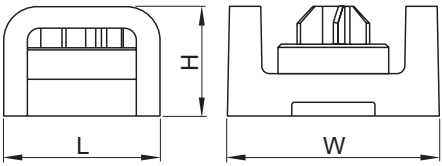
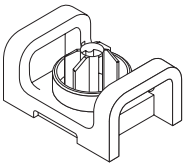
X-ECT-E MX Cable Tie Holder

Product data

Dimensions

X-ECT-E MX





Features and benefits

The X-ECT-E MX is a cable tie holder for cable fixings, optimized for use with Hilti battery-actuated fastening tool and gas tools.

General information

Material specification

Cable Tie Holder: HDPE
halogen and silicon free
light grey RAL 7035

Recommended fastening tools

GX 120-ME, GX 3-ME, BX 3-ME

Applications

Examples

Cable tie holder for cable fixings on soft & some tough concrete

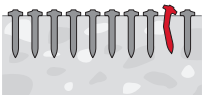
Performance data

Recommended loads (Base material: concrete)

Fastener	N_{rec} [N]	Max. cable tie width [mm]
X-ECT-E MX	0.04	11.5

Design conditions:

- Cable tie fixed symmetrically through both ears of the X-ECT-E MX fastener.
- All visible failures must be replaced.
- Predominantly static loading.
- Valid for soft and some tough concrete with strength of $f_{c,cube}$ = 25-60 N/mm^2, that may contain medium sized aggregate like granite, river rock or softer. Please refer to **Concrete Fastener Selection** section in Hilti Direct Fastening Technology Manual (DFTM).
- Long-term behaviour of X-ECT-E MX plastic material considered.



Stick rate estimation		
	Soft Concrete	Tough Concrete
X-P B3 & G3, X-GHP	85% – 98%	70% – 85%
X-C B3 & G3, X-GN	75% – 90%	55% – 70%

- The stick rate indicates the percentage of nails that were driven correctly to carry a load.
- Stick rate can vary from the above values depending on job site conditions.

Recommended loads (Base material: steel)

Fastener	N_{rec} [N]	Max. cable tie width [mm]
X-ECT-E MX	0.04	11.5

Nail recommendations

For **concrete** base material							
Fastening tool	**Nail types**	**Length [mm]**	**Tip**	**Shank Ø [mm]**	**Material**	**Hardness [HRC]**	**Coating [µm]**
BX3-ME	X-P B3 MX	17 - 24*	Long conical	3.0	Carbon steel	57.5	Zinc, 2-13
GX3-ME	X-P G3 MX					57.5	Zinc, 2-13
GX120-ME	X-GHP MX					57.5	Zinc, 2-13

*) 17mm nail recommended for tough concrete

- For the X-ECT-E MX element, only 17 mm – 24 mm pin lengths are recommended in order to ensure sufficient embedment depth.
- Premium nails (as listed above) are recommended for wall and ceiling application (soft and some tough concrete and sandlime stone, GX/BX tools). For more details regarding nail classification and concrete types, please refer to **Concrete Fastener Selection** section in Hilti Direct Fastening Technology Manual (DFTM).

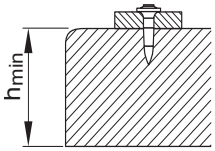
Fastening tool	**Nail types**	**Length [mm]**	**Tip**	**Shank Ø [mm]**	**Material**	**Hardness [HRC]**	**Coating [µm]**
BX3-ME	X-C B3 MX	20 - 24	Cut	3.0	Carbon steel	56.5	Zinc, 2-13
GX3-ME	X-C G3 MX	20 - 27				56.5	Zinc, 2-13
GX120-ME	X-GN MX	20 - 27				53.5	Zinc, 2-13

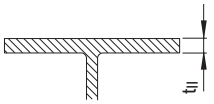
- For the X-ECT-E MX element, only 20 mm, 24 mm and 27 mm pin lengths are recommended in order to ensure sufficient embedment depth.
- Standard nails (as listed above) are recommended for floor application (soft concrete and sandlime stone, GX/BX tools). For more details regarding nail classification and concrete types, please refer to **Concrete Fastener Selection** section in Hilti Direct Fastening Technology Manual (DFTM).

For **steel** base material							
Fastening tool	**Nail types**	**Length [mm]**	**Tip**	**Shank Ø [mm]**	**Material**	**Hardness [HRC]**	**Coating [µm]**
BX3-ME	X-S B3 MX	14	Balistic	3.0	Carbon steel	57.5	Zinc, 2-13
GX3-ME	X-S G3 MX					57.5	Zinc, 2-13
GX120-ME	X-EGN MX					57.5	Zinc, 2-13

Application requirements

Thickness of base material





Concrete		Steel	
X-P B3 MX, X-P G3 MX, X-C B3 MX, X-C G3 MX X-GHP MX, X-GN MX	h_{min} = **60 mm**	X-S 14 B3 MX X-S 14 G3 MX X-EGN 14 MX	$t_{II} \geq$ **4.0 mm**

Edge distance and fastener spacing

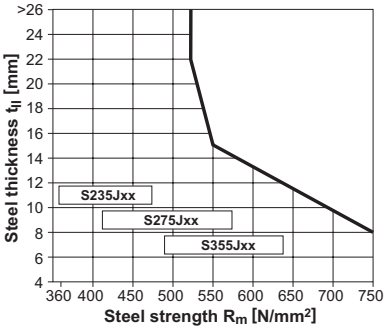
Distance to edge of concrete: c ≥ 70 mm
Min. fastener spacing on concrete: s ≥ 50 mm

Spacing along the cable tie: 50–100 cm. Adjust spacing as needed to adjust cable slag.

Corrosion information

The zinc-coated fasteners are not suitable for long-term service outdoors or in otherwise corrosive environments. For further detailed information on corrosion see relevant chapter in **Direct Fastening Principles and Technique** section.

Application limits for fastenings on steel



For fastening on steel base material

- X-EGN 14 MX
- X-S 14 B3 MX
- X-S 14 G3 MX

Fastener selection

Example of suitable cables with X-ECT-E		
Cable type	**Cable measure Ø [mm]**	**Max. no. of cable**
NYM 3x1.5	8	14
NYM 5x1.5	10	10

Fastener program

Fastener Designation	Item no.	L [mm]	W [mm]	H [mm]
X-ECT-E MX	2149227	25	17	12

Tool selection

X-GHP MX, X-GN MX, X-EGN 14 MX :	GX 120-ME
X-P G3 MX, X-C G3 MX, X-S G3 MX:	GX 3-ME
X-P B3 MX, X-C B3 MX, X-S B3 MX:	BX 3-ME

System recommendation

GX 3-ME	Gas can GC 40, GC 41 and GC 42
GX 120-ME	Gas can GC 20, GC 21 and GC 22
BX 3-ME	No gas can required

Fastening quality assurance