

Drawing nr.	Contents of drawing
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SPA02-A-1E-EN	Horizontal installation, brick cladding, vertical section
SPA02-A-2E-EN	Horizontal installation, horizontal flashing, vertical section
SPA02-A-3E-EN	Horizontal installation, horizontal flashing in groove, vertical section
SPA03-A-1E-EN	Horizontal installation, vertical joint / profiled sheet, horizontal section
SPA03-A-2E-EN	Horizontal installation, vertical joint / brick cladding, horizontal section
SPA06-A-1E-EN	Horizontal installation, bottom edge of eaves, vertical section
SPA06-A-2E-EN	Horizontal installation, fastening of ladder, vertical section
SPA06-A-3E-EN	Horizontal installation, fastening of ladder, horizontal section
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SPA12-A-1E-EN	Horizontal installation, vertical joint T-steel / steel frame
SPA12-A-2E-EN	Horizontal installation, vertical joint T-steel / concrete frame
SPA12-A-3E-EN	Horizontal installation, external corner L-steel / steel frame

City sector	Block	Site/Reg. nr.	File nr.		
Building type			Drawing type		
Building, Name and address			Nr.		
 Ruukki Construction Oy Panuntie 11 00620 HELSINKI FINLAND tel. +358 (0) 20 59 150 www.ruukki.com			Contents of drawing		Scale
			Sandwich panel SPA Extra details External walls		
Date	Designer	Work nr.	Work nr.	Drw. nr.	Rev.
27.09.2023					
Drawn by	Checked				
Ruukki					

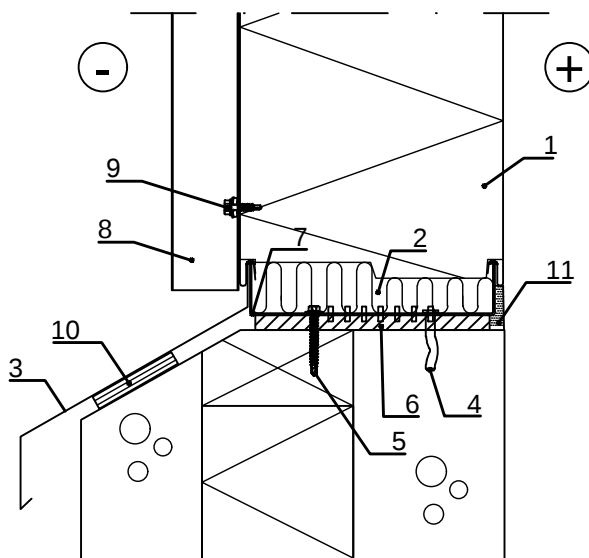


Contents of drawing

Sandwich panel SPA, horizontal installation
Plinth / profiled sheet
Vertical section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA01-A-1E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.

Check the strength calculation with the surface covering!



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. /EAWS30565/ Mineral wool
- ☐ 3. /EA1P3-___/ Cill flashing (installed simultaneously with elements)
- ☐ 4. Spike-fastener, concrete c/c600 ||
or
- ☐ 5. Fastener, wood c/c600
- ☐ 6. /EA3SP___10/ Plinth sealing
- ☐ 7. /EA1U___/ U-plinth purlin
- ☐ 8. Profiled sheet ≥ 45 mm, vertical installation
- ☐ 9. Fastener
- ☐ 10. Plywood, if needed
- ☐ 11. Ruukki silicone, if needed

☒ Ruukki's delivery

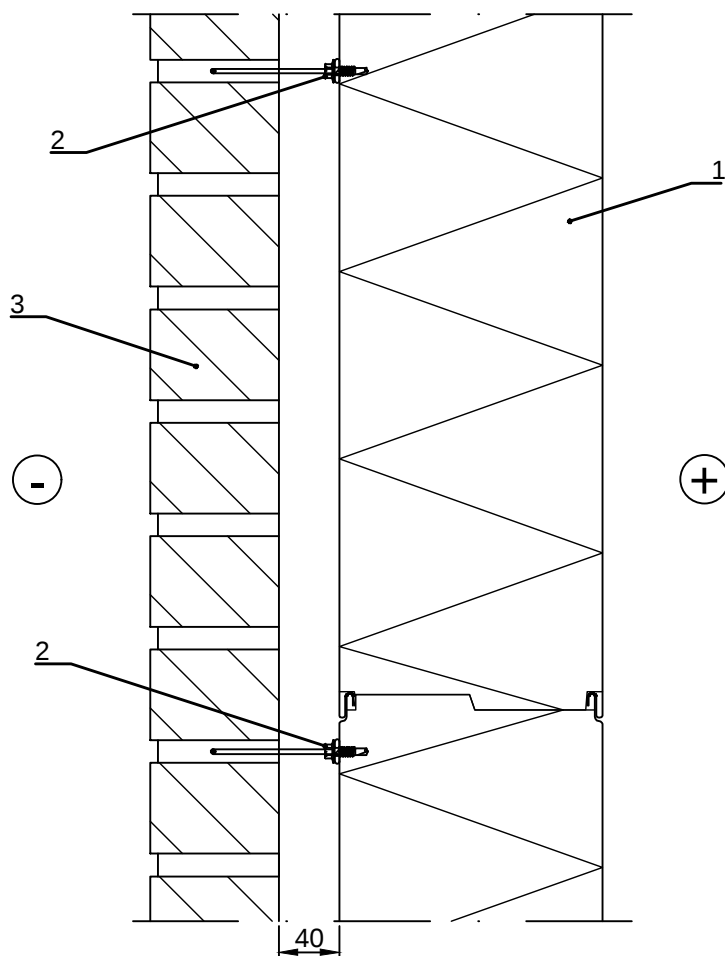
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Contents of drawing

Sandwich panel SPA, horizontal installation
Plinth / brick cladding
Vertical section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA02-A-1E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. Fastener, brick cladding to be fixed to the panel with stainless fasteners (≥ 4 pc / m²)
- ☐ 3. Brick cladding

☒ Ruukki's delivery

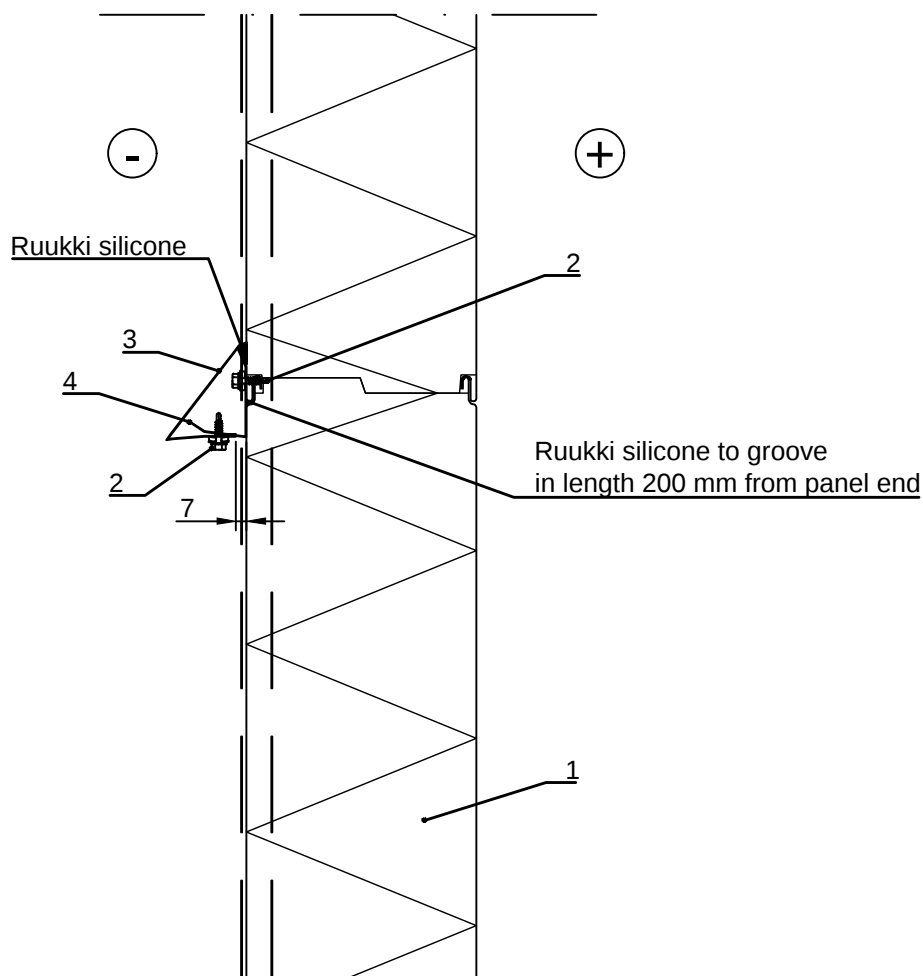
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Contents of drawing

Sandwich panel SPA, horizontal installation
Horizontal flashing
Vertical section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA02-A-2E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. Fastener
- ☐ 3. Horizontal flashing EA1H2
- ☐ 4. Horizontal support flashing EA1HS2

☒ Ruukki's delivery

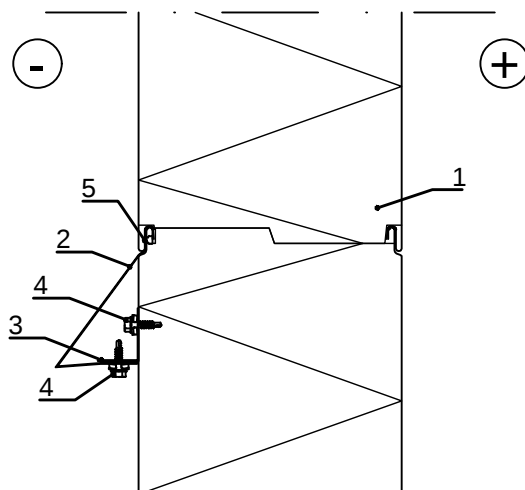
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Contents of drawing

Sandwich panel SPA, horizontal installation
Horizontal flashing in groove
Vertical section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA02-A-3E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. Horizontal flashing EA1H1
- ☐ 3. Horizontal support flashing EA1HS1
- ☐ 4. Fastener
- ☐ 5. Rivet

☒ Ruukki's delivery

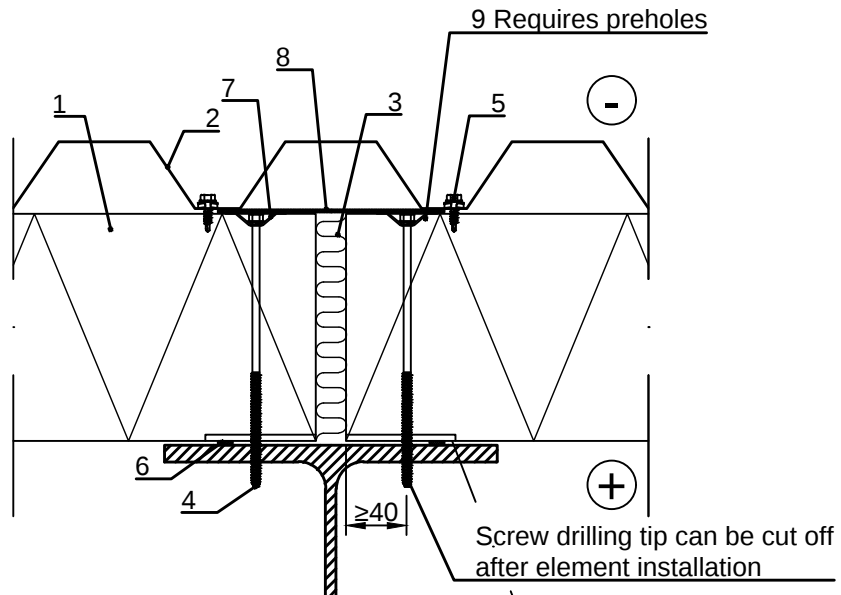
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Contents of drawing

Sandwich panel SPA, horizontal installation
Vertical joint / profiled sheet
Horizontal section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA03-A-1E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building	File nr.	



Check the strength calculation with the surface covering!

Ruukki silicone to inner groove
in length 60 mm

- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. Profiled sheet ≥ 45 mm, vertical installation
- ☐ 3. /EAWS30565/ Mineral wool
- ☐ 4. Element fastener
- ☐ 5. Fastener
- ☐ 6. /EA3SS410/ Sealing strip
- ☐ 7. /EA2W40-910S/ Countersunk washer
- ☐ 8. /EA3JS15025/ Joint sealing
- ☐ 9. /EA2HS D27/ Hole saw

☒ Ruukki's delivery

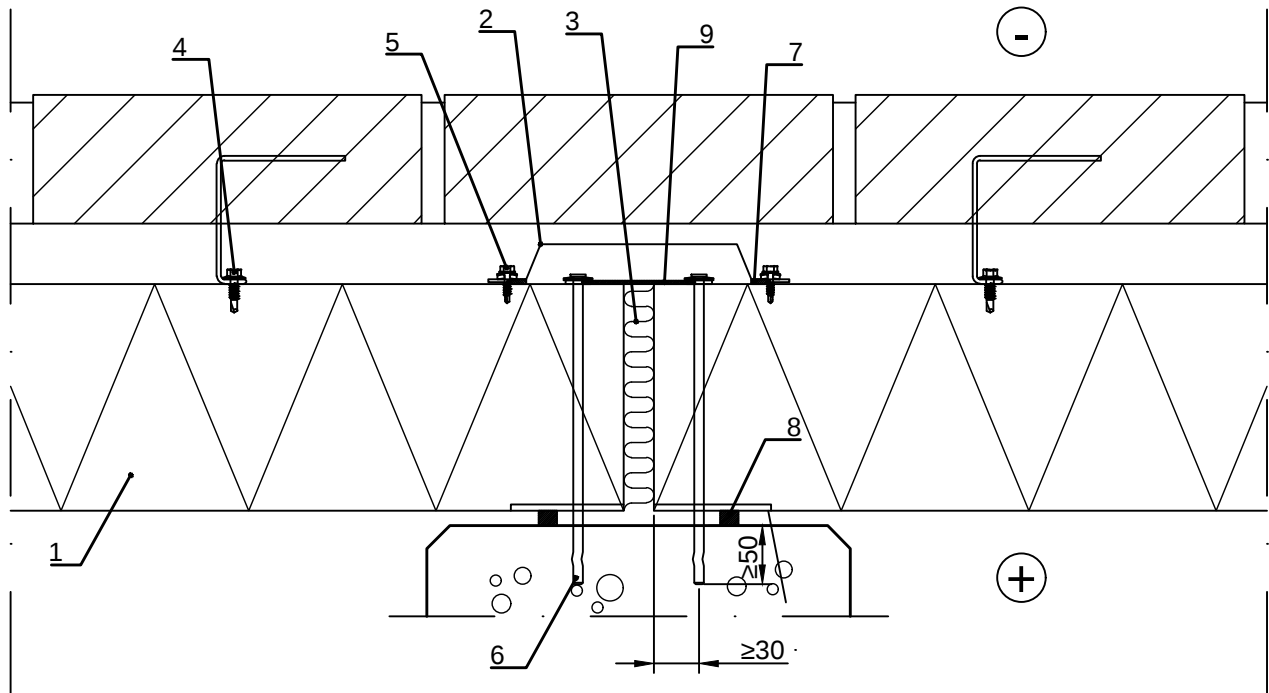
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Contents of drawing

Sandwich panel SPA, horizontal installation
Vertical joint / brick cladding
Horizontal section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA03-A-2E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



Ruukki silicone to inner groove
in length 60 mm

- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. /EA1JV1/ Vertical joint flashing
- ☐ 3. /EAWS30565/ Mineral wool
- ☐ 4. Fastener, brick cladding to be fixed to the panel with stainless fasteners (≥ 4 pc / m²)
- ☐ 5. Fastener
- ☐ 6. Spike element fastener
- ☐ 7. /EA3SS410/ Sealing strip
- ☐ 8. /EA3SS1012/ Sealing strip
- ☐ 9. /EA3JS7525/ Joint sealing

☒ Ruukki's delivery

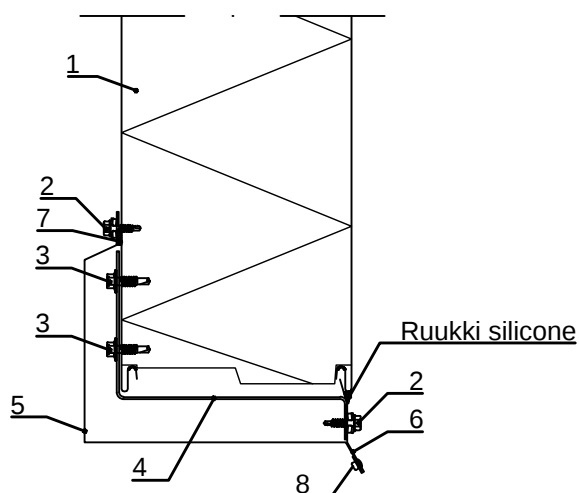
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Contents of drawing

Sandwich panel SPA, horizontal installation
Bottom edge of eaves
Vertical section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA06-A-1E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. Fastener
- ☐ 3. Fastener
- ☐ 4. Purlin, zinc coated t = 2 mm, according to project
- ☐ 5. Cover flashing, according to project
- ☐ 6. Cover flashing, according to project
- ☐ 7. /EA3SS410/ Sealing strip
- ☐ 8. Rivet

☒ Ruukki's delivery

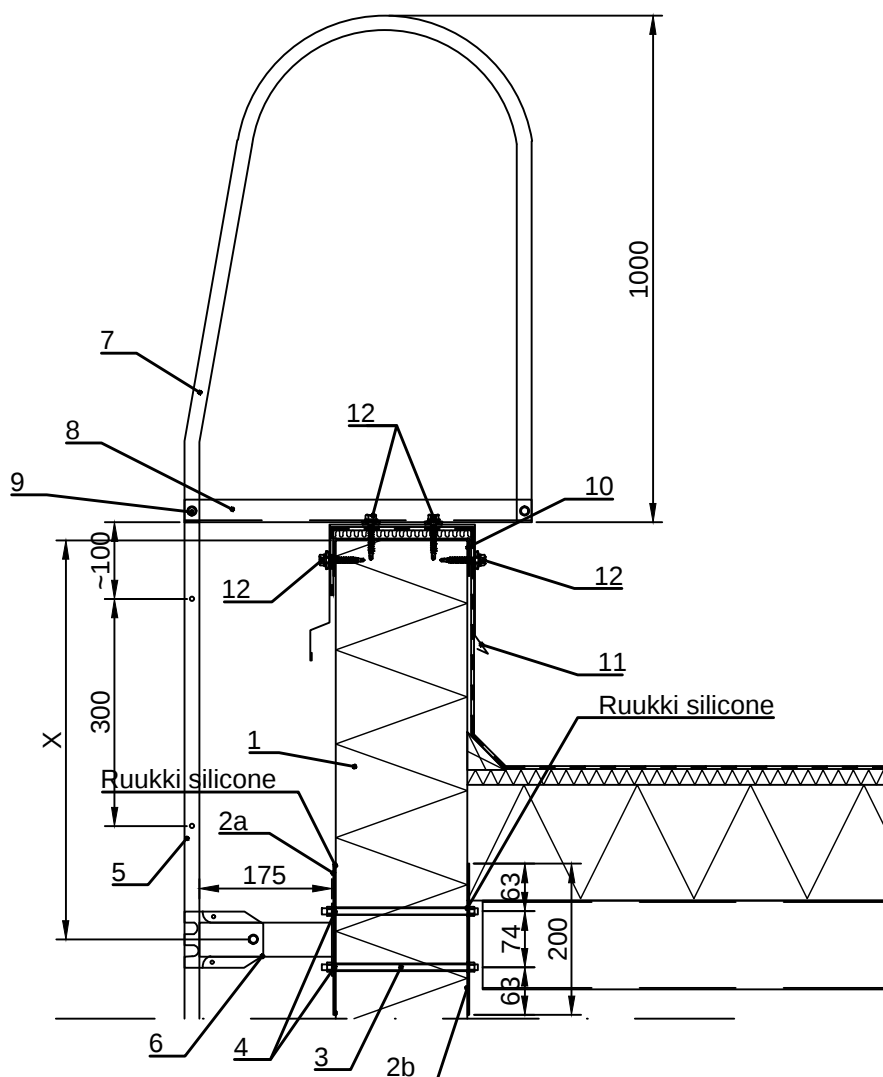
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Contents of drawing

Sandwich panel SPA, horizontal installation
Fastening of ladder
Vertical section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA06-A-2E-EN
Drawn by Ruukki	Rev.		
Scale 1:10	Building		File nr.



Roof and eaves structures, see SPA external wall principle details

- | | |
|--|---|
| ☐ 1. Sandwich panel SPA, horizontal installation | ☐ 6. Leg of the ladder |
| ☐ 2a. Mounting plate, zinc coated + (painting),
tmin = 2 mm, for demanding climate stainless | ☐ 7. Top chamber |
| ☐ 2b. Mounting plate, zinc coated + (painting), tmin = 2 mm | ☐ 8. Fixing part of top chamber |
| ☐ 3. M8 threaded rod or M8 bolt | ☐ 9. M8x20 bolt |
| ☐ 4. Mounting glue tai rubber sealing band | ☐ 10. /EA1D__ / Purlin t = 2 mm |
| ☐ 5. Wall ladder | ☐ 11. Eaves flashing, according to project |
| | ☐ 12. Fastener |

☒ Ruukki's delivery

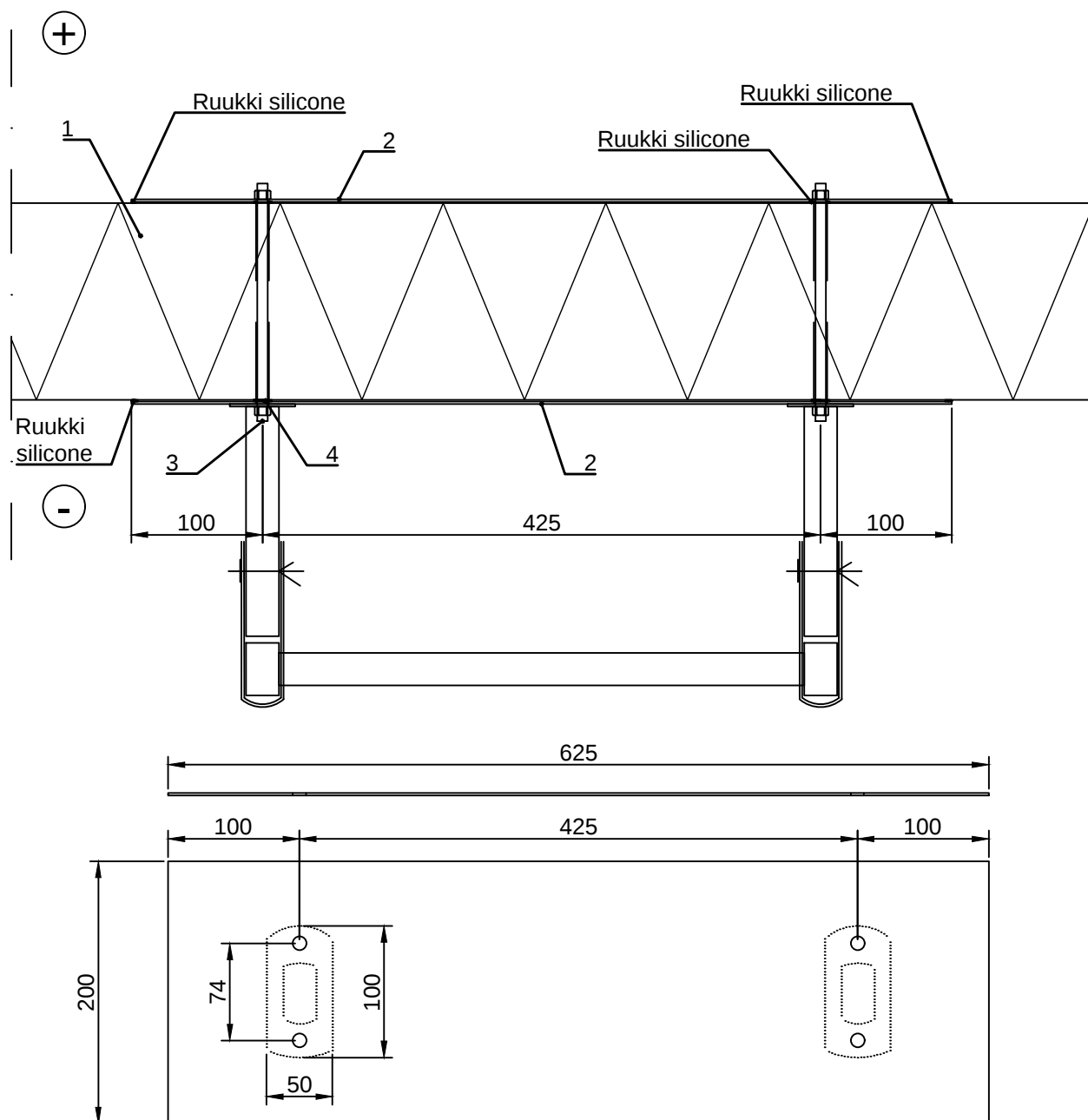
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Contents of drawing

Sandwich panel SPA, horizontal installation
Fastening of ladder
Horizontal section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA06-A-3E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. Mounting plate, $t_{min} = 2 \text{ mm}$ (see. previous detail)
- ☐ 3. M8 threaded rod or M8 bolt
- ☐ 4. Mounting glue tai rubber sealing band

☒ Ruukki's delivery

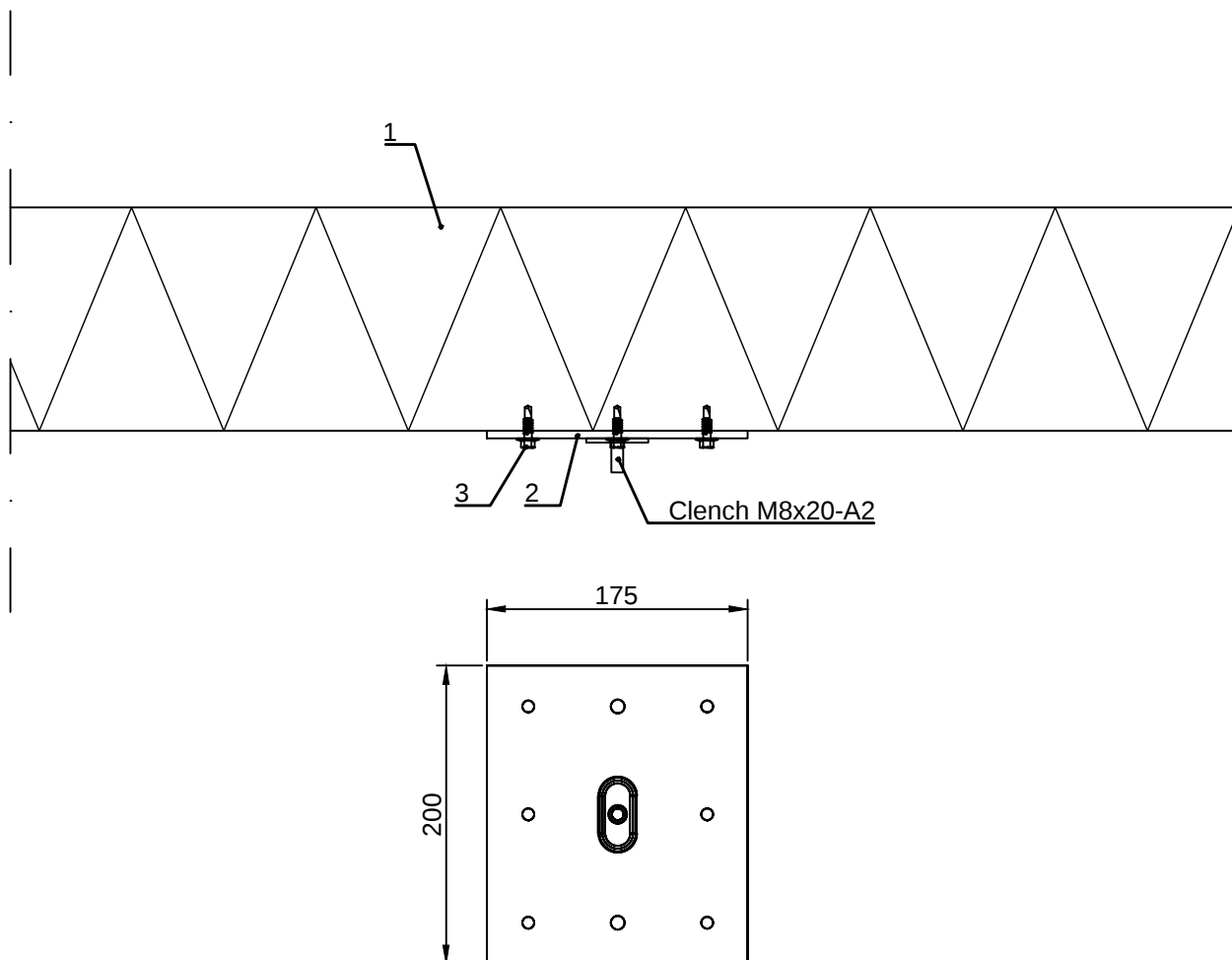
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Contents of drawing

Sandwich panel SPA
Hanging / fastening to panel outer (inner) sheet
Horizontal section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA06-A-4E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



- ☐ 1. Sandwich panel SPA
- ☐ 2. Sandwich fastener, 1-bolted
- ☐ 3. Screw 6,3x19 HX8 A2

☒ Ruukki's delivery

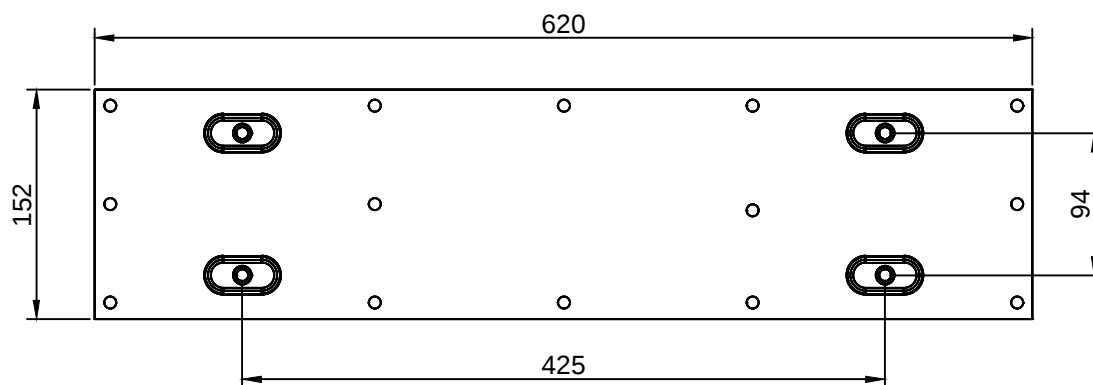
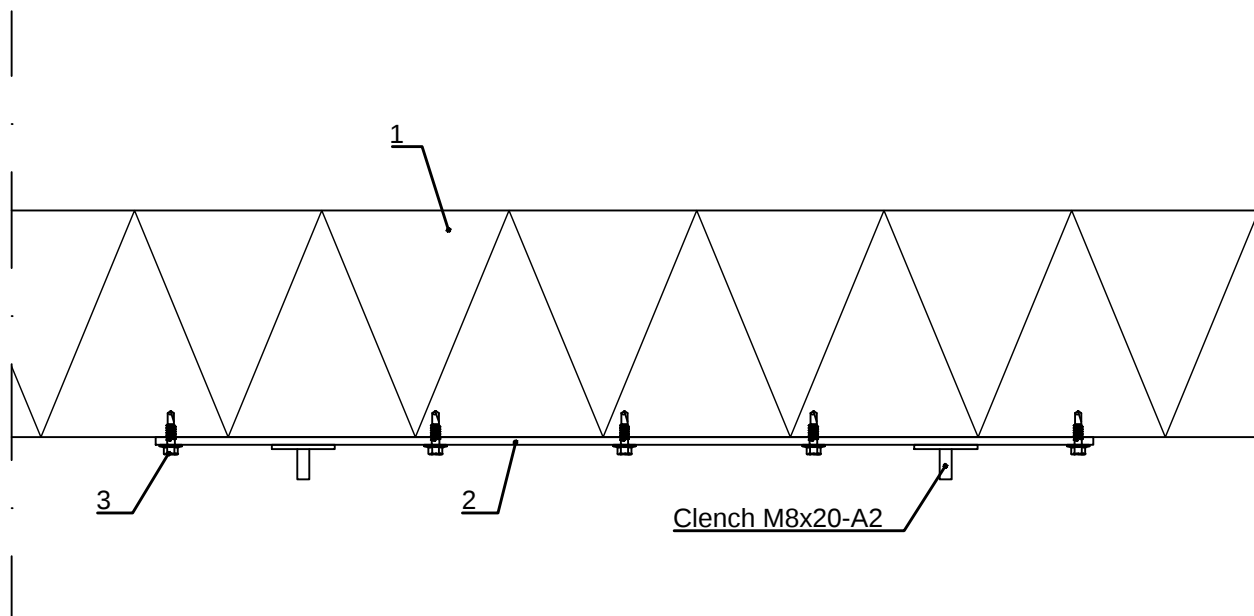
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Contents of drawing

Sandwich panel SPA
Hanging / fastening to panel outer (inner) sheet
Horizontal section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA06-A-5E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



Especially suitable for fixing wall ladders.

- ☐ 1. Sandwich panel SPA
- ☐ 2. Sandwich fastener for ladder
- ☐ 3. Screw 6,3x19 HX8 A2

☒ Ruukki's delivery

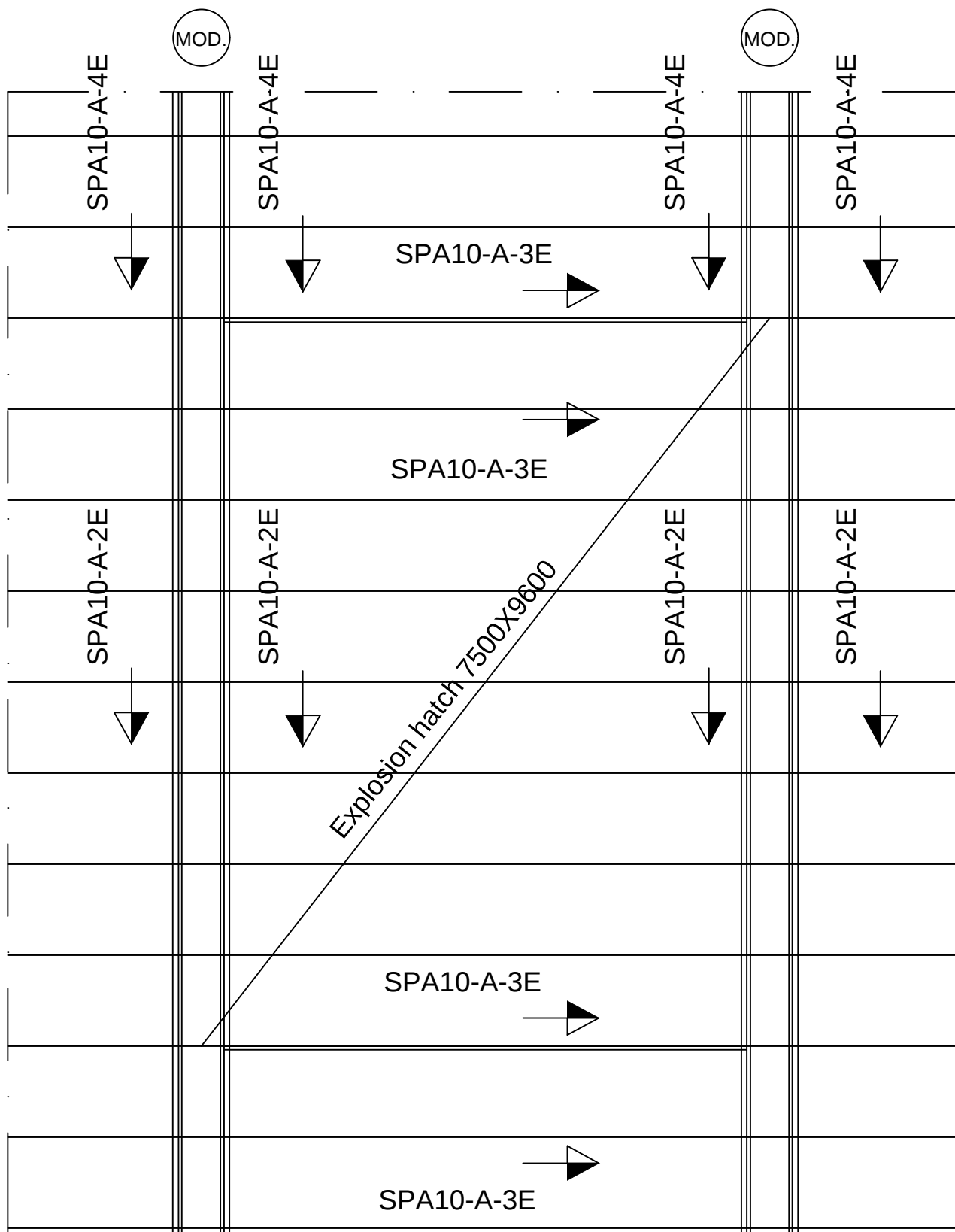
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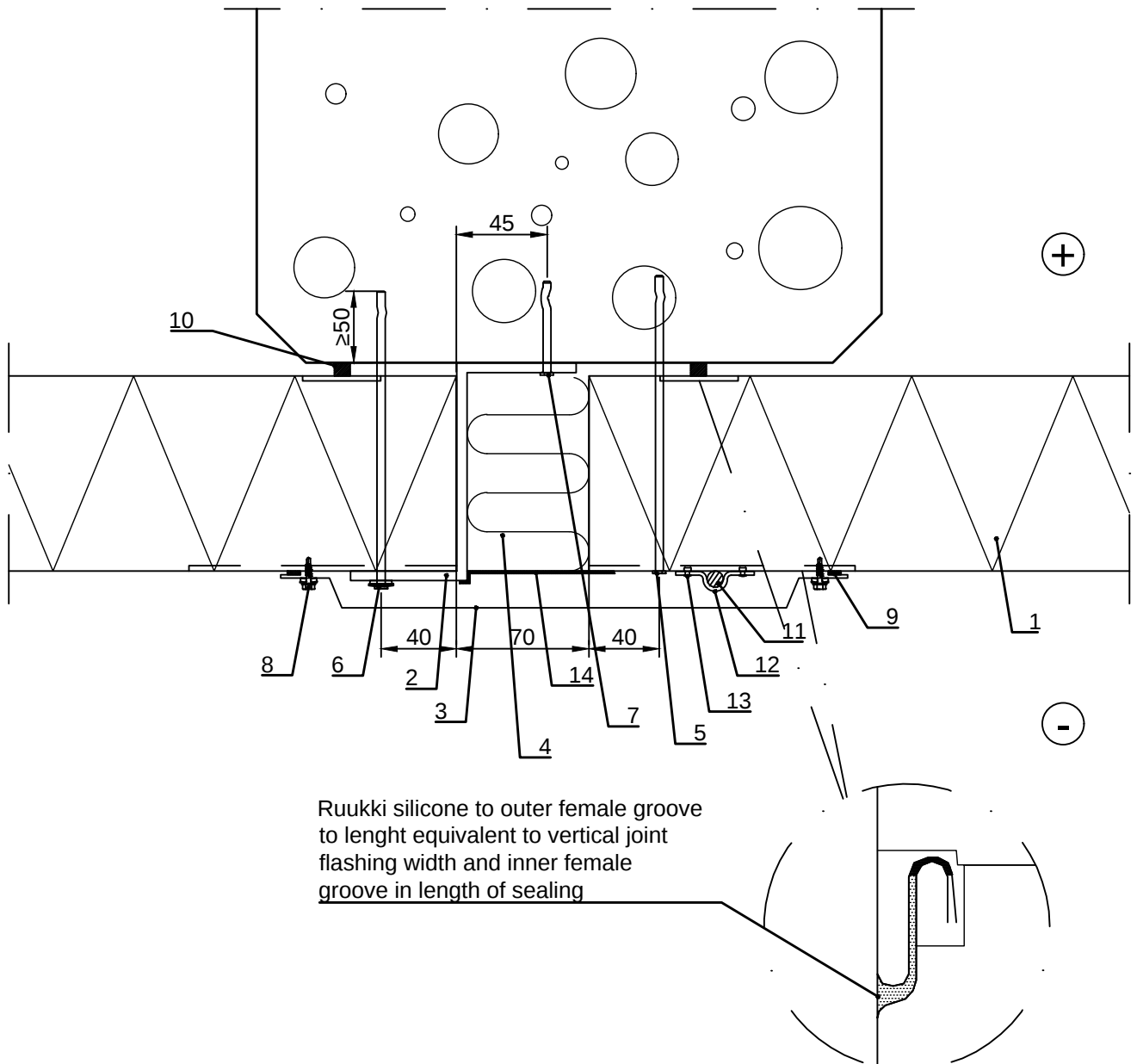
Contents of drawing

Sandwich panel SPA, horizontal installation
Explosion hatch

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA10-A-1E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA10-A-2E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. Support purlin, zinc coated, tmin = 3 mm,
according to project, dimensions according to panel
- ☐ 3. Cover flashing, according to project
- ☐ 4. Mineral wool
- ☐ 5. Spike element fastener,
without washer, 2 pc / panel end
- ☐ 6. Spike element fastener
- ☐ 7. Spike-fastener
- ☐ 8. Fastener
- ☐ 9. /EA3SS410/ Sealing strip
- ☐ 10. /EA3SS1012/ Sealing strip
- ☐ 11. Cable Ø8 mm
- ☐ 12. Preforated tape, 3 fastening / panel end
- ☐ 13. Rivet
- ☐ 14. /EA3JS15025/ Joint sealing

☒ Ruukki's delivery

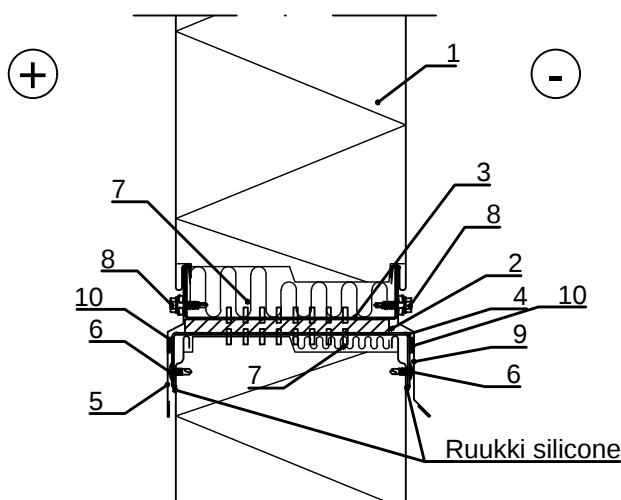


Contents of drawing

Sandwich panel SPA, horizontal installation
Explosion hatch
Vertical section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA10-A-3E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.

If necessary, the uppermost element of the hatch to be cut at the site



- ☐ 1. Sandwich panel SPA, horizontal installation
- ☐ 2. /EA3SP___10/ Plinth sealing
- ☐ 3. /EA1U___/ U-plinth purlin
- ☐ 4. /EA1W___/ Window frame stud
- ☐ 5. Cover flashing, according to project
- ☐ 6. Fastener
- ☐ 7. Mineral wool
- ☐ 8. Fastener
- ☐ 9. Cover flashing, according to project
- ☐ 10. /EA3SS410/ Sealing strip

☒ Ruukki's delivery

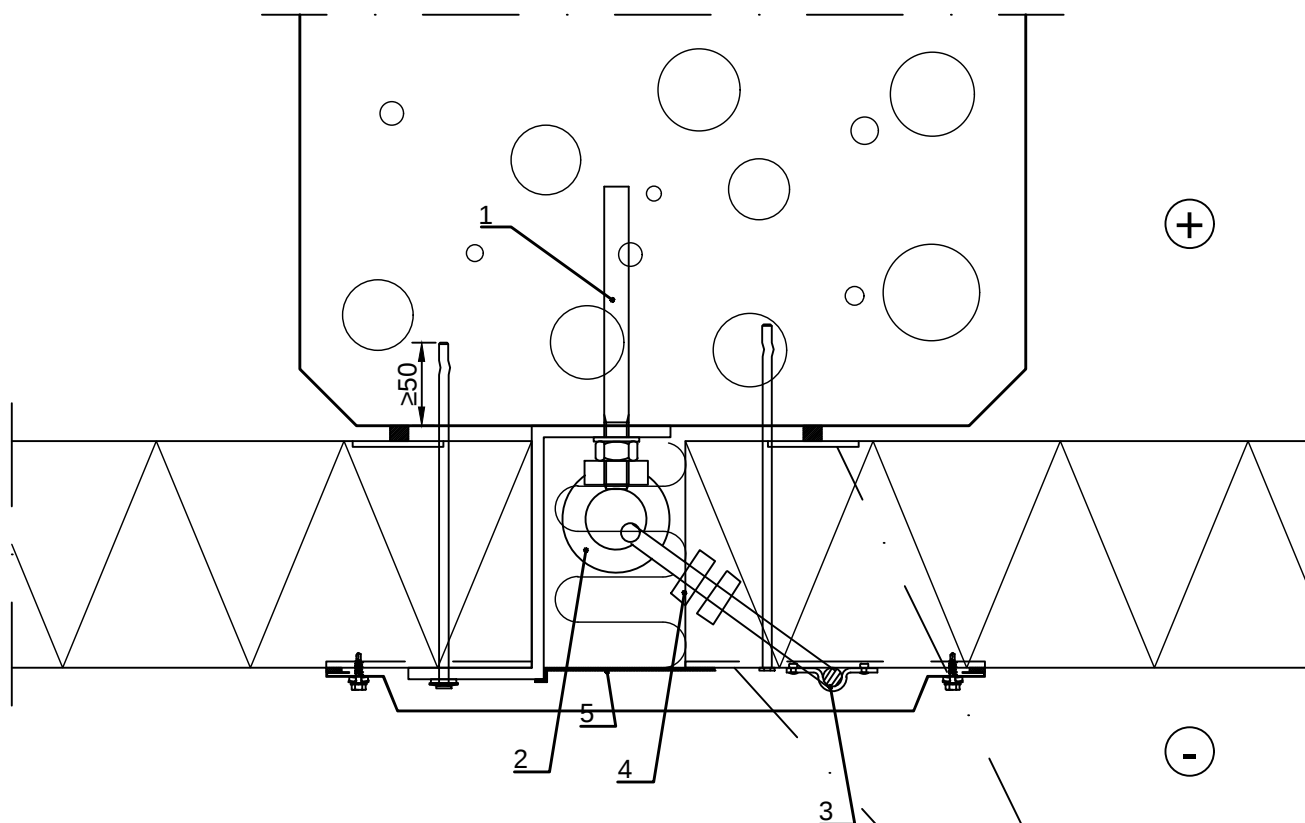
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Contents of drawing

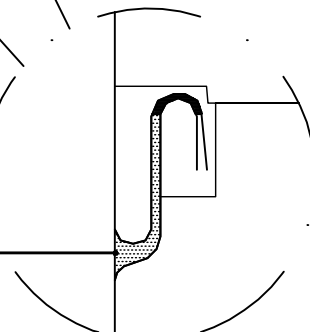
Sandwich panel SPA, horizontal installation
Explosion hatch / fastening of cable
Horizontal section

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA10-A-4E-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building	File nr.	



At the upper corners of the explosion hatch, wedge anchors are attached to the pillar to prevent the elements of the hatch from falling after the explosion.

Ruukki silicone to outer female groove
in length 200 mm and to inner
female groove in length 60 mm



- ☐ 1. Wedge anchor M20x170
- ☐ 2. Lifting eye nut M20 DIN 582
- ☐ 3. Cable Ø8 mm
- ☐ 4. Cable lock 2 pc / end of cable
- ☐ 5. /EA3JS15025/ Joint sealing

☒ Ruukki's delivery

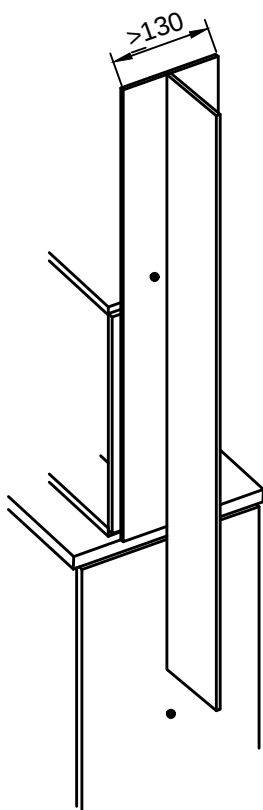
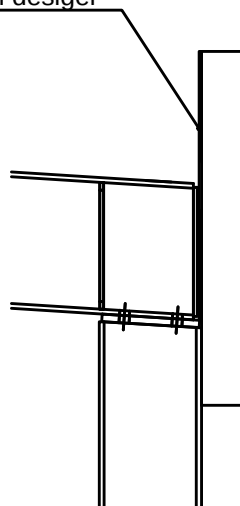
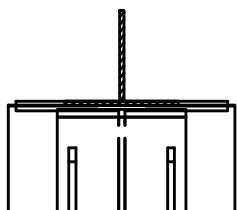


Contents of drawing

Sandwich panel SPA, horizontal installation
T-steel of vertical joint / steel frame

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA12-A-1E-EN
Drawn by Ruukki	Rev.		
Scale 1:10	Building		File nr.

T-steel of vertical joint
according to structural designer



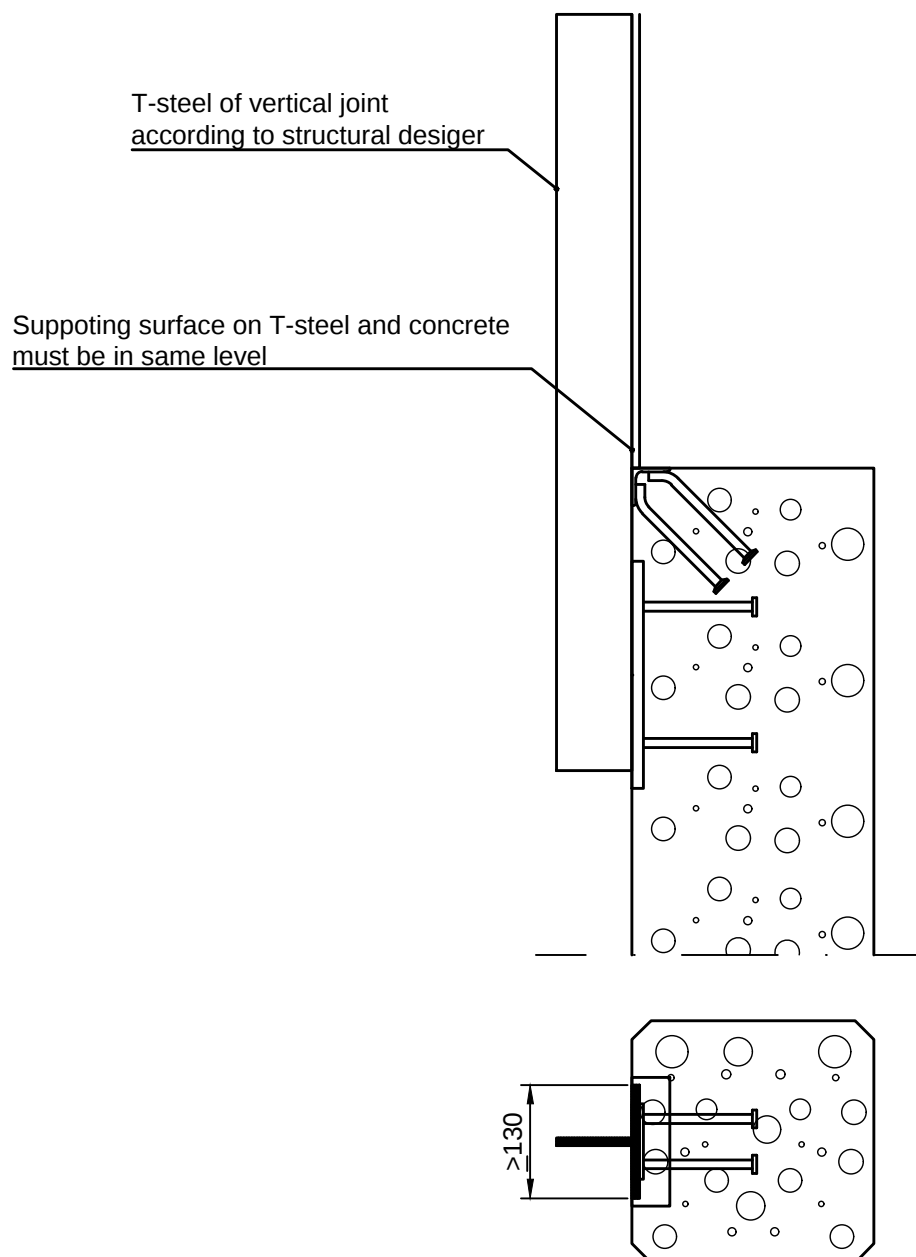
On the eaves, at the vertical seam, the elements are supported by T-steel. The flanges of T-steel are flush with the supporting surface of the steel column.



Contents of drawing

Sandwich panel SPA, horizontal installation
T-steel of vertical joint / concrete frame

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA12-A-2E-EN
Drawn by Ruukki	Rev.		
Scale 1:10	Building		File nr.

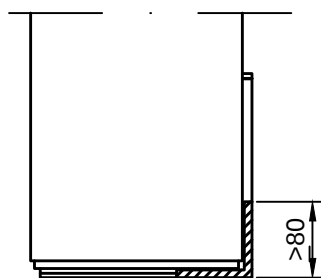
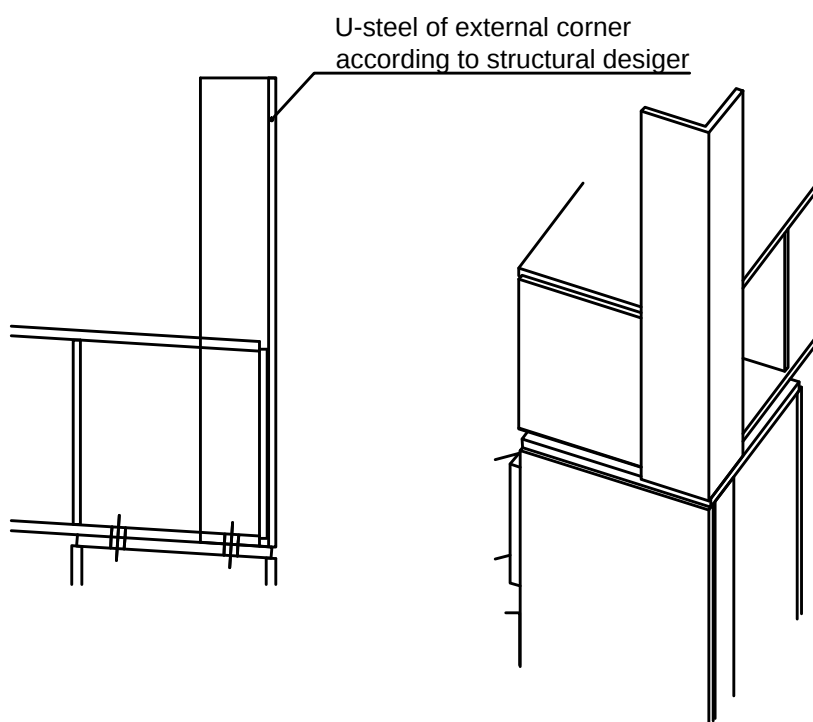




Contents of drawing

Sandwich panel SPA, horizontal installation
L-steel of external corner / steel frame

Date 27.09.2023	Rev. date	Work nr.	Drawing nr. SPA12-A-3E-EN
Drawn by Ruukki	Rev.		
Scale 1:10	Building		File nr.



On the eaves, at the external corner, the elements are supported by L-steel. The flanges of L-steel are flush with the supporting surface of the steel column.