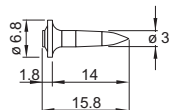


X-EGN, X-GHP, X-GN: GX Fasteners

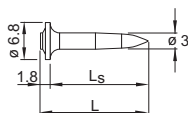
Product data

Dimensions

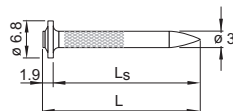
X-EGN 14



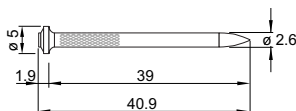
X-GHP 16/18/20/24



X-GN 20/27/32



X-GN 39



General information

Material specifications

Carbon steel shank:	X-EGN	HRC 58
	X-GHP	HRC 58
	X-GN	HRC 53.5

Zinc coating: 2–13 µm

Recommended fastening tools

GX 120, GX 120-ME

GX 100, GX 100 E

See X-EGN, X-GHP, X-GN fastener program in the next pages and Tools and equipment chapter for more details.

Approvals

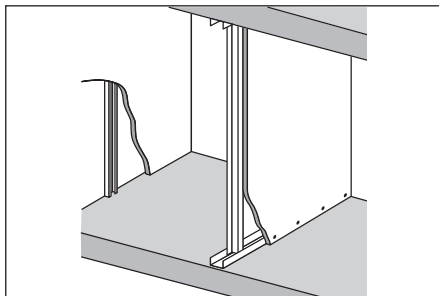
ICC-ESR 1752 (USA):	X-GN 20/27/32, X-EGN 14, X-GHP 16/18/20/24 X-GHP, X-GN
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IBMB

Note: technical data presented in these approvals and design guidelines reflect specific local conditions and may differ from those published in this handbook.

Applications

Examples



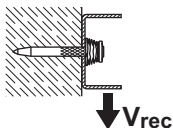
Drywall tracks to concrete and steel



Electrical applications

Load data

Recommended loads



Concrete

N_{rec} [kN]	V_{rec} [kN]	h_{ET} [mm]
0.4	0.4	≥ 27
0.3	0.3	≥ 22
0.2	0.2	≥ 18
0.1	0.1	≥ 14

Design conditions:

- Minimum 5 fastenings per fastened unit
- All visible failures must be replaced

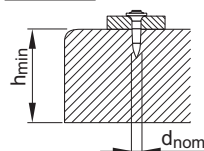
Steel

$$N_{rec} = V_{rec} = 0.4 \text{ kN}$$

Application requirements

Thickness of base material

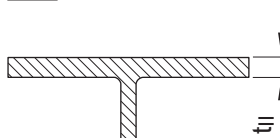
Concrete



$$h_{min} = 60 \text{ mm}$$

$$(d_{nom} = 3.0 \text{ mm})$$

Steel



$$t_l \geq 4 \text{ mm}$$

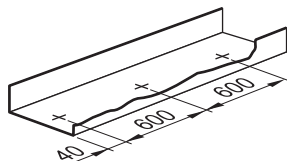
Thickness of fastened material

Wooden track: $t_l \leq 24 \text{ mm}$

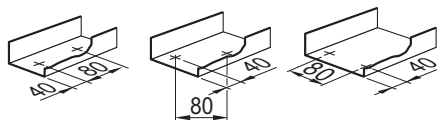
Metal track: $t_l \leq 2 \text{ mm}$

Spacing and edge distances (mm)

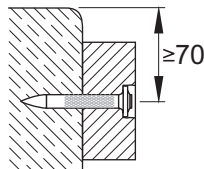
Spacing along track
(as per U.S. Gypsum Handbook)



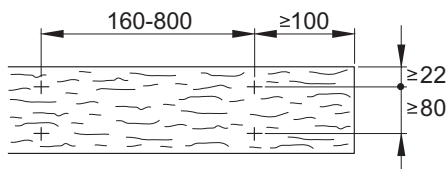
All track ends (cut-outs for doors),
secure with 2 nails



Distance to edge of concrete /
sandlime masonry



Fastener spacings on wood:

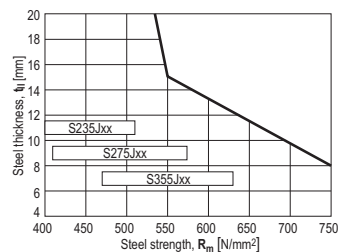


Corrosion information

The intended use only comprises fastenings which are not directly exposed to external weather conditions or moist atmospheres. For further detailed information on corrosion see relevant chapter in **Direct Fastening Principles and Technique** section.

Application limits

Steel



X-EGN 14

Fastener selection and system recommendation

Fastener selection

Fastening to concrete / sandlime masonry

	Application	Base material	
X-GN 39 MX	Wooden track ($t_f \leq 24$ mm)	Concrete/sandlime masonry	 increasing strength
X-GN 27MX	Metal track	Concrete/sandlime masonry	
X-GN 20 MX	Metal track	Concrete/sandlime masonry	
X-GHP_MX	Metal track	Concrete/sandlime masonry	

Fastening to steel

	Application	Base material	
X-EGN 14	Metal track	Steel	

Fastener program

	Item no.	L_s [mm]	L [mm]	d_{nom} [mm]
X-EGN 14 MX	340231	14	15.8	3.0
X-GHP 16 MX	2071471	16	17.8	3.0
X-GHP 18 MX	340228	18	19.8	3.0
X-GHP 20 MX	285724	20	21.8	3.0
X-GHP 24 MX	438945	24	25.8	3.0
X-GN 20 MX	340232	19	20.9	3.0
X-GN 27 MX	340230	27	28.9	3.0
X-GN 32 MX	340233	32	33.9	3.0
X-GN 39 MX	340234	39	40.9	2.6

Tool and gas can

Designation

GX 120 / GX 120 ME

with gas can GC 20, GC 21 and GC 22

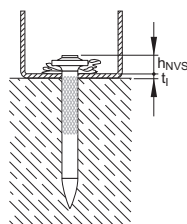
GX 100 / GX 100 E

with gas can GC 11 and GC 12 (for USA)

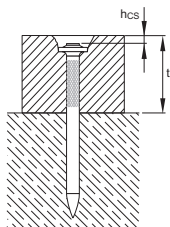
Fastening quality assurance

Fastening inspection

Fastening to concrete / sandlime masonry

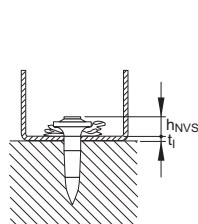


X-GN/GHP: $h_{NVS} = 2-5 \text{ mm}$



X-GN 39: $h_{CS} = 2-3 \text{ mm}$

Fastening to steel



X-EGN 14: $h_{NVS} = 4-7 \text{ mm}$

