

# Quick Tray Fill and Load Calculations

## Supporting Quick Tray Wire Mesh Cable Tray

The Quick Tray Wire Mesh Cable Tray is sized based on the number and type of cables required for the current and future need. A 50% fill ratio should equal the maximum number of cables pulled in a given cross section. Straight section supports installed at 5-foot (1.5m) centers are typical. For support spans greater than 5 feet (1.5m), cable loads must be evaluated to ensure that the span between the supports is suitable for the load. The support and

anchor must be evaluated separately. Supports should be placed within 24 in. (610mm) of a splice on straight sections, and the span between supports should not exceed the length of tray. Additional supports will be required around bends and when the cable tray level changes.

The load ratings of the hardware that supports the Quick Tray Wire Mesh Cable Tray must also be considered. Load ratings for some commonly used supports are shown in the Support Maximum Load table below.

Once the load/foot has been determined, the weight on each support can be determined by multiplying the load/foot by the number of feet between supports.

Cable Tray Catalog Number	Maximum Load in lb/ft According to Span					
	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft
QT2X2	17.17	12.54	7.51	6.04	4.77	3.86
QT2X4	18.10	14.00	11.30	9.30	7.40	5.10
QT2X6	25.10	19.80	16.00	13.40	11.00	9.00
QT2X8	25.10	19.80	16.00	13.40	11.00	9.00
QT2X12	36.00	27.70	22.10	18.10	14.60	10.50
QT2X18	65.00	45.50	33.80	26.10	19.40	15.00
QT2X20	65.00	45.50	33.80	26.10	19.40	15.00
QT2X24	67.00	48.70	37.80	30.30	23.70	17.00
QT4X8	43.80	35.90	30.10	25.40	21.20	17.00
QT4X12	57.95	43.77	27.77	22.94	18.12	14.68
QT4X20	89.80	71.00	57.70	47.60	38.50	22.00
QT4X24	89.80	71.00	57.70	47.60	38.50	22.00

### EXAMPLE:

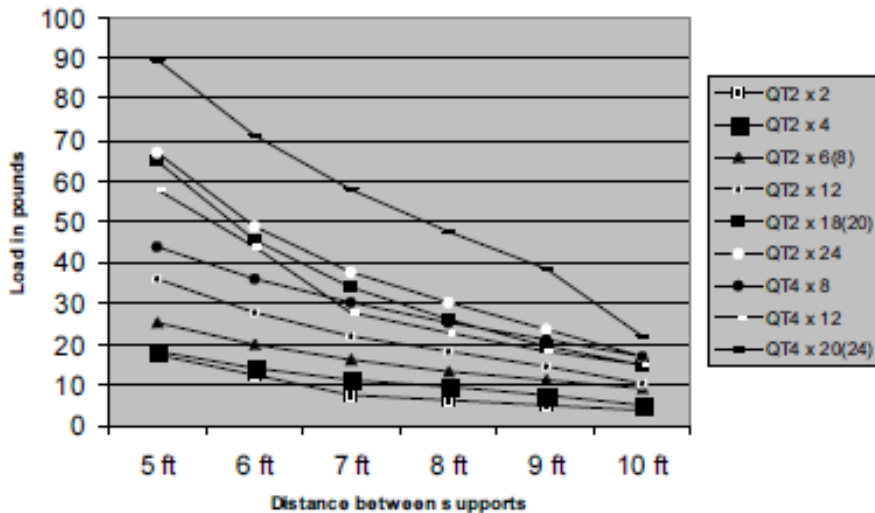
Weight of span = Load/foot \* No. ft between supports

Load/foot figure from the 2 x 2 in. cable tray with 40% fill ratio example: .98 lb/ft

Weight of span = .98 \* 5 = 4.9 lb

Weight on support = weight of span / 2

## Cross section- load versus span



### Support Maximum Load

Catalog Number	Description	Bracket Width		Max. Load lbs
		in.	mm	
QTCB4	C Bracket	4	102	259
QTCB8	C Bracket	8	203	216
QTCB12	C Bracket	12	305	108
QTLB4	L Bracket	4	102	259
QTLB8	L Bracket	8	203	216
QTLB12	L Bracket	12	305	108
QTH	Trapez Hanging Clips	-	-	216