fischer frame fixings

The complete product range for all requirements

fischer

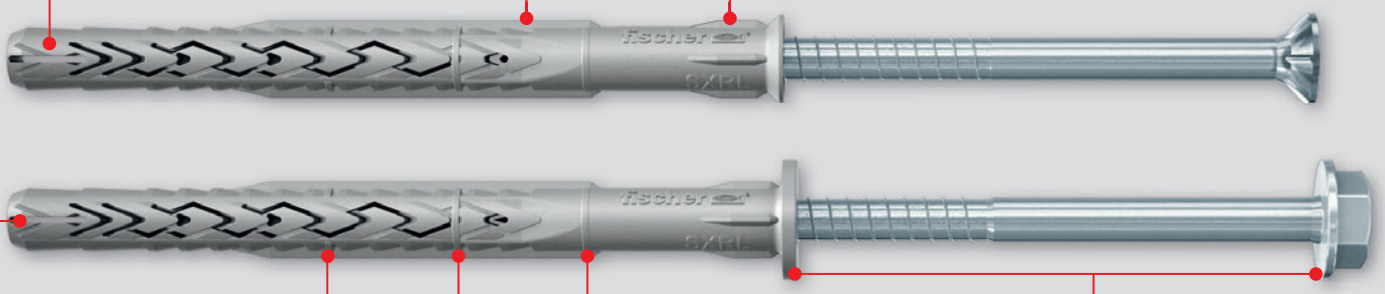
innovative solutions

SXRL frame fixing

The versatile with multiple anchorage depth

The long expansion element with up to three anchorage depths makes the SXRL a flexible product and thus to the **most versatile frame fixing** in the fischer assortment.

When the plug is to be set deeper, the side ribs prevent the plug from turning during installation. This provides **additional security.**



The special geometry of the plug with its conical shape distributes the loads uniformly in the drill hole. It ensures for **use in all building materials** and **outstanding load values.**

Anchorage depth 90 mm
In hollow building materials and aerated concrete for SXRL 8 and SXRL 14, in aerated concrete for SXRL 10

Anchorage depth 70 mm
In all building materials – conrete, solid and hollow building materials, areated concrete

Anchorage depth 50 mm
In concrete, solid and hollow building materials for SXRL 8 and SXRL 10

For metal structures the version FUS (hexagon head screw with moulded washer and plug with wide sleeve rim) is ideally suited. **Contact corrosion between the fixture and the screw is prevented.**

Our extensive assortment

- Diameter 8, 10 and 14
- fischer safety screws available in the versions of zinc-plated steel and stainless A4 steel
- Two head variants:
  - countersunk head
  - hexagon head with moulded washer

Overview of the advantages

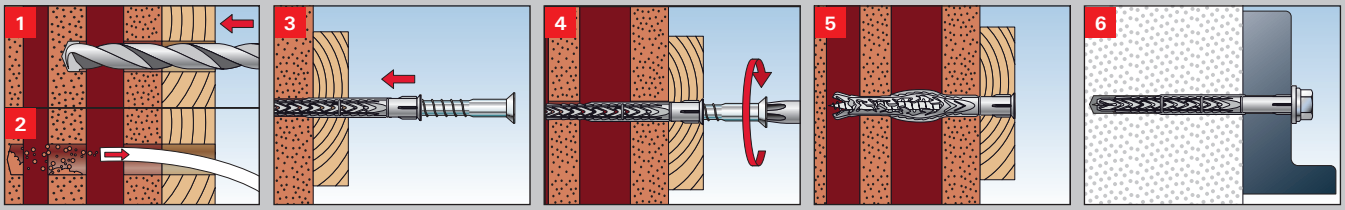
- In the European Technical Assessment (ETA), which takes into consideration all classes of building materials, several anchorage depths are regulated: 50, 70 and 90 mm for SXRL 8 and SXRL 10, 70 and 90 mm for SXRL 14.
- The SXRL 14 is additionally approved for applications that are subject to pressure and may be used for façade structures that are installed without wall brackets with a spacing.

Functionality

A In **hollow building materials** the force is transmitted equally through the two expansion zones. The internal substrate webs are not crushed by the expansion zones and so transmit the force safely.

B In **solid building materials and aerated concrete** the two expansion zones combine to form one long expansion element, thus providing for a uniform and even distribution of the load into substrate.

Installation



Recommendation

Approvals and markings

ETA-07/0121
ETAG 020 a, b, c, d
Multiple use in concrete and masonry for non-structural applications

Mit allgemeiner bauaufsichtlicher Zulassung
Institut für Massivbau Technische Universität Darmstadt

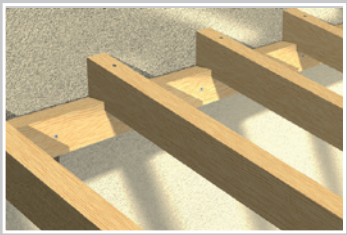
Fire resistance classification
R 90
for facade systems see ETA

EDELSTAHL Rost frei
INOX
STAINLESS STEEL

Applications

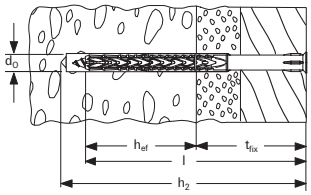
Façade substructures

Interior fitting



Wood construction

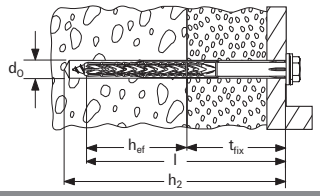
SXRL technical data



SXRL-T – fischer safety screw with countersunk head

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval DIBt	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Usable length at anchorage depth h_{ef} 50 mm t_{fix} [mm]	70 mm t_{fix} [mm]	90 mm t_{fix} [mm]	Anchor length l [mm]	Drive type	Sales unit [pcs]
SXRL 8 x 60 T	**540113**	**540119**	-	■	8	70	10	-	-	60	T30	50
SXRL 8 x 80 T	**540114**	**540121**	-	■	8	90	30	10	-	80	T30	50
SXRL 8 x 100 T	**540115**	**540123**	-	■	8	110	50	30	10	100	T30	50
SXRL 8 x 120 T	**540116**	**540124**	-	■	8	130	70	50	30	120	T30	50
SXRL 8 x 140 T	**540117**	**540125**	-	■	8	150	90	70	50	140	T30	50
SXRL 8 x 160 T	**540118**	**540126**	-	■	8	170	110	90	70	160	T30	50
SXRL 10 x 80 T	**522698**	**522709**	-	■	10	90	30	10	-	80	T40	50
SXRL 10 x 100 T	**522699**	**522710**	-	■	10	110	50	30	10	100	T40	50
SXRL 10 x 120 T	**522700**	**522711**	-	■	10	130	70	50	30	120	T40	50
SXRL 10 x 140 T	**522701**	**522712**	-	■	10	150	90	70	50	140	T40	50
SXRL 10 x 160 T	**522703**	**522713**	-	■	10	170	110	90	70	160	T40	50
SXRL 10 x 180 T	**522704**	**522714**	-	■	10	190	130	110	90	180	T40	50
SXRL 10 x 200 T	**522705**	**522715**	-	■	10	210	150	130	110	200	T40	50
SXRL 10 x 230 T	**522706**	**522716**	-	■	10	240	180	160	140	230	T40	50
SXRL 10 x 260 T	**522707** 1)	**522717** 1)	-	■	10	270	210	190	170	260	T40	50
SXRL 10 x 290 T	**522708** 1)	**522718** 1)	-	■	10	300	240	220	200	290	T40	50
SXRL 14 x 80 T	**530920**	**530932**	●	■	14	95	-	10	-	80	T50	50
SXRL 14 x 100 T	**530921**	**530933**	●	■	14	115	-	30	10	100	T50	50
SXRL 14 x 120 T	**530922**	**530934**	●	■	14	135	-	50	30	120	T50	50
SXRL 14 x 140 T	**530923**	**530935**	●	■	14	155	-	70	50	140	T50	50
SXRL 14 x 160 T	**530924**	**530936**	●	■	14	175	-	90	70	160	T50	50
SXRL 14 x 180 T	**530925**	**530937**	●	■	14	195	-	110	90	180	T50	50
SXRL 14 x 200 T	**530926**	**530938**	●	■	14	215	-	130	110	200	T50	50
SXRL 14 x 230 T	**530927**	**530939**	●	■	14	245	-	160	140	230	T50	50
SXRL 14 x 260 T	**530928**	**530940**	●	■	14	275	-	190	170	260	T50	50
SXRL 14 x 300 T	**530929** 1)	**530941** 1)	●	■	14	315	-	230	210	300	T50	20
SXRL 14 x 330 T	**530930** 1)	**530942** 1)	●	■	14	345	-	260	240	330	T50	20
SXRL 14 x 360 T	**530931** 1)	**530943** 1)	●	■	14	375	-	290	270	360	T50	20

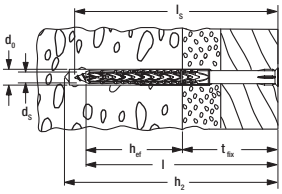
1) not pre-assembled



SXRL-FUS – fischer hexagon head safety screw, moulded washer and integrated bit recess

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval DIBt	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Usable length at anchorage depth h_{ef}: 50 mm t_{fix} [mm]	70 mm t_{fix} [mm]	90 mm t_{fix} [mm]	Anchor length l [mm]	Drive type	Sales unit [pcs]
SXRL 8 x 60 FUS	540127	540135	-	■	8	70	10	-	-	60	T30/SW10	50
SXRL 8 x 80 FUS	540129	540136	-	■	8	90	30	10	-	80	T30/SW10	50
SXRL 8 x 100 FUS	540130	540137	-	■	8	110	50	30	10	100	T30/SW10	50
SXRL 8 x 120 FUS	540131	-	-	■	8	130	70	50	30	120	T30/SW10	50
SXRL 8 x 140 FUS	540133	-	-	■	8	150	90	70	50	140	T30/SW10	50
SXRL 8 x 160 FUS	540134	-	-	■	8	170	110	90	70	160	T30/SW10	50
SXRL 10 x 80 FUS	522719	522730	-	■	10	90	30	10	-	80	T40/SW13	50
SXRL 10 x 100 FUS	522720	522731	-	■	10	110	50	30	10	100	T40/SW13	50
SXRL 10 x 120 FUS	522721	522732	-	■	10	130	70	50	30	120	T40/SW13	50
SXRL 10 x 140 FUS	522723	522733	-	■	10	150	90	70	50	140	T40/SW13	50
SXRL 10 x 160 FUS	522724	522734	-	■	10	170	110	90	70	160	T40/SW13	50
SXRL 10 x 180 FUS	522725	522735	-	■	10	190	130	110	90	180	T40/SW13	50
SXRL 10 x 200 FUS	522726	522736	-	■	10	210	150	130	110	200	T40/SW13	50
SXRL 10 x 230 FUS	522727	522737	-	■	10	240	180	160	140	230	T40/SW13	50
SXRL 10 x 260 FUS	522728 1)	522738 1)	-	■	10	270	210	190	170	260	T40/SW13	50
SXRL 10 x 290 FUS	522729 1)	522739 1)	-	■	10	300	240	220	200	290	T40/SW13	50
SXRL 14 x 80 FUS	530946	530955	●	■	14	95	-	10	-	80	T50/SW17	50
SXRL 14 x 100 FUS	530947	530956	●	■	14	115	-	30	10	100	T50/SW17	50
SXRL 14 x 120 FUS	530948	530957	●	■	14	135	-	50	30	120	T50/SW17	50
SXRL 14 x 140 FUS	530949	530958	●	■	14	155	-	70	50	140	T50/SW17	50
SXRL 14 x 160 FUS	530950	530959	●	■	14	175	-	90	70	160	T50/SW17	50
SXRL 14 x 180 FUS	530951	530960	●	■	14	195	-	110	90	180	T50/SW17	50
SXRL 14 x 200 FUS	530952	530961	●	■	14	215	-	130	110	200	T50/SW17	50
SXRL 14 x 230 FUS	530953	530962	●	■	14	245	-	160	140	230	T50/SW17	50
SXRL 14 x 260 FUS	530954	530963	●	■	14	275	-	190	170	260	T50/SW17	50

1) not pre-assembled



SXRL – without screw

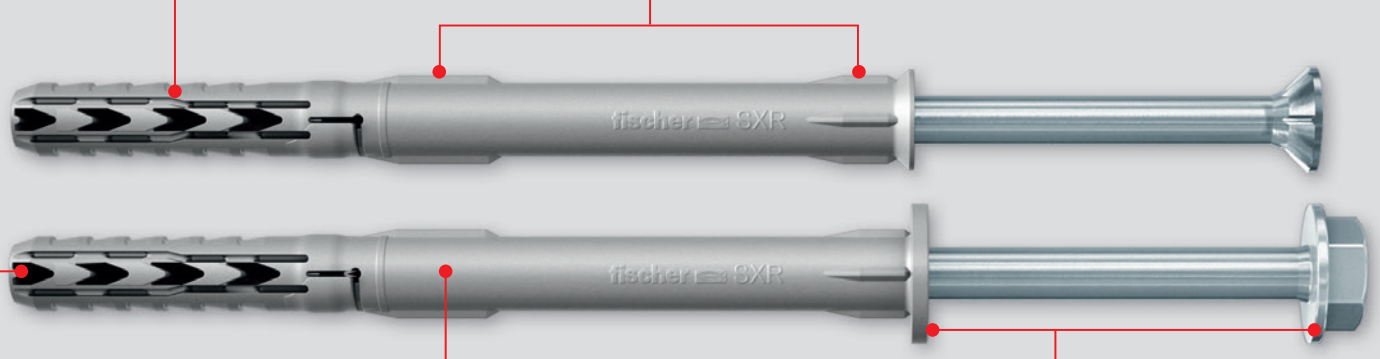
Item	Art.-No.	Approval DIBt	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through h_2 [mm]	Usable length at anchorage depth h_{ef}: 50 mm t_{fix} [mm]	70 mm t_{fix} [mm]	90 mm t_{fix} [mm]	Anchor length l [mm]	Screw diameter d_s [mm]	Screw length ≥ l_s [mm]	Sales unit [pcs]
SXRL 8 x 60	540879	-	-	8	70	10	-	-	60	5,5 – 6,0	65	100
SXRL 8 x 80	540880	-	-	8	90	30	10	-	80	5,5 – 6,0	85	100
SXRL 8 x 100	540881	-	-	8	110	50	30	10	100	5,5 – 6,0	105	100
SXRL 8 x 120	540882	-	-	8	130	70	50	30	120	5,5 – 6,0	125	100

SXR frame fixing

The efficient with short expansion element

The short expansion element measuring 50 mm only requires a small drill hole depth. This **saves on drilling time** and results in **less drill bit wear.**

The anti rotation fins increase the installation comfort and provide **additional safety.**



The special geometry of the short expansion element allows for **use in many building materials.**

With the push-through installation through timber construction, the **hammer-in stop** stops premature expansion in the fixture.

For metal structures the version FUS (hexagon head screw with moulded washer and plug with wide sleeve rim) is ideally suited. **Contact corrosion between the fixture and the screw is prevented.**

Our extensive assortment

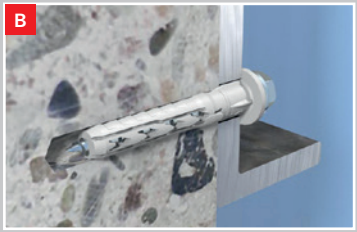
- Diameter 6, 8 and 10
- fischer safety screws available in the versions of zinc-plated steel and stainless A4 steel
- Two head variants:
  - countersunk head
  - hexagon head with moulded washer

Overview of the advantages

- The European Technical Assessment (ETA) for SXR 8 and 10 covers the use in various solid and hollow building materials and thus guarantees a secure fixing.
- The use of SXR 10 in thin concrete slabs (weather resistant shells of external wall panels) is regulated in the ETA.

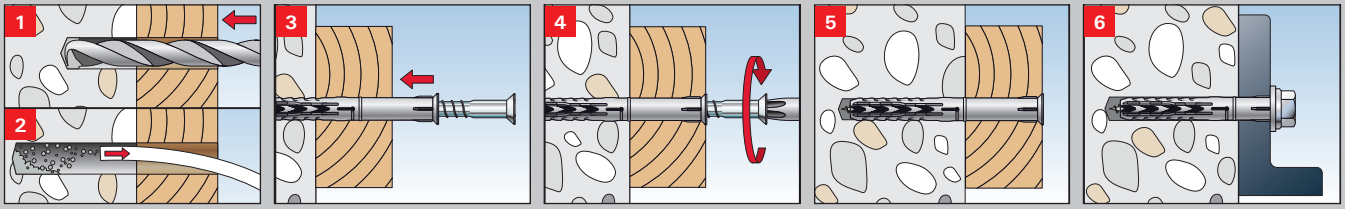
Functionality

A In **hollow building materials** the loads are transmitted to the substrate webs.



B In **solid building materials** the SXR expands.

Installation



Recommendation

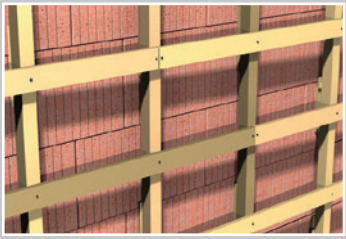
Approvals and markings

ETA-07/0121
ETAG 020 a, b, c, d
Multiple use in concrete and masonry for non-structural applications

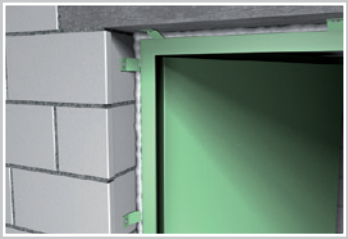
Fire resistance classification
R 90
for facade systems see ETA

EDELSTAHL Rost frei
INOX
STAINLESS STEEL

Applications



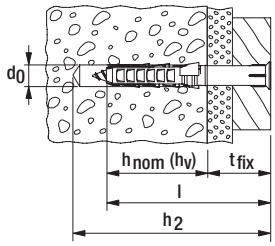
Façade substructures



Interior fitting

Electrical installation

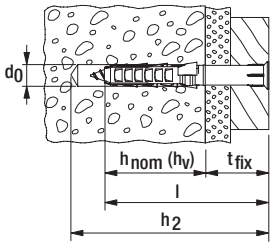
SXR technical data



SXR-Z – fischer safety screw with countersunk head and integrated cross drive PZ bit

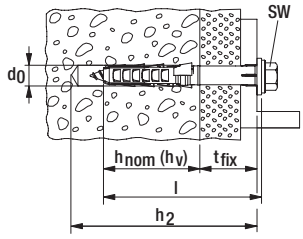
Item	Steel, zinc-plated Art.-No. zinc-plated	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
SXR 6 x 50 Z	**503232** 1)	-	6	60	30	50	20	PZ2	50
SXR 6 x 60 Z	**503233** 1)	-	6	70	30	60	30	PZ2	60

1) not pre-assembled



SXR-T – fischer safety screw with countersunk head

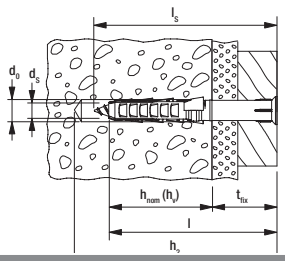
Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
SXR 8 x 60 T	**502999**	-	■	8	70	50	60	10	T30	50
SXR 8 x 80 T	**503000**	-	■	8	90	50	80	30	T30	50
SXR 8 x 100 T	**503001**	-	■	8	110	50	100	50	T30	50
SXR 8 x 120 T	**503002**	-	■	8	130	50	120	70	T30	50
SXR 10 x 80 T	**046263**	**046272**	■	10	90	50	80	30	T40	50
SXR 10 x 100 T	**046264**	**046274**	■	10	110	50	100	50	T40	50
SXR 10 x 120 T	**046265**	**046278**	■	10	130	50	120	70	T40	50
SXR 10 x 140 T	**046266**	**046279**	■	10	150	50	140	90	T40	50
SXR 10 x 160 T	**046267**	**046283**	■	10	170	50	160	110	T40	50
SXR 10 x 180 T	**046268**	**046285**	■	10	190	50	180	130	T40	50
SXR 10 x 200 T	**046269**	**046286**	■	10	210	50	200	150	T40	50
SXR 10 x 230 T	**046270**	**046287**	■	10	240	50	230	180	T40	50
SXR 10 x 260 T	**046271**	**046288**	■	10	270	50	260	210	T40	50



SXR-FUS – fischer hexagon head safety screw, moulded washer and integrated T40 bit recess

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
SXR 10 x 52 FUS	**502456** 1)	-	■	10	62	50	52	2	T40/SW13	50
SXR 10 x 60 FUS	**046329**	**046339**	■	10	70	50	60	10	T40/SW13	50
SXR 10 x 80 FUS	**046330**	**046340**	■	10	90	50	80	30	T40/SW13	50
SXR 10 x 100 FUS	**046331**	**046342**	■	10	110	50	100	50	T40/SW13	50
SXR 10 x 120 FUS	**046332**	**046343**	■	10	130	50	120	70	T40/SW13	50
SXR 10 x 140 FUS	**046333**	**046344**	■	10	150	50	140	90	T40/SW13	50
SXR 10 x 160 FUS	**046334**	**046345**	■	10	170	50	160	110	T40/SW13	50
SXR 10 x 180 FUS	**046335**	**046361**	■	10	190	50	180	130	T40/SW13	50
SXR 10 x 200 FUS	**046336**	**046362**	■	10	210	50	200	150	T40/SW13	50
SXR 10 x 230 FUS	**046337**	**046363**	■	10	240	50	230	180	T40/SW13	50
SXR 10 x 260 FUS	**046338**	**046364**	■	10	270	50	260	210	T40/SW13	50

1) not pre-assembled



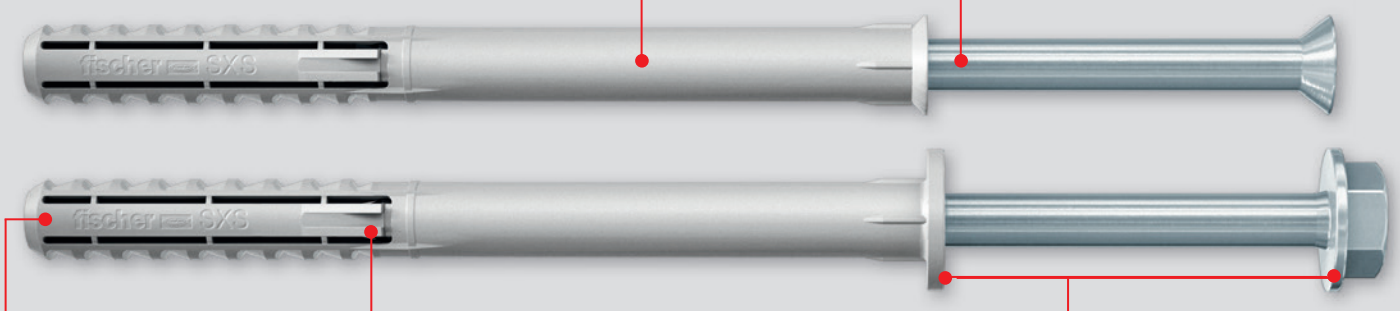
SXR – without screw

Item	Art.-No.	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Screw diameter d_s [mm]	Screw length ≥ l_s [mm]	Max. fixture thickness t_{fix} [mm]	Sales unit [pcs]
SXR 6 x 35	**503228**	-	6	45	30	35	4,5	40	5	100
SXR 6 x 50	**503229**	-	6	60	30	50	4,5	55	20	100
SXR 6 x 60	**503230**	-	6	70	30	60	4,5	65	30	100
SXR 8 x 60	**506194**	-	8	70	50	60	5,5 -6,0	65	10	100
SXR 8 x 80	**506196**	-	8	90	50	80	5,5 -6,0	85	30	100
SXR 8 x 100	**506198**	-	8	110	50	100	5,5 -6,0	125	50	100
SXR 8 x 120	**506199**	-	8	130	50	120	5,5 -6,0	105	70	100

SXS frame fixing
The high-performance specialist

The ideal interaction of the SXS with the CO-NA screw (CO-NA is short for the German term for „conical expansion") ensures a **high load bearing capacity in solid building materials and cracked concrete** with only 50 mm anchorage depth and offers **maximum safety.**

Due to the permissible bending moment of 16.3 Nm, the SXS is **highly suited for challenging fixings with high bending stress.**



The SXS expands in four directions, thus providing for a **uniform load introduction** into the substrate.

The integrated hammer-in stop ensures **a smooth push-through installation** even in extreme conditions (e. g. wet wooden slats or tight drill hole).

For metal structures the version FUS (hexagon head screw with moulded washer and plug with wide sleeve rim) is ideally suited. **Contact corrosion between the fixture and the screw is prevented.**

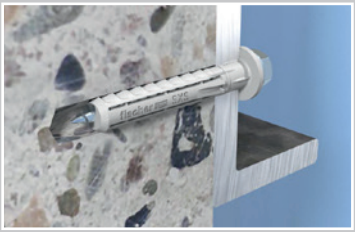
Our assortment

- Diameter 10
- fischer CO-NA screws available in the versions of zinc-plated steel and stainless A4 steel
- Two head variants:
  - countersunk head
  - hexagon head with moulded washer

Overview of the advantages

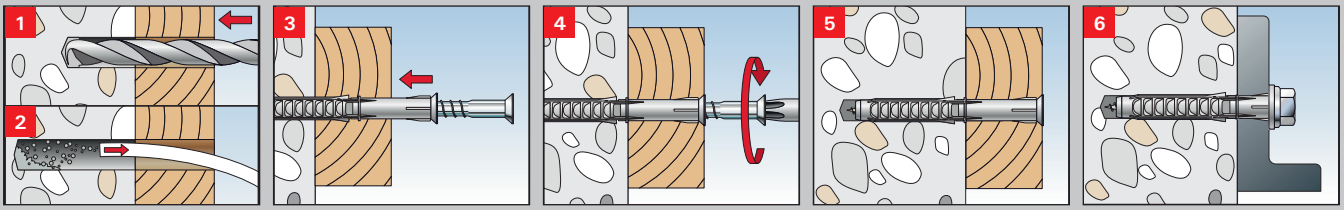
- The large diameter of the CO-NA screw ensures the safe introduction of high shear loads and a maximum permissible bending moment. Thus fewer fixing points are required.
- The approval for single-point fixing in cracked concrete makes the SXS the designated specialist in concrete particularly for tasks such as the installation of awning roofs and outdoor railings compared to steel anchors.

Functionality



The specially developed CO-NA screw geometry generates expansion forces when the screw is driven in and the SXS is activated. When subjected to a load, the expansion forces increase due to its conical geometry. In **cracked concrete**, the plug is expanded even further by the CO-NA screw, thus ensuring safe installations.

Installation



Recommendation

Approvals and markings

ETA-09/0352
ETAG 020 Part 2, 3, 5
Multiple use in concrete and masonry for non-structural applications

ALLGEMEINE BAUAUFSICHTLICHE
CC-ZULASSUNG
mit charakteristischen Tragfähigkeiten und Teilsicherheitsbeiwerten

Fire resistance classification
R 90
for facade systems see ETA

EDELSTAHL Rost frei
INOX
STAINLESS STEEL

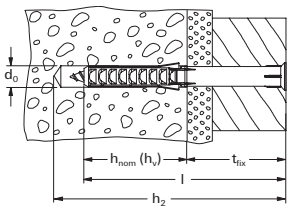
Applications

Railings

Fixed ladders

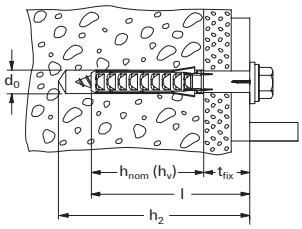
Façade substructures

SXS technical data



SXS-T — fischer CO-NA countersunk head screw

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval DIBt	 ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
SXS 10 x 80 T	**019601**	**019602**	●	■	10	90	50	80	30	T40	50
SXS 10 x 100 T	**019604**	**019605**	●	■	10	110	50	100	50	T40	50
SXS 10 x 120 T	**019616**	**019617**	●	■	10	130	50	120	70	T40	50
SXS 10 x 140 T	**019621**	**019623**	●	■	10	150	50	140	90	T40	50
SXS 10 x 160 T	**024076**	**024077**	●	■	10	170	50	160	110	T40	50
SXS 10 x 180 T	**024080**	**024082**	●	■	10	190	50	180	130	T40	50



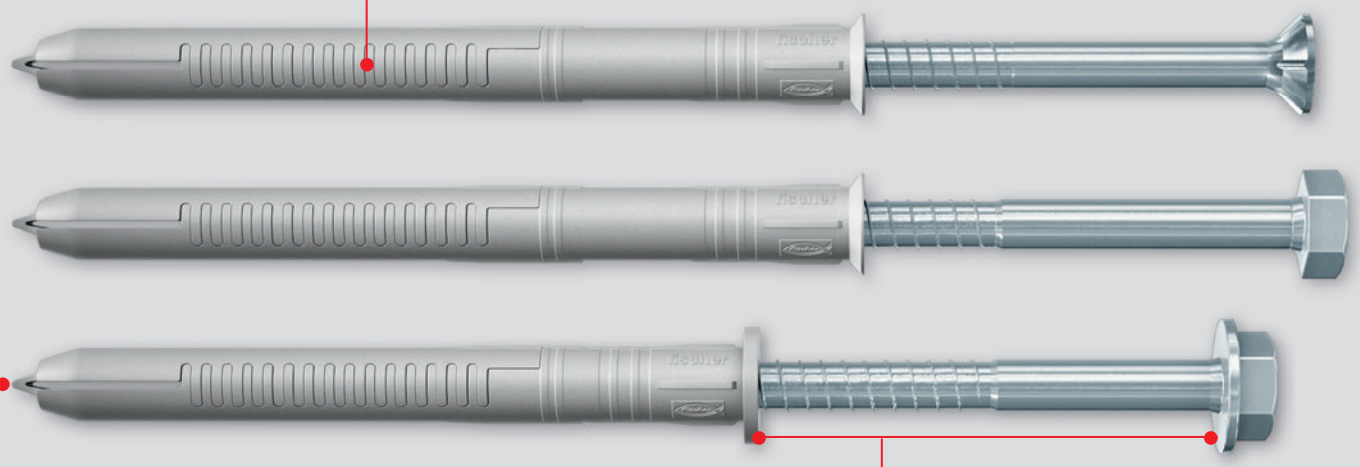
SXS-FUS — fischer CO-NA countersunk head screw, moulded washer and integrated T40 bit recess

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval DIBt	 ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
SXS 10 x 60 FUS	**019599**	**019600**	●	■	10	70	50	60	10	T40/SW13	50
SXS 10 x 80 FUS	**019603**	**019628**	●	■	10	90	50	80	30	T40/SW13	50
SXS 10 x 100 FUS	**019614**	**019615**	●	■	10	110	50	100	50	T40/SW13	50
SXS 10 x 120 FUS	**019619**	**019620**	●	■	10	130	50	120	70	T40/SW13	50
SXS 10 x 140 FUS	**019624**	**019626**	●	■	10	150	50	140	90	T40/SW13	50
SXS 10 x 160 FUS	**024045**	**024062**	●	■	10	170	50	160	110	T40/SW13	50
SXS 10 x 180 FUS	**024046**	**024063**	●	■	10	190	50	180	130	T40/SW13	50

FUR frame fixing

The lamella plug with gentle power transfer

With its asymmetrical interlocking lamellae the FUR plug adapts to the hollow building material and provides for **gentle power transfer.**



Due to the plug sleeve's slender geometry the FUR can be **easily inserted** even into thick and waterlogged wooden attachments and smaller drill holes. The plug **does not bind in the attachment.**

For metal structures the version FUS (hexagon head screw with moulded washer and plug with wide sleeve rim) is ideally suited. **Contact corrosion between the fixture and the screw is prevented.**

Our assortment

- Diameter 8 und 10
- fischer safety screws available in the versions of zinc-plated steel and stainless A4 steel
- Three head variants:
  - countersunk head
  - hexagon head
  - hexagon head with moulded washer

Overview of the advantages

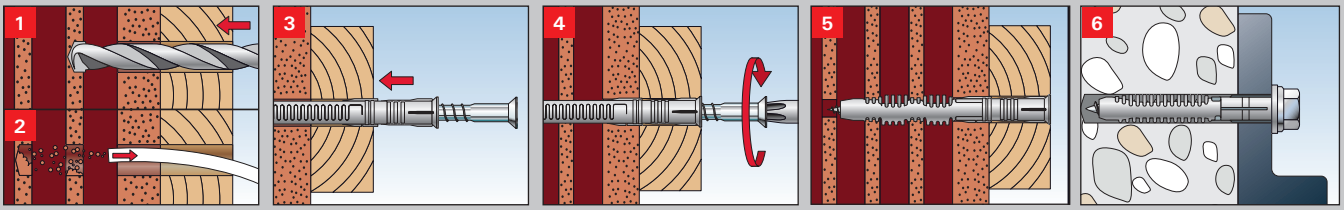
- The operating principle with 70 mm anchorage depth and tried and tested lamellae technology makes it an assembly-friendly plug even in unknown base material.
- With its low expansion forces, FUR is suitable for fixings near the edge (e. g. in door and gate construction).

Functionality

A Inserting the screw causes the expansion of the individual lamella. In **solid building materials** the lamellae generate uniform expansion forces.

B In **hollow building materials** the lamellae expand into the voids and locks the fixing into the material.

Installation



Recommendation

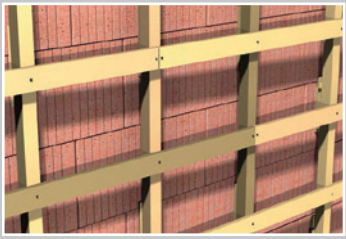
Approvals and markings

ETA-13/0235
ETAG 020 Part 2, 3, 4
Multiple fixings for non-structural applications in concrete and masonry

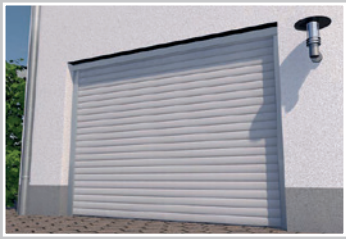
Fire resistance classification
R 90
for facade systems see ETA

EDELSTAHL Rost frei
INOX
STAINLESS STEEL

Applications



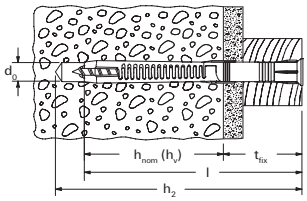
Façade substructures



Door and gate construction

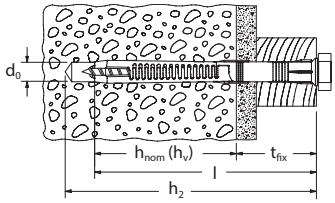
Window installation

FUR technical data



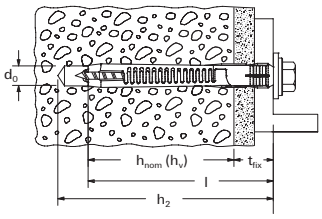
FUR-T – fischer safety screw with countersunk head

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Rost frei Art.-No. A4	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
FUR 8 x 80 T	**070110**	**070120**	–	8	90	70	80	10	T30	50
FUR 8 x 100 T	**070111**	**070121**	–	8	110	70	100	30	T30	50
FUR 8 x 120 T	**070112**	**070122**	–	8	130	70	120	50	T30	50
FUR 10 x 80 T	**088756**	**088784**	■	10	90	70	80	10	T40	50
FUR 10 x 100 T	**088757**	**088785**	■	10	110	70	100	30	T40	50
FUR 10 x 115 T	**088760**	**088791**	■	10	125	70	115	45	T40	50
FUR 10 x 135 T	**088758**	**088786**	■	10	145	70	135	65	T40	50
FUR 10 x 160 T	**088759**	**088787**	■	10	170	70	160	90	T40	50
FUR 10 x 185 T	**088761**	**088788**	■	10	195	70	185	115	T40	50
FUR 10 x 200 T	**088764**	**088789**	■	10	210	70	200	130	T40	50
FUR 10 x 230 T	**088762**	**088790**	■	10	240	70	230	160	T40	50



FUR-SS – fischer hexagon head safety screw

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
FUR 8 x 80 SS	**070130**	**070140**	–	8	90	70	80	10	SW 10	50
FUR 8 x 100 SS	**070131**	**070141**	–	8	110	70	100	30	SW 10	50
FUR 8 x 120 SS	**070132**	–	–	8	130	70	120	50	SW 10	50
FUR 10 x 80 SS	**088776**	**088792**	■	10	90	70	80	10	SW 13	50
FUR 10 x 100 SS	**088777**	**088793**	■	10	110	70	100	30	SW 13	50
FUR 10 x 115 SS	**088783**	**088799**	■	10	125	70	115	45	SW 13	50
FUR 10 x 135 SS	**088778**	**088794**	■	10	145	70	135	65	SW 13	50
FUR 10 x 160 SS	**088779**	**088795**	■	10	170	70	160	90	SW 13	50
FUR 10 x 185 SS	**088780**	**088796**	■	10	195	70	185	115	SW 13	50
FUR 10 x 200 SS	**088781**	**088797**	■	10	210	70	200	130	SW 13	50
FUR 10 x 230 SS	**088782**	**088798**	■	10	240	70	230	160	SW 13	50



FUR-FUS – fischer hexagon head safety screw, moulded washer and integrated T40 bit recess

Item	Steel, zinc-plated Art.-No. zinc-plated	Stainless steel Art.-No. A4	Approval ETA	Nominal drill hole diameter d_0 [mm]	Min. drill hole depth for push-through installation h_2 [mm]	Min. anchorage depth h_{nom} (h_v) [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Drive type	Sales unit [pcs]
FUR 10 x 80 FUS	**093527**	**093528**	■	10	90	70	80	10	T40/SW13	50
FUR 10 x 100 FUS	**097797**	–	■	10	110	70	100	30	T40/SW13	50

Accessories for SXRL, SXR, SXS and FUR

Corrosion protection spray FTC-CP professionally prevents the penetration of moisture into the anchor shaft and securely protects the connection from corrosion

Corrosion protection spray

Item	Art.-No.	Colour	Content per canister [ml]	Sales unit [pcs]
FTC-CP	**511440**	black	500 1)	12

1) With one can about 300 screw heads can be coated.

Cover cap ADT for a discreet covering of the screw heads

Cover caps

Item	Art.-No.	Colour	Cap [Ø mm]	Matches the safety screw with bit recess	Sales unit [pcs]
ADT 15 W	**060326**	white	15	T40	100
ADT 15 DB	**060329**	dark brown	15	T40	100
ADT 18 W	**060334**	white	18	T40	100
ADT 18 DB	**060337**	dark brown	18	T40	100

Washer U made of stainless A2 steel,
e. g. for façade substructures with slotted holes

Washer

Item	Art.-No.	Outer diameter [mm]	Hole [Ø mm]	Thickness [mm]	Matches anchor type	Sales unit [pcs]
U 11,5 x 21 x 1,5 DIN 522 A2	**010026**	21	11,5	1,5	SXR 10, SXRL 10, SXS 10, FUR 10	500

FDB Diamond Bit

FPB Profi Bit

FMB Maxx Bit

Bits

Item	Art.-No.	Drive type	Length [mm]	Contents	Sales unit [pcs]
FDB T30 Diamant Bit W 10	**533140**	TX30	25	10	10
FDB T40 Diamant Bit W 10	**533141**	TX40	25	10	10
FPB T30 Profi Bit W 10	**533116**	TX30	25	10	10
FPB T40 Profi Bit W 10	**533117**	TX40	25	10	10
FPB T50 Profi Bit W 1	**533085**	TX50	25	1	10
FMB T30 Maxx Bit W 5	**533158**	TX30	29	5	10
FMB T40 Maxx Bit W 5	**533159**	TX40	29	5	10

FBH Bit Holder W 1

FBH Quick Bit Magnet W 1

FBH Quick Bit Slim W 1

Bit holder

Item	Art.-No.	Drive type	Length [mm]	Contents	Sales unit [pcs]
FBH Bit Holder W 1	**533148**	1/4"	50	1	1
FBH Quick Bit Magnet W 1	**533149**	1/4"	50	1	1
FBH Quick Bit Slim W 1	**533150**	1/4"	80	1	1

Aerated concrete hole punch GBS

Aerated concrete hole punch for SXR

Item	Art.-No.	Drill hole [Ø mm]	Min. drill hole depth for push-through installation [mm]	Matches	Sales unit [pcs]
GBS 10 x 80	**050590** 1)	9	85	SXR 10 x 52, SXR 10 x 60, SXR 10 x 80	1
GBS 10 x 100	**050591** 1)	9	105	SXR 10 x 100	1
GBS 10 x 135	**050593** 1)	9	140	SXR 10 x 120	1
GBS 10 x 160	**050594** 1)	9	165	SXR 10 x 140, SXR 10 x 160	1
GBS 10 x 185	**050595** 1)	9	190	SXR 10 x 180	1
GBS 10 x 230	**050596** 1)	9	235	SXR 10 x 200, SXR 10 x 230	1

1) According to the ETA, the aerated concrete hole punch GBS must be used for drill-hole production in aerated concrete PB < 4N/mm².

Fixing selection aid

	Anchor diameter		Ø 6	Ø 8					Ø 10						Ø 14	
	Product		SXR	SXRL			SXR	FUR	SXRL			SXR	FUR	SXS	SXRL	
	Anchorage depth [mm]		50	50	70	90	50	70	50	70	90	50	70	50	70	90
	Max. usable length [mm]	T	30	110	90	70	70	50	240	220	200	210	160	130	190	170
		FUS	-	110	90	70	-	50	240	220	200	210	160	130	290	270
Concrete	Concrete		✓	✓	+ +		+ +	+	✓	+ +		+ +	+	+ +	✓	
Concrete	Thin concrete slabs and weather resistant shells of external wall panels		✓	✓			+ +		+ +			✓				
Concrete	Pre-stressed hollow concrete core slabs		✓	✓			+ +		✓			+ +		+ +		
Solid building material	Solid bricks		✓	+ +	✓		+ +	+	+ +	✓		+ +	+	+	✓	
Solid building material	Solid sand-lime bricks		✓	+ +	✓		+ +	+	+ +	✓		+ +	+	+	✓	
Solid building material	Solid lightweight concrete bricks		✓	+ +	✓		+ +	+	+ +	✓		+ +	+	+	✓	
Solid building material	Aerated concrete				+ +	✓				+ +	✓	+		+	+ +	✓
Hollow building material	Vertically perforated brick		✓	+	✓	+ +	+ +	+	+	✓	+ +	+ +	+		✓	+ +
Hollow building material	Perforated sand-lime bricks		✓	+	✓	+ +	+ +	+		✓	+ +	+ +	+		✓	+ +
Hollow building material	Hollow lightweight concrete blocks		✓	+ +	✓		+ +	+	+ +	✓		+ +	+		✓	+ +
Hollow building material	Ceilings made of vertically perforated bricks				+ +	✓		+		+ +	✓		+			
	ETA			■			■		■			■	■	■	■	

✓	++	+	■
fischer recommendation per Ø	very good	good	ETA

Permissible loads

Permissible loads of a single anchor as part of a multiple fixing of non-structural systems in concrete and masonry according to European Technical Assessment or Approval (ETA).

Product			SXRL[5]								SXR[5]		FUR[5]	SXS[5]
Anchor diameter		[mm]	Ø 8			Ø 10			Ø 14		Ø 8	Ø 10	Ø 10	Ø 10
Anchorage depth	h_{nom}	[mm]	50	70	90	50	70	90	70	90	50	50	70	50
Anchorage in concrete ≥ C12/15														
Permissible tensile load		[kN]	1,59	1,98		1,98	2,58		3,37		0,99	1,79	1,79	1,39
Permissible shear load	Zinc-plated steel	[kN]	4,23			5,98			12,40		4,23	5,98	5,37	7,37
	Stainless steel A4	[kN]	3,93			5,98			11,63		3,93	5,98	4,98	6,92
Minimum member thickness	h_{min}	[mm]	80	100	120	100		120	110	130	100	100	110	100
Characteristic edge distance	$c_{cr,N}$	[mm]	85			140			140		70	140	140	100
Characteristic spacing	a resp. $s_{cr,N}$	[mm]	90	105		120			135		70	100	90	75
Minimum spacing with an edge distance	s_{min}	[mm]	85			70			85		70	70	70	55
	c ≥	[mm]	85			140			140		70	210	140	100
Minimum edge distance with a spacing	c_{min}	[mm]	85			70			85		70	85	70	50
	s ≥	[mm]	85			175			175		70	100	210	250
Anchorage in narrow concrete members (h ≥ 40 mm) made of concrete ≥ C12/15, e. g. weather shells of triple-skin outer wall panels														
Permissible tensile load		[kN]	–			0,99	–		–		–	1,19	–	–
Permissible shear load		[kN]	–			5,98	–		–		–	5,98	–	–
Anchorage in pre-stressed hollow-core concrete slabs (mirror thickness d_b ≥ 30 mm) made of concrete ≥ C45/55														
Permissible tensile load		[kN]	–			1,39	–		–		–	–	–	–
Permissible shear load		[kN]	–			5,98	–		–		–	–	–	–
Anchorage in masonry														
Permisible load in solid brick	≥ Mz 12 a. ≥ NF	[kN]	0,57	0,71		0,57	1,14	–	0,86		0,57	0,57	0,86	0,34
	≥ Mz 20 a. ≥ NF	[kN]	0,86	1,14		1,00	1,14	–	1,14		0,71	0,86	0,86	0,57
Permissible load in solid sand-lime brick	≥ KS 10 a. ≥ NF	[kN]	0,57			0,57	0,71	–	0,86		0,57	0,57	0,57	0,43
	≥ KS 20 a. ≥ NF	[kN]	0,71	0,86		1,00		–	1,29		0,71	0,71	0,71	0,71
Permissible load in lightweight concrete block	≥ V 2; ρ ≥ 1,2 kg/dm³	[kN]	0,11	0,26		0,11		–	0,26		0,26	0,21	–	0,34
	≥ V 6; ρ ≥ 1,6 kg/dm³	[kN]	0,34	0,57		0,57	1,29	–	0,57		0,26	0,71	0,57	0,43
Permissible load in vertically perforated brick	≥ HLz 10 ρ ≥ 1,0 kg/dm³	[kN]	0,17			–	0,21	–	0,57	0,71	0,17	0,26	0,37	–
Permissible load in perforated sand-lime brick	≥ KSL 6	[kN]	–			–	0,21	–	0,26	0,34	0,26	0,43	–	–
	≥ KSL 12	[kN]	0,34	0,43		–	0,71	–	0,43	0,71	0,57	0,57	0,57	–
Permissible load in hollow lightweight concrete blocks	≥ Hbl 2	[kN]	0,43	0,57	0,43	0,57	0,71	–	0,34	0,21	–	0,43	–	–
	≥ Hbl 6	[kN]	0,43	0,71	0,43	0,71	0,43	–	0,57	–	0,43	0,57	–	–
Permissible load in ceilings made of vertically perforated bricks	f_b ≥ 10 N/mm² ρ ≥ 0,7 kg/dm³	[kN]	–			–	0,57	–	–		–	–	–	–
Minimum member thickness	h_{min}	[mm]	115			110			115		100	100	110	115
Minimum spacing (single anchor)	a_{min}	[mm]	250			250			250		250	250	250	250
Minimum spacing (anchor group)	s_{min}	[mm]	100			100			100		100	100	100	100
Minimum edge distance (anchor group)	c_{min}	[mm]	100			100			100		100	100	100	100
Anchorage in aerated concrete														
Permissible load in aerated concrete	2 N/mm²	[kN]	–	0,14	0,21	–	0,18	0,21	0,32	0,43	–	0,14[1]	–	0,32
	4 N/mm²	[kN]	–	0,32	0,43	–	0,43	0,54	0,89	1,07	–	0,27	–	0,62
	6 N/mm²	[kN]	–	0,54	0,71	–	0,71	0,89	1,43	1,79	–	0,27	–	0,92
Minimum member thickness	h_{min}	[mm]	–	175		–	100	120	175[2] / 300[3]		–	100	–	175
Minimum spacing (single anchor)	a_{min}	[mm]	–	250		–	250		250		–	250	–	250
Minimum spacing (anchor group)	s_{min}	[mm]	–	80[2] / 110[4]		–	100[2]/ 120[4]		80	100[2] /125[3]	–	400	–	100
Minimum edge distance (anchor group)	c_{min}	[mm]	–	90[2] / 110[4]		–	120		120	120[2] /150[3]	–	100	–	100

For the design the related assessment (ETA) has to be considered.
All loads refer to a long-term temperature of 50 °C and a short-term temperature of 80 °C.
The material safety factor γ_M and the safety factor of γ_F = 1,4 were included in the calculation.
For details on block parameters and joints please see relevant ETA.
With other bricks/blocks or increased spacings and edge distances, higher loads can be achieved.

1) Drill holes to be made with aerated concrete hole punch
2) Only valid for AAC with compression strength ≥ 2 to < 4 N/mm²
3) Only valid for AAC with compression strength ≥ 4 N/mm²
4) Only valid for AAC with compression strength ≥ 6 N/mm²
5) ETA-07/0121 (SXR/SXRL), ETA-13/0235 (FUR) resp. ETA-09/0352 (SXS)

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