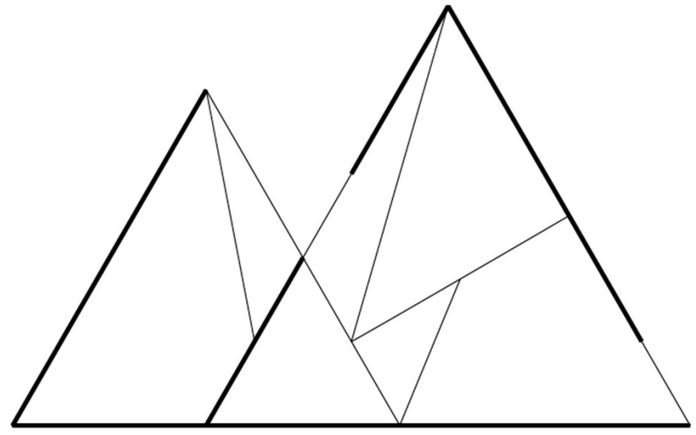
UP THERE



THE TRAIL TOWARDS A MORE SUSTAINABLE ALPINE HUT.

A RENOVATION PROJECT FOR RIFUGIO CARDUCCI, 2297 MT., ALTA VAL GIRALBA, DOLOMITI.

Explorelab 31

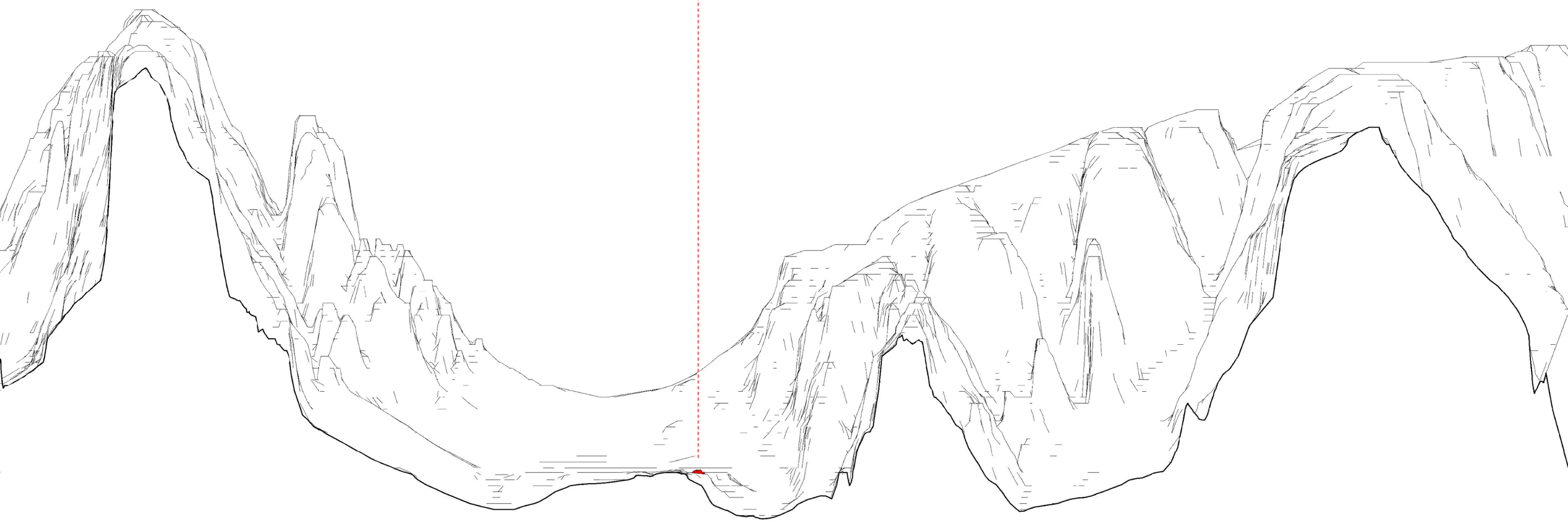
P5 Drawing-set | 13-09-2021

Francesco Longo - 4726579

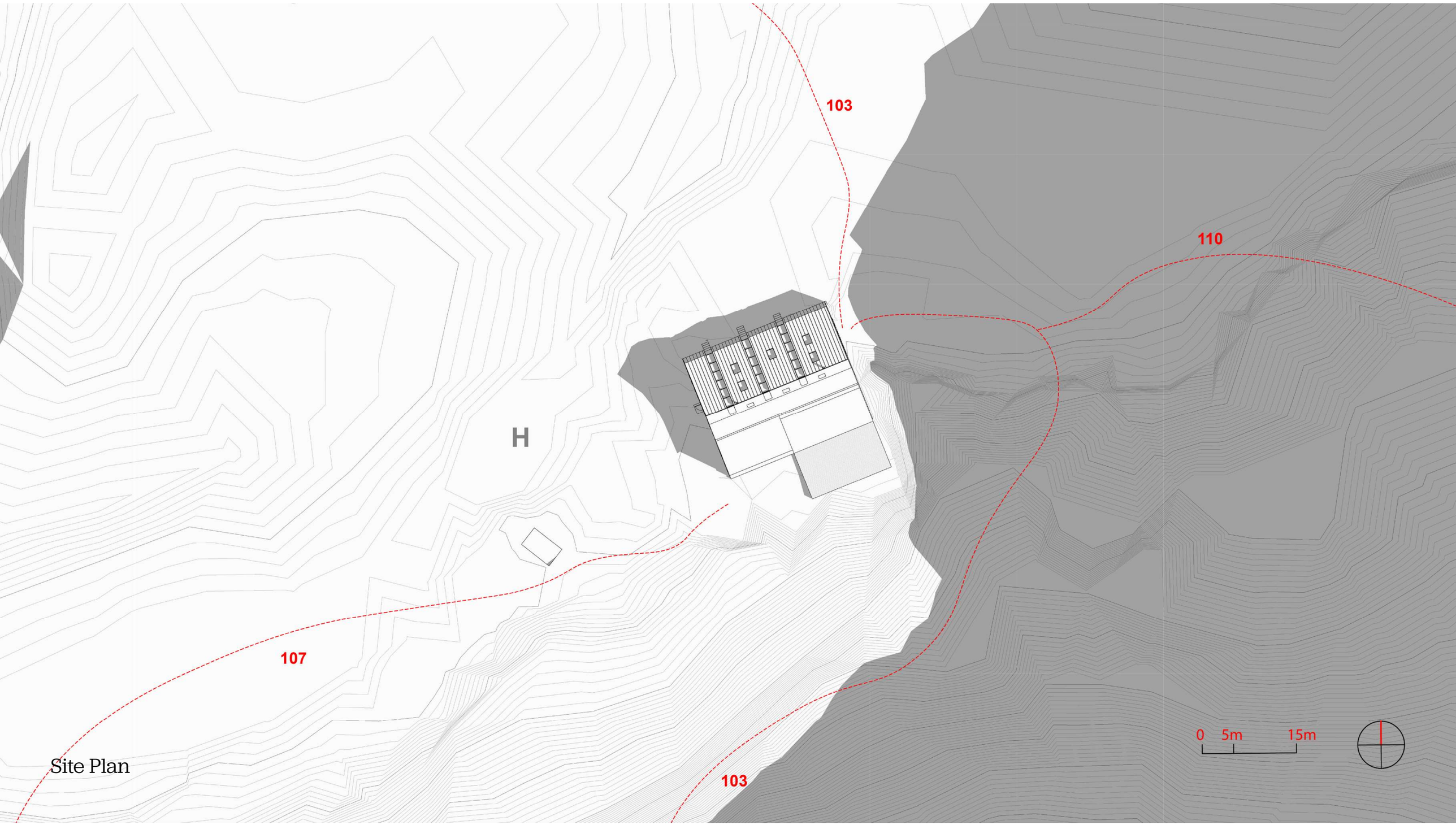
Mentoring team: Henri van Bennekom | Andy van den Dobbelsteen | Gilbert Koskamp

Board of Examiner's delegate: Ronald van Warmerdam

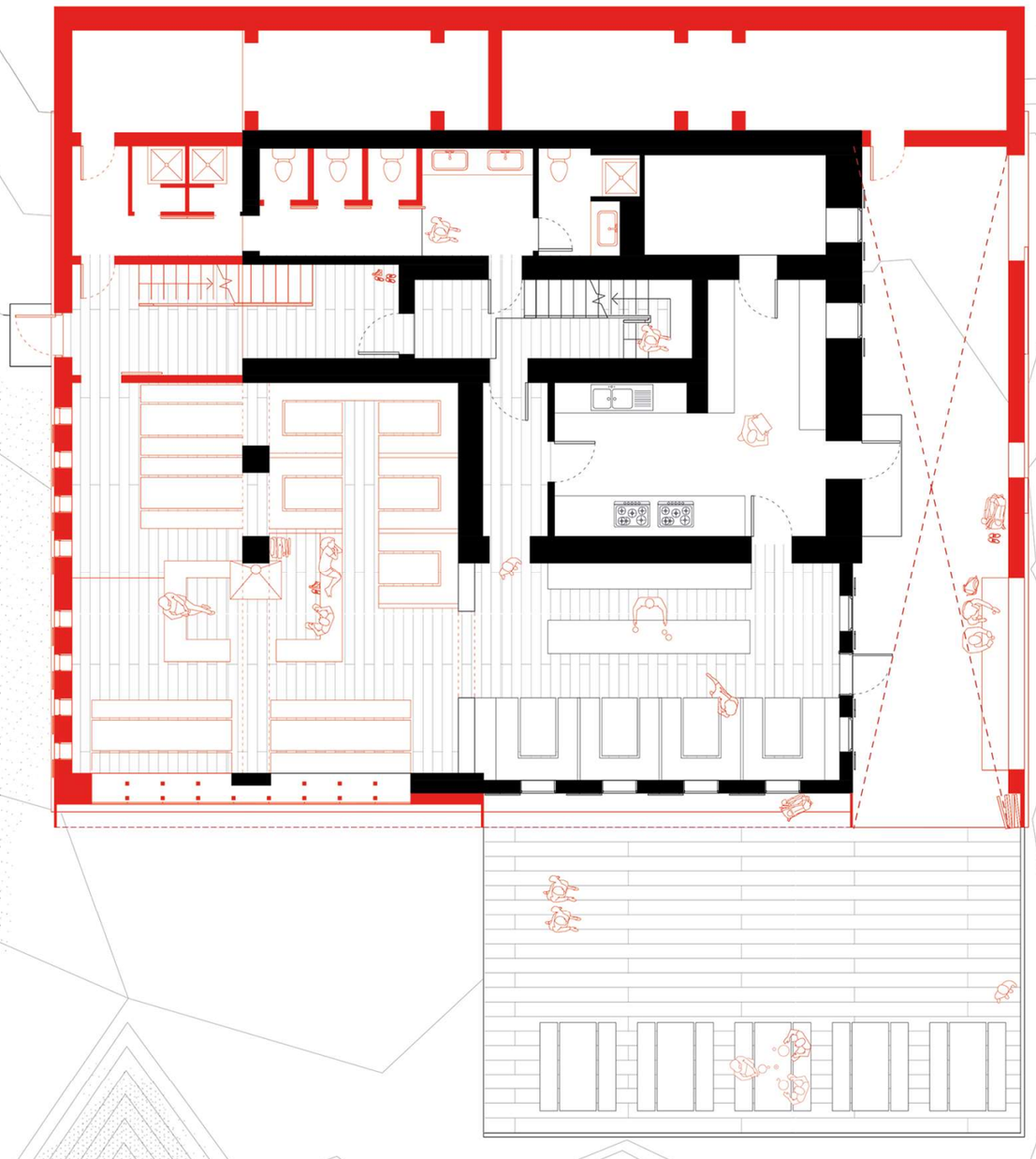
Rifugio Carducci



Site Section

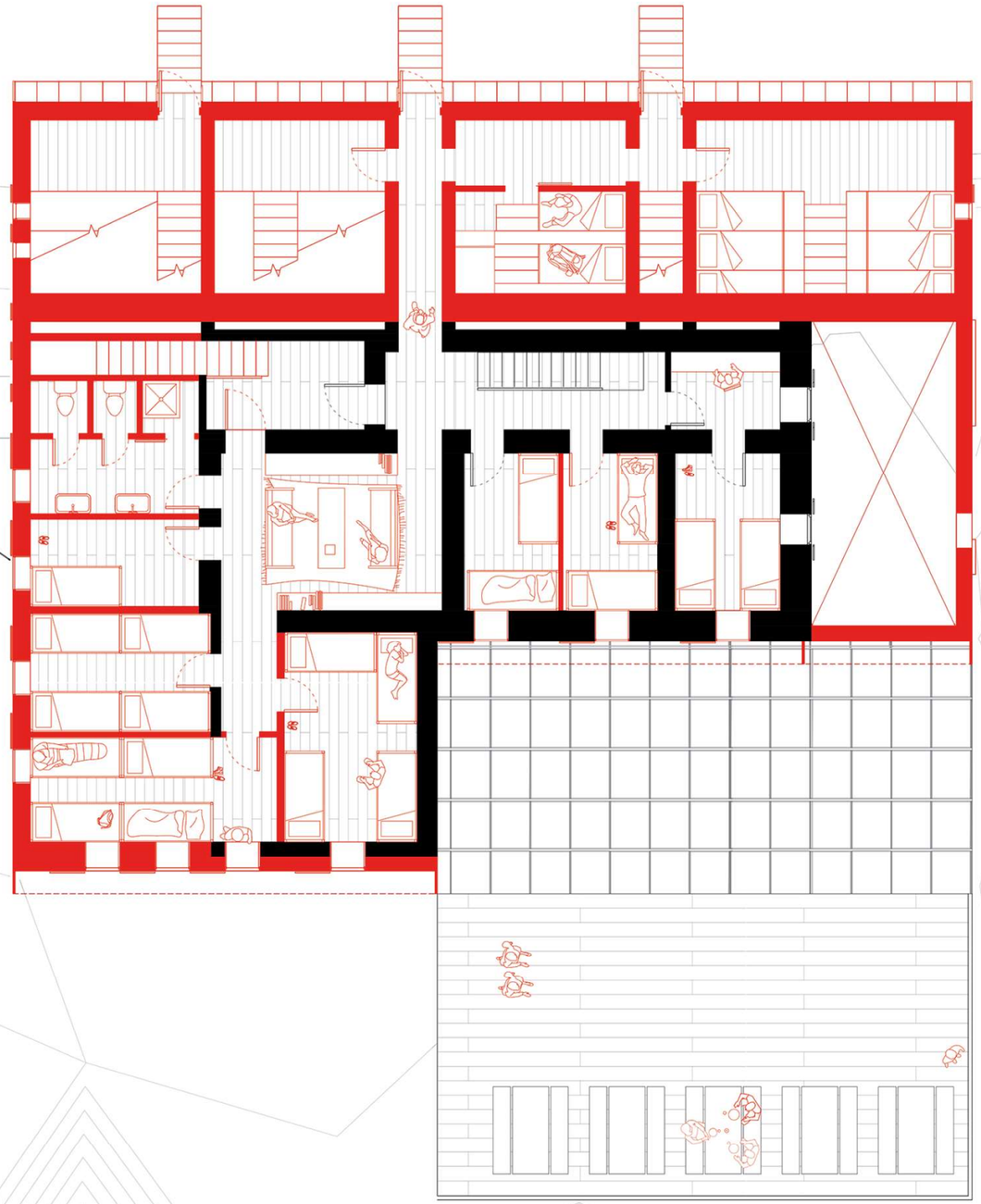


Site Plan

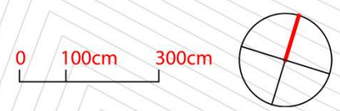


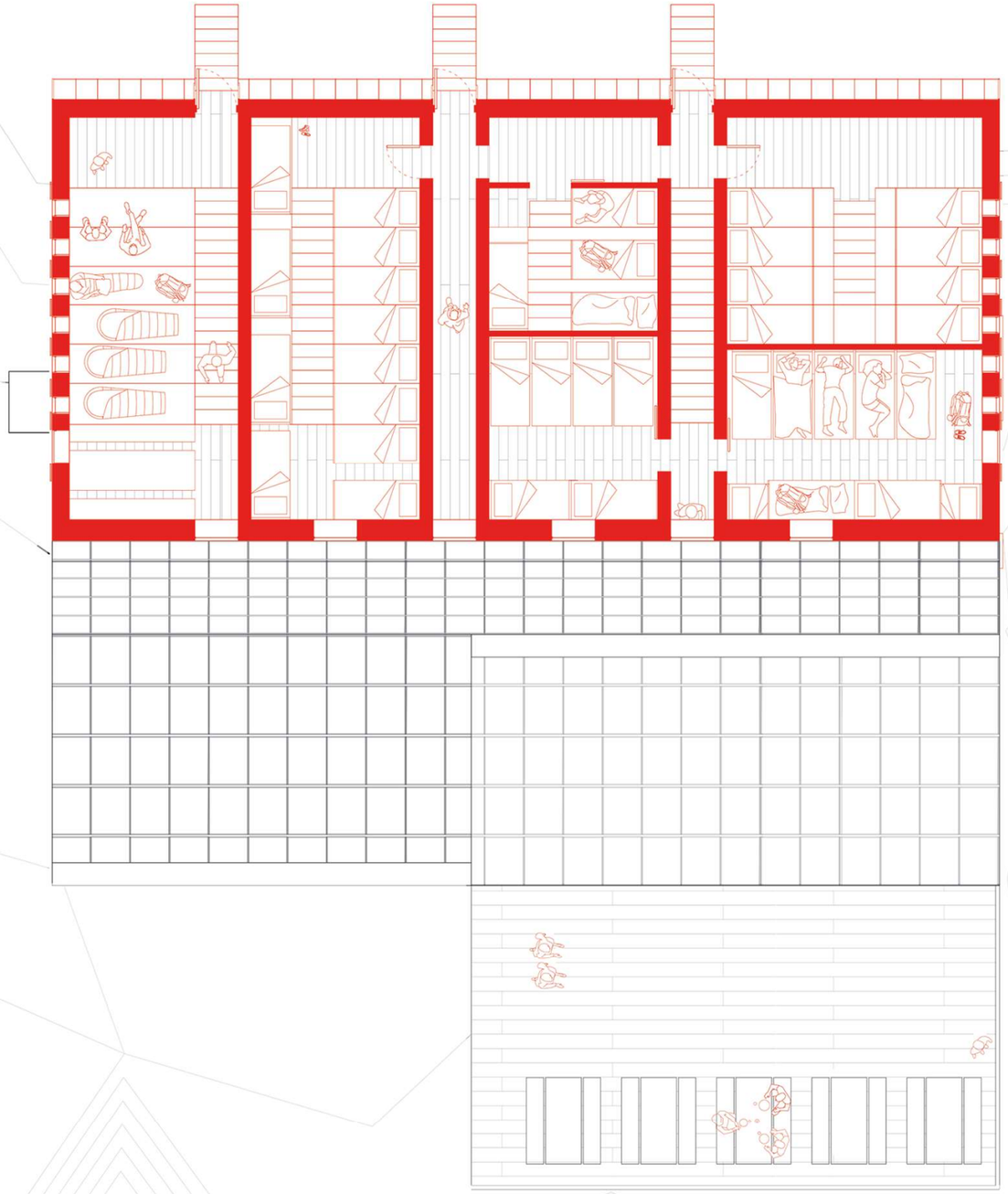
Ground Floor

0 100cm 300cm

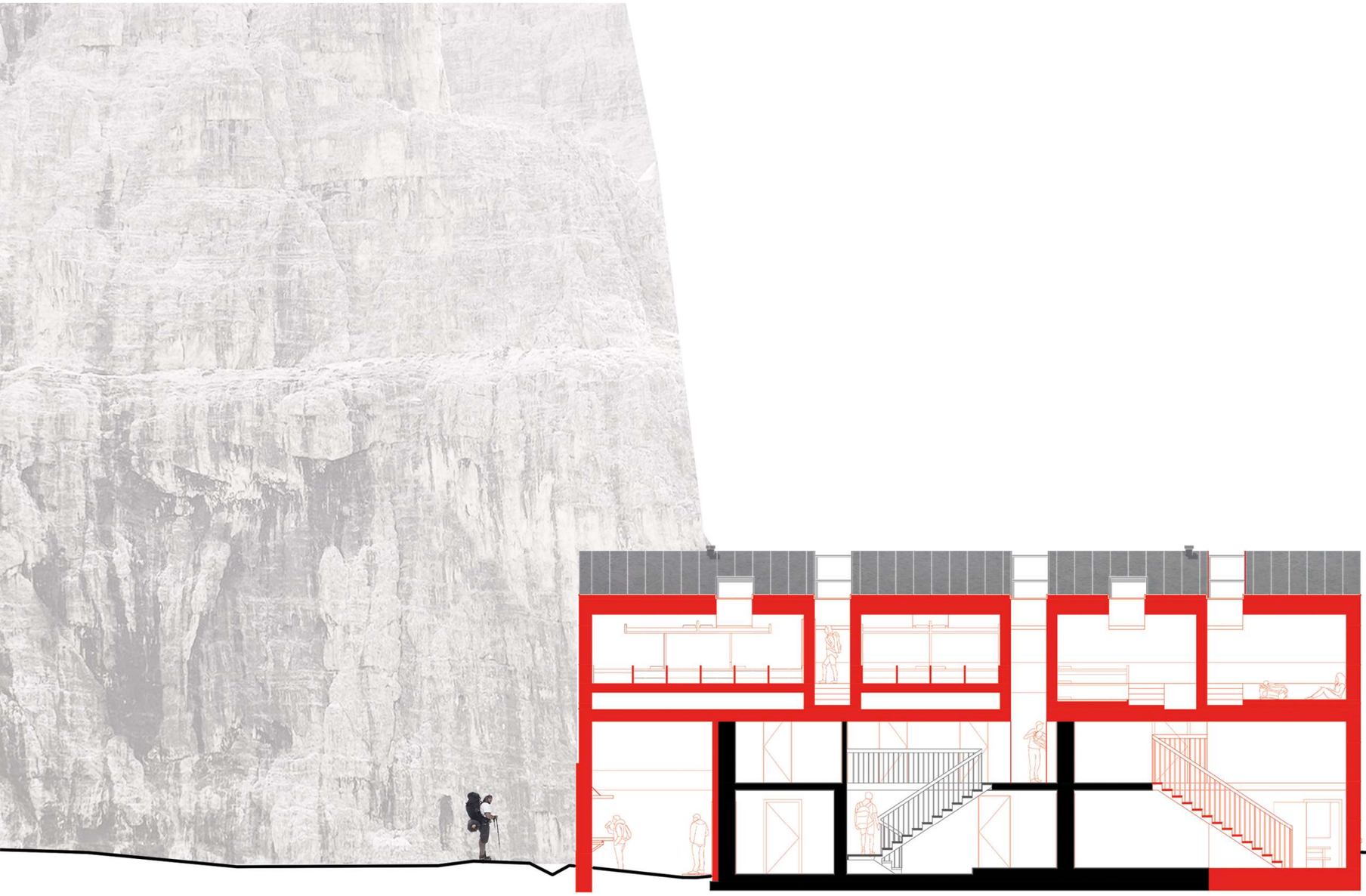


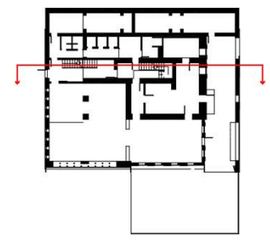
First Floor





Second Floor





0 100cm 300cm

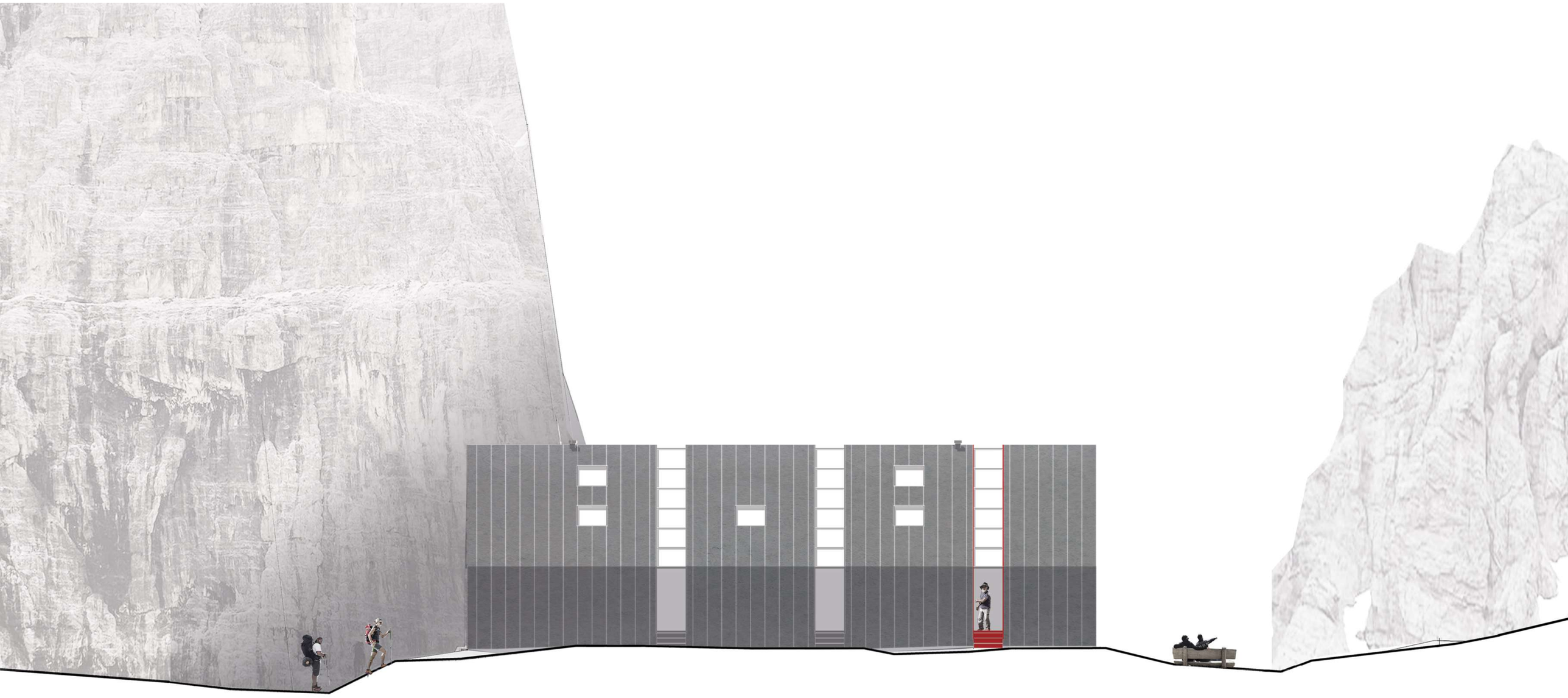
Longitudinal Section

West Elevation

South Elevation

East Elevation

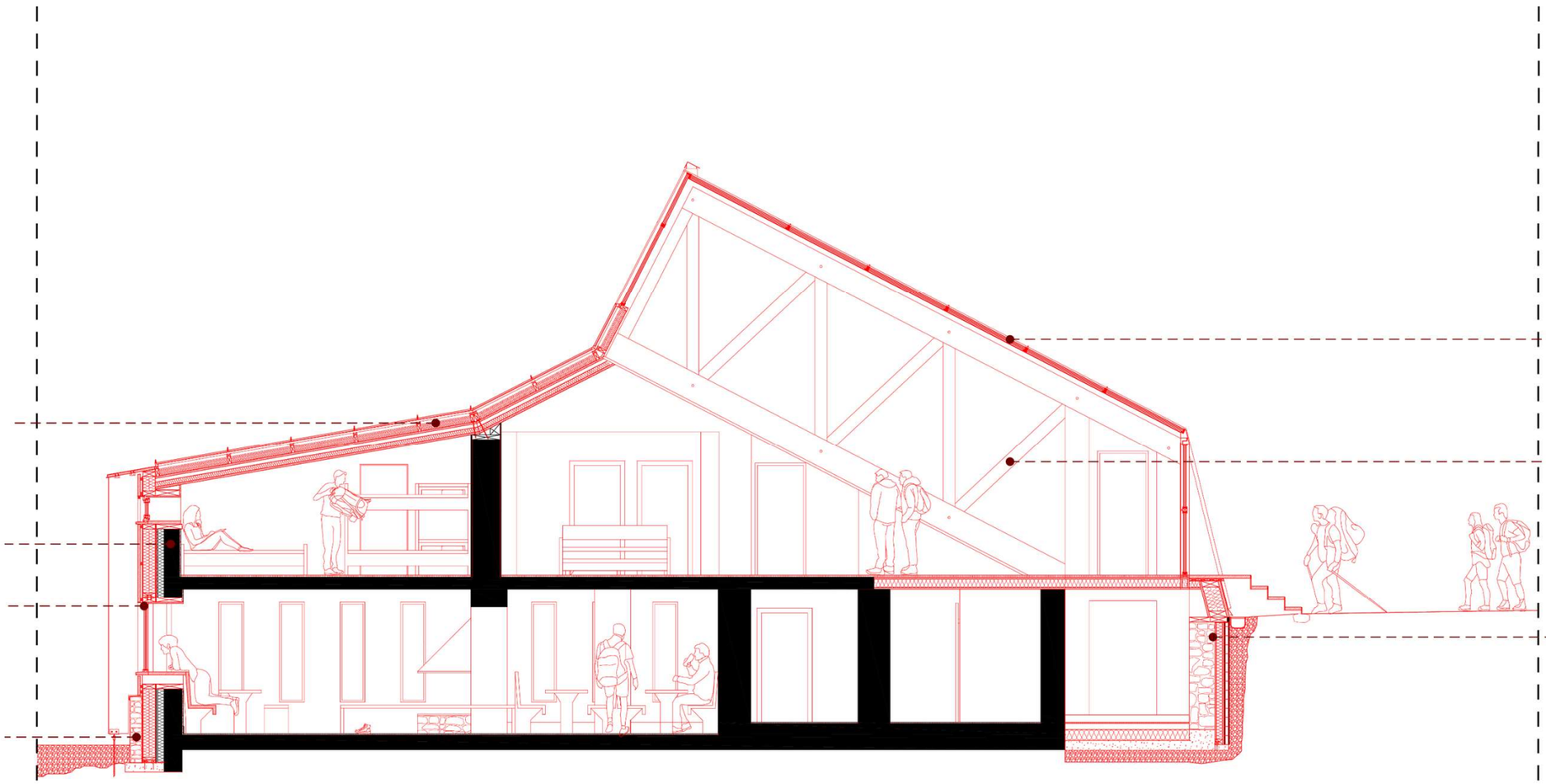
0 100cm 300cm



North Elevation

0 100cm 300cm

1:50
Full Section Detail.



1 In-roof sonal panels on renovated roof. 120mm natural wool insulation; 200mm Lignatur geometry surface elements.

2 Existing natural stone wall.

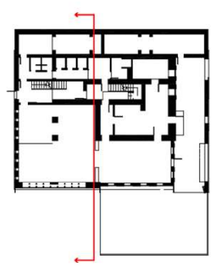
3 Prefabricated wall elemetns with Triple glazing windows and larch battens cladding.

4 Natural stone wall with metal coping for protection from melting snow.

5 1000mm triple glazing elements on circulation spaces.

6 180mm GLT Truss Frame Superstructure.

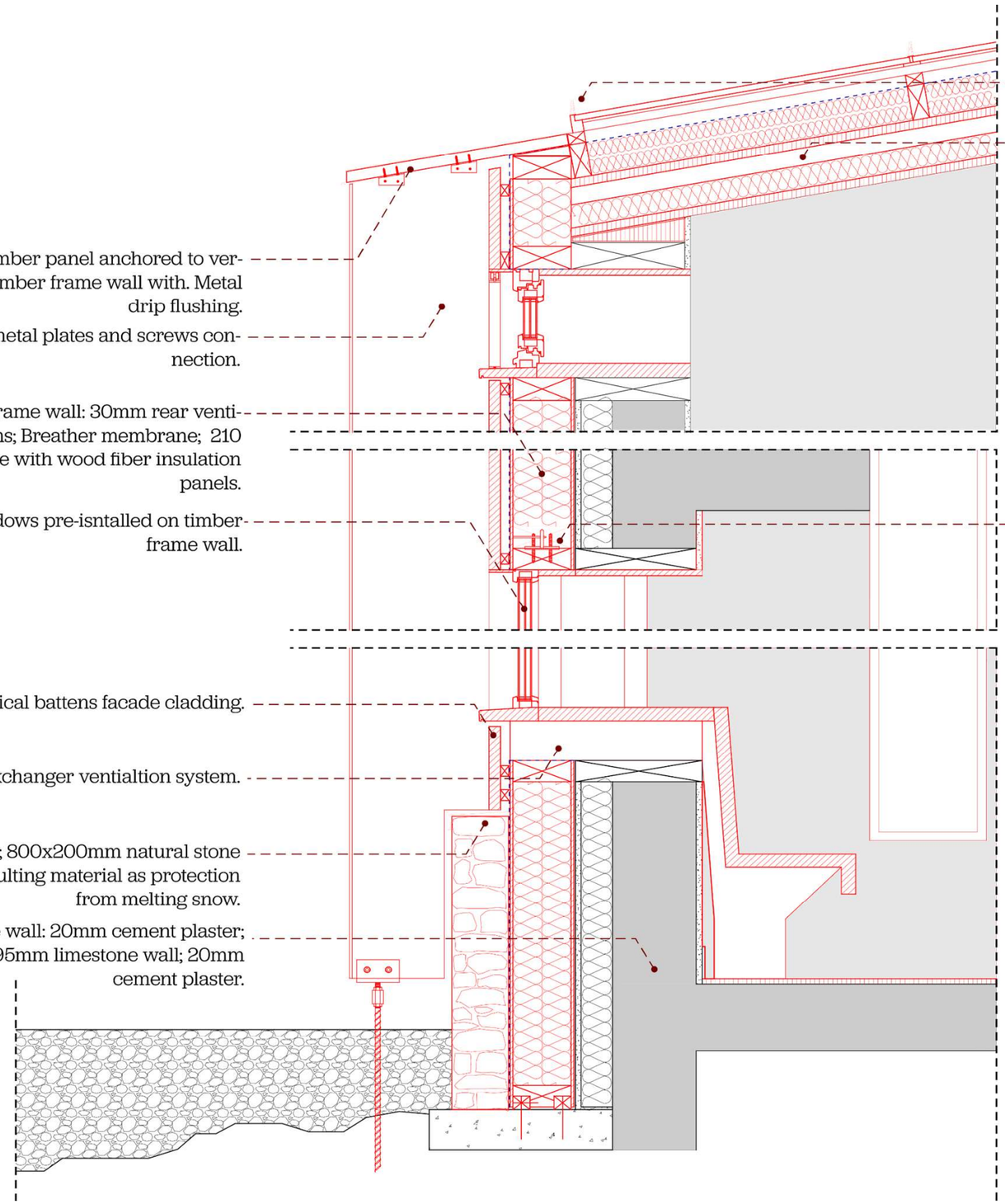
6 Insulated exterior wall built with excavation resulting material.

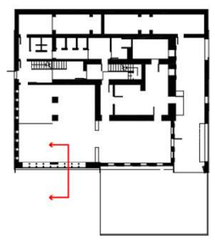


0 2m

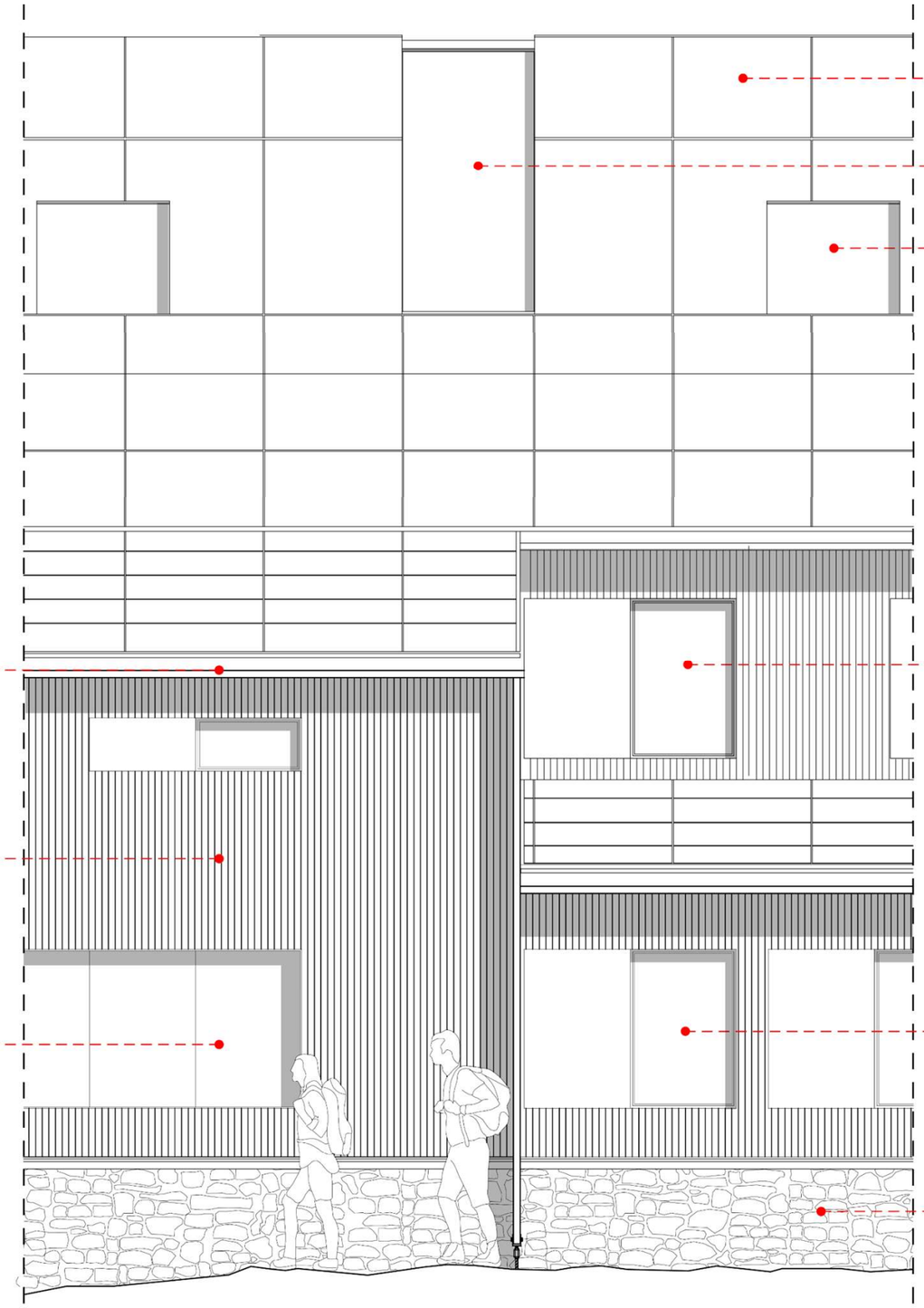
1:10

South facade detail.





1:20
Elevation Section Detail.



1 Metal drip flushing.

2 Vertical cladding of 5cm wide raw-cut larch battens.

3 720x80cm Triple glazing landscape window. 12x80cm glazing elements. Behind the glazing the wall is supported by 2 8x8cm timber columns with 80cm spacing.

4 In-roof intergated PV surface integrated with snow breakers.

5 100cm Triple galzing. Corridor skylights.

6 100cm triple glazing. Dorm windows.

7 80x120cm Triple glazing windows on prefabricated wall elements. Larch sliding shutter.

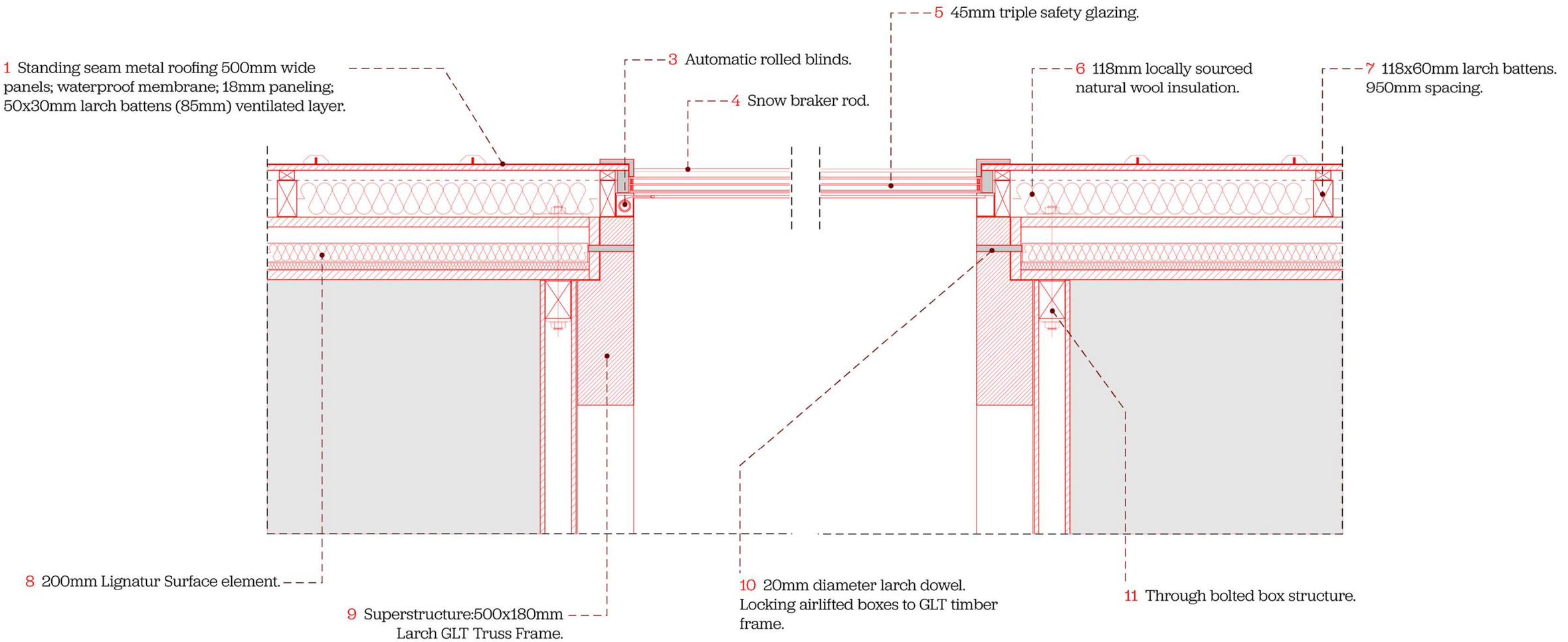
8 80x120cm Triple glazing existing windows. Added larch sliding shutter.

9 85cm Natural stone wall with metal coping for protection from melting snow.

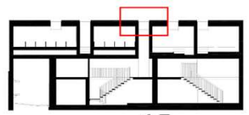
0 50cm 100cm

1:5

Roof-Superstructure-Corridor Glazing-Interior boxes Detail.

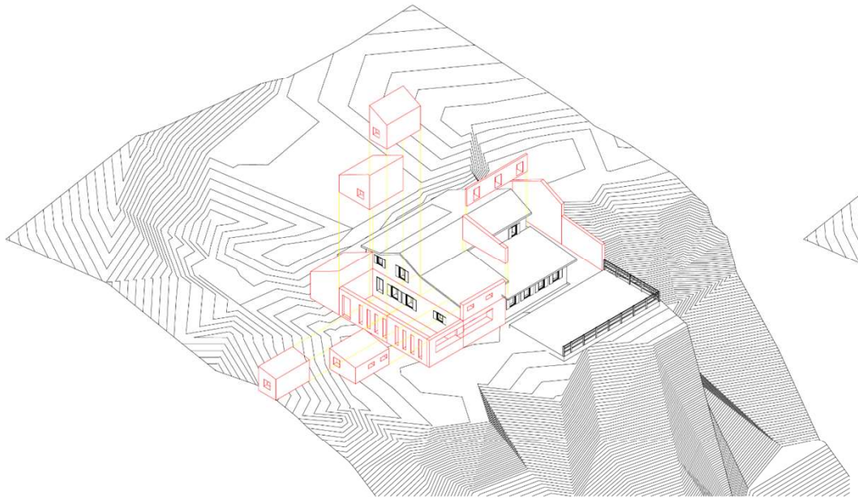


0 50cm

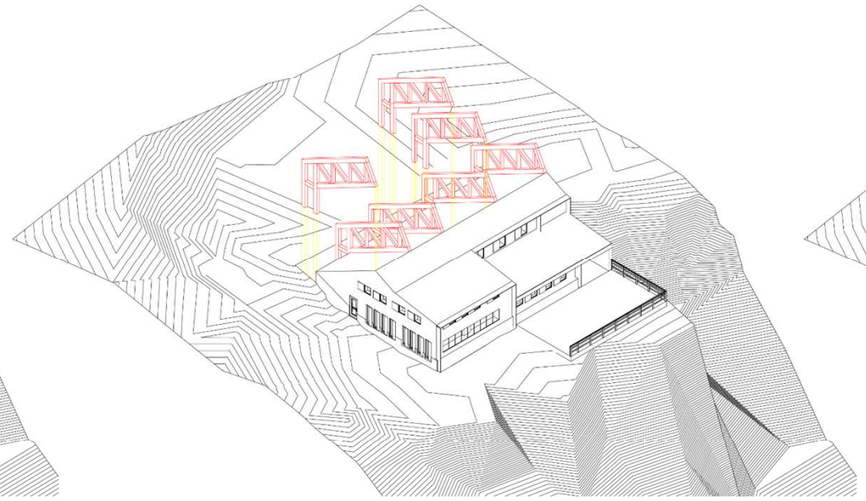


Assembly

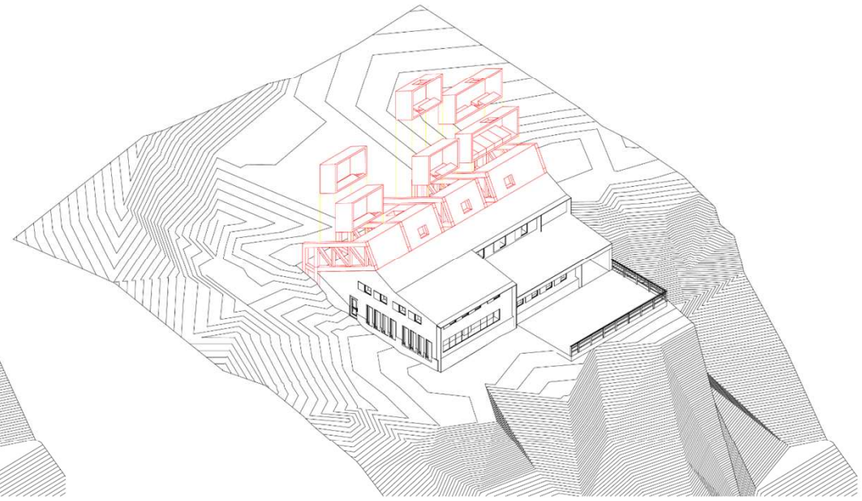
Renovation, Superstructure, Boxes assembly.



Prefabricated elements are used for the expansion and insulation of the existing refuge.



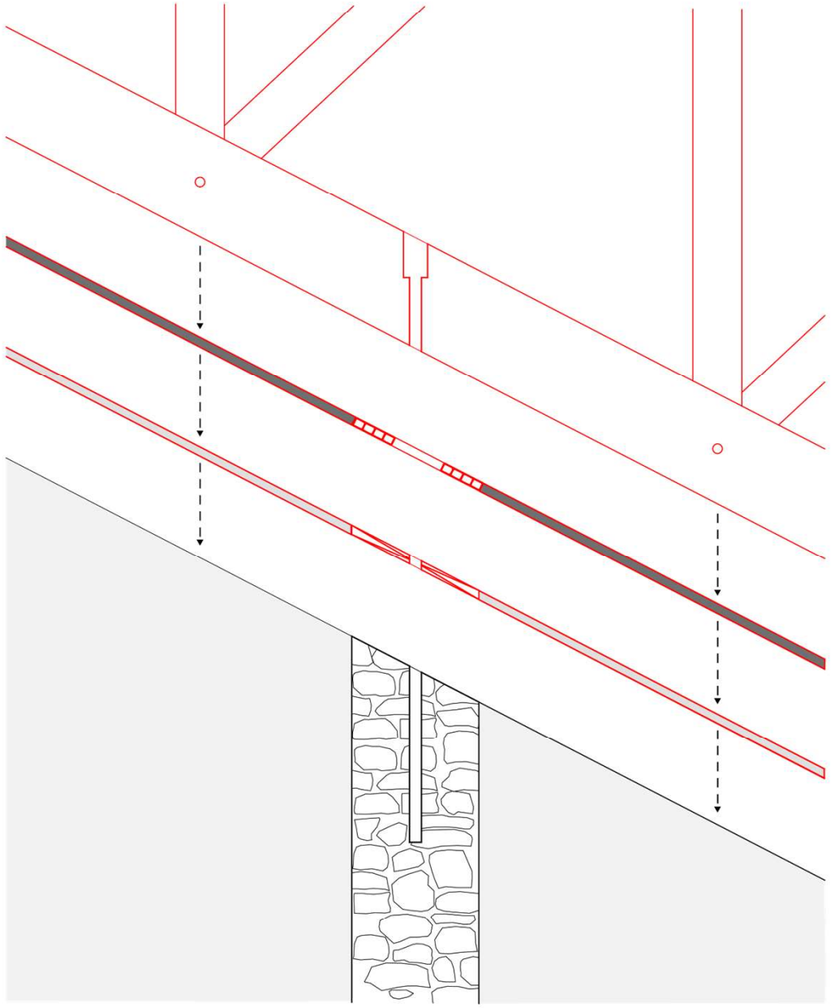
The superstructure is airlifted on-site.



The prefabricated boxes are airlifted and anchored to the Superstructure

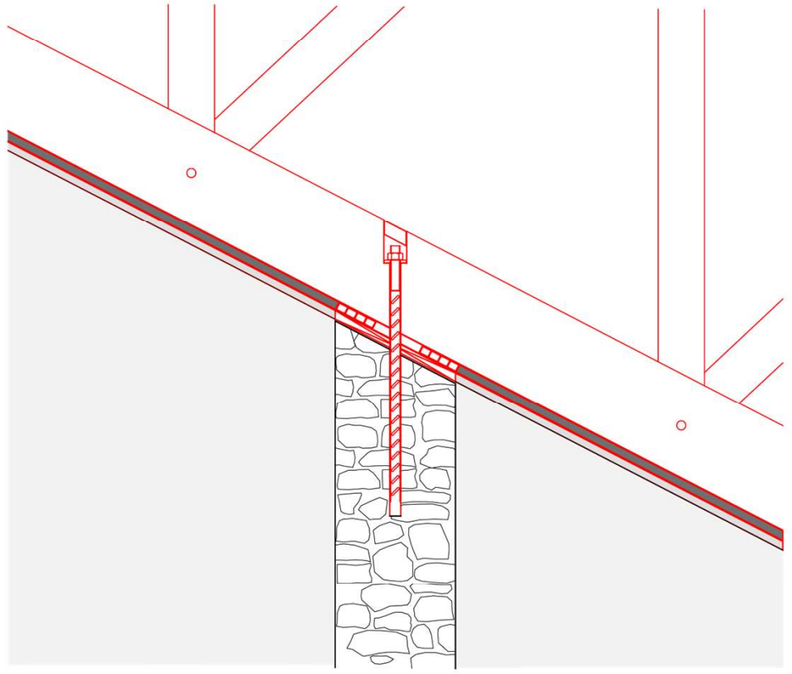
Assembly

Superstructure-boxes assembly.

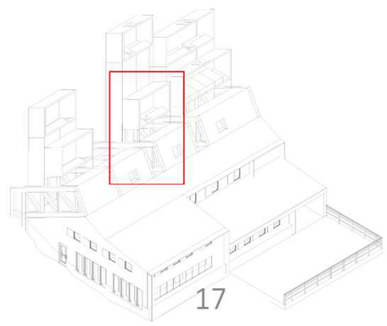


0 100cm

The superstructure is positioned above the exisitng walls and sealed with rubber gaskets.

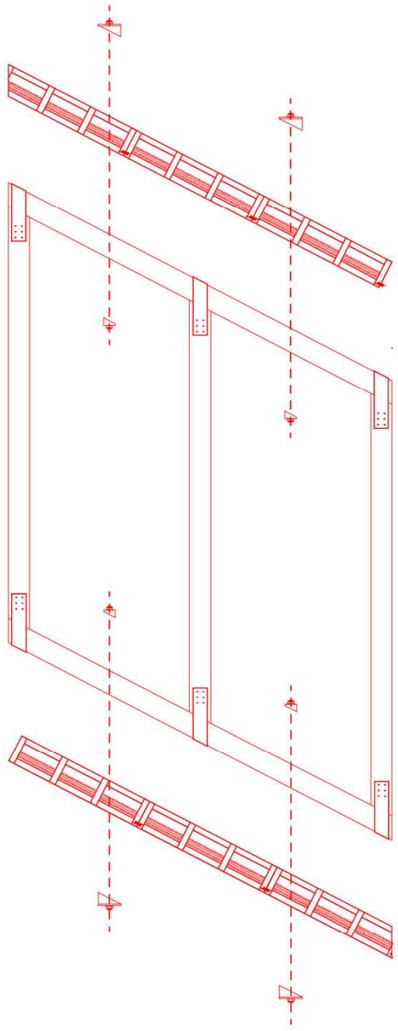


Superstrucuture and exisitng structure are connected through rebars and throughbolted.

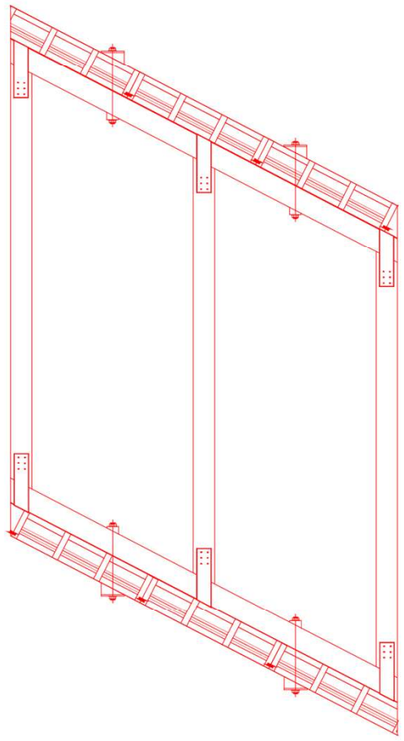


Assembly

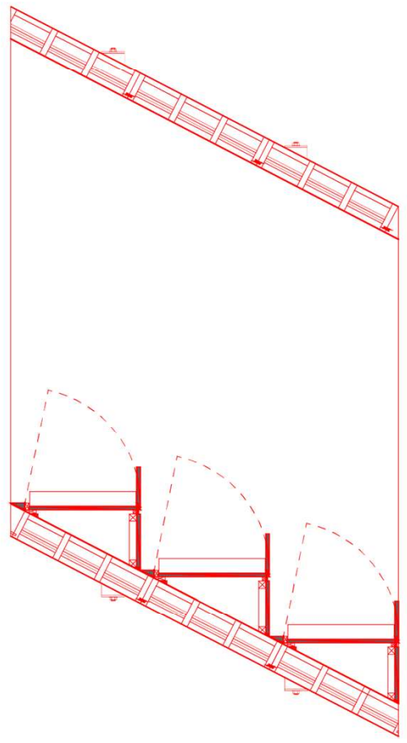
Boxes assembly.



Lignatur and timber frame wall pre-assembled.

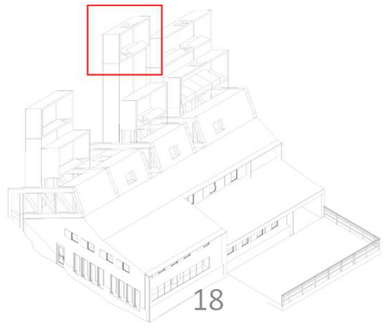


Through-bolted boxes delivered on-site.



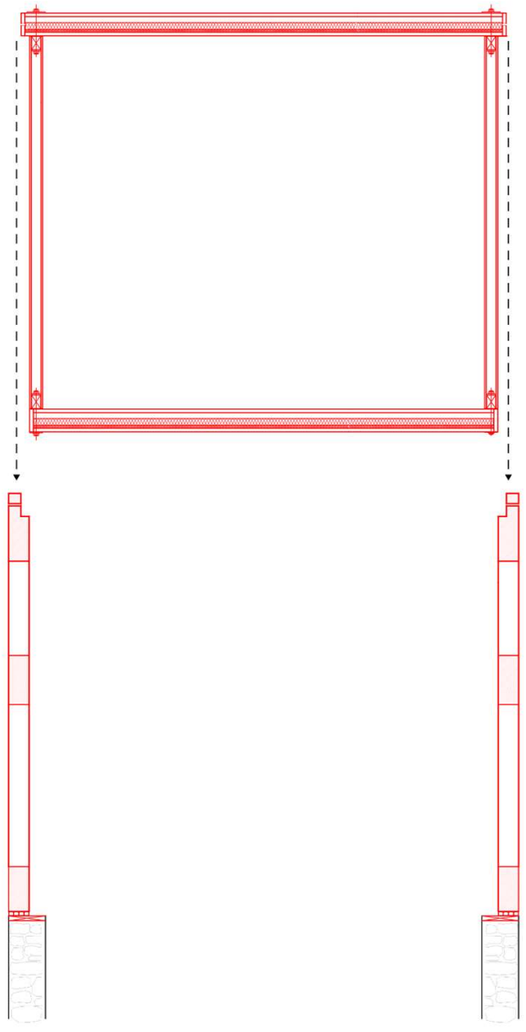
Interior space with sleeping berths and starage space for each guest.-

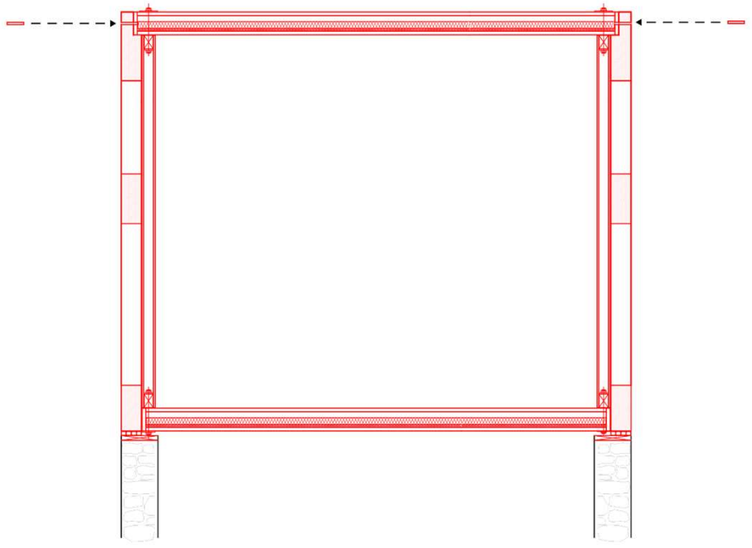
0 100cm



Assembly

Superstructure-boxes assembly.

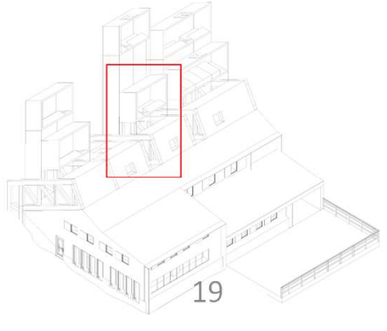




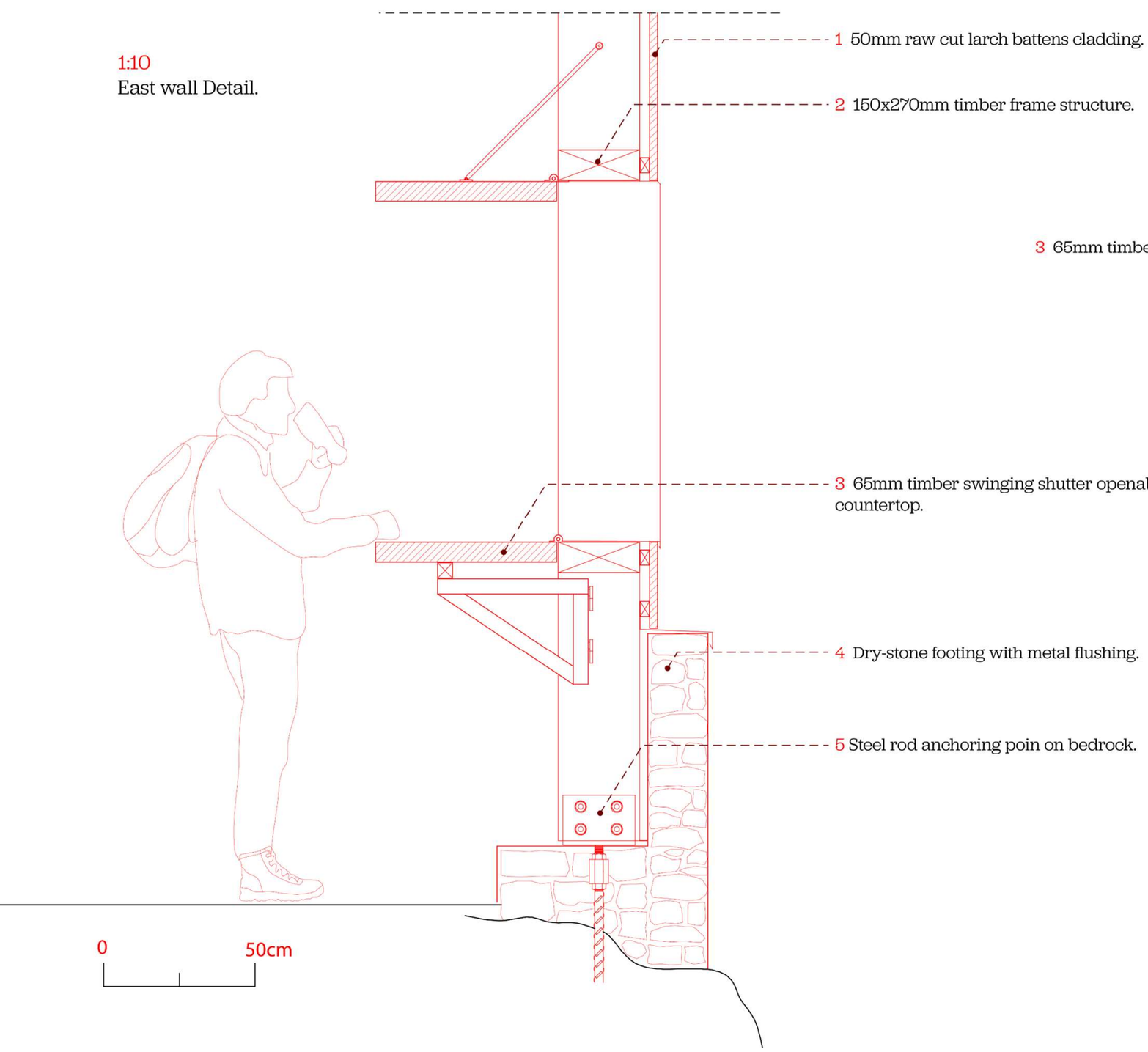
0 100cm

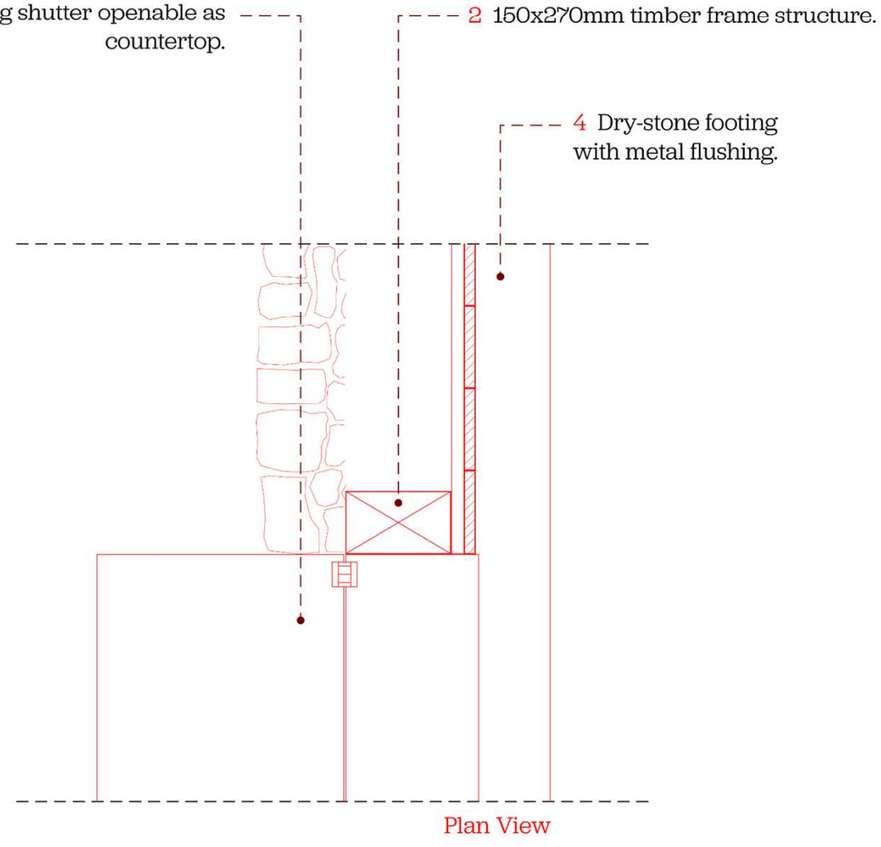
The pre-assembled boxes are lowered between the superstructure.

Boxes and superstructure are locked together through wooden dowels.



1:10
East wall Detail.





Plan View

Rifugio Carduc
2.297m