



X-C B4 MX,
X-C B3 MX,
X-C G3 MX,
X-C G2 MX,
X-GN MX
CONCRETE NAILS
(COLLATED)

Data Sheet

06.2024








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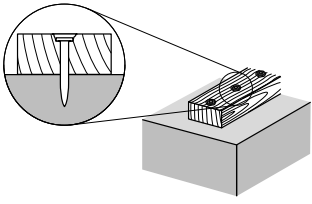
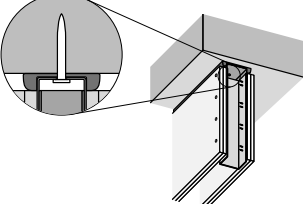
1 PRODUCT INFORMATION

1.1 Product description

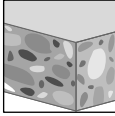
Designation	Features
X-C B4 MX	<ul style="list-style-type: none"> • Premium nail for excellent performance on soft concrete • Everyday fastening solution with cut-tip nail
	
X-C B3 MX	
	
X-C G3 MX	
	
X-C G2 MX	
	
X-GN MX	
	

2 APPLICATION CONDITIONS

2.1 Application examples

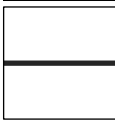
	
Wood to concrete	Deflection head track fastening (optional with sealant)

2.2 Base materials



Concrete

2.3 Load conditions



Static / quasi-static

2.4 Environmental conditions



Dry indoor



• For more details, please refer to the [Hilti Corrosion Handbook](#)

3 PRODUCT DATA

3.1 Dimensions

Technical drawing	Fastener	Head length	Shank length	Shank diameter	Head diameter
		L_h [mm]	L_s [mm]	d_s [mm]	d_h [mm]
	X-C 20 G3 MX	1.9	19	3	6.5
	X-GN 20 MX	1.9	19	3	6.5
	X-C 20 G2 MX	1.8	19.05	2.75	6.3
	X-C 20 B4 MX	1.8	20	3	6.5
	X-C 20 B3 MX	1.8	20	3	6.8
	X-C 24 B3 MX	1.9	24	3	6.5
	X-C 27 B4 MX	1.8	27	3	6.5
	X-C 27 B3 MX	1.9	27	3	6.5
	X-C 27 G3 MX	1.9	27	3	6.5
	X-GN 27 MX	1.9	27	3	6.5
	X-C 27 G2 MX	1.8	27.4	2.75	6.3
	X-C 30 B3 MX	1.9	30	3	6.5
	X-C 32 G3 MX	1.9	30	3	6.5
	X-C 32 B4 MX	1.8	32	3	6.5
	X-GN 32 MX	1.9	32	3	6.5
	X-C 36 B3 MX	1.8	36	2.75	6.3
	X-C 39 B4 MX	1.8	37.5	2.75	6.3
	X-C 39 G3 MX	1.9	38.5	2.6	5.8
	X-C 39 G2 MX	1.9	38.5	2.6	5.8
	X-GN 39 MX	1.9	38.5	2.6	5.8
X-C 45 B4 MX	1.8	45	2.75	6.3	

3.2 Material properties for carbon steel parts

Fastener	Component part	Material	Coating	Coating thickness	Hardness	Corrosivity category
				t_c [μm]	[HRC]	
X-C B4 MX	Nail	Carbon steel	Zinc coated	≥5	56.5	C1
X-C B3 MX	Nail	Carbon steel	Zinc coated	≥5	56.5	C1
X-C G3 MX	Nail	Carbon steel	Zinc coated	≥5	56.5	C1
X-C G2 MX	Nail	Carbon steel	Zinc coated	≥5	56.5	C1
X-GN 20 MX	Nail	Carbon steel	Zinc coated	≥5	53.5	C1
X-GN 27 MX	Nail	Carbon steel	Zinc coated	≥5	53.5	C1
X-GN 32 MX	Nail	Carbon steel	Zinc coated	≥5	53.5	C1
X-GN 39 MX	Nail	Carbon steel	Zinc coated	≥5	56.5	C1

• Corrosivity category according to ISO 9223

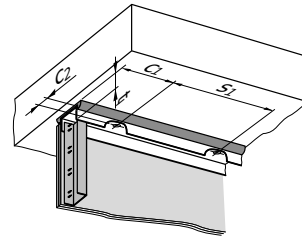
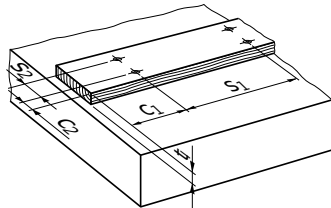
4 SYSTEM RECOMMENDATION

4.1 Tool recommendation

Fastening condition	Fastener	Tool type
Wood to concrete	X-C B3 MX	BX 3-ME, BX 3-IF, BX 3-ME (02), BX 3 (02), BX 3-L (02), BX 3-ME-22, BX 3-L-22, BX 3-22
	X-C B4 MX	BX 4-22 (01)
	X-C G2 MX	GX 2
	X-C G3 MX	GX 3-ME, GX 3
	X-GN MX	GX 120-ME, GX 120
Deflection head track fastening (optional with sealant)	X-C B3 MX	BX 3-ME, BX 3-IF, BX 3-ME (02), BX 3 (02), BX 3-L (02), BX 3-ME-22, BX 3-L-22, BX 3-22
	X-C B4 MX	BX 4-22 (01)
	X-C G2 MX	GX 2
	X-C G3 MX	GX 3-ME, GX 3
	X-GN MX	GX 120-ME, GX 120

5 APPLICATION REQUIREMENTS

5.1 Fastened material properties

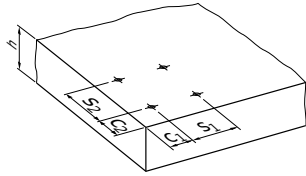


Wood to concrete

Deflection head track fastening (optional with sealant)

Fastening condition	Fastened material	Fastened material thickness	Edge distance	Edge distance	Fastener spacing distance	Fastener spacing distance
		t _f [mm]	c ₁ [mm]	c ₂ [mm]	s ₁ [mm]	s ₂ [mm]
Wood to concrete	Wood	≤25	≥100	≥22	180–800	≥80
Deflection head track fastening (optional with sealant)	Steel track, Hilti CSF-TTS or sealant	≤33.5				

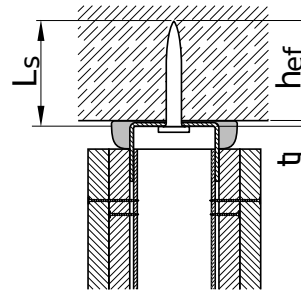
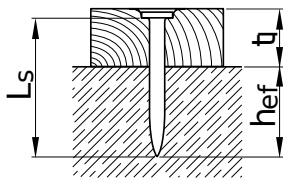
5.2 Base material properties



Fastening to concrete

Base material	Base material thickness h [mm]	Edge distance c ₁ [mm]	Edge distance c ₂ [mm]	Fastener spacing distance s ₁ [mm]	Fastener spacing distance s ₂ [mm]
Concrete	≥60	≥70	≥70	≥100	≥100

5.3 Nail length recommendation



Wood to concrete

Deflection head track fastening (optional with sealant)

Fastening condition	Fastening characteristics	Shank Length	Embedment depth	Fastened material thickness
		L _s [mm]	h _{ef} [mm]	t ₁ [mm]
Wood to concrete	Standard fastening	$L_s \geq h_{ef} + t_1$	≥14	≤25
	Flush fastening	$L_s \geq h_{ef} + t_1 - 3$	≥14	≤25
Deflection head track fastening (optional with sealant)	2 board layers	$L_s \geq h_{ef} + t_1$	≥14	≤33.5

6 PERFORMANCE DATA

6.1 Recommended loads under quasi static/static loading

Fastening condition	Base material type	Embedment depth	Tension load	Shear load
		h_{ef} [mm]	N_{rec} [kN]	V_{rec} [kN]
Wood to concrete	Soft concrete, Medium concrete	14 - < 18	0.1	0.1
	Soft concrete, Medium concrete	≥ 18	0.2	0.2
Deflection head track fastening (optional with sealant)	Soft concrete, Medium concrete	14 - < 18	0.1	0.1
	Soft concrete, Medium concrete	≥ 18	0.2	0.2

6.2 Stick rate estimation

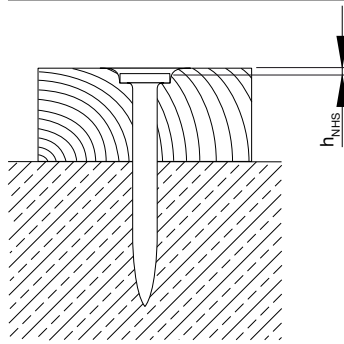
Technical drawing	Fastening condition	Base material	Stick rate estimation [%]
	Wood to concrete	Soft concrete	75-90
		Medium concrete	
	Deflection head track fastening (optional with sealant)	Soft concrete	
		Medium concrete	



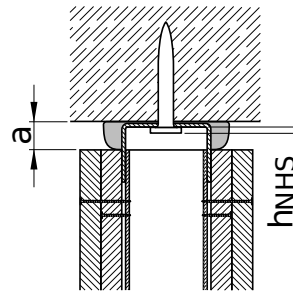
- The stick rate indicates the percentage of nails that were driven correctly to carry a load.
- Stick rate can vary from the above values depending on job site conditions.

7 QUALITY ASSURANCE

7.1 Fastening inspection



Wood to concrete



Deflection head track fastening (optional with sealant)

Fastening condition	Fastener	Deflection head gap a [mm]	Fastener standoff h _{NHS} [mm]
Wood to concrete	X-C B3 MX, X-C B4 MX, X-C G2 MX, X-C G3 MX		≤3
Deflection head track fastening (optional with sealant)	X-C 45 B4 MX	≤20	2-3



- Visible setting failures must be replaced with a new fastener, not in the same hole.
- These are abbreviated instructions which may vary by application.
- Always review/follow the instructions accompanying the product.

8 ORDERING INFORMATION

8.1 Item number and description

Designation	Item number	Description
X-C 20 B3 MX	2123993, 2246267	X-C B3 MX Concrete nails (collated)
X-C 24 B3 MX	2123994, 2314526	
X-C 27 B3 MX	2224568	
X-C 30 B3 MX	2149988, 2314527	
X-C 36 B3 MX	2149989	
X-C 20 B4 MX	2361658, 2361663, 2412651, 2412652	X-C B4 MX Concrete nails (collated)
X-C 27 B4 MX	2361659, 2361664, 2412653, 2412654	
X-C 32 B4 MX	2361660, 2361665, 2412655, 2412656	
X-C 39 B4 MX	2361661, 2361666, 2412657, 2412658	
X-C 45 B4 MX	2361662, 2361667, 2412659, 2412760	
X-C 20 G2 MX	2102013	X-C G2 MX Concrete nails (collated)
X-C 27 G2 MX	2102014	
X-C 39 G2 MX	3539617	

Designation	Item number	Description
X-C 20 G3 MX	2100955, 2100959	X-C G3 MX Concrete nails (collated)
X-C 27 G3 MX	2100956, 2101040	
X-C 32 G3 MX	2100957	
X-C 39 G3 MX	2100958, 2122633	
X-GN 20 MX	2045541, 2064004, 2071406, 226933, 340232	X-GN MX Concrete nails (collated)
X-GN 27 MX	2045540, 2064005, 2071407, 226934, 340230	
X-GN 32 MX	2045542, 2064006, 2071408, 226935, 340233	
X-GN 39 MX	2064007, 340234	



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