

MARCO STEEL WIRE CABLE TRAY RECOMMENDATIONS

WALL SUPPORT BRACKET RECOMMENDATIONS

Ref. No.	Dimensions	Fast Fix Wall Bracket	Cantilever Bracket	Heavy Duty Bracket	Wall / Floor Bracket	MCAMP	MCB35
MC3050	30mm x 50mm	MCWFB100 *	MCCB100 *	~	MCWB50	~	1
MC30100	30mm x 100mm	MCWFB100	MCCB100	~	MCWB100	~	~
MC30150	30mm x 150mm	MCWFB150	MCCB150	~	MCWB150	~	~
MC30200	30mm x 200mm	MCWFB200	MCCB200	~	MCWB200	~	~
MC30300	30mm x 300mm	MCWFB300	MCCB300	MCHDB320	MCWB300	~	~
MC30400	30mm x 400mm	MCWFB400	MCCB400	MCHDB420	MCWB400	~	~
MC30450	30mm x 450mm	MCWFB450	~	MCHDB470	MCWB450	~	~
MC30500	30mm x 500mm	~	~	MCHDB520	MCWB500	~	~
MC30600	30mm x 600mm	~	~	MCHDB620	MCWB600	~	~
MC5550	55mm x 50mm	MCWFB100 *	MCCB100 *	~	MCWB50	1	1
MC55100	55mm x 100mm	MCWFB100	MCCB100	~	MCWB100	~	~
MC55150	55mm x 150mm	MCWFB150	MCCB150	~	MCWB150	~	~
MC55200	55mm x 200mm	MCWFB200	MCCB200	~	MCWB200	~	~
MC55300	55mm x 300mm	MCWFB300	MCCB300	MCHDB320	MCWB300	~	~
MC55400	55mm x 400mm	MCWFB400	MCCB400	MCHDB420	MCWB400	~	~
MC55450	55mm x 450mm	MCWFB450	~	MCHDB470	MCWB450	~	~
MC55500	55mm x 500mm	~	~	MCHDB520	MCWB500	~	~
MC55600	55mm x 600mm	~	~	MCHDB620	MCWB600	~	~
MC106100	106mm x 100mm	MCWFB100	MCCB100	~	MCWB100	~	~
MC106150	106mm x 150mm	MCWFB150	MCCB150	~	MCWB150	~	~
MC106200	106mm x 200mm	MCWFB200	MCCB200	~	MCWB200	~	~
MC106300	106mm x 300mm	MCWFB300	MCCB300	MCHDB320	MCWB300	~	~
MC106400	106mm x 400mm	MCWFB400	MCCB400	MCHDB420	MCWB400	~	~
MC106450	106mm x 450mm	MCWFB450	~	MCHDB470	MCWB450	~	~
MC106500	106mm x 500mm	~	~	MCHDB520	MCWB500	~	~
MC106600	106mm x 600mm	~	~	MCHDB620	MCWB600	~	~

SUSPENSION BRACKET RECOMMENDATIONS

Ref. No.	Dimensions	Support Channel Standard / Fast Fix	MCSB			
			MCSB	MCSH	MCSB50	MCSB100
MC3050	30mm x 50mm	MCSC100 *	2	~	1	~
MC30100	30mm x 100mm	MCSC150 / MCFSC150	2	1	~	1
MC30150	30mm x 150mm	MCSC200 / MCFSC200	2	1**	~	~
MC30200	30mm x 200mm	MCSC250 / MCFSC250	2	1	~	~
MC30300	30mm x 300mm	MCSC350 / MCFSC350	~	~	~	~
MC30400	30mm x 400mm	MCSC450 / MCFSC450	~	~	~	~
MC30450	30mm x 450mm	MCSC500 / MCFSC500	~	~	~	~
MC30500	30mm x 500mm	MCSC550 / MCFSC550	~	~	~	~
MC30600	30mm x 600mm	MCSC650 / MCFSC650	~	~	~	~
MC5550	55mm x 50mm	MCSC100 *	2	~	1	~
MC55100	55mm x 100mm	MCSC100 / MCFSC100	2	1	~	1
MC55150	55mm x 150mm	MCSC200 / MCFSC200	2	1**	~	~
MC55200	55mm x 200mm	MCSC250 / MCFSC250	2	1	~	~
MC55300	55mm x 300mm	MCSC350 / MCFSC350	~	~	~	~
MC55400	55mm x 400mm	MCSC450 / MCFSC450	~	~	~	~
MC55450	55mm x 450mm	MCSC500 / MCFSC500	~	~	~	~
MC55500	55mm x 500mm	MCSC550 / MCFSC550	~	~	~	~
MC55600	55mm x 600mm	MCSC650 / MCFSC650	~	~	~	~
MC106100	106mm x 100mm	MCSC100 / MCFSC100	2	1	~	~
MC106150	106mm x 150mm	MCSC200 / MCFSC200	2	1**	~	~
MC106200	106mm x 200mm	MCSC250 / MCFSC250	~	~	~	~
MC106300	106mm x 300mm	MCSC350 / MCFSC350	~	~	~	~
MC106400	106mm x 400mm	MCSC450 / MCFSC450	~	~	~	~
MC106450	106mm x 450mm	MCSC500 / MCFSC500	~	~	~	~
MC106500	106mm x 500mm	MCSC550 / MCFSC550	~	~	~	~
MC106600	106mm x 600mm	MCSC650 / MCFSC650	~	~	~	~

COUPLER RECOMMENDATIONS

Ref No.	Dimensions	MCQC Quick Coupler		MCCA Coupler	
		Side	Base	Side	Base
MC3050	30mm x 50mm	2	0	2	0
MC30100	30mm x 100mm	2	0	2	1
MC30150	30mm x 150mm	2	0	2	1
MC30200	30mm x 200mm	2	1	2	1
MC30300	30mm x 300mm	2	1	2	2
MC30400	30mm x 400mm	2	2	2	2
MC30450	30mm x 450mm	2	2	2	2
MC30500	30mm x 500mm	2	2	2	2
MC30600	30mm x 600mm	2	3	2	3
MC5550	55mm x 50mm	2	0	2	0
MC55100	55mm x 100mm	2	0	2	1
MC55150	55mm x 150mm	2	1	2	1
MC55200	55mm x 200mm	2	1	2	1
MC55300	55mm x 300mm	2	1	2	2
MC55400	55mm x 400mm	2	2	2	2
MC55450	55mm x 450mm	2	2	2	2
MC55500	55mm x 500mm	2	2	2	2
MC55600	55mm x 600mm	2	3	2	3
MC106100	106mm x 100mm	2	1	2	1
MC106150	106mm x 150mm	2	1	2	1
MC106200	106mm x 200mm	2	1	2	1
MC106300	106mm x 300mm	2	2	2	2
MC106400	106mm x 400mm	2	3	2	3
MC106450	106mm x 450mm	2	3	2	3
MC106500	106mm x 500mm	2	3	2	3
MC106600	106mm x 600mm	2	3	2	3

Suspension & Wall bracket recommendations

These tables are intended to be used as a guide only. It is recommended that the tray should be supported at approximately 1 metre intervals. For large volumes of cable, more support may be necessary.

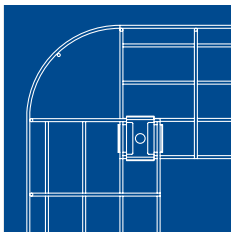
Suspension brackets can be used effectively only up to a certain weight. For larger Steel Wire Cable Tray, support channels are recommended.

*Due to a central wire running down the length of the tray a MCTS35 would be needed.

**Due to a central wire running down the length of the tray, central suspension brackets would need to be staggered.

Coupler recommendations

This table is intended to be used as a guide only. For large volumes of cable, more support may be necessary.

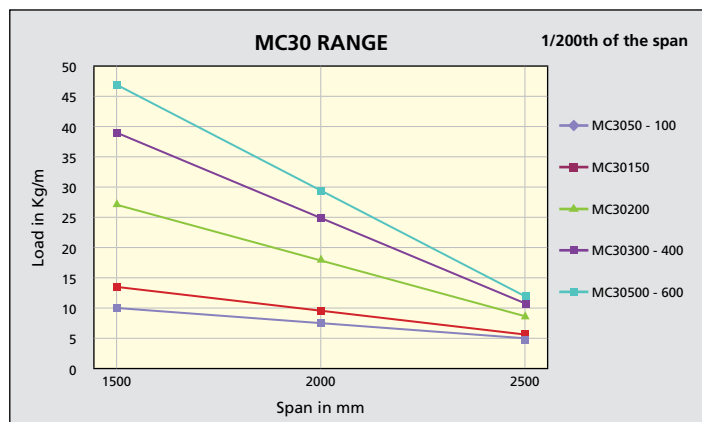


PERMISSIBLE LOADS

Permissible loads for a maximum deflection of 1/200th of the span, with a coupling positioned at 1/5th of the span from the support.

The coefficient applied to the load for coupling in the middle of the span = 0.7

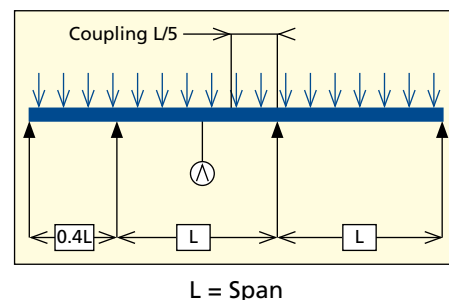
Permissible load for maximum sag = $L/200$ on the intermediate span, coupling at 1/5th of the span.



TEST METHOD

The cable trays were tested across two spans and a cantilever. The deflection is measured on the central span using three sensors placed on the sides and at the centre of the tray. The test method conforms to the BSEN 61537 standard.

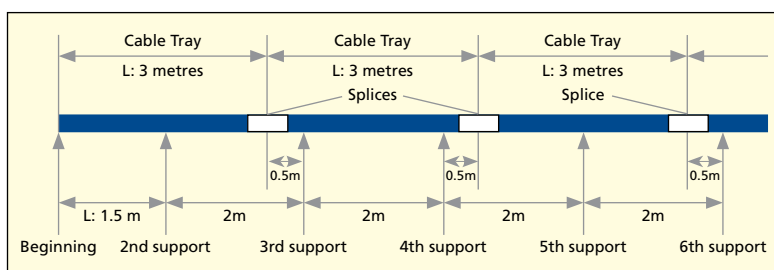
Note: The maximum deflection of 1/200 is always reached for a lesser load than that of the safety load. (The breaking point divided by a safety co-efficient of 1.7). CEI/61537.



SPAN

Recommended Support Spacing

There is an optimum configuration to obtain 2 metre spans without the couplings being positioned at the supports or in the middle of the spans.



To obtain this result, the first span is deliberately limited to 1.5 metres, then the supports are placed approximately every 2 metres. The coupling points are therefore always 0.5 metres from a support.

CHOICE AND POSITION OF SUPPORTS

The brackets are characterized by their permissible loads (in Kg).
The hangers are characterized by their permissible torques (in Kg.m).

All Marco supports are tested and conform with the standard BSEN61537.

The safe working load (SWL) as defined by the standard is the lowest value of either:

- The load creating a deflection of $L/20$ at the end.
- The breaking load divided by 1.7, if the deflection at $L/20$ is not reached.

