Drawing nr. Conte	ents of drawing
nSPD01-MW-FNFRGY-01-FN	Vertical installation, Plinth detail
nSPD01-MW-02-EN	Vertical installation, Plinth detail
SCODOS MIM ENEDOVIOS EN	Vertical installation, Jointa hotuson panels
	Vertical installation, Joints between panels
nSPD02-MW-ENERGY-02-EN	Vertical installation, Joints between panels
nSPD02-MW-ENERGY-03-EN	Vertical installation, external corner
nSPD02-MW-ENERGY-04-EN	Vertical installation, external corner
nSPD02-MW-ENERGY-05-EN	Vertical installation, external corner
nSPD03-MW-ENERGY-01-EN	Vertical installation, Window joint
	· · · · · · · · · · · · · · · · · · ·
nspbus-ww-energy-uz-en	Vertical installation, Window joint
nSPD04-MW-ENERGY-01-EN	Vertical installation, Parapet, end eaves
nSPD04-MW-ENERGY-02-EN	Vertical installation, Roof drainage, side eaves

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



Sandwich panel nSPD MW ENERGY Accessory numbers in details

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD-MW-ENERGY-00-EN
Drawn by	Rev.		IISPD-WW-ENERGT-00-EN
Ruukki			
Scale	Building		File nr.

SANDWICH PANELS

001. Sandwich panel nSPD MW ENERGY 100-230

FLASHINGS

100. Standard purlins and starter tracks

101-109. Purlins and other t ≥ 2 mm fastening flashings

111-119. Plinth flashings

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
- 271. Rivet
- 288. Fastener L15

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

321. Elastic sealant

325. Elastic sealant during installation

327. Elastic polyurethane, eg. Illbruck FM330 or FM637

328. Elastic sealant

332. PU foam

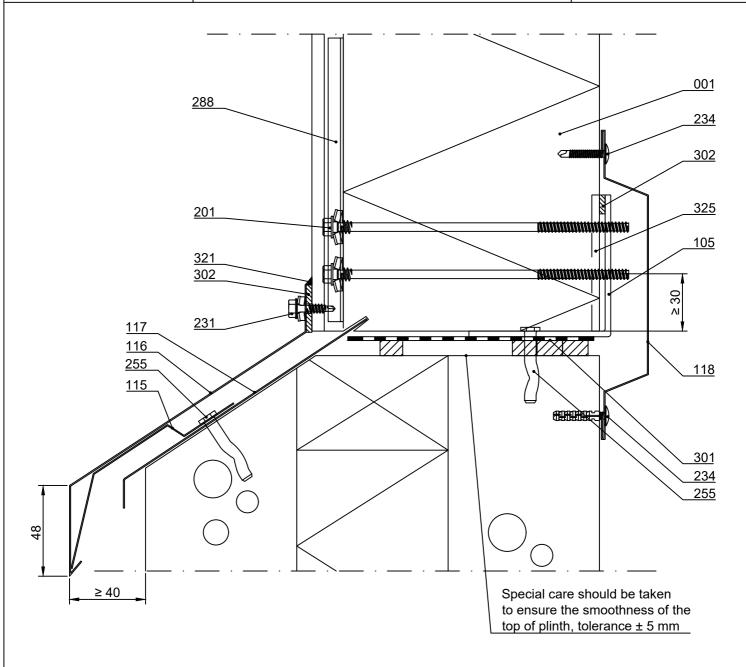
ADDITIONAL

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Sandwich panel nSPD MW ENERGY Vertical installation - Plinth detail Vertical section, Option 1

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD01-MW-ENERGY-01-EN
Drawn by	Rev.		113PDU 1-WWY-ENERGY-U 1-EN
Ruukki			
Scale	Building		File nr.
4.0			



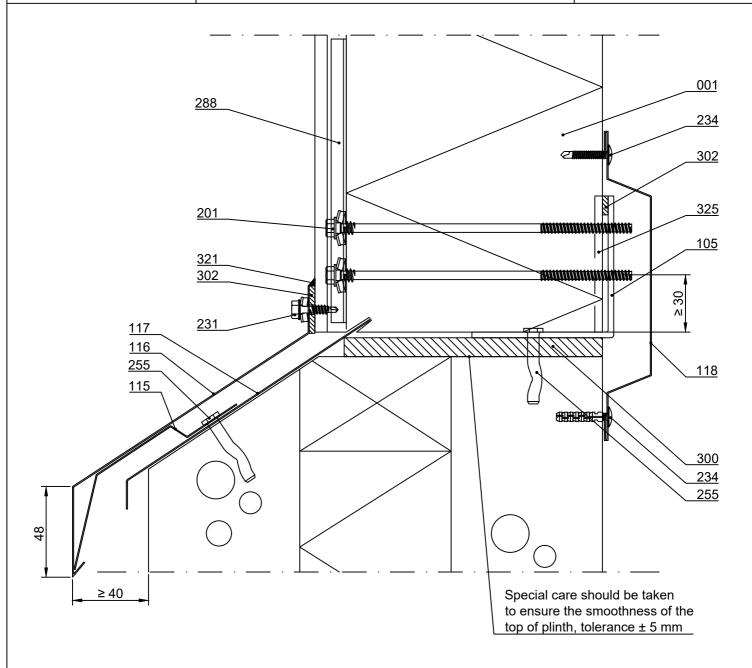
- □ 001. Sandwich panel SP2D PIR ENERGY
- ☐ 105. /EA1L7530ZN/ Support L-purlin, (t=3mm)
- ☐ 115. Support flashing, L200 k1000, according to project ☐ 255. /S5R48038/ Spike-fastener, concrete c/c600 (installed simultaneously with elements)
- ☐ 116. /EA1P5-/Cill flashing (can be installed after element 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
- ☑ Ruukki's delivery

- ☐ 231. Flashing fastener, washer with sealing
- ☐ 234. Flat head flashing fastener
- ☐ 288. Fastener L15
- ☐ 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



Sandwich panel nSPD MW Vertical installation - Plinth detail Vertical section, Option 2

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD01-MW-02-EN
Drawn by	Rev.		113PDU 1-IVIVV-UZ-EIN
Ruukki			
Scale	Building		File nr.
1.2			



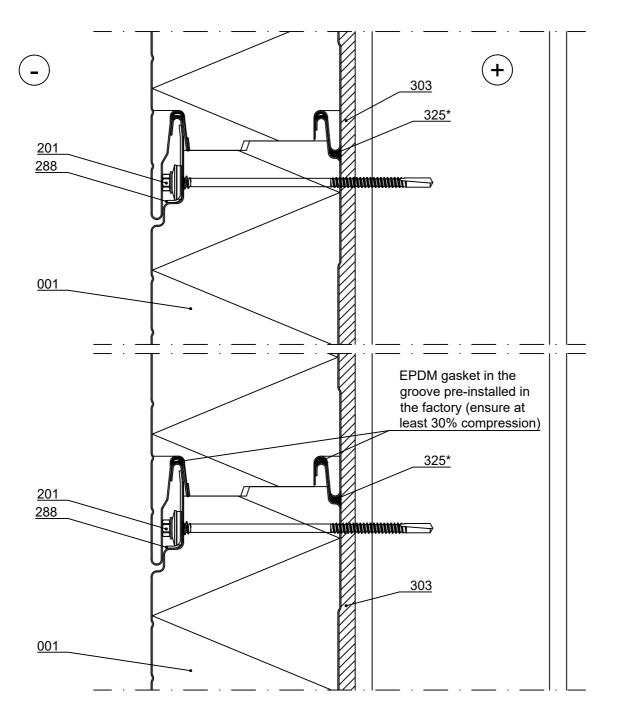
- □ 001. Sandwich panel SP2D PIR ENERGY
- ☐ 105. /EA1L7530ZN/ Support L-purlin, (t=3mm)
- ☐ 115. Support flashing, L200 k1000, according to project ☐ 255. /S5R48038/ Spike-fastener, concrete c/c600 (installed simultaneously with elements)
- ☐ 116. /EA1P5-/Cill flashing (can be installed after element 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
- ☑ Ruukki's delivery

- ☐ 231. Flashing fastener, washer with sealing
- □ 234. Flat head flashing fastener
- ☐ 288. Fastener L15
- ☐ 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



Sandwich panel nSPD MW ENERGY Vertical installation - Joints between panels Horizontal section

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD02-MW-ENERGY-01-EN
Drawn by	Rev.		113PDUZ-WW-ENERGY-UT-EN
Ruukki			
Scale	Building		File nr.
1:2			



- ☐ 001. Sandwich panel nSPD MW ENERGY
- ☐ 201. Self-drilling element screw, washer with sealing
- ☐ 288. Fastener L15
- □ 303. /EA3SS1210/ Sealing strip ENERGY or /EA3SS410/ Sealing strip non ENERGY
- □ Ruukki's delivery

□ 325. /EA3SM310___/ Elastic sealant during inst.

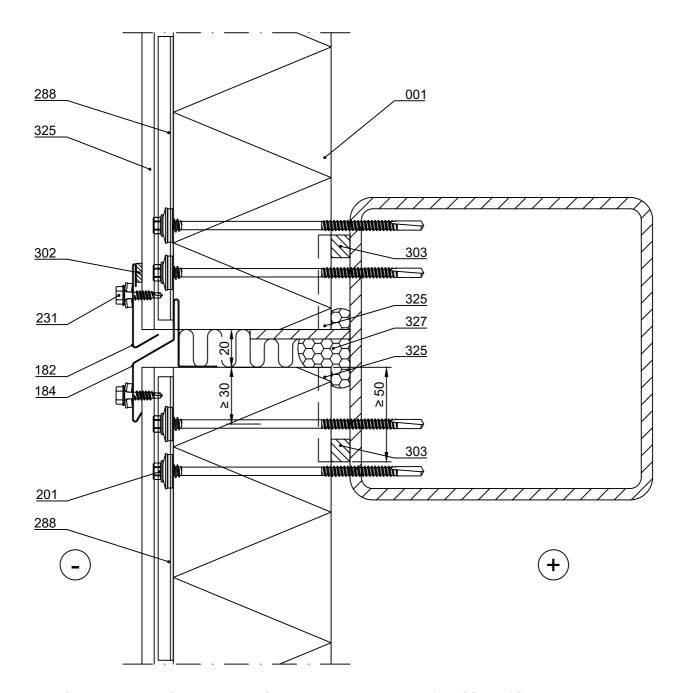
* length equivalent to support structrue

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Sandwich panel nSPD MW ENERGY Vertical installation - Joints between panels Vertical section

Date	Rev. date	Work nr.	Drawing nr.	
28.08.2024			"CDD00 MW ENEDGY 00 EN	
Drawn by	Rev.		nSPD02-MW-ENERGY-02-EN	
Ruukki				
Scale	Building		File nr.	
1:2				



- □ 001. Sandwich panel nSPD MW ENERGY
- \square 182. Drip flashing, t = 0.6 mm, according to project
- ☐ 184. Drip flashing, t = 0.6 mm, according to project
- $\hfill \square$ 201. Self-drilling element screw, washer with sealing
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 288. Fastener L15
- □ 302. /EA3SS410/ Sealing strip

/EA3SS510/ Sealing band EPDM for flashing (for demanding climate conditions e.g. coastal areas)

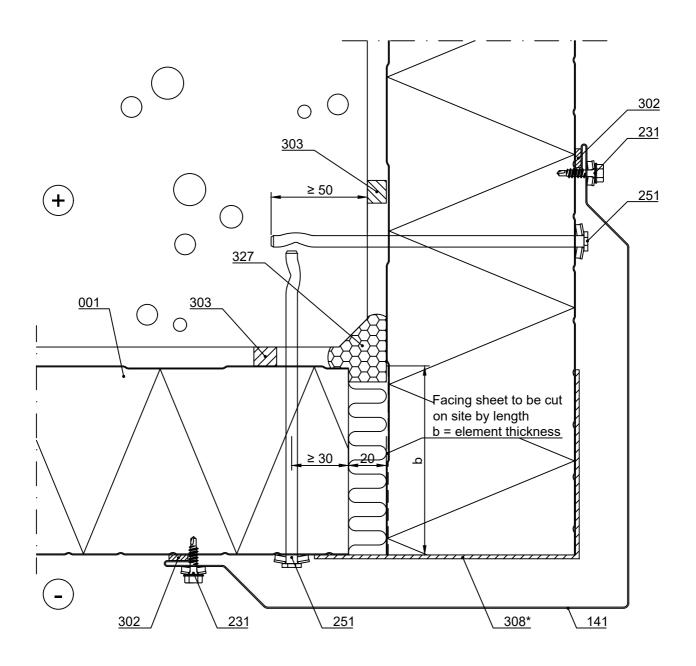
☑ Ruukki's delivery

- ☐ 303. /EA3SS1210/ Sealing strip
- □ 325. /EA3SM310___/ Elastic sealant during inst. length equivalent to support structure
- ☐ 327. /EA6FM330/ Elastic polyurethane foam



Sandwich panel nSPD MW ENERGY Vertical installation - External corner Horizontal section, Option 1

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			SCDDO2 MW ENEDOX 03 EN
Drawn by	Rev.		nSPD02-MW-ENERGY-03-EN
Ruukki			
Scale	Building		File nr.
1 40	_		



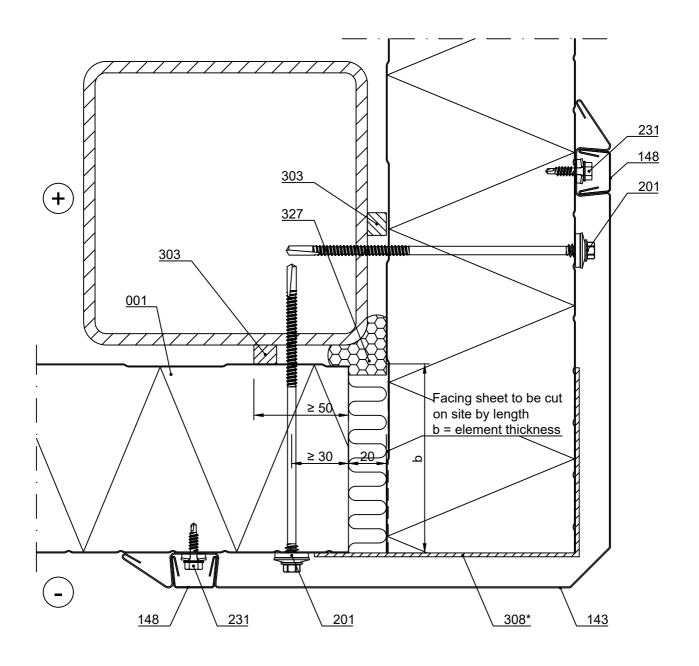
- ☐ 001. Sandwich panel nSPD MW ENERGY
- ☐ 141. /EA1B28___/ External corner flashing,
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 251. Spike panel fastener, washer with sealing
- ☐ 302. /EA3SS410/ Sealing strip
 /EA3SS510/ Sealing band EPDM for flashing
 (for demanding climate conditions e.g.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

☑ Ruukki's delivery



Sandwich panel nSPD MW ENERGY Vertical installation - External corner Horizontal section, Option 2

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD02-MW-ENERGY-04-EN
	Rev.		113PD02-10100-ENERG 1-04-EN
Ruukki			
Scale	Building		File nr.
1:2			



- ☐ 001. Sandwich panel nSPD MW 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

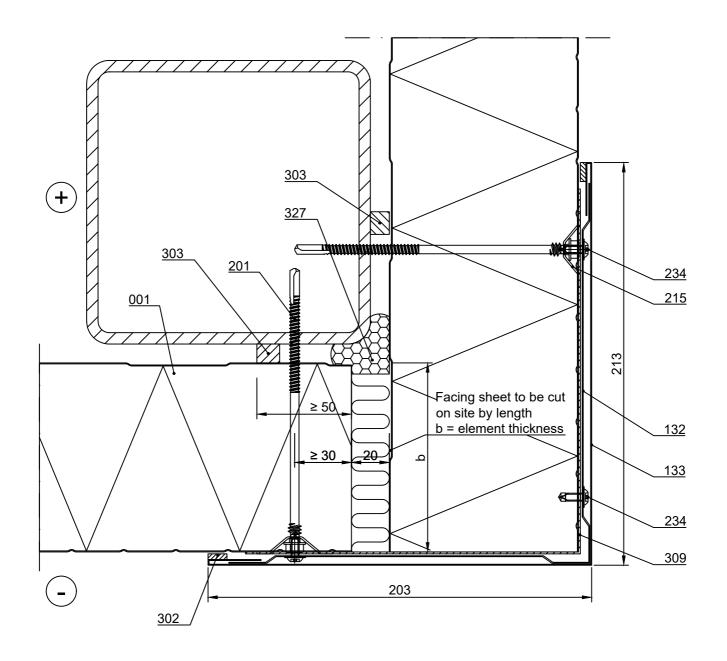
☑ Ruukki's delivery

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Sandwich panel nSPD MW ENERGY Vertical installation - External corner Horizontal section, Option 3

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD02-MW-ENERGY-05-EN
Drawn by	Rev.		IISPDUZ-WWV-ENERGY-US-EN
Ruukki			
Scale	Building		File nr.
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- ☐ 001. Sandwich panel nSPD MW 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)
- ☑ Ruukki's delivery

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



Sandwich panel nSPD MW ENERGY Vertical installation - Window joint Horizontal section

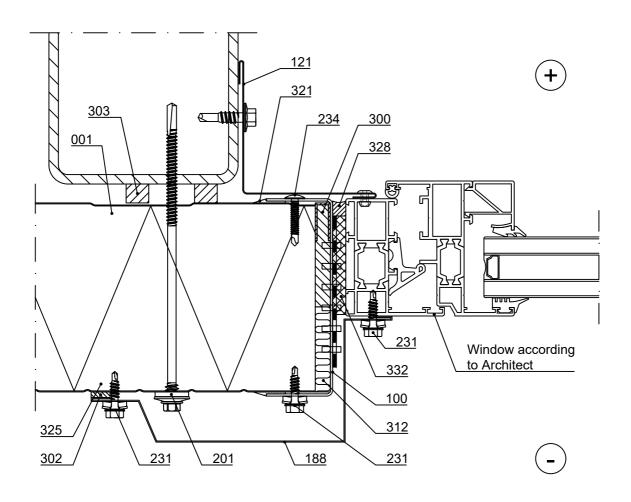
Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD03-MW-ENERGY-01-EN
Drawn by	Rev.		HISPDUS-IVIVV-ENERGY-UT-EN
Ruukki			
Scale	Building		File nr.
4.0			

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.



- ☐ 001. Sandwich panel nSPD MW ENERGY ☐ 302. /EA3SS410/ Sealing strip ☐ 100. /EA1W / Window purlin /EA3SS510/ Sealing band EPDM for flashing □ 121. /EA1B05 / Internal flashing (for demanding climate conditions e.g. coastal areas) ☐ 188. Cover flashing, t = 0.6 mm, acc. to project ☐ 303. /EA3SS1210/ Sealing strip □ 201. Self-drilling element screw, washer with sealing □ 312. /EAWS / Mineral wool band ☐ 321. /EA3SM310 ☐ 231. Flashing fastener, washer with sealing / Elastic sealant □ 234. Flat head flashing fastener ☐ 328. Elastic sealant ☐ 300. /EA3SWE54318/ Expandable sealing band ☐ 332. PU foam (plastic tape facing inside)
- ☑ Ruukki's delivery



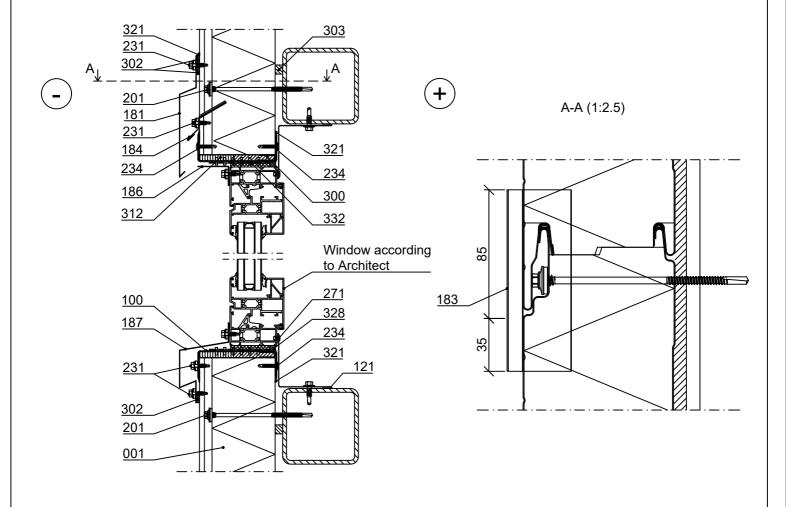
Sandwich panel nSPD MW ENERGY Horizontal installation - Window joint Vertical section

Date	Rev. date	Work nr.	Drawing nr.	
28.08.2024			"CDD03 MW ENEDGY 03 EN	
Drawn by	Rev.		nSPD03-MW-ENERGY-02-EN	
Ruukki				
Scale	Building		File nr.	
1.5				

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.



- □ 001. Sandwich panel nSPD MW ENERGY
- ☐ 100. /EA1W___/ Window purlin
- ☐ 121. /EA1B05_/ Internal flashing
- ☐ 181. Drip flashing, t = 0.6 mm, according to project
- ☐ 184. Drip flashing, t = 0.6 mm, according to project
- \square 186. Support- / cover flashing, t = 0.6 mm, acc. to project
- ☐ 187. External window flashing, t = 0.6 mm, acc. to project ☐ 303. /EA3SS1210/ Sealing strip
- ☐ 201. Self-drilling element screw, washer with sealing
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 234. Flat head flashing fastener
- □ 271. Rivet
- ☑ Ruukki's delivery

- ☐ 300. /EA3SWE54318/ Expandable sealing band (plastic tape facing inside)
- ☐ 302. /EA3SS410/ Sealing strip /EA3SS510/ Sealing band EPDM for flashing (for demanding climate conditions
 - e.g. coastal areas)
- ☐ 312. /EAWS / Mineral wool band
- ☐ 321. /EA3SM310 / Elastic sealant
- ☐ 328. Elastic sealant
- ☐ 332. PU foam



Sandwich panel nSPD MW ENERGY Vertical installation - Parapet, end eaves Vertical section

□ 232. Flashing fastener, without washer

☐ 288. Fastener L15

vapour barrier

☐ 311. /EAWS5657850/ Mineral wool

☐ 265. Fastener screw to wood, washer with sealing

☐ 302. /EA3SS410/ Sealing, between panel and

Insulation thickness is dimensioned

according to project.

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD04-MW-ENERGY-01-EN
Drawn by	Rev.		113PDU4-WW-ENERGY-UT-EN
Ruukki			
Scale	Building		File nr.
1.5	•		

Supports and fastening of Horizontal load-bearing sheet according to 100 support studwork structural designer. Plywood Secondary steel supports (T-steel) 161 Vertical for the element according to support studwork structural designer. 232 <u> 265</u> Vapour barrier and insulation support 163 fastening, see Detail A Waterproofing is not fastened to structures below L~400 mm 171 Ventilation grooves **DETAIL A** 311 <u>173</u> 171 001 303 288 201

☑ Ruukki's delivery

☐ 100. /EA1EP / Purlin

□ 001. Sandwich panel SP2B PIR ENERGY

☐ 171. Insulation support flashing, t = 0.6 mm

☐ 173. U-flashing to vapour barrier fastening,

t = 0.6 mm, according to project

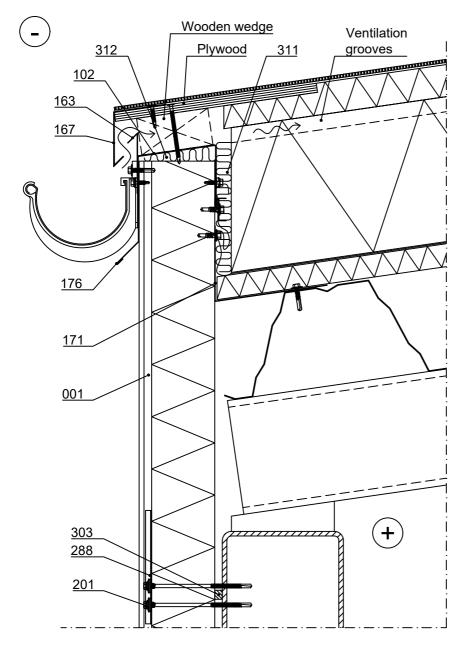
☐ 161. Eave flashing, t = 0.6 mm, according to project

☐ 163. Storm flashing, t = 0.6 mm, according to project



Sandwich panel nSPD MW ENERGY Vertical installation - Roof drainage, side eaves Vertical section

Date	Rev. date	Work nr.	Drawing nr.
28.08.2024			nSPD04-MW-ENERGY-02-EN
Drawn by	Rev.		113PDU4-WW-ENERGY-UZ-EN
Ruukki			
Scale	Building		File nr.
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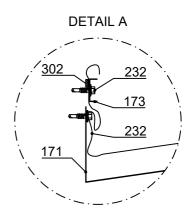


Insulation thickness is dimensioned according to project.

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



- □ 001. Sandwich panel SP2B 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
- ☐ 288. Fastener L15
- ☐ 302. /EA3SS410/ Sealing, between panel and vapour barrier
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAWS___/ Mineral wool band

☑ Ruukki's delivery