TECHNICAL MANUAL

STUDIX® Headed Connectors

Effective & time-saving anchorage

Version PEIKKO GROUP 05/2024

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Effective & time-saving anchorage

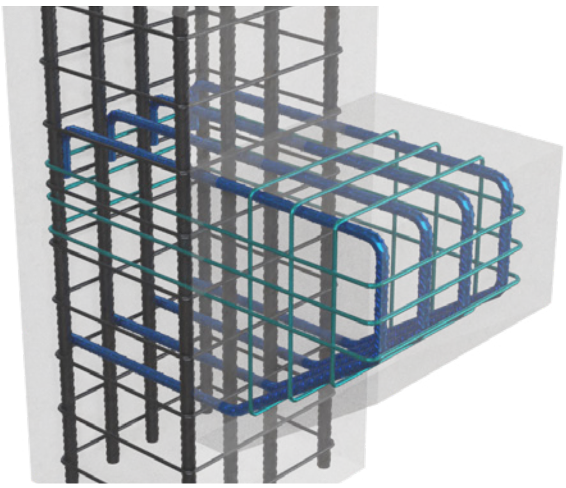
- **Simplifies reinforcement layout in congested areas.**
- **ETA assessed Anchorage system (ETA 21/0463) and Coupler system (ETA-21/0804).**
- **Easy connections of precast and cast-in-situ concrete structures.**
- **Streamlines the precast column formwork by eliminating the need for corbel formwork.**
- **Efficient logistic of precast columns without corbels.**

STUDIX® Headed Connectors are an approved reinforcement system designed primarily for use in reinforced concrete corbels. Featuring ETA assessed anchorage heads (ETA 21/0463) and a coupling system (ETA-21/0804), STUDIX® offers a simplified reinforcement layout in congested areas and more efficient installation compared to bent reinforcement.

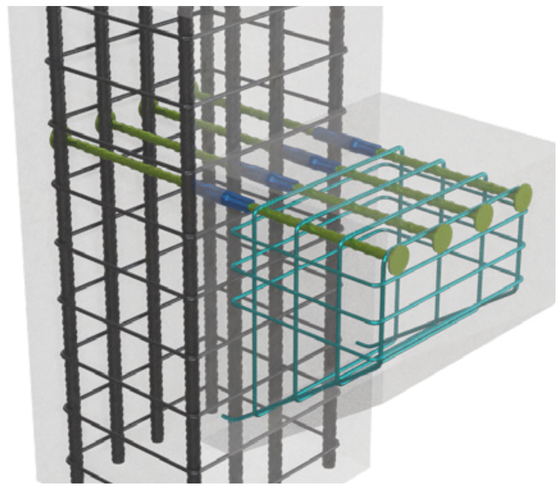
The STUDIX® system comprises three main rebar components named A, B, and D. Component A consists of a ribbed bar with an anchor head at one end and a female coupler at the other. Component D features female couplers on both ends of the ribbed bar. Similar to Component A, Component B also includes a ribbed bar with an anchor head at one end, but it features a male coupler at the opposite end. Components A and D are typically installed into precast elements as starter bars for Component B, which is assembled via screwing together the couplers prior to corbel casing.

STUDIX® presents a cost-effective solution, especially where precast column is connected with post-install cast-in-situ corbels. Whether the cast-in-situ corbel is attached to the precast column on-site or in a precast factory, this solution offers numerous benefits, including but not limited to simplified formwork for precast columns, eliminating the need for modified formwork due to the corbel part, and more efficient transportation. Straight columns without corbels require less space on trailers, contributing to an easier logistics.

Corbel with conventional reinforcement



Corbel with STUDIX® Headed connector



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About STUDIX® Headed Connectors

1. Product properties

STUDIX® Headed Connectors are designed for optimization of anchorage of reinforcement in concrete structures. Headed connectors offer a solution for concrete corbels with adequate anchorage and a simple reinforcement layout compared to corbels with conventional reinforcement using large bending diameters. Headed Connector consists of a ribbed bar that ends with an anchor head and threaded coupler swaged onto a ribbed bar with a diameter of between 12 mm and 25 mm. Rebar couplers are used to create threaded connections between ribbed bars.

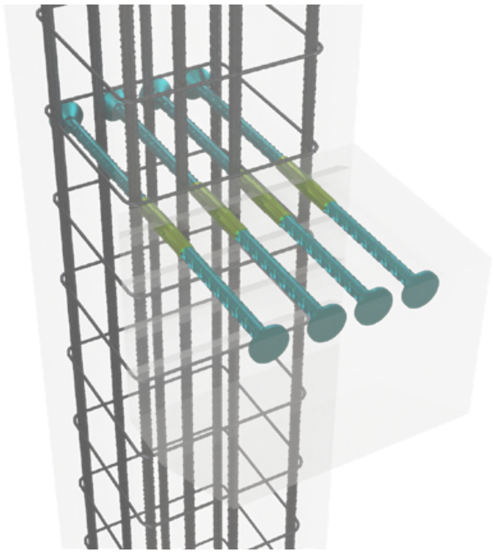


Figure 1. Console with STUDIX® Headed Connectors.

Types of STUDIX® Headed Connectors:

Rebar Couplers have been designed, tested, and approved according to ETA 21/0804. The performance of headed anchors has been assessed by ETA 21/0463.

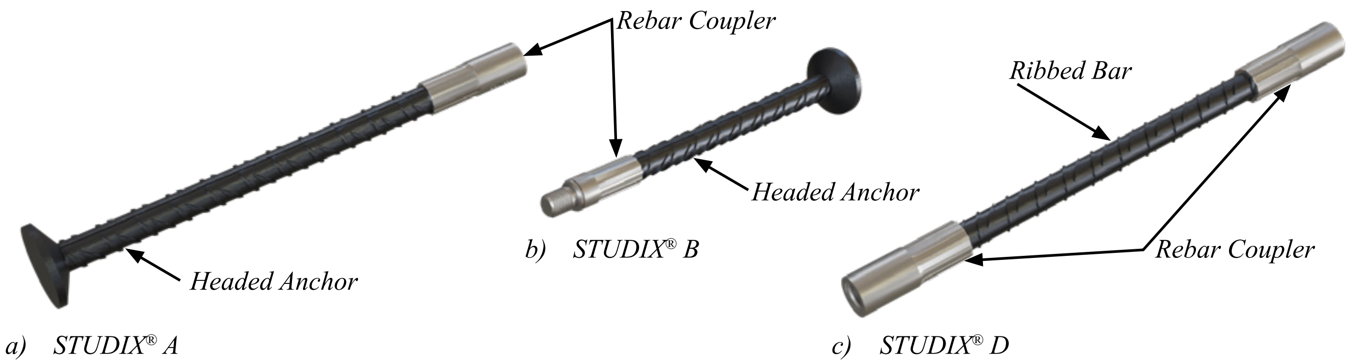


Figure 2. STUDIX® Headed Connector types.

1.1 Limitations for application

1.1.1 Loading and environmental conditions

The specified properties are guaranteed in concrete structures with minimum concrete strength of C30/37.

1.1.2 Concrete cover

The concrete cover can be calculated according to Chapter 4.4.1 in EN 1992-1-1.

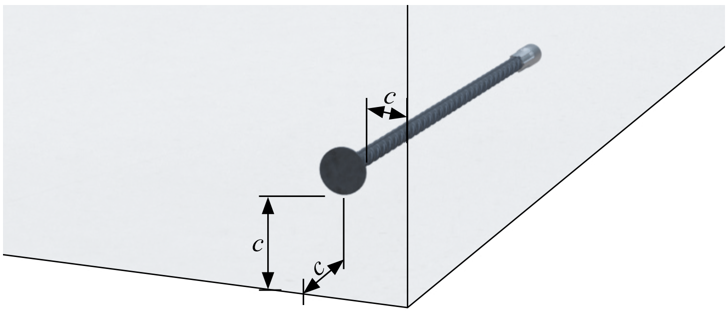


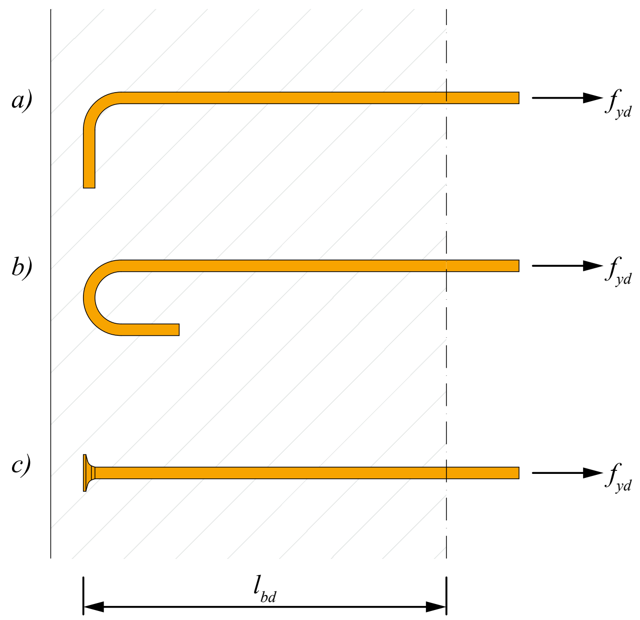
Figure 3. Defined concrete cover of STUDIX® Headed Connector.

1.1.3 Blow-out failure

Verification of blow-out failure needs to be checked according to Chapter 7.2.1 in EN 1992-4.

1.1.4 Anchorage length

The anchor head at STUDIX® Headed Connector allows the development of full tensile strength of the rebars once cast into concrete that reaches the required strength. The anchor head provides mechanical end anchorage or an alternative to anchoring reinforcement through the combination of bonds and bends/ hooks.



a) rebar with a 90-degree hook
b) rebar with a 180-degree hook
c) head anchor at STUDIX® Headed Connector

Figure 4. Anchorage length of the hook and headed anchor of STUDIX®.

1.2 Other properties

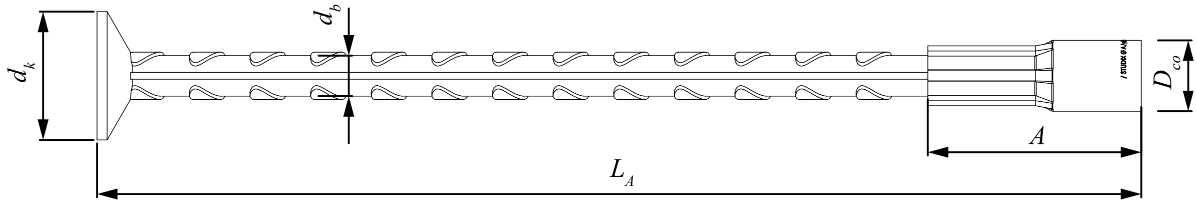
1.2.1 Materials

The material properties of the STUDIX® Headed Connecters have the following properties:
Rebar Couplers S355 EN 10025-2
Ribbed bars B500 EN 100080

Peikko Group's production units are externally controlled and periodically audited based on production certifications and product approvals by various organizations.

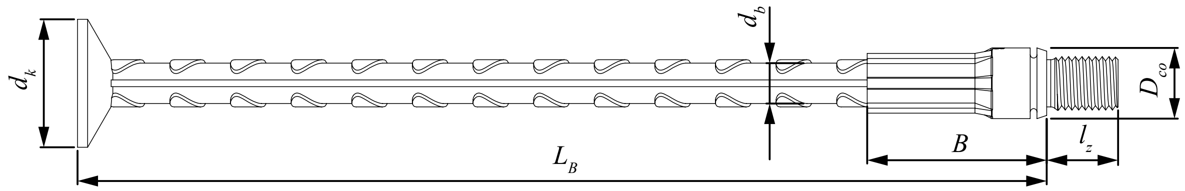
1.2.2 Dimensions

Table 1. Dimensions of STUDIX® A Headed Connectors.



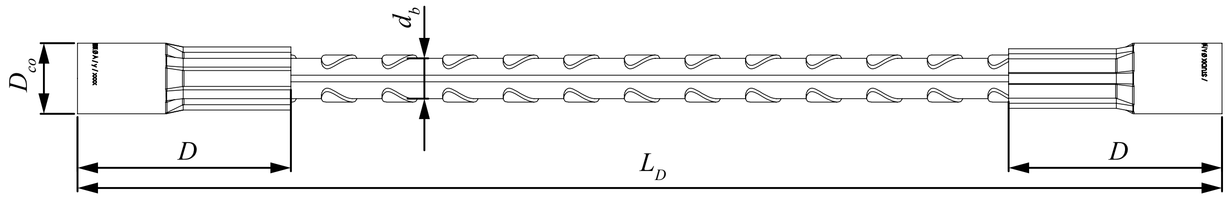
STUDIX® A	Rebar diameter d_b [mm]	Coupler diameter D_{co} [mm]	Coupler length A [mm]	Head diameter d_k [mm]	Minimum length L_A [mm]	ISO metric thread M [mm]	Color of thread protector
STUDIX 12A	12	21	63	38	160	M 16 × 2	Yellow
STUDIX 14A	14	24	72	44	165	M 18 × 2.5	Blue
STUDIX 16A	16	27	80	50.5	165	M 20 × 2.5	White
STUDIX 20A	20	33	98	63	170	M 24 × 3	Gray
STUDIX 25A	25	41	122	79	180	M 30 × 3.5	Red

Table 2. Dimensions of STUDIX® B Headed Connectors.



STUDIX® B	Rebar diameter d_b [mm]	Coupler diameter D_{co} [mm]	Coupler length B [mm]	Head diameter d_k [mm]	Minimum length L_B [mm]	ISO metric thread M [mm]	Thread length l_z [mm]	Color of thread protector
STUDIX 12B	12	21	52	38	120	M 16 × 2	21.2	Yellow
STUDIX 14B	14	24	57	44	120	M 18 × 2.5	24.8	Blue
STUDIX 16B	16	27	63	50.5	120	M 20 × 2.5	27.5	White
STUDIX 20B	20	33	77	63	120	M 24 × 3	31.6	Gray
STUDIX 25B	25	41	98	79	125	M 30 × 3.5	39	Red

Table 3. Dimensions of STUDIX® D Headed Connectors.



STUDIX® D	Rebar diameter d_b [mm]	Coupler diameter D_{co} [mm]	Coupler length D [mm]	Minimum length L_D [mm]	ISO metric thread M [mm]	Color of thread protector
STUDIX 12D	12	21	63	150	M 16 × 2	Yellow
STUDIX 14D	14	24	72	170	M 18 × 2.5	Blue
STUDIX 16D	16	27	80	185	M 20 × 2.5	White
STUDIX 20D	20	33	98	225	M 24 × 3	Gray
STUDIX 25D	25	41	122	265	M 30 × 3.5	Red

2. Resistances

2.1 Tensile resistance

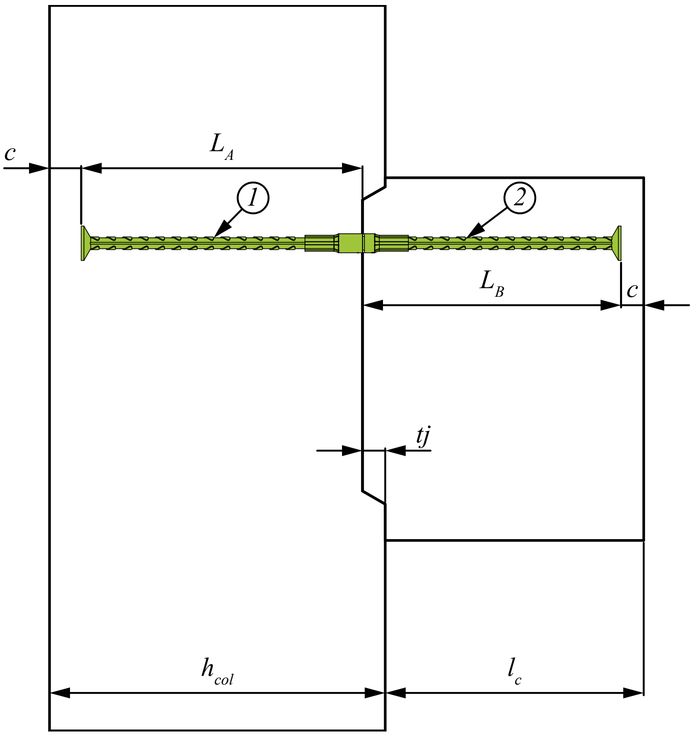
The tensile resistances of STUDIX® Headed Connectors are defined based on resistance of B500 reinforcement bar and are given in *Table 4*.

Table 4. Tensile resistances of STUDIX® Headed Connectors.

	Rebar diameter d_b [mm]	Area of rebar A_s [N/mm^2]	Safety factor for steel γ_s [-]	Yield strength of steel f_{yk} [N/mm^2]	Tensile resistance of rebar N_{Rd} [kN]
STUDIX 12	12	113.1	1.15	500	49.2
STUDIX 14	14	153.9			66.9
STUDIX 16	16	201.1			87.4
STUDIX 20	20	314.2			136.6
STUDIX 25	25	490.9			213.4

Selecting STUDIX® Headed Connectors

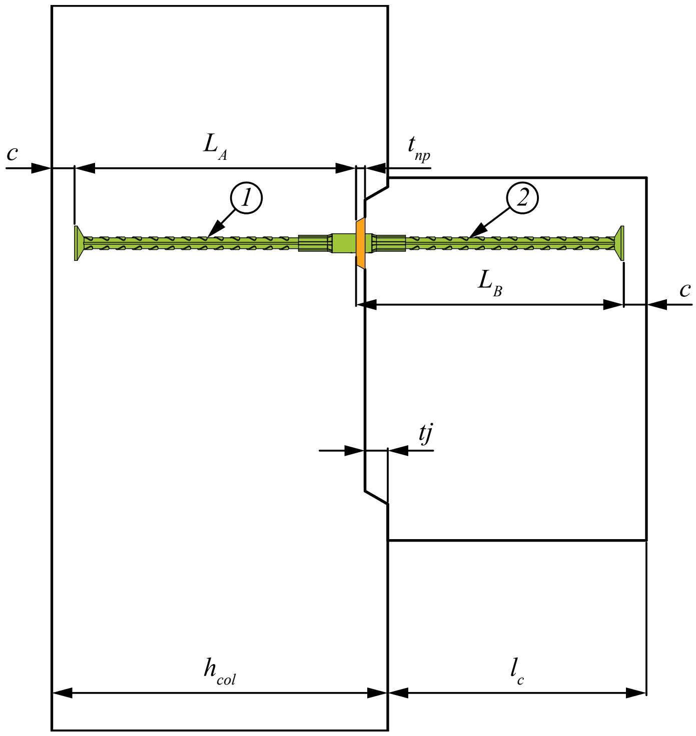
Single-sided console without nailing plates



① $L_A = h_{col} - t_j - c$

② $L_B = l_c + t_j - c$

Single-sided console with nailing plates

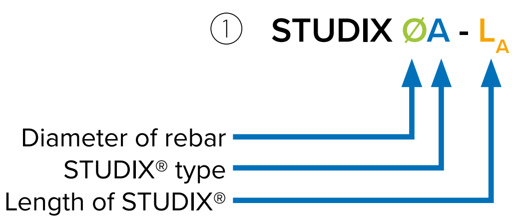


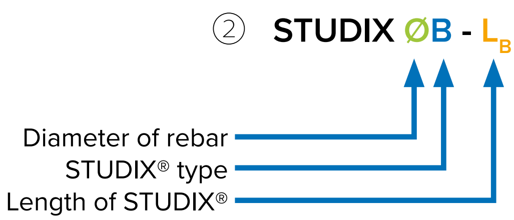
① $L_A = h_{col} - t_j - t_{np} - c$

② $L_B = l_c + t_j + t_{np} - c$

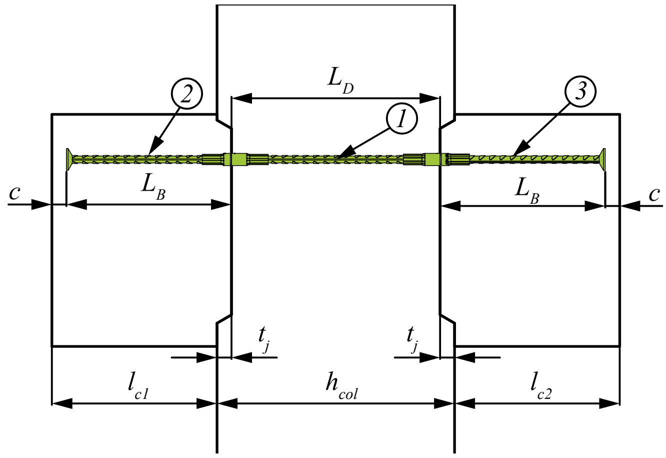
L_A = total length of STUDIX® A type
L_B = total length of STUDIX® B type
h_{col} = width of column
l_c = length of console
t_j = width of the key
t_{np} = thickness of nailing plate (see *Table 5*)
c = concrete cover

Product codes of STUDIX® for Single-sided console





Double-sided console without nailing plates

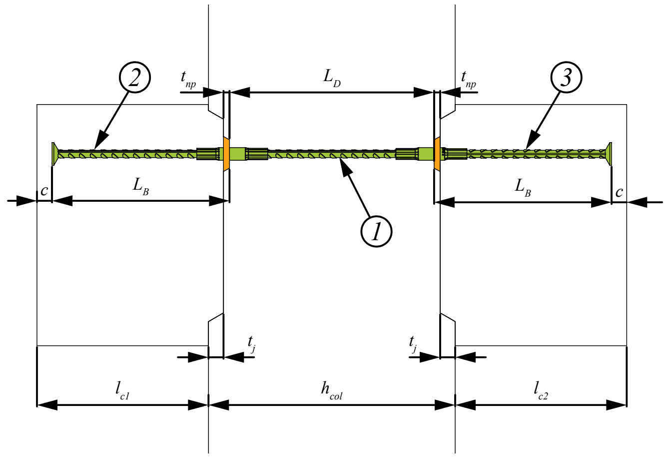


① $L_D = h_{col} - 2 \cdot t_j$

② $L_B = l_{c1} + t_j - c$

③ $L_B = l_{c2} + t_j - c$

Double-sided console with nailing plates



① $L_D = h_{col} - 2 \cdot t_j - 2 \cdot t_{np}$

② $L_B = l_{c1} + t_{np} + t_j - c$

③ $L_B = l_{c2} + t_{np} + t_j - c$

L_D = total length of STUDIX® D type
L_B = total length of STUDIX® B type
h_{col} = width of column
$l_{c1};l_{c2}$ = length of console
t_j = width of the key
t_{np} = thickness of nailing plate (see *Table 5*)
c = concrete cover

General design code principles

Product codes of STUDIX® for Double-sided console

① STUDIX ØD - L_D

Diameter of rebar
STUDIX® type
Length of STUDIX®

② STUDIX ØB - L_B

Diameter of rebar
STUDIX® type
Length of STUDIX®

③ STUDIX ØB - L_B

Diameter of rebar
STUDIX® type
Length of STUDIX®

Annex A – Worked example of console design

Design of reinforcement of single-sided concrete console according to EN 1992-1-1.

Input data:

Vertical force: F_{Ed} = 380 kN
Horizontal force (20%) H_{Ed} = 0.2 · F_{Ed} = 0.2 · 380 = 76 kN
Concrete grade: C40/50
Steel grade: B500B
Bearing plate: 250 × 200 × 10 mm
Exposure class: XC2
Structural class: S4
Concrete cover: c = 35mm

Geometry of console:

Column: b_{col} = 400mm; h_{col} = 400mm
Console: b_c = 400mm; l_c = 350mm; h_c = 450mm
Bearing plate: b_{bp} = 250mm; l_{bp} = 200mm; Δ_h = 10mm

Other dimensions are defined in *Figure 5*.

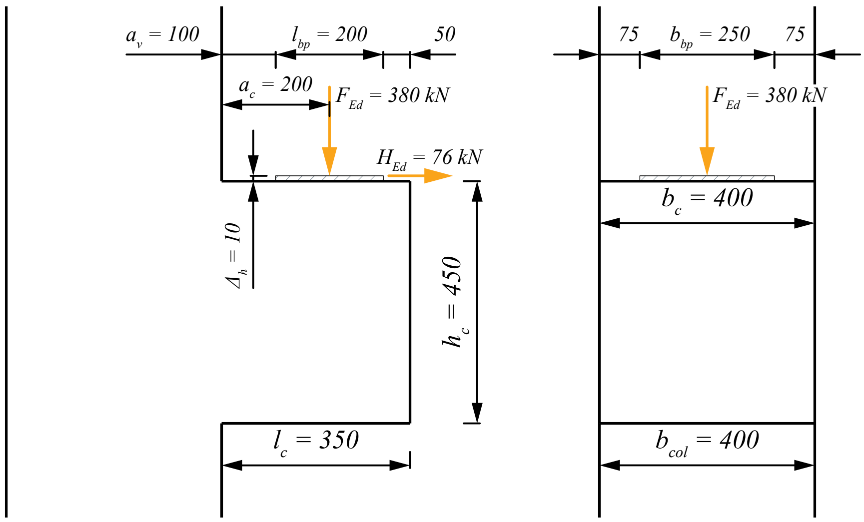


Figure 5. Worked example – console dimensions.

Material properties:

Concrete C40/50: $f_{ck} = 40\ N/mm^2;\ \alpha_{cc} = 1.0;\ \gamma_c = 1.5;\ \varepsilon_{cu3} = 3.5$ ‰,

$$f_{cd} = \alpha_{cc} \cdot f_{ck}/\gamma_c = 1.0 \cdot 40 / (1.5) = 26.67\ N/mm^2$$

$$v' = 1 - f_{ck}/250 = 1 - 40 / 250 = 0.84$$

Design values for the compressive stresses in compression node 1 (CCC)

$$\sigma_{1Rd,max} = k_1 \cdot v' \cdot f_{cd} = 1.0 \cdot 0.84 \cdot 26.67 = 22.4\ N/mm^2$$

Design values for the compressive stresses in compression-tension node 2 (CCT)

$$\sigma_{2Rd,max} = k_2 \cdot v' \cdot f_{cd} = 0.85 \cdot 0.84 \cdot 26.67 = 19.04\ N/mm^2$$

Design strength for concrete struts in cracked compression zones

$$\sigma_{3Rd,max} = 0.6 \cdot v' \cdot f_{cd} = 0.6 \cdot 0.84 \cdot 26.67 = 13.44\ N/mm^2$$

Steel B500B: $f_{yk} = 500\ N/mm^2;\ \gamma_s = 1.15;\ \varepsilon_{cu3} = 3.5$ ‰,

$$f_{yd} = f_{yk}/\gamma_s = 1.0 \cdot 500 / (1.15) = 434.78\ N/mm^2$$

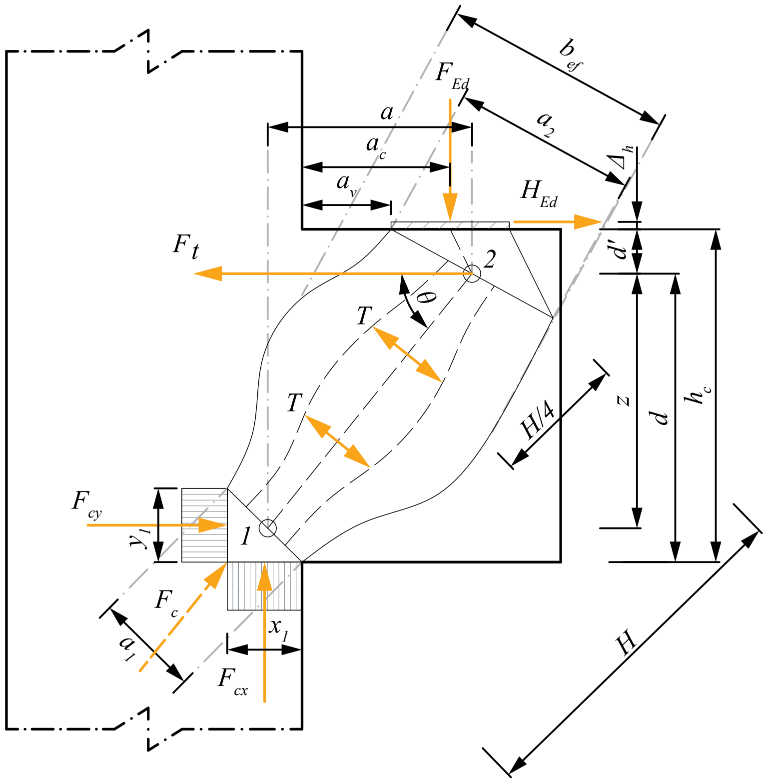


Figure 6. Console – strut and tie model.

Concentrated resistance force under bearing plate:

Loaded area

$$A_{c0} = b_{bp} \cdot l_{bp} = 250 \cdot 200 = 50{,}000\ mm^2$$

Maximum design distribution area with a similar shape to A_{c0}

$$A_{c1} = b_{bp} \cdot l_{bp} = 250 \cdot 200 = 50{,}000\ mm^2$$

Concentrated resistance force

$$F_{Rdu} = A_{c0} \cdot f_{cd} \cdot \sqrt{\frac{A_{c1}}{A_{c0}}} = 50000 \cdot 26.67 \cdot \sqrt{\frac{50000}{50000}} = 1333500\ N = 1333.5\ kN$$

$$F_{Rdu} \leq 3 \cdot f_{cd} \cdot A_{c0};\ F_{Rdu} \leq 3 \cdot 26.67 \cdot \frac{50000}{1000};\ 1333.5\ kN < 4000.5\ kN$$

$$F_{Ed} \leq F_{Rdu};\ 380\ kN < 1333.5\ kN$$ *Verification OK!*

Design of main reinforcement:

Head diameter of selected STUDIX M16 (see *Table 1.* and *Table 2.*)

$$d_k = 50.5\ mm$$

Center of gravity of STUDIX® Headed connectors (assumption of single layer)

$$d' = c + \frac{d_k}{2} = 35 + \frac{50.5}{2} = 60\ mm$$

Effective depth of section

$$d = h_c - d' = 450 - 60 = 390\ mm$$

Strength reduction factor for concrete cracked in shear

$$v = 0.6 \cdot \left[1 - \frac{f_{ck}}{250}\right] = 0.6 \cdot \left[1 - \frac{40}{250}\right] = 0.504$$

Shear resistance of the console

$$V_{Rd,max} = 0.5 \cdot v + b_c \cdot d \cdot f_{cd} = 0.5 \cdot 0.504 \cdot 400 \cdot 390 \cdot \frac{26.67}{1000} = 1047.6\ kN$$

$$V_{Rd,max} \geq F_{Ed};\ 1047.6\ kN > 380\ kN \quad \textit{Verification OK!}$$

Width of vertical strut in compression area

$$x_1 = \frac{F_{Ed}}{b_c \cdot \sigma_{1Rd,max}} = \frac{380 \cdot 1000}{400 \cdot 22.4} = 42.4\ mm$$

Lever arm of force F_{Ed}

$$a = a_x + 0.5 \cdot x_1 + \frac{H_{Ed}}{F_{Ed}} \cdot (d' + \Delta h) = 200 + 0.5 \cdot 42.4 + \frac{76}{380} \cdot (60 + 10) = 235.3\ mm$$

The distance y_1 of the node 1 from the lower border

$$y_1 = d - \sqrt{d^2 - 2 \cdot x_1 \cdot \left(a + \frac{H_{Ed}}{F_{Ed}} \cdot (d' + \Delta h)\right)} = 390 - \sqrt{390^2 - 2 \cdot 42.4 \cdot \left(235.3 + \frac{76}{380} \cdot (60 + 10)\right)} = 28.1\ mm$$

Lever arm of inner forces

$$z = d - 0.5 \cdot y_1 = 390 - 0.5 \cdot 28.1 = 375.7\ mm$$

The angle between the compressed diagonal concrete strut and the horizontal direction

$$\theta = cot\frac{a}{z} = arctg\frac{235.3}{375.7} = 0.626 \rightarrow \theta = 57.9^\circ$$

Horizontal Tensile force F_t

$$F_t = F_{Ed} \cdot \frac{a}{z} + H_{Ed} = 380 \cdot \frac{235.3}{375.7} + 76 = 313.96\ kN$$

Required area of main top reinforcement

$$A_{s,req} = \frac{F_t}{f_{yd}} = \frac{313.96 \cdot 1000}{434.78} = 722.1\ mm^2$$

Design of area of main top reinforcement

4 pcs of STUDIX 16; A_s = 804.2 mm^2

Verification of reinforcement area

$$A_s = 804.2\ mm^2 > A_{s,req} = 722.1\ mm^2$$ *Verification OK!*

Usability ratio of reinforcement

$$100 \cdot \frac{A_{s,req}}{A_s} = 100 \cdot \frac{722.1}{804.2} = 89.8\%$$

Order code for STUDIX® Headed connectors

$$L_A = h_{col} - t_j - c = 400 - 0 - 35 = 365\ mm$$
$$L_B = l_c + t_j - c = 350 + 0 - 35 = 315\ mm$$

Item no.	Product code/Type	Amount [pcs]
1	STUDIX 16A - 365	4
2	STUDIX 16B - 315	4

Verification of stress in diagonal strut:

The force of diagonal strut in compression area F_c

$$F_c = \frac{F_{Ed}}{\sin\theta} = \frac{380}{\sin 57.9^\circ} = 448.4\ kN$$

Length of diagonal strut

$$H = \sqrt{a^2 + z^2} = \sqrt{235.3^2 + 375.7^2} = 443.3\ mm$$

Check of strut and tie model

$$l_c > \frac{H}{2};\ 350 > \frac{443.3}{2}; 350\ mm > 221.7\ mm \rightarrow full\ discontinuity$$

Width of concrete - both nodes 1 and 2

$$a_1 = \sin\theta \cdot x_1 + \cos\theta \cdot y_1 = \sin 57.9^\circ \cdot 42.4 + \cos 57.9^\circ \cdot 28.1 = 50.9\ mm$$

Width of concrete strut at node 2

$$a_2 = \sqrt{{l_{bp}}^2 + \left(2 \cdot d'\right)^2} = \sqrt{200^2 + \left(2 \cdot 60\right)^2} = 233.5\ mm$$

Width of diagonal strut

$$b_{ef} = 0.5 \cdot H + 0.65 \cdot a_1 = 0.5 \cdot 443.3 + 0.65 \cdot 50.9 = 254.7\ mm$$

Compressive stress in diagonal strut

$$\sigma_c = \frac{F_c}{b_{ef} \cdot b_c} = \frac{448.4 \cdot 1000}{373.4 \cdot 400} = 4.40\ N/mm^2$$

Verification of stress

$$\sigma_c = 4.40 \frac{N}{mm^2} \leq \sigma_{Rd,max};\ 4.40 \frac{N}{mm^2} < 13.44\ N/mm^2$$ *Verification OK!*

Design of vertical and horizontal stirrups:

Console type boundaries

$$a_v \le \frac{d}{2};\ 100\ mm \le \frac{390}{2};\ 100\ mm < 195\ mm \rightarrow short\ console$$

$$\frac{a_c}{h_c} \le 0.5;\ \frac{200}{450} \le 0.5;\ 0.44 < 0.5 \rightarrow short\ console$$

Additional area to the main tension reinforcement

$$A_{s,lnk} = 0.25 \cdot A_s = 0.25 \cdot 804.2 = 201.1\ mm^2$$

Transverse tensile forces at nodes 1 and 2

$$T_1 = \frac{1}{4} \cdot \left(1 - 0.7 \cdot \frac{a_1}{h}\right) \cdot F_c = \frac{1}{4} \cdot \left(1 - 0.7 \cdot \frac{2 \cdot 50.9}{443.3}\right) \cdot 448.4 = 94.1\ kN$$

$$T_2 = \frac{1}{4} \cdot \left(1 - 0.7 \cdot \frac{a_2}{h}\right) \cdot F_c = \frac{1}{4} \cdot \left(1 - 0.7 \cdot \frac{2 \cdot 233.5}{443.3}\right) \cdot 448.4 = 29.4\ kN$$

Transverse tensile force T

$$T = 2 \cdot max(T_1;\ T_2) = 2 \cdot max(94.1;\ 29.4) = 188.2\ kN$$

Required area of vertical stirrups

$$A_{swv,req} = \frac{T \cdot sin\theta}{f_{yd}} = \frac{188.2 \cdot sin(57.9) \cdot 1000}{434.78} = 366.8\ mm^2$$

$$A_{swv,prov} \ge A_{swv,req};\ 402.1\ mm^2 > 366.8\ mm^2$$

Design of vertical stirrups

4 pcs of Ø8 mm ($A_{swv} = 402.1\ mm^2$) **+ 1 pcs of Ø8 mm for STUDIX® near the headed anchor**

Required area of horizontal stirrups

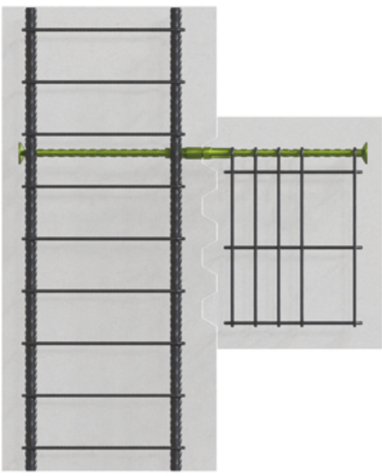
$$A_{swh,req} = \frac{T \cdot cos\theta}{f_{yd}} = \frac{188.2 \cdot cos(57.9) \cdot 1000}{434.78} = 229.7\ mm^2$$

$$A_{swh,prov} \ge A_{swh,req};\ 301.6\ mm^2 > 229.7\ mm^2$$

Design of Horizontal stirrups

3 pcs of Ø8 mm ($A_{swh} = 301.6\ mm^2$)

Verification of shear resistance at the interface between the column and console is not taken into account in worked example and needs to be verified by responsible project engineer according to Chapter 6.2.5 in EN 1992-1-1.



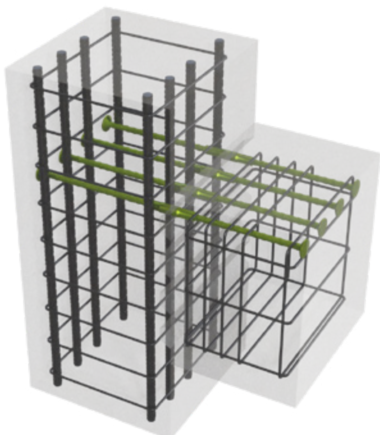


Figure 7. Console reinforcement with STUDIX® Headed connectors according to the calculation example.

Installation of STUDIX® Headed Connectors

Identification of the product

The type of STUDIX® Headed Connectors can be identified by the markings on the product. The diameter of the headed connector can be identified according to the color of the thread protection accessories. The color codes are shown in *Tables 2*, *3*, and *4*.

Thread protection accessories are installed into the STUDIX® by production factory and delivered with the couplers.

Figure 8. Protection accessories for STUDIX® A, and STUDIX® D.

Figure 9. Protection accessories for STUDIX® B.

Screw-in protective plug

- Screwed into coupler Part A.
- Protects the thread from water, concrete, dust, and particles during the first pouring.
- Removed directly before fitting Part B or replaced by a nailing plate before being attached to the mold.

Slip over protective cap

- Slipped onto coupler part B.
- Protects the thread from water and dust during storage and transportation.
- Removed directly before assembling with Part A.

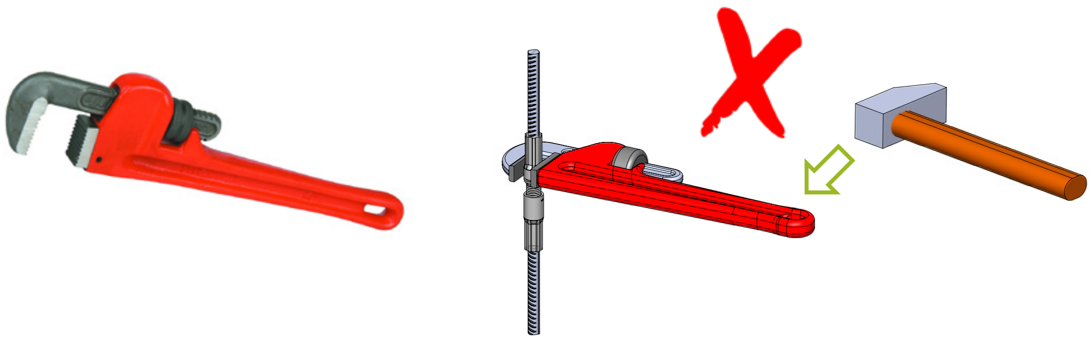
Storage

To avoid corrosion and damage to STUDIX® Headed Connectors, they should be stored in dry conditions and not directly exposed to water.

Quality of connection

General procedures to follow before and during the assembly of STUDIX® Headed Connectors:

1. Remove the thread protector from the STUDIX® part.
2. Clean the thread properly.
3. Check visually that the thread has no damage.
4. To reduce friction, it is recommended to apply a special lubrication spray or grease to the threads.
5. Carefully align the counterparts to avoid damage to the first pitches.
6. Carefully turn on the first pitches.
7. Never use force to connect STUDIX® parts – correct use enables a screw connection to be made by hand.
8. Proper tightening of the STUDIX® Headed Connector system is achieved when the ring gap on STUDIX® Part B and the distance sleeve are closed (see Figure 10). This can be achieved using a wrench (a torque wrench is not required). Excessive tightening (e.g. using a hammer) is prohibited. Connections can be checked by visual inspection.



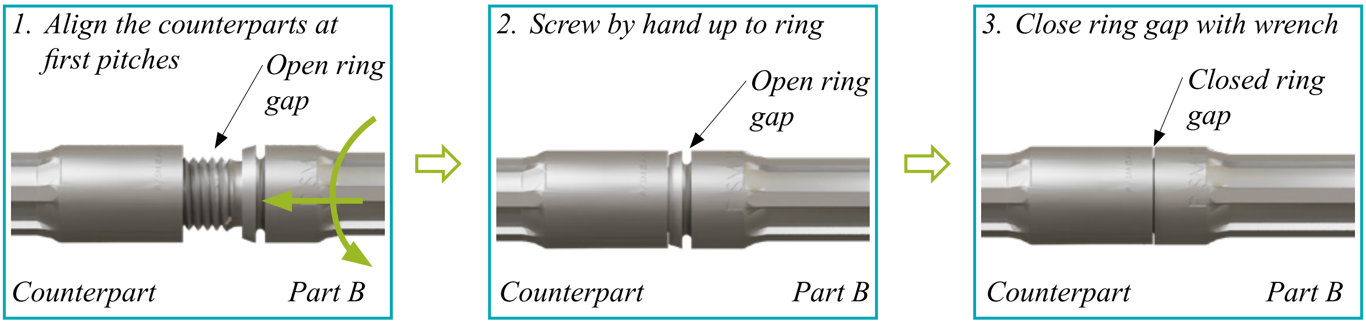


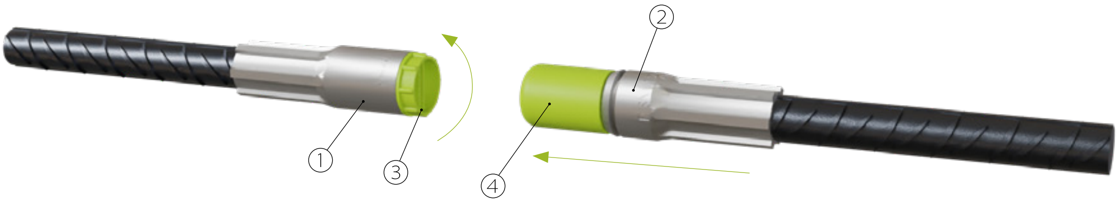
Figure 10. Correctly connected STUDIX® A and STUDIX® B with a closed ring gap.

It is prohibited to weld on the STUDIX® A, STUDIX® B, and STUDIX® D muff closer than 3Ø (three times the diameter of the reinforcement bar) to the swaging zone; fixation with wire is recommended instead.

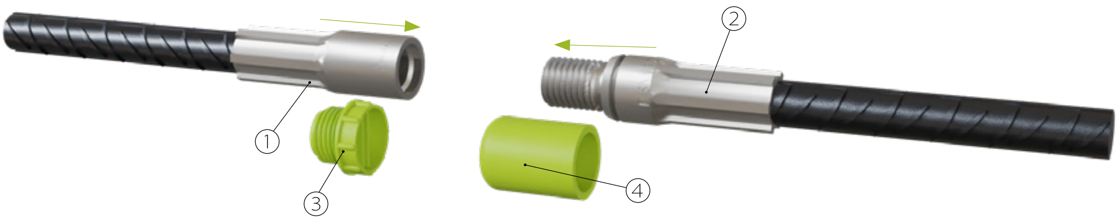
STUDIX® connected inside of the concrete elements

STUDIX® A, B, D:

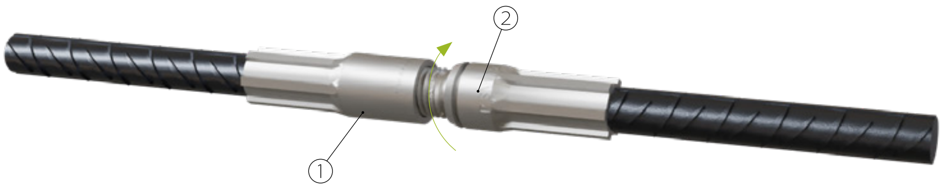
1. STUDIX® A or STUDIX® D ① and STUDIX® B ②, including the attached bar, are delivered with thread protectors ③ and ④.



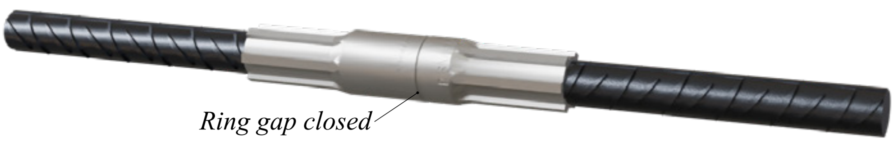
2. Remove plugs from couplers directly before installation. Clean the thread properly. Visually check that the thread is not damaged. Carefully center the counterpart (STUDIX® B) to avoid causing damage to the first pitches.



3. STUDIX® B ② is screwed onto coupler STUDIX® A or STUDIX® D ①. Carefully turn Part B ② on the first pitches into Coupler Part A or D ①. Never use force to connect Coupler Part A or D ① and Coupler Part B ②. Correct use enables a screw connection to be made by hand.



4. It is tightened using a wrench until the ring gap is completely closed.



STUDIX® connected on the edge of concrete element

During the casting of concrete elements, it is important to ensure that the rebar is placed and fixed appropriately in the correct position. Depending on the structural solution and construction technology, STUDIX® Headed Connector must be fixed to formwork, reinforcement, or supplementary fixation details. Peikko accessories are available to ensure that the STUDIX® rebar is correctly fixed to the formwork.

STUDIX® attached to formwork using fixation plates

Nailing plates can be used to fix STUDIX® A or STUDIX® D to the mold in the correct position on the construction site or in the precast factory. These accessories are optional and must be ordered in addition to STUDIX® Headed Connectors. The color codes of the nailing plates are shown in *Table 5* below.

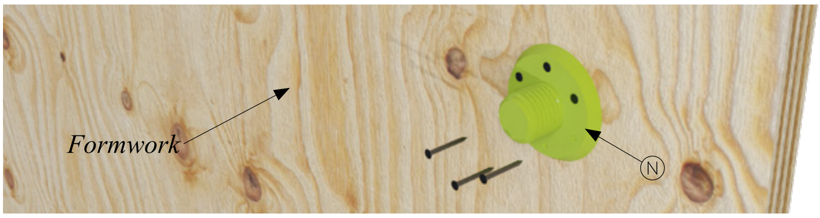
Table 5. Color codes and nailing plates dimensions.

Bar Ø [mm]	12	14	16	20	25
M-thread	M 16 × 2	M 18 × 2.5	M 20 × 2.5	M 24 × 3	M 30 × 3.5
Thickness of nailing plate t_{np} [mm]	10	10	10	10	10
Color of thread protector	Yellow	Blue	White	Gray	Red

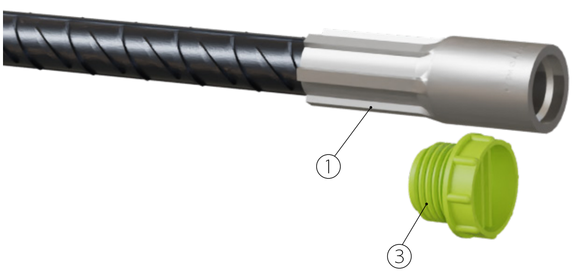
Screw-in plastic nailing plate

- Solution for fixing STUDIX® to wooden or plywood formwork.
- Is screwed into coupler of STUDIX® A or STUDIX® D.
- Is removed directly before fitting STUDIX® B.
- Nailing plate thickness is minimum of 10 mm for all diameters of STUDIX®.

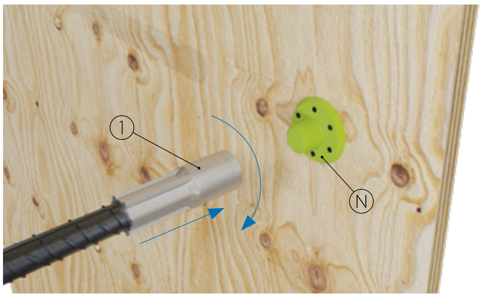
1. The nailing plate Ⓝ must be attached to the formwork with nails.



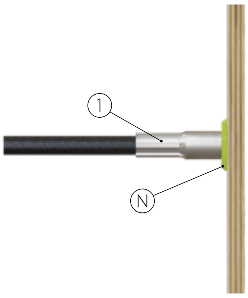
2. Directly before installing STUDIX® A or STUDIX® D ①, remove the thread protector ③ from the coupler.

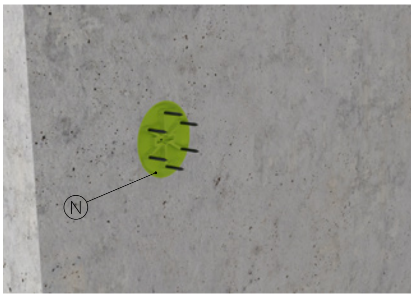


3. STUDIX® A or STUDIX® D ① is screwed to the nailing plate Ⓝ. It is recommended that lubrication be applied to the thread of STUDIX® A or STUDIX® D ① to avoid pollution from fresh concrete and also for better handling when removing the thread protector from STUDIX®.



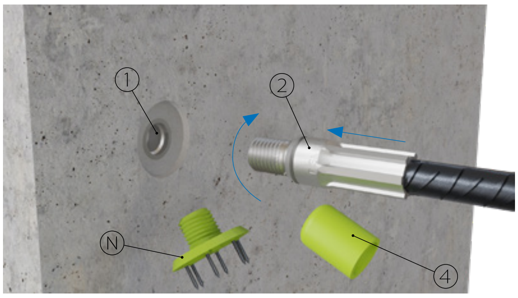
4. When STUDIX® A or STUDIX® D ① is fixed with nails, the formwork can be filled with concrete. After removing the formwork, the nailing plate Ⓝ is visible. After the fixation plate is removed, STUDIX® A or STUDIX® D is ready for assembly with the counterpart.



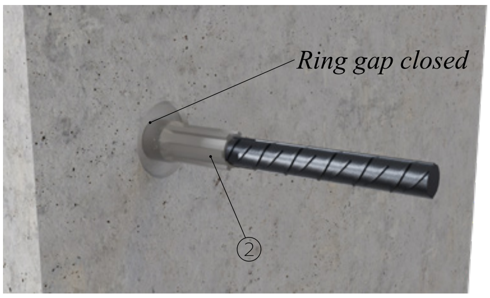


STUDIX® B connected to STUDIX® A or STUDIX® D in concrete element

1. Unscrew the nailing plate Ⓝ from STUDIX® A or STUDIX® D ① and remove the thread protective cap ④ directly before installing STUDIX® B ②.



2. Coupler of STUDIX® B ② is screwed onto coupler of STUDIX® A or STUDIX® D ① (already cast in the concrete element). It is tightened using a wrench until the ring gap is completely closed.



NOTES

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Revision History

Version: PEIKKO GROUP 05/2024. Revision: 001

- First publication.

Resources

DESIGN TOOLS

Use our powerful software every day to make your work faster, easier, and more reliable. Peikko design tools include design software, 3D components for modeling programs, installation instructions, technical manuals, and product approvals of Peikko's products.

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TECHNICAL SUPPORT

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EPDS AND MANAGEMENT SYSTEM CERTIFICATES

Environmental Product Declarations and management system certificates can be found at the quality section of our websites.

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