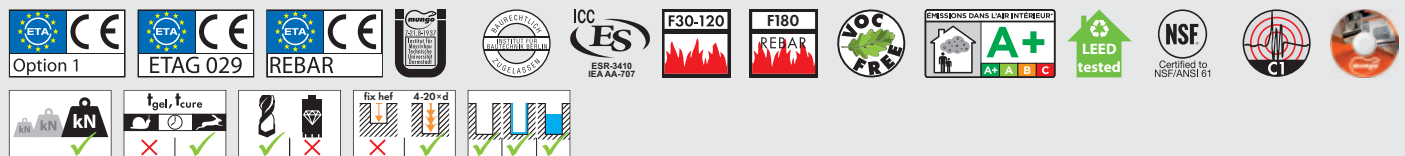
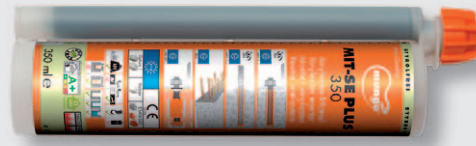


MIT-SE Plus Vinylester mortar, styrene free



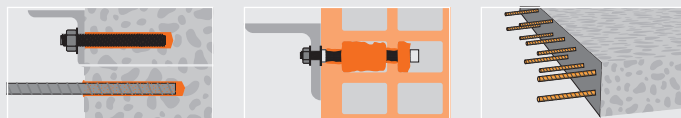
Features

- European Technical Approval Option 1 for cracked and non-cracked concrete with anchor rod and with rebar used as anchor
- European Technical Approval according to ETAG 029 for use in masonry
- European Technical Approval for post-installed rebar connections
- German National Approval for post-installed rebar connections
- ICC-ES Report ESR-3410
- Fire resistance test certification F30-F120
- Fire resistance test certification F180 (Rebar)
- VOC free according to Swiss legislation and certified A+ according to DEVL 1101903D / DEVL 1104875A
- LEED - Test Report
- Certification for drinking water systems
- The anchor may also be used under seismic influence for performance category C1
- Universal mortar for highest loads in almost all building materials
- Application also in damp and water-filled drill holes
- Variable setting depth
- Suitable for overhead fixings
- Simple and speedy working
- Styrene free and low odour
- Colour of mortar: grey
- Indoor (zinc plated) and outdoor (stainless steel) applications



Applications

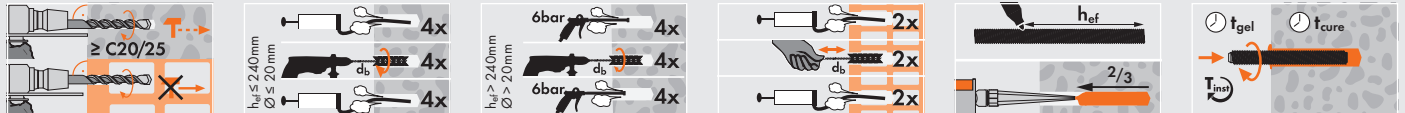
post-installed rebar connections, steel constructions, wooden constructions, façades, façade scaffolds, railings, high-racks, machines, staircases, ladders, cable trays, canopies, hand-rails, consoles



Temperatures

| | ≥ -10°C | ≥ -5°C | ≥ 0°C | ≥ +5°C | ≥ +10°C | ≥ +20°C | ≥ +30°C | ≥ +35°C | ≥ +40°C |
|--|---------|--------|-------|--------|---------|---------|---------|---------|---------|
| Working time, in minutes (t _{gel}) | 90 | 90 | 45 | 25 | 15 | 6 | 4 | 2 | 1.5 |
| Curing time, dry in minutes (t _{cure}) | 24 h | 14 h | 7 h | 2 h | 90 | 45 | 25 | 20 | 15 |
| Curing time, wet in minutes (t _{cure}) | 48 h | 28 h | 14 h | 4 h | 3 h | 90 | 50 | 40 | 30 |

Installation



| Article code | Description | Languages | Content | Box content | Quantity per pallet |
|--------------|--------------------------|-----------|---------|-------------|---------------------|
| 1710024 | Cartridge incl. 2 mixers | DE/GB | 165 | 12 | 1260 |

Not part of the rebar approval
Application with silicone gun

MIT-SE Plus Vinylester mortar, styrene free, 165 ml cartridge



| Article code | Description | Languages | Content | Box content | Quantity per pallet |
|--------------|--------------------------|----------------|---------|-------------|---------------------|
| 1710015 | Cartridge incl. 2 mixers | DE/GB/FR/IT/PL | 280 | 12 | 1152 |

Application with silicone gun

MIT-SE Plus Vinylester mortar, styrene free, 280 ml cartridge, self opening



MIT-SE Plus Vinylester mortar, styrene free, 300 ml cartridge



| Article code | Description | Languages | Content | Box content | Quantity per pallet |
|--------------|--------------------------|-----------------------------|---------|-------------|---------------------|
| 1710017 | Cartridge incl. 2 mixers | DE/GB/FR/IT/PL | 300 | 12 | 1152 |
| 17100170 | Cartridge incl. 2 mixers | RU/CZ/SK/GB/HR/SLO/HU/BG/RO | 300 | 12 | 1152 |

Not part of the rebar approval
Application with silicone gun

MIT-KE System-case MIT-SE Plus 300 ml



40×30×32 cm



| Article code | Content | Languages | Content | Box content | Quantity per pallet |
|--------------|---|----------------|---------|-------------|---------------------|
| 1710102 | 22 x Cartridge incl. 2 mixers 1 x System-case IV with cartridge insert | DE/GB/FR/IT/PL | 300 | 1 | 16 |



MIT-SE Plus Vinylester mortar, styrene free, 350 ml cartridge



| Article code | Description | Languages | Content | Box content | Quantity per pallet |
|--------------|--------------------------|----------------|---------|-------------|---------------------|
| 1710025 | Cartridge incl. 2 mixers | DE/GB/FR/IT/PL | 350 | 12 | 1152 |

MIT-BE Maxi-Box MIT-SE Plus 350 ml



40×30×23.5 cm



| Article code | Content | Languages | Content | Box content | Quantity per pallet |
|--------------|--|----------------|---------|-------------|---------------------|
| 1710118 | 20 x MIT-SE Plus 350 ml Cartridge incl. 2 mixers 1 x Maxi-Box | DE/GB/FR/IT/PL | 350 | 1 | 24 |

MIT-SE Plus Vinylester mortar, styrene free, 400 ml cartridge



| Article code | Description | Languages | Content | Box content | Quantity per pallet |
|--------------|--------------------------|-----------------------------|---------|-------------|---------------------|
| 1710026 | Cartridge incl. 2 mixers | DE/GB/FR/IT/PL | 400 | 12 | 840 |
| 17100260 | Cartridge incl. 2 mixers | RU/CZ/SK/GB/HR/SLO/HU/BG/RO | 400 | 12 | 840 |

MIT-SE Plus Vinylester mortar, styrene free, 825 ml cartridge



| Article code | Description | Languages | Content | Box content | Quantity per pallet |
|--------------|--------------------------|---|---------|-------------|---------------------|
| 1710022 | Cartridge incl. 2 mixers | DE/GB/FR/IT/PL/RU/CZ/SK/HR/SLO/HU/BG/RO | 825 | 6 | 180 |

Application with pneumatic injection gun only

MIT-K System-case



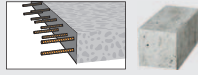
| Article code | Content | For | Box content | Quantity per pallet |
|--------------|--|------------------------------------|-------------|---------------------|
| 1710110 | Drilling aid Piston plugs Infrared thermometer Brushes Brush measure Cleaning accessories | MIT-SE Plus MIT600RE (REBAR) | 1 | 20 |

MIT-SE Plus with MIT-S(r) and MIT-G(r) according to European Technical Approval 10/0130

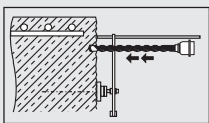

| | Drilling hole \varnothing mm | Effective anchorage depth min. mm | Effective anchorage depth max. mm | Drilling depth mm | Usable length mm | Clearance hole in fixture mm | Brush \varnothing mm | Min. distance betw. anchors mm | Min. edge distance mm | Installation torque (Nm) |
|-----|-----------------------------------|--------------------------------------|--------------------------------------|----------------------|---------------------|---------------------------------|---------------------------|--------------------------------------|--------------------------|-----------------------------|
| | d_0 | h_{ef} min | h_{ef} max | h_0 | f_{fix} | d_f | d_b | s_{min} | c_{min} | T_{req} max |
| M8 | 10 | 60 | 160 | = hef | 0 - 1500 | 9 | 12 | 40 | 40 | 10 |
| M10 | 12 | 60 | 200 | = hef | 0 - 1500 | 12 | 14 | 50 | 50 | 20 |
| M12 | 14 | 70 | 240 | = hef | 0 - 1500 | 14 | 16 | 60 | 60 | 40 |
| M16 | 18 | 80 | 320 | = hef | 0 - 1500 | 18 | 20 | 80 | 80 | 80 |
| M20 | 24 | 90 | 400 | = hef | 0 - 1500 | 22 | 26 | 100 | 100 | 120 |
| M24 | 28 | 96 | 480 | = hef | 0 - 1500 | 26 | 30 | 120 | 120 | 160 |
| M27 | 32 | 108 | 540 | = hef | 0 - 1500 | 30 | 34 | 135 | 135 | 180 |
| M30 | 35 | 120 | 600 | = hef | 0 - 1500 | 33 | 37 | 150 | 150 | 200 |

MIT-SE Plus with rebar used as anchor according to European Technical Approval 10/0130


| | Drilling hole \varnothing mm | Effective anchorage depth min. mm | Effective anchorage depth max. mm | Drilling depth mm | Brush \varnothing mm | Min. distance betw. anchors mm | Min. edge distance mm |
|------------------|-----------------------------------|--------------------------------------|--------------------------------------|----------------------|---------------------------|-----------------------------------|--------------------------|
| | d_0 | h_{ef} min | h_{ef} max | h_0 | d_b | s_{min} | c_{min} |
| \varnothing 8 | 12 | 60 | 160 | = hef | 14 | 40 | 40 |
| \varnothing 10 | 14 | 60 | 200 | = hef | 16 | 50 | 50 |
| \varnothing 12 | 16 | 70 | 240 | = hef | 18 | 60 | 60 |
| \varnothing 14 | 18 | 75 | 280 | = hef | 20 | 70 | 70 |
| \varnothing 16 | 20 | 80 | 320 | = hef | 22 | 80 | 80 |
| \varnothing 20 | 24 | 90 | 400 | = hef | 26 | 100 | 100 |
| \varnothing 25 | 32 | 100 | 480 | = hef | 34 | 125 | 125 |
| \varnothing 28 | 35 | 112 | 540 | = hef | 37 | 140 | 140 |
| \varnothing 32 | 40 | 128 | 640 | = hef | 41.5 | 160 | 160 |

MIT-SE Plus for post-installed rebar connections according to European Technical Approval 11/0168


| | Drilling hole \varnothing mm | Brush \varnothing mm | Minimum embedment depth mm | Minimum lap splice length mm | Maximum installation length mm | Minimum distance between bonded-in rebars mm | Maximum distance between bonded-in and existing rebars mm |
|------------------|-----------------------------------|---------------------------|-------------------------------|---------------------------------|-----------------------------------|--|---|
| | d_0 | d_b | $l_{b,min}$ | $l_{0,min}$ | l_{max} | | |
| \varnothing 8 | 12 | 14 | 113 | 200 | 1000 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 10 | 14 | 16 | 142 | 200 | 1000 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 12 | 16 | 18 | 170 | 200 | 1200 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 14 | 18 | 20 | 198 | 210 | 1400 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 16 | 20 | 22 | 227 | 240 | 1600 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 20 | 25 | 27 | 284 | 300 | 2000 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 22 | 28 | 30 | 312 | 330 | 2000 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 24 | 32 | 34 | 340 | 360 | 2000 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |
| \varnothing 25 | 32 | 34 | 354 | 375 | 2000 | $\geq 5 ds / \geq 50$ mm | $\leq 4 ds$ |

Drilling process


| | Minimum concrete cover, without drilling aid | Minimum concrete cover, with drilling aid |
|----------------------------------|--|--|
| Hammer drilling, < 25 mm | $30 \text{ mm} + 0.06 \times lv \geq 2 ds$ | $30 \text{ mm} + 0.02 \times lv \geq 2 ds$ |
| Hammer drilling, = 25 mm | $40 \text{ mm} + 0.06 \times lv \geq 2 ds$ | $40 \text{ mm} + 0.02 \times lv \geq 2 ds$ |
| Compressed air drilling, < 25 mm | $50 \text{ mm} + 0.08 \times lv$ | $50 \text{ mm} + 0.02 \times lv$ |
| Compressed air drilling, = 25 mm | $60 \text{ mm} + 0.08 \times lv$ | $60 \text{ mm} + 0.02 \times lv$ |

MIT-SE Plus with MIT-S(r) and MIT-G(r) according to European Technical Approval 12/0544


| | Sleeve for MIT-SE Plus | Drilling hole \varnothing mm | Effective anchorage depth mm | Drilling depth mm | Usable length mm | Clearance hole in fixture mm | Brush \varnothing mm | Installation torque (Nm) |
|---------------------|---------------------------|-----------------------------------|---------------------------------|----------------------|---------------------|---------------------------------|---------------------------|-----------------------------|
| | MIT-SH-K1 | d_0 | h_{ef} | h_0 | f_{fix} | d_f | d_b | T_{req} max |
| Without sleeve, M8 | 13 x 100 | 10 | 80 | 85 | 0 - 400 | 9 | 20 | 2 |
| With sleeve, M8 | 13 x 100 | 14 | 80 | 105 | 0 - 400 | 9 | 20 | 2 |
| Without sleeve, M10 | 15 x 100 | 12 | 90 | 95 | 0 - 400 | 12 | 20 | 2 |
| With sleeve, M10 | 15 x 100 | 16 | 90 | 105 | 0 - 400 | 12 | 20 | 2 |
| Without sleeve, M12 | 15 x 100 | 12 | 90 | 95 | 0 - 400 | 14 | 20 | 2 |
| With sleeve, M12 | 15 x 100 | 16 | 90 | 105 | 0 - 400 | 14 | 20 | 2 |