

commencement on site: 07 / 2008
 completion: 10 / 2009
 building costs: 12 mil CHF
 area: 3'363.44m²
 volume: 29'163.05m³
 curling / event use: 6-10°C / 20-24°C
 copper façade: 1'750m²

Waldhaus Arena Flims, Curling & Events

One of the most modern curling centres of Europe during wintertime, between April and December a multifunctional event location situated in the park of the 5-star Waldhaus Flims Mountain Resort & Spa in Flims Waldhaus, Switzerland.

Our aim was to deliver the highest possible technical standards for curling centres and creating an atmospheric place for large events at the same time.

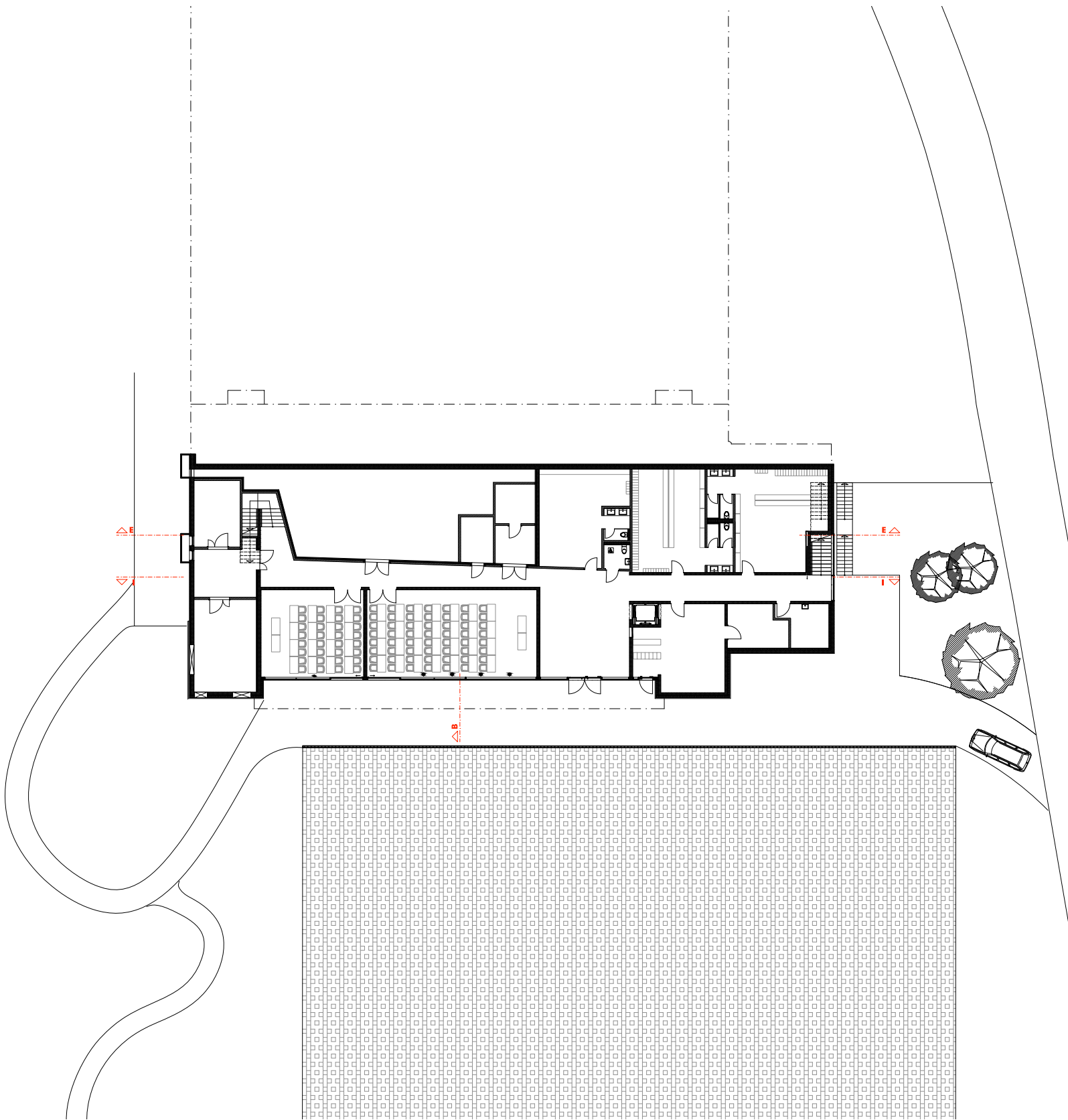
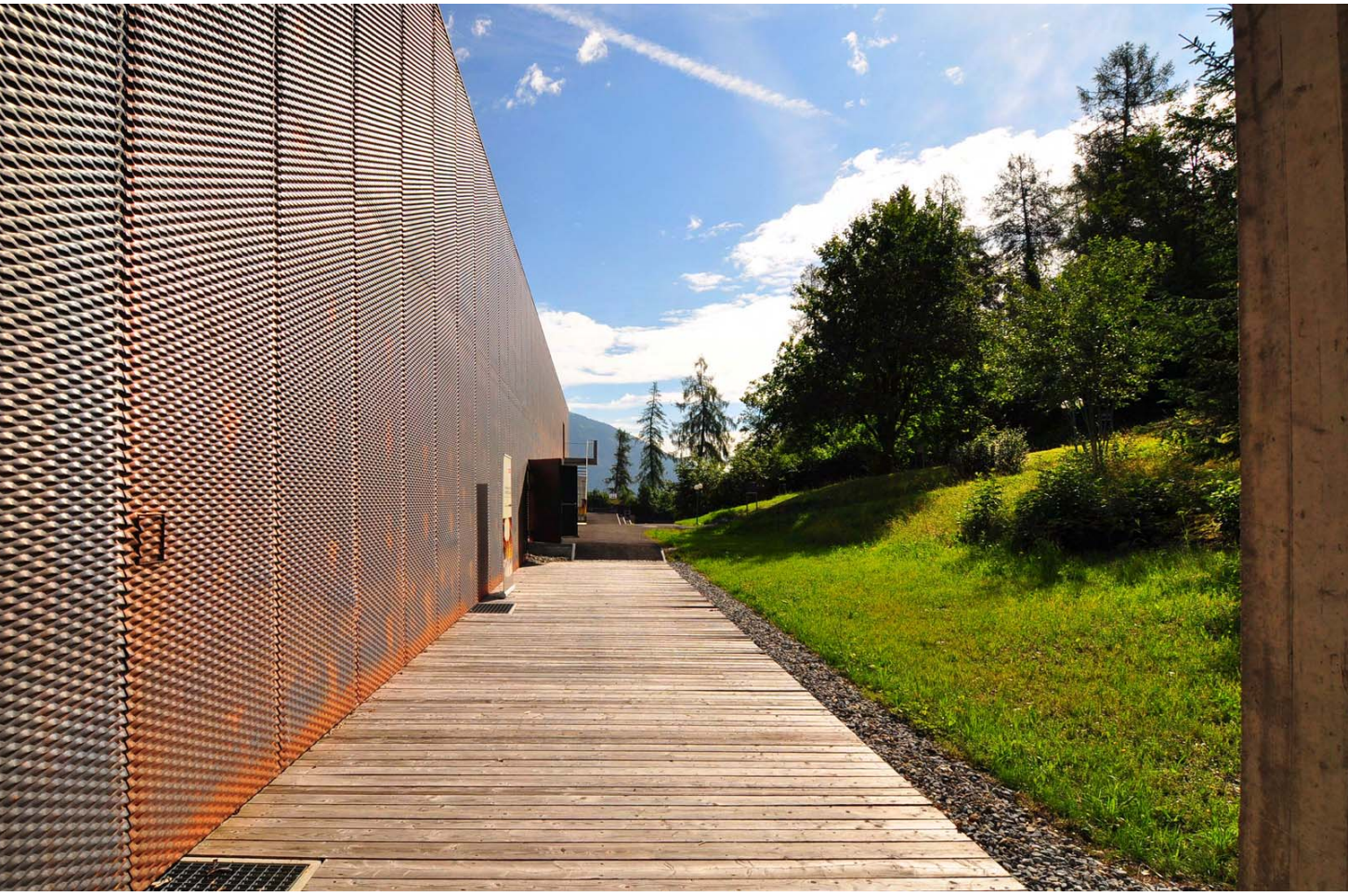
The old curling centre from the 60s with its four rinks did not suffice today's demands and international standards for curlers. Since the neighbouring tennis hall did not get the desired use, was insufficient for events and had to be modernised in the near future the idea of combining curling and event use by converting the old tennis hall arose.

The substantial building volume divides into a large centre building (cladded with TECU Classic copper bands) and lengthwise connected aisles on both sides (cladded with the TECU Net plates). The entrance, finished in concrete with its canopy on filigree columns and the glass façade is oriented to the street.

Guests are welcomed in the bright and spacious foyer with dark coloured terrazzo flooring, exposed concrete walls and elegant lounge furniture. From here all levels of the building can easily be accessed. A wide single flight stairway along the glass façade leads to the lower floor with comfortable seminar rooms, changing and shower rooms as well as technical installation and storage rooms.

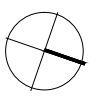
On ground floor level accessed directly from the entrance hall a modest, elegant restaurant offers fantastic views to the ice surface on one of its sides and Flims and the Flimsenstein mountain on the other. Hidden behind an exposed concrete wall and separated from the restaurant a bar with pub atmosphere surprises. The curler pub is fully clad with dark painted Swiss Pine wood and features a bar and lamp finished in copper to reflect the façade of the building.

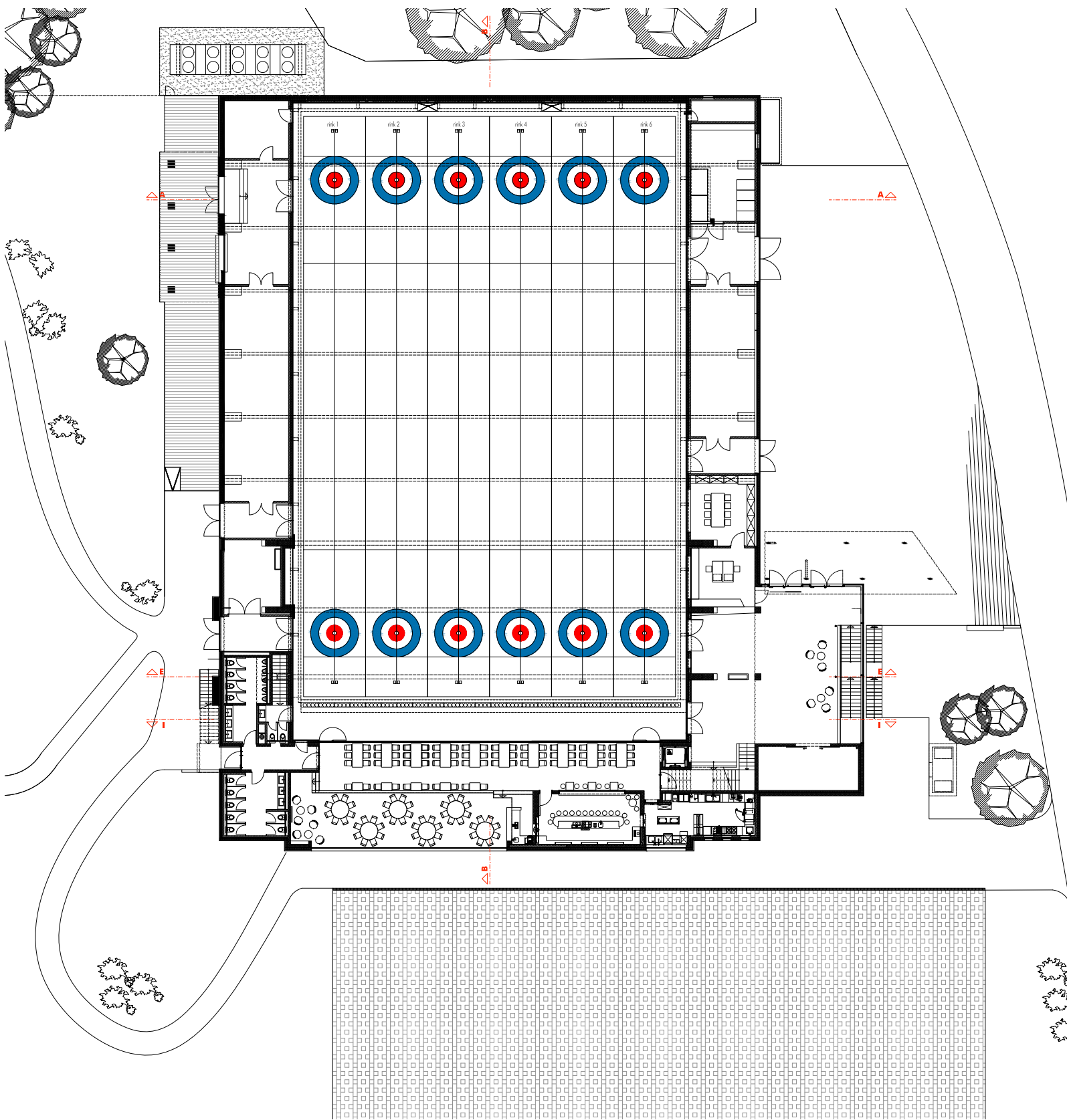
From the open fan stands at the upper floor one has a perfect view onto the rinks. All three floors are connected via lift and feature disabled access.



Lower Floor

0 5 10 15m

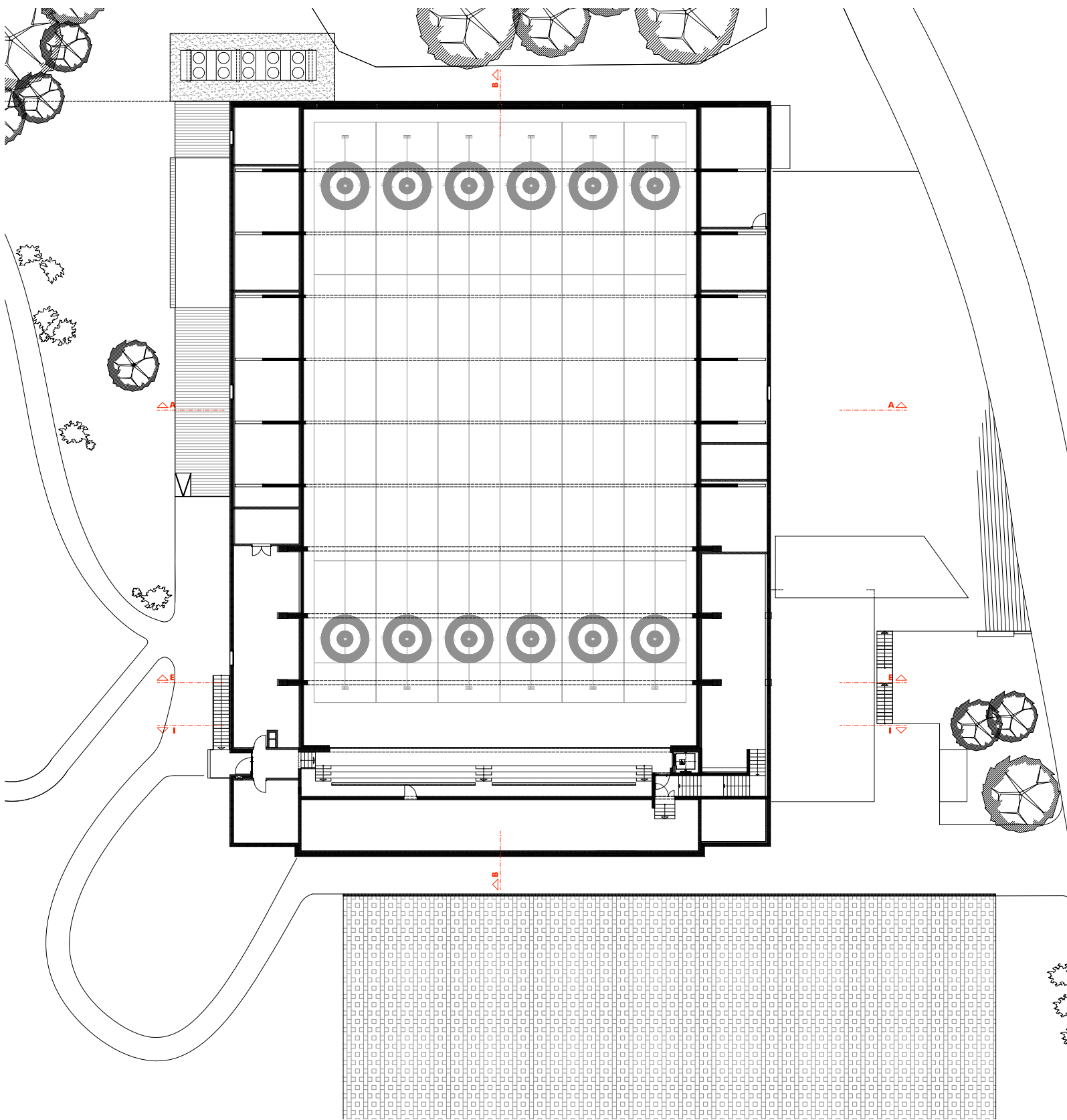




Ground Floor

0 5 10 15m

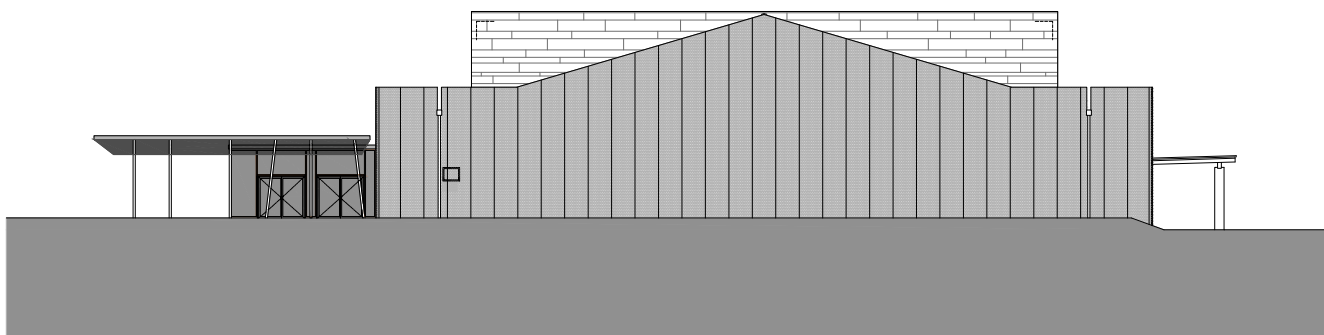
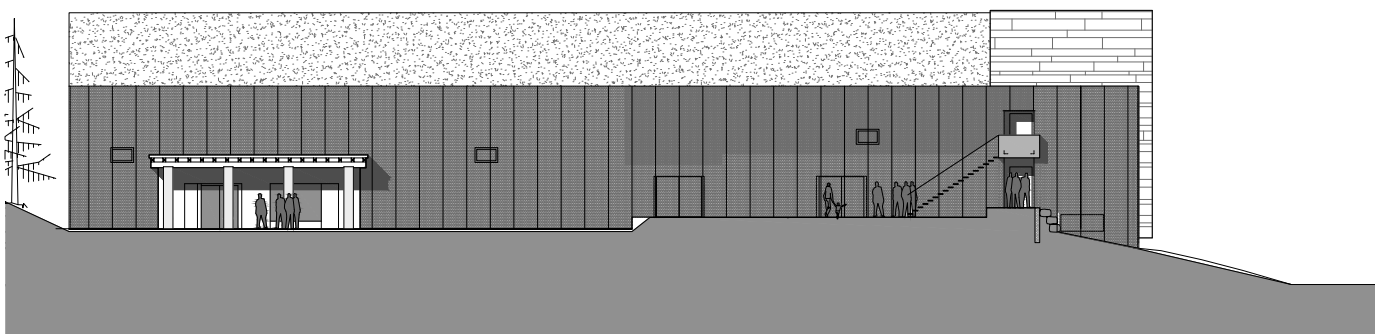
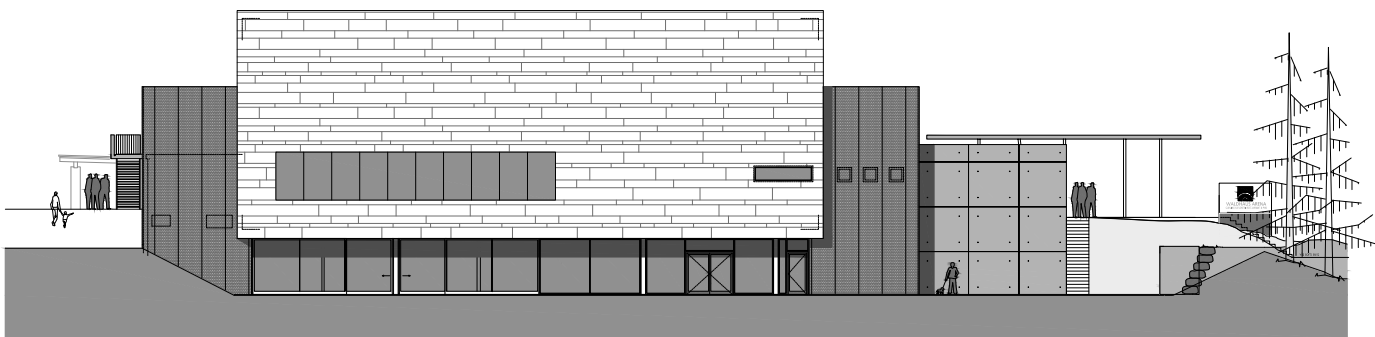
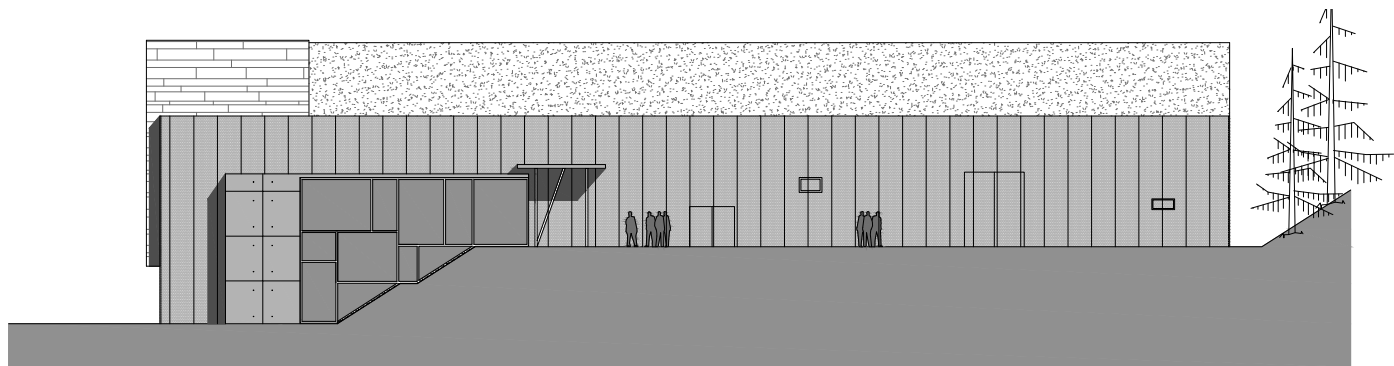




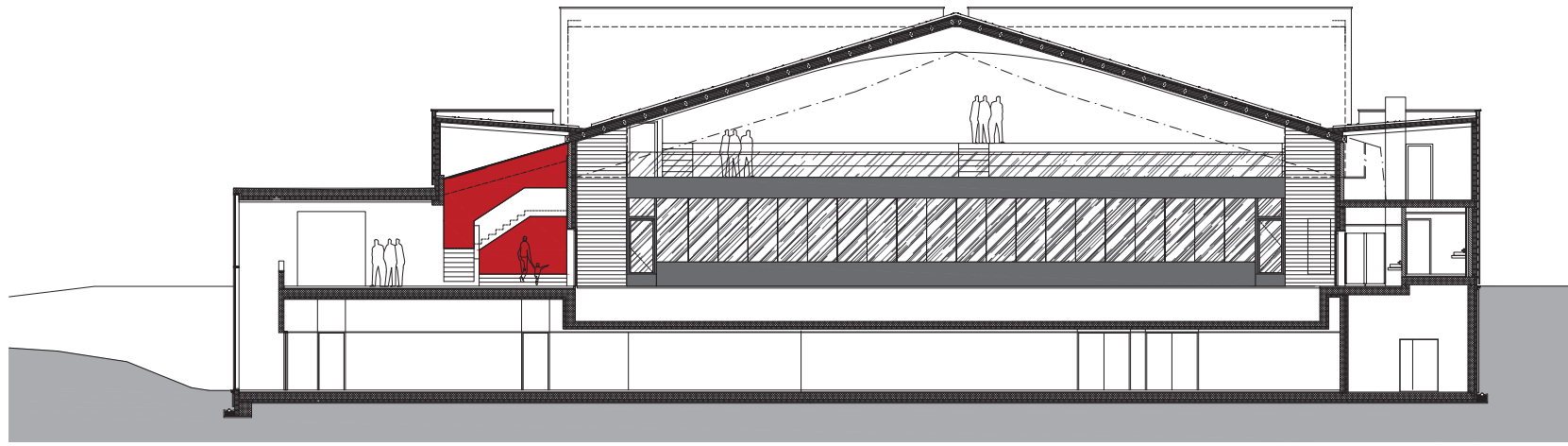
Upper Floor

0 5 10 15m

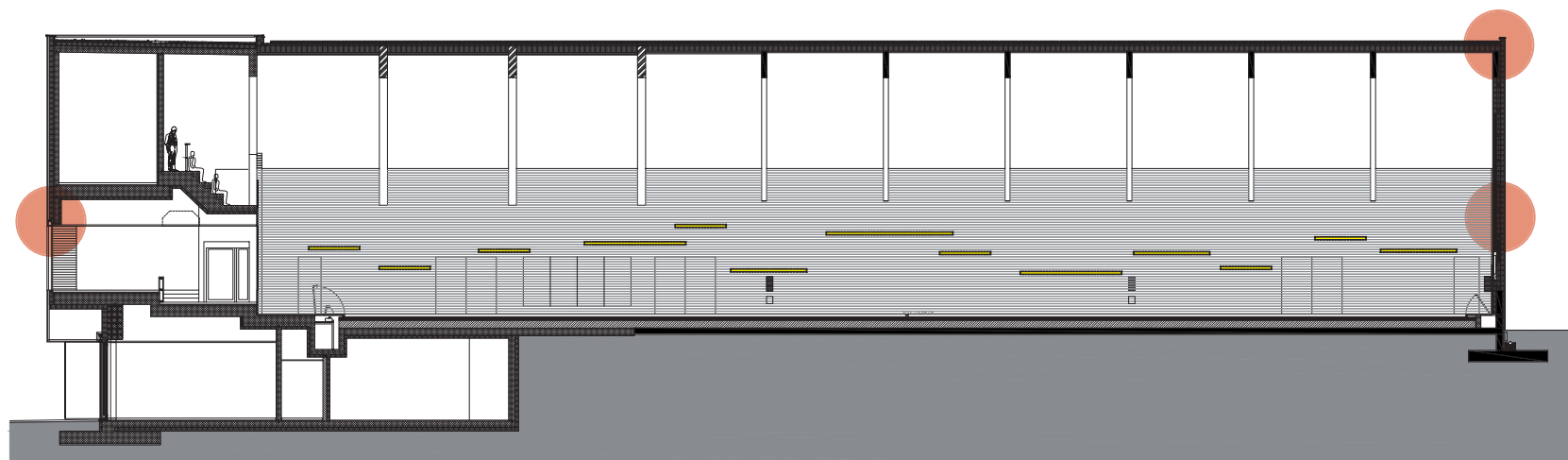




Elevations



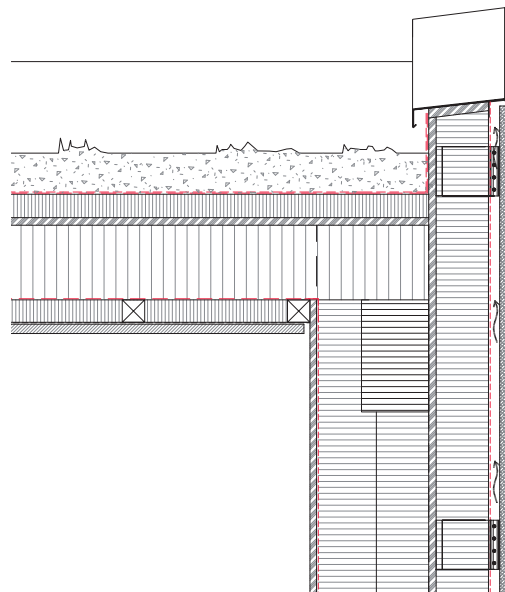
Section I



Section B

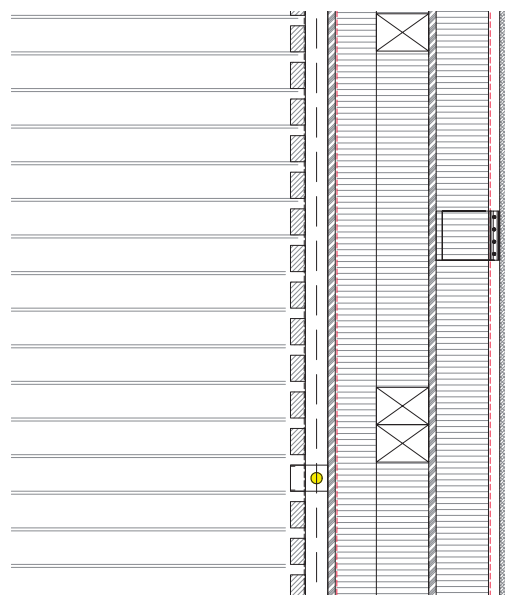
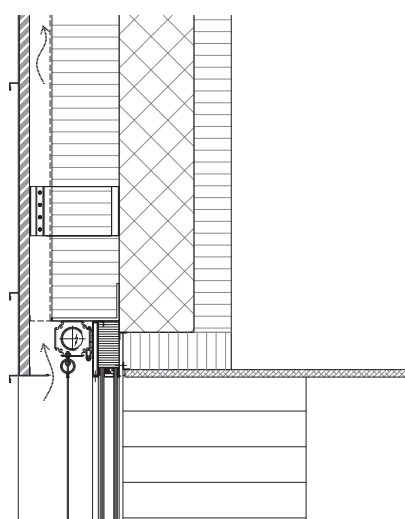
Thermal qualities of the facades

The constructions of external walls and roof have to comply with two extreme thermal situations: curling use at 6-10°C and event use at 20-24°C. We had to ensure that under no circumstance water vapour would condensate in any of the layers of the construction at those extremes. From the inside as well as from the outside Sisalex 500 vapour barriers were fitted, the outer barrier also working as a wind seal.



from outside to inside:
 TECU Net rib mesh, copper classic
 ventilation layer 30mm
 vapour barrier / wind seal Sisalex 500
 insulation: mineralwool 140mm
 oriented strand board 18mm
 squared timber framework: vertical 300mm, horizontal 140/100mm
 insulation mineralwool 300mm
 vapour barrier Sisalex 500
 oriented strand board 18mm, painted black

from outside to inside:
 TECU Classic, horizontal copper bands
 oriented strand board 27mm
 ventilation layer / battens 60mm
 wind seal
 insulation 180mm
 concrete 200mm



from outside to inside:
 TECU Net rib mesh, copper classic
 ventilation layer 30mm
 vapour barrier / wind seal Sisalex 500
 insulation: mineralwool 140mm
 oriented strand board 18mm
 squared timber framework: vertical 300mm, horizontal 140/100mm
 insulation mineralwool 300mm
 vapour barrier Sisalex 500
 oriented strand board 18mm, painted black
 existing squared timber vertical
 vertical battens 30/50mm (installation layer)
 fleece, black
 horizontal battens 70/40mm