



Chemical anchors

Strong anchoring solutions for every construction project

Chemical anchoring

Advanced fastening technology for the most demanding applications

Chemical anchoring is a modern and reliable method of fixing for buildings and structures. It involves permanently securing threaded rods, reinforcing bars or anchors in a drilled hole using a special injection mortar or resin. Once set, a particularly strong bond is formed between the base material and the anchor.

Chemical anchoring does not generate any spreading forces. This makes it particularly suitable for fixings close to edges, as well as for cracked and uncracked concrete or masonry.

In addition to their high load-bearing capacity, modern chemical anchoring systems also offer solutions for demanding safety requirements. Specifically tested systems are approved for seismic applications (Seismic C1 and C2) and ensure reliable load transfer even under dynamic loads, such as those that may occur during earthquakes.

Furthermore, numerous injection mortars have been tested for their behaviour in the event of a fire and achieve – depending on the system and installation conditions – fire resistance classes of up to R240. Chemical anchors thus meet the highest requirements for fire safety and personal protection in safety-critical structures.

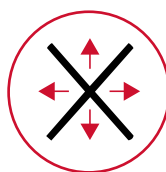
Chemical anchors are used in building construction and civil engineering, in steel structures, railings and machine fixings, as well as in refurbishment and renovation work. Thanks to their high performance, they are also used in safety-critical areas such as bridges, tunnels, industrial plants, hospitals and other infrastructure projects, where earthquake resistance and fire resistance are crucial design requirements.

Advantages of chemical anchoring:



High load capacity

Reliable load transfer under high static and dynamic loads.



No expansion forces

Ideal for small edge distances and close anchor spacing.



Long-term durability

Corrosion-resistant materials for lasting performance in demanding environments.



Fire resistance

Proven performance under fire exposure.



Versatile applications

Suitable for concrete and masonry.



Seismic approved

ETA-approved systems for seismic categories C1 and C2.

Multifx Range

Strong products for strong applications

For a wide range of fastening applications in the construction industry, the Multifix chemical anchor range offers tailored solutions designed to meet the specific requirements of every project and application. Whether for heavy-duty structural fixings exposed to high loads, seismic actions and fire exposure, structural applications requiring short or long curing times, medium-duty fixings installed across a wide temperature range, or light-duty applications such as railings and handrails, Multifix provides the right solution for every challenge.

From pure epoxy and hybrid resins to vinylester and polyester systems, the Multifix range delivers flexible, reliable and high-performance anchoring solutions for most of applications.

Product overview chemical anchors

	Injection system Multifix SE1000 Seismic	Injection system Multifix HSF	Injection system Multifix SE500
Anchor			
Material	Pure epoxy premium resin	Urethane hybrid resin, styrene-free	Pure epoxy resin
Application range	Anchoring at high load level in cracked and uncracked concrete. Post-installed rebar applications.	Anchoring at high load level in cracked and uncracked concrete. Post-installed rebar applications.	Anchoring at medium level in cracked and uncracked concrete. Post installed rebar applications.
Cracked concrete (EAD 330232-00-0601)	M8 – M30 Ø 8 – 32 mm	M8 – M30 Ø 8 – 32 mm	M8 – M30 Ø 8 – 32 mm
Uncracked concrete (EAD 330232-00-0601)	M8 – M30 Ø 8 – 32 mm	M8 – M30 Ø 8 – 32 mm	M8 – M30 Ø 8 – 32 mm
Masonry	–	–	–
Post installed rebar (EAD 330087-01-0601)	Ø 8 – 40 mm	Ø 8 – 32 mm	Ø 8 – 40 mm
Technical specifications	  		
Approvals	ETA-20/1280 ETA-22/0365 ETA-23/1010	ETA-24/0646 ETA-24/0647 ETA-24/0648	ETA-26/0189 ETA-26/0190
Admissible tensile load [kN]	13.8 – 103.9	11.5 – 103.9	14.4 – 103.9
Admissible shear load [kN]	8.6 – 72.3	9.7 – 72.3	9.7 – 72.3
Technical data sheet			

Injection system Multifix USF	Injection system Multifix USF Winter	Injection system Multifix USF Tropical	Injection system Multifix PSF+
			
Vinylester resin, styrene-free	Vinylester resin, styrene-free	Vinylester resin, styrene-free	Polyester resin, styrene free
Anchoring at medium load level in cracked and uncracked concrete and masonry. Post-installed rebar applications.	Anchoring at medium load level in cracked and uncracked concrete and masonry.	Anchoring at medium load level in cracked and uncracked concrete and masonry.	Anchoring at low load level in uncracked concrete.
M8 – M30 Ø 8 – 32 mm	M8 – M30 Ø 8 – 32 mm	M8 – M16 –	–
M8 – M30 Ø 8 – 32 mm	M8 – M30 Ø 8 – 32 mm	M8 – M30 Ø 8 – 32 mm	M8 – M24
M8 – M16	M8 – M16	M8 – M16	M8 – M16
Ø 8 – 32 mm	–	Ø 8 – 25 mm	–
			–
ETA-16/0089 ETA-16/0107 ETA-22/0704	ETA-16/0089 ETA-16/0107	ETA-26/0193 ETA-26/0194 ETA-26/0195	ETA-21/0089 ETA-22/0438
4.3 – 93.9	4.3 – 93.9	6.8 – 50.3	5.6 – 31.0
3.3 – 65.5	3.3 – 65.5	6.3 – 48.1	5.1 – 50.3
			



AI-modified

Multifix SE1000 Seismic

Pure epoxy premium resin

Premium pure epoxy 3:1 injection resin engineered for the highest performance in concrete applications. Its advanced formulation delivers exceptional mechanical strength, superior thermal resistance, low odour emissions and outstanding chemical durability. The resin offers flexible working times and exhibits very low shrinkage, making it particularly suitable for installations with large annular gaps. For use in damp concrete and water-filled drill holes, it ensures reliable performance even under demanding site conditions including fire and seismic applications.



585 ml

Main application

- > Installation of threaded rods in uncracked and cracked concrete
- > Installation of post-installed rebars
- > Suitable for heavy-duty loads
- > Suitable for seismic loads and fire exposure



Properties

- > Suitable for use in damp and water-filled boreholes
- > Suitable for use in both hammer-drilled and diamond-drilled boreholes
- > Excellent mechanical and thermal properties
- > Outstanding chemical resistance
- > Low shrinkage: Suitable for larger annular gaps
- > Low odor emission
- > 24 month shelf life

Reactivity

Temperature in base material	Maximum working time	Curing time in dry base material	Curing time in wet base material
0 °C to +4 °C	90 min	144h	288h
+5 °C to +9 °C	80 min	48h	96h
+10 °C to +14 °C	60 min	28h	56h
+15 °C to +19 °C	40 min	18h	36h
+20 °C to +24 °C	30 min	12h	24h
+25 °C to +34 °C	12 min	9h	18h
+25 °C to +39 °C	8 min	6h	12h
+40 °C	8 min	4h	8h

Cartridge temperature +5 °C to +40 °C



For more information visit:
www.ejot.com/p/multifix-se





Multifix HSF Seismic

Urethan-methacrylat hybrid resin

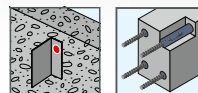
High-performance hybrid Urethan-Methacrylate resin for concrete applications. Designed for superior performance at elevated temperatures, this premium resin combines fast curing times with excellent mechanical and thermal properties. It offers outstanding long-term creep behaviour and exceptional resistance to alkaline substances, oils, acids, and other aggressive chemicals. Suitable for water-filled boreholes, including hollow drill bit applications. It ensures reliable performance even under demanding site conditions including fire and seismic applications.

Main application

- > Installation of threaded rods in uncracked and cracked concrete
- > Installation of post-installed rebars
- > Suitable for heavy-duty loads
- > Suitable for seismic loads and fire exposure

Properties

- > Suitable for use in damp and water-filled boreholes
- > Excellent mechanical and thermal properties
- > Very high chemical resistance
- > Suitable for use in aggressive environments
- > Low odor emission



Reactivity			
Temperature in base material	Maximum working time	Curing time in dry base material	Curing time in wet base material
-5 °C to -1 °C	50 min	5h	10h
0 °C to +4 °C	25 min	3.5h	7h
+5 °C to +9 °C	15 min	2h	4h
+10 °C to +14 °C	10 min	1h	2h
+15 °C to +19 °C	6 min	40 min	80 min
+20 °C to +29 °C	3 min	30 min	1h
+30 °C to +40 °C	2 min	30 min	1h
Cartridge temperature +5 °C to +40 °C			



For more information visit:
www.ejot.com/p/multifix_hsf_seismic



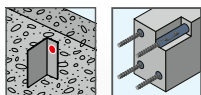


Multifix SE500

Pure epoxy resin

Standard pure epoxy resin engineered for high performance

in concrete applications. Its formulation delivers very good mechanical strength, good thermal resistance, low odour emissions, and outstanding chemical durability. For less demanding structural applications. For use in damp concrete and water-filled drill holes.



585 ml

Main application

- > Installation of threaded rods in uncracked and cracked concrete
- > Installation of post-installed rebars
- > Suitable for heavy-duty loads
- > Suitable for fire exposure

Properties

- > Suitable for use in damp and water-filled boreholes
- > Suitable for use in both hammer-drilled and diamond-drilled boreholes
- > Excellent mechanical and thermal properties
- > Outstanding chemical resistance
- > Low shrinkage: Suitable for larger annular gaps
- > Low odor emission
- > 24 month shelf life

Reactivity			
Temperature in base material	Maximum working time	Curing time in dry base material	Curing time in wet base material
+5°C to +9°C	1h 20min	60h	120h
+10°C to +14°C	1h	48h	96h
+15°C to +19°C	40 min	24h	48h
+20°C to +24°C	30 min	12h	24h
+25°C to +34°C	12 min	10h	20h
+35°C to +39°C	8 min	7h	14h
+40°C	8 min	4h	8h
Cartridge temperature +5 °C to +40 °C			



For more information visit:
www.ejot.com/p/multifix_se500

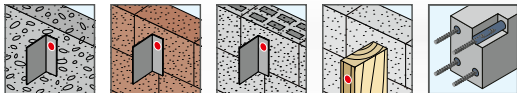




Multifix USF

Vinylester premium resin

High-performance styrene-free vinylester resin for concrete and masonry. Designed for medium- and heavy-duty anchoring applications, it offers excellent chemical resistance, low odour, and reliable performance in damp concrete and water-filled drill holes. Certified fire and seismic resistance that ensures performance in safety-critical applications.



Main application

- > Installation of threaded rods in uncracked and cracked concrete
- > Installation of post-installed rebars
- > Installation of threaded rods in solid and hollow masonry with mesh sleeve
- > Suitable for medium-duty loads
- > Suitable for seismic loads and fire exposure

Properties

- > Suitable for use in damp and water-filled boreholes
- > Excellent mechanical and thermal properties
- > Very high chemical resistance
- > Suitable for use in aggressive environments
- > Low odor emission

Reactivity

Temperature in base material	Maximum working time	Curing time in dry base material	Curing time in wet base material
-10 °C*	1h 30 min	24h	48h
≥ -5 °C	1h 30 min	14h	28h
≥ 0 °C	45 min	7h	14h
≥ +5 °C	25 min	2h	4h
≥ +10 °C	15 min	1h 20 min	2h 40 min
≥ +20 °C	6 min	45 min	1h 30 min
≥ +30 °C	4 min	25 min	50 min
≥ +35 °C	2 min	20 min	40 min
+40 °C	1.5 min	15 min	30 min

*Min. cartridge temperature +15 °C

280 ml

420 ml



For more information visit:
www.ejot.com/p/usf

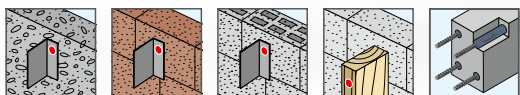




Multifix USF Winter

Vinylester premium resin

High-performance styrene-free vinylester resin for concrete and masonry. Designed for medium- and heavy-duty anchoring applications in low temperatures up to -20 °C. Offers excellent chemical resistance, low odour, and reliable performance in damp concrete and water-filled drill holes. Certified fire and seismic resistance that ensures performance in safety-critical applications.



Main applications

- > Installation of threaded rods in uncracked and cracked concrete in cold temperatures
- > Installation of post-installed rebars in cold temperatures
- > Installation of threaded rods in solid and hollow masonry with mesh sleeve in cold temperatures
- > Suitable for medium-duty loads
- > Suitable for seismic loads and fire exposure

Properties

- > Suitable for use in damp and water-filled boreholes
- > Excellent mechanical and thermal properties
- > Very high chemical resistance
- > Suitable for use in aggressive environments
- > Low odor emission



Reactivity			
Temperature in base material	Maximum working time	Curing time in dry base material	Curing time in wet base material
-20 °C*	1h 15 min	24h	48h
≥ -15 °C	55 min	16h	32h
≥ -10 °C	35 min	10h	20h
≥ -5 °C	20 min	5h	10h
≥ 0 °C	10 min	2h 30 min	5h
≥ +5 °C	6 min	1h 20 min	2h 40 min
10 °C	6 min	1h	2h

*Min. cartridge temperature -20 °C



For more information visit:
www.ejot.com/p/usf_winter

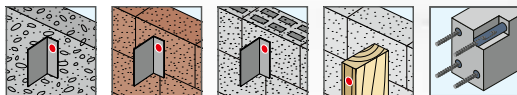




Multifix USF Tropical

Vinylester premium resin

High-performance styrene-free vinylester resin for concrete and masonry. Designed for medium- and heavy-duty anchoring applications in high temperatures up to +45 °C. Offers excellent chemical resistance, low odour, and reliable performance in damp concrete and water-filled drill holes. Certified fire and seismic resistance that ensures performance in safety-critical applications.



Main applications

- > Installation of threaded rods in uncracked and cracked concrete in hot temperatures.
- > Installation of post-installed rebars in hot temperatures
- > Installation of threaded rods in solid and hollow masonry with mesh sleeve in hot temperatures.
- > Suitable for medium-duty loads
- > Suitable for seismic loads

Properties

- > Suitable for use in damp and water-filled boreholes
- > Excellent mechanical and thermal properties
- > Very high chemical resistance
- > Suitable for use in aggressive environments
- > Low odor emission

Reactivity

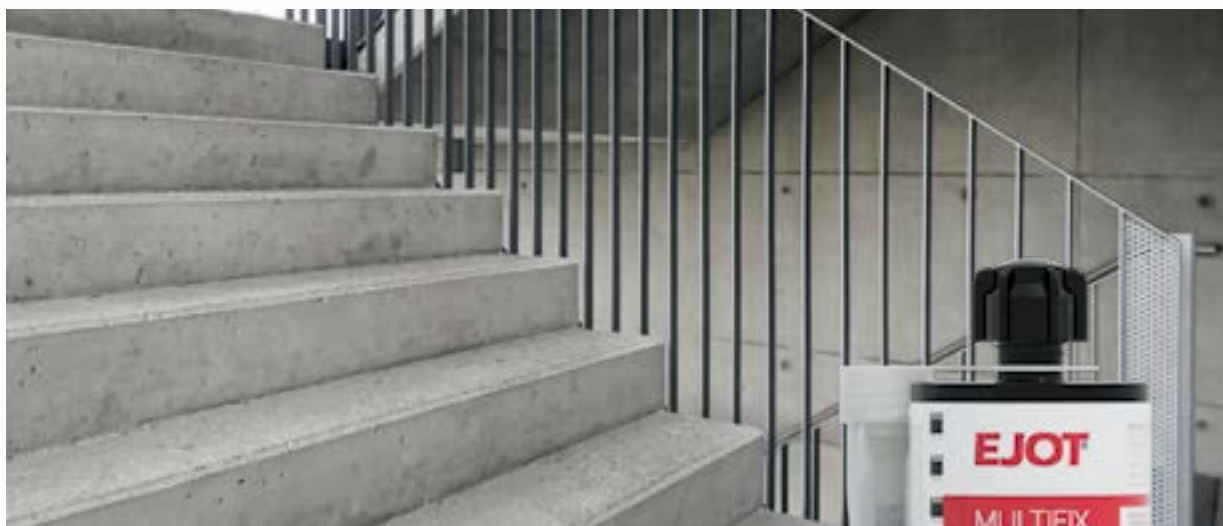
Temperature in base material	Maximum working time	Minimum curing time
+10°C to +14°C	30 min	5h
+15°C to +19°C	20 min	3h 30 min
+20°C to +29°C	15 min	2h 25 min
+30°C to +34°C	10 min	1h 20 min
+35°C to +39°C	6 min	45 min
+40°C to +44°C	4 min	25 min
+45°C	2 min	20 min

Cartridge temperature +5°C up to +45°C



For more information visit:
www.ejot.com/p/usf_tropical

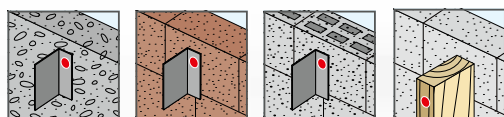




Multifix PSF+

Polyester resin, styrene free

Styrene-free polyester resin for uncracked concrete and masonry applications. A proven bonded anchor system offering reliable performance for light-duty applications. Suitable for use in wet base materials and water-filled drill holes, providing a versatile and cost-effective solution for everyday fastening applications.



Main applications

- > Installation of threaded rods in uncracked concrete
- > Installation of threaded rods in solid and hollow masonry with mesh sleeve
- > Suitable for light-duty loads

Properties

- > High bending and pressure strength
- > Universal formulation

Reactivity

Temperature in base material	Maximum working time	Curing time in dry base material
≥ -5 °C	1 h 30 min	6h
≥ 0 °C	45 min	3h
≥ +5 °C	25 min	2h
≥ +10 °C	20 min	1 h 40 min
≥ +20 °C	6 min	45 min
≥ +30 °C	4 min	25 min
≥ +39 °C	2 min	20 min

*Min. cartridge temperature +15 °C

420 ml



For more information visit:
<https://www.ejot.com/p/psf-plus>



Accessories Tools

Anchor rods / sleeves / Application guns

Anchor rod AST / threaded rod


Application range

- > For installation in concrete and solid brick
- > For installation in perforated brick in combination with mesh sleeve
- > Also available in steel and A4 stainless steel

AP 585 ml

Application range

- > For Multifix SE1000 Seismic
- > For Multifix SE500
- > For comparable 585 ml side-by-side cartridges



Threaded rod / Nut / Washer


Application range

- > For installation in concrete and solid brick
- > For installation in perforated brick in combination with mesh sleeve

AP 420 ml

Application range

- > For Multifix HSF Seismic 420 ml
- > For Multifix USF 420 ml
- > For Multifix PSF+ 420 ml



Mesh sleeve


Application range

- > For anchoring in perforated brick in combination with
 - Multifix USF
 - Multifix USF Winter
 - Multifix USF Tropical
 - Multifix PSF+

Side by Side AP 345 ml

Application range

- > For Multifix USF 280 ml
- > For Multifix USF Winter 300 ml
- > For pressing-out of other various cartridges 280 / 300 ml (e.g. silicone)

Characteristics

- > Additional pressing-out cylinder can be used to read the cartridge scale.



Cleaning tools

Blow-out pump

Application range

- > For cleaning the drill hole in concrete and masonry



Cleaning brush

Application range

- > For cleaning the drill hole in concrete and masonry
- > Advantages
- > Easy to use
- > High cleaning effect
- > Robust design



Cleaning brush RBT metal

Application range

- > For cleaning drill holes of chemical anchoring in concrete and masonry
- > For approval-compliant drill hole cleaning
- > Use in combination with standard cordless screwdriver, drill or T-handle



Duster Expert SDS plus®

Application range

- > Application range
- > Concrete
- > Gas concrete
- > Granite
- > Sand-lime brick
- > Clinker brick
- > aerated concrete
- > Marble
- > Masonry
- > Stone


Characteristics

- > Anti-dust drill bit for drilling and cleaning in one step

Advantages

- > Dust is removed directly in the drill hole
- > Simple usage and reliable anchor installation: Removes dust almost completely - subsequent cleaning of the drill hole is redundant
- > Cheap solution for the end user: Saves time during drill hole and / or environment cleaning
- > Same robustness and comparable performance as a standard drill
- > Universal and flexible usage with SDS-plus hammers and commercial vacuum cleaners

Recommended performance features for vacuum cleaners

- > Industrial vacuum cleaner class M
- > Hose length up to 5 m
- > Performance $P \geq 1,400 \text{ W}$
- > Volume flow rate $v \geq 40 \text{ l/sec}$
- > Reduced pressure $p \geq 230 \text{ mbar}$
- > Automatic filter cleaning



Drills

Hammer drill SDS plus®


Application range

- > For masonry, concrete, natural stone, artificial stone etc.

Advantages

- > Long service life
- > Centering point for easy, pinpoint drilling
- > Short spiral starts for optimized drill dust transport
- > Radially shaped reinforcement protection against hooking in case of reinforcement hits
- > 4x4 design allows precise concentricity and minimizes wear and friction losses
- > High-quality hardened and tempered steel for the toughest applications

Hammer drill SDS max


Application range

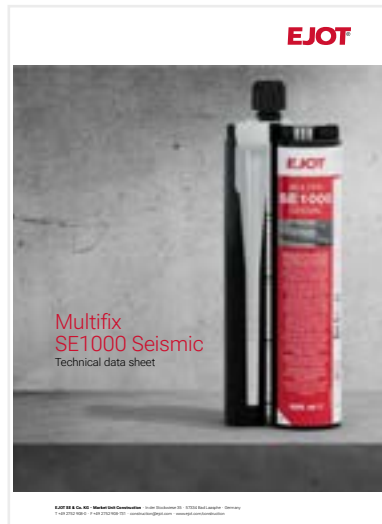
- > For masonry, concrete, natural stone, artificial stone etc.

Advantages

- > Long service life
- > Centering point for easy, pinpoint drilling
- > Short spiral starts for optimized drill dust transport
- > Radially shaped reinforcement protection against hooking in case of reinforcement hits
- > 4x4 design allows precise concentricity and minimizes wear and friction losses
- > High-quality hardened and tempered steel for the toughest applications

Technical data sheets

You can find more detailed technical information in our technical data sheets



Multifix
SE1000 Seismic



Multifix
HSF Seismic



Multifix
SE500



Multifix
USF / USF Winter



Multifix
USF Tropical



Multifix
PSF+





EJOT ANCHOR FIX®

Anchor dimensioning made easy

With the brand EJOT ANCHOR FIX®, the free dimensioning software for anchoring, EJOT is offering a very helpful tool for the static dimensioning of anchoring in your projects. Specially developed for structural engineers, specifiers, engineers and technicians, the software can also be used as a handy guide in the pre-planning phase.

With EJOT ANCHOR FIX®, the limits of the load-bearing capacity of EJOT anchoring products such as through bolts and concrete screws in concrete substrates can be determined. Another new feature is the possibility of dimensioning nylon and chemical anchors in concrete and masonry.

In addition, with the new software version, a design for fire and seismic load cases is possible. EJOT ANCHOR FIX® still allows you to directly input data from site extraction tests and their evaluation in accordance with regulations.

The targeted selection of the calculation methods for single vs. multiple fastening of various products offers the user application safety. Also with planning reliability on the part of the user is achieved by the output of individual quantity requirements for chemical anchors and this also with variable installation depths.

All additional documents such as approvals and product data sheets can be easily accessed, directly via the software.

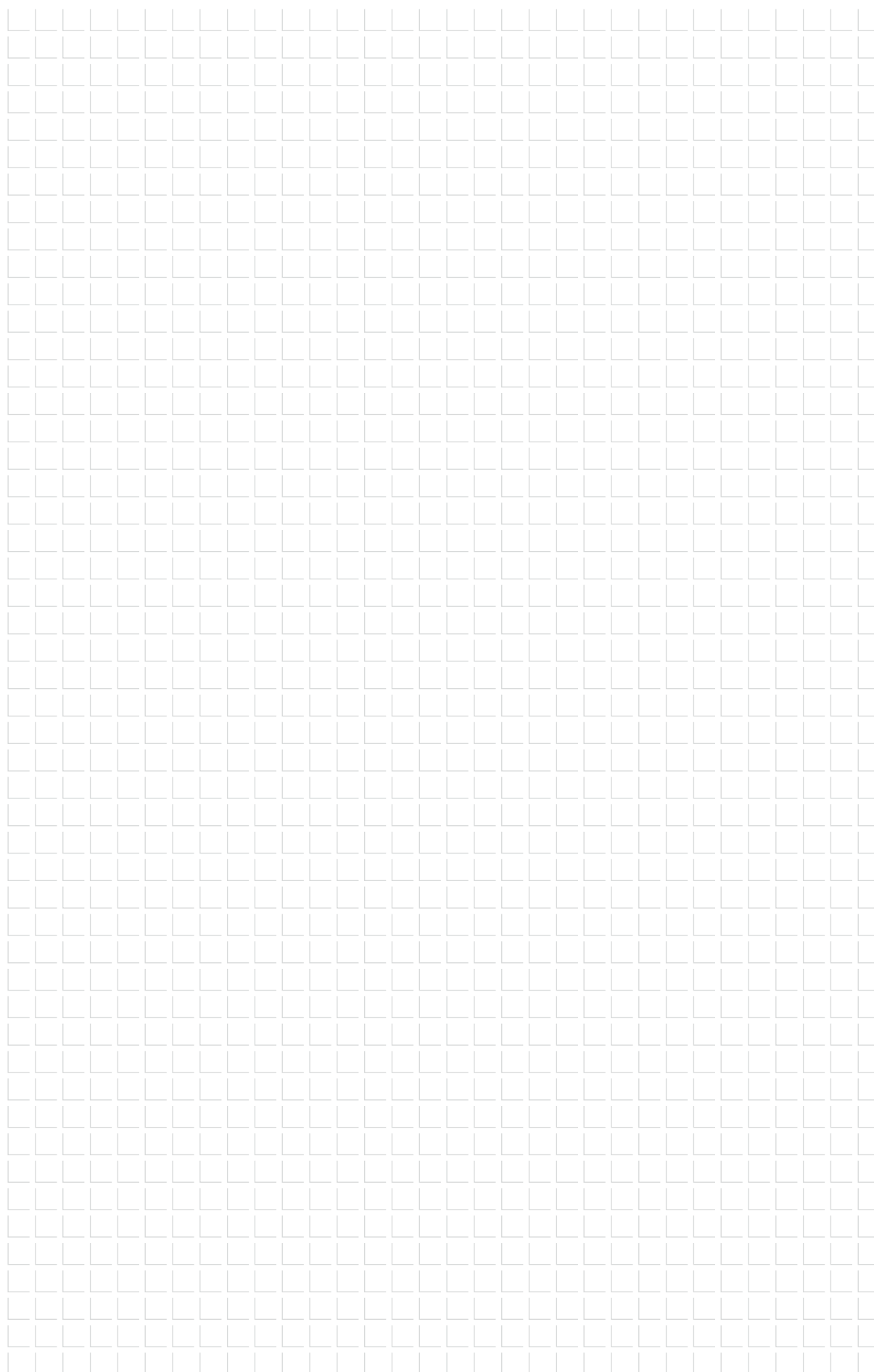
That's new:

- > Geometry Editor: Allows user defined base plate and anchor positions
- > Annular gap filling: Required to transfer actions on base plates with more than 4 anchors (with an edge distance)
- > New Multifix HSF hybrid resin
- > Updated data and ETAs

Try it out – for free...



EJOT ANCHOR FIX® can be downloaded here:
www.ejot.com/software-anchorfix





EJOT SE & Co. KG

Market Unit Construction

In der Stockwiese 35

57334 Bad Laasphe · Germany

T +49 2752 908-0

F +49 2752 908-731

construction@ejot.com

www.ejot.com/construction