


City sector	Block	Site/Reg. nr.	File nr.				
Building type			Drawing type				Nr.
Building, Name and address			Contents of drawing			Scale	
<div> Ruukki Construction Oy Vimpelintie 661 FI - 62900 ALAJÄRVI FINLAND</div> <div>tel +358 2059 127 fax +358 2059 27700 www.ruukki.com</div>			Sandwich panel SP2D PIR ENERGY PRINCIPLE DETAIL DRAWINGS External walls (10 pcs)				
Date	Designer		Work nr.	Work nr.	Drw. nr.	Rev.	
28.08.2024							
Drawn by	Checked						
Ruukki							



Contents of drawing

Sandwich panel SP2D PIR ENERGY
Accessory numbers in details

Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D-PIR-ENERGY-00-EN
Drawn by Ruukki	Rev.		
Scale	Building		File nr.

SANDWICH PANELS

001. Sandwich panel SP2D PIR ENERGY 60-120

321. Elastic sealant

325. Elastic sealant during installation

FLASHINGS

100. Standard purlins and starter tracks

327. Elastic polyurethane, eg. Illbruck FM330 or FM637

101-109. Purlins and other $t \geq 2$ mm fastening flashings

328. Elastic sealant

111-119. Plinth flashings

332. PU foam

ADDITIONAL

121-124. Internal flashings

131-159. Vertical seam-, external- and internal corner flashings

161-179. Eave flashings

181-194. Window- and door flashings

FASTENERS

201. Self-drilling element screw, washer with sealing

231. Flashing fastener, washer with sealing

232. Flashing fastener, without washer

234. Flat headed flashing fastener

251. Spike panel fastener, washer with sealing

255. Spike-fastener, concrete

265. Fastener screw to wood, washer with sealing

266. Concrete screw

271. Rivet

289. Fastener L16 C/N

SEALANTS AND INSULATIONS

300. Expandable sealing band

301. Plinth sealing expanding

302. Sealing band for flashings

303. Sealing band for frame

307. Joint sealing Nordic

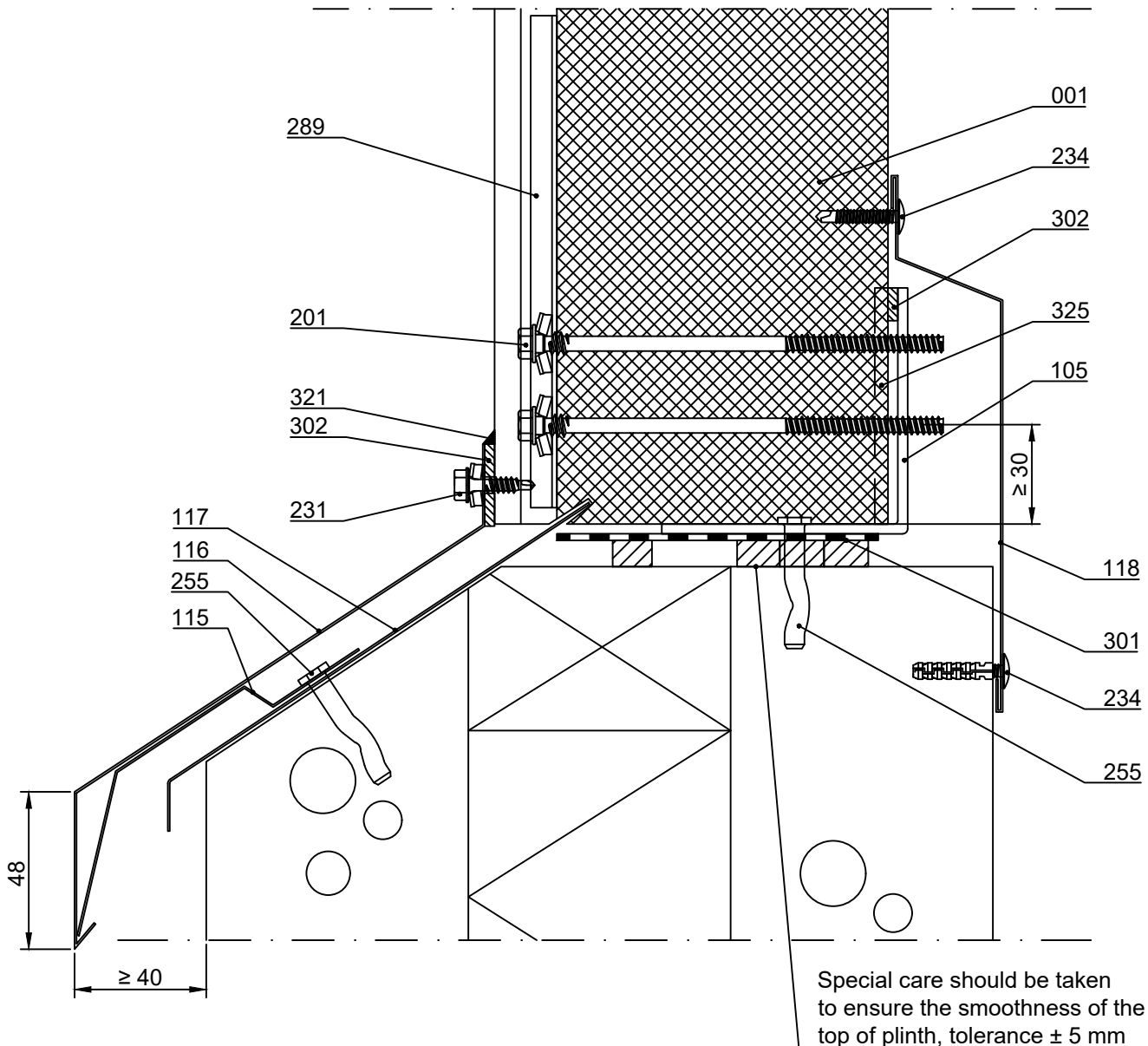
308. Joint sealing corner Nordic

311. Mineral wool

312. Mineral wool band

Sandwich panel SP2D PIR ENERGY
Vertical installation - Plinth detail
Vertical section, Option 1

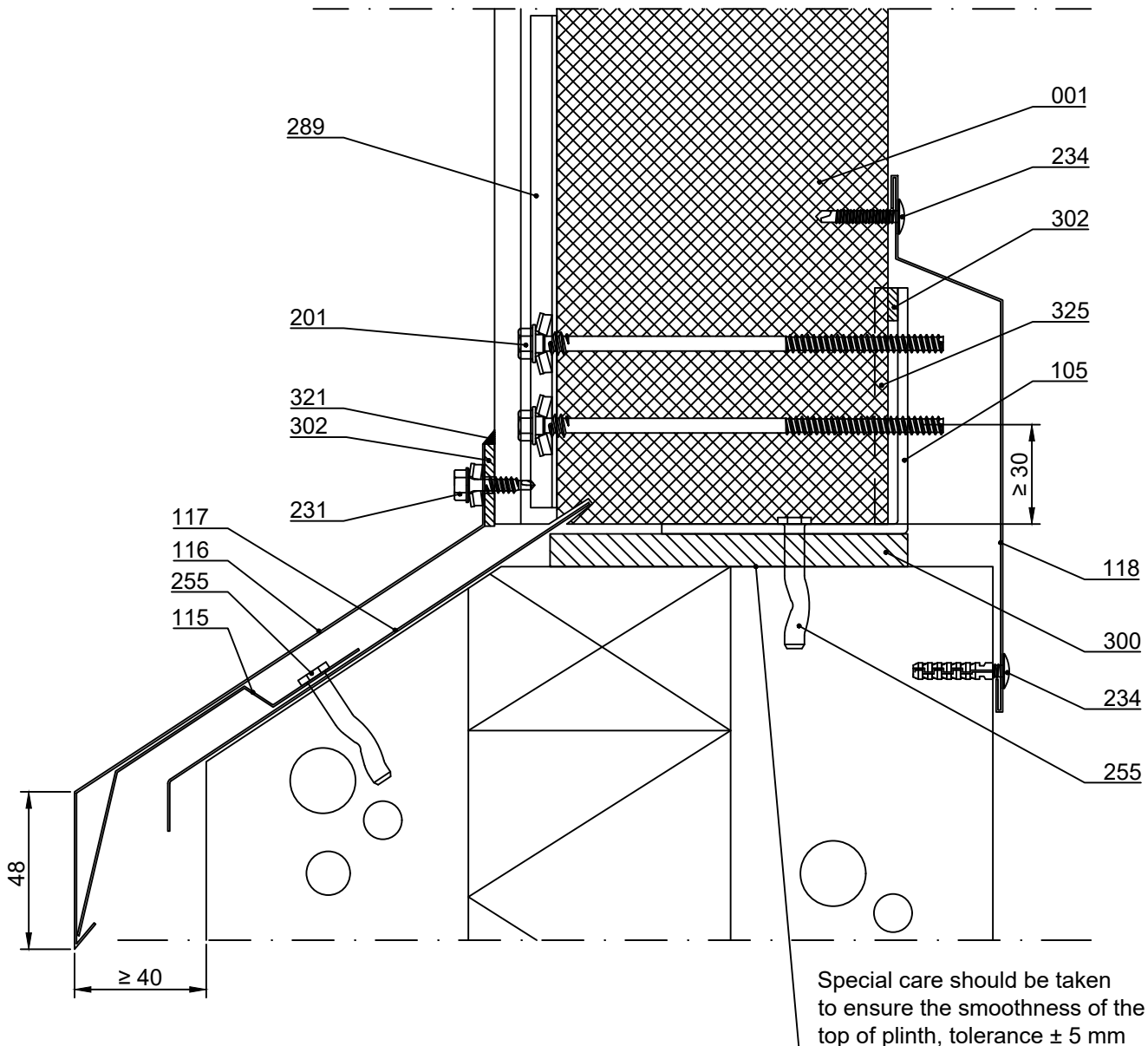
Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D01-PIR-ENERGY-01-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building	File nr.	



- ☐ 001. Sandwich panel SP2D PIR ENERGY
- ☐ 105. /EA1L7530ZN/ Support L-purlin, (t=3mm)
- ☐ 115. Support flashing, L200 k1000, according to project (installed simultaneously with elements)
- ☐ 116. /EA1P5-___/Cill flashing (can be installed after element installation)
- ☐ 117. Cover flashing, according to project (installed simultaneously with elements)
- ☐ 118. Cover flashing, according to project
- ☐ 131. /EA1JV1/ Vertical joint flashing
- ☐ 201. Self-drilling element screw, washer with sealing
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 234. Flat head flashing fastener
- ☐ 255. /S5R48038/ Spike-fastener, concrete c/c600
- ☐ 289. Fastener L16 C/N
- ☐ 301. /EA3PSE/ Plinth sealing expanding (wider sealing on internal side)
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 321. Ruukki silicone
- ☐ 325. Ruukki silicone during installation to inner female groove 60 mm from panel end

☒ Ruukki's delivery

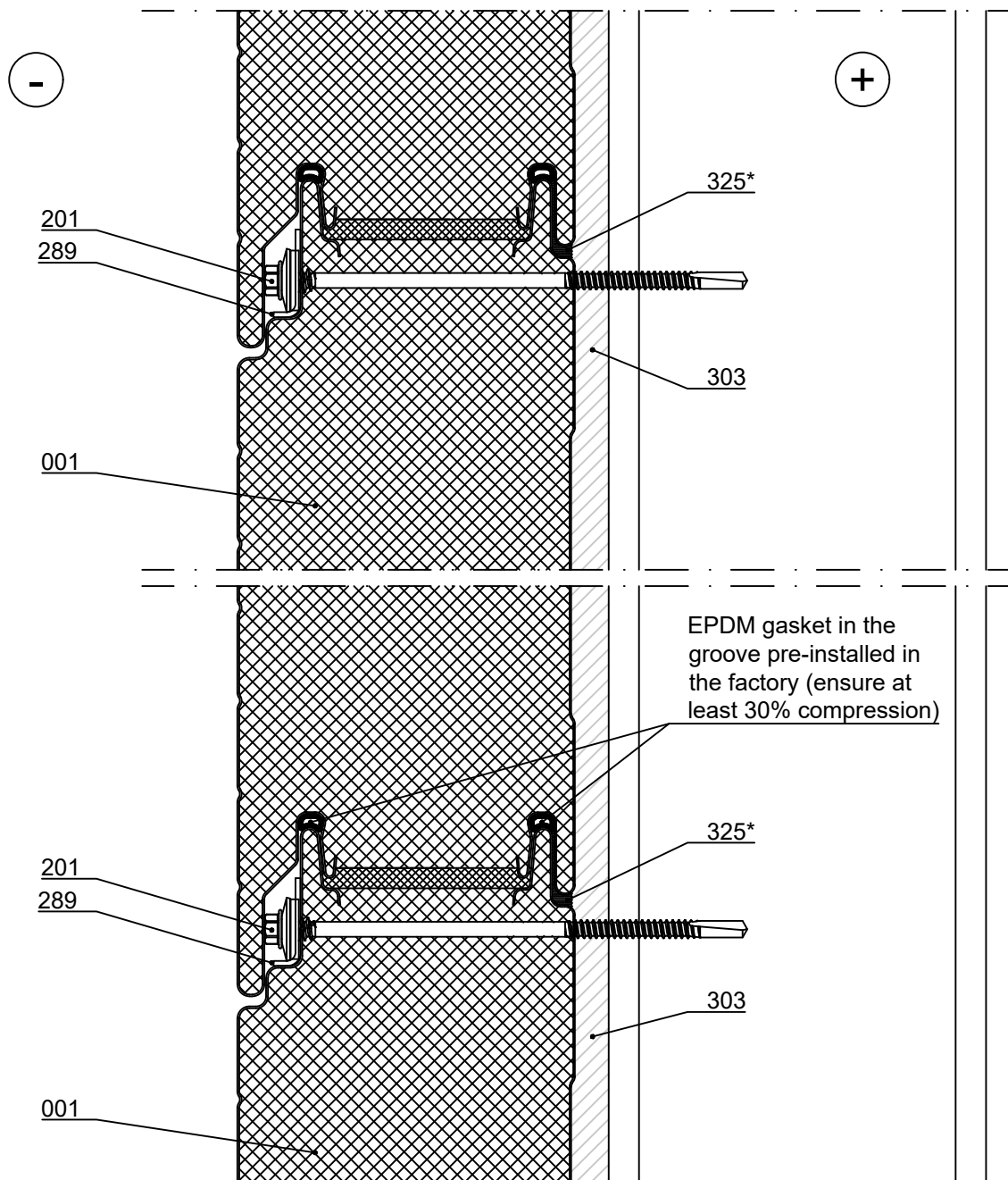
Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D01-PIR-02-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building		File nr.



- ☐ 001. Sandwich panel SP2D PIR ENERGY
- ☐ 105. /EA1L7530ZN/ Support L-purlin, (t=3mm)
- ☐ 115. Support flashing, L200 k1000, according to project (installed simultaneously with elements)
- ☐ 116. /EA1P5-___/Cill flashing (can be installed after element installation)
- ☐ 117. Cover flashing, according to project (installed simultaneously with elements)
- ☐ 118. Cover flashing, according to project
- ☐ 131. /EA1JV1/ Vertical joint flashing
- ☐ 201. Self-drilling element screw, washer with sealing
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 234. Flat head flashing fastener
- ☐ 255. /S5R48038/ Spike-fastener, concrete c/c600
- ☐ 289. Fastener L16 C/N
- ☐ 300. /EA3SP___/ Plinth sealing
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 321. Ruukki silicone
- ☐ 325. Ruukki silicone during installation to inner female groove 60 mm from panel end

☒ Ruukki's delivery

Date 28.08.2024	Rev. date	Work nr.	Drawing nr. SP2D02-PIR-ENERGY-03-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building	File nr.	

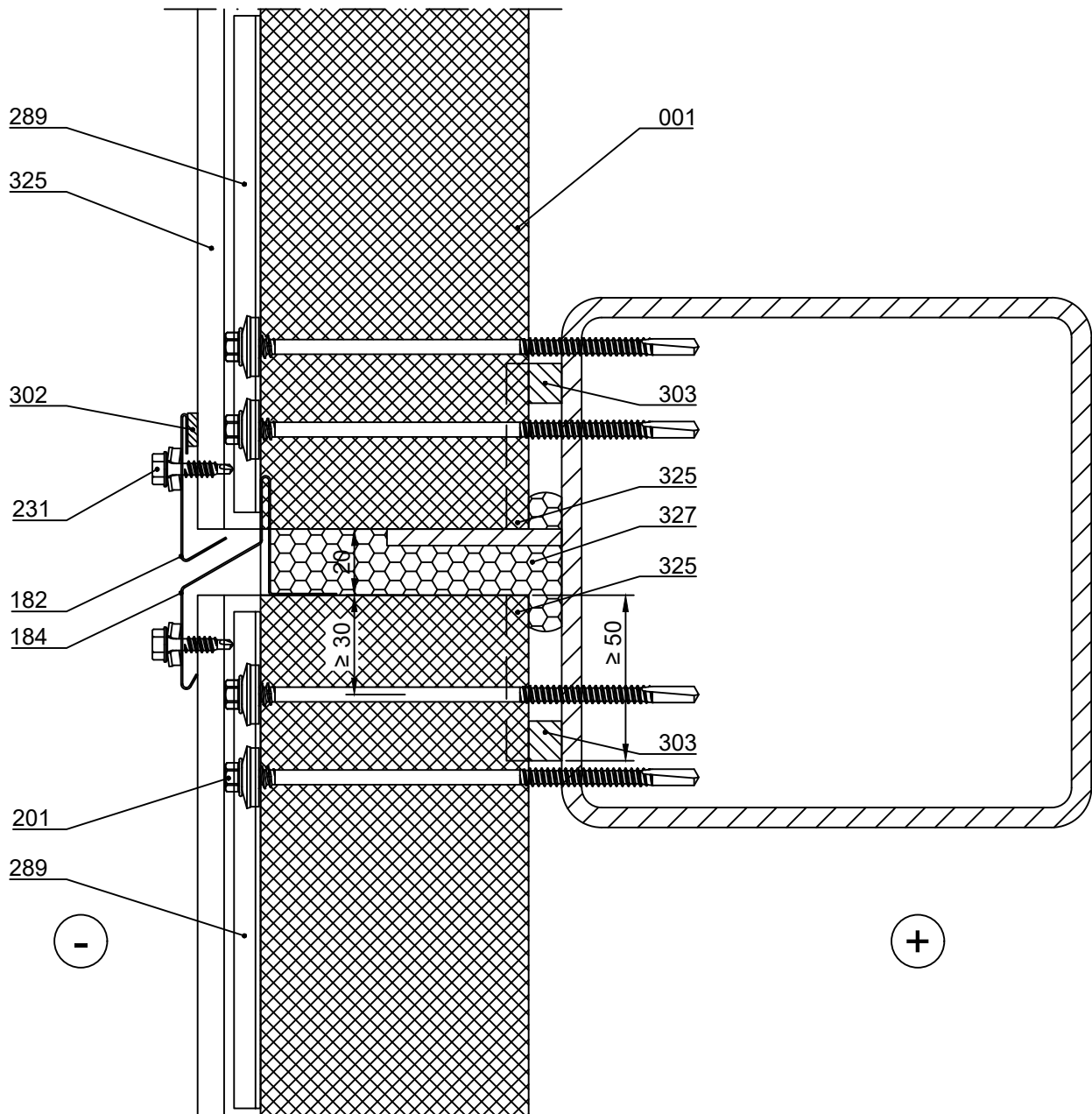


- ☐ 001. Sandwich panel nSPD PIR ENERGY
- ☐ 201. Self-drilling element screw, washer with sealing
- ☐ 289. Fastener L16 C/N
- ☐ 303. /EA3SS1210/ Sealing strip

- ☐ 325. /EA3SM310___/ Elastic sealant during inst.
*length equivalent to support structure width

☒ Ruukki's delivery

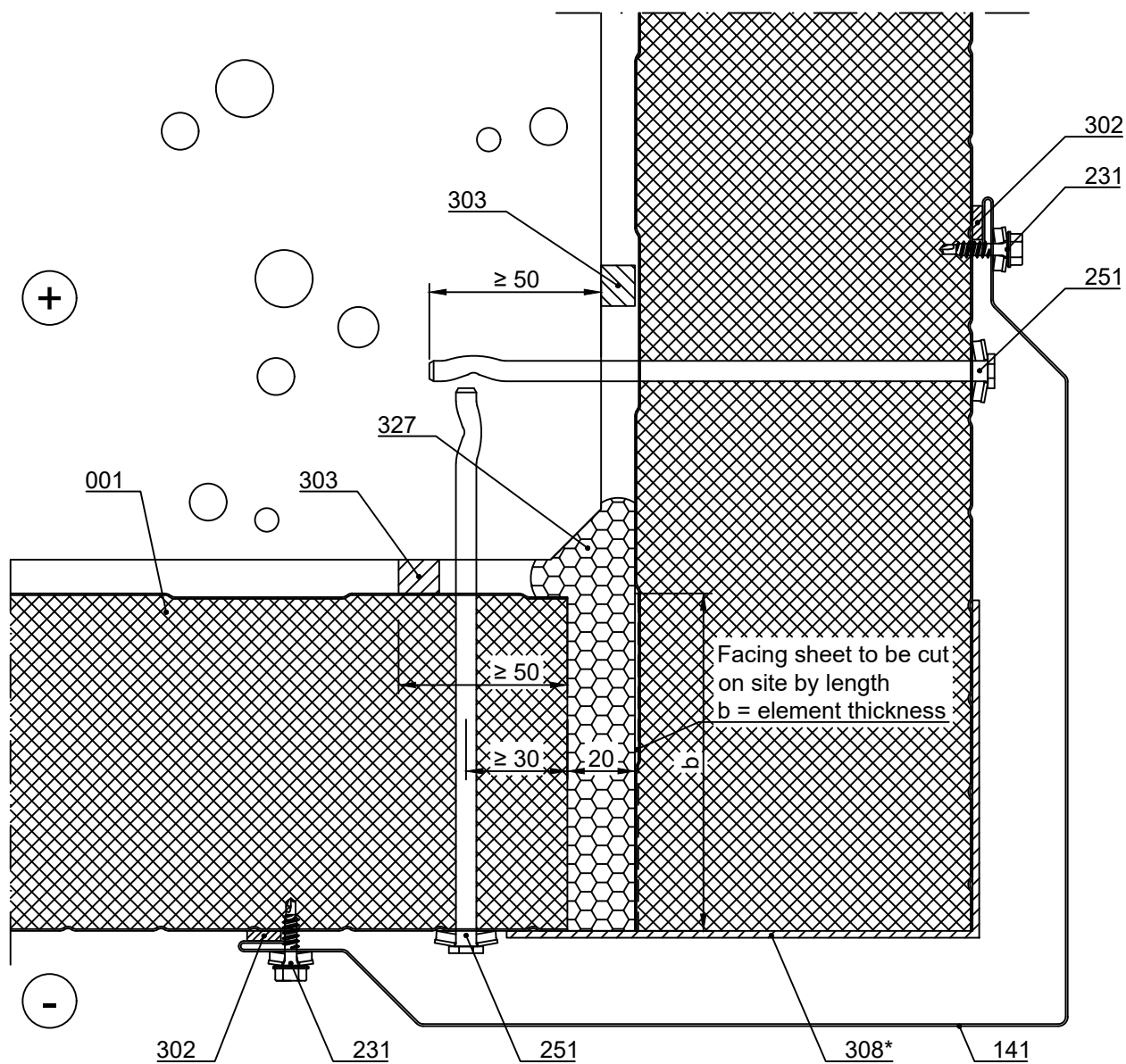
Date 28.08.2024	Rev. date	Work nr.	Drawing nr. SP2D02-PIR-ENERGY-04-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building	File nr.	



- ☐ 001. Sandwich panel nSPD PIR ENERGY
- ☐ 182. Drip flashing, t = 0.6 mm, according to project
- ☐ 184. Drip flashing, t = 0.6 mm, according to project
- ☐ 201. Self-drilling element screw, washer with sealing
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 289. Fastener L16 C/N
- ☐ 302. /EA3SS410/ Sealing strip
/EA3SS510/ Sealing band EPDM for flashing
(for demanding climate conditions e.g. coastal areas)
- ☐ 303. /EA3SS1210/ Sealing strip
- ☐ 307*. /EA3JSN7525/ Joint sealing Nordic
(recommended to assure tightness)
- ☐ 325. /EA3SM310___/ Elastic sealant during inst.
length equivalent to support structure width
- ☐ 327. /EA6FM330/ Elastic polyurethane foam

☒ Ruukki's delivery

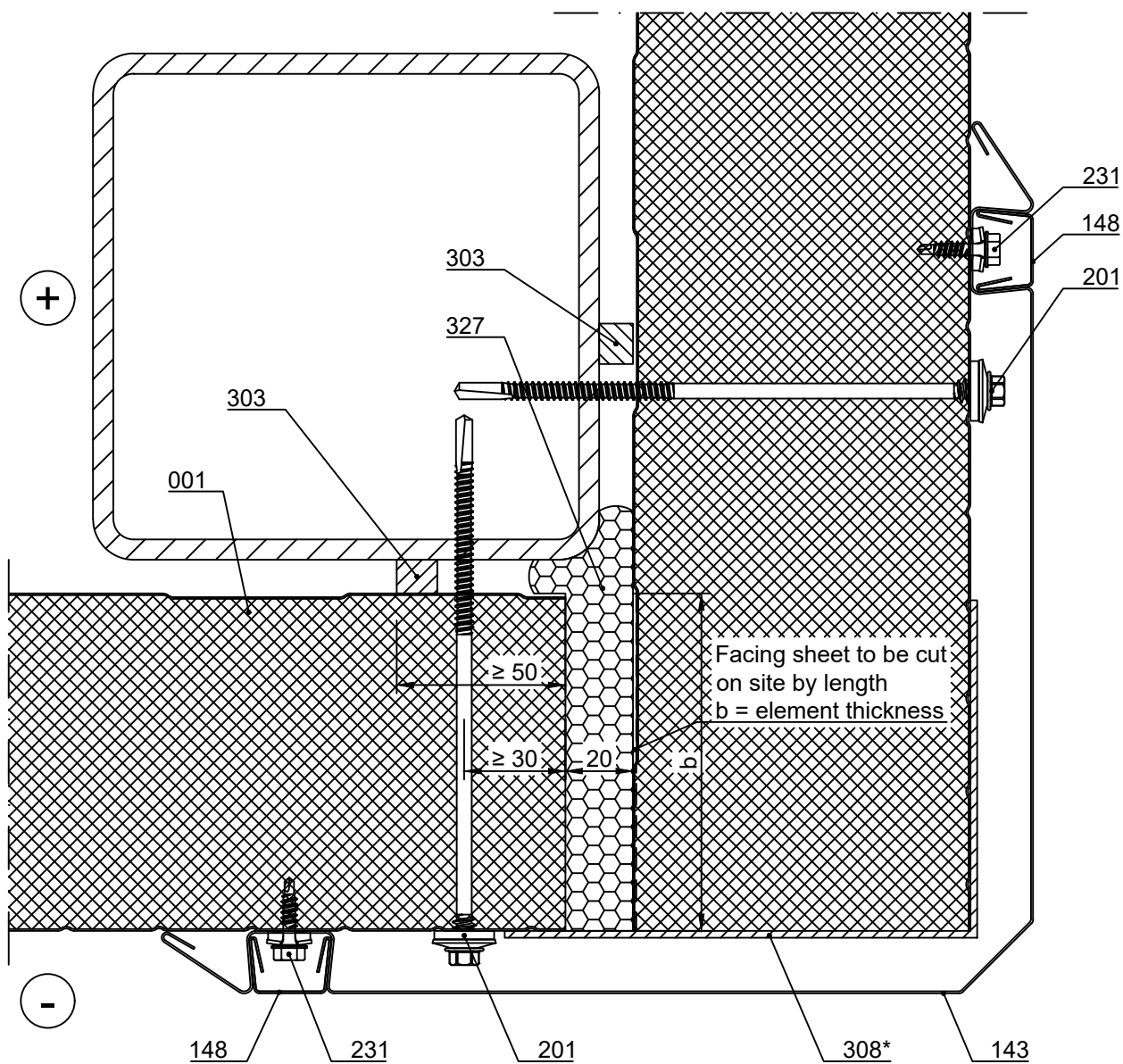
Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D02-PIR-ENERGY-05-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building	File nr.	



- ☐ 001. Sandwich panel nSPD PIR ENERGY
- ☐ 141. /EA1B28___/ External corner flashing,
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 251. Spike panel fastener, washer with sealing
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 303. /EA3SS1210/ Sealing strip
- ☐ 308*. /EA3JSCN37025/ Joint sealing corner Nordic (recommended to assure tightness)
- ☐ 327. /EA6FM330/ Elastic polyurethane foam
- ☐ /EA3SS510/ Sealing band EPDM for flashing (for demanding climate conditions e.g. coastal areas)

☒ Ruukki's delivery

Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D02-PIR-ENERGY-04-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building	File nr.	

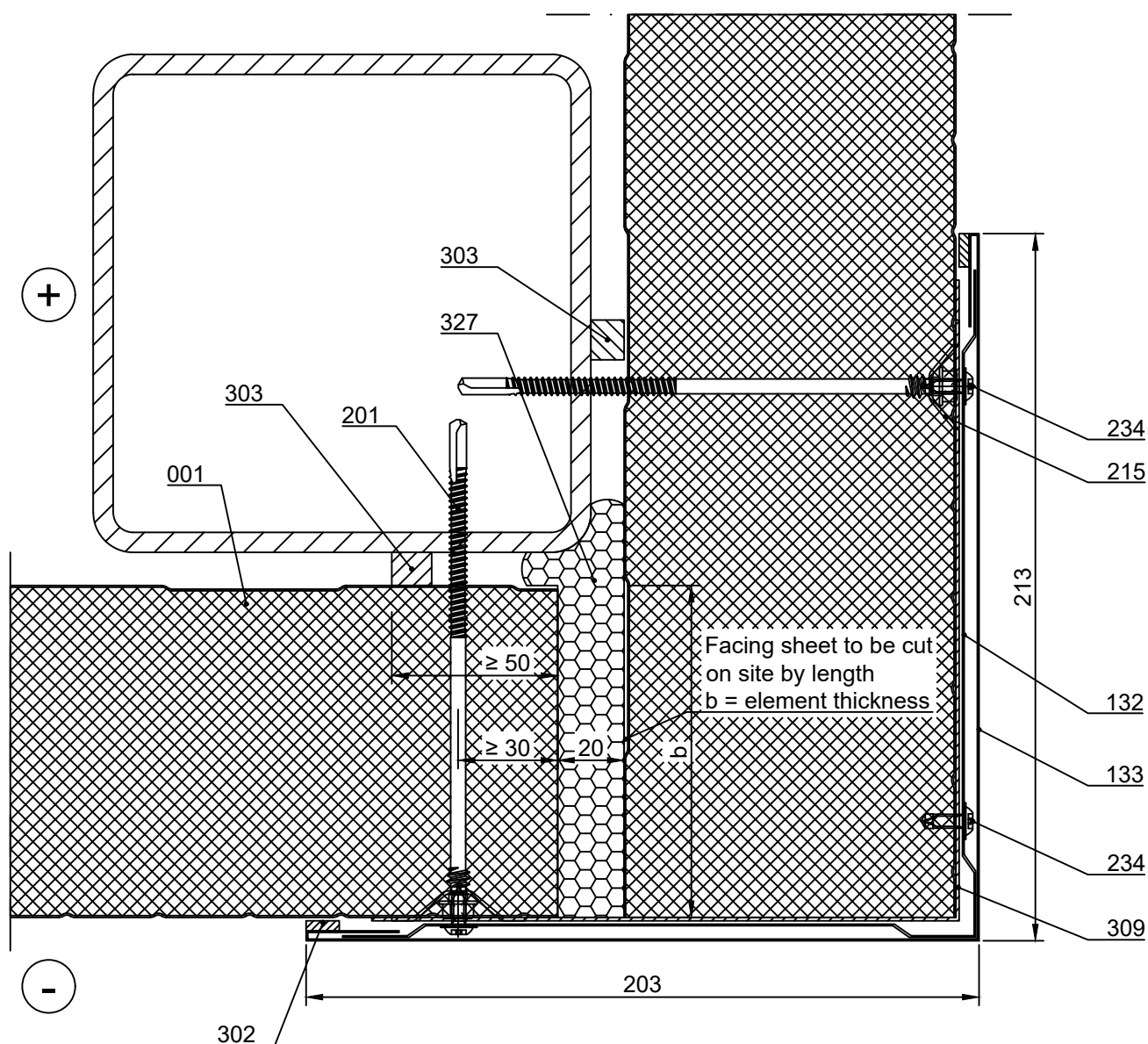


- ☐ 001. Sandwich panel nSPD PIR ENERGY
- ☐ 143. /EA1EC5/ External corner flashing
- ☐ 148. /EA1VCO/ Vertical cover flashing
- ☐ 201. Self-drilling element screw, washer with sealing
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 303. /EA3SS1210/ Sealing strip

- ☐ 308*. /EA3JSCN37025/ Joint sealing corner Nordic (recommended to assure tightness)
- ☐ 327. /EA6FM330/ Elastic polyurethane foam

☒ Ruukki's delivery

Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D02-PIR-ENERGY-05-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building		File nr.



- ☐ 001. Sandwich panel nSPD PIR ENERGY
- ☐ 132. /EA1EXB4/ Corner bottom flashing Invisible
- ☐ 133. /EA1ECI/ External corner flashing Invisible
- ☐ 201. Self-drilling element screw, without washer
- ☐ 215. /EA2W40-910S/ Countersink washer
- ☐ 234. /S1E42013GE/ Flat head flashing fastener
- ☐ 302. /EA3SS410/ Sealing strip
/EA3SS510/ Sealing band EPDM for flashing
(for demanding climate conditions e.g. coastal areas)

- ☐ 303. /EA3SS1210/ Sealing strip
- ☐ 309. /EA3JSC37025/ Joint sealing corner
- ☐ 327. Elastic polyurethane

☒ Ruukki's delivery

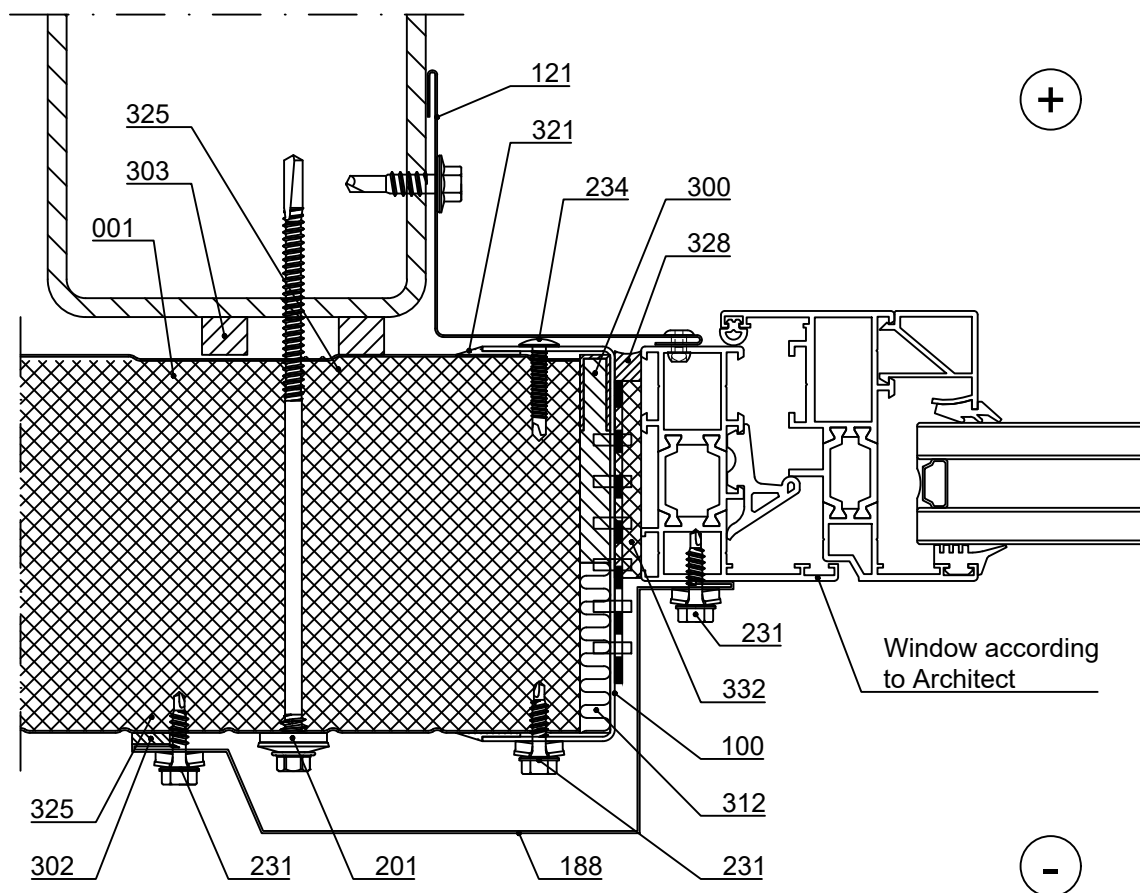
Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D03-PIR-ENERGY-01-EN
Drawn by Ruukki	Rev.		
Scale 1:2	Building		File nr.

Note! Openings must be taken into account in dimensioning of elements.

Note! When thermal purlin (window purlin, for example) is used around the opening, the thermal holes of the purlin must be sealed with tape (aluminium tape, for example) from the inside of the purlin to ensure tightness of the purlin.

Note! Remember to seal the grooves of the elements joining the window during the installation with elastic sealant to outer female groove to length equivalent to vertical joint flashing width.

Supporting structures, if necessary, according to structural designer.



- | | |
|---|---|
| <input type="checkbox"/> 001. Sandwich panel SP2D PIR ENERGY | <input type="checkbox"/> 302. /EA3SS410/ Sealing strip |
| <input type="checkbox"/> 100. /EA1W___/ Window purlin | <input type="checkbox"/> /EA3SS510/ Sealing band EPDM for flashing
(for demanding climate conditions e.g. coastal areas) |
| <input type="checkbox"/> 121. /EA1B05_/ Internal flashing | <input type="checkbox"/> 303. /EA3SS1210/ Sealing strip |
| <input type="checkbox"/> 188. Cover flashing, t = 0.6 mm, acc. to project | <input type="checkbox"/> 312. /EAWS___/ Mineral wool band |
| <input type="checkbox"/> 201. Self-drilling element screw, washer with sealing | <input type="checkbox"/> 321. /EA3SM310___/ Elastic sealant |
| <input type="checkbox"/> 231. Flashing fastener, washer with sealing | <input type="checkbox"/> 325. /EA3SM310___/ Elastic sealant during inst.
to outer and inner female grooves |
| <input type="checkbox"/> 234. Flat head flashing fastener | <input type="checkbox"/> 328. Elastic sealant |
| <input type="checkbox"/> 300. /EA3SWE54318/ Expandable sealing band
(plastic tape facing inside) | <input type="checkbox"/> 332. PU foam |

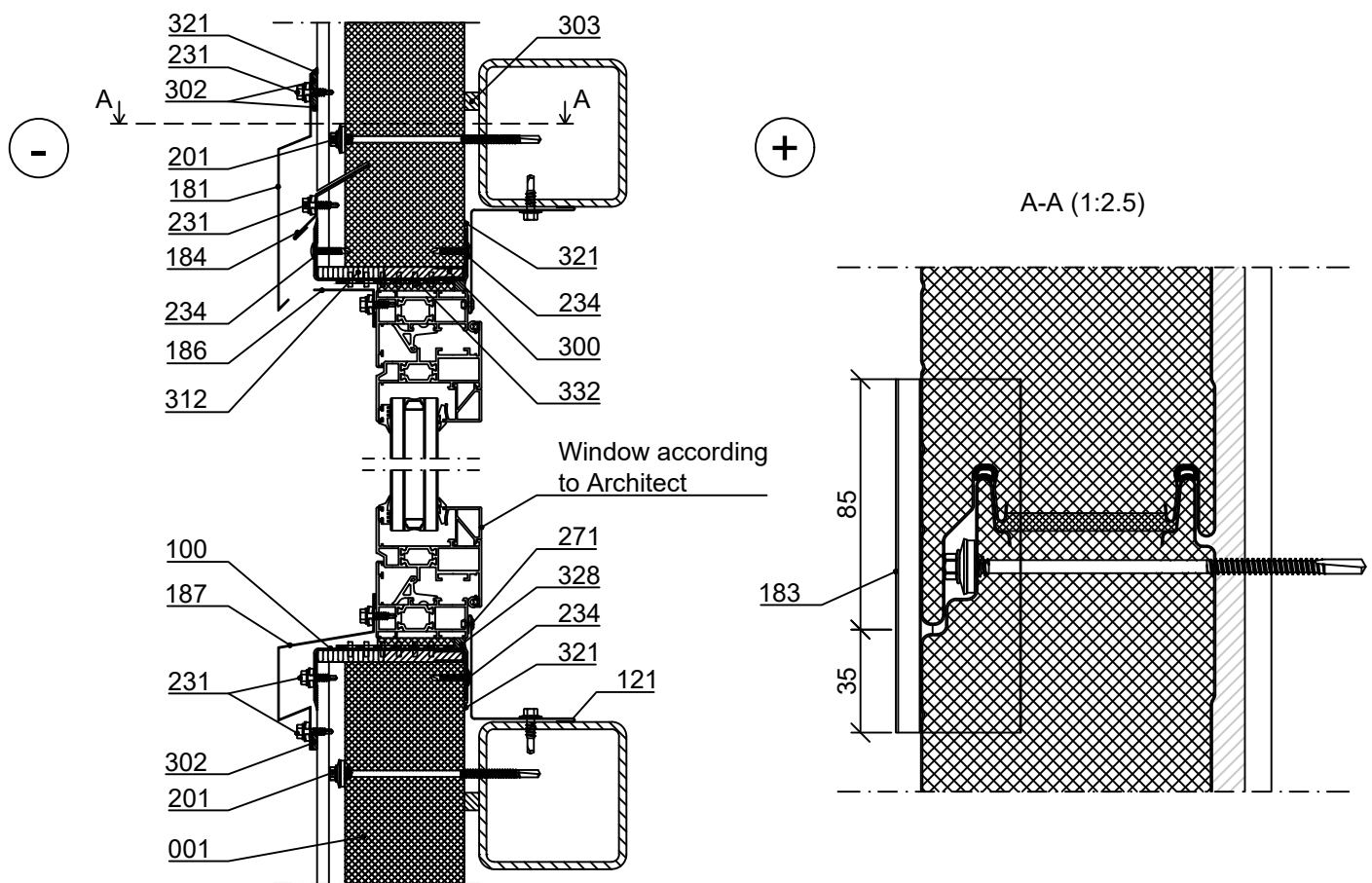
☒ Ruukki's delivery

Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D03-PIR-ENERGY-02-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.

Note! Openings must be taken into account in dimensioning of elements.

Note! When thermal purlin (window purlin, for example) is used around the opening, the thermal holes of the purlin must be sealed with tape (aluminium tape, for example) from the inside of the purlin to ensure tightness of the purlin.

Supporting structures, if necessary, according to structural designer.



- | | |
|--|--|
| <input type="checkbox"/> 001. Sandwich panel nSPD PIR ENERGY | <input type="checkbox"/> 300. /EA3SWE54318/ Expandable sealing band (plastic tape facing inside) |
| <input type="checkbox"/> 100. /EA1W___/ Window purlin | <input type="checkbox"/> 302. /EA3SS410/ Sealing strip /EA3SS510/ Sealing band EPDM for flashing (for demanding climate conditions e.g. coastal areas) |
| <input type="checkbox"/> 121. /EA1B05_/ Internal flashing | <input type="checkbox"/> 303. /EA3SS1210/ Sealing strip |
| <input type="checkbox"/> 181. Drip flashing, t = 0.6 mm, according to project | <input type="checkbox"/> 312. /EAWS___/ Mineral wool band |
| <input type="checkbox"/> 183. Drip flashing, t = 0.6 mm, according to project | <input type="checkbox"/> 321. /EA3SM310___/ Elastic sealant |
| <input type="checkbox"/> 186. Support- / cover flashing, t = 0.6 mm, acc. to project | <input type="checkbox"/> 328. Elastic sealant |
| <input type="checkbox"/> 187. External window flashing, t = 0.6 mm, acc. to project | <input type="checkbox"/> 332. PU foam |
| <input type="checkbox"/> 201. Self-drilling element screw, washer with sealing | |
| <input type="checkbox"/> 231. Flashing fastener, washer with sealing | |
| <input type="checkbox"/> 234. Flat head flashing fastener | |
| <input type="checkbox"/> 271. Rivet | |

☒ Ruukki's delivery

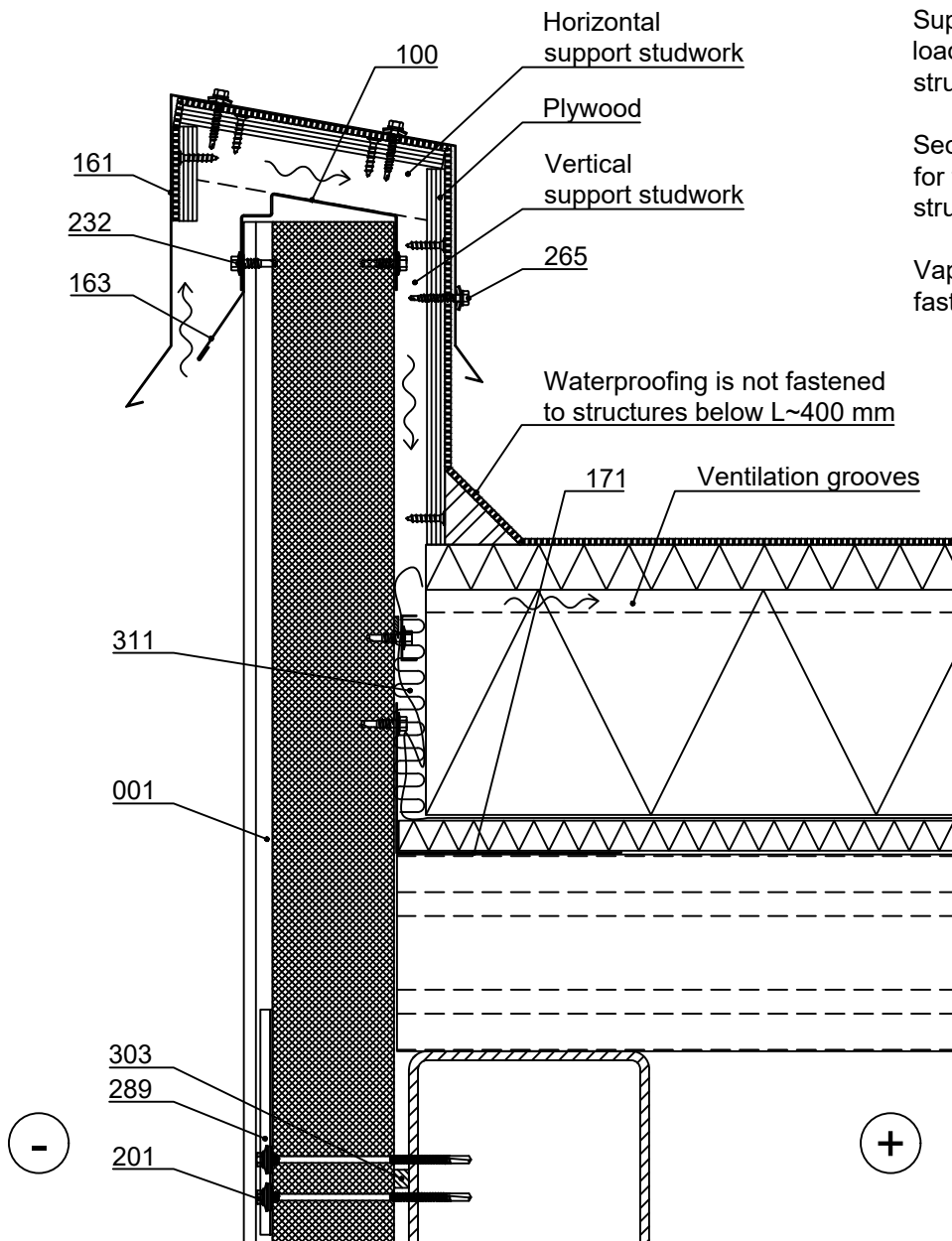
Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D04-PIR-ENERGY-01-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.

Insulation thickness is dimensioned according to project.

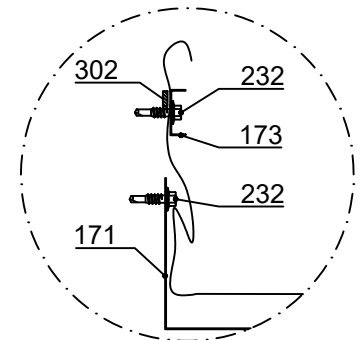
Supports and fastening of load-bearing sheet according to structural designer.

Secondary steel supports (T-steel) for the element according to structural designer.

Vapour barrier and insulation support fastening, see Detail A



DETAIL A



- | | |
|--|---|
| <input type="checkbox"/> 001. Sandwich panel nSPD PIR ENERGY | <input type="checkbox"/> 232. Flashing fastener, without washer |
| <input type="checkbox"/> 100. /EA1EP___/ Purlin | <input type="checkbox"/> 265. Fastener screw to wood, washer with sealing |
| <input type="checkbox"/> 161. Eave flashing, t = 0.6 mm, according to project | <input type="checkbox"/> 289. Fastener L16 C/N |
| <input type="checkbox"/> 163. Storm flashing, t = 0.6 mm, according to project | <input type="checkbox"/> 302. /EASCS4016/ Sealing, between panel and |
| <input type="checkbox"/> 171. Insulation support flashing, t = 0.6 mm | <input type="checkbox"/> 311. /EAWS5657850/ Mineral wool |
| <input type="checkbox"/> 173. U-flashing to vapour barrier fastening, t = 0.6 mm, according to project | |

☒ Ruukki's delivery

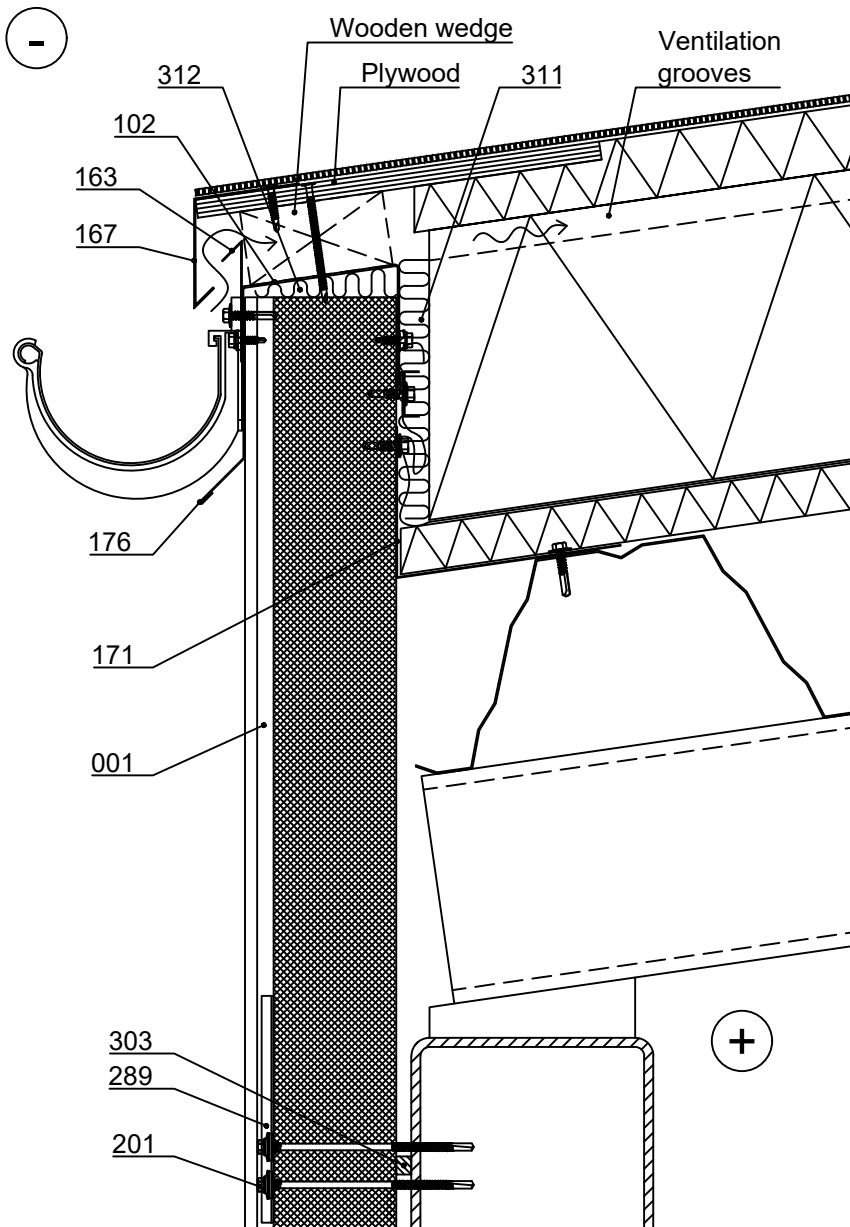
Date 28.08.2024	Rev. date .	Work nr.	Drawing nr. SP2D04-PIR-ENERGY-02-EN
Drawn by Ruukki	Rev.		
Scale 1:5	Building		File nr.

Insulation thickness is dimensioned according to project.

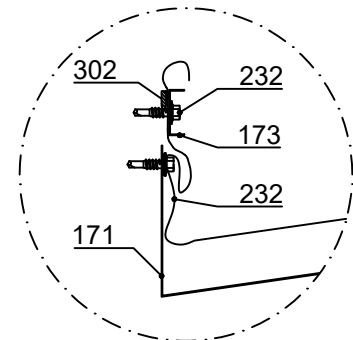
Supports and fastening of load-bearing sheet according to structural designer.

Secondary steel supports (T-steel) for the element according to structural designer.

Vapour barrier and insulation support fastening, see Detail A



DETAIL A



- ☐ 001. Sandwich panel nSPD PIR ENERGY
- ☐ 102. /EA1B20___/ Purlin
- ☐ 163. Storm flashing, t = 0.6 mm, according to project
- ☐ 167. Eave flashing, t = 1.0 mm, according to project
- ☐ 171. Insulation support flashing, t = 0.6 mm
- ☐ 173. U-flashing to vapour barrier fastening, t = 0.6 mm, according to project
- ☐ 176. Storm flashing, t = 0.6 mm, according to project
- ☐ 232. Flashing fastener, without washer
- ☐ 289. Fastener L16 C/N
- ☐ 302. /EA3SS410/ Sealing, between panel and vapour barrier
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAWS___/ Mineral wool band

☒ Ruukki's delivery