

Loads

Highest recommended loads¹ for a single anchor.

Type		Cavity metal fixing HM								
		HM 4 x 32 S	HM 4 x 45 S	HM 5 x 37 S	HM 5 x 52 S	HM 5 x 65 S	HM 6 x 37 S	HM 6 x 52 S	HM 6 x 65 S	HM 8 x 54 SS
Thread size	[M]	M4	M4	M5	M5	M5	M6	M6	M6	M8
Installation characteristics										
Panel thickness	[mm]	3-13	16-23	6-15	7-21	20-34	6-15	7-21	17-34	7-21
Recommended load in the respective building material F_{rec}^2										
Gypsum plasterboard	9.5 mm	[kN]	0.15	-	0.15	0.15	-	0.15	0.15	0.15
Gypsum plasterboard	12.5 mm	[kN]	0.15	-	0.15	0.15	-	0.15	0.15	0.15
Gypsum plasterboard	19 mm (2 x 9.5 mm)	[kN]	-	0.25	-	0.25	-	-	0.25	0.25
Gypsum plasterboard	25 mm (2 x 12.5 mm)	[kN]	-	-	-	-	0.3	-	-	0.3
Chipboard	10 mm	[kN]	0.25	-	0.25	0.25	-	0.25	0.25	-
Chipboard	13 mm	[kN]	0.25	-	0.25	0.25	-	0.25	0.25	-
Chipboard	28 mm	[kN]	-	-	-	-	0.5	-	-	0.5
Plywood	4 mm	[kN]	0.1	-	-	-	-	-	-	-
Hardboard	3 mm	[kN]	0.1	-	-	-	-	-	-	-
Light building boards made of wood wool	16 mm	[kN]	-	0.05	-	0.05	-	-	-	0.05
Light building boards made of wood wool	25 mm	[kN]	-	-	-	-	0.05	-	-	0.05
Fibre-cement board	8 mm	[kN]	0.15	-	0.15	0.15	-	0.25	0.25	-
Gypsum fibreboard	10 mm	[kN]	0.15	-	0.15	0.15	-	0.25	0.25	-
Gypsum fibreboard	15 mm	[kN]	-	-	0.25	0.25	-	0.25	0.25	-

Highest recommended loads³ for a single anchor.

Type		Toggle and spring fixing KD									
		KD 3	KD 4	KD 5	KD 6	KD 8	KDH 3	KDH 4	KDH 5	KDH 6	KDH 8
Thread size	[M]	M3	M4	M5	M6	M8	M3	M4	M5	M8	M10
Recommended load in the respective building material F_{rec}^2											
Max. achievable recommended load ⁴	[kN]	0.35	0.50	1.50	1.90	3.20	0.05	0.10	0.17	0.32	1.00
Gypsum plasterboard	12.5 mm	[kN]	0.05	0.10	0.15	0.20	0.25	0.05	0.10	0.15	0.25
OSB panels	15 mm	[kN]	0.35	0.40	0.40	0.50	0.60	-	-	-	-
OSB panels	22 mm	[kN]	-	-	-	0.80	1.20	-	-	-	-

Highest recommended loads⁵ for a single anchor. Load values apply to the use of wood screws with the specified screw diameters.

Type		Universal plug UX					
		UX 5	UX 6	UX 6 x 50	UX 8	UX 10	
Screw diameter	Ø [mm]	4	5	5	6	8	
Recommended load in the respective building material F_{rec}^2							
Gypsum plasterboard	12.5 mm	[kN]	0.10	0.10	0.10	0.10	0.10
Gypsum plasterboard	25 mm	[kN]	0.10	0.15	0.15	0.15	0.15
Gypsum fibreboard (Fermacell)	15 mm	[kN]	0.20	0.20	0.20	0.20	0.25

Highest recommended loads⁶ for a single anchor. Load values apply to the use of chipboard screws with the specified screw diameters.

Type		Board fixing PD		
		PD 8	PD 10	PD 12
Chipboard screw	Ø [mm]	4	5	6
Recommended load in the respective building material F_{rec}^2				
Gypsum plasterboard	9.5 mm	[kN]	0.10	0.10
Gypsum plasterboard	12.5 mm	[kN]	0.10	0.15
Gypsum plasterboard	2 x 12.5 mm	[kN]	0.15	0.15
Gypsum fibreboard	12.5 mm	[kN]	0.20	0.30
Plywood	25 mm	[kN]	0.15	0.80
Chipboard	16 mm	[kN]	0.25	0.25

Highest recommended loads⁶ for a single anchor. Load values apply to the use of chipboard screws with the specified screw diameters.

Model		Gypsum plasterboard fixing GK / GKM	
Chipboard screw	Ø [mm]	4.0 - 5.0	
Gypsum plasterboard	9.5 mm	0.07	
Gypsum plasterboard	12.5 mm	0.08	
Gypsum plasterboard	2 x 12.5 mm	0.11	

¹ Contains safety factor 3.

² Applies to tension load, shear load and diagonal pull under each angle.

³ Contains safety factor 4.

⁴ If the base material cannot fail. With KDH, the bending of the hook is decisive.

⁵ Contains safety factor 7.

⁶ Required safety factor taken into account.

What are panel building materials?



Panel building materials are thin-walled materials that are often only of relatively low strength – e.g. gypsum plasterboards such as "Rigips", "Knauf" and "Norgips"; gypsum fibreboards such as "Fermacell" and "Rigicell"; or chipboard, hard fibre boards, plywood, etc. Special fixings must be selected for optimum reinforcement: so-called cavity fixings. These are plastic or metal fixings that expand on the reverse side. They grip with form-locking and anchor directly on the reverse side of the panel in the cavity. As such, special fixings should be used for the best anchorage in panel building materials.

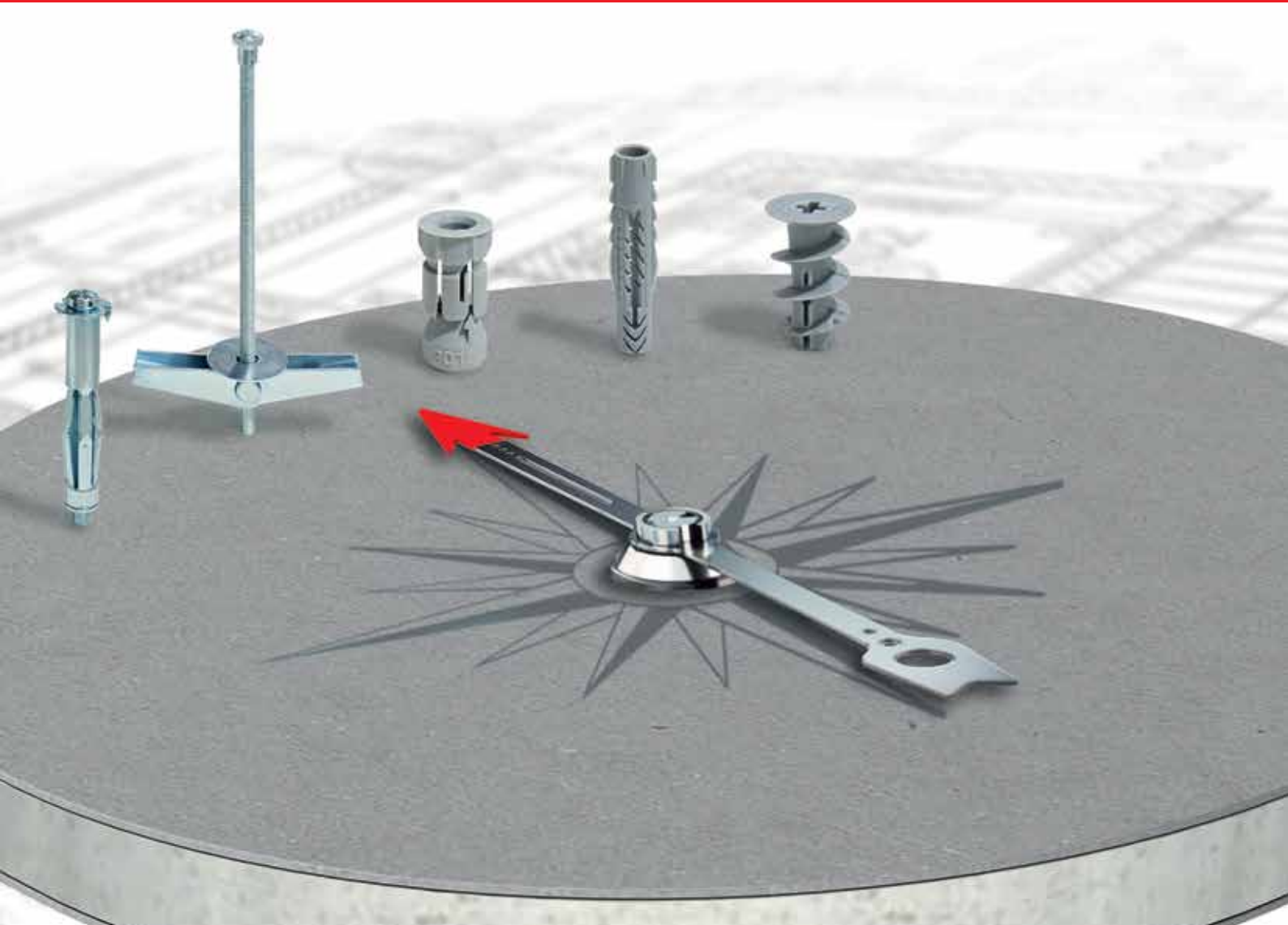
For example: HM, PD, KD, GK/GKM or UX

Our all-round service for you.



We are a reliable partner, one that will stand by your side and address your individual requirements with advice and action:

- Our products range from chemical systems and steel anchors to plastic anchors.
- Competence and innovation through own research and development.
- Global presence and active sales service in more than 100 countries.
- Qualified application-specific advice for economic installation solutions that are compliant with directives. If need be we are there for you – even at the construction site.
- Training measures (some with certification) at your premises or at the fischer ACADEMY.
- Construction and design software for challenging fixings.



fischer fixing compass **Panel building materials.**



fischer 
innovative solutions

Fastening simply and safely in panel building materials.

Cavity metal fixing HM

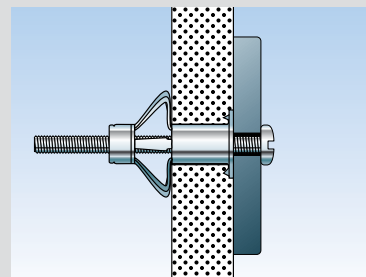
Our strongest solution for panel building materials.

Relative tension load level
for gypsum plasterboard 12.5 mm: 100 %



fischer cavity metal anchor HM – the expansion arms expand behind the panel, thus ensuring the secure fixing of heavy loads

- Highest loads due to the large coverage of the expansion arms behind the panel
- Installation can either be completed by hand, with a battery operated screwdriver, or using the fischer installation pliers
- Pre-assembled set comprising metal anchor and screw or angle hook – suitable for all panel building materials from 3 to 50 mm
- The fixing should be selected based on the thickness of the panel building material
- The metric internal thread allows for the repeated loosening and fixing of the attachment



Versions



Cavity metal anchor
HM-S with metric screw



Cavity metal anchor
HM-SS with hexagonal
screw



Cavity metal anchor HM-H
with angle hook

Type of installation



Toggle and spring fixing KD

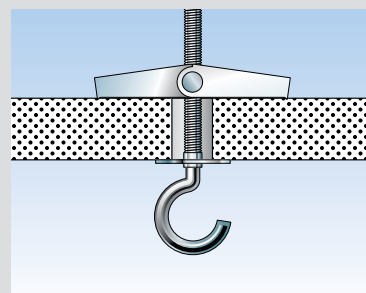
The cavity fixing for ceilings made from panel building materials.

Relative tension load level
for gypsum plasterboard 12.5 mm: 100 %



fischer toggle and spring fixing KD – especially for the ceiling for a simple and secure installation with the highest load level

- Highest loads due to the large coverage of the transition beams on the panel
- The long thread of the toggle fixing allows for use with various panel thicknesses
- Simple installation – the toggle fixing is placed in the drill hole by hand and flips open independently
- Pre-assembled set comprising toggle fixing and threaded rod or angle hook – suitable for all panel building materials from 3 to 69 mm
- Surface-flush removal



Versions



Spring fixing KD 3+4 / KDH 3+4
with thread in various lengths, with screw
head or hook



Toggle fixing KD 5+6+8 / KDH 5+6+8
with thread in various lengths, with nut or
hook

Type of installation



Board fixing PD

The expansion plug for limited space.

Relative tension load level
for gypsum plasterboard 12.5 mm: **65 %**



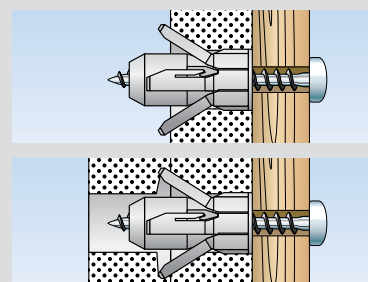
fischer board fixing PD – the short, powerful expansion zone requires only a small amount of space

- Medium loads thanks to expansion in pressure-resistant panels and compression in the anchorage area in the case of softer panels (e.g. gypsum plasterboard)
- The fixing requires only a small amount of space behind the panel building material – as such, the PD is ideal for affixed gypsum plasterboard during renovation works
- Easy screwing in of the screw thanks to the pre-formed thread – good setting sensation, the anchor noticeably rotates

Versions



Board fixing PD for the use of standard chipboard screws in gvz. and A4



Type of installation



Universal plug UX

The universal solution in panel building materials.

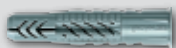
Relative tension load level
for gypsum plasterboard 12.5 mm: **65 %**



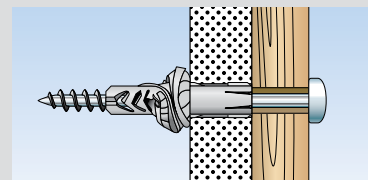
fischer universal fixing UX – the universal expansion part knots behind the panel and adapts ideally to the substrate

- Good load-bearing capacity thanks to the knotting of the expansion part in the cavity
- Quick and easy installation – use UX R with edge to prevent the fixing from being pushed in too far
- Plastic fixing suitable for all panel building materials when combined with wood or chipboard screws

Versions



Universal fixing UX with or without edge for the use of screws, hooks and eyes in gvz. and A4



Type of installation



Gypsum plasterboard fixing GK/GKM

The simple gypsum plasterboard fixing for a quick installation.

Relative tension load level
for gypsum plasterboard 12.5 mm: **55 %**



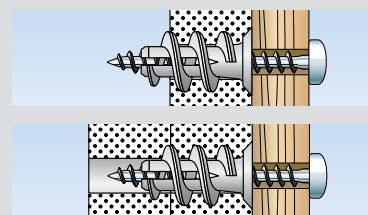
fischer gypsum plasterboard GK/GKM – the sharp, self-cutting thread allows for a quick and secure fixing in gypsum plasterboard

- Good load-bearing capacity thanks to the screw principle in the gypsum plasterboard
- The self-cutting thread cuts into the gypsum plasterboard and allows for a quick and easy installation by hand
- Short fixing length – for limited space behind the gypsum plasterboard
- Easy to remove fully

Versions



Gypsum plasterboard fixing GK (plastic) / gypsum plasterboard fixing GKM (metal) for the use of screws and hooks in gvz. and A4













Type of installation



Gypsum plasterboard GK for use with setting tool (included)



The right fixing for every application.

Designation	fischer cavity metal fixing HM	fischer toggle fixing KD	fischer panel fixing PD	fischer universal fixing UX	fischer gypsum plaster-board fixing GK/GKM
Illustration					
Relative tension load level for gypsum plasterboard 12.5 mm	100 % with HM 6x37: 0.15 kN (15 kg) 	100 % with KD 5: 0.15 kN (15 kg) 	65 % with PD10: 0.10 kN (10 kg) 	65 % with UX 6: 0.10 kN (10 kg) 	55 % with GK/GKM: 0.08 kN (8 kg) 
Maximum load for the fixing ¹	HM 5x65 S: 0.50 kN	KD 8: 1.20 kN	PD 12: 0.80 kN	UX 10: 0.25 kN	GK/GKM: 0.11 kN
Suitability for the following types of panel materials	<ul style="list-style-type: none">- Gypsum plasterboard- Chipboard- Plywood boards- Hardboard- Light building boards made of wood wool- Gypsum fibreboard- OSB panels	<ul style="list-style-type: none">- Gypsum plasterboard- Chipboard- Plywood boards- Hardboard- Gypsum fibreboard- OSB panels	<ul style="list-style-type: none">- Gypsum plasterboard- Chipboard- Plywood boards- Gypsum fibreboard- OSB panels	<ul style="list-style-type: none">- Gypsum plasterboard- Chipboard- Plywood boards- Hardboard- Gypsum fibreboard- OSB panels	<ul style="list-style-type: none">- Gypsum plasterboard
Use on ceiling	Yes	Yes	No	No	No
Application outdoors	No	No	Yes, with screw A4	Yes, with screw A4	Yes, with screw A4
Pre-positioned installation	Yes	Yes	Yes	Yes	Yes
Push-through installation	No	No	No	Yes	No
Type of connection	Metric screw, angle hook	Metric screw, round hook	Chipboard screw	Chipboard screw	Chipboard screw
Usage length (conditional)	up to 30 mm	up to 63 mm	screw length	screw length	screw length
Min. cavity depth for 12.5 mm panel thickness	19 mm	27 mm	23 mm	23 mm	13 mm

Please note

Installation aids	Installation pliers (optional)	No	No	No	Setting tool for GK
Installation through tiles	Yes	Yes	No	Yes	No
Removal	Surface-flush removal	Yes	Yes	Yes	Yes

Application examples

<ul style="list-style-type: none">- Lightweight shelves- Lightweight mirror cabinets- Sub-structures- Curtain rails- Lightweight cabinets- Bathroom cabinets- Cabled lighting	On the ceiling: <ul style="list-style-type: none">- Lighting- Curtain rails- Decorations	<ul style="list-style-type: none">- Pictures- Lighting- Cornicing- Lightweight mirrors- Roller blinds- Cosmetic mirrors	<ul style="list-style-type: none">- Pictures- Lighting- Cornicing- Lightweight mirrors- Roller blinds- Cosmetic mirrors	<ul style="list-style-type: none">- Pictures- Wall clocks- Noticeboards- Decorations- Lighting- Electrical installations
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¹⁾ The load-bearing properties of the base material are not considered.