



# **Dryer machinery**

## **INSTALLATION MANUAL**

**S series**

**M series**

**C series**

Read this manual before using product. Failure to follow instructions and safety precautions can result in serious injury, death, or property damage. Keep manual for future reference.

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## **INTRODUCTION**

This manual describes how to assemble the MEPU grain dryer. Before assembling this equipment, please read this manual. Familiarize yourself with the process and the necessary precautions for efficient and safe assembly.

Anyone present at the assembly site is required to be familiar with all safety precautions. Keep this manual available for frequent reference and review it with new personnel.

Call your local distributor or dealer if you need assistance or additional information.

## **WARRANTY AND WARRANTY CONDITIONS**

The product is intended for professional use. Installation, use and maintenance of the equipment require normal general knowledge and skills related to machines and equipment that a professional farmer should presumably possess.

### **Warranty conditions**

The dryer machinery is covered by a 12-month warranty from the commissioning date, but the maximum duration of the warranty is 18 months from the invoice date of the Goods. Mepu Oy cannot be held responsible for any defects discovered after the aforementioned time limits. Mepu Oy undertakes to eliminate any design, raw materials, or workmanship-related faults in the Goods through repair or replacement. Mepu Oy is not responsible for any other direct or indirect damages or losses.

The warranty does not cover faults arising from materials provided by the Purchaser or structural solutions specified or set out by the Purchaser. Moreover, Mepu Oy's warranty and liability for faults do not cover minor faults and deviations that exert no substantial influence on the use and functionality of the dryer machinery. The warranty does not cover faults caused by any factors discovered after transfer of the burden of risk. For example, the warranty does not cover faults caused by failure to comply with the use and storage conditions specified for the Goods or instructions for use, or improper use of the Goods. In this connection, inter alia, feeding the equipment with material significantly differing from the average quality of the material processed or with material that does not belong in the equipment is also considered improper use, for example, feeding of grain dryers with material of significantly higher-than-average moisture content and / or of significantly higher-than-average weed and / or other impurities (such as rocks, dirt or foreign objects) content, or feeding of material containing large rocks onto the conveyors. The warranty does not cover faults arising from inadequate maintenance or incorrect installation carried out by the Mepu Oy, or faults arising from modifications or repairs performed without the Seller's written consent. Moreover, the warranty does not cover normal wear and tear.

Whenever a fault is detected, the Seller is required to submit a written fault report without undue delay. The fault report must describe the nature of the fault. If there is reason to assume that the fault could cause additional damage, use of the Goods must be discontinued and the fault report submitted immediately. Otherwise, the Purchaser shall lose its right to submit claims regarding damages that could have been avoided by immediate termination of the use and/or submission of a fault report. If the Purchaser has reported a fault and it is determined that the Goods are free of faults covered by Mepu Oy's warranty, Mepu Oy shall have the right of demanding compensation for the work and expenses incurred because of the fault report. If intervention with Goods other than those delivered by Mepu Oy is required in order to repair a fault, Mepu Oy shall not be responsible for the related works and expenses. If a fault in some component of the Goods has been eliminated, Mepu Oy shall be liable for the repaired or replaced component in the same way as for the original delivery for 18 months. However, Mepu Oy shall not be liable for faults in any component of the Goods or damage caused by the Goods for longer than 36 months from the beginning of the original liability period.

## SAFETY

*The general safety section contains instructions related to all safety routines. Instructions pertaining to certain specific subjects (for example, assembly-related safety) can be found in the respective section. Always read all the instructions, not only the summary of safety practices, before commencing any operations with the equipment.*

YOU are responsible for SAFE use and maintenance of the product. YOU need to make sure that you and any other persons working in the vicinity of the product are aware of all procedures and information related to SAFETY and contained in this manual. Remember – YOU are the key to safety. Good safety practices will keep you and the people around you safe. Make these procedures a functional part of the safety programme.

- The user or operator is responsible for reading, understanding, and following the manual's safety instructions. All accidents can be avoided.
- The equipment owner needs to provide guidance and go through the instructions prior to commissioning of the equipment and at least once a year with all the employees before they are allowed to use the equipment. Untrained users/operators expose themselves and bystanders to the risk of serious or fatal injuries.
- Use the equipment only for its intended purpose.
- Do not modify the equipment in any way. Unauthorised modifications may impair the functionality and / or safety and affect the product's service life. Any modification of the product voids the warranty.
- Keep children and unauthorised persons away from the work area.
- Keep first aid means available at all times and make sure you know how to use them.
- A fire extinguisher must be readily available at the work site. Keep it in a visible place.
- Electrical equipment: Before electrical equipment maintenance, adjustment or repair, disconnect the plugs, set all switches to the neutral or OFF position, stop the motors, remove the ignition key or disconnect the power supply, and wait for all moving parts to stop.

- Use proper personal protection equipment:

- hard hat
- work gloves
- anti-slip safety shoes
- safety goggles
- hearing protection
- coveralls



- Comply with good work area practices:
  - Keep the usage area clean and dry.
  - Make sure the electrical outlets and tools are properly grounded.
  - Use adequate lighting for works performance.
  - Consider SAFETY! Work SAFELY!

### General safety instructions

The safety-related warning sign marks important safety instructions on the product and in the manual. If you see this symbol, consider the possible risk of serious or fatal injury. Follow safety instructions.



### Signal words

Pay attention to the following signal words in the safety instructions: DANGER, WARNING, CAUTION, and NOTE. The signal words used in the safety instructions have been chosen based on the following definitions.

<b>DANGER</b>	Indicates an imminent danger to life that may result in serious or fatal injuries unless avoided.
<b>WARNING</b>	Indicates a potential danger to life that may result in serious or fatal injuries unless avoided.
<b>CAUTION</b>	Indicates a dangerous situation that may result in minor or moderate injuries unless avoided.
<b>NOTE</b>	Indicates a potentially dangerous situation that may result in property damage unless avoided.

### Important safety instructions for dryer user

MEPU grain dryers have been designed to be as safe as possible. However, depending on local conditions, installation, and equipment configuration, the user needs to consider some safety precautions when using or servicing the device.



#### Unexpected starting

Before performing any maintenance operations, always turn off the main power of the grain dryer. Get to know the operation of dryer control.



#### Instructions for use

Read all the instructions on use of the grain dryer equipment prior to installation and commissioning.



#### Main switch

Before servicing the dryer or opening the covers of dryer equipment, turn the main switch to the 0 position.



### **Assembly safety**

- Do not take chances with safety. The components can be large, heavy and hard to handle. Always use proper tools, rated lifting equipment and lifting points for the job.
- Always have two or more people assembling the equipment.
- Make sure you have sufficient lighting for the work area.
- Tighten all fasteners according to their specifications. Do not replace or substitute bolts, nuts, or other hardware that is of lesser quality than the hardware supplied by the manufacturer.

### **Ladder safety**

Consider the following when using a ladder for installation, operating or maintenance related duties:

- Identify possible risks before using the ladder.
- Use belts and hoists to lift material up a ladder; maintain three points of contact with the ladder at all times.
- Ensure rungs are free from ice or material build up that makes climbing difficult.

### **Platform safety**

- Ensure guardrails are properly installed and in good repair.
- Ensure platform access door is closed before and after working on the platform.
- Be aware of open silo roof access doors.
- Ensure silo roof access door is closed before leaving the platform.

### **Number of workers**

Working alone can be dangerous. Consider the following:

- Identify the risks for working alone in your workplace and ensure a plan is in place to mitigate them.
- Do not operate, assemble, or maintain equipment alone.
- Ensure that maintenance is performed in accordance with all workplace safety programs and be sure all workers are aware of any maintenance work being performed.

### **Working at heights**

- Ensure guardrails are properly installed and in good repair.
- Ensure fall protection measures are in place if guardrails are not installed.
- Follow workplace procedures and policies when performing any work at heights.
- Do not perform work at heights without proper protection and training.





# 1. Assembling the dryer

## 1.1. Dryer overview

The model depicted in figure 1.1. is for reference only.

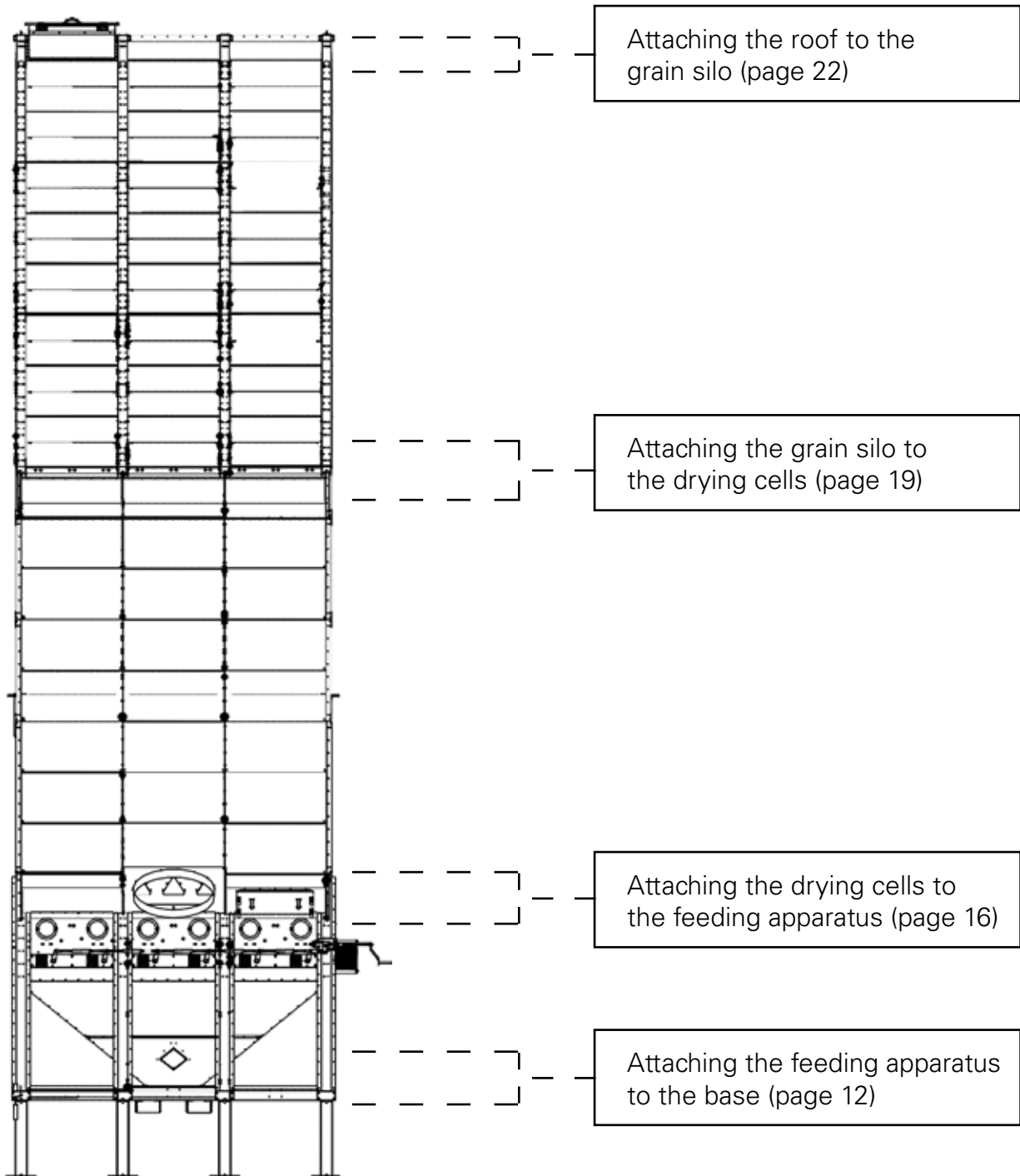



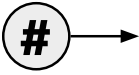


Figure 1.1. Visual index

### 1.1.1. Symbol and note guide

This manual use the following symbols:

SYMBOL	DESCRIPTION
	Indicates location.
	Indicates a numbered nut.
	Indicates a numbered bolt.
	Indicates a specific, numbered part or element.
*	Indicates an important message located below the figure.

## 1.2. Attaching the feeding apparatus to the base

### 1.2.1. Low profile base

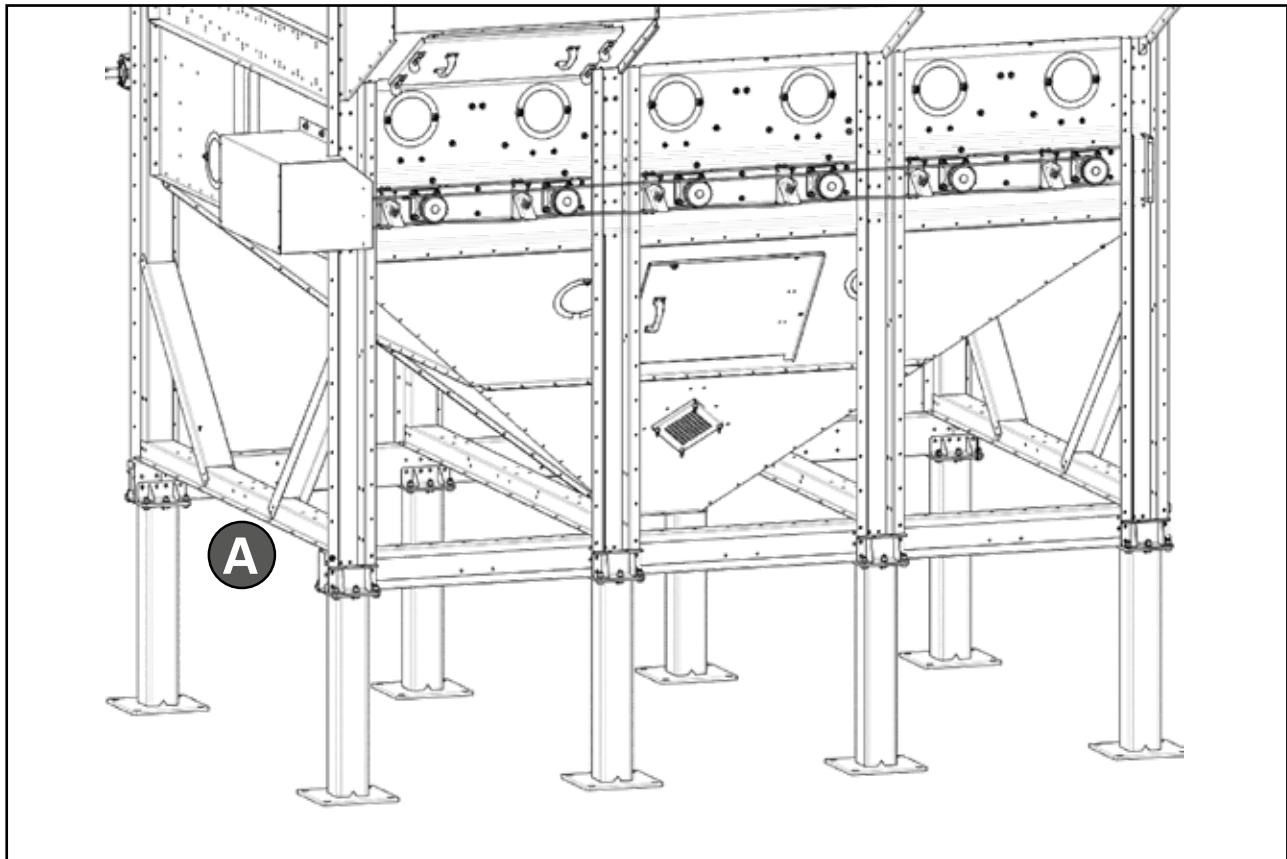


Figure 1.2. Feeding apparatus and a low profile base

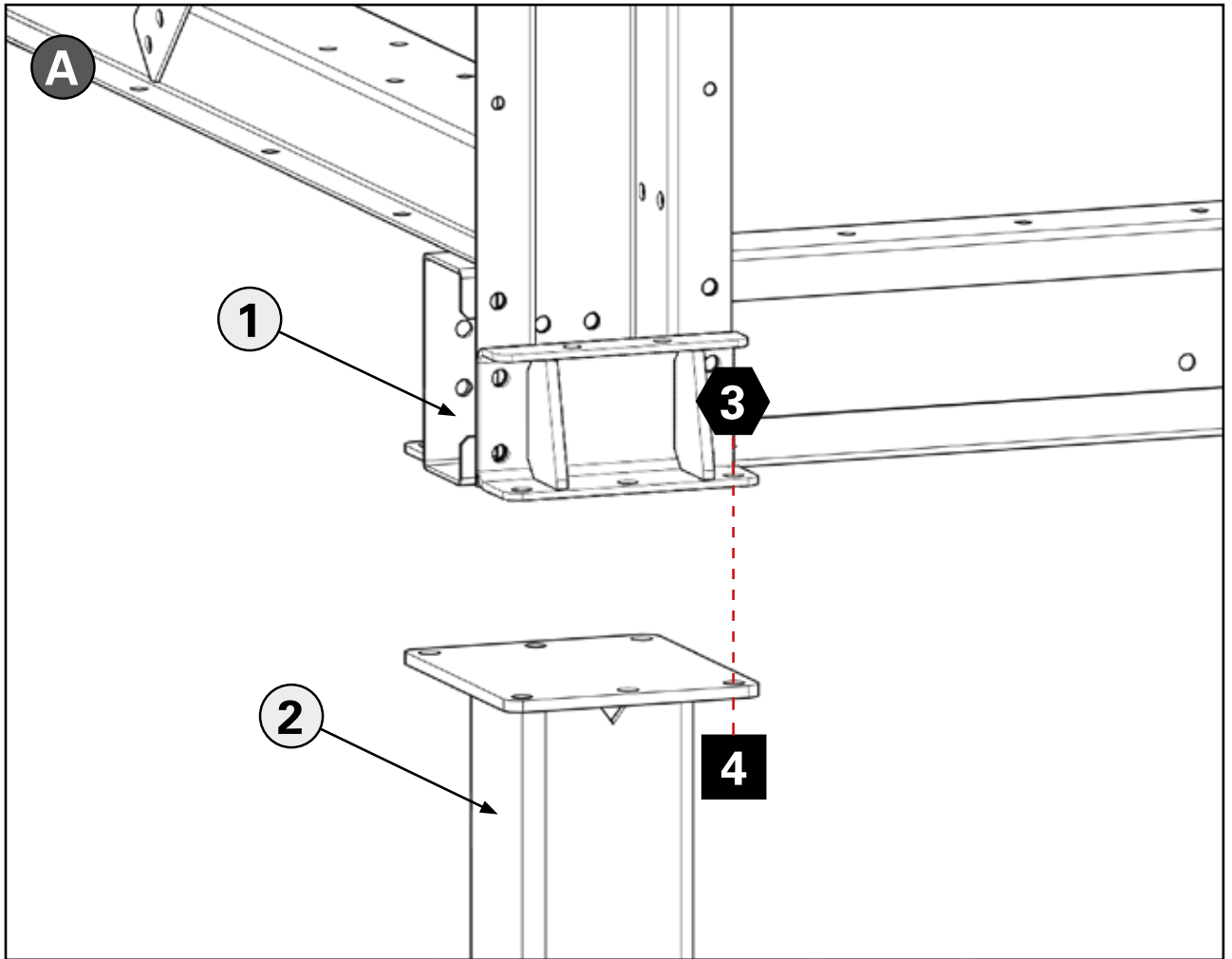


Figure 1.3. Attaching the feeding apparatus to the low profile base

NUMBER	PART	DESCRIPTION
1		Feeding apparatus
2		Low profile base
3		Flange nut M12, DIN6923
4		Hex bolt M12x35, DIN933

## 1.2.2. High profile base

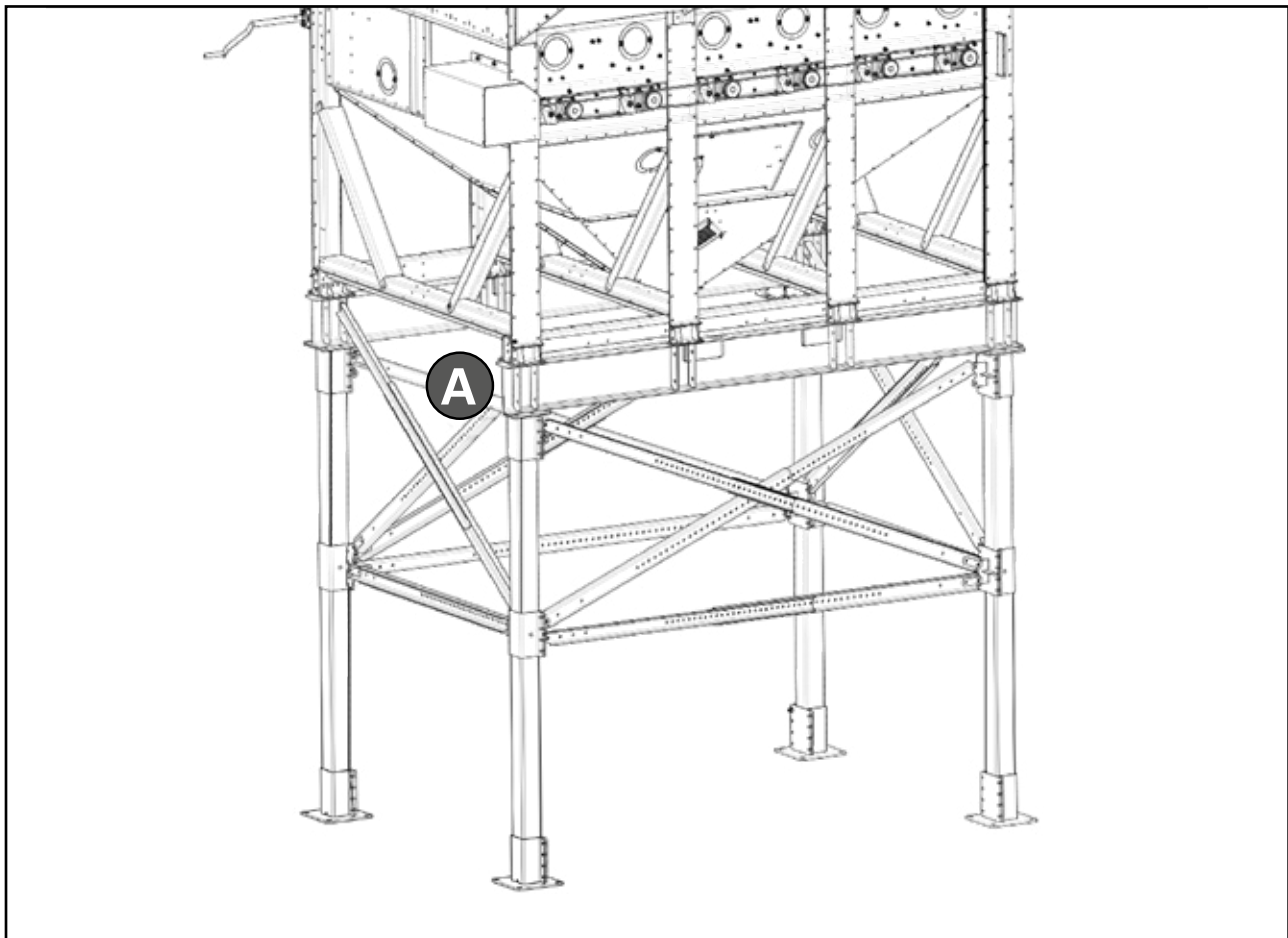


Figure 1.4. Feeding apparatus and a high profile base

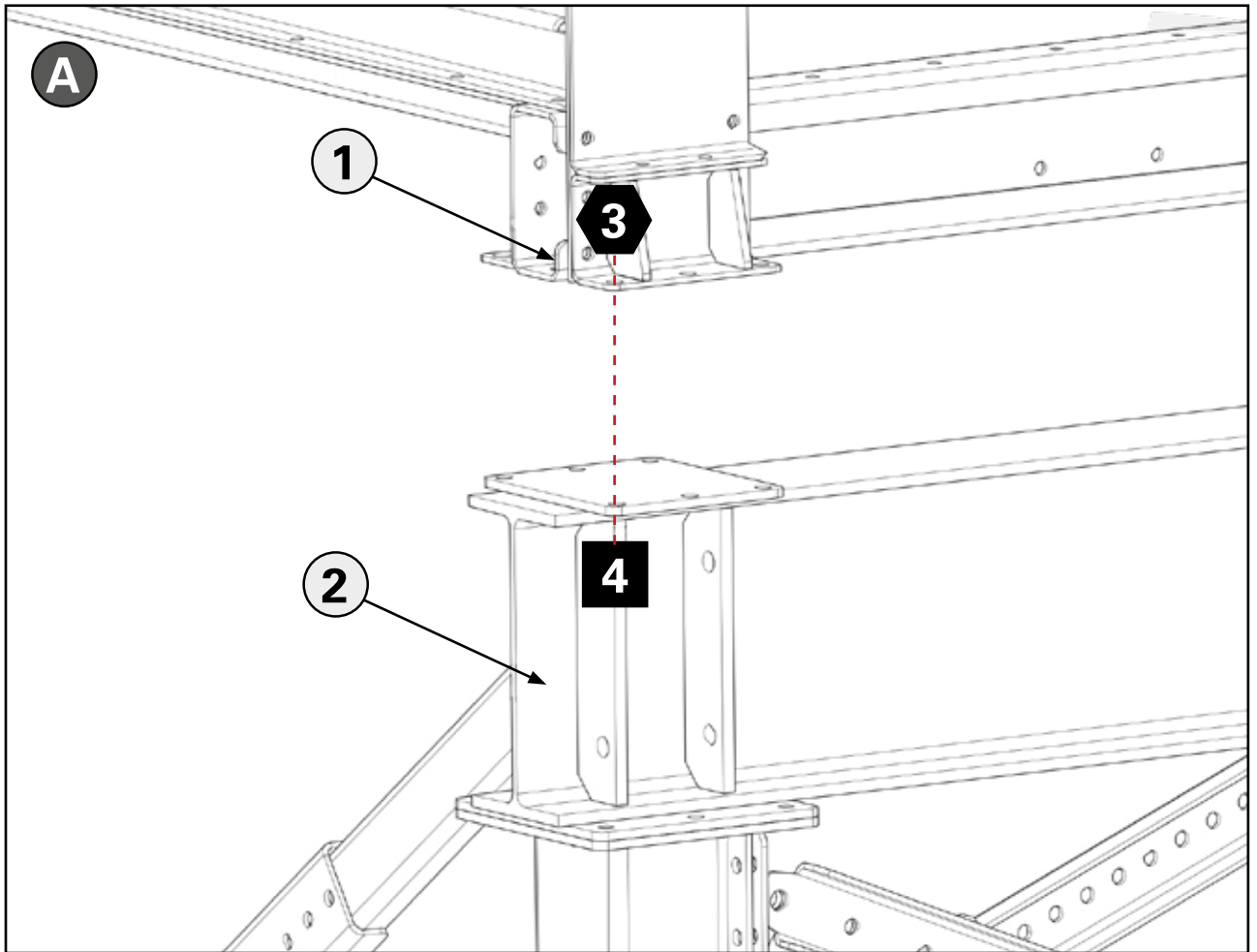


Figure 1.5. Attaching the feeding apparatus to the high profile base

NUMBER	PART	DESCRIPTION
1		Feeding apparatus
2		High profile base
3		Flange nut M12, DIN6923
4		Hex bolt M12x35, DIN933

### 1.3. Attaching the drying cells to the feeding apparatus

Portions of the air casing have been removed in figures 1.6, 1.7 and 1.8.

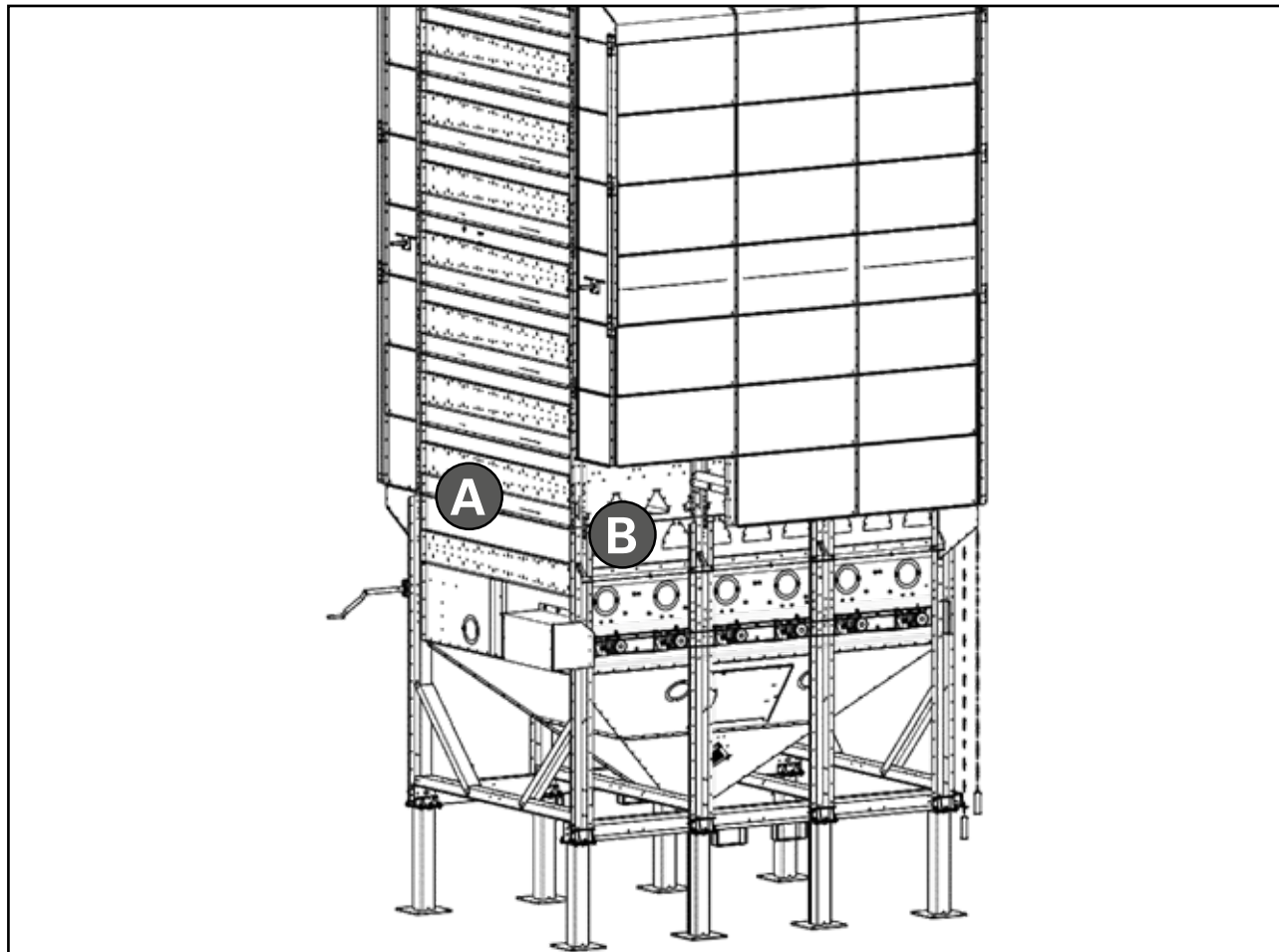


Figure 1.6. Feeding apparatus and drying cells



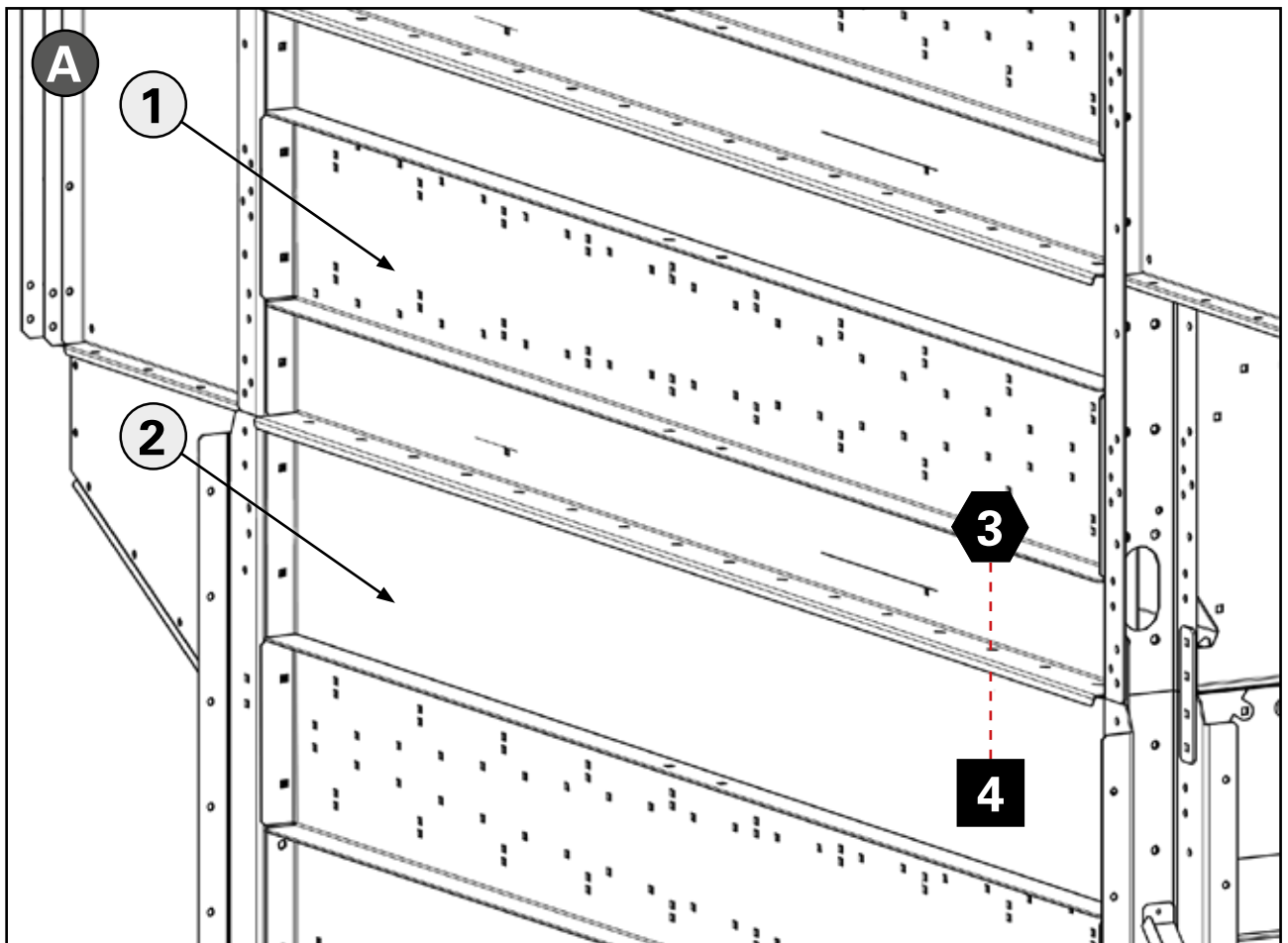


Figure 1.7. Attaching the drying cells to the feeding apparatus

NUMBER	PART	DESCRIPTION
1		Drying cell side wall
2		Feeding apparatus
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

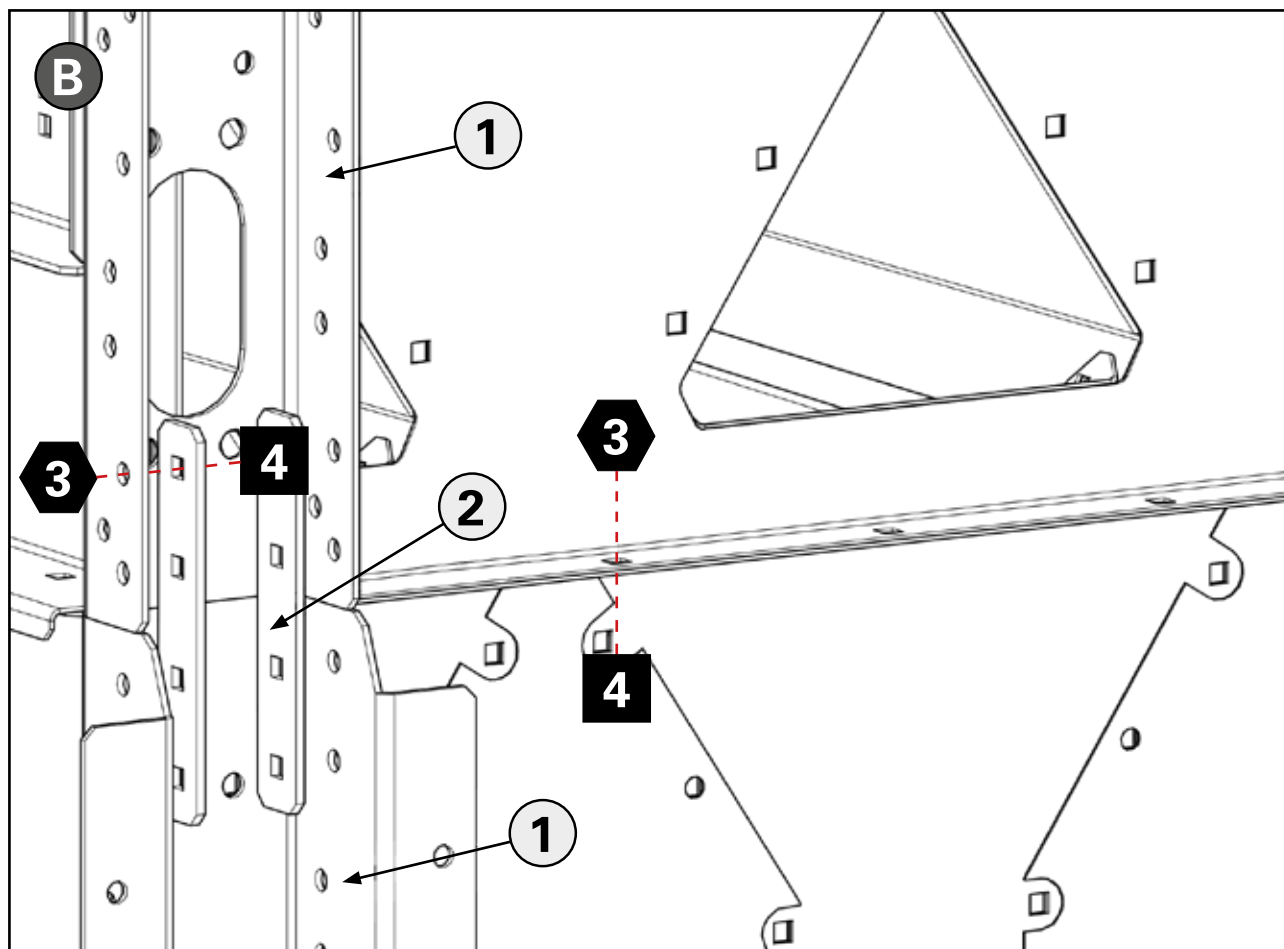


Figure 1.8. Attaching the drying cells to the feeding apparatus

NUMBER	PART	DESCRIPTION
1		Exterior support channel
2		Fastener plate
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

### 1.4. Attaching the grain silos to the drying cells

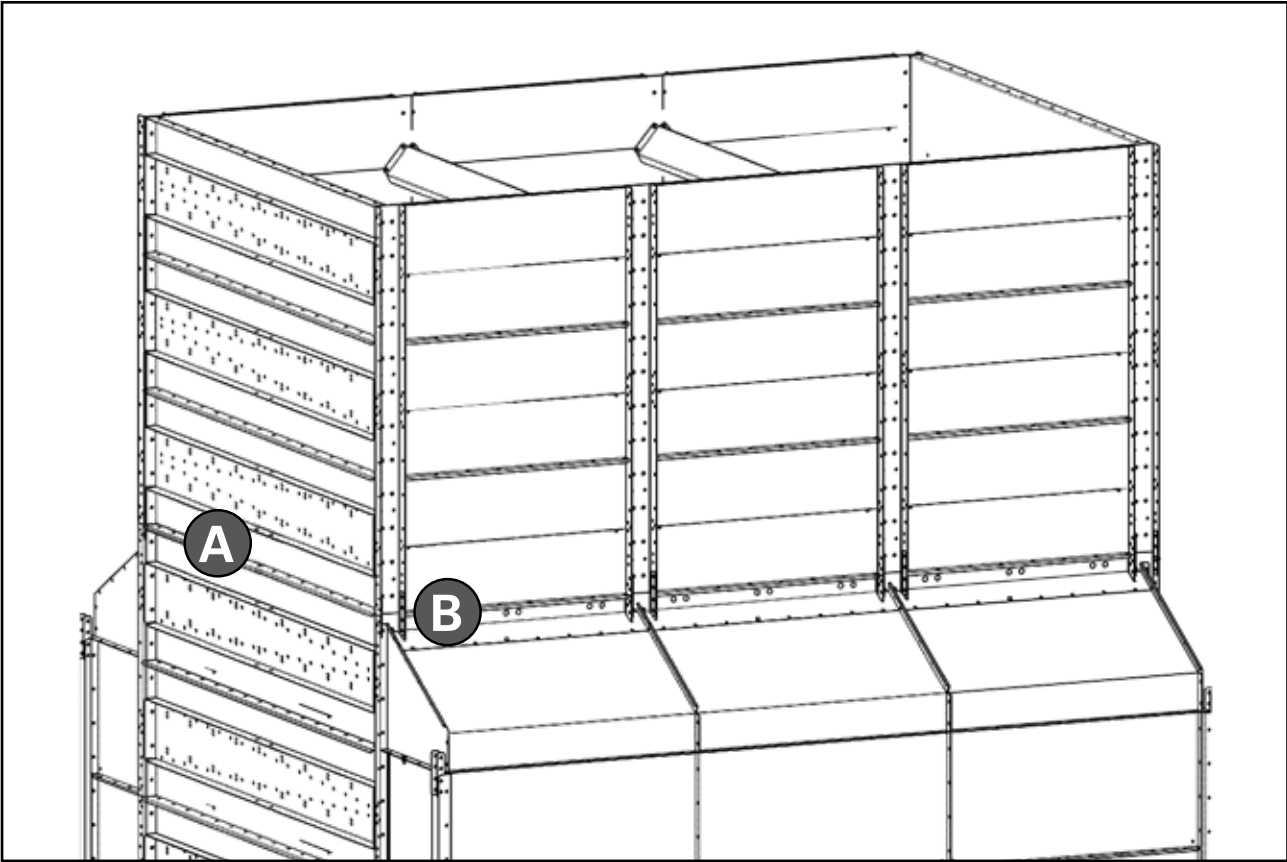


Figure 1.9. Attaching a grain silo to the drying cells

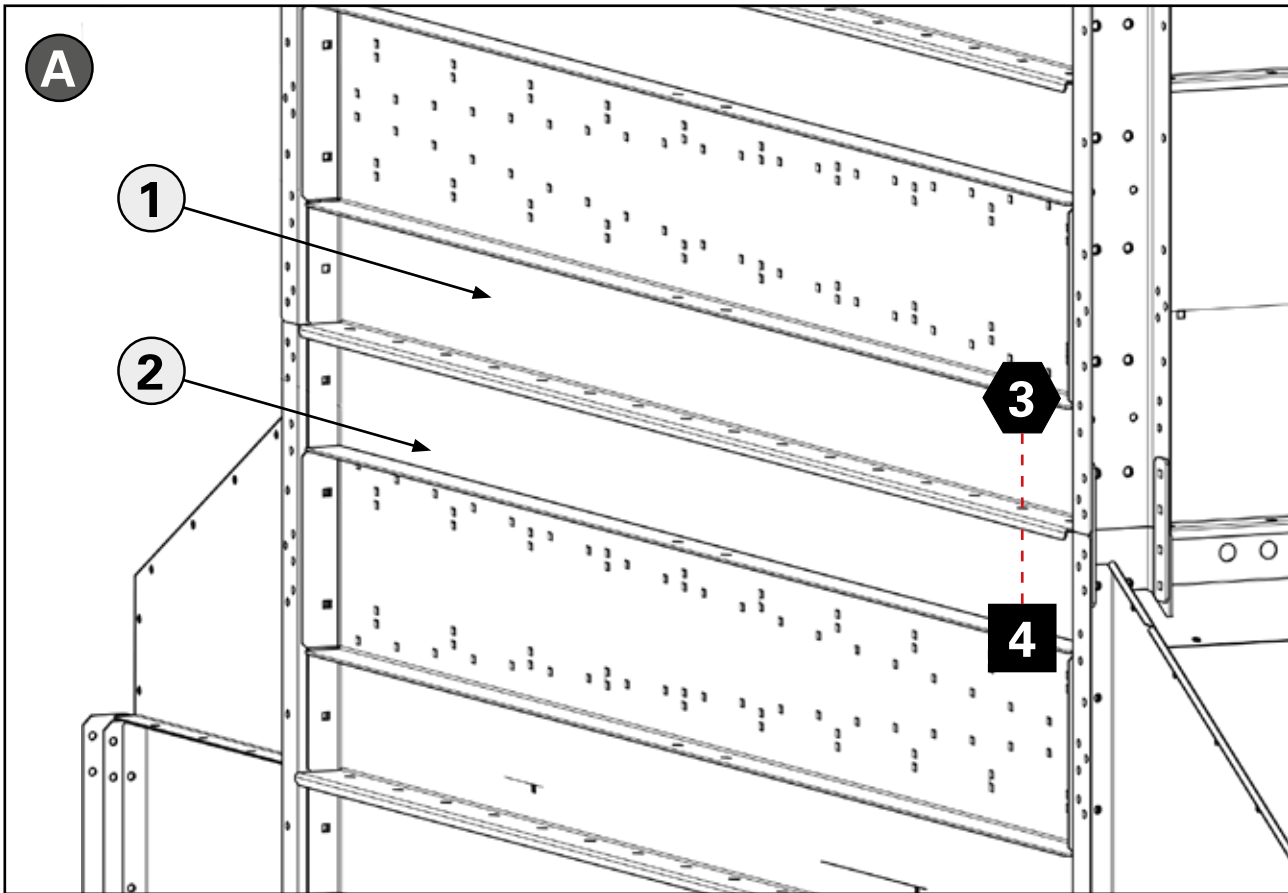


Figure 1.10. Attaching a grain silo to the drying cells

NUMBER	PART	DESCRIPTION
1		Grain silo side wall
2		Drying cell side wall
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

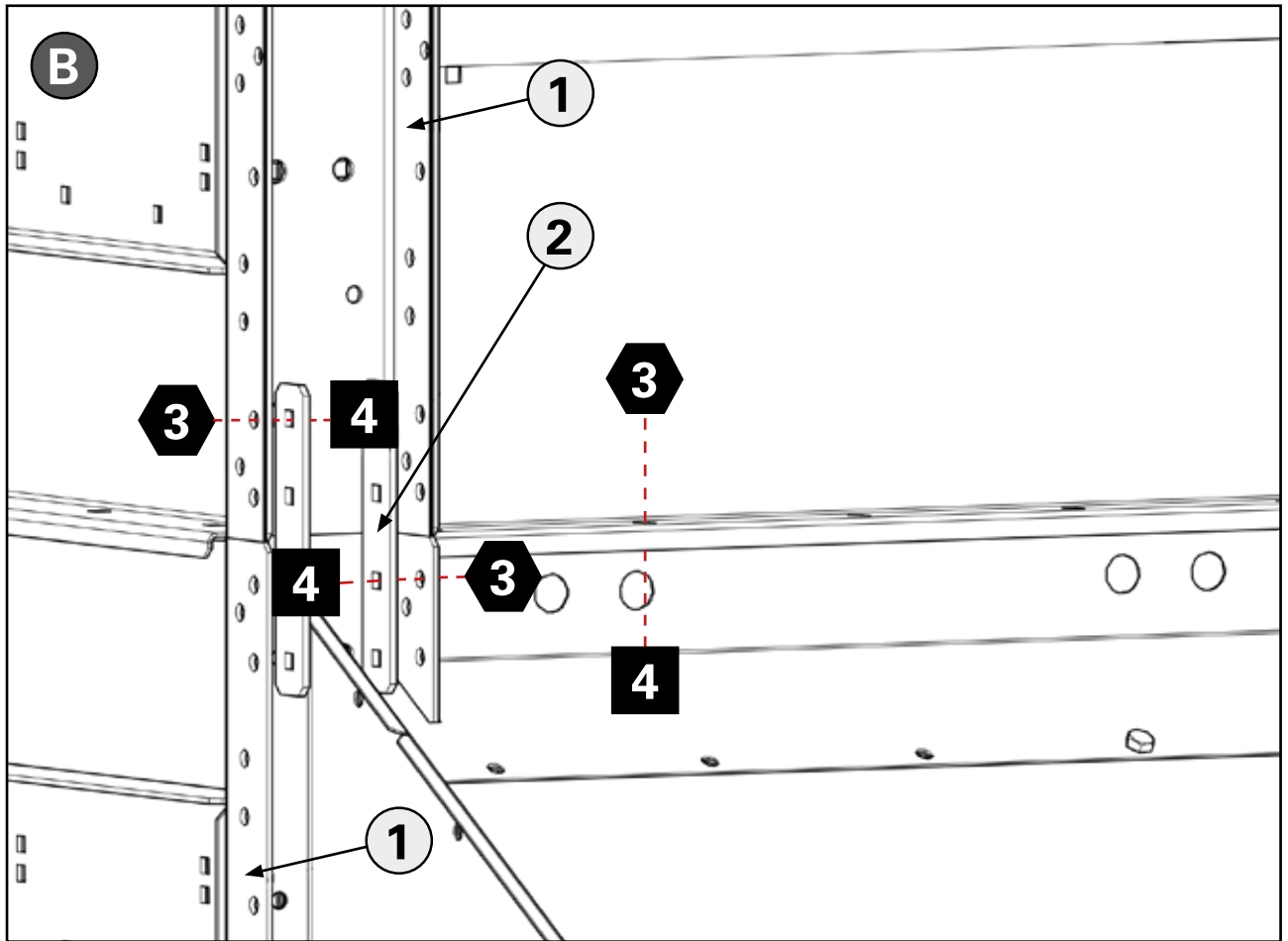


Figure 1.11. Attaching a grain silo to the drying cells

NUMBER	PART	DESCRIPTION
1		Exterior support channel
2		Fastener plate
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

## 1.5. Attaching the grain silo roof

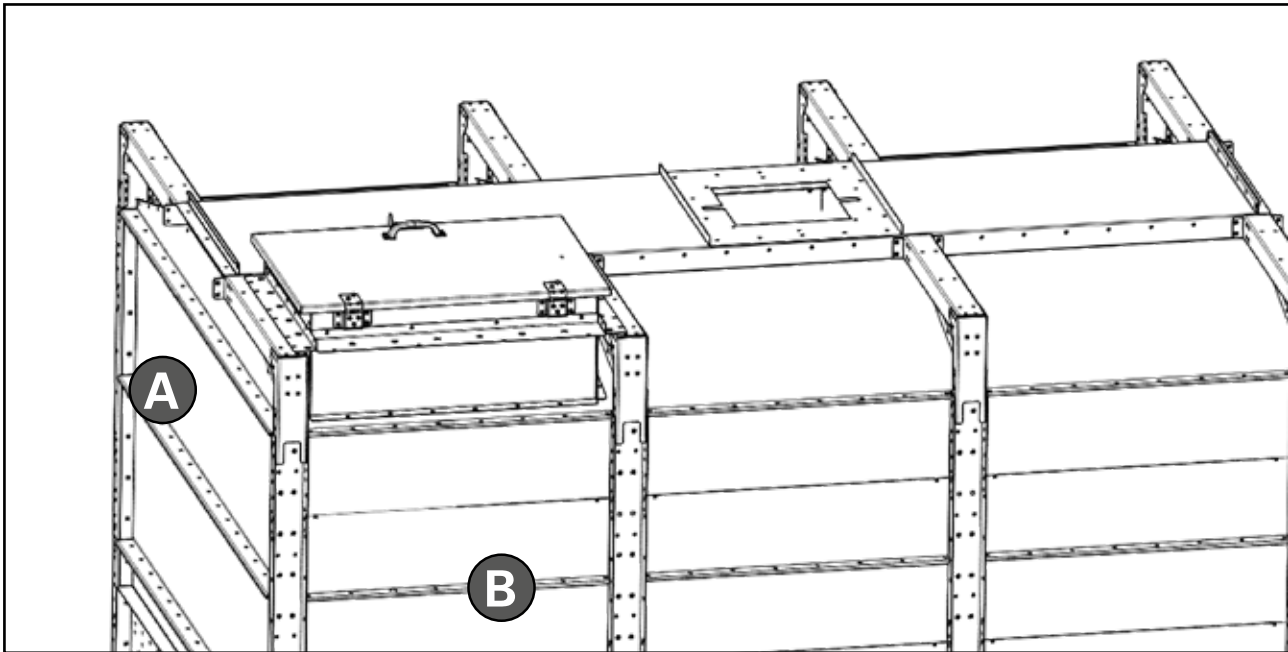


Figure 1.12. Grain silo and grain silo roof

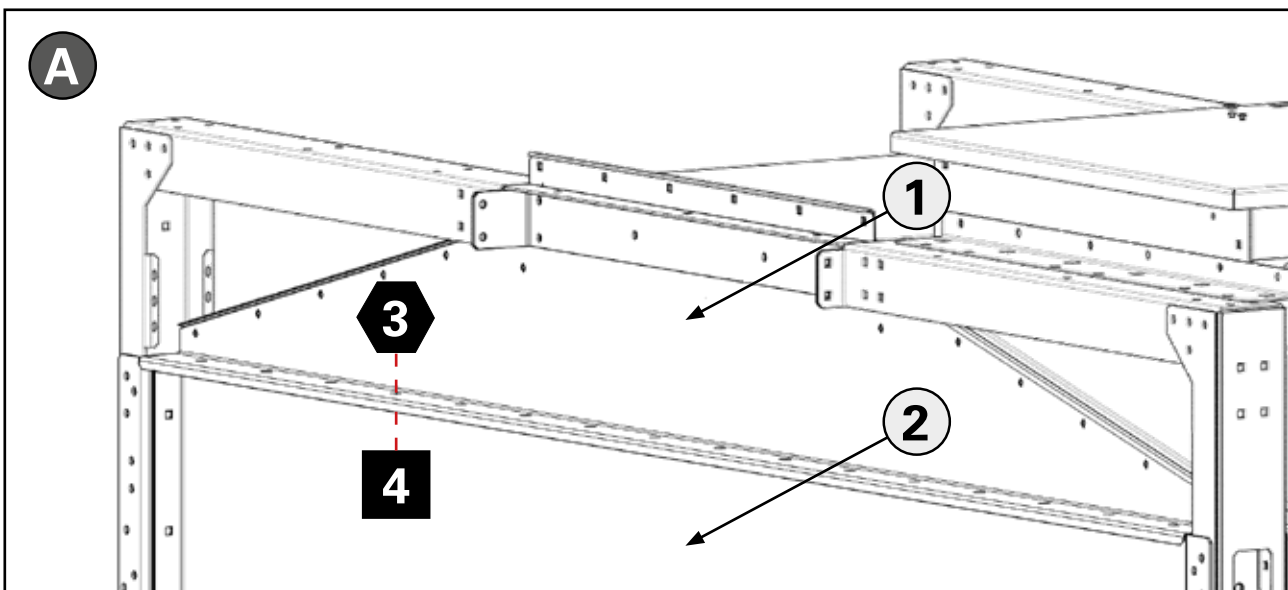


Figure 1.13. Attaching the grain silo roof to the grain silo

NUMBER	PART	DESCRIPTION
1		Grain silo roof side wall
2		Grain silo side wall
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

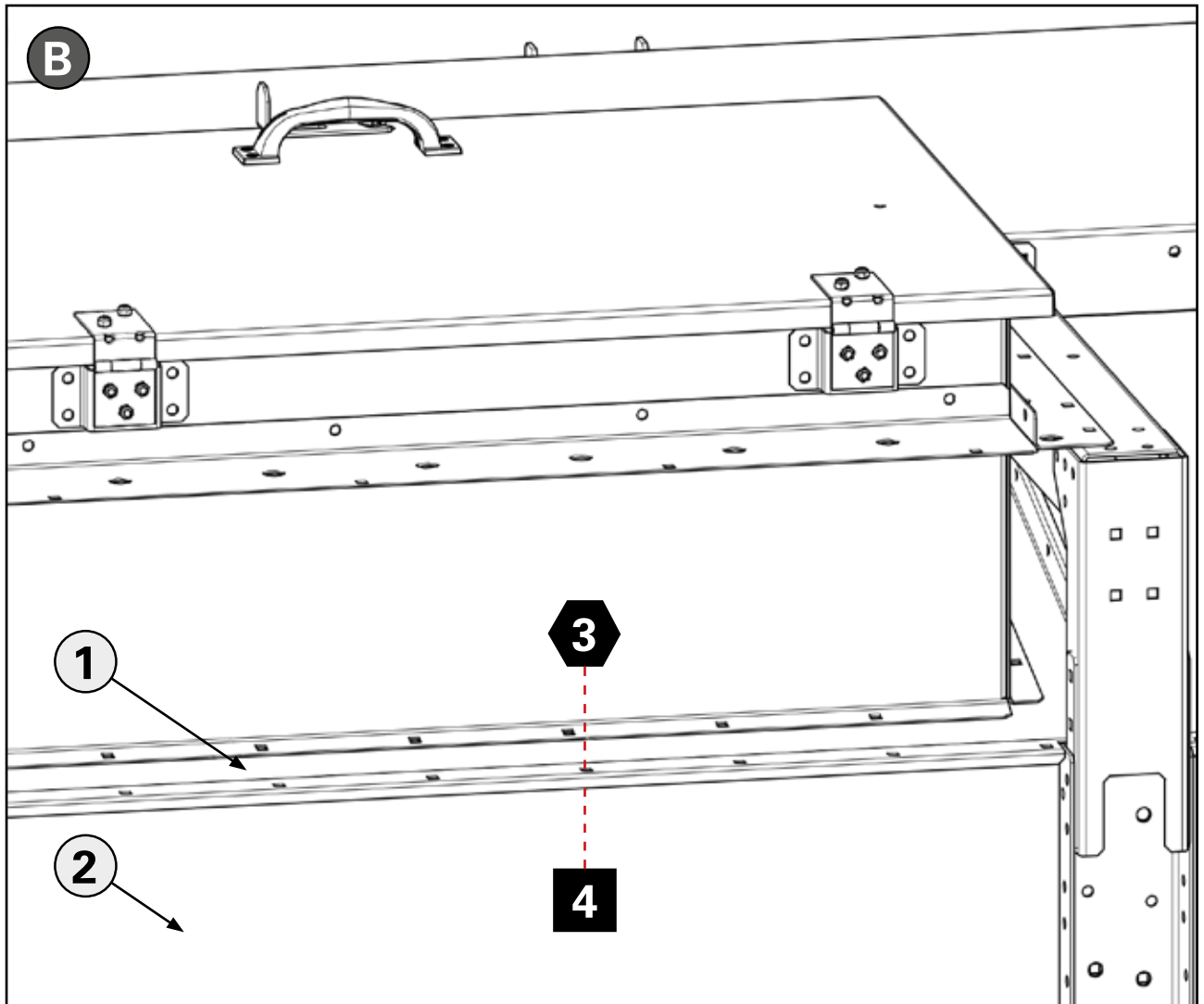


Figure 1.14. Attaching the grain silo roof to the grain silo

NUMBER	PART	DESCRIPTION
1		Grain silo roof
2		Grain silo
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

## 2. Assembling the components

### 2.1. Components overview

The model depicted in figure 2.1. is for reference only.

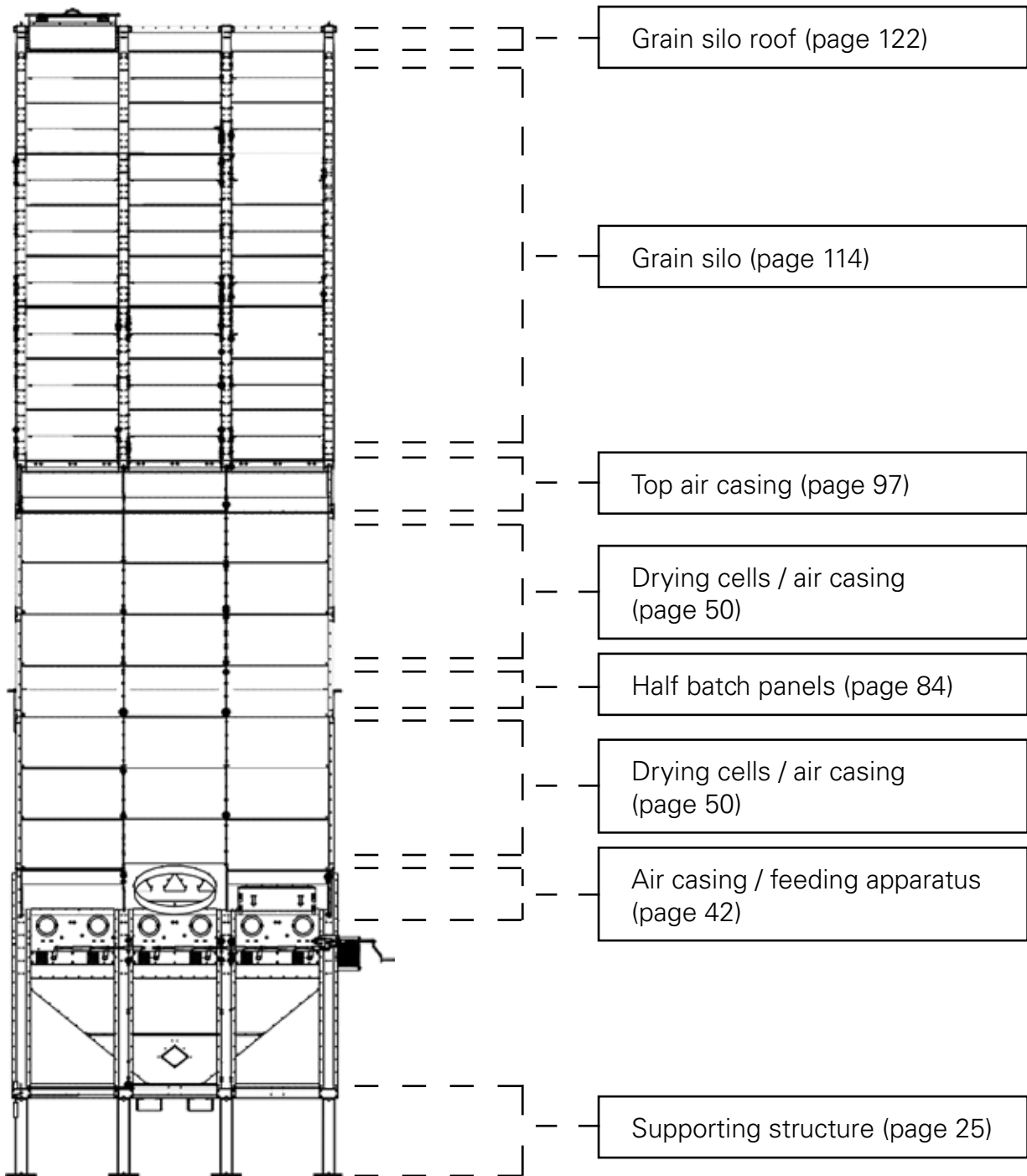


Figure 2.1. Visual index



## 2.2. Supporting structure

### 2.2.1. Low profile base

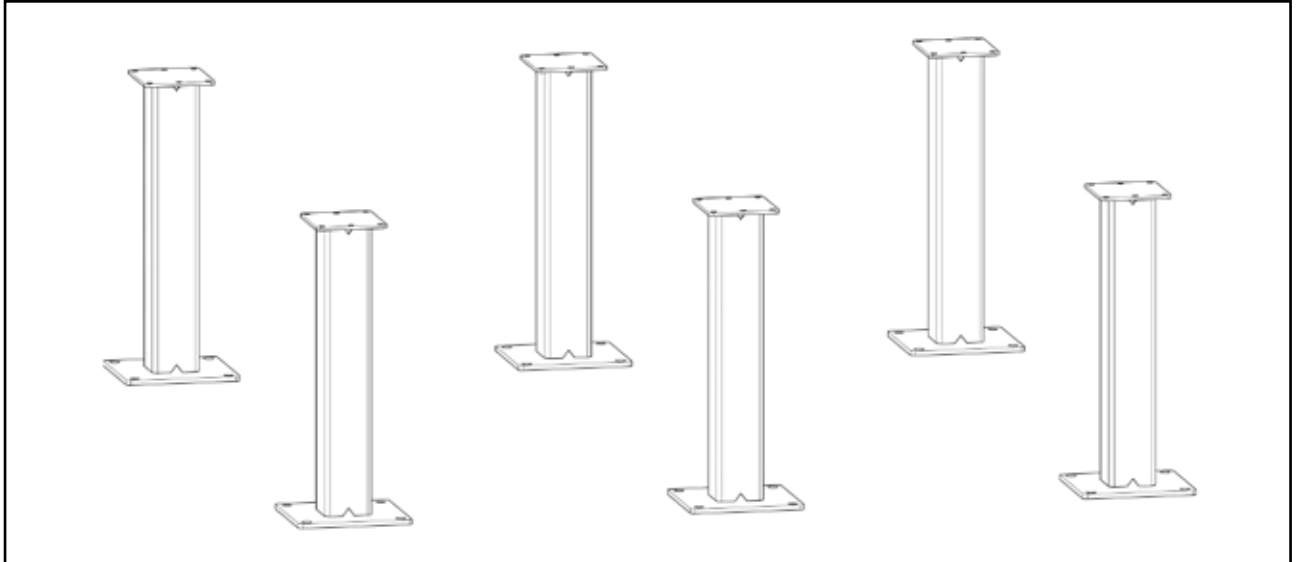


Figure 2.2. Low profile supports

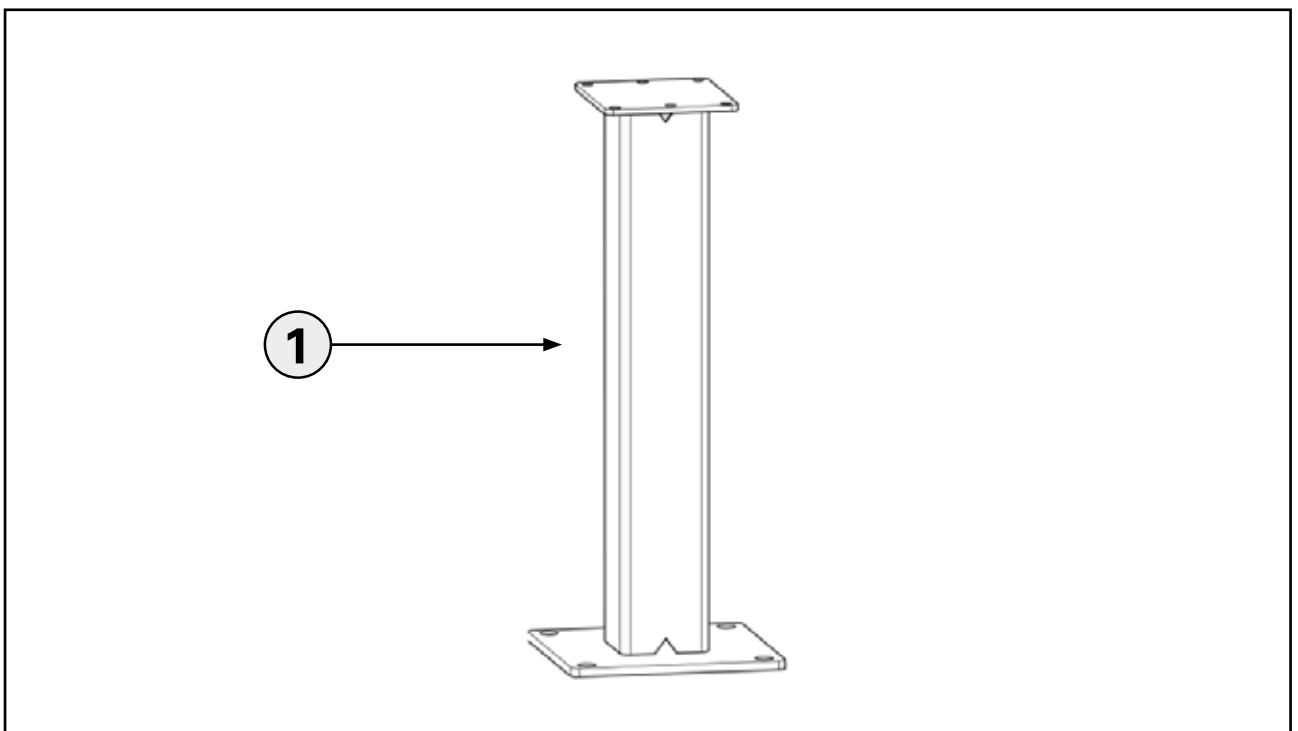


Figure 2.3. Low profile support

NUMBER	PART	DESCRIPTION
1	138093	Low profile support

## 2.2.2. High profile base

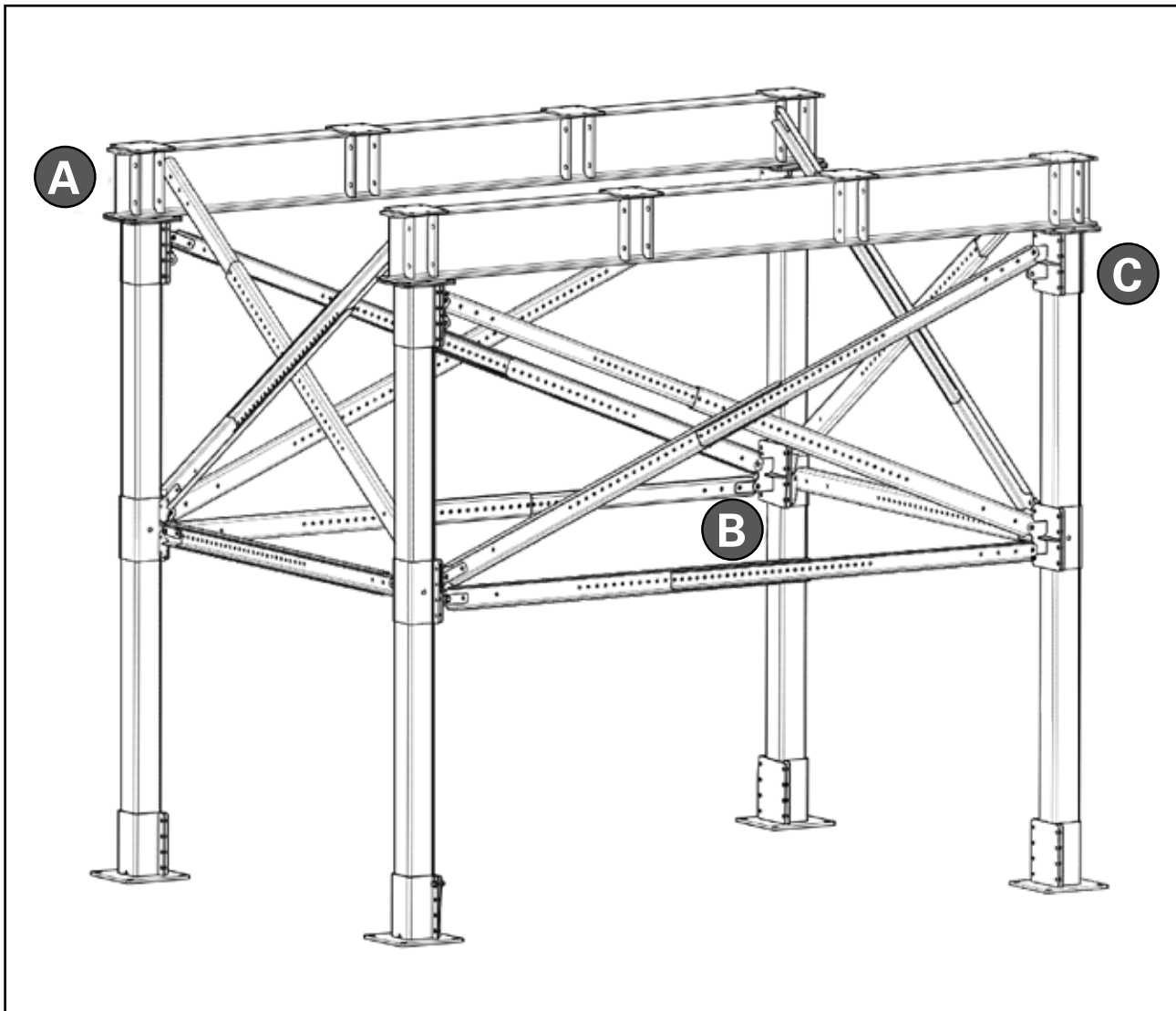


Figure 2.4. Finished high profile base

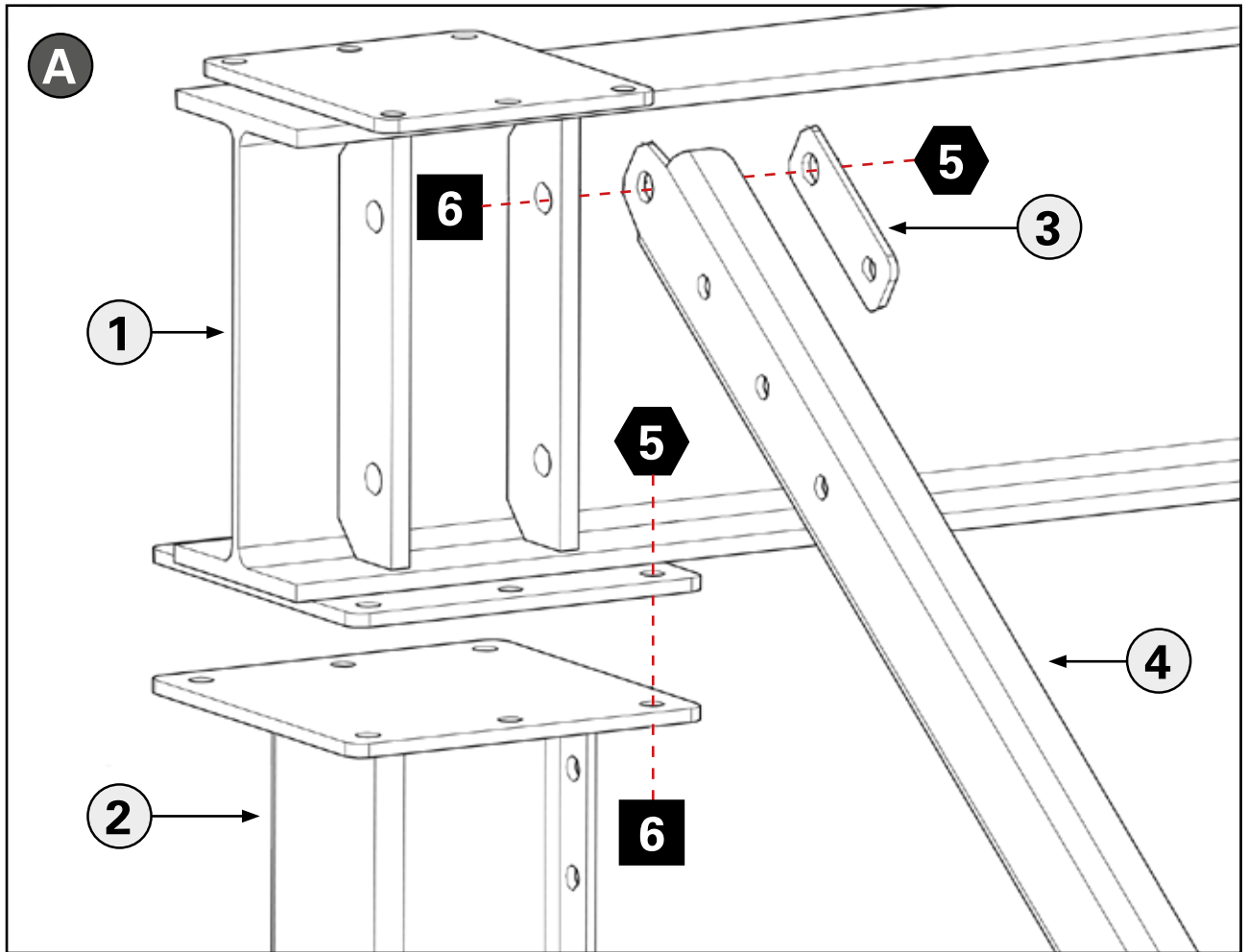


Figure 2.5. Assembling the high profile base

NUMBER	PART	DESCRIPTION
1	138008	Base beam
2	138014	Clamp
3	138023	Strengthener
4	138019	Crosspiece
5		Flange nut M8, DIN6923
6		Low square bolt M8x16, DIN603

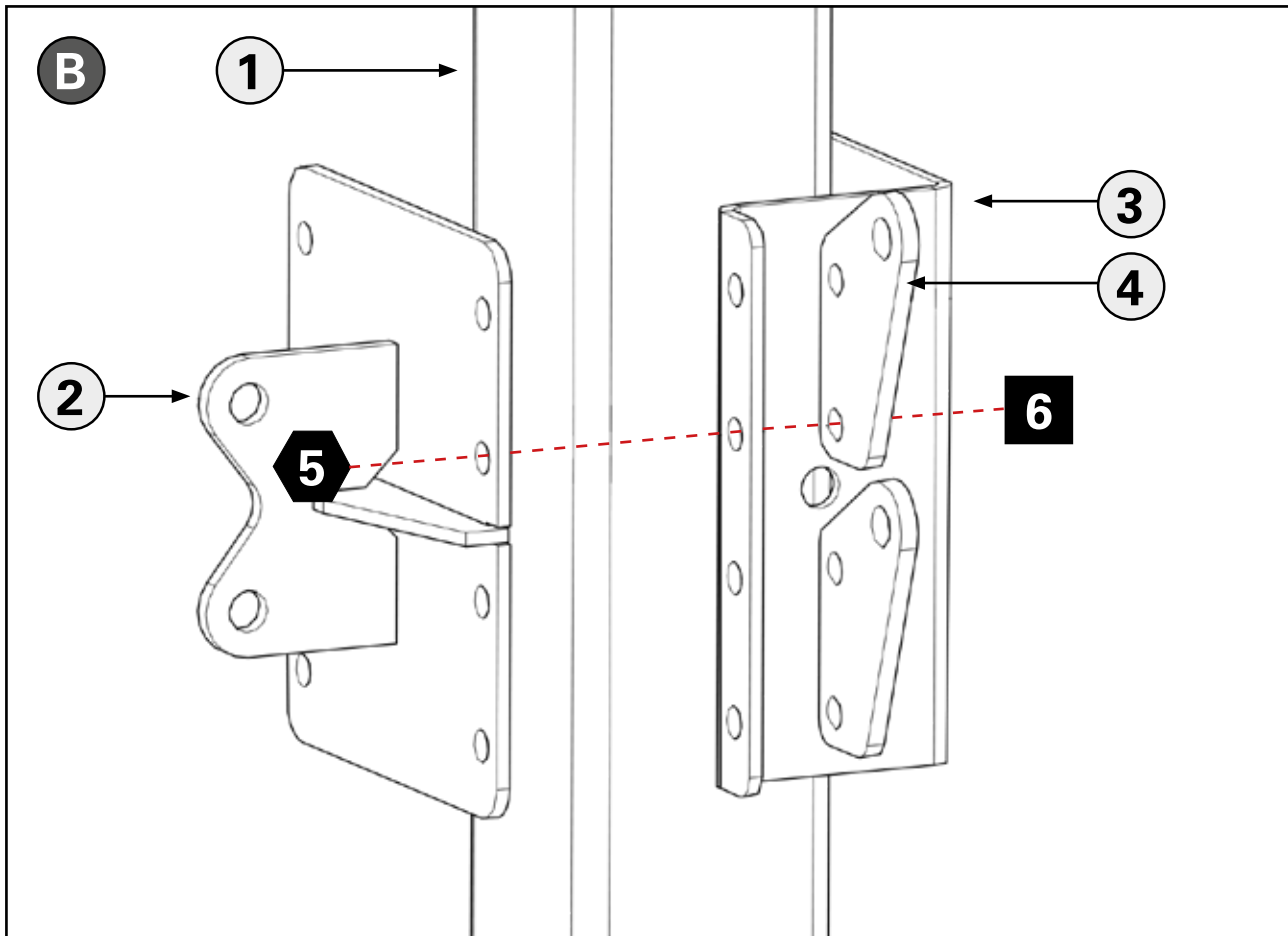


Figure 2.6. Assembling the high profile base

NUMBER	PART	DESCRIPTION
1	138239	Leg
2	138106	Clamp plate
3	138018	Clamp
4	138022	Connector
5		Flange nut M8, DIN6923
6		Low square bolt M8x16, DIN603

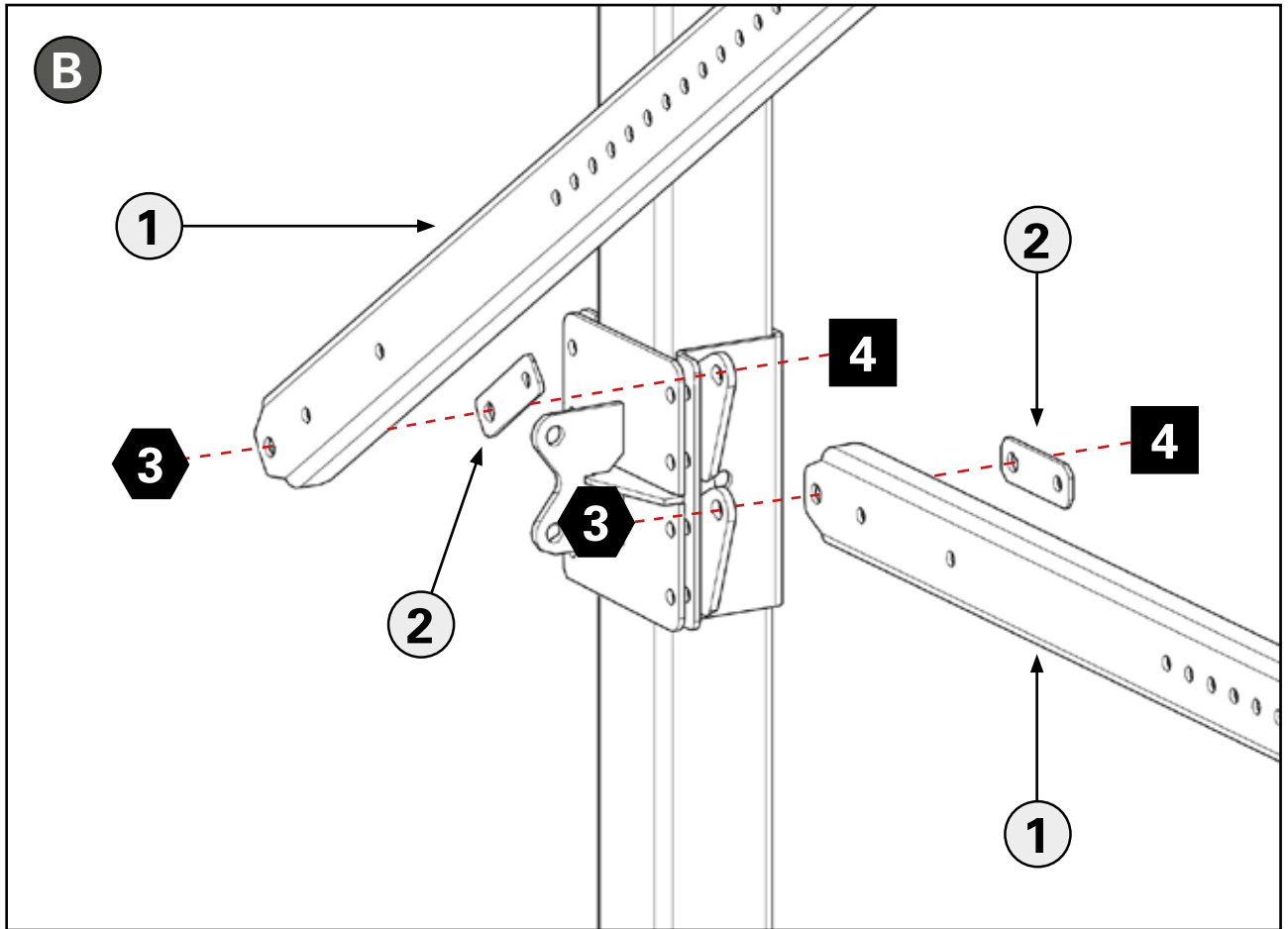


Figure 2.7. Assembling the high profile base

NUMBER	PART	DESCRIPTION
1	138020	Crosspiece
2	138023	Strengthener
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

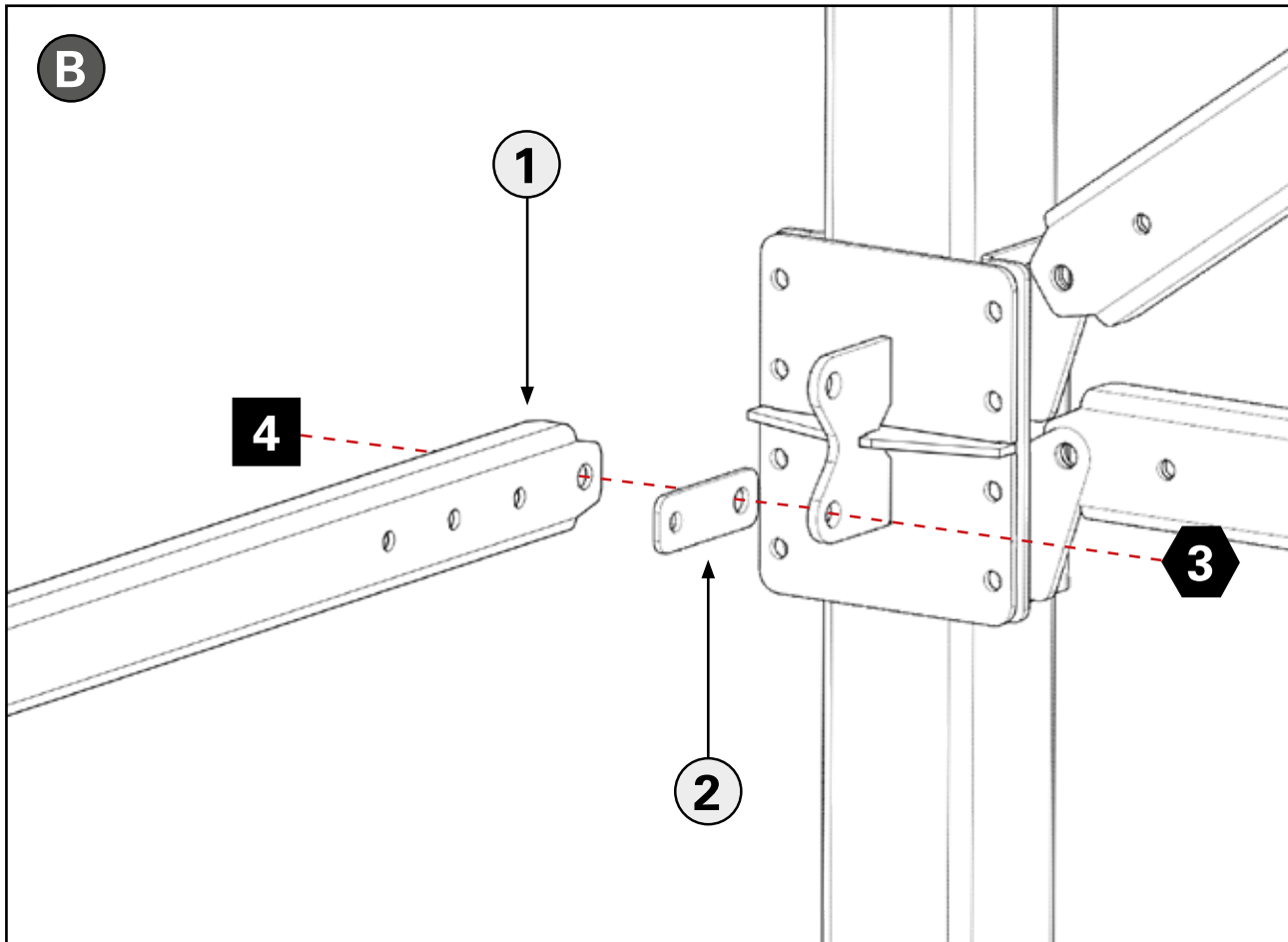


Figure 2.8. Assembling the high profile base

NUMBER	PART	DESCRIPTION
1	138019	Crosspiece
2	138023	Strengthenner
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

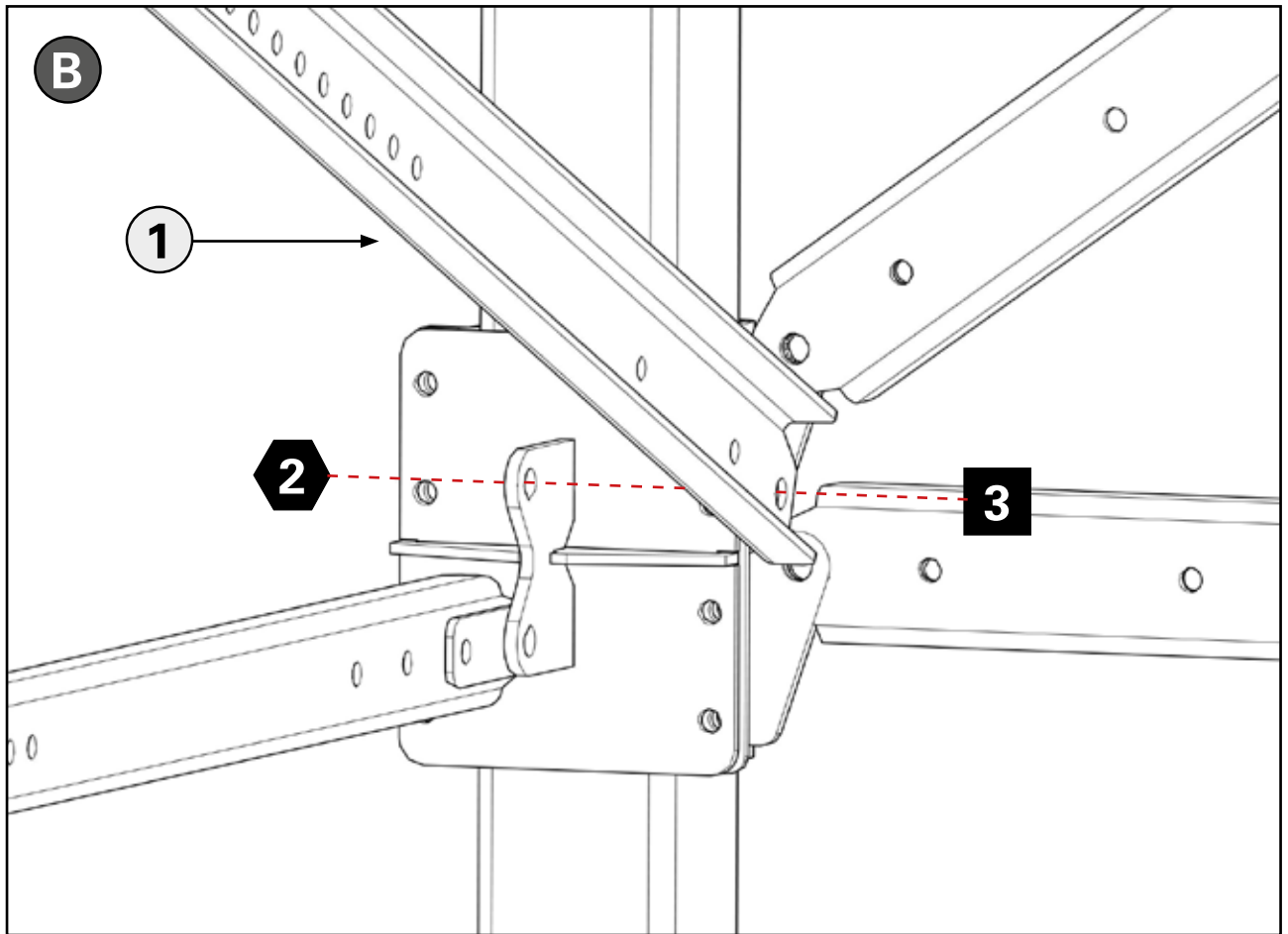


Figure 2.9. Assembling the high profile base

NUMBER	PART	DESCRIPTION
1	138020	Crosspiece
2		Flange nut M8, DIN6923
3		Low square bolt M8x16, DIN603

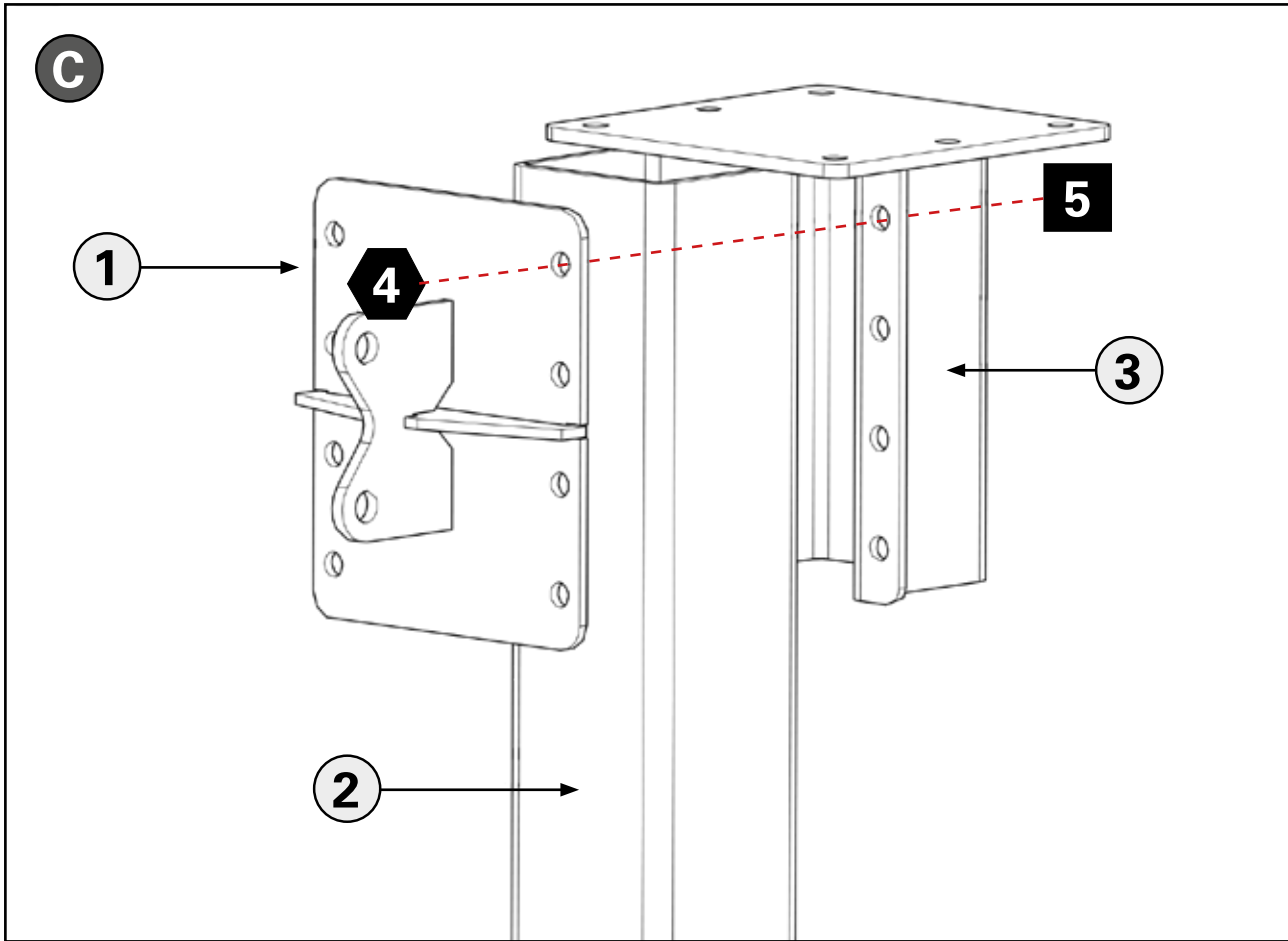


Figure 2.10. Assembling the high profile base

NUMBER	PART	DESCRIPTION
1	138106	Clamp plate
2	138239	Leg
3	138014	Clamp
4		Flange nut M12, DIN6923
5		Hex flange bolt M12x40, DIN6921



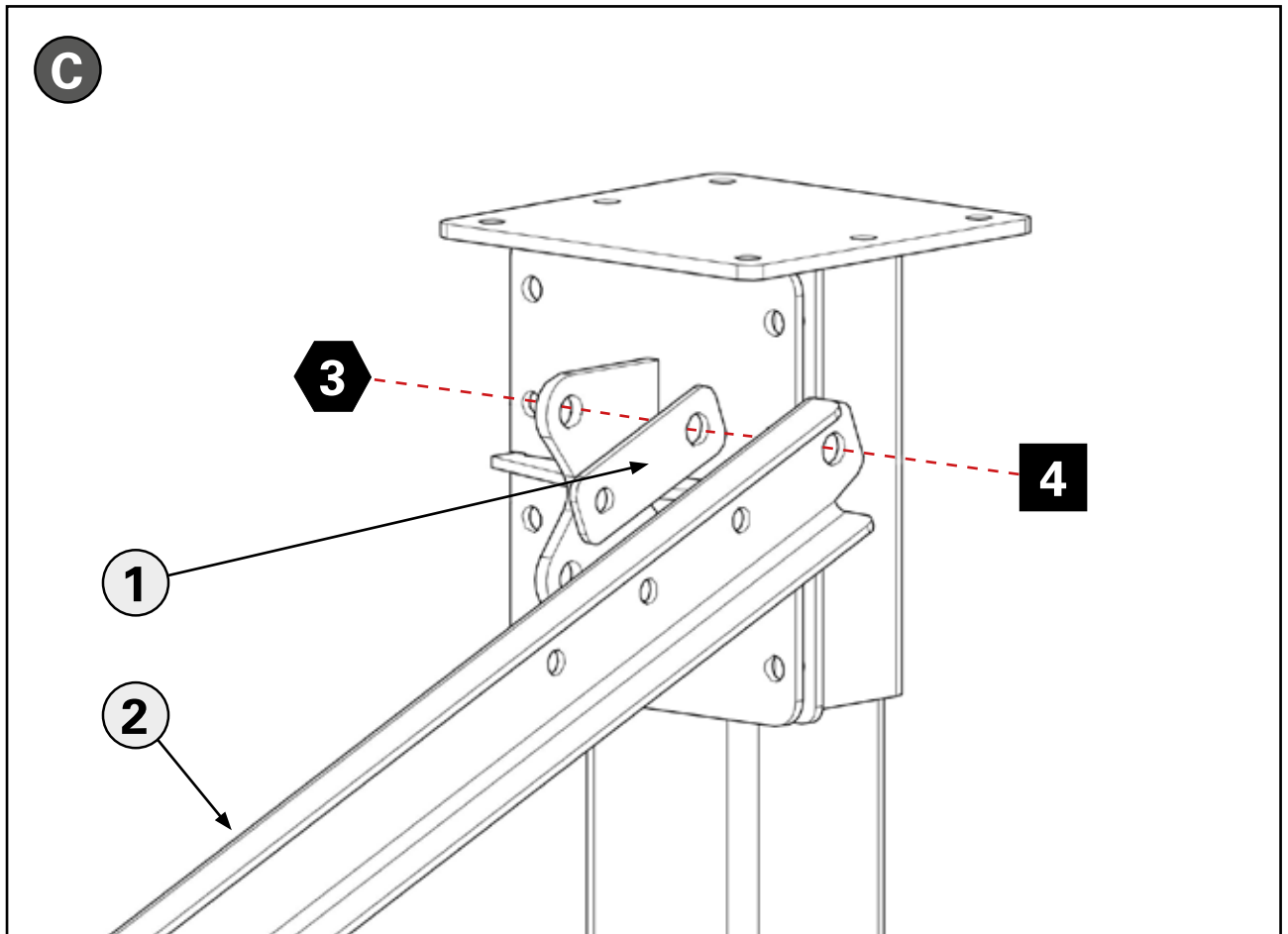
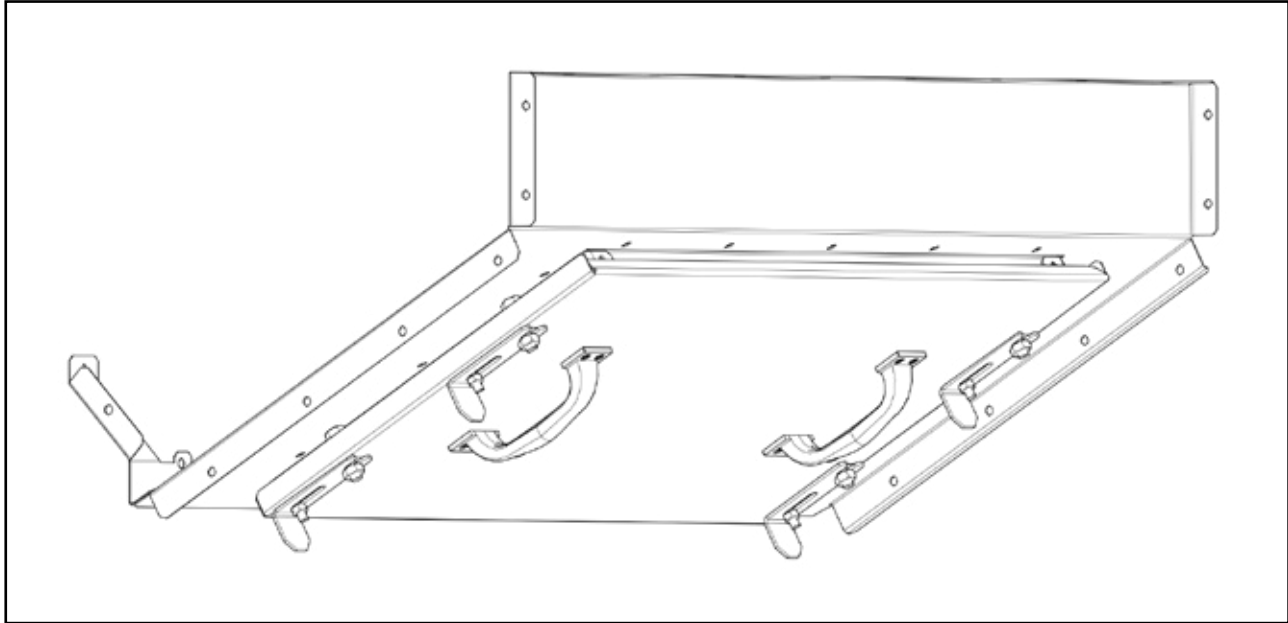


Figure 2.11. Assembling the high profile base

NUMBER	PART	DESCRIPTION
1	138023	Strengtheners
2	138019	Crosspiece
3		Flange nut M16, DIN6923
4		Hex flange bolt M12x40, DIN6921

## 2.3. Service panel, air intakes / outputs and roof hatch

### 2.3.1. Assembling the service panel



*Figure 2.12. Finished service panel*

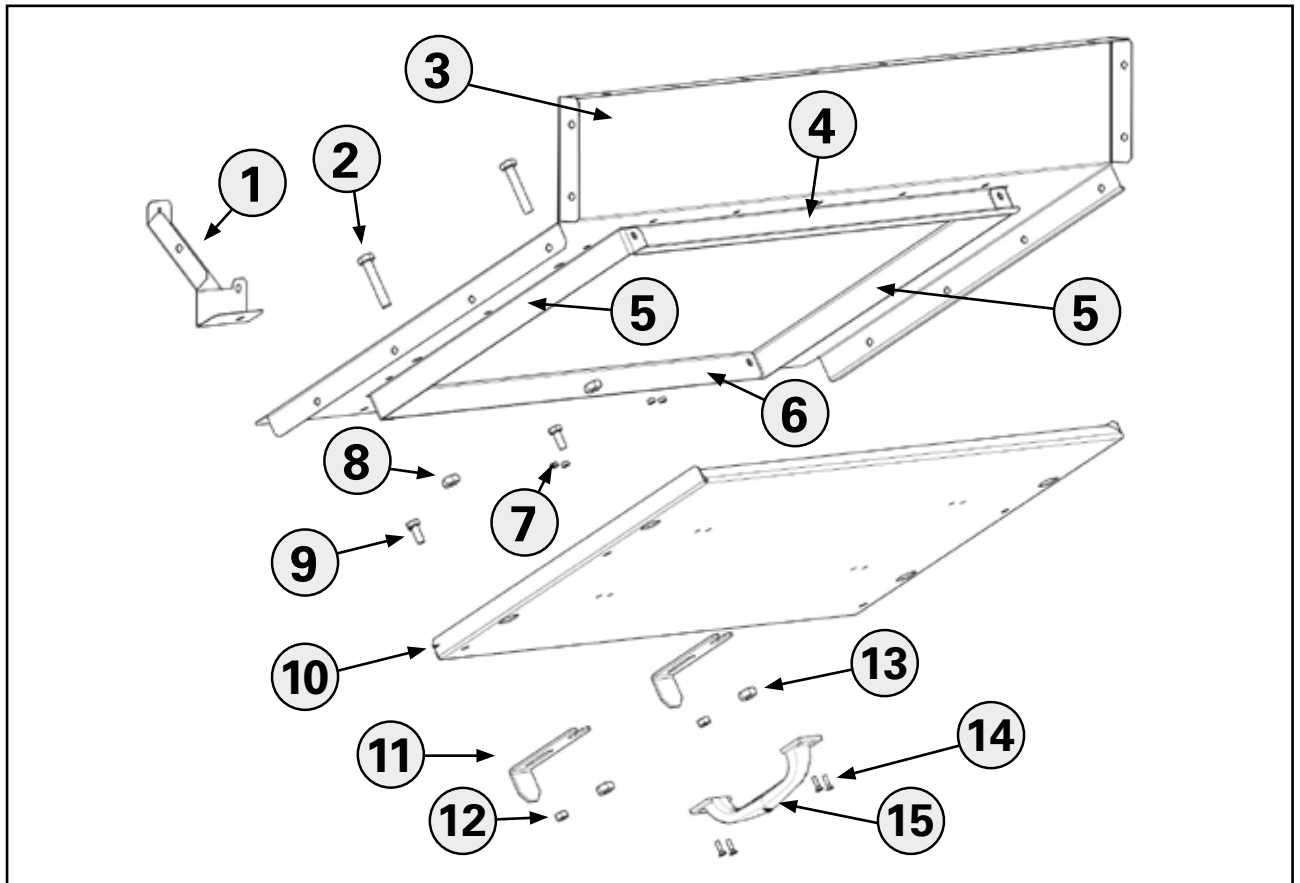
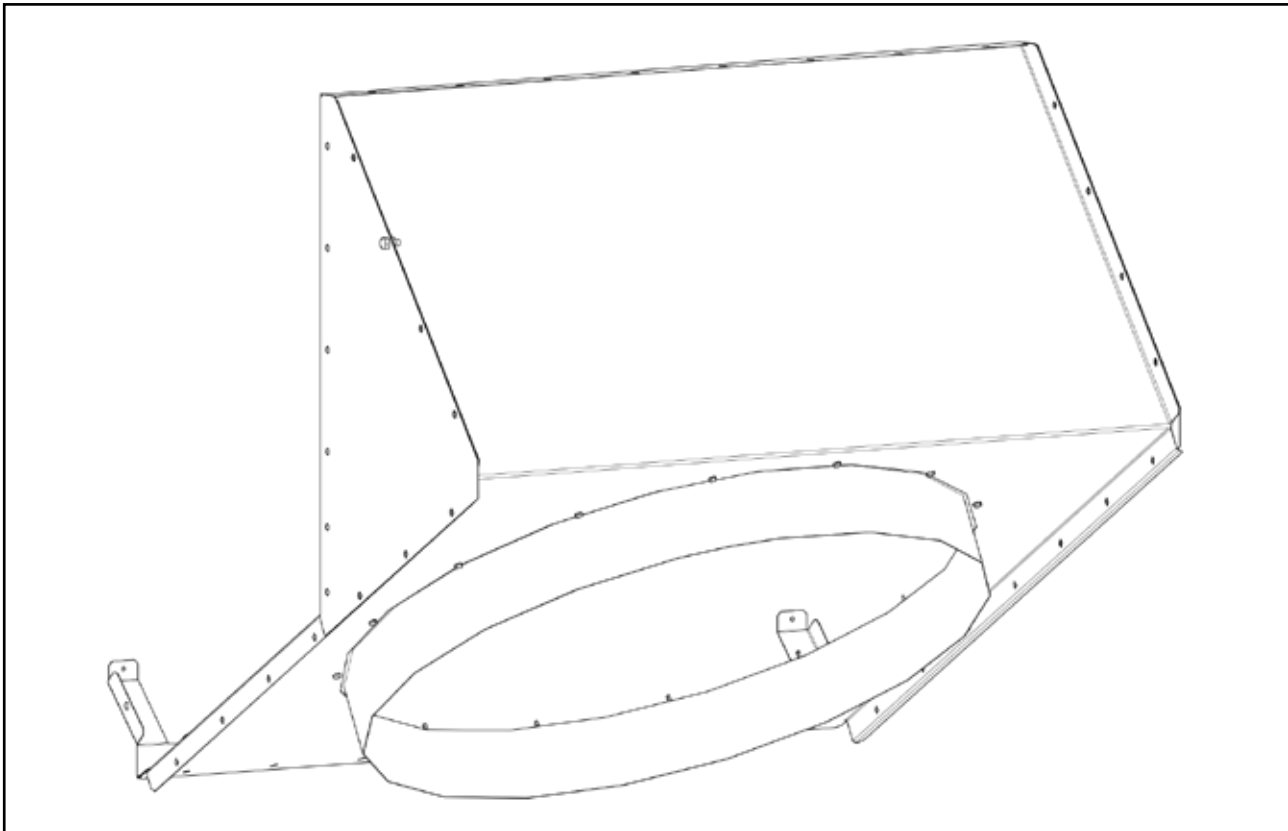


Figure 2.13. Exploded view of the service panel

NUMBER	PART	DESCRIPTION
1	137801	
2		Hex bolt M10x55, DIN933
3	137796	Service panel frame
4	135932	Door frame section
5	135910	Door frame section
6	135885	Door frame section
7		Hex nut M5, DIN4032
8		Hex nut M10, DIN4032
9		Hex bolt M8x20, DIN933
10	135931	Service panel door
11	135938	Bracket
12		Hex nut M8, DIN4032
13		Nut
14		Bolt M5x16, DIN 7046
15	960001	Handle

### 2.3.2. Assembling the air intakes / outputs



*Figure 2.14. Finished small air intake / output*

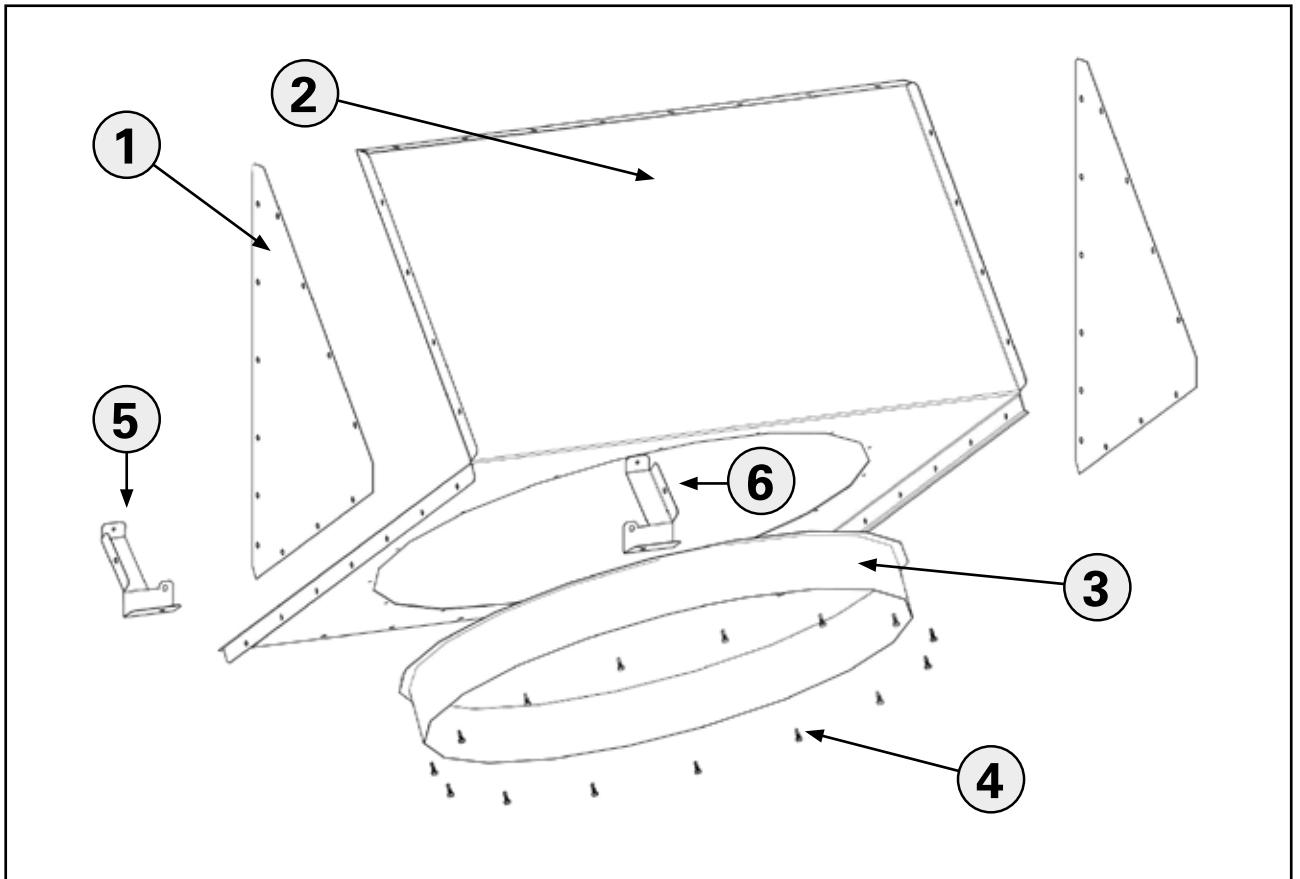
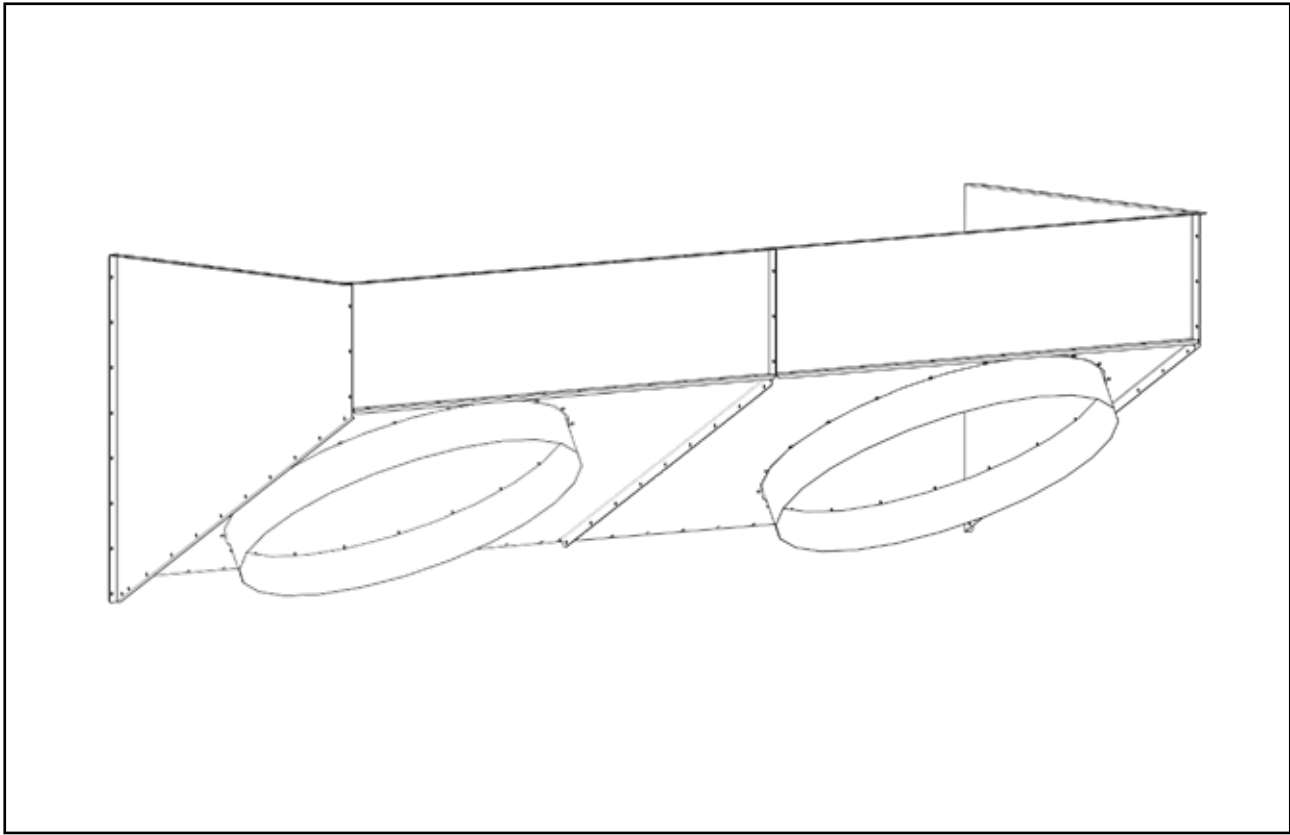


Figure 2.15. 5 Exploded view of the small air intake / output

NUMBER	PART	DESCRIPTION
1	137782	Air intake / output panel
2	138108	Air intake / output panel
3		Air intake / output panel
4		Screw 4, 8x16
5	137801PK	Air casing support bracket
6	137801	Air casing support bracket



*Figure 2.16. Finished large air intake / output*

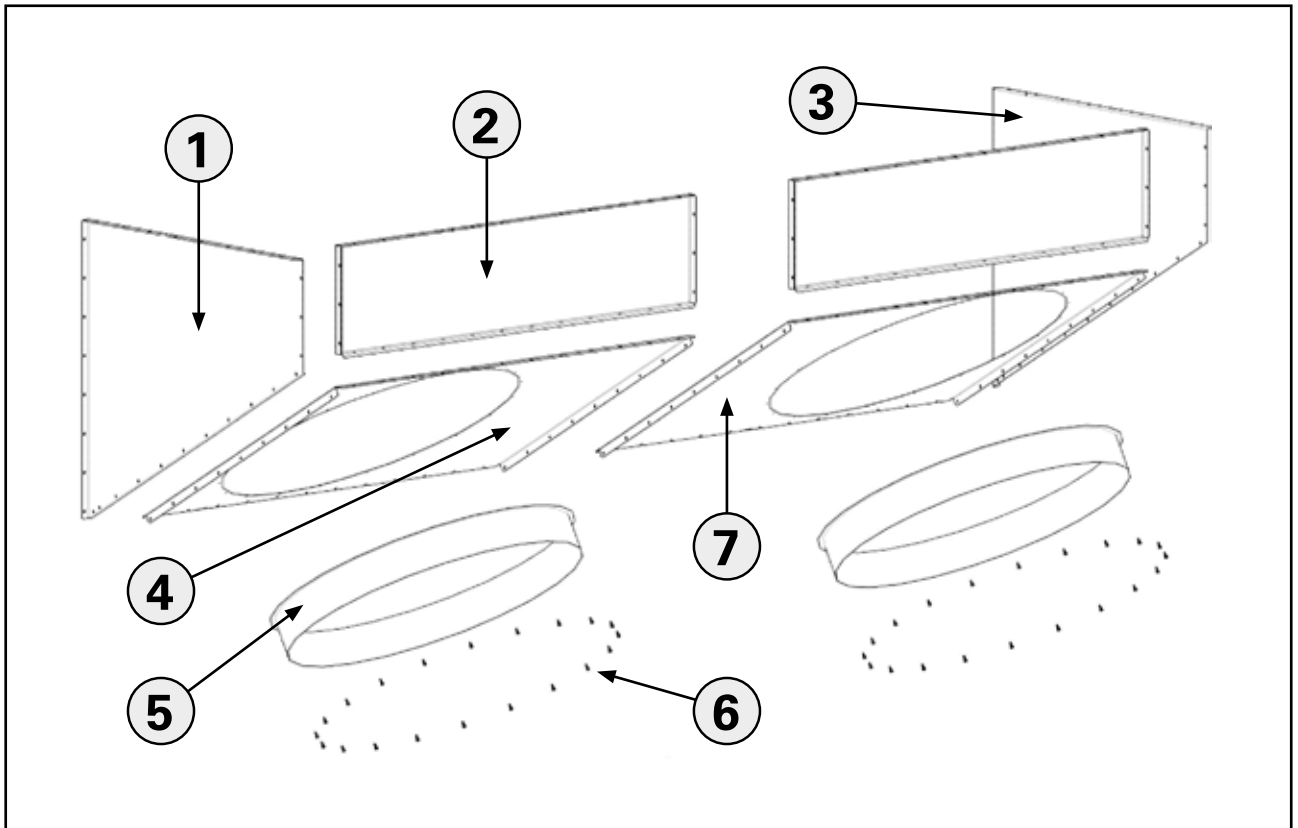
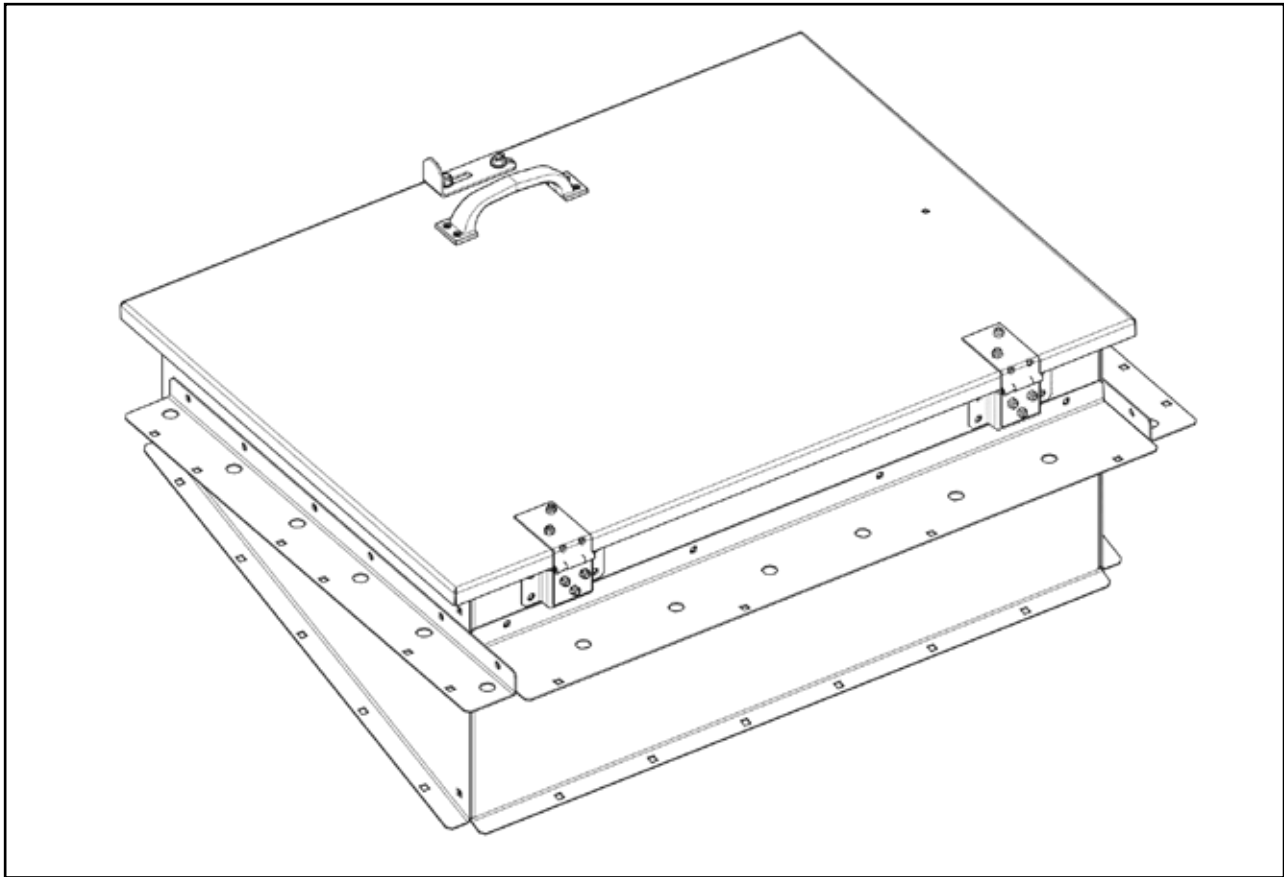


Figure 2.17. Exploded view of the large air intake / output

NUMBER	PART	DESCRIPTION
1	136688	Air casing panel
2	137937	Air casing panel
3	136695	Air casing panel
4	137936	Air casing panel
5		Air intake / output ring
6		Screw 4, 8x16
7	137936PK	Air casing panel

### 2.3.3. Assembling the roof hatch



*Figure 2.18. Finished roof hatch*



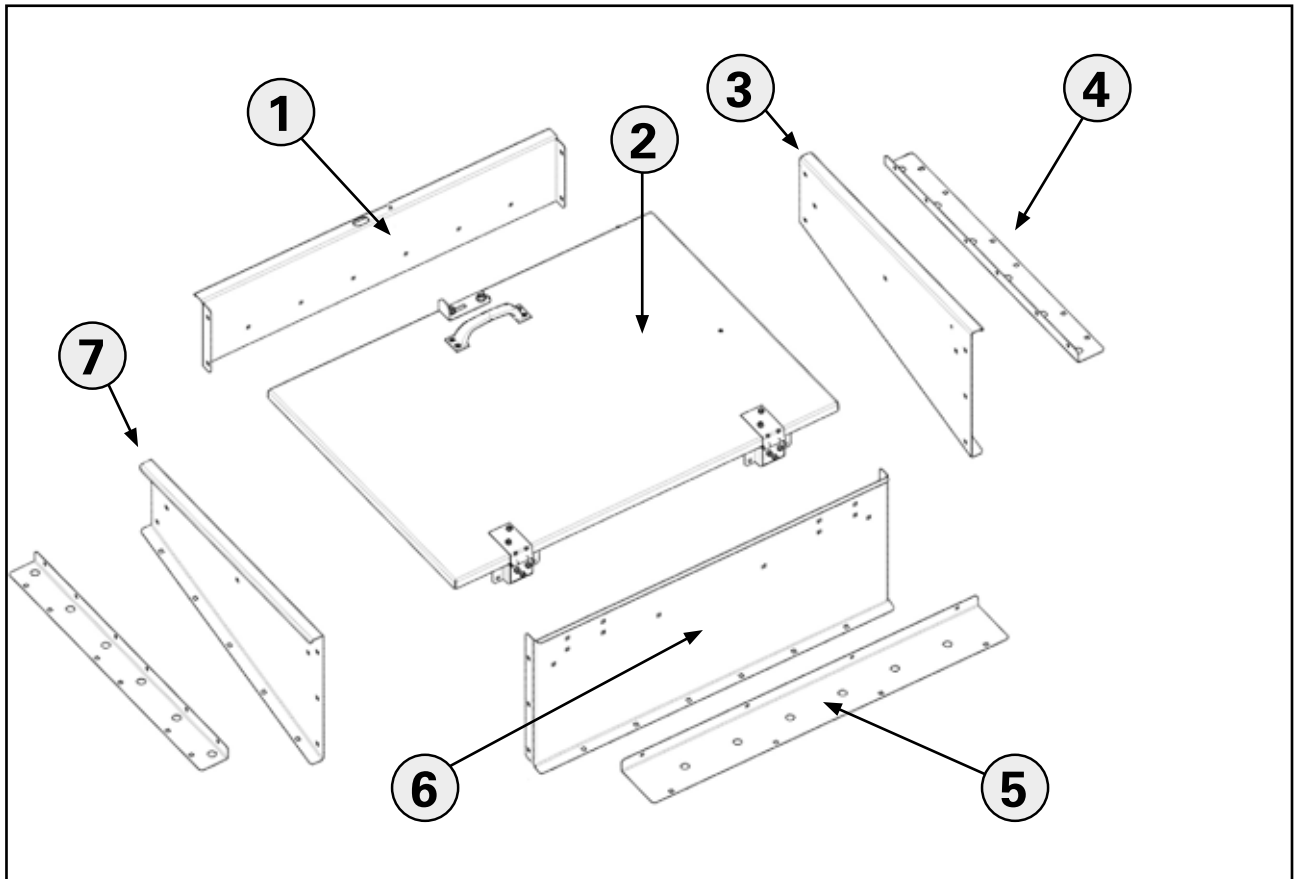


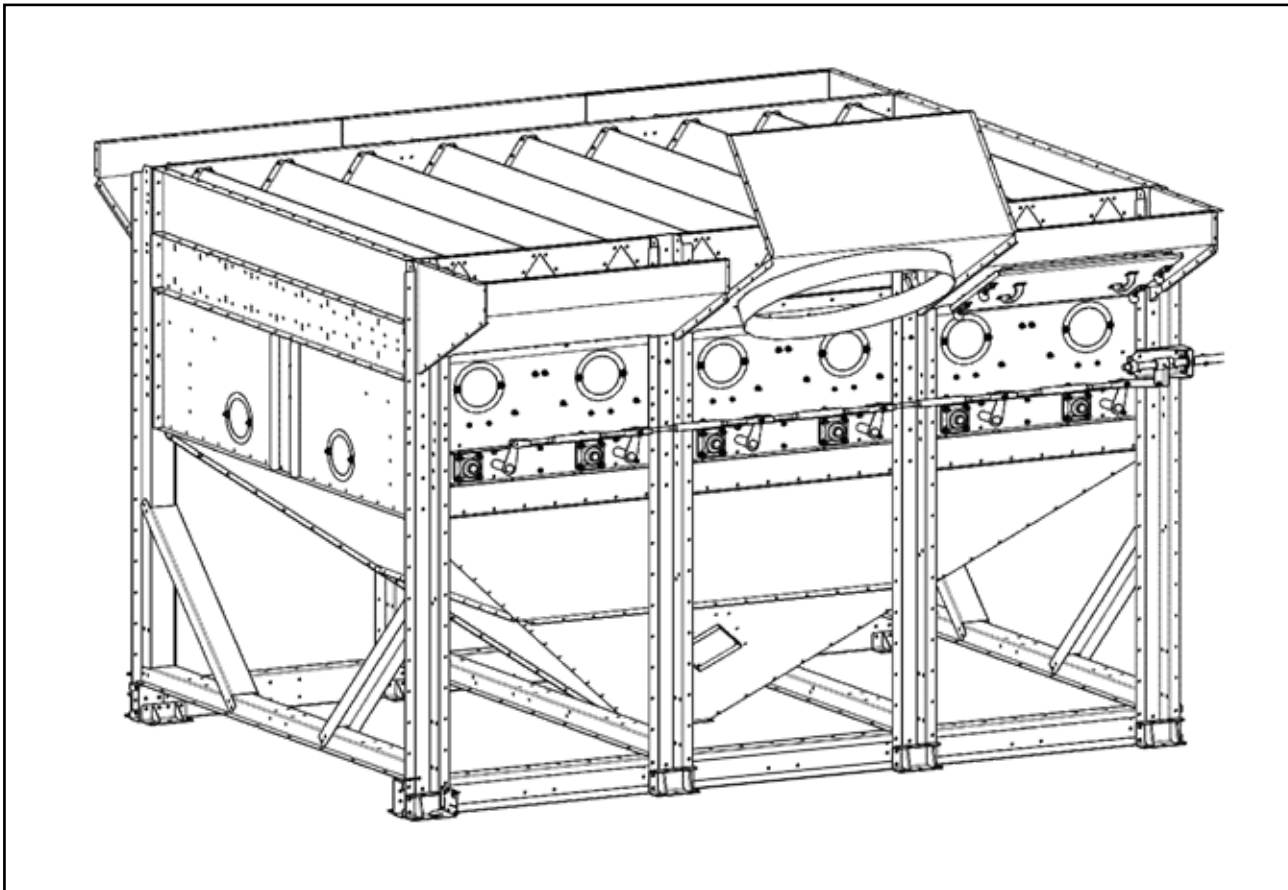
Figure 2.19. Exploded view of the roof hatch

NUMBER	PART	DESCRIPTION
1	137466	Roof hatch panel
2		Roof hatch door assembly
3	137465PK	Roof hatch panel
4	137477	Roof hatch bracing
5	137478	Roof hatch bracing
6	137463	Roof hatch panel
7	137465	Roof hatch panel

## 2.4. Feeding apparatus

### 2.4.1. Attaching the air casing to the feeding apparatus

Section 2.4.1. applies to all models.



*Figure 2.20. Feeding apparatus with air casing attached*

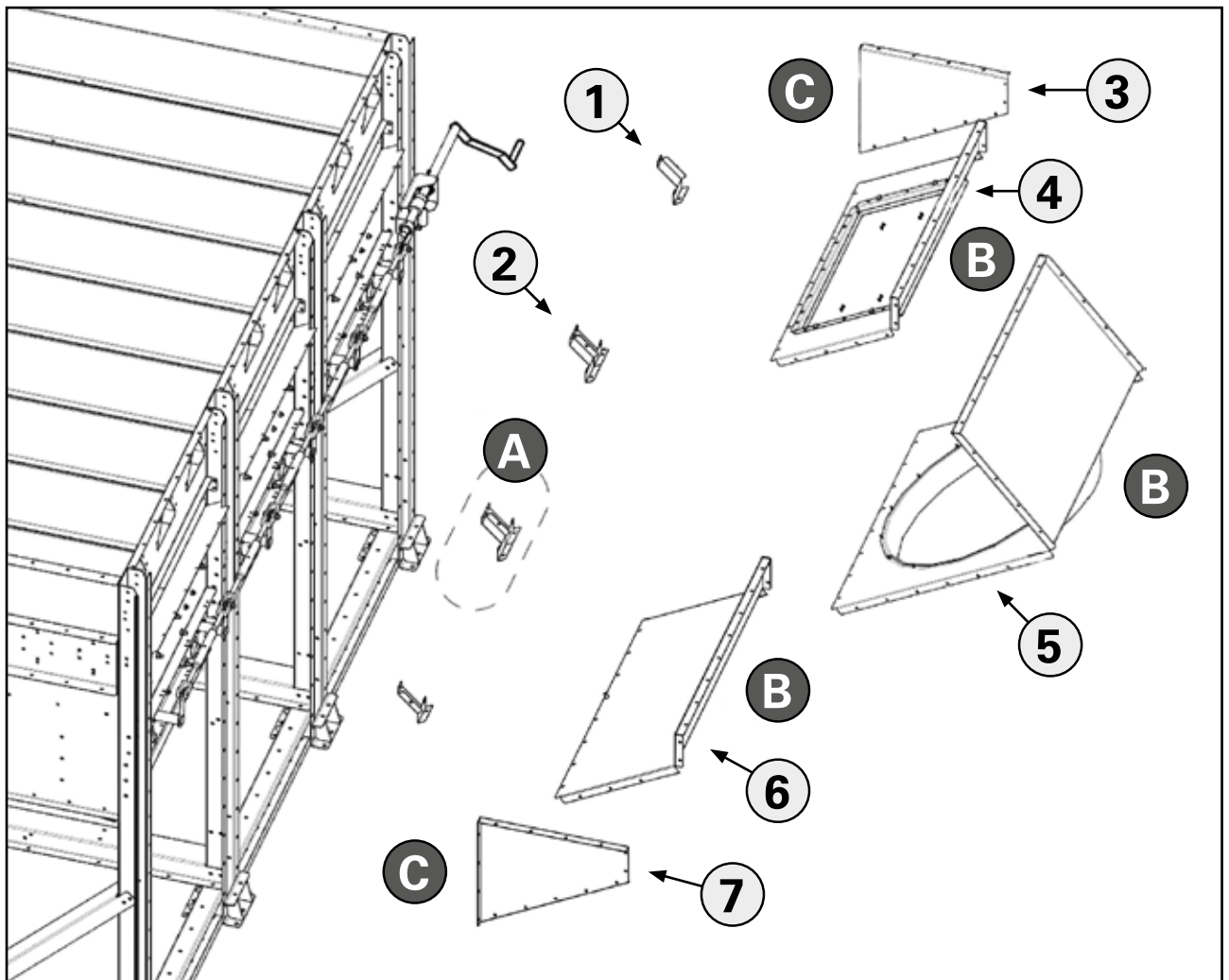


Figure 2.21. Exploded view of the air casing

NUMBER	PART	DESCRIPTION
1	137801	Air casing support bracket
2	137801PK	Air casing support bracket
3	136442	Air casing panel
4		Service panel assembly *
5		Air inlet assembly **
6	137784	Air casing panel
7	136735	Air casing panel

\* See section 2.3.1. on page 34 for instructions on assembling the service panel.

\*\* See section 2.3.2. on page 36 for instructions on assembling the air inlet.

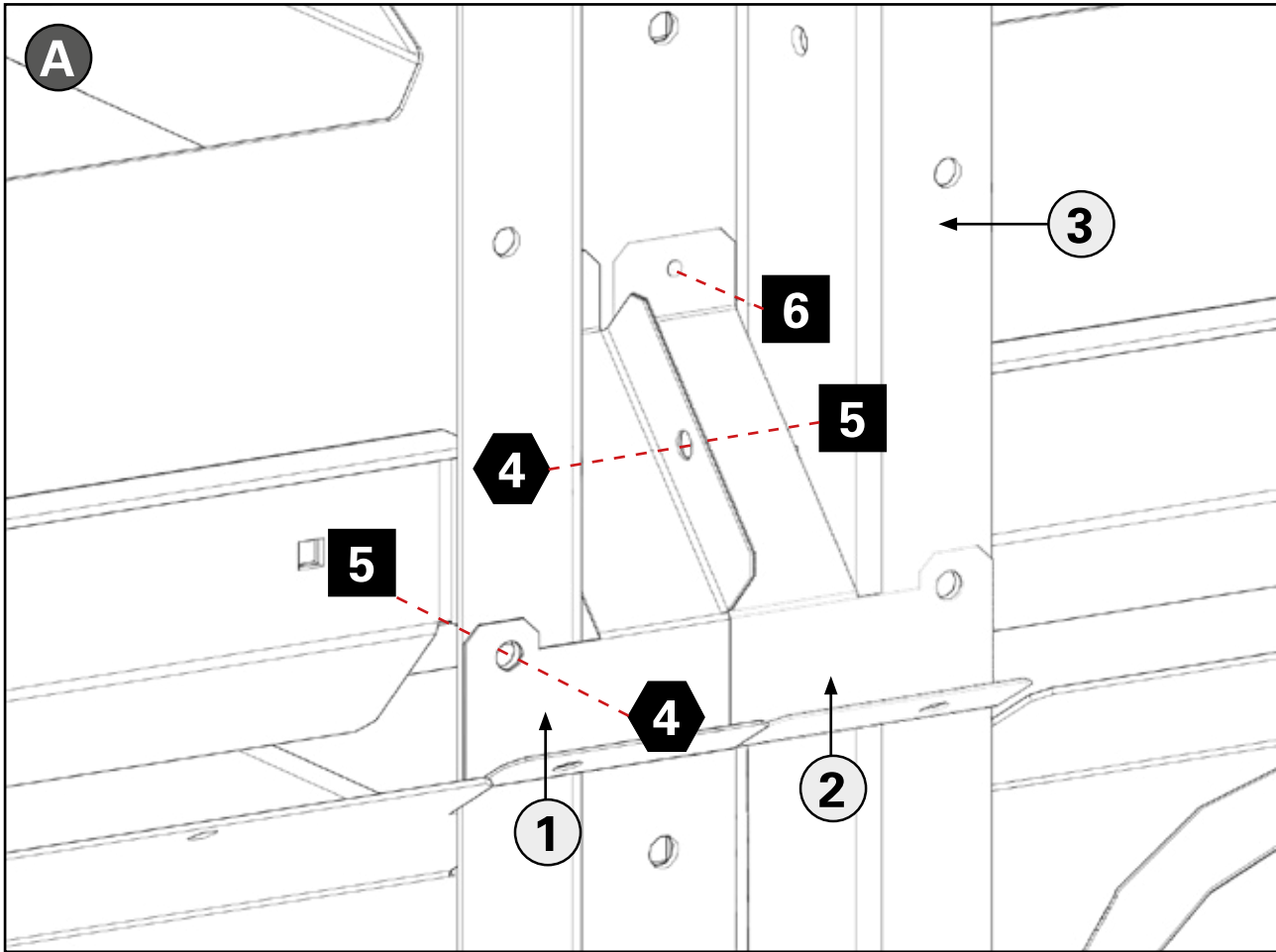


Figure 2.22. Attaching the air casing support brackets to the feeding apparatus

NUMBER	PART	DESCRIPTION
1	137801	Air casing support bracket
2	137801PK	Air casing support bracket
3		Feeding apparatus
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603
6		Screw

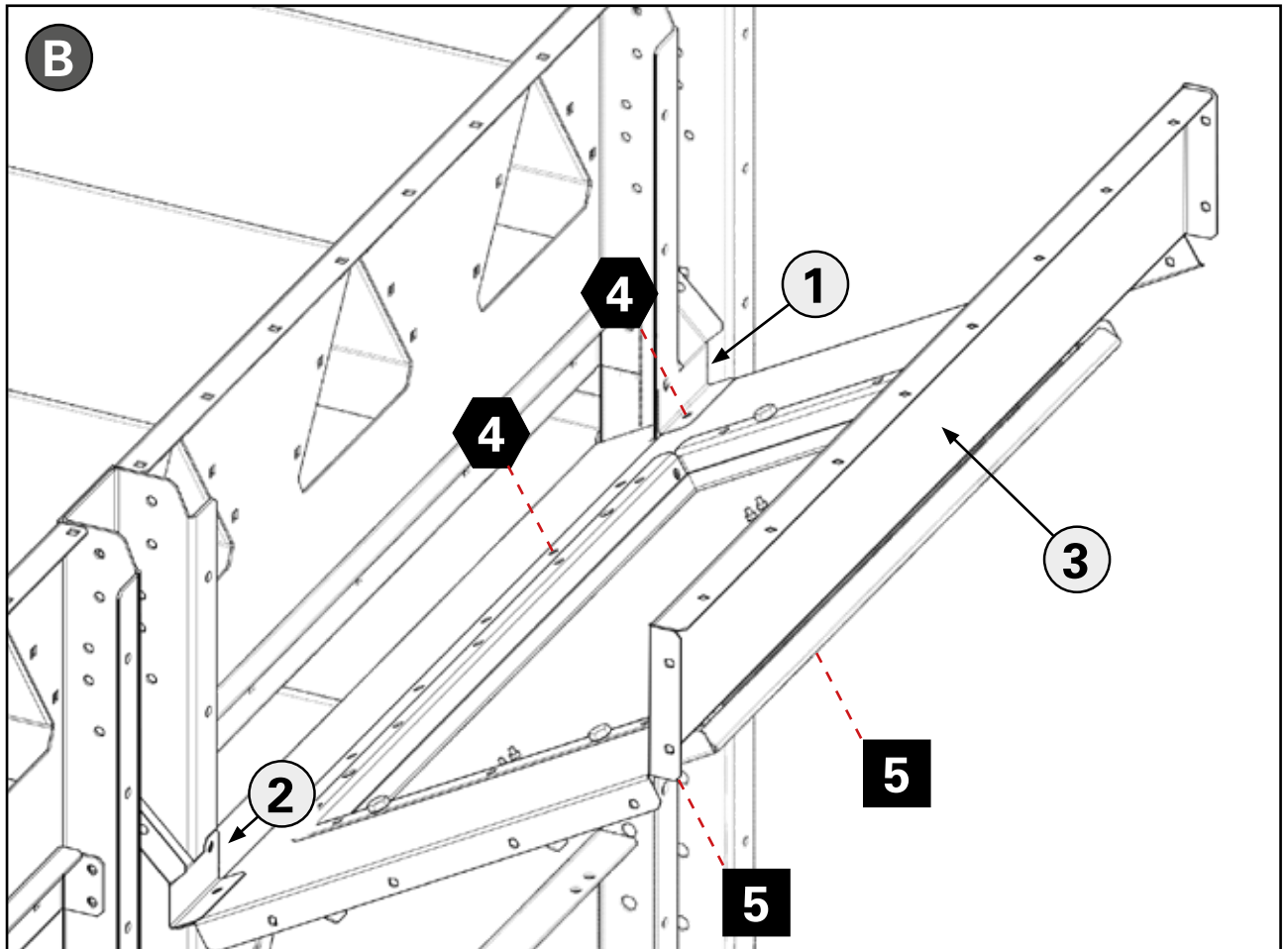


Figure 2.23. Attaching the service panel to the feeding apparatus

NUMBER	PART	DESCRIPTION
1	137801	Air casing support bracket
2	137801PK	Air casing support bracket
3		Service panel assembly *
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603

\* See section 2.3.1. on page 34 for instructions on assembling the service panel.

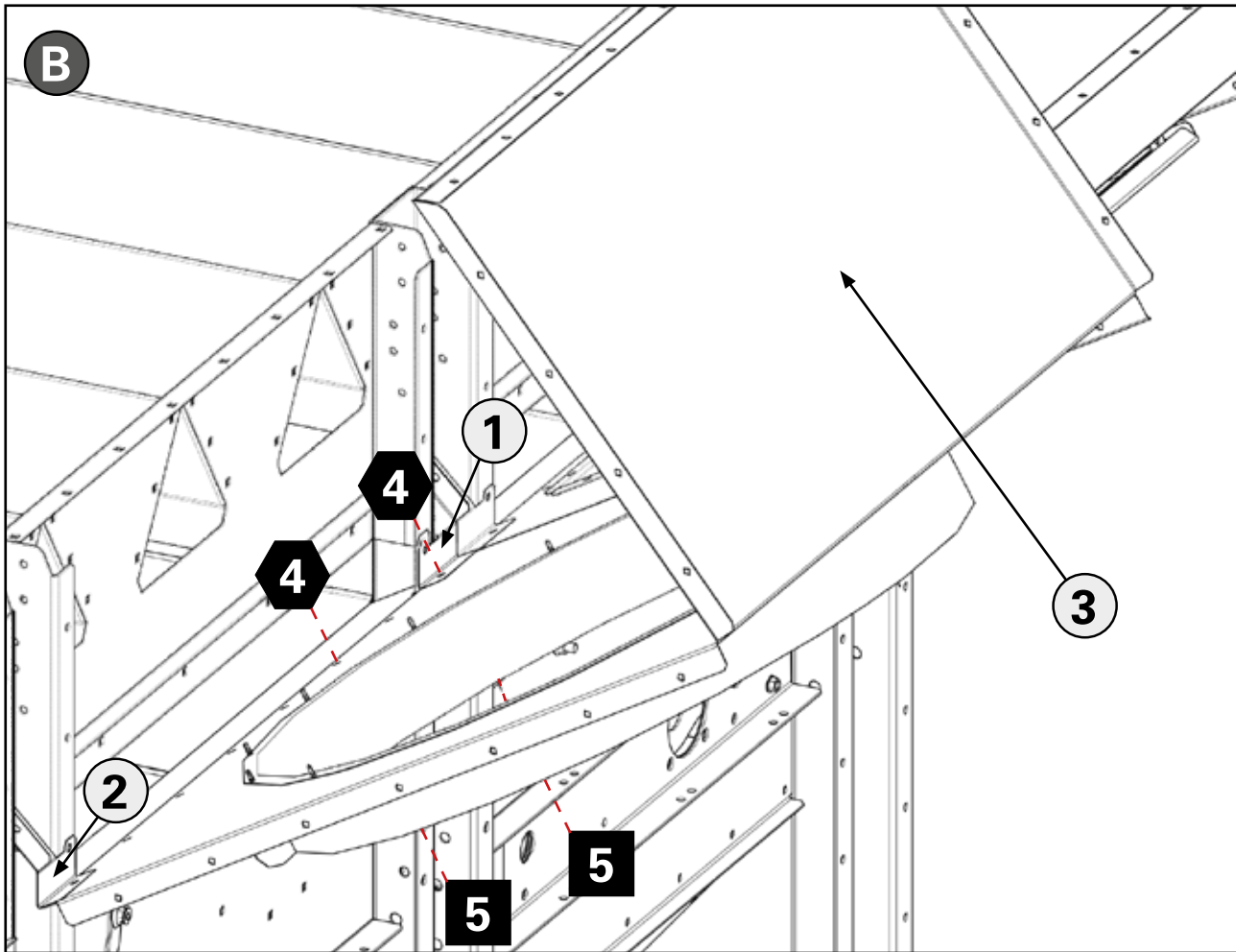


Figure 2.24. Attaching the air intake to the feeding apparatus

NUMBER	PART	DESCRIPTION
1	137801	Air casing support joint
2	137801PK	Air casing support joint
3		Air intake assembly *
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603

\* See section 2.3.2. on page 36 for instructions on assembling the air inlet.

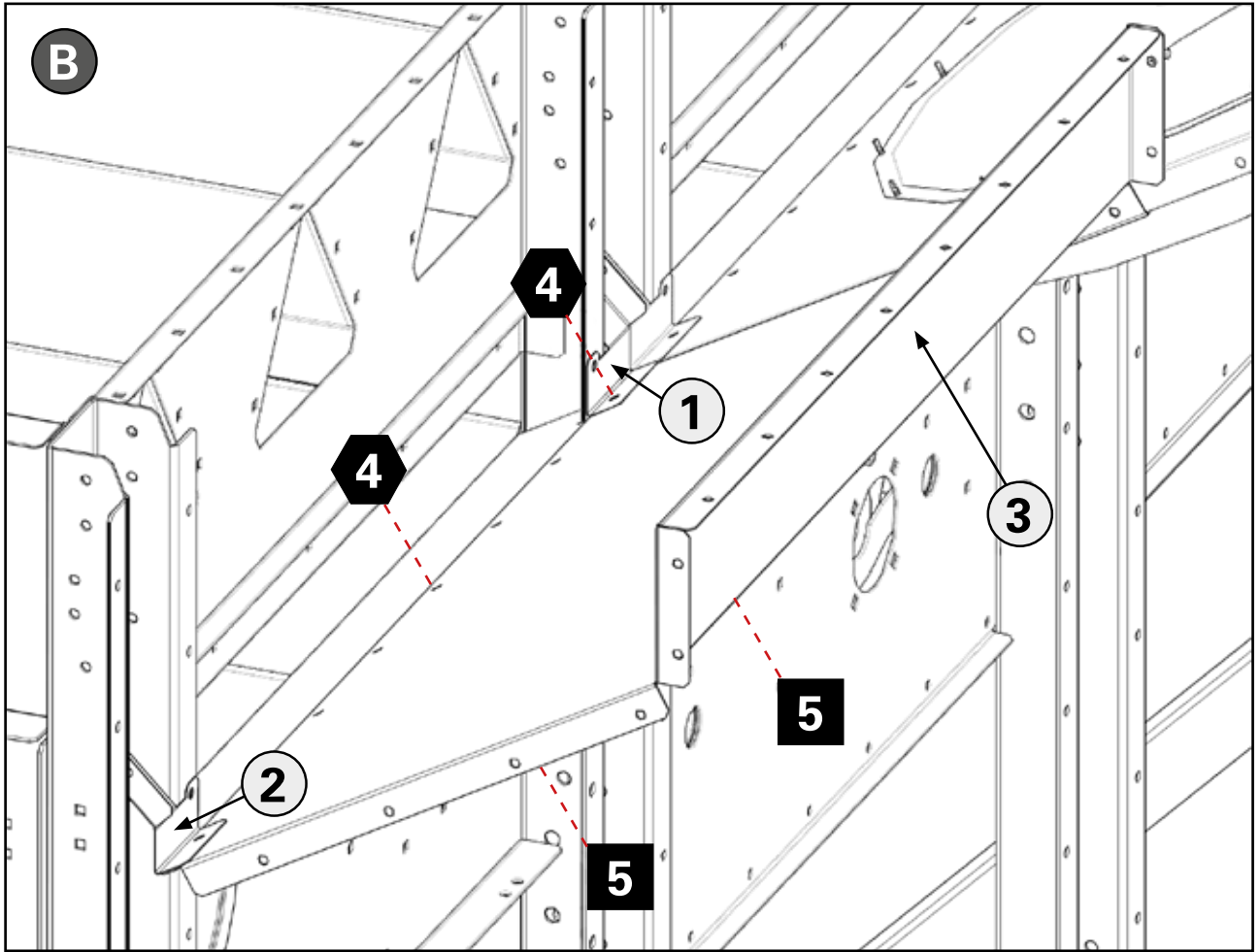


Figure 2.25. Attaching the air casing panel to the feeding apparatus

NUMBER	PART	DESCRIPTION
1	137801	Air casing support bracket
2	137801PK	Air casing support bracket
3	137784	Panel
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603

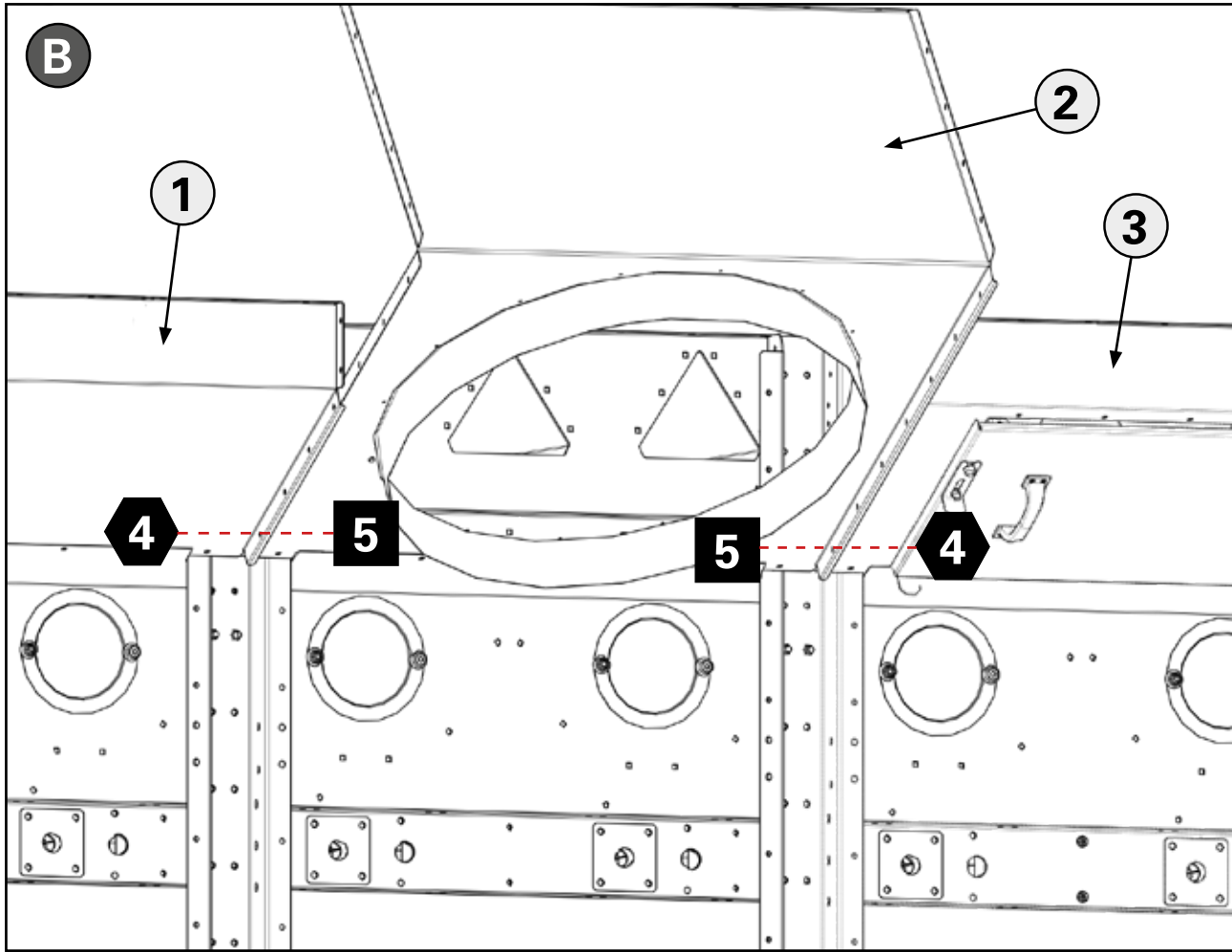


Figure 2.26. Attaching the air casing components to each other

NUMBER	PART	DESCRIPTION
1	137784	Air casing panel
2		Air inlet assembly *
3		Service panel assembly **
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603

\* See section 2.3.2. on page 36 for instructions on assembling the air inlet.

\*\* See section 2.3.1. on page 34 for instructions on assembling the service panel.



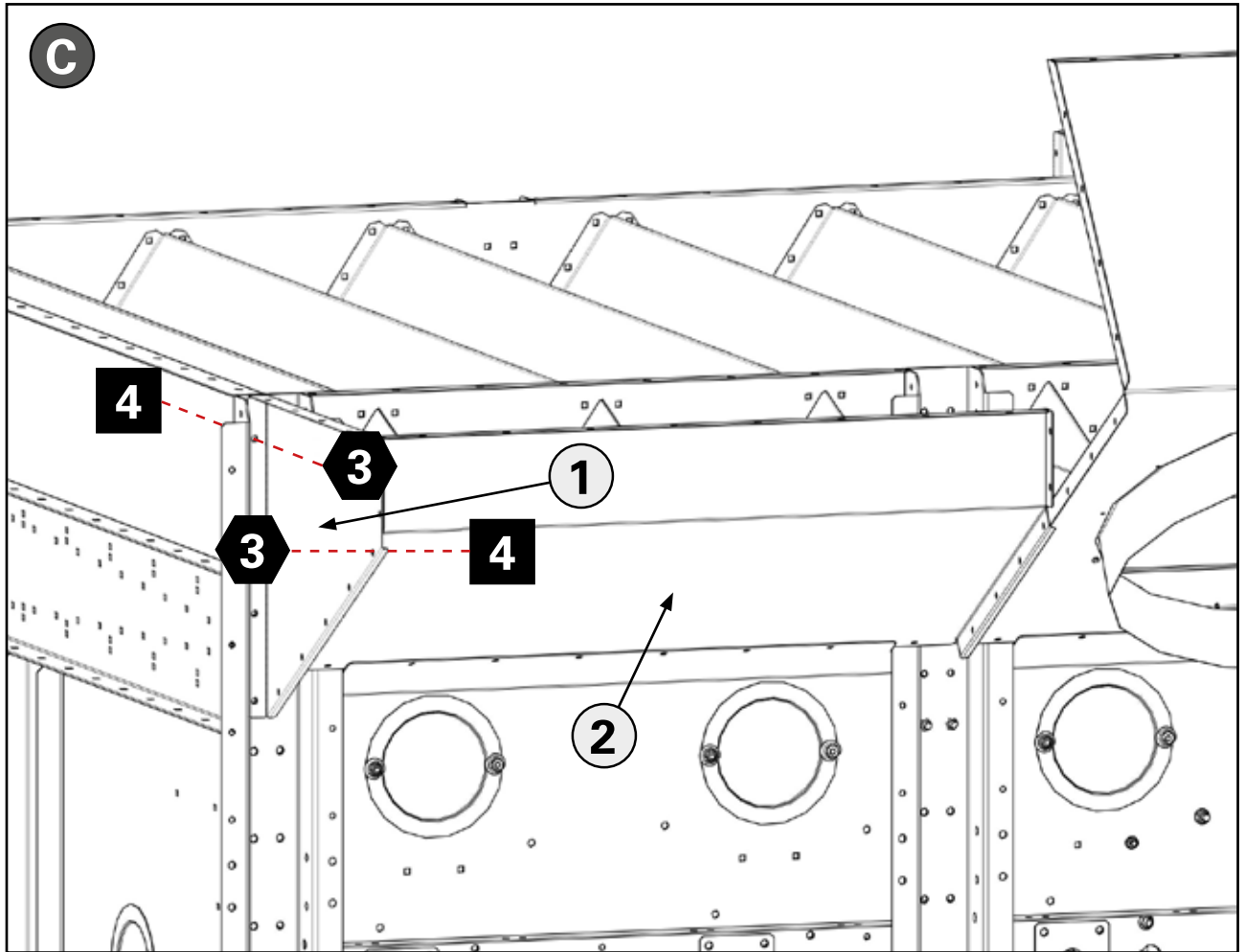
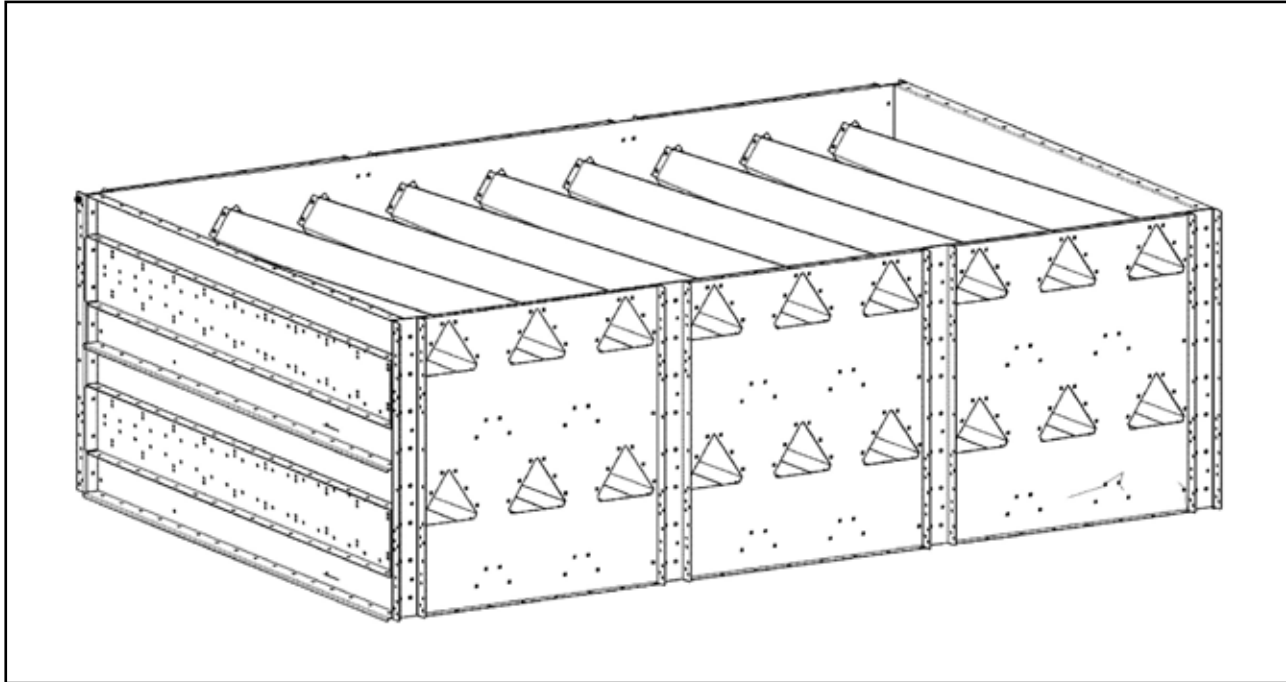


Figure 2.27. Attaching the air casing panel to the feeding apparatus

NUMBER	PART	DESCRIPTION
1	136735	Air casing side panel
2	137784	Air casing panel
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

## 2.5. Drying cell and air casing

### 2.5.1. Assembling a light model drying cell



*Figure 2.28. Finished light model drying cell*

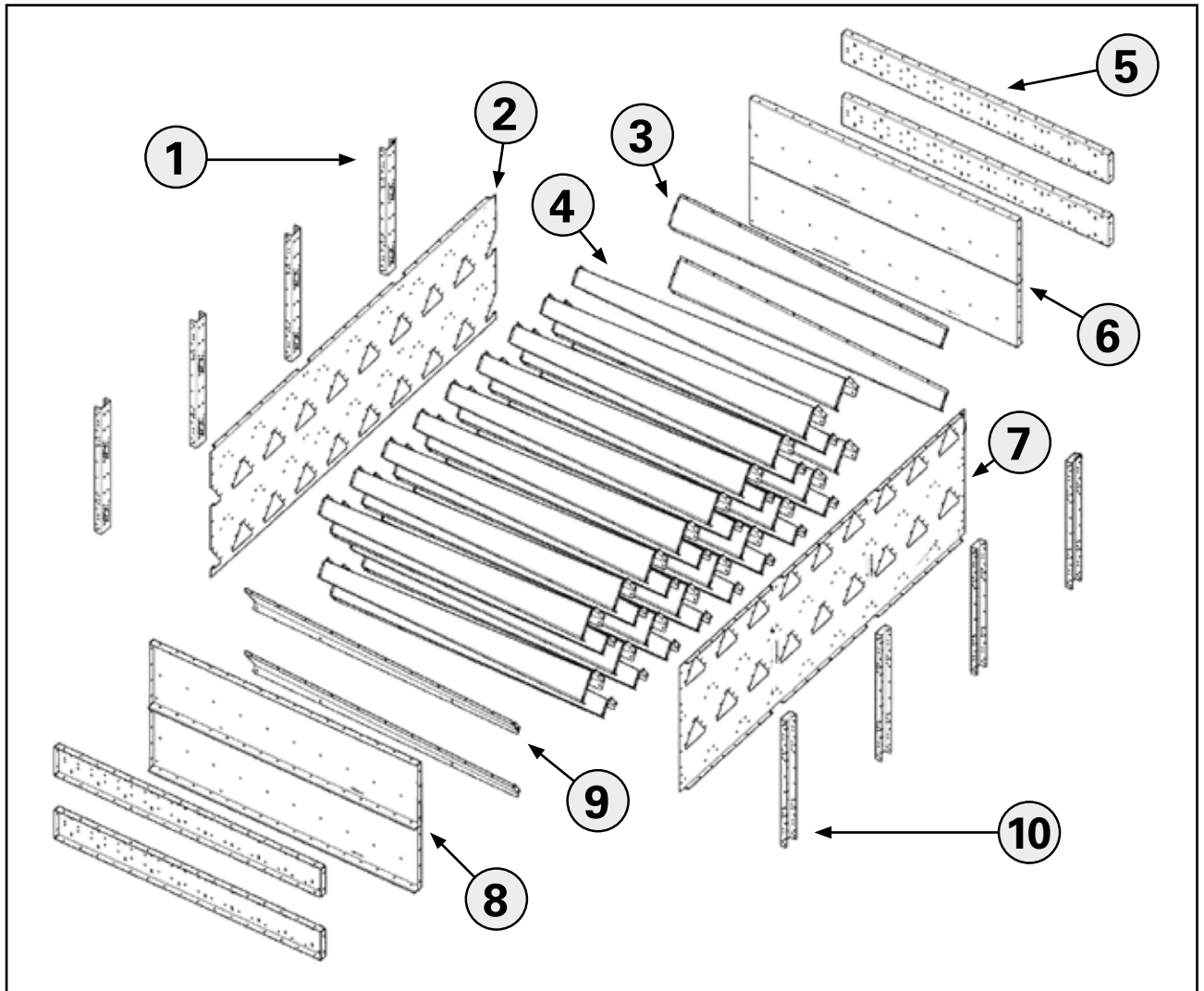


Figure 2.29. Exploded view of the light model drying cell

NUMBER	PART	DESCRIPTION
1	136678	Drying cell bracing
2	137728	Drying cell panel
3	137734PK	Crest plate
4	137733	Crest plate
5	136457	Drying cell panel
6	137731PK	Drying cell panel
7	137729	Drying cell panel
8	137731	Drying cell panel
9	137734	Crest plate
10	136360	Drying cell bracing

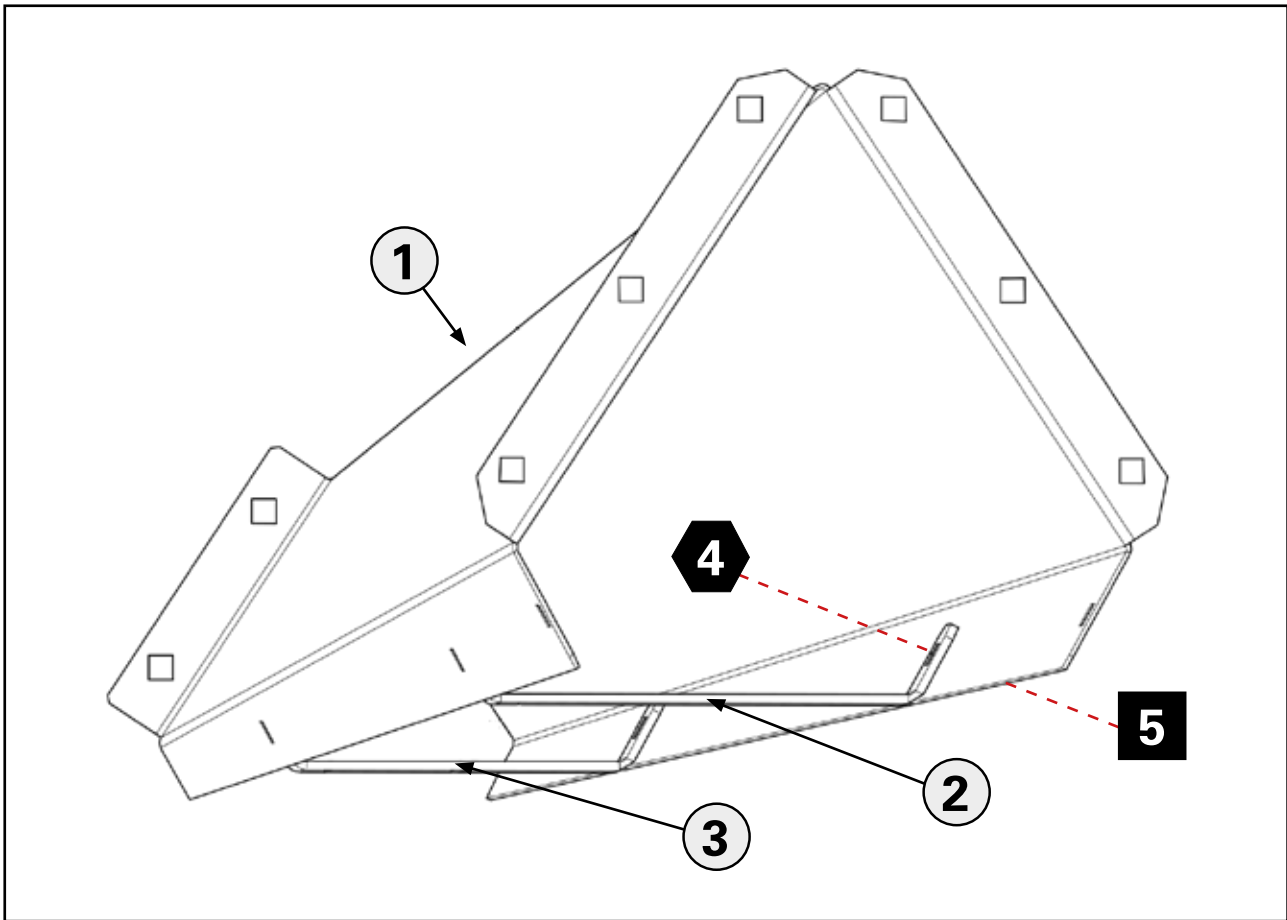


Figure 2.30. Crest plate strengtheners

NUMBER	PART	DESCRIPTION
1	137733	Crest plate
2	137735	Crest plate strengthener
3	137736	Crest plate strengthener
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603

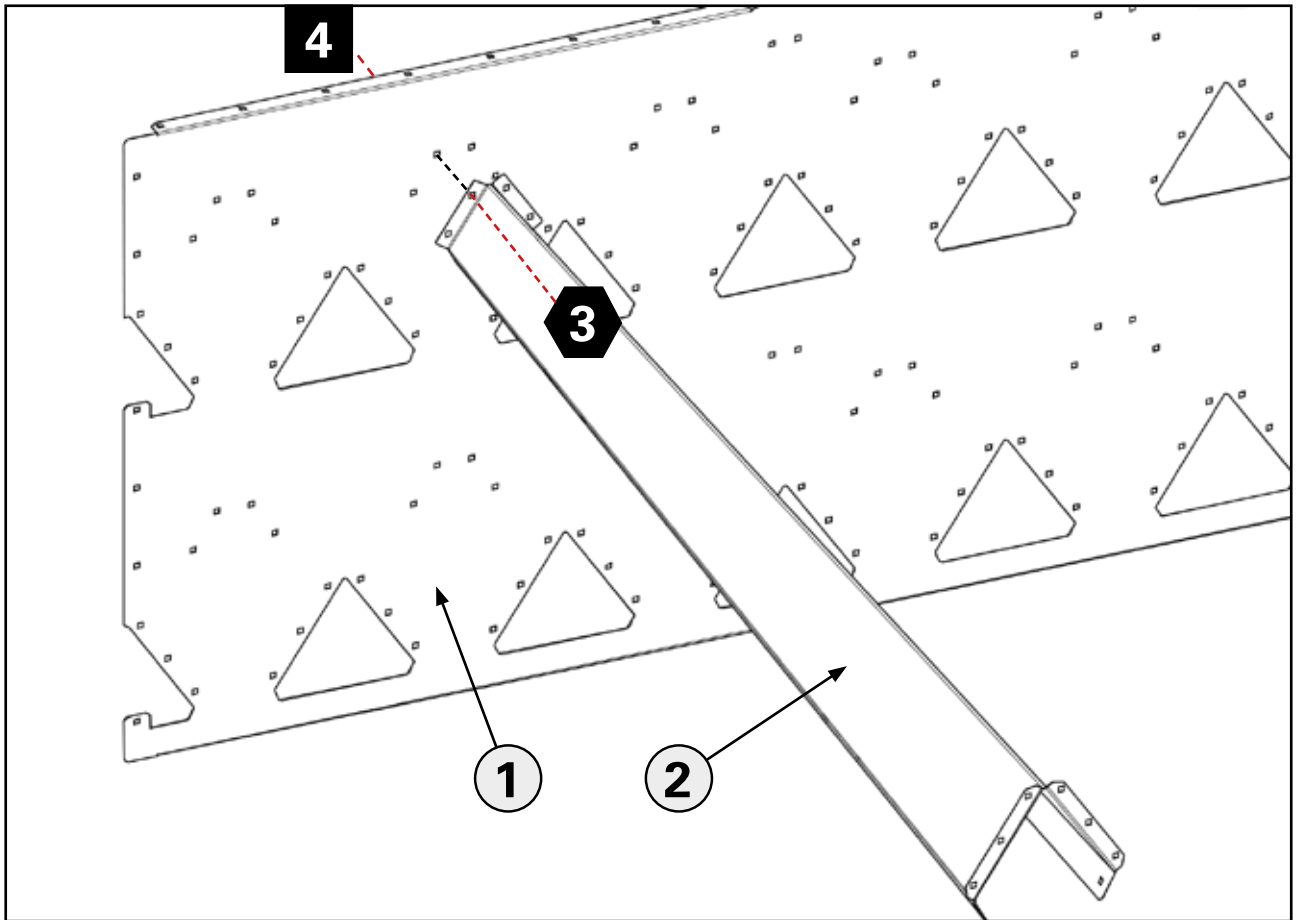
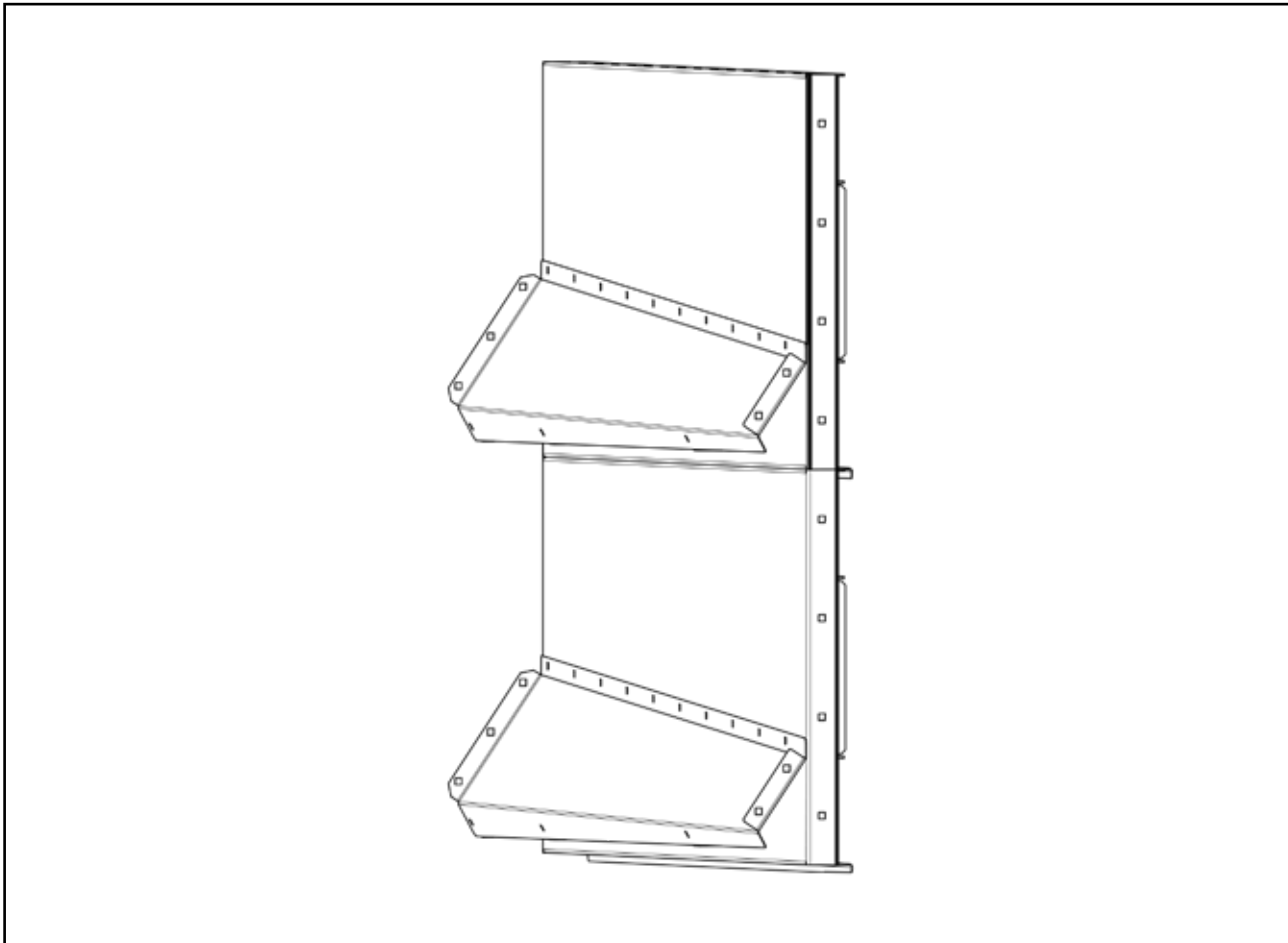


Figure 2.31. Attaching the crest plate to the light model drying cell panel

NUMBER	PART	DESCRIPTION
1	137728	Drying cell panel *
1	137729	Drying cell panel
2	137733	Crest plate
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

\* Shown in the figure.



*Figure 2.32. Finished light model drying cell - short wall*

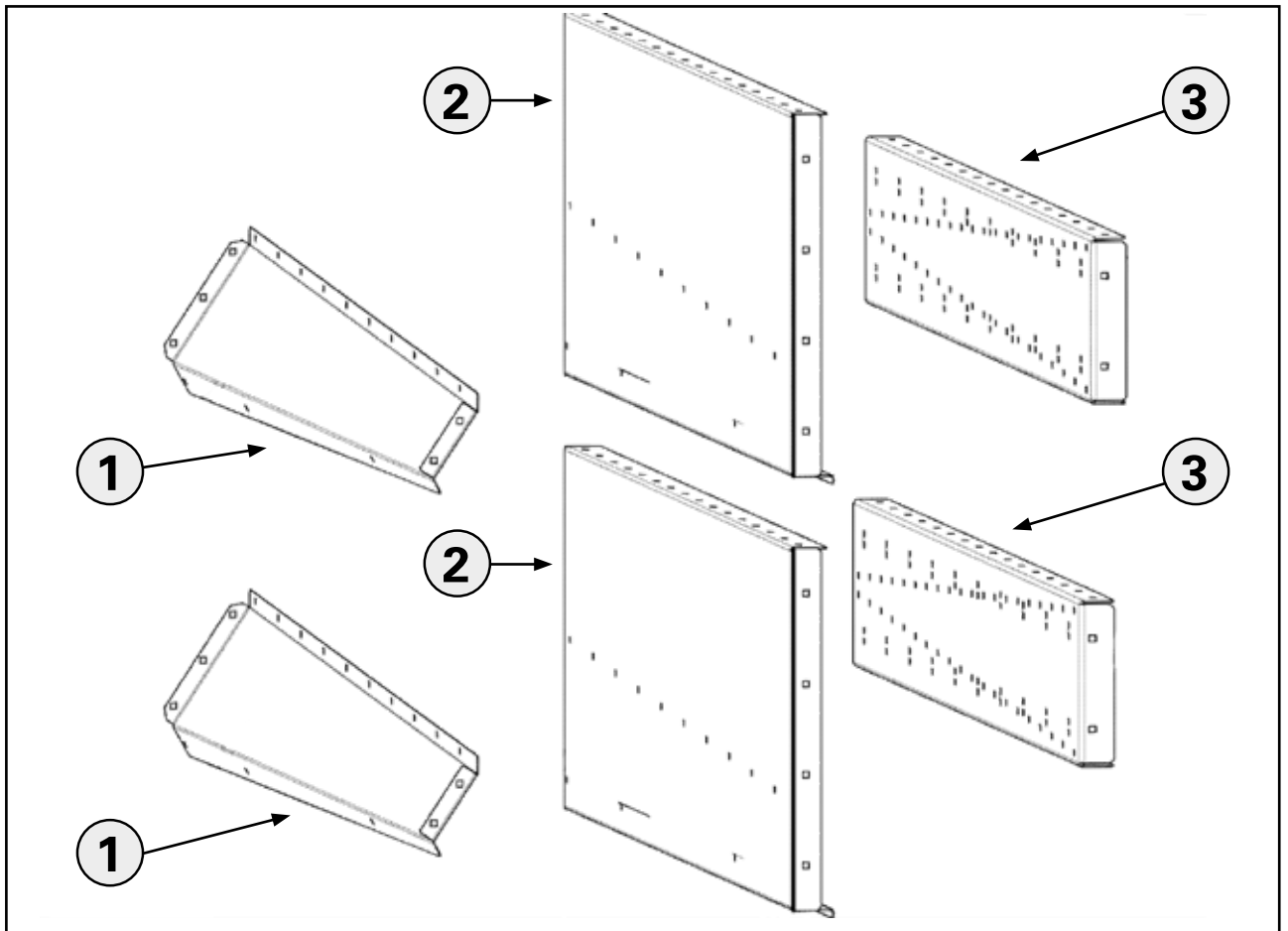


Figure 2.33. Components of the light model drying cell short wall

NUMBER	PART	DESCRIPTION
1	137734PK	Crest plate *
1	137734	Crest plate
2	137731PK	Drying cell short wall panel *
2	137731	Drying cell short wall panel
3	136457	Drying cell short wall panel

\* Shown in figure.

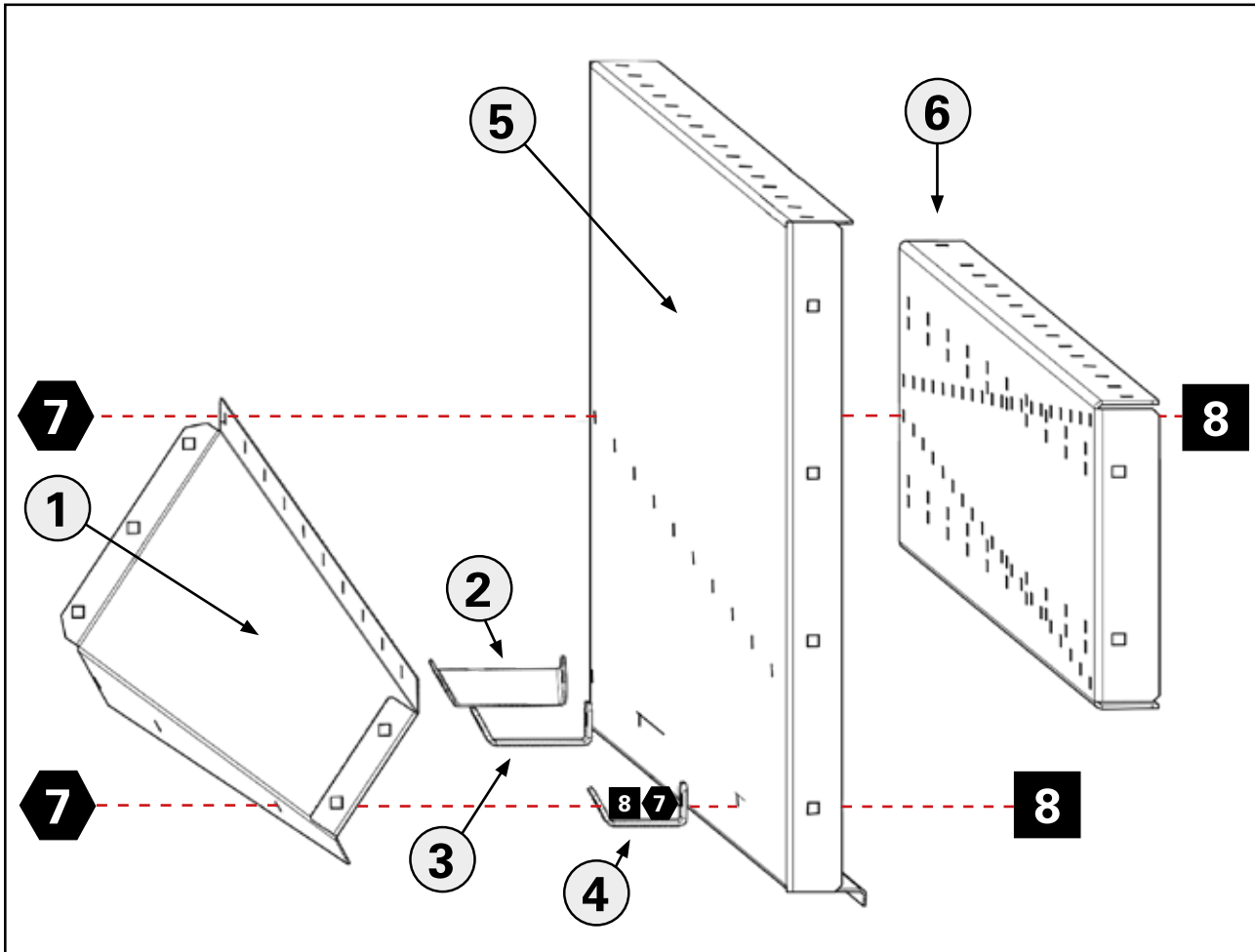


Figure 2.34. Assembling the light model drying cell short wall

NUMBER	PART	DESCRIPTION
1	137734PK	Crest plate *
1	137734	Crest plate
2	136770	Crest plate strengthener
3	137738	Crest plate strengthener
4	137737	Crest plate strengthener
5	137731PK	Drying cell panel *
5	137731	Drying cell panel
6	136457	Drying cell panel
7		Flange nut M8, DIN6923
8		Low square bolt M8x16, DIN603

\* Shown in figure.



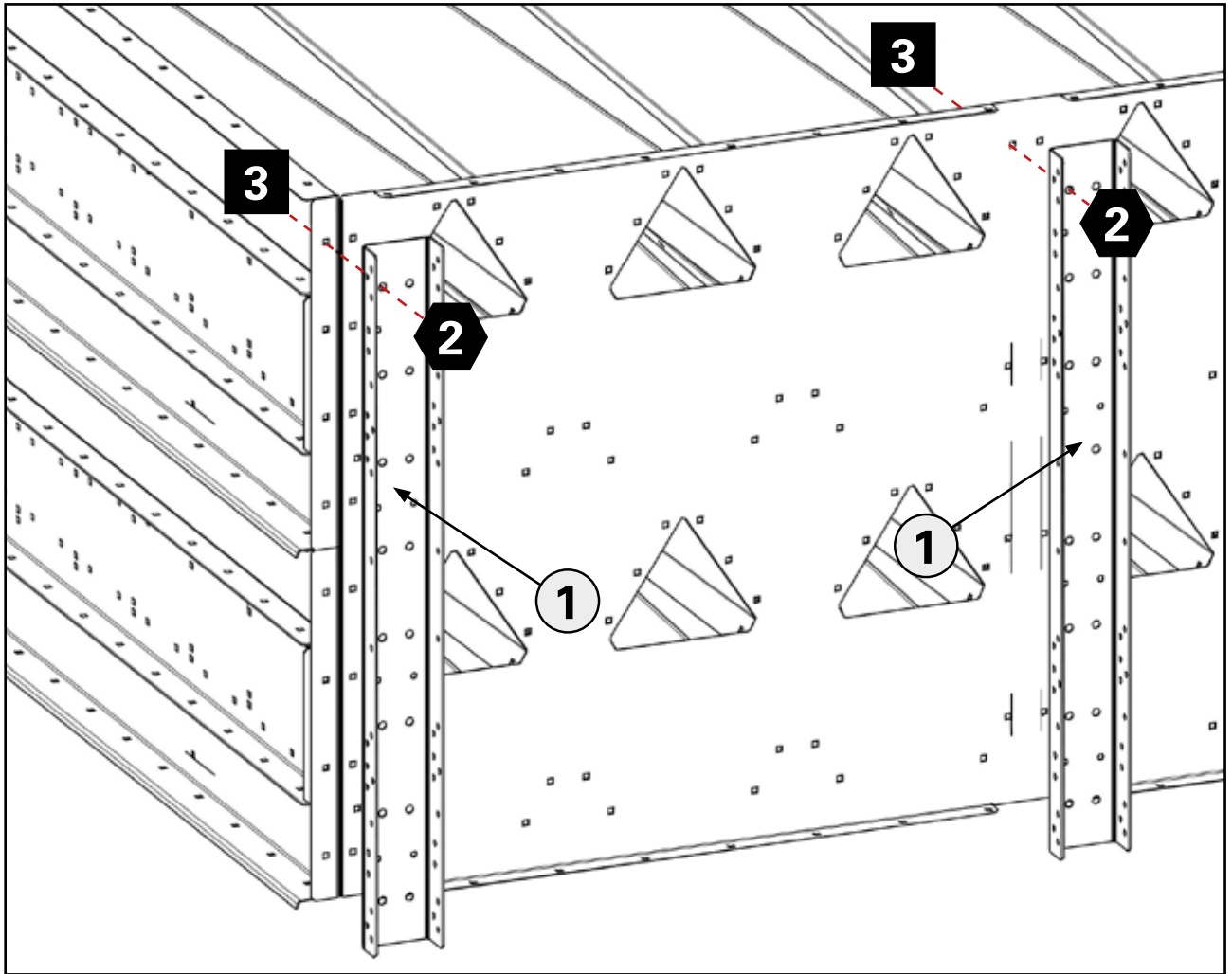
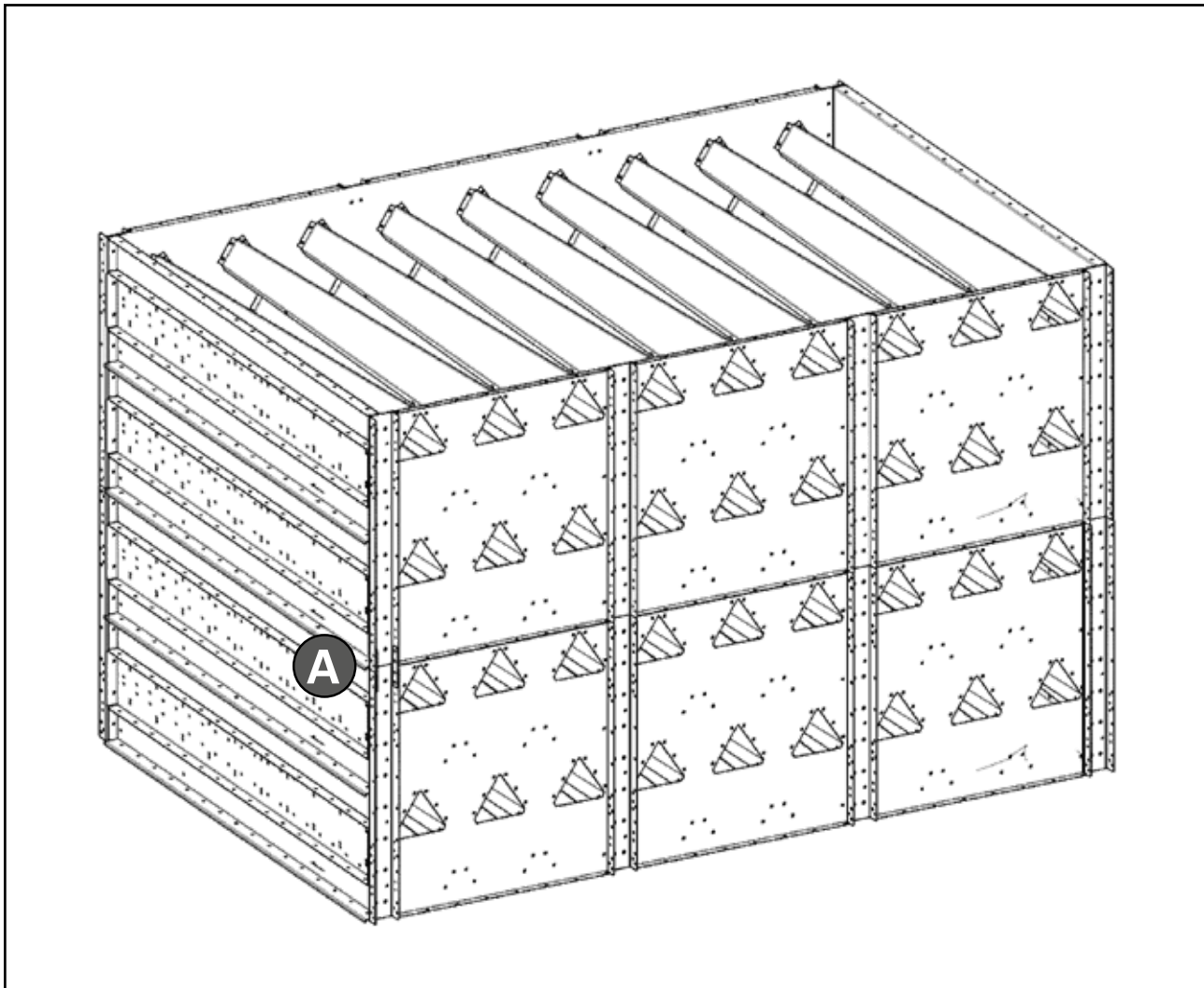


Figure 2.35. Attaching the light model drying cell bracing

NUMBER	PART	DESCRIPTION
1	136360	Drying cell bracing *
1	136678	Drying cell bracing
2		Flange nut M8, DIN6923
3		Low square bolt M8x16, DIN603

\* Shown in figure.

## 2.5.2. Attaching two light model drying cells to each other



*Figure 2.36. Two light model drying cells attached*

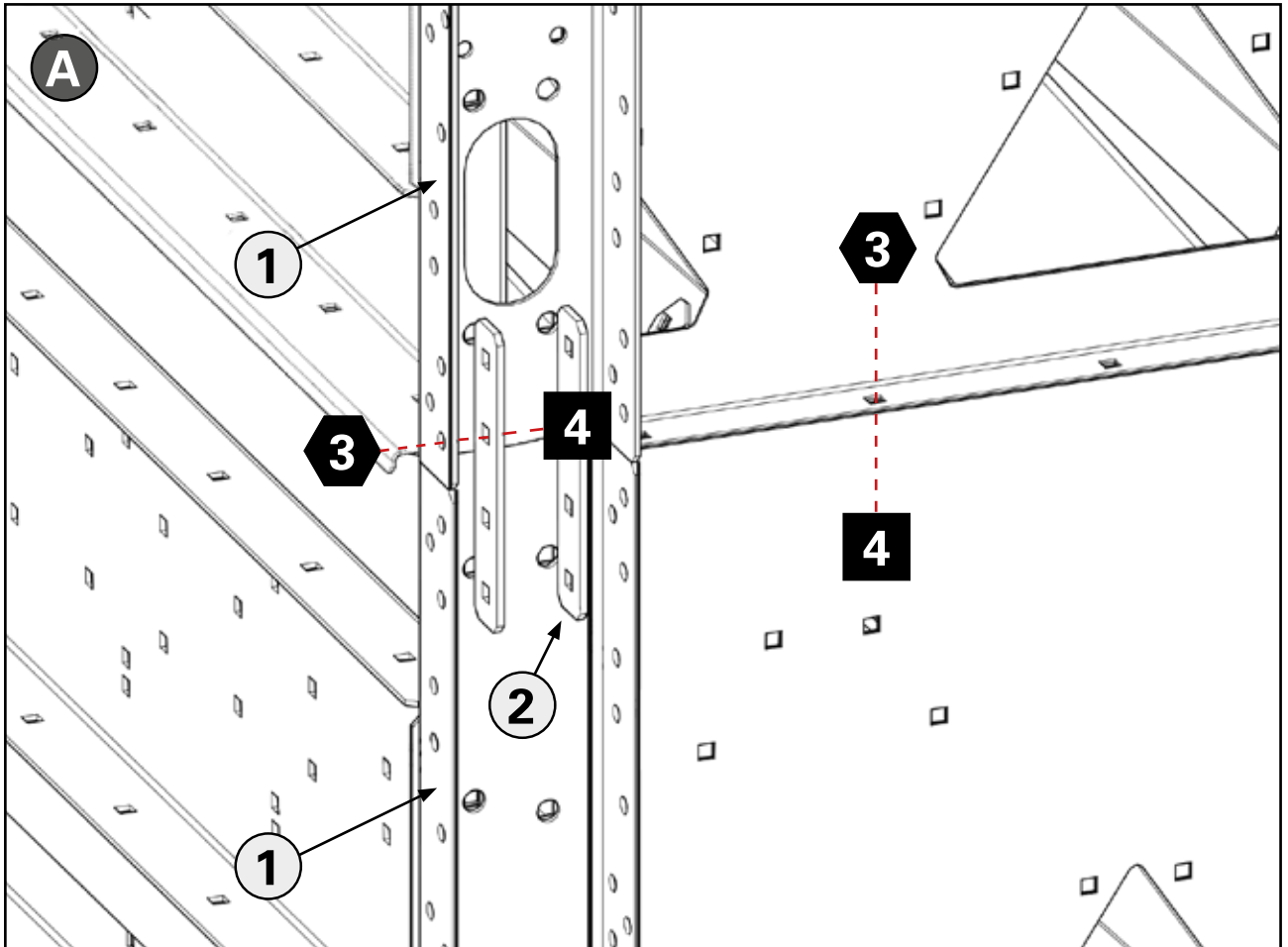


Figure 2.37. Attaching two light model drying cells to each other

NUMBER	PART	DESCRIPTION
1	136360	Drying cell bracing *
1	136678	Drying cell bracing
2	136362	Fastening plate
3		Flange nut M8, DIN6923
4		Low square bolt M8x16, DIN603

\* Shown in figure.

### 2.5.3. Assembling a heavy model drying cell

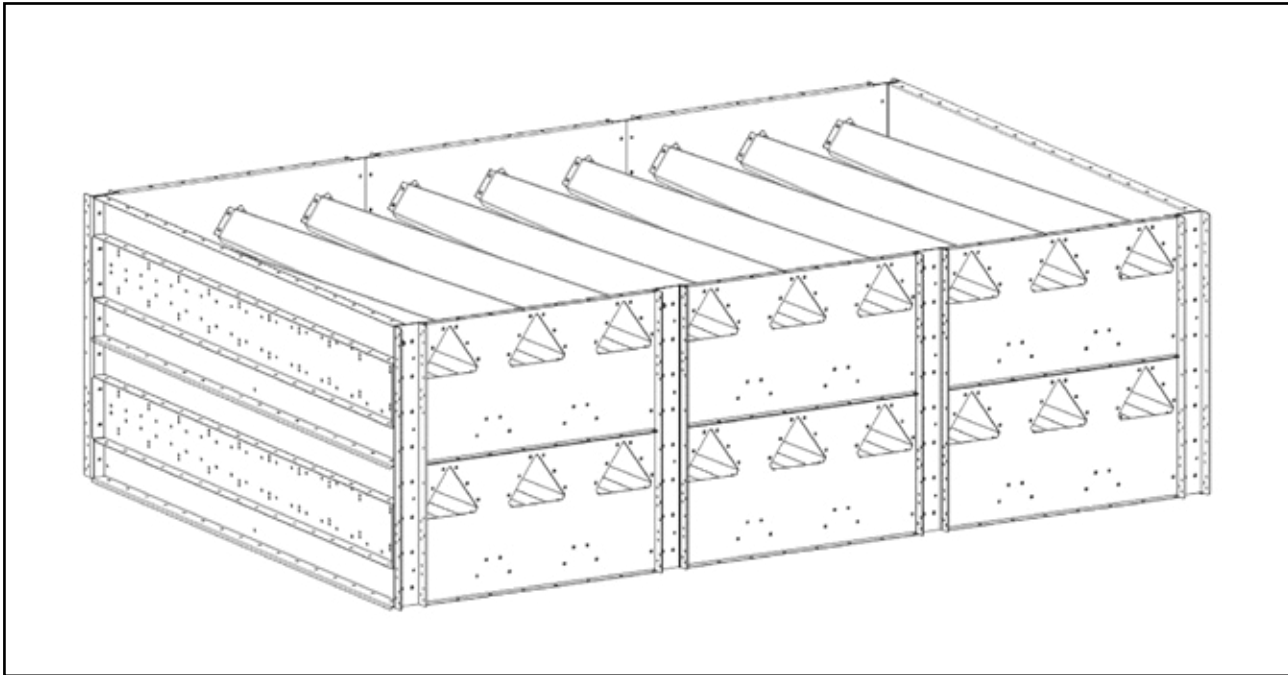


Figure 2.38. Finished heavy model drying cell

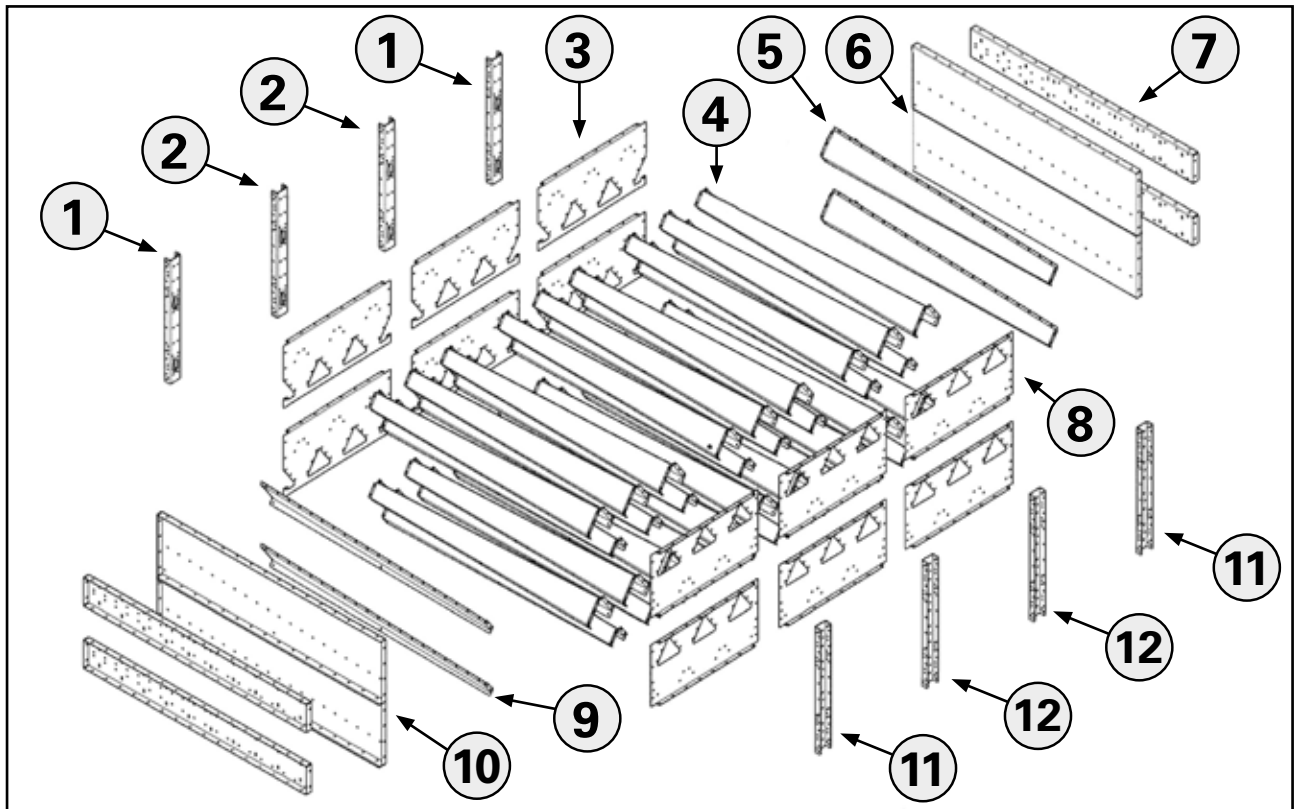


Figure 2.39. Exploded view of the heavy model drying cell

NUMBER	PART	DESCRIPTION
1	136677	Drying cell bracing
2	136678	Drying cell bracing
3	136351	Drying cell panel
4	136676	Crest plate
4	136671	Crest plate *
5	136675PK	Crest plate
5	136672PK	Crest plate *
6	136347PK	Drying cell panel
7	136457	Drying cell panel
8	136348	Drying cell panel
9	136675	Crest plate
9	136672	Crest plate *
10	136347	Drying cell panel
11	136356	Drying cell bracing
12	136360	Drying cell bracing

\* The topmost drying cell requires different crest plates. Use the crest plate noted with a \* when assembling the topmost drying cell.

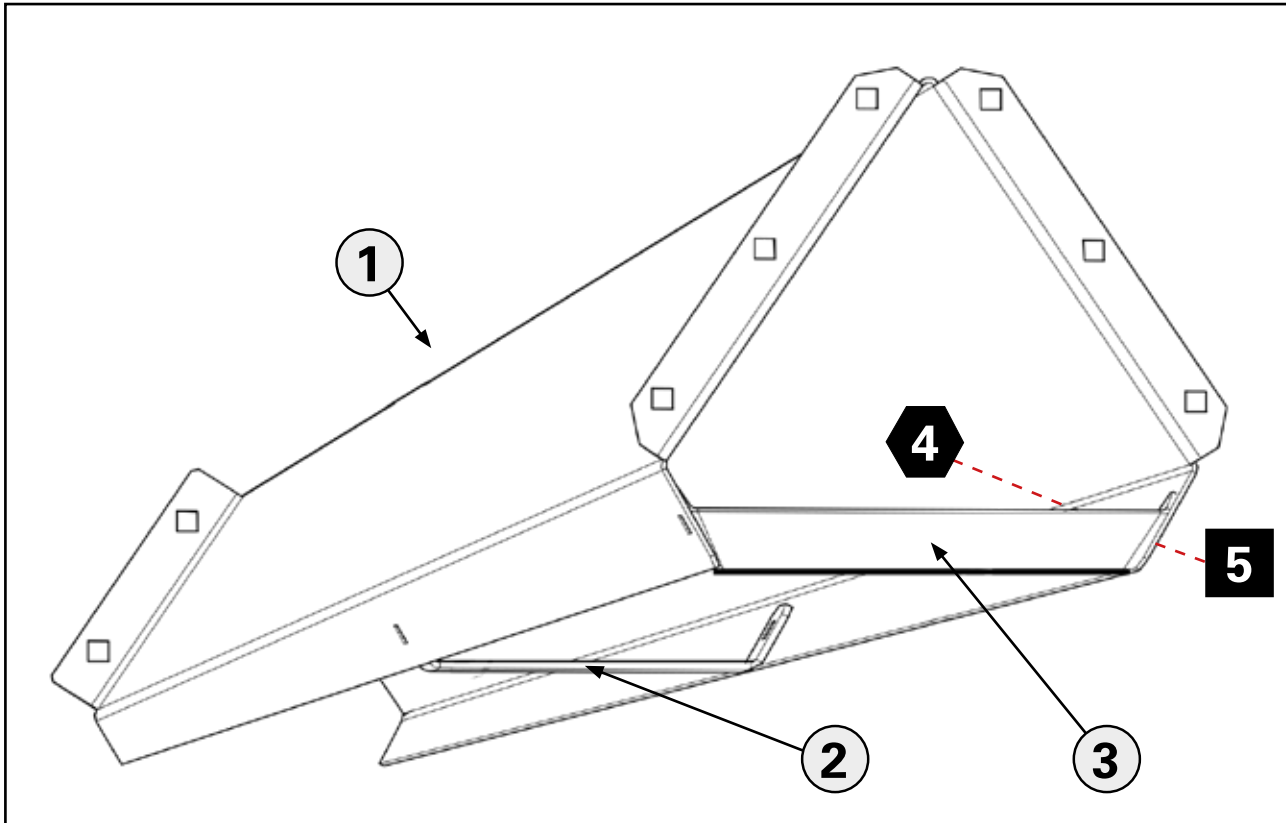


Figure 2.40. Crest plate strengtheners

NUMBER	PART	DESCRIPTION
1	136676	Crest plate
1	136671	Crest plate *
2	136771	Crest plate strengthener
3	136772	Crest plate strengthener **
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603

\* For all heavy model dryers, the topmost drying cell must be assembled using crest plate 136671.

\*\* Crest plate strengthener 136772 is assembled only to the end of the air output.

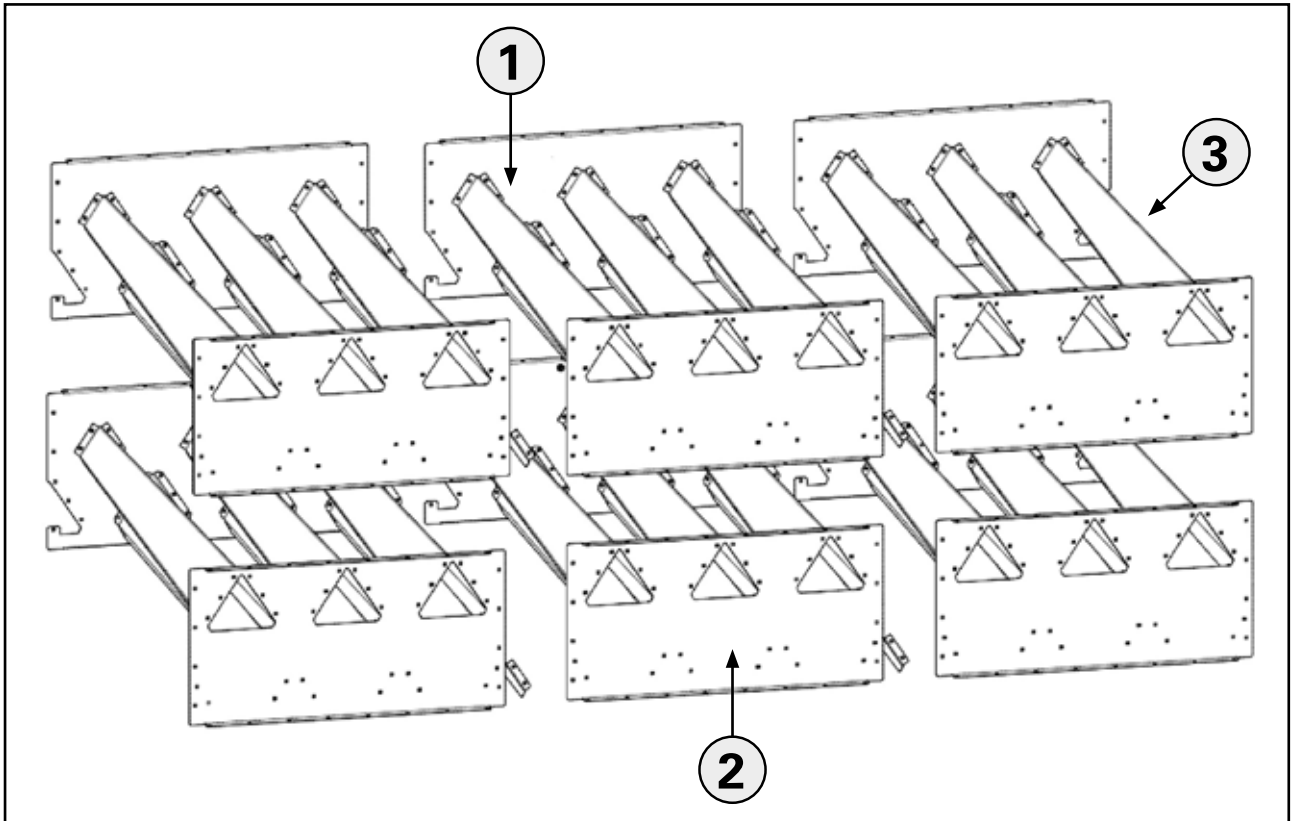


Figure 2.41. Heavy model drying cell sections

NUMBER	PART	DESCRIPTION
1	136351	Drying cell panel
2	136348	Drying cell panel
3	136676	Crest plate
3	136671	Crest plate *

\* For all heavy model dryers, the topmost drying cell must be assembled using crest plate 136671.

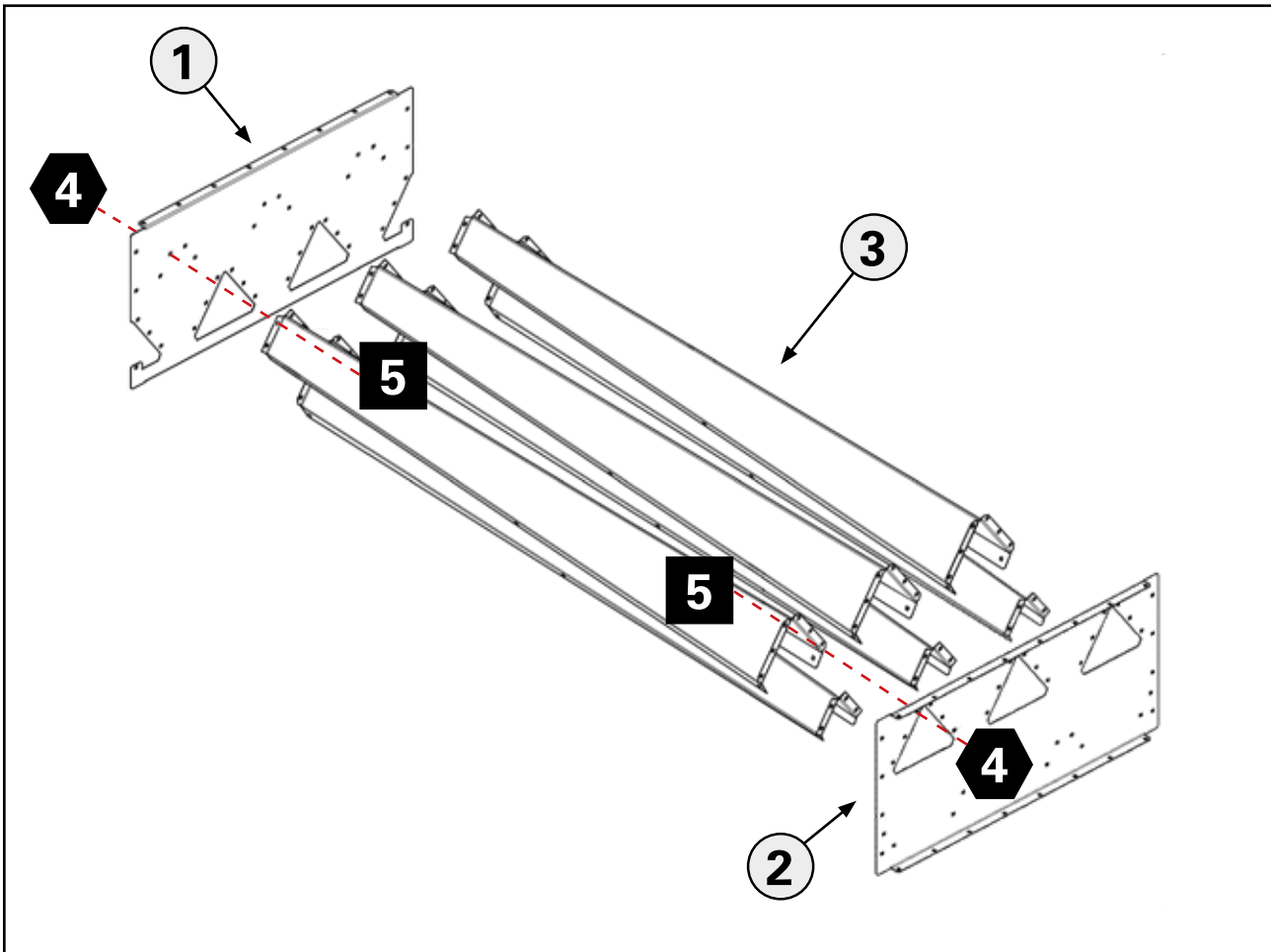


Figure 2.42. Assembling a section of the heavy model drying cell

NUMBER	PART	DESCRIPTION
1	136351	Drying cell panel
2	136348	Drying cell panel
3	136676	Crest plate
3	136671	Crest plate *
4		Flange nut M8, DIN6923
5		Low square bolt M8x16, DIN603

\* For all heavy model dryers, the topmost drying cell must be assembled using crest plate 136671.



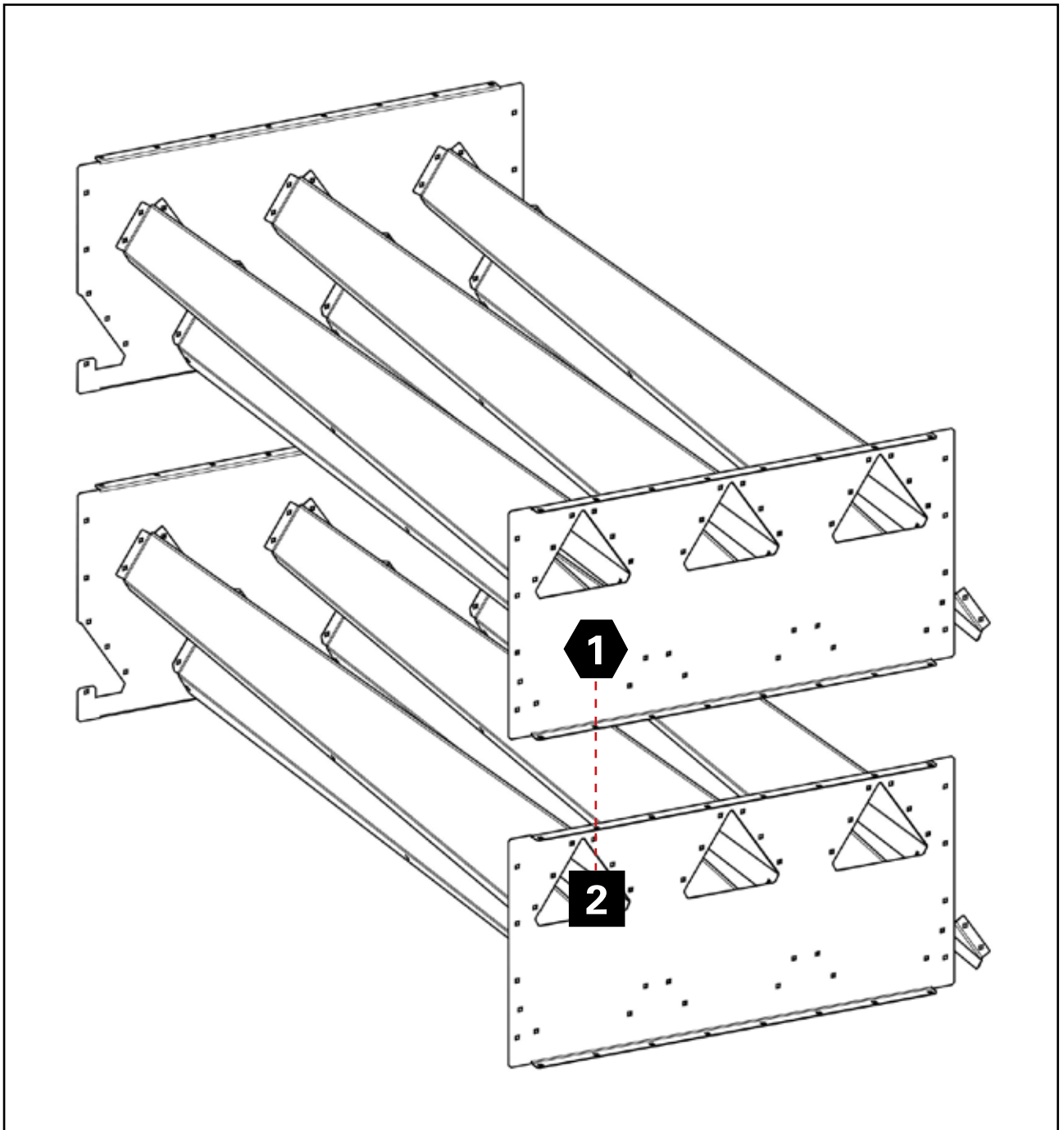


Figure 2.42. Attaching two heavy model drying cell sections to each other

NUMBER	PART	DESCRIPTION
1		Flange nut M8, DIN6923
2		Low square bolt M8x16, DIN603

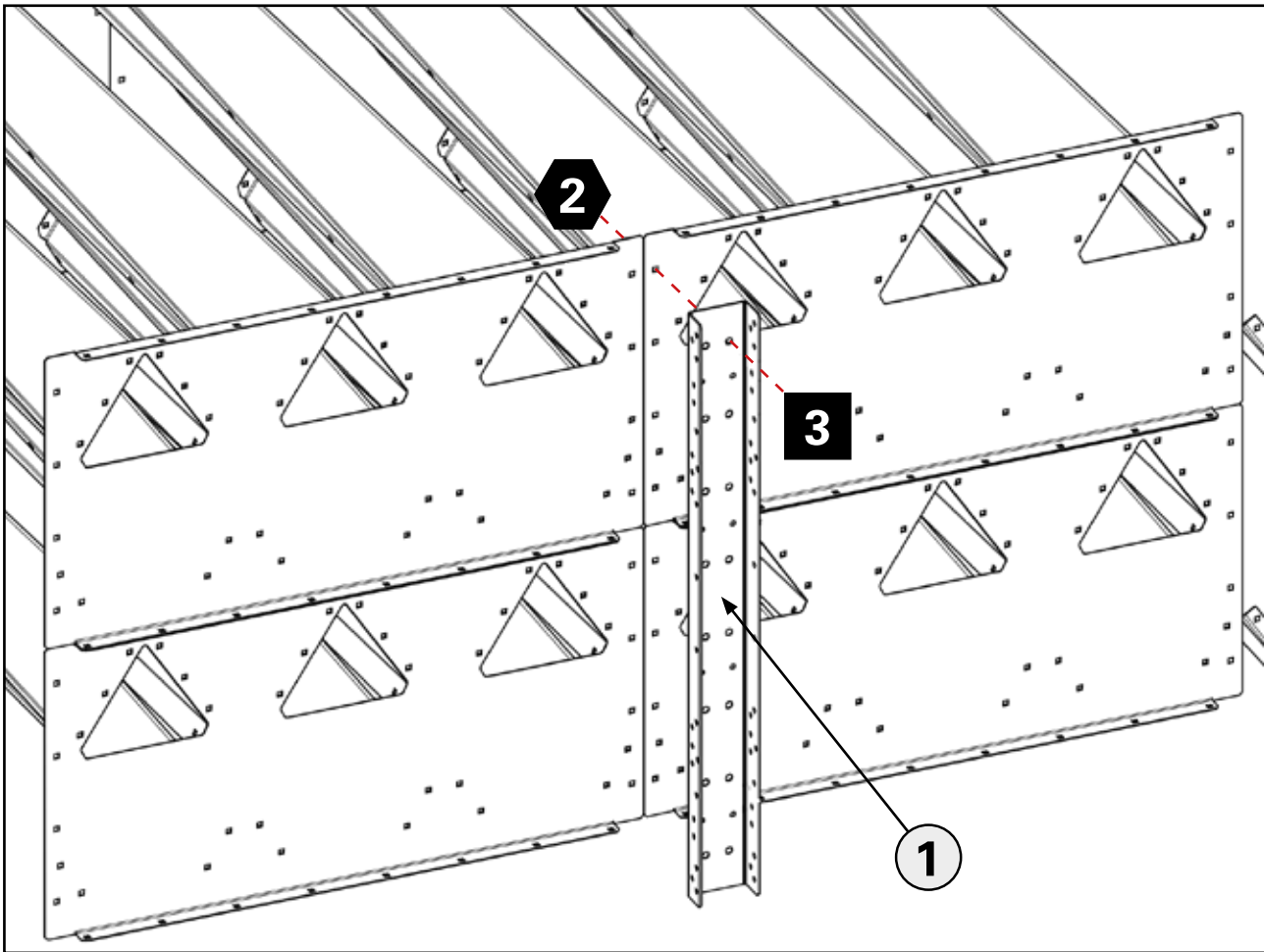
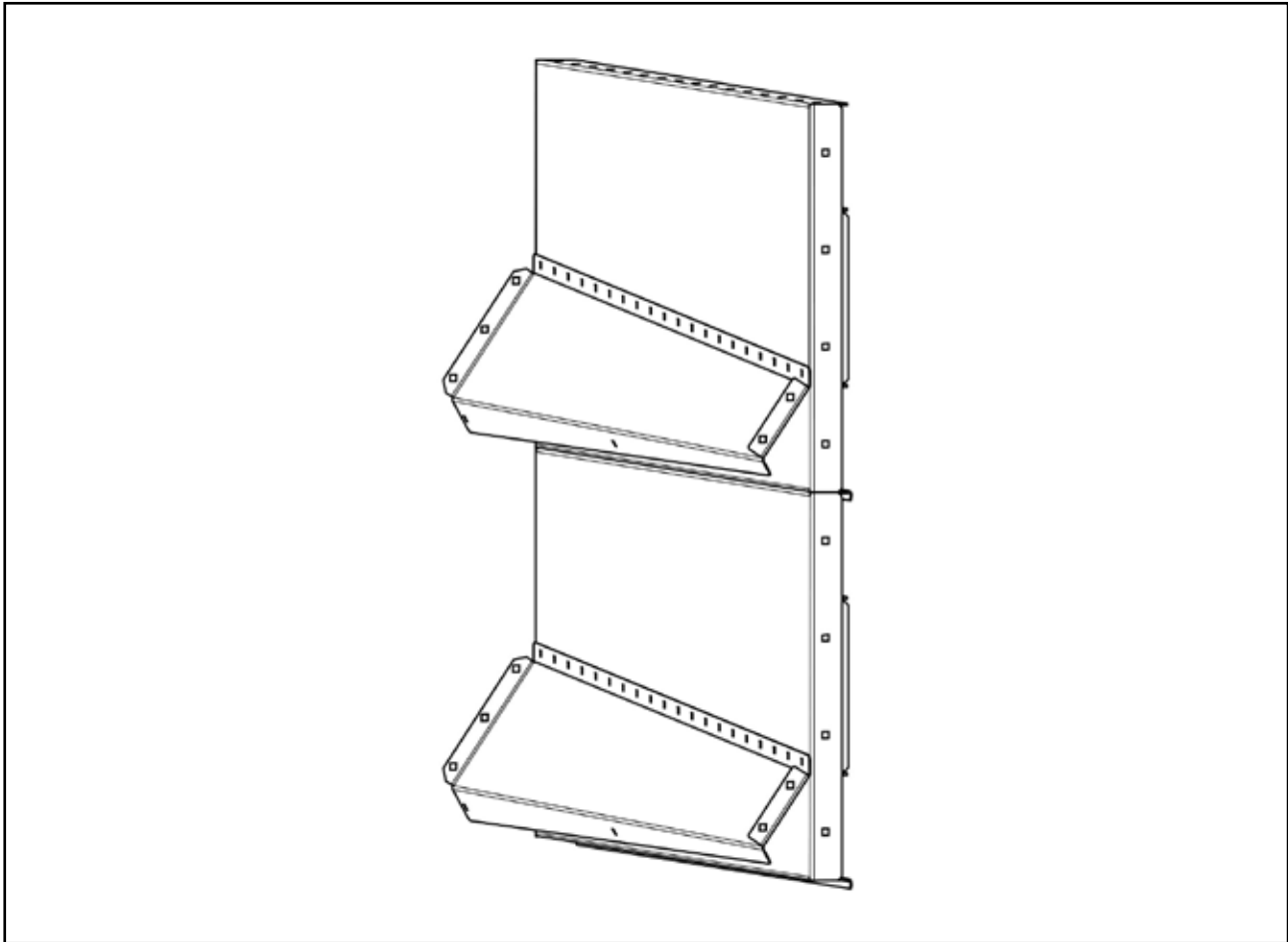


Figure 2.44. Attaching the drying cell bracing

NUMBER	PART	DESCRIPTION
1	136360	Drying cell bracing *
1	136678	Drying cell bracing
2		Flange nut M8, DIN6923
3		Low square bolt M8x16, DIN603

\* Shown in figure.





*Figure 2.45. Finished heavy model drying cell - short wall*

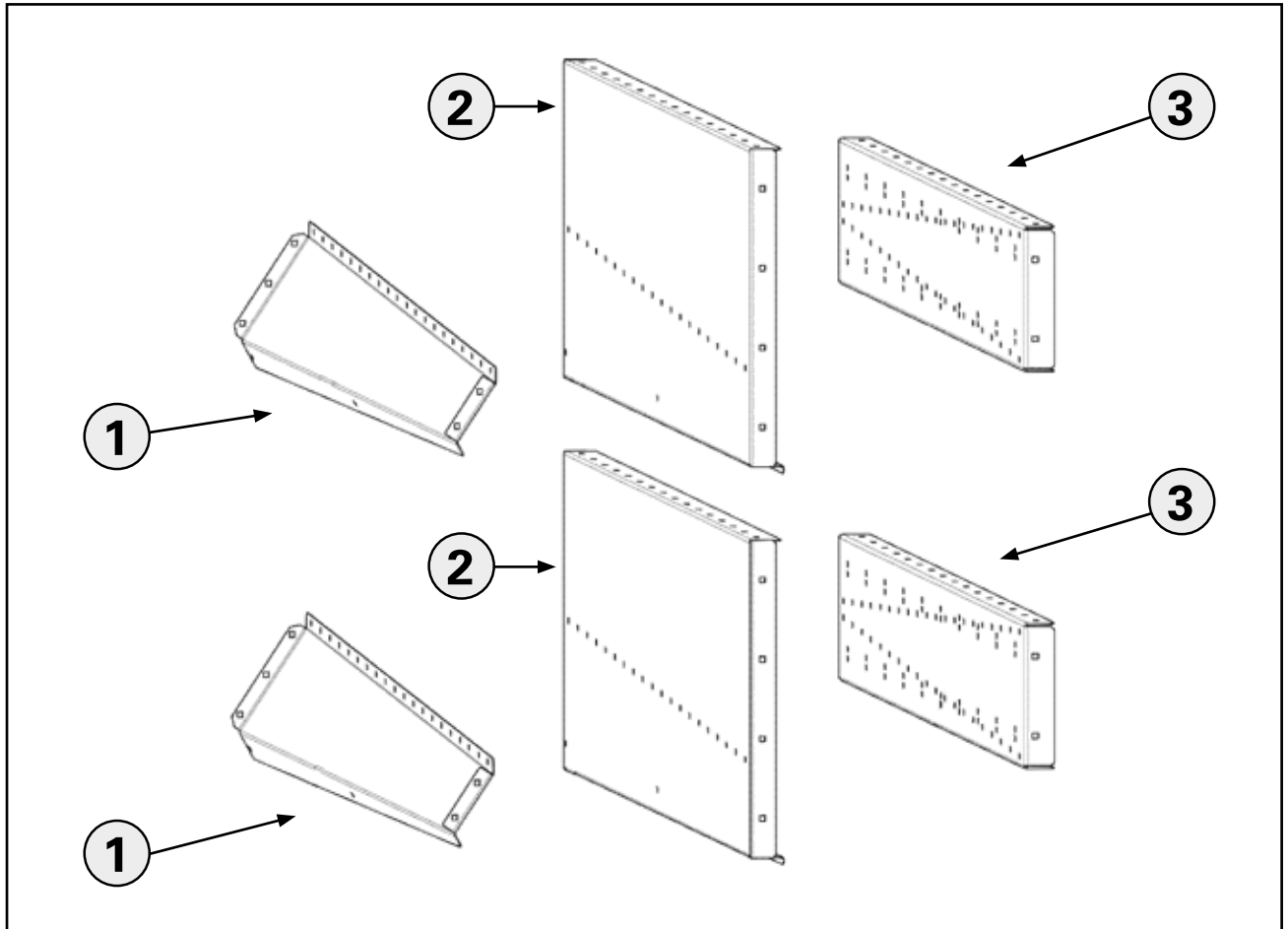


Figure 2.46. Components of the heavy model drying cell short wall

NUMBER	PART	DESCRIPTION
1	136675	Drying cell crest plate
1	136672	Drying cell crest plate *
2	136347	Drying cell panel
2	136347PK	Drying cell panel **
3	136457	Drying cell panel

\* For all heavy model dryers, the topmost drying cell must be assembled using crest plate 136672.

\*\* Shown in figure.

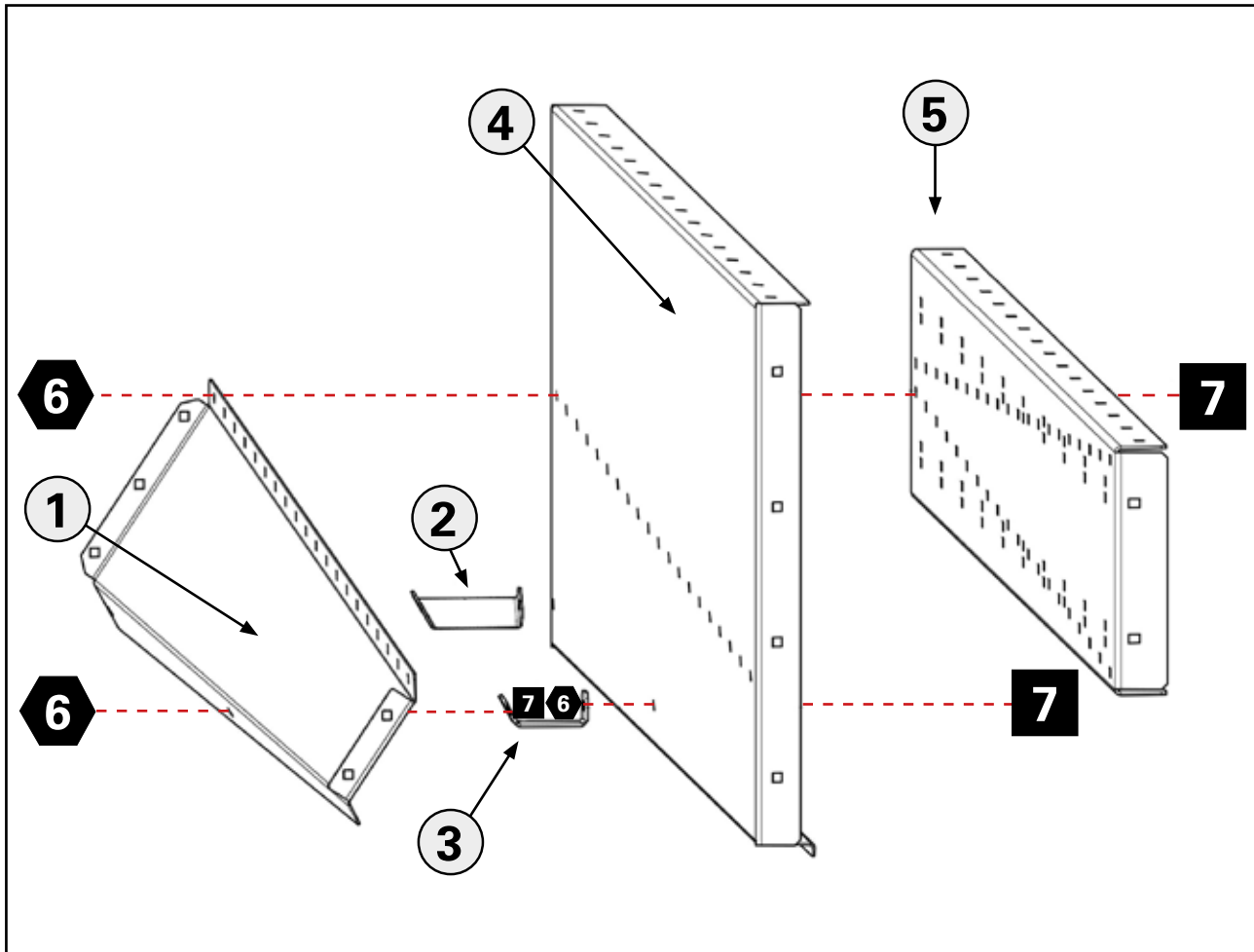


Figure 2.47. Assembling the heavy model drying cell short wall

NUMBER	PART	DESCRIPTION
1	136675	Drying cell crest plate
1	136672	Drying cell crest plate *
2	1363471	Crest plate strengthener
3	136769	Crest plate strengthener
4	136347	Drying cell panel
4	136347PK	Drying cell panel **
5	136457	Drying cell panel
6		Flange nut M8, DIN6923
7		Short square bolt M8x16, DIN603

\* For all heavy model dryers, the topmost drying cell must be assembled using crest plate 136672.

\*\* Shown in figure.

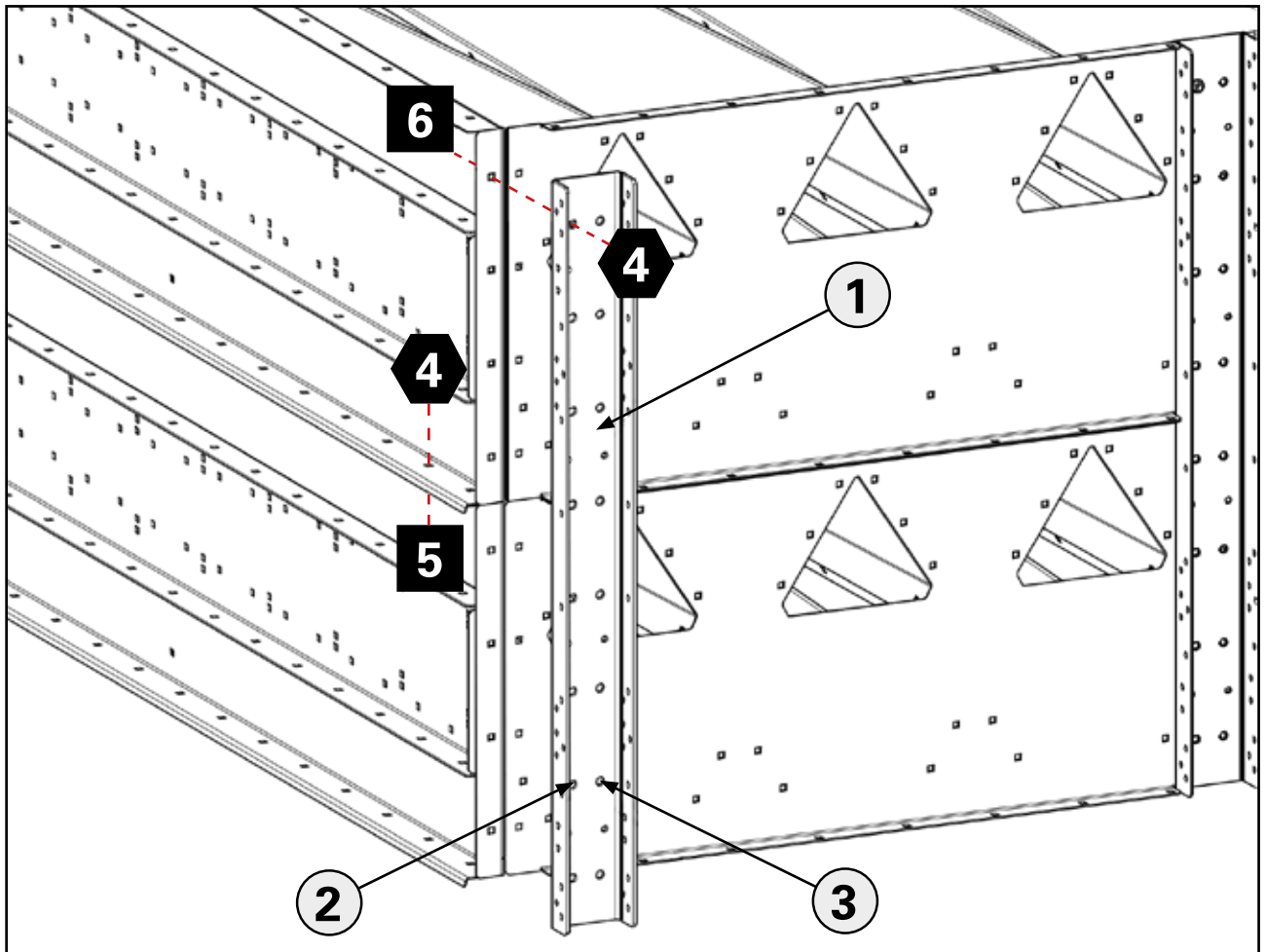


Figure 2.48. Attaching the heavy model drying cell short wall and bracing

NUMBER	PART	DESCRIPTION
1	136356	Drying cell bracing *
1	136677	Drying cell bracing
2		Short wall panel side
3		Long wall panel side
4		Flange nut M8, DIN6923
5		Short square bolt M8x16, DIN603 **
6		Short square bolt M8x20, DIN603 **

\* Shown in figure.

\*\* Two different lengths of bolts are used to attach the drying cell bracing at the corner. The M8x20 bolt is used to fasten the drying cell bracing to the short wall panels while the M8x16 is used to fasten the drying cell bracing to the long wall panel side.

### 2.5.4. Attaching two heavy model drying cells to each other

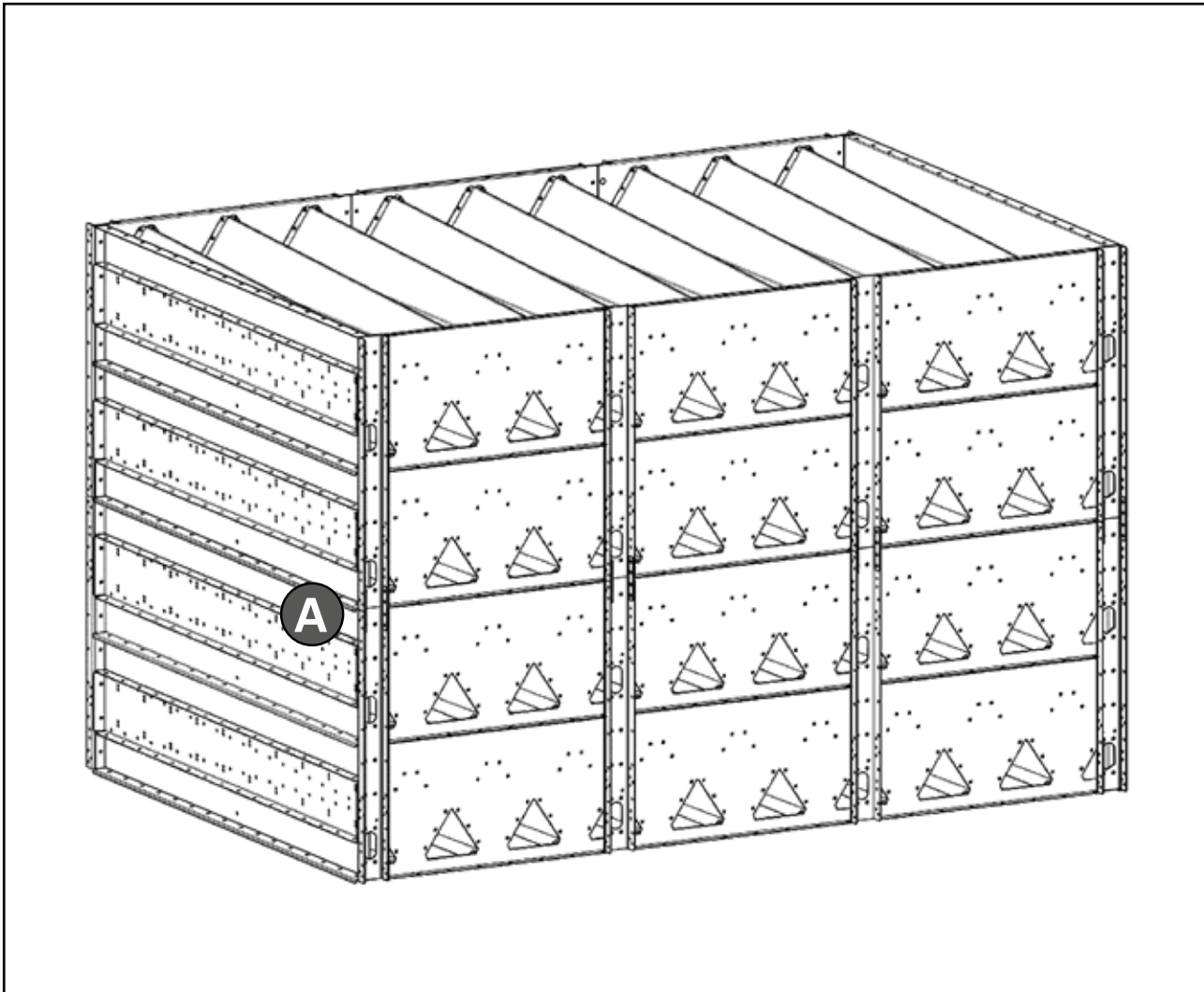


Figure 2.49. Two heavy model drying cells attached



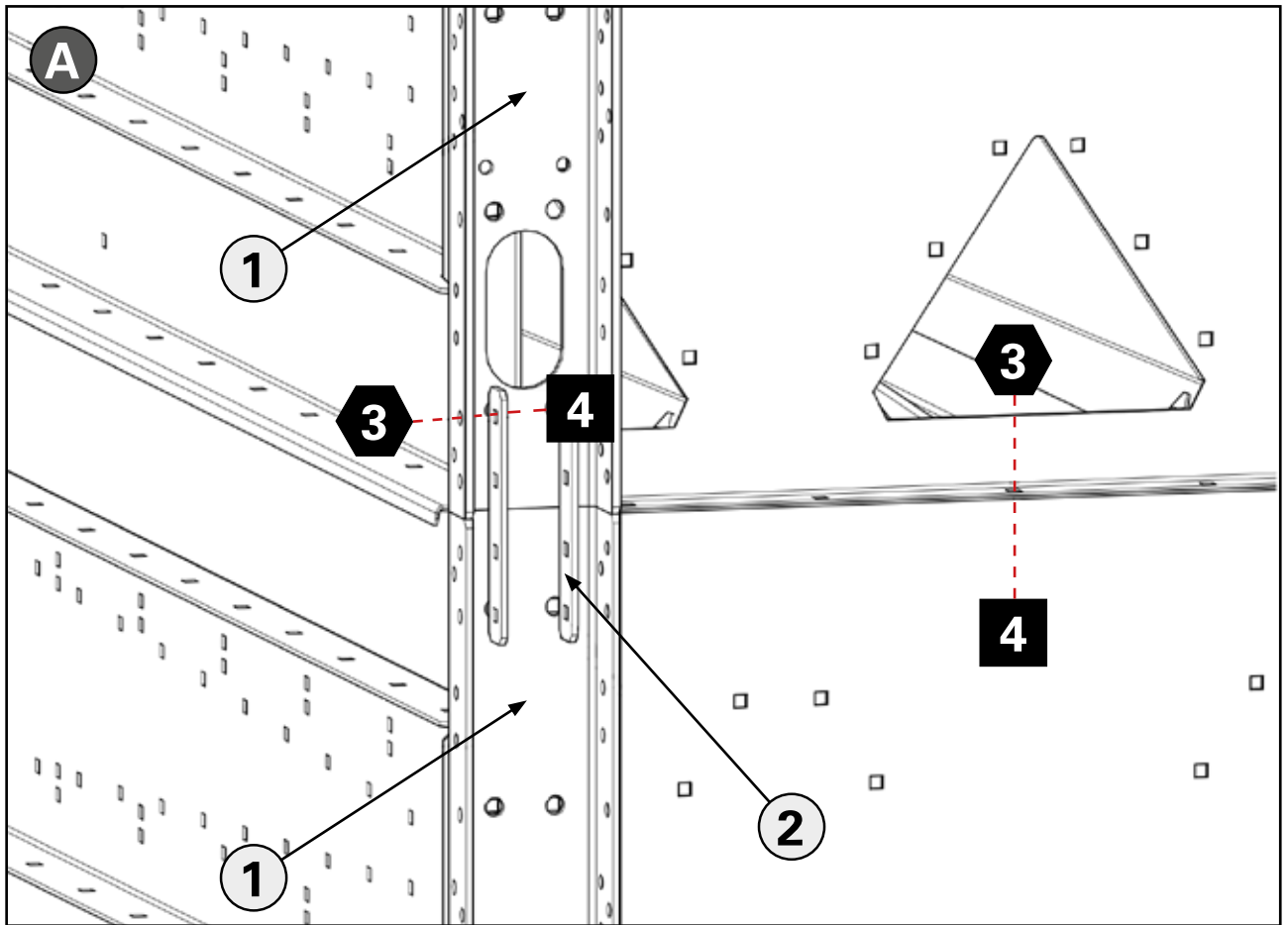


Figure 2.50. Attaching two heavy model drying cells to each other

NUMBER	PART	DESCRIPTION
1	136677	Drying cell bracing *
1	136356	Drying cell bracing
2	136362	Fastening plate
3		Flange nut M8, DIN6923
4		Short square bolt M8x16, DIN603 **

\* Shown in figure.

## 2.5.5. Attaching the air casing to the drying cell

Note! Silicone is applied to various flanges and joints of the air casing. The location of the silicone is noted in this section.

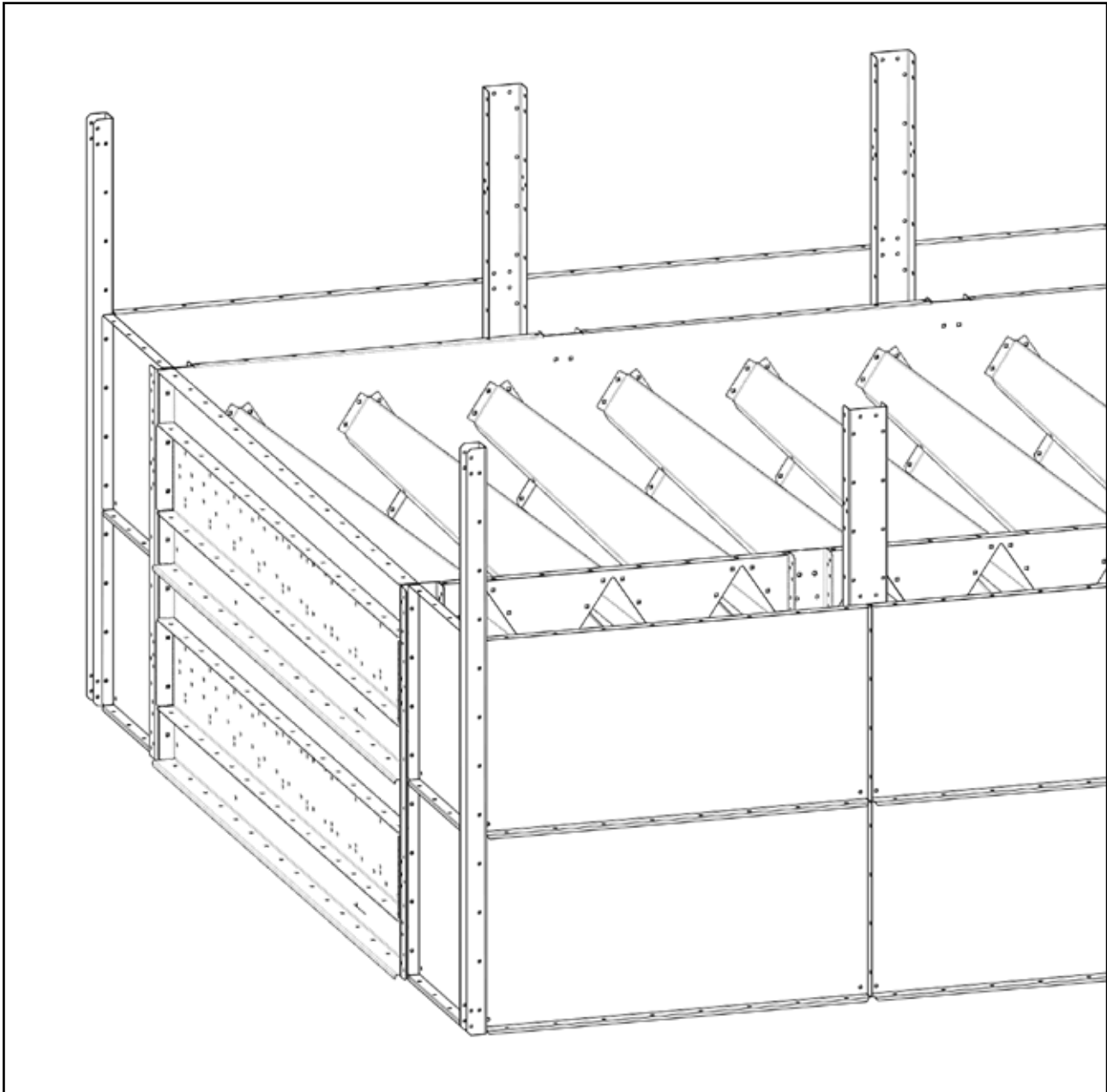


Figure 2.51. Drying cell with air casing attached

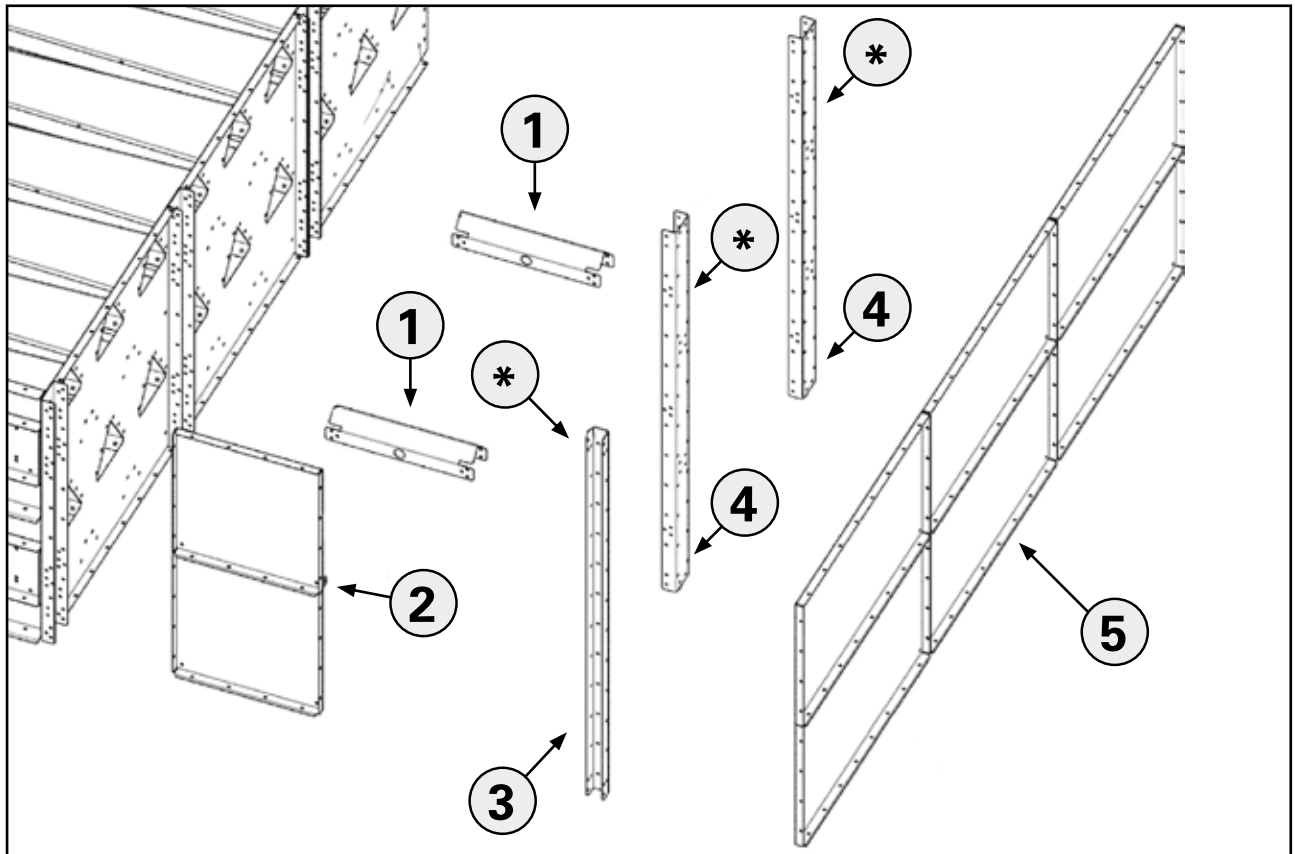


Figure 2.52. Exploded view of the air casing

\* The air casing bracing varies in length. Refer to your arrangement drawing to determine which bracing is required for assembly. All bracing part numbers are provided in the material tables of this section.

Note! Figure 2.52. depicts the parts required to assemble the small air casing. In some cases, different supports and panels are required to assemble a large air casing. The different supports and panels are identified in the table below. The method of assembling both small and large air casings is identical.

### Small air casing materials

NUMBER	PART	DESCRIPTION
1	136492	Air casing support
2	136391	Air casing panel
3	136393	Air casing bracing **
3	136395	Air casing bracing
4	136363	Air casing bracing **
4	136364	Air casing bracing
5	136391	Air casing panel

\*\* Shown in figure.

### Large air casing materials

NUMBER	PART	DESCRIPTION
1	136370	Air casing support
2	136931	Air casing panel

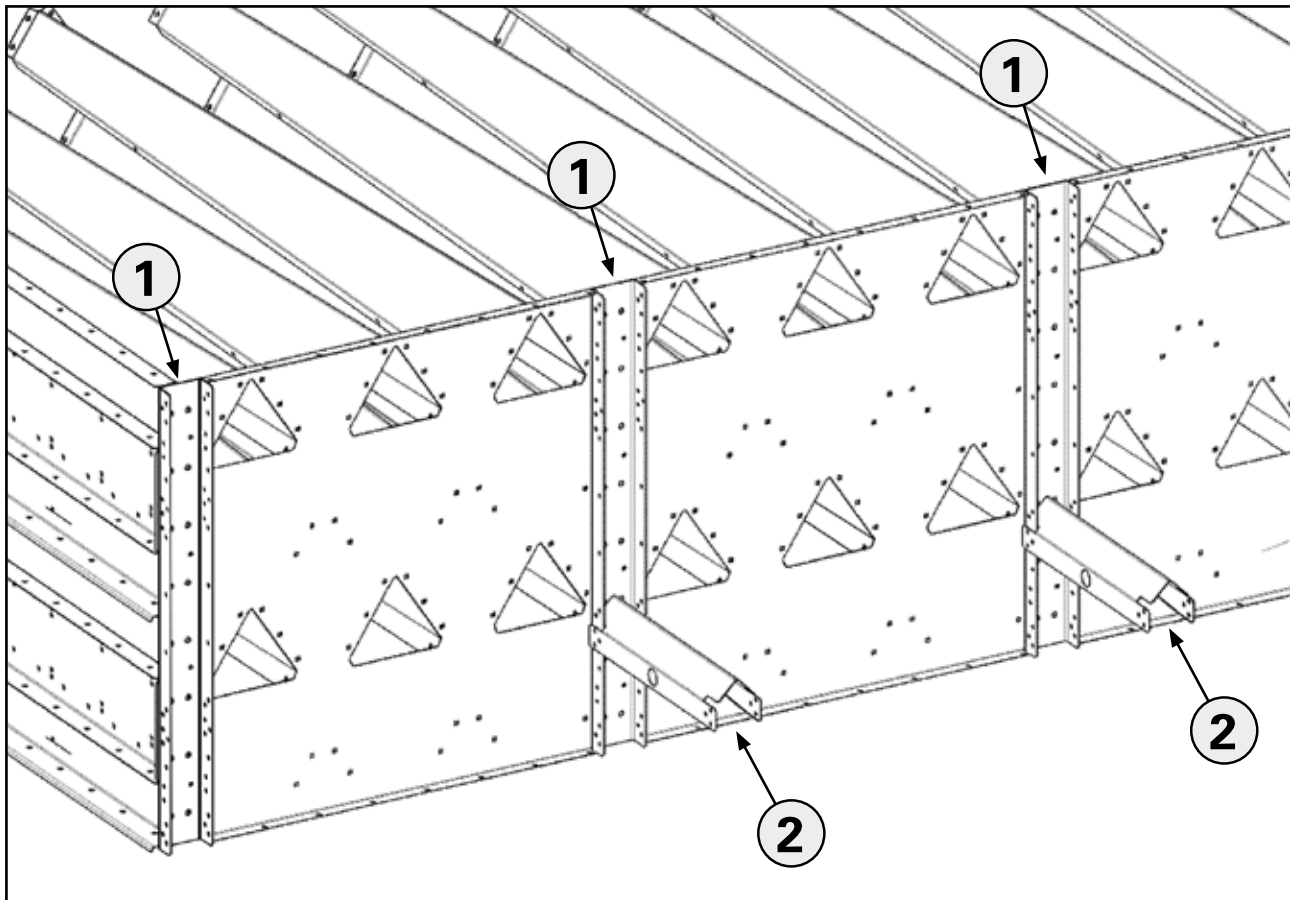


Figure 2.53. Placing the air casing supports on the drying cell bracing

NUMBER	PART	DESCRIPTION
1		Drying cell bracing *
2	136492	Air casing support **
2	136370	Air casing support

\* The bracing part number varies depending on the drying cell. For instructions on assembling the drying cells see section 2.5.1. on page 50 (light model drying cell) and section 2.5.3. on page 60 (heavy model drying cell).

\*\* Shown in figure.

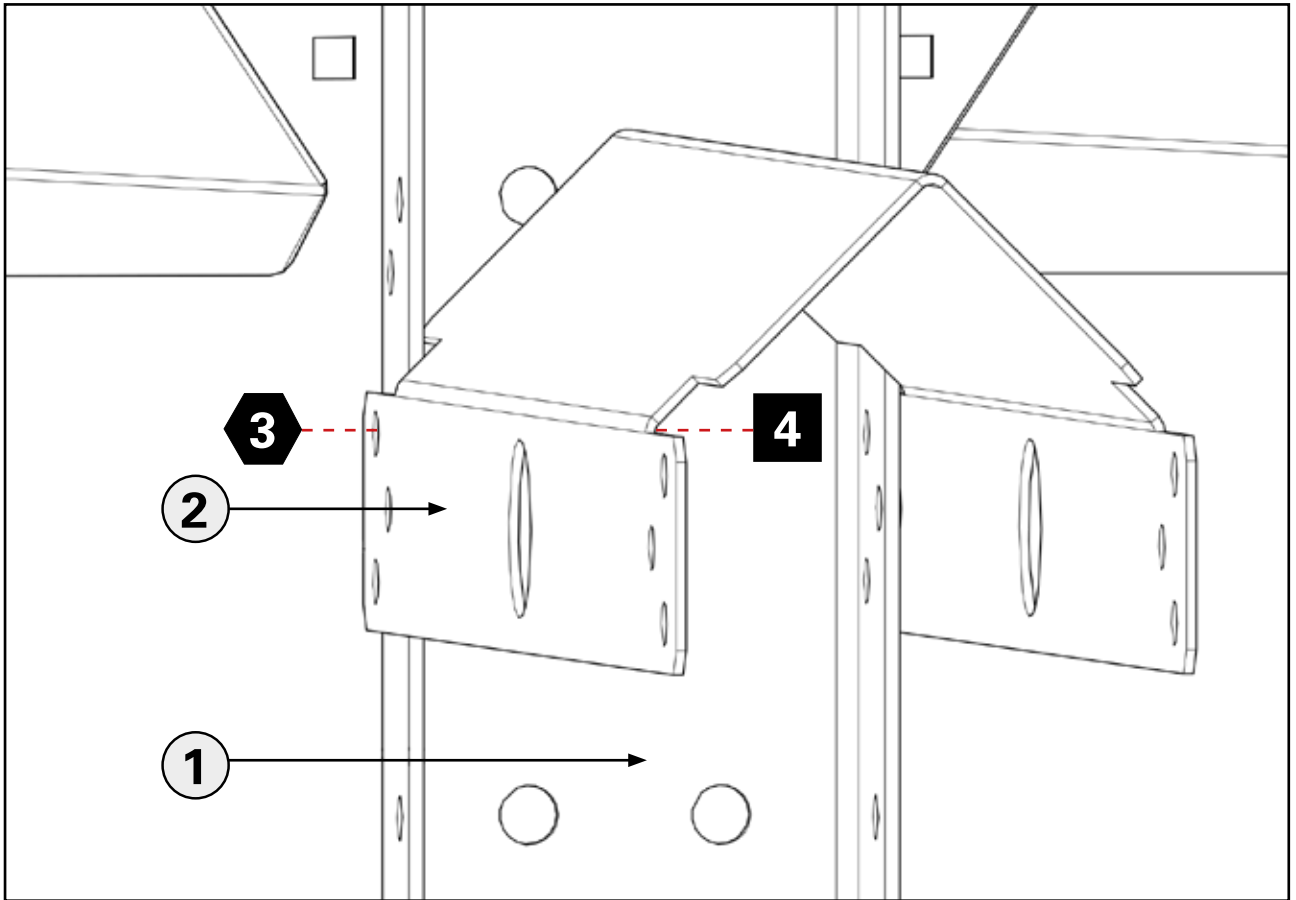


Figure 2.54. Fastening the air casing support to the drying cell bracing

NUMBER	PART	DESCRIPTION
1		Drying cell bracing *
2	136492	Air casing support **
2	136370	Air casing support
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* The bracing part number varies depending on the drying cell. For instructions on assembling the drying cells see section 2.5.1. on page 50 (light model drying cell) and section 2.5.3. on page 60 (heavy model drying cell).

\*\* Shown in figure.

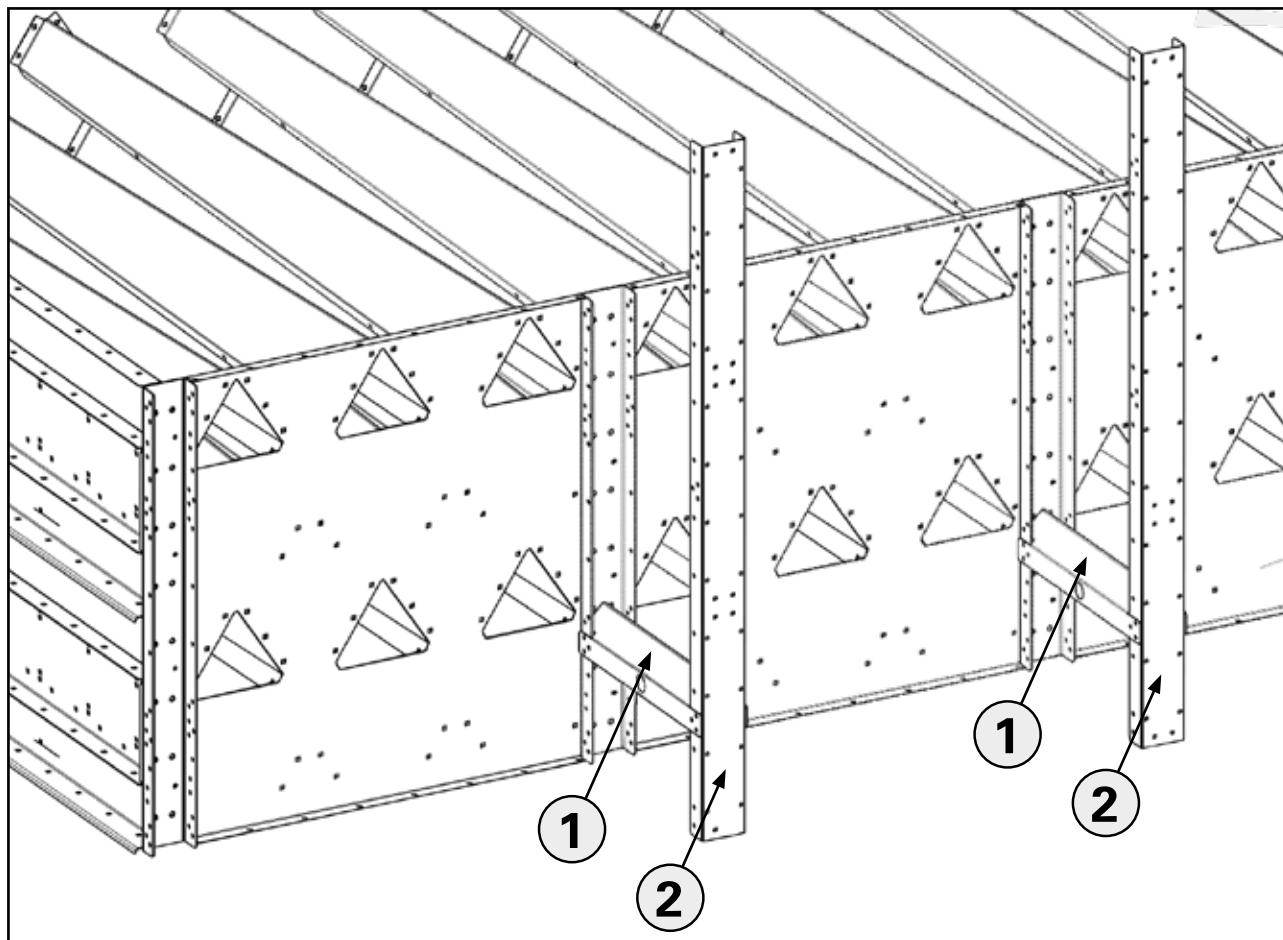


Figure 2.55. Placing the air casing bracing

NUMBER	PART	DESCRIPTION
1	136492	Air casing support *
1	136370	Air casing support
2	136363	Air casing bracing *
2	136364	Air casing bracing

\* Shown in figure.

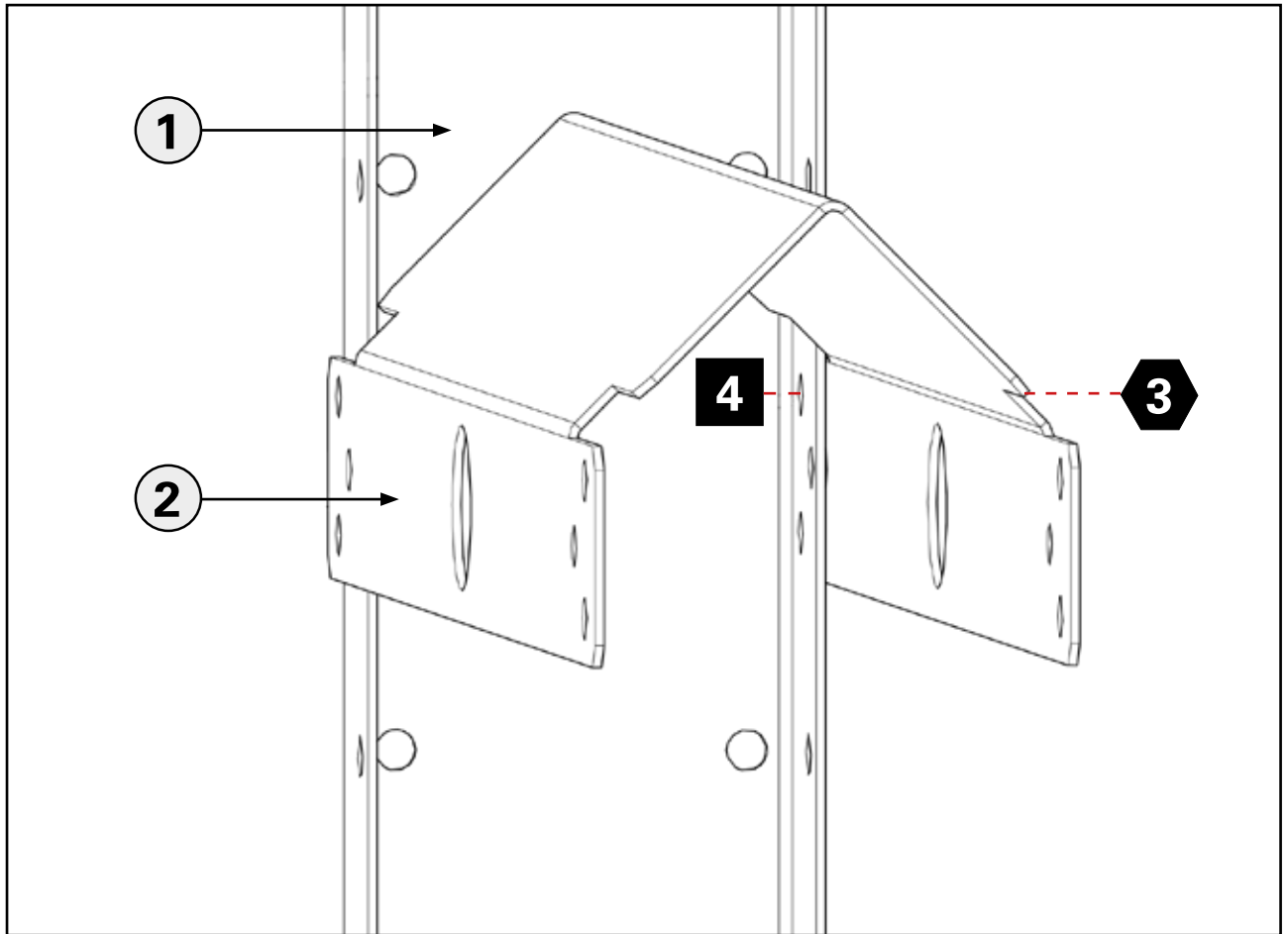


Figure 2.56. Fastening the air casing bracing to the air casing support

NUMBER	PART	DESCRIPTION
1	136363	Air casing bracing *
1	136364	Air casing bracing
2	136492	Air casing support *
2	136370	Air casing support
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Shown in figure.

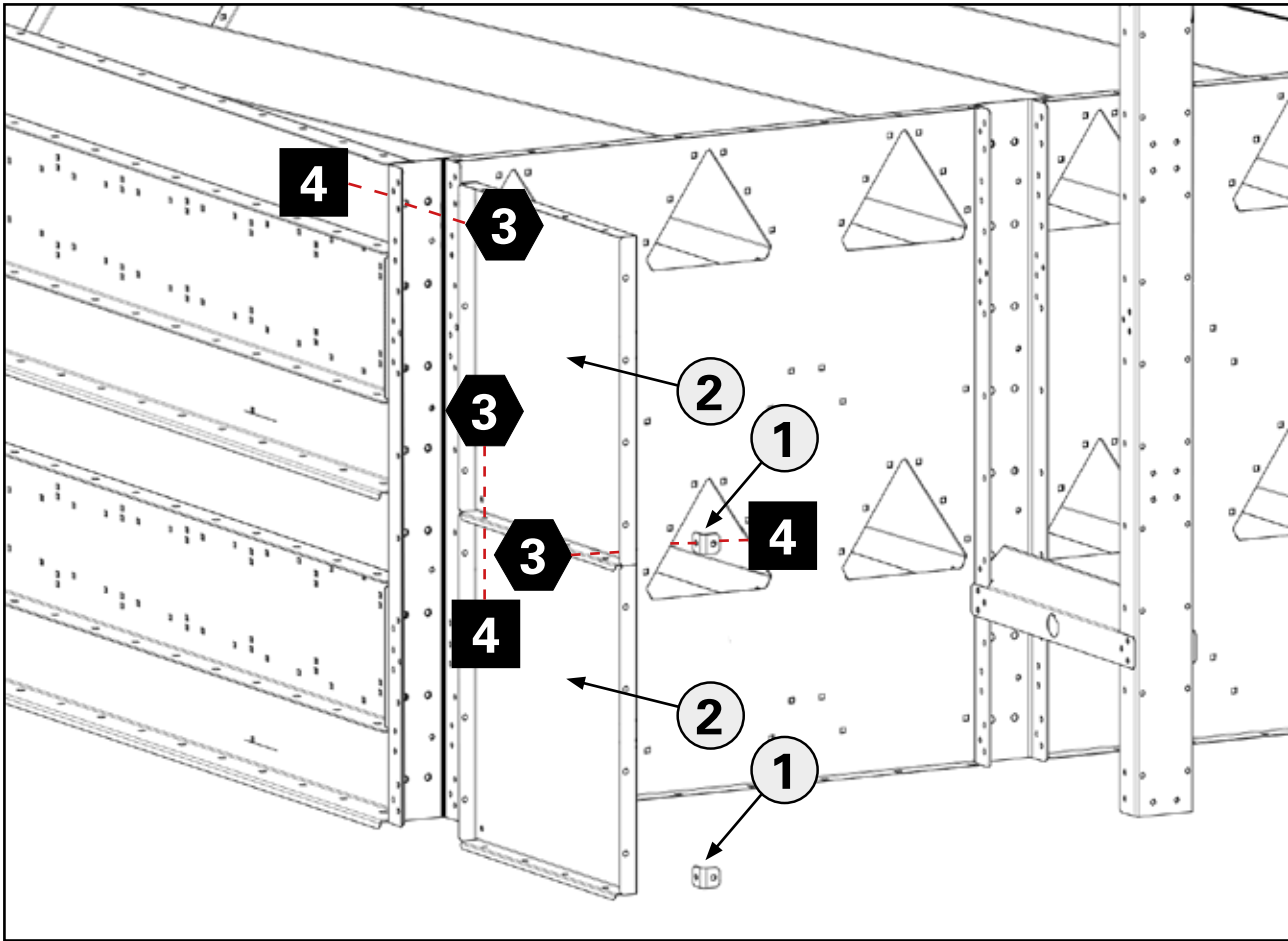


Figure 2.57. Attaching the air casing panels and brackets

NUMBER	PART	DESCRIPTION
1	136392	Bracket
2	136441	Air casing panel * / **
2	136931	Air casing panel
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Silicone must be applied on the flanges between the air casing panels (136441) and on the connection between the air casing panels and the drying cell bracing.

\*\* Shown in figure.



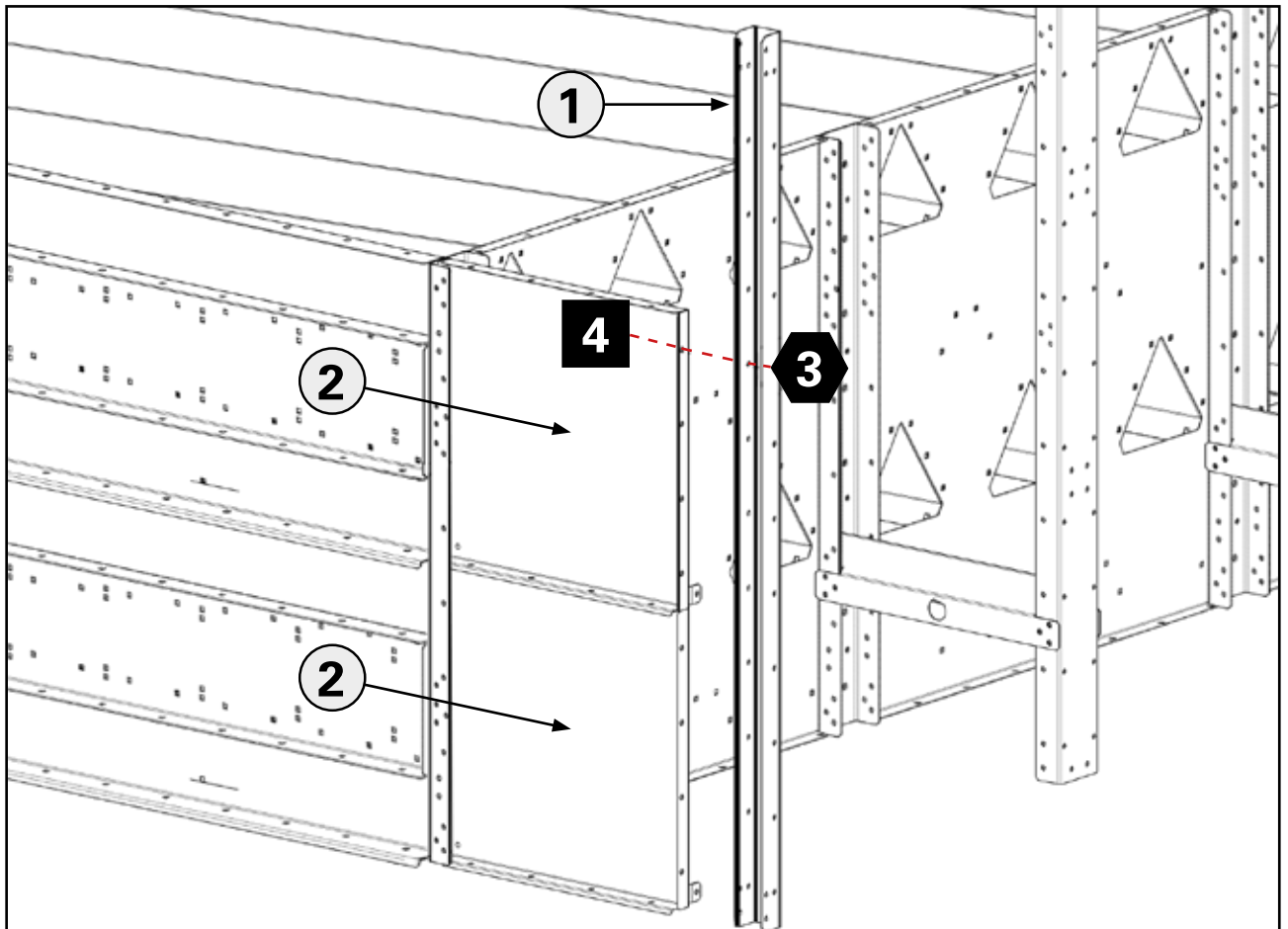


Figure 2.58. Attaching the corner bracing

NUMBER	PART	DESCRIPTION
1	136393	Air casing bracing * / **
1	136395	Air casing bracing **
2	136441	Air casing panel * / **
2	136931	Air casing panel **
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Shown in figure.

\*\* Silicone must be applied between the air casing bracing and the air casing panels.

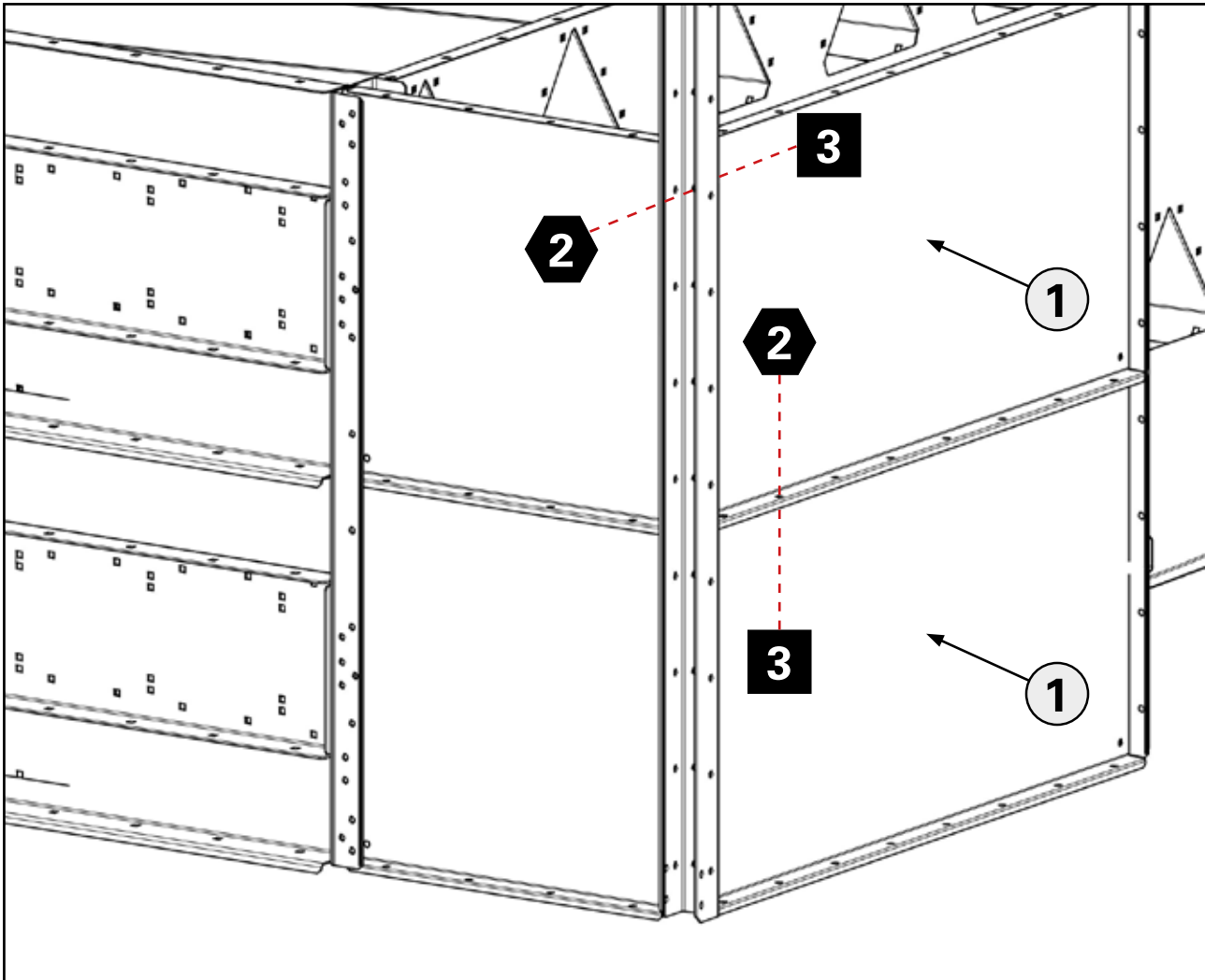


Figure 2.59. Attaching the air casing panels

NUMBER	PART	DESCRIPTION
1	136391	Air casing panel *
2		Flange nut M8, DIN6923
3		Hex flange bolt M8x16, DIN6921

\* Silicone must be applied between the air casing panels.

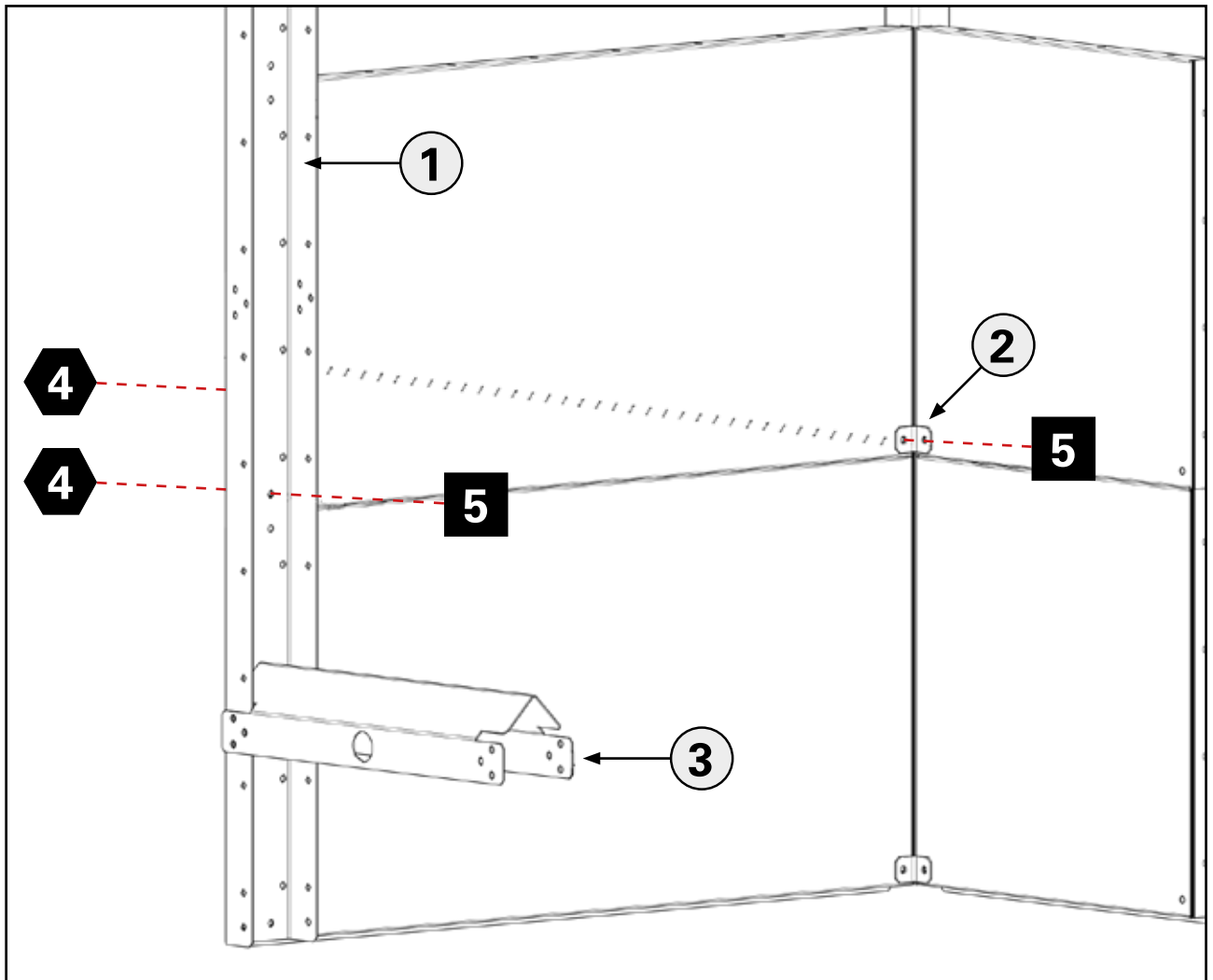


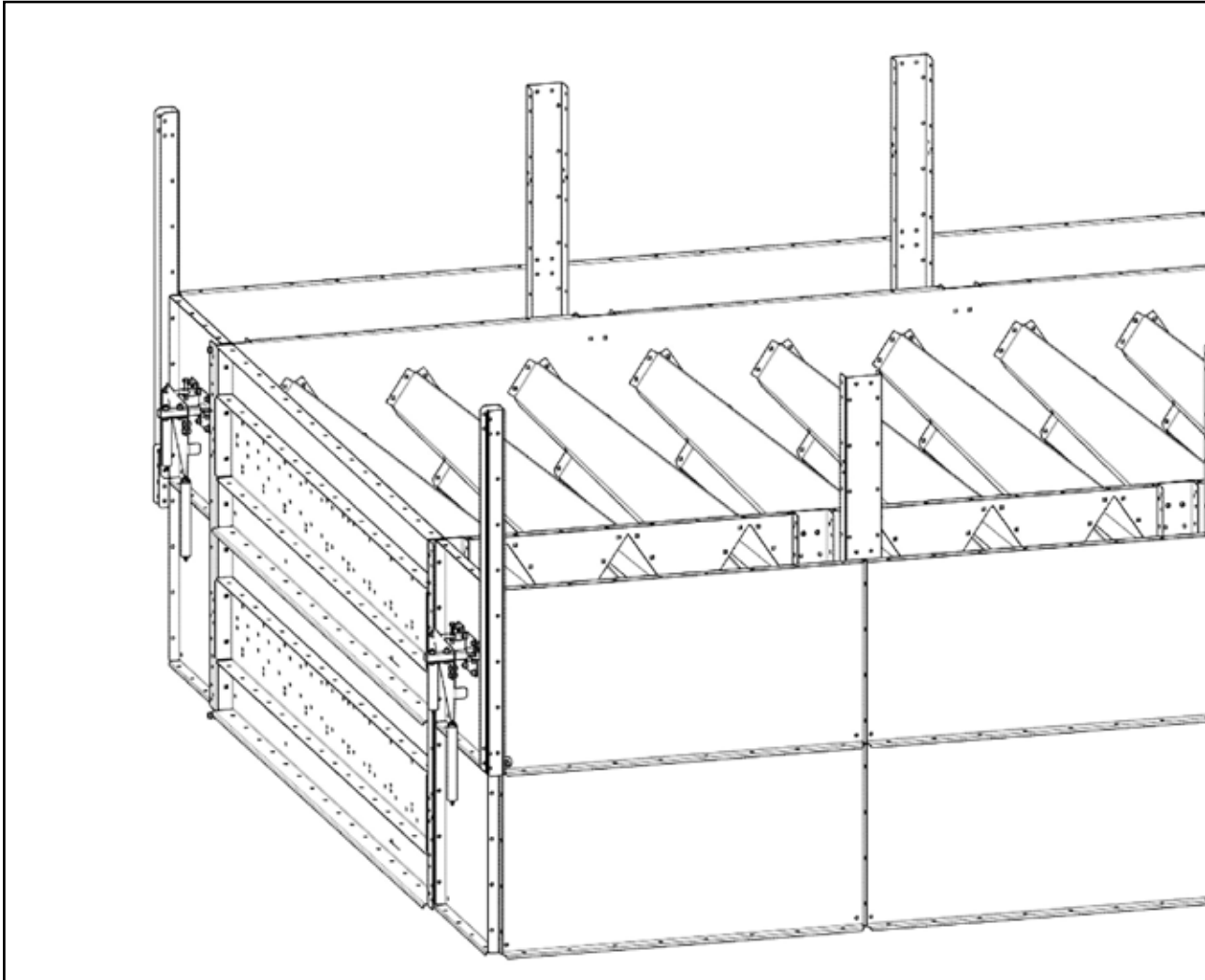
Figure 2.60. Attaching the air casing panels (reverse angle)

NUMBER	PART	DESCRIPTION
1	136363	Air casing bracing *
1	136364	Air casing bracing
2	136392	Bracket
3	136492	Air casing support
4		Flange nut M8, DIN6923
5		Hex flange bolt M8x16, DIN6921

\* Shown in figure.

## 2.5.6. Attaching the half batch section to the air casing

Note! Silicone is applied to various flanges and joints of the half batch assembly. The location of the silicone is noted in this section.



*Figure 2.61. Drying cell with finished air casing and half batch section*

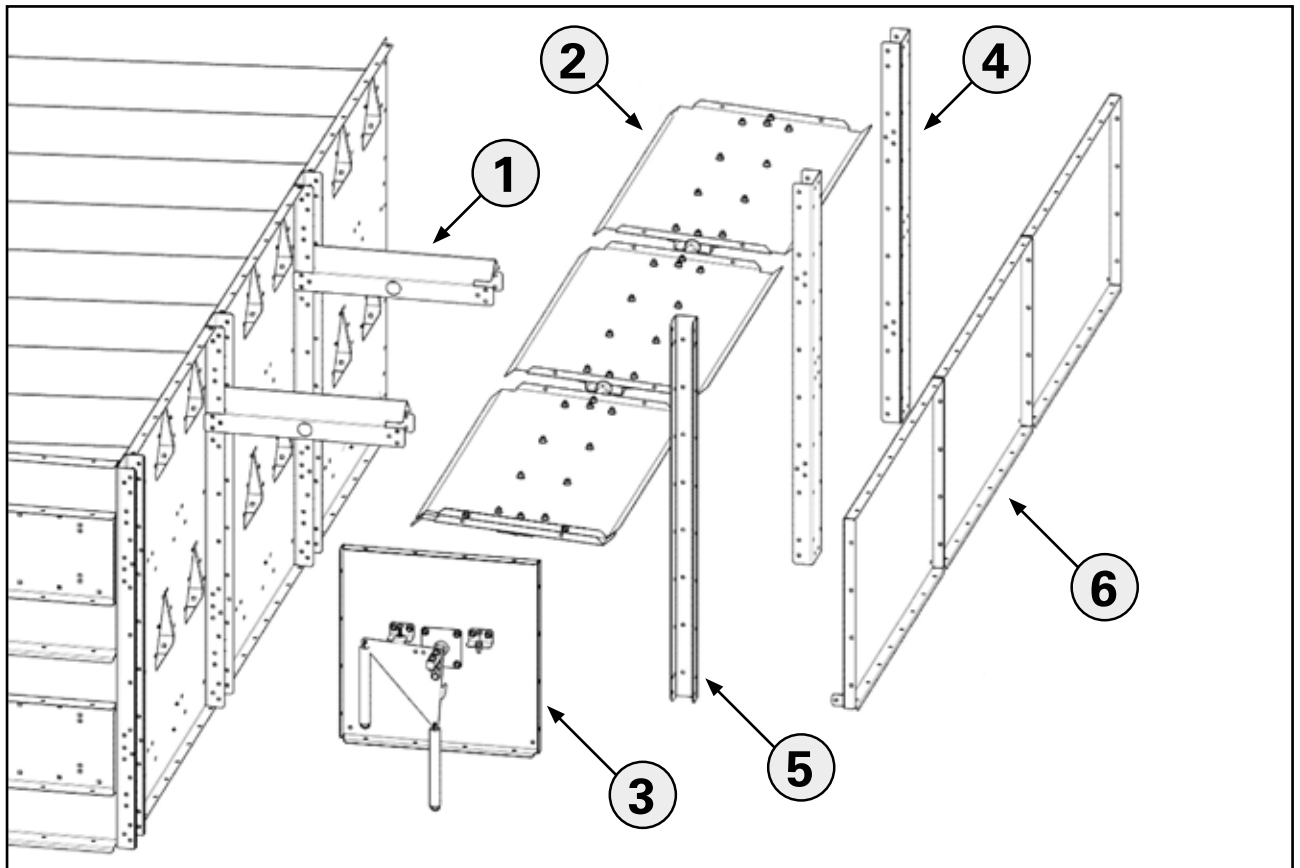


Figure 2.62. Exploded view of half batch section assembly

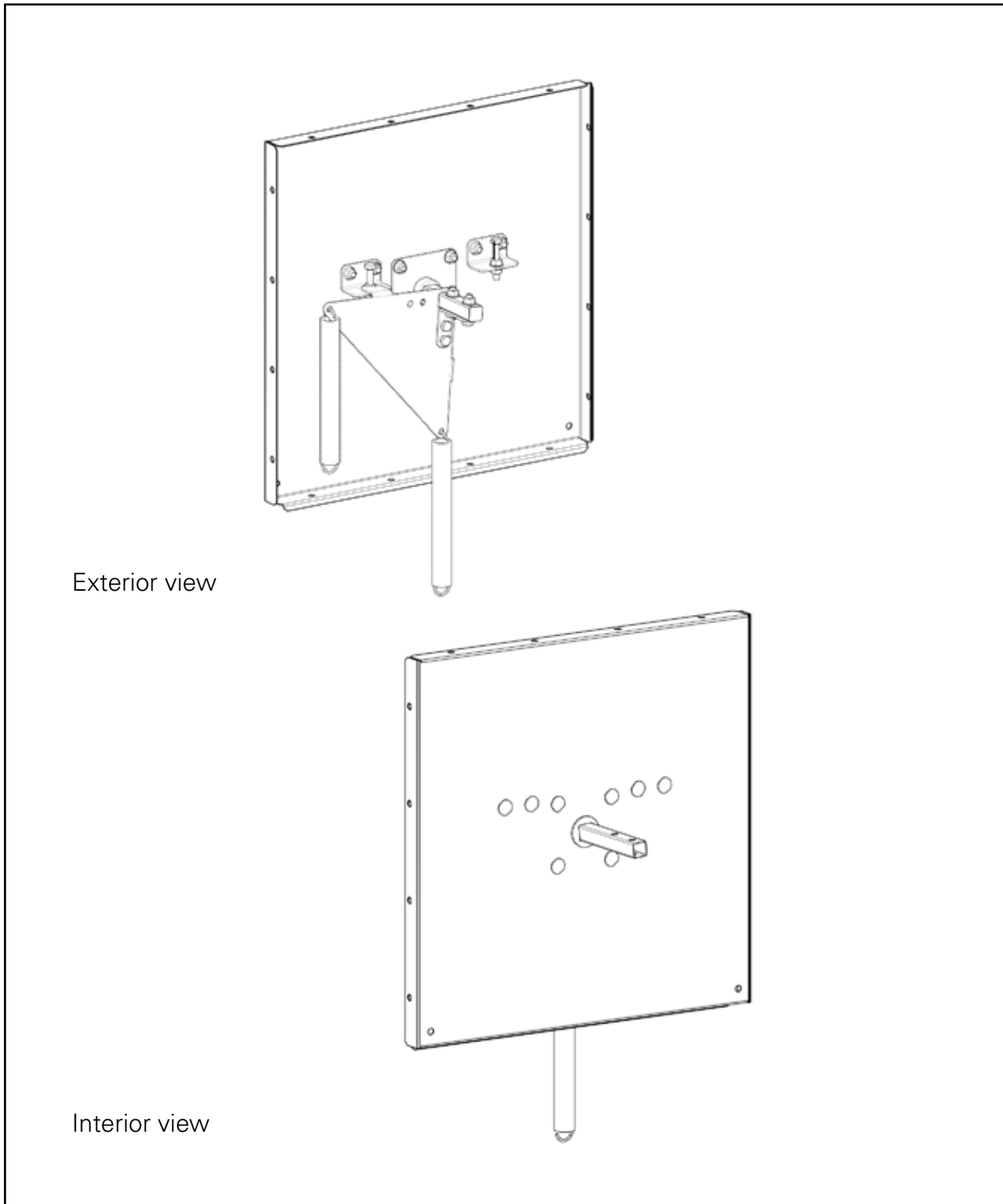
Note! Figure 2.62 depicts the parts required to assemble the small half batch assembly. In some cases, different supports and panels are required to assemble a large half batch assembly. The different supports and panels are identified in the table below. The method of assembling both small and large half batch assemblies is identical.

### Small half batch section materials

NUMBER	PART	DESCRIPTION
1	136492	Air casing support
2	137317	Half batch air flow panel
3	137320	Half batch side panel
4	136364	Air casing bracing
5	136395	Air casing bracing
6	136391	Air casing panel

### Large half batch section materials

NUMBER	PART	DESCRIPTION
1	136370	Air casing support
2	138130	Half batch air flow panel
3	138129	Half batch side panel



*Figure 2.63. Two views of the half batch section side panel*

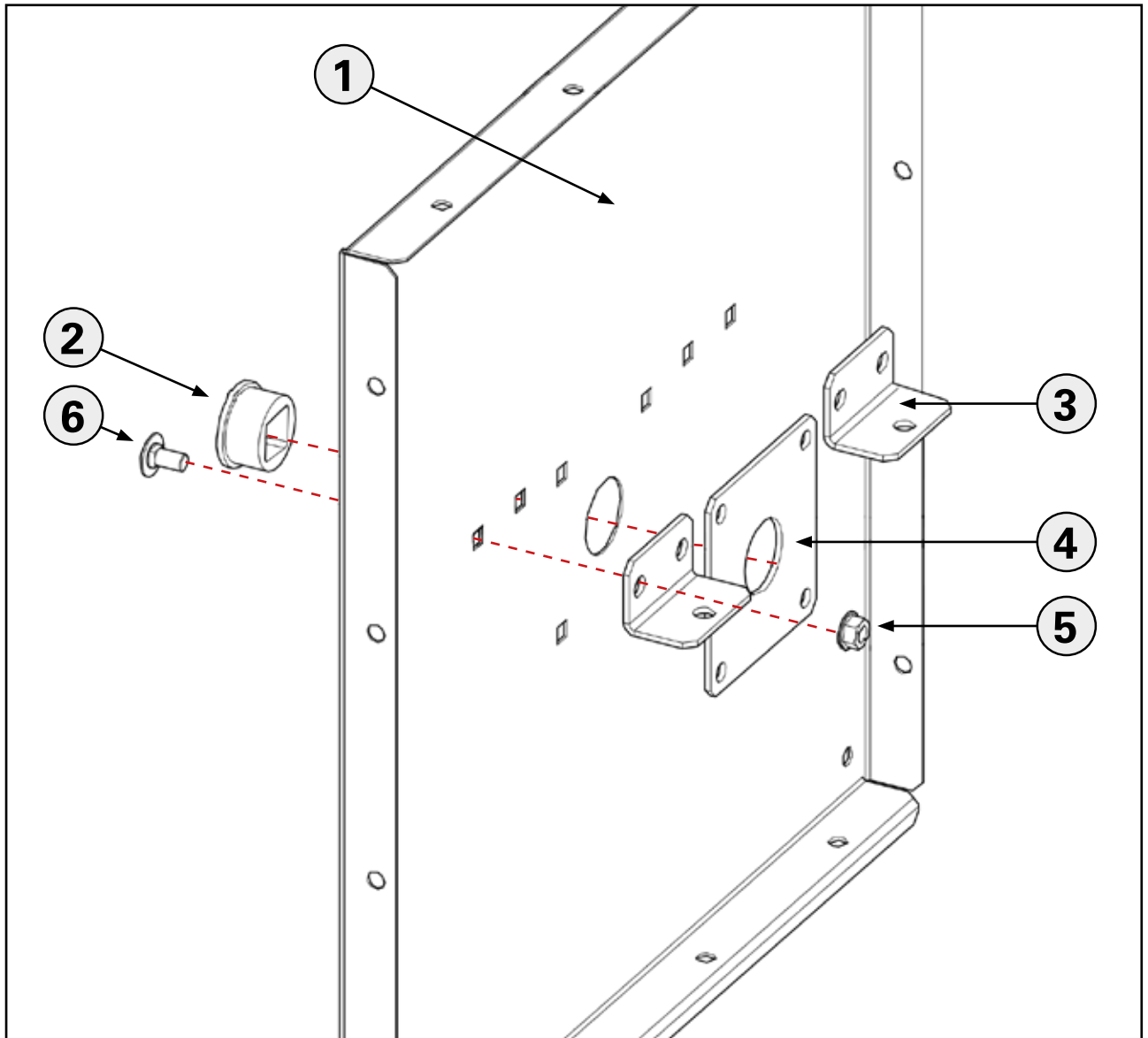


Figure 2.64. Assembling the half batch side panel

NUMBER	PART	DESCRIPTION
1	137320	Half batch side panel *
1	138129	Half batch side panel
2	137327	Bearing
3	137324	Bracket
4	137331	Plate
5		Flange nut M8, DIN6923
		Short square bolt M8x16, DIN603

\* Shown in figure.

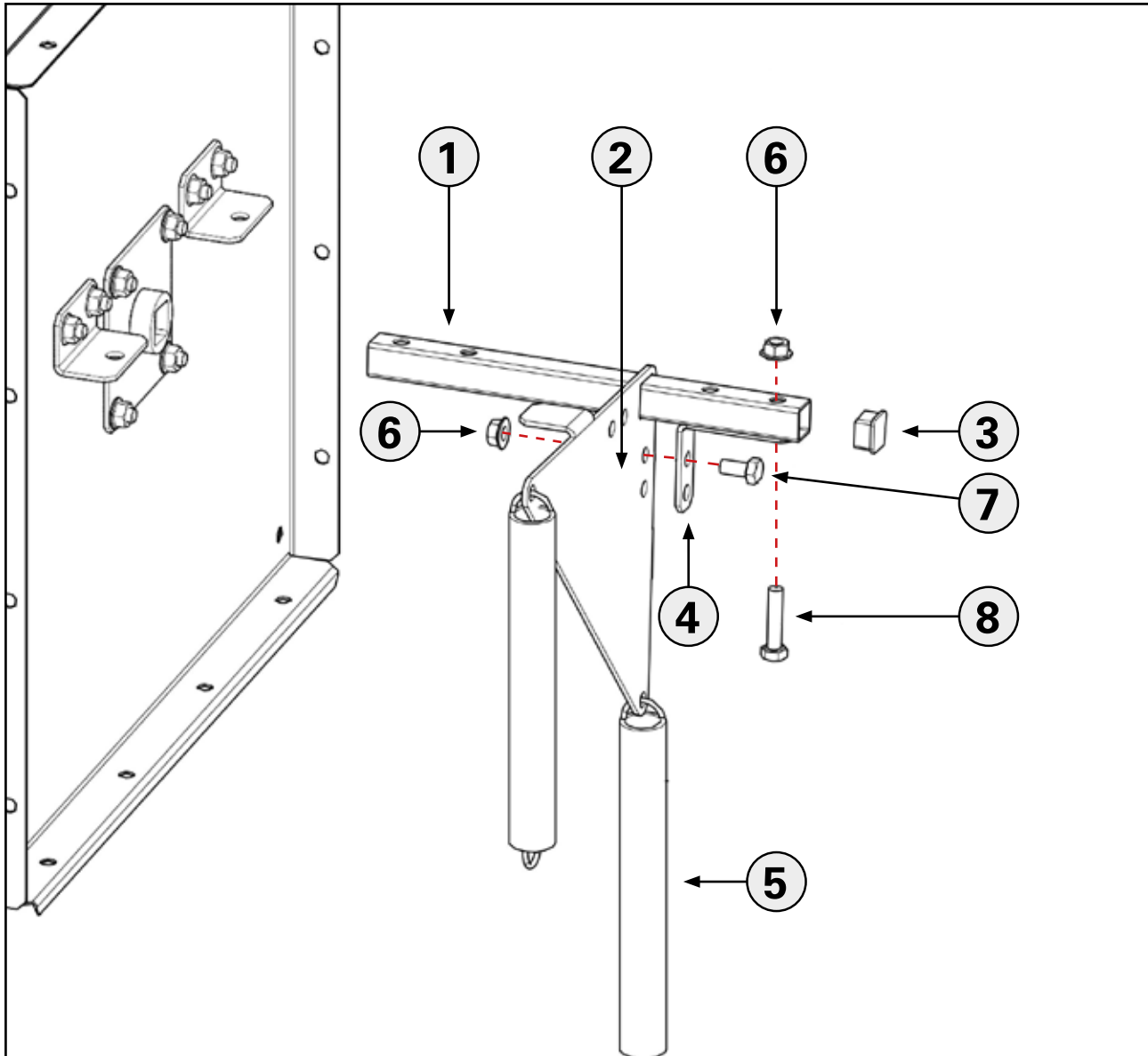


Figure 2.65. Assembling the half batch side panel

NUMBER	PART	DESCRIPTION
1	137326	Shaft
2	137321	Plate
3	960651	End cap
4	137323	Bracket
5	101858	Chain connector
6		Flange nut M8, DIN6923
7		Hex bolt M8x16, DIN933
8		Hex bolt M8x35, DIN933



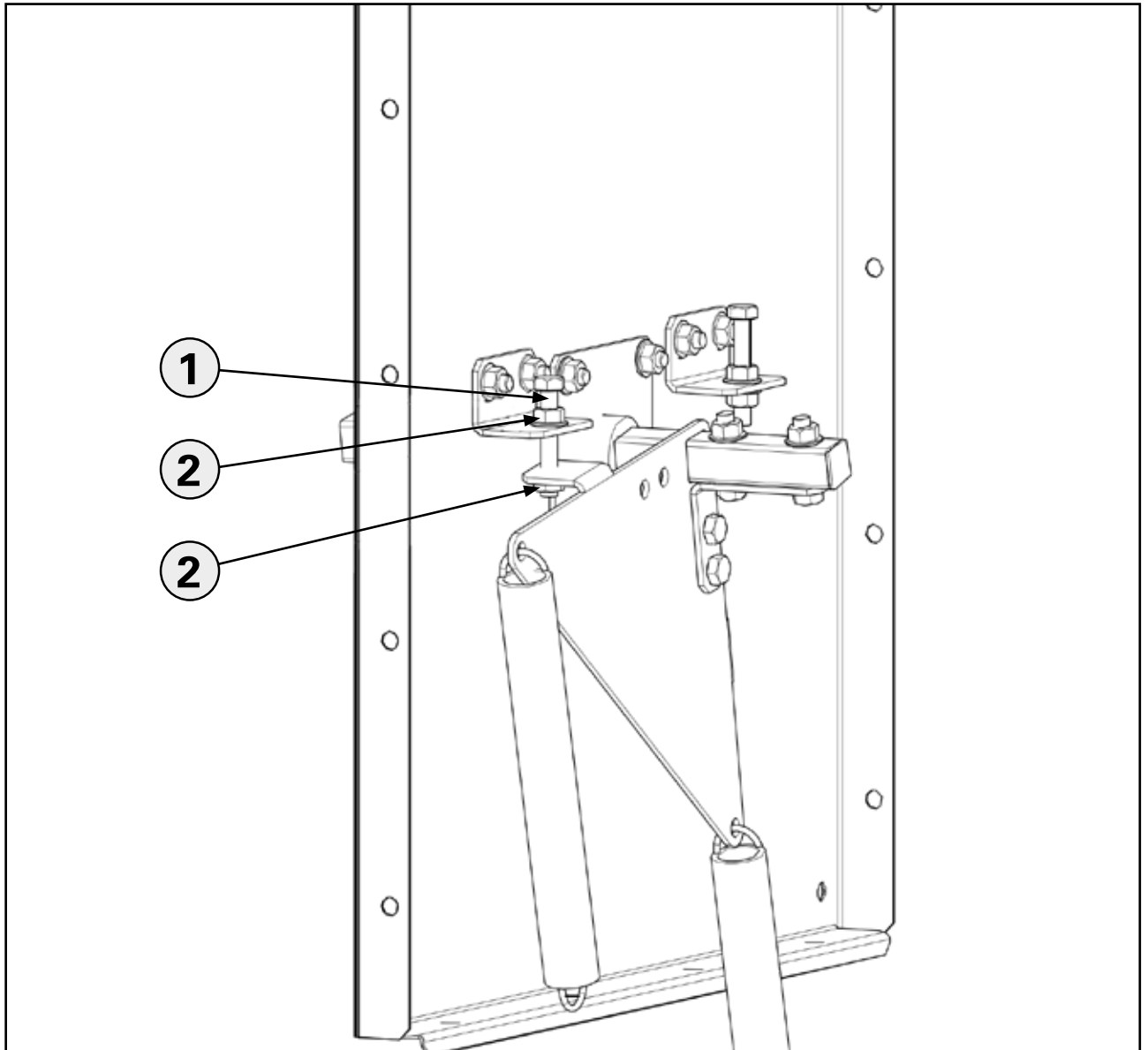


Figure 2.66. Assembling the half batch side panel

NUMBER	PART	DESCRIPTION
1		Hex bolt M8x50, DIN933
2		Flange nut M8, DIN6923

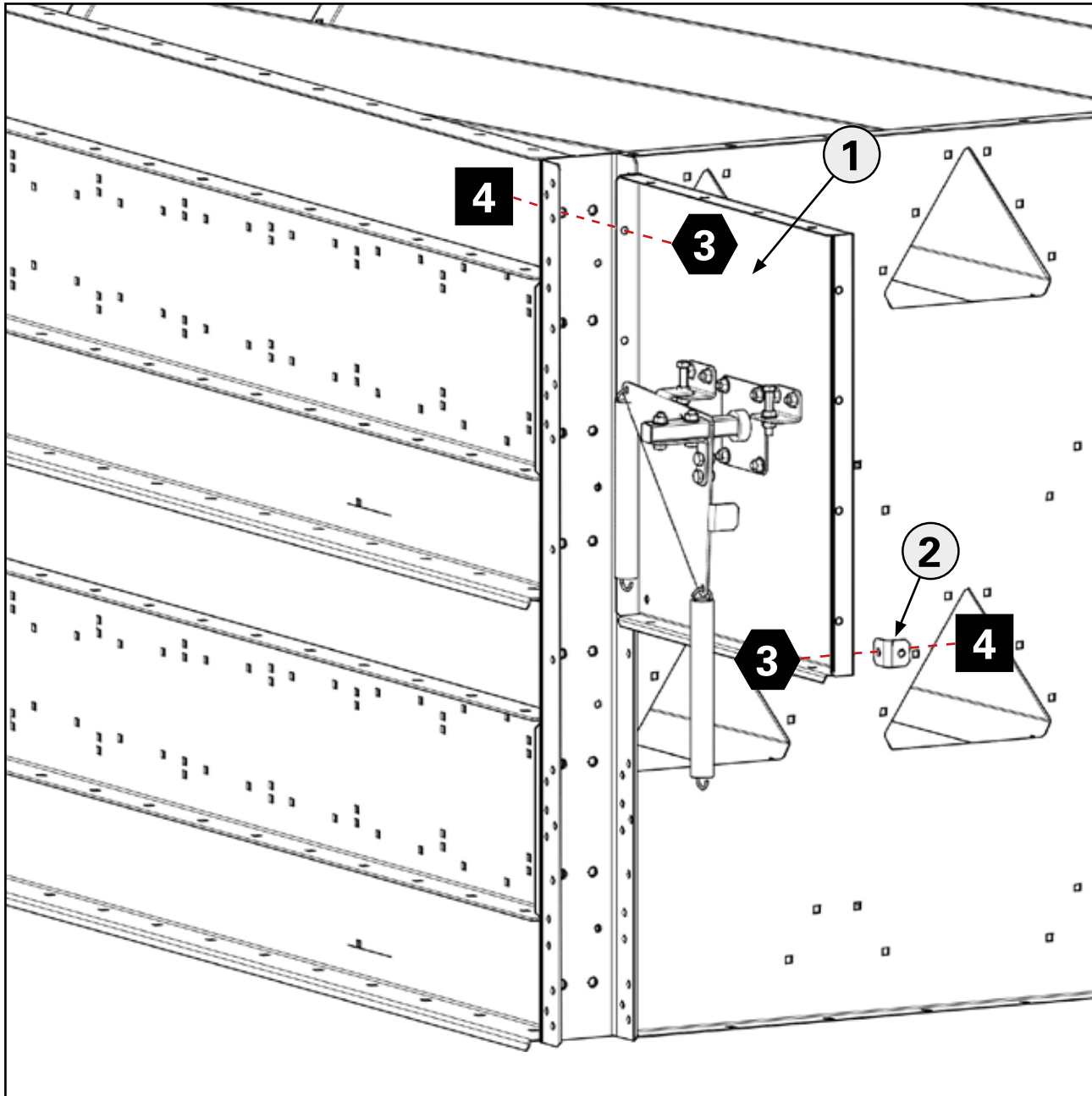
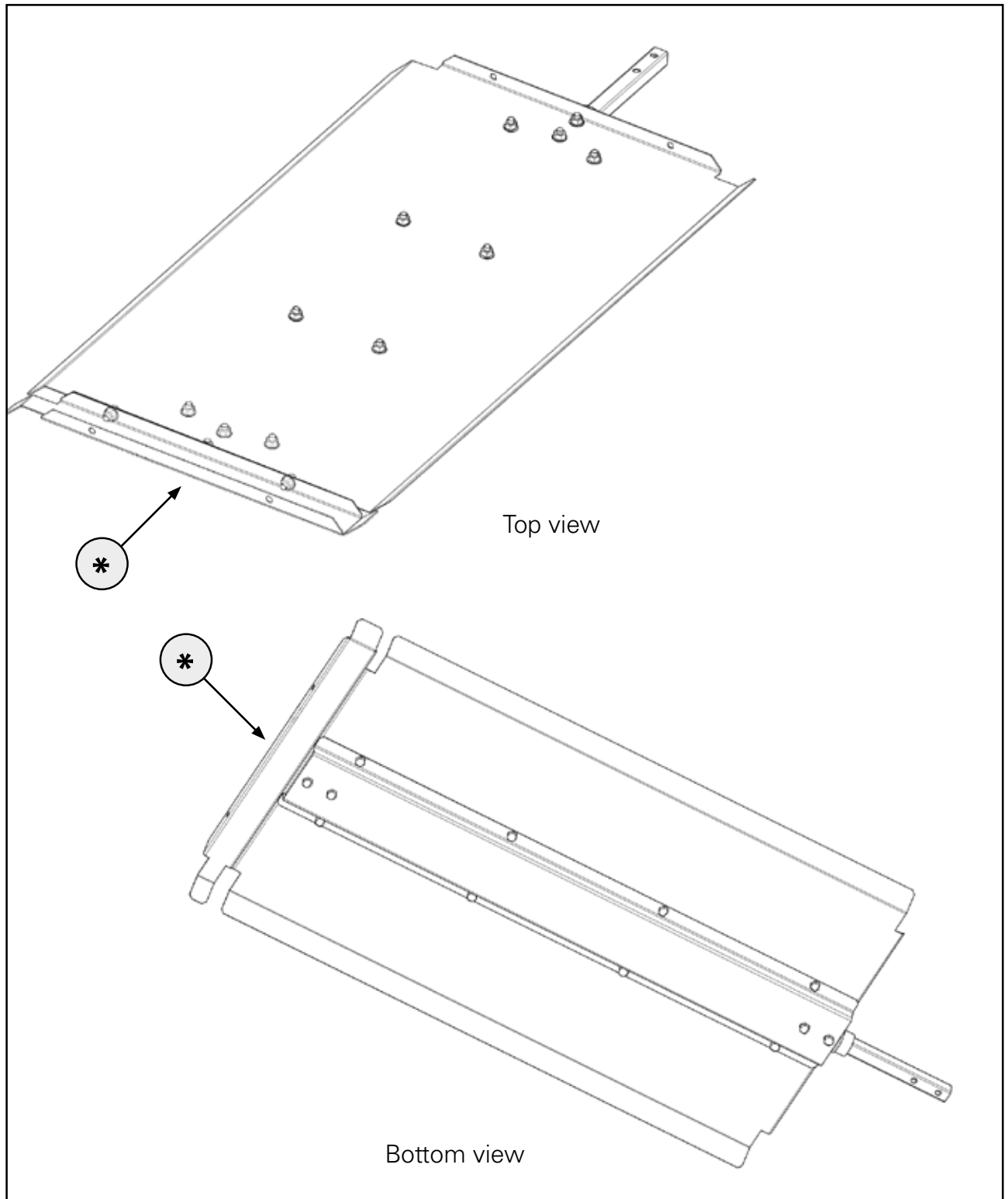


Figure 2.67. Attaching the half batch side panel to the drying cell

NUMBER	PART	DESCRIPTION
1		Half batch side panel *
2	136392	Bracket
3		Flange nut M8, DIN6923
4		Hex bolt M8x16, DIN6921

\* Silicone must be applied between the half batch side panel and the drying cell.



*Figure 2.68. Two views of the half batch air flow panel*

\* Spacer is required only for end panels to fill gap between side panel and air flow panel.

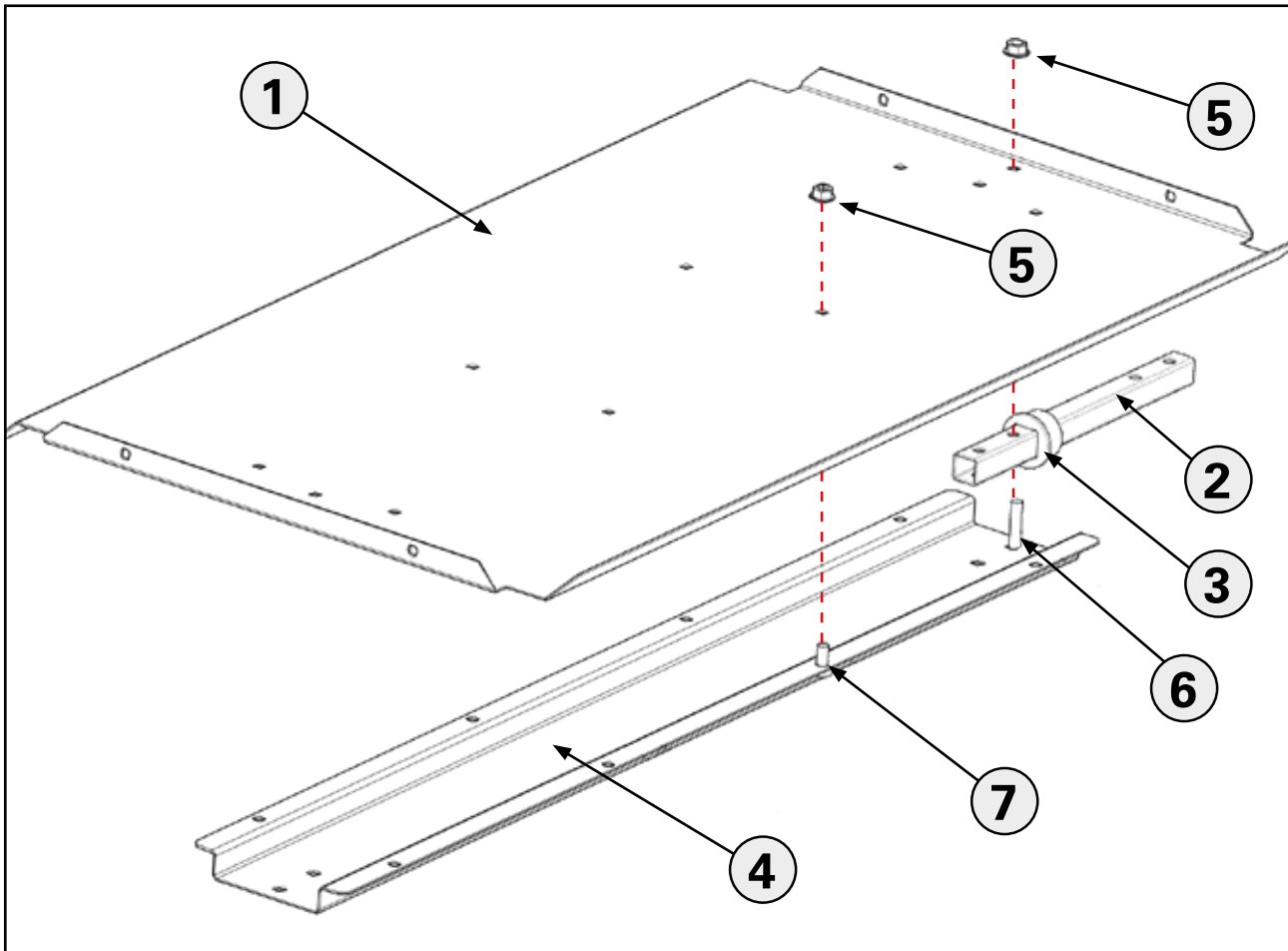


Figure 2.69. Assembling the half batch air flow panel

NUMBER	PART	DESCRIPTION
1	137317	Half batch air flow panel *
1	138130	Half batch air flow panel
2	137326	Shaft
3	137327	Bearing
4	137319	Channel
5		Flange nut M8, DIN6923
6		Hex bolt M8x35, DIN933
7		Hex bolt M8x16, DIN933

\* Shown in figure.

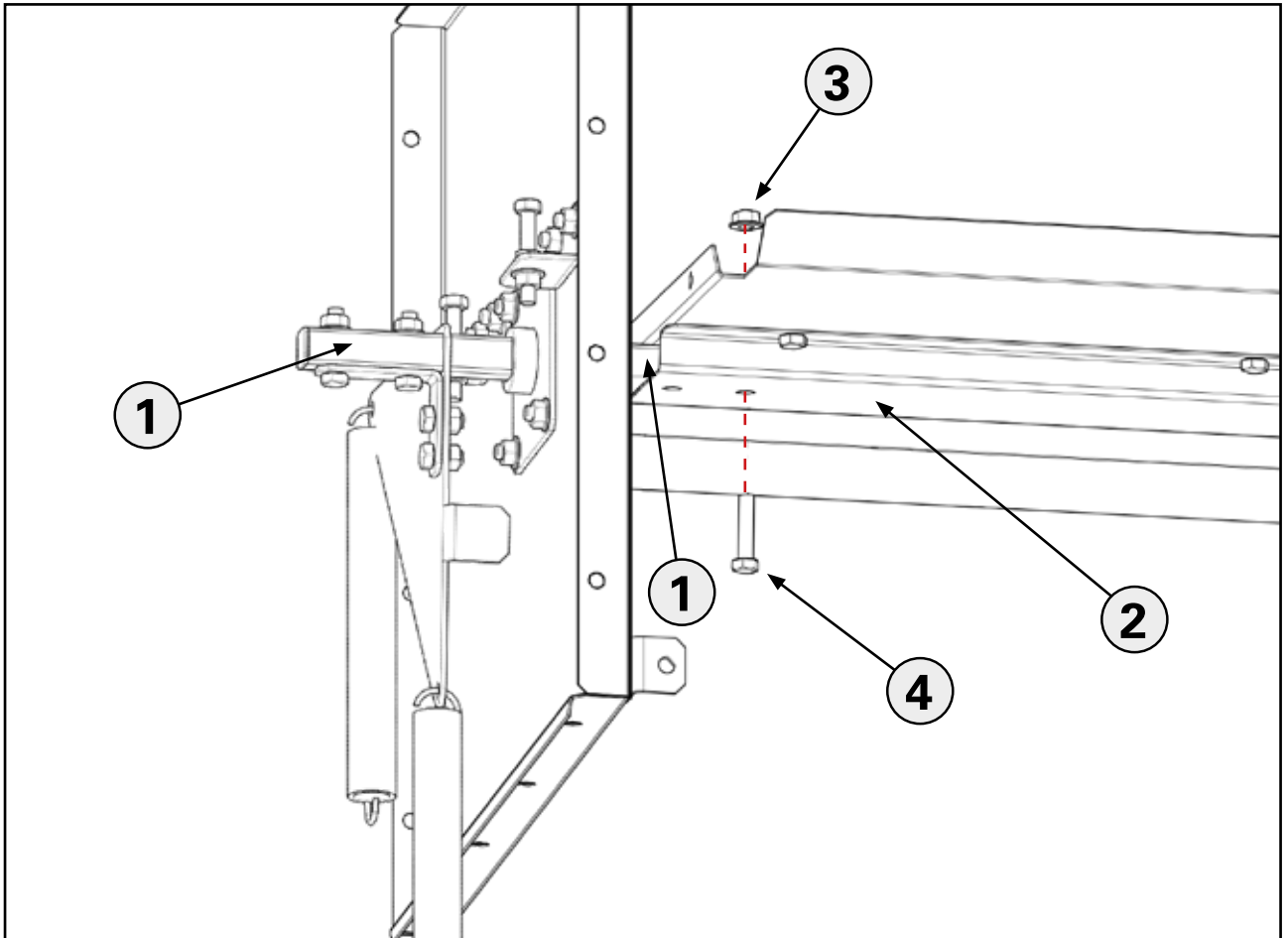


Figure 2.70. Attaching the half batch air flow panel to the half batch side panel

NUMBER	PART	DESCRIPTION
1	137326	Shaft
2	137319	Channel
3		Flange nut M8, DIN6923
4		Hex bolt M8x35, DIN933

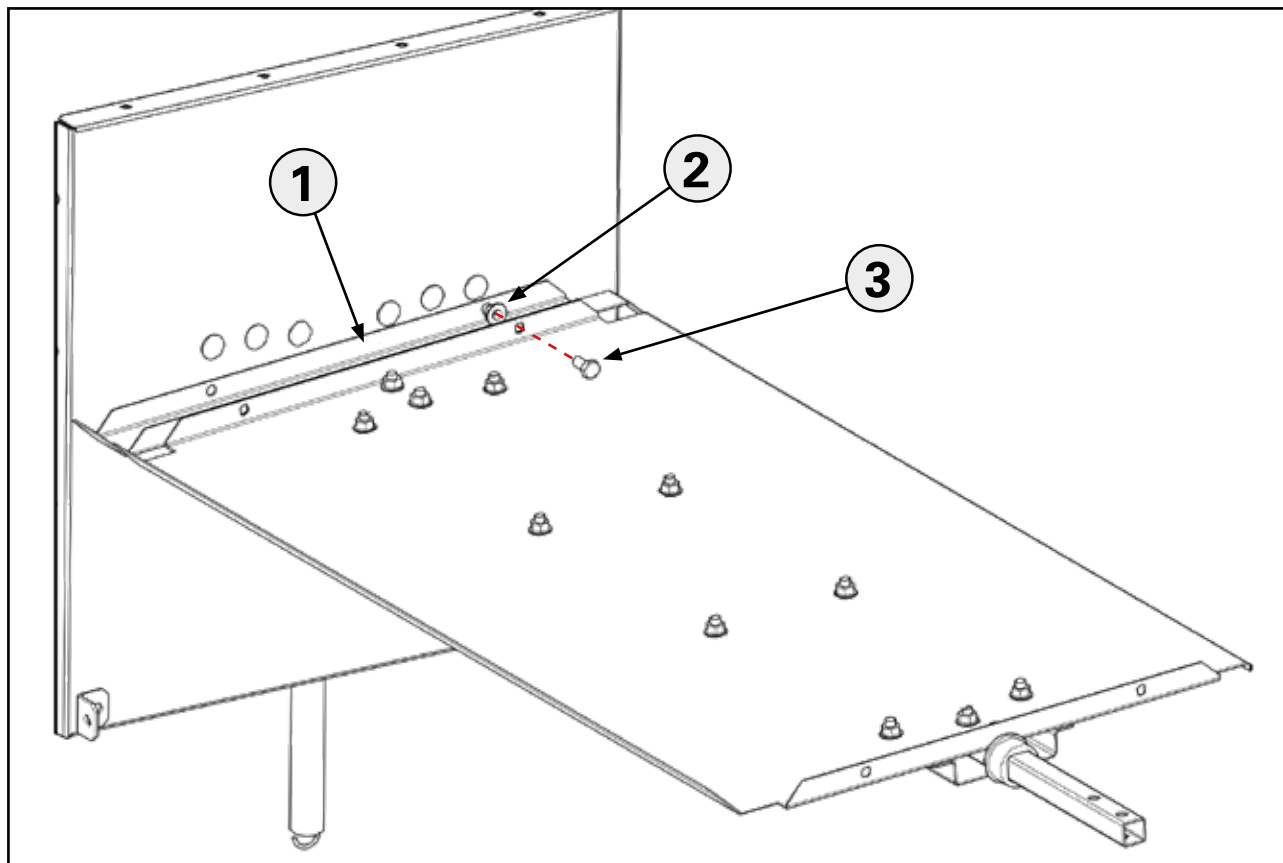


Figure 2.71. Attaching a spacer between air flow panel and side panel

NUMBER	PART	DESCRIPTION
1	137328	Spacer *
1	138130	Spacer
2		Flange nut M8, DIN6923
3		Hex bolt M8x16,DIN933

\* Shown in figure.

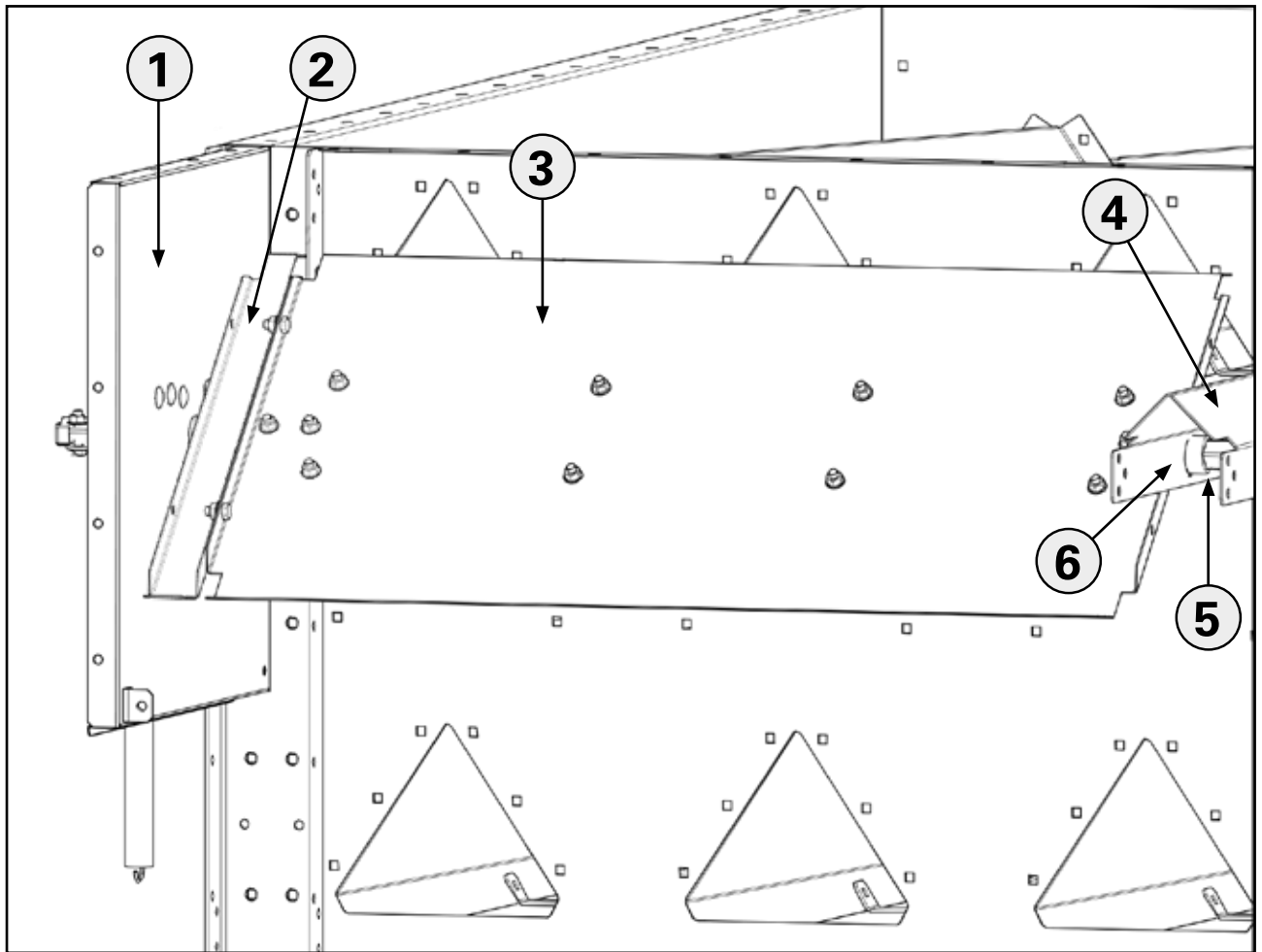
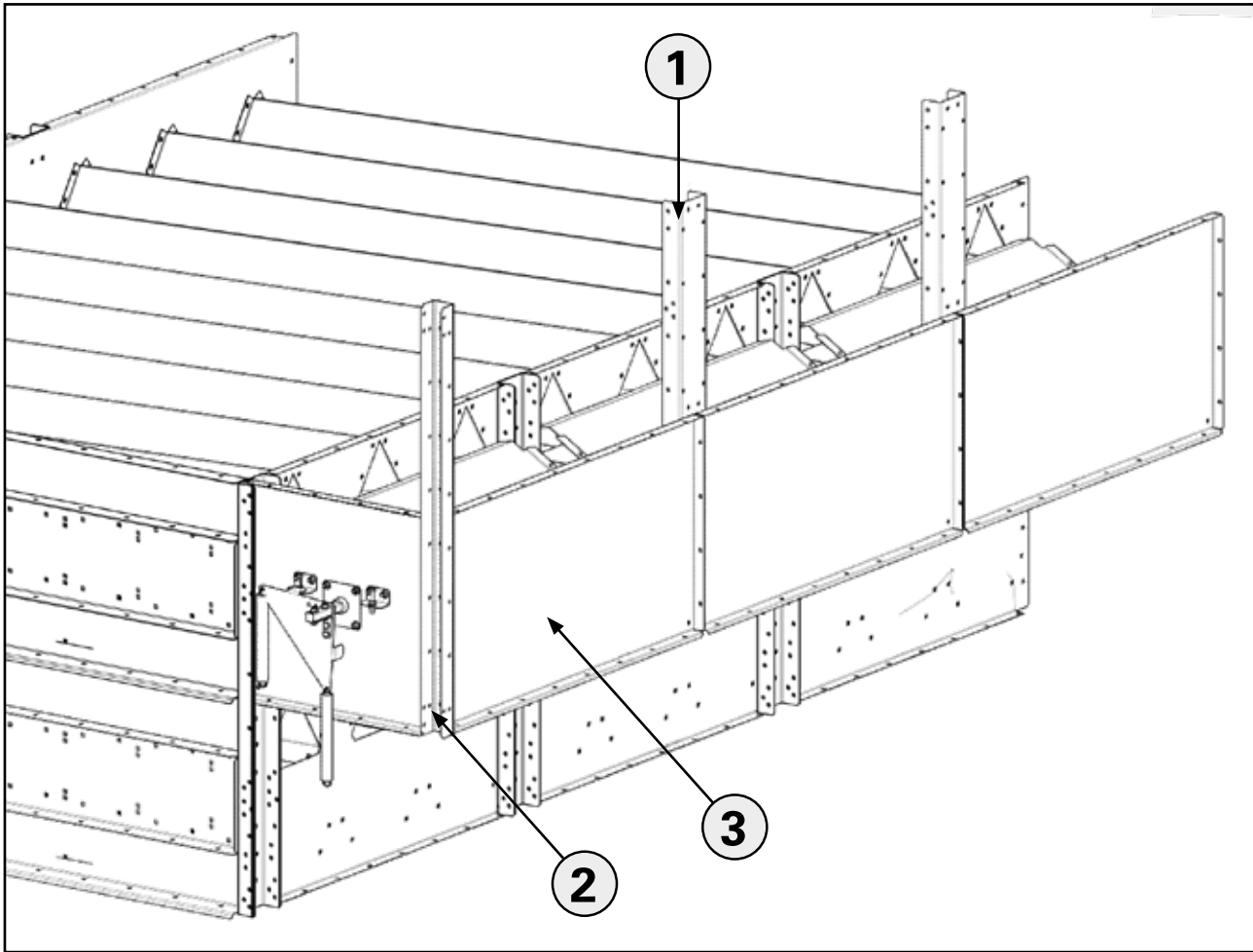


Figure 2.72. Attaching the half batch air flow panel to the drying cell

NUMBER	PART	DESCRIPTION
1	137320	Side panel
2	137328	Spacer *
2	138131	Spacer
3	137317	Air flow panel *
3	138130	Air flow panel
4	136492	Air casing support *
4	136370	Air casing support
5	137326	Shaft
6	137327	Bearing

\* Shown in figure.



*Figure 2.73. Attaching the air casing panels and bracings*

Assembling and attaching the air casing panels and bracing is detailed in section 2.5.5. on page 74.

NUMBER	PART	DESCRIPTION
1	136364	Air casing bracing
2	136395	Air casing bracing
3	136391	Air casing panel



### 2.5.7. Attaching the top air casing to the light model drying cell

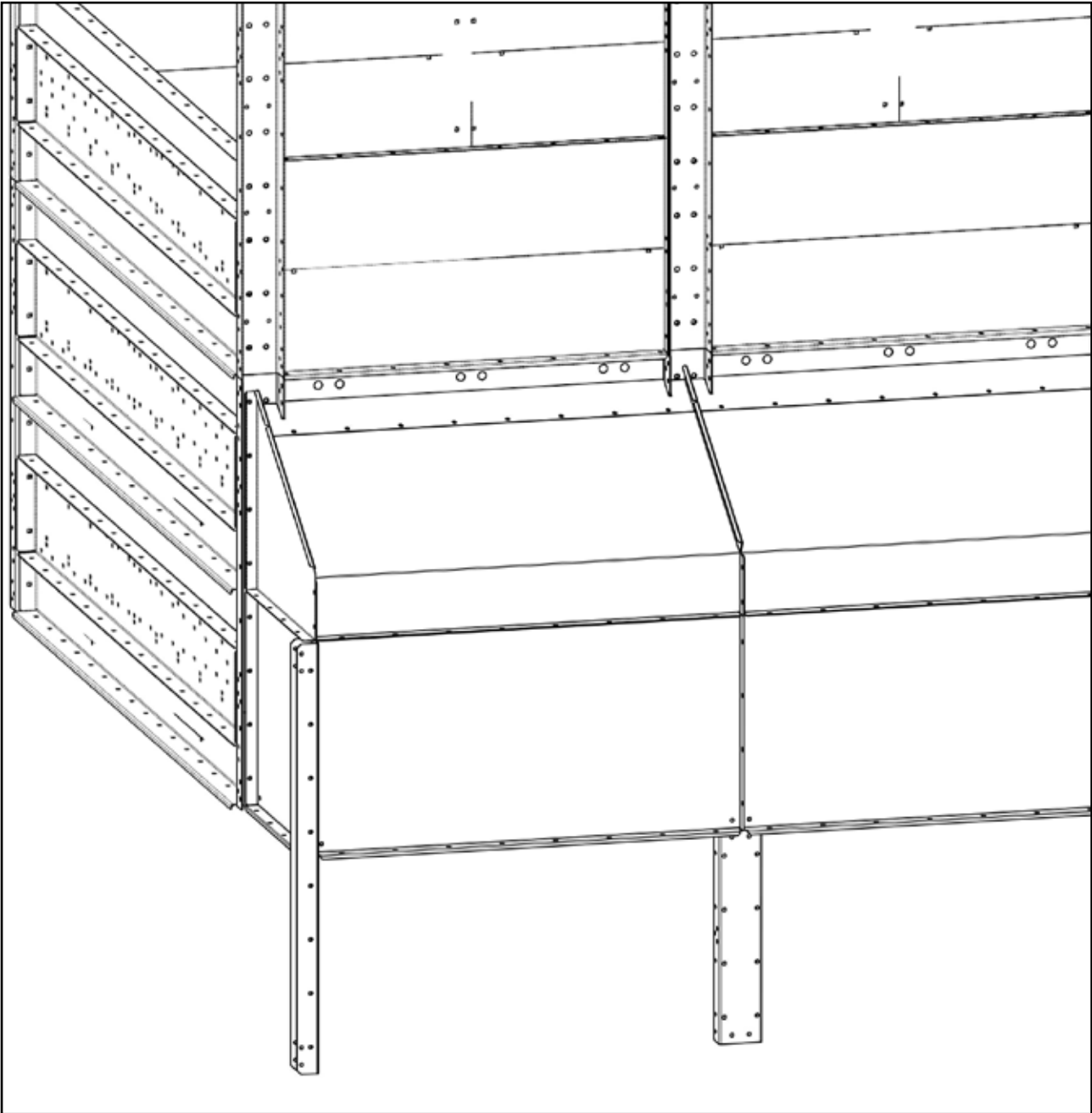


Figure 2.74. Light model drying cell with finished air casing

Note! Silicone is applied to various flanges and joints of the top air casing. The location of the silicone is noted in this section.

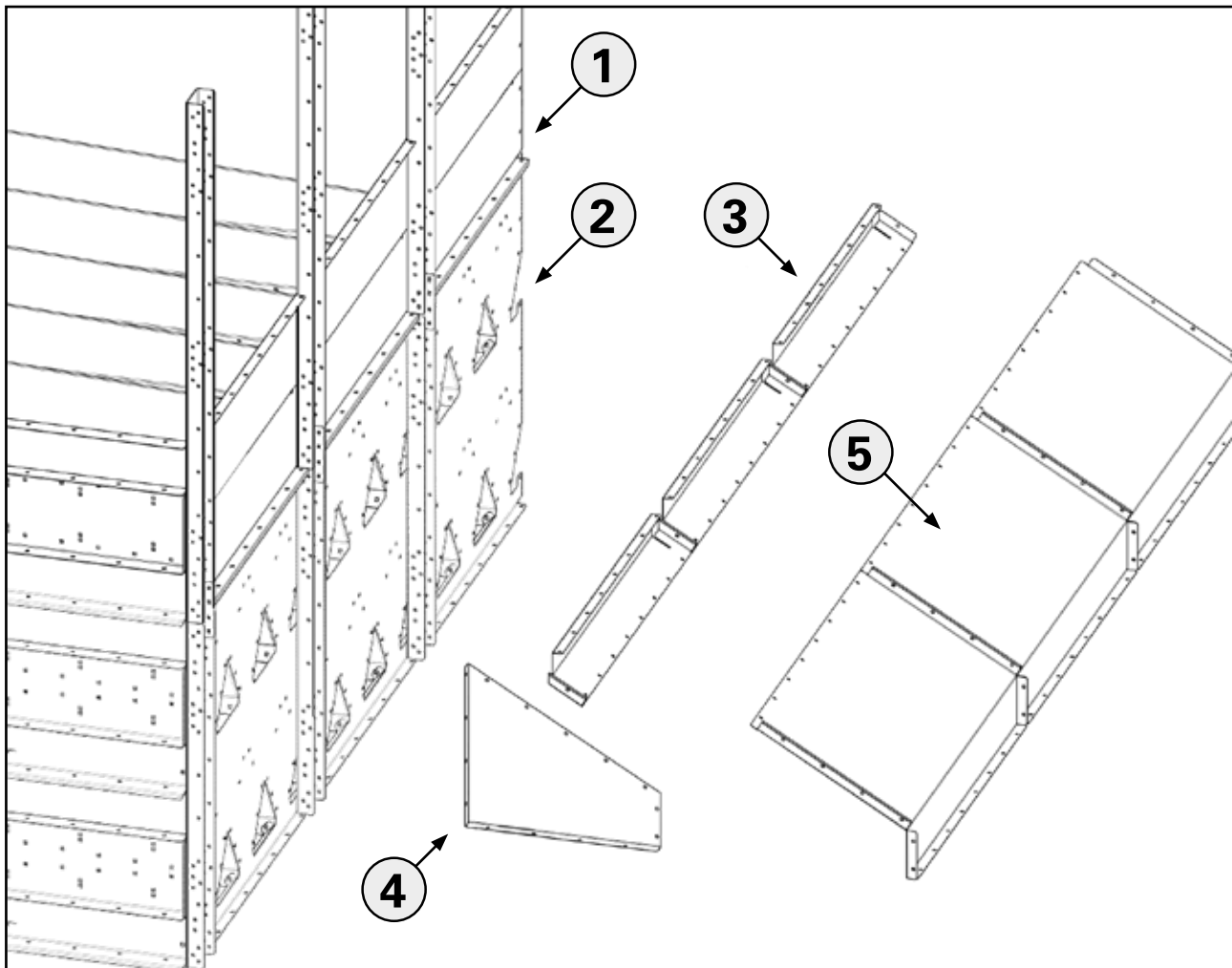


Figure 2.75. Exploded view of the light model drying cell and top air casing

NUMBER	PART	DESCRIPTION
1	137701	Grain silo panel
2	137728	Drying cell panel *
2	137729	Drying cell panel
3	137785	Top air casing bracing
4	136442	Top air casing side panel *
4	136735	Top air casing side panel
5	137784	Top air casing panel

\* Shown in figure.

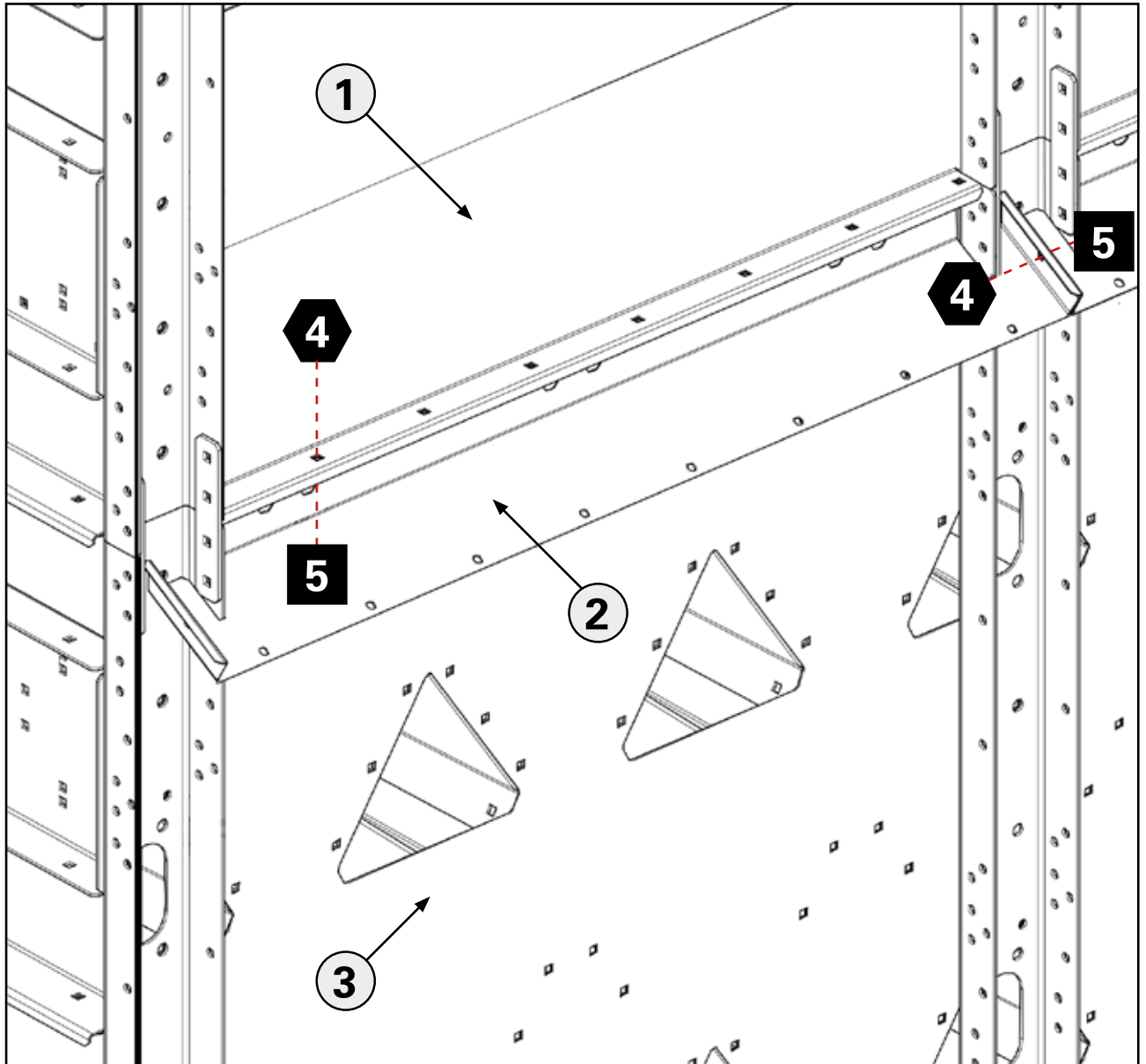


Figure 2.76. Attaching the top air casing bracing to the drying cell

NUMBER	PART	DESCRIPTION
1	137701	Grain silo panel
2	137785	Top air casing bracing
3	137728	Drying cell panel *
3	137729	Drying cell panel
4		Flange nut M8, DIN6923
5		Hex flange bolt M8x16, DIN6921

\* Shown in figure.

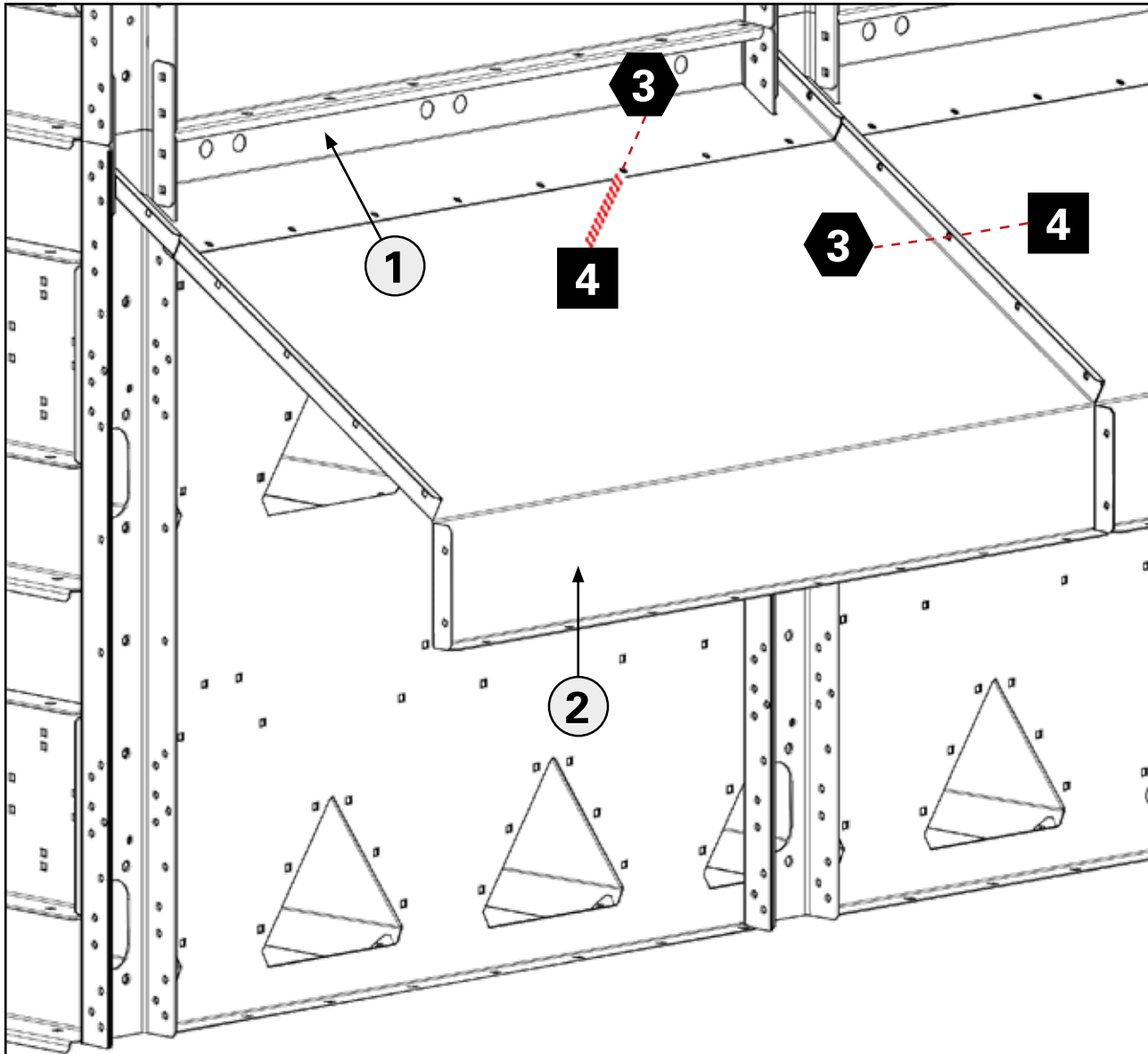


Figure 2.77. Attaching the top air casing panels to the top air casing bracing

NUMBER	PART	DESCRIPTION
1	137785	Top air casing bracing *
2	137784	Top air casing panel *
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Silicone must be applied to the flanges between the top air casing bracing (137785) and the top air casing panels (137784).

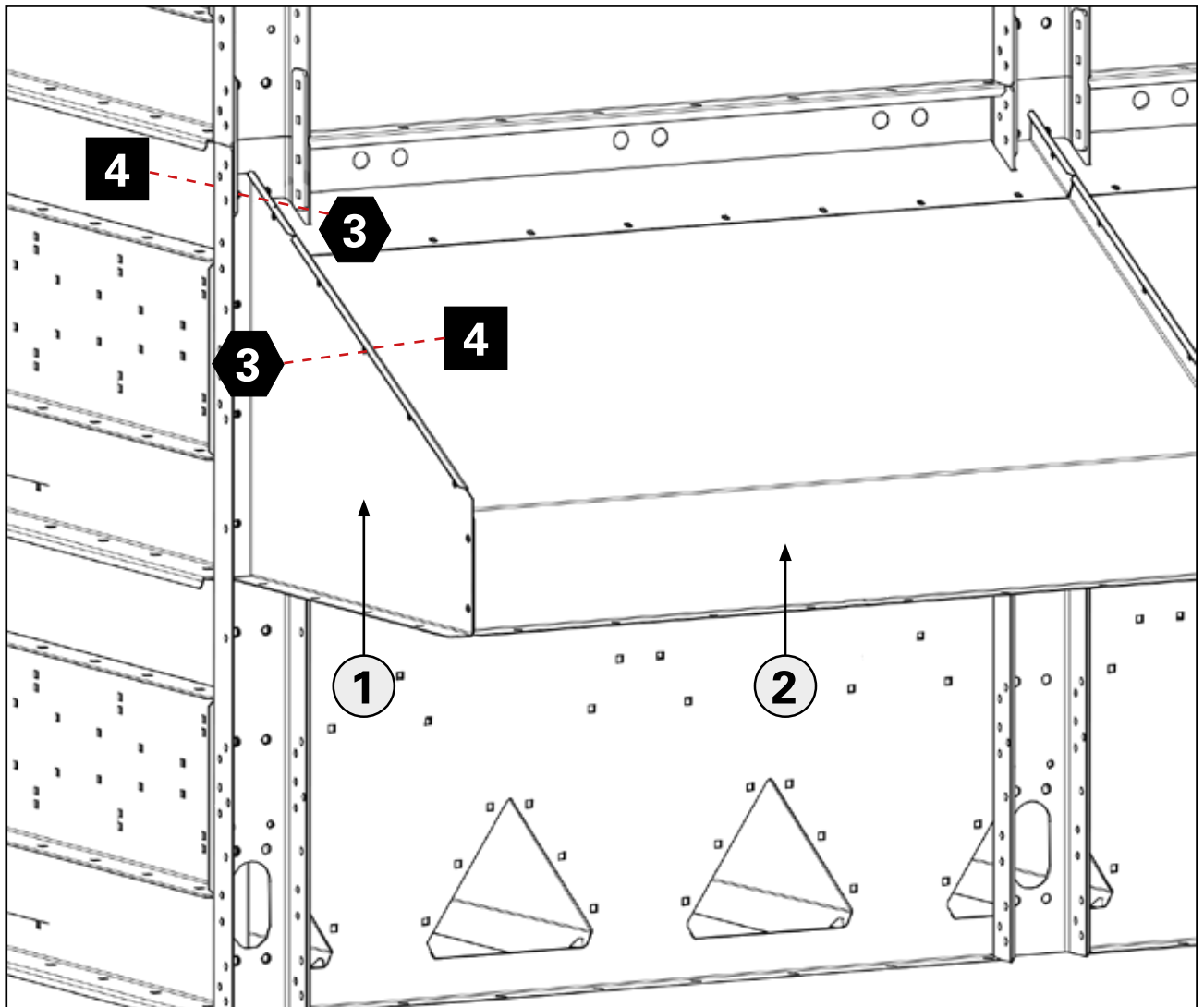


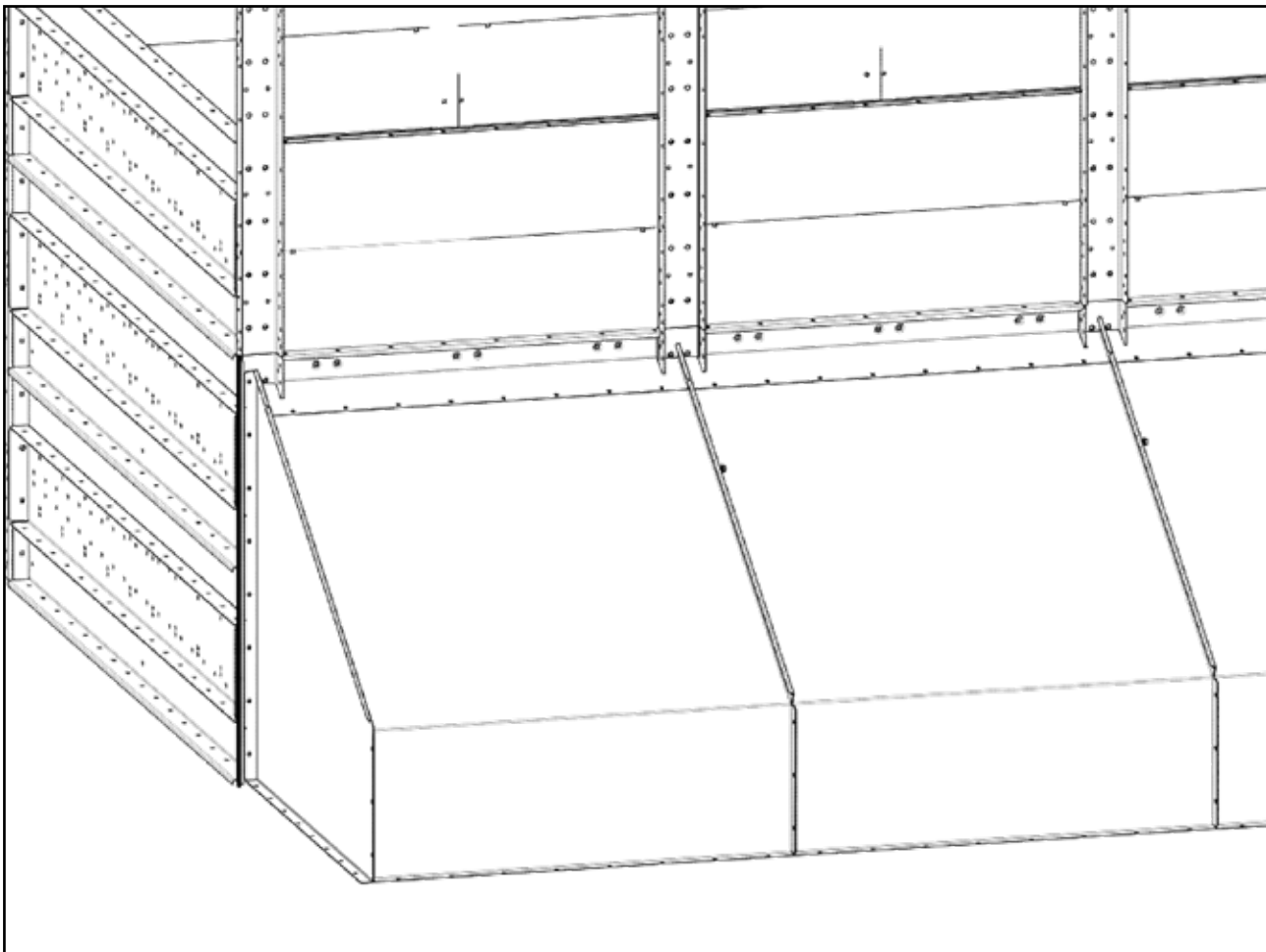
Figure 2.78. Attaching the top air casing side panel

NUMBER	PART	DESCRIPTION
1	136442	Top air casing side panel * / **
1	136735	Top air casing side panel **
2	137785	Top air casing panel
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Shown in figure.

\*\* Silicone must be applied between the top air casing side panel (136442) and the drying cell. Silicone must also be applied to the flanges between the top air casing side panel (136442) and the top air casing side panel (136735).

### 2.5.8. Attaching the top air casing to the heavy model drying cell



*Figure 2.78. Heavy model drying cell with finished top air casing*

Note! Silicone is applied to various flanges and joints of the top air casing. The location of the silicone is noted in this section.

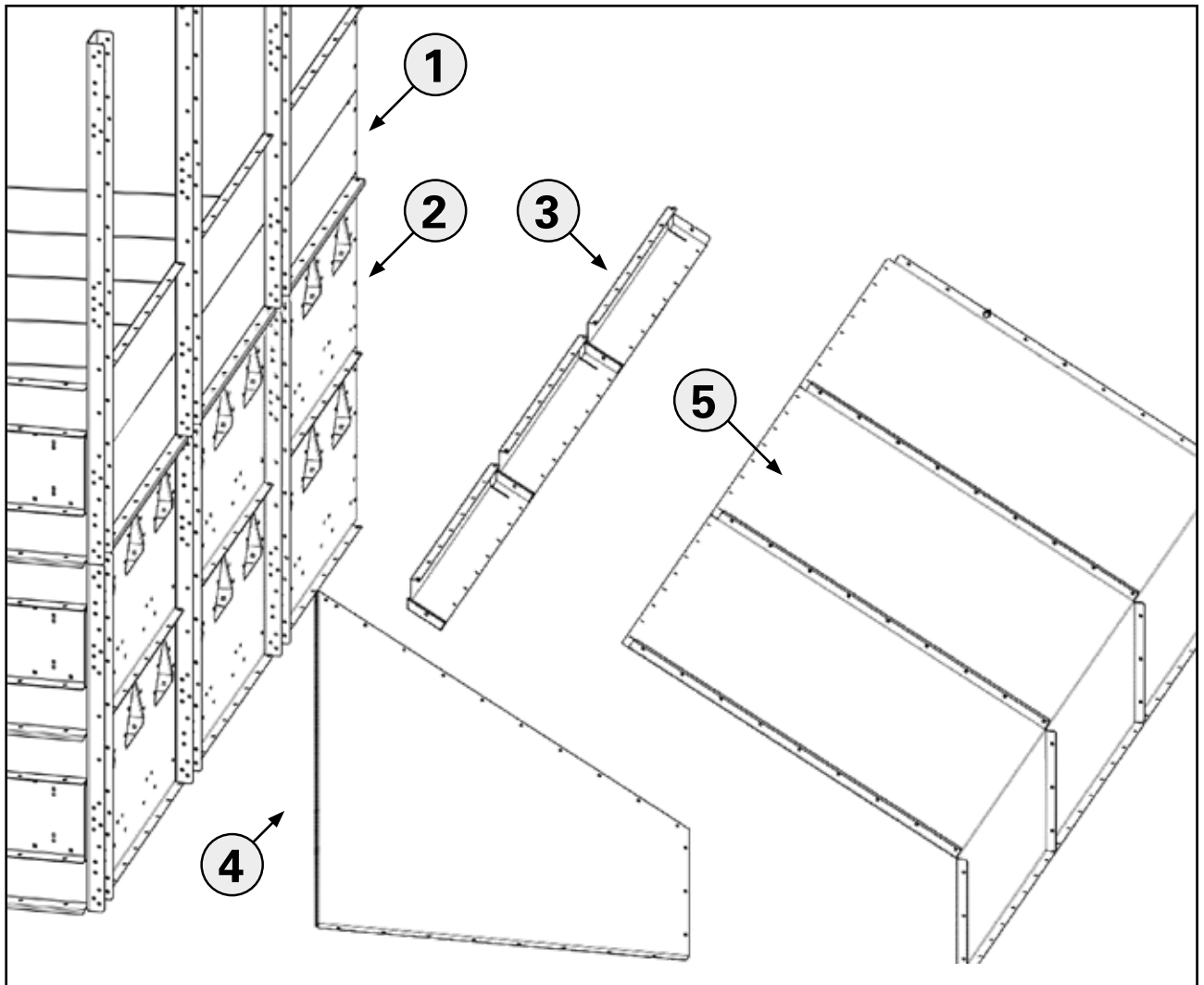


Figure 2.80. Exploded view of the heavy model drying cell with top air casing

NUMBER	PART	DESCRIPTION
1	137701	Grain silo panel
2	136348	Drying cell panel *
2	136351	Drying cell panel
3	137785	Top air casing bracing
4	136695	Top air casing side panel *
4	136688	Top air casing side panel
5	137929	Top air casing panel

\* Shown in figure.

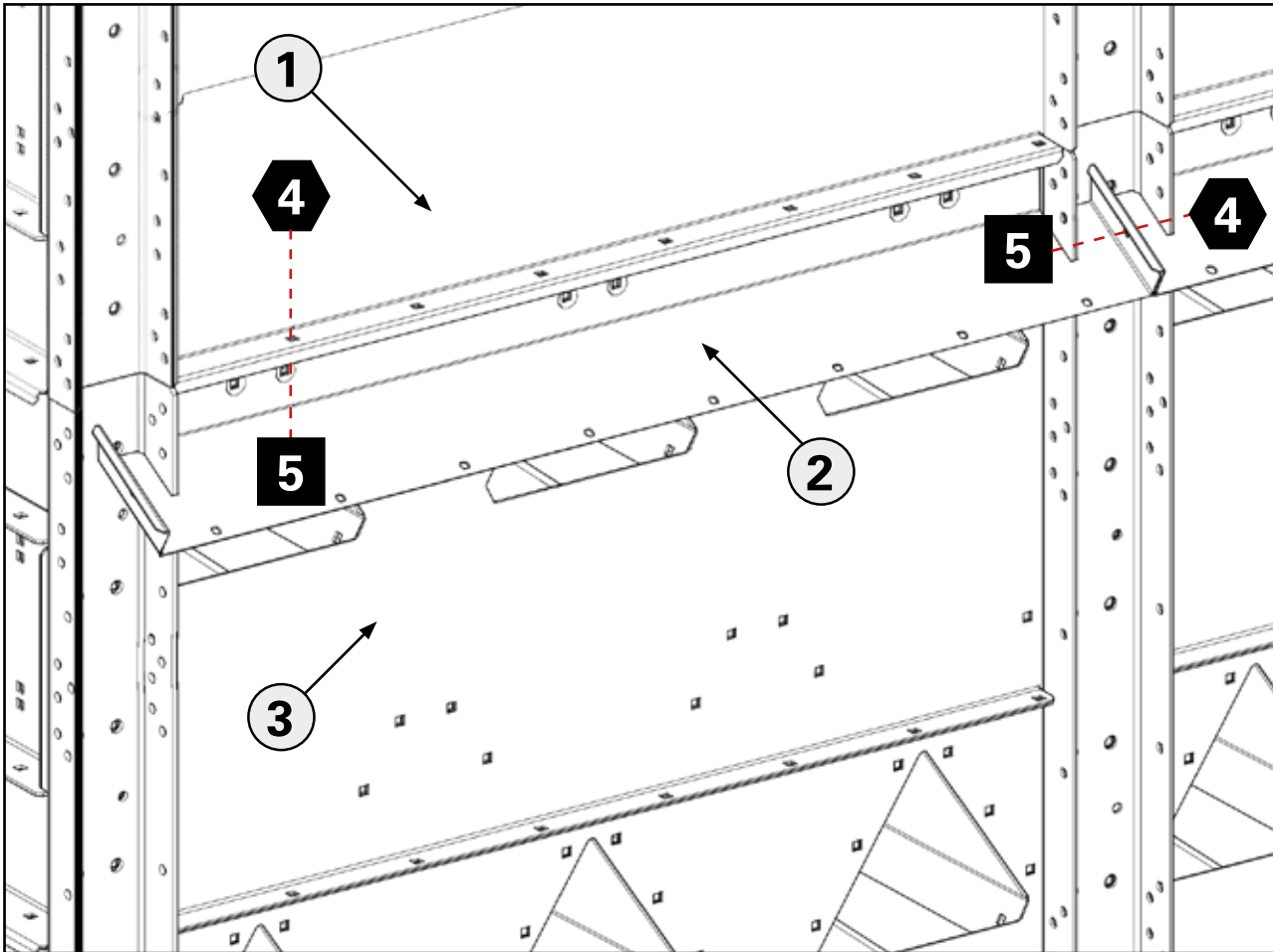


Figure 2.81. Attaching the top air casing bracing to the drying cell

NUMBER	PART	DESCRIPTION
1	137701	Grain silo panel
2	137785	Top air casing bracing
3	136348	Drying cell panel *
3	136351	Drying cell panel
4		Flange nut M8, DIN6923
5		Hex flange bolt M8x16, DIN6921

\* Shown in figure.



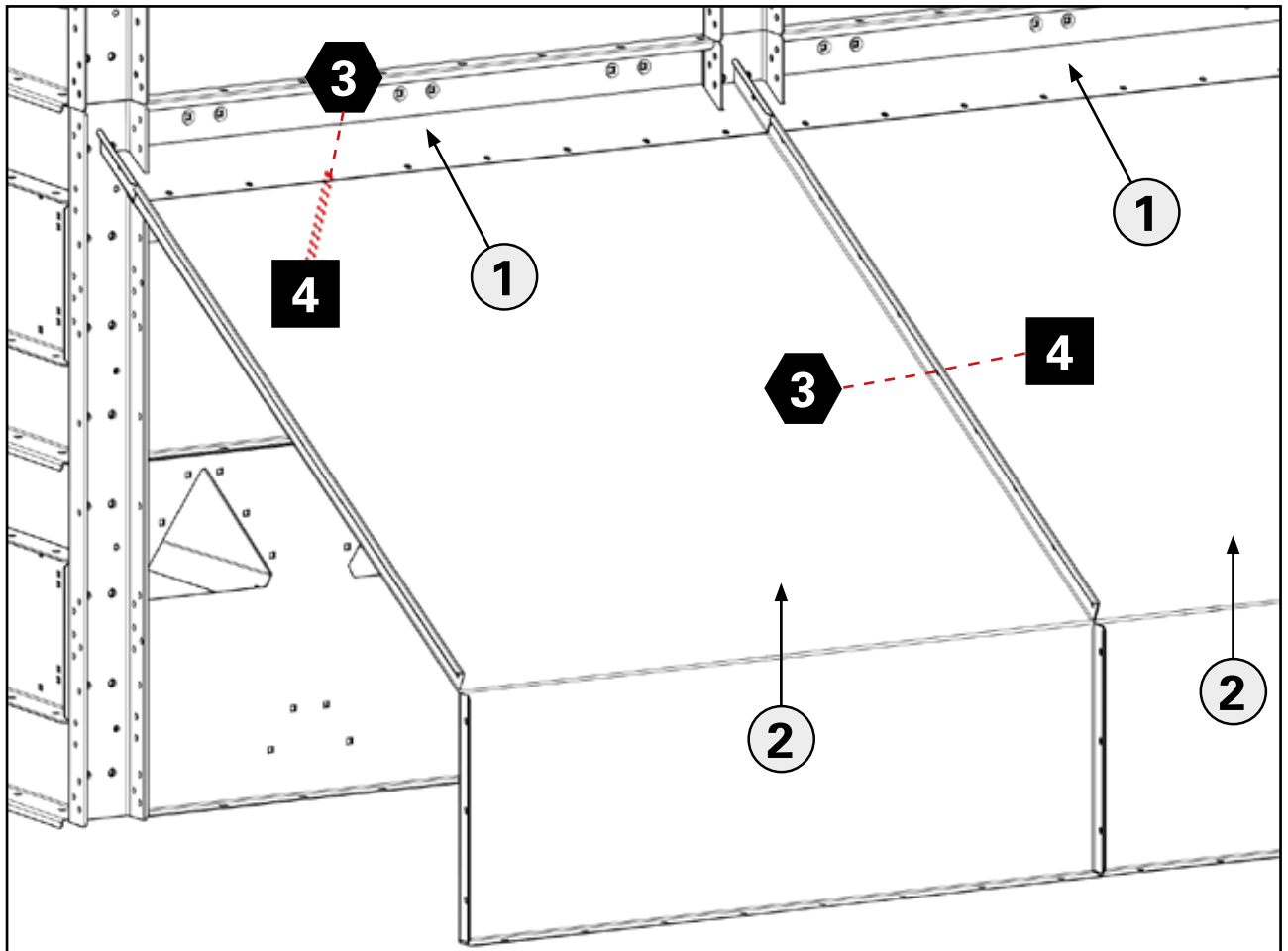


Figure 2.82. Attaching the top air casing panels to the top air casing bracing

NUMBER	PART	DESCRIPTION
1	137785	Top air casing bracing *
2	137929	Top air casing panel
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Silicone must be applied to the flanges between the top air casing bracing (137785) and the top air casing panels (137929).

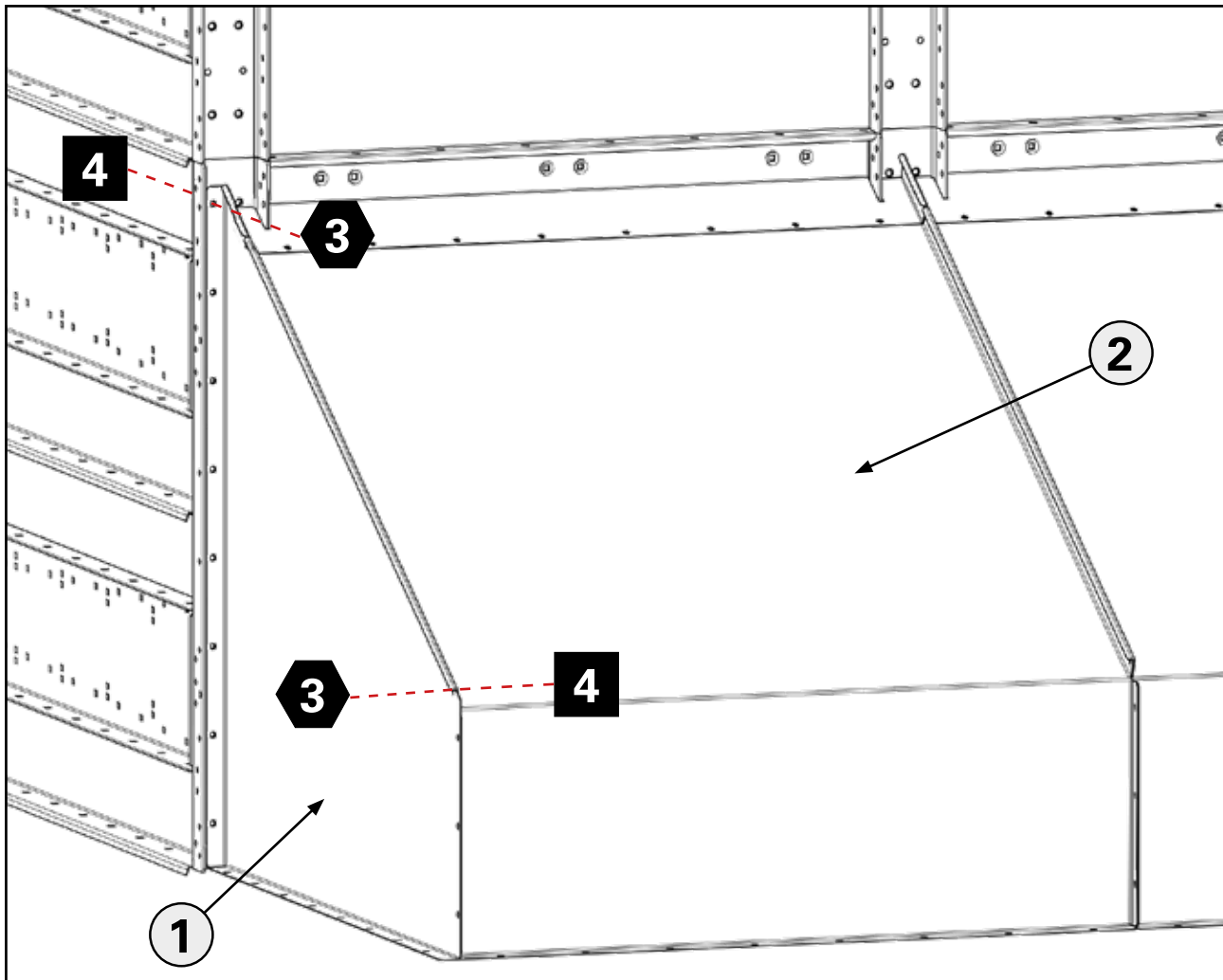


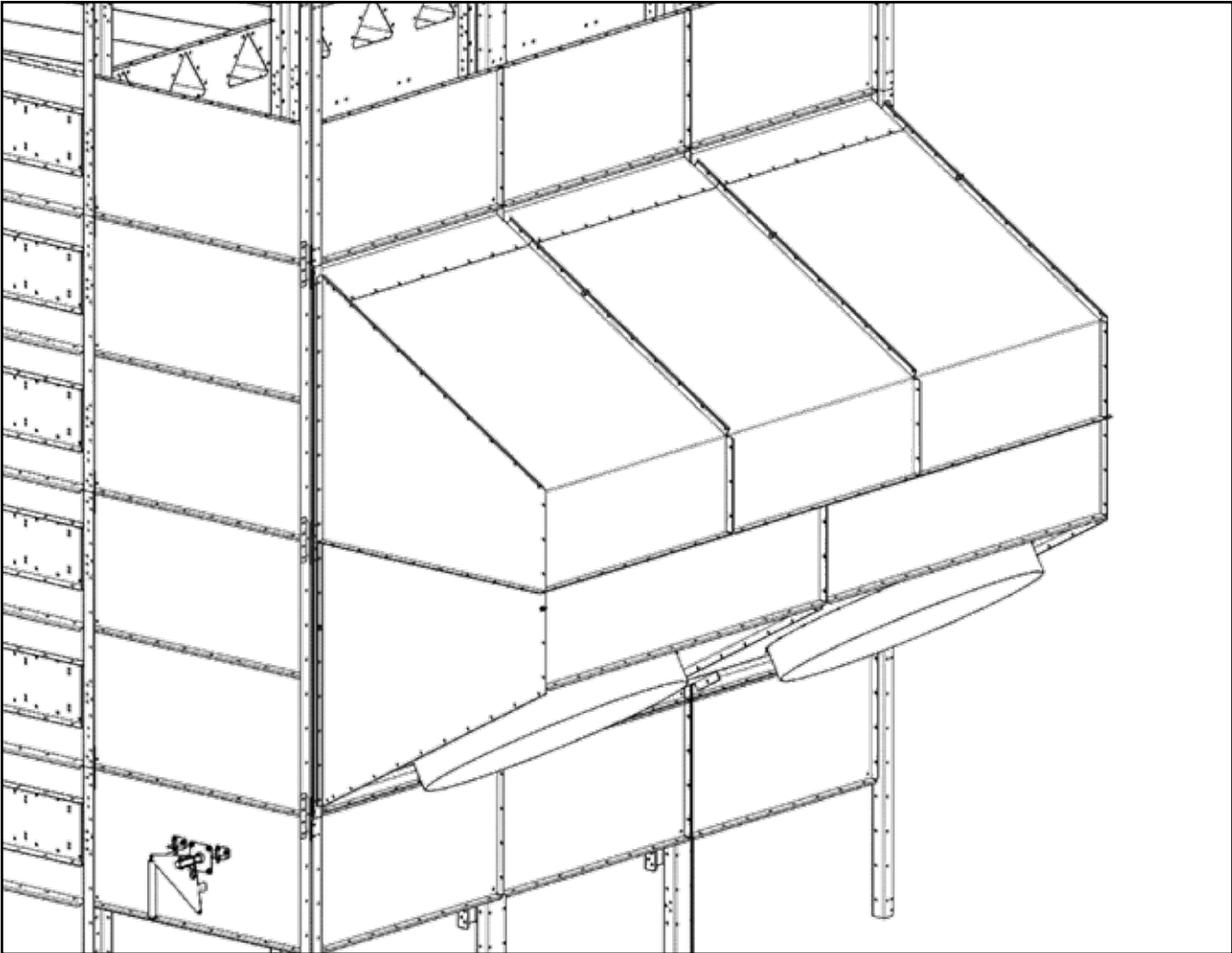
Figure 2.83. Attaching the top air casing side panel

NUMBER	PART	DESCRIPTION
1	136695	Top air casing side panel * / **
1	136688	Top air casing side panel
2	137929	Top air casing panel
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Shown in figure.

\*\* Silicone must be applied between the top air casing side panel (136696) and the drying cell. It must also be applied to the flanges between the top air casing side panel (136695) and the top air casing panels (137929).

**2.5.9. Attaching the air intake / output to C series grain dryer (model C3)**



*Figure 2.84. Finished air casing with air intake / output attached*

Note! Silicone is applied to various flanges and joints of the air intake / outputs. The location of the silicone is noted in this section.

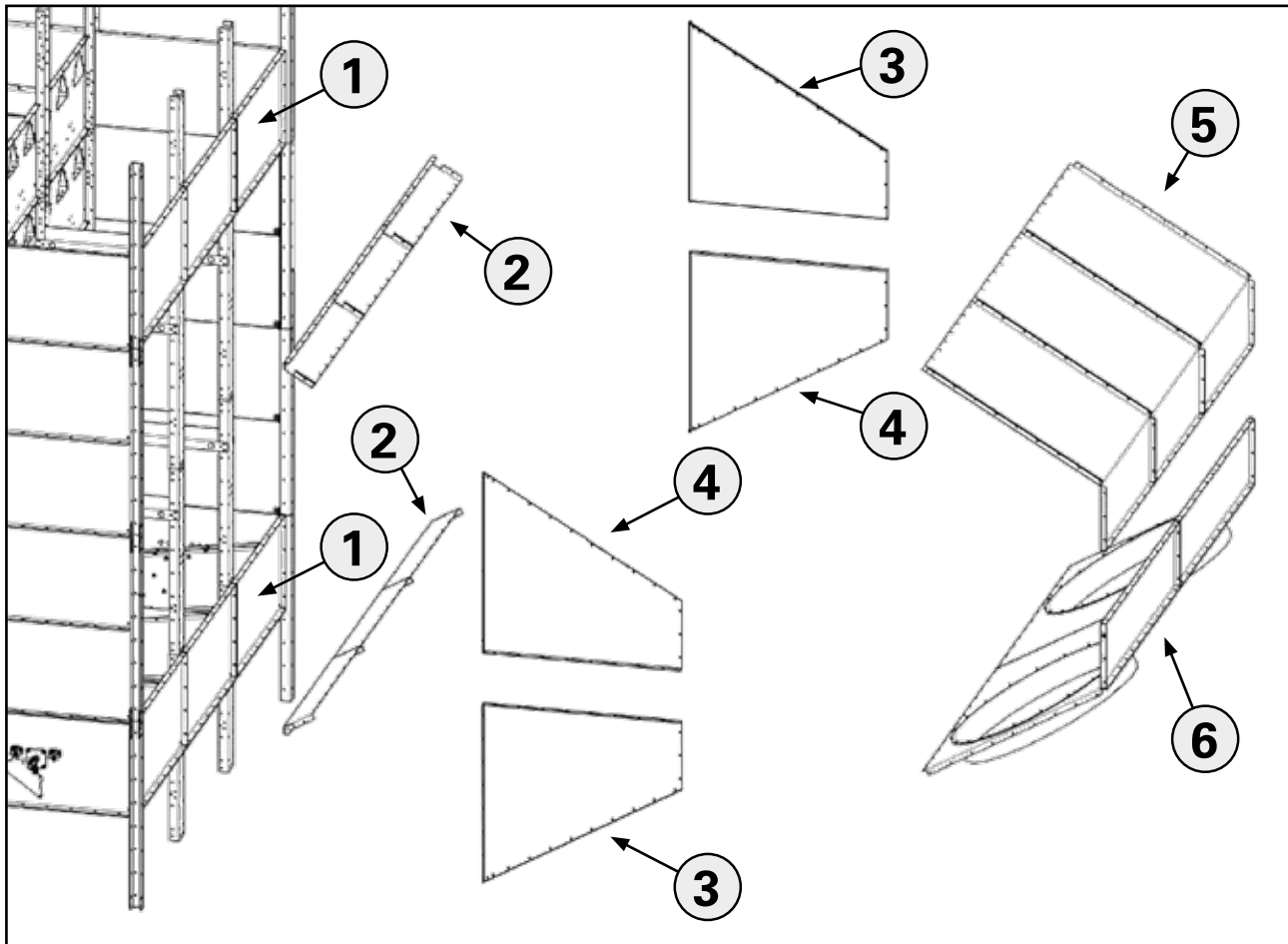


Figure 2.85. Exploded view of the air casing with air Intake / output attached

NUMBER	PART	DESCRIPTION
1	136391	Air casing panel
2	137798	Air casing bracing
3	136688	Air intake / output side panel
4	136695	Air intake / output side panel
5	137929	Air intake / output panel
6		Air intake / output assembly *

\* See section 2.3.2. on page 36 for instructions on assembling the air intakes / outputs.

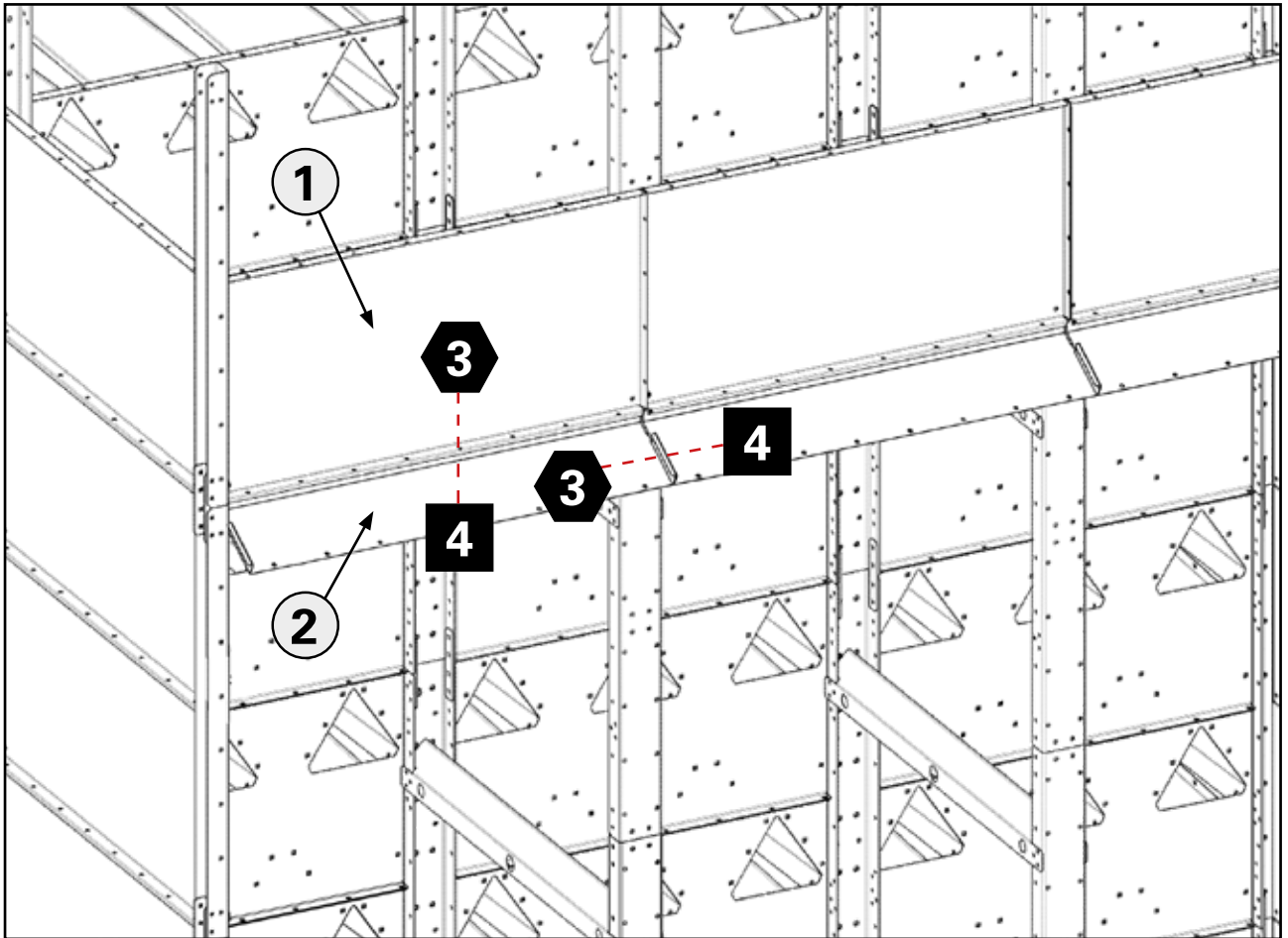


Figure 2.86. Attaching the upper air casing bracing

NUMBER	PART	DESCRIPTION
1	136391	Air casing panel
2	137798	Air casing bracing
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

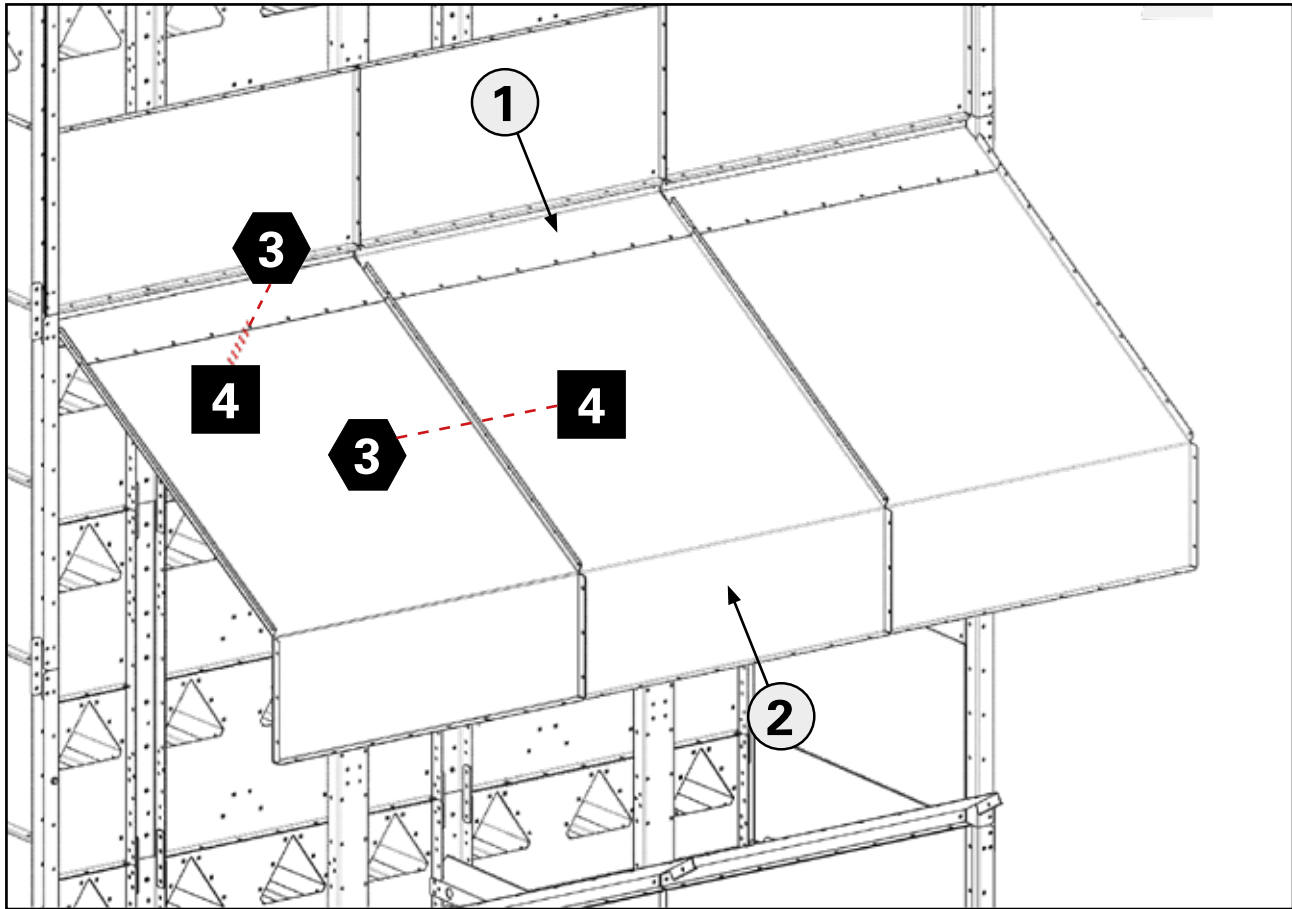


Figure 2.87. Attaching the air casing panels

NUMBER	PART	DESCRIPTION
1	137798	Air casing bracing *
2	137929	Air casing panel *
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Silicone must be applied to the flanges between the air casing bracing (137798) and air casing panels (137929). It must also be applied to the flanges between the air casing panels (137929).

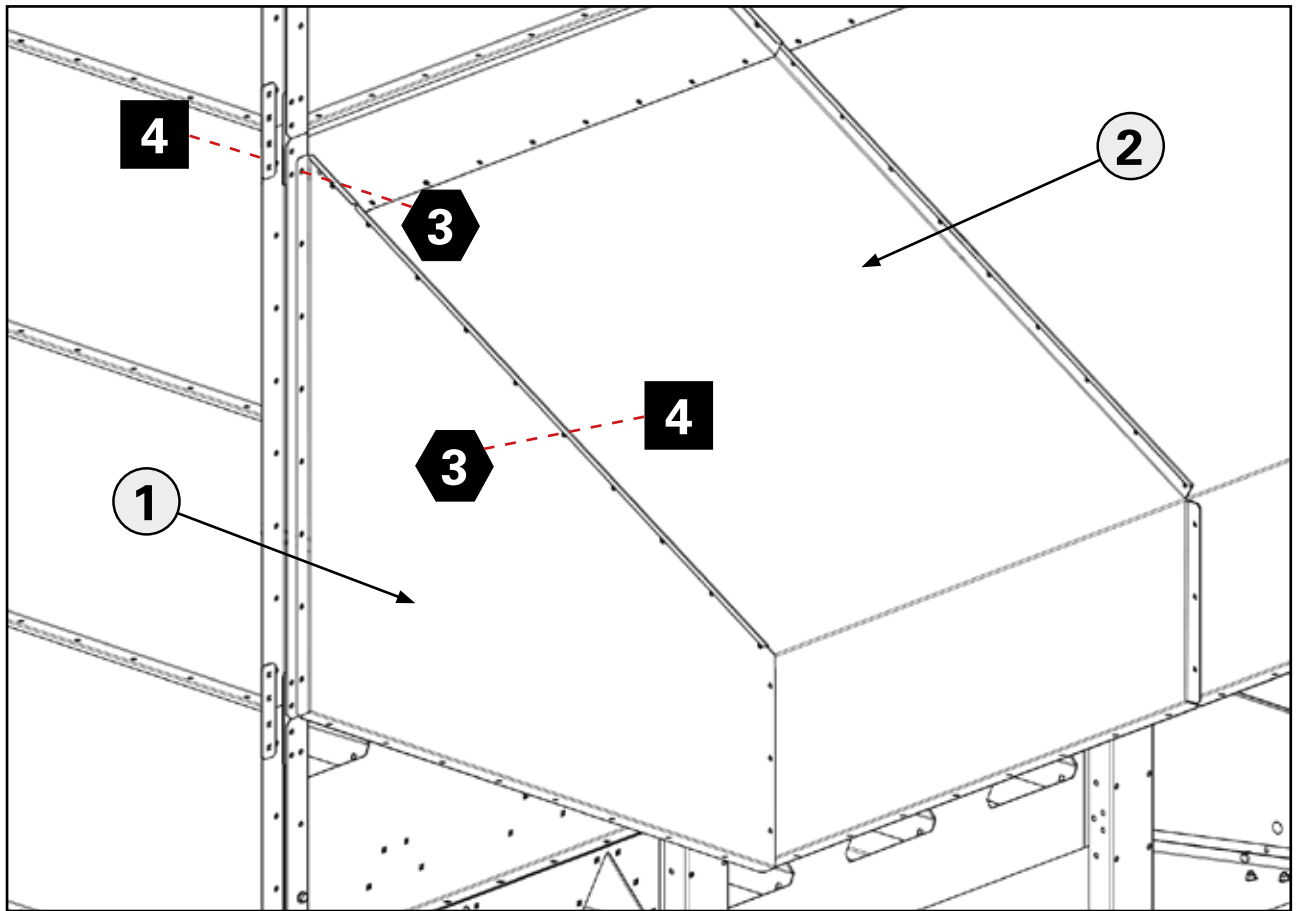


Figure 2.88. Attaching the air casing side panel

NUMBER	PART	DESCRIPTION
1	136695	Air casing side panel *
2	137929	Air casing panel
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921

\* Silicone must be applied to flanges between the air casing side panel (136695) and the drying cell. It must also be applied between the air casing side panel (136695) and the air casing panels (137929).

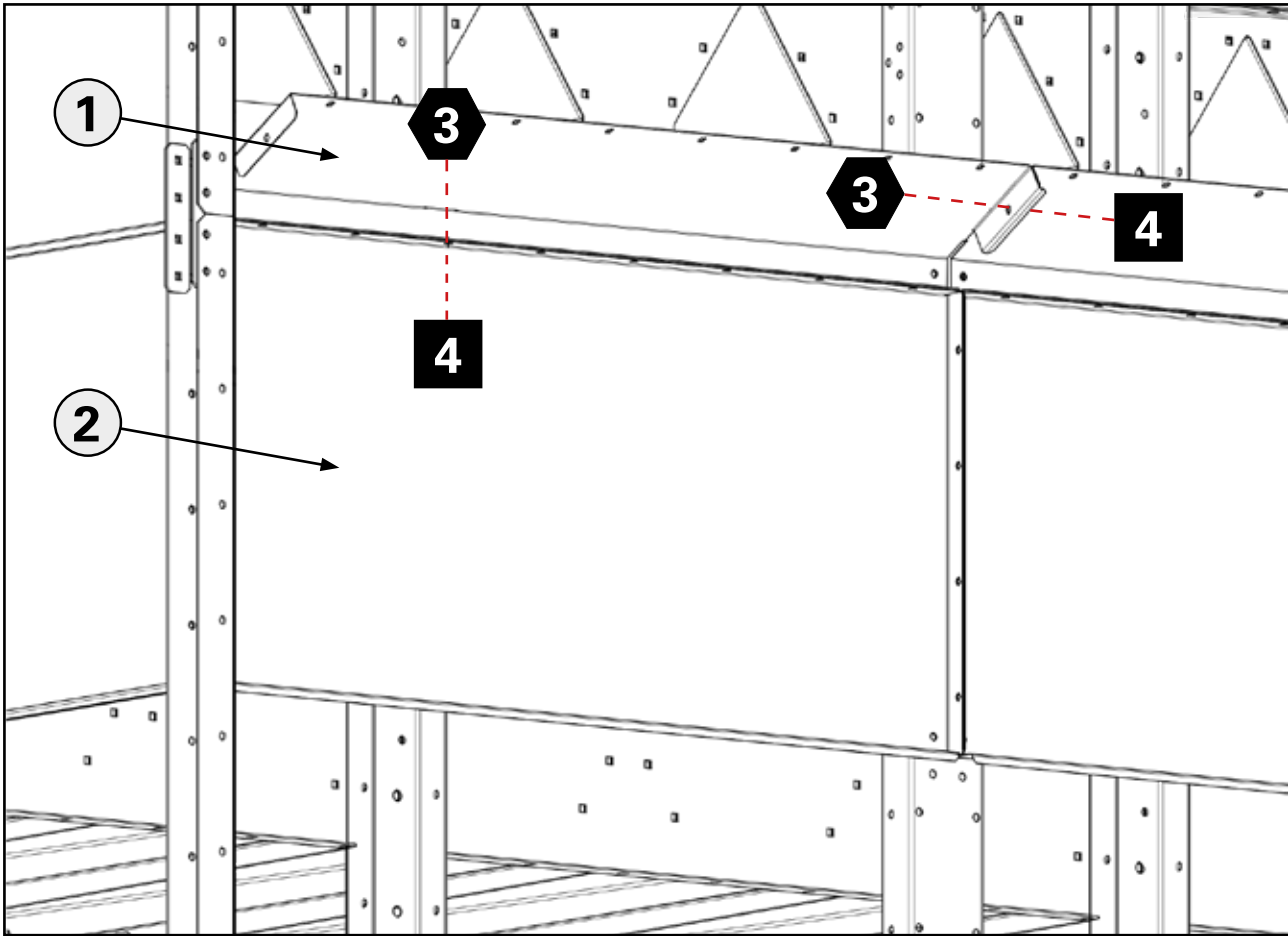


Figure 2.89. Attaching the lower air casing bracing

NUMBER	PART	DESCRIPTION
1	137798	Air casing bracing
2	136391	Air casing panel
3		Flange nut M8, DIN6923
4		Hex flange bolt M8x16, DIN6921



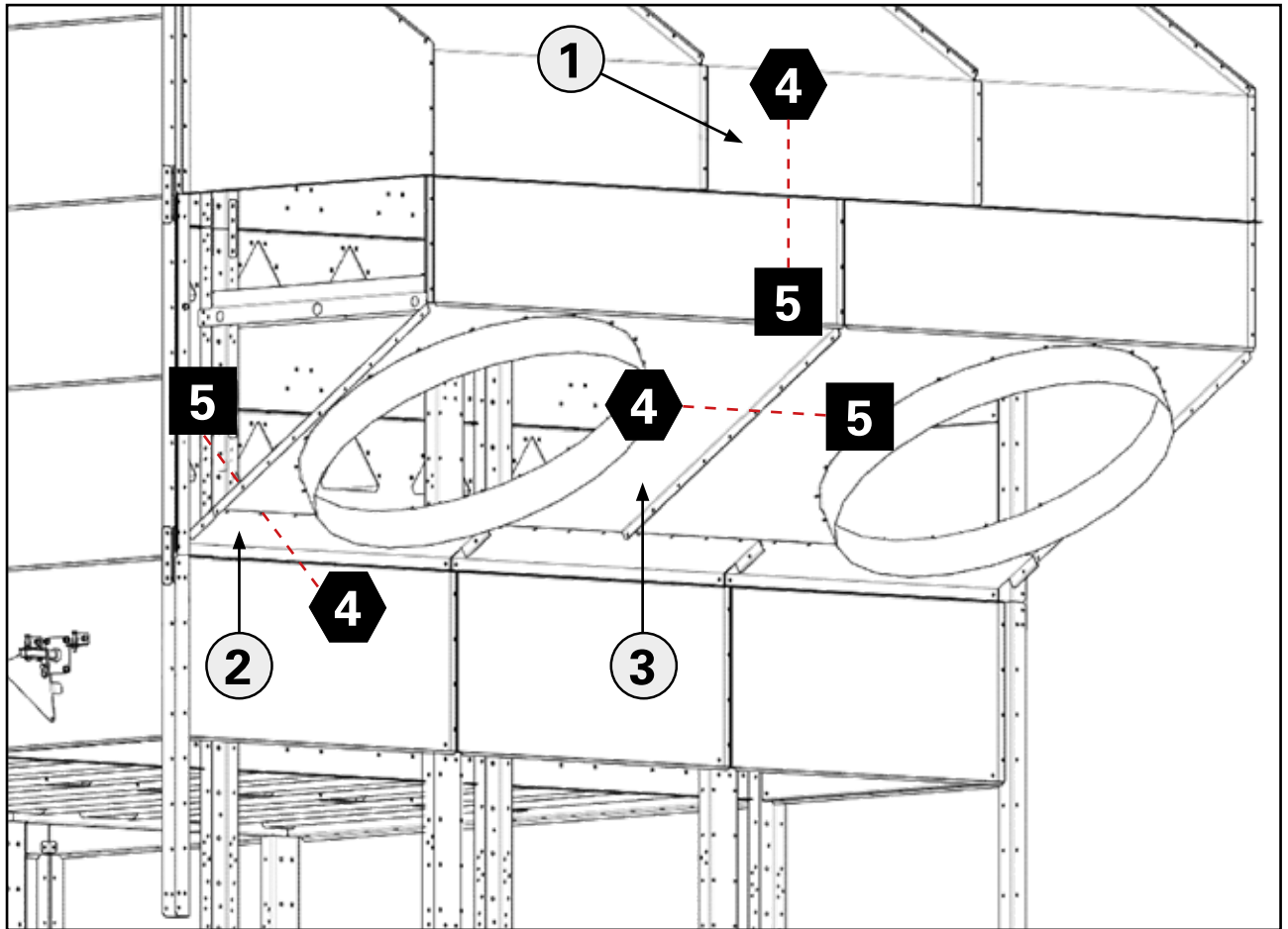


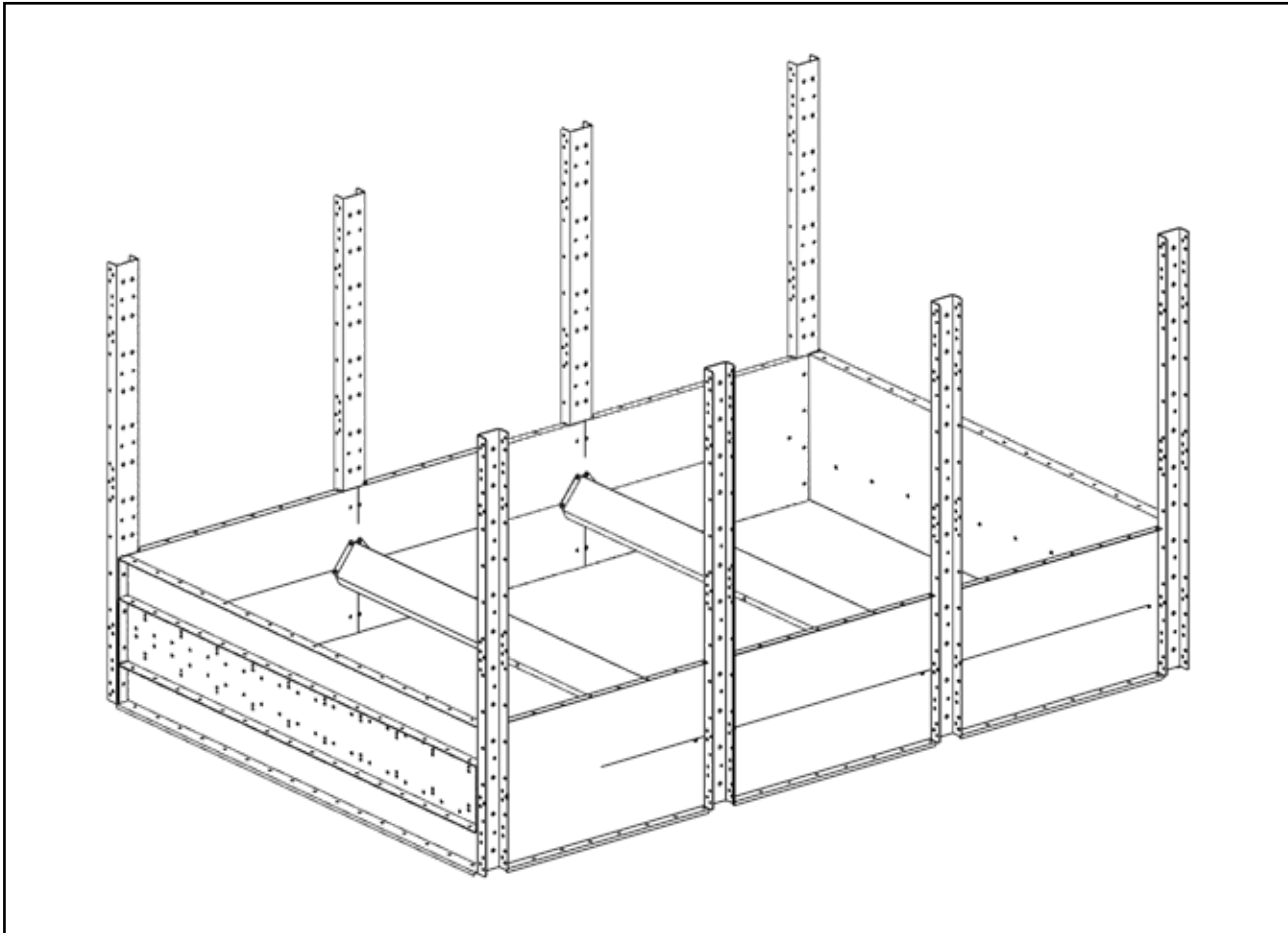
Figure 2.90. Attaching the air intake / output

NUMBER	PART	DESCRIPTION
1	137929	Air casing panel
2	137798	Air casing bracing
3		Air intake / output assembly *
4		Flange nut M8, DIN6923
5		Hex flange bolt M8x16, DIN6921

\* See section 2.3.2. on page 36 for instructions on assembling the air intakes / outputs.

## 2.6. Assembling the grain silos

### 2.6.1. Assembling a grain silo



*Figure 2.91. Finished grain silo layer with bracing*

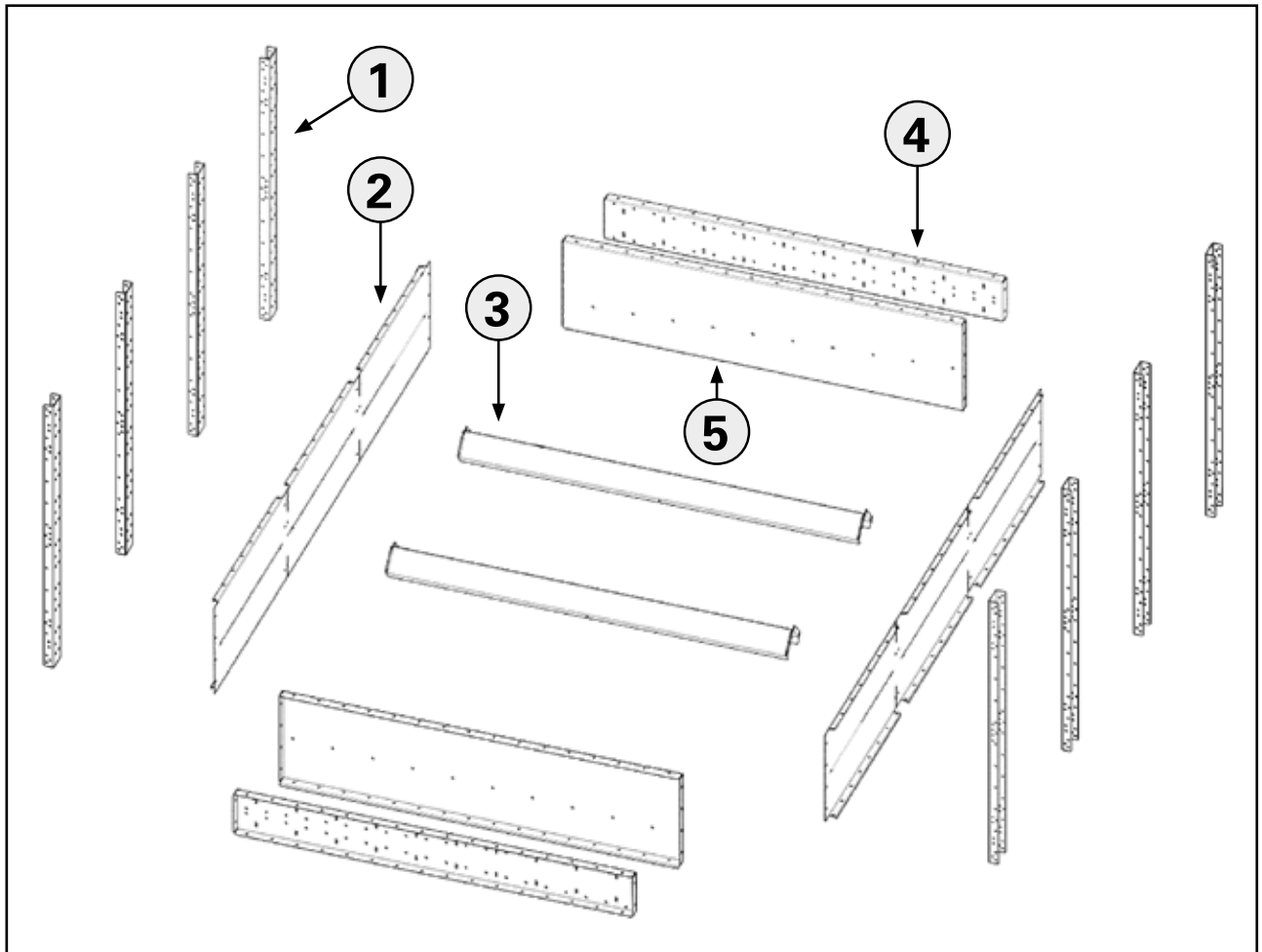


Figure 2.92. 2 Exploded view of the grain silo layer

NUMBER	PART	DESCRIPTION
1	136365	Grain silo bracing *
1	136360	Grain silo bracing
2	137701	Grain silo panel *
2	137702	Grain silo panel
3	137704	Crest plate
4	136457	Grain silo panel
5	137706	Grain silo panel *
5	137702	Grain silo panel

\* Shown in figure.

Note! The bracing (number 1) varies in length. Refer to your arrangement drawings to identify the correct length of bracing.

Note! The two highest grain silo sections use grain silo panel 137702 as indicated in the table above (number 5).

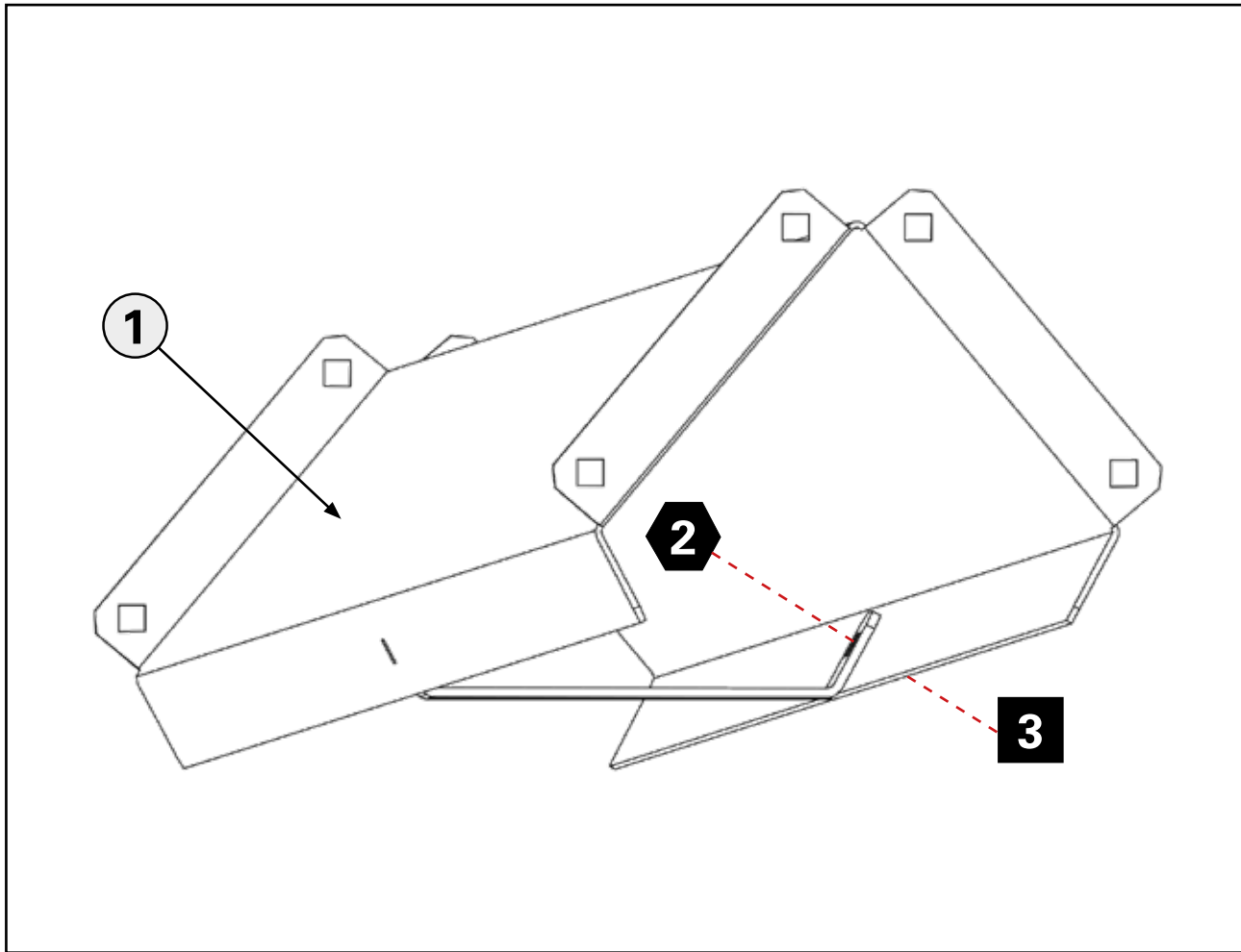


Figure 2.93. Crosspiece strengtheners

NUMBER	PART	DESCRIPTION
1	137704	Crest plate
2		Flange nut M8, DIN6923
3		Short square bolt M8x16, DIN603

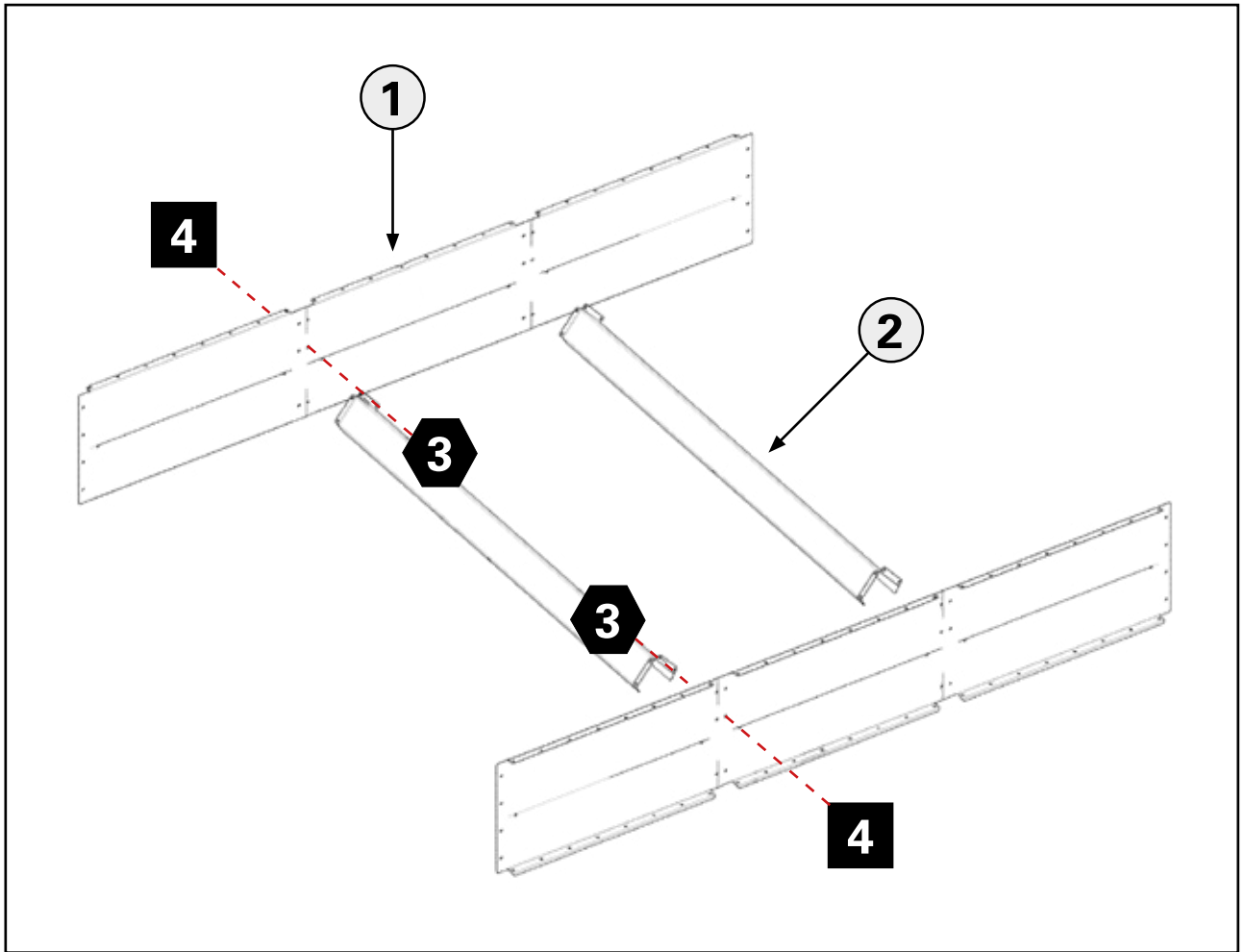


Figure 2.94. Assembling a grain silo

NUMBER	PART	DESCRIPTION
1	137701	Grain silo panel
2	137704	Crosspiece
3		Flange nut M8, DIN6923
4		Short square bolt M8x16, DIN603

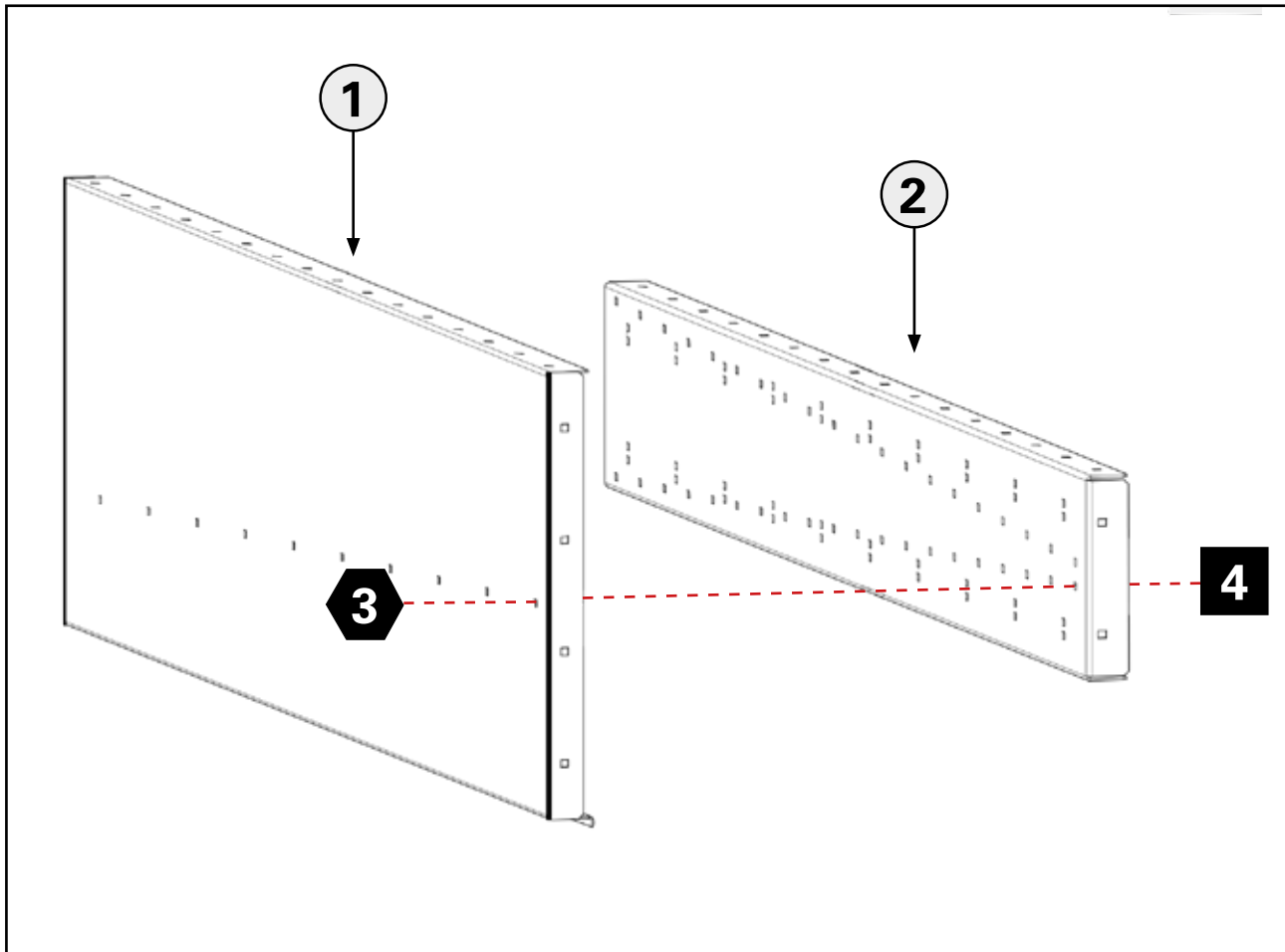


Figure 2.95. Assembling a grain silo

NUMBER	PART	DESCRIPTION
1	137706	Grain silo panel *
1	137702	Grain silo panel
2	136457	Grain silo panel
3		Flange nut M8, DIN6923
4		Short square bolt M8x16, DIN603

\* Shown in figure.

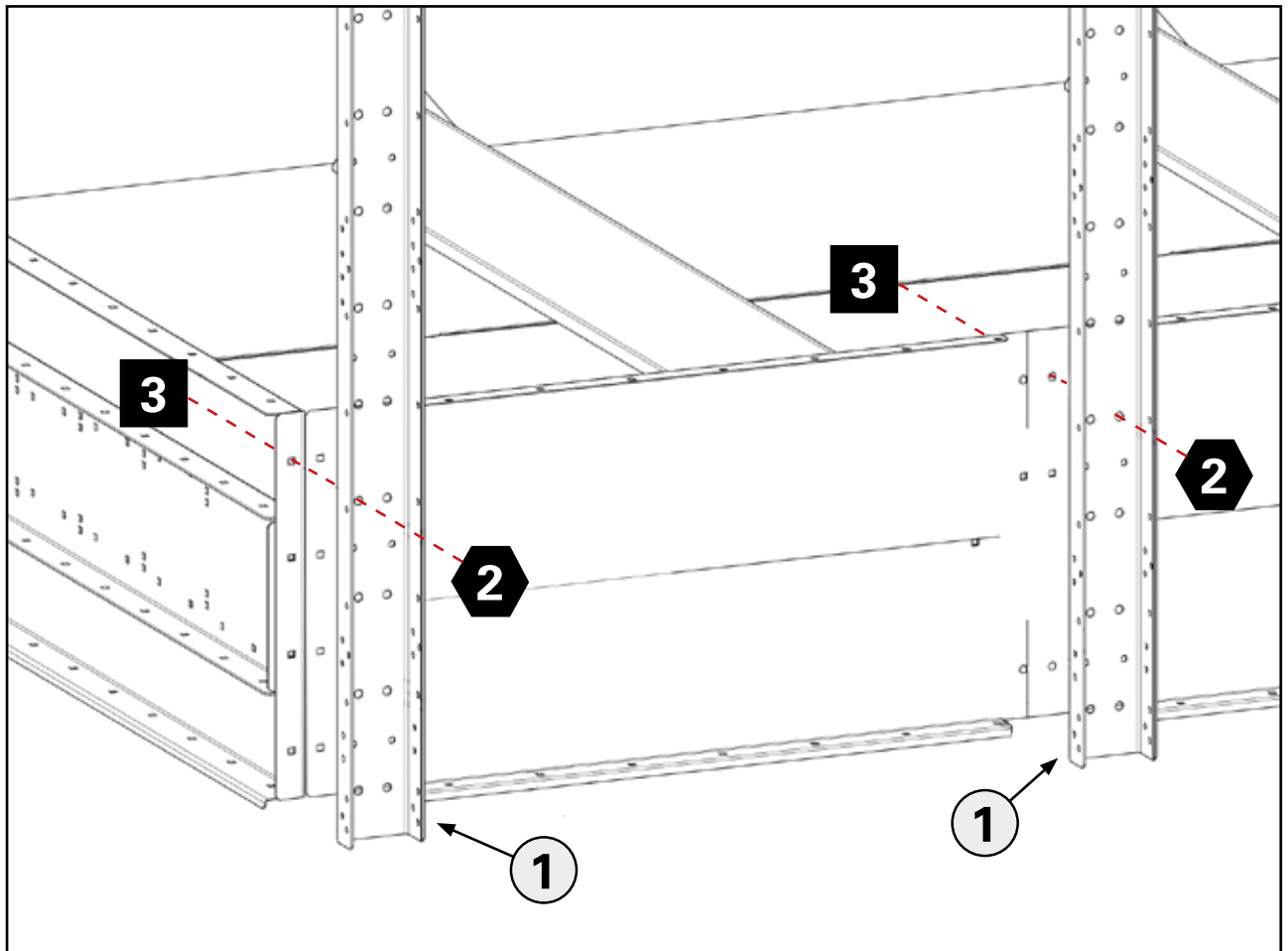


Figure 2.96. Assembling a grain silo

NUMBER	PART	DESCRIPTION
1	136365	Grain silo bracing *
1	136360	Grain silo bracing
2		Flange nut M8, DIN6923
3		Short square bolt M8x16, DIN603

\* Shown in figure.

## 2.6.2. Attaching two grain silo layers to each other

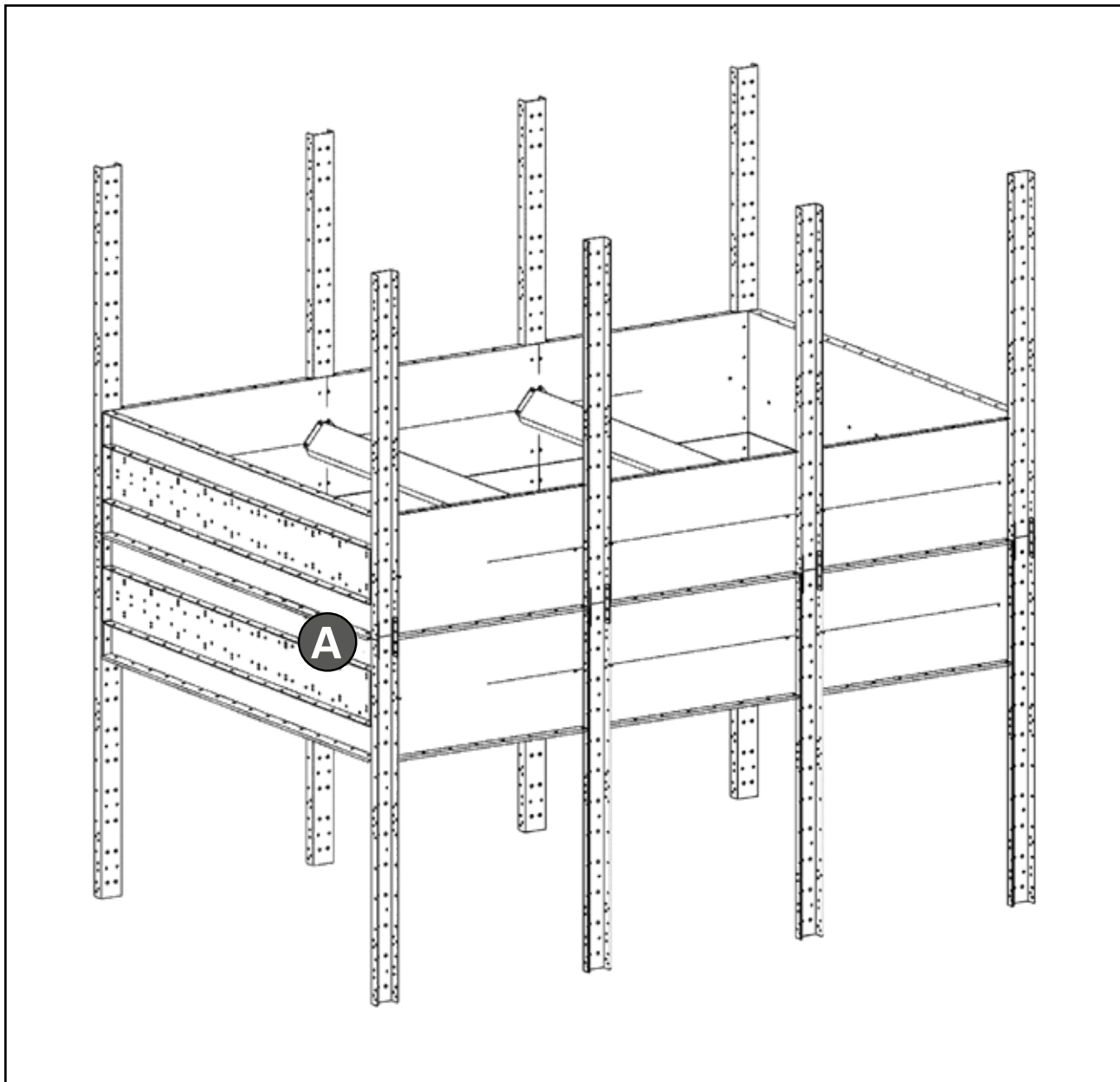


Figure 2.97. Two light model grain silos attached



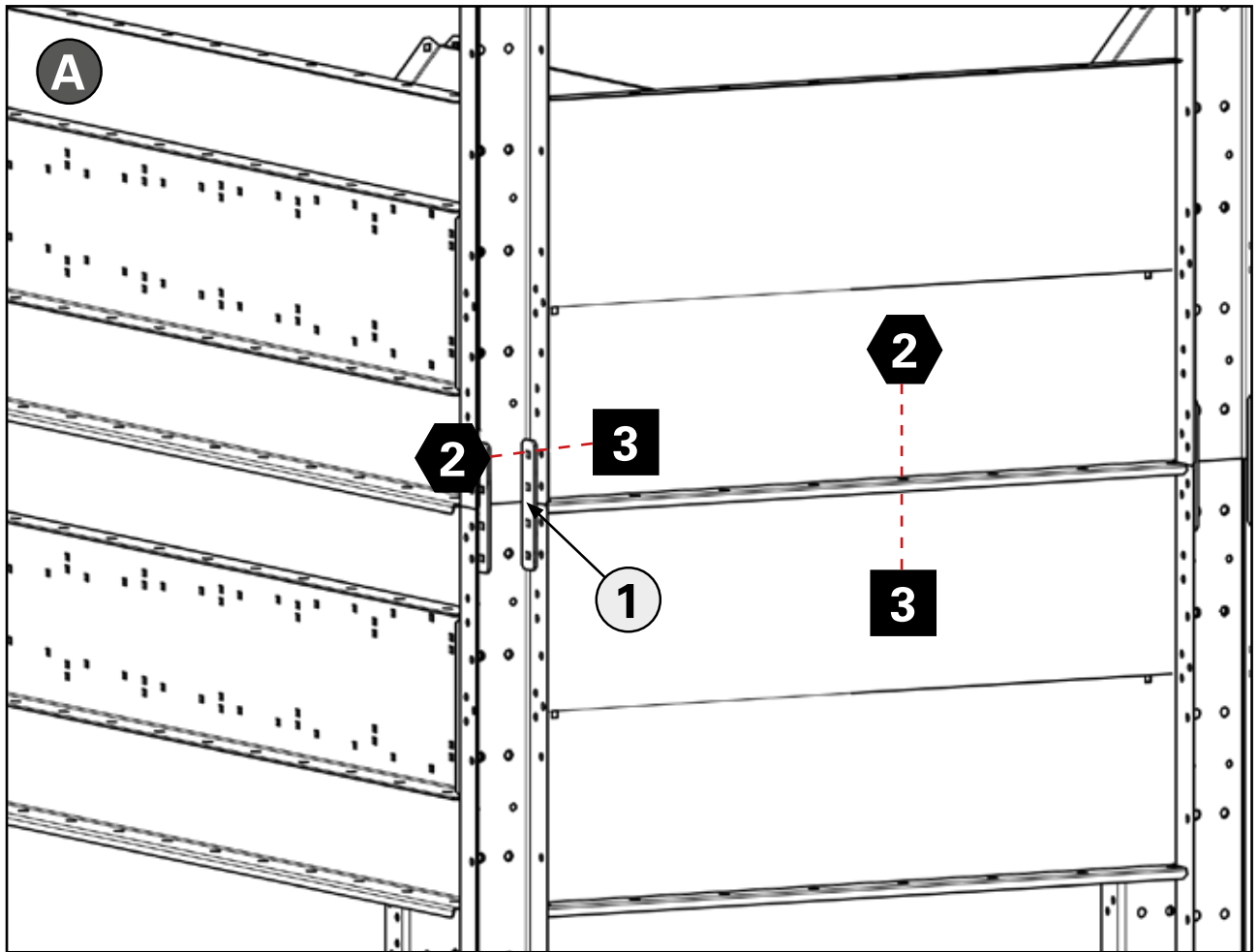


Figure 2.98. Attaching two grain silo layers to each other

NUMBER	PART	DESCRIPTION
1	136362	Fastening plate
2		Flange nut M8, DIN6923
3		Short square bolt M8x16, DIN603

### 2.6.3. Assembling the grain silo roof

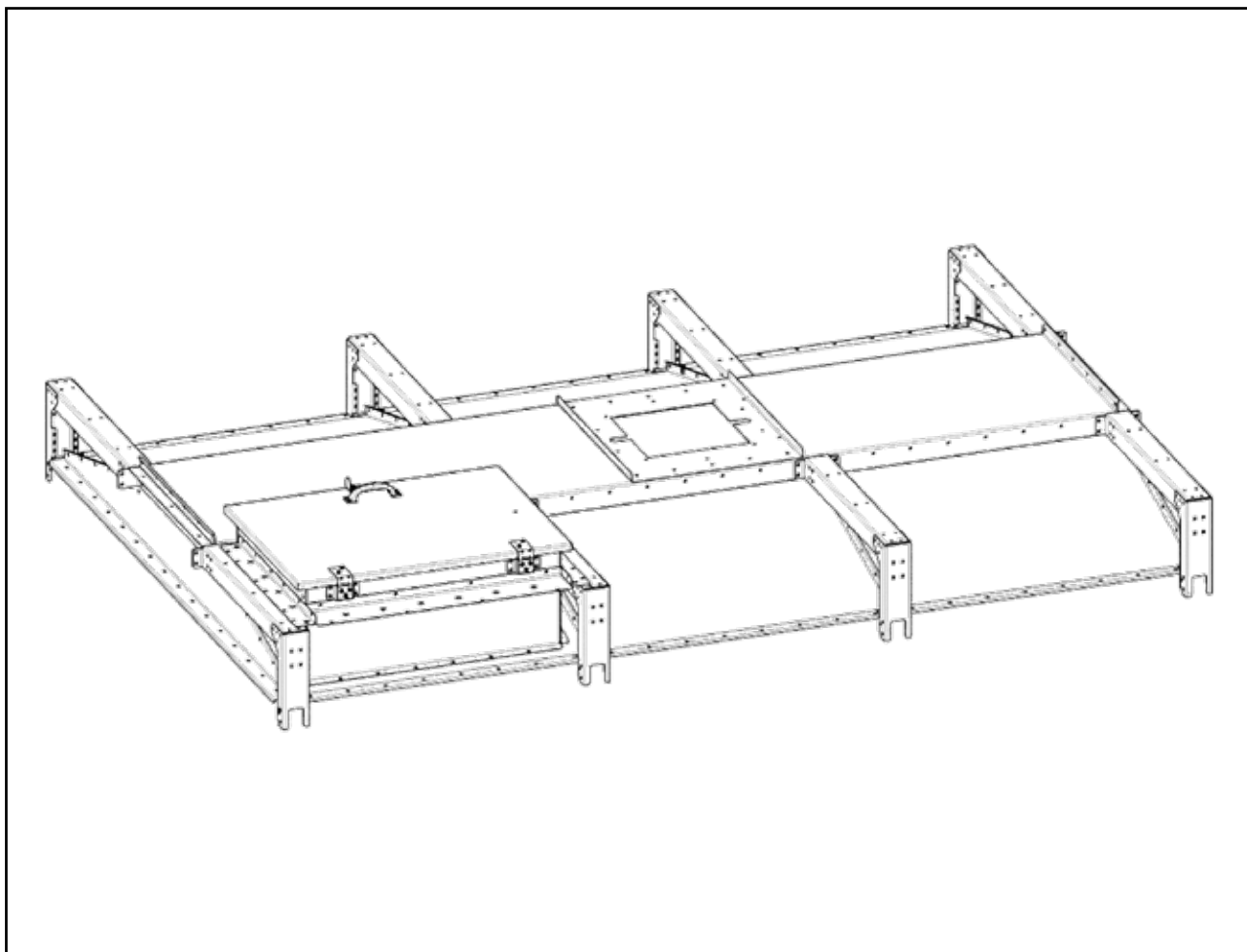


Figure 2.99. Finished grain silo roof

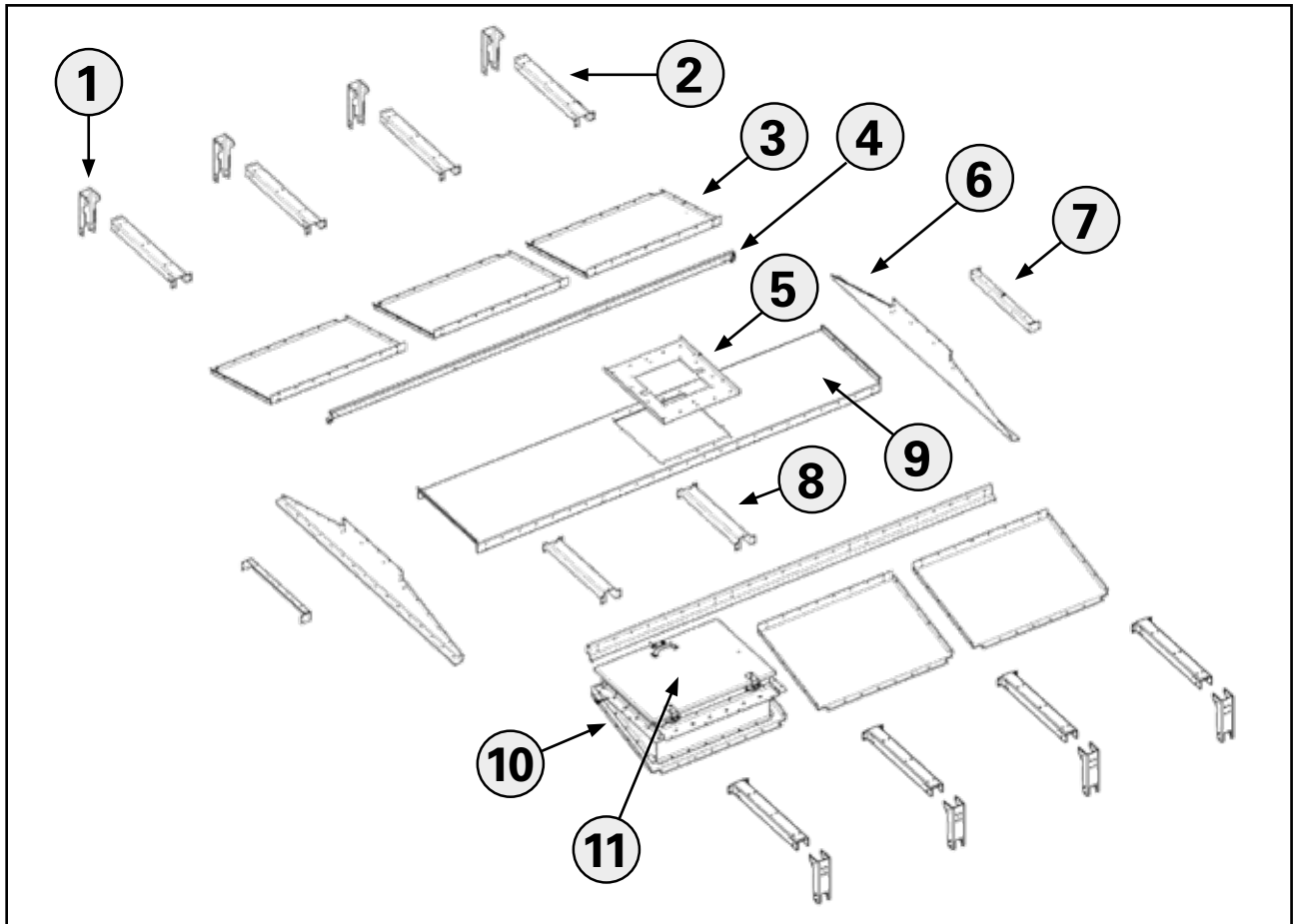


Figure 2.100. Exploded view of the grain silo roof

NUMBER	PART	DESCRIPTION
1	137450	Silo roof corner bracing
2	137451	Silo roof bracing
3	137456	Silo roof panel
4	137449	Silo roof strengthener *
4	137453	Silo roof strengthener
5	137482	Intake strengthener
6	137469	Silo roof panel
7	137462	Silo roof bracing
8	137452	Silo roof bracing
9	137667	Silo roof top panel
10	137641	Roof hatch frame
11		Roof hatch assembly **

\* Shown in figure.

\*\* See section 2.3.3. on page 40 for instructions on assembling the roof hatch.

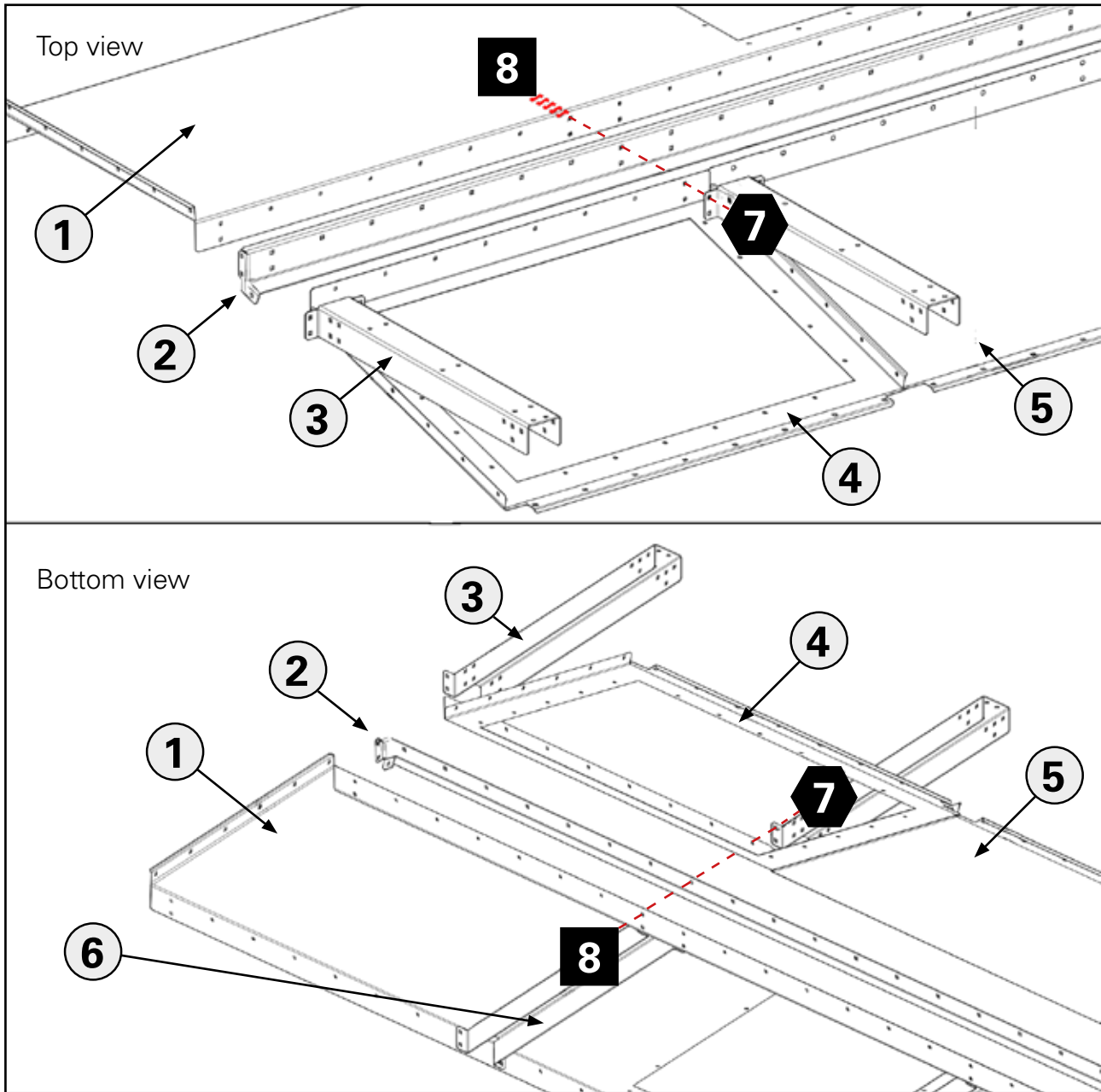


Figure 2.101. Assembling the grain silo roof: two views

NUMBER	PART	DESCRIPTION
1	137667	Silo roof top panel
2	137449	Silo roof strengthener *
2	137453	Silo roof strengthener
3	137451	Silo roof bracing
4	137641	Roof hatch frame
5	137456	Silo roof panel
6	137452	Silo roof bracing
7		Flange nut M8, DIN6923
8		Short square bolt M8x16, DIN603

\* Shown in figure.

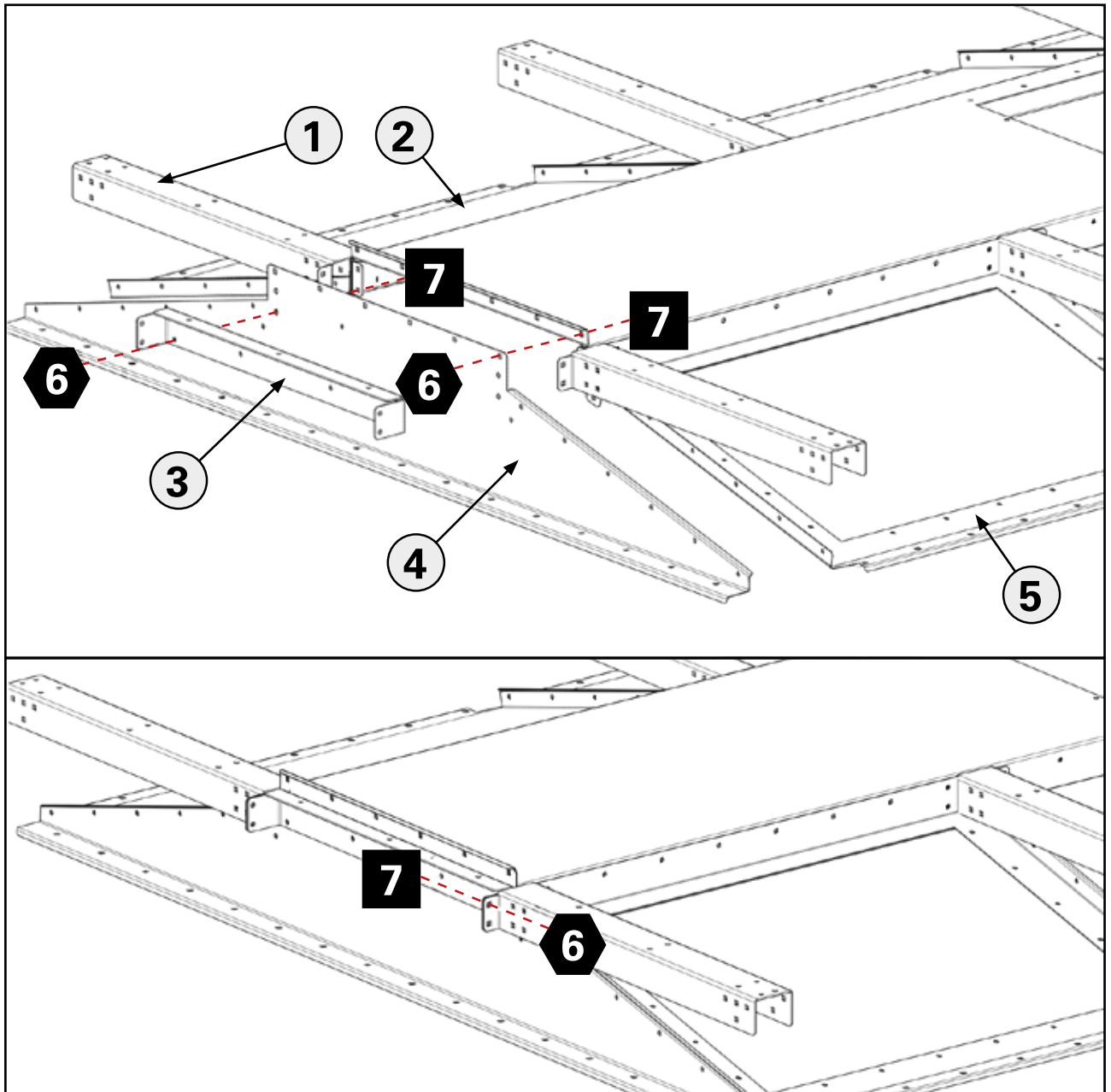


Figure 2.102. Attaching the grain silo roof side panel

NUMBER	PART	DESCRIPTION
1	137451	Silo roof bracing
2	137456	Silo roof panel
3	137462	Silo roof strengthener
4	137469	Silo roof panel
5	137461	Roof hatch frame
6		Flange nut M8, DIN6923
7		Short square bolt M8x16, DIN603

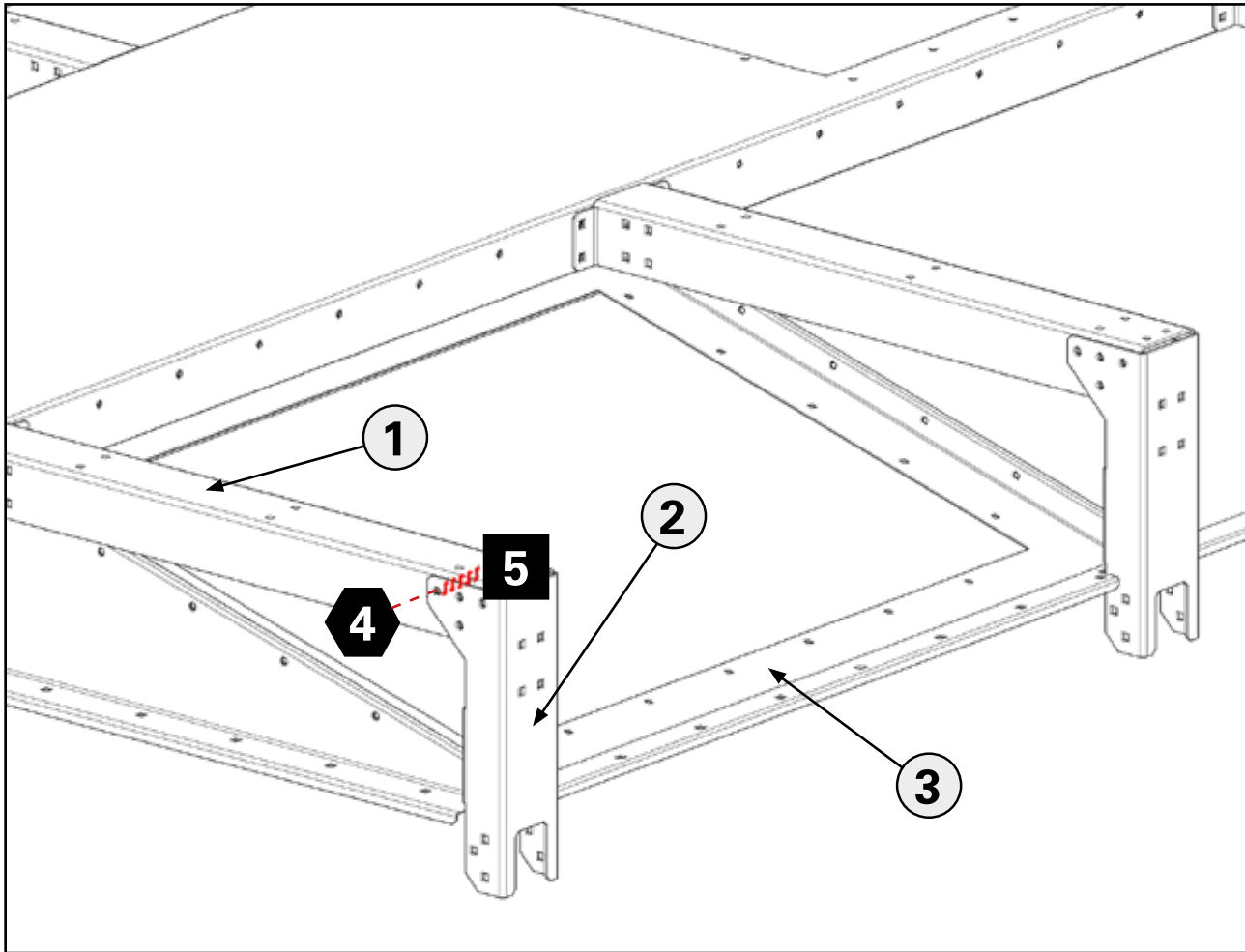


Figure 2.103. Attaching the corner bracing

NUMBER	PART	DESCRIPTION
1	137451	Silo roof bracing
2	137450	Silo roof corner bracing
3	137461	Roof hatch frame
4		Flange nut M8, DIN6923
5		Short square bolt M8x16, DIN603

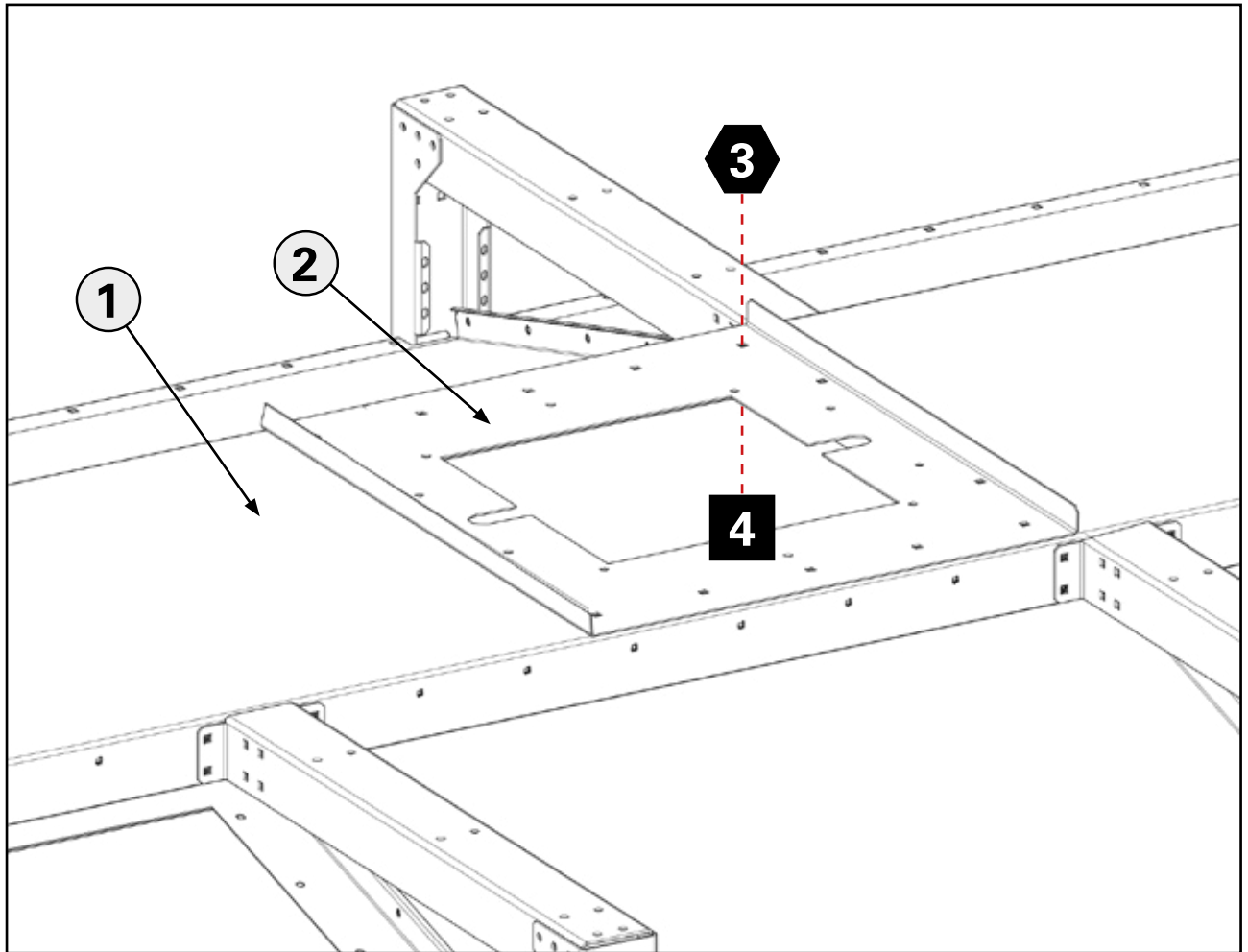


Figure 2.104. Attaching the intake strengthener

NUMBER	PART	DESCRIPTION
1	137667	Silo roof top panel
2	137482	Intake frame
3		Flange nut M8, DIN6923
4		Short square bolt M8x16, DIN603

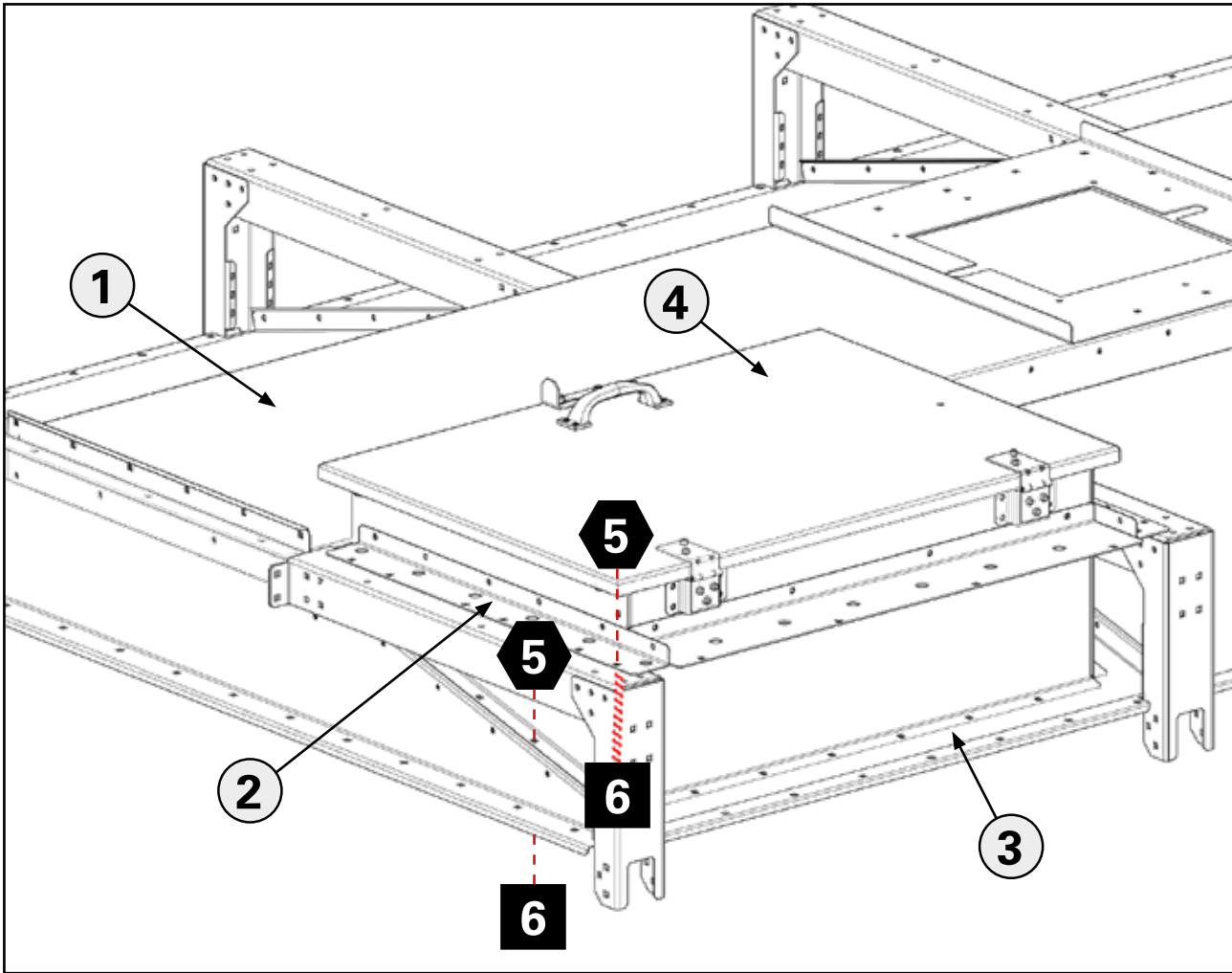


Figure 2.105. Attaching the roof hatch

NUMBER	PART	DESCRIPTION
1	137667	Silo roof top panel
2	137451	Silo roof bracing
3	137461	Roof hatch frame
4		Roof hatch assembly *
5		Flange nut M8, DIN6923
6		Short square bolt M8x16, DIN603

\* See section 2.3.3. on page 40 for instructions on assembling the roof hatch.











**MEPU Ltd**  
Mynämäentie 59, 21900 Yläne, Finland  
tel. +358 2 275 4444, [mepu@mepu.com](mailto:mepu@mepu.com)  
[www.mepu.com](http://www.mepu.com)