

ARC ROOF 6X4



SYSTEM DESCRIPTION

The Arc Roof is a fixed construction, based on three inward-curving trusses that are mounted to side masts. Special corners connect the arches to the main grid. Different configurations are made possible by simply changing the arches. The arched trusses have a keder profile on top for fitting the optional canopy.

INCLUDING

- Tension gear and steel wires
- Comprehensive building manual
- Structural report

Structure

| | |
|----------------|--------------------------|
| Main grid | H30D |
| Towers | H30V |
| Roof structure | Arc Roof |
| Stiffening | Guywires + Pressure bars |

Loading capacity

| Description | Type | Totals |
|-------------|------------------------|--------|
| Maingrid* | UDL | 1800kg |
| | CPL | 950kg |
| | Point load combination | 2000kg |
| PA wing | CPL per wing | 1000kg |

*Exact figures depend on configuration and loading plan

Why?

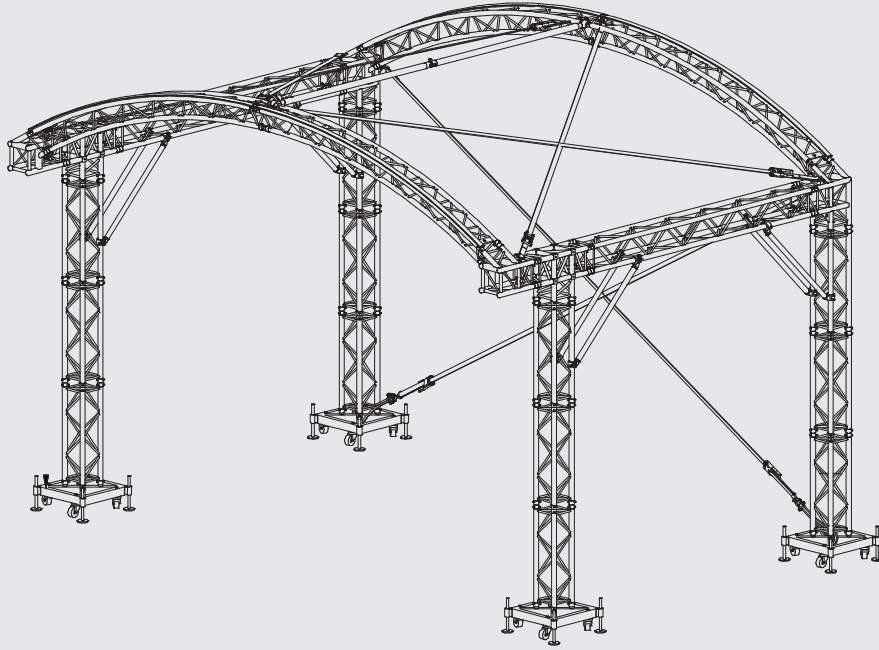
- Easy to handle, quick setup
- Significant loading capacity
- Versatile application

Logistic

| | |
|---|------------------|
| Self-weight structure | 600kg |
| Transport volume structure | 16m ³ |
| Exact figures depends on configuration and loading plan | |

Assembling

| | |
|---|---------------------|
| Build up approximately | 4 hours (4 persons) |
| Dismantling approximately | 4 hours (4 persons) |
| All these numbers varies depending on weather conditions, amount of persons available and skills of the crew. | |



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Design standards

| | |
|----------------------|---|
| ISO-17842-1 (2015) | Safety of amusement rides and amusement devices -- Part 1: Design and manufacture |
| EN 13814-1 (2015) | Fairground and amusement park machinery and structures - Safety |
| EUROCODE 0 (EN-1990) | Basis of structural design |
| EUROCODE 1 (EN-1991) | Actions on structures |
| EUROCODE 3 (EN-1993) | Design of steel structures |
| EUROCODE 9 (EN-1999) | Design of aluminum structures |

- All structural components/structures are produced according EN1090 EXC3.
- All structures are supplied with a structural report and manual – a on-site training is mandatory

Wind management

According ISO-17842-1 (2015)

(wind loading valid for area $V_b,0 = 28\text{m/s}$ – terrain category III)

| | | |
|-------------|--|---|
| Out-Service | 0,44kN/m ² | 26,5 m/s – 95,4km/hr (Max. gust wind speed) |
| In-Service | 0,20kN/m ² | 17,9 m/s – 64,4km/hr (Max. gust wind speed) |
| Measures | Upon reaching 17,9 m/s side and backwall canopies shall be removed | |

Canopy

Top, side and back

Standard side and back wall 100% closed - scrims available on request.

Color outside grey, inside black – other colors on request

Canopy complies to B1 fire retardant standards (ISO 9239-1)

Ballast

| | |
|-----------|--------------------------------|
| Total | Varies between 1600kg – 6000kg |
| Per tower | Varies between 400 – 1550kg |

Amount of ballast depends on:

- Self-weight of the structure (position of the tower)
- Interconnected tower bases or free-standing towers
- The use of an integrated staging system
- Friction coefficient between spindles-padding-sub soil

Staging

Layher scaffolding stage or Easyframe B stage, available as an option.

| | |
|------------------|---|
| Floor dimensions | variable |
| Floor height | max +/-1,4 m |
| Floor loading | 500kg/m ² – 750kg/m ² |

Soundwing

Available as an option

Grounding

Available as an option

Side/Backstage area

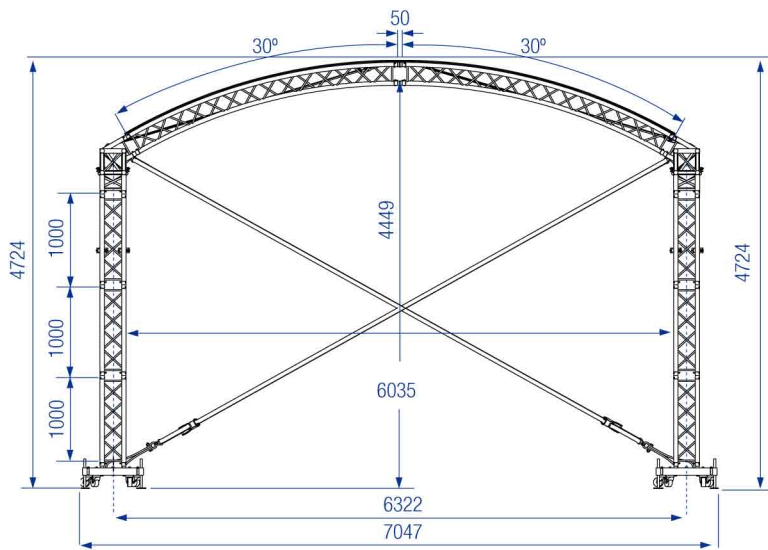
None

Lifting

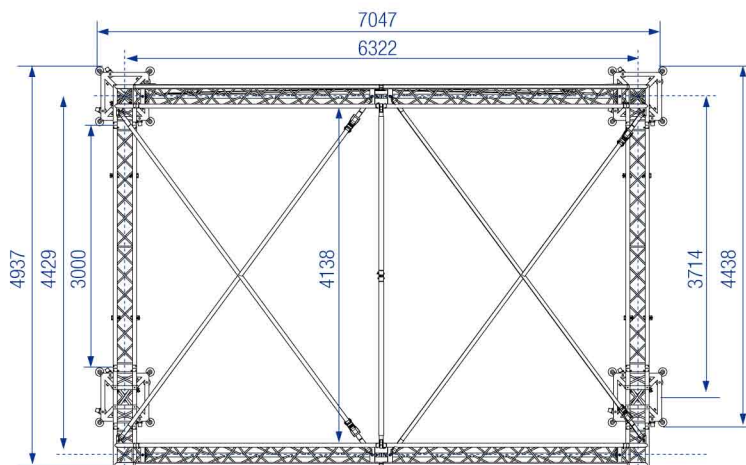
None n.a.

DIMENSIONS

FRONT VIEW 6X4



TOP VIEW 6X4



SIDE VIEW 6X4

