

**MEGA** 

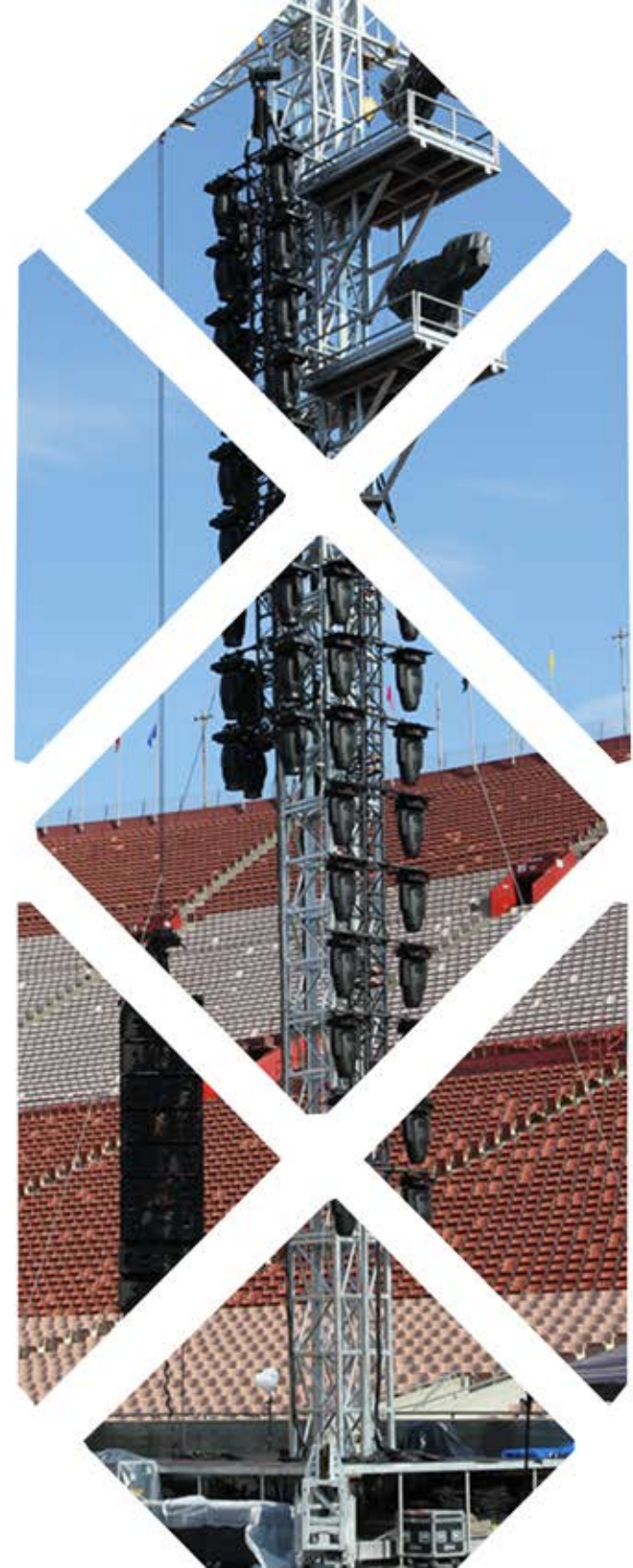
**TRUSS**

**FOR**

**MEGA** 

**STRUCT**

**build your  
struct with trust**



# OUR COMPANY

MEGA is renowned for its excellent and high-quality equipment, proper design, precise calculations specific for each customer and event, dedicated and respectful staff and a wide selection of products.

You provide the event - we provide the stage!

DESIGN / MANUFACTURE / INSTALLATION AND MAINTENANCE

INDOOR / OUTDOOR / PERMANENT / TEMPORARY

STAGES / BLEACHERS / CREATIVE STRUCTURES / CUSTOM-MADE SOLUTIONS

[www.mega-stage.com](http://www.mega-stage.com)  
1.888.359.4001

927 Gaudette Street,  
Saint-Jean-sur-Richelieu, QC  
J3B 7S7 Canada



# OUR SERVICES

## **R&D / STRUCTURAL ENGINEERING**

MEGA'S TEAM IS ALWAYS EXCITED TO WORK ON A PROJECT THAT REQUIRES RESEARCH AND DEVELOPMENT. OUR DESIGN SOFTWARE SOLID EDGE, AUTOCAD, EXPRESS ROUTE AND SAP ARE THE PERFECT TOOLS TO SAVE TIME AND ENERGY. THEY ALLOW US TO DESIGN STRUCTURES WITH ALL TYPES OF MATERIALS, INCLUDING CABLES AND FABRIC.

WE OFFER OUR STRUCTURAL ENGINEERING SERVICES THROUGHOUT NORTH AMERICA.

## **SALES AND RENTALS**

WE HAVE THE STRUCTURE YOU NEED, FROM FENCING, TO SMALL HYDRAULIC STAGES THROUGH THE MEGA CONSTRUCTIONS, MOBILE AND PERMANENT. WHETHER IT BE FOR AN EVENT, TAKING PLACE INSIDE OR OUTSIDE, IN THE DESERT OR THE NORTH POLE, ON A BOAT OR IN THE MOUNTAINS, WE HAVE THE SOLUTION FOR YOUR PROJECT.

## **MEGA STRUCT / MEGA TRUSS**

THE MEGA STRUCT OFFERS THE FLEXIBILITY CREATORS NEED FOR SMALL TO LARGE PROJECTS. THE SERIES INCLUDE LIGHT DUTY ALUMINIUM TRUSSES TO THE HEAVY DUTY STEEL TRUSSES. AT MEGA WE BELIEVE IN THE RIGHT PRODUCT FOR THE RIGHT APPLICATION. WE USUALLY PROPOSE STEEL TRUSSING FOR THE MOTHER GRID AND LIGHTER ALUMINUM TRUSSES FOR THE SECONDARY TRUSSES AND FACADES. THERE IS NO LIMIT TO YOUR CREATIVITY AS WE OFFER THE SOLUTION FOR YOUR NEED WITH THE MODULAR SYSTEM. FURTHERMORE WE CAN DESIGN CUSTOM COMPONENTS TO MEET YOUR NEED INCLUDING 3D DRAWINGS AND ENGINEERING APPROVAL FOR YOUR LOCATION.

PA TOWERS | FOH STRUCTURES | STAGE ROOFS | VIDEO STRUCTURE | SIGNAGE  
VIEWING PLATFORMS | CREATIVE STRUCTURES | ARCHES | LIGHT TOWERS

# WHY 120 KM/H OR 78 MPH? (FOR SHORT TERM)

**A GENUINE 78 MPH RESISTANCE:** We like to say a GENUINE 78 MPH (120km/h) as this takes in consideration a real installation. Yes, with the LED screens, PA, lights and other wind surfaces. Many suppliers will claim they can resist even more, but that would be without the wind surfaces.

**YES! The gear is not blow through:** Most people are concerned about the rigging capacity. However, the equipment load is rarely the problem. Our biggest enemy remains the winds which create a lot of stress on the structures. More equipment = more wind surface!

**BARE STRUCTURE MEETS THE BUILDING CODE:** Most of our temporary structures meet the local building code when the equipment is lowered and secured.

**CLIMATE CHANGES:** Due to climate changes, Many storms exceed the 50 MPH wind. and we believe that the reasonable mark for an installation with equipment installed should be able to resist those winds. However, the mark of 78 MPH is not reached in most of the storms.

**SAFETY PROCEDURES:** We encourage event producers to use the 50 MPH MARK to implement the safety measures while the installation with all the equipment installed should resist to a minimum of 78 MPH (120 km/h). WHY? This gives you a second chance, as the human behavior can be wrong from time to time! In other words, if your crew is not careful or if the personnel is not available at the right timing you still have a margin. We like to call it the second line of defense!

**CAPACITY:** Using higher wind speed designs brings us more confidence in larger and higher builds.

# WHY GALVANIZED STEEL?

1. **Lowest Lifetime Cost** - Low initial cost and long life make Hot Dip Galvanizing the most versatile and economic way of protecting steel for long periods (25 + years).
2. **Long Life** - Hot Dip Galvanizing has many years proven performance. Long life up to seventy years is commonplace in most atmospheres. For more details see the Millennium Map Project.
3. **Resistance to impact** - The galvanized steel has a much better resistance to impact which occurs frequently in the industry during manipulation, installation and loading.
4. **Reliability** - The process is simple, straightforward and closely controlled. The coating thicknesses are regular, predictable and easily specified and are defined by I.S. EN ISO 1461 : 2009. This ensures us to deliver a consistency and durability to the client.
5. **Speed of Application** - A fully galvanized protective coating can be applied in a few hours. A proper four coat paint system requires approximately one week. The galvanized process reduces the delivery delay.
6. **Complete Coverage** - Because it is dipped in molten zinc, all parts of the surfaces are coated - inside and out - including awkward corners and narrow gaps. We like it in show business as we don't like the leaking rusty soup the painted structures offer us.
7. **Coating Toughness** - Hot Dip Galvanizing is unique - the coating bonds metallurgically with the steel giving a much greater resistance to damage than other coatings.
8. **Three Way Protection** - Hot Dip Galvanizing protects in three ways:
  - It weathers at a slow rate giving a long and predictable life.
  - The coating sacrifices itself to any small areas exposed through drilling, cutting or accidental damage.
  - If large areas get damaged it prevents the sideways creep of rust.
9. **Ease of Inspection** - Hot Dip Galvanizing is an honest coating - if it looks continuous and sound, it is so. Coating thickness can be checked easily with the use of a magnetic probe (Elcometer).
10. **Faster Construction** - Hot Dip Galvanized steel is ready for use. No further site preparation, painting or inspection is necessary. Once erected, cladding can begin immediately, thus accelerating the construction programme.
11. **Capacity** - Does not reduce the capacity of the materials
12. **Inspection** - Avoid inspection process due to the rusting of the steel

## Table of Content

80K Series



40K Series















# 80K SERIES

The 80K Series 20" by 40" is by far the most flexible series ever built. Up to 130ft span and goes up to 100' in height. The series of product allows the following:

- Side by side bolting to double (40X40) or triple (40X60) the capacity & resistance.
- Use of smaller 40K Series 20X20 cubes and head blocks to be more creative.
- EZ to climb and attached fall arrest. Access to the inside of the truss if necessary.
- Possibility to insert ballasting inside.
- 2" standard show business diagonal tubes suit all show bizz clamps.
- 3" square clamps available for main chords.
- Same bolt as the 40K Series (Grade 8 1125").
- 3D custom parts development certified by professional engineers available on request.

## LOAD CHART

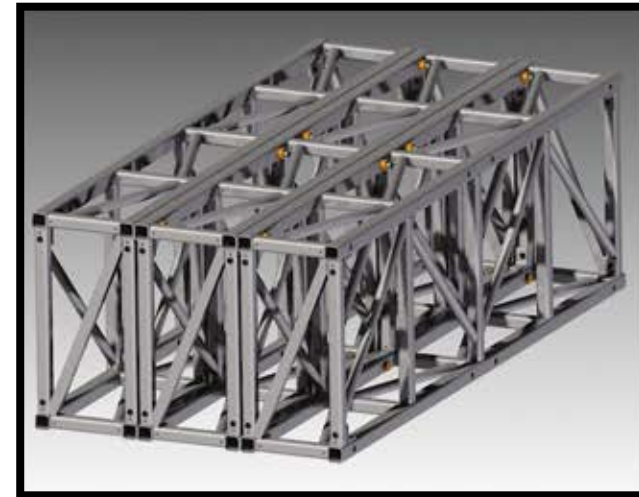
Span (ft.)	Single Central Point Load (lb.)	Deflection (in.)	Spreaded Load (lb.)	Deflection (in.)
40	22 670	0.666	45 330	0.82
50	17 380	1.061	34 770	1.29
60	13 720	1.562	27 440	1.87
70	10 990	2.181	21 980	2.57
80	8 830	2.931	17 670	3.4
90	7 060	3.828	14 130	4.36
100	5 570	4.89	11 130	5.47

Product	Weight	
	LB	KG
 20'X40' TRUSS 10FT (P04A002-10)	841	381
 20'X40' TRUSS 20FT (P04A002-20)	1588	719
 20'X40' TRUSS 5FT (P04A002-5)	463	210
 CUBE 20'X40'X40' (PSS2040-50)	546	247
 15 DEG. CUBE TRUSS (PSS2040-09)	945	428
 KEYSTONE-TOP TRUSS(60') (ARK-6000)	666	316
 KEYSTONE-TOP TRUSS(80') (ARK-8000)	697	316
 KEYSTONE-TOP TRUSS(100') (ARK-10000)	733	332
 10'X10' COLUMN (31FT) (PSS2040-16)	1596	723
 7'X7' CONNECTION (PSS2040-56)	72	33
 OCTOPUS BASE (OCTO-402000)	2011	911
 40 000lb Adjustable Jack		

# Side by Side



## Dual



## Triple

Span (ft.)	Single Central Point Load (lb.)	Deflection (in.)	Spreaded Load (lb.)	Deflection (in.)
40	45 340	0.666	90 660	0.82
50	34 760	1.061	69 540	1.29
60	27 440	1.562	54 880	1.87
70	21 980	2.181	43 960	2.57
80	17 660	2.931	35 340	3.4
90	14 120	3.828	28 260	4.36
100	11 140	4.89	22 260	5.47

Span (ft.)	Single Central Point Load (lb.)	Deflection (in.)	Spreaded Load (lb.)	Deflection (in.)
40	68 010	0.666	135 990	0.82
50	52 140	1.061	104 310	1.29
60	41 160	1.562	82 320	1.87
70	32 970	2.181	65 940	2.57
80	32 970	2.931	53 010	3.4
90	21 180	3.828	42 390	4.36
100	16 710	4.89	33 390	5.47

# MEGA Base

Compatible  
with



## Adjustable Free Standing MEGA Base








## Low Rider Version





# Follow Spot & LED Screen



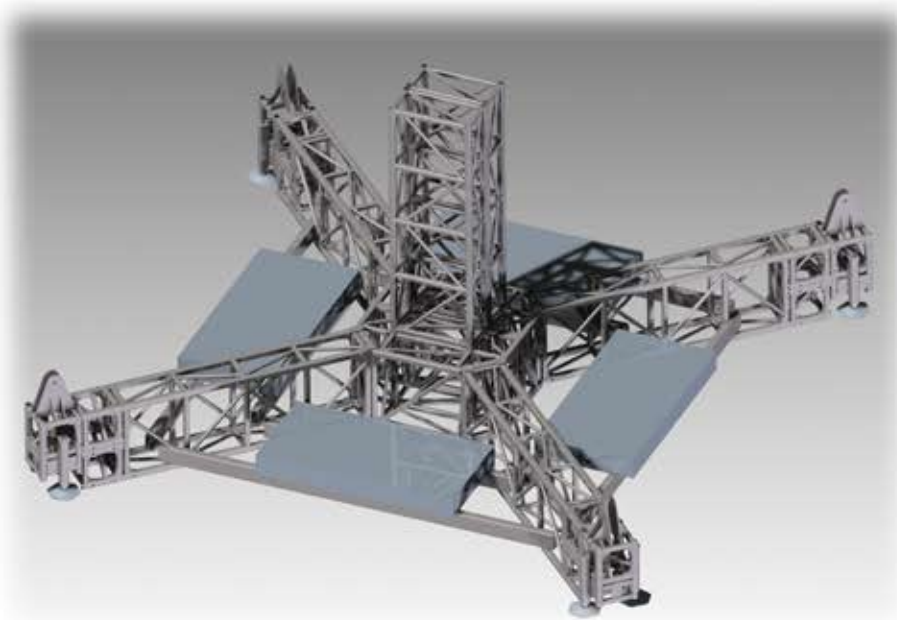
Product	Weight	
	LB	KG
 Horizontal LED Screen Support	240	108
 8' SECURITY GATE (SO-110)	120	54
 6' SECURITY GATE (SO-111)	90	41
 6'X8' PLATFORM (WITHOUT GATES) (SO-103)	658	298
 FLAT ANGLE BRACKET (SO-000)	174	79



# Mini Base



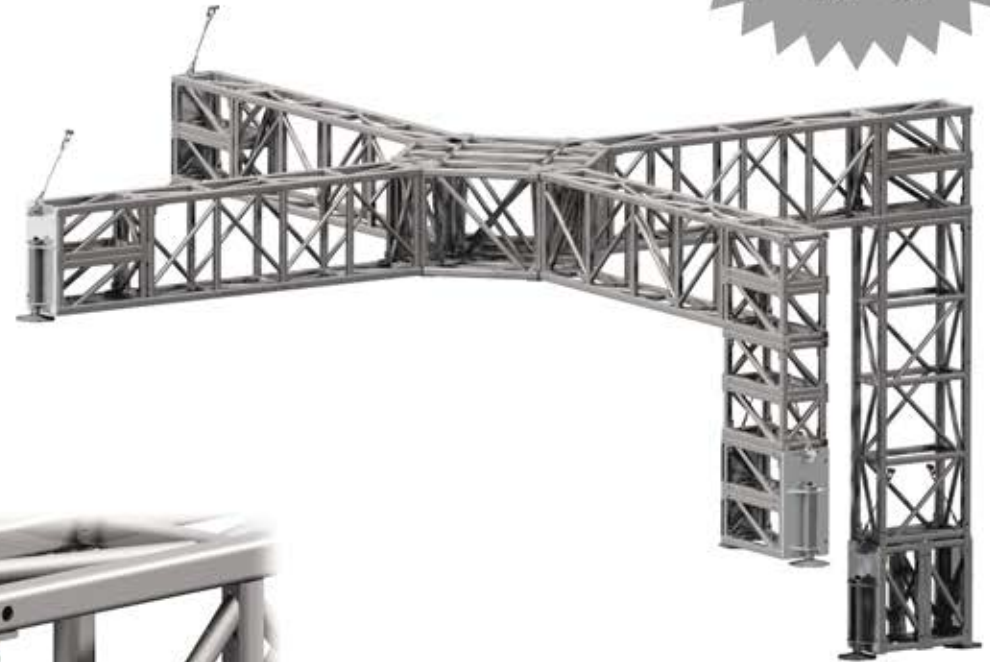
## ① Octopus Using Adjustable Mini Base



## ② T-Shape Using Adjustable Mini Base



# MEGA Jack



MEGA-STRUCT 80K TRUSS CAN BE GROUND-LEVELED AT MANY DIFFERENT PLACES FOR HIGH, SAFE AND CUSTOM BUILDINGS.



MEGA-STRUCT 80K BASE CAN BE GROUND-LEVELED AT MANY DIFFERENT PLACES AND HEIGHTS FOR CUSTOM APPLICATIONS WHERE THE BASE IS SUPPORTED ON DIFFERENT HEIGHTS. SIMPLY ADD CUBES OR TRUSS



**Lighting Tower For Red Bull Crashed Ice**

# 80K Follow Spot Tower



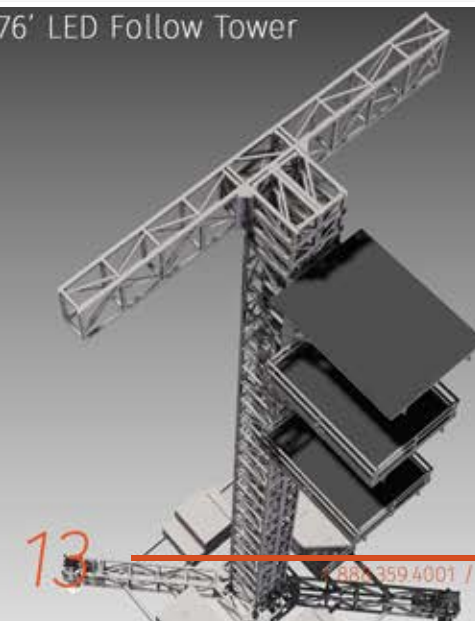
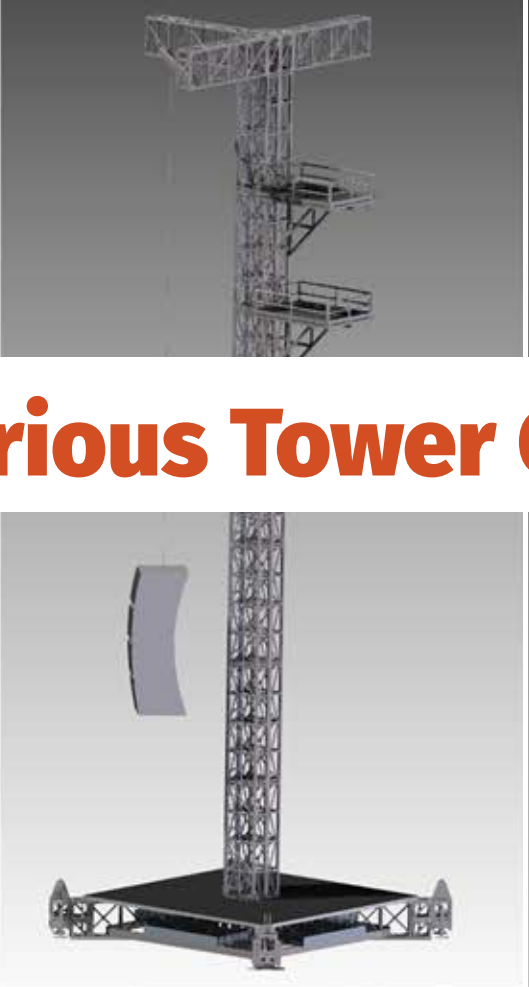
- 75' high / 78 MPH Wind Resistance
- Sound - Lights - Follow Spot (up to 4)
- Climbing Ladder
- Low Profile Bases
- 20,000 Lb Rigging Capacity



60'x20'x20' Tower



# Various Tower Configurations



76' LED Follow Tower

55' Delay Tower

- 65' High / 78 MPH Wind Resistance
- 20 000 Lb Rigging Capacity
- Follow - LED- Banners

## Follow Spot Tower with LED Support





# Montreal FestiBlues



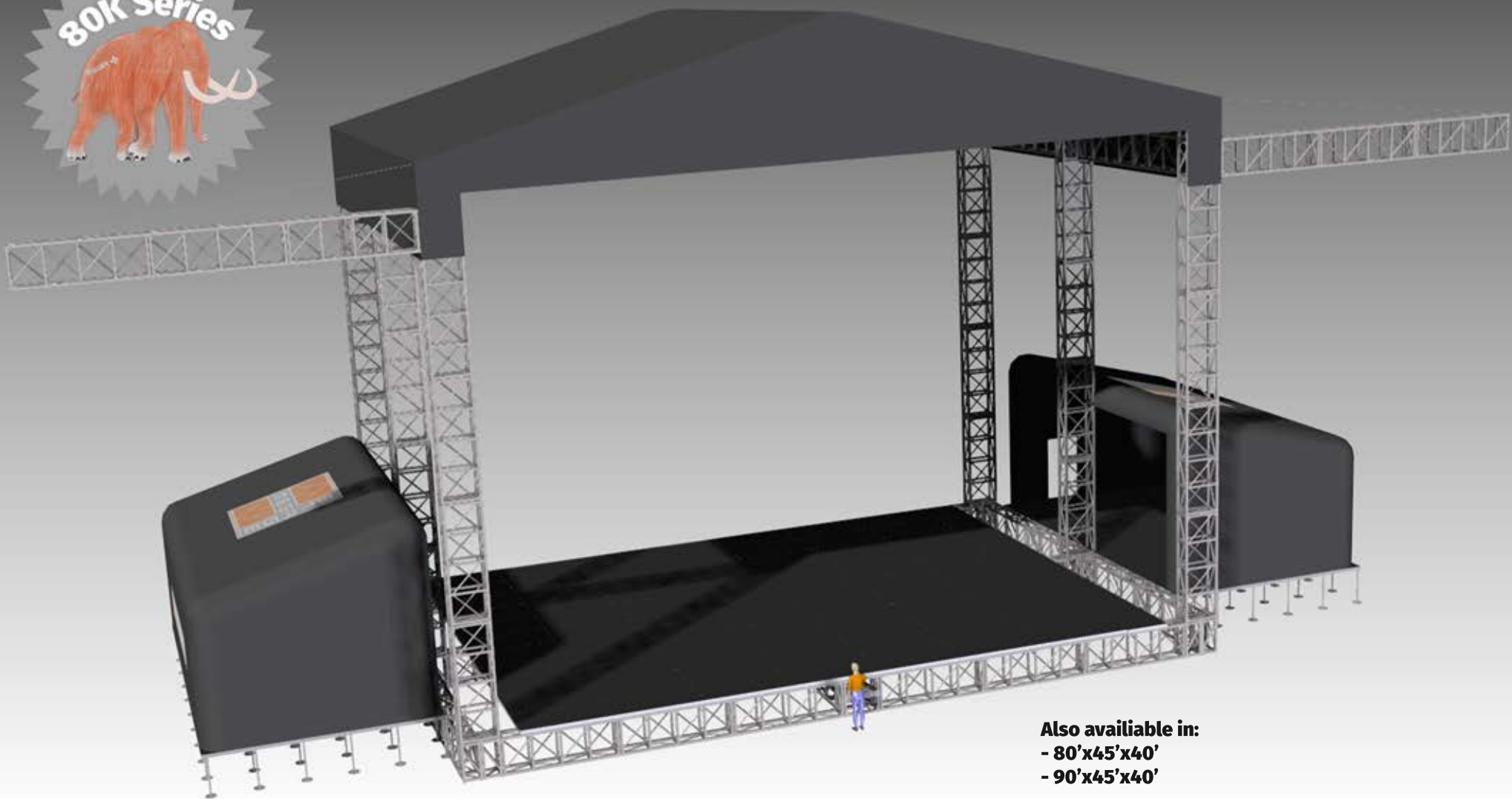


# Stage 70'x45'x40' (40' Out Rigger)



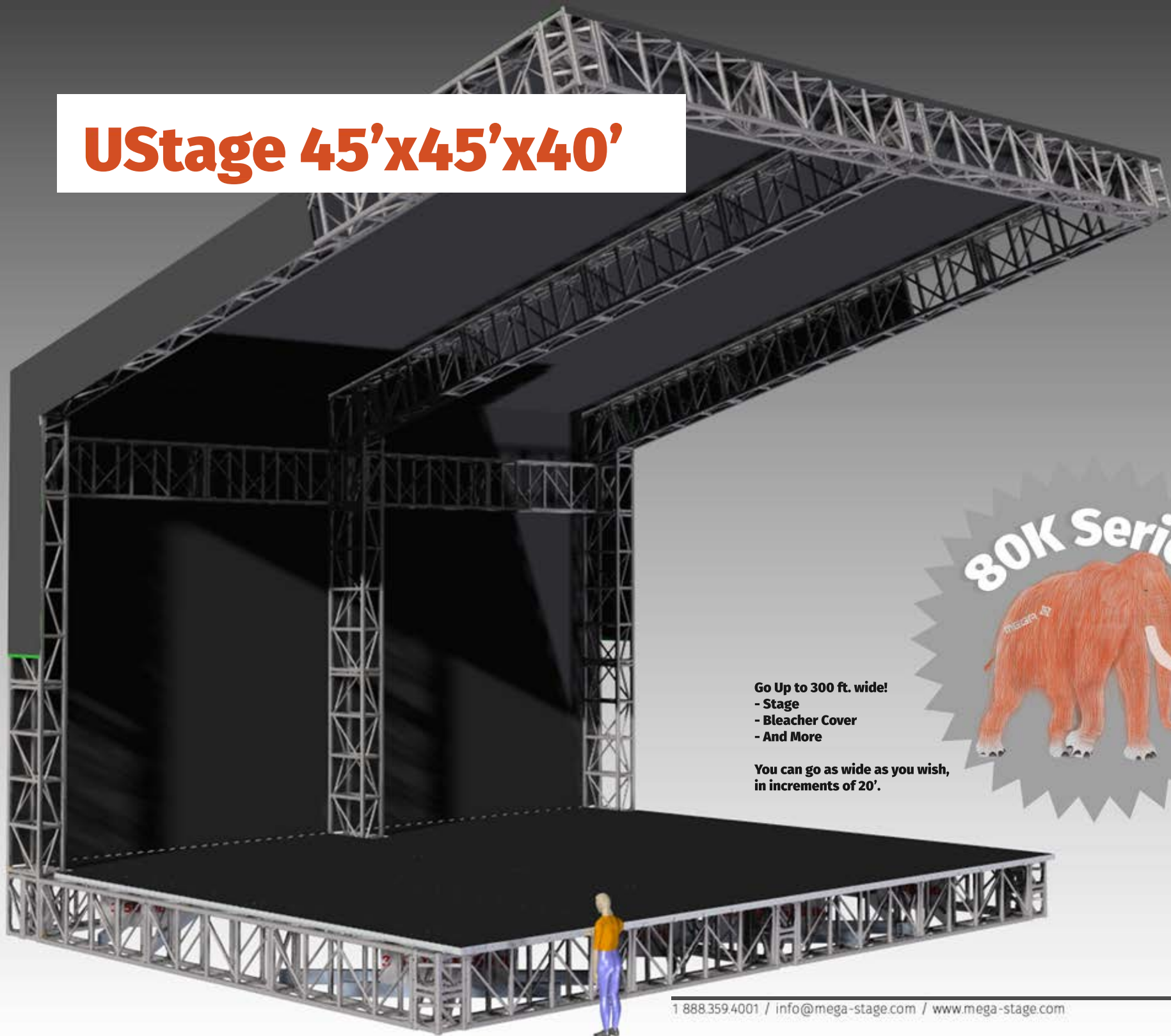
**Also available in:**  
- 80'x45'x40'  
- 90'x45'x40'

# Stage 70'x45'x50' (30' Out Rigger)



**Also available in:**  
- 80'x45'x40'  
- 90'x45'x40'

# UStage 45'x45'x40'



80K Series



Go Up to 300 ft. wide!

- Stage
- Bleacher Cover
- And More

You can go as wide as you wish,  
in increments of 20'.

# 40K SERIES


















The 40 K Series 20 inch by 20 inch is the strongest and most compact truss of our steel truss family. The series of products allows the following:

- Up to 80' span. Easily fit to 60' span with good rigging and wind capacity
- Reaches 70' high.
- The series of products allow the following:
- Cubes and head blocks are compatible with the 80K 20'X40'.
- EZ to climb and attach fall arrest. Access to the inside of the truss if necessary.
- Possibility of inserting a ballasting inside.
- 2" standard show business diagonal pipes suits all show bizz clamps.
- 3" square clamps available for main chords.
- Same bot as the 80K series ( Grade 8 1.125").
- Sleeve blocks and compact free standing bases available.
- Broad range of pre-engineered solutions.
- 3D custom parts development certified by professional engineers available on request.

## LOAD CHART

Span (ft.)	Single Central Point Load (lb.)	Deflection (in.)	Spreaded Load (lb.)	Deflection (in.)
10	12 000	0.022	25 000	0.029
20	11 000	0.169	24 000	0.226
30	8 000	0.449	17 000	0.575
40	5 000	0.777	11 000	0.99
50	4 000	1.399	8 000	1.621
60	2 000	1.829	5 000	2.26
70	1 000	2.578	3 000	3.11
80	n/a	n/a	1 000	3.927

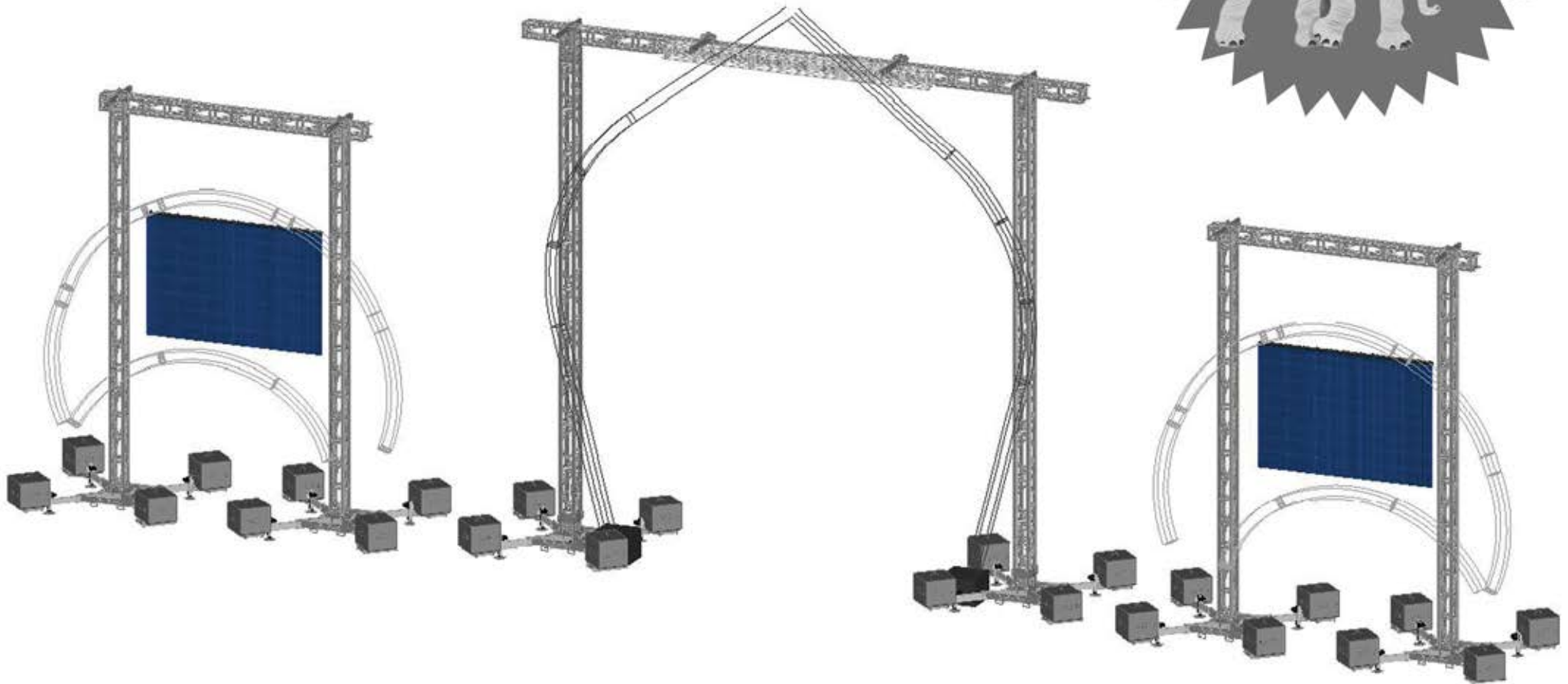
Product	Weight	
	LB	KG
 AJUSTABLE FREE-STANDING MEGA-BASE (5008-122-01)	2628	1190
 AJUSTABLE MINI-BASE (5010-108-01)	202	92
 SPARE GROUND PLATE (5008-121-01)		
 10' TRUSS SECTION (P020A010)	645	292
 5' TRUSS SECTION (P00A005)	333	151
 FOUR WAY CORNER BLOCK (P020A025)	160	72
 GROUND FLOOR BASE (5010-100)	203	92
 HEAD BLOCK FOR 35' MONSTER BEAM (T101P000)		
 HEAD BLOCK (P020A026)	285	129
 4' CANTELIVER BEAM (D001A124)	98	44
 6' CANTELIVER BEAM (D001A126)	147	67
 8' CANTELIVER BEAM (D001A128)	196	89
 10' CANTELIVER BEAM (D001A118)	245	111
 16' CANTELIVER BEAM (D001A130)	392	178
 21' CANTELIVER BEAM (D001A132)	514	233



# Custom Stage for Montreal IglooFest



# Custom Arch Concept

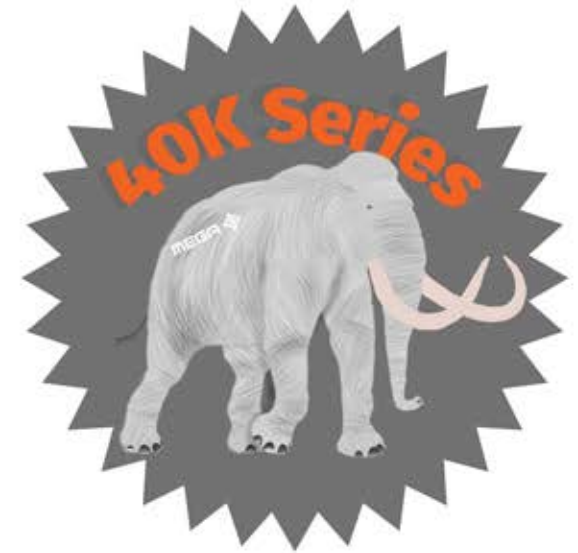


# Entrance or Race CAT WALK ARCH





# Free Standing 9'X12' LED Screen Support 39ft Height





TEMPORARY, SEMI-PERMANENT  
OR PERMANENT.



IMPOSING AND SOLID AWESOME!  
PROJECT NO. 325

**CLIENT:** Cogeco Amphitheatre – Trois-Rivières

**CHALLENGE:** Stop the intensity of rain and swirling winds amplified by the confluence of the Saint-Maurice River and the St. Lawrence River

**SOLUTION:** Design, manufacture and installation of solid and lasting Weather Barrier structures of each side of the stage

**RESULTS:** Increased comfort of the spectators through structures fabricated in harmony with the building design

40K Series

