

Installation conditions and application examples reinforcing bars, part 1

Figure A1.1:

Overlap joint with existing reinforcement for rebar connections of slabs and beams

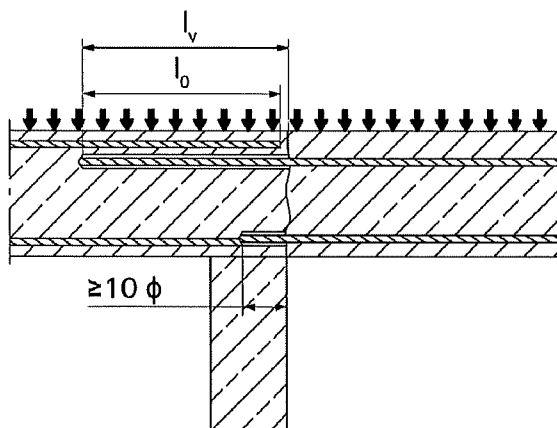


Figure A1.2:

Overlap joint with existing reinforcement at a foundation of a column or wall where the rebars are stressed

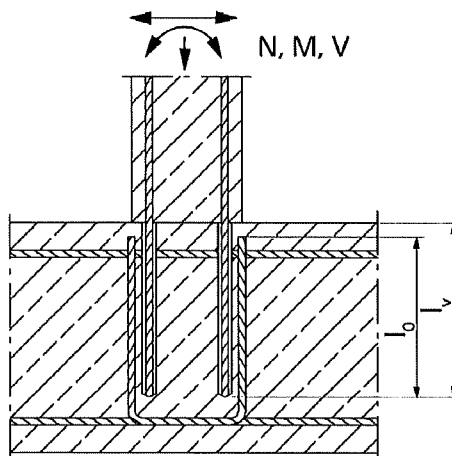
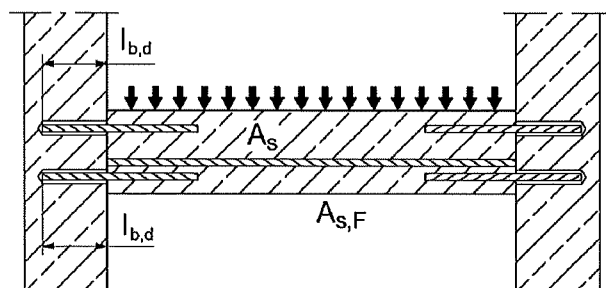


Figure A1.3:

End anchoring of slabs or beams (e.g. designed as simply supported)



Figures not to scale

Rebar connection with injection system FIS V

Product description

Installation conditions and application examples reinforcing bars, part 1

Annex A 1

Installation conditions and application examples reinforcing bars, part 2

Figure A2.1:

Rebar connection for stressed primarily in compression

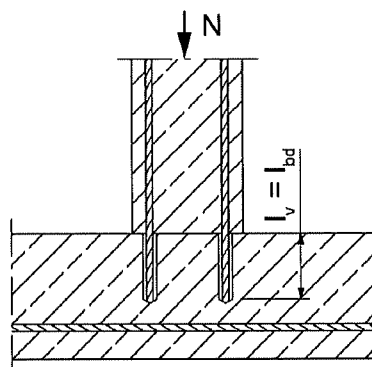
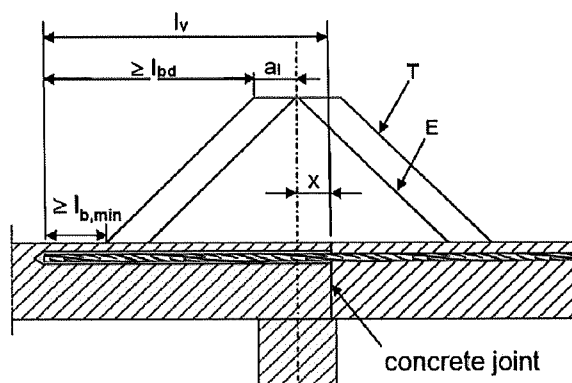


Figure A2.2:

Anchoring of reinforcement to cover the enveloped line of acting tensile force in the bending member



(only post-installed rebar is plotted)

Key to Figure

- T Acting tensile force
- E Envelope of $M_{ed} / z + N_{ed}$ (see EN 1992-1-1:2004+AC:2010)
- x Distance between the theoretical point of support and concrete joint

Note to **figure A1.1 to A1.3** and **figure A2.1 to A2.2**

In the figures no traverse reinforcement is plotted, the transverse reinforcement as required by EN 1992-1-1:2004+AC:2010 shall be present.

The shear transfer between old and new concrete shall be designed according to EN 1992-1-1:2004+AC:2010

Preparation of joints according to **Annex B 3** of this document

Figures not to scale

Rebar connection with injection system FIS V

Product description

Installation conditions and application examples reinforcing bars, part 2

Annex A 2

Installation conditions and application examples fischer rebar anchor FRA

Figure A3.1:

Lap to a foundation of a column under bending.

- 1. Shear lug (or fastener loaded in shear)
- 2. fischer rebar anchor FRA (tension only)
- 3. Existing stirrup / reinforcement for overlap (lap splice)
- 4. Slotted hole

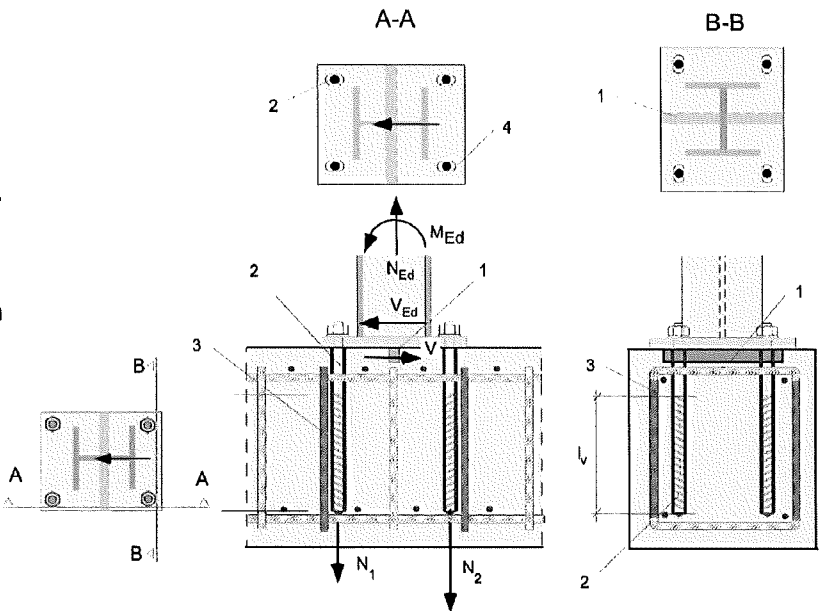
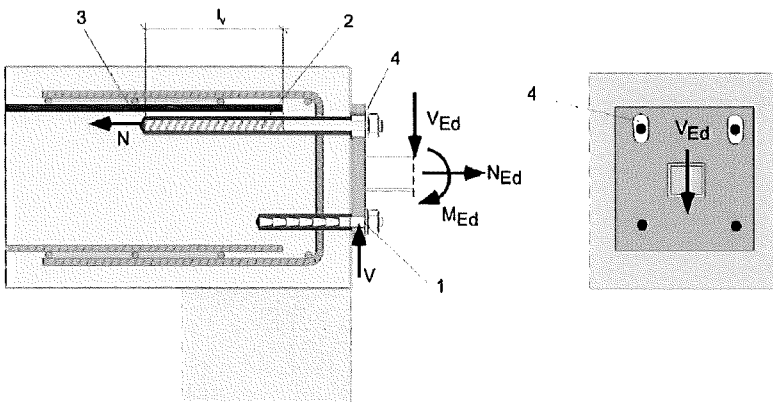


Figure A3.2:

Lap of the anchoring of guardrail posts or anchoring of cantilevered building components.
In the anchor plate, the drill holes for the fischer rebar anchors have to be designed as slotted holes with axial direction to the shear force.

- 1. Fastener for shear load transfer
- 2. fischer rebar anchor FRA (tension only)
- 3. Existing stirrup / reinforcement for overlap (lap splice)
- 4. Slotted hole



The required transverse reinforcement acc. to EN 1992-1-1:2004+AC:2010 is not shown in the figures. **The fischer rebar anchor FRA may be only used for axial tensile force.** The tensile force must transferred by lap to the existing reinforcement of the building. The transfer of the shear force has to be ensured by suitable measure, e.g. by means of shear force or anchors with European Technical Assessment (ETA)

Figures not to scale

Rebar connection with injection system FIS V	Annex A 3
Product description Installation conditions and application examples fischer rebar anchors	