



KERN & Sohn GmbH

# Installation instructions

## Pit frame

**KERN BFN-A06 / BFN-A02 /  
BFS-A03N / BFS-A04N /  
BFS-A08N**

Version 2.5

2024-08

GB



BFN-A06\_BFN-A02\_BFS-A03N\_BFS-A04N\_BFS-A08N-IA-e-2425



# KERN BFN-A06 / BFN-A02 / BFS-A03N / BFS-A04N / BFS-A08N

Version 2.5 2024-08

## Installation instructions Pit frame

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## 1 Basic safety instructions

### 1.1 Follow the instructions in the documentation



⇒ Read the document carefully before installation.

### 1.2 Staff training

The product may only be installed by qualified specialists using suitable fastening materials.

### 1.3 Unpacking and checking

Remove the product from the packaging and remove the packaging material. Check that all parts included in the scope of delivery are present and undamaged.

### Scope of delivery / standard accessories:

- Pit frame
- 8x screws (M12) and 8x nuts (M12)
- Installation instructions

## 1.4 Installation

### INFORMATION

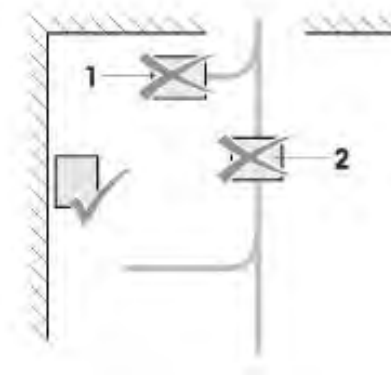


- The necessary preparatory work is described in the relevant installation instructions for the weighbridge.

#### 1.4.1 Select installation location

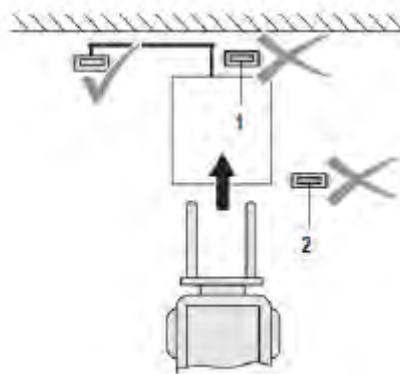
The pit frame must be installed in a suitable location.

- Do not install near doors
- Do not install in heavily frequented areas
- Weighing bridge must be protected from strong air movements
- Weighbridge must be protected from shocks and vibrations



When selecting the installation location, also consider the subsequent position of the weighing platform indicator.

- Do not install directly behind or next to the weighbridge
- Position the display unit so that it is easy to operate and read
- Note the length of the connecting cable between the indicator and the weighing platform



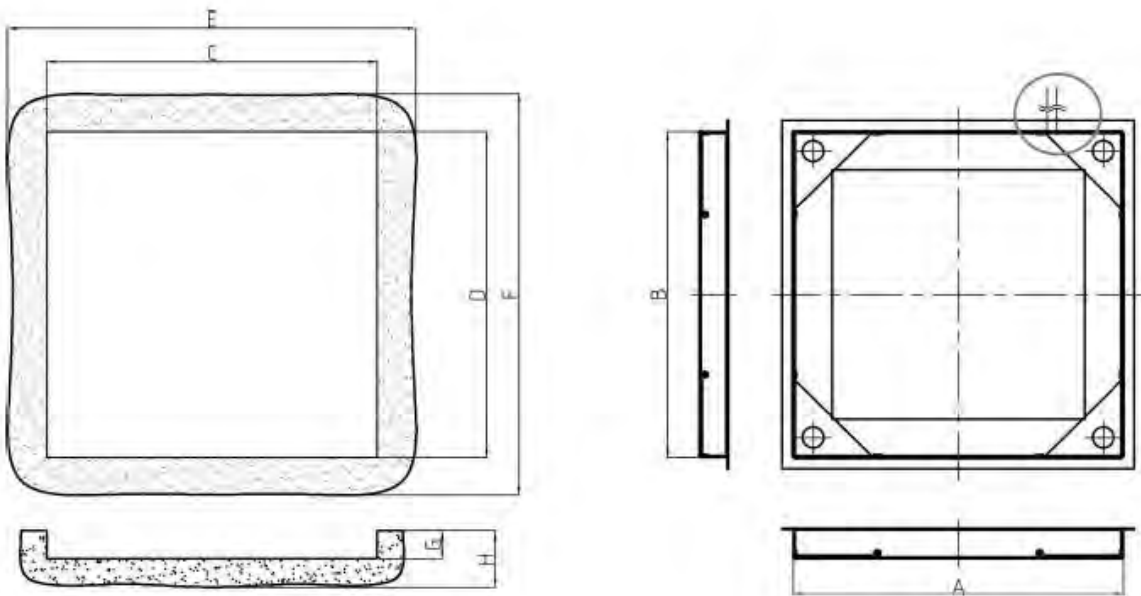
## 1.4.2 Make a pit

### NOTE



⇒ For wet operation, drainage must be provided and the pit must be designed as a wet pit. Further information on creating a wet pit can be found on the next page.

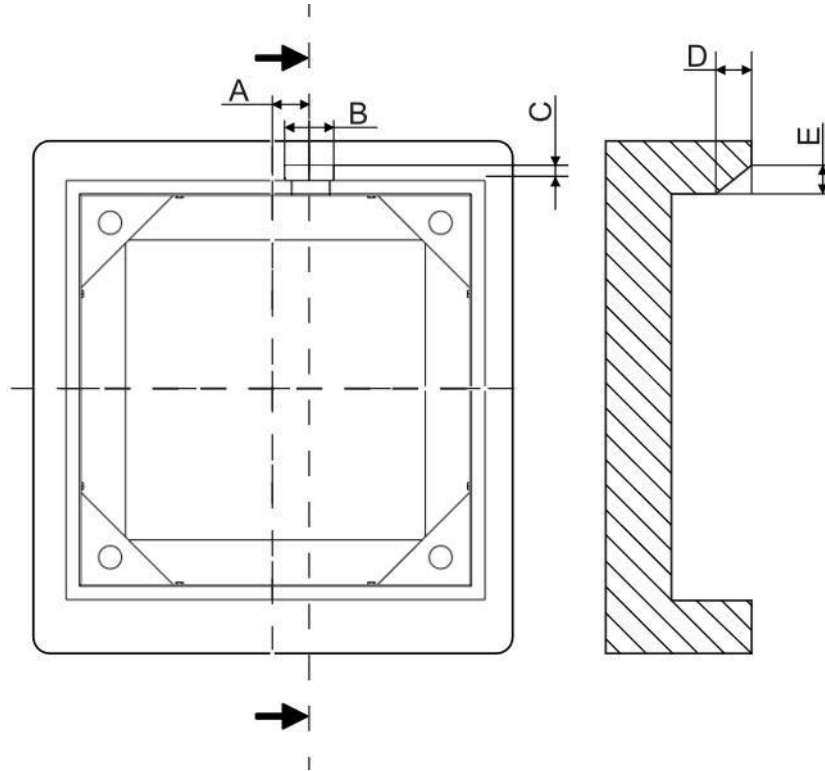
1. Make a pit for the corresponding pit frame.



Type	Pit frame		Quick Pit			Raw pit		
	A	B	C	D	G	E	F	H
BFN-A06	1020	1020	1050	1050	90	1250	1250	150
BFN-A02	1270	1520	1300	1550	90	1500	1750	150
BFS-A03N	1020	1020	1050	1050	90	1250	1250	150
BFS-A04N	1270	1520	1300	1550	90	1500	1750	150
BFS-A08N	1520	1520	1550	1550	90	1750	1750	150

2. Make a slot for the cable outlet. This must be at least 100 mm wide so that the cable cover screws can still be reached.

**Note:** When making the cable outlet, pay attention to the later positioning of the display unit. Only this position will be possible later.



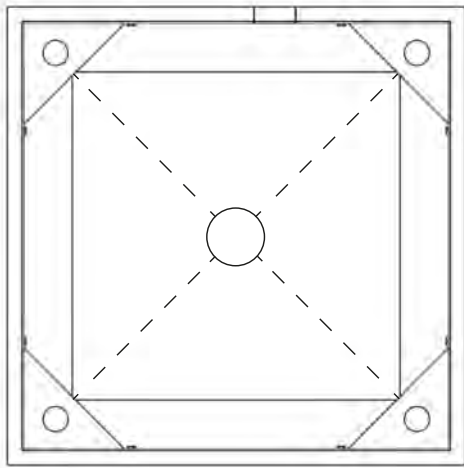
A	B	C	D	E
92	min. 100	min. 50	min. 50	min. 90

**Instructions for creating a wet pit:**

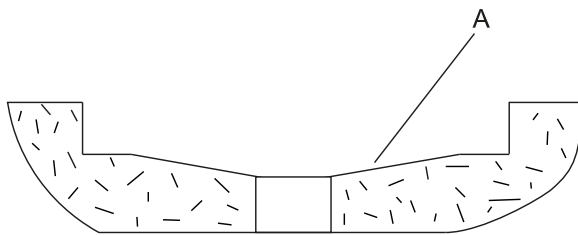
**NOTE**



⇒ The wet pit with drainage must be adapted to the ambient conditions. The wet pit may therefore only be installed by specialised personnel who have the necessary qualifications.



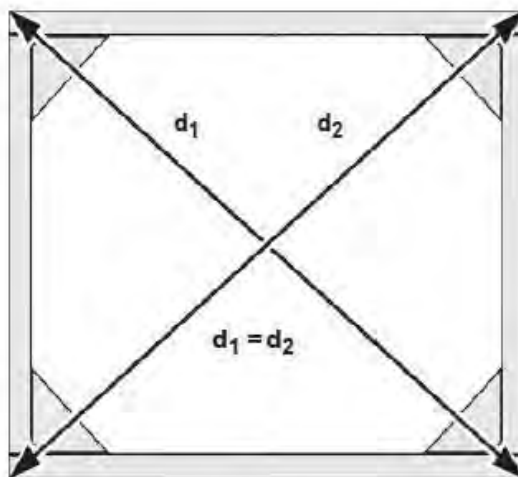
- The gradient **A** must be at least 4 %
- The wet pit must be constructed in such a way that the frame of the pit frame can still stand on solid ground



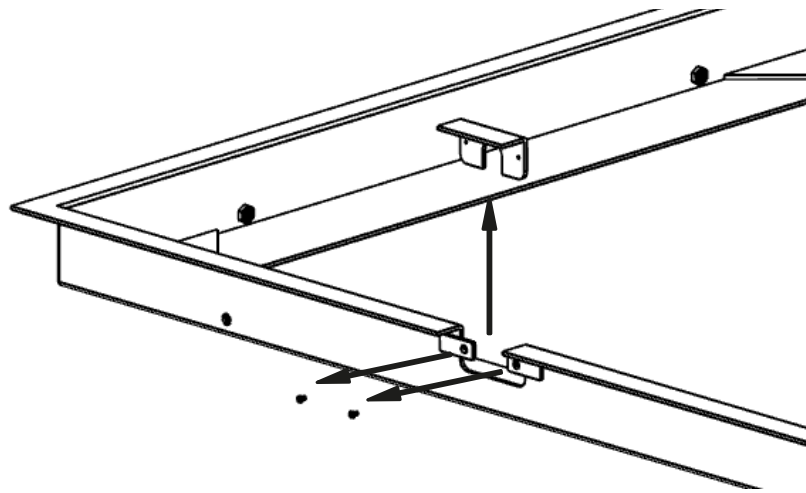
### 1.4.3 Insert pit frame

1. Ensure that the pit frame is square.

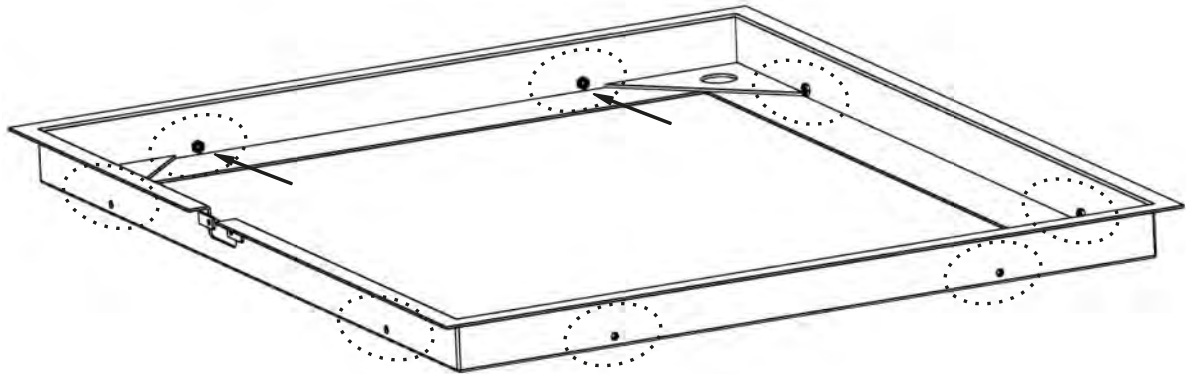
The pit frame is right-angled if the two diagonals have the same length. The tolerance is +/- 2 mm. If there are larger deviations, the pit frame must not be set in concrete.



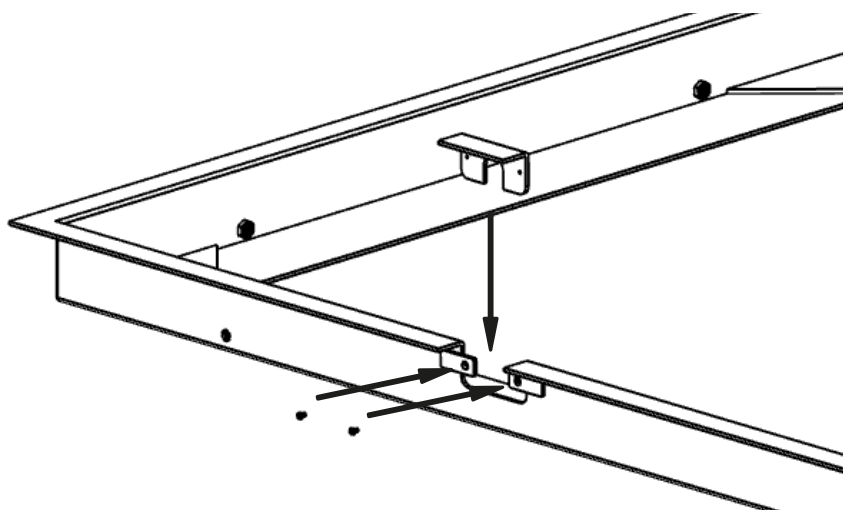
2. Prepare the cable outlet.



3. Place the pit frame in the pit.
4. Secure the pit frame with the 8 screws. The screws must touch the pit.



5. Level the pit frame precisely and secure with the 8 nuts. Only precisely levelled pit frames guarantee the best weighing results.

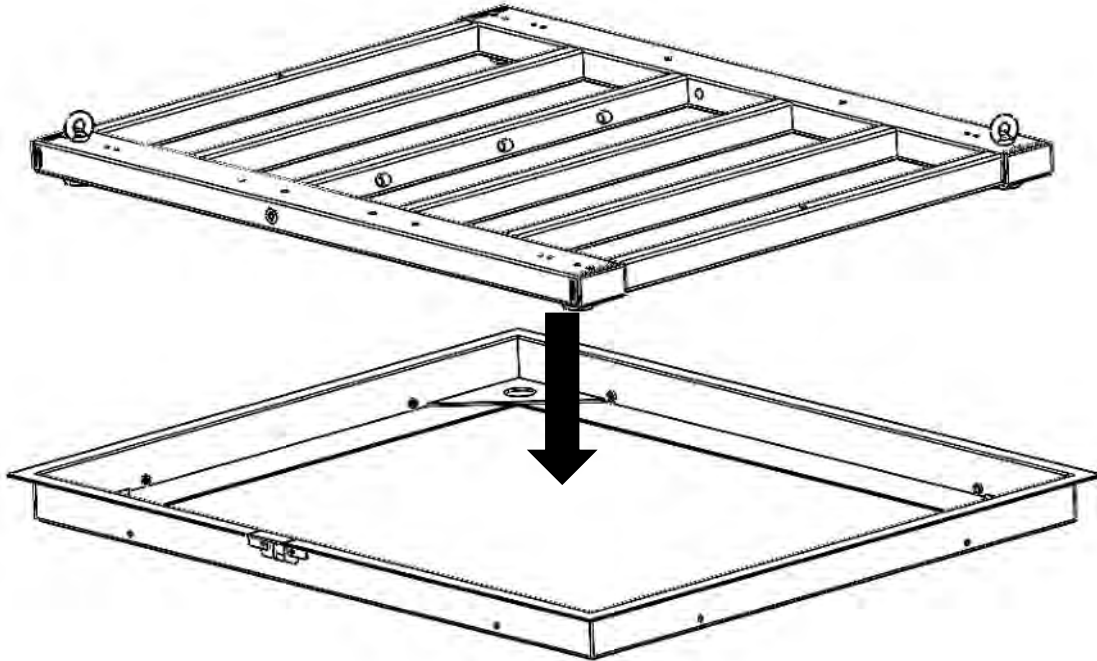


#### **1.4.4 Setting the pit frame in concrete**

- 1.** Set the pit frame in concrete according to the specifications of an architect or structural engineer.
- 2.** Allow the concrete to harden in accordance with the concrete manufacturer's specifications.
- 3.** If there is moisture in the surrounding area, seal the masonry with a suitable material.

### 1.5 Place the weighing platform on the pit frame

- ⇒ Place the weighing platform with the levelling feet on the recesses of the base plates in the pit frame. Then proceed as described in the relevant installation instructions for the weighbridge.

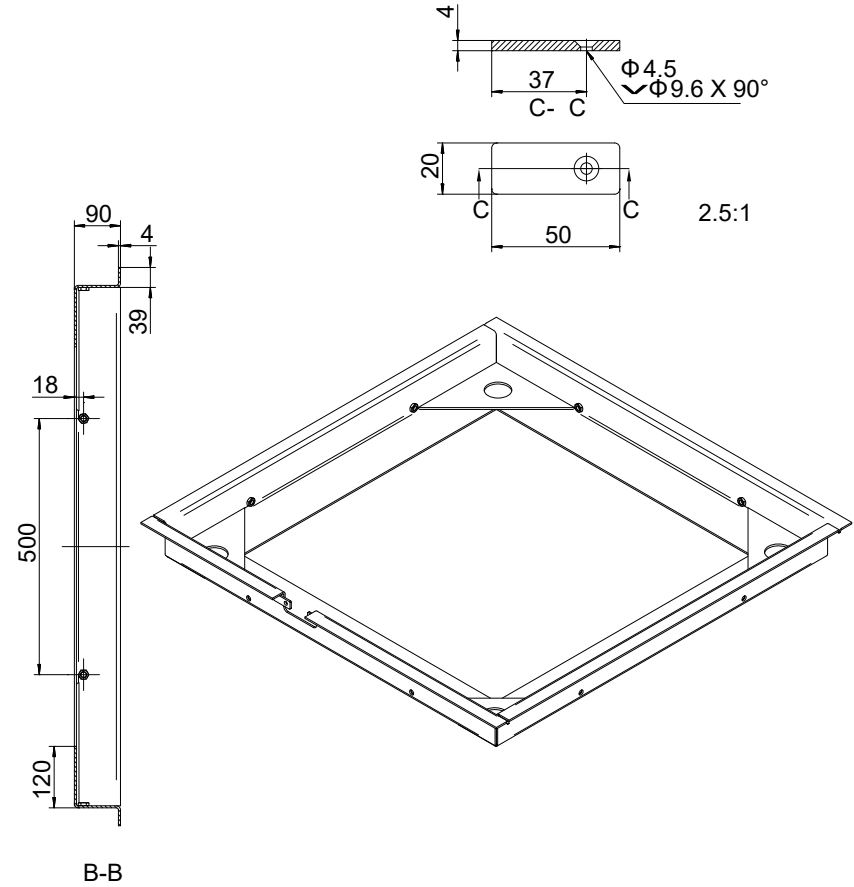
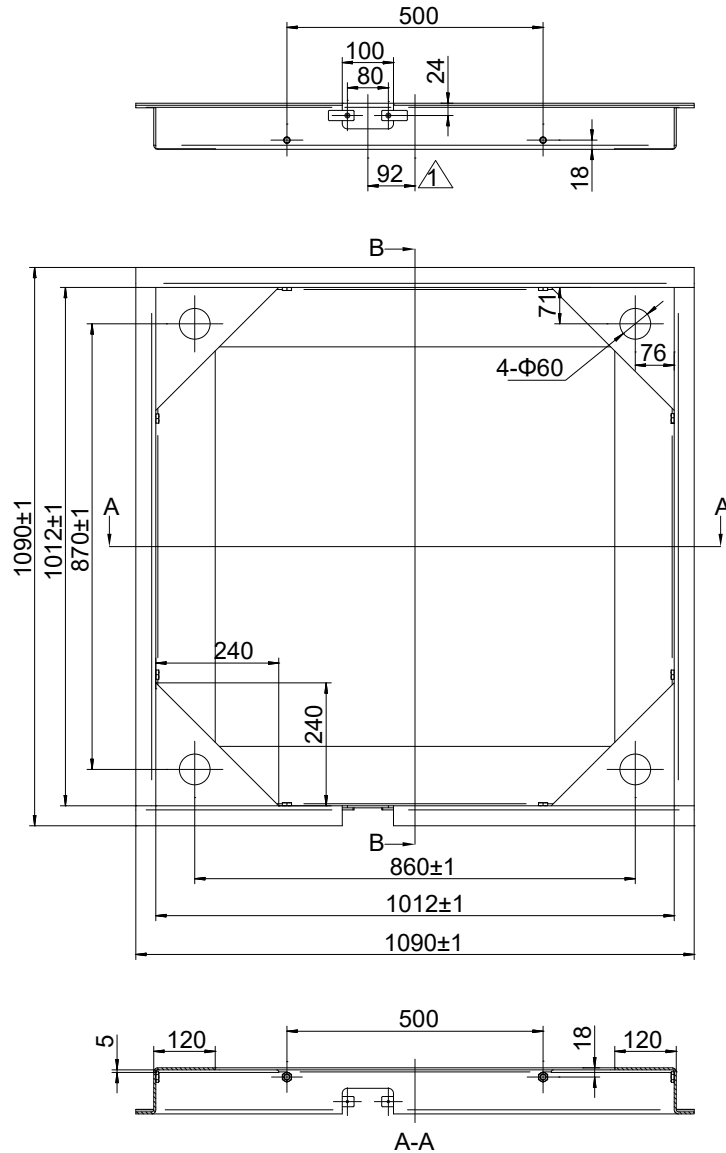


## **2 Drawings**

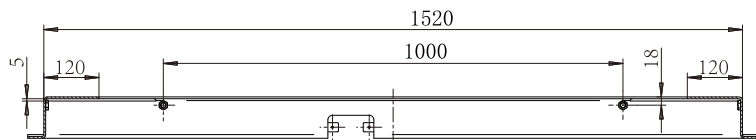
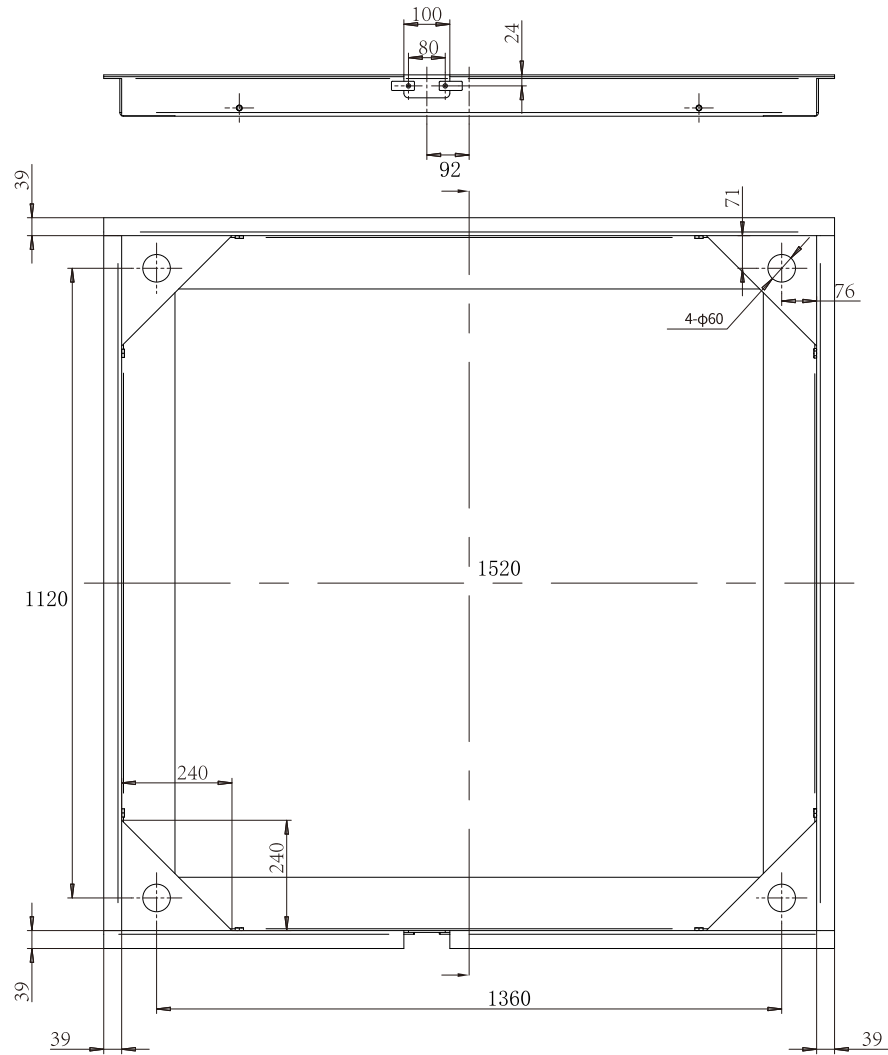
Drawings at the end of the document

A4

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A0	Released	2024.05.06	Tim.Zhao

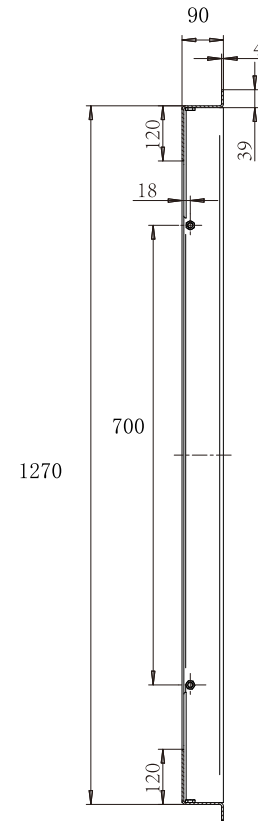


TOLERANCE UNLESS OTHERWISE SPECIFIED DEC ANGLES ±0.5 ±0.1 FOR 0.X ±0.05 FOR 0.XX		<b>KERN® KERN &amp; SOHN GmbH</b>		
3RD ANGLE PROJECTION		TITLE: BFN-A06		
DRAWN	Y.J.Zhao	MODEL NO.	FMS1010-KERN	PART NO. 130901200053
CHECKED	Tim.Zhao	MATERIAL		FINISH
APPROVED	Tim.Zhao			
UNIT	mm	SCALE	DO NOT SCALE DRAWING SHEET OF	

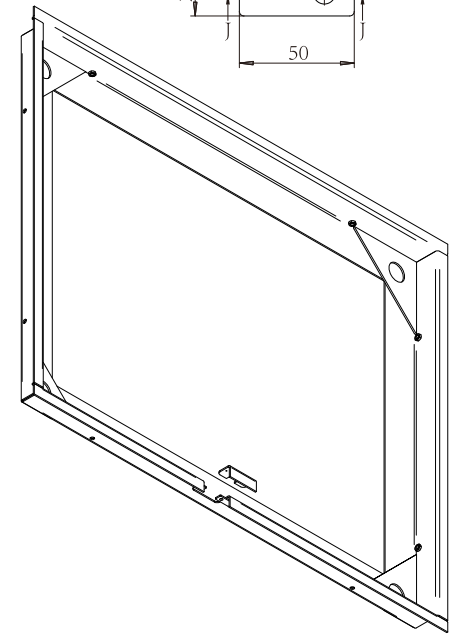
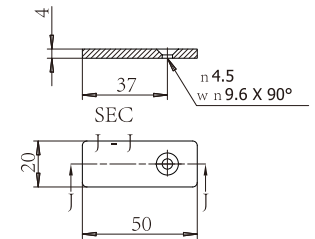


A-A

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A0	Released	2024.05.06	Tim.Zhao



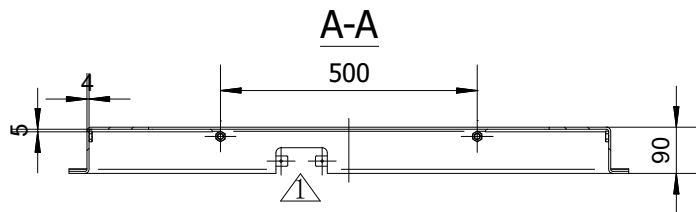
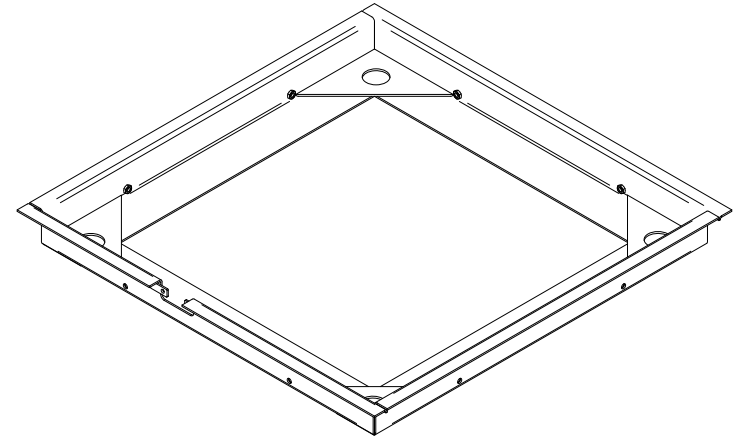
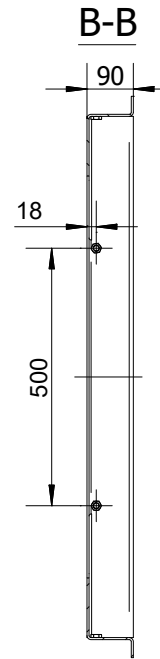
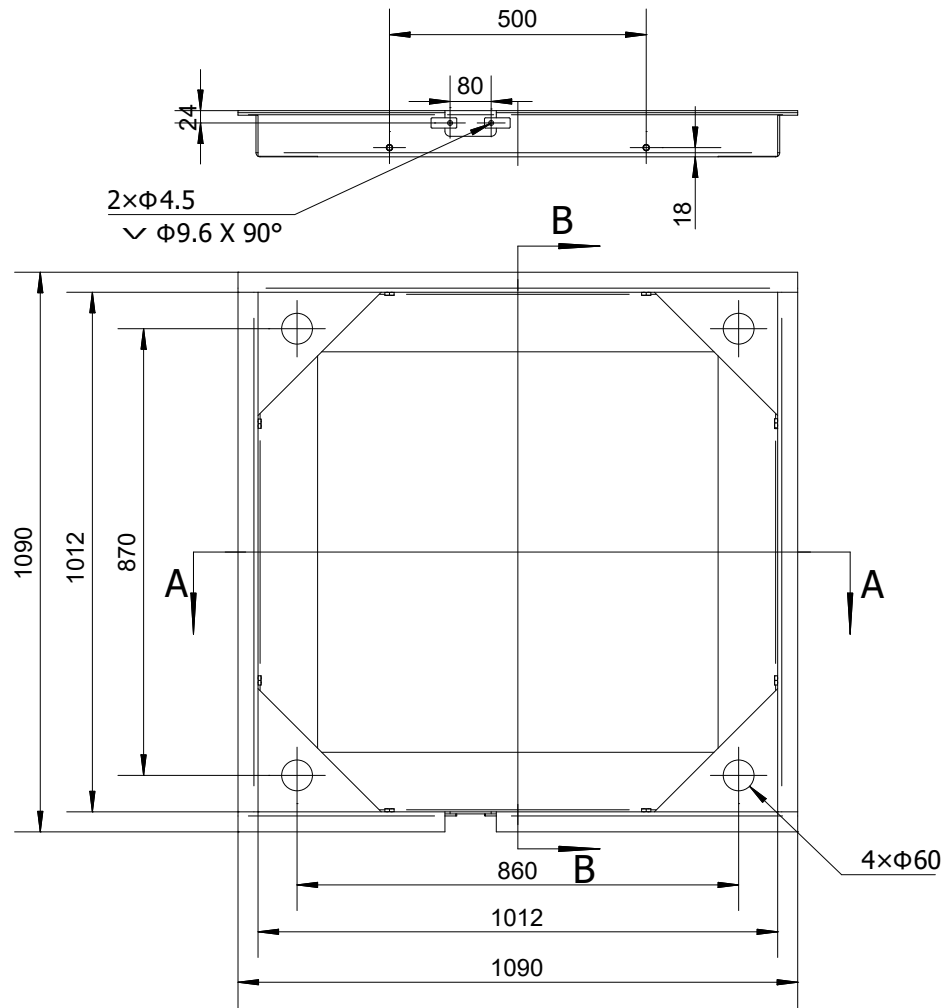
B-B



TOLERANCE UNLESS OTHERWISE SPECIFIED			
DEC	ANGLES	±0.5	
±0.1 FOR 0.X			
±0.05 FOR 0.XX			
3RD ANGLE PROJECTION			
DRAWN	YJ.Zhao	TITLE: BFN-A02	
CHECKED	Tim.Zhao	MODEL NO.	FMS12515-KERN
APPROVED	Tim.Zhao	PART NO.	130901200014
		MATERIAL	FINISH
UNIT	mm	SCALE	DO NOT SCALE DRAWING
			SHEET OF

**KERN® KERN & SOHN GmbH**

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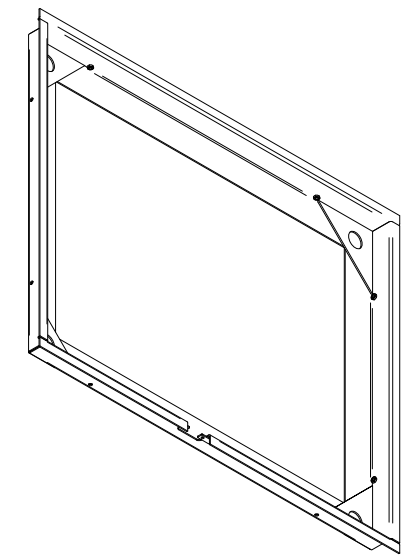
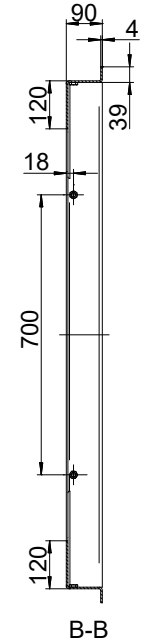
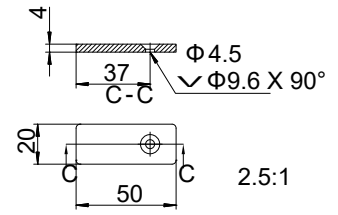
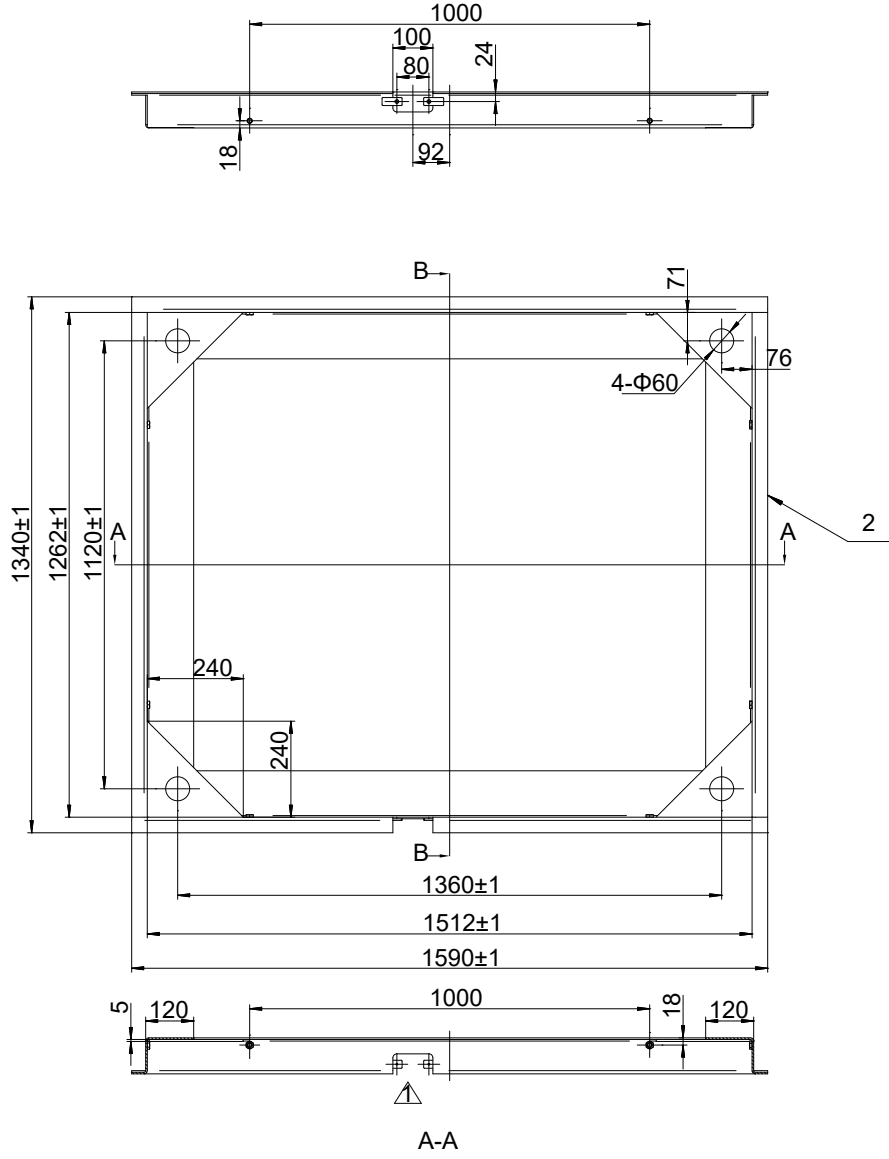


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ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A0	Released	2024.05.06	Tim.Zhao

<small>TOLERANCE UNLESS OTHERWISE SPECIFIED DEC ANGLES ±0.1 FOR 0.X ±0.05 FOR 0.XX</small>		<b>KERN &amp; SOHN GmbH</b>		
<small>3RD ANGLE PROJECTION</small>		TITLE: BFS-A03N		
DRAWN	Y.J.Zhao	MODEL NO.	FM1010-KERN	PART NO. 130901200043
CHECKED	Tim.Zhao	MATERIAL		FINISH
APPROVED	Tim.Zhao	SCALE		DO NOT SCALE DRAWING
UNIT	mm			SHEET OF

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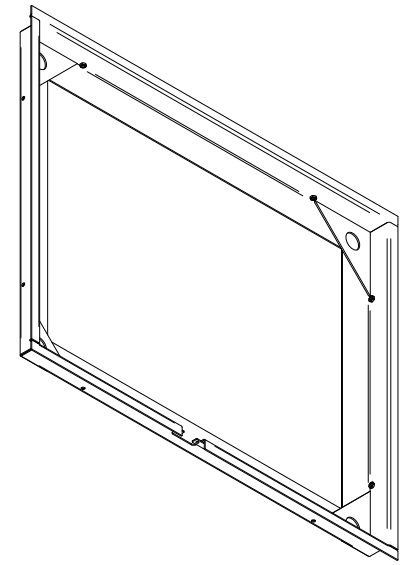
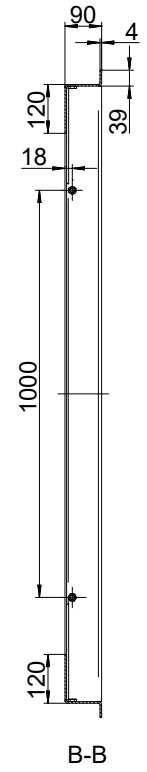
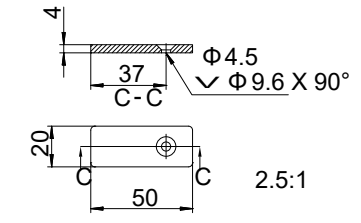
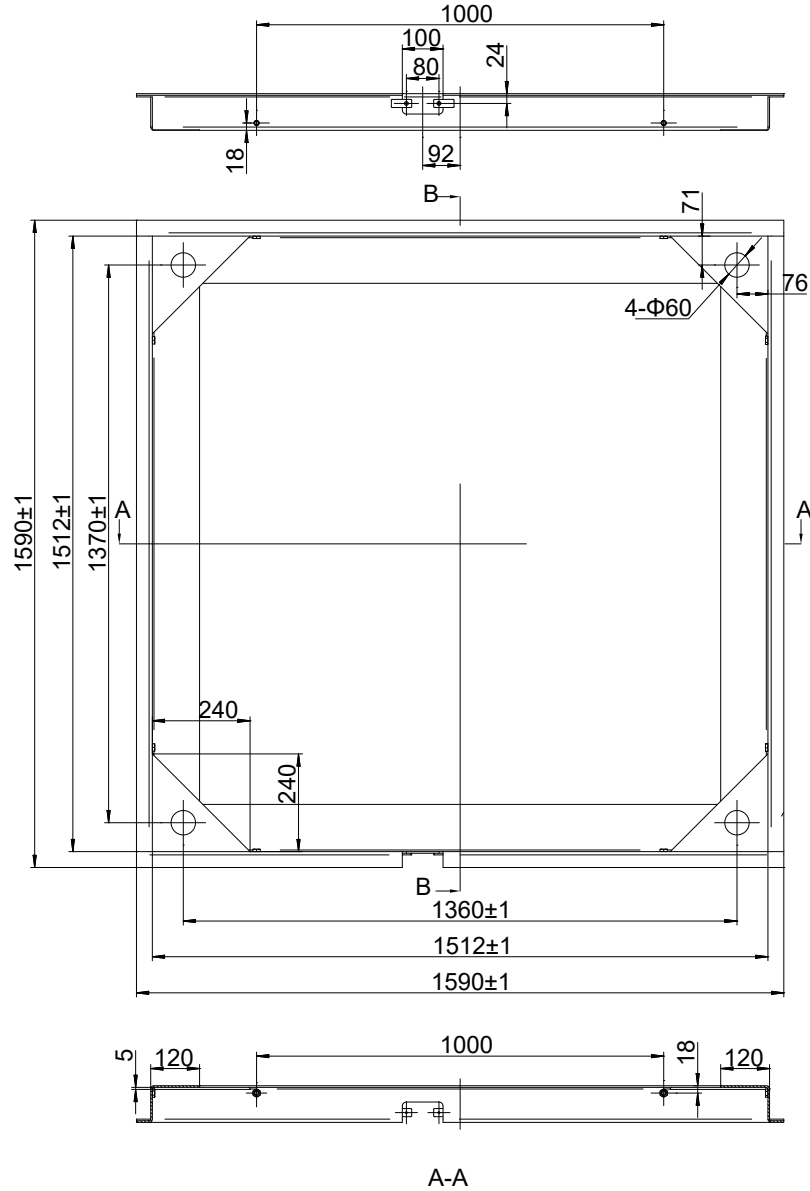
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<small>TOLERANCE UNLESS OTHERWISE SPECIFIED DEC ANGLES ±0.1 FOR 0.X ±0.05 FOR 0.XX</small>		<small>±0.5</small>		<b>KERN &amp; SOHN GmbH</b>	
3RD ANGLE PROJECTION		TITLE: BFS-A04N			
DRAWN	Y.J.Zhao	MODEL NO.	FM12515-KERN	PART NO.	130901200044
CHECKED	Tim.Zhao	MATERIAL		FINISH	
APPROVED	Tim.Zhao	SCALE		DO NOT SCALE DRAWING	SHEET OF
UNIT	mm	SCALE		DO NOT SCALE DRAWING	SHEET OF

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A0	Released	2024.05.06	Tim.Zhao



TOLERANCE UNLESS OTHERWISE SPECIFIED DEC ANGLES ±0.1 FOR 0.X ±0.05 FOR 0.XX ±0.5		<b>KERN® KERN &amp; SOHN GmbH</b>		
3RD ANGLE PROJECTION DRAWN: Y.J.Zhao		TITLE: BFS-A08N		
CHECKED: Tim.Zhao	MODEL NO. FM1515-KERN	PART NO. 130901200045		
APPROVED: Tim.Zhao	MATERIAL	FINISH		
UNIT: mm	SCALE	DO NOT SCALE DRAWING	SHEET OF	