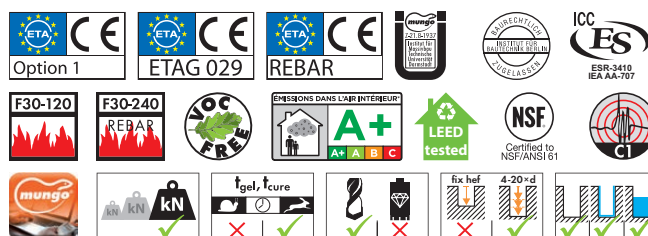


# MIT-SE Plus Mortar for use in concrete



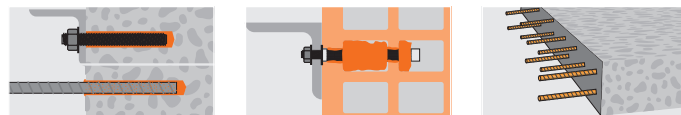
## Features

- 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 F30-F240 (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
- Fast curing
- Variable setting depth
- Application also in damp and water-filled drill holes
- Suitable for overhead fixings
- Styrene free and low odour
- Colour of mortar: grey
- Indoor (zinc plated) and outdoor (stainless steel) applications



## Applications

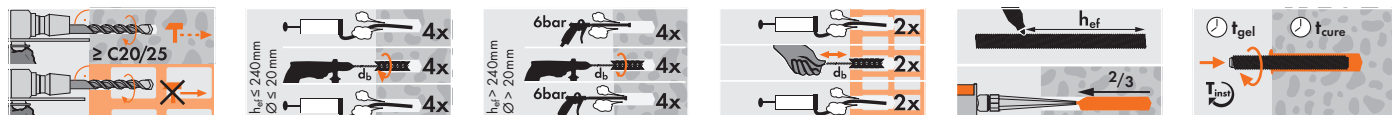
post-installed rebar connections, steel constructions, wooden constructions, façades, façade scaffolds, railings, high-racks, machines, staircases, ladders, cable trays, canopies, hand-rails, consoles



## Temperatures

|                                            | -10÷-6°C | -5÷-1°C | 0÷4°C | 5÷9°C | 10÷19°C | 20÷29°C | 30÷34°C | 35÷39°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   | 80      | 45      | 25      | 20      | 15    |
| Curing time, wet in minutes ( $t_{cure}$ ) | 48 h     | 28 h    | 14 h  | 4 h   | 160     | 90      | 50      | 40      | 30    |

## Installation



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

| 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<br>Application with silicone gun |                          |           |         |             |                     |

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

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

**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/NL     | 300     | 12          | 1152                |
| 17100170                                                        | Cartridge incl. 2 mixers | GB/RU/SLO/HR/HU/BG/RO | 300     | 12          | 1152                |
| Not part of the rebar approval<br>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<br>1 x System-case IV with cartridge insert | DE/GB/FR/IT/PL/NL | 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/NL | 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<br>1 x Maxi-Box | DE/GB/FR/IT/PL/NL | 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/NL     | 400     | 12          | 840                 |
| 17100260     | Cartridge incl. 2 mixers | GB/RU/SLO/HR/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/NL | 825     | 6           | 312                 |
| Application with pneumatic injection gun only |                          |                   |         |             |                     |

**MIT-K** System-case

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

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

|     | Drilling hole $\varnothing$ mm<br>$d_0$ | Effective anchorage depth min. mm<br>$h_{ef}$ min | Effective anchorage depth max. mm<br>$h_{ef}$ max | Drilling depth mm<br>$h_0$ | Usable length mm<br>$t_{fix}$ | Clearance hole in fixture mm<br>$d_f$ | Brush $\varnothing$ mm<br>$d_b$ | Min. distance betw. anchors mm<br>$s_{min}$ | Min. edge distance mm<br>$c_{min}$ | Installation torque (Nm)<br>$T_{inst}$ max |
|-----|-----------------------------------------|---------------------------------------------------|---------------------------------------------------|----------------------------|-------------------------------|---------------------------------------|---------------------------------|---------------------------------------------|------------------------------------|--------------------------------------------|
| M8  | 10                                      | 60                                                | 160                                               | = hef                      | 0 - 1500                      | ≤ 9                                   | 10.5-12                         | 40                                          | 40                                 | 10                                         |
| M10 | 12                                      | 60                                                | 200                                               | = hef                      | 0 - 1500                      | ≤ 12                                  | 12.5-14                         | 50                                          | 50                                 | 20                                         |
| M12 | 14                                      | 70                                                | 240                                               | = hef                      | 0 - 1500                      | ≤ 14                                  | 14.5-16                         | 60                                          | 60                                 | 40                                         |
| M16 | 18                                      | 80                                                | 320                                               | = hef                      | 0 - 1500                      | ≤ 18                                  | 18.5-20                         | 80                                          | 80                                 | 80                                         |
| M20 | 24                                      | 90                                                | 400                                               | = hef                      | 0 - 1500                      | ≤ 22                                  | 24.5-26                         | 100                                         | 100                                | 120                                        |
| M24 | 28                                      | 96                                                | 480                                               | = hef                      | 0 - 1500                      | ≤ 26                                  | 28.5-30                         | 120                                         | 120                                | 160                                        |
| M27 | 32                                      | 108                                               | 540                                               | = hef                      | 0 - 1500                      | ≤ 30                                  | 32.5-34                         | 135                                         | 135                                | 180                                        |
| M30 | 35                                      | 120                                               | 600                                               | = hef                      | 0 - 1500                      | ≤ 33                                  | 35.5-37                         | 150                                         | 150                                | 200                                        |

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

|      | Drilling hole $\varnothing$ mm<br>$d_0$ | Effective anchorage depth min. mm<br>$h_{ef}$ min | Effective anchorage depth max. mm<br>$h_{ef}$ max | Drilling depth mm<br>$h_0$ | Brush $\varnothing$ mm<br>$d_b$ | Min. distance betw. anchors mm<br>$s_{min}$ | Min. edge distance mm<br>$c_{min}$ |
|------|-----------------------------------------|---------------------------------------------------|---------------------------------------------------|----------------------------|---------------------------------|---------------------------------------------|------------------------------------|
| Ø 8  | 12                                      | 60                                                | 160                                               | = hef                      | 12.5-14                         | 40                                          | 40                                 |
| Ø 10 | 14                                      | 60                                                | 200                                               | = hef                      | 14.5-16                         | 50                                          | 50                                 |
| Ø 12 | 16                                      | 70                                                | 240                                               | = hef                      | 16.5-18                         | 60                                          | 60                                 |
| Ø 14 | 18                                      | 75                                                | 280                                               | = hef                      | 18.5-20                         | 70                                          | 70                                 |
| Ø 16 | 20                                      | 80                                                | 320                                               | = hef                      | 20.5-22                         | 80                                          | 80                                 |
| Ø 20 | 24                                      | 90                                                | 400                                               | = hef                      | 24.5-26                         | 100                                         | 100                                |
| Ø 25 | 32                                      | 100                                               | 480                                               | = hef                      | 32.5-34                         | 125                                         | 125                                |
| Ø 28 | 35                                      | 112                                               | 540                                               | = hef                      | 35.5-37                         | 140                                         | 140                                |
| Ø 32 | 40                                      | 128                                               | 640                                               | = hef                      | 40.5-41.5                       | 160                                         | 160                                |

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

|                                     | Sleeve mm | Drilling hole $\varnothing$ mm<br>$d_0$ | Effective anchorage depth mm<br>$h_{ef}$ | Drilling depth mm<br>$h_0$ | Clearance hole in fixture mm<br>$d_f$                   | Installation torque (Nm)<br>$T_{inst}$ max |
|-------------------------------------|-----------|-----------------------------------------|------------------------------------------|----------------------------|---------------------------------------------------------|--------------------------------------------|
| Without sleeve, M8                  | -         | 10                                      | 80                                       | 80                         | ≤ 9                                                     | 2 (MZ DF = 14)                             |
| Without sleeve, M10                 | -         | 12                                      | 90                                       | 90                         | ≤ 12                                                    | 2 (MZ DF = 14)                             |
| Without sleeve, M12                 | -         | 14                                      | 100                                      | 100                        | ≤ 14                                                    | 2 (MZ DF = 14)                             |
| Without sleeve, M16                 | -         | 18                                      | 100                                      | 100                        | ≤ 18                                                    | 2 (MZ DF = 14)                             |
| Without sleeve, MIG-M6              | -         | 12                                      | 90                                       | 90                         | ≤ 7                                                     | 2 (MZ DF = 14)                             |
| Without sleeve, MIG-M8              | -         | 14                                      | 100                                      | 100                        | ≤ 9                                                     | 2 (MZ DF = 14)                             |
| Without sleeve, MIG-M10             | -         | 18                                      | 100                                      | 100                        | ≤ 12                                                    | 2 (MZ DF = 14)                             |
| With sleeve, M8                     | 12x80     | 12                                      | 80                                       | 85                         | ≤ 9                                                     | 2 (MZ DF = 14)                             |
| With sleeve, M8/M10/MIG-M6          | 16x85     | 16                                      | 85                                       | 90                         | ≤ 7 (MIG-M6) / ≤ 9 (M8) / ≤ 12 (M10)                    | 2 (MZ DF = 14)                             |
| With sleeve, M8/M10/MIG-M6          | 16x130    | 16                                      | 130                                      | 135                        | ≤ 7 (MIG-M6) / ≤ 9 (M8) / ≤ 12 (M10)                    | 2 (MZ DF = 14)                             |
| With sleeve, M12/M16/MIG-M8/MIG-M10 | 20x85     | 20                                      | 85                                       | 90                         | ≤ 9 (MIG-M8) / ≤ 12 (MIG-M10) / ≤ 14 (M12) / ≤ 18 (M16) | 2 (MZ DF = 14)                             |
| With sleeve, M12/M16/MIG-M8/MIG-M10 | 20x130    | 20                                      | 130                                      | 135                        | ≤ 9 (MIG-M8) / ≤ 12 (MIG-M10) / ≤ 14 (M12) / ≤ 18 (M16) | 2 (MZ DF = 14)                             |
| With sleeve, M12/M16/MIG-M8/MIG-M10 | 20x200    | 20                                      | 200                                      | 205                        | ≤ 9 (MIG-M8) / ≤ 12 (MIG-M10) / ≤ 14 (M12) / ≤ 18 (M16) | 2 (MZ DF = 14)                             |