

# FR4532 Stage Configurations

*Additional fees may apply for options other than the Standard Configuration shown*

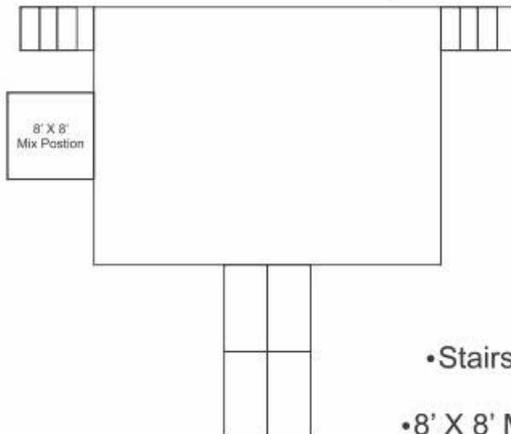
Standard Configuration  
32' 1" W X 23' 8" D  
(No extra decks used)



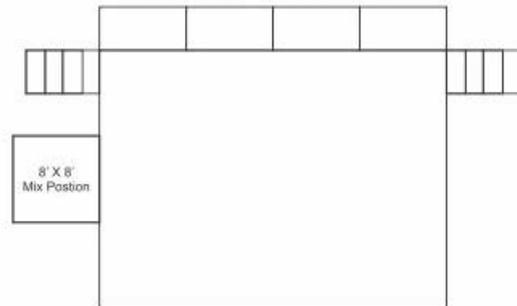
Standard w/ Sound Wings  
32' 1" W X 23' 8" D  
48' 1" W at front



Runway option  
32' 1" W X 23' 8" D  
16' L X 8' W Runway



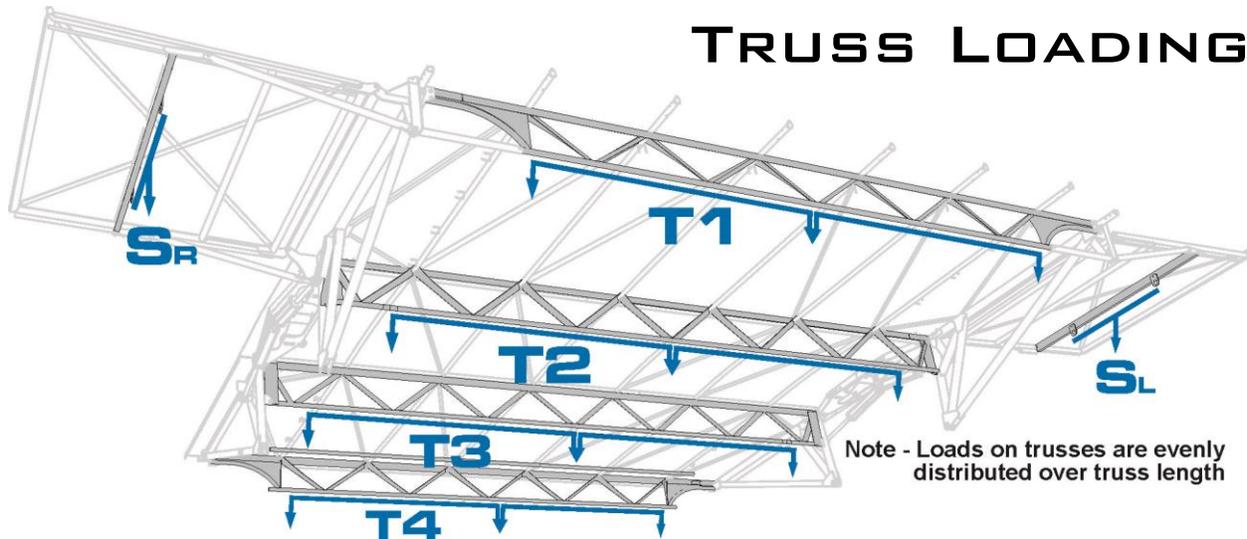
Additional Depth  
32' 1" W X 27' 8" D



## Notes:

- Stairs (2) and loading ramp can be placed anywhere around the stage
- 8' X 8' Mix position folds down & can be left in "up" position if desired

# TRUSS LOADING



Roof loading for the FrontRow 4500 stage varies for two different set up situations, **static** and **dynamic** loading. For both safety and damage prevention, it is important to understand the difference between the two types, and how the loading differs.

**Static Loading** – With this configuration of equipment installation the roof is fully raised and the lock bars are pinned in place prior to the installation of equipment. Note that this type of loading allows the maximum roof load capacity to be utilized. Also note that all listed loads require the supported weight to be evenly distributed along the length of the truss.

**Truss Point Loads** – Maximum point loads on the trusses are 250 lbs. (113 kg)

**Flybay Loads** – Either attach points may be loaded to 100%

## Static Loading Conditions

- Prior to adding loads, both folding stage decks must be down and locked, and the leveling support legs set.

S <sub>R</sub>	T1	S <sub>L</sub>	T2	T3	T4	TOTAL
1000 lbs (450 kg)	6000 lbs (2721 kg)					

Note T4 is the combined load weight of the T4 truss and adjacent light bar

**Dynamic Loading** – With the dynamic configuration, the roof is lowered, the equipment is attached to the roof trusses, then the roof is raised and secured. This arrangement requires consideration of both the total load hoisted, and any weight differential between the front and the rear.

T <sub>1T</sub> = S <sub>R</sub> + T1 + S <sub>L</sub>					T4	
S <sub>R</sub>	T1	S <sub>L</sub>	T2	T3	T4	TOTAL
800 lbs (362 kg)	800 lbs (362 kg)	800 lbs (362 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	5000 lbs (2250 kg)

Note – While the above table lists the maximum weights that can be lifted at each load station, one cannot simply add all of the numbers for the total weight as weight differential must also be taken into consideration (as noted by the 5000 lb listed maximum weight).

## Dynamic Loading Conditions

- Prior to adding loads, both folding stage decks must be down and locked, and the leveling support legs set.
- When installing equipment, the lower canopy truss rail must be at least 5 ft (1.5m) above the stage deck
- The maximum equipment weight differential between the front and rear of the canopy is 1000 lbs (450 kg)

**Equipment Weight Differential** - An important consideration with dynamic load lifting is the equipment weight differential between the roof front and rear, as a severe loading imbalance may cause linkage binding or structural failure during the roof raising process.

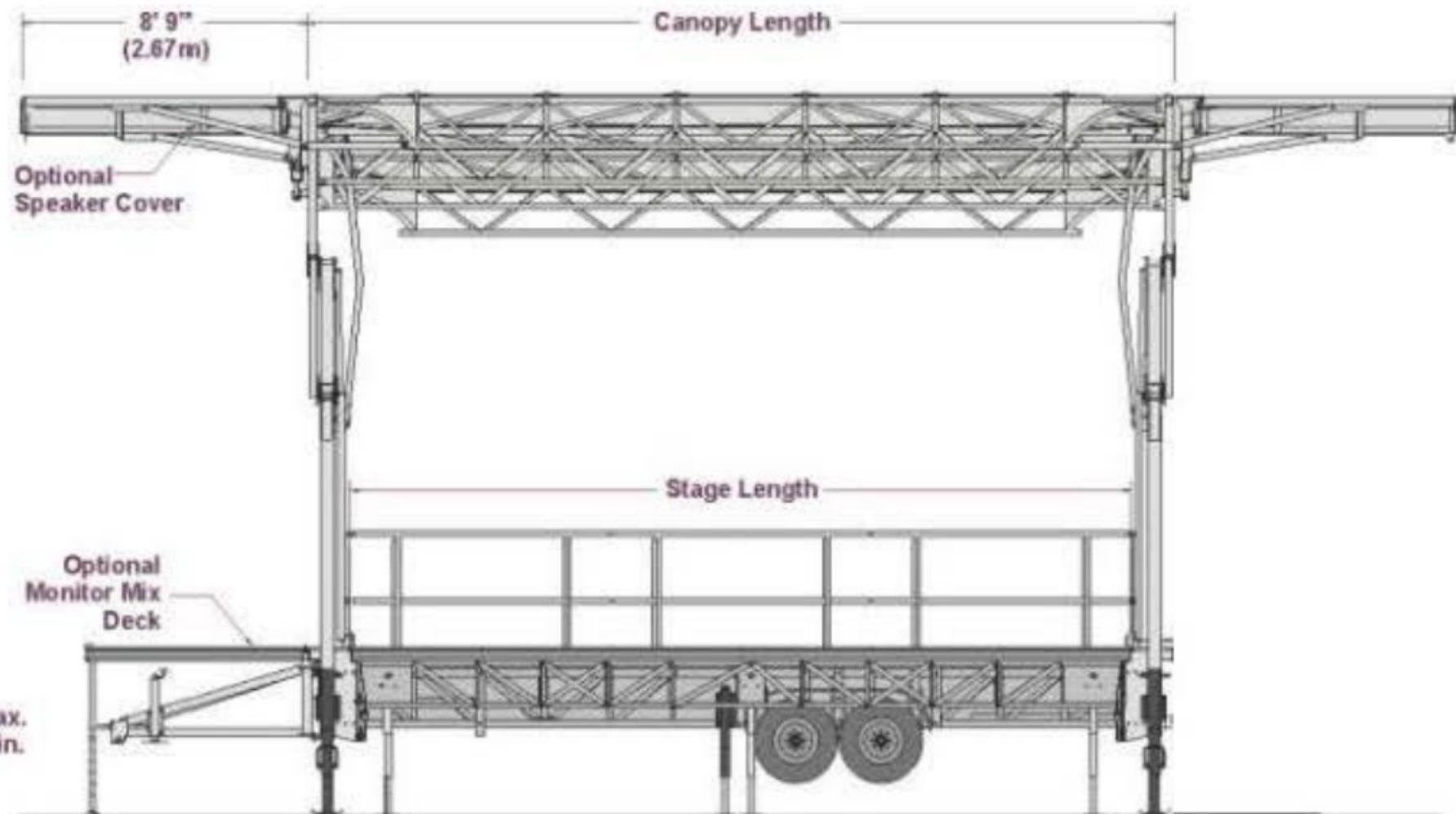
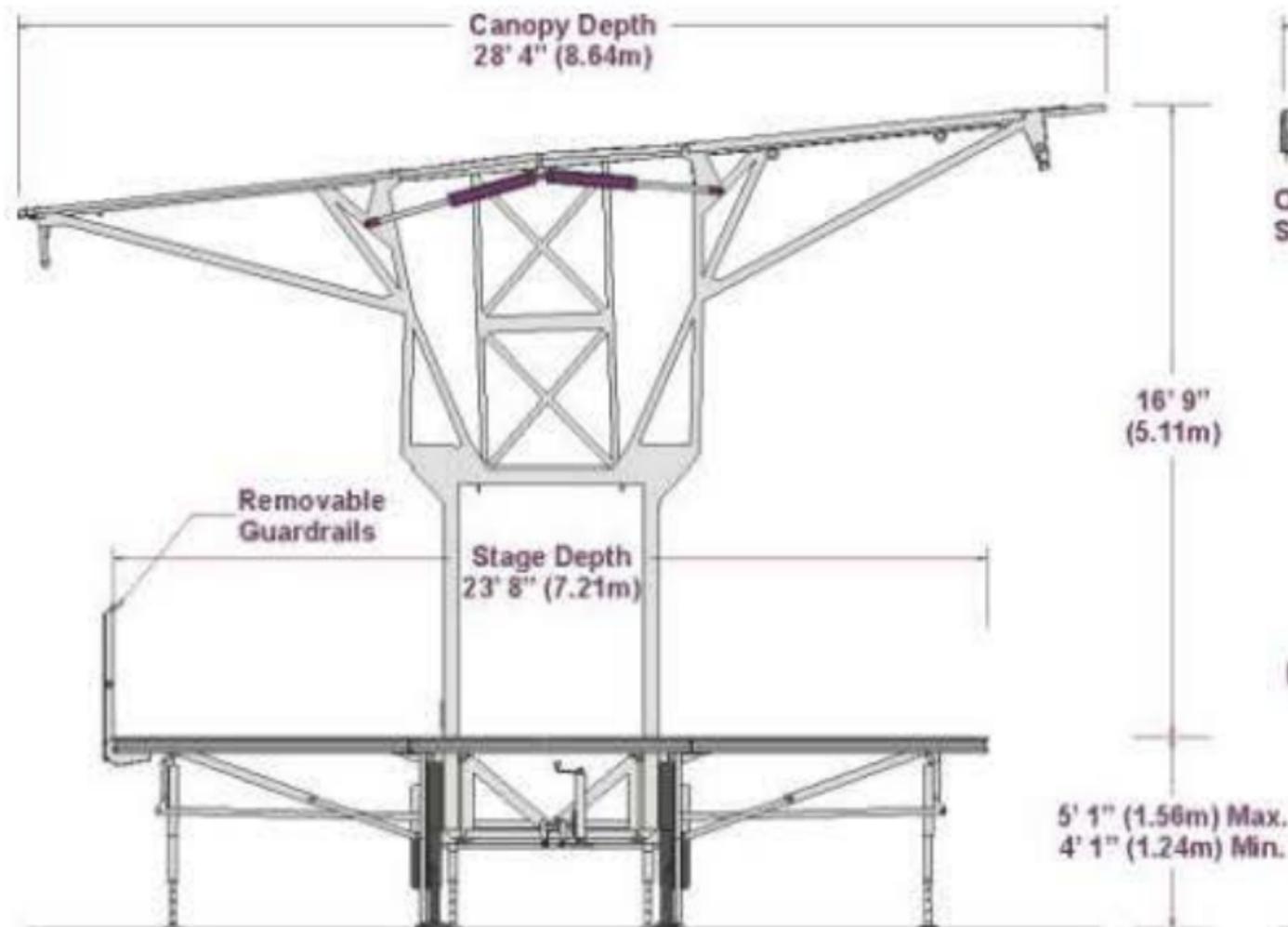
### Example Roof Truss Loadings

Condition	SR	T1	SL	T2	T3	T4	Total	Imbalance
1	500 lbs (226 kg)	1000 lbs (450 kg)	500 lbs (226 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	5000 lbs (2268 kg)	1000 lbs (450 kg)
2	800 lbs (362 kg)	-	800 lbs (362 kg)	-	-	600 lbs (272 kg)	2200 lbs (998 kg)	1000 lbs (450 kg)
3	800 lbs (362 kg)	400 lbs (181 kg)	800 lbs (362 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	4600 lbs (2086 kg)	1000 lbs (450 kg)
4	-	1000 lbs (450 kg)	-	1000 lbs (450 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	4000 lbs (1814 kg)	-
5	-	1000 lbs (450 kg)	-	1000 lbs (450 kg)	1000 lbs (450 kg)	-	3000 lbs (1361 kg)	1000 lbs (450 kg)
6	-	1000 lbs (450 kg)	-	-	-	-	1000 lbs (450 kg)	1000 lbs (450 kg)
7	-	-	-	1000 lbs (450 kg)	1000 lbs (450 kg)	1000 lbs (450 kg)	3000 lbs (1361 kg)	1000 lbs (450 kg)

#### Maximum Imbalances Illustrated

As shown in the above sample loading configurations, there are two conditions which must be met, the maximum total load and the maximum load imbalance. Exceeding either condition requires either load redistribution or load reduction.

Note – If the equipment that you wish to install exceeds the limitations for dynamic loading, consider raising and locking the roof with a partial equipment load, and then winching the remaining equipment into position. Also note that when lowering a roof that has been loaded in this manner, it will be necessary to lower the winched equipment prior to unpinning and lowering the roof.



Optional  
Monitor Mix  
Deck

Stage Depth  
23' 8" (7.21m)

Stage Length

