


| Drawing nr. | Contents of drawing |
|------------------|--|
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| SPA30-FIRE-2E-EN | Fastening to floor, vertical or horizontal installation |
| SPA31-FIRE-1E-EN | Vertical joint, horizontal installation |
| SPA31-FIRE-2E-EN | Vertical joint, horizontal installation |
| SPA31-FIRE-3E-EN | Vertical joint, horizontal installation |
| SPA31-FIRE-4E-EN | Vertical joint, horizontal installation, ≤EI60 |
| SPA31-FIRE-5E-EN | Vertical joint, horizontal installation, ≤EI120 |
| SPA32-FIRE-1E-EN | L-corner without column, vertical installation, ≤ EI30 |
| SPA32-FIRE-2E-EN | T-corner with column, horizontal (or vertical) installation |
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| SPA32-FIRE-7E-EN | T-corner without column, vertical installation, ≤ EI60 |
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| SPA35-FIRE-2E-EN | Fastening to load-bearing sheet roof, roof sheet parallel to compartment wall |
| SPA35-FIRE-3E-EN | Fastening to load-bearing sheet roof, roof sheet parallel to compartment wall, alternative solution, EI120 |
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| SPA36-FIRE-2E-EN | Fastening to ext. wall, vertical installation, ≤ EI60 |
| SPA36-FIRE-3E-EN | Fastening to ext. wall, vertical installation, ≤ EI30 |
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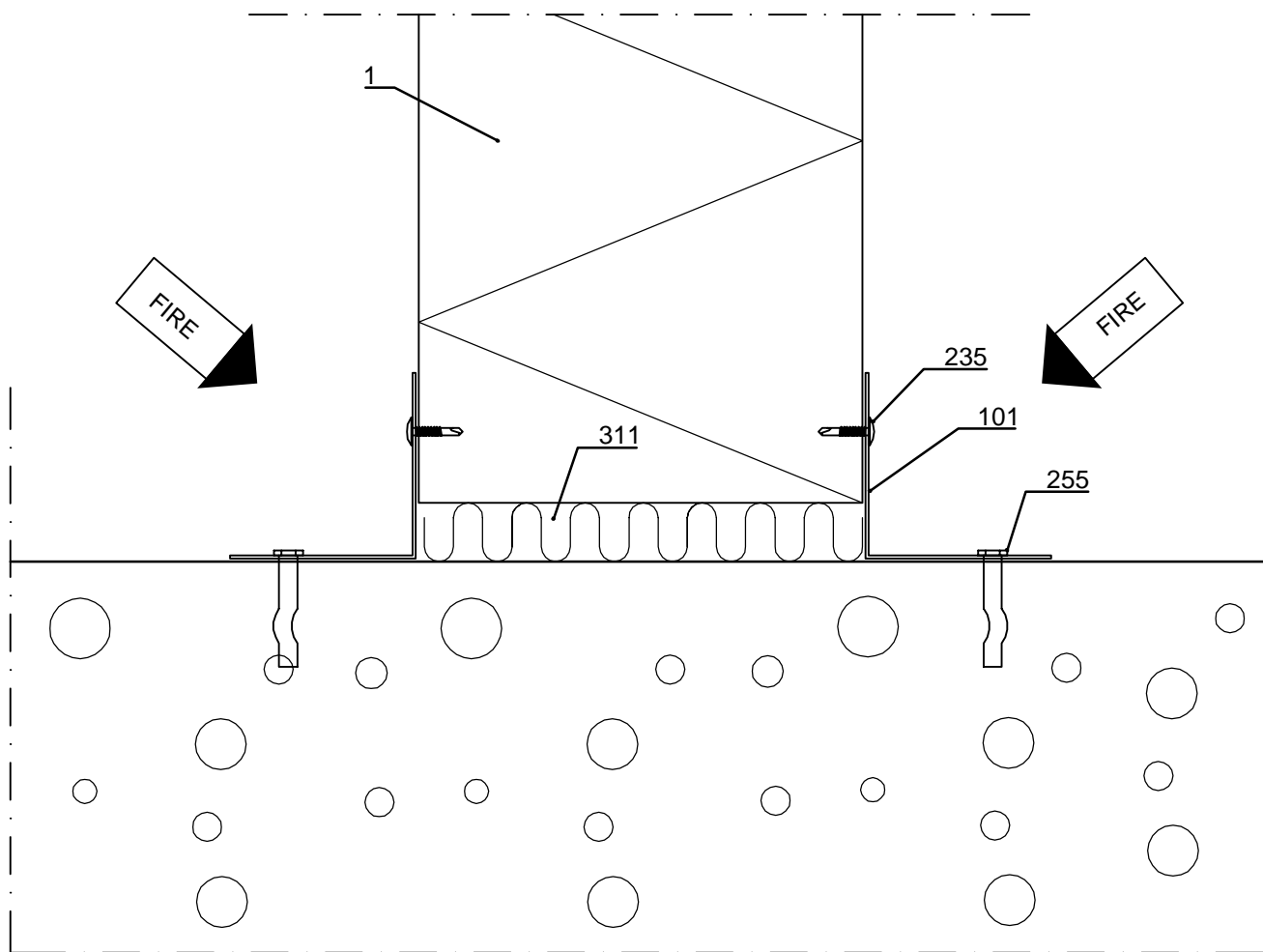
| | | | | | |
|--|----------|---------------|---|----------|-------|
| City sector | Block | Site/Reg. nr. | File nr. | | |
| Building type | | | Drawing type | | |
| Building, Name and address | | | Contents of drawing | | Nr. |
|  <p>Ruukki Construction Oy Panuntie 11 00620 HELSINKI FINLAND</p> <p>tel. +358 (0) 20 59 150 www.ruukki.com</p> | | | <p>Sandwich panel SPA compartment details, wall Principle details</p> | | Scale |
| | | | | | |
| Date | Designer | Work nr. | Work nr. | Drw. nr. | Rev. |
| 20.05.2025 | | | | | |
| Drawn by | Checked | | | | |
| Ruukki | | | | | |



Contents of drawing

Sandwich panel SPA compartment details
Vertical or horizontal installation
Fastening to floor, vertical section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA30-FIRE-1E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:2.5 | Building | | File nr. |



- ☐ 001. Sandwich panel SPA, vertical or horizontal installation
- ☐ 101. /EA1FC1/ Fastening corner flashing
- ☐ 235. Screw c/c 300 mm
- ☐ 255. Spike-fastener
- ☐ 311. /EAWS5657850/ Mineral wool

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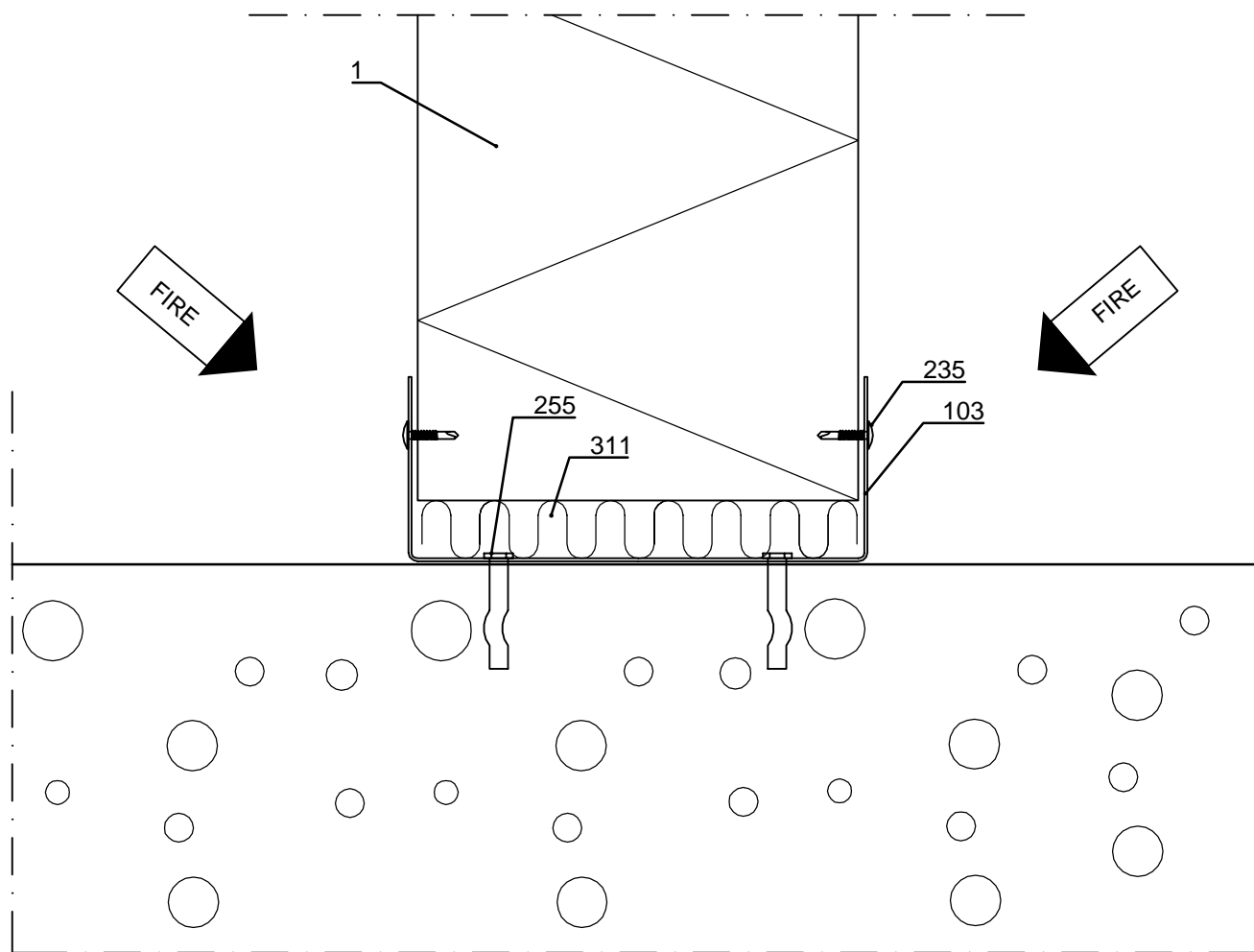
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Contents of drawing

Sandwich panel SPA compartment details
Vertical or horizontal installation, fastening to
floor, vertical section, alternative solution

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA30-FIRE-2E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:2.5 | Building | | File nr. |



- ☐ 001. Sandwich panel SPA, vertical or horizontal installation
- ☐ 103. Termo Purlin, U-profile
- ☐ 235. Screw c/c 300 mm
- ☐ 255. Spike-fastener
- ☐ 311. /EAWS5657850/ Mineral wool

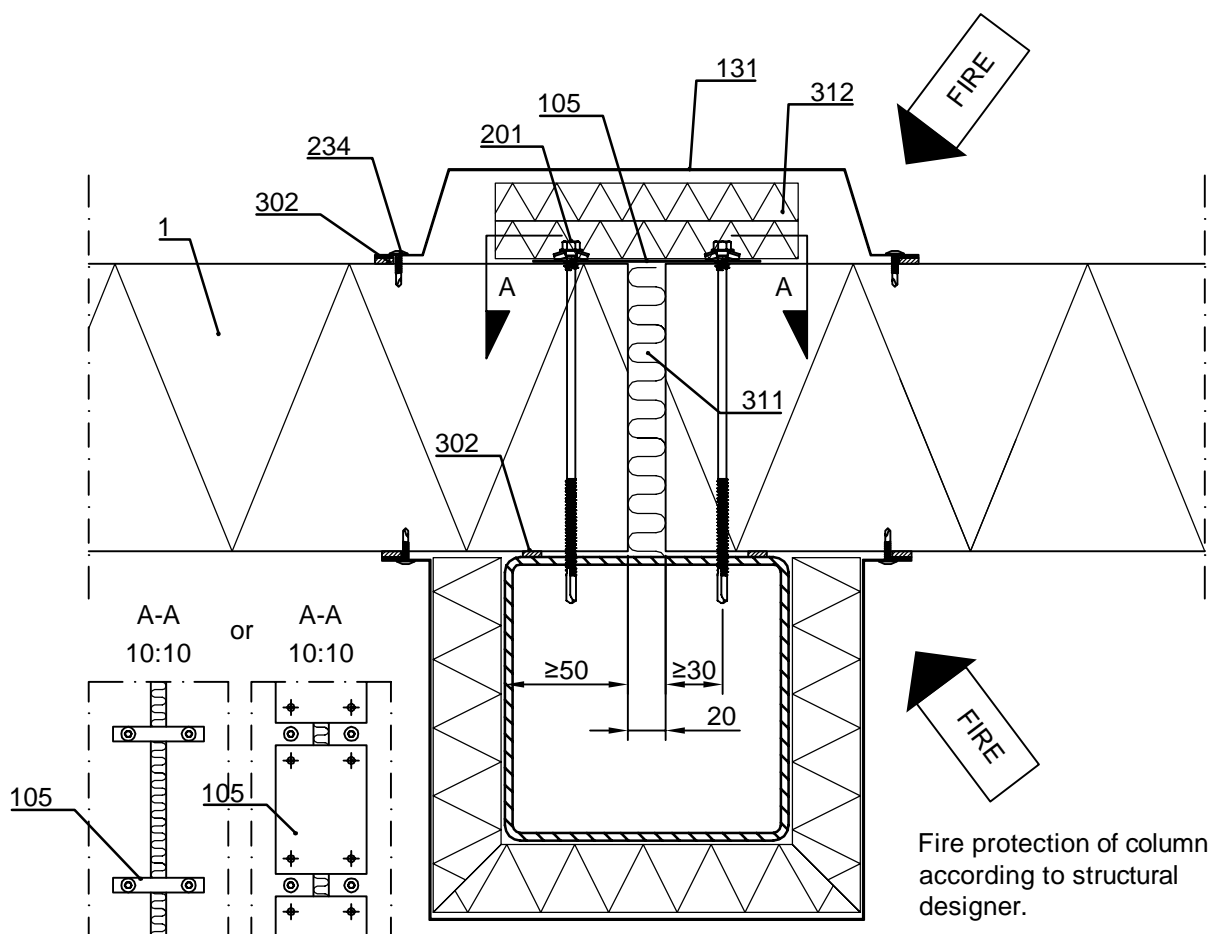
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| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA31-FIRE-1E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Fire protection wool, mechanical fastening, thickness (mm)

| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
|-----------|------|------|-------|-------|-------|
| Wall | 0 | 20 | 20 | 30 | 50 |



Fire protection of column
according to structural
designer.

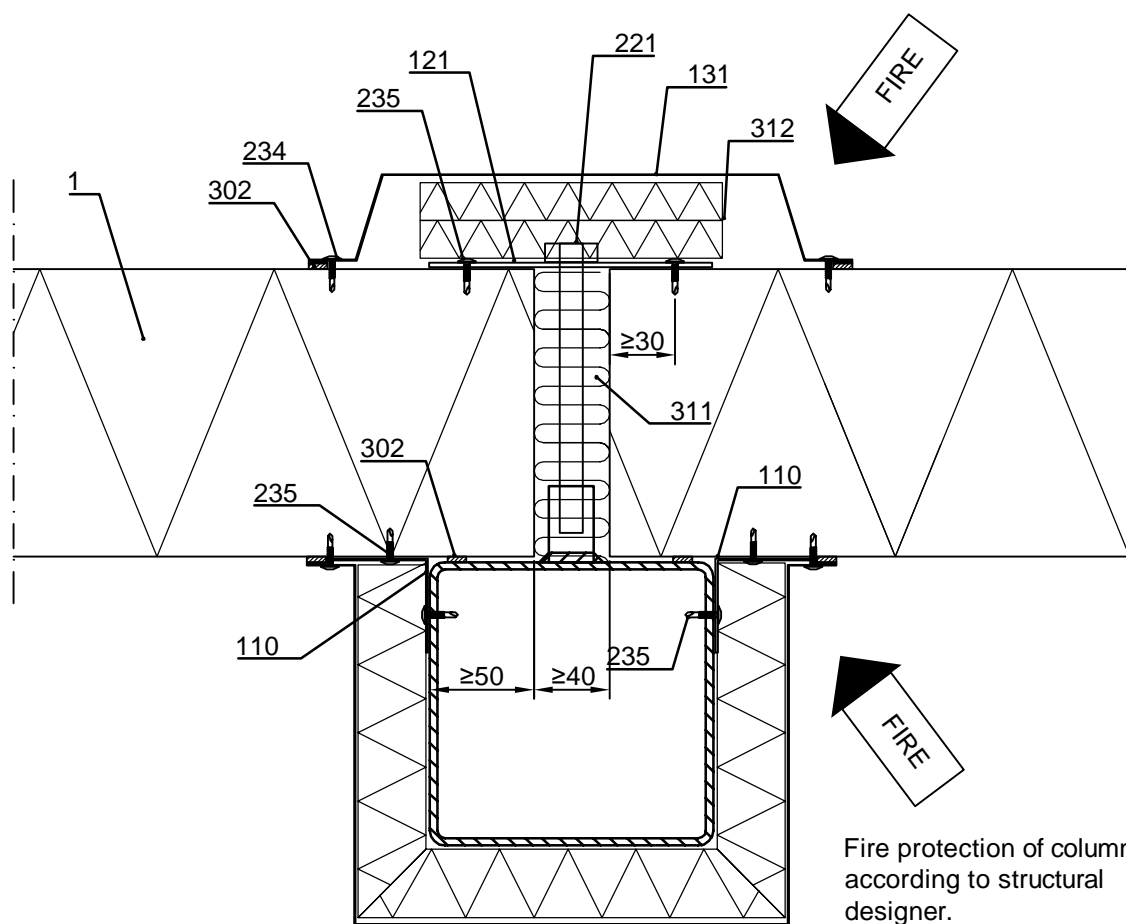
- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 105. Steel bandings or steel sheets, $t \geq 0,7$ mm
- ☐ 131. /EA1R18/ or other Cover flashing
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool,
mechanical fastening to surface

☒ Ruukki's delivery

Sandwich panel SPA compartment details Horizontal installation, vertical joint, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA31-FIRE-2E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 0 | 20 | 20 | 30 | 50 |



Fire protection of column
according to structural
designer.

- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 110. L-purlin, 50x50 or 60x60, t ≥ 1,2 mm
- ☐ 121. /EA6FP___/ Fastening plate
- ☐ 131. /EA1R18/ or other Cover flashing
- ☐ 221. Internal thread socket + hex bolt
- ☐ 234. Flashing screw c/c 300 mm

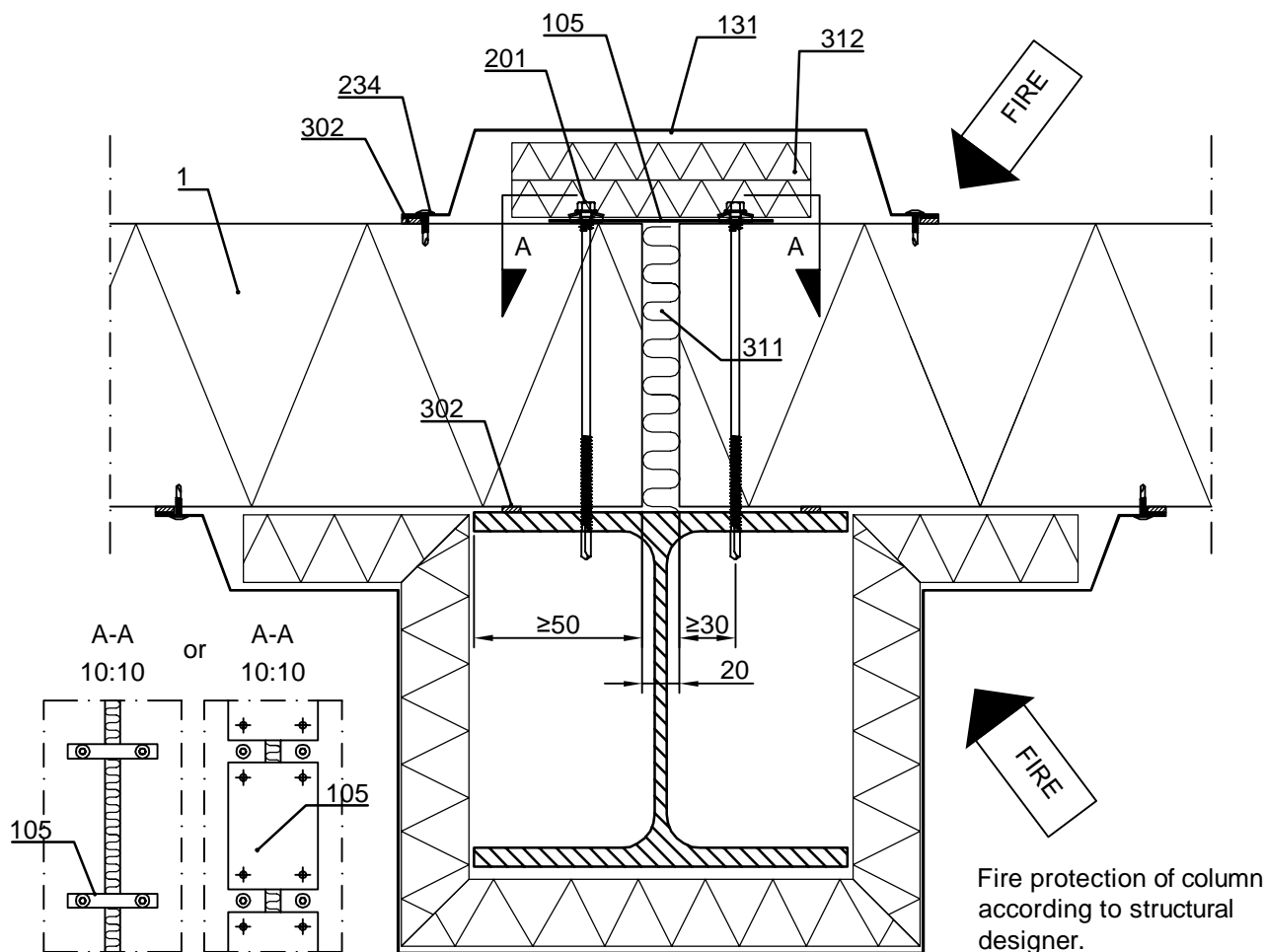
- ☐ 235. Screw (according to structural designer)
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

☒ Ruukki's delivery

Sandwich panel SPA compartment details
Horizontal installation,
vertical joint, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA31-FIRE-3E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 0 | 20 | 20 | 30 | 50 |



Fire protection of column
according to structural
designer.

- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 105. Steel bandings or steel sheets, $t \geq 0,7$ mm
- ☐ 131. /EA1R18/ or other Cover flashing
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool,
mechanical fastening to surface

☒ Ruukki's delivery

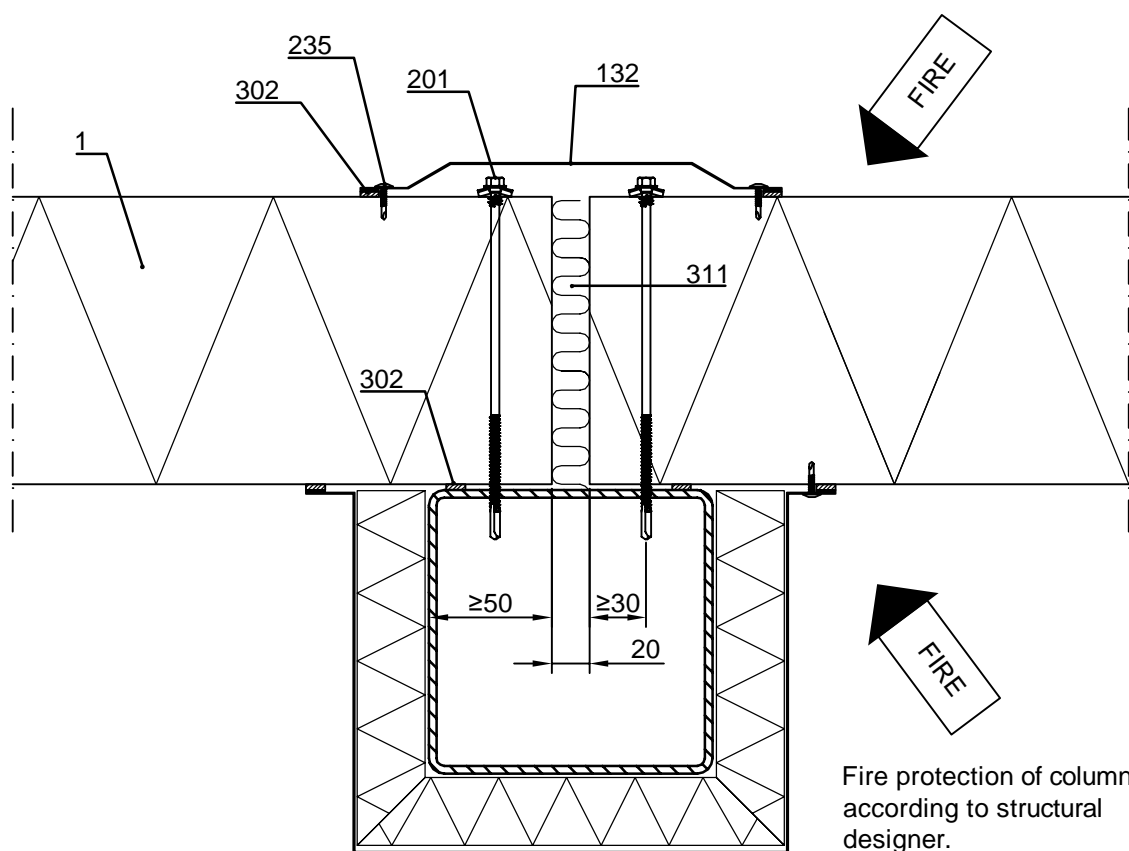


Contents of drawing

Sandwich panel SPA compartment details
Horizontal installation,
vertical joint \leq EI60, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA31-FIRE-4E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI60 or less. For EI90 - EI120 walls see SPA31-FIRE-5E-EN. Otherwise, see universally applicable solutions SPA31-FIRE-1E-EN, SPA31-FIRE-2E-EN or SPA31-FIRE-3E-EN.



Fire protection of column
according to structural
designer.

- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 132. /EA1JF60-1/ or /EA1JF60-2/ Fire flashing
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 235. Flashing screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool

☒ Ruukki's delivery

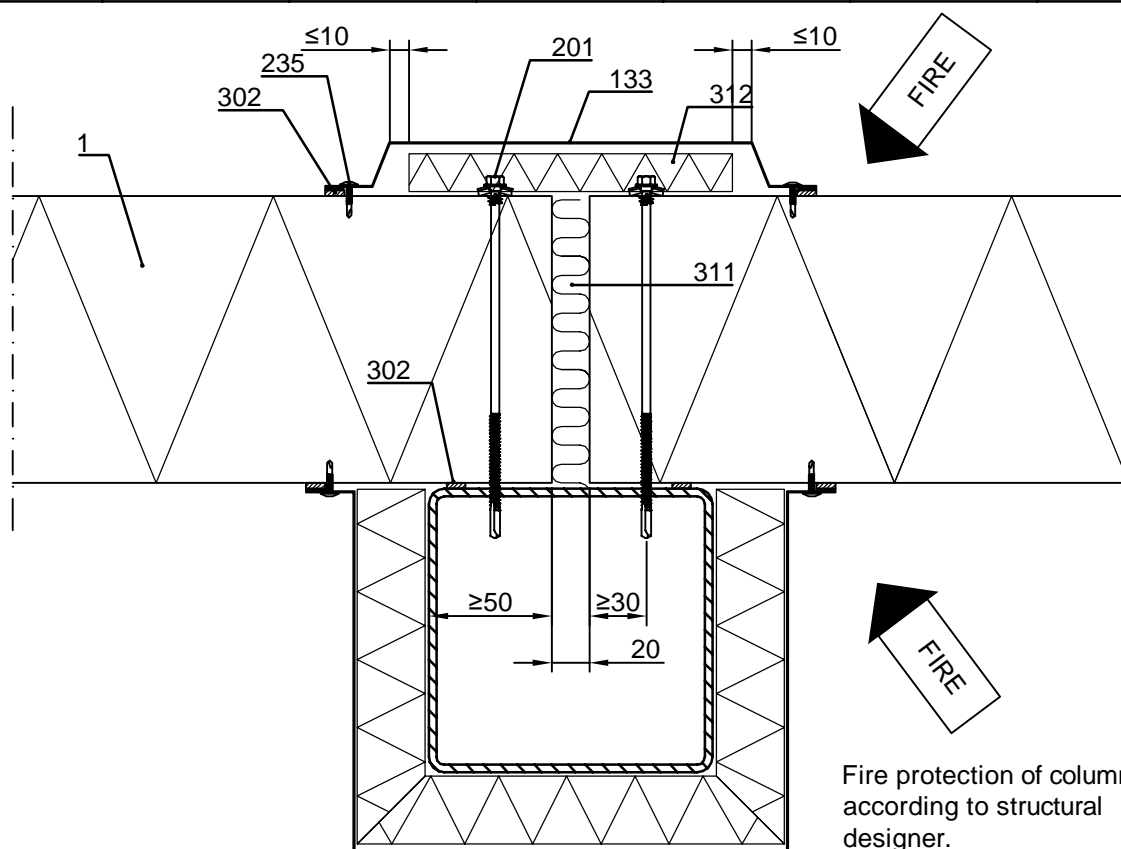
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| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA31-FIRE-5E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI120 or less. For \leq EI60 walls see SPA31-FIRE-4E-EN. Otherwise, see universally applicable solutions SPA31-FIRE-1E-EN, SPA31-FIRE-2E-EN or SPA31-FIRE-3E-EN.

Fire protection wool, mechanical fastening, thickness (mm)

| Structure | EI30 | EI60 | EI90 | EI120 | EI180 | EI240 |
|-----------|------|------|------|-------|-------|-------|
| Wall | 20 | 20 | 20 | 20 | N/A | N/A |



Fire protection of column
according to structural
designer.

- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 133. /EA1JV1/ or /EA1JV2/ Vertical joint flashing
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 235. Flashing screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool,
mechanical fastening to surface

20 mm fire protection wool is always mandatory with
this joint type to better facilitate the load transfer
between outer panel sheets during fire.

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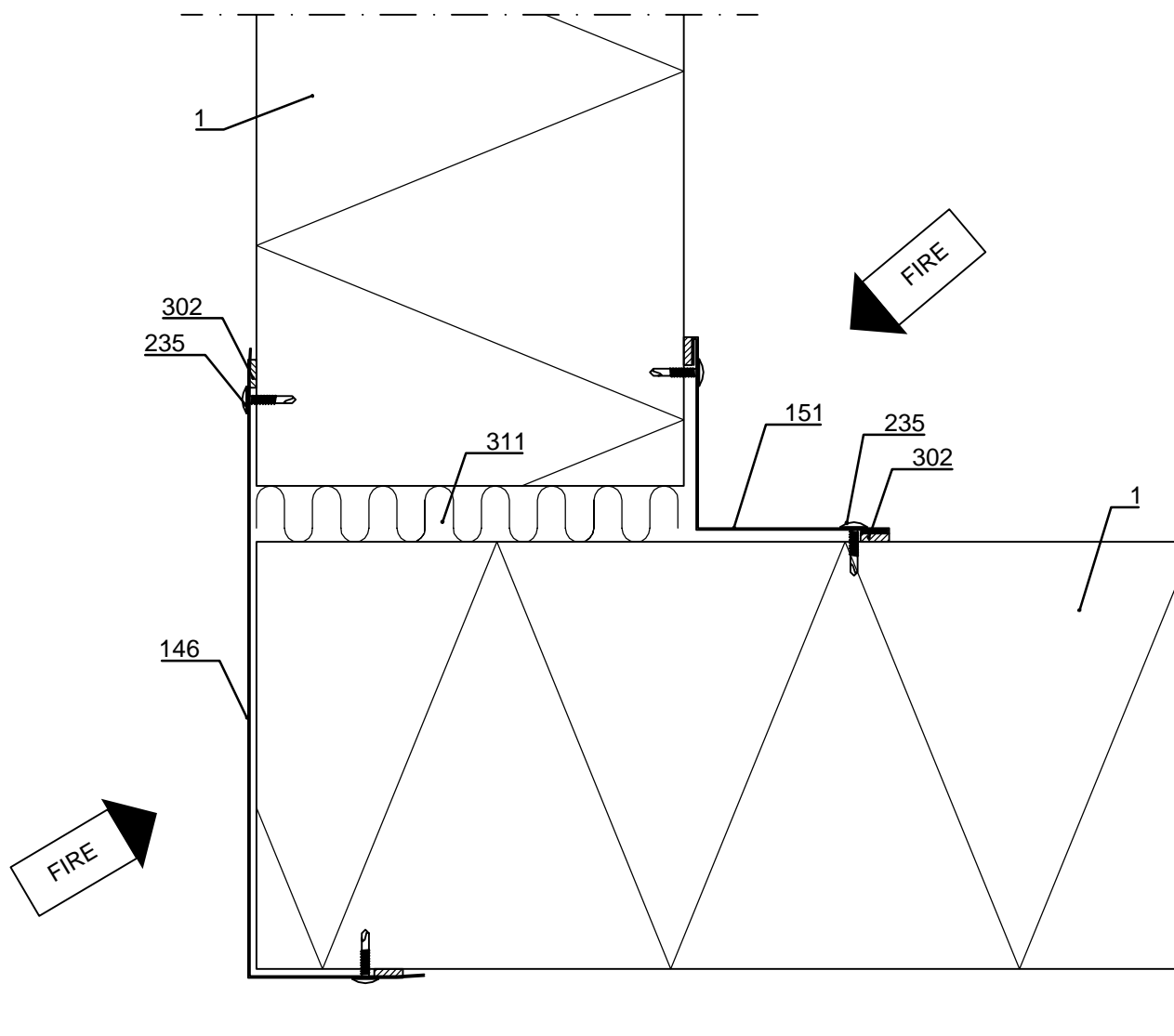


Contents of drawing

Sandwich panel SPA compartment details
Vertical installation, L-corner
without column, \leq EI30, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA32-FIRE-1E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:2.5 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI30 or less, and when vertical panels don't require additional support structures (see roof fastening detail SPA33-FIRE-2E-EN).



- ☐ 001. Sandwich panel SPA, vertical installation
- ☐ 146. /EA1EC9-___/ External corner flashing
- ☐ 151. /EA1IC2/ Internal corner flashing
- ☐ 235. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool

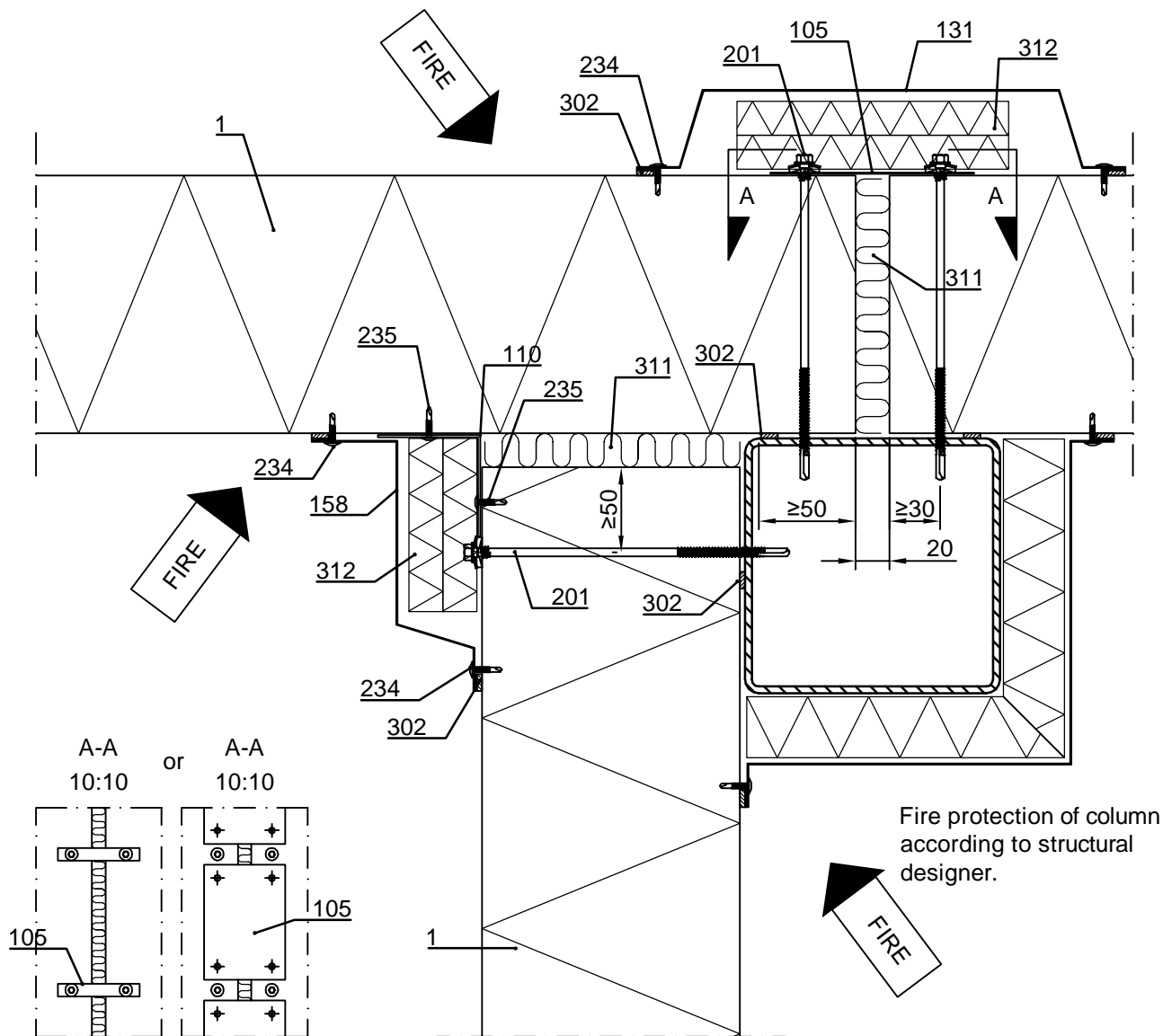
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Sandwich panel SPA compartment details
Horizontal (or vertical) installation,
T-corner with column, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA32-FIRE-2E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 0 | 20 | 20 | 30 | 50 |



- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 105. Steel bandings or steel sheets, $t \geq 0,7$ mm, required in horizontal installation only
- ☐ 110. L-purlin, 50x50 or 60x60, $t \geq 1,2$ mm, required in horizontal installation only
- ☐ 131. /EA1R18/ or other Cover flashing
- ☐ 158. /EA1R23/ Cover flashing

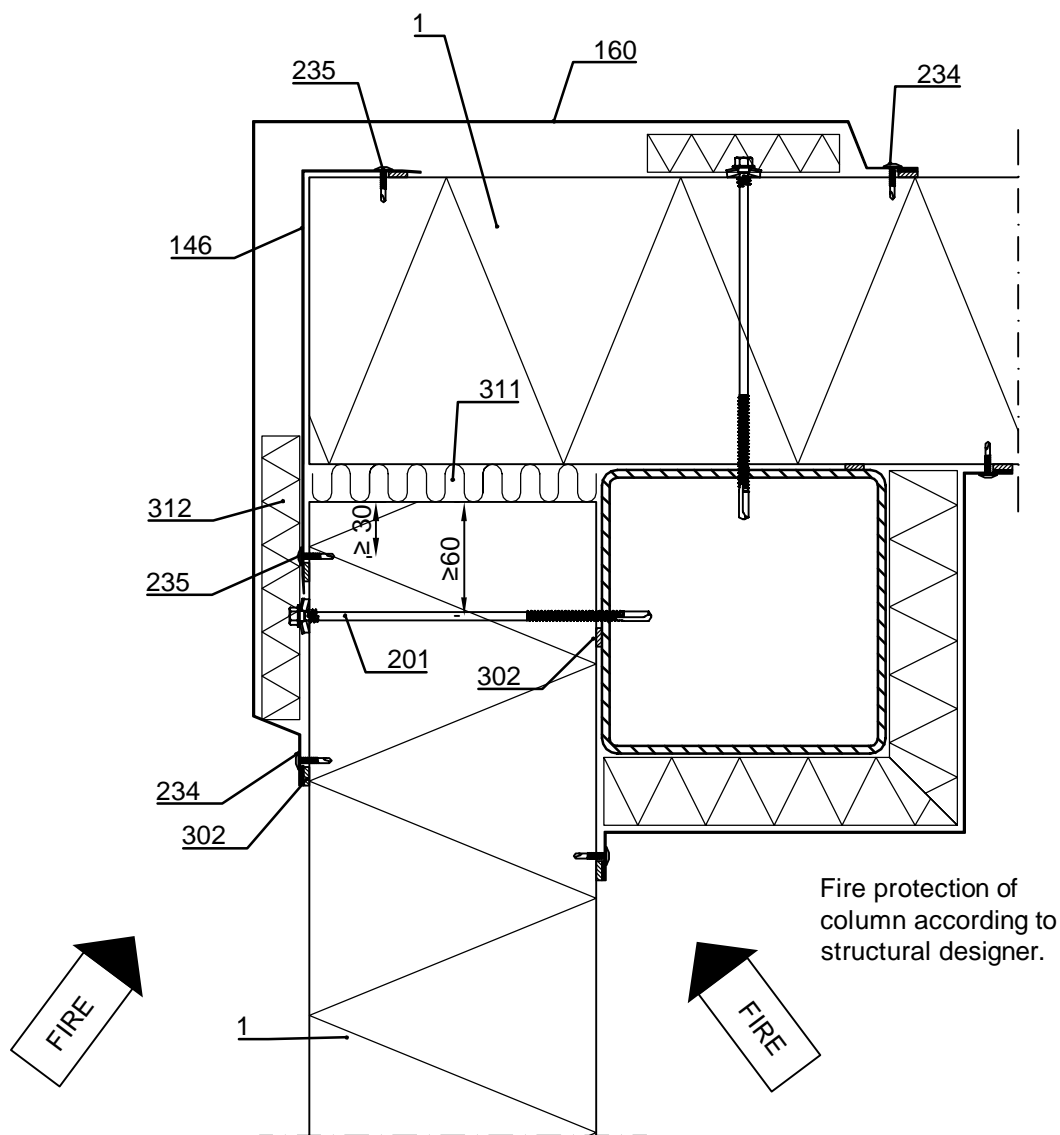
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

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| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA32-FIRE-3E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Fire protection wool, mechanical fastening, thickness (mm)

| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
|-----------|------|------|-------|-------|-------|
| Wall | 0 | 20 | 20 | 30 | 50 |



- ☐ 001. Sandwich panel SPA, horizontal or vertical inst.
- ☐ 146. /EA1EC9-___/ External corner flashing
- ☐ 160. /EA1EC4/ External corner flashing (if panel thickness > 200 mm, or fire protection wool > 20 mm, flashing must be designed according to dimensions)
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

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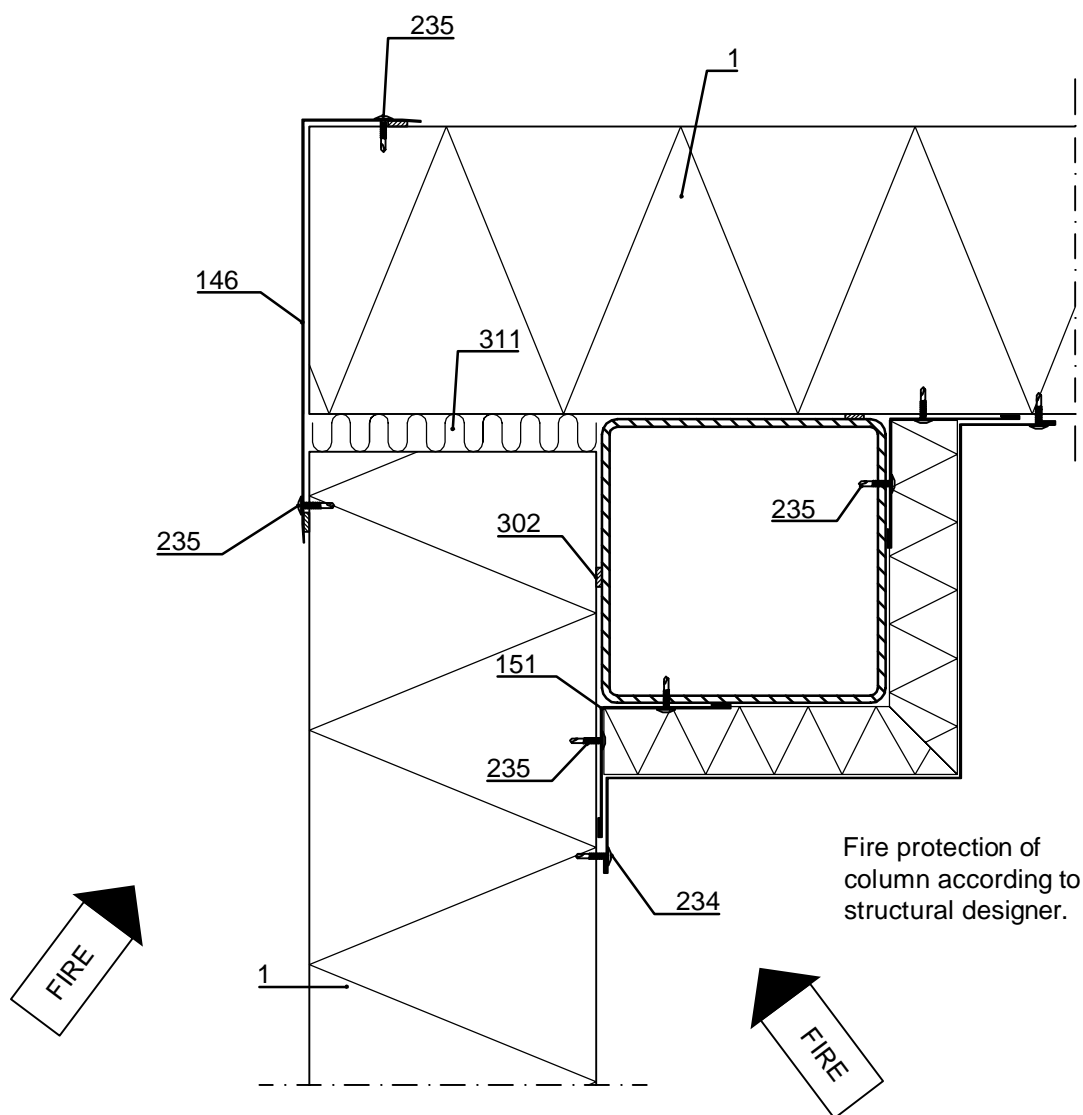


Contents of drawing

Sandwich panel SPA compartment details
Vertical installation,
L-corner with column, \leq EI60, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA32-FIRE-4E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI60 or less.
Otherwise, see SPA32-FIRE-3E-EN.



Fire protection of
column according to
structural designer.

- ☐ 001. Sandwich panel SPA, vertical installation
- ☐ 146. /EA1EC9-___/ External corner flashing
- ☐ 151. /EA1IC2/ Internal corner flashing
- ☐ 302. /EA3SS410/ Sealing strip

- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw c/c 300 mm
- ☐ 311. /EAWS5657850/ Mineral wool

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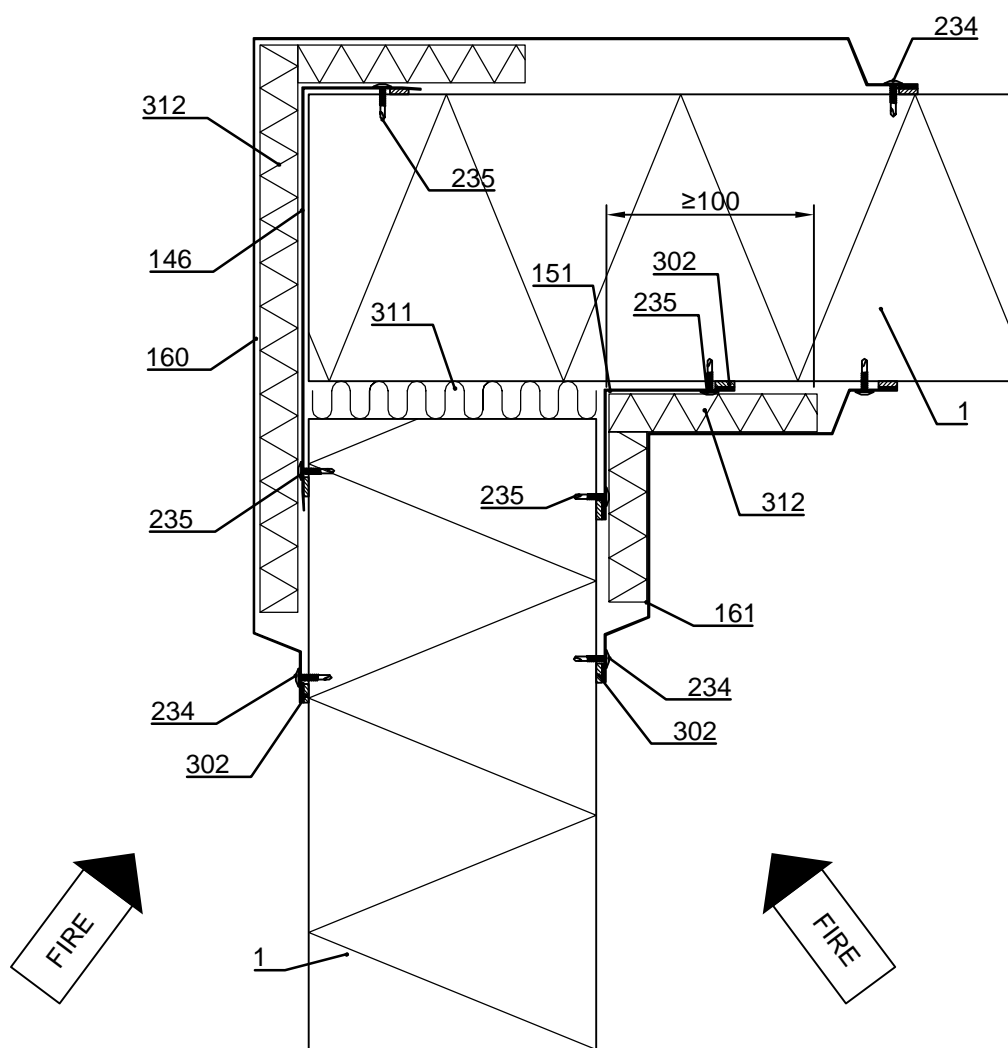
Contents of drawing

Sandwich panel SPA compartment details
Vertical installation, L-corner
without column, \leq EI60, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA32-FIRE-5E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI60 or less, and when vertical panels don't require additional support structures (see roof fastening detail SPA33-FIRE-2E-EN).

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 20 | N/A | N/A | N/A | N/A |



- ☐ 001. Sandwich panel SPA, horizontal or vertical inst.
- ☐ 146. /EA1EC9-___/ External corner flashing
- ☐ 151. /EA1IC2/ Internal corner flashing
- ☐ 160. /EA1EC4/ External corner flashing
- ☐ 161. /EA1IC3/ Internal corner flashing
- ☐ 234. Flashing screw c/c 300 mm

- ☐ 235. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

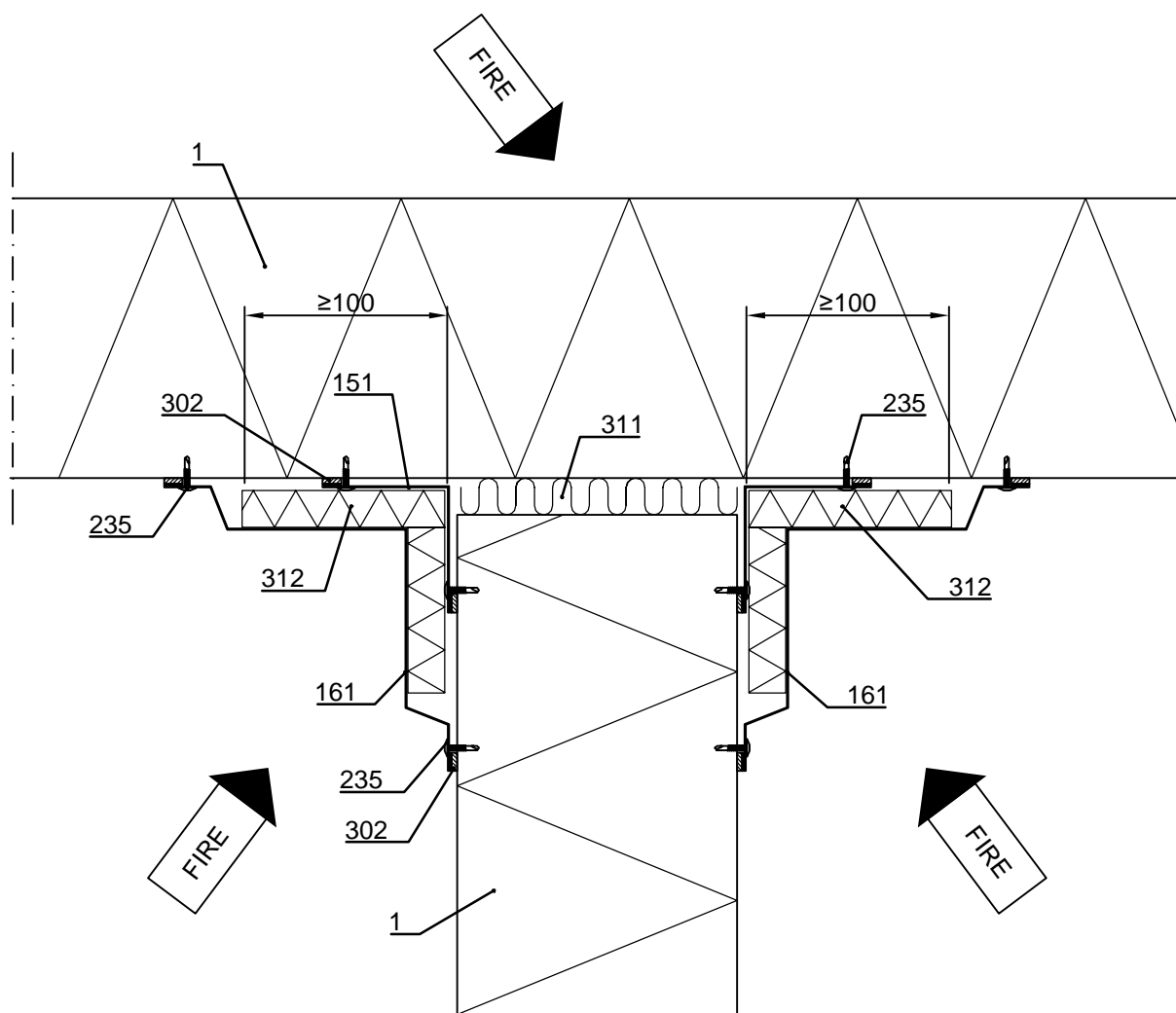
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| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA32-FIRE-7E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI60 or less, and when vertical panels don't require additional support structures (see roof fastening detail SPA33-FIRE-2E-EN).

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 20 | N/A | N/A | N/A | N/A |



- ☐ 001. Sandwich panel SPA, vertical installation
- ☐ 151. /EA1IC2/ Internal corner flashing
- ☐ 161. /EA1IC3/ Internal corner flashing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool

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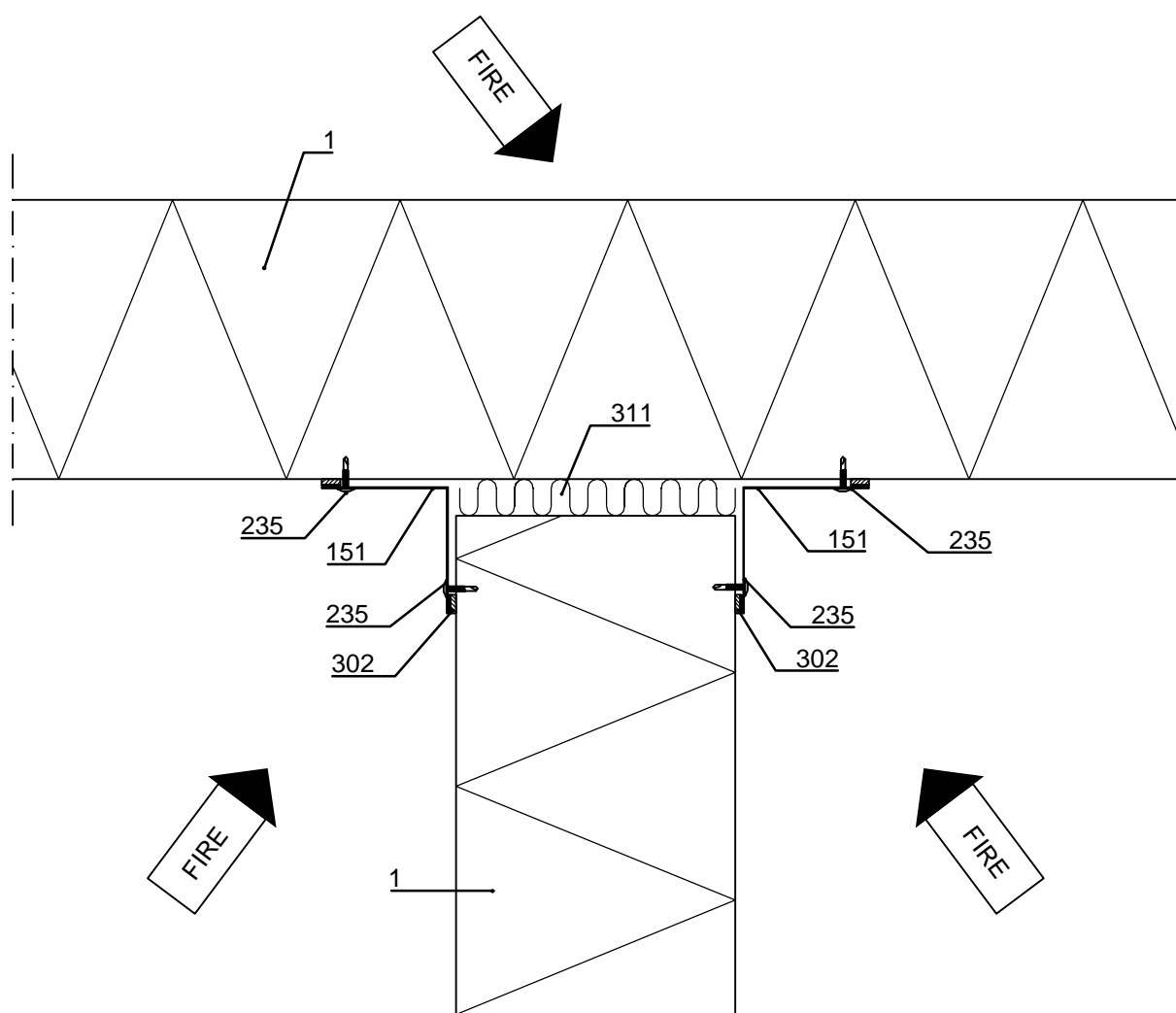


Contents of drawing

Sandwich panel SPA compartment details
Vertical installation, T-corner
without column, \leq EI30, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA32-FIRE-8E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI30 or less, and when vertical panels don't require additional support structures (see roof fastening detail SPA33-FIRE-2E-EN).



- ☐ 001. Sandwich panel SPA, vertical installation
- ☐ 151. /EA1IC2/ Internal corner flashing
- ☐ 234. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool

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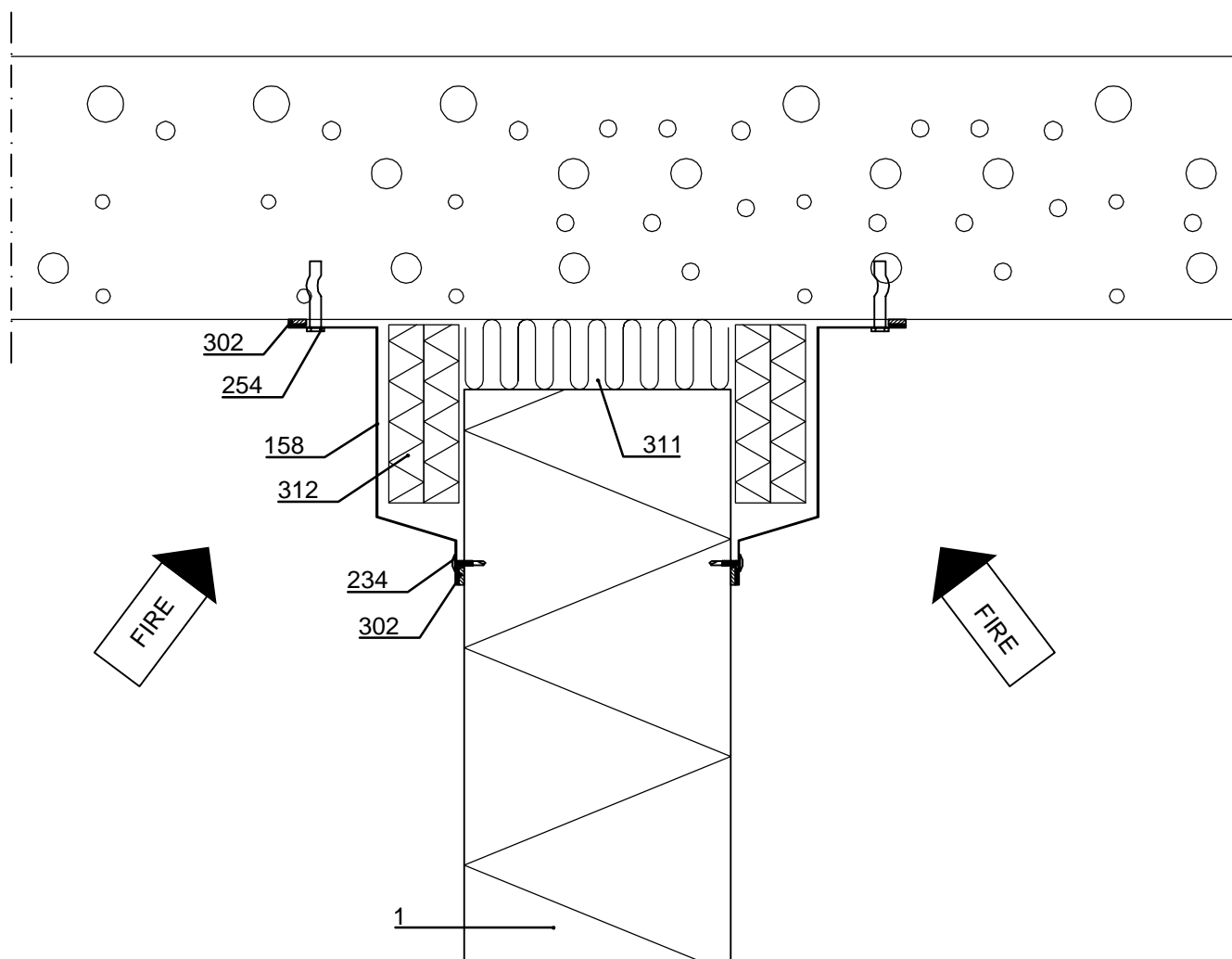
Contents of drawing

Sandwich panel SPA compartment details
Horizontal installation,
fastening to concrete roof, vertical section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA33-FIRE-1E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Fire protection wool, mechanical fastening, thickness (mm)

| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
|-----------|------|------|-------|-------|-------|
| Wall | 0 | 20 | 20 | 30 | 50 |



- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 158. /EA1R23/ Cover flashing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 254. Spike-fastener

- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

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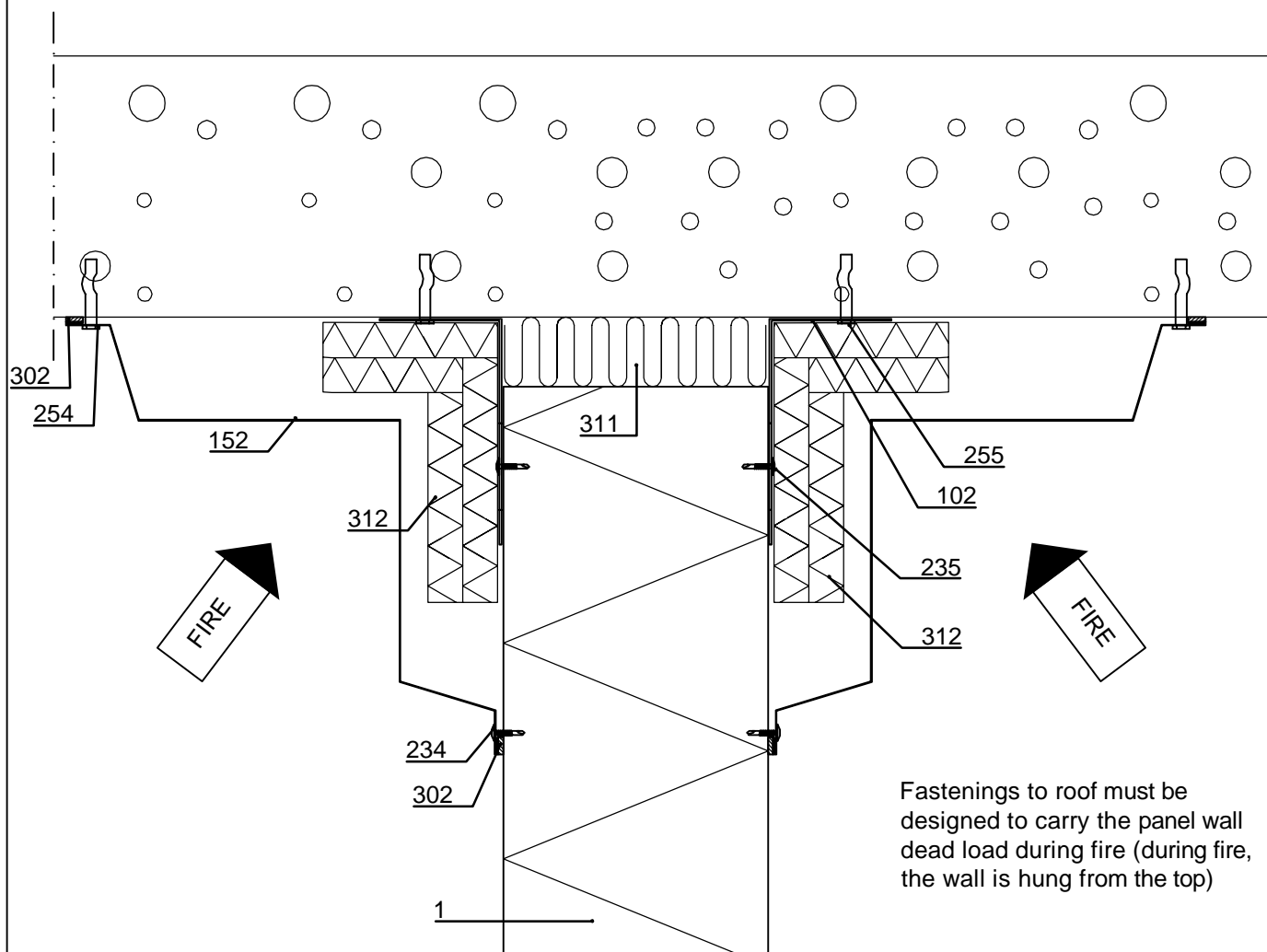
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Sandwich panel SPA compartment details
Vertical installation,
fastening to concrete roof, vertical section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA33-FIRE-2E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Fire protection wool, mechanical fastening, thickness (mm)

| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
|-----------|------|------|-------|-------|-------|
| Wall | 0 | 20 | 20 | 30 | 50 |



- ☐ 001. Sandwich panel SPA, horizontal installation
- ☐ 102. /EA1FC5/ L-corner
- ☐ 152. /EA1R21/ Roof flashing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw (according to structural designer)
- ☐ 254. Spike-fastener

- ☐ 255. Spike-fastener (according to structural designer)
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

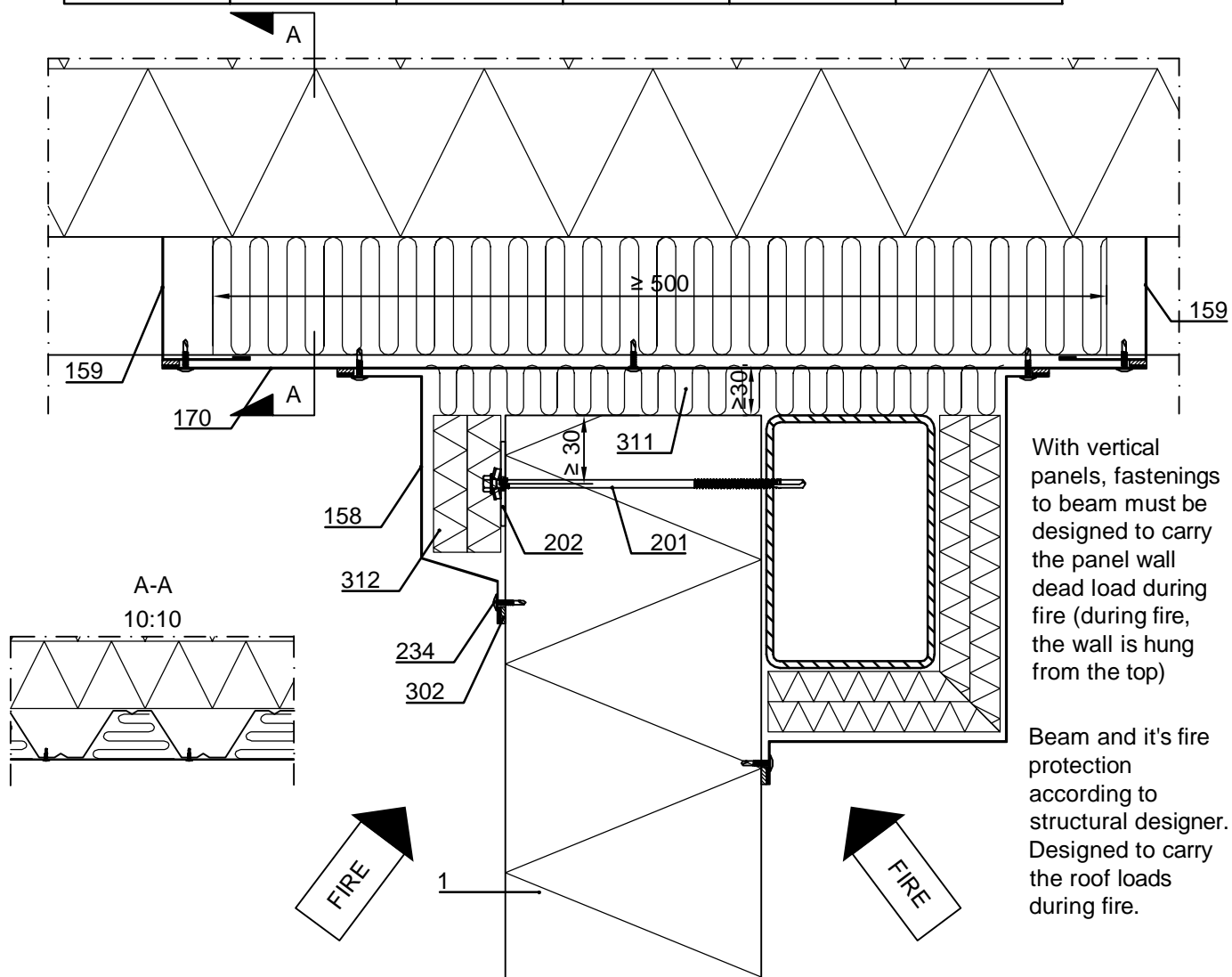
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Sandwich panel SPA compartment details Horizontal or vertical installation, fastening to load-bearing sheet (span perpendicular)

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA35-FIRE-1E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | File nr. | |

Note! This detail is used for cases where the fire resistance of the load-bearing roof sheets is much lower (e.g R15) than the fire resistance of the compartment walls (EI30-E240). In these cases the compartment walls cannot be supported only from the load-bearing sheets; additional beam is required to carry the roof loads during fire.

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 0 | 20 | 20 | 30 | 50 |



- ☐ 001. Sandwich panel SPA, horizontal or vertical inst.
- ☐ 158. /EA1R23/ Cover flashing
- ☐ 159. /EA1CFT_____LB/ Closure flashing, bent
- ☐ 170. Flat steel sheet
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 202. Large washer, 50x50 mm, t ≥ 2 mm, required for vertical panel installations only

- ☐ 234. Flashing screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

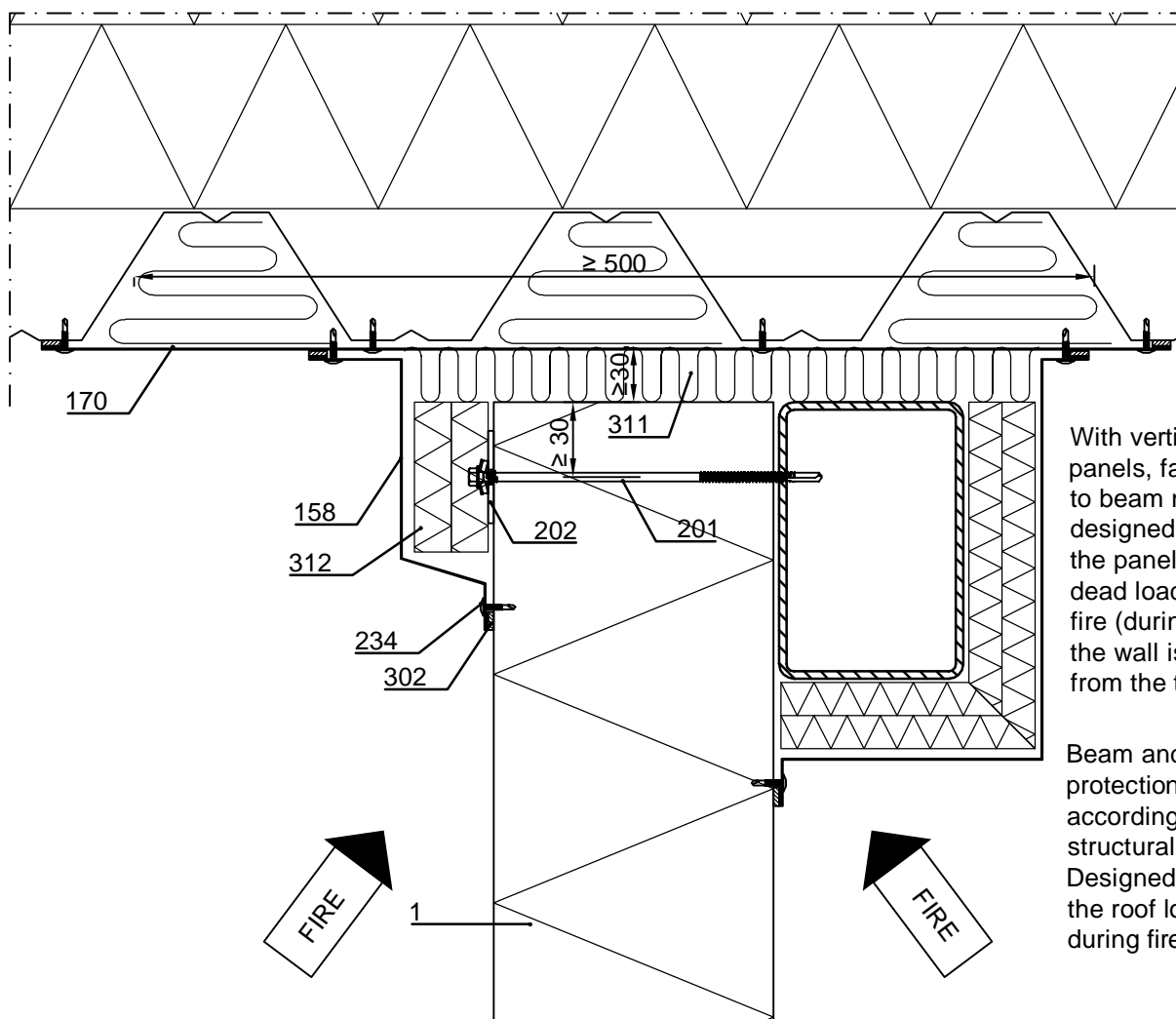
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Sandwich panel SPA compartment details Horizontal or vertical installation, fastening to load-bearing sheet (span parallel)

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA35-FIRE-2E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | File nr. | |

Note! This detail is used for cases where the fire resistance of the load-bearing roof sheets is much lower (e.g R15) than the fire resistance of the compartment walls (EI30-E240). In these cases the compartment walls cannot be supported only from the load-bearing sheets; additional beam is required to carry the roof loads during fire. Although, when roof sheet span is parallel to compartment walls and load transfer to compartment walls is prevented by fire protecting the roof sheet, alternative detail can be used (see SPA35-FIRE-3E-EN).

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 0 | 20 | 20 | 30 | 50 |



With vertical panels, fastenings to beam must be designed to carry the panel wall dead load during fire (during fire, the wall is hung from the top)

Beam and it's fire protection according to structural designer. Designed to carry the roof loads during fire.

- ☐ 001. Sandwich panel SPA, horizontal or vertical inst.
- ☐ 158. /EA1R23/ Cover flashing
- ☐ 170. Flat steel sheet
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 202. Large washer, 50x50 mm, t ≥ 2 mm, required for vertical panel installations only

- ☐ 234. Flashing screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 312. /EAFW206001000/ Fire protection wool, mechanical fastening to surface

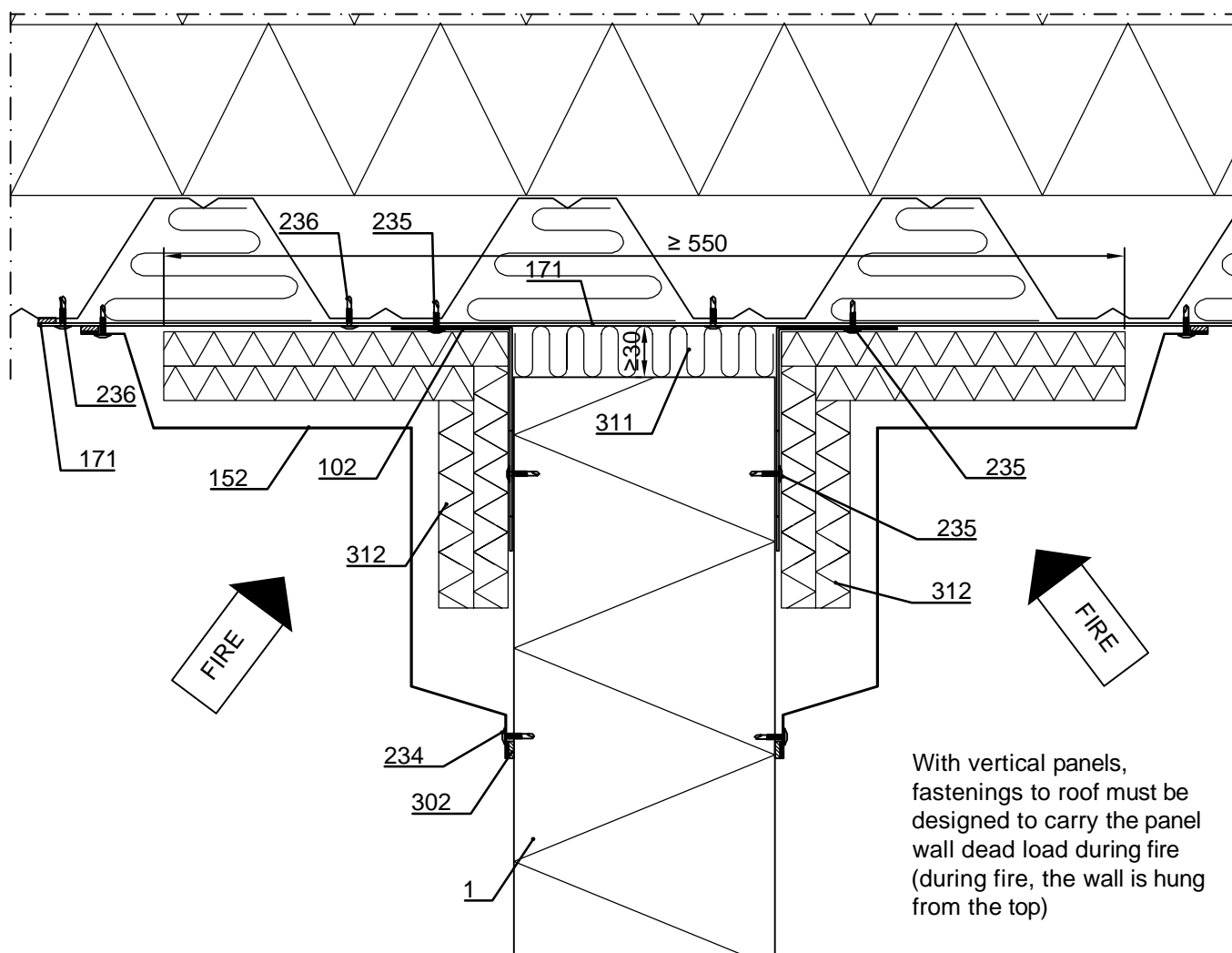
☒ Ruukki's delivery

Sandwich panel SPA compartment details Horizontal or vertical installation, fastening to load-bearing sheet (span parallel), ≤ EI120

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA35-FIRE-3E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | File nr. | |

Note! This detail is only applicable when load-bearing roof sheet span is parallel to compartment walls and load transfer to compartment walls during fire is prevented by fire protecting the roof sheet, and when requirements for compartment walls are EI120 or less. Otherwise, see SPA35-FIRE-1E-EN and SPA35-FIRE-2E-EN.

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | | |
|--|------|------|------|-------|-------|-------|
| Structure | EI30 | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 0 | 0 | 20 | 20 | 30 | 50 |
| Roof | 0 | 20 | 30 | 50 | n/a | n/a |



- ☐ 001. Sandwich panel SPA, horizontal or vertical inst.
- ☐ 102. /EA1FC5/ L-corner
- ☐ 152. /EA1R21/ Roof flashing
- ☐ 171. Flat steel sheet, t = 0.7 - 2.5 mm
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw (according to structural designer)

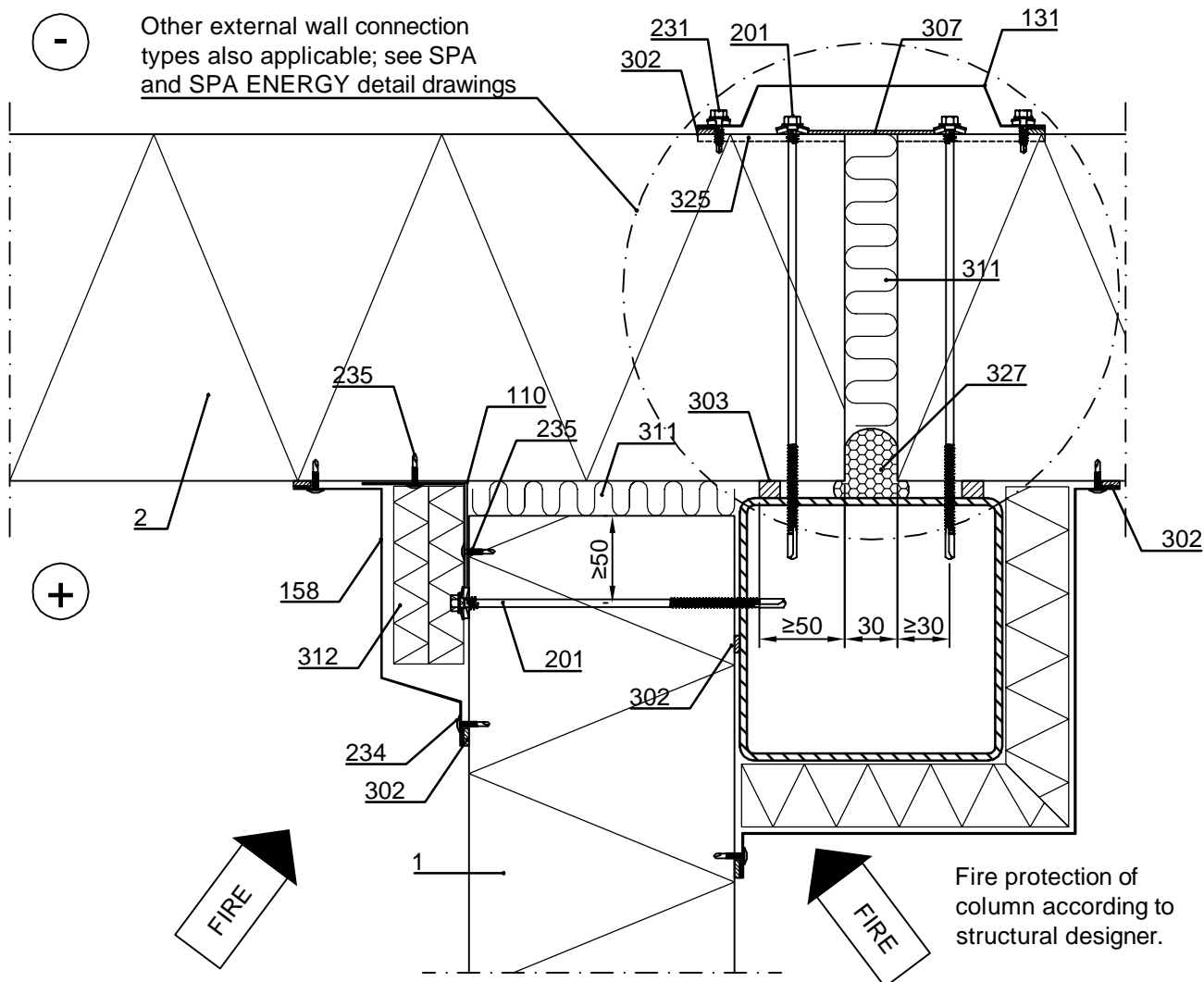
- ☐ 236. Screw (according to structural designer)
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool mechanical fastening to surface
- ☐ 312. /EAFW206001000/ Fire protection wool,

☒ Ruukki's delivery

Sandwich panel SPA compartment details
Horizontal (or vertical) installation,
fastening to external wall, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA36-FIRE-1E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 0 | 20 | 20 | 30 | 50 |

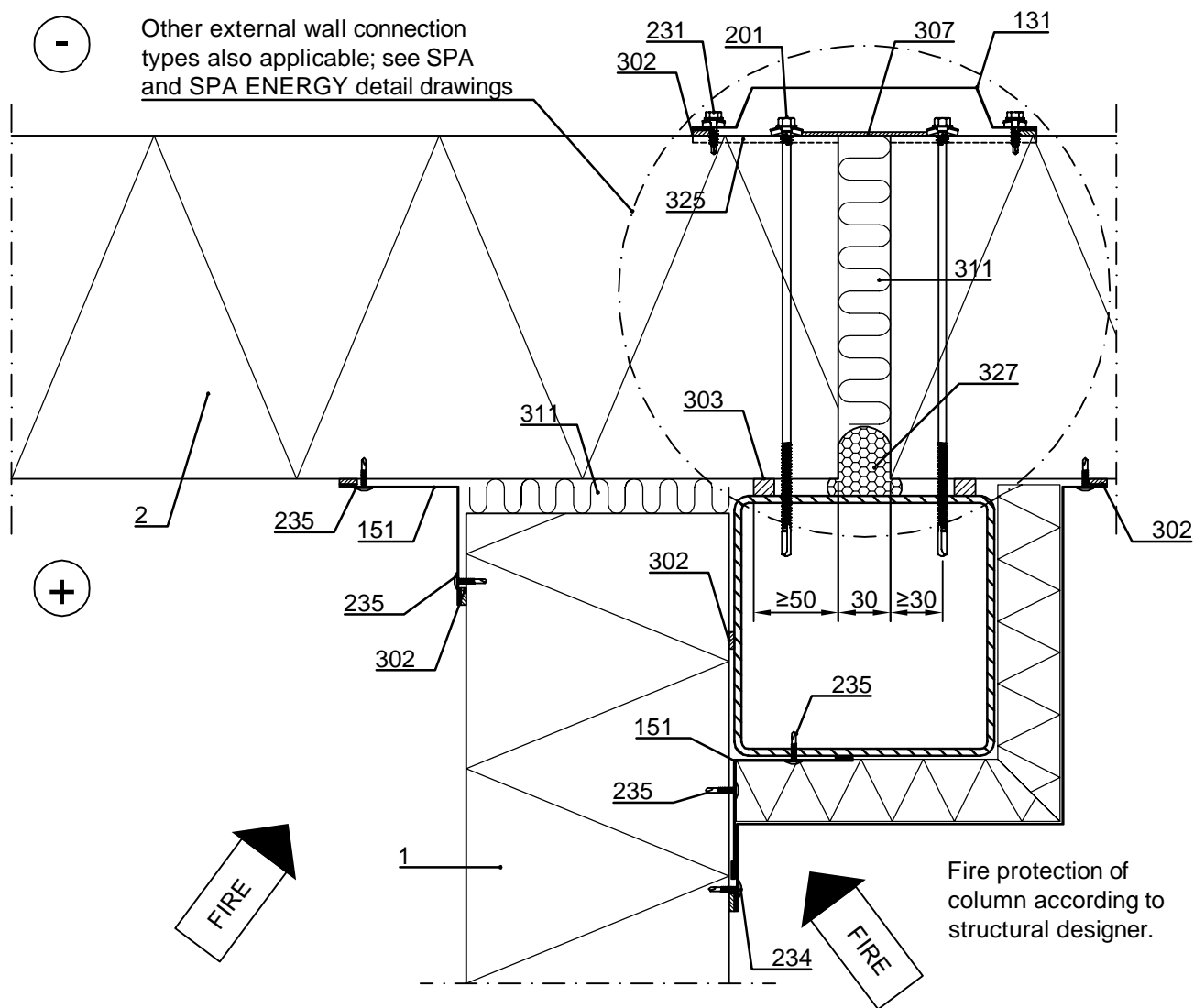


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Sandwich panel SPA compartment details Vertical installation, fastening to external wall, ≤ EI60, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA36-FIRE-2E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI60 or less. Otherwise, see SPA36-FIRE-1E-EN.



- ☐ 001. Sandwich panel SPA, vertical installation
- ☐ 002. Sandwich panel SPA, SPA ENERGY or SPA E LIFE, horizontal installation
- ☐ 131. /EA1JV1/ Vertical joint flashing
- ☐ 151. /EA1IC2/ Internal corner flashing
- ☐ 201. Self-drilling panel screw, washer with sealing
- ☐ 231. Flashing fastener, washer with sealing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw c/c 300 mm

- ☐ 302. /EA3SS410/ Sealing strip, or /EA3SS510/ Sealing strip EPDM for flashing (for demanding climate conditions e.g. coastal areas)
- ☐ 303. /EA3SS1210/ Sealing strip
- ☐ 307. /EA3JS7525/ Joint sealing
- ☐ 311. /EAWS5657850/ Mineral wool
- ☐ 325. Ruukki silicone during installation to outer female groove in length equivalent to vertical joint flashing width
- ☐ 327. Elastic polyurethane foam

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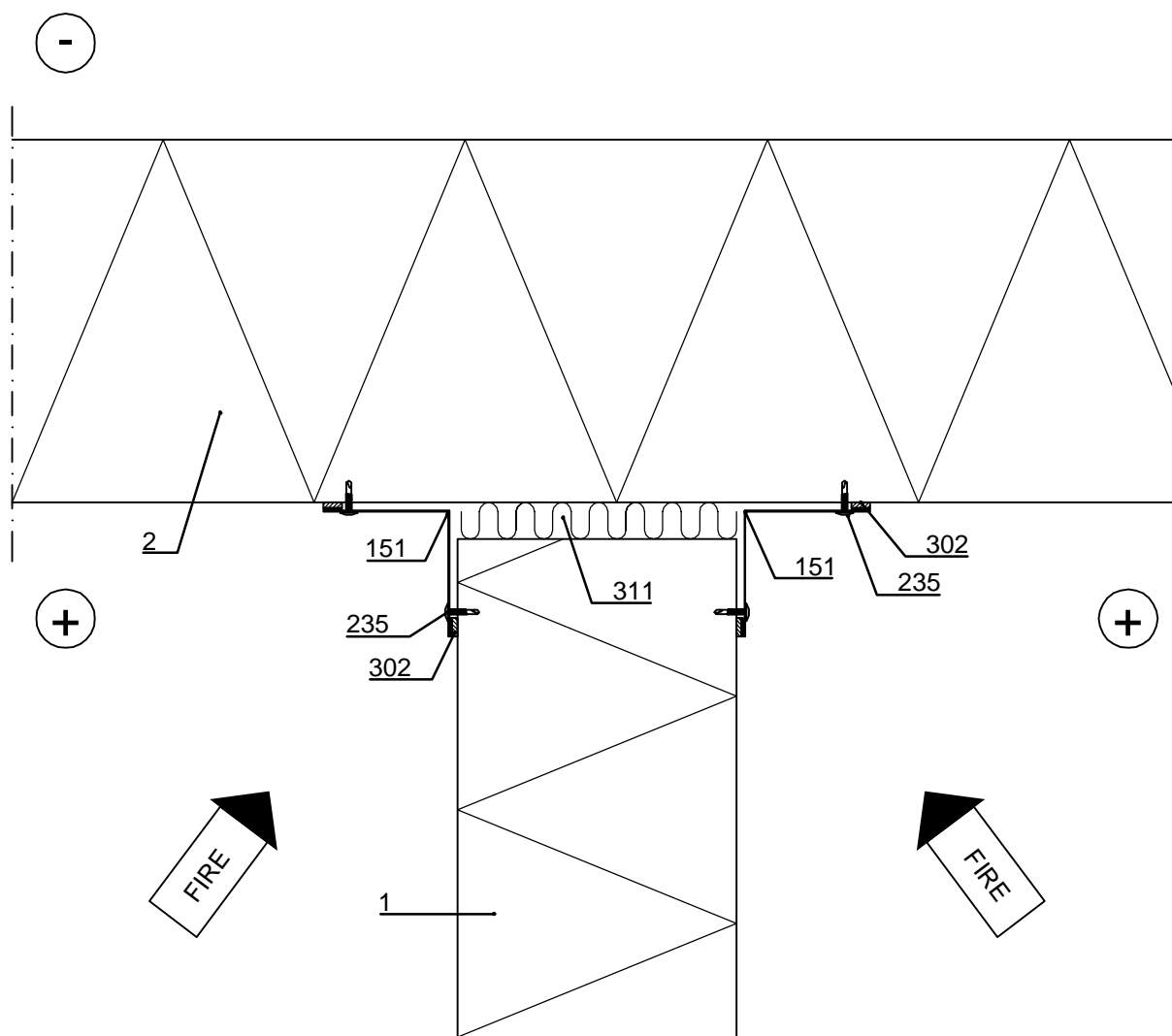


Contents of drawing

Sandwich panel SPA compartment details
Vertical installation, fastening to
external wall, \leq EI30, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA36-FIRE-3E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | | File nr. |

Note! This detail is only applicable when requirements for compartment walls are EI30 or less, and when vertical panels don't require additional support structures (see roof fastening details SPA33-FIRE-2E-EN and SPA35-FIRE-3E-EN). Otherwise, see external wall fastening details SPA36-FIRE-1E-EN or SPA36-FIRE-2E-EN. If requirement is EI60 or less, see SPA36-FIRE-4E-EN.



- ☐ 001. Sandwich panel SPA, vertical installation
- ☐ 002. Sandwich panel SPA, SPA ENERGY or SPA E LIFE
- ☐ 151. /EA1IC2/ Internal corner flashing

- ☐ 235. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool

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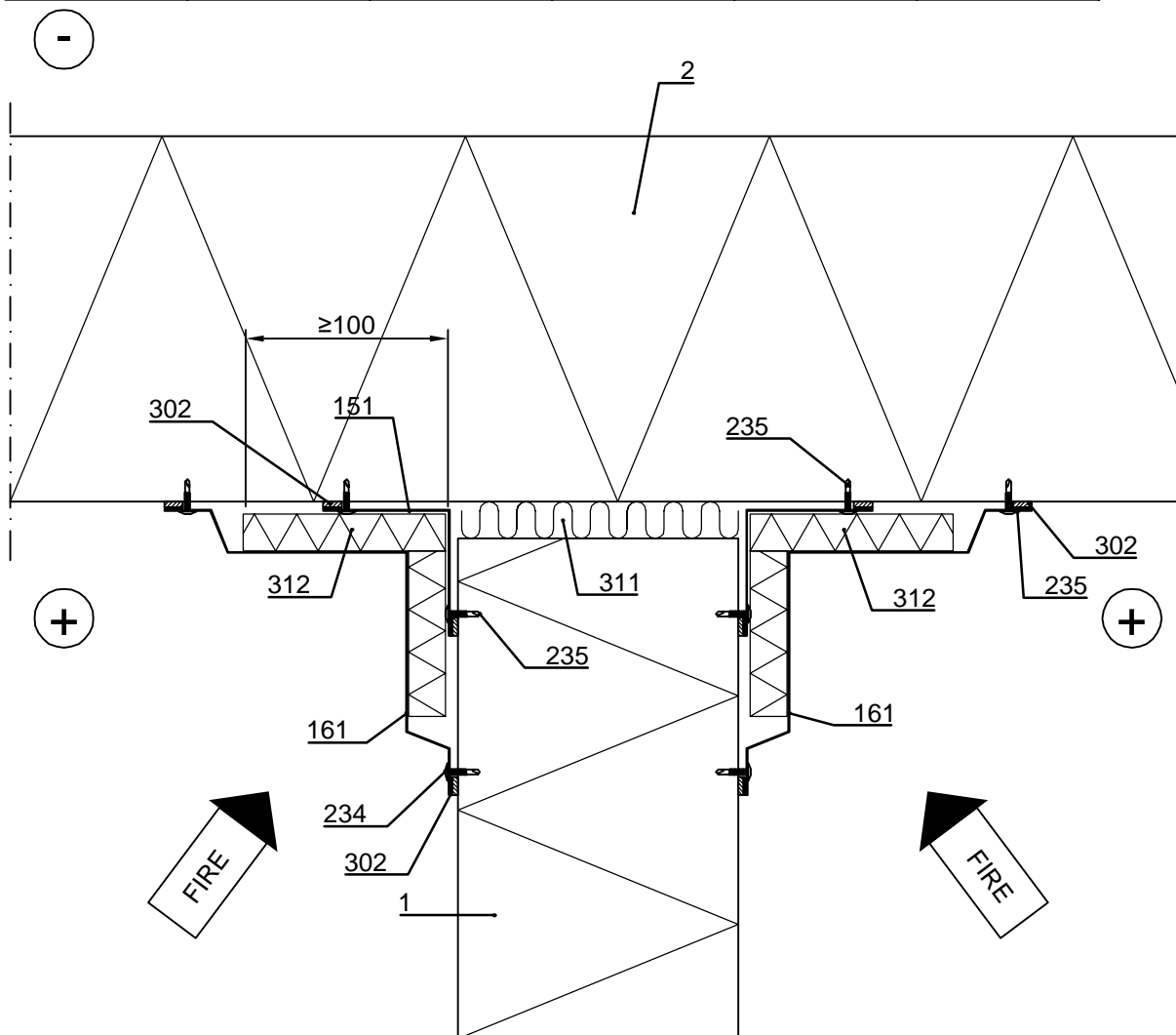
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Sandwich panel SPA compartment details Vertical installation, fastening to external wall, ≤ EI60, horizontal section

| | | | |
|--------------------|-----------|----------|---------------------------------|
| Date 20.05.2025 | Rev. date | Work nr. | Drawing nr. SPA36-FIRE-4E-EN |
| Drawn by Ruukki | Rev. | | |
| Scale 1:4 | Building | File nr. | |

Note! This detail is only applicable when requirements for compartment walls are EI60 or less, and when vertical panels don't require additional support structures (see roof fastening details SPA33-FIRE-2E-EN and SPA35-FIRE-3E-EN). Otherwise, see external wall fastening details SPA36-FIRE-1E-EN or SPA36-FIRE-2E-EN. If requirement is EI30 or less, see SPA36-FIRE-3E-EN.

| Fire protection wool, mechanical fastening, thickness (mm) | | | | | |
|--|------|------|-------|-------|-------|
| Structure | EI60 | EI90 | EI120 | EI180 | EI240 |
| Wall | 20 | N/A | N/A | N/A | N/A |



- ☐ 001. Sandwich panel SPA, vertical installation
- ☐ 002. Sandwich panel SPA, SPA ENERGY or SPA E LIFE
- ☐ 151. /EA1IC2/ Internal corner flashing
- ☐ 161. /EA1IC3/ Internal corner flashing
- ☐ 234. Flashing screw c/c 300 mm
- ☐ 235. Screw c/c 300 mm
- ☐ 302. /EA3SS410/ Sealing strip
- ☐ 311. /EAWS5657850/ Mineral wool

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