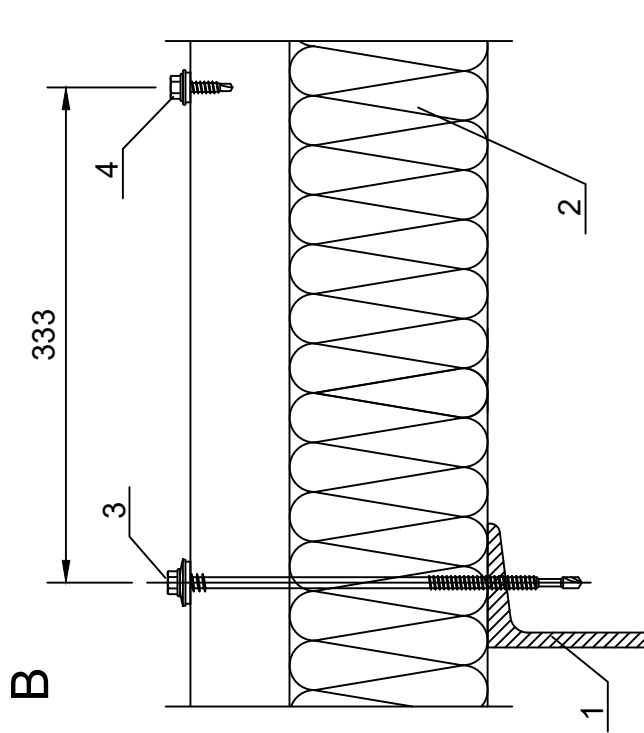
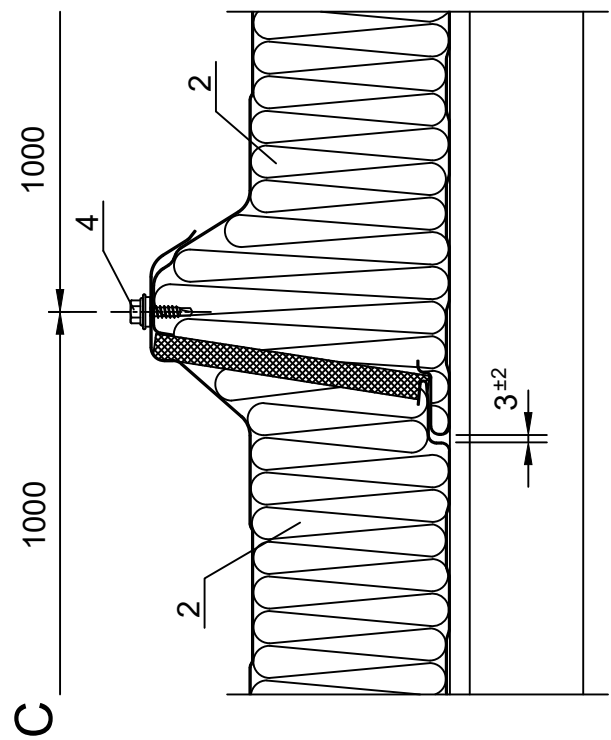
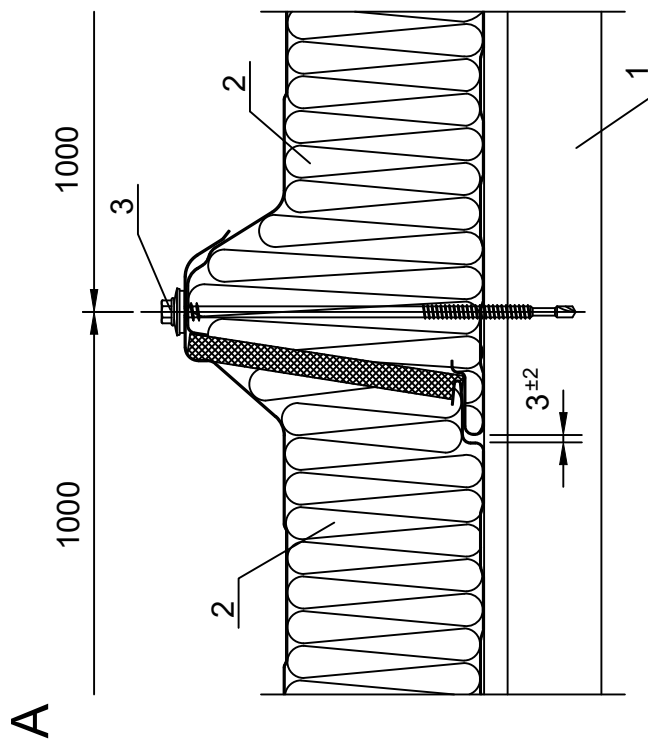


Date	Rev. date	Work nr.	Drw. nr.	Rev.
Drawn by Ruukki	Rev.	M04/S01	-	
Scale 1:3	Building		File nr. P2001/003-00038	

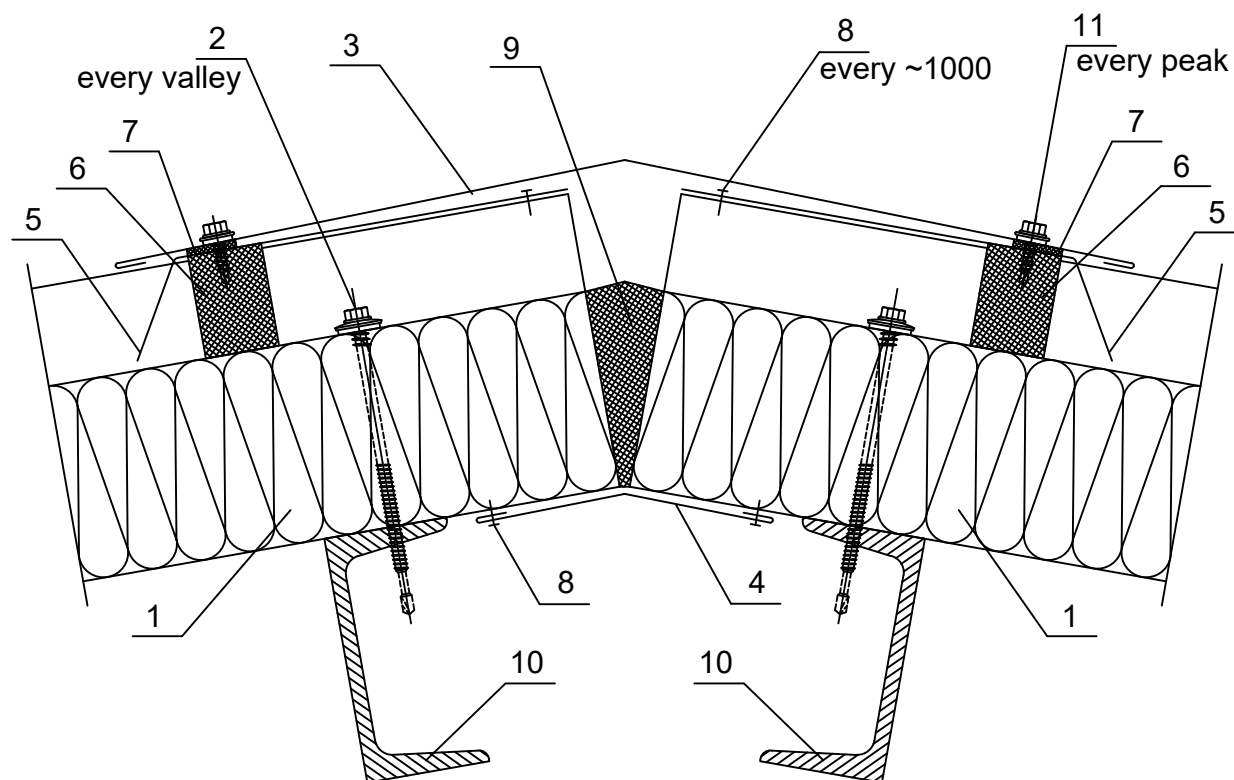


- A. Cross-section as seen parallel to PIRlin - fixing
 B. Cross-section as seen perpendicular to PIRlin
 C. Cross-section as seen parallel to PIRlin - through panel joint
 1. Steel PIRlin acc. to engineering design of the structure
 2. Ruukki SP2C PIR
 3. Panel fastener for hot-rolled PIRlin or for cold-bent PIRlin
 4. L03 fastener (every ~333 mm)



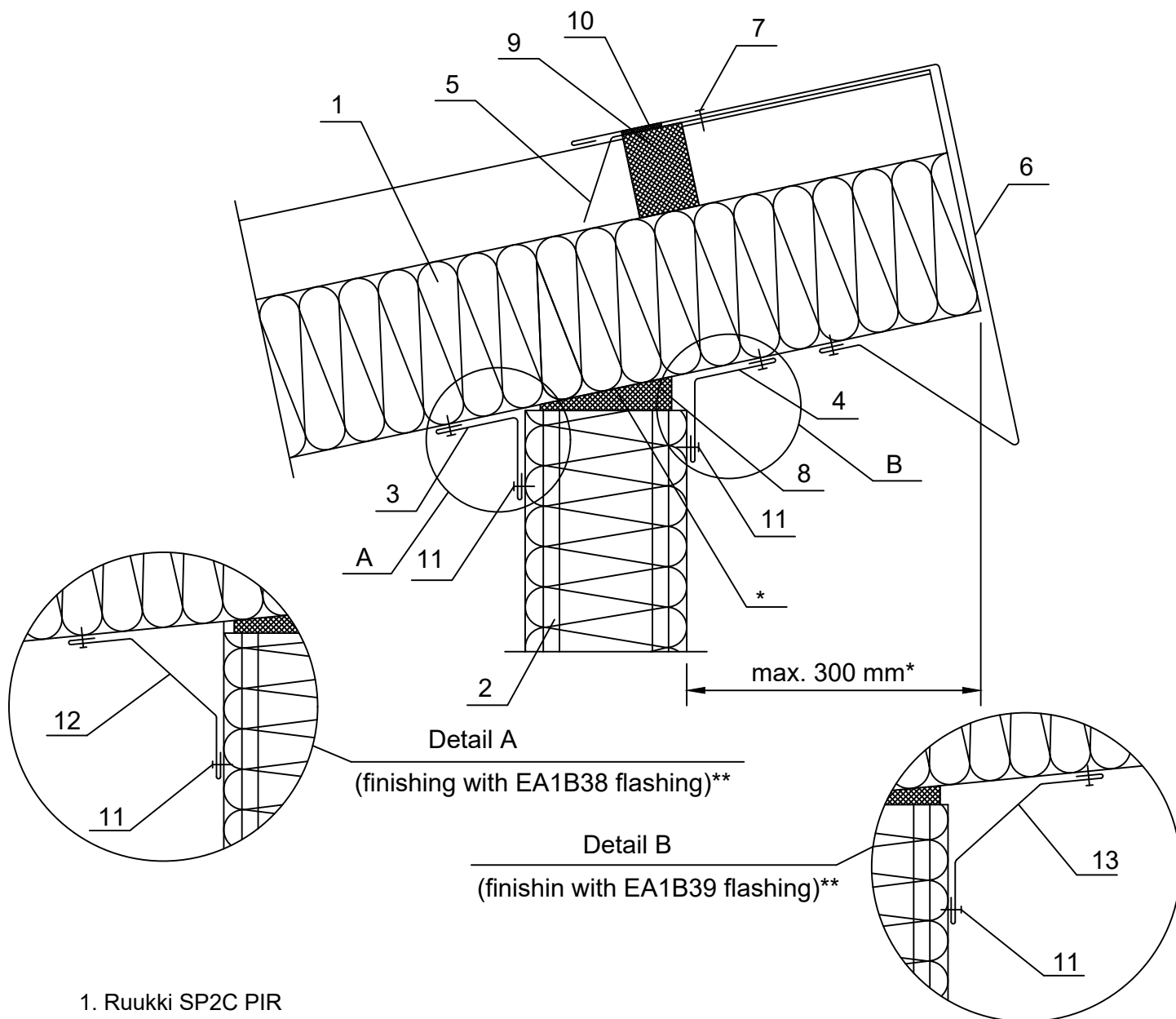
Fixing of Ruukki SP2C PIR panel with roof ridge.

Date 30.11.2007	Rev. date .	Work nr. M04/S02	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	



1. Ruukki SP2C PIR
2. Panel fastener for hot-rolled PIRlin or for cold-bent PIRlin
3. EA1B09 top ridge flashing
4. EA1B10 bottom ridge flashing
5. EA1B13 side ridge flashing
6. U01 polyethylene sealant
7. 4x20 PIR self-adhesive sealant
8. Steel rivet (every ~300 mm)
9. Impregnated polyurethane sealant or expanded foam
10. Steel PIRlin acc. to engineering design of the structure
11. L03 fastener or watertight rivet

Date 30.11.2007	Rev. date .	Work nr. M04/S03	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	



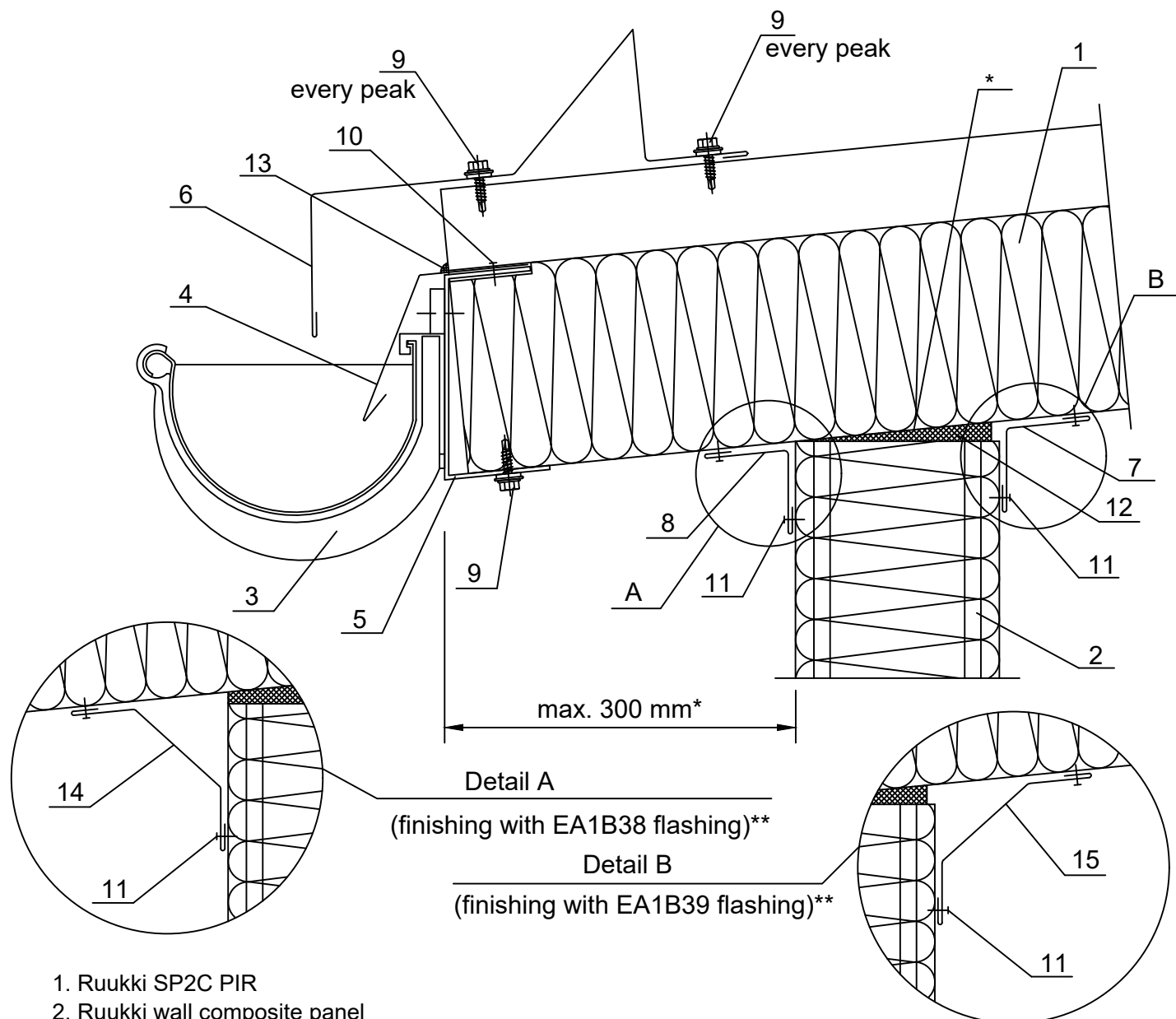
1. Ruukki SP2C PIR
2. Ruukki wall composite panel
3. EA1B31 joint flashing
4. EA1B30 joint flashing
5. EA1B13 side ridge flashing
6. EA1B12 peak closing flashing
7. Watertight rivet or L03 fastener (every ~300 mm)
8. Impregnated polyurethane sealant or expanded foam
9. U01 polyethylene sealant
10. 4x20 PIR self-adhesive sealant
11. Steel rivet (every ~300 mm)
12. EA1B38 joint flashing (alternative option for finishing with EA1B31 joint flashing)
13. EA1B39 joint flashing (alternative option for finishing with EA1B30 joint flashing)

* for structures with high requirements regarding thermal insulation facing gap is ~30 mm; in this case the maximum support length is 300 mm

** for roof with inclination exceeding 20%

Joint between Ruukki SP2C PIR panel and wall panel - eaves. Option 1.

Date 30.11.2007	Rev. date .	Work nr. M04/S04	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	



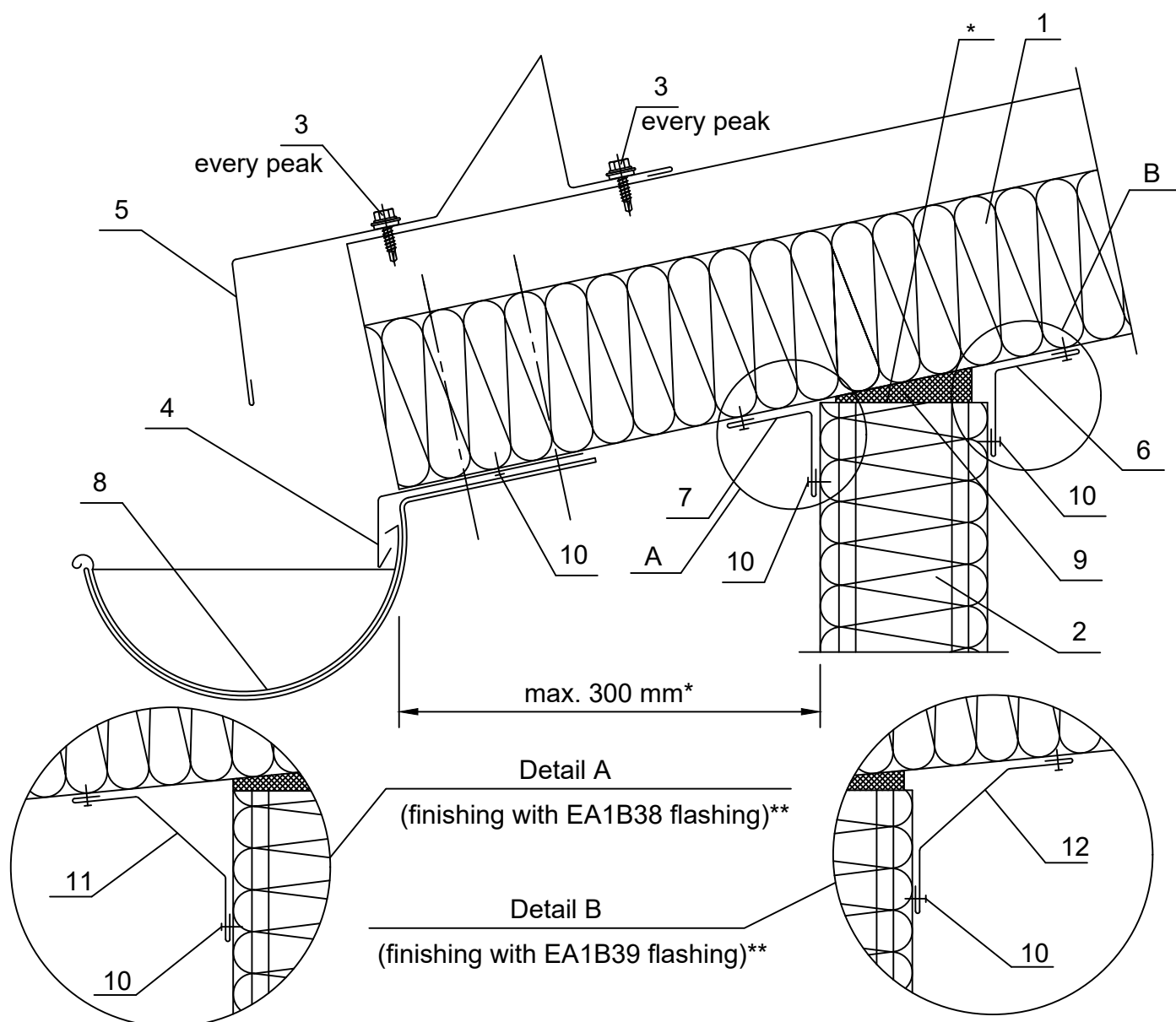
1. Ruukki SP2C PIR
2. Ruukki wall composite panel
3. PCV gutter + gutter hook + joint elements
4. EA1B11 drip flashing
5. EA1B20 assembly flashing
6. EA1B25 drip roof flashing
7. EA1B30 joint flashing
8. EA1B31 joint flashing
9. L03 fastener
10. Watertight rivet (every ~300 mm)
11. Steel rivet (every ~300 mm)
12. Impregnated polyurethane sealant or expanded foam
13. Permanently elastic sealing compound
14. EA1B38 joint flashing (alternative option for finishing with EA1B31 joint flashing)
15. EA1B39 joint flashing (alternative option for finishing with EA1B30 joint flashing)

Note:

prior to fixing EA1B20 and EA1B11 flashing
polyurethane under the external panel
facing should be notched

* for structures with high requirements regarding
thermal insulation facing gap is ~30 mm;
in this case the maximum support length is 300 mm
** for roof with inclination exceeding 20%

Date 30.11.2007	Rev. date .	Work nr. M04/S05	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	

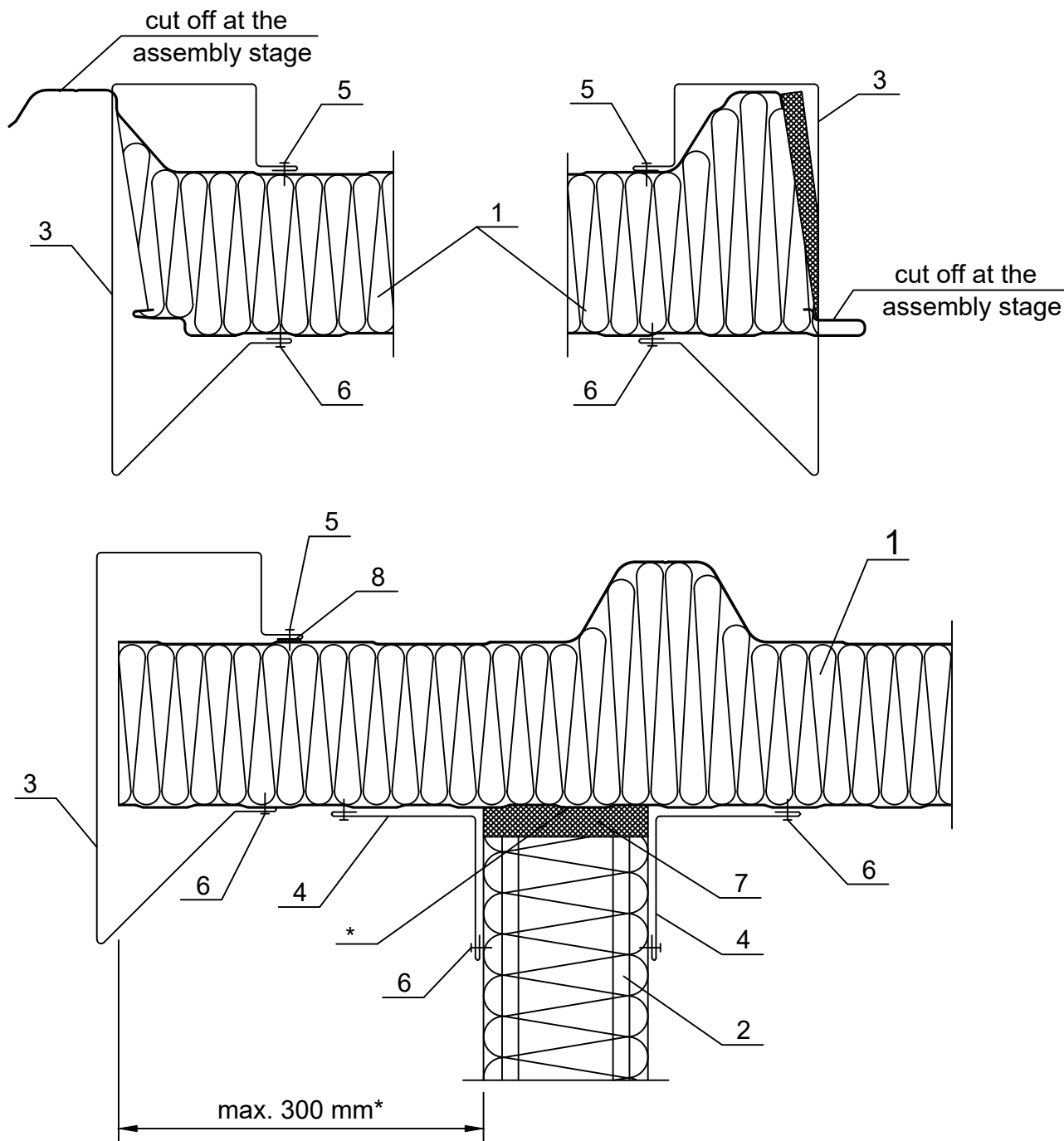


1. Ruukki SP2C PIR
2. Ruukki wall composite panel
3. L03 fastener
4. EA1B24 drip roof flashing
5. EA1B25 drip roof flashing
6. EA1B30 joint flashing
7. EA1B31 joint flashing
8. Steel gutter + gutter hook + joint elements
9. Impregnated polyurethane sealant or expanded foam
10. Steel rivet (every ~300 mm)
11. EA1B38 joint flashing (alternative option for finishing with EA1B31 joint flashing)
12. EA1B39 joint flashing (alternative option for finishing with EA1B30 joint flashing)

* for structures with high requirements regarding thermal insulation facing gap is ~30 mm; in this case the maximum support length is 300 mm

** for roof with inclination exceeding 20%

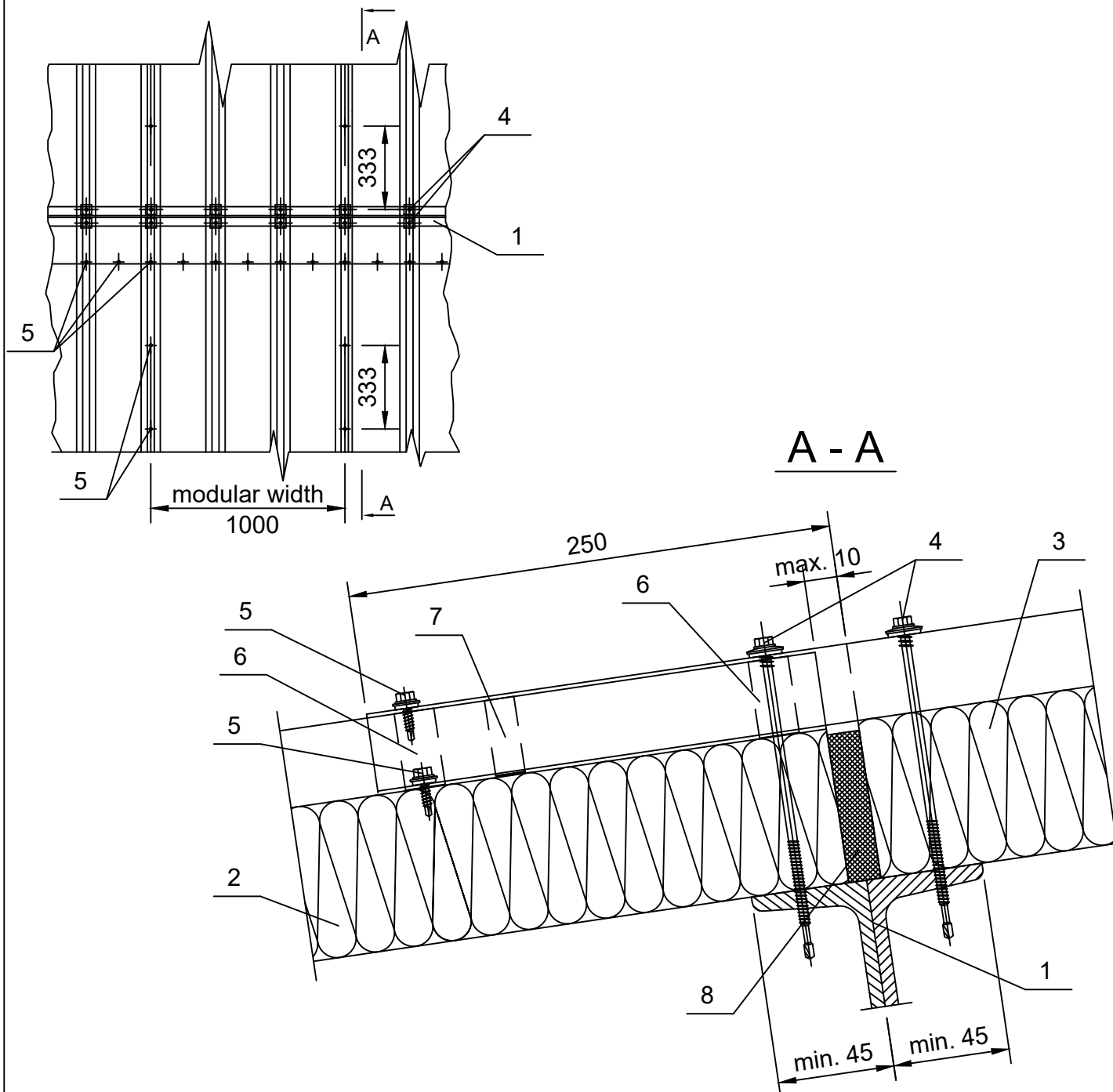
Date 30.11.2007	Rev. date .	Work nr. M04/S06	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	



1. Ruukki SP2C PIR
2. Ruukki wall composite panel
3. EA1B14 peak closing flashing
4. EA1B05 corner flashing
5. Watertight rivet (every ~300 mm)
6. Steel rivet (every ~300 mm)
7. Impregnated polyurethane sealant or expanded foam
8. Butyl tape

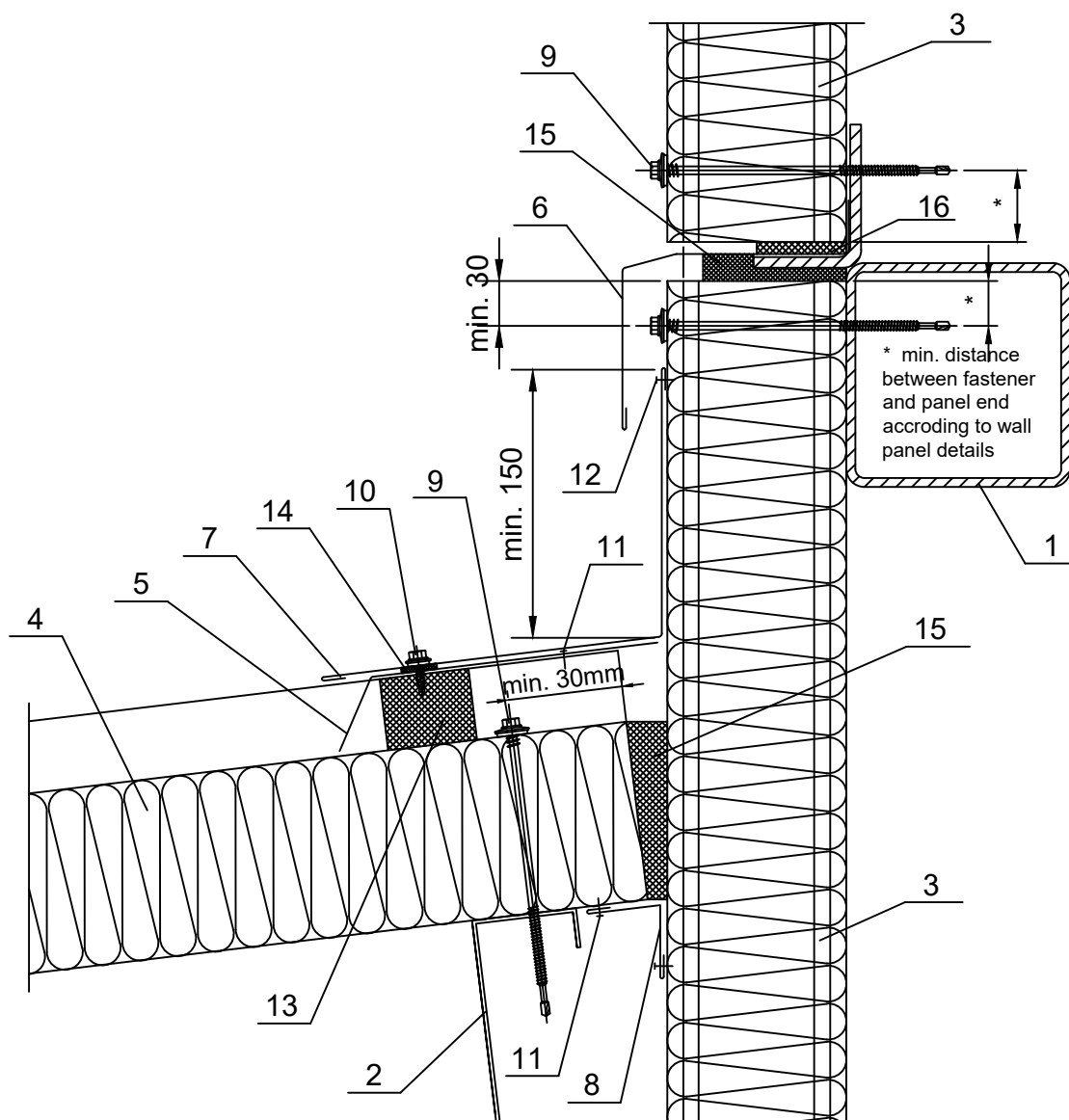
* for structures with high requirements regarding thermal insulation facing gap is ~30 mm; in this case the maximum support length is 300 mm

Date 30.11.2007	Rev. date .	Work nr. M04/S07	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	



1. Steel PIRlin acc. to engineering design of the structure (recommended support width ≥ 100 mm)
2. Ruukki SP2C PIR
3. Ruukki SP2C PIR with undercut internal facing core
4. Panel fastener for hot-rolled PIRlin or for cold-bent PIRlin - 3 pcs. per panel
5. L03 fastener
6. 4x20 PIR self-adhesive sealant
7. Butyl tape
8. Impregnated polyurethane sealant or expanded foam

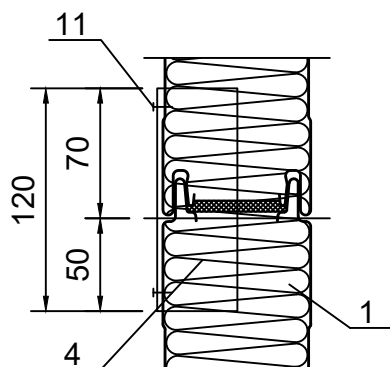
Date 30.11.2007	Rev. date .	Work nr. M04/S08	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	



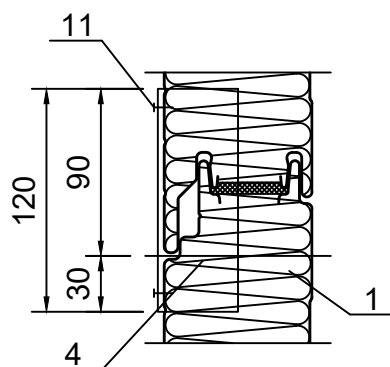
1. Steel sheeting rail acc. to engineering design of the structure
2. Steel PIRlin acc. to engineering design of the structure
3. Ruukki wall composite panel
4. Ruukki SP2C PIR
5. EA1B13 side ridge flashing
6. Custom ordered flashing
7. Custom ordered flashing
8. EA1B31 joint flashing
9. Panel fastener for hot-rolled PIRlin or for cold-bent PIRlin
10. L03 fastener
11. Steel rivet (every ~300 mm)
12. Watertight rivet (every ~300 mm)
13. U01 polyethylene sealant
14. 4x20 PIR self-adhesive sealant
15. Impregnated polyurethane sealant or expanded foam
16. Impregnated polyurethane sealant

Date 30.11.2007	Rev. date .	Work nr. M04/S09	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	

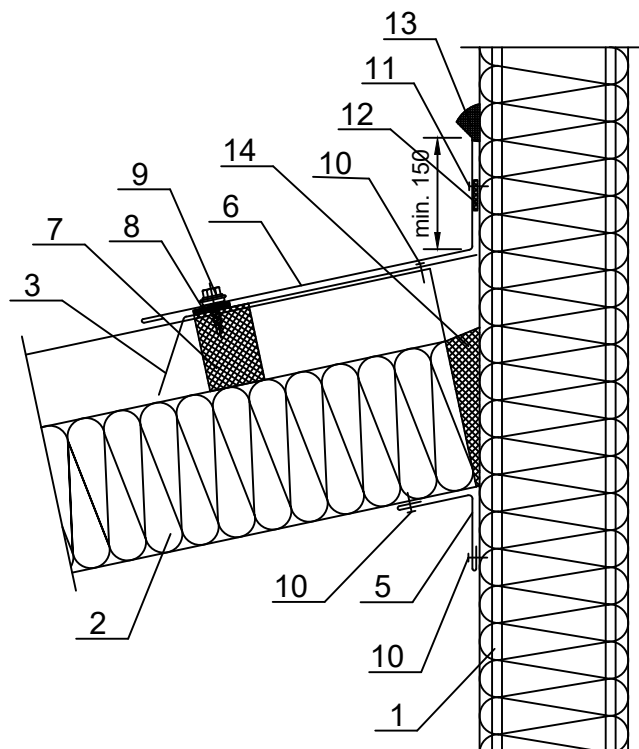
A - A (for SP2B PIR)



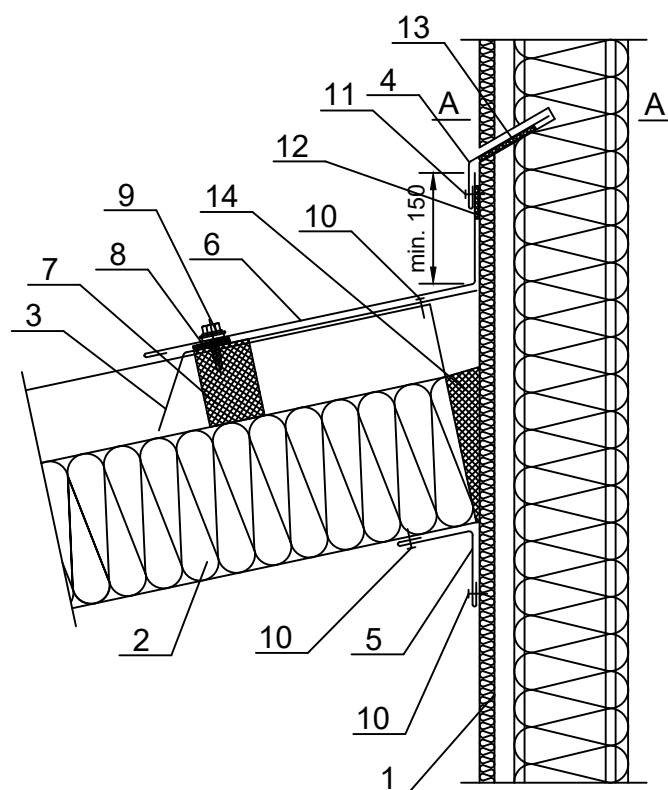
A - A (for SP2D PIR)



Cross-section outside panel joint

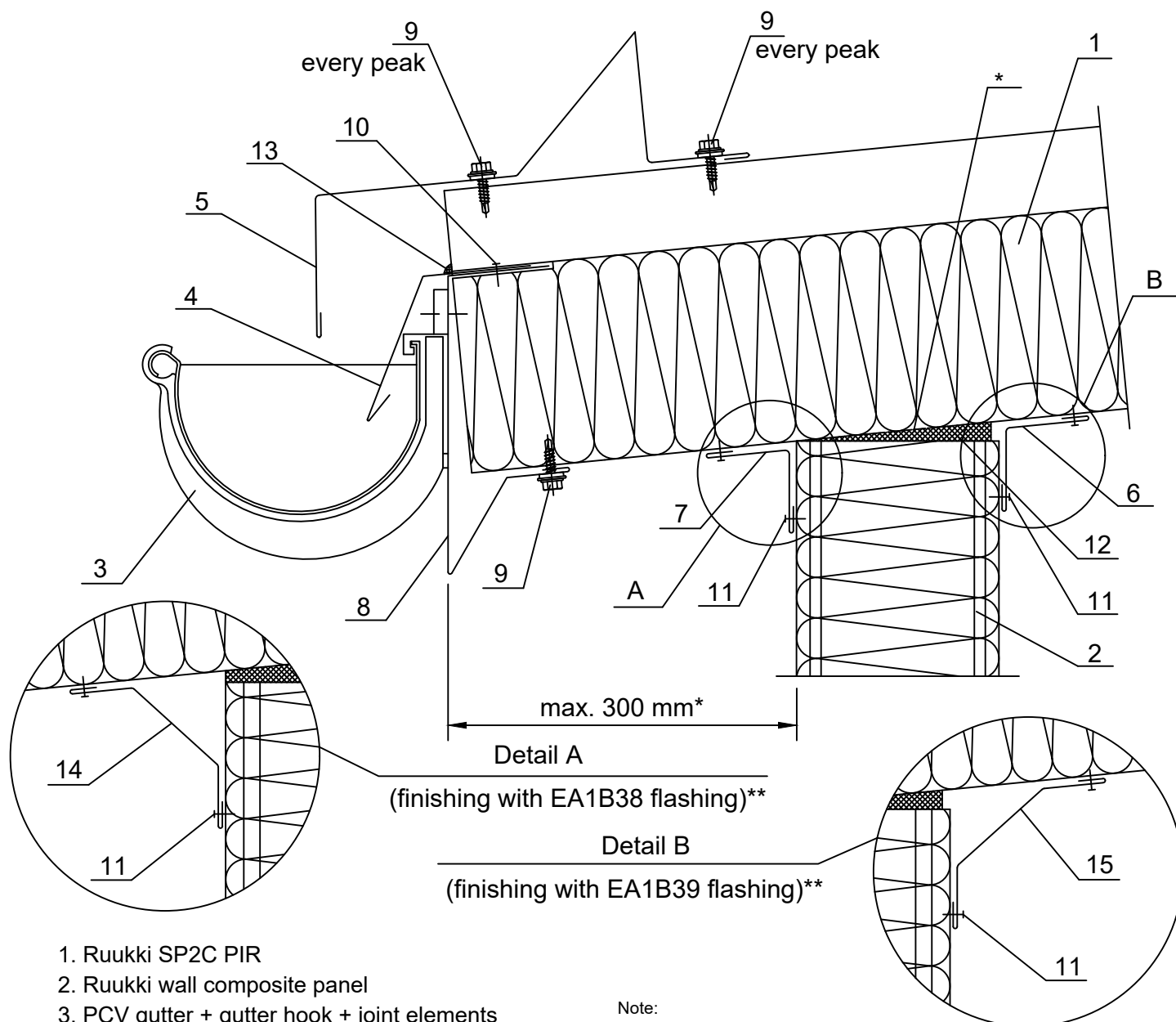


Cross-section through panel joint



1. Ruukki SP2B PIR or SP2D PIR composite panel
2. Ruukki SP2C PIR
3. EA1B13 side ridge flashing
4. EA1B32 drip wall flashing
5. EA1B31 joint flashing
6. Custom ordered flashing
7. U01 polyethylene sealant
8. 4x20 PIR self-adhesive sealant
9. L03 fastener
10. Steel rivet (every ~300 mm)
11. Watertight rivet (every ~300 mm)
12. Butyl tape
13. Permanently elastic sealing compound
14. Impregnated polyurethane sealant or expanded foam

Date 30.11.2007	Rev. date .	Work nr. M04/S10	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	



1. Ruukki SP2C PIR
2. Ruukki wall composite panel
3. PCV gutter + gutter hook + joint elements
4. EA1B11 drip flashing
5. EA1B25 drip roof flashing
6. EA1B30 joint flashing
7. EA1B31 joint flashing
8. EA1B37 peak closing flashing
9. L03 fastener (co ~300 mm)
10. Watertight steel rivet (every ~200 mm)
11. Steel rivet (every ~300 mm)
12. Impregnated polyurethane sealant or expanded foam
13. Permanently elastic sealing compound
14. EA1B38 joint flashing (alternative option for finishing with EA1B31 joint flashing)
15. EA1B39 joint flashing (alternative option for finishing with EA1B30 joint flashing)

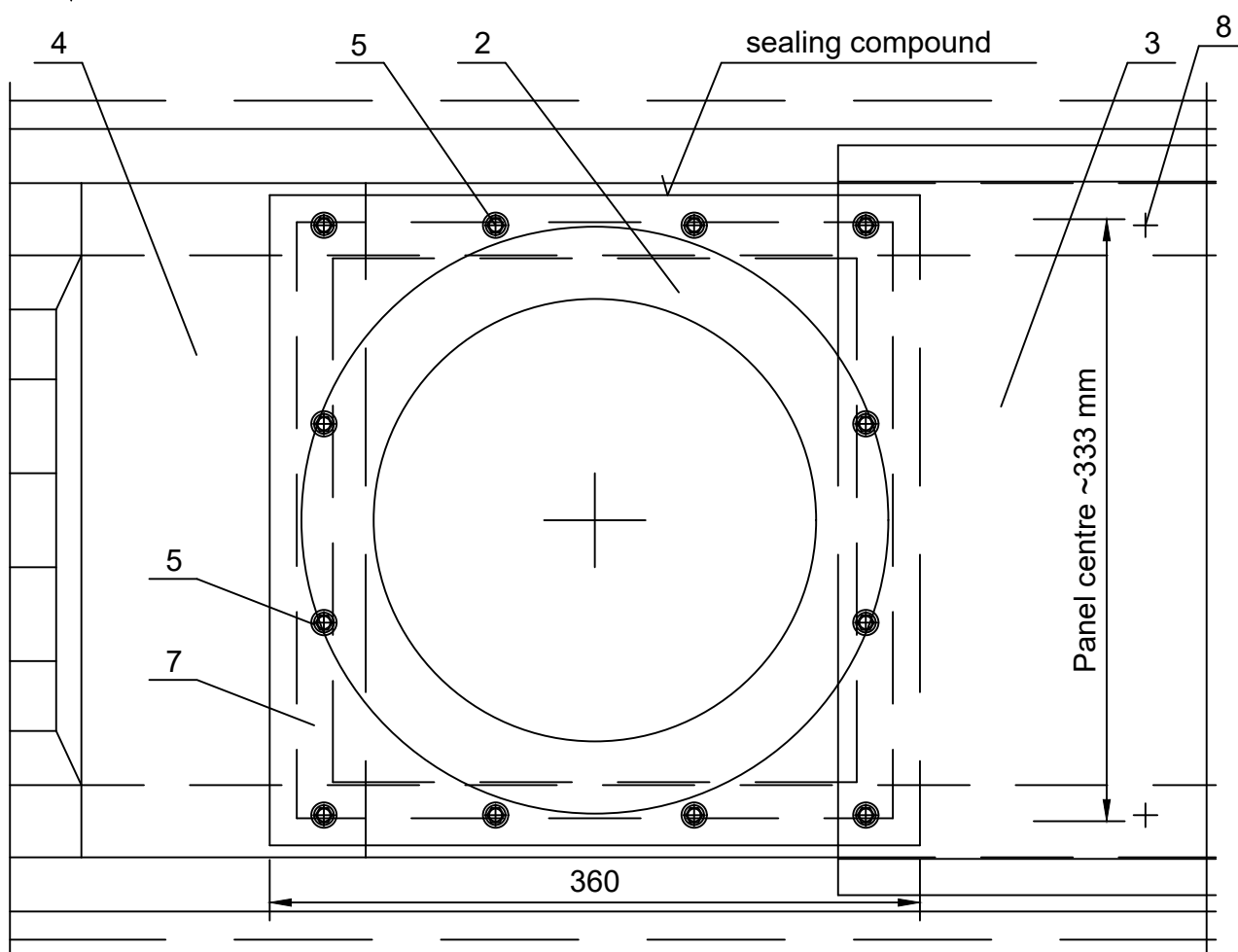
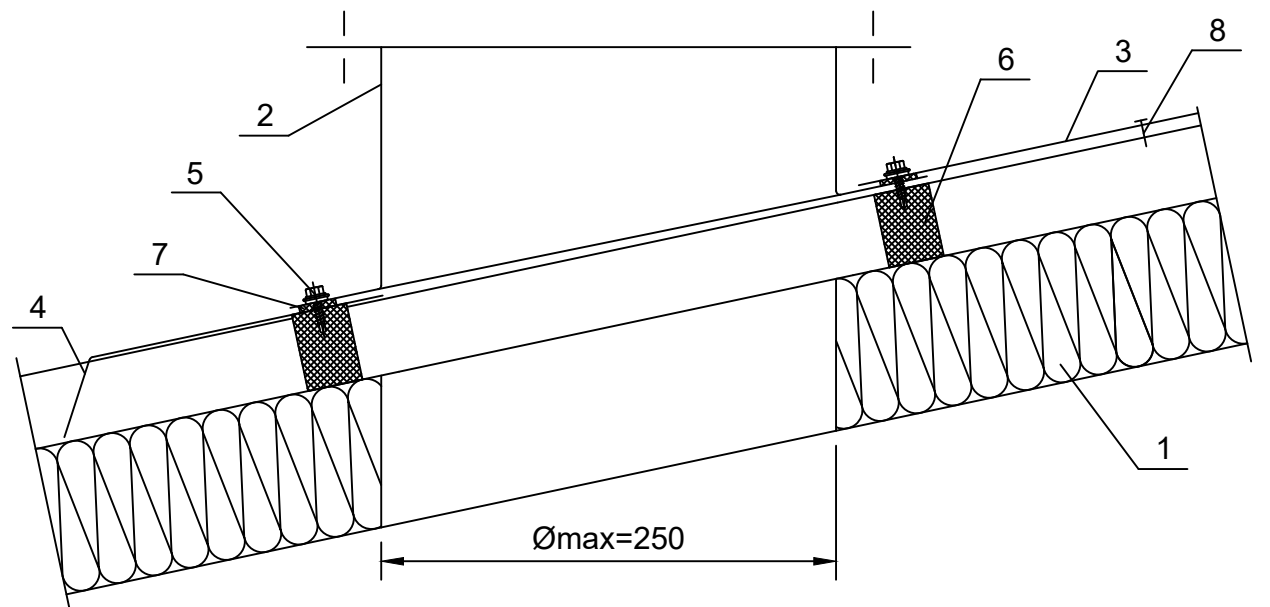
Note:

prior to fixing EA1B37 and EA1B11 flashing
polyurethane under the external panel
facing should be notched

* for structures with high requirements regarding
thermal insulation facing gap is ~30 mm;
in this case the maximum support length is 300 mm

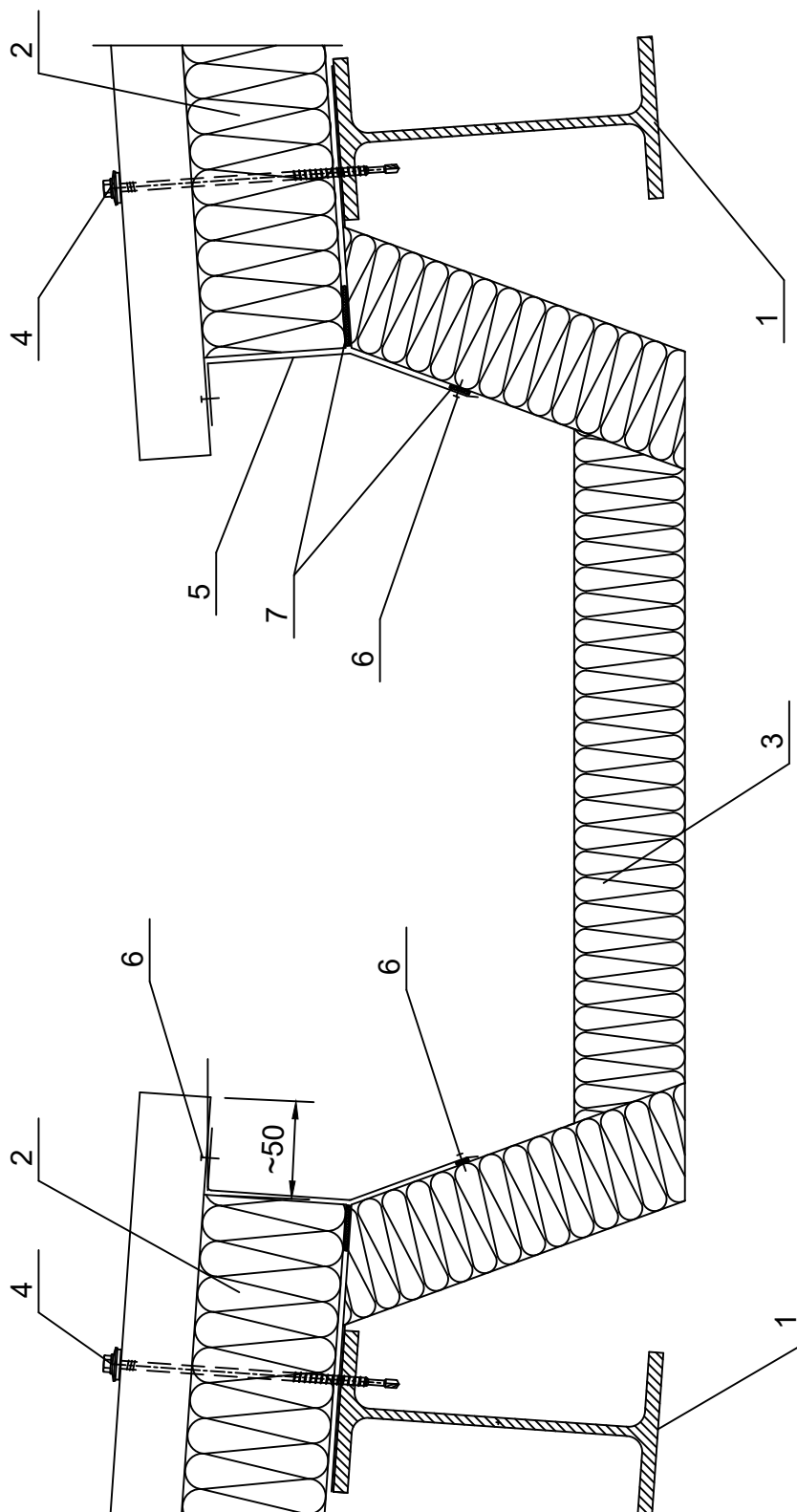
** for roof with inclination exceeding 20%

Date 30.11.2007	Rev. date .	Work nr. M04/S21	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	



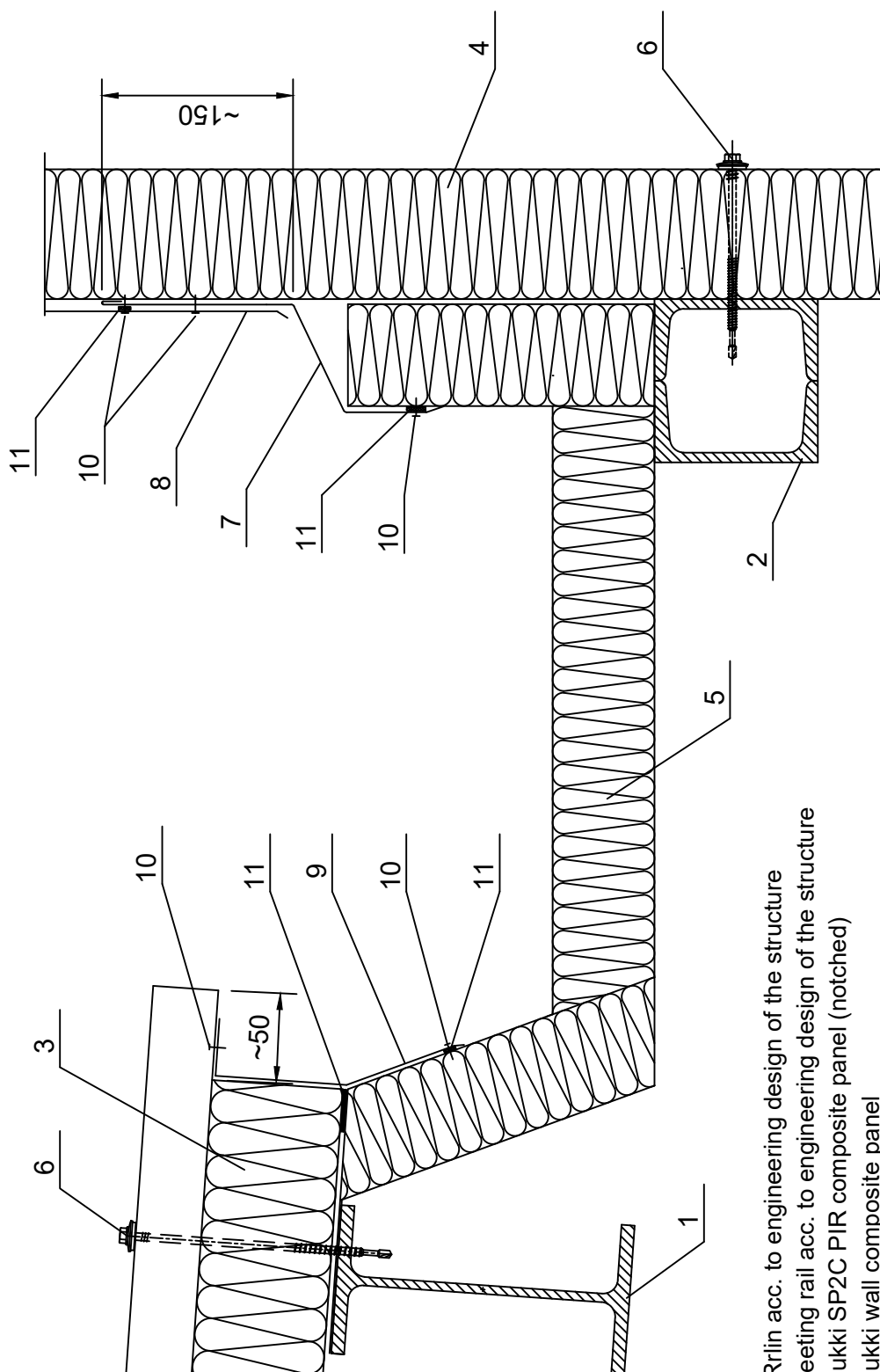
- | | |
|---|---|
| 1. Ruukki SP2C PIR composite panel | 5. L03 fastener |
| 2. Barrel vault of roof sent (to be installed by the investor itself) | 6. U01 polyethylene sealant |
| 3. EA1B19 roof flashing | 7. 4x20 PIR self-adhesive sealant
(on the footing circumference) |
| 4. EA1B13 side ridge flashing | 8. Watertight rivet (every ~300 mm) |

Date 30.11.2007	Rev. date .	Work nr. M04/S27	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	



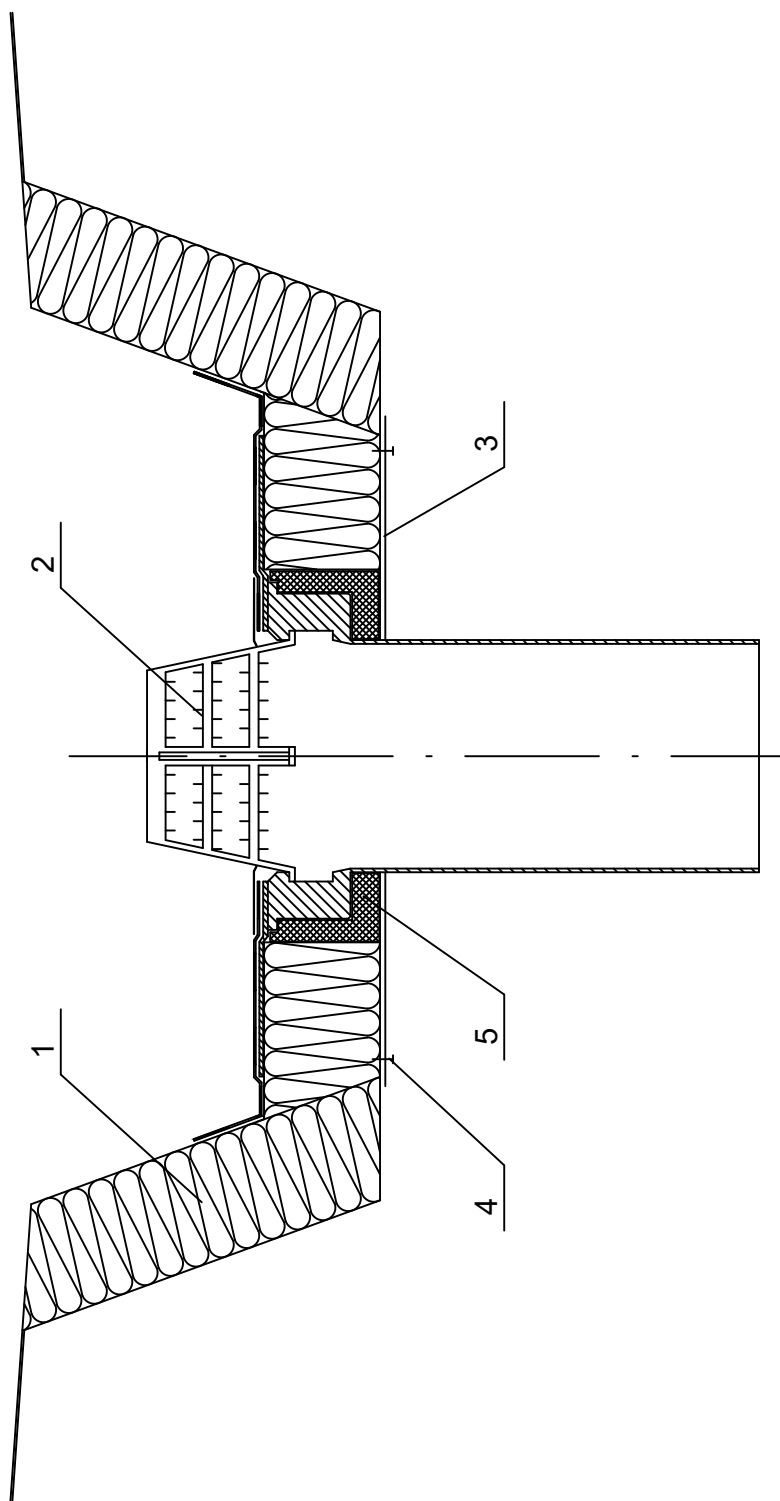
1. PIRlins acc. to engineering design of the structure
2. Ruukki SP2C PIR composite panel (notched)
3. RwS type internal middle gutter (45, 60, 80)
4. Panel fastener for hot-rolled PIRlin or for cold-bent PIRlin
5. Custom ordered flashing
6. Watertight rivet (every ~300 mm)
7. Butyl tape

Date 30.11.2007	Rev. date .	Work nr. M04/S28	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	



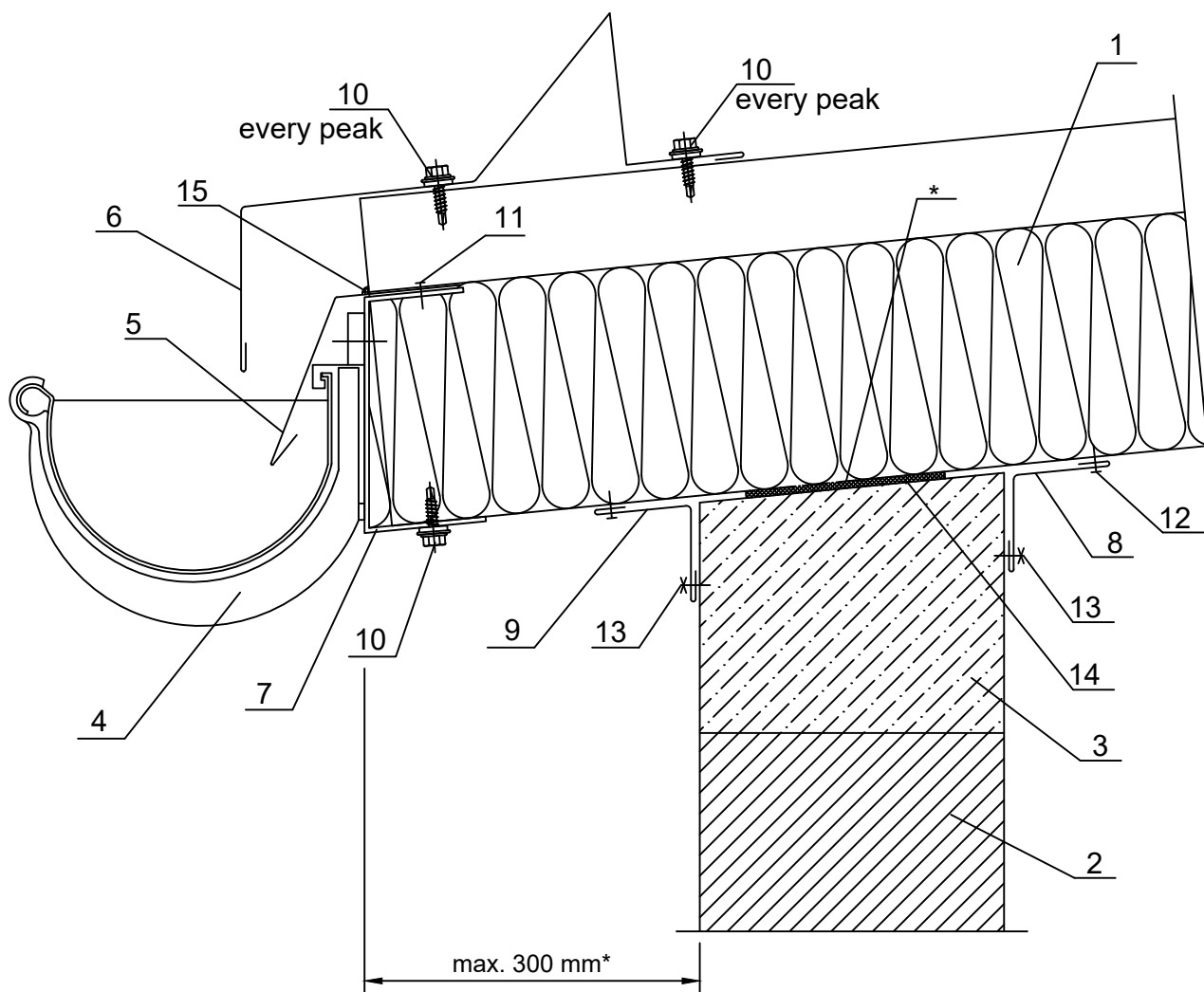
1. PIRlin acc. to engineering design of the structure
2. Sheetting rail acc. to engineering design of the structure
3. Ruukki SP2C PIR composite panel (notched)
4. Ruukki wall composite panel
5. Rwa type internal attic gutter (45, 60, 80)
6. Panel fastener for hot-rolled PIRlin or for cold-bent PIRlin
7. Custom ordered flashing
8. Custom ordered flashing
9. Custom ordered flashing
10. Watertight rivet (every ~300 mm)
11. Butyl tape

Date 30.11.2007	Rev. date .	Work nr. M04/S30	Drw. nr. -	Rev.
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	



1. Internal middle gutter
2. Vertical roof drain with sealant and leaf grate
3. Custom ordered flashing
4. Steel rivet (every ~300 mm)
5. Expanding foam

Date 30.11.2007	Rev. date .	Work nr. M04/S31	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:3	Building		File nr. P2001/003-00038	



1. Ruukki SP2C PIR composite panel
2. Brick wall acc. to architectural design of the structure
3. Reinforced concrete caping acc. to architectural design of the structure
4. PCV gutter + gutter hook + joint elements
5. EA1B11 drip flashing
6. EA1B25 drip roof flashing
7. EA1B20 assembly flashing
8. EA1B30 joint flashing
9. EA1B31 joint flashing
10. L03 fastener
11. Watertight steel rivet (every ~200 mm)
12. Steel rivet (every ~300 mm)
13. Expansion bolt
14. 10x85 PIR self-adhesive sealant
15. Butyl sealing compound

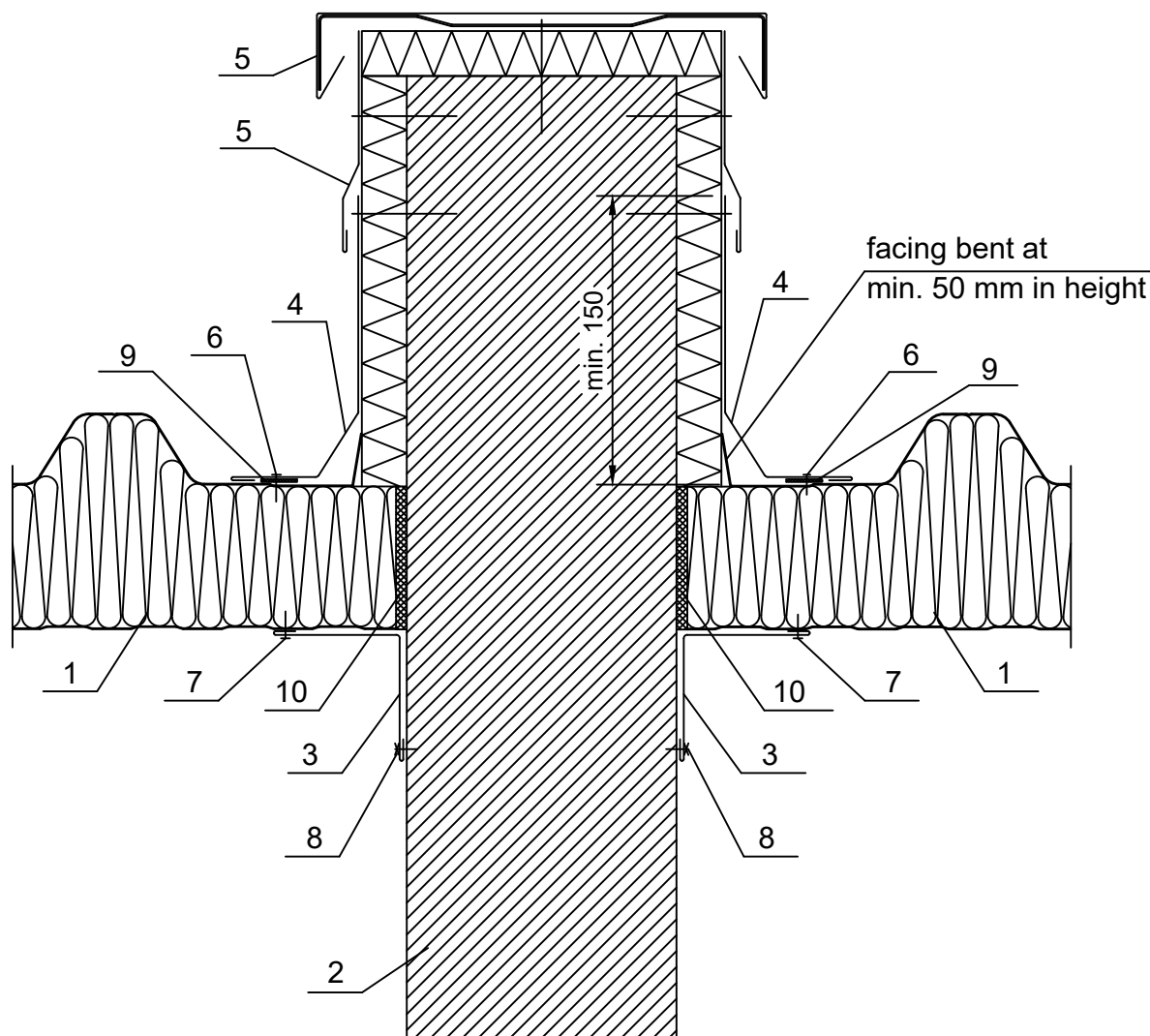
Note:

prior to fixing EA1B20 and EA1B11 flashing
polyurethane, polystyrene or mineral wool
under the external panel
facing should be notched

* for structures with high requirements regarding
thermal insulation facing gap is ~30 mm;
in this case the maximum support length is 300 mm

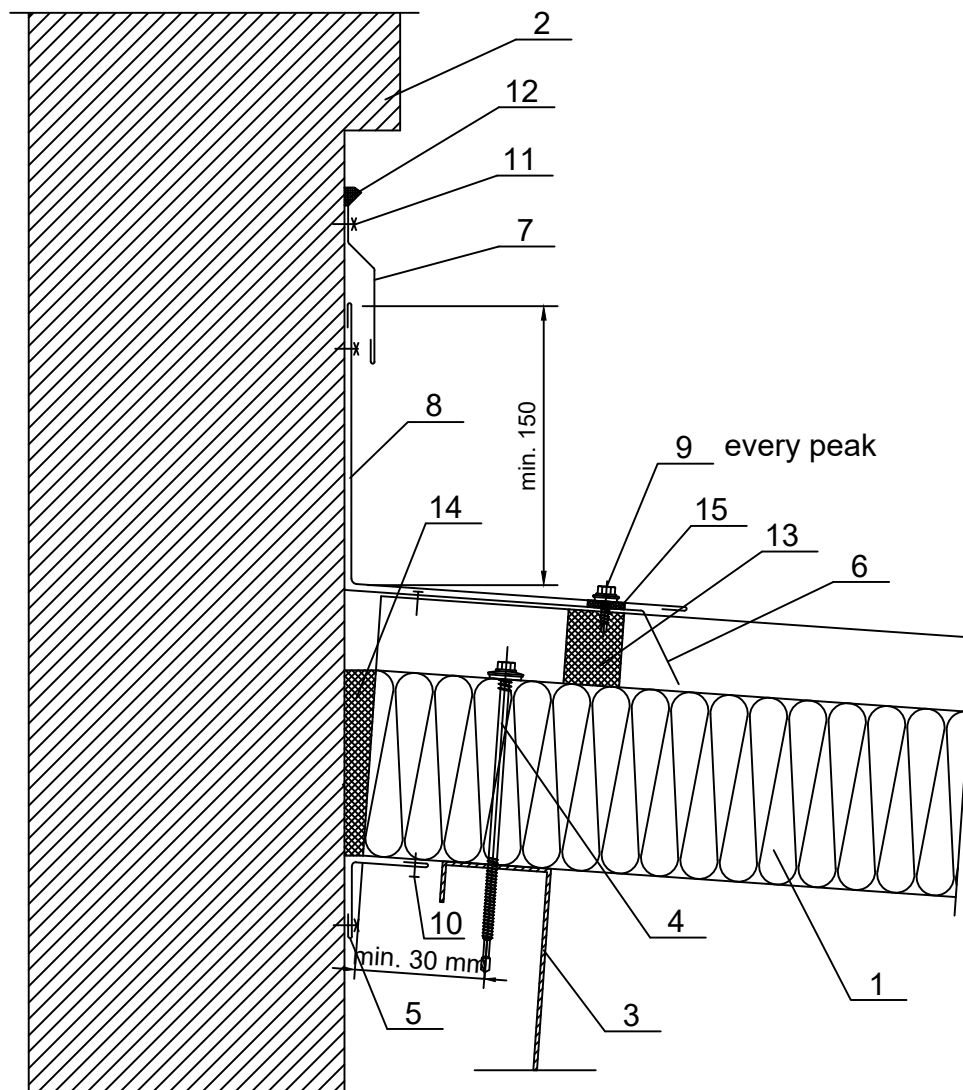
** for roof with inclination exceeding 20%

Date 30.11.2007	Rev. date .	Work nr. M04/S32	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	



1. Ruukki SP2C PIR composite panel
2. Brick wall
3. EA1B05 corner flashing
4. Custom ordered flashing
5. Custom ordered flashings acc. to architectural design of the structure
6. Watertight rivet (every ~300 mm)
7. Steel rivet (every ~300 mm)
8. Expanding bolt
9. Butyl tape
10. Impregnated polyurethane sealant, expanded foam or mineral wool (for SPC W)

Date 30.11.2007	Rev. date .	Work nr. M04/S33	Drw. nr. -	Rev. .
Drawn by Ruukki	Rev. .			
Scale 1:4	Building		File nr. P2001/003-00038	



1. Ruukki SP2C PIR composite panel
2. Brick wall
3. PIRrlins acc. to engineering design of the structure
4. Panel fastener for hot-rolled PIRrlin or for cold-bent PIRrlin
5. EA1B31 joint flashing
6. EA1B13 side ridge flashing
7. EA1B22 wall opening flashing
8. Custom ordered flashing
9. L03 fastener
10. Steel rivet (every ~300 mm)
11. Expanding bolt
12. Butyl sealing compound
13. U01 polyethylene sealant
14. Impregnated polyurethane sealant, expanded foam or mineral wool (for SPC W)
15. 4x20 PIR self-adhesive sealant