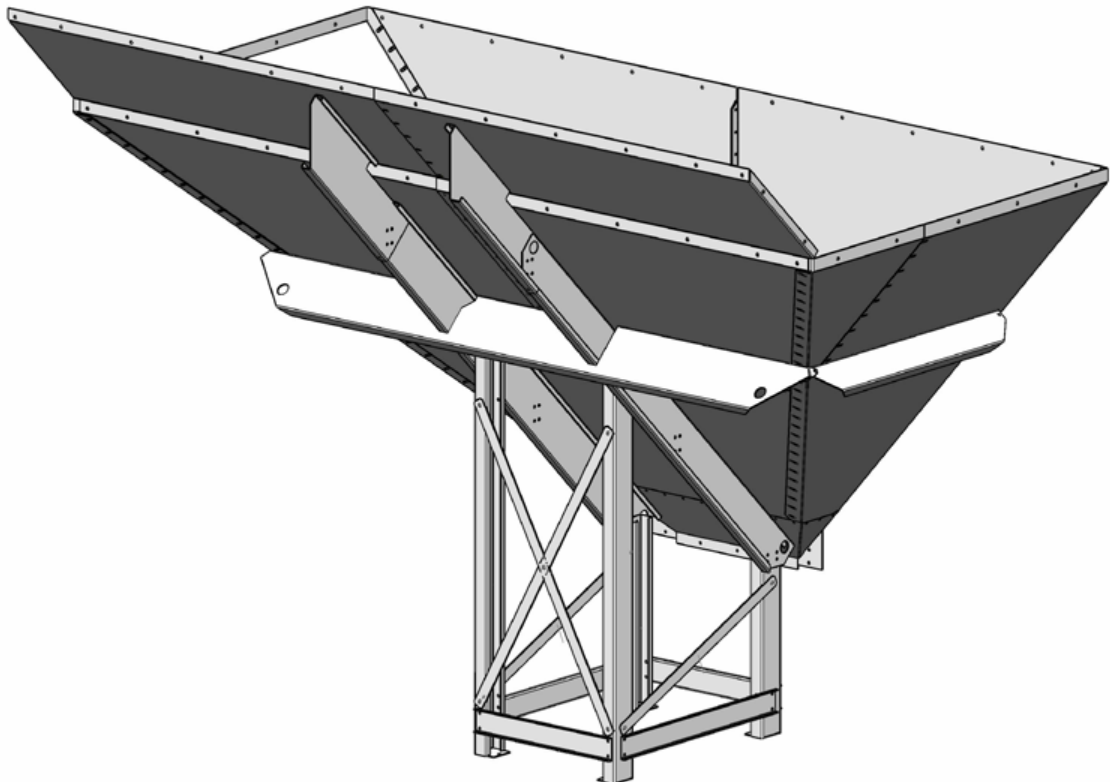


Installation and Operating Instructions

Bolt-assembled hopper
4020x2325 (4x2,5m)

408122 (en) 02-2025



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Read the Installation and Instruction Manual carefully before installing the hopper and putting it into operation.

Safety

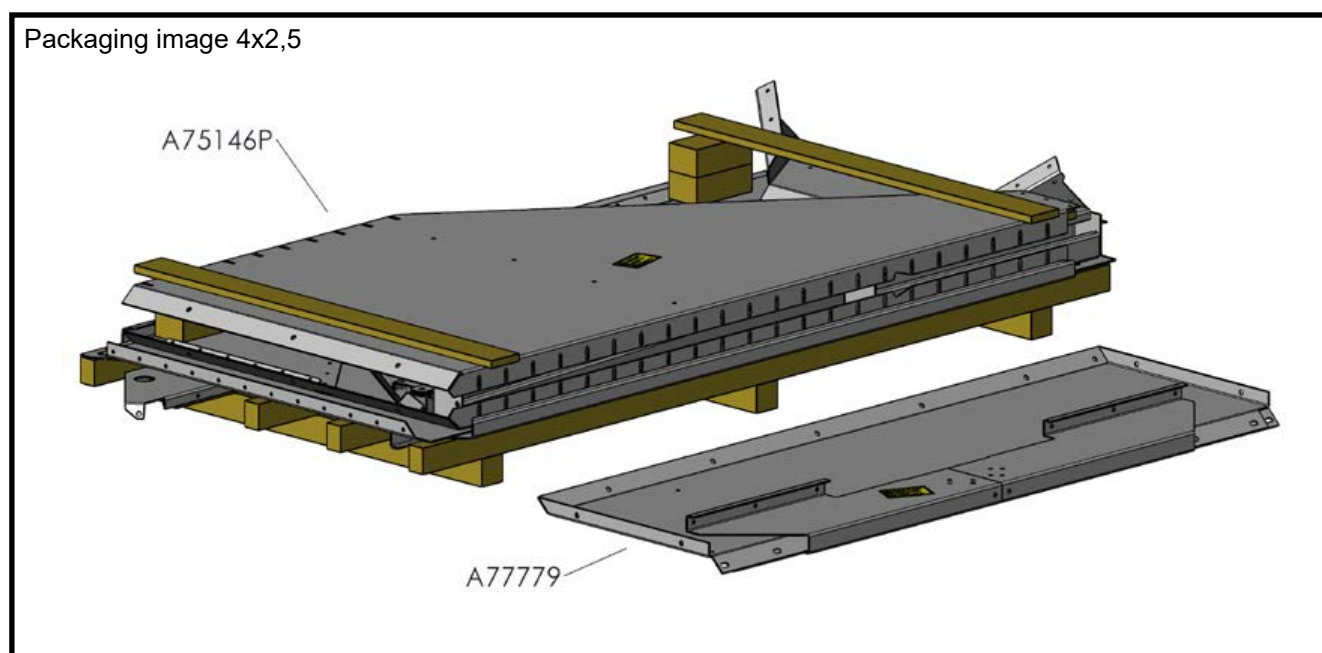
Follow the local instructions for occupational safety.

When assembling, take into account that the plates are large and heavy. Two fitters and a decent lift are minimum requirements. The assembly can be carried out using ordinary tools.

The ready-assembled hopper shall be lifted using four chains, which makes the installation into the concreted hopper pit easy.

Bolt-assembled hopper

The bolt-assembled hopper is designed for grain dryers with silo elements measuring 2.0 or 2.5 metres. The hopper is therefore suitable for dividing the elements and the foundations remain simple. The hopper is therefore suitable for dividing the elements and the foundations remain simple. It is possible to connect an elevated A-series or E-series elevator to the hopper by means of an intake spout. During assembly, observe the model of the elevator, and the height position of the legs.



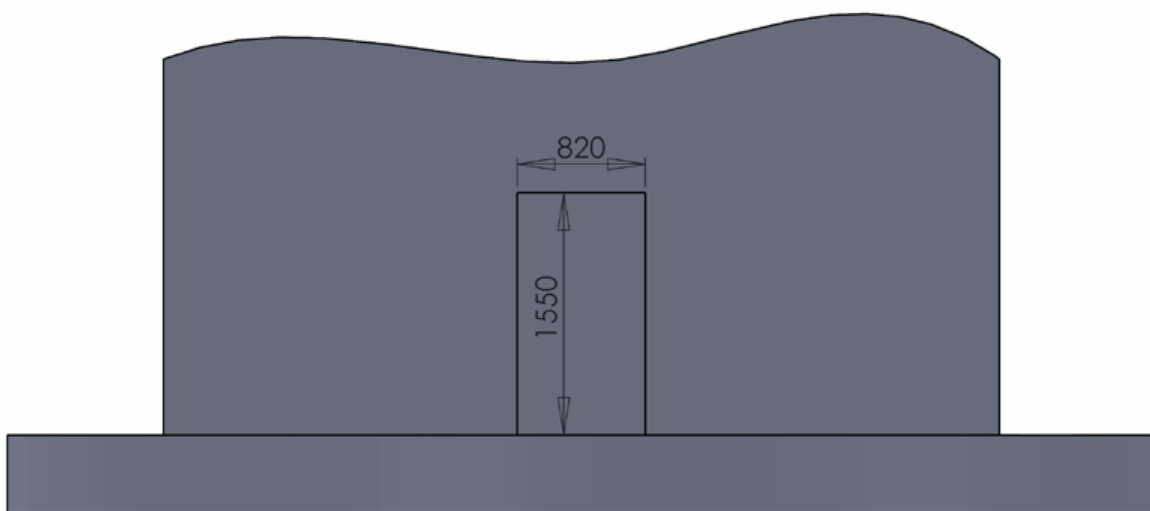
Hopper pit (foundation)

The bolt-assembled hopper is designed to be installed in a concreted hopper pit. When planning the pit, it is advisable to design openings that provide access to underside of the hopper and facilitate the exchange of air. This will inhibit the parts made of iron from getting corroded too easily. The dimensions of the hopper are to some extent adjustable, enabling the hopper to be fitted even into a pit, that differs slightly from the nominal size.

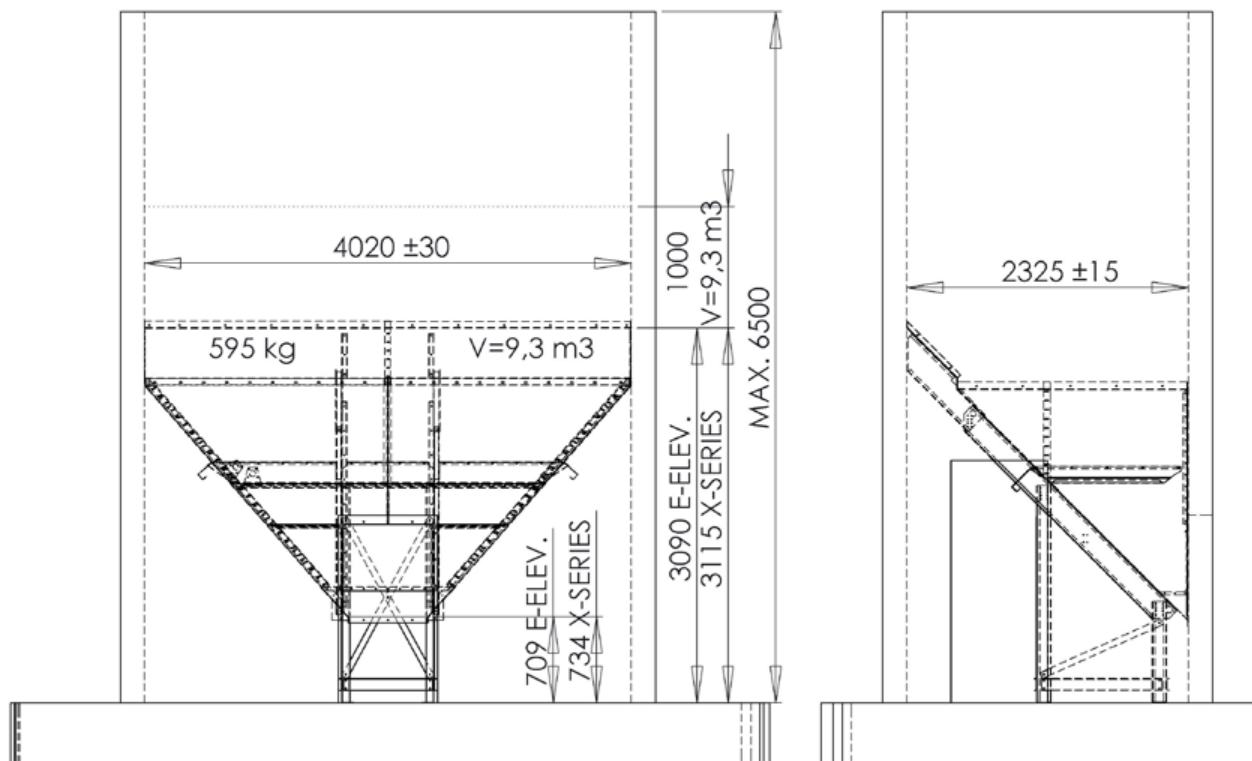
Attach the upper edge of the hopper either using expander bolts or by welding to the bond plates, set in the concrete. Attach the legs to the bottom using expansion bolts or by welding to the bond plates. The hopper's legs do not have to stand on a level surface – as necessary, their length can be adjusted by means of pieces of sheet metal, for example.

For special applications, it is essential to make a sufficient sturdy frame around the upper part of the hopper, and provide legs that are sufficient strong to carry the load all the way down. Supporting the (vertical) rear wall is mandatory. If the foundation is made by concreting, the wall will lean against a surface of concrete, and will not bend.

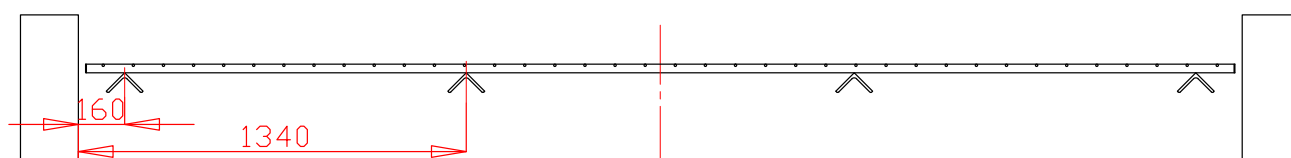
Opening in the foundation for the elevator connection



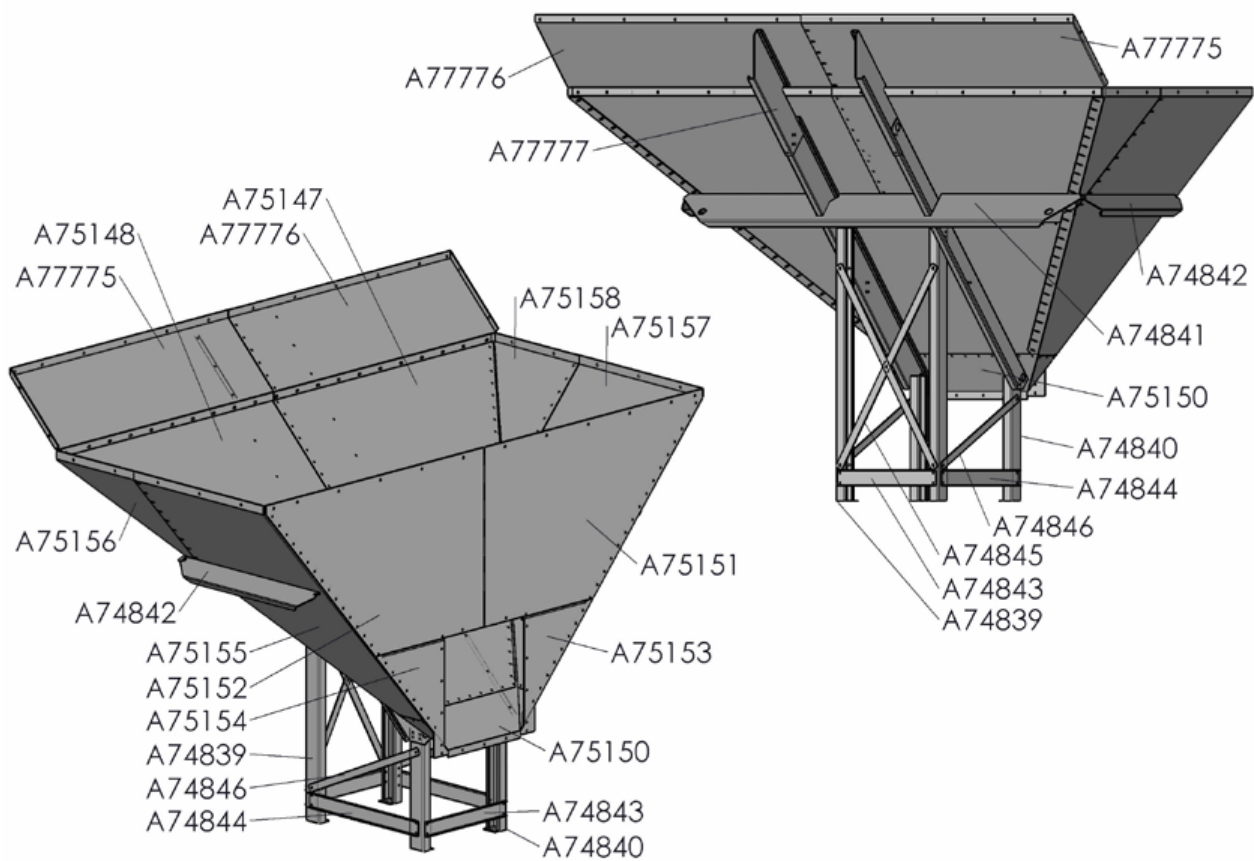
Dimensioning of the foundation and the adjustment reserves of the hopper.



Distribution of the support beams of the walk-way grate



Spare parts





Part number	Denomination	Pcs	Weight
503017	LIFTING LUG 15KN PL4X150X160 30DEG	4	0,48
A75147	BOLT ON INTAKE HOPPER PLATE1 2X4 M15	1	48,47
A75148	BOLT ON INTAKE HOPPER PLATE2 2X4 M15	1	48,47
A75149	BOLT ON INTAKE HOPPER PLATE3 2X4 M15	1	51,9
A75150	BOLT ON INTAKE HOPPER PLATE4 2X4 M15	1	10,31
A75151	BOLT ON INTAKE HOPPER PLATE5 2X4 M15	1	44,54
A75152	BOLT ON INTAKE HOPPER PLATE6 2X4 M15	1	44,54
A75153	BOLT ON INTAKE HOPPER PLATE7 2X4 M15	1	5,88
A75154	BOLT ON INTAKE HOPPER PLATE8 2X4 M15	1	5,88
A75155	BOLT ON INTAKE HOPPER PLATE9 2X4 M15	1	55,03
A75156	BOLT ON INTAKE HOPPER PLATE10 2X4 M15	1	12,52
A75157	BOLT ON INTAKE HOPPER PLATE11 2X4 M15	1	55,03
A75158	BOLT ON INTAKE HOPPER PLATE12 2X4 M15	1	12,52
A75159	BOLT ON INTAKE HOPPER STIFFNER 2X4 M15	2	17,32
A74839	BOLT ON INTAKE HOPPER LEG1 M13	2	11,83
A74840	BOLT ON INTAKE HOPPER LEG2 M13	2	5,54
A74841	BOLT ON INTAKE HOPPER HORI SUPPORT1 M13	1	22,59
A74842	BOLT ON INTAKE HOPPER HORI SUPPORT2 M13	2	6,82
A74843	BOLT ON INTAKE HOPPER LEG SUPPORT1 M13	2	2,24
A74844	BOLT ON INTAKE HOPPER LEG SUPPORT2 M13	2	3,04
A74845	BOLT ON INTAKE HOPPER SUPPORT M13	2	1,75
A74846	BOLT ON INTAKE HOPPER SUPPORT2 M13	2	1,28
A77775	BOLT ON INTAKE HOPPER EXTENSION LEFT 2,5x4	1	33,65
A77776	BOLT ON INTAKE HOPPER EXTENSION RIGHT 2,5x4	1	33,65
A77777	BOLT ON INTAKE HOPPER EXTENSION STIFFNER RIGHT 2,5x4	1	6,17
A77778	BOLT ON INTAKE HOPPER EXTENSION STIFFNER LEFT 2,5x4	1	6,17
131004	EXPANDER BOLT KA 12X100 ZN	52	
104261	SCREW COACH SCREW ZN 10.9 8X16 AM ISO 7380-2	349	
110540	NUT M8 ZN 8 DIN934	429	
107910	SCREW LOCK ZN M 8X16 DIN603 8.8	70	
111562	WASHER ZN D28/D9X3 DIN440R	163	
104266	SCREW COACH SCREW ZN 10.9 8X20 AM ISO 7380-2	10	
102195	BOLT HEX ZN 8.8 10X16 AM DIN933	45	
104259	COACH SCREW CUP HEAD ZN 10.9 10X20 AM ISO 7380-1	33	
110560	NUT M10 ZN 8 DIN934	78	
800271	SEAL MASTIC GREY 290 ML SOUDAL Fix ALL Flexi	2	

Assembly

The place of assembly must be level and steady, No sealants shall be used for the assembly. Seal up the joints last, when the hopper stands ready-installed in place.

It is advisable to use 3 pieces of wood, 50x100 L=3200 in size, as an aid to make installation of the bolts easier.

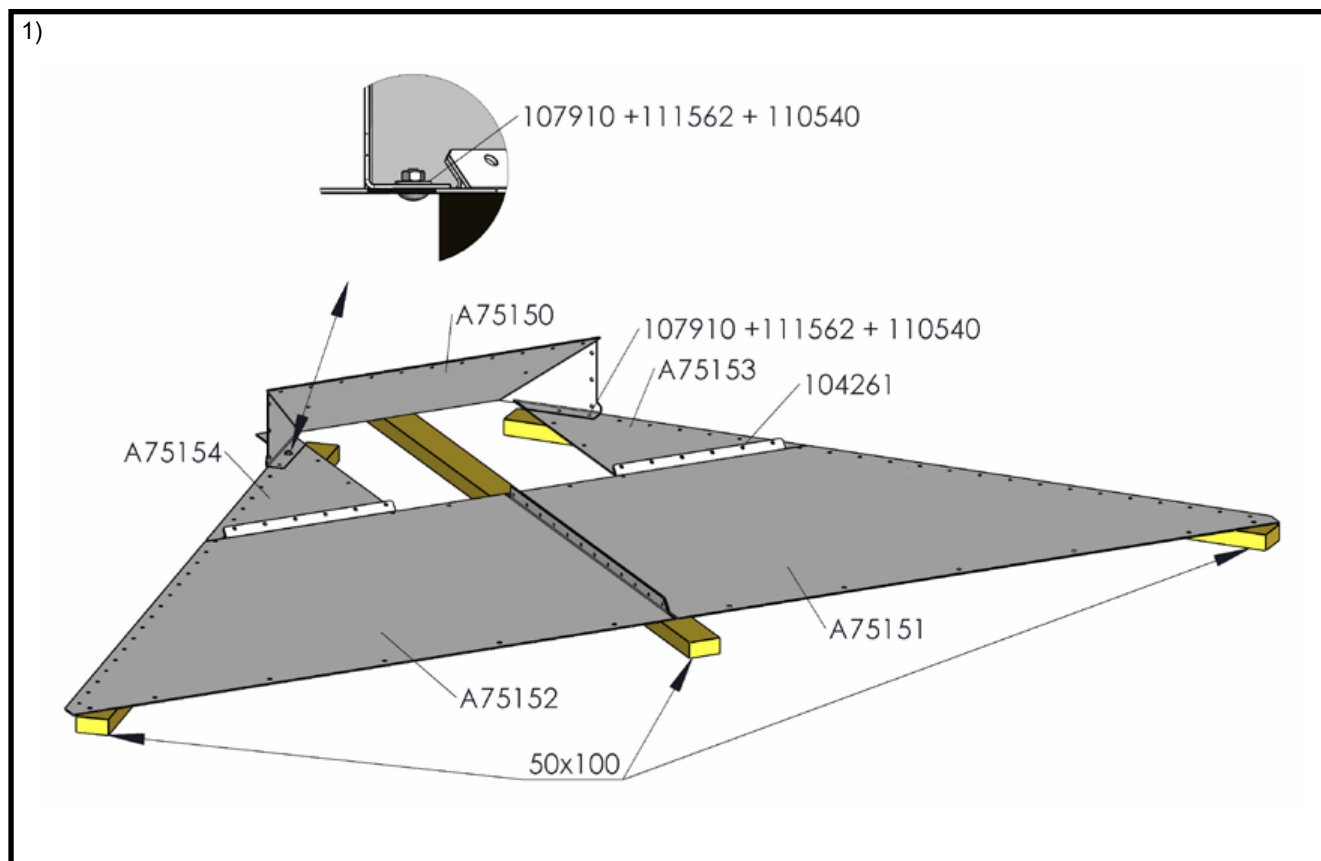


Fig. 1): Place the countersunk bolts with their caps pointing outward (against the concrete surface). Provide the long holes with a fender washer. Tighten all bolts.

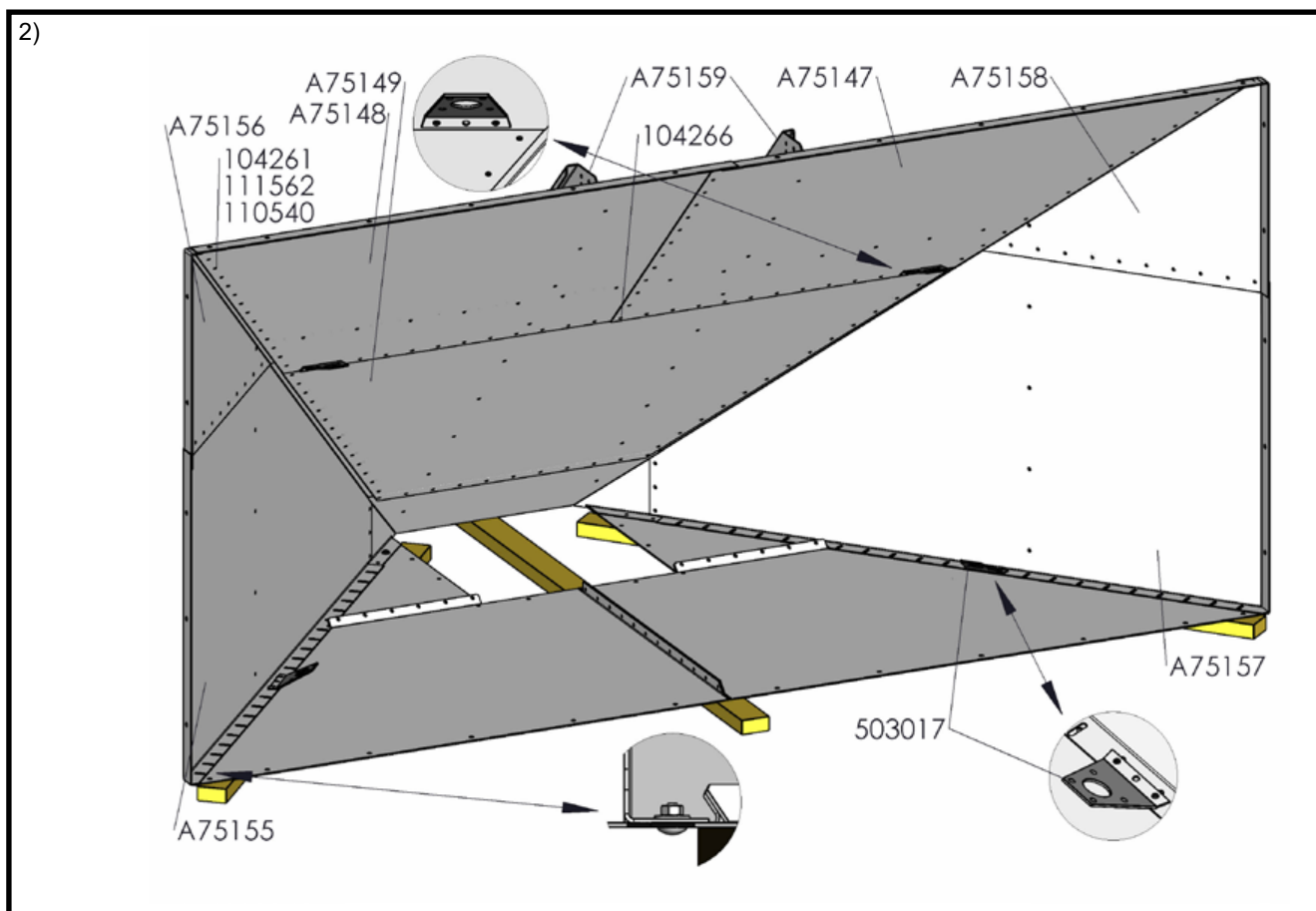
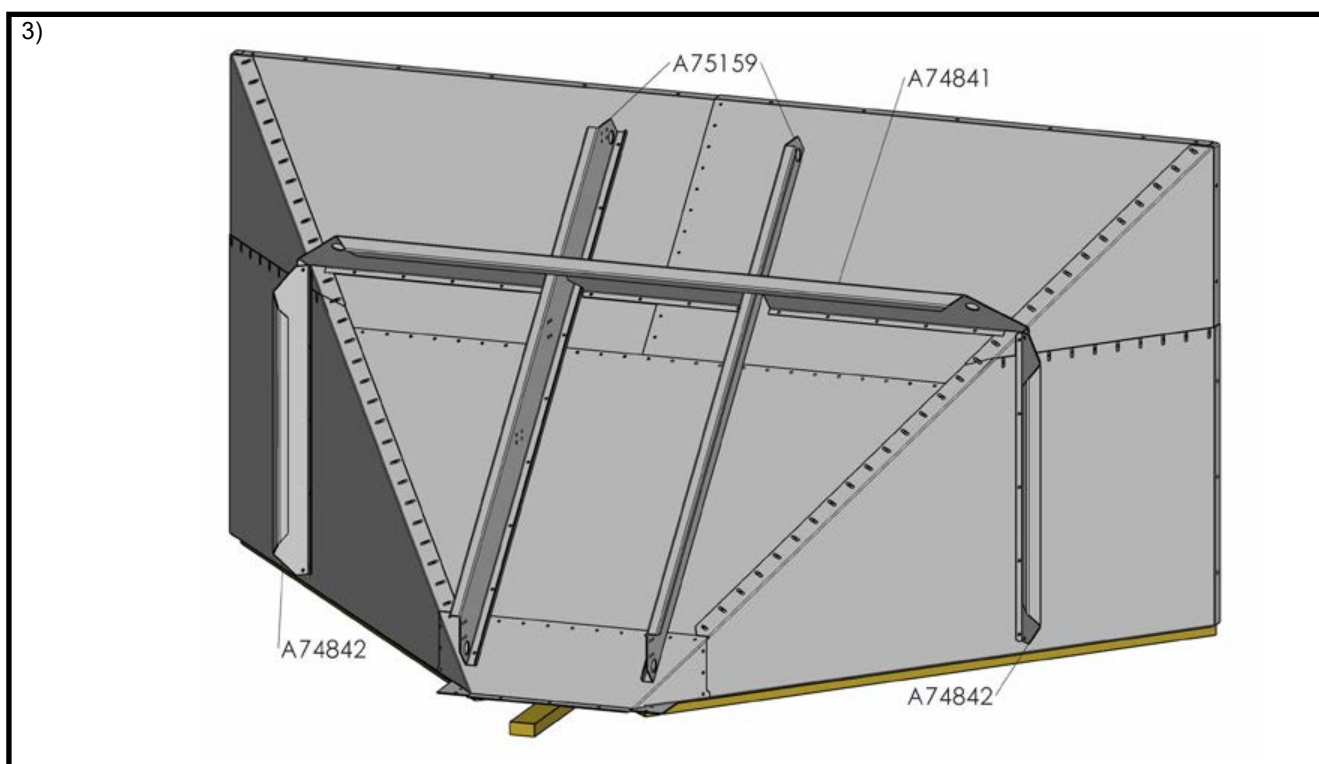


Fig. 2): Place the countersunk bolts with their caps pointing outward (against the concrete surface). Install the lifting lugs (4 pcs.). Leave the connections with the long holes loose (adjustment reserve).



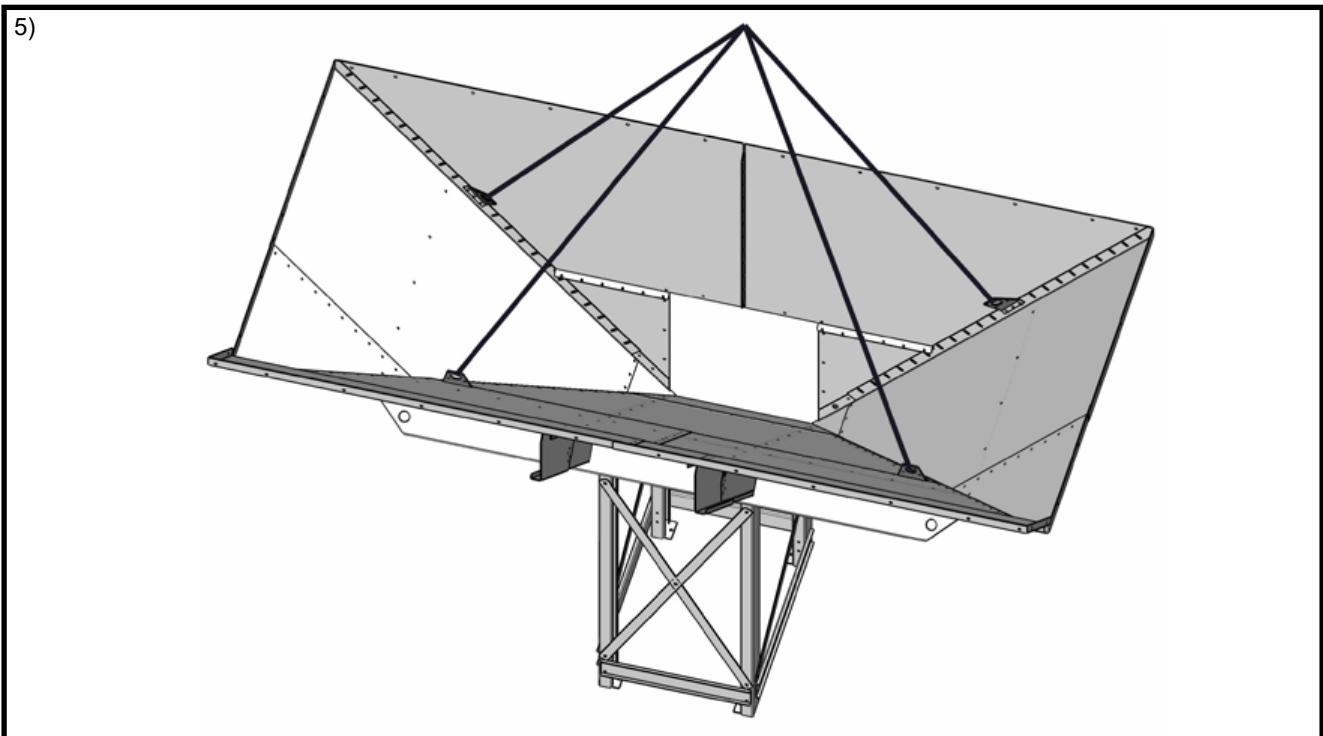
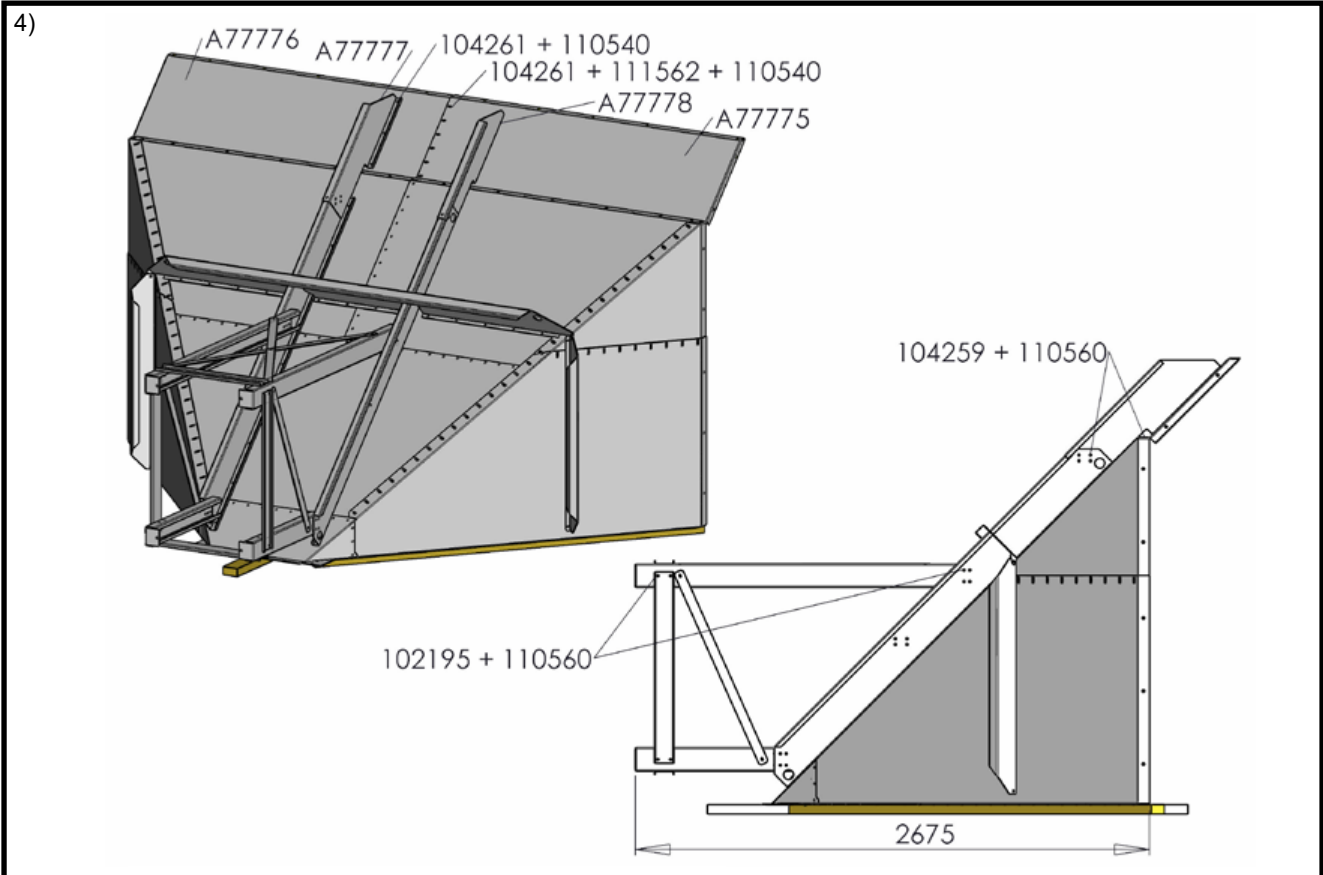


Fig. 5): Installation of the hopper into the pit requires sufficiently powerful lifting equipment. Use four chains for lifting.

6)

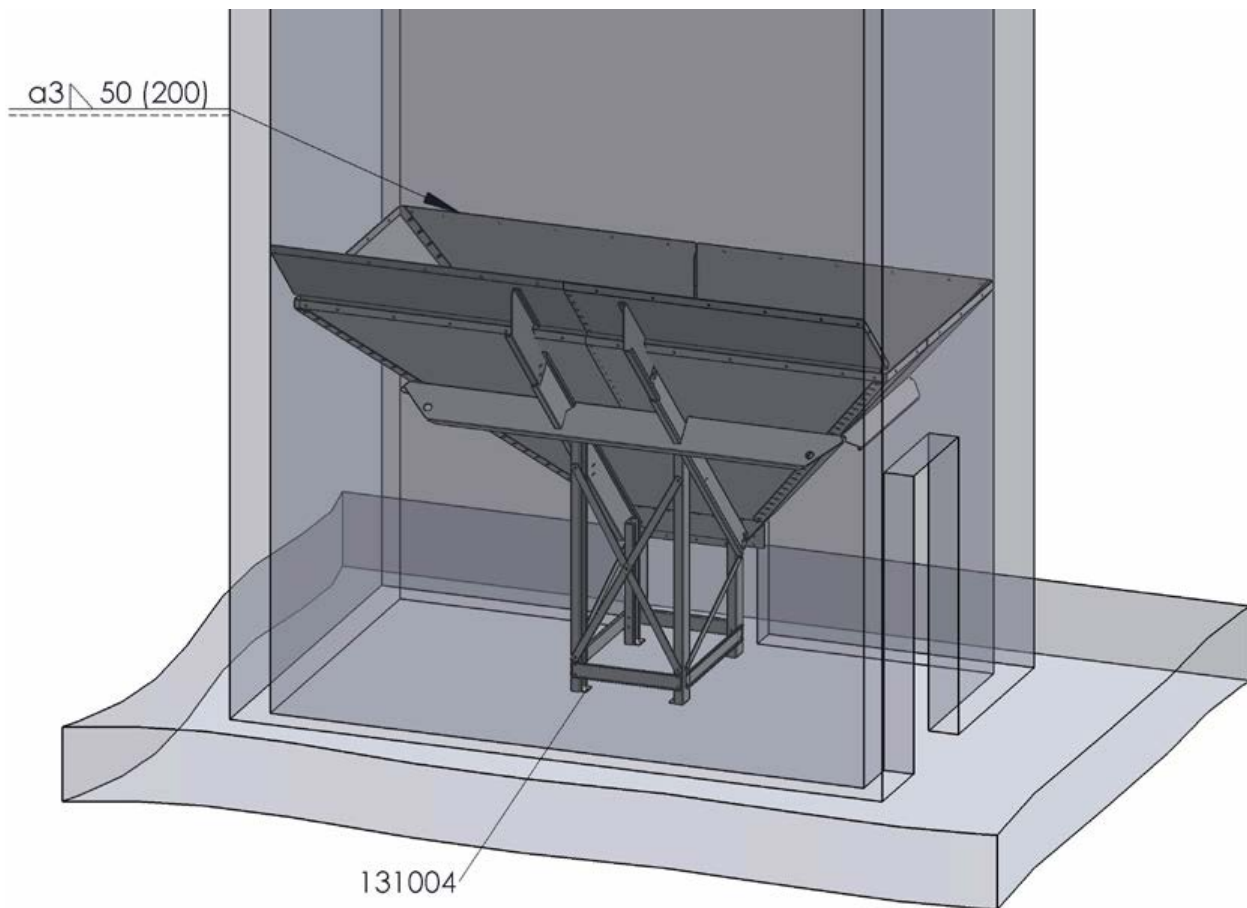


Fig 6): As soon as the hopper stands level, the legs can be attached to the foundation by means of expander bolts (131004, M12).

Once the bolts in the long holes are loose, the upper edge can be attached using expander bolts (M12) or by welding to the bond plates set in the concrete – the seams shall be at least 50 mm long at intervals of 200 mm.

The bolts in the long holes can be tightened as soon as the upper edge has been fixed.

After that, apply glue compound to seal up the joints of the overlapping plates, the corners, the chink between the concrete and the upper edge etc.

7)

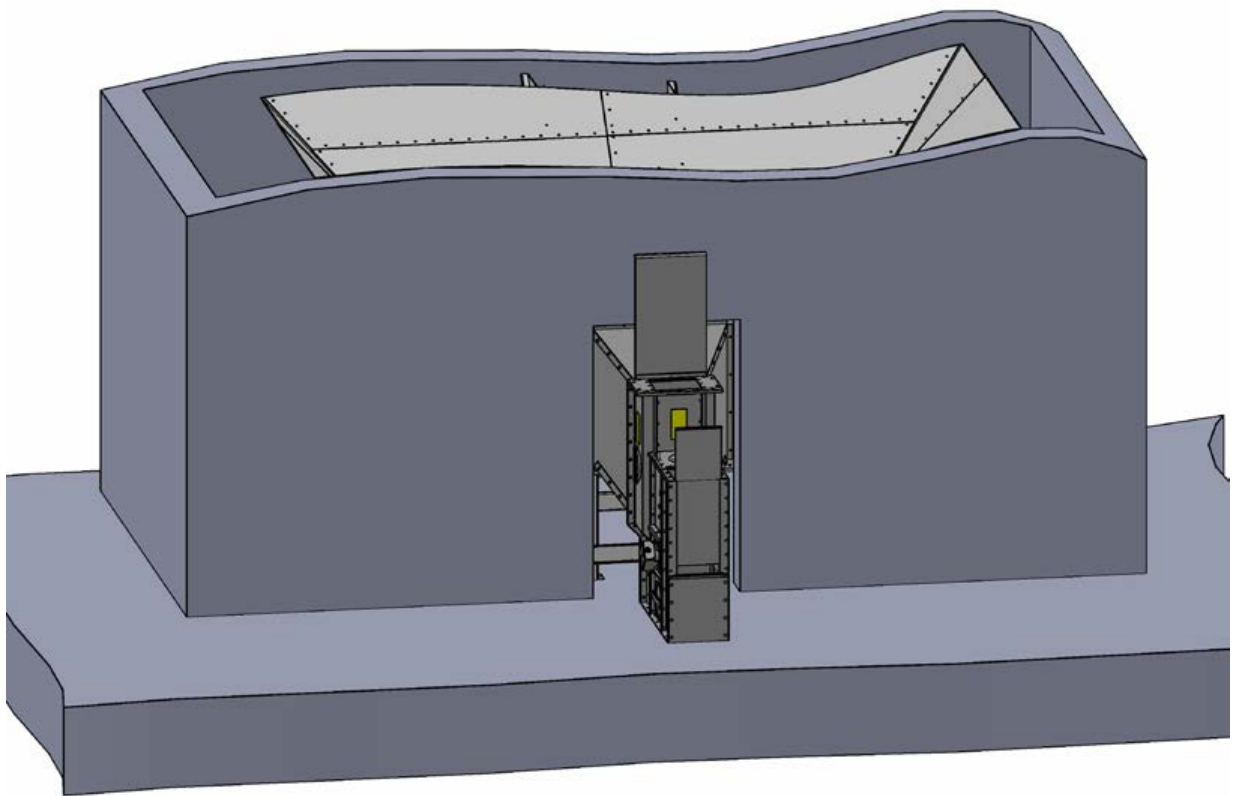


Fig. 7): Install the intake spout before installing the elevator. This way you can put the bolts in place through the spout. As required, drill holes into the lower edge of the connecting part.



EU Declaration of Conformity

ANTTI-TEOLLISUUS OY
Koskentie 89
FI- 25340 KANUNKI; SALO
Tel.: +358 2 7744700

declares that

BOLT-ASSEMBLED HOPPER 4020 x 2325
conform with the provisions of the following directives:

- **Machine Directive 2006/42/EU**

Salo 02.01.2025

Kalle Isotalo
Managing Director