

MAY 2025

ENHANCING WELL-BEING BY DESIGN:
THE ROLE OF CO-HOUSING AND NATURE

DETAIL BOOKLET

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DETAIL BOOKLET

Details supporting the family housing design of the co-housing project in the context of Tarwewijk



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AR3AD110 Dwelling Graduation Studio
Designing for Health and Care in an Inclusive Environment

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Word Count: 8793
Including Research Plan and Research

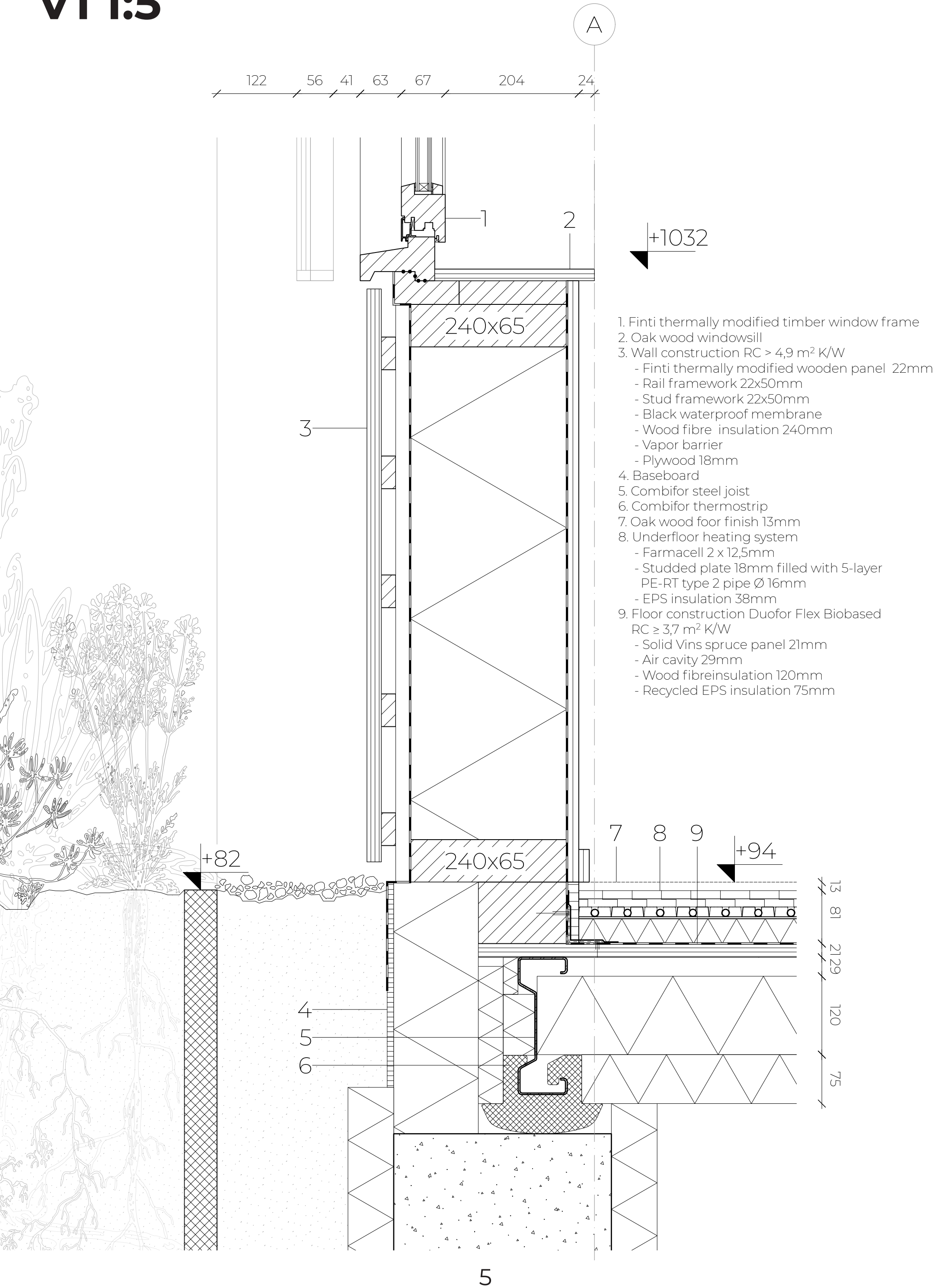
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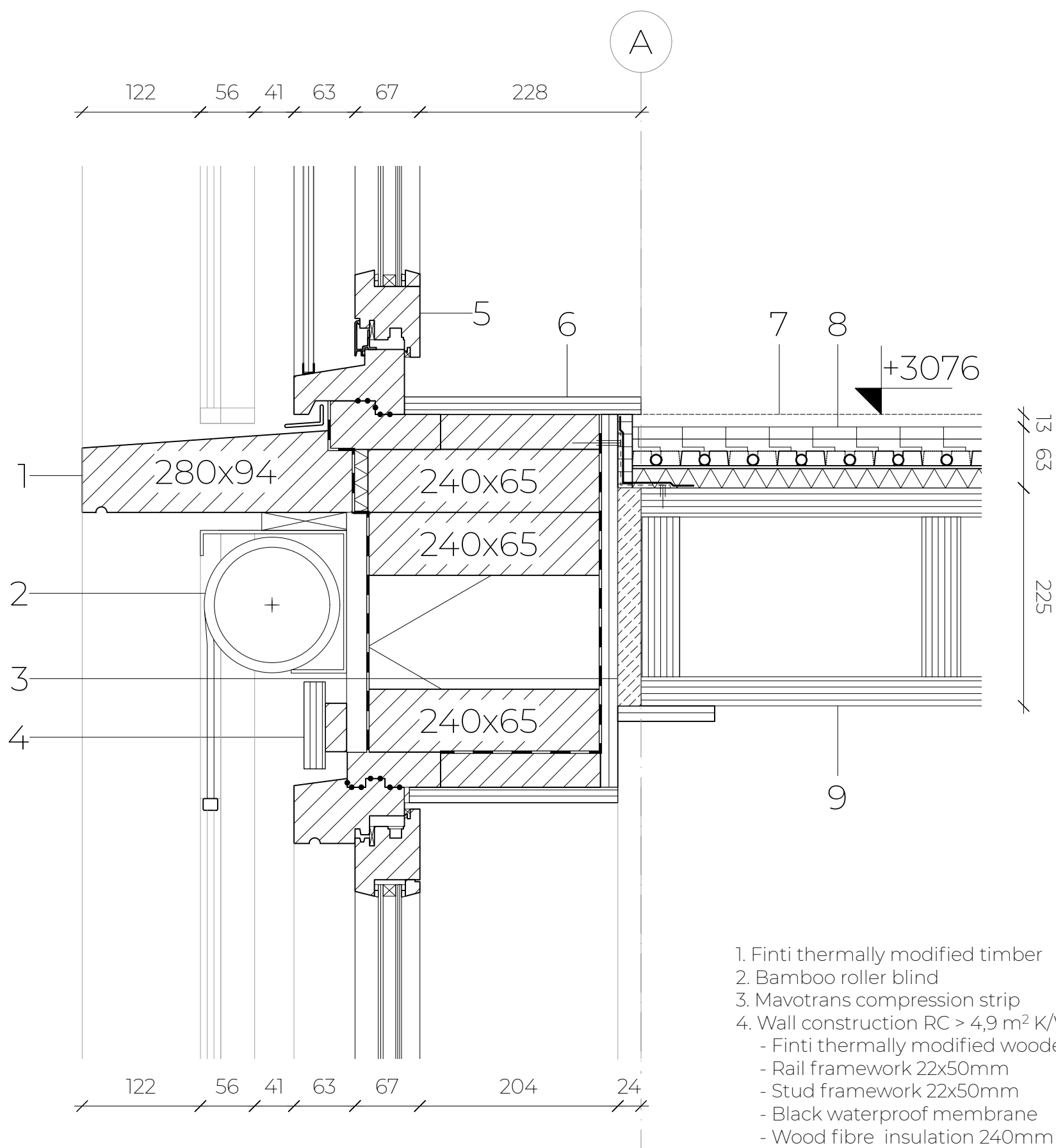
DETAIL OVERVIEW 1:75



V1 1:5

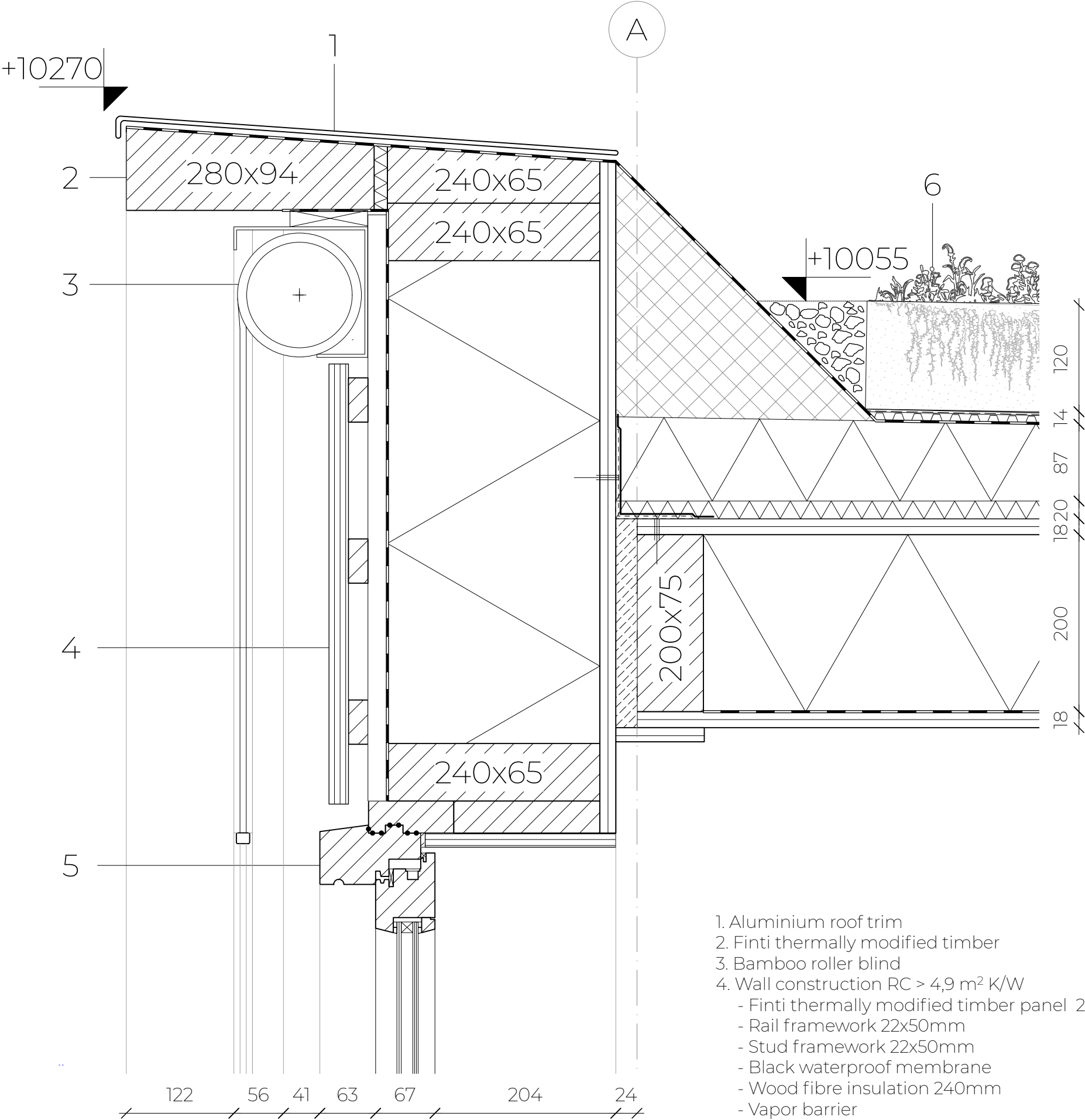


V2 1:5



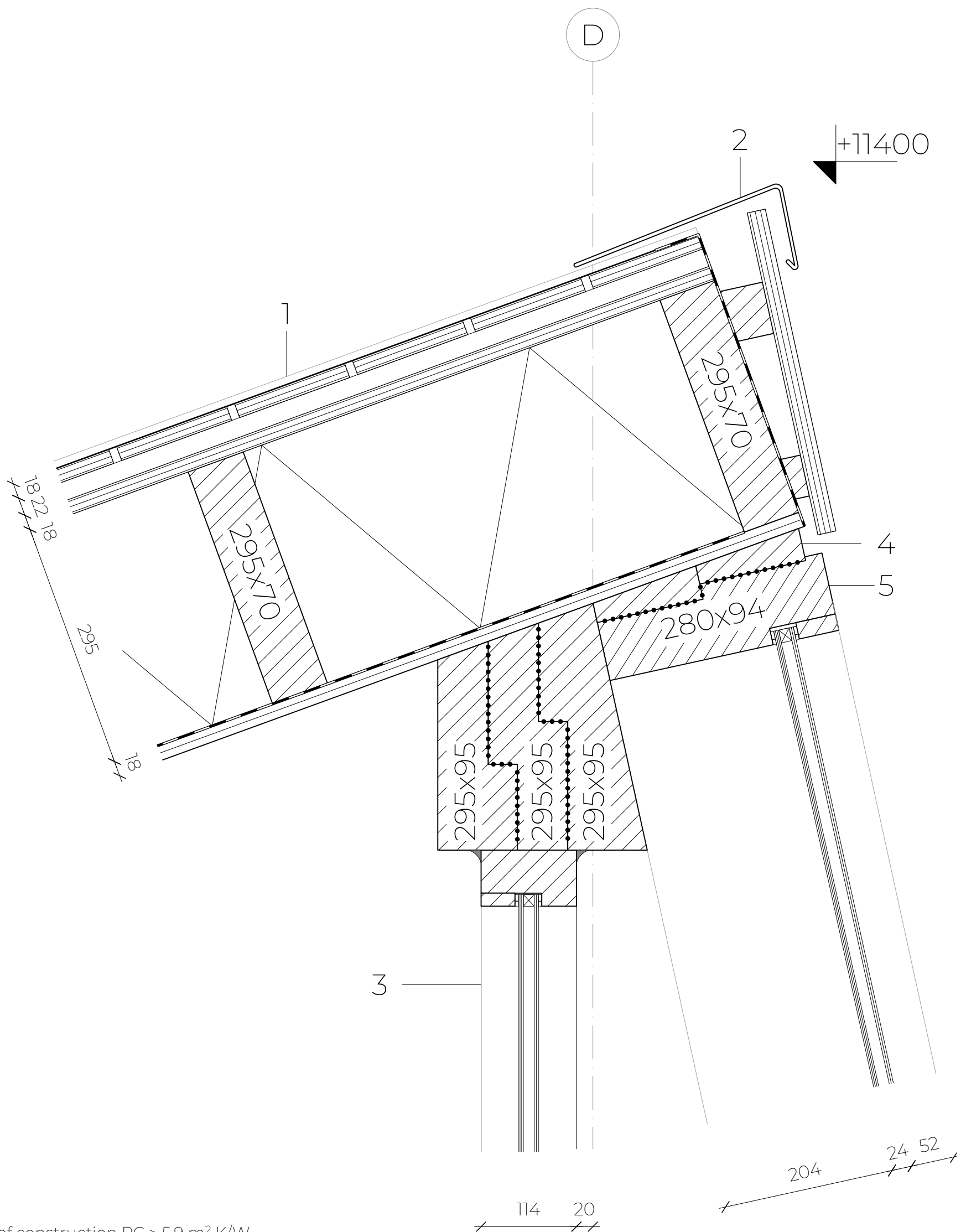
1. Finti thermally modified timber
2. Bamboo roller blind
3. Mavotrans compression strip
4. Wall construction RC > 4,9 m² K/W
 - Finti thermally modified wooden panel 22mm
 - Rail framework 22x50mm
 - Stud framework 22x50mm
 - Black waterproof membrane
 - Wood fibre insulation 240mm
 - Vapor barrier
 - Plywood 18mm
5. Finti thermally modified timber window frame
6. Oak wood windowsill
7. Oak wood floor finish 13mm
8. Underfloor heating system
 - Farmacell 2 x 12,5mm
 - Studded plate 18mm filled with 5-layer PE-RT type 2 pipe Ø 16mm
 - EPS insulation 20mm
9. Kerto Ripa box 225mm

V3 1:5



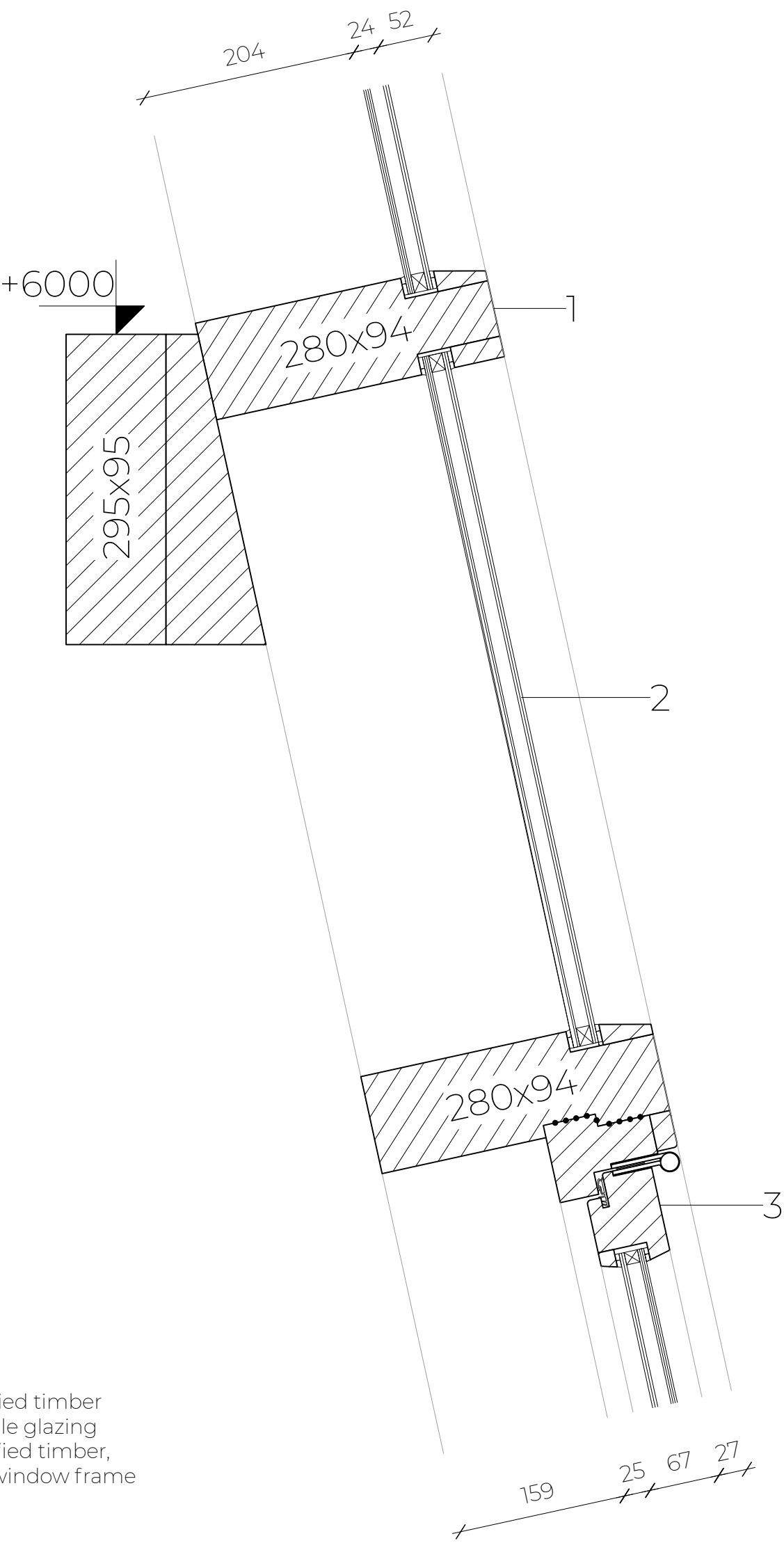
- 1. Aluminium roof trim
- 2. Finti thermally modified timber
- 3. Bamboo roller blind
- 4. Wall construction $RC > 4,9 \text{ m}^2 \text{ K/W}$
 - Finti thermally modified timber panel 22mm
 - Rail framework 22x50mm
 - Stud framework 22x50mm
 - Black waterproof membrane
 - Wood fibre insulation 240mm
 - Vapor barrier
 - Plywood 18mm
- 5. Finti thermally modified timber window frame
- 6. Roof construction $RC > 6,1 \text{ m}^2 \text{ K/W}$
 - Vegetation
 - Substrate 120mm
 - Drainage mat with filter fabric
 - Root-resistant top layer + bottom layer
 - Waterproof membrane
 - Sloped EPS insulation
 - Wood fibre insulation 20mm
 - Plywood 18mm
 - Wood fibre insulation 200mm
 - Vapor barrier
 - Plywood 18mm

V4 1:5



1. Roof construction $RC > 5,9 \text{ m}^2 \text{ K/W}$
- Standing seam
 - Timber battens 18mm
 - Rail framework 22x50mm
 - Roof underlay 18mm
 - Wood fibre insulation 295mm
 - Plywood 18mm

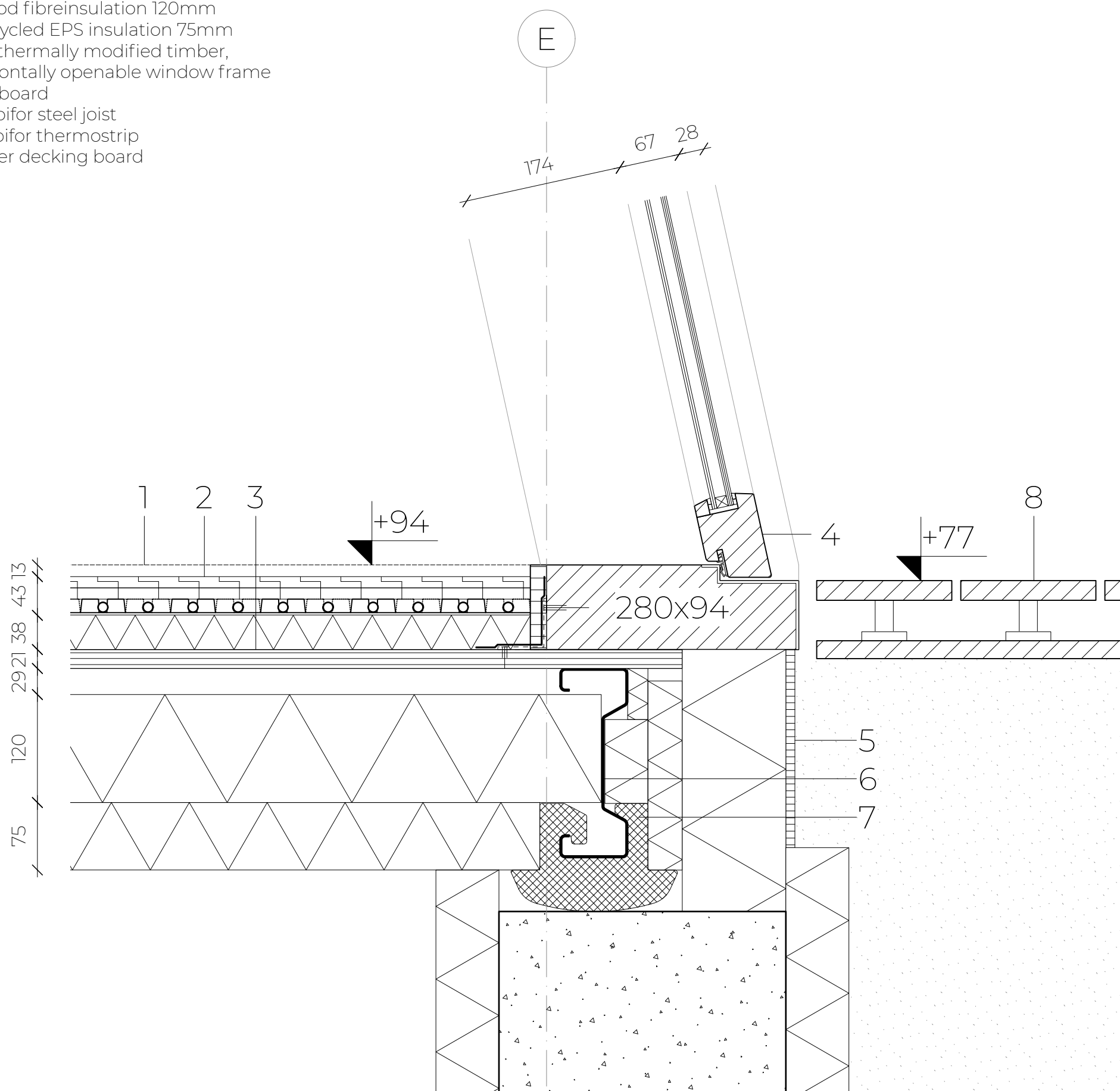
V5 1:5



- 1. Finti thermally modified timber
- 2. High-efficiency double glazing
- 3. Finti thermally modified timber, horizontally openable window frame

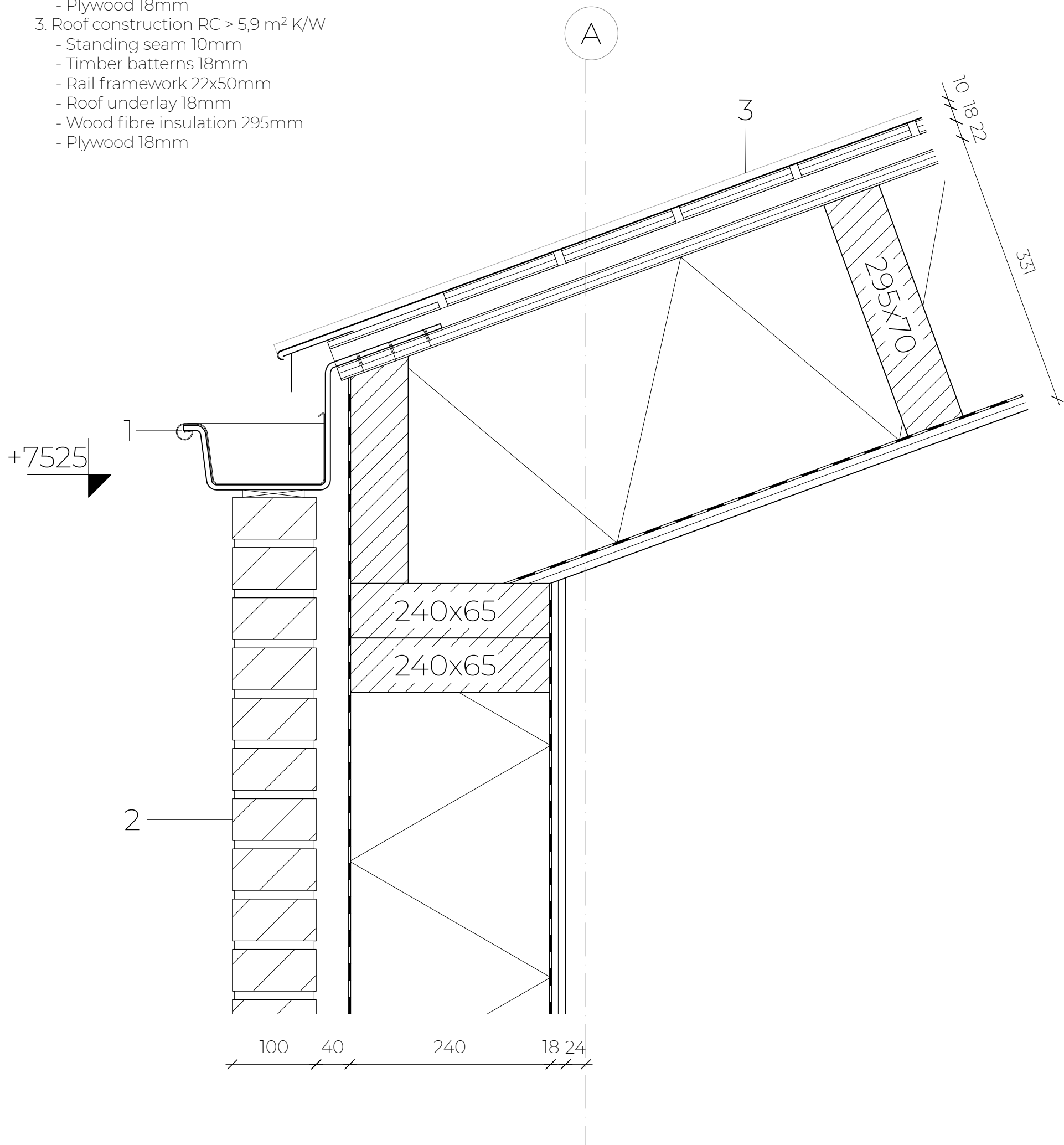
V6 1:5

1. Oak wood floor finish 13mm
2. Underfloor heating system
 - Farmacell 2 x 12,5mm
 - Studded plate 18mm filled with 5-layer PE-RT type 2 pipe Ø 16mm
 - EPS insulation 38mm
3. Floor construction Duofor Flex Biobased RC $\geq 3,7 \text{ m}^2 \text{ K/W}$
 - Solid Vins spruce panel 21mm
 - Air cavity 29mm
 - Wood fibreinsulation 120mm
 - Recycled EPS insulation 75mm
4. Finti thermally modified timber, horizontally openable window frame
5. Base board
6. Combifor steel joist
7. Combifor thermostrip
8. Timber decking board

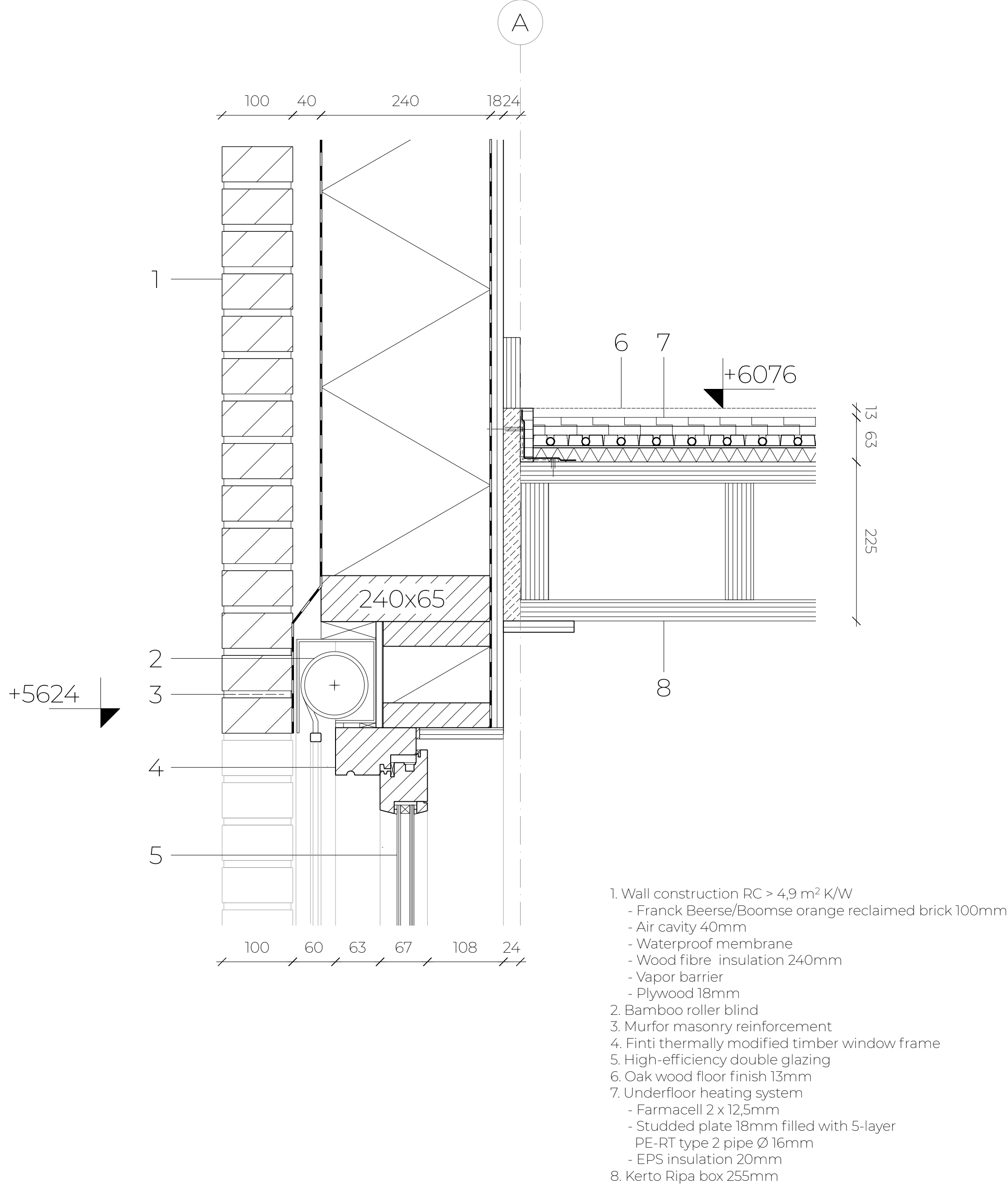


V7 1:5

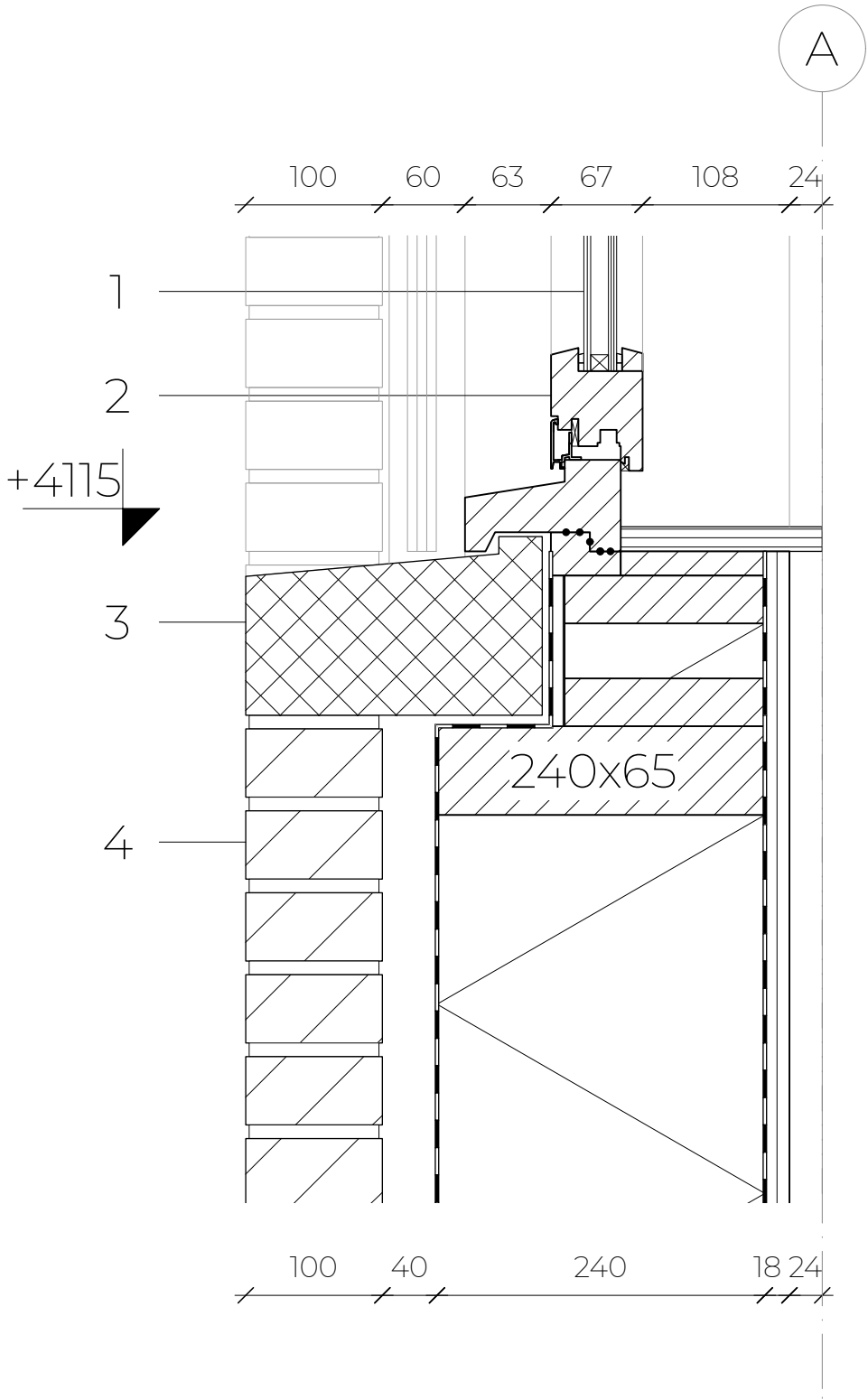
1. Metal roof gutter
2. Wall construction $RC > 4,9 \text{ m}^2 \text{ K/W}$
 - Franck Beerse/Boomse orange reclaimed brick 100mm
 - Air cavity 40mm
 - Waterproof membrane
 - Wood fibre insulation 240mm
 - Vapor barrier
 - Plywood 18mm
3. Roof construction $RC > 5,9 \text{ m}^2 \text{ K/W}$
 - Standing seam 10mm
 - Timber battens 18mm
 - Rail framework 22x50mm
 - Roof underlay 18mm
 - Wood fibre insulation 295mm
 - Plywood 18mm



V8 1:5

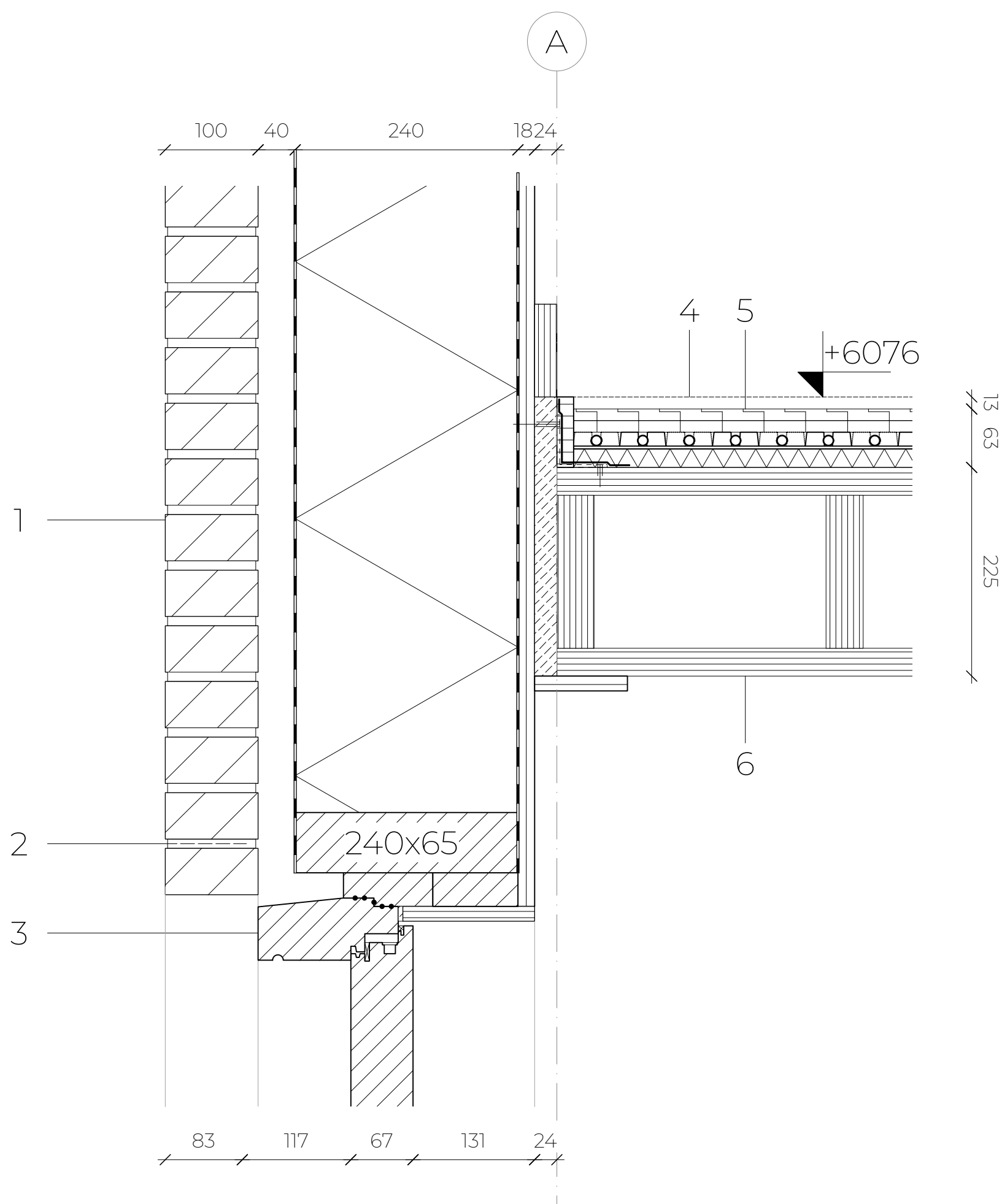


V9 1:5



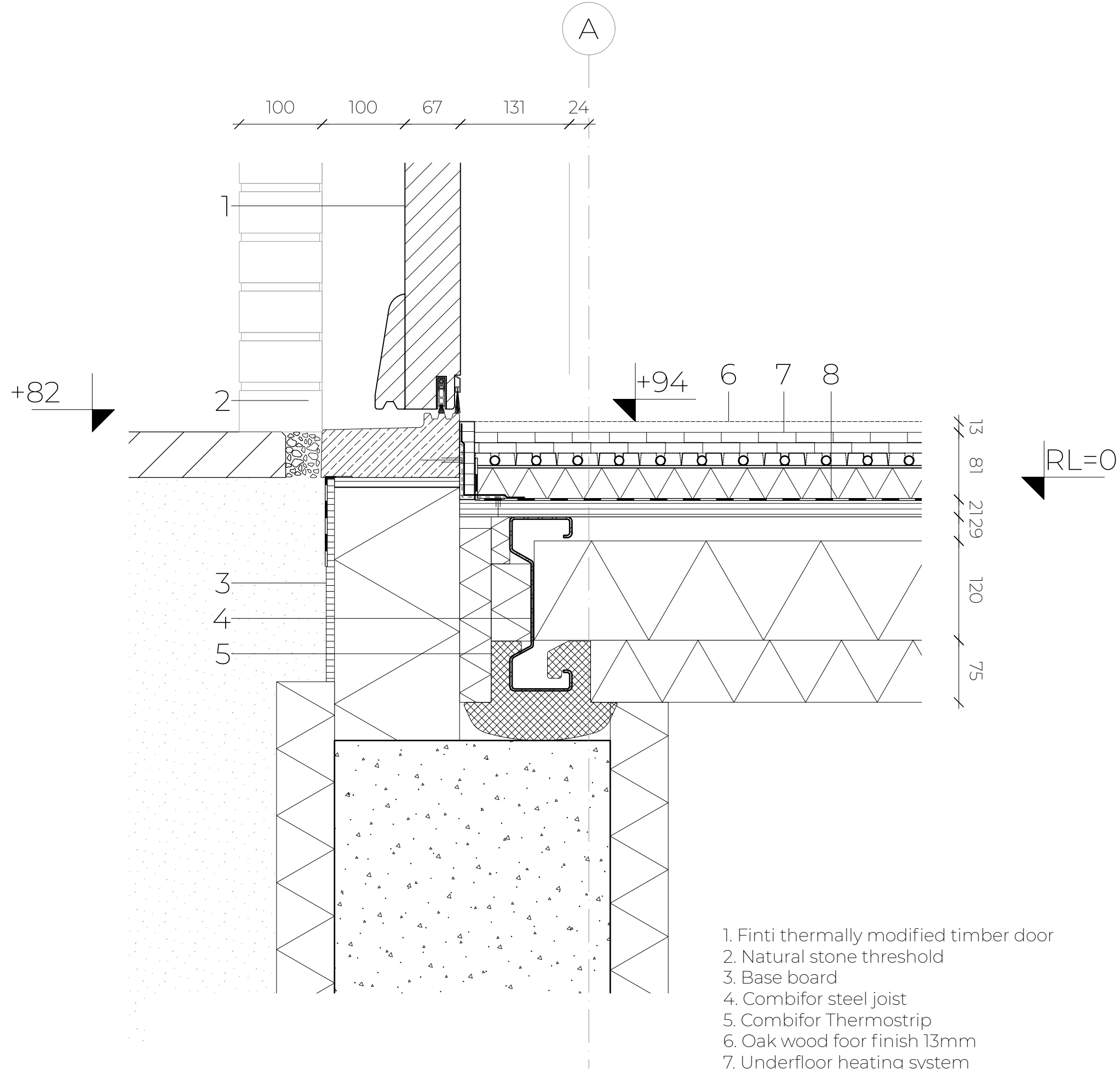
- 1. High-efficiency double glazing
- 2. Finti thermally modified timber window frame
- 3. elephant grass-based concrete
- 4. Wall construction RC > 4,9 m² K/W
 - Franck Beerse/Boomse orange reclaimed brick 100mm
 - Air cavity 40mm
 - Waterproof membrane
 - Wood fibre insulation 240mm
 - Vapor barrier
 - Plywood 18mm

V10 1:5



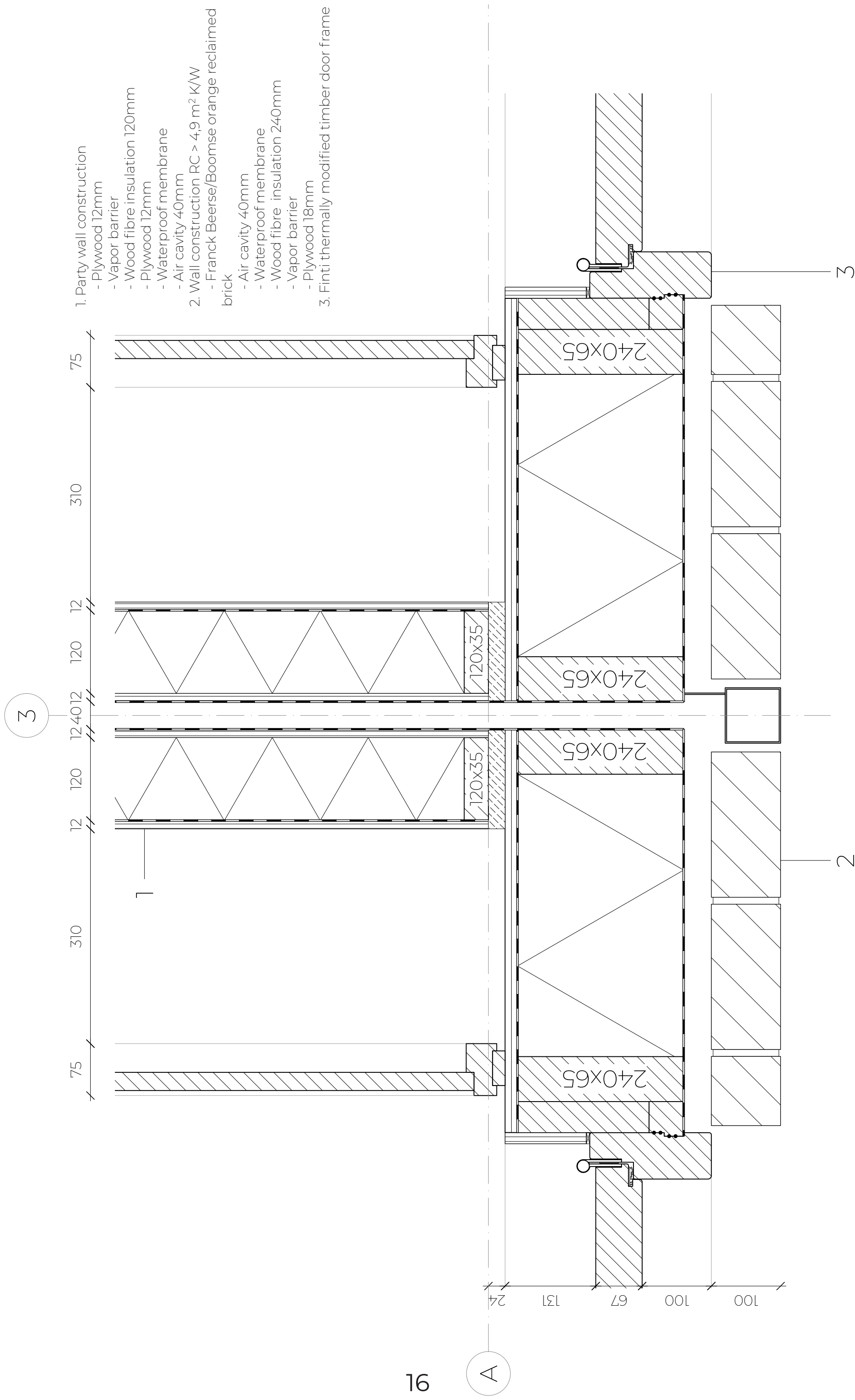
- 1. Wall construction RC > 4,9 m² K/W
 - Franck Beerse/Boomse orange reclaimed brick 100mm
 - Air cavity 40mm
 - Waterproof membrane
 - Wood fibre insulation 240mm
 - Vapor barrier
 - Plywood 18mm
- 2. Murfor masonry reinforcement
- 4. Finti thermally modified timber door
- 4. Oak wood floor finish 13mm
- 5. Underfloor heating system
 - Farmacell 2 x 12,5mm
 - Studded plate 18mm filled with 5-layer PE-RT type 2 pipe Ø 16mm
 - EPS insulation 20mm
- 6. Kerto Ripa box 255mm

V11 1:5

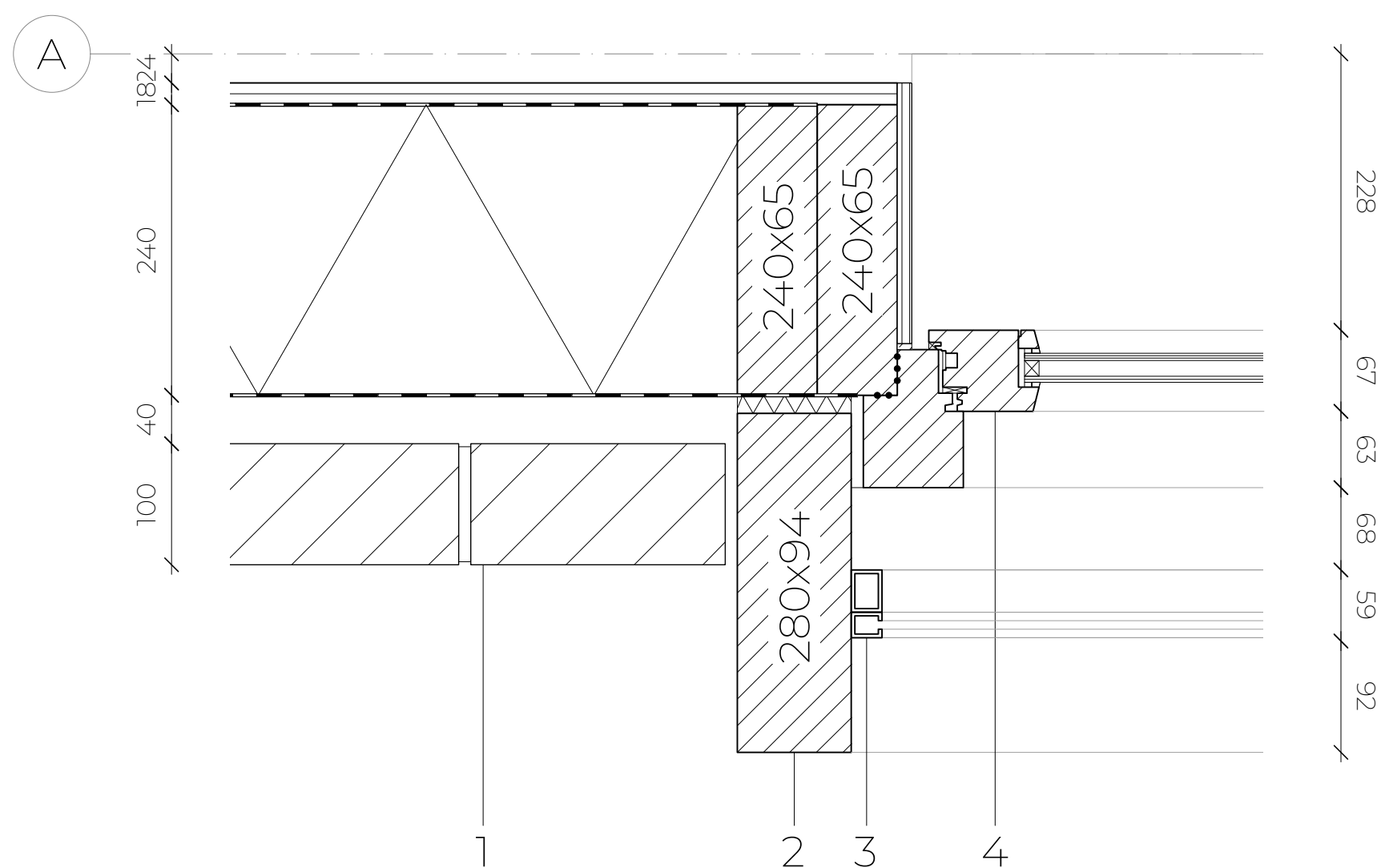


- 1. Finti thermally modified timber door
- 2. Natural stone threshold
- 3. Base board
- 4. Combifor steel joist
- 5. Combifor Thermostrip
- 6. Oak wood floor finish 13mm
- 7. Underfloor heating system
 - Farmacell 2 x 12,5mm
 - Studded plate 18mm filled with 5-layer PE-RT type 2 pipe Ø 16mm
 - EPS insulation 38mm
- 8. Floor construction Duofoor Flex Biobased $RC \geq 3,7 \text{ m}^2 \text{ K/W}$
 - Solid Vins spruce panel 21mm
 - Air cavity 29mm
 - Wood fibreinsulation 120mm
 - Recycled EPS insulation 75mm

5:11

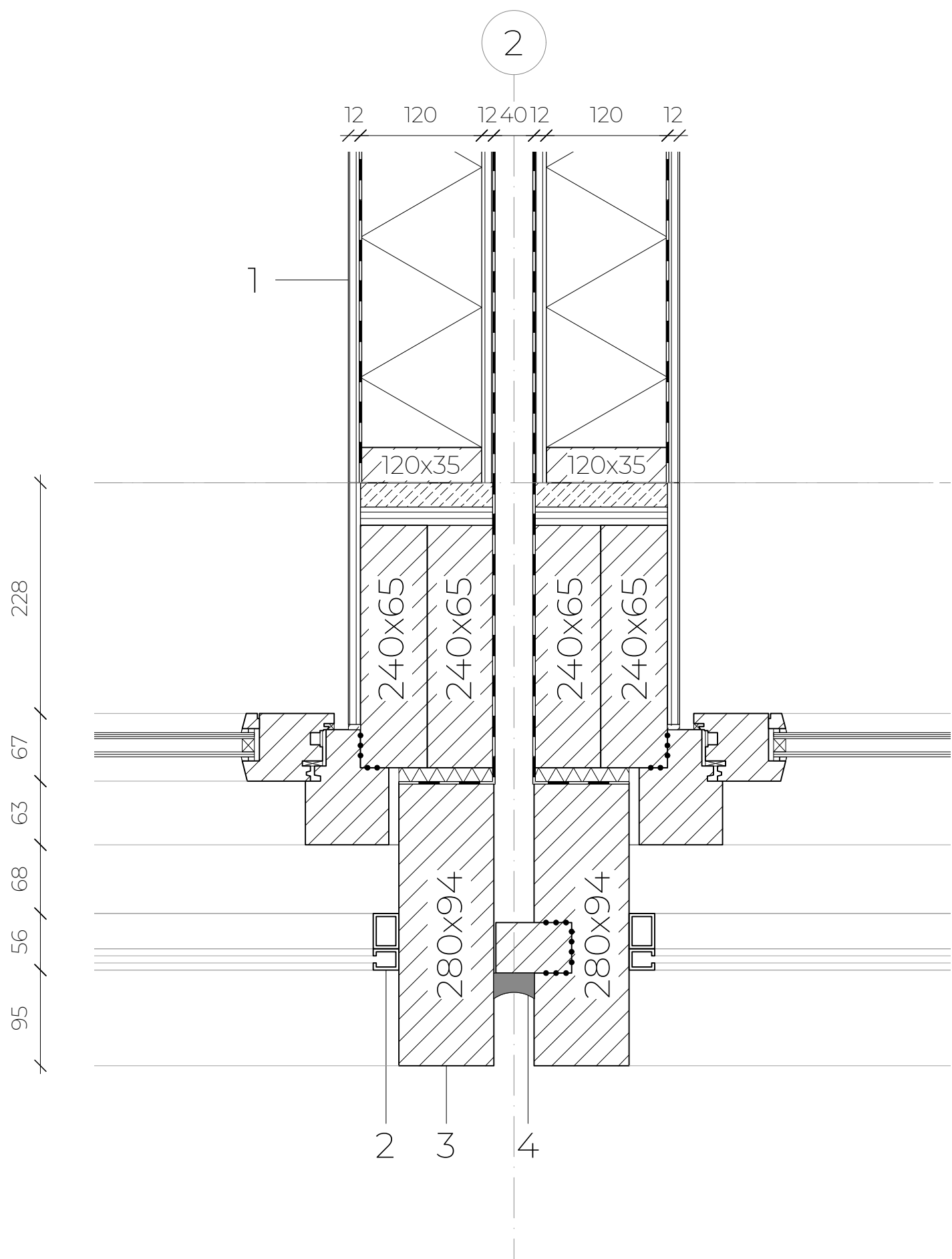


H2 1:5



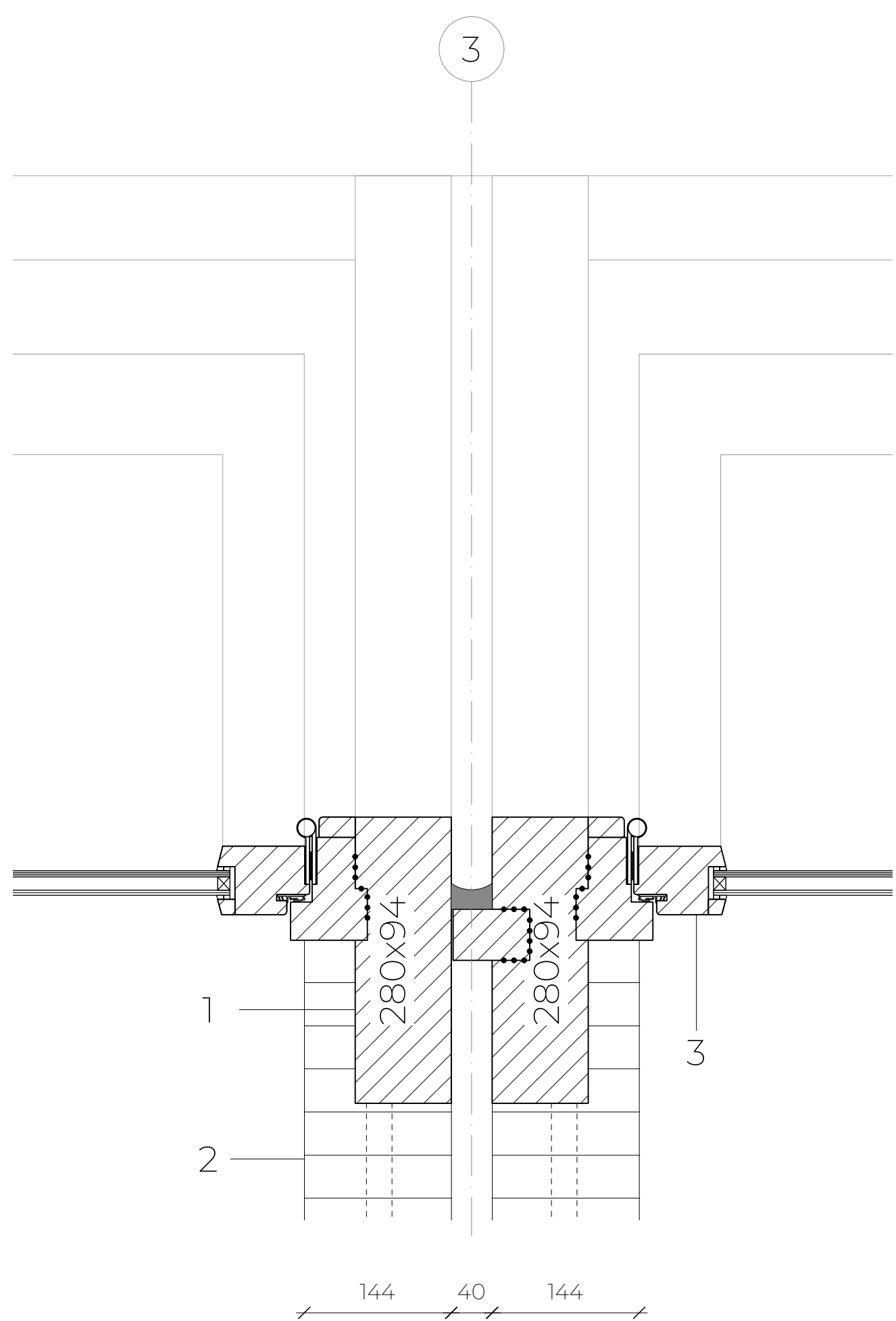
- 1. Wall construction $RC > 4,9 \text{ m}^2 \text{ K/W}$
 - Franck Beerse/Boomse orange reclaimed brick
 - Air cavity 40mm
 - Waterproof membrane
 - Wood fibre insulation 240mm
 - Vapor barrier
 - Plywood 18mm
- 2. Finti thermally modified timber
- 3. Rails for bamboo roller blind
- 4. Finti thermally modified timber window frame

H3 1:5



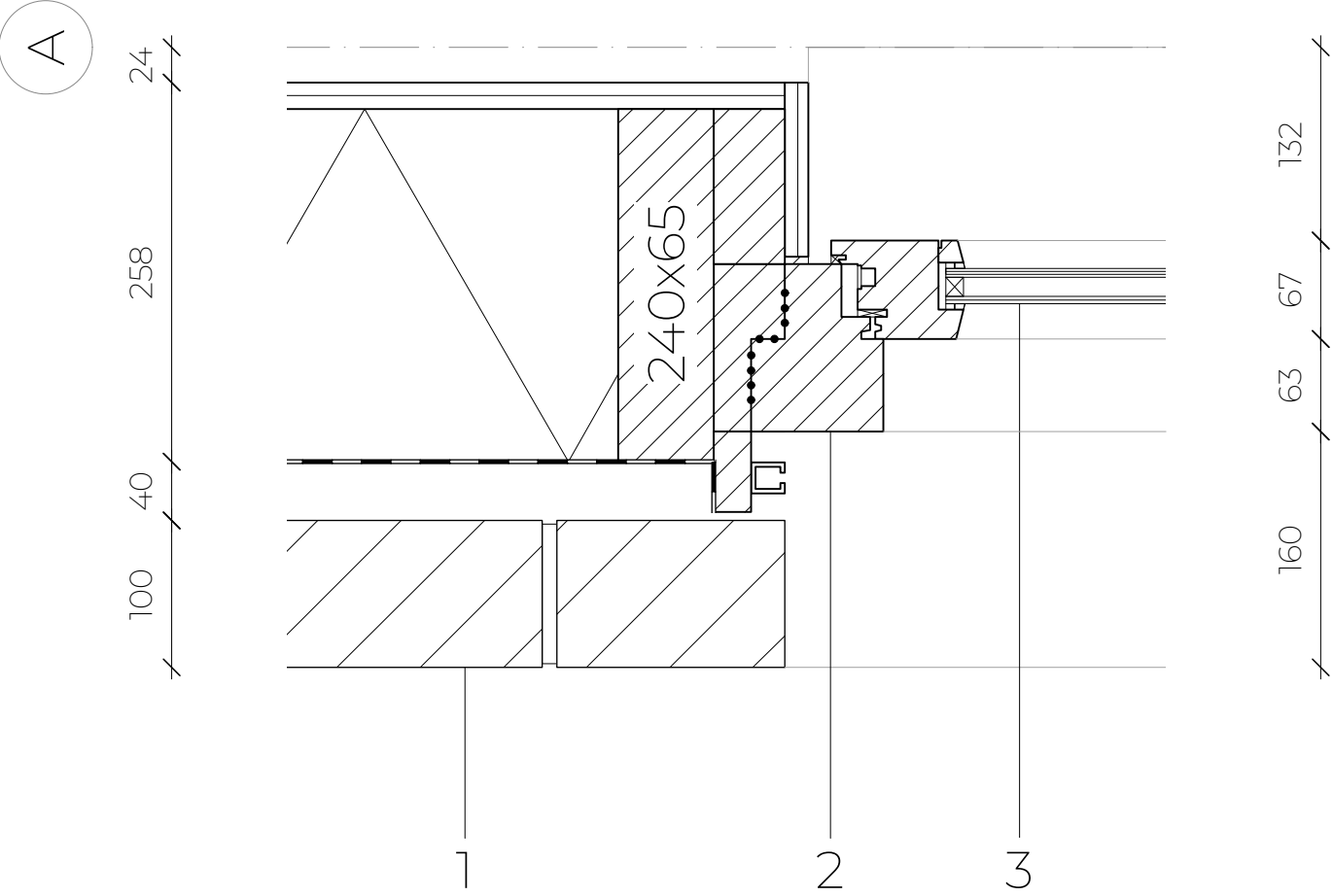
- 1. Party wall construction
 - OSB panel 12mm
 - Vapor barrier
 - Wood fibre insulation 120mm
 - OSB panel 12mm
 - Waterproof membrane
 - Air cavity 40mm
- 2. Rails for bamboo roller blind
- 3. Finti thermally modified timber
- 4. Black sealant joint on backer rod

H4 1:5



- 1. Finti thermally modified timber
- 2. Party wall construction
 - DLT panel 144mm
 - Air cavity 40mm
 - DLT panel 144mm
- 3. Finti thermally modified timber door frame

H5 1:5



- 1. Wall construction $RC > 4,9 \text{ m}^2 \text{ K/W}$
 - Franck Beerse/Boomse orange reclaimed brick 100mm
 - Air cavity 40mm
 - Waterproof membrane
 - Wood fibre insulation 240mm
 - Vapor barrier
 - Plywood 18mm
- 2. Finti thermally modified timber window frame
- 3. High-efficiency double glazing