Permissable Loads for Acrylic Shelves



SPECIFICATIONS FOR CABLE/ROD SUSPENDED ACRYLIC SHELVING

Cable/Rod Load Specifications*

Shelving

For the majority of shelving applications the entire weight load is solely held by the upper cable fixings. When installed properly your shelving system will be supported by the full strength of each cable. In compliance with industry standards, Nova Display Systems recommends using no more than 50% of the actual breaking strength of the cables as a safe working load. Shelving clamp supports are used to attach the shelving to the cables, the supports allow the shelving to be positioned anywhere along the cable system. The Safe Working Load for each of these supports is **25 lbs**.

Cable/Rod Suspension System Safety Load Limits

Weight-bearing per suspension point	1.5mm (1/16") Cable	3mm (1/8") Cable	6mm (1/4") Rod	10mm (3/8") Rod
Ceiling-to-Floor	264 lb (120 kg)	441 lb (200 kg)	441 lb (200 kg)	441 lb (200 kg)
Wall-to-Wall	132 lb (60 kg)	N/A	132 lb (60 kg)	132 lb (60 kg)

^{*} Note: For shelves it is recommended to have no more than 48 inches between suspension points (cable/rod centers)

Disclaimer: These cable/rod systems are only as strong as the structures to which they are anchored to and the anchoring hardware used to install them. Installers must determine a safe depth and length of shelving to prevent any bowing or breakage. When choosing your shelving material, the weight of the shelving must be factored into the total weight that the overall system can support. Incorrect installation rests with the installer.

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Recommended Weight Loads - Single Column Shelves

Although the combined strength of the (4) four cable suspension sets is 540 lbs (for 1/16" diameter cables) and 880 lbs (for 1/8" diameter cables), the maximum allowable weight per shelf is less because the weight on each shelf may be unevenly distributed towards the shelf support clips. We recommend no more than 6 sets of shelves per column.

Recommended Weight Loads - Multiple Column Shelves (sharing cables)

Although the combined strength of the (6) six cable suspension sets is 790 lbs (for 1/16" diameter cables) and 1,320 lbs (for 1/8" diameter cables), the maximum allowable weight per shelf is less because the weight on each shelf may be unevenly distributed towards the shelf support clips. We recommend no more than 6 sets of shelves per column.

Recommended Safety Load for Acrylic Shelves

Nominal Acrylic Shelf Thickness		Distance between cable/rod shelf supports in (inch)						
	14"	24"	32"	36"	48"			
3/8"	24 (48) lbs	12 (20) lbs	6 (8) lbs	4 (6) lbs	N/A			
1/2"	32 (64) lbs	16 (24) lbs	8 (12) lbs	6 (8) lbs	N/A			
3/4"	48 (96) lbs	24 (40) lbs	12 (16) lbs	8 (12) lbs	4 (6) lbs			
1"	64 (128) lbs	32 (48) lbs	16 (24) lbs	12 (16) lbs	6 (8) lbs			

^{*} Maximum loads are based on even distribution of weight across shelving

^{*} The number in the (parentheses) stands for maximum load limit before acrylic shelves start to show visible deflection (sagging) under load. Deflection rate may vary from 1/4" - 1/2".