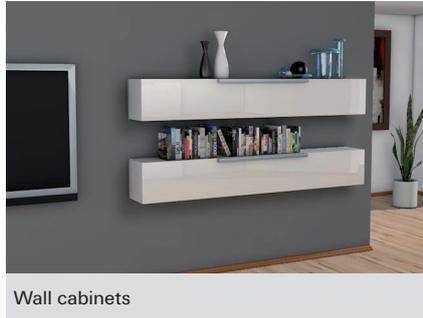
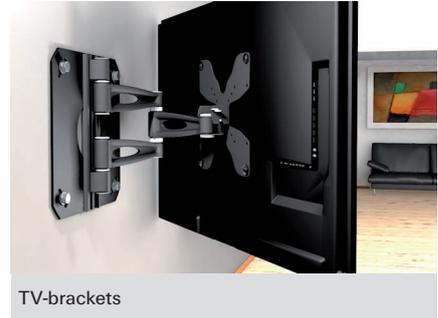


## The duo of power and intelligence



Wall cabinets



TV-brackets

General fixings 6

### BUILDING MATERIALS

- Concrete
- Solid brick
- Solid sand-lime brick
- Aerated concrete
- Vertically perforated brick
- Perforated sand-lime brick
- Plasterboard
- Gypsum plasterboard and gypsum fibreboards
- Hollow blocks made from lightweight concrete
- Cavity floor slabs made from bricks and concrete or similar
- Natural stone
- Chipboard
- Solid panel made from gypsum
- Solid brick made from lightweight concrete

### CERTIFICATES



### ADVANTAGES

- Two component materials for top load values and intelligent functioning (expansion, folding, knotting), depending on the substrate.
- Great feedback (feel-good-factor) of the plug. You can feel exactly when the plug is installed perfectly.
- The short plug length ensures fast fixing without deep drilling.
- The narrow plug rim prevents slipping into the drill hole.
- The serrated anti-rotation feature interlock in the building material and prevents rotation in the drill hole during installation.

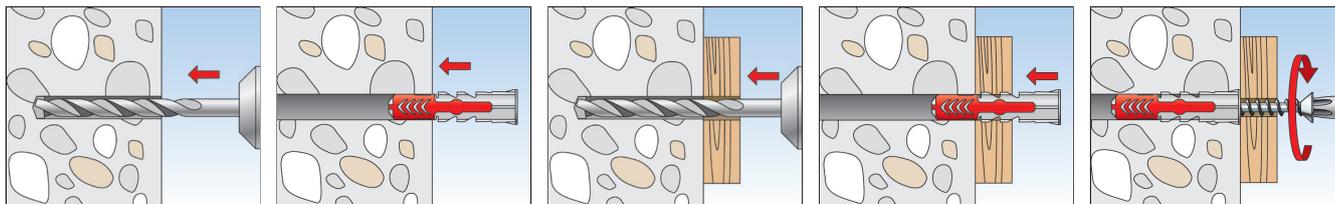
### APPLICATIONS

- TV consoles
- Lighting
- Shelves
- Mirror cabinets
- Letter boxes
- Pictures
- Fixing blinds
- Curtain rails
- Wash basin fixings
- Plumbing and heating fixings
- Bath and toilet installations
- Wall cabinets
- Range hood

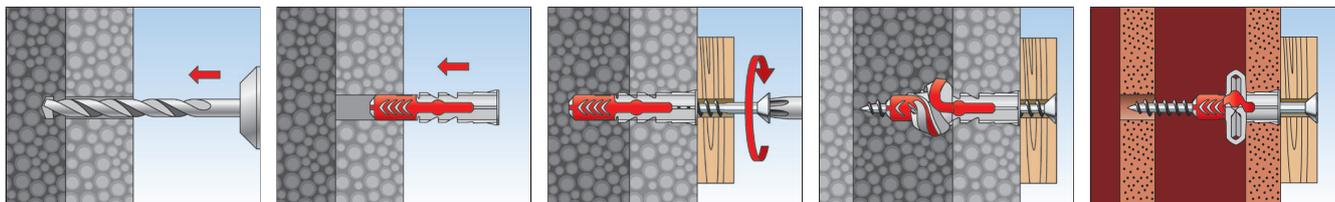
### FUNCTIONING

- The DUOPOWER is suitable for pre-positioned and push-through installation.
- The duo of two different materials and its multiple functional abilities (expanding, folding, and knotting) extend the range of applications to additional materials with top loads.
- Suitable for sheet metal, wood, chipboard and LAG screws.
- The required screw length is given by the plug length + fixture thickness + 1x the screw diameter.
- In the case of fixing boards, the threadless part of the screw must not be longer than the fixture.
- The edge distance must be at least one plug length.

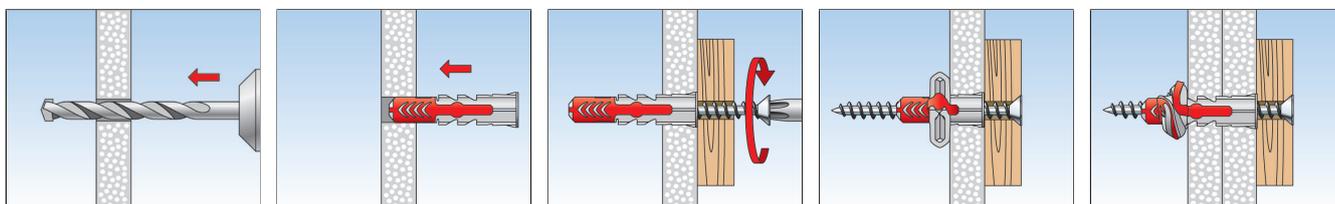
## INSTALLATION IN SOLID BUILDING MATERIALS



## INSTALLATION IN HOLLOW BUILDING MATERIALS



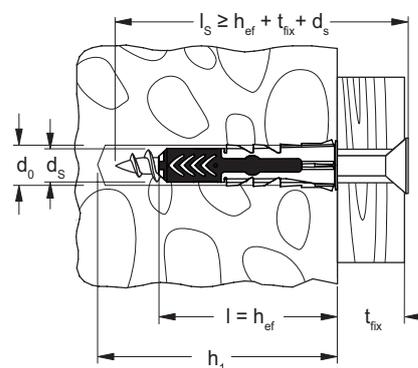
## INSTALLATION IN PANEL BUILDING MATERIALS



## TECHNICAL DATA



DUOPOWER



Item	without screw	with screw	Drill diameter $d_0$ [inch]	Min. drill hole depth for pre-positioned installation $h_1$ [inch]	Effect. anchoring depth $h_{ef}$ [inch]	Anchor length $l$ [inch]	Max. fixture thickness $t_{fix}$ [inch]	Min. bolt penetration $l_{E,min}$ [inch]	Sheet metal or wood screws $d_s \times l_s$ [inch]	Drive	Sales unit [pcs]
	Art.-No.	Art.-No.									
DUOPOWER 3/16"	548571	—	3/16	1 3/8	1	1	—	1 1/8	# 4 - 6	—	100
DUOPOWER 1/4"	548572	—	1/4	1 5/8	1 3/16	1 3/16	—	1 3/8	# 6 - 10	—	100
DUOPOWER 5/16"	548573	—	5/16	2	1 5/8	1 5/8	—	1 7/8	# 8 - 12	—	100
DUOPOWER 3/16"	—	548574	3/16	1 5/8	1	1	3/8	1 1/8	# 6 x 1 1/2	PH 2	50
DUOPOWER 1/4"	—	548575	1/4	2	1 3/16	1 3/16	3/8	1 3/8	# 8 x 1 3/4	PH 2	50
DUOPOWER 5/16"	—	548576	5/16	2 3/4	1 5/8	1 5/8	5/8	1 7/8	# 10 x 2 1/2	PH 2	50

## LOADS

### DUOPOWER inch

Allowable Capacities<sup>1) 2)</sup> for a single anchor.

Type		DUOPOWER 3/16"		DUOPOWER 1/4"		DUOPOWER 5/16"	
Sheet Metal Screw	#	4 - 6		6 - 10		8 - 12	
<b>Recommended loads in the respective base material F<sub>rec</sub></b>		<b>Tension</b> <sup>3)</sup>	<b>Shear</b> <sup>4)</sup>	<b>Tension</b> <sup>3)</sup>	<b>Shear</b> <sup>4)</sup>	<b>Tension</b> <sup>3)</sup>	<b>Shear</b> <sup>4)</sup>
Gypsum plasterboard	1/2" [lbf]	25	35	30	45	35	55
Concrete Hollow Block	[lbf]	35	115	55	200	60	270
Solid Concrete <sup>5)</sup>	[lbf]	50	115	100	200	115	325

<sup>1)</sup> Allowable load capacities listed are calculated using an applied safety factor of 4.0.

<sup>2)</sup> The loads are based on the largest possible screw diameter.

<sup>3)</sup> The load data are valid for tension and combined tension and shear load.

<sup>4)</sup> The load data are valid only for shear load.

<sup>5)</sup> Solid concrete compression strength  $f_c \geq 4000$  psi.