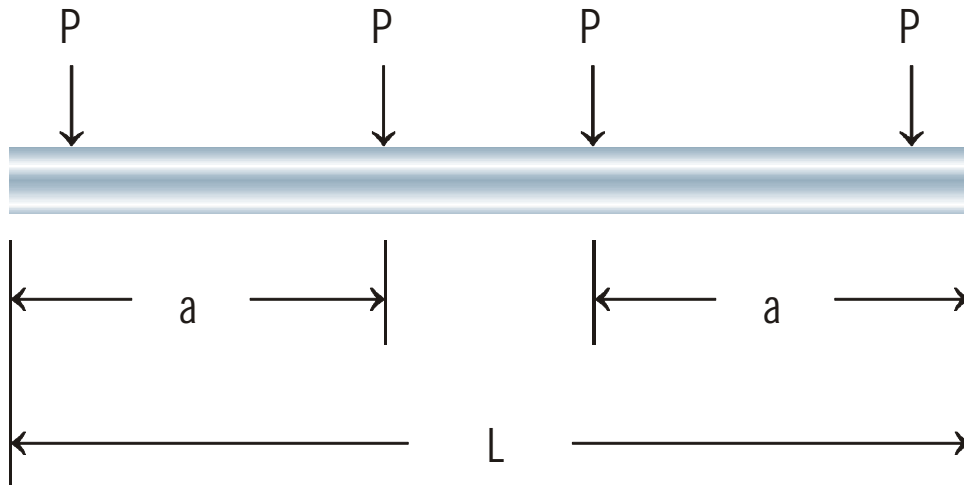


Formula for Calculating Deflection of Bath Enclosure and Shower Door Headers

Header Illustration



MAXIMUM DEFLECTION = $\frac{Pa}{24EI} (3L^2 - 4a^2)$
Or

MAXIMUM DEFLECTION = $[\frac{P \times a}{24 \times E \times I}] \times [(3 \times L \text{ squared}) - (4 \times a \text{ squared})]$

E = 10^7

I = Moment of header

L = Length of header

a = Length divided by 2

P = Individual panel weight divided by 2

<u>SC NUMBER</u>	<u>UNIT</u>	<u>I or MOMENT</u>
SC-917	340	.39771
SC-614	340DLX	.38740
SC-583	540	.14593
SC-881	640	.30294
SC-917	740	.39771
SC-565	940	.32208

For example: 350 60" wide x 70" tall

Panel weight = 27.498# ea.

I = .39771

E = 10000000

L = 60"

a = 30"

Using the formula deflection = .031