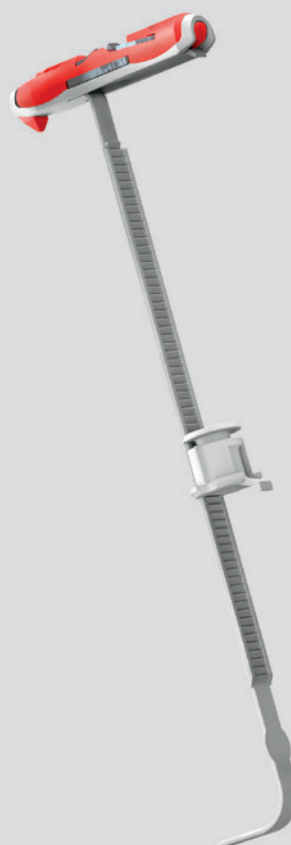




# fischer DUOTEC

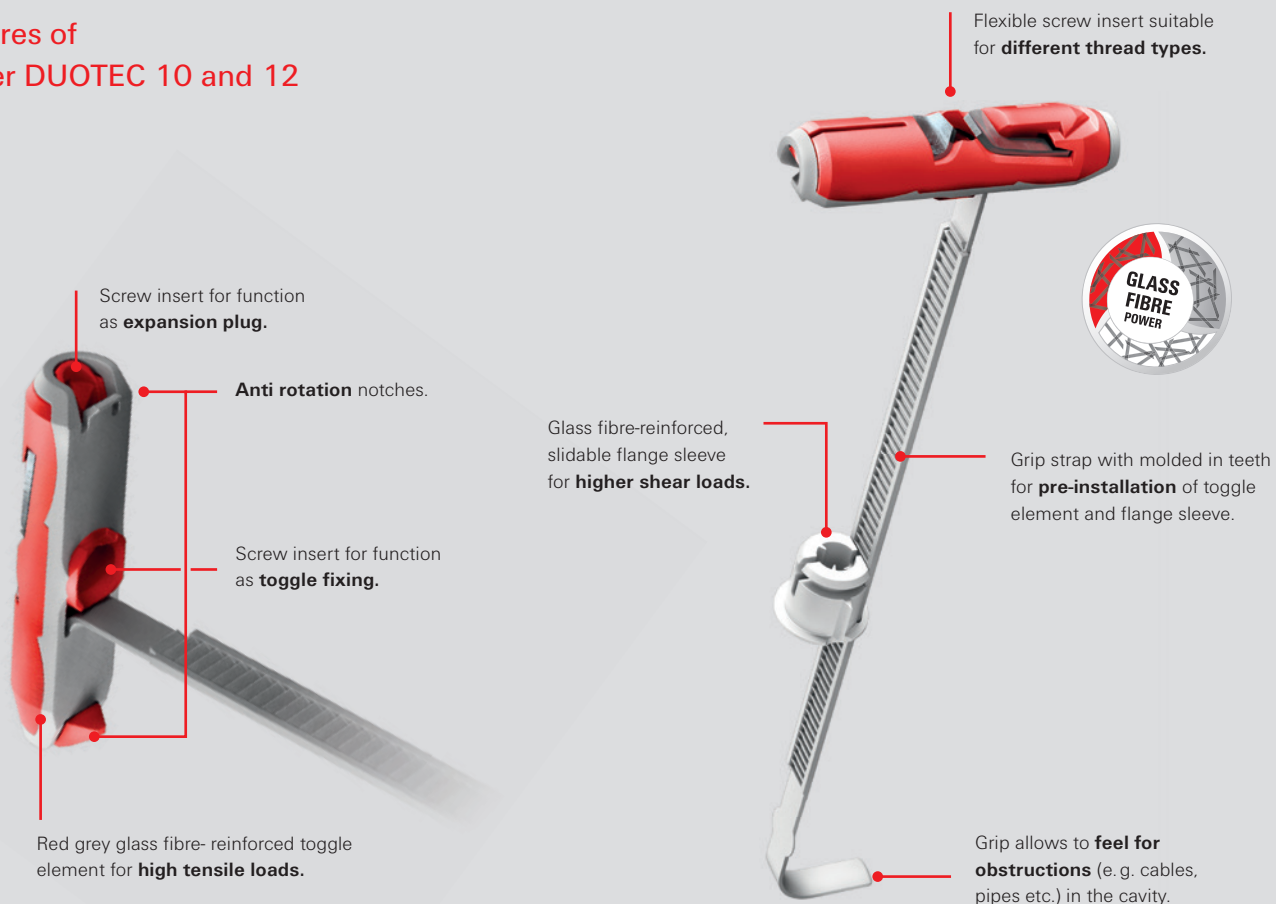
Easy to install nylon toggle for high loads  
in all panel building materials



# fischer DUOTEC 10

## Easy to install nylon toggle for high loads in gypsum plasterboard

### Features of fischer DUOTEC 10 and 12



### Your advantages at a glance

- Flexible screw insert allows for screws and hooks with different thread types to be used.
- Glass fibre-reinforced plastics and a metal skeleton insert (fischer DUOTEC 12) allow the toggle to handle high tensile and transverse loads in all panel building materials.
- Soft grey nylon contact surface distributes the load over the panel surface, thereby minimising any weakening of the supporting building material.
- Standard drill hole diameters and a short toggle element for easy installation in narrow cavities, including use in cavities with insulation.
- White flange sleeve with snap function allows the toggle to be pre-installed quickly and securely in the drill hole prior to fitting the screw.
- Scale on the grip strap (fischer DUOTEC 12) helps to determine the necessary screw length (scale value + 20 mm).



# fischer DUOTEC 12

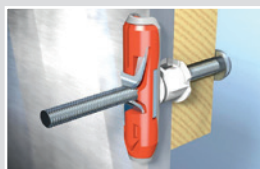
Easy to install nylon toggle with metal insert for high loads in all panel building materials

## Additional features of fischer DUOTEC 12



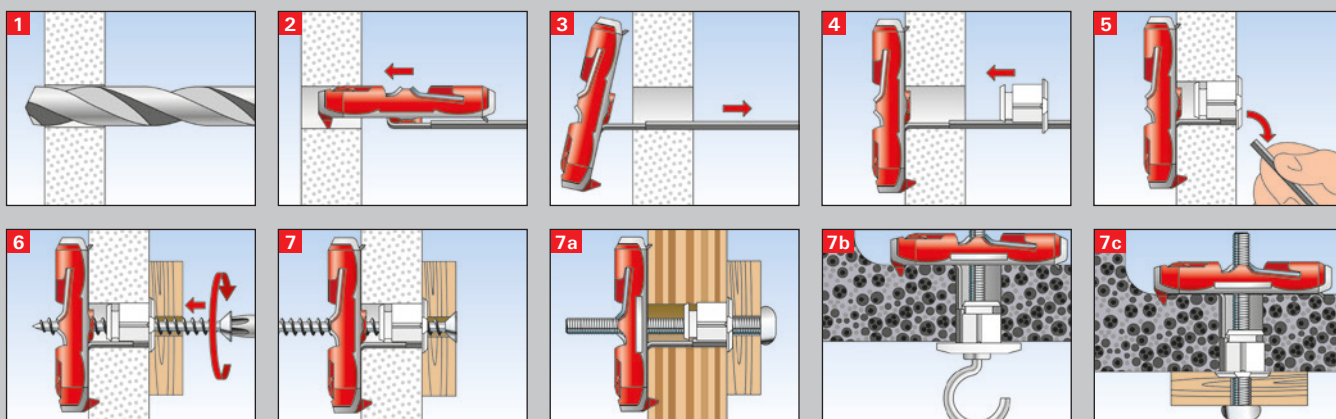
## Functioning

- The fischer DUOTEC is designed for pre-positioned installation.
- Simple installation with a standard diameter 10 or 12 mm drill bit.
- The short toggle element makes it suitable for narrow and even with mineral wool insulated cavities. Note the length of the toggle element!
- Functions like an expansion plug in solid building materials such as concrete or wood. Note, not with metric screws!
- Flexible screw insert allows for the use of wood, chipboard and metric screws and hooks.

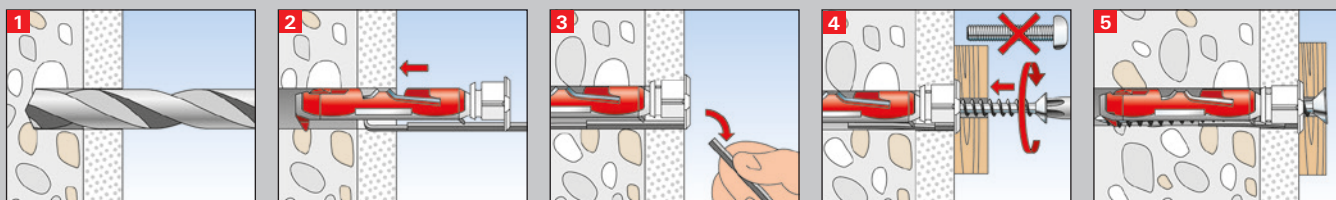


# Installation and recommendation

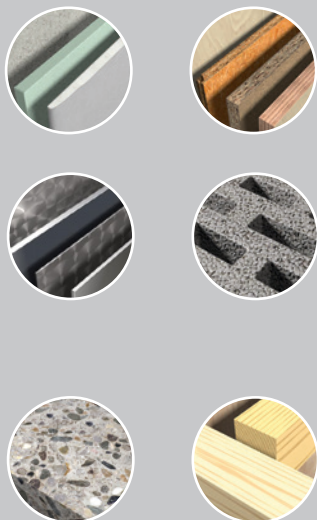
## fischer DUOTEC – Installation in panel building materials and cavities



## fischer DUOTEC – Installation hitting in solid materials



### Recommendation



#### ■ Suitable for all panel construction materials, such as:

- Gypsum plasterboard
- Gypsum fibreboard
- Wooden panels, such as OSB boards, chipboard, MDF sheets and plywood boards
- Steel panels
- Plastic boards
- Hollow blocks made from concrete

#### ■ Also suitable for drill holes hitting solid materials, such as:

- Concrete
- Wood

### Test mark



### Product family





# Applications

## Applications



Kitchen cabinets



Wall cabinets



Washbasins



Handrails



Wardrobes



Radiators



Lamps



Mirrors



Shelves



Pictures

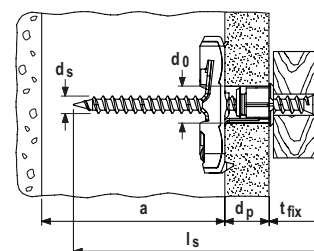
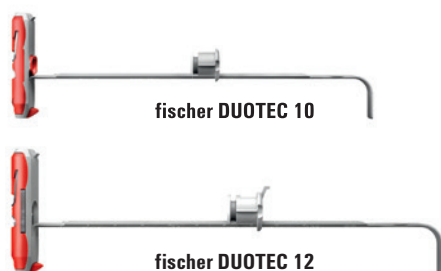


Tv consoles



Hanging baskets

# Range



## Technical data for board materials

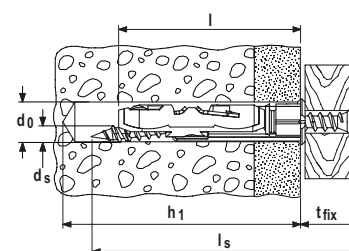
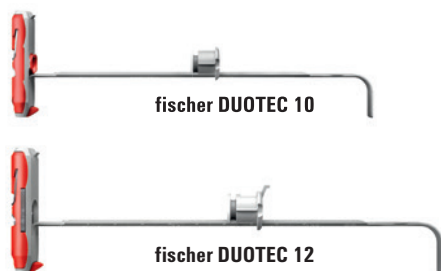
Item	Art.-No.	Drill hole diameter $d_0$ [mm]	Min. panel thickness $d_p$ [mm]	Max. panel thickness $d_p$ [mm]	Min. cavity depth $a$ [mm]	Screw diameter $d_s$ [mm]	Screw length $l_s$ [mm]	Sales unit [pcs]
<b>fischer DUOTEC 10</b>	537258	10	9,5	55	40	4,5 - 5	$\geq d_p + t_{fix} + 20$	50
<b>fischer DUOTEC 10 S</b>	537259 <sup>1)</sup>	10	9,5	55	40	5	70	25
<b>fischer DUOTEC 10 S PH</b>	539025 <sup>2)</sup>	10	9,5	55	40	5	70	25
<b>fischer DUOTEC 12</b>	542796	12	9,5	55	50	5-6 / M6	$\geq d_p + t_{fix} + 20$	10
<b>fischer DUOTEC 12 S PH</b>	542797 <sup>3)</sup>	12	9,5	55	50	M6	70	10
<b>fischer DUOTEC 12 RH</b>	542798 <sup>4)</sup>	12	9,5	55	50	5,5	55	10

<sup>1)</sup> DUOTEC S - with chipboard screw countersunk head

<sup>2)</sup> DUOTEC S PH - with chipboard screw panhead

<sup>3)</sup> DUOTEC S PH - with machine screw panhead

<sup>4)</sup> DUOTEC RH - with screw with round hook



## Technical data for solid materials

Item	Art.-No.	Drill hole diameter $d_0$ [mm]	Min. drill hole depth $h_1$ [mm]	Screw diameter $d_s$ [mm]	Screw length $l_s$ [mm]	Anchor length $l$ [mm]	Max. fixture thickness $t_{fix}$ [mm]	Sales unit [pcs]
<b>fischer DUOTEC 10</b>	537258	10	$l_s + 10$	4,5 - 5	$\geq t_{fix} + 60$	50	$l_s - 60$	50
<b>fischer DUOTEC 10 S</b>	537259	10	80	5	70	50	10	25
<b>fischer DUOTEC 10 S PH</b>	539025	10	80	5	70	50	10	25
<b>fischer DUOTEC 12</b>	542796	12	80	5-6 / M6	$\geq t_{fix} + 70$	58	$l_s - 70$	10
<b>fischer DUOTEC 12 S PH <sup>1)</sup></b>	542797	—	—	—	—	—	—	10
<b>fischer DUOTEC 12 RH</b>	542798	12	80	5,5	55	58	—	10

<sup>1)</sup> Installation with panhead screws in solid construction materials not possible.

# Loads

## Nylon toggle fischer DUOTEC

Highest recommended loads<sup>1) 4)</sup> for a single anchor.

Type		fischer DUOTEC 10				fischer DUOTEC 12			
		Chipboard screw		Metrical screw	fischer Hook	Chipboard screw		Metrical screw	fischer Hook
Screw diameter	[mm]	4,5	5	5	5	5	6	6	5,5
Recommended loads in the respective base material $F_{rec}^{2)}$ for a span in the construction $b = 625$ mm									
Gypsum plasterboard	9,5 mm	[kN]	0,17	0,17	0,17	0,17	0,17	0,17	0,17
Gypsum plasterboard	12,5 mm	[kN]	0,20	0,20	0,20	0,20	0,20	0,20	0,20
Gypsum plasterboard	2 x 12,5 mm	[kN]	0,43	0,43	0,43	0,43	0,43	0,43	0,43
Gypsum fibreboard	12,5 mm	[kN]	0,51	0,51	0,51	0,51	0,51	0,51	0,50 <sup>3)</sup>
Chipboard	16 mm	[kN]	0,71	0,71	0,71	0,75	0,80	0,80	0,50 <sup>3)</sup>
OSB board	18 mm	[kN]	0,75	0,75	0,75	0,75	1,30	1,20	0,50 <sup>3)</sup>
Recommended loads in the respective base material $F_{rec}^{2)}$ for a span in the construction $b = 120$ mm									
Gypsum plasterboard	9,5 mm	[kN]	0,20	0,20	0,20	0,20	0,20	0,20	0,20
Gypsum plasterboard	12,5 mm	[kN]	0,36	0,36	0,36	0,36	0,36	0,36	0,20
Gypsum plasterboard	2 x 12,5 mm	[kN]	0,59	0,59	0,59	0,70	0,80	0,80	0,50 <sup>3)</sup>
Gypsum fibreboard	12,5 mm	[kN]	0,75	0,75	0,75	0,80	1,10	1,10	0,50 <sup>3)</sup>
Chipboard	16 mm	[kN]	0,75	0,75	0,75	0,80	1,40	1,30	0,50 <sup>3)</sup>
OSB board	18 mm	[kN]	0,75	0,75	0,75	0,80	1,50	1,40	0,50 <sup>3)</sup>
Recommended loads in solid building materials $F_{rec}^{2)}$									
Concrete	$\geq C20/25$	[kN]	0,45	0,75	—	0,40	0,75	—	0,30
Wood		[kN]	0,30	0,75	—	0,20	0,65	—	0,30
Recommended loads in the respective base material $F_{rec}^{2)}$									
Hollow block of lightweight aggregate concrete 'Sepa Parpaing'	$fb \geq 8$ N/mm <sup>2</sup>	[kN]	—	—	—	0,65	1,00	1,00	0,50 <sup>3)</sup>
Pre-stressed hollow-core concrete slabs			—	—	—	1,00	1,40	1,30	0,50 <sup>3)</sup>
Hollow block of lightweight aggregate concrete Hbl acc. EN 771-3	$fb \geq 2$ N/mm <sup>2</sup>	[kN]	—	—	—	0,90	1,00	1,00	0,50 <sup>3)</sup>

<sup>1)</sup> Required safety factors are considered.

<sup>2)</sup> Valid for tensile load, shear load and oblique load under any angle.

<sup>3)</sup> Bending of the hook is decisive. Only for tension load.

<sup>4)</sup> The recommended loads are reference values and depending to the building material and the workmanship. The values are only valid for the given screw diameter.

# fischer FIXPERIENCE

## The design and information software suite



- The modular design program includes engineering software and application modules.
- The software is based on international design standards (ETAG 001 and EC2, such as EC1, EC3 and EC5), including the national application documents. All common force and measurement units are available.
- Incorrect input will be recognized and the software gives tips to get a correct result. This ensures a safe and reliable design every time.
- The graphical display can easily be rotated through 360°, panned, tilted or zoomed as required.
- The 3D display gives a detailed and realistic image.
- The "live update" feature helps to keep the program up to date ensuring you are always working with the latest version.
- Free download and updates at [www.fischer.de/fixperience-en](http://www.fischer.de/fixperience-en)

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We are available to you at any time as a reliable partner to offer technical support and advice:

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- Global presence and active sales service in over 100 countries.
- Qualified technical consulting for economical and compliant fastening solutions. Also on-site at the construction site if requested.
- Training sessions, some with accreditation, at your premises or at the fischer ACADEMY.
- Design and construction software for demanding applications.

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FIXING SYSTEMS



AUTOMOTIVE SYSTEMS



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