

UNBALANCED LOAD CALCULATIONS

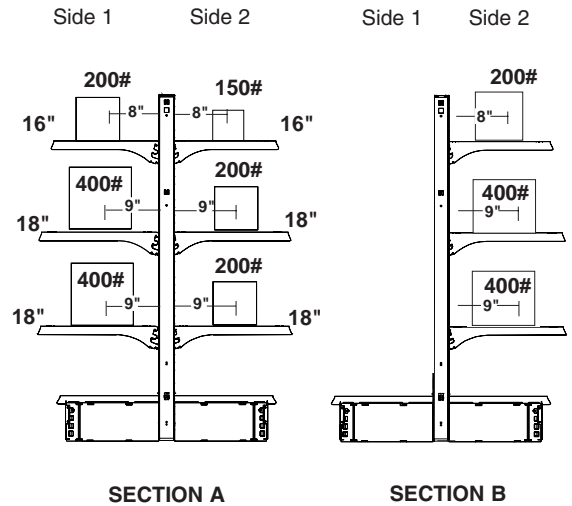
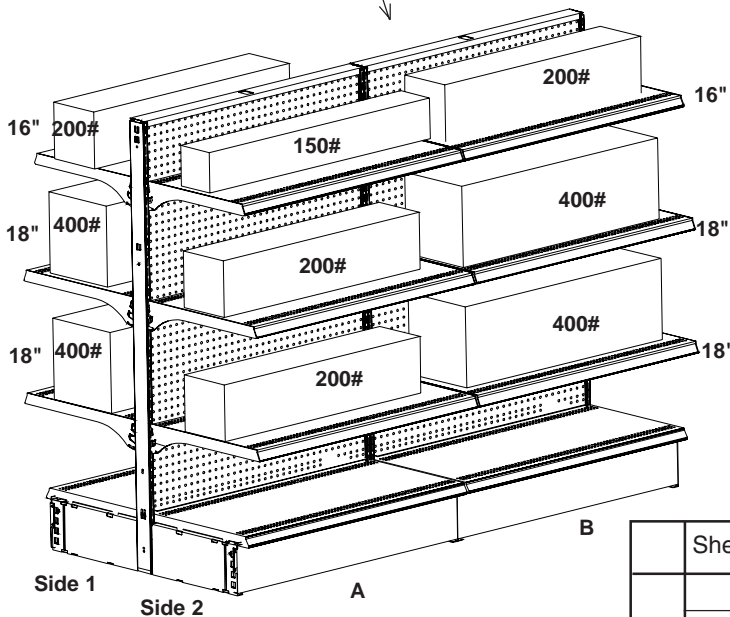
When heavily loading one side of your wall or gondola shelving, it is important to determine if you are creating an unbalanced load that exceeds the maximum design load (SEE LOAD CAPACITY CHART ON PAGE 106). The sample calculation below illustrates how you can determine your unbalanced load in inch-pounds.

NOTE: Inch-pounds are a measure of the shelf loads acting at a distance (½ shelf depth) from the standard (upright).

SAMPLE CALCULATION

STARTER / ADD-ON UNIT TYPE USED FOR ILLUSTRATION

CALCULATE THE UNBALANCED LOAD ACTING ON THIS STANDARD



	Shelf depth ÷ 2	x	Shelf load ÷ 2	Side 1	Side 2
SECTION A	8"	x	100#	800"#	
	9"	x	200#	1800"#	
	9"	x	200#	1800"#	
	8"	x	75#		600"#
	9"	x	100#		900"#
	9"	x	100#		900"#
SECTION B	no load			0	
	8"	x	100#		800"#
	9"	x	200#		1800"#
	9"	x	200#		1800"#
total (Section A & B)				4400"#	6800"#

NOTE: Shelf depth is divided by 2 because an **evenly distributed shelf load** is calculated as a total load at center of shelf depth.

Shelf load is divided by 2 because a shelf load is supported by 2 standards.

Deck load does **not** contribute to unbalanced load.

Subtract the smaller from the larger 6800"#
- 4400"#
 Total unbalanced load acting on standard 2400"#