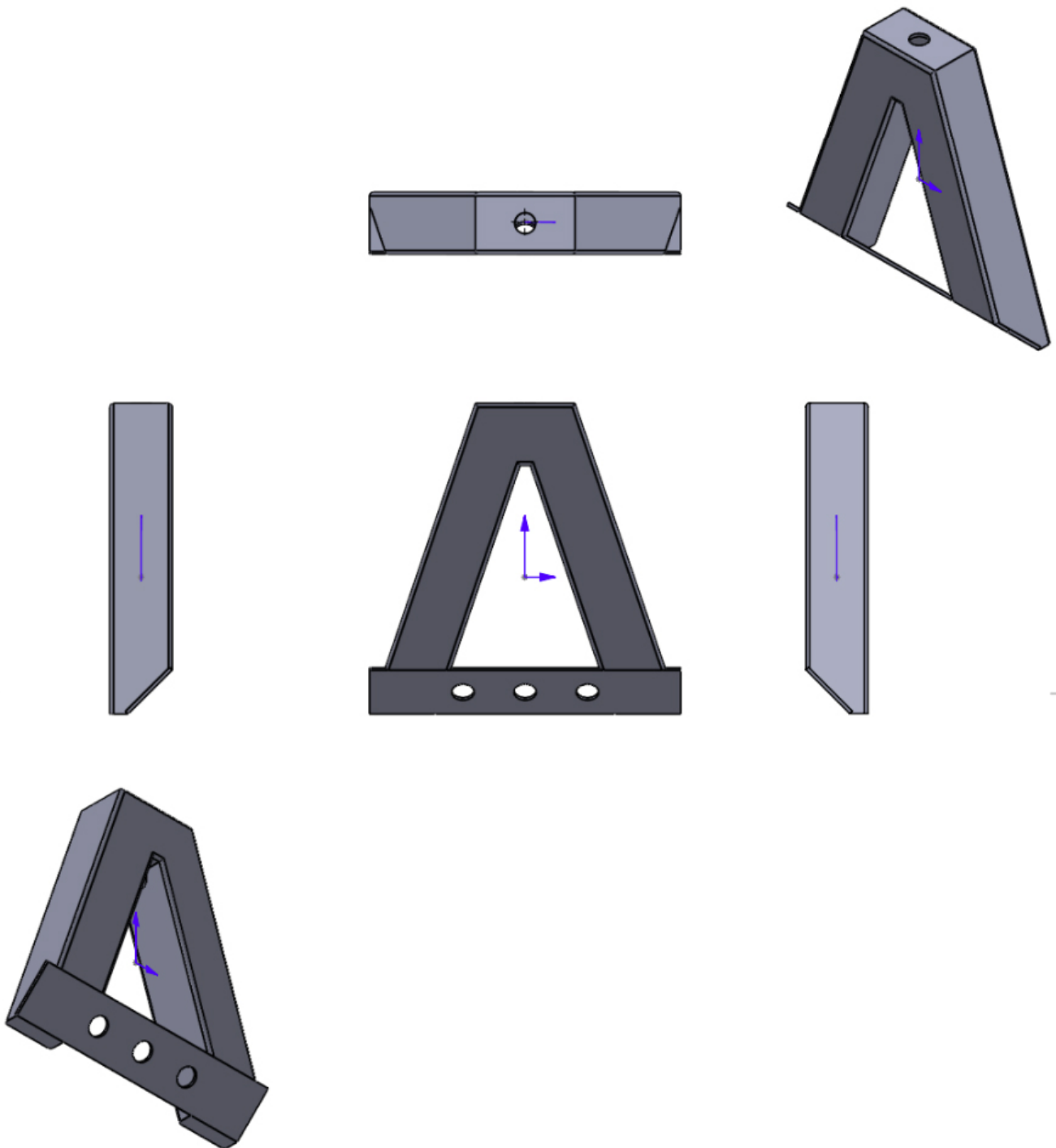
2x Double swing lifting ring DSR-UP M16 / SWL 1.4t



4x Shackle / SWL 1t



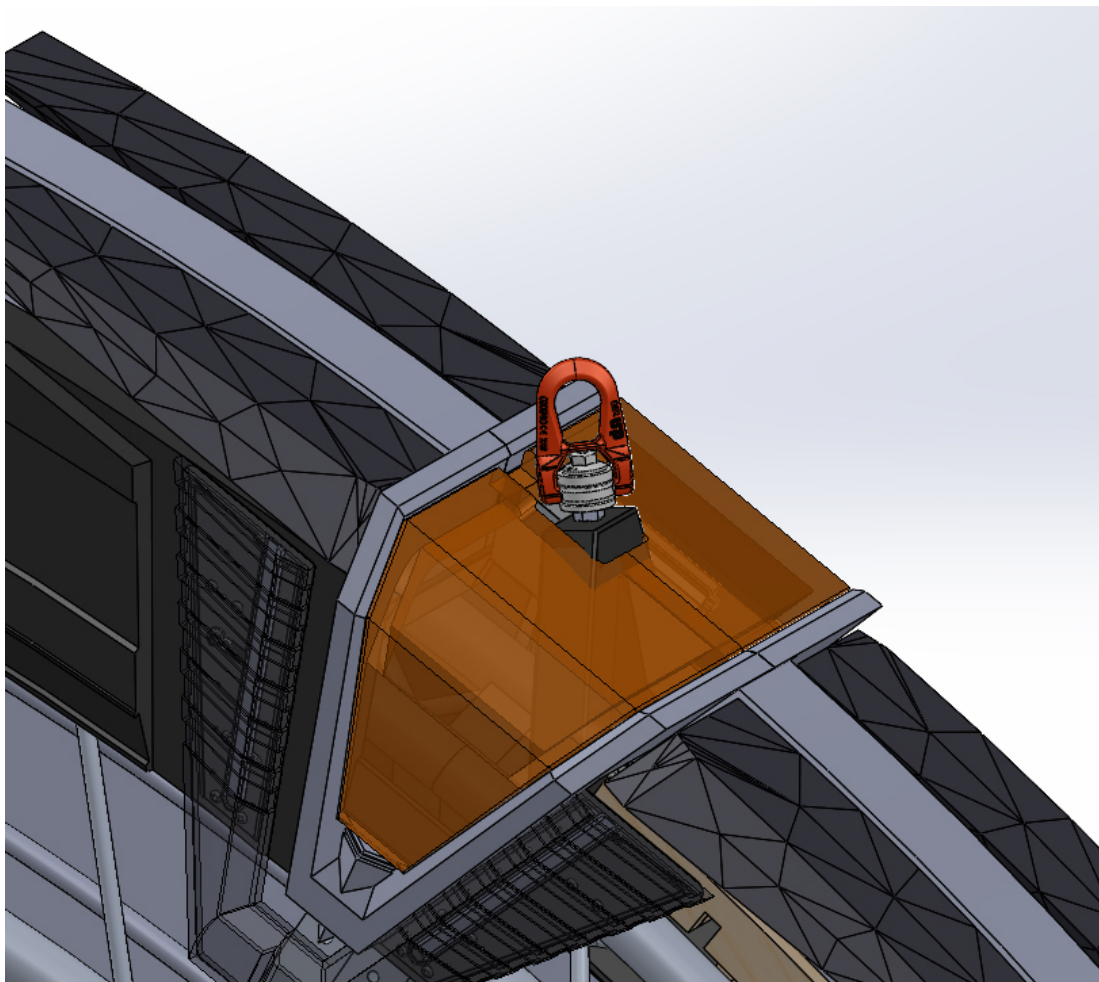
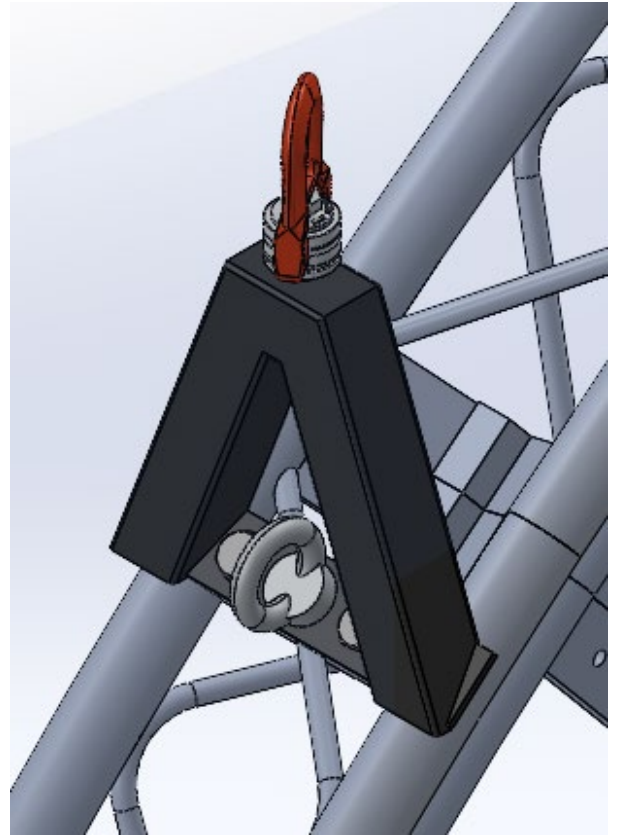
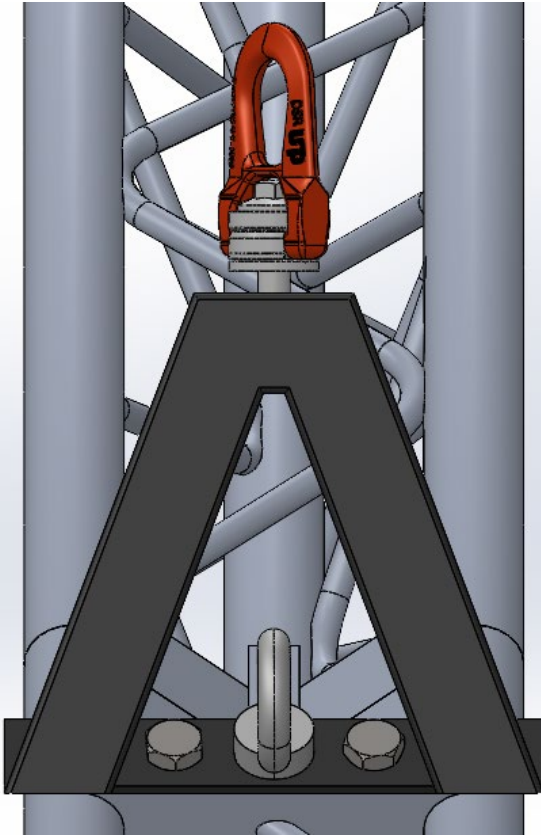
2x 1m Sling / SWL 1t



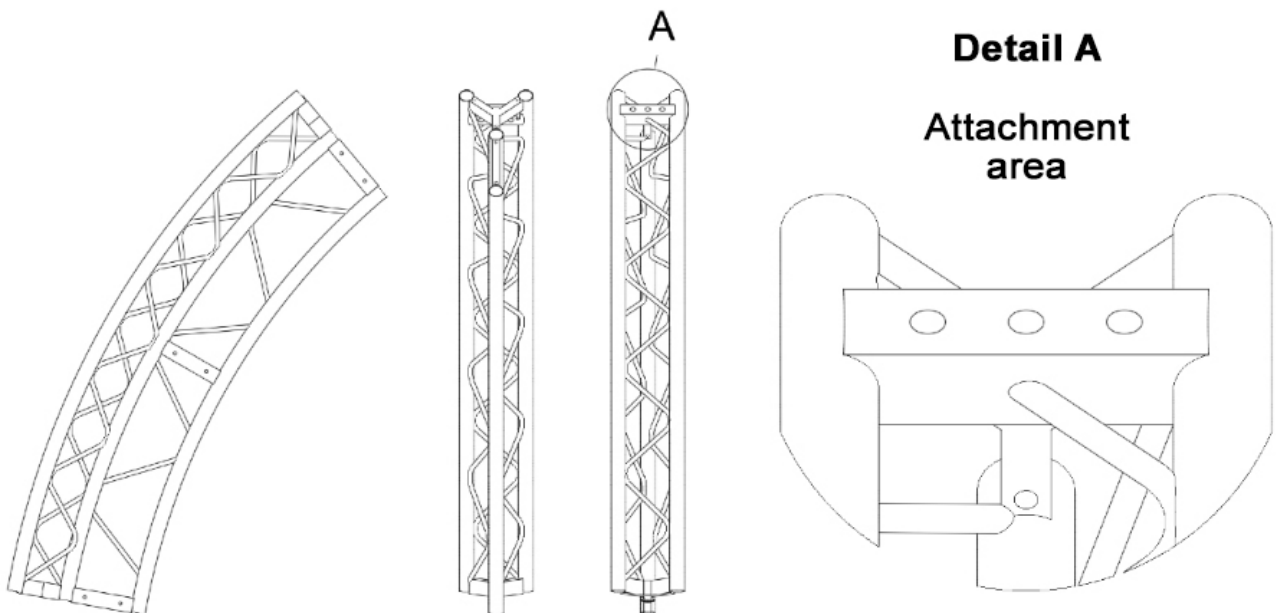
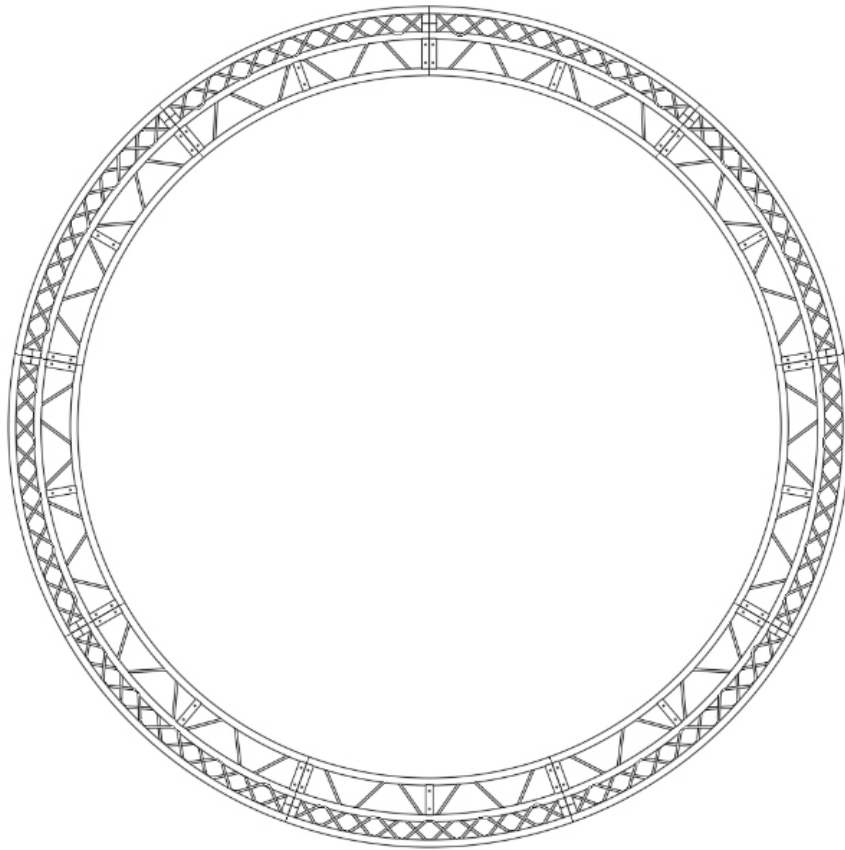
Two steel modules are bolted to the Truss structure via the attachment area (see following pages).

The lifting rings are bolted to the tip of these modules.

An additional ring is located at their base, bolted directly to the structure to provide a secondary attachment system.

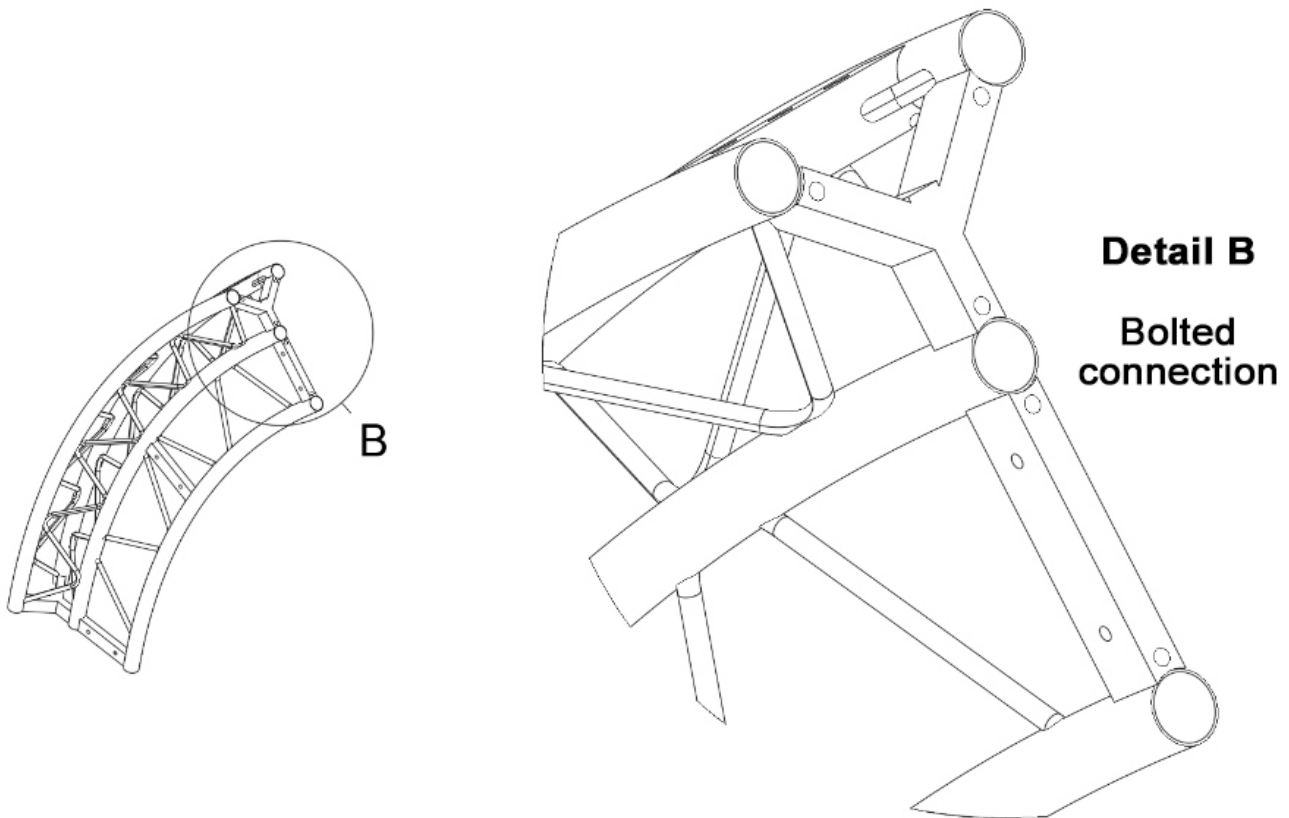
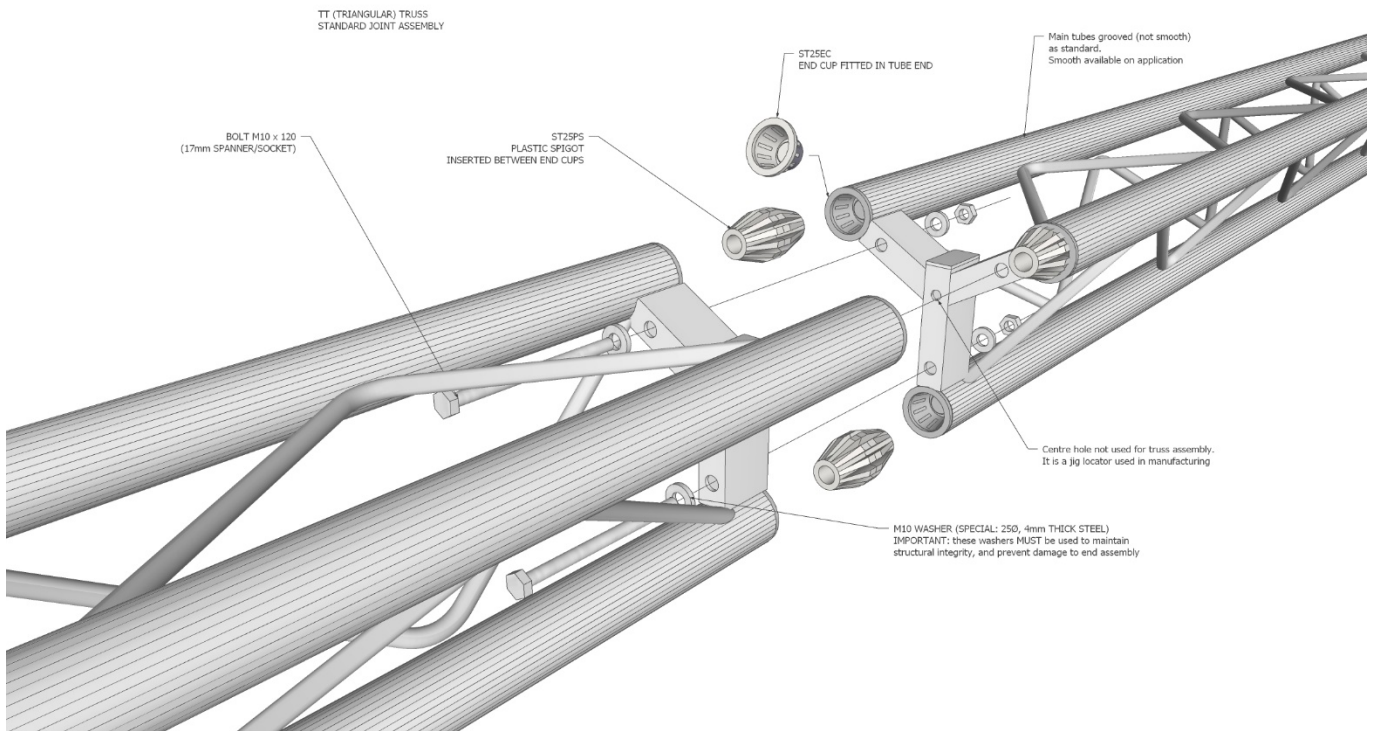


Truss details



Detail A

**Attachment
area**



Our truss structure is based on the TT252R standard from Metalworx (UK-based company).
<https://www.metalworx.com/product/tt-radius/>

Plastic spigots are present at the junctions of the main tubes.

Each section is bolted to the next using 4 M10 x 120 bolts.

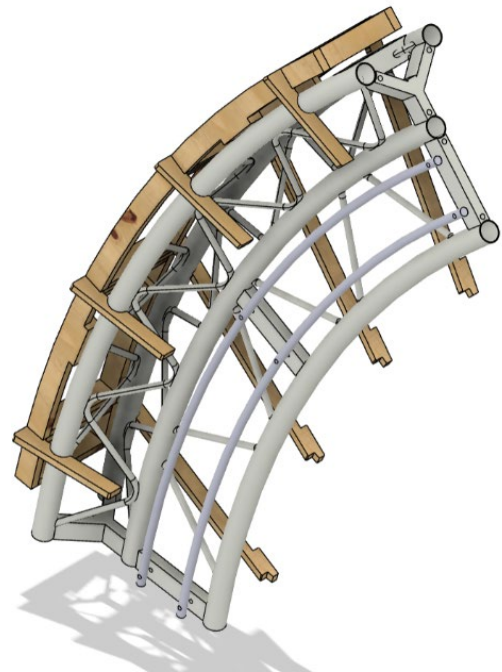
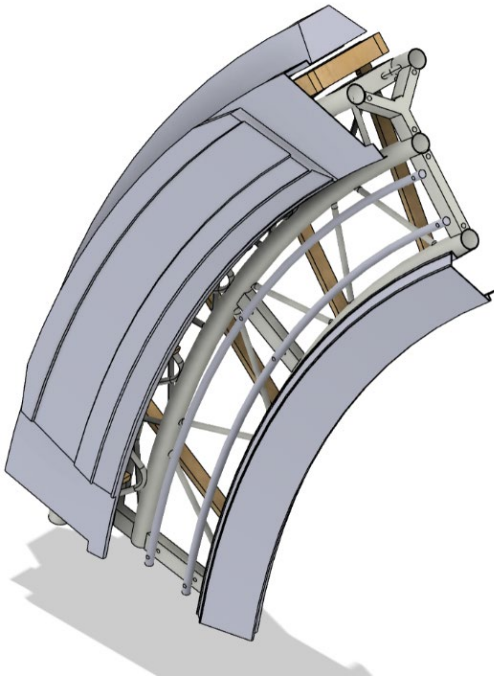
Details of the decorative element attachment



For each section, the fiberglass panels are screwed into threaded inserts.

The inserts are screwed into a plywood structure.

The plywood structure is attached to the truss structure using three Doughty clamps, each with a capacity of 100kg, and four threaded metal U-bolts.



The removable accessories of the set are either:

Attached to the plywood structure using screw/inserts sets,

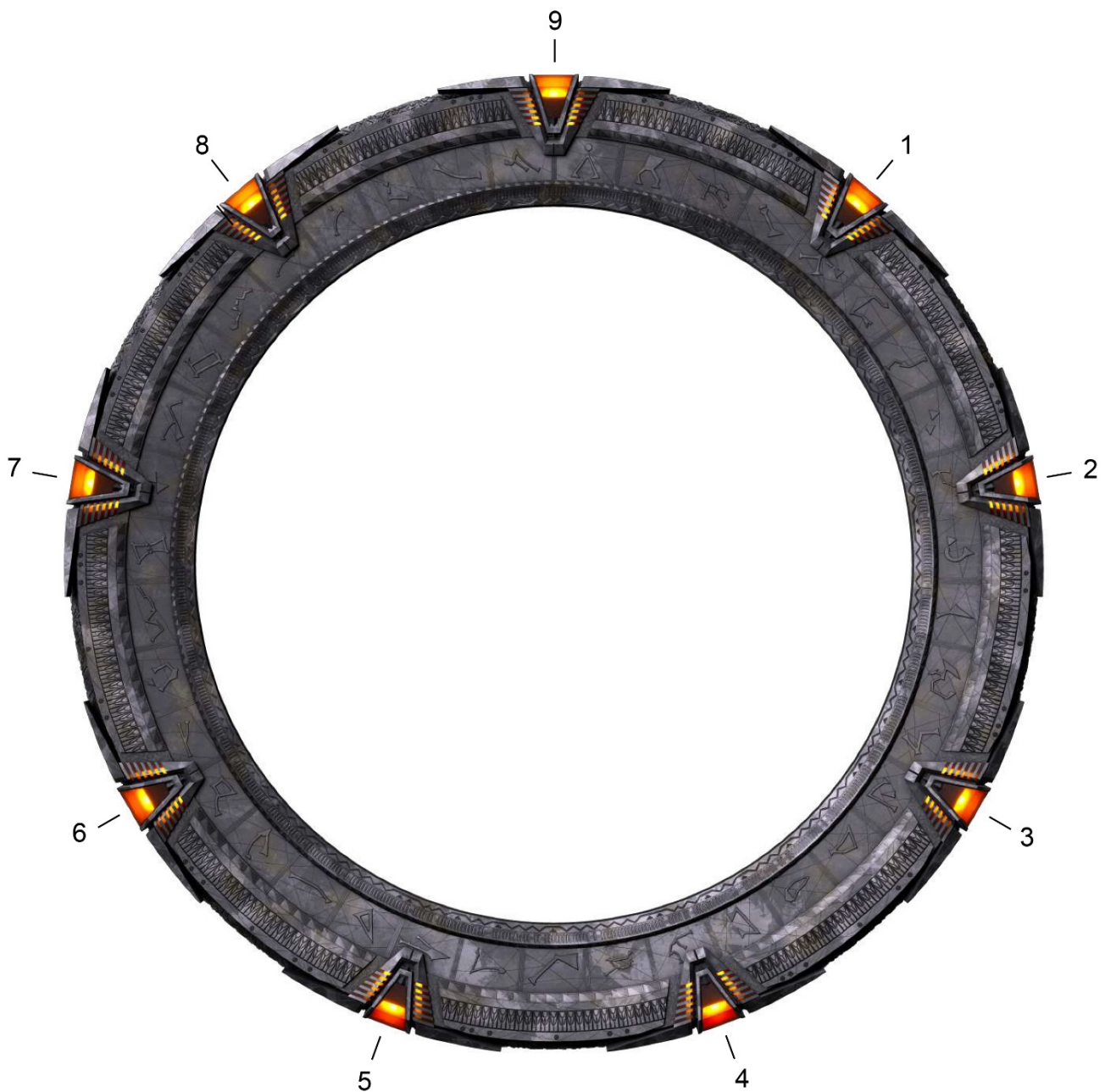
Attached to the panels using magnets and secured by metal slings, which are in turn fastened to the truss structure.

LIGHTING CONTROL / DMX

The lighting of the Gate is DMX-controllable. The DMX input is 3-pin.

The 3 LED drivers can be addressed individually.

| Adress | Fixture | DMX value | Function |
|--------|----------------------------|-----------|--------------------|
| 1 to 3 | LED Driver Chevrons 1 to 3 | 0 - 255 | Intensity 0 - 100% |
| 4 to 6 | LED Driver Chevrons 4 to 6 | | |
| 7 to 9 | LED Driver Chevrons 7 to 9 | | |



CONTACT

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