STAGELINE®

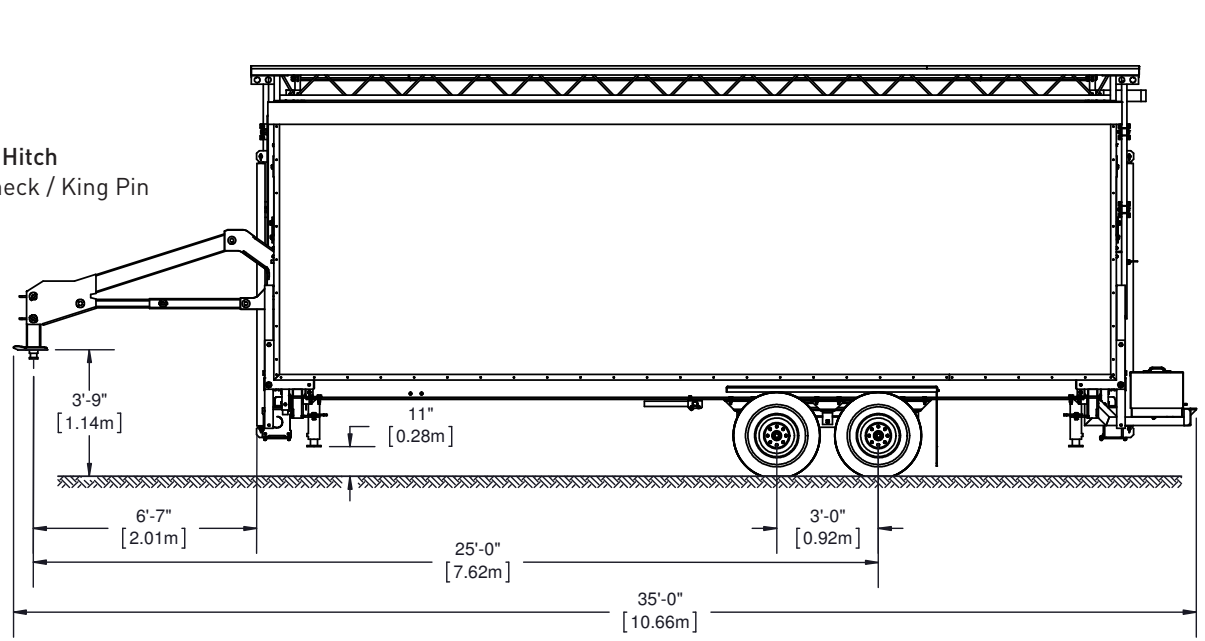
RENTAL DIVISION - DIVISION LOCATION

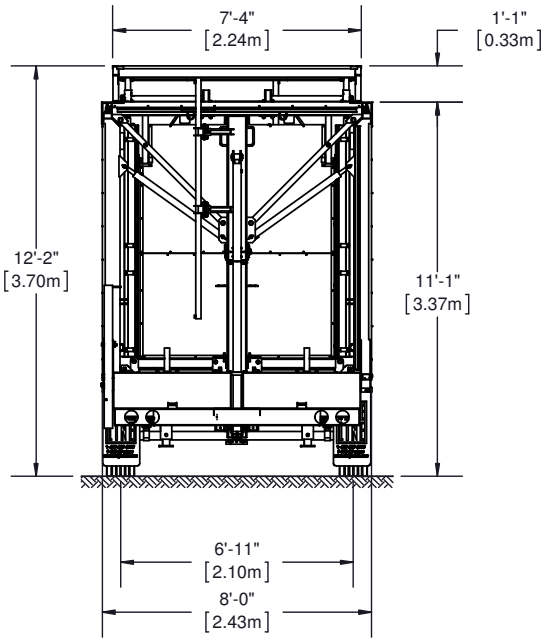
SL100 MIX
TECHNICAL DRAWINGS
2020

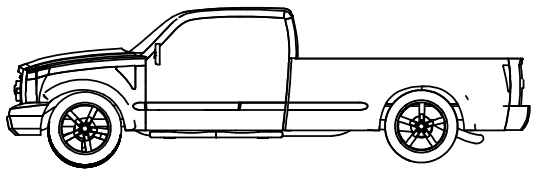
SL100 MIX

MASS & DIMENSIONS

Trailer Hitch
Gooseneck / King Pin





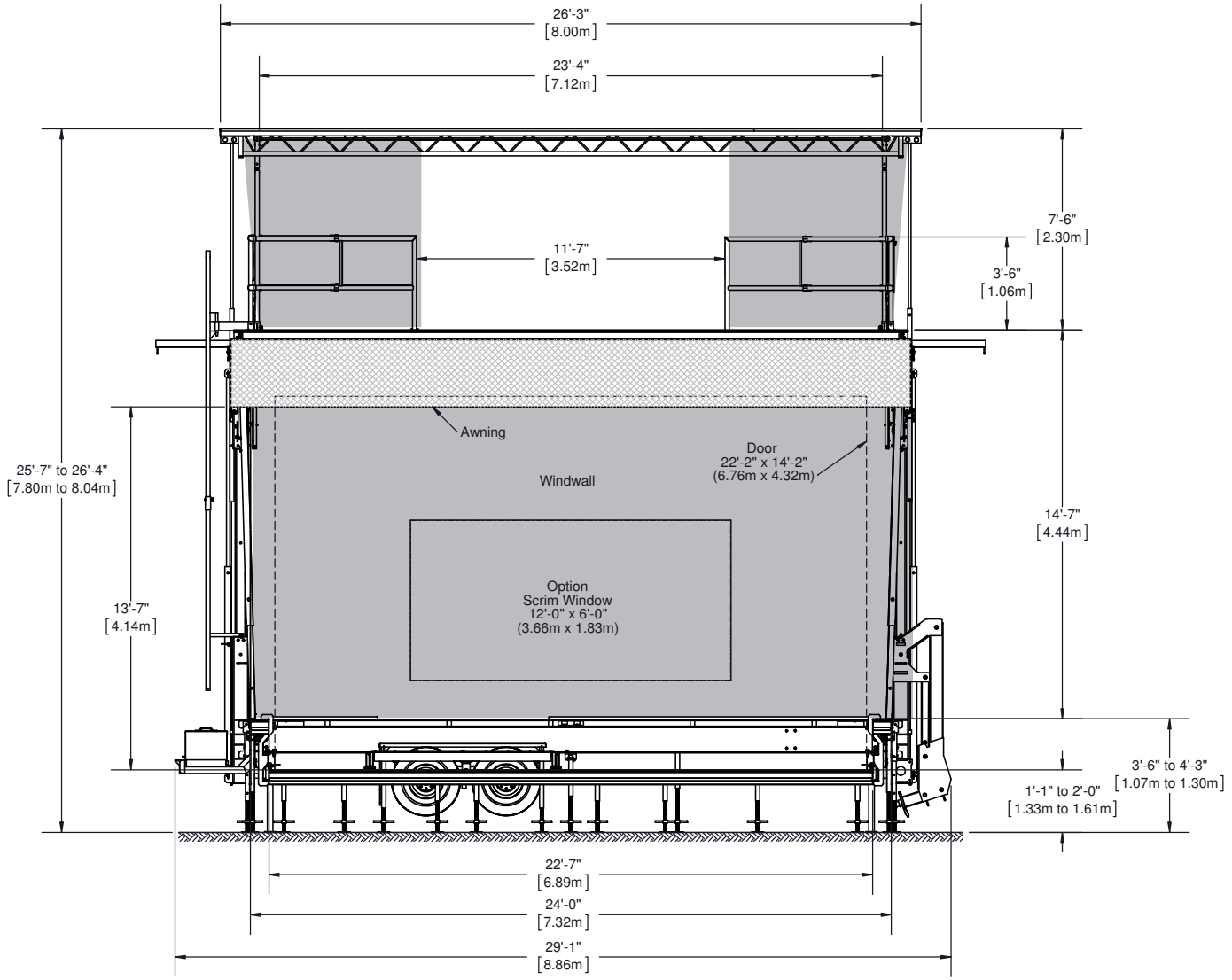


Mass SL100MIX #580 and up	Unladen		Standard Equipment		Maximum Capacity	
	Lbs	Kg	Lbs	Kg	Lbs	Kg
Total Mass	10685	4846	14198	6440	15000	6804
Mass on Axle	8845	4011	11754	5331	14000	6350
Mass on Hitch	1840	835	2444	1109	3750	1700

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

SL100 MIX

FRONT VIEW



SCRIM

WINDWALL

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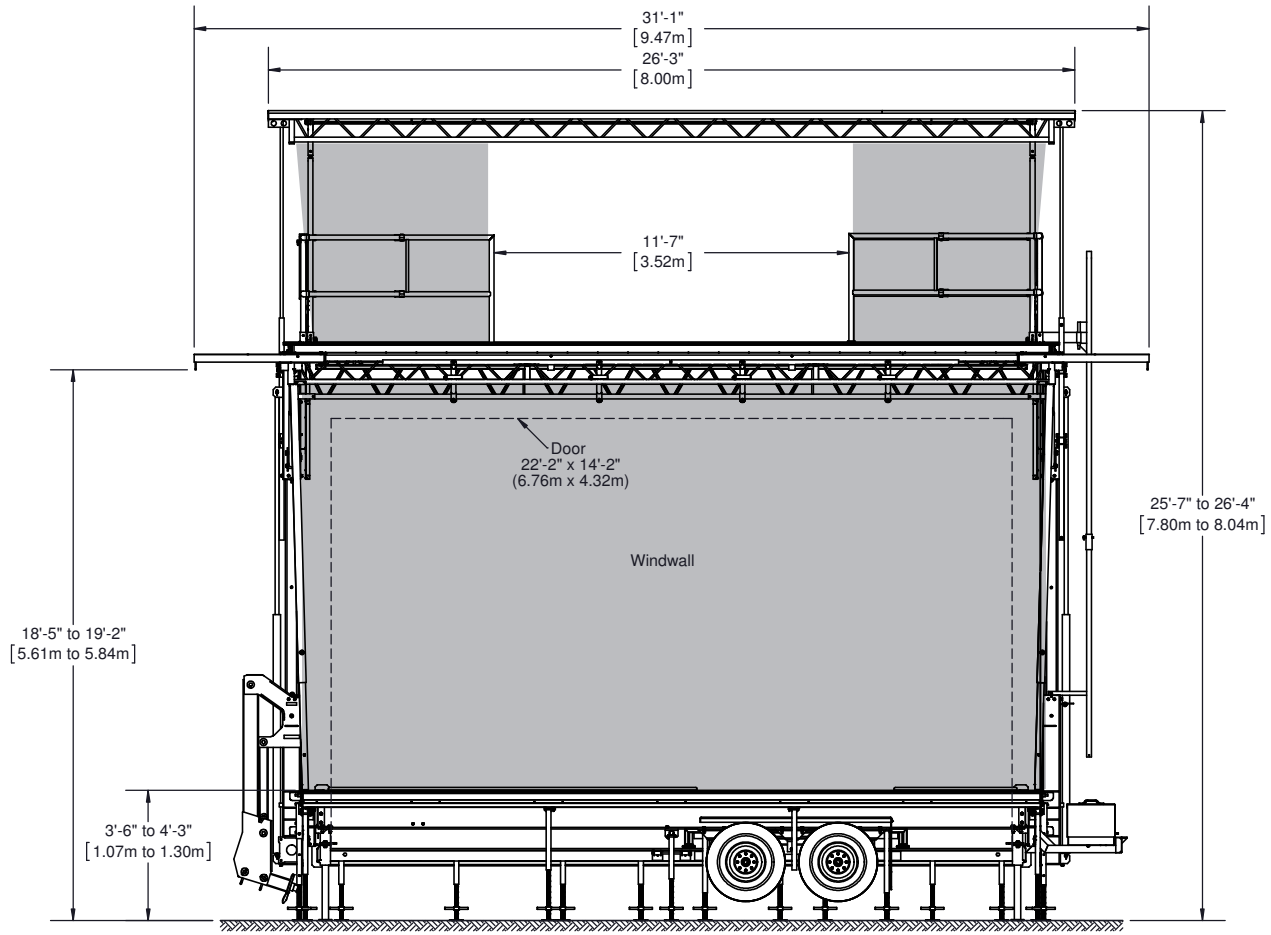
SL100 MIX

BACK VIEW



WINDWALL

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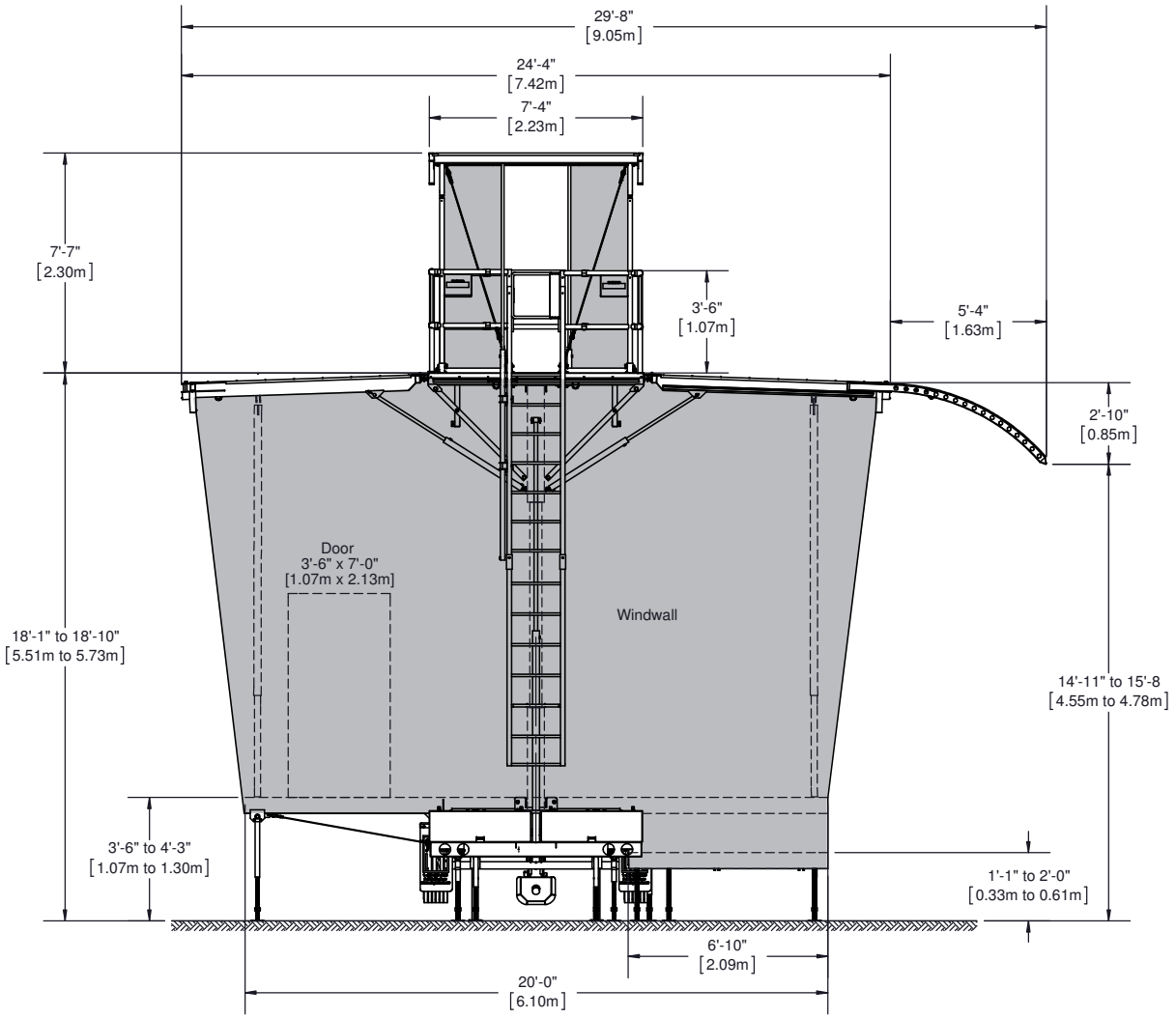
SL100 MIX

SIDE VIEW



WINDWALL

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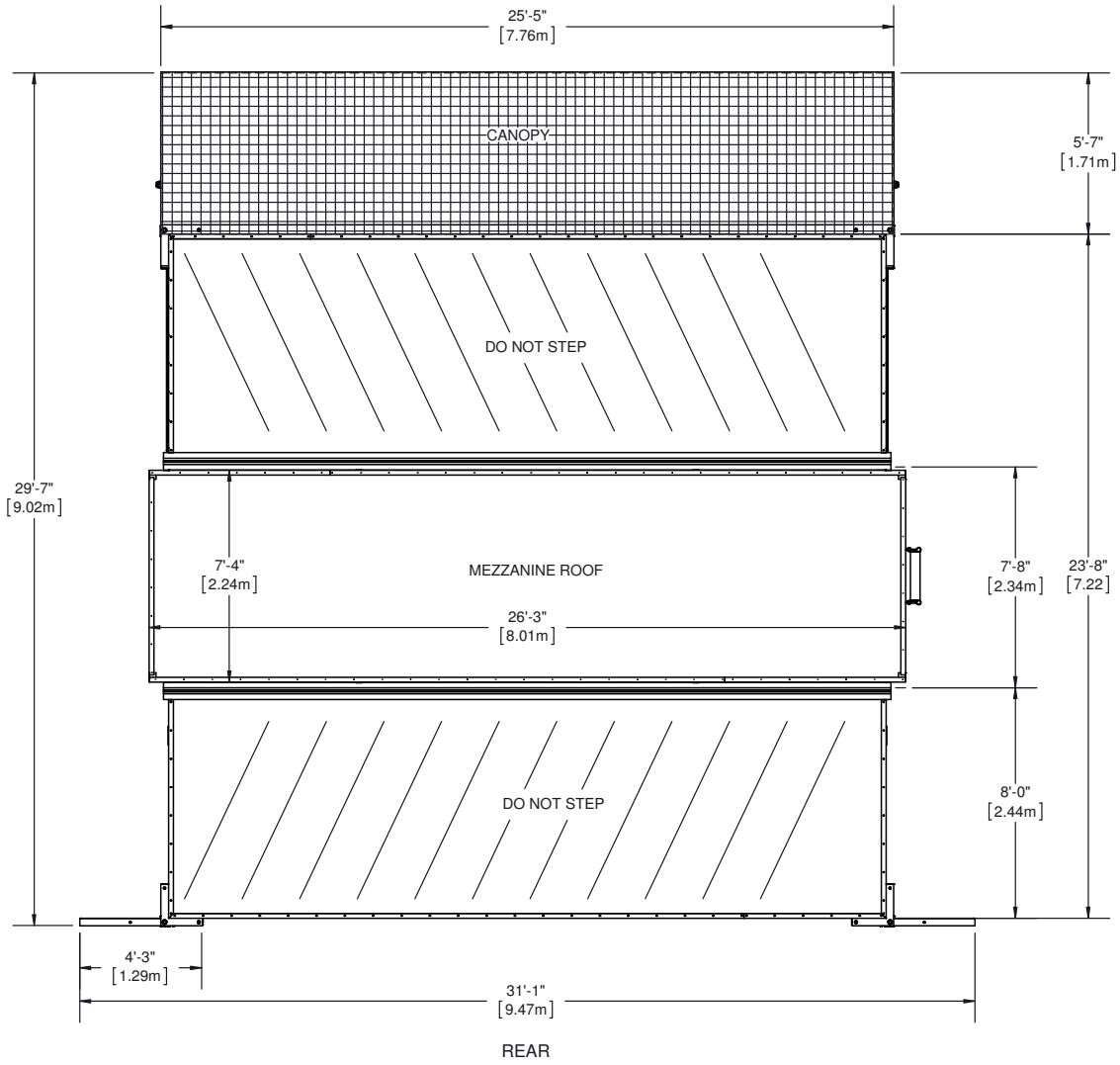
SL100 MIX

ROOF VIEW



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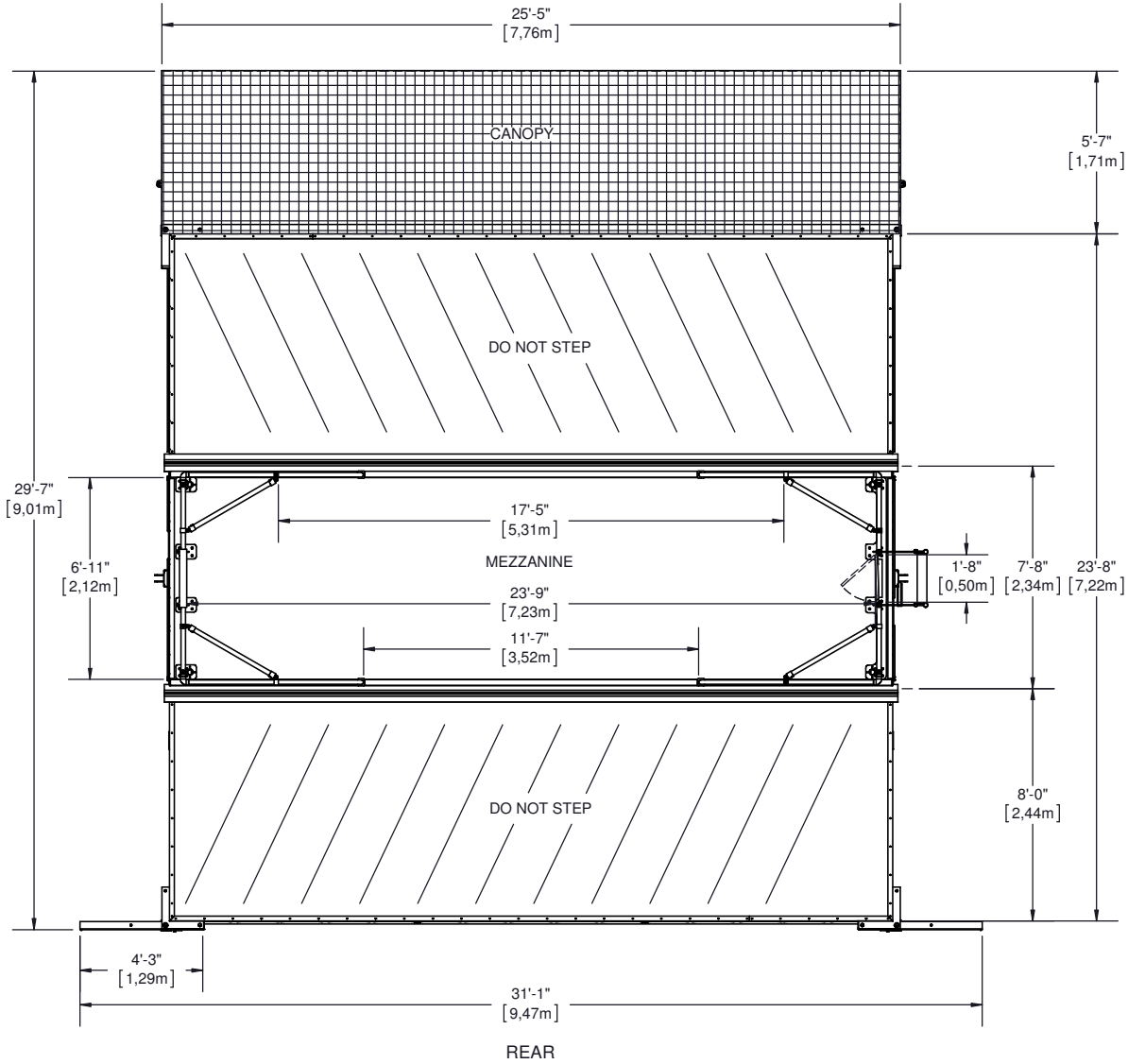
SL100 MIX

MEZZANINE VIEW



CAPACITY: 20lbs/ft² (98kg/m²)

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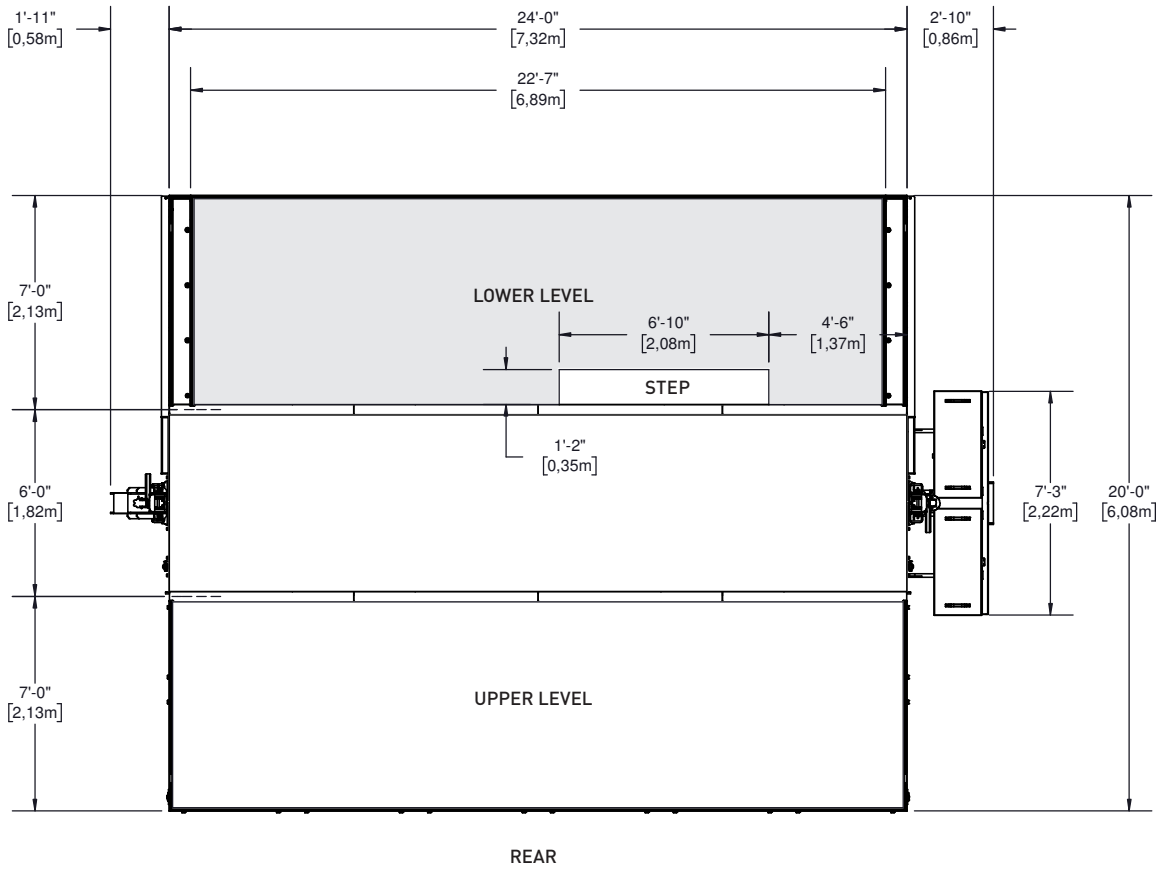
SL100 MIX

FLOOR VIEW



CAPACITY: 100lbs/ft² (490kg/m²)

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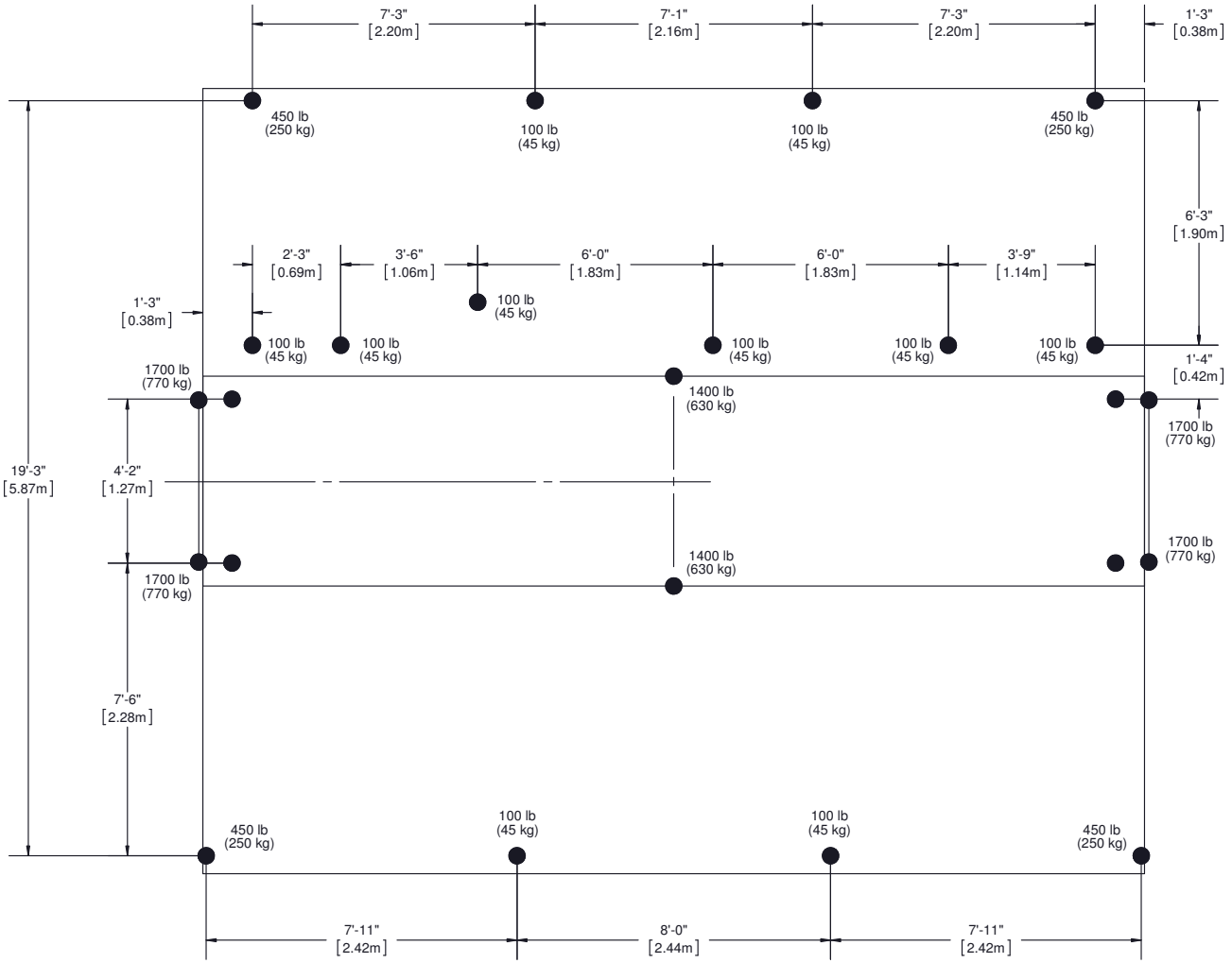
SL100 MIX

DEAD LOAD GROUND SUPPPORT



● FLOOR STABILIZERS, EXTENSIONS AND LEVELLING JACKS

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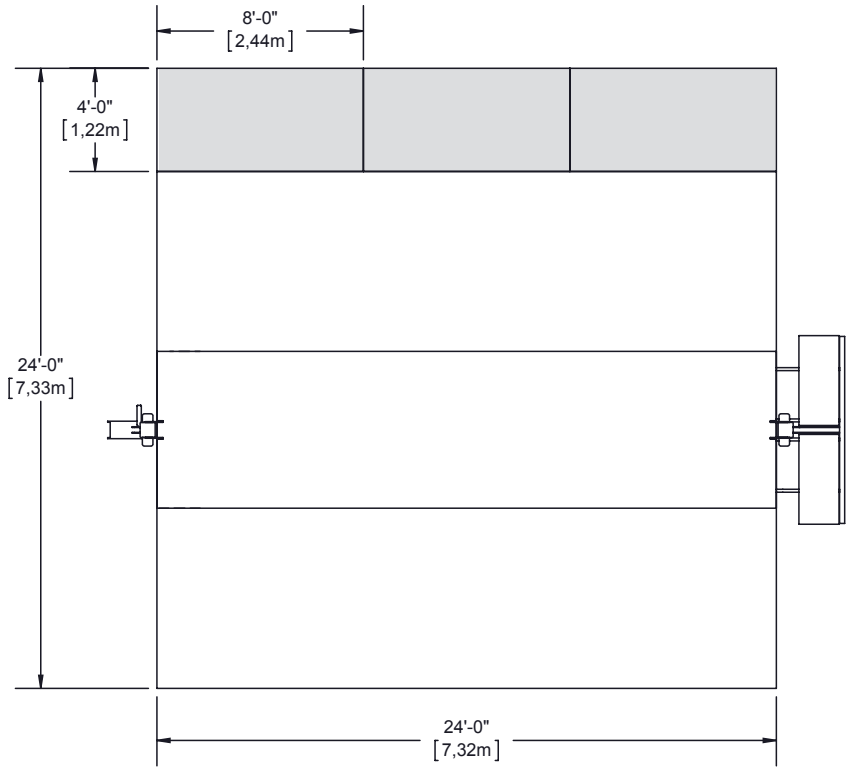
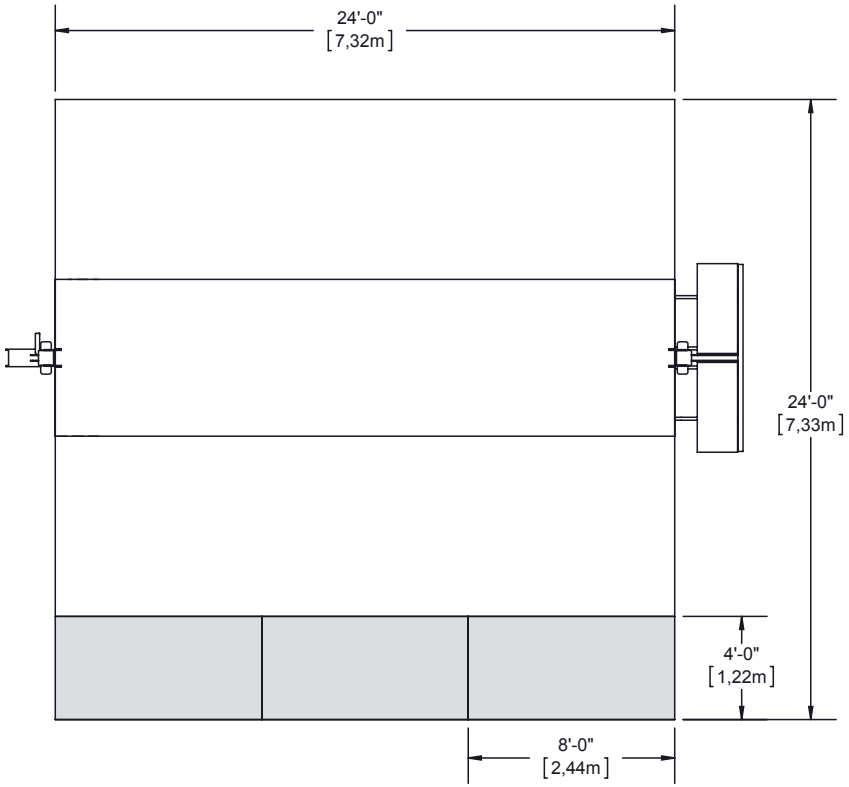




PLATFORM

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

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.

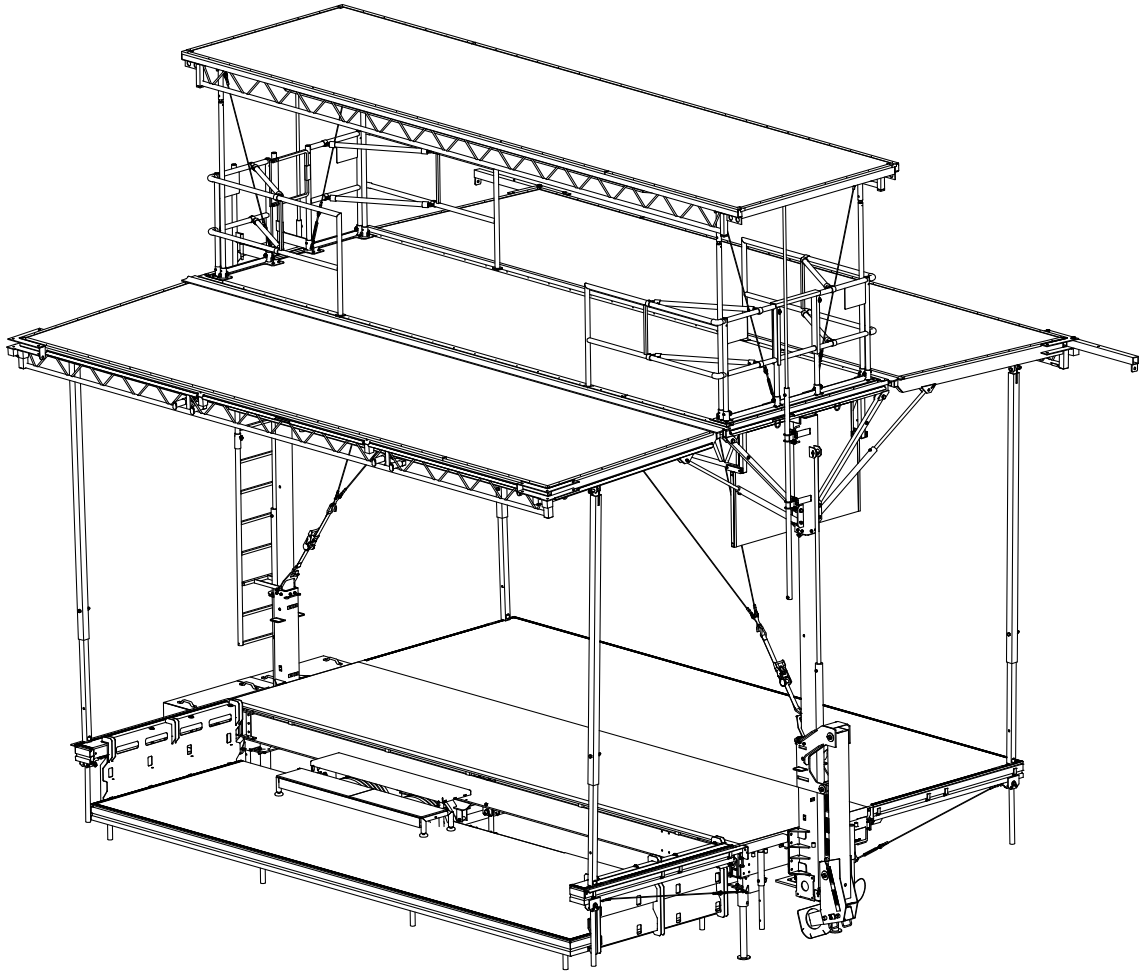
There are rigging pipes, trusses, roof rigging points and side overhang rigging beams.

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 is final and must be considered as such. They are derived from design briefs and summarized 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 responsible 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 professional 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

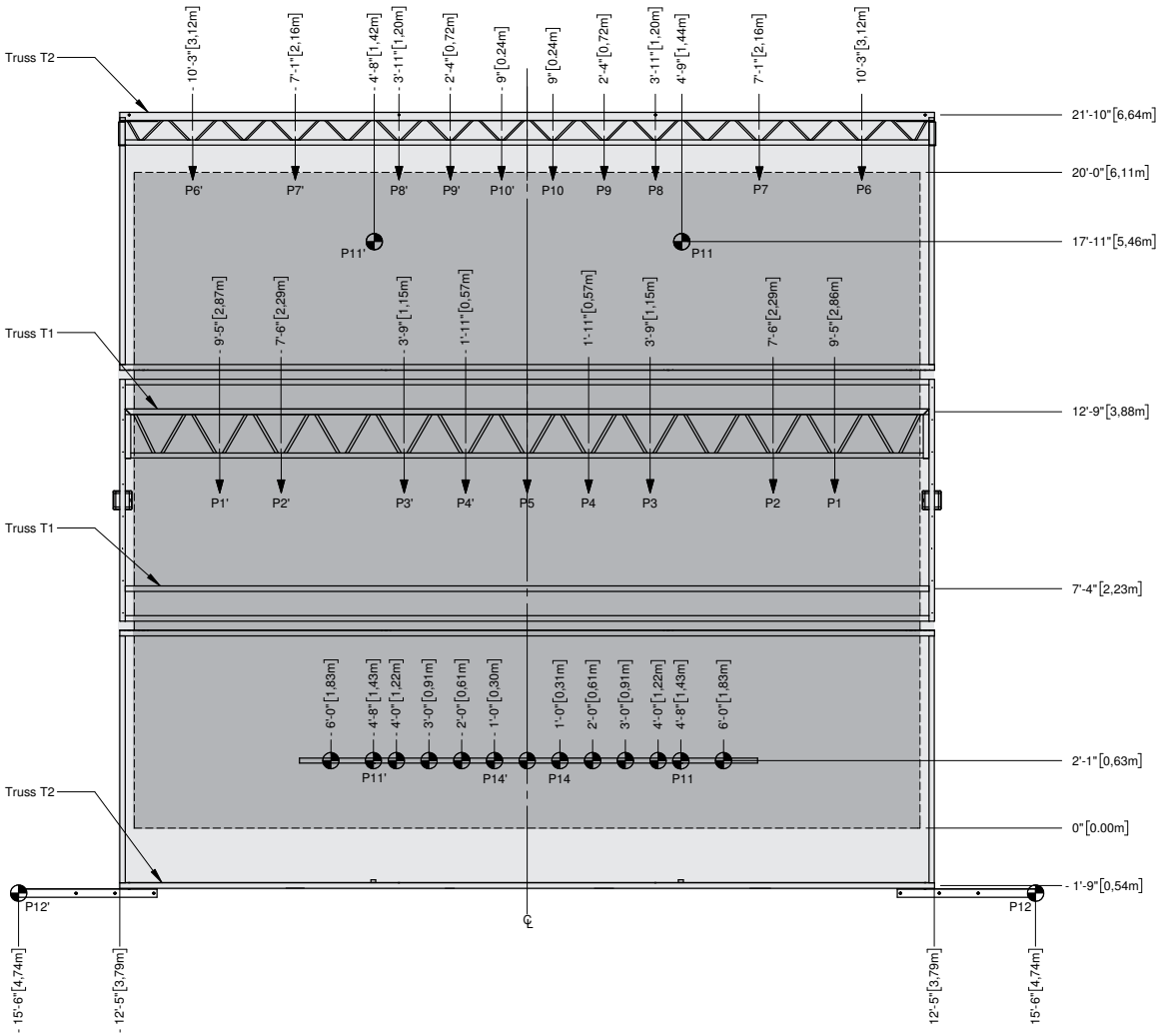
- MAXIMUM LOAD BEARING CAPACITY : 6500 lb (2948 kg).
  All corner posts and telescopic columns must be installed, pinned and secured.
- Total loads on P12s is 425 lb (190 kg) once all corner posts have been installed and lateral banners are installed. Capacity can be increased to 800 lb (363 kg) if all corner posts are installed and lateral banners are not installed.
- Load any number of P14s on rigging pipe, symetrically, at positions shown on diagram, or use P11s.
- 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).

LIFTING RESTRICTIONS

- MAXIMUM ROOF LIFTING CAPACITY : 3800 lb (1725 kg)
- Total load on T2, P12s must not exceed 500 lb (227 kg) when using downstage P11s or rigging pipe. Total load can be increased to 800 lb (363 kg) if not using downstage P11s or rigging pipe.
- When lifting, make sure loads are evenly divided between right and left side of roof.
- Maximum asymmetric load difference between downstage and upstage roof must not exceed 1550 lb (705 kg) including loads on T1 trusses.

MEZZANINE RESTRICTIONS

- Maximum number of people allowed on the mezzanine floor is 4.
- Do not rig on T1 trusses when mezzanine is in use.



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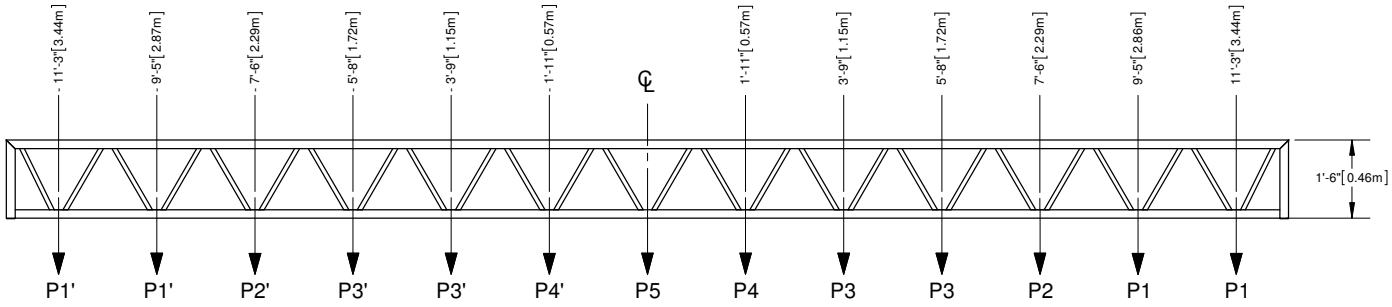
SL100 MIX UNIT NO. 450, 456 AND UP

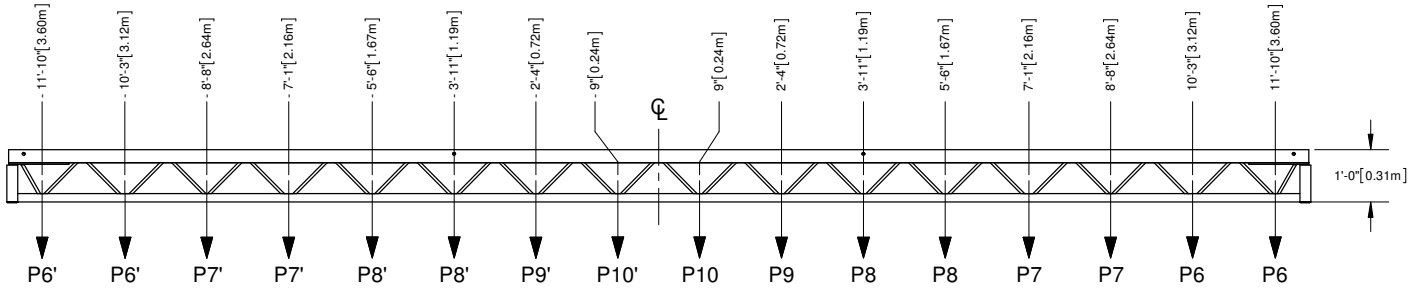
RIGGING PLAN 3/4

Truss T1



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

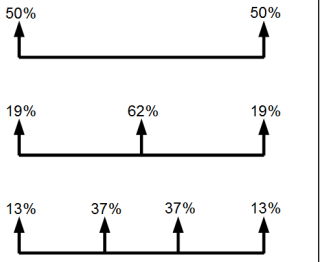
Truss T2



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	P14	30	13
P6, P7, P8	250	113			
P9	175	79			
P10	90	41			
P11	350	159			

UDL CHART



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

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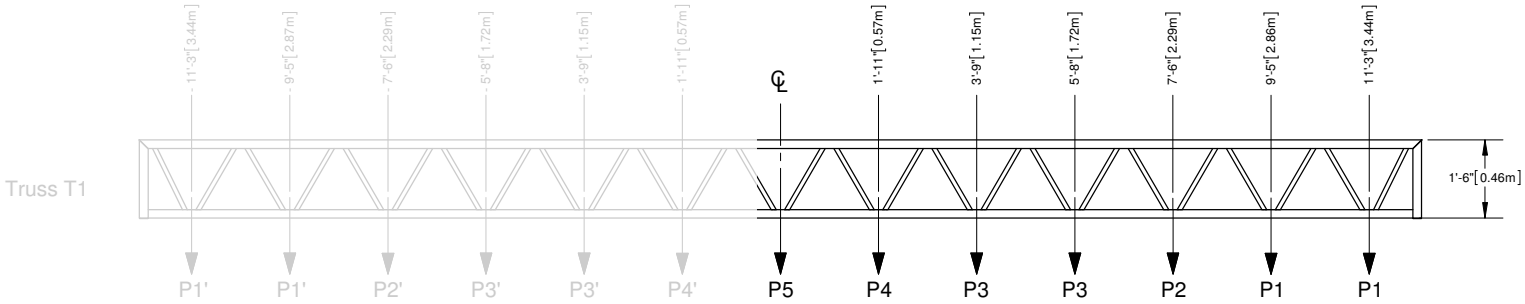
WHEN CALCULATING THE LOAD ON A SL100 MIX TRUSS, USE FOLLOWING METHOD.

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 MIX.
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 1000 lb. Mezzanine is not in use.
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 1000 lb. Mezzanine is not in use.
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 1000 lb. Mezzanine is not in use.
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.