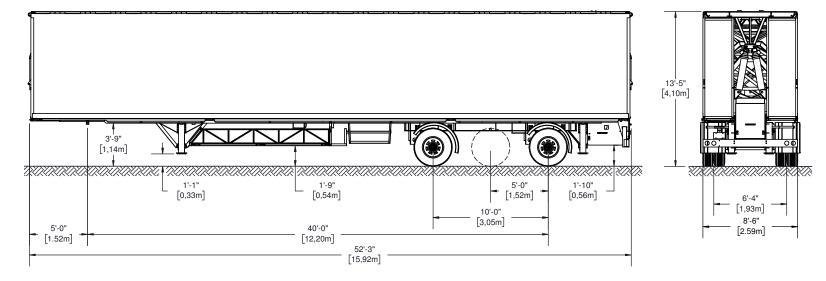
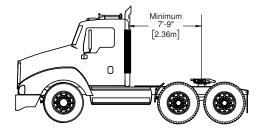


SAM575 CW TECHNICAL DRAWINGS 2019



# **MASS & DIMENSIONS**





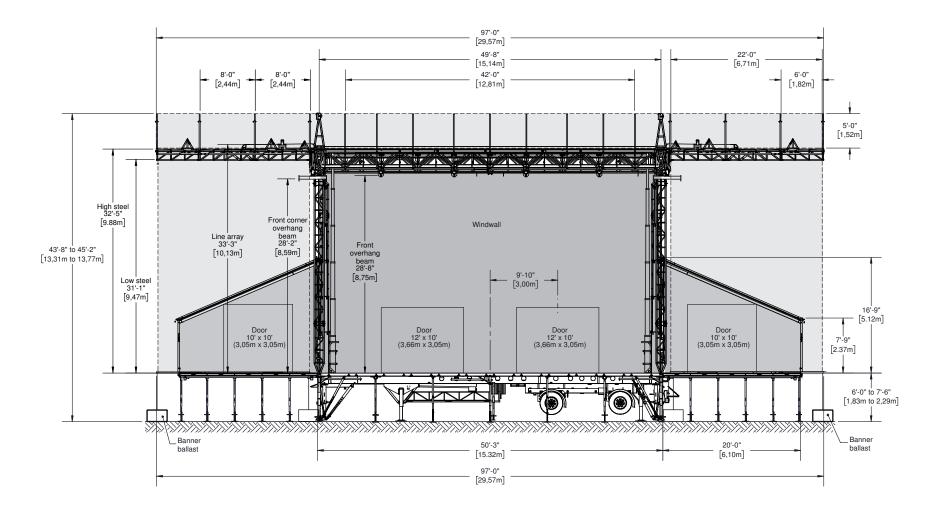
Mass SAM575	Unladen		Standard Equipment		Maximum Capacity	
#670 and up	Lbs	Kg	Lbs	Kg	Lbs	Kg
Total Mass	53738	24375	64331	29180	77162	35000
Mass on Axle	34688	15734	39793	18050	46000	20865
Mass on Hitch	19050	8641	24537	11130	31000	14061

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# FRONT VIEW WITH COVERED WINGS



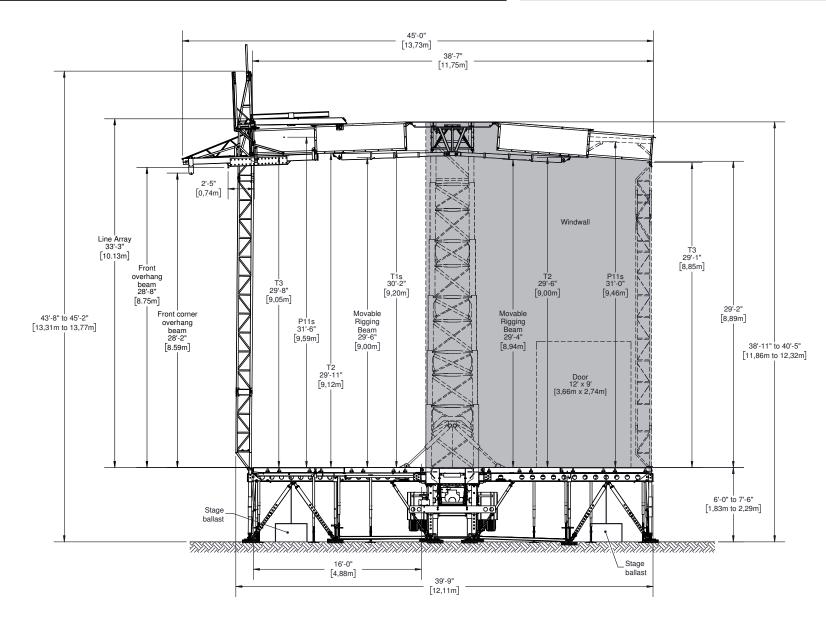
WINDWALL

BANNER (For dimensions, please refer to Banner Book)

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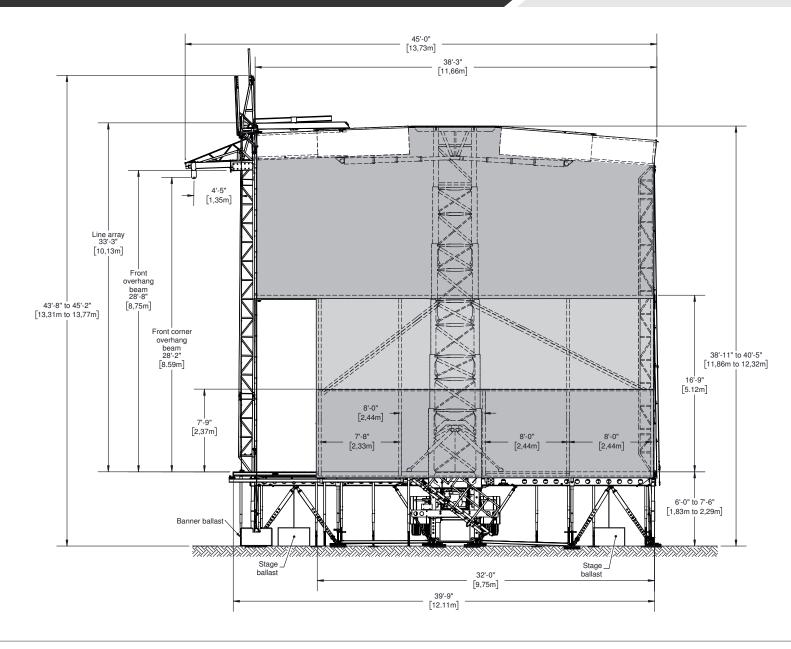
WINDWALL

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# SIDE VIEW WITH COVERED WINGS



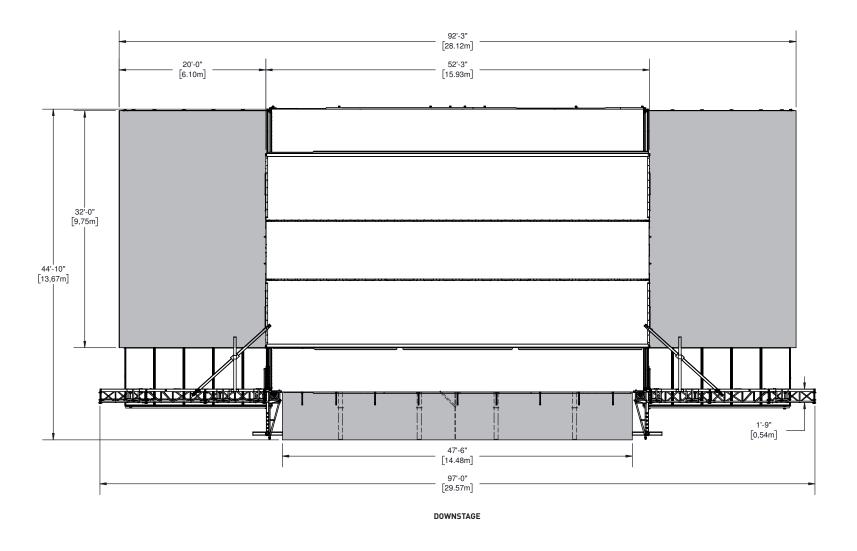
WINDWALL

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# **ROOF VIEW WITH COVERED WINGS**



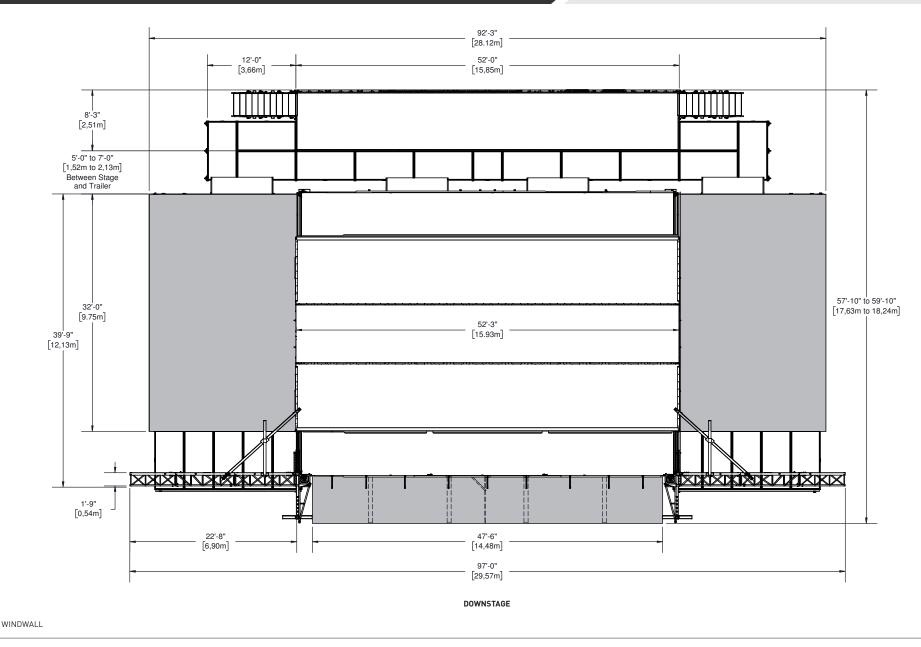
WINDWALL

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## ROOF VIEW WITH COVERED WINGS AND LOADING DOCK

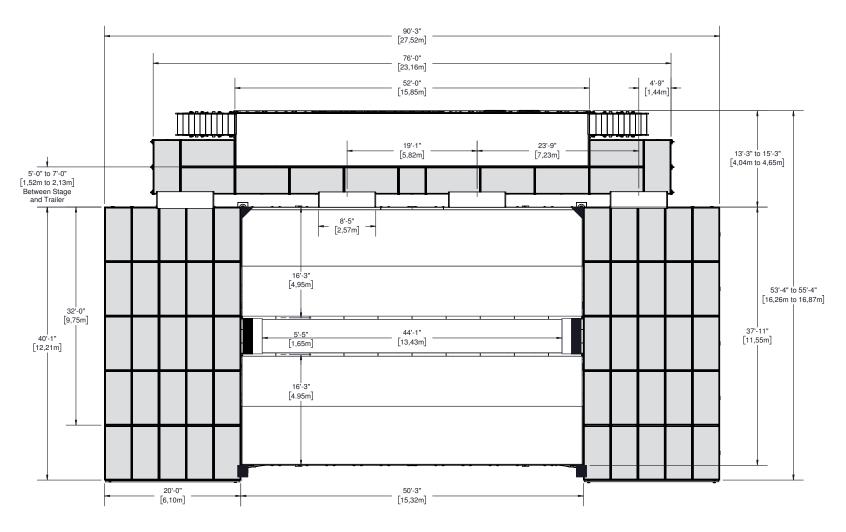


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# FLOOR VIEW AND LOADING DOCK



DOWNSTAGE

#### CAPACITY: 150lbs/ft<sup>2</sup> (732kg/m<sup>2</sup>)

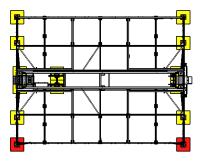
PLATFORM

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

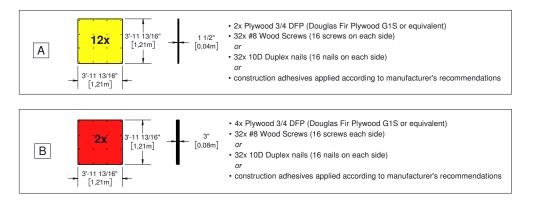
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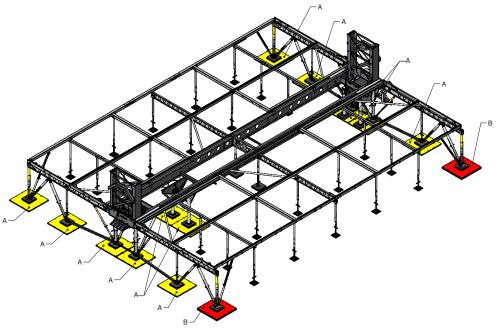


# WOOD PAD 4X4



For installation over asphalt or concrete surfaces, standard woodpads shall be used without any additional 4'x4' (1,22m x 1,22m) or 4'x8' (1,22m à 2,44m) pads.





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Woodpad requirement

Add constructed pads

Add constructed pads

Survey or ground protection

Standard pads Standard pads

Surface type

Ground protection

Grass

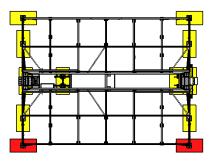
Dirt

Sand

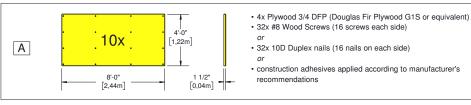
Concrete

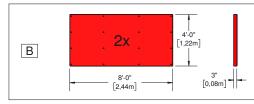


# WOOD PAD 4X8



For installation over asphalt or concrete surfaces, standard woodpads shall be used without any additional 4'x4' (1,22m x 1,22m) or 4'x8' (1,22m x 2,44m) pads.





- 4x Plywood 3/4 DFP (Douglas Fir Plywood G1S or equivalent)
  32x #8 Wood Screws (16 screws each side)
- or
- 32x 10D Duplex nails (16 nails on each side) or
- construction adhesives applied according to manufacturer's recommendations

Surface type

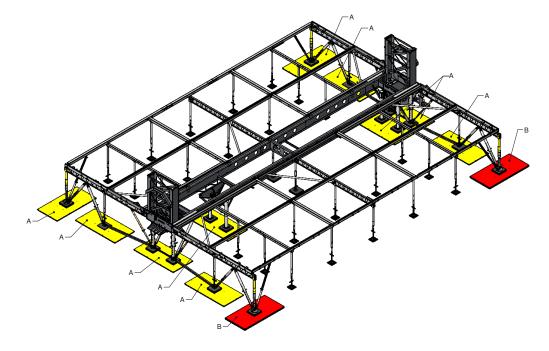
Ground protection

Grass

Dirt

Sand

Concrete



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Woodpad requirement

Add constructed pads

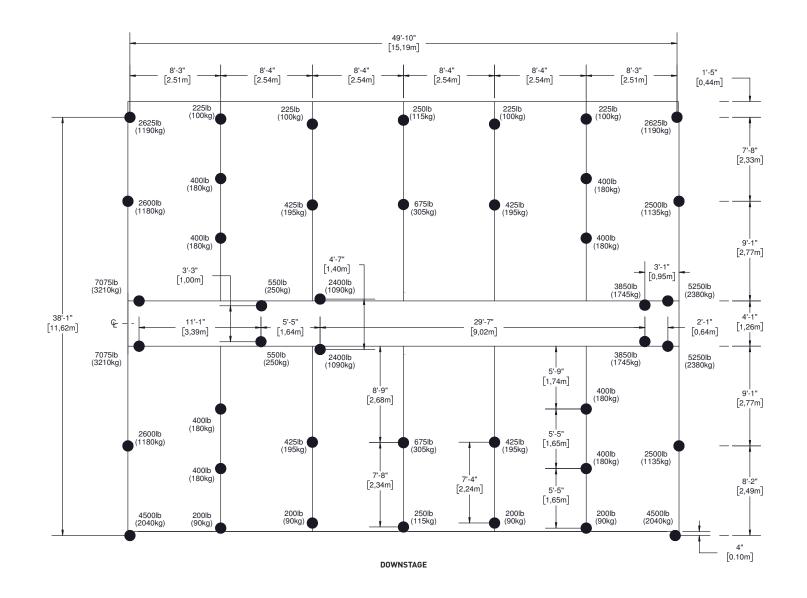
Add constructed pads

Survey or ground protection

Standard pads Standard pads



# **DEAD LOAD GROUND SUPPPORT**



#### FLOOR STABILIZERS, EXTENSIONS AND LEVELLING JACKS

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# **RIGGING PLAN 1/5**

## 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.

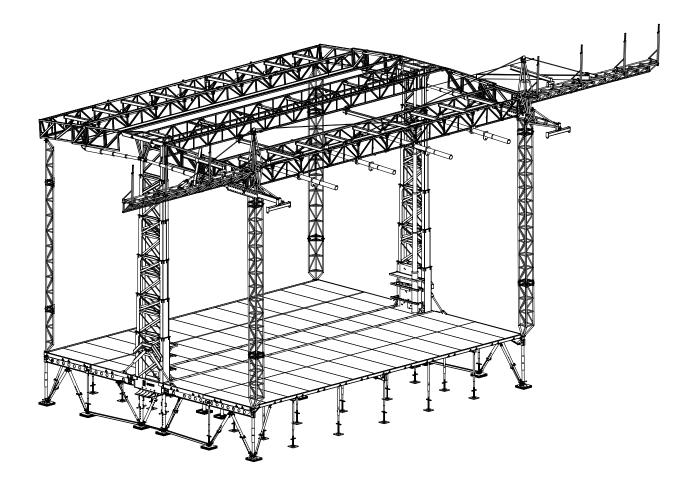
There are rigging pipes, trusses, roof rigging points and side overhang rigging beams.

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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Α

# **RIGGING PLAN 2/5**

## **RIGGING RESTRICTIONS:**

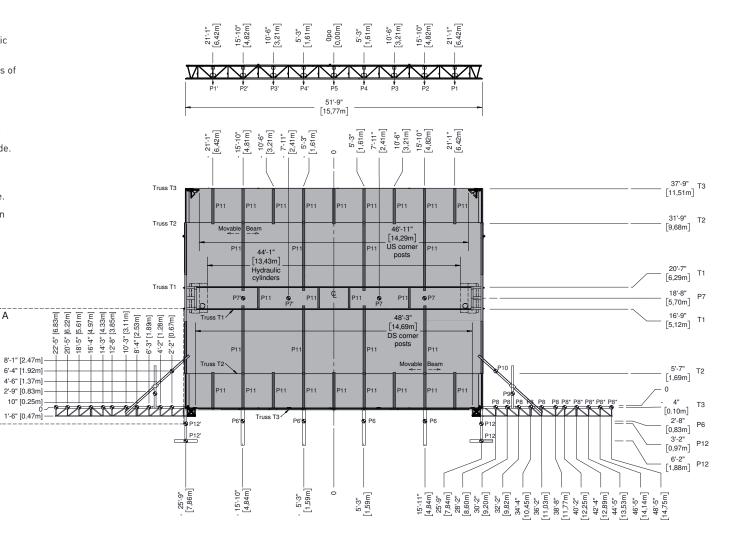
- MAXIMUM LOAD BEARING CAPACITY: 94 000 lb (42 638 kg). All corner posts must be installed and pinned, and telescopic columns pinned and secured.
- The sum of all rigging points shown in area "A" of both sides of roof cannot exceed 12 000 lb (5 445 kg).
- Total load on P9 and P10 must not exceed 4000 lb (1815 kg) on each side.
- Total load on P6s must not exceed 2000 lb (910 kg) per side.
- Total load on P12s must not exceed 3000 lb (1360 kg) per side.
- Capacity of side overhang truss must take into account the redistribution of the weight from the P9 and P10 points.
- Total loads on P8\* shall not exceed 2000 lb (907 kg) per side.
- Loads on P6 and P11 points must be considered as a load on their respective adjoining truss(es) points.

## LIFTING RESTRICTIONS

- MAXIMUM LIFTING CAPACITY IS 4000 lb (1814 kg).
- Maximum asymmetric load difference between front and rear of stage is 2000 lb (910 kg). This includes loads on T1 trusses.
- Load must be symmetrically distributed between right and left side of stage.

## NOTES:

- Line array can be positioned at 2'2" (0.67 m), 4'2" (1.28 m).or at 6'3" (1.89 m) from roof extension panel.
- Movable beams must be attached to truss rigging points.



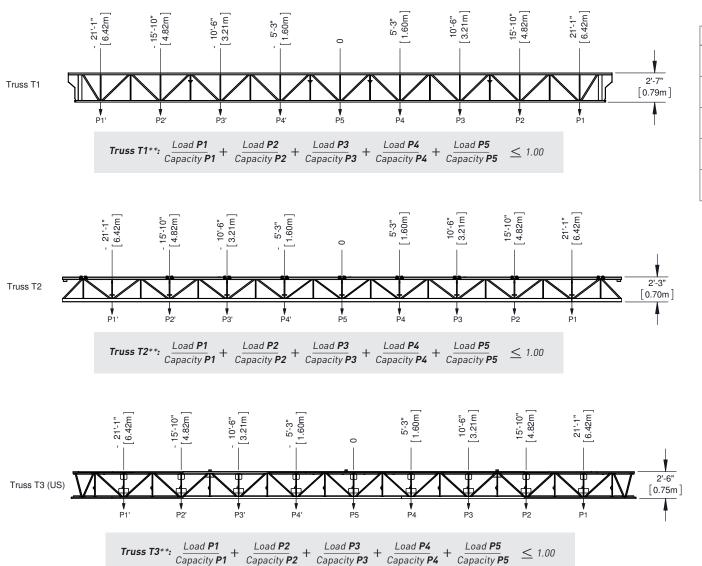


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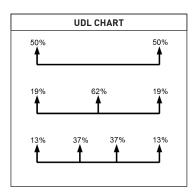


**RIGGING PLAN 3/5** 



TRUSSES CAPACITY								
	P1	P2	P3	P4	P5			
T1	5000 Lb	4000 Lb	3000 Lb	2000 Lb	3000 Lb			
	2270 Kg	1815 Kg	1360 Kg	910 Kg	1360 Kg			
T2	5000 Lb	4000 Lb	4000 Lb	4000 Lb	6000 Lb			
	2270 Kg	1815 Kg	1815 Kg	1815 Kg	2720 Kg			
Upstage	5000 Lb	4000 Lb	3000 Lb	2000 Lb	3000 Lb			
T3	2270 Kg	1815 Kg	1360 Kg	910 Kg	1360 Kg			
Downstage	7000 Lb	6000 Lb	4000 Lb	2500 Lb	4500 Lb			
T3	3175 Kg	2720 Kg	1815 Kg	1135 Kg	2040 Kg			

MAXIMUM LOAD CAPACITY						
Point No.	Lbs	Kg				
P6, P7,P8, P8*	2000	910				
P9, P10, P11	4000	1815				
P12	3000	1360				



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

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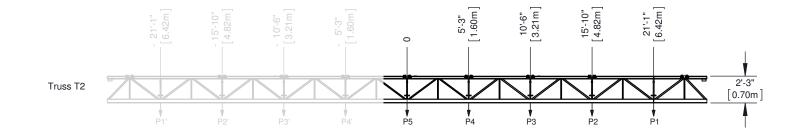


## WHEN CALCULATING THE LOAD ON A SAM575 TRUSS, USE FOLLOWING METHOD.

Each truss in the roof must be visualized as 2 trusses put together that share a center point.

### Examples: Truss T2 on a SAM575.

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 8000lbs.

Each motor will be hung from the P1 points.

- 0.50 x 8000 (50% of weight, see UDL chart) / 5000 (the capacity of the P1 on the T2 truss) = 0.80
- 0.80 = 80 %, as 1.00 would equal 100 %.

So the T2 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 8000 lbs. The motors will be hung from P1', P5, P1.

- P1

0.19 x 8000 (19% of weight, see UDL chart) / 5000 (capacity P1) = 0.30, so this one point will use 30 % of the truss capacity.

- P3

0.62 x 8000 (62% of weight, see UDL chart) / 6000 (capacity P5) = 0.83, so this point will use 83% 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.

0.30 + 0.83 = 1.13

So the T2 truss is at 113 % of its total capacity.

## **CALCULATION EXAMPLE #3:**

1 lighting truss on 4 motors, total uniformly distributed weight of the truss is 8000lbs. The motors will be hung from P1', P3', P3 and P1.

### - P1

0.13 x 8000 (13% of weight, see UDL chart) /5000 (capacity P1) = 0.21, so this one point will use 21 % of the truss capacity.

### - P3

 $0.37 \ x \ 8000 \ (37\% \ of weight, see UDL chart) / 4000 \ (capacity P3) = 0.74.$ 

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

0.21 + 0.74 = 0.95 So the T2 truss is at 95 % of its total capacity.

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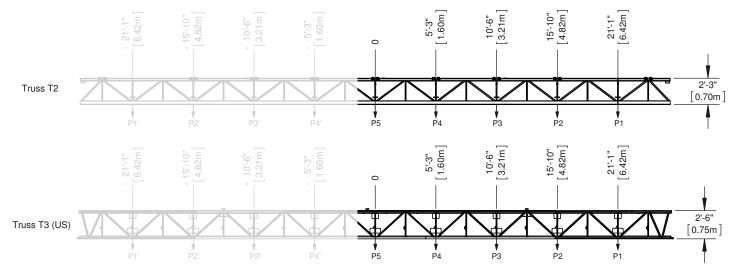


## WHEN CALCULATING THE LOAD ON A SAM575 TRUSS, USE FOLLOWING METHOD.

Each truss in the roof must be visualized as 2 trusses put together that share a center point.

### Examples: Truss T2 on a SAM575.

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 #4:**

1 screen on 4 motors, total uniformly distributed weight of the screen is 8000lbs. The motors will be hung 4' from the upstage T3 truss, on P11 points (movable beams), at P2', P4', P4 and P2.

### - Weight distribution

T2 truss 4' (distance from T3 truss) / 6' (distance between T2 and T3 trusses) = 0.67, so 67% of the weight from each motor will be distributed to the T2 truss, T3 truss = 2' (distance from T2 truss) / 6' (distance between T2 and T3 trusses) = 0.33, so 33% of the weight will be distributed to the T3 truss.

### - T2, P2

 $0.13 \times 8000$  (13% of weight, see UDL chart)  $\times$  0.67 (weight transfer on T2) / 4000 (capacity P2)

= 0.17, so this one point will use 17 % of the truss capacity.

### - T2, P4

0.37 x 8000 (37% of weight, see UDL chart) x 0.67 (weight transfer on T2) / 4000 (capacity P4) = 0.50.

Now that we have the loads for both points, we add them together to determine the total load on the T2 truss.

0.17 + 0.50 = 0.67 So the T2 truss is at 67 % of its total capacity.

### - T3, P2

0.13 x 8000 (13% of weight, see UDL chart) x 0.33 (weight transfer on T3) / 4000 (capacity P2) = 0.09, so this one point will use 9 % of the truss capacity.

### - T3, P4

0.37 x 8000 (37% of weight, see UDL chart) x 0.33 (weight transfer on T3) / 2000 (capacity P4) = 0.49.

Now that we have the loads for both points, we add them together to determine the total load on the T3 truss.

0.09 + 0.49 = 0.58 So the T3 truss is at 58 % of its total capacity.

### - P11 @ P2

0.13 x 8000 (13% of weight, see UDL chart) / 4000 (capacity P11) = 0.26, so this one point will use 26 % of the beam capacity.

### - P11 @ P4

0.37 x 8000 (37% of weight, see UDL chart) / 4000 (capacity P11) = 0.74, so this one point will use 74 % of the beam capacity.

So none of the points on the P11s exceed the movable beams capacity.

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