

INSTALLATION INSTRUCTIONS FBD PUNCHING SHEAR REINFORCEMENT

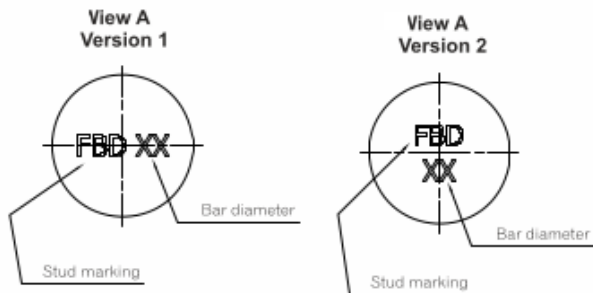
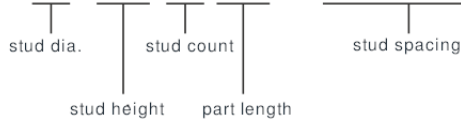


General installation remarks and work conditions

When installing FBD punching shear reinforcement, adhere to the provisions indicated in the reinforcement installation drawings of the created component, the issued execution documentation. Before commencement of work, prepare the necessary sets, group and assign them to the foreseen installation locations. Every FBD rod is marked with a visible and permanent manner (the markings are embedded on the rod head), allowing its correct identification. The sets are arranged and marked with a collected identification label. When checking the delivery correctness and inspecting the installed product, read the data on the label as indicated below.

Rod marking mode

FBD 10/175-2/260 (65/130/65)



Collect identification label template

FORBUILD	TRZPIENIE STALOWE FBD	 Krajowy Certyfikat Stałości Wykonawstwa Użytkowego 020-UWB-2936/W ITB Filimowa 1, 00-631 Warszawa Zakład Certyfikacji, 17 września AC 1201
	Manufacturer: FORBUILD SA, Górną 2A, 26-200 Końskie Producent: FORBUILD SA, Górną 2A, 26-200 Końskie Manufacturing facility: FORBUILD SA, Górną 2A, 26-200 Końskie Miejsce produkcji: FORBUILD SA, Górną 2A, 26-200 Końskie Polish national technical assessment Krajowa Ocena Techniczna ITB-KOT-2022/2146 WYDANIE 1 Deklarowane właściwości użytkowe zgodnie z: Declared performances pursuant to: Polish national performance declaration Krajowa Deklaracja Właściwości Użytkowych Nr 20/1/2022/000/04.03.2022	
Name of construction product Nazwa wyrobu budowlanego TRZPIENIE STALOWE typu: STEEL RODS type: np. FBD 12/175-2/280(70/140/70)		Count Ilość sztuk: XXX
Order no. Numer zamówienia ZMG/XX/XX/XXX		Date of manufacture Data produkcji: RRRR-MM-DD

Rod variants:

FBD-1P



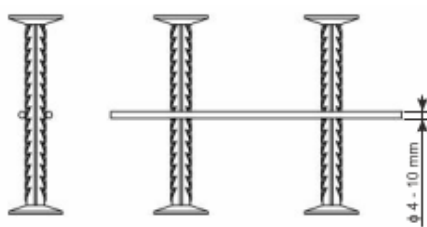
One mounting bar (ribbed or plain)

FBD



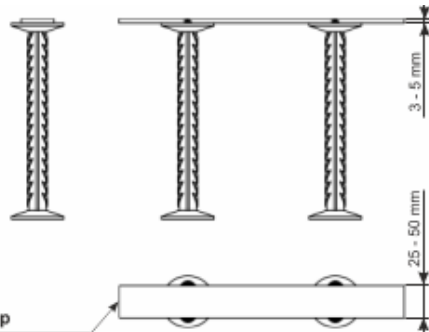
Two mounting bars (ribbed or plain)

FBD-2PS



Two centre mounting bars (ribbed or plain)

FBD-PK



Mounting strip

Order of work

Upper-level installation

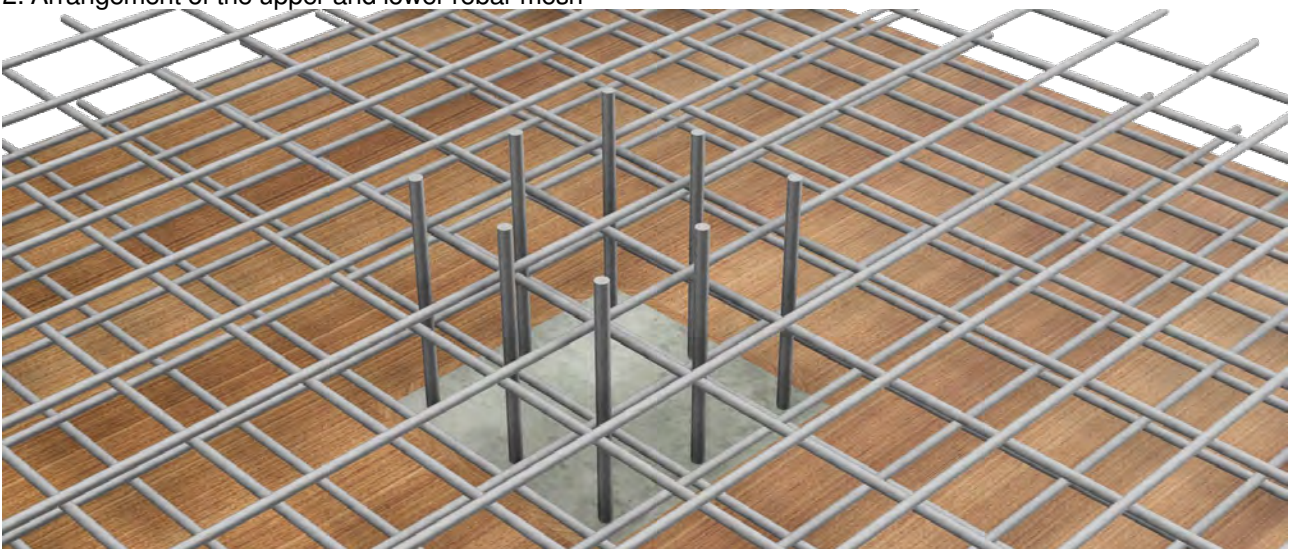
Following the layout of the upper and lower rebar mesh, commence the installation of additional FBD rebar by sliding it from above. First up lay out the sets closest to the support (pillar). The distance of the first stud from the pillar circumference can be found in the rebar design drawing. Subsequent sets in the same line should be placed so that the fixing rods touch each other. The set is placed on the upper rebar mesh, and where this is not possible, use additional 6 mm or 8 mm bars, with their length adapted to the spacing of the main bars of the upper rebar mesh (not included in the FBD rod delivery range).



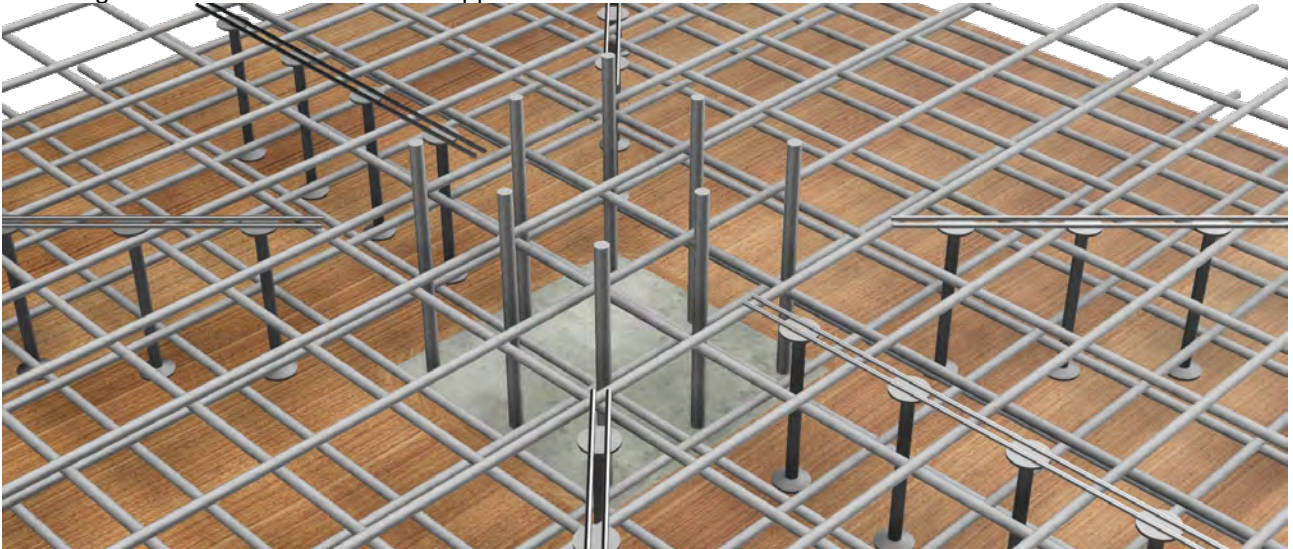
1. Formwork around the central pillar



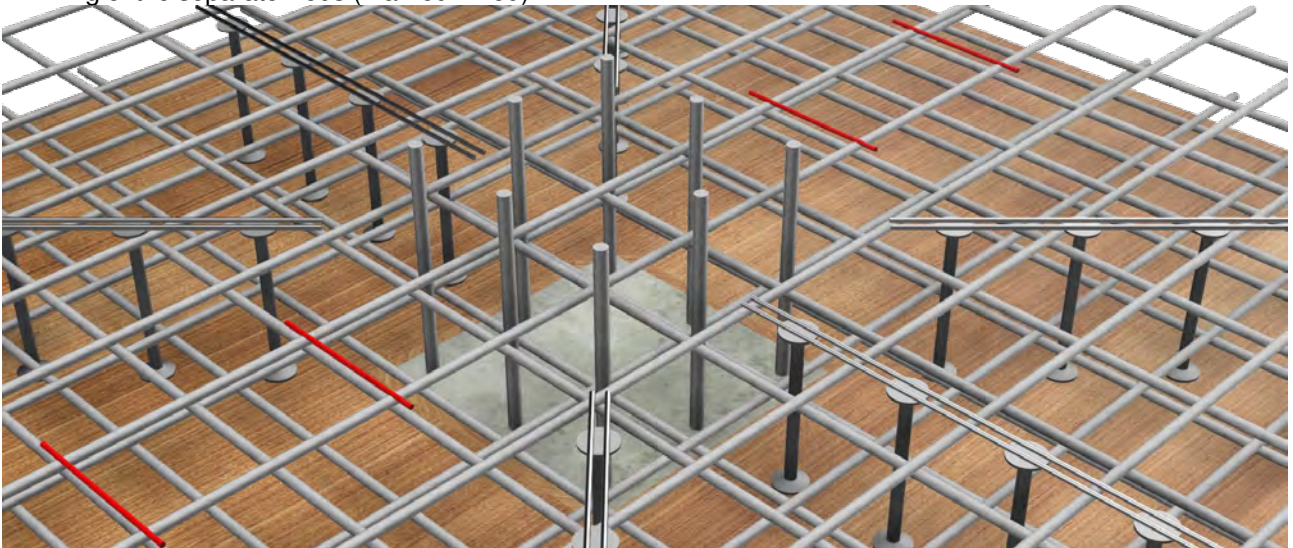
2. Arrangement of the upper and lower rebar mesh



3. Arrangement of the stud sets on the upper mesh



4. Fixing of the separator rods (marked in red)



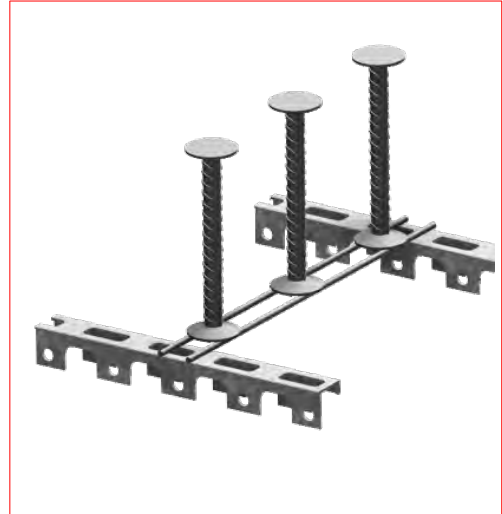
5. Fixing of the other stud sets on the separator rods



Order of work

Lower-level installation

In case of precast ceilings, or if the upper-level rebar mesh has excessive spacing, it is recommended to install the FBD bars in reverse. For this purpose, use the FIX 15, 20, 25, 30, 35, 40, 45, 50 point spacers or TRICK 15, 20, 25, 30, 35, 40, 50 line spacers, depending on the coat assumed in the design (the spacers are not in the delivery range of the FBD bars, they have to be ordered separately). The number of spacers must be selected to fit the set size. The distribution of the sets is carried out analogously to the one presented in the installation of the upper-level installation version.



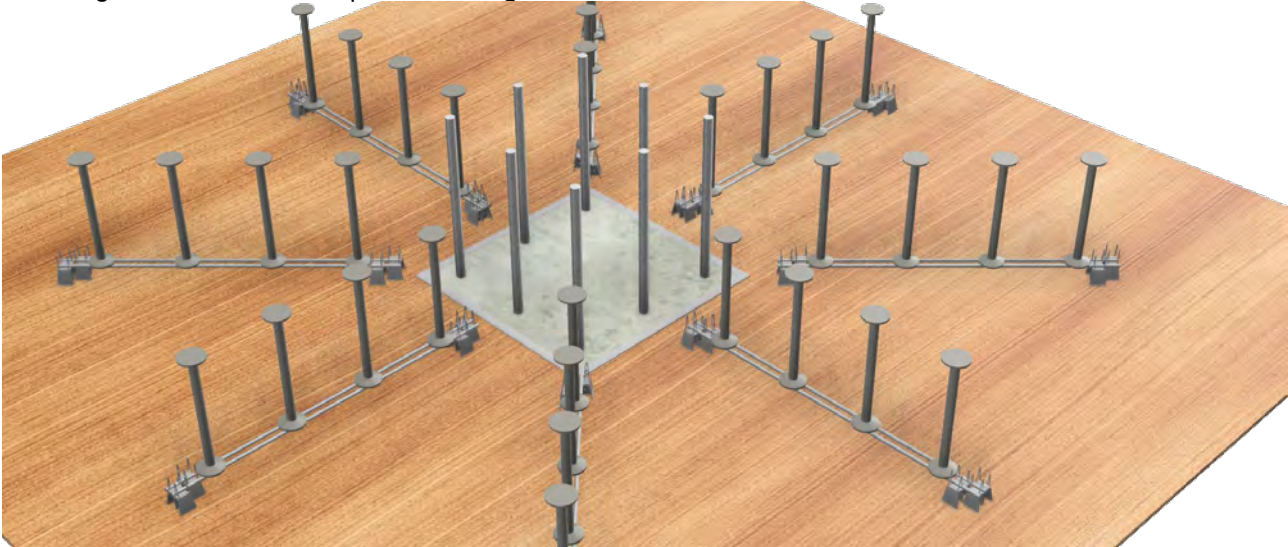
1. Formwork around the central pillar



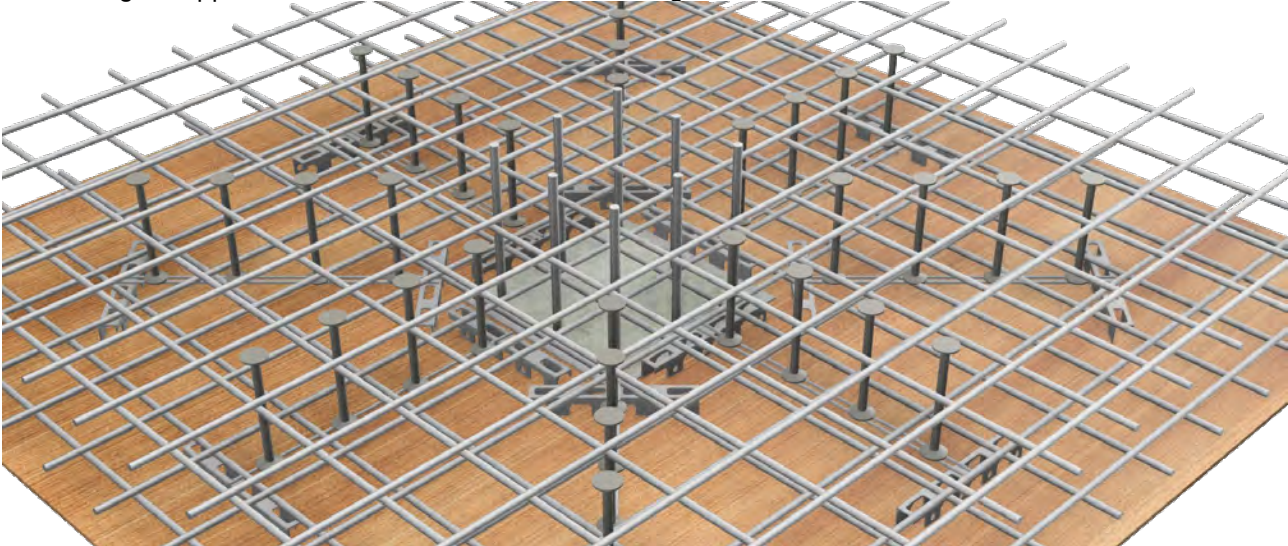
2. Arrangement of the sets on spacers - using TRICK



3. Arrangement of the on the spacers – using FIX



4. Installing the upper and lower level reinforcement – using TRICK



5. Installing the upper and lower level reinforcement – using FIX

