

WIT-REBAR

Post-installed REBAR solutions





PASSION FOR WORK

DEAR WÜRTH CUSTOMER,

Your passion is our passion. This is why we want to support you in your daily work at all times. It is our objective to be on your side, as powerful and reliable partner and to do our bit in helping with your work.

Your passion is our passion. **PASSION FOR QUALITY, PASSION FOR PERFORMANCE, PASSION FOR PERFECTION AND GOOD WORK.** The present brochure shows you a selection of high-quality products that will help you to achieve your goals and live up to your passion.

Please get in touch with your contacts at Würth, if you have any questions regarding products, systems or services.

Best regards from your partner,
The PASSION FOR WORK Team



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WHAT DOES WIT-REBAR STAND FOR?

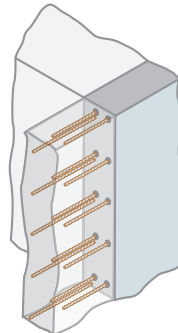
The term **WIT-REBAR** refers to the use of post-installed reinforcing bars in combination with Würth's injection mortars to mimic the function of cast-in-place steel reinforcement in concrete. **REBAR** applications are used to combine new and existing concrete elements in either new or renovation projects.

For proper and approved use, a responsible engineer is required to perform the structural design and deliver the design drawings of the post-installed **REBAR** application. Our Würth Technical Software provides a **REBAR** module for engineers to design their post-installed rebar application according to EN 1992-1-1. Our **REBAR** services also include the delivery of the injection systems and system components in addition to providing direct support for our customers on the construction site.

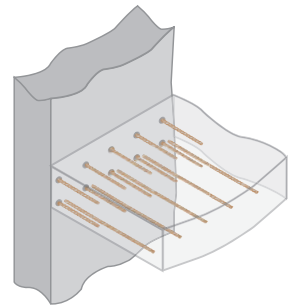
We are constantly optimizing and improving our systems to enable our customers to use **REBAR** products in the best and simplest way.

In this brochure, you will find information on areas of application, advantages, properties, installation instructions, and system components.

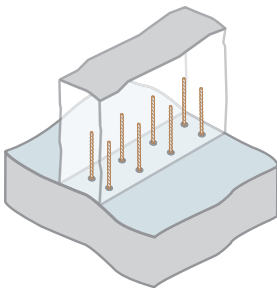
REBAR APPLICATIONS



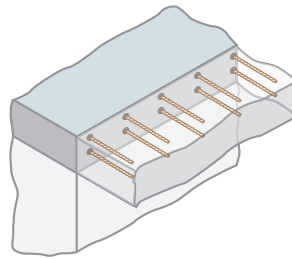
Wall extension



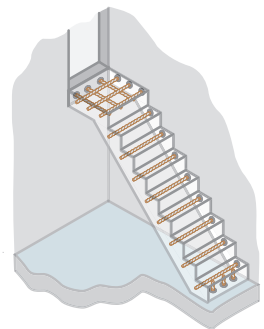
Slab-to-wall connection



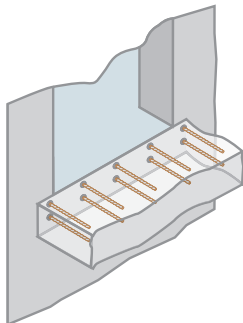
Wall-to-slab connection



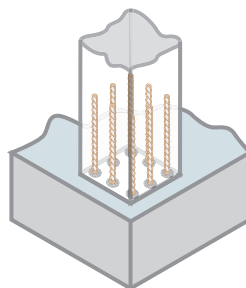
Slab-to-slab connection



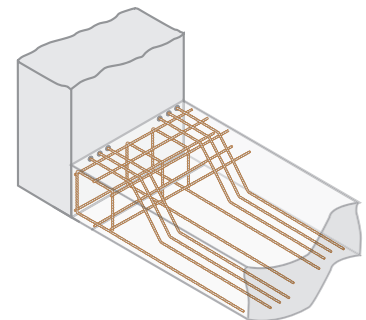
Stairway connection



Balcony extension



Column extension



Diaphragm walls

WIT-REBAR SYSTEMS

SHORT CURING TIME

LONG CURING TIME

HIGH PERFORMANCE

WIT-UH 300

Cartridge sizes:

320 ml

420 ml

825 ml

Art. No. 5918 500 320

Art. No. 5918 500 420

Art. No. 5918 503 825



WIT-PE 1000

Cartridge sizes:

440 ml

585 ml

1400 ml

Art. No. 5918 605 440

Art. No. 5918 605 585

Art. No. 5918 605 140



STANDARD

WIT-VM 250

Cartridge sizes:

330 ml

420 ml

825 ml

Art. No. 0903 450 202

Art. No. 0903 450 205

Art. No. 0903 450 206



WIT-PE 500

Cartridge sizes:

385 ml

585 ml

1400 ml

Art. No. 0903 480 001

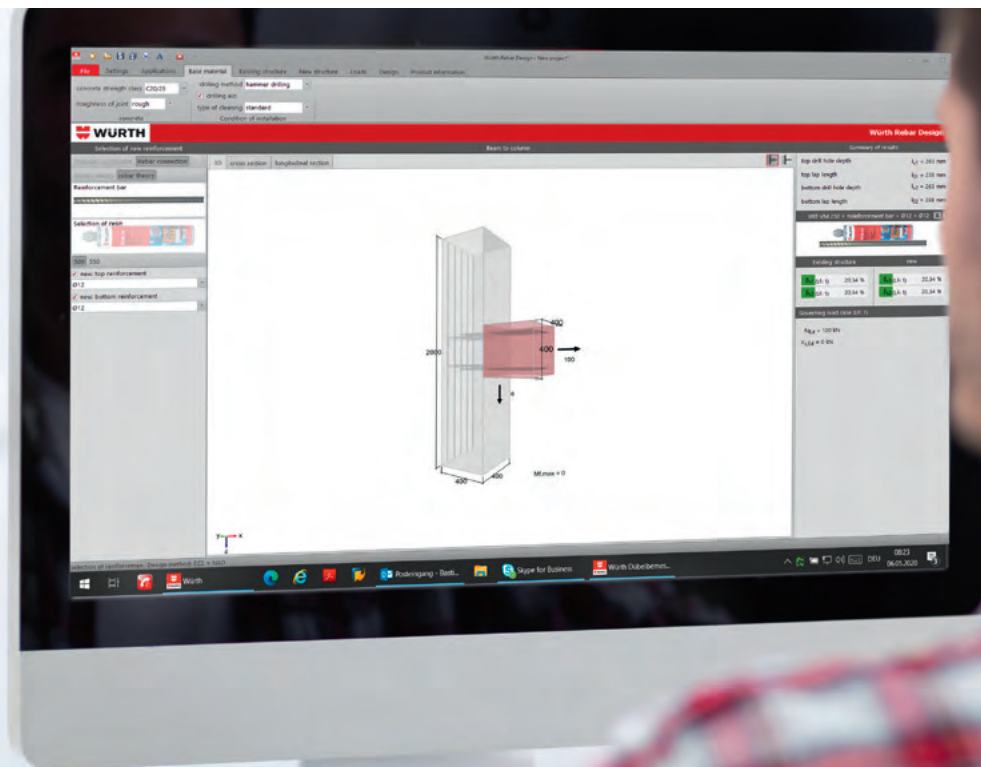
Art. No. 0903 480 005

Art. No. 0903 480 002



FEATURES AND BENEFITS

	WIT-PE 1000	WIT-UH 300	WIT-PE 500	WIT-VM 250
Chemical composition	Pure Epoxy	Urethane Hybrid Mortar	Pure Epoxy	Vinyl Ester Mortar
Properties	• very good fluidity • long processing time • long curing time	• good fluidity • fast curing time • high fire resistance	• very good fluidity • long processing time • long curing time • large anchoring depths	• good fluidity • fast curing time
Shelf-life	24 months	18 months	24 months	18 months
ETA approval	ETA - 19/0543	ETA - 17/0036	ETA - 07/0313	ETA - 12/0166
Temperature Range	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Cartridge ratio	1:3	1:10	1:3	1:10
Concrete strength	C12/15 to C50/60	C12/15 to C50/60	C12/15 to C50/60	C12/15 to C50/60
Rebar sizes	Ø 8 to Ø 40	Ø 8 to Ø 32	Ø 8 to Ø 28	Ø 8 to Ø 32
Tension Anchor	M12 to M24	M12 to M24	M12 to M24	M12 to M24
Max. Anchoring depth	2000 mm	2000 mm	2800 mm	2000 mm
Installation	In dry or wet concrete	In dry or wet concrete	In dry or wet concrete	In dry or wet concrete
Working time at 20°C	30 Minutes	3 Minutes	30 Minutes	6 Minutes



REBAR SOFTWARE

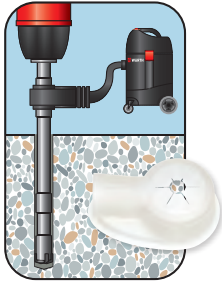
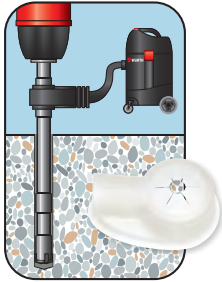
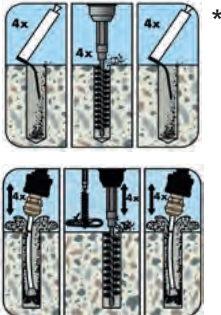
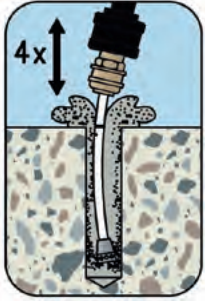
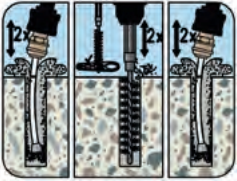
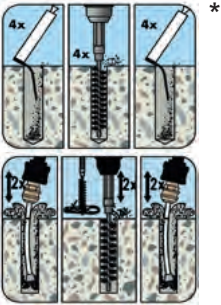
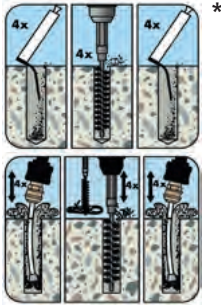
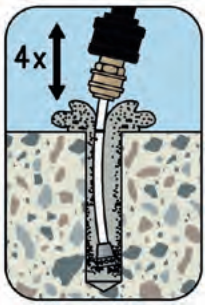
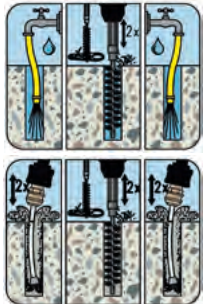
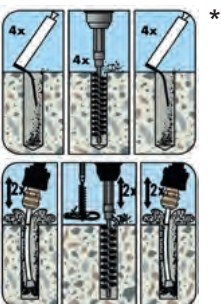
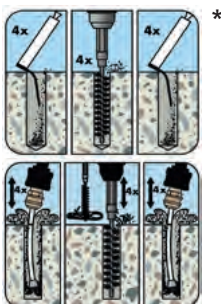
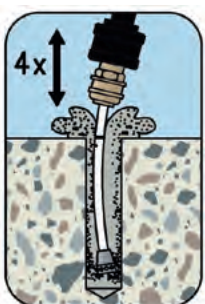
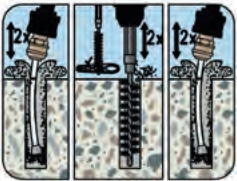
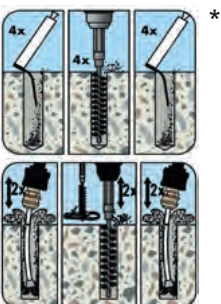
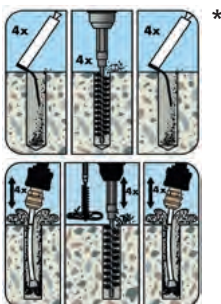
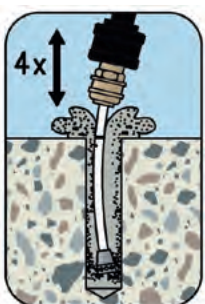
KEY FEATURES

- User friendly selection of existing and new concrete members in 3D and 2D
- Many combinations of new to existing members possible
- Design based on EN 1992-1-1 with various NADs
- Rebar diameter sizes from 8 mm to 40 mm for slow and fast curing injection mortars
- Detailed printout with references to the code and approval for technical reviews

To download the software, please visit:
www.wuerth.eu/technicalsoftware

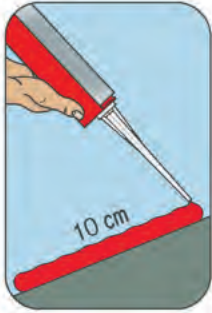
INSTALLATION

STEP 1: DRILLING AND DRILL-HOLE CLEANING

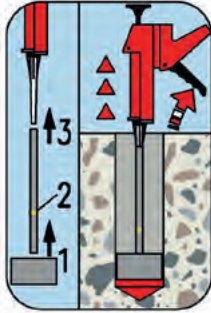
Drilling method	WIT-PE 1000	WIT-UH 300	WIT-VM 250	WIT-PE 500
Hollow Drill Bit System 	No cleaning required 	No cleaning required 		
Hammer drilling 				
Diamond drilling 				
Compressed air drilling 				

*Manual air cleaning (MAC) for drill diameters $d_0 \leq 20$ mm und drill hole depths $h_0 \leq 10$ d

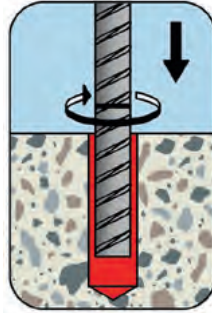
STEP 2: MORTAR INJECTION AND REBAR SETTING



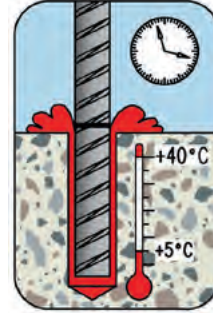
Discard mortar
(approx. 10 cm of
injection material)



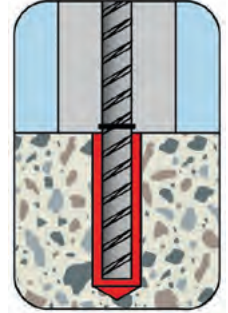
Fill the drill-hole with
mortar



Insert the rebar in the
drill-hole



Carefully remove
excess mortar on the
surface



Pour new concrete
element after full curing
time has elapsed

DRILLING ACCESSORIES



Drilling Aid for REBAR

Art.-Nr. 0903 489 401

VE/St. 1



Carriage

Art.-Nr. 5709 116 005

VE/St. 1

Drilling stand DS Compact

Art.-Nr. 5709 116 11

VE/St. 1



Hammer drill/ Chipping hammer

Art.-Nr. 0702 557 1

VE/St. 1



Core Drill

Art.-Nr. 5709 116 02

VE/St. 1



DRILLING ACCESSORIES

Hammer drill bit Plus Quadro



Art.-Nr.	Diameter Ø	Working length	Length
0648 051 245*	12 mm	400 mm	450 mm
0648 051 445*	14 mm	400 mm	450 mm
0648 701 645*	16 mm	400 mm	450 mm
0648 701 845	18 mm	400 mm	450 mm
0648 702 045*	20 mm	400 mm	450 mm
0648 702 545*	25 mm	400 mm	450 mm
0648 702 645*	26 mm	400 mm	450 mm
0648 702 845*	28 mm	400 mm	450 mm
0648 053 245*	32 mm	400 mm	450 mm



Diamond wet core bits

Art.-Nr.	Diameter Ø	Working length	Length
5456 060 014*	14 mm	200 mm	255 mm
5456 060 016*	16 mm	300 mm	355 mm
5456 060 018*	18 mm	300 mm	355 mm
5456 060 020*	20 mm	300 mm	355 mm
5456 060 025*	25 mm	300 mm	355 mm
5456 060 026*	26 mm	300 mm	355 mm

*VE/St. 1

Hollow drill bit

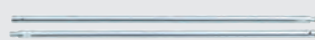


Art.-Nr.	Diameter Ø	Working length	Length
Hollow drill bit Plus D			
0648 451 232*	12 mm	200 mm	320 mm
Hollow drill bit Max M			
0647 401 460*	14 mm	400 mm	600 mm
0647 401 660*	16 mm	400 mm	600 mm
0647 401 860*	18 mm	400 mm	600 mm
0647 402 060*	20 mm	400 mm	600 mm
0647 402 560*	25 mm	400 mm	600 mm
0647 403 260*	32 mm	400 mm	600 mm
0647 403 560*	35 mm	400 mm	600 mm

CLEANING ACCESSORIES

WIT-UH 300, WIT-PE 1000,
WIT-VM 250, WIT-PE 500

Cleaning brushes WIT-RB for REBAR
Connection thread M8

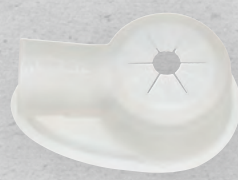


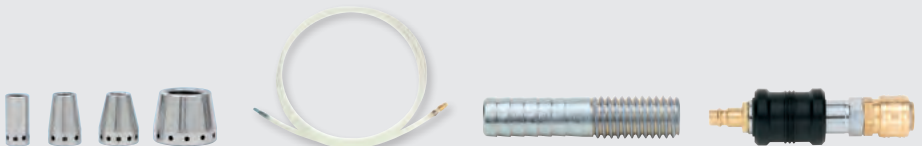
REBAR dia. [mm]	Drill-hole dia. d ₀ [mm]	Cleaning brush Art.-No. PU [qty.] = 1	Extension 2 x 345 mm Art.-No. PU [qty.] = 1	Machine chuck M8 SDS-plus Art.-No. PU [qty.] = 1
8	12	0903 489 512	0903 489 111	0903 489 101
10	14	0903 489 514		
12	16	0903 489 516		
14	18	0903 489 518		
16	20	0903 489 520		
20	25	0903 489 525		
24	32	0903 489 532		
25	32	0903 489 532		
28	35	0903 489 535		
32	40	0903 489 540		

CLEANING ACCESSORIES

Blow out pump 	Art.-No.	PU [qty.]
	0903 990 001	1

M8 reducer pipe To reduce the diameter of the blow out pump from 10 mm to 8 mm 	Art.-No.	PU [qty.]
	0905 499 202	1

Suction bell 	Art.-No.	PU [qty.]
	0903 990 010	1

Accessories for cleaning with compressed air						
						
REBAR dia. [mm]	Threaded rod dia.	Drill-hole dia. d ₀ [mm]	Compressed air nozzle WIT-DD Art.-No. PU [qty.] = 1 (only for WIT-PE 500)	Pneumatic hose WIT-SDD (pre-assembled) Art.-No. PU [qty.] = 1	Thread connection for compressed air nozzle Art.-No. PU [qty.] = 1	Hand slide valve (pre-assembled) Art.-No. PU [qty.] = 1
8		12	0903 489 210	Dia. 10 mm x 2 m 0699 903 7	0903 489 291 M8	0699 903 38
10		14				
12		16				
14		18				
16		20	0903 489 217			
	M20	24				
20		25	0903 489 227	Dia. 20 mm x 3 m 0699 903 13	0903 489 292 M16	
22		28				
	M24	28				
24	M27	32				
25		32				
	M30	35				
32		40				

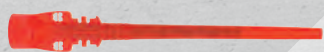
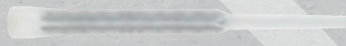
MORTAR INJECTION

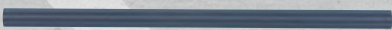
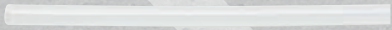
Piston plug (only REBAR)



WIT-UH 300, WIT-PE 1000,
WIT-VM 250, WIT-PE 500

REBAR dia. [mm]	Threaded rod dia.	Drill-hole dia.	Piston plug No.	Art.-No.	PU [qty.]
8		d ₀ = 12 mm (hammer drilling)	-	No piston plug necessary	-
10		d ₀ = 14 mm (hammer drilling)	No. 14	0903 488 055	10
12		d ₀ = 16 mm (hammer drilling, pneumatic drilling)	No. 16	0903 488 056	
14		d ₀ = 18 mm (hammer drilling, pneumatic drilling)	No. 18	0903 488 057	
16		d ₀ = 20 mm (hammer drilling, pneumatic drilling)	No. 20	0903 488 058	
	M20	d ₀ = 22 mm d ₀ = 24 mm	No. 22 No. 24	0903 488 062 0903 488 051	
20		d ₀ = 25 mm (hammer drilling); d ₀ = 26 mm (pneumatic drilling)	No. 25	0903 488 059	
22	M24	d ₀ = 28 mm (hammer drilling, pneumatic drilling)	No. 28	0903 488 052	
24	M27	d ₀ = 32 mm (hammer drilling, pneumatic drilling)	No. 32	0903 488 053	
25		d ₀ = 32 mm (hammer drilling, pneumatic drilling)	No. 32	0903 488 053	
28		d ₀ = 35 mm (hammer drilling, pneumatic drilling)	No. 35	0903 488 060	
32		d ₀ = 40 mm (hammer drilling, pneumatic drilling)	No. 40	0903 488 061	

Mixer nozzles		Suitable for cartridge size	Art.-No.	PU [qty.]
Mixer nozzle Fill & Clean for WIT-VM 100, WIT-VM 250, WIT-PM 200		coaxial (1:10): 150 ml, 330 ml, 420 ml foil-tube (1:10): 300 ml	0903 420 001	10
Mixer nozzle 18 W for WIT-PE 500		Side-by-side (1:3): 385 ml, 585 ml, 1400 ml	0903 488 101	10
Mixer nozzle for WIT-UH 300		coaxial (1:10): 320 ml, 420 ml peeler (1:10): 280 ml side-by-side (1:10): 360 ml, 825 ml	0903 488 102	20
Mixer nozzle for WIT-PE 1000		Side-by-side (1:3): 440 ml, 585 ml, 1400 ml	0903 488 103	20

Extensions for mixer nozzles		Art.-No.	PU [qty.]
Mixer nozzle extension – rigid WIT-MV 10 x 200 mm		0903 420 004	10
Mixer nozzle extension – rigid WIT-MV 10 x 2000 mm		0903 488 121	20
Mixer nozzle extension – flexible, WIT-MV 10 x 2000 mm		0903 488 123	10
Mixer nozzle extension – rigid, WIT-MV 16 x 2000 mm		0903 488 122	20
Mixer nozzle extension – flexible, WIT-MV 16 x 2000 mm		0895 812	1

APPLICATION GUNS

Application guns, manual		Suitable for cartridges	Art.-No.	PU [qty.]
Application gun WIT, 330 ml		coaxial (1:10): 150 ml, 320 ml, 330 ml foil-tube (1:10): 300 ml	0891 003	1
Application gun WIT, 420 ml		coaxial (1:10): 420 ml	0891 038 0	
Application gun Handymax		side-by-side (1:3): 440 ml, 585 ml	0891 018	
Application gun WIT-Multi		coaxial (1:10): 150 ml, 320 ml, 330 ml, 420 ml foil-tube (1:10): 300 ml side-by-side (1:3): 385 ml, 440 ml, 585 ml	0891 003 105	

Application gun, cordless		Suitable for cartridges	Art.-No.	PU [qty.]
Cordless Application Gun WIT		coaxial (1:10): 330 ml, 420 ml	0891 003 420*	1
		side-by-side (1:3): 385 ml, 440 ml, 585 ml	0891 003 585*	
		side-by-side (1:10): 825 ml	0891 003 825*	

Memory function: By actuating the memory function, the application gun repeats a pre-recorded application cycle, ensuring that exactly the right quantity of mortar is injected into the drill hole in series application

Adjustable speed :Infinitely controllable with adjustment wheel in handle

* incl. battery and charger 18 V 2.0 Ah-Li-Ion (in case)

APPLICATION GUNS

Application guns, pneumatic		Suitable for cartridges	Art.-No.	PU [qty.]
Pneumatic application gun		side-by-side (1:3): 385 ml, 585 ml	0891 017	1
		side-by-side (1:3): 1400 ml	0891 015	
		coaxial (1:10): 420 ml	0891 004 420	
		side-by-side (1:10): 825 ml	0891 004 826	

		Suitable for Application gun	No.Art.	PU [qty.]
Female thread plug-in nipple Series 2000		Pneumatic application gun 385, 585, 1400, 420, 825 ml	0699 100 514	1

NOTES

WIT-REBAR

Post-installed REBAR solutions

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