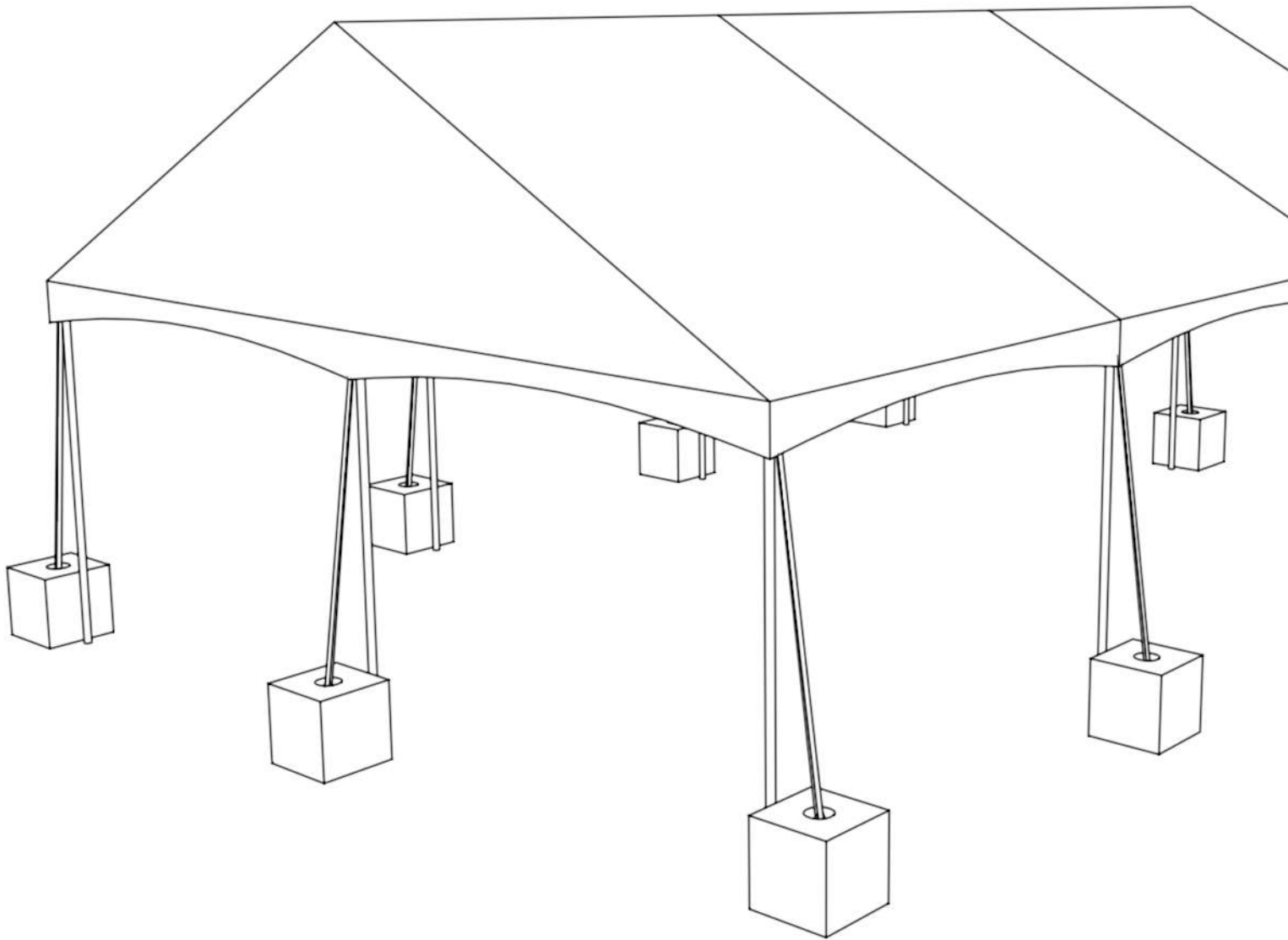


TENT BALLASTING CHARTS



ARA's Commitment

ARA is committed to putting forth initiatives that increase awareness of best practices around tent safety, tent ballasting, and tent education. To that end, ARA has developed tools and resources that can be accessed by ARA members to help put safe tenting into practice. This Tent Ballasting document includes ballasting charts and calculations for three different tent types.

Thank you to the members of the Safe Tenting Taskforce that helped ARA create this document.

The logo for the American Rental Association (ARA) is displayed on the side of a modern, multi-story building. The logo features a stylized 'A' icon to the left of the letters 'ARA' in a bold, blue font. Below 'ARA', the full name 'American Rental Association' is written in a smaller, blue font. The building itself has a mix of light-colored panels and dark blue accents, with large windows and a prominent entrance.

This Tent Ballasting document, developed by the American Rental Association (“ARA”), is intended to provide general information to member companies and tent rental employees with regard to tent ballasting best practices. This document was created to assist installers with basic tent installation theory, but does not take into account the specific features of a particular tent installation, including weather and wind conditions, ground elevation, and other site conditions, and is not intended as a substitute for the experience and judgment of the properly trained installers. Installers must determine if the site conditions require engineered calculations for proper ballasting and anchoring. ARA does not purport to include in this document all relevant terminology or possible tenting scenarios. Installers are solely responsible for managing all risks to their own and others’ health and/or safety when ballasting tents. ARA assumes no liability for risks to installers, occupants or other third parties.

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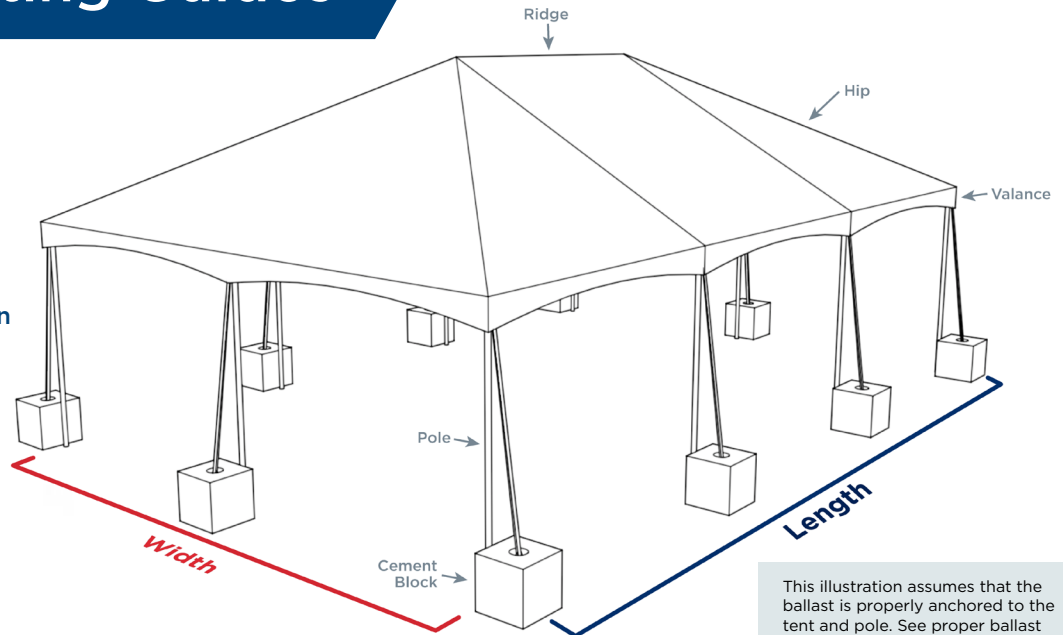
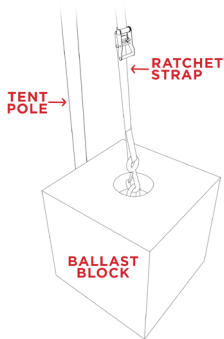
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Section I: Ballasting Guides

Hip End Tent

Assumptions:

- Partially exposed wind condition
- 50mph wind rating
- Fixed to pole ballast configuration
- 8' eave height
- 1' valance height
- Ballast type - concrete blocks
- Ground surface - asphalt



This illustration assumes that the ballast is properly anchored to the tent and pole. See proper ballast table below.

OPEN - NO SIDEWALLS

IMPORTANT NOTE: The weight shown in each box below is per tent leg.

		LENGTH						
		10'	20'	30'	40'	45'	50'	60'
WIDTH	10'	213	333	329	334		337	339
	20'		367	510	522		554	550
	30'			756	912	1,009	897	889 (10' mid) 1,055 (15' mid)
	40'				1,282		1,427	1,359 (10' mid) 1,673 (15' mid)
	50'						995	1,157

Calculations shown are minimum ballasting requirements. If your specifications differ from the criteria above, you may need additional engineering and/or calculations. Refer to the Non-Engineered Ballasting Tool for other surface calculations, such as grass.

ENCLOSED

IMPORTANT NOTE: The weight shown in each box below is per tent leg.

		LENGTH						
		10'	20'	30'	40'	45'	50'	60'
WIDTH	10'	675	850	882	915		936	952
	20'		871	1,056	1,103		1,146	1,177
	30'			1,535	1,639	1,834	1,639	1,640 (10' mid) 1,954 (15' mid)
	40'				2,386		2,415	2,319 (10' mid) 2,865 (20' mid)
	50'						1,883	1,888

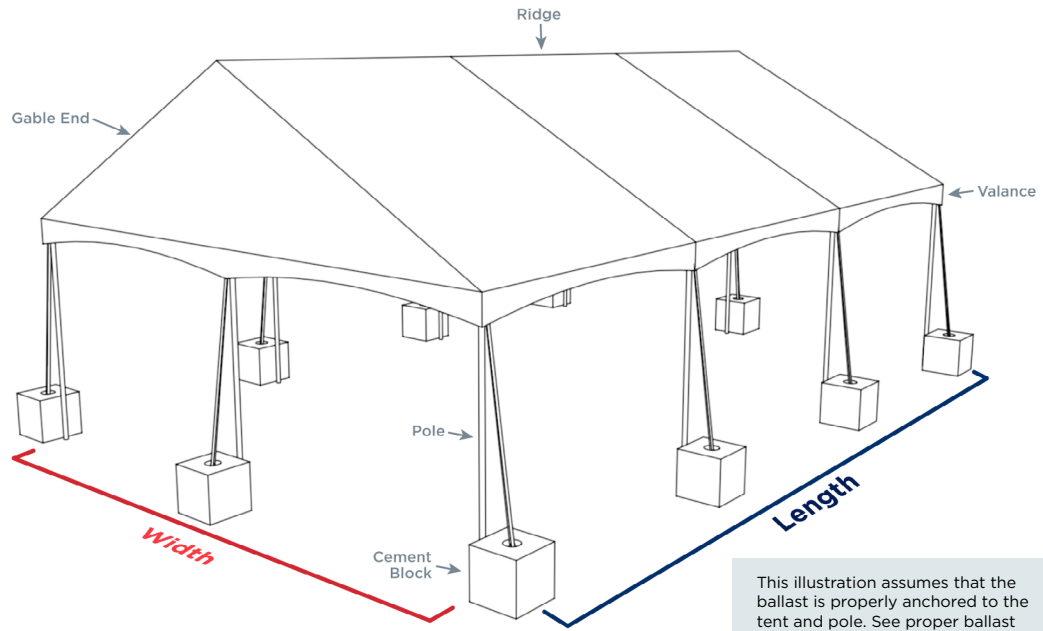
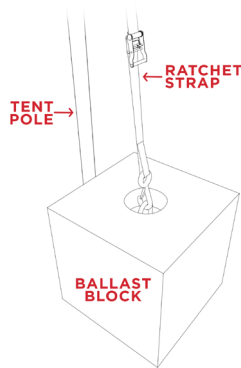
Calculations shown are minimum ballasting requirements. If your specifications differ from the criteria above, you may need additional engineering and/or calculations. Refer to the Non-Engineered Ballasting Tool for other surface calculations, such as grass.

The difficulty in producing one measurement for each size tent is compounded by the fact that a tent renter can install a 30'x60' frame tent with either 10' spacing on the length (14 uprights/poles) or 15' spacing on the length (12 uprights/poles).

Gable End Tent

Assumptions:

- Partially exposed wind condition
- 50mph wind rating
- Fixed to pole ballast configuration
- 8' eave height
- 1' valance height
- Ballast type - concrete blocks
- Ground surface - asphalt



This illustration assumes that the ballast is properly anchored to the tent and pole. See proper ballast table below.

OPEN - NO SIDEWALLS

IMPORTANT NOTE: The weight shown in each box below is per tent leg.

		LENGTH						
		10'	20'	30'	40'	45'	50'	60'
WIDTH	10'	318	369	380	385		389	391
	20'	426	614	667	696		714	727
	30'	717	766	1,156	1,130	1,256	1,113	1,317
	40'		1,120	1,481	1,493	1,659	1,427	1,734
	50'			1,517	1,598	1,799	1,648	1,943

Calculations shown are minimum ballasting requirements. If your specifications differ from the criteria above, you may need additional engineering and/or calculations. Refer to the Non-Engineered Ballasting Tool for other surface calculations, such as grass.

ENCLOSED

IMPORTANT NOTE: The weight shown in each box below is per tent leg.

		LENGTH						
		10'	20'	30'	40'	45'	50'	60'
WIDTH	10'	812	993	980	1,006		1,022	1,033
	20'	1,023	1,153	1,266	1,333		1,377	1,409
	30'	1,618	1,537	2,040	2,016	2,252	2,002	2,381
	40'		2,217	2,445	2,472	2,757	2,453	2,911
	50'			2,483	2,514	2,840	2,613	3,098

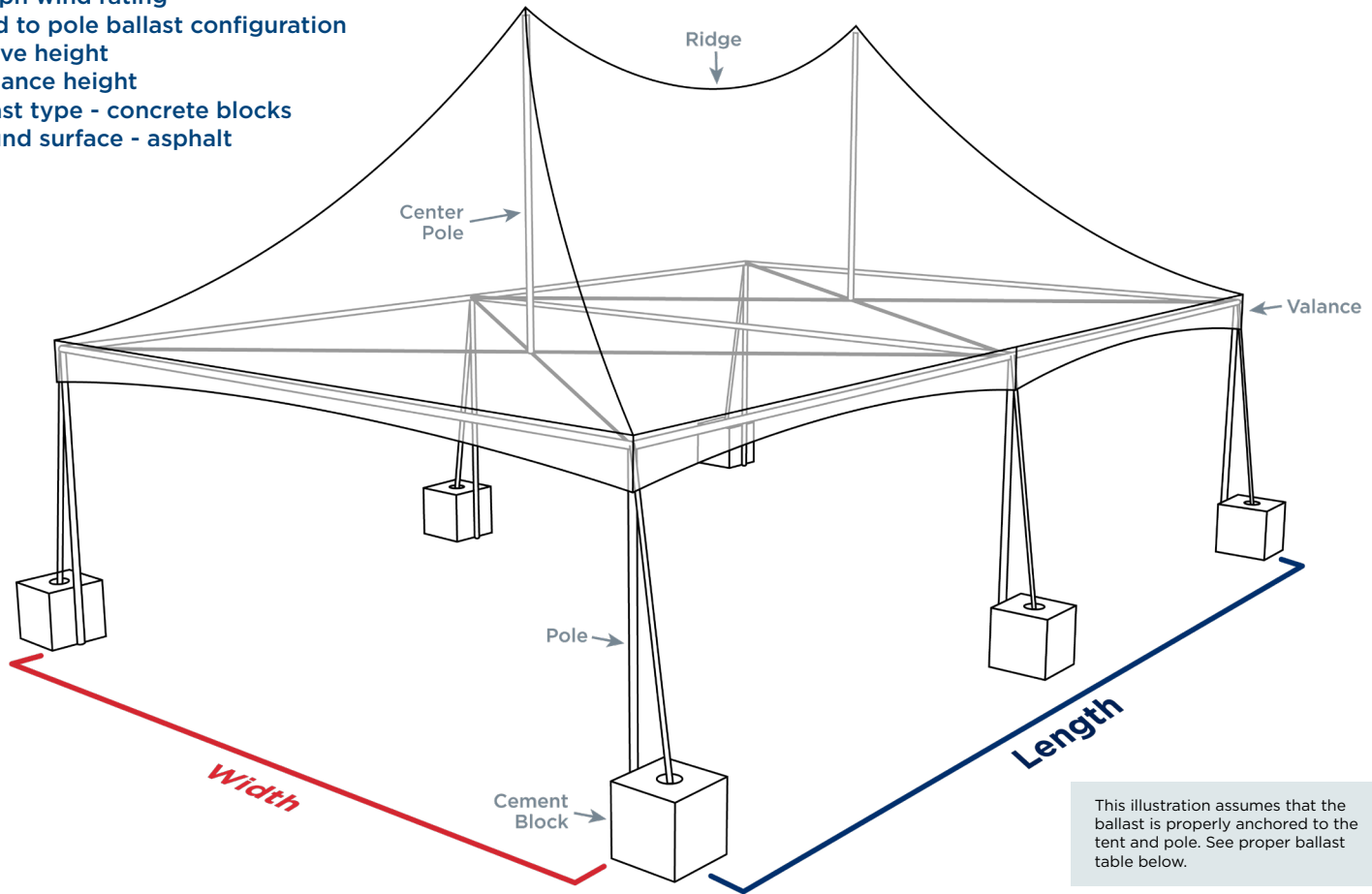
Calculations shown are minimum ballasting requirements. If your specifications differ from the criteria above, you may need additional engineering and/or calculations. Refer to the Non-Engineered Ballasting Tool for other surface calculations, such as grass.

The difficulty in producing one measurement for each size tent is compounded by the fact that a tent renter can install a 30'x60' frame tent with either 10' spacing on the length (14 uprights/poles) or 15' spacing on the length (12 uprights/poles).

Hi-Peak Tent

Assumptions:

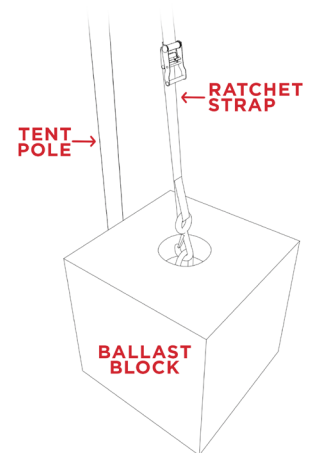
- Partially exposed wind condition
- 50mph wind rating
- Fixed to pole ballast configuration
- 8' eave height
- 1' valance height
- Ballast type - concrete blocks
- Ground surface - asphalt



This illustration assumes that the ballast is properly anchored to the tent and pole. See proper ballast table below.

		OPEN	ENCLOSED
TENT DIMENSIONS	10'x10'	256	762
	15'x15'	486	1,225
	20'x20'	798	1,828
	20'x30'	772	1,670
	20'x40'	1,062	2,227
	30'x30'	801	1,627

IMPORTANT NOTE: The weight shown in each box above is per tent leg.



Calculations shown are minimum ballasting requirements. If your specifications differ from the criteria above, you may need additional engineering and/or calculations. Refer to the Non-Engineered Ballasting Tool for other surface calculations, such as grass.