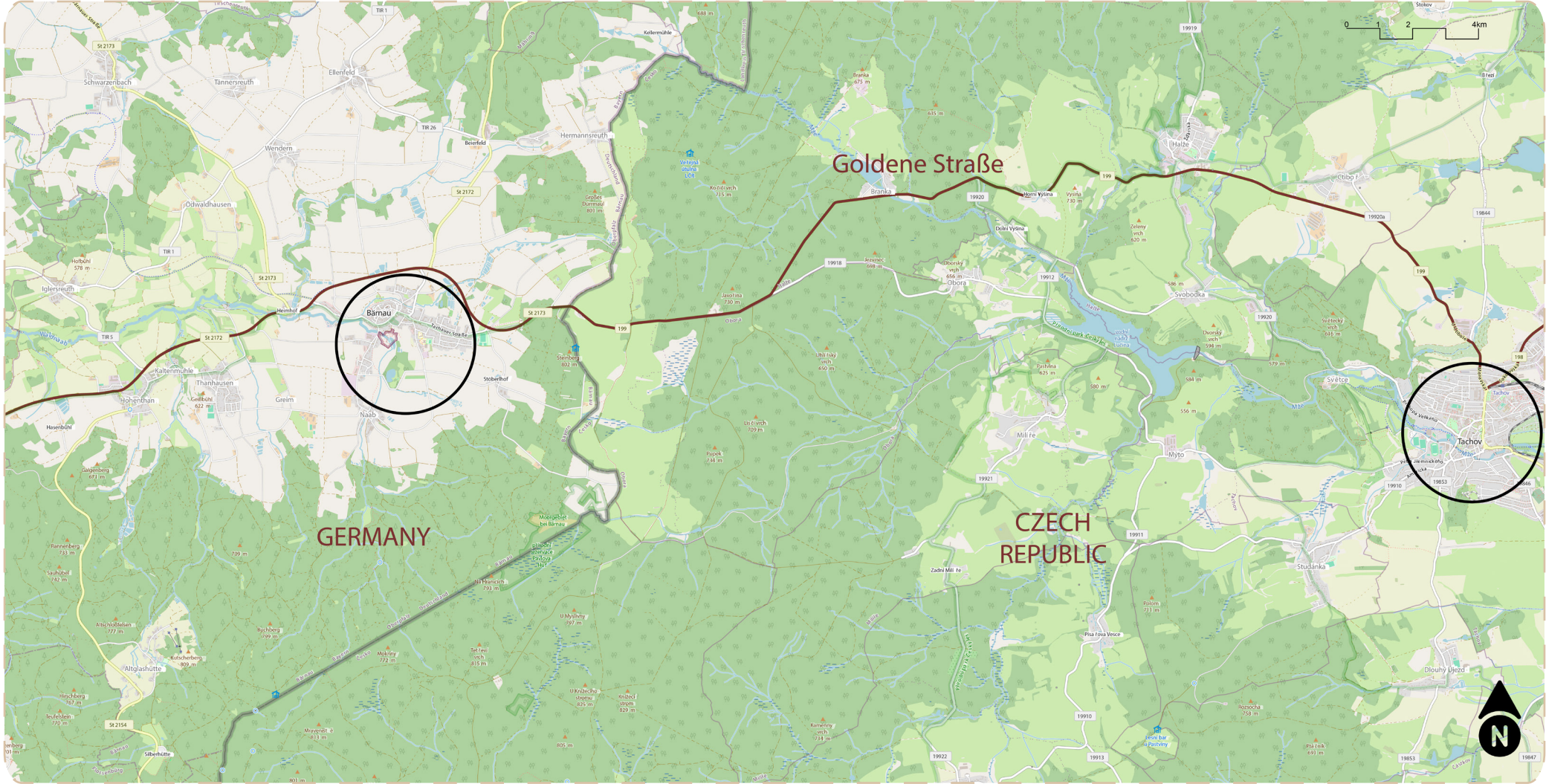


01 — TERRITORIAL CONTEXT



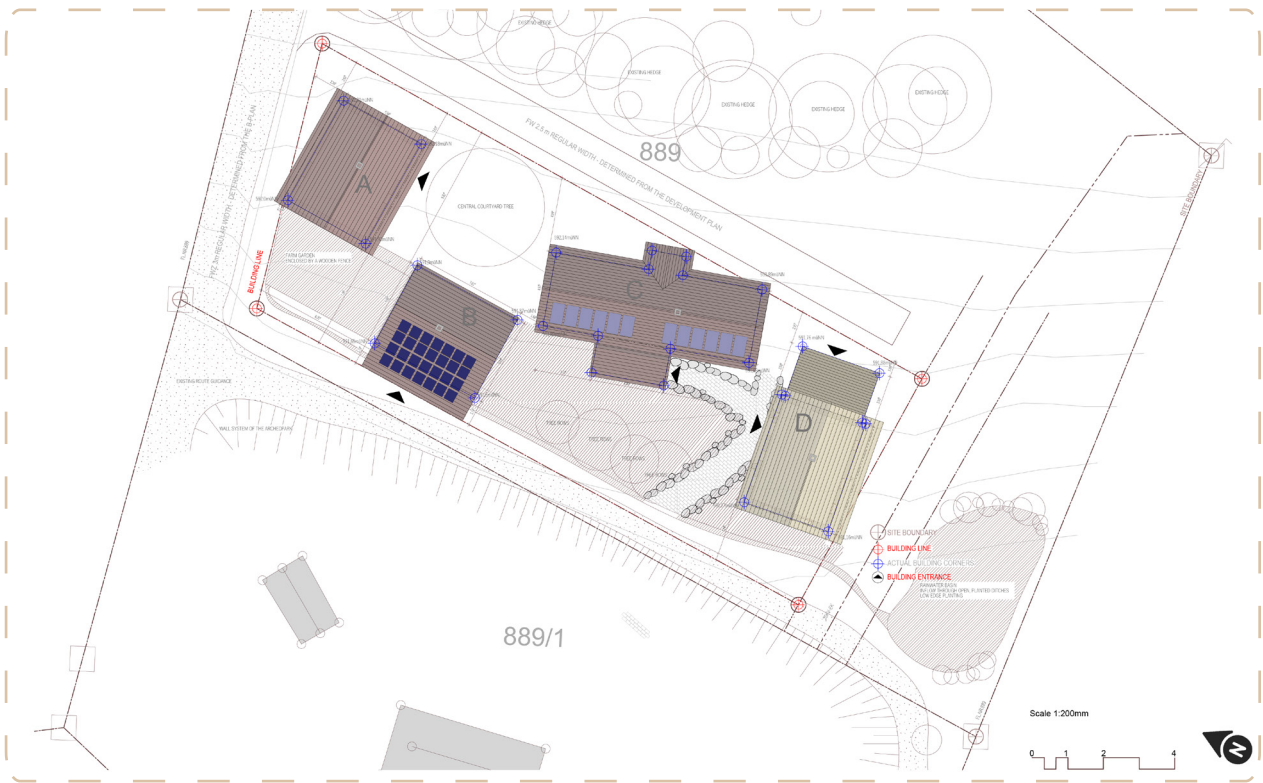
Regional location map — Bärnau & Goldene Straße corridor

Upper Palatinate, Bavaria — German–Czech border. Medieval Goldene Straße (Via Carolina): centuries of material, craft, and knowledge exchange. Adjacent to the Geschichtspark Bärnau–Tachov — experimental archaeology site directly informing the Naturdorf project.



Geschichtspark Bärnau–Tachov — Experimental archaeology site

02 — NATURDORF BÄRNAU — SITE & BUILDING D



Site plan, Buildings A–D — Scale 1:200



Building D — completed photo

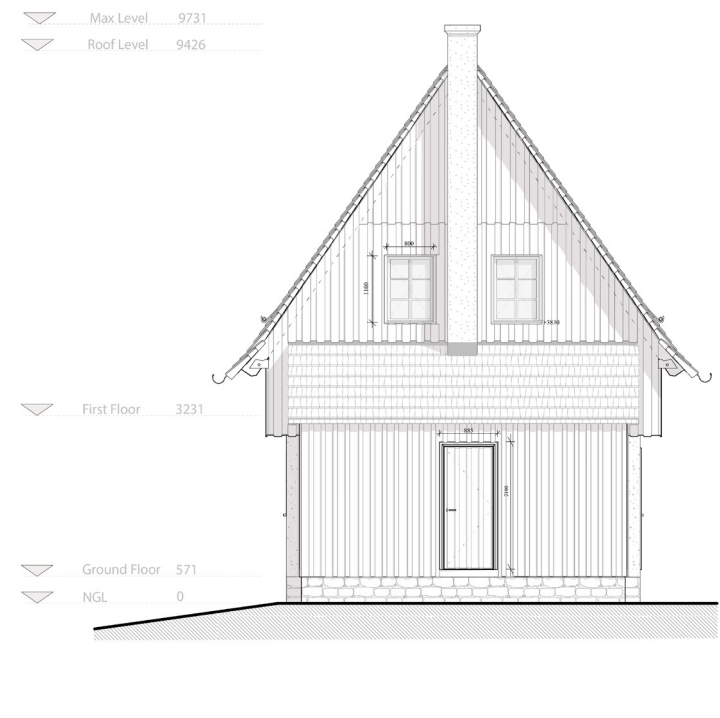
Building D — Key Data

GIA: 76.64 m² · Structure: Untreated spruce & larch
Walls: Hemp-lime infill
Roof: Sheep wool insulation
Foundation: Reinforced-concrete-free, lime-based

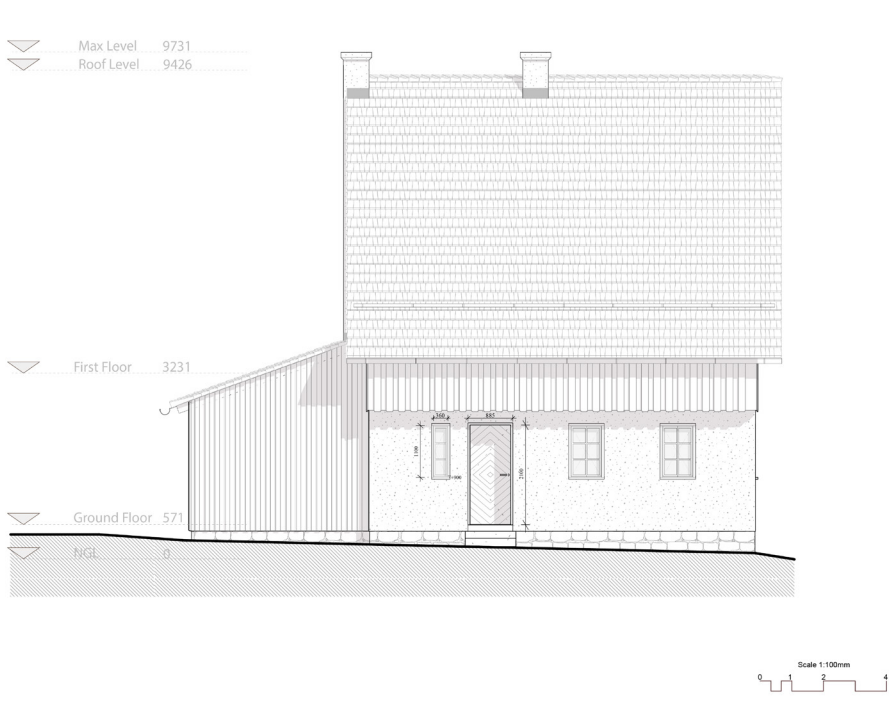


The Geschichtspark Bärnau–Tachov — is an open-air museum that is used to construct prototypes of historcal building for re-search purposes.

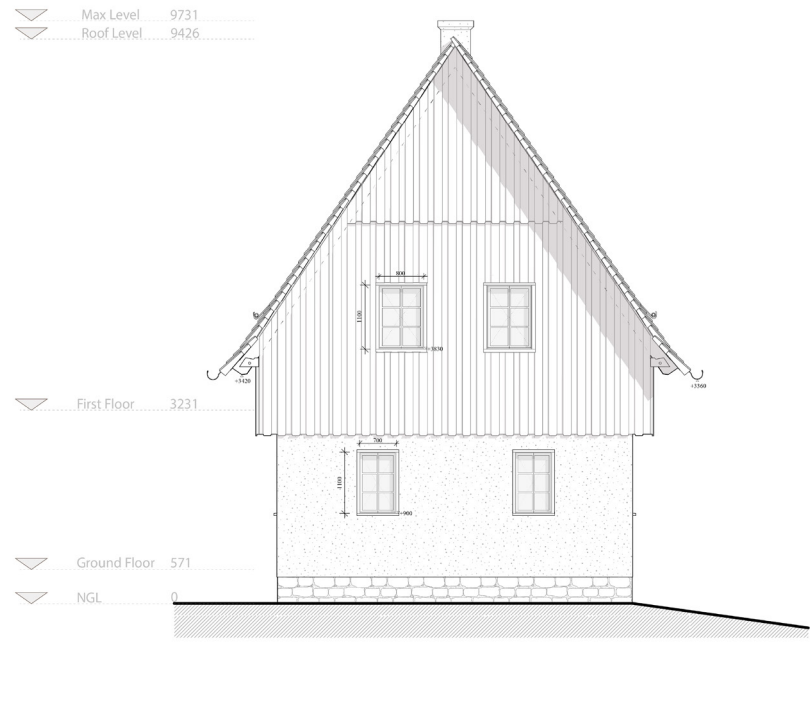
03 — ELEVATIONS — SCALE 1:100



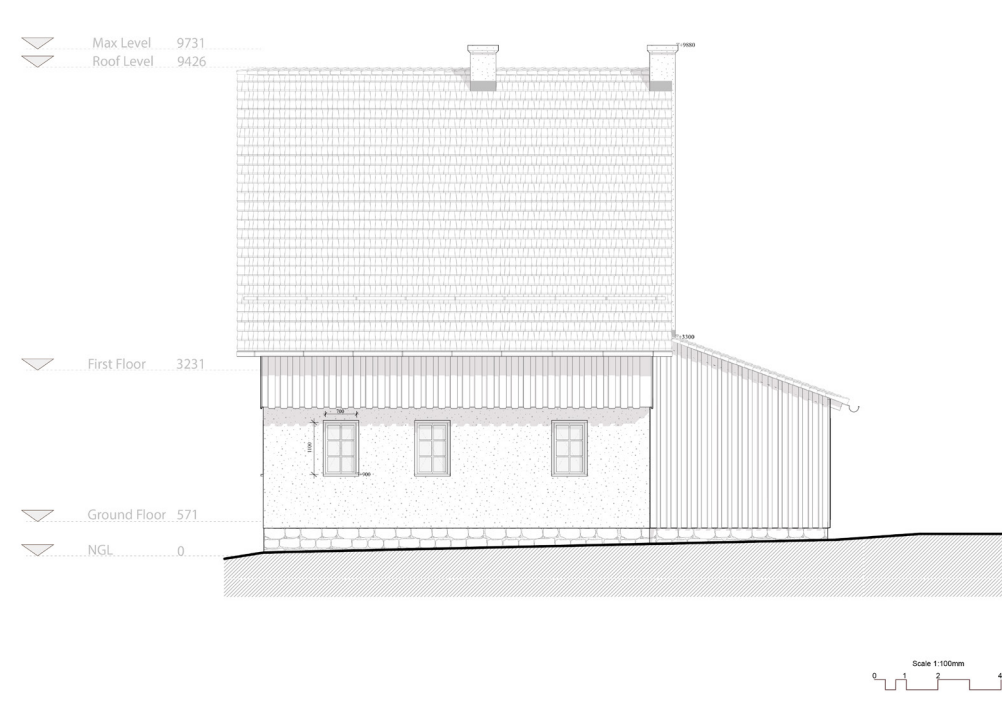
West Elevation — Scale 1:100



South Elevation — Scale 1:100

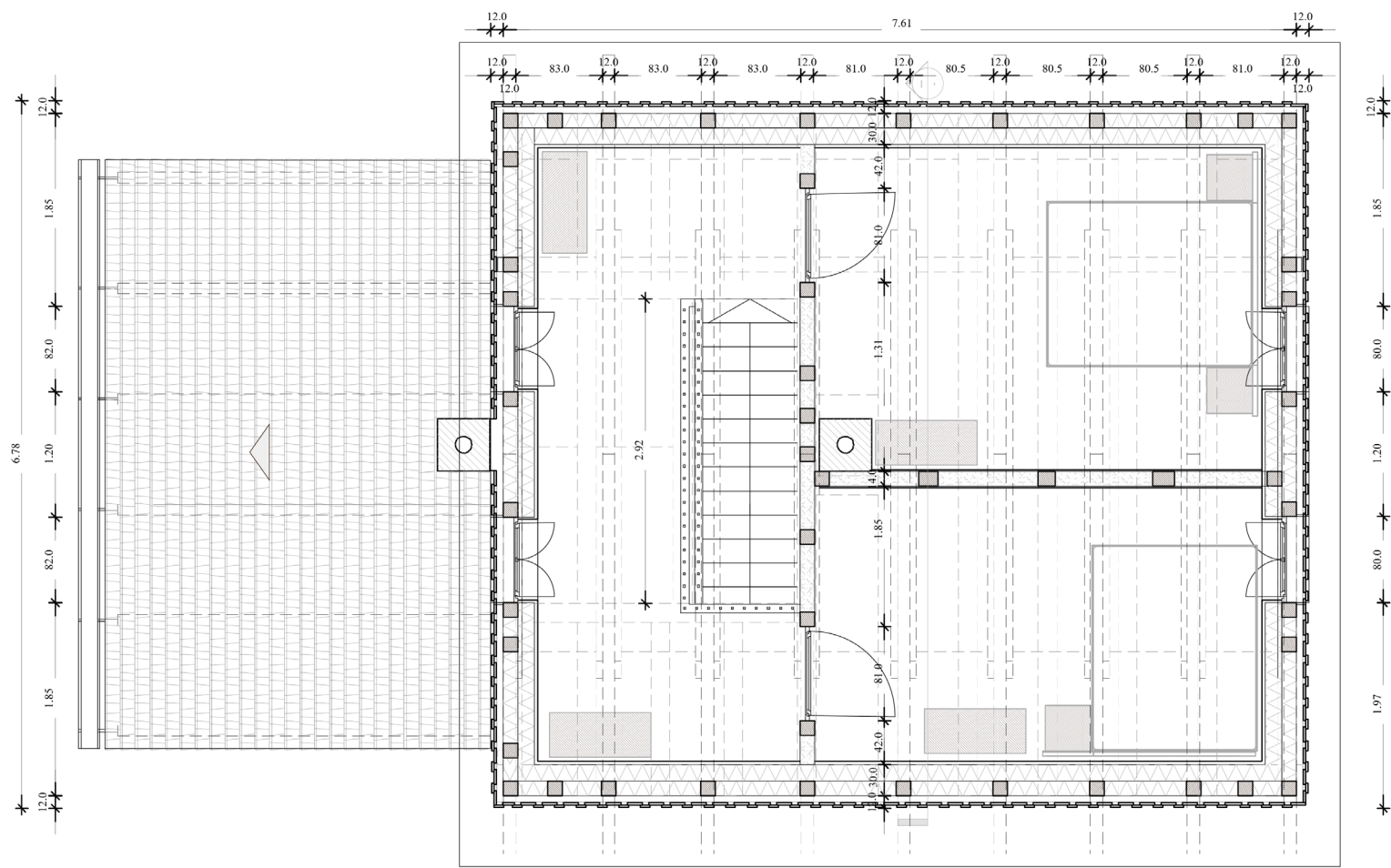


East Elevation — Scale 1:100

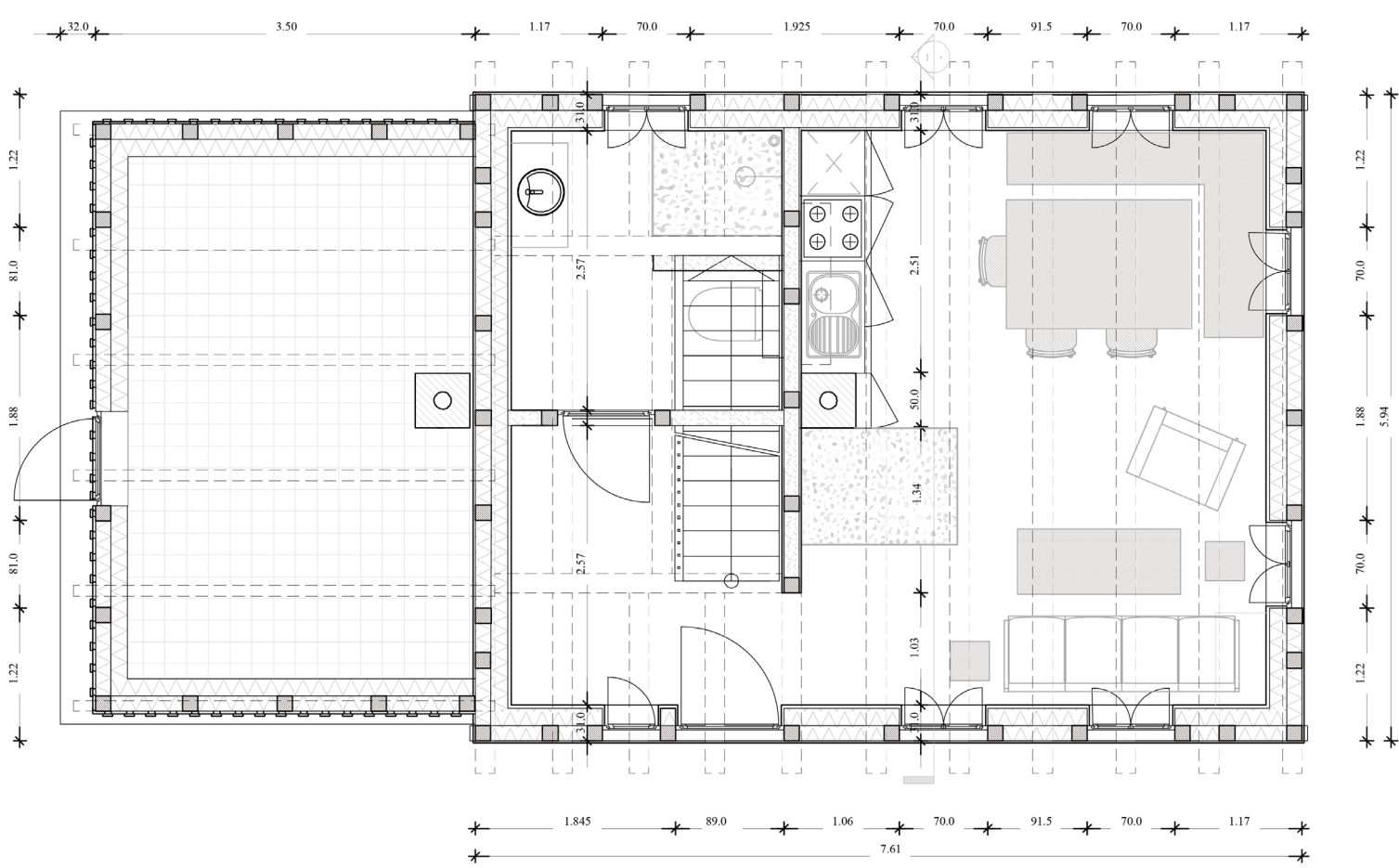


North Elevation — Scale 1:100

04 — FLOOR PLANS — SCALE 1:100

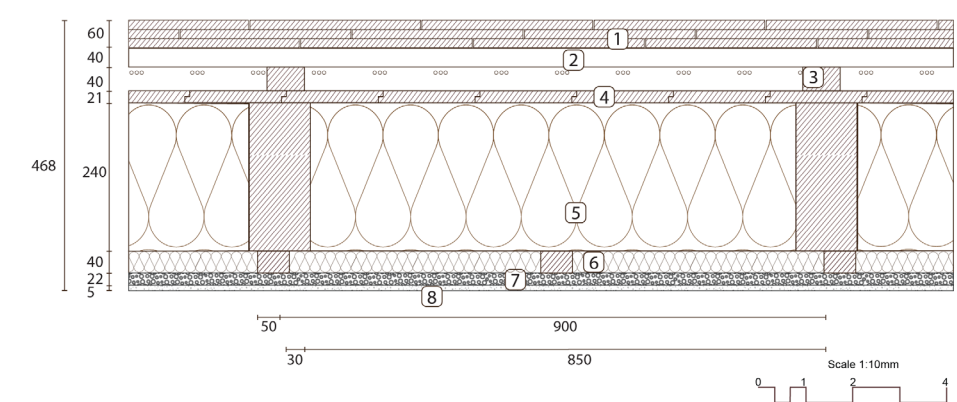


Ground Floor Plan — Scale 1:100



First Floor Plan — Scale 1:100

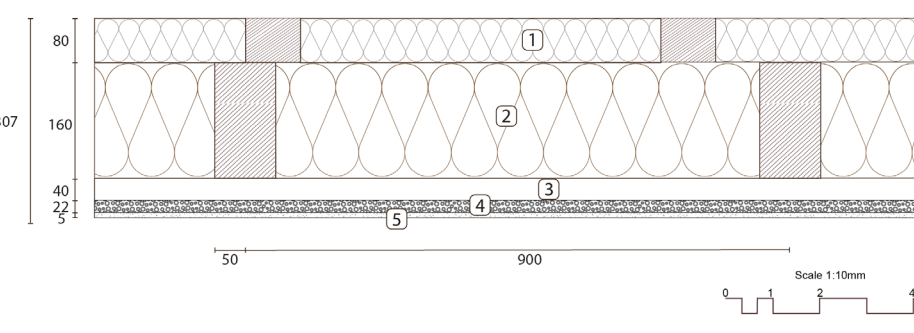
05 — CONSTRUCTION DETAILS — SCALE 1:10



Roof — Warm roof

- 60 mm larch shingles (20mm x3 layers)
- 40 mm battens 4/6
- 40 mm counter battens 4/6
- 21 mm tongue/groove formwork
- 240 mm premium sheep wool insulation
- 40 mm optimal sheep wool insulation
- 22 mm Claytec clay building board
- 5 mm Clay plaster on jute mesh

468 mm

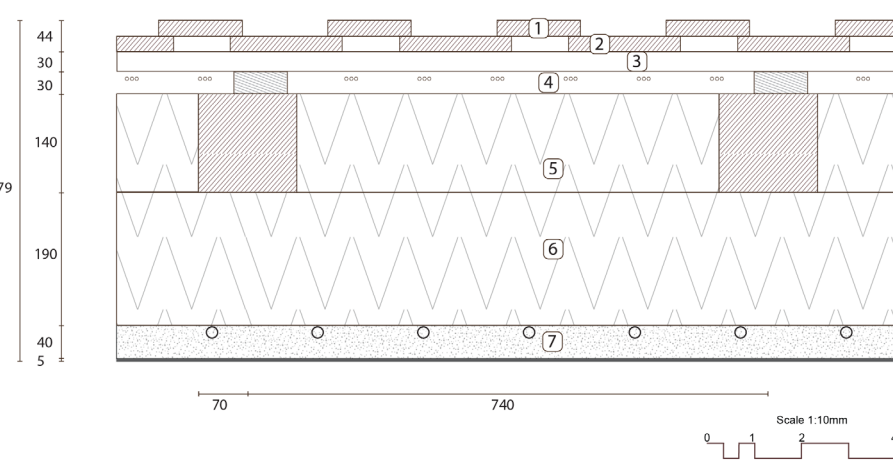


Roof — Cold roof

- 80 mm sheep wool
- 160 mm sheep wool
- 40 mm air layer counter battens 4/6
- 22 mm Claytec clay building board
- 5 mm Clay plaster on jute mesh

307 mm

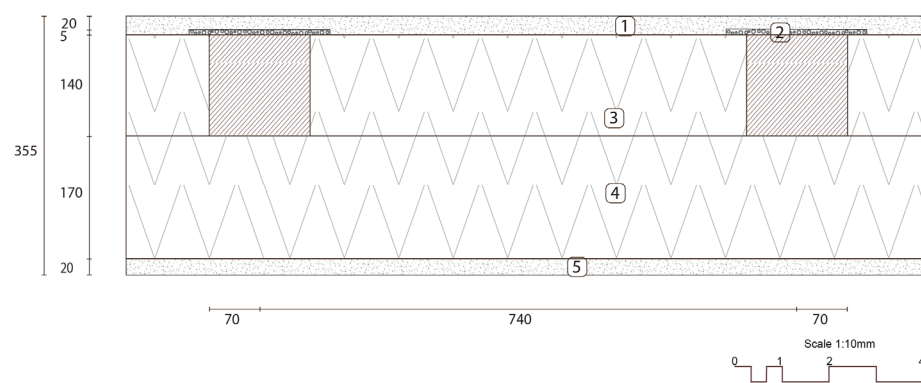
N.B; The roof configuration occur along the same roof slope, with the upper portion constructed as a cold roof and the lower portion as a warm roof.



Exterior wall — First floor

- 22 mm spruce wood panels
- 22 mm spruce wood panels
- 30 mm battens 3/6
- 30 mm rear ventilation layer 3/6
- 140 mm hemp lime
- 190 mm hemp lime
- 40 mm clay plaster (basecoat)
- 5 mm clay plaster (topcoat)

479 mm

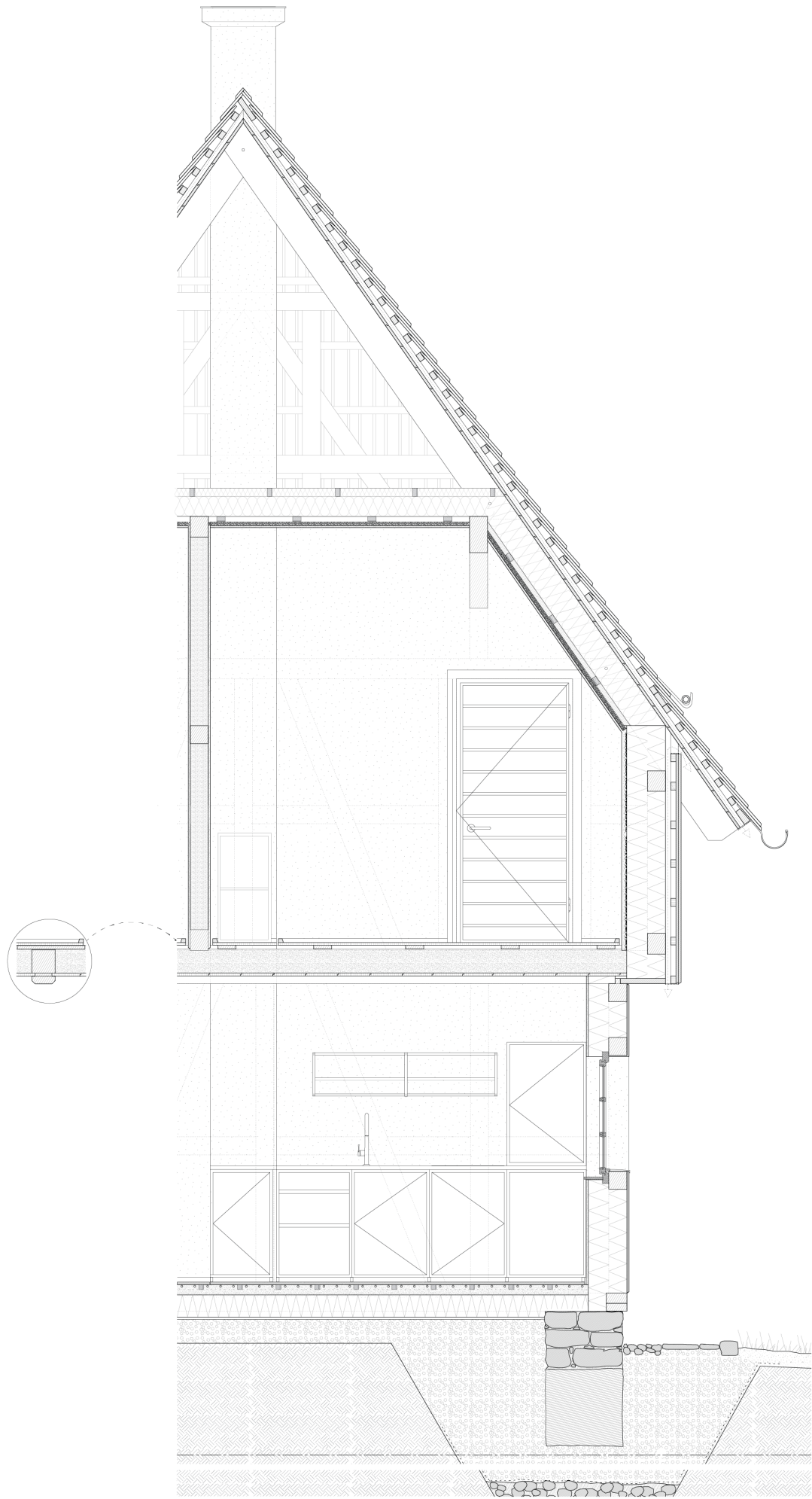


Exterior wall — Ground floor

- 20 mm lime render (exterior)
- 5 mm reed mats (on timbers)
- 140 mm hemp lime
- 170 mm hemp lime
- 20 mm clay plaster (interior)

355 mm

06 — CROSS - SECTION



Building D Cross-section — Scale 1:100

07 — ASSESSMENT FRAMEWORK

Life Cycle Assessment ISO 14040 · EN 15978 Modules A1–A4 · ÖKOBAUDAT 2024-I	Climate Impact EN 15804+A2 · IPCC factors GWP in kgCO ₂ e	Biogenic Carbon EN 16449 · Static –1/+1 Reported separately from fossil	Thermal Performance u-wert.net calculations Benchmarked vs GEG 2020 Neubau
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08 — EMBODIED CARBON RESULTS

