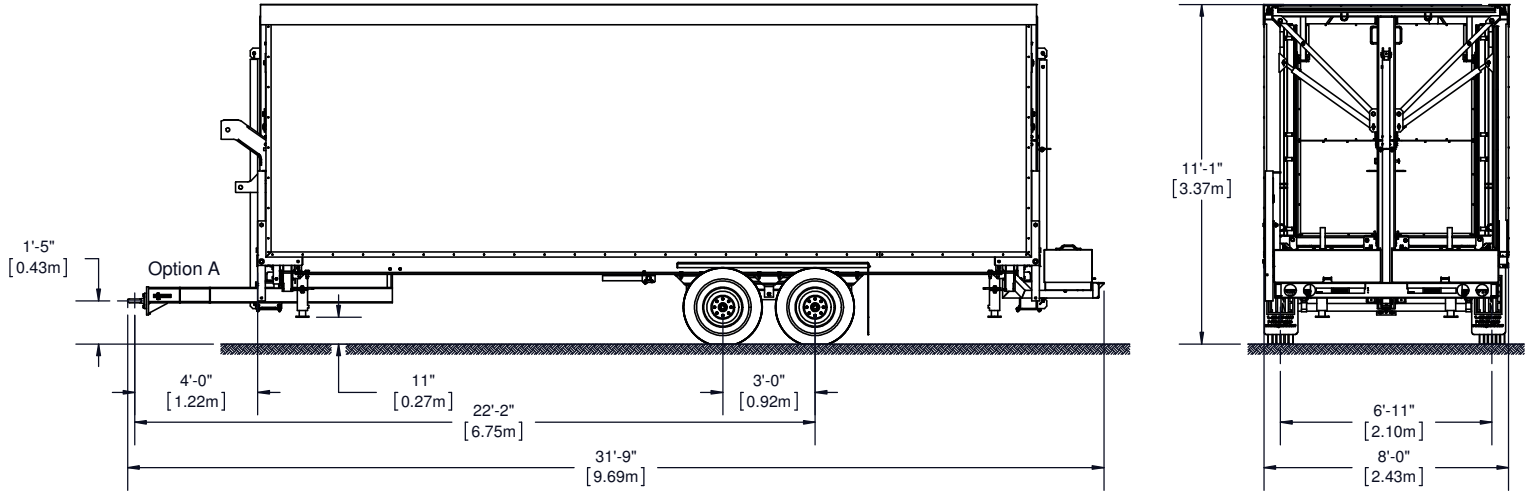
STAGE LINE®

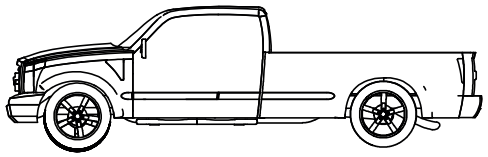
SL100

TECHNICAL DRAWINGS

2017

Trailer Hitch Option A
Drawbar / Pintle Eye

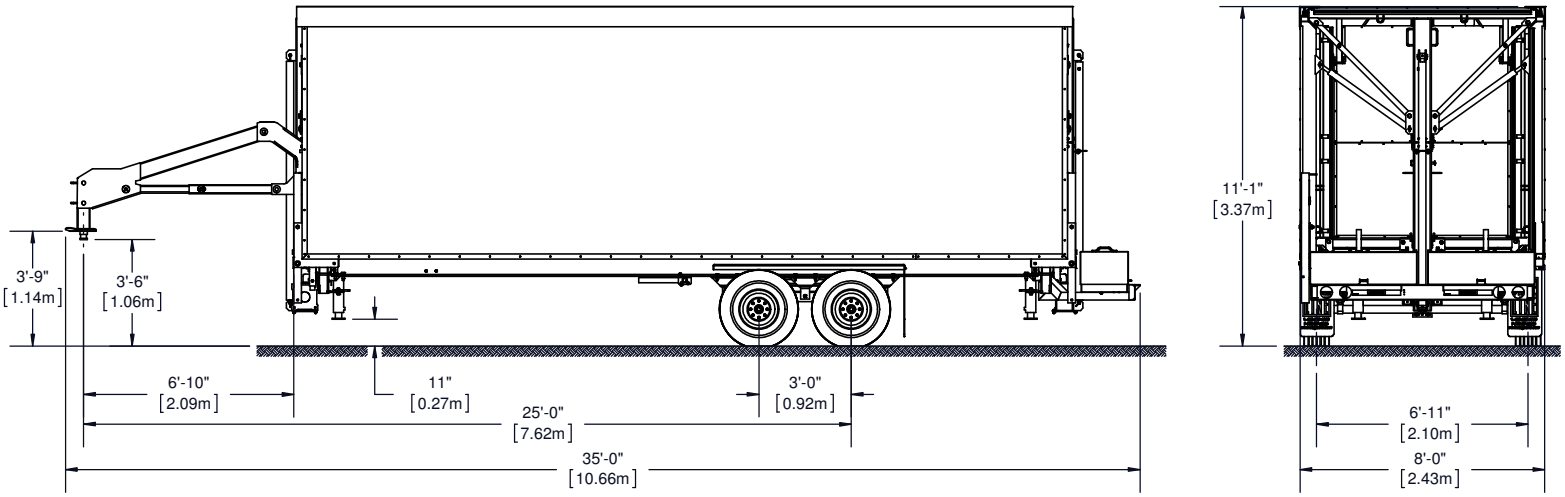


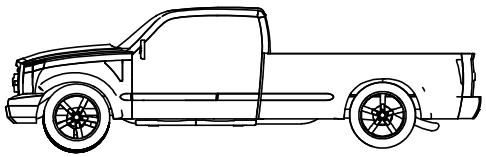


Mass SL100	Unladen		Standard Equipment		Maximum Capacity	
	Lbs	Kg	Lbs	Kg	Lbs	Kg
Total Mass	8752	3970	10604	4810	15000	6804
Mass on Axle	7496	3400	9171	4160	14000	6350
Mass on Hitch	1257	570	1433	650	3750	1701

Drawings may show stage equipped with optional accessories. May be sold separately.

Trailer Hitch Option B
KingPin / Fifth Wheel





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Mass on Hitch	1257	570	1433	650	3750	1701

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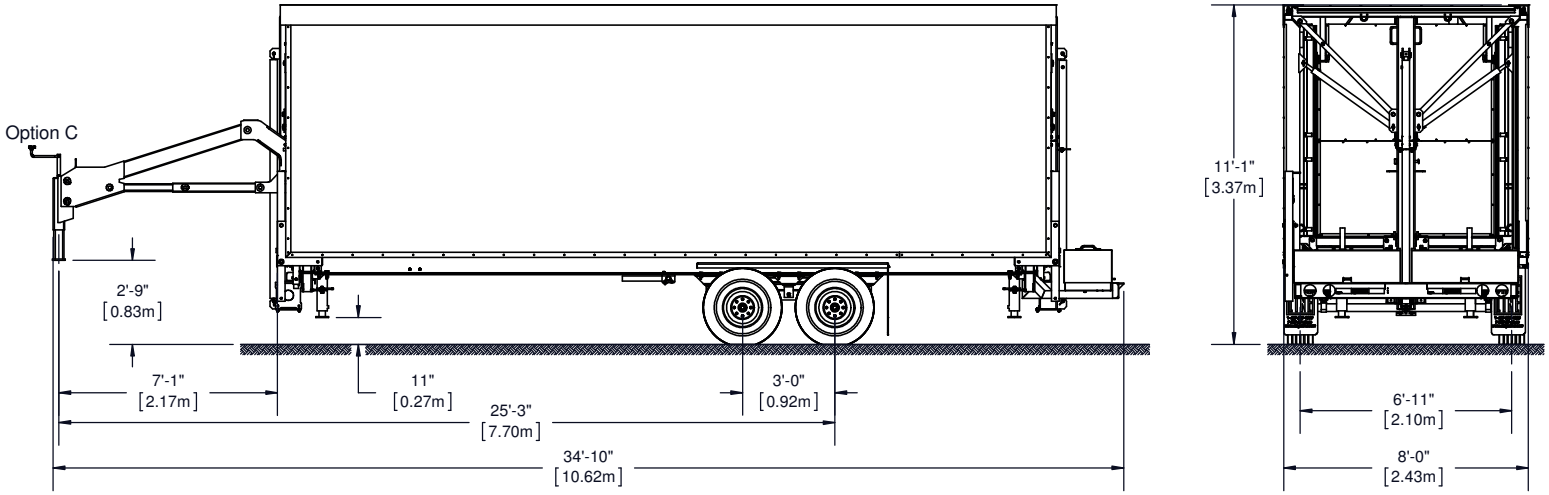
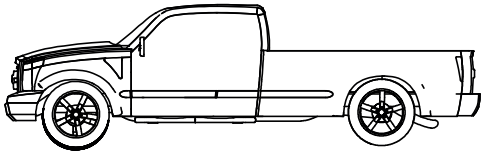
Trailer Hitch Option C
Gooseneck / Ball Hitch





Mass SL100	Unladen		Standard Equipment		Maximum Capacity	
	Lbs	Kg	Lbs	Kg	Lbs	Kg
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Mass on Axle	7496	3400	9171	4160	14000	6350
Mass on Hitch	1257	570	1433	650	3750	1701

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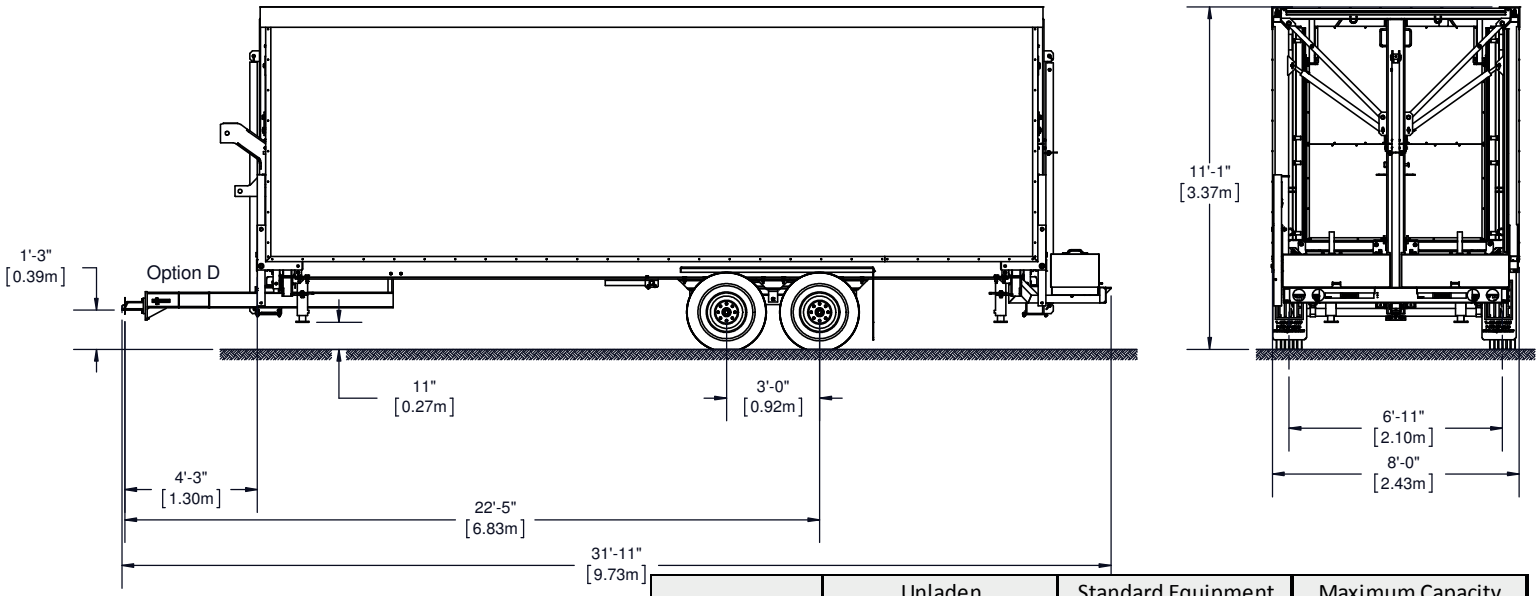
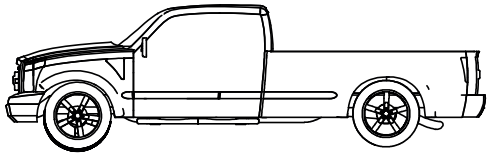
Trailer Hitch Option D
Drawbar / Ball Coupler 2 5/16''





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	Lbs	Kg	Lbs	Kg	Lbs	Kg
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Mass on Axle	7496	3400	9171	4160	14000	6350
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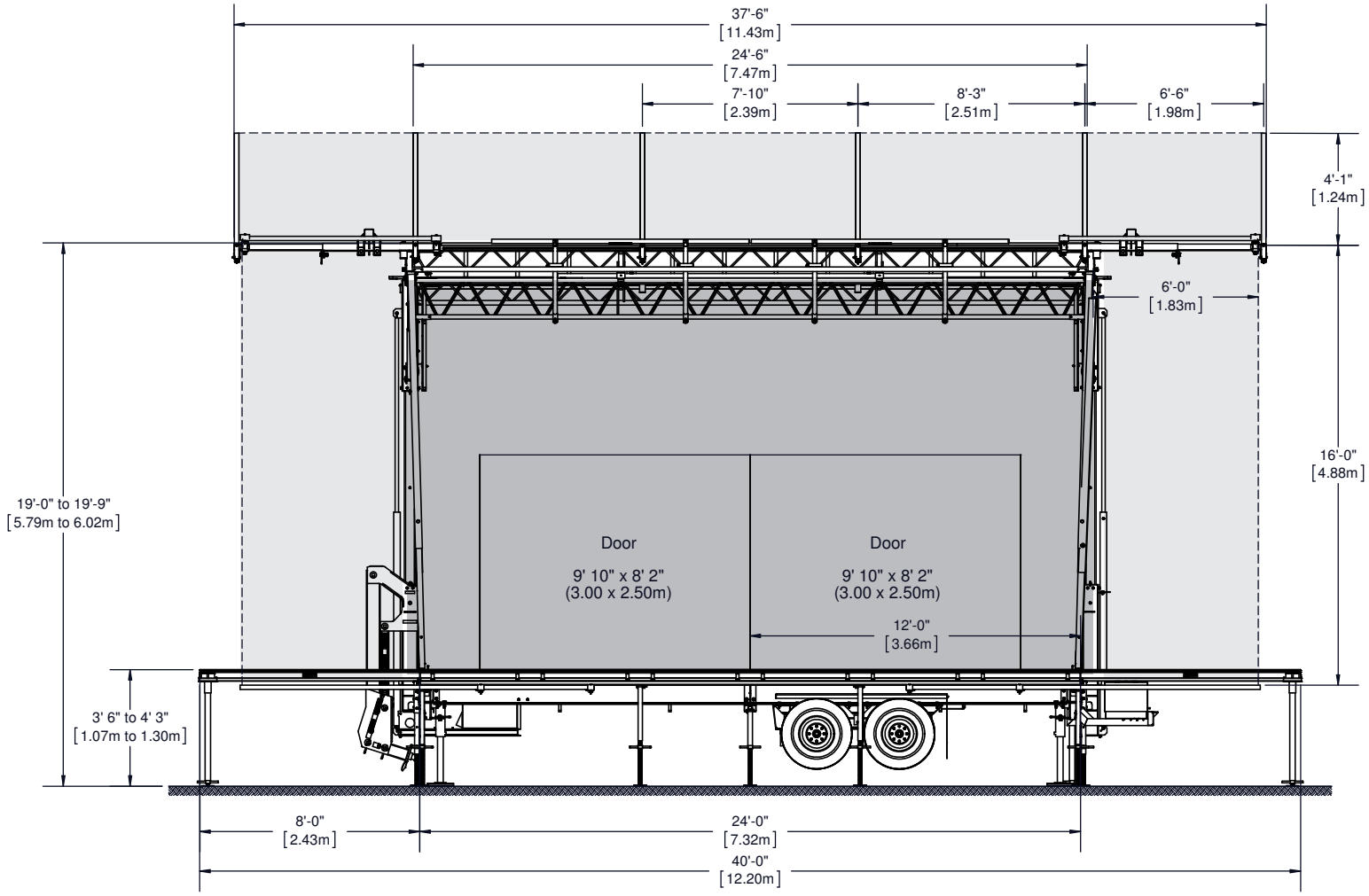

WINDWALL

BANNER (For dimensions, please refer to banner book)

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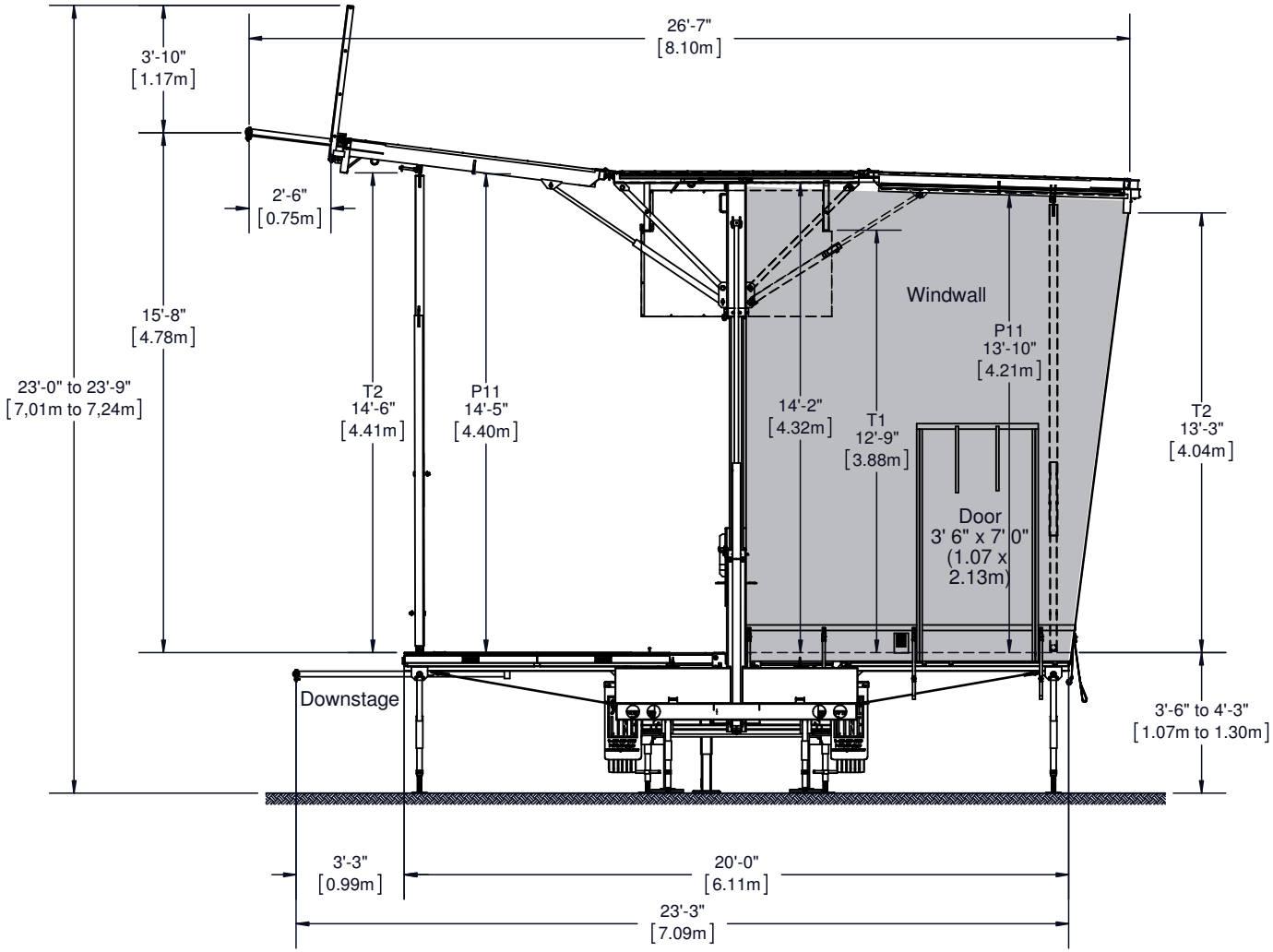

WINDWALL

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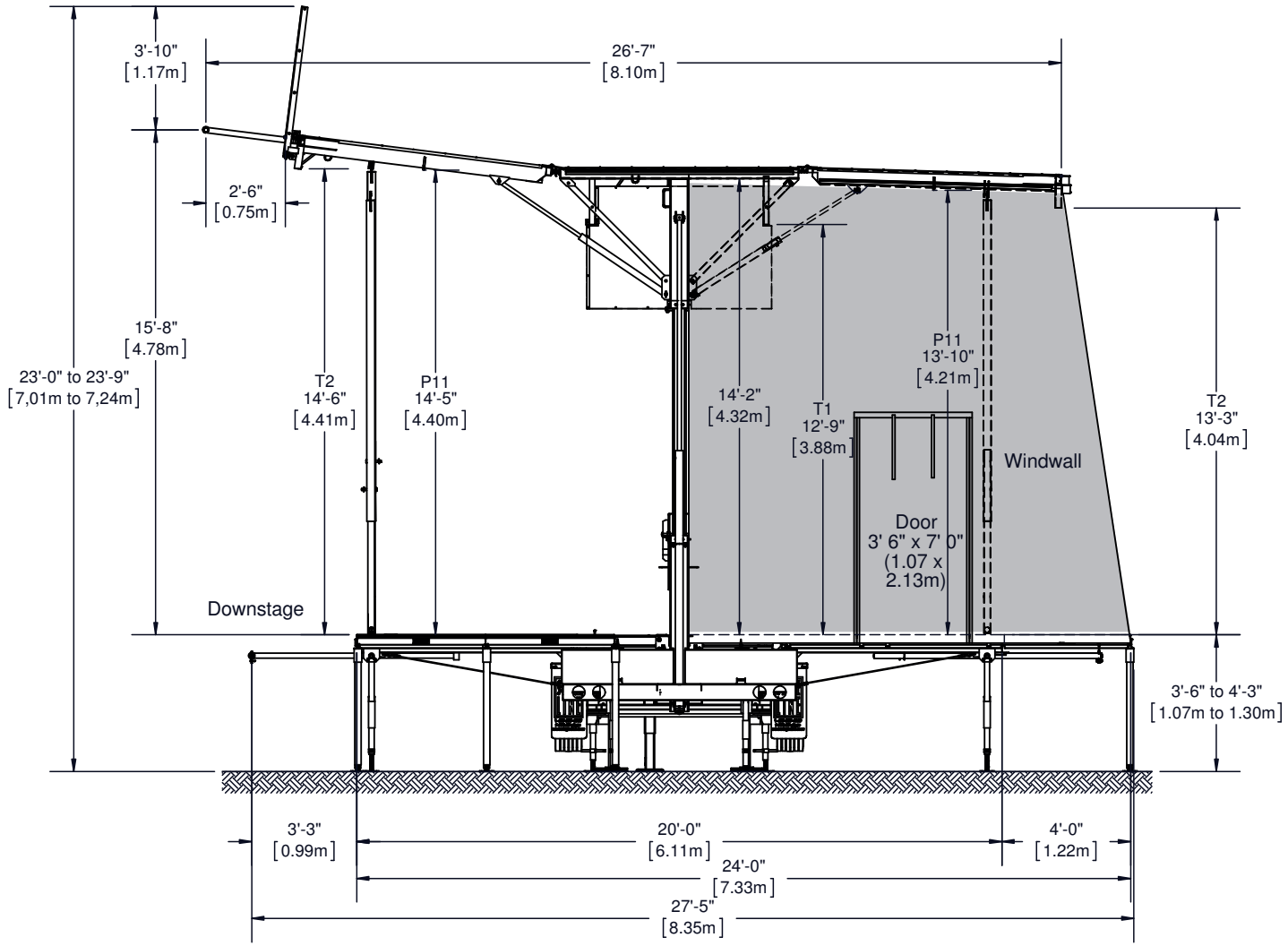
SIDE VIEW WITH EXTENSION



WINDWALL

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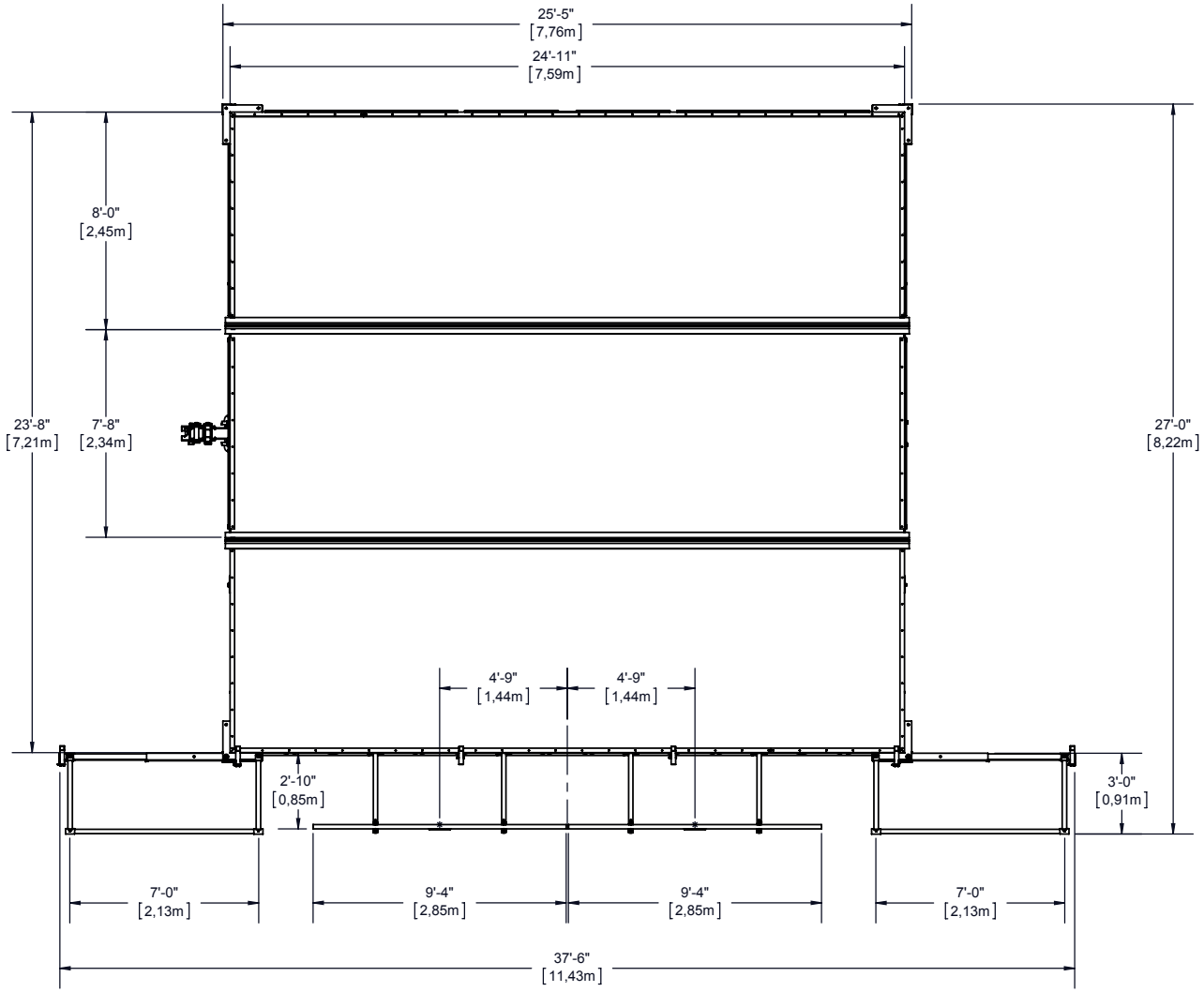

DOWNSTAGE

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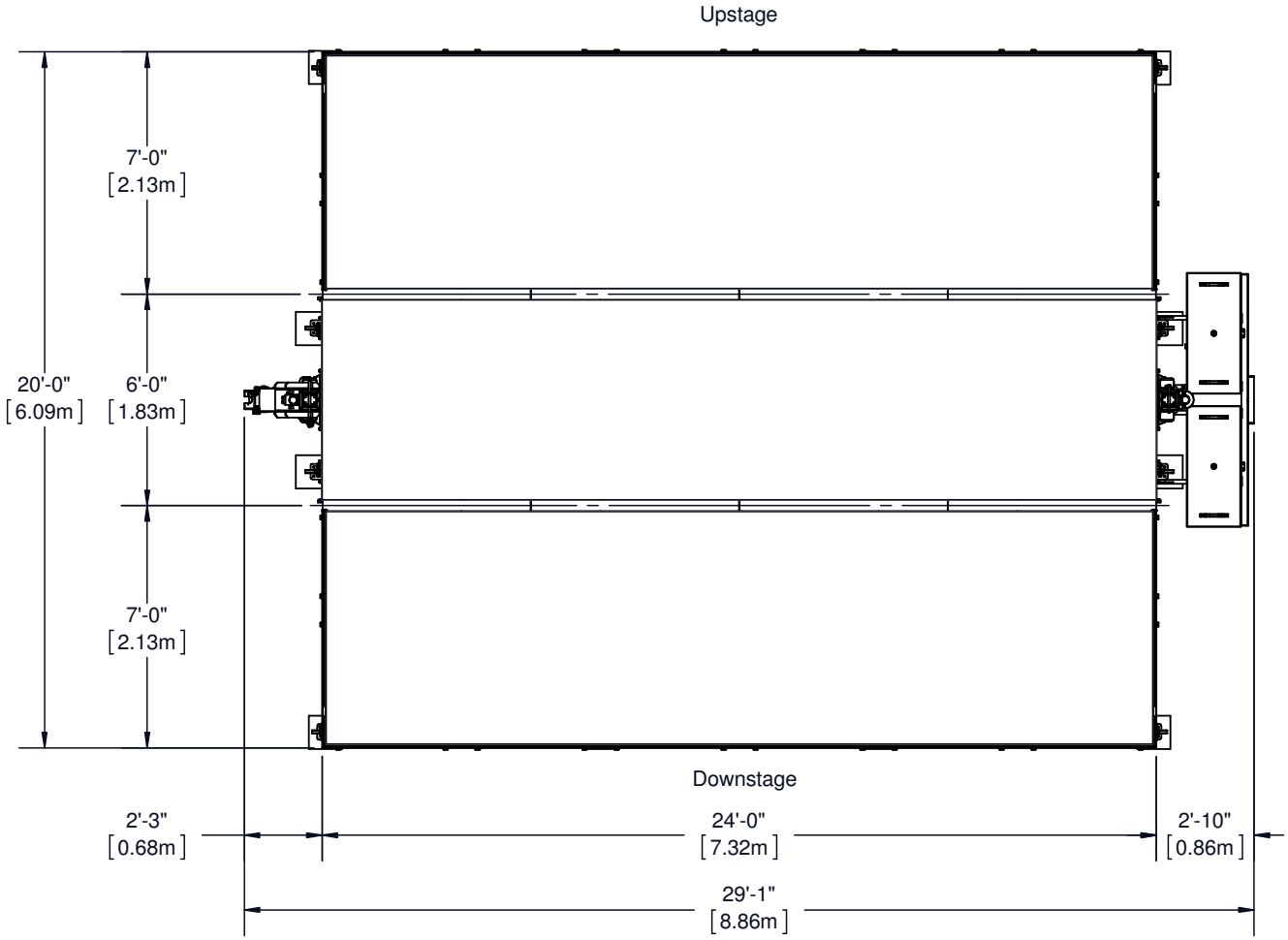

CAPACITY: 100lbs/ft² (490kg./m²)

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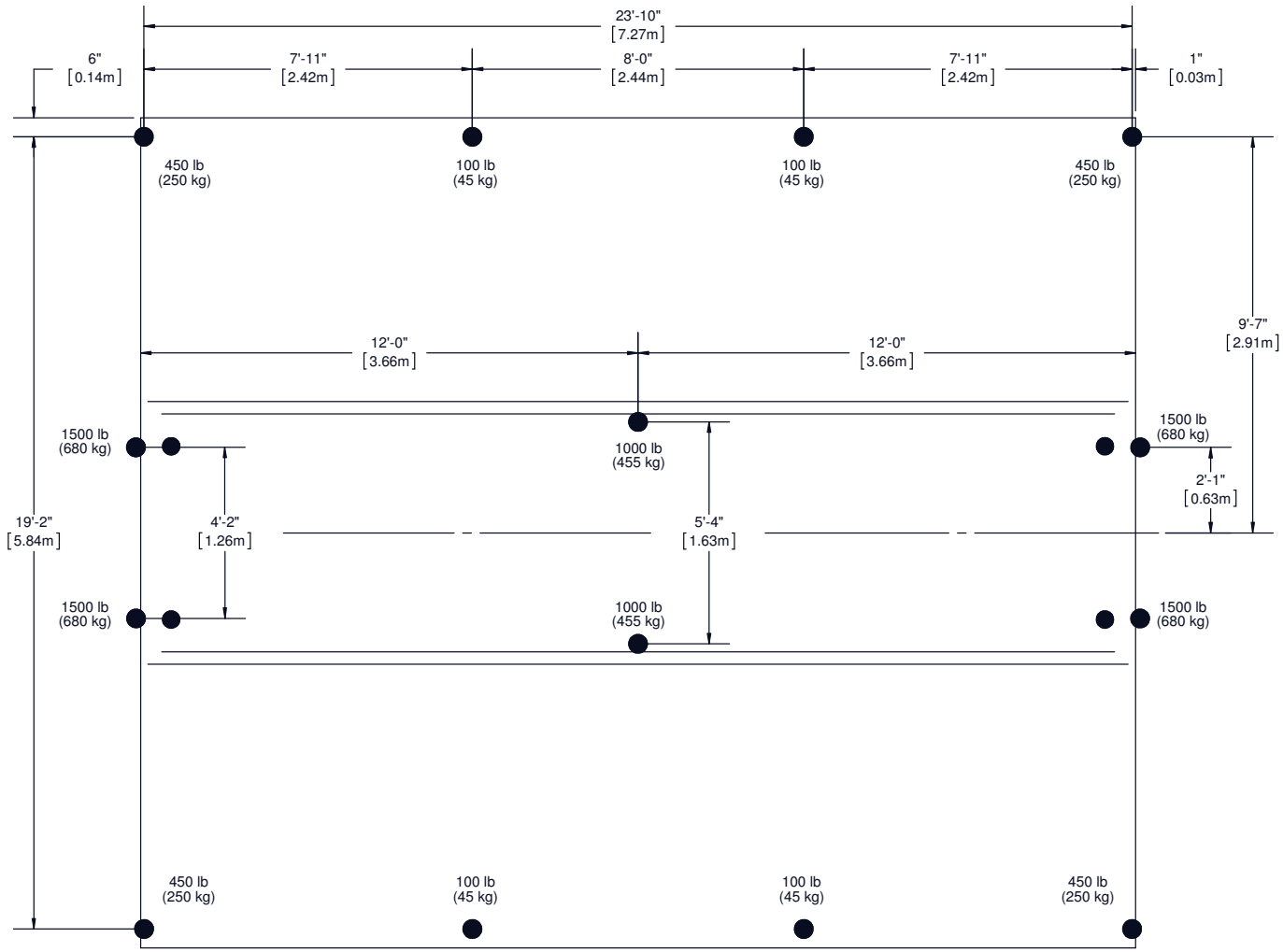
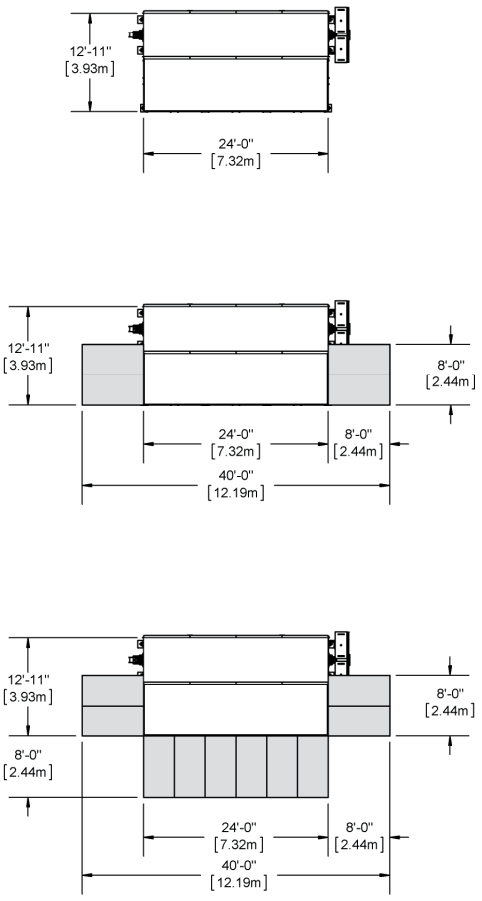


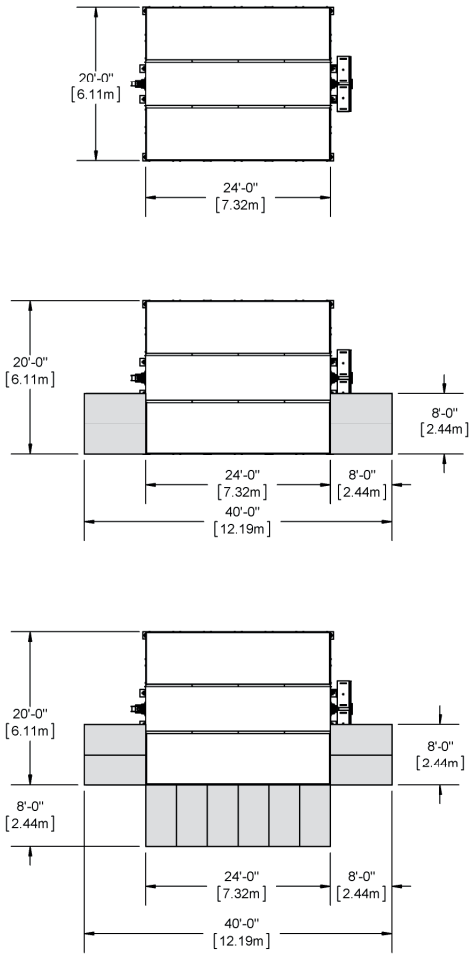
● FLOOR STABILIZERS, EXTENSIONS AND LEVELLING JACKS

Drawings may show stage equipped with optional accessories. May be sold separately.

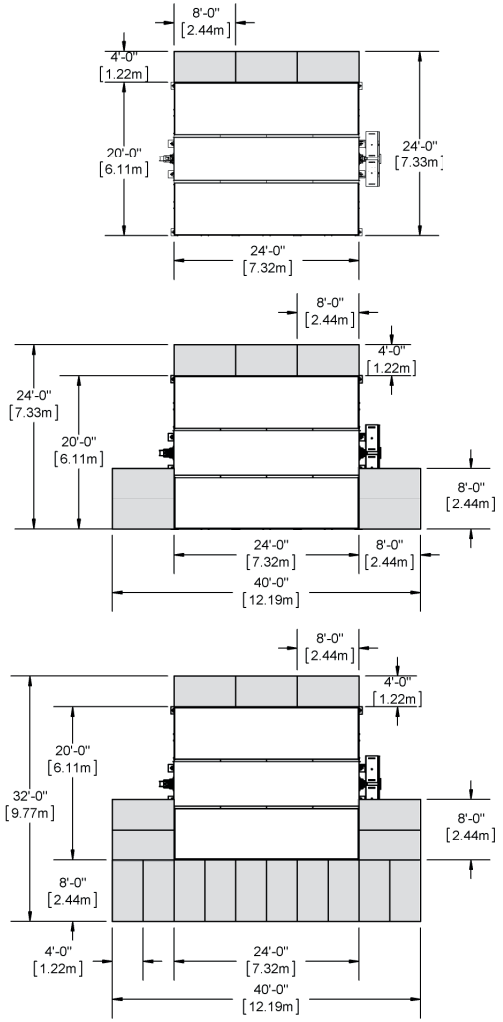
Bandshell Configurations *



Standard Configurations



Extended Configurations



* *Bandshell configuration requires that stringent instructions be followed.*
For reference only.

PLATFORM 4´-0˝x 8´-0˝ [1.22m x 2.44m]

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A THOROUGH UNDERSTANDING OF THE INTER-RELATED LOADINGS SHOWN IN THIS RIGGING PLAN IS NEEDED IN ORDER TO SAFELY USE THIS MOBILE STAGE ROOF AND TAKE FULL ADVANTAGE OF THE MANY RIGGING OPPORTUNITIES IT OFFERS.

This mobile stage roof offers a variety of rigging options with regard to load capacity, placement and type.

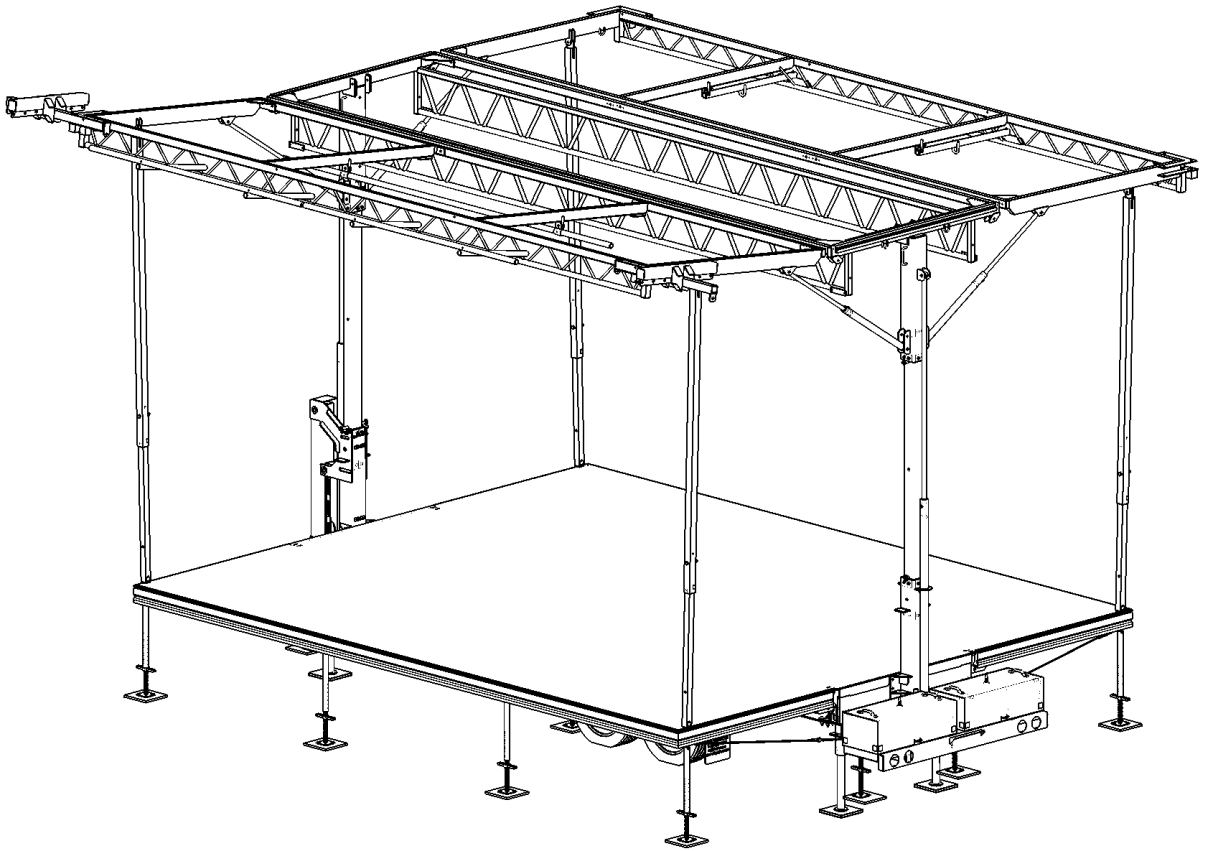
There are rigging pipes, trusses, roof rigging points and side overhang rigging beams.

This rigging plan locates and defines these rigging features, includes load capacity for each and describes maximum combinations of loads amongst features.

Take note of exclusions, maximum sub-totals in a group, load balance requirements, maximum lifting capacity of roof and maximum rigging load on roof.

The maximum load on the roof is less than the sum of the maximum load on each rigging feature.

Refer to Operator's Manual for procedures in regards to proper setup and setup methods of the stage and its options.



The information contained in the current document are final and must be considered as such. They are derived from design briefs and summerized to help the user plan rigging configurations safely. It is therefore mandatory that the user follows and respects the capabilities and limitations described herein. Overloading of stage components above their specified capacity may result in structural failure, equipment damage, injury or death. Stageline cannot be held responsable if the user, himself or subcontractors under his supervision, derogate from this document and/or the approved rigging plan. If a desired configuration cannot meet these requirements, the user must contact Stageline to analyse the case and obtain further instructions. Special restrictions and limitations may apply.

Certain authorities may require that a rig configuration plan, signed and sealed by a recognized member of a professionnal body, be available to allow the stage to be setup on their territory. This document was not intended to and cannot be used or considered as an official document or certificate to serve this purpose. Contact responsible authorities or Stageline for details.

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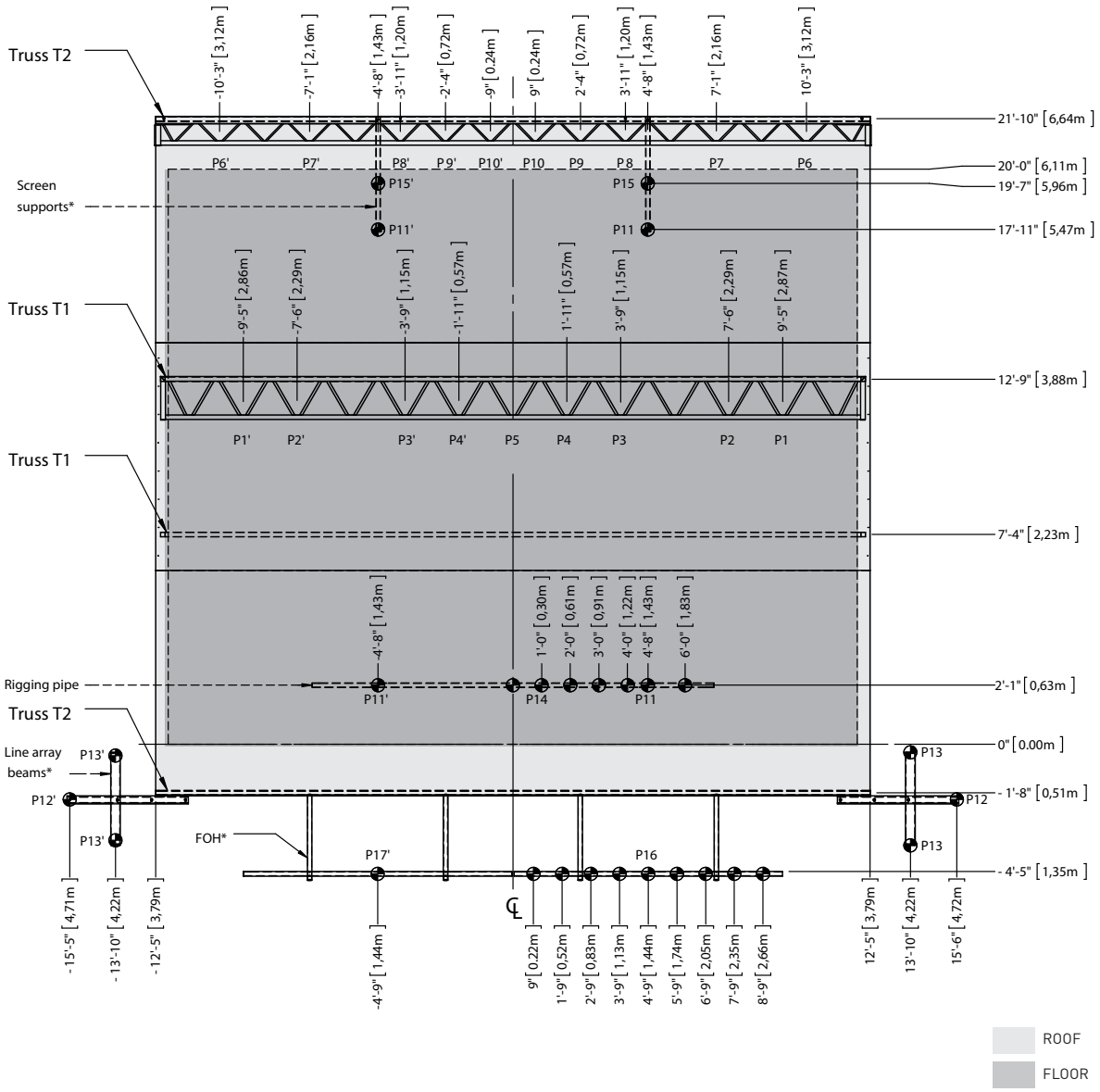
RIGGING RESTRICTIONS

- MAXIMUM LOAD BEARING CAPACITY: 6500 lb (2948 kg).
  All corner posts must be installed and pinned, and telescopic columns pinned and secured.
- Total loads on P12s, P13s is 500 lb once all corner posts have been installed and lateral banners are installed. Capacity can be increased to 800 lb if all corner posts are installed and lateral banners are not installed.
- Maximum of 125 lb (57kg) can be loaded at any place along each FOH pipe (P17) between supports. T2 capacity must take into account these loads.
- Load any number of P16s on FOHs symmetrically, at positions shown on diagram, or use P17. T2 capacity must take into account these loads.
- Do not load more than 250 lb (115 kg) on downstage roof pannel, when corner posts are replaced by cylinder locks (Cylinder locks can only be used on the downstage roof pannel).
- Load any number of P14s on rigging pipe, symmetrically, at positions shown on diagram, or use P11s.
- Optional screen support has a capacity of 350 lbs (159 kg) at any location between P11 and P15 and 250 lb (113 kg) between P15 and T2 truss. Do not rig on both sides of P15 simultaneously.
  T2 capacity must take into account these loads.
- If maximum capacity of screen support is used, no other loads can be rigged on T2 truss.

LIFTING RESTRICTIONS

- MAXIMUM ROOF LIFTING CAPACITY: 3800 lb (1725 kg)
- Maximum assymmetric load difference between downstage and upstage roof must not exceed 1550 lb (705 kg) including loads on T1 trusses.
- When lifting, make sure loads are evenly divided between right and left side of roof.
- Total load on T2, P12s and P13s must not exceed 500 lb (227 kg) when using downstage P11s or rigging pipe. Total load can be increased to 850 lb (386 kg) if not using downstage P11s or rigging pipe.



** Optional items, see stage specifications.*

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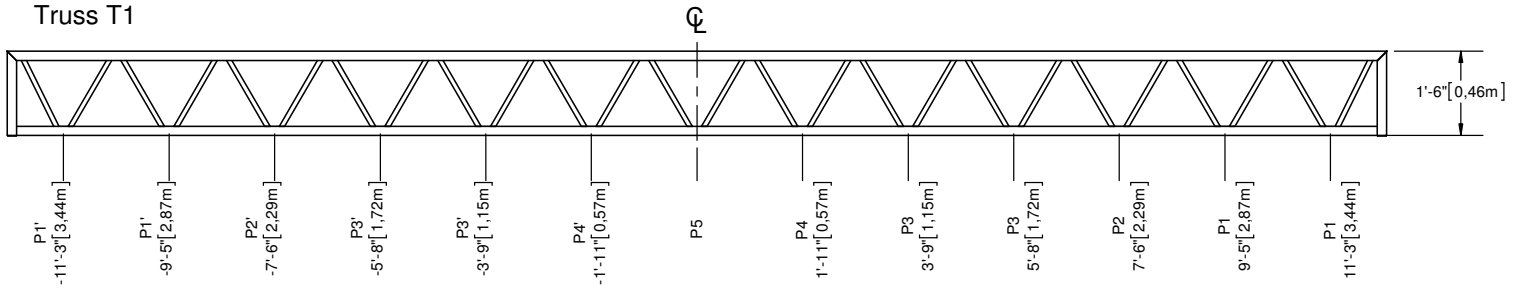
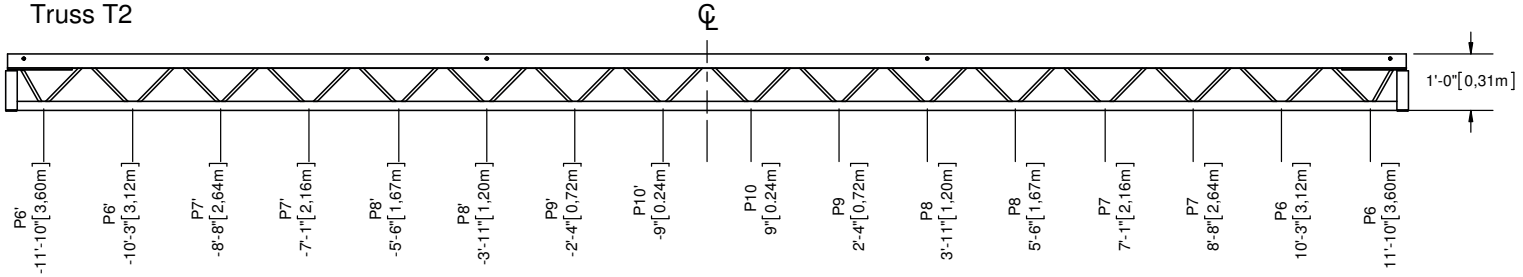
Truss T1



$$\textbf{Truss T1}^{**}: \frac{\text{Load } \mathbf{P1}}{\text{Capacity } \mathbf{P1}} + \frac{\text{Load } \mathbf{P2}}{\text{Capacity } \mathbf{P2}} + \frac{\text{Load } \mathbf{P3}}{\text{Capacity } \mathbf{P3}} + \frac{\text{Load } \mathbf{P4}}{\text{Capacity } \mathbf{P4}} + \frac{\text{Load } \mathbf{P5}}{\text{Capacity } \mathbf{P5}} \leq 1.00$$

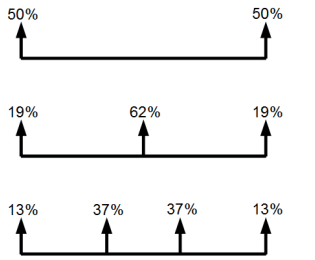
Truss T2



$$\textbf{Truss T2}^{**}: \frac{\text{Load } \mathbf{P6}}{\text{Capacity } \mathbf{P6}} + \frac{\text{Load } \mathbf{P7}}{\text{Capacity } \mathbf{P7}} + \frac{\text{Load } \mathbf{P8}}{\text{Capacity } \mathbf{P8}} + \frac{\text{Load } \mathbf{P9}}{\text{Capacity } \mathbf{P9}} + \frac{\text{Load } \mathbf{P10}}{\text{Capacity } \mathbf{P10}} \leq 1.00$$

MAXIMUM LOAD CAPACITY					
Point No.	Lbs	Kg	Point No.	Lbs	Kg
P1, P2, P3	625	283	P12	800	364
P4, P5	500	227	P13 *	400	182
P6, P7, P8	250	113	P14	30	13
P9	175	79	P15 *	600	272
P10	90	41	P16 *	20	9
P11	350	159	P17 *	125	57

UDL CHART



* *Optional items, see stage specifications.*

** *Valid for symmetric loads only. In other cases, contact Stageline for assistance.*

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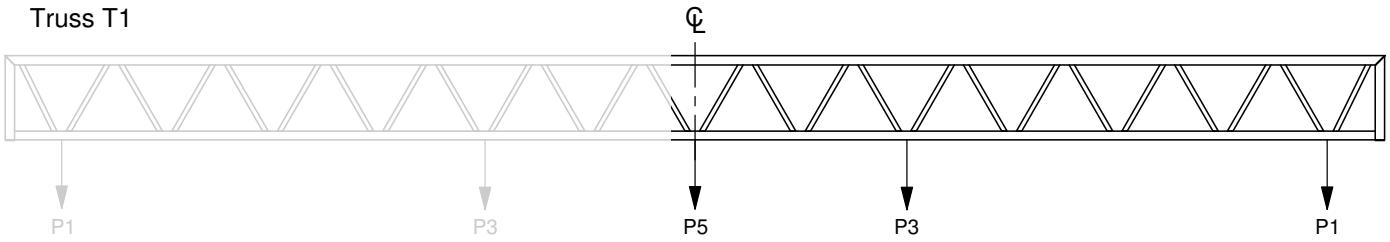
WHEN CALCULATING THE LOAD ON A SL100 TRUSS, USE FOLLOWING METHOD.

Each truss in the roof must be visualized as 2 trusses put together that share a center point, which in the following example is the P5.

Example: T1 on a SL100.
Points from left to right are P1', P2', P3', P4', P5, P4, P3, P2, P1. We will only verify loads on 1 side of the truss, Meaning P1 thru P5.



CALCULATION EXAMPLE #1:

1 lighting truss on 2 motors, total uniformly distributed weight of the truss is 1000lbs.
The motors will be hung from P1.

- 500lbs (50% of weight, see UDL chart) / 625 (the capacity of the P1 on the T1 truss) = 0.8
- 0.8 = 80 %, as 1.00 would equal 100 %.

So the T1 truss is at 80 % of its total capacity.

CALCULATION EXAMPLE #2:

1 lighting truss on 3 motors, total uniformly distributed weight of the truss is 1000lbs.
The motors will be hung from P1, P5, P1.

- **P1**
  0.19 x 1000 (19% of weight, see UDL chart) / 625 (P1) = 0.3, so this one point will use 30 % of the truss capacity.
- **P5**
  0.62 x 1000 (62% of weight, see UDL chart) / 500 (P5) = 1.24, so this one point will use 124 % of the truss capacity.

Now that we have the loads for both points, we add them together to determine the total load on the truss.

1.24 + 0.30 = 1.54
So the T1 truss is at 154 % of its total capacity, which is overloaded.

CALCULATION EXAMPLE #3:

1 lighting truss on 4 motors, total uniformly distributed weight of the truss is 1000lbs.
The motors will be hung from P1, P3, P3, P1.

- **P1**
  0.13 x 1000 (13% of weight, see UDL chart) / 625 (P1) = 0.21, so this one point will use 21 % of the truss capacity.
- **P3**
  0.37 x 1000 (37% of weight, see UDL chart) / 625 (P3) = 0.59, so this one point will use 59 % of the truss capacity.

Now that we have the loads for both points, we add them together to determine the total load on the truss.

0.21 + 0.59 = 0.80
So the T1 truss is at 80 % of its total capacity.