



Peab Region North

Oversight of where we are currently building





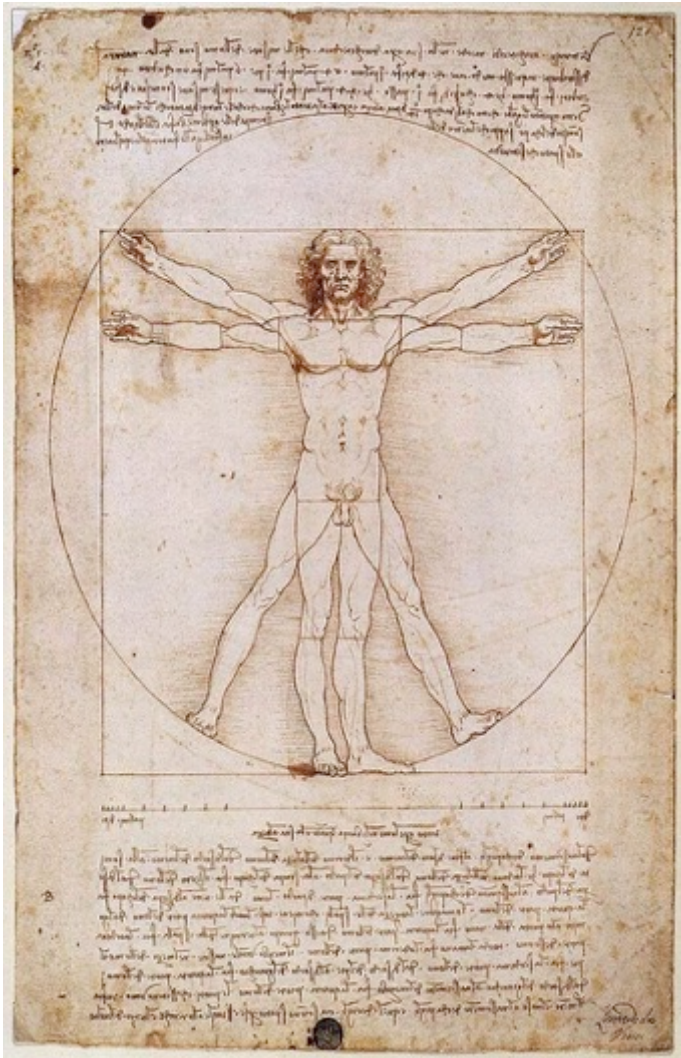
Hotel

BORGARFJÄLL

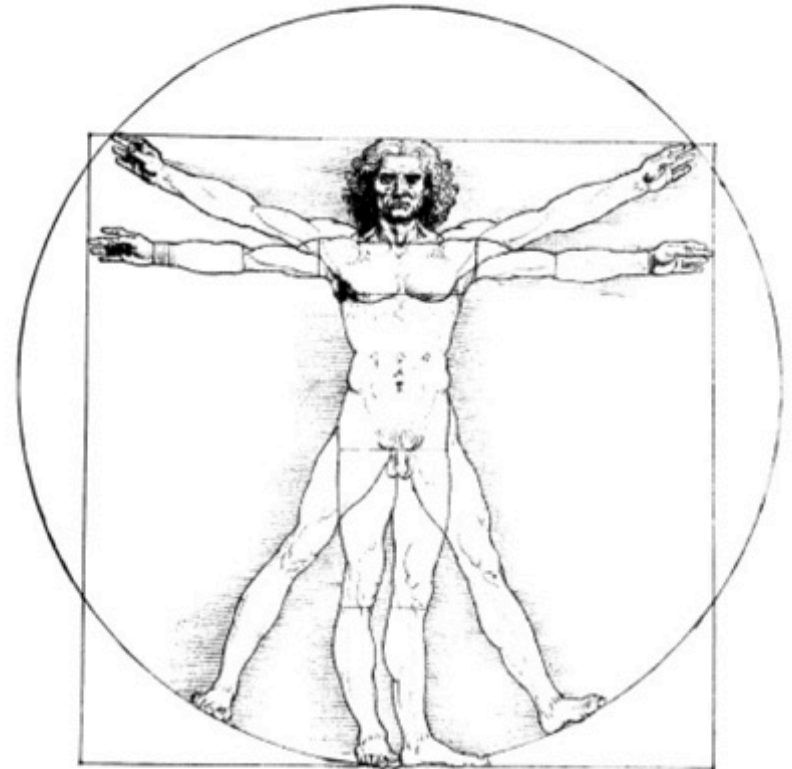
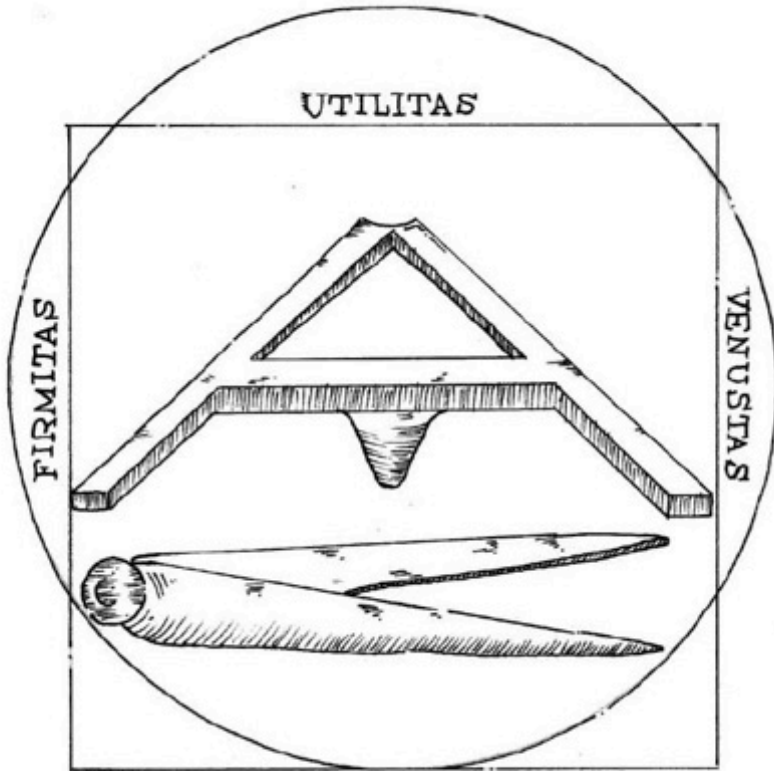


” Some houses last longer and ages more beautiful than others. But how do we build them and how can we afford to live in them?





How do you want to live?



SUSTAINABILITY

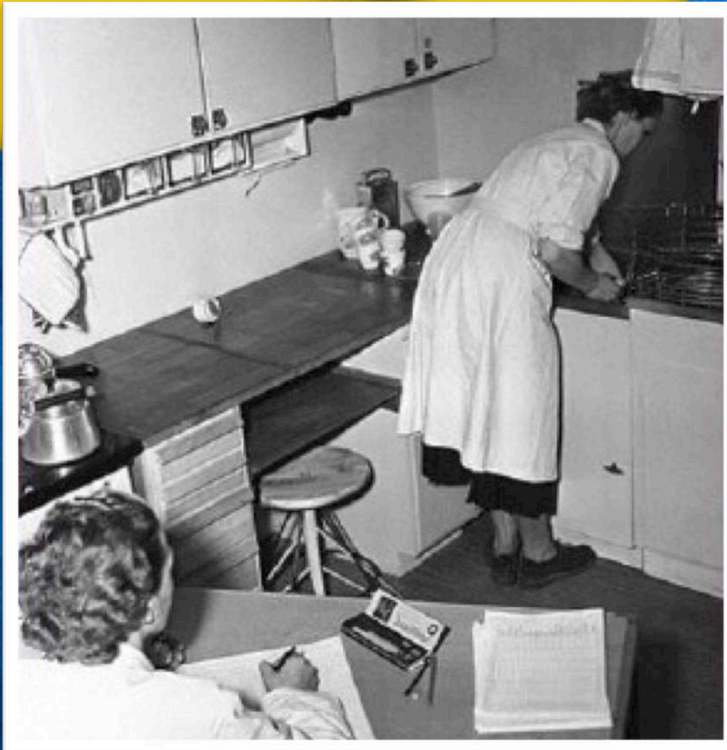


CREATION

FUNCTION

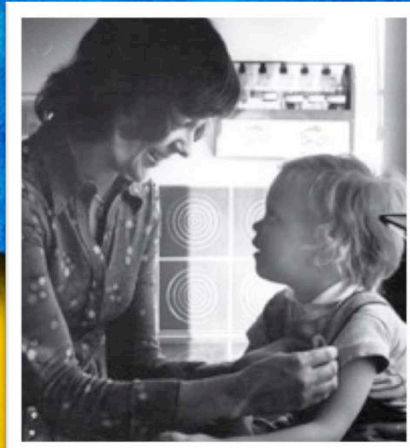
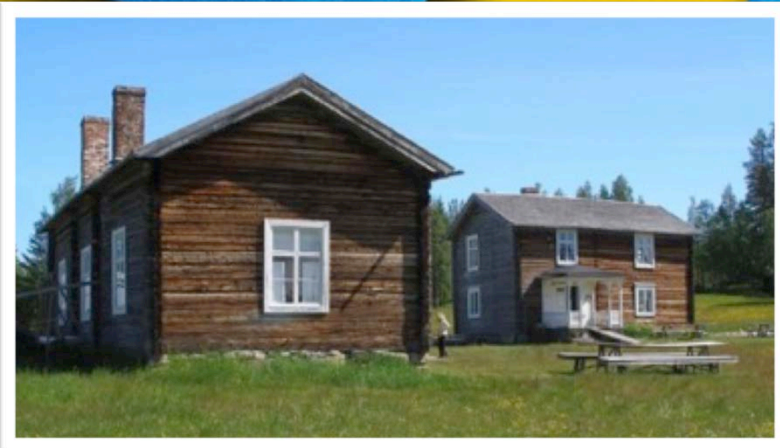
FUNCTION MEASURABLE VALUES

- Square meters
- Function measurement
- Availability
- Volume
- Energy
- Rent



FUNCTION

UNMEASURABLE VALUES

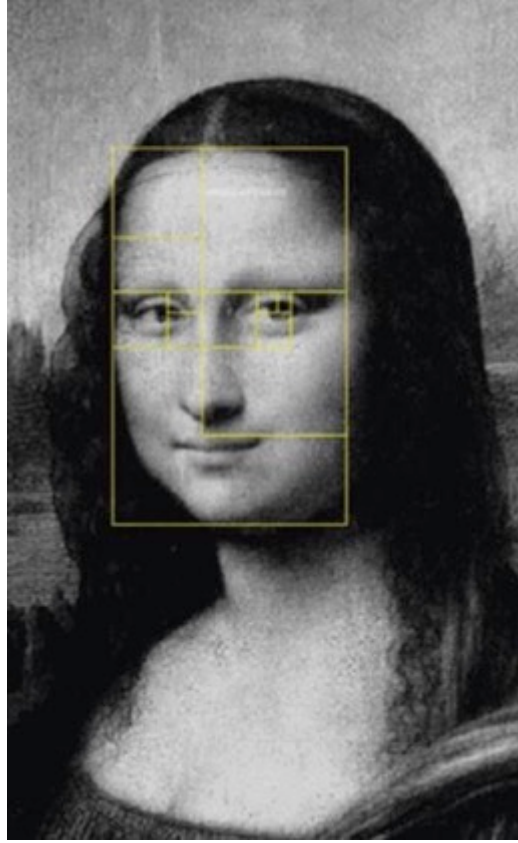


- Material and details
 - Alignment
- Degree of public/private
 - Rectangular
 - Movements
- Room organisation



BEAUTY

THE GOLDEN CUT



$$\frac{a+b}{a} = \frac{a}{b}$$

SUSTAINABILITY

When taking into account the total life span, the management stage occupies 70-80% of the total cost.



- Repairs of residential buildings costs an estimated 6 billion USD every year. (SCB, 2012)
- Any relocation in an apartment costs about 3000 USD (Bostads AB Poseidon)
- Good management is a competitive tool to keep the tenants
- Focus on management has gone from technology to individual



How shall we afford to live?

CALCULATION METHODS

CALCULATION METHODS

SUSTAINABILITY

Starting point in the user
and revenue drivers



Starting point in the
technical solution and
cost drivers

Costing in early stages

SUSTAINABILITY



- KEY FIGURES
- EXPERIENCE VALUES
- ASSUMING CONDITIONS
- SENSITIVITY ANALYSIS

Investment assessment

SUSTAINABILITY



Project cost < Market value

= OK to invest?

Project cost > Market value

= Haggle project cost?

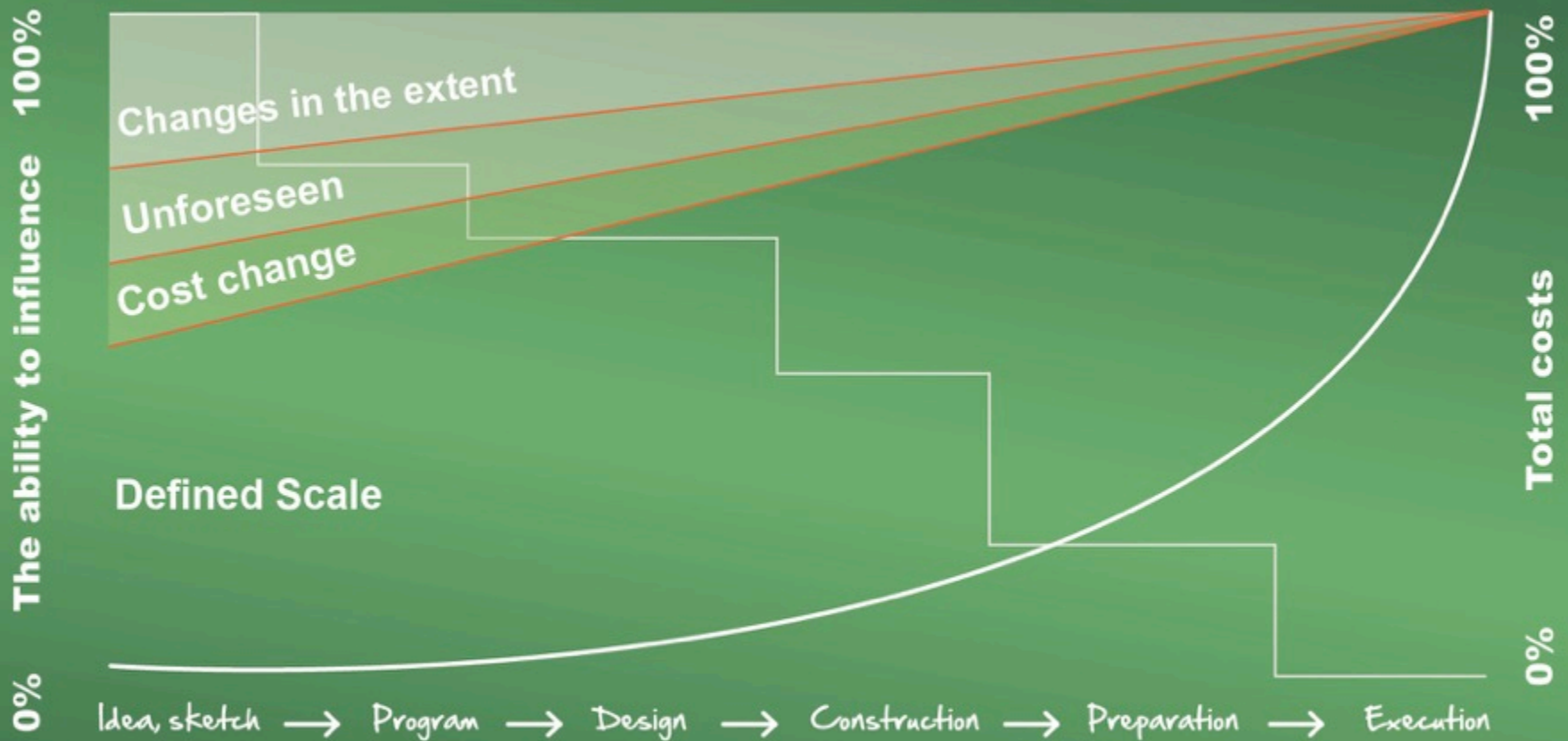
Key figures

SUSTAINABILITY



- RESIDENCES – Living area, Living area/gross area
- OFFICE PREMISES – Office area, Office area/Living area
- SCHOOLS – LOA/pupil, UMA/pupil
- HOTEL – number of beds, room size
- HOSPITAL – number of hospital beds
- ARENA – number of seating places

Project costs - Impact chart



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31 HUS FRÅN FINLAND I ÖSTER TILL KANADA I VÄSTER



SUSTAINABLE BUILDINGS IN A COLD CLIMATE

31 BUILDINGS FROM FINLAND IN THE EAST TO CANADA IN THE WEST

REDAKTÖRER/EDITORS ULF NORDWALL & THOMAS OLOFSSON

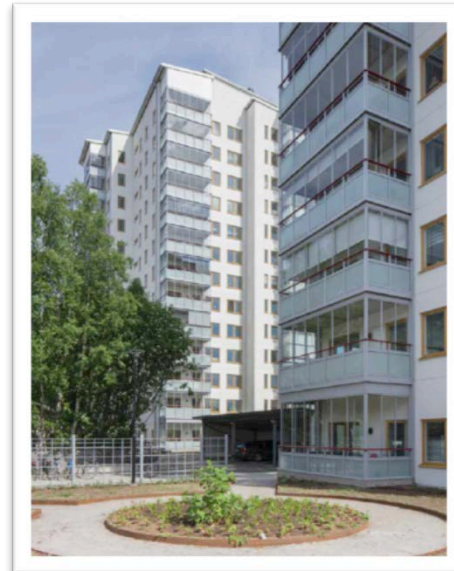




Landmärket, Skellefteå

(ULF NORDWALL)

” *The goal is to create more homes with low energy use and a safer environment in the city’s central areas.*



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QB Tromsø

(OSTEIN RØNSEN)

” *A geothermal plant with 3,600 drilling meters provides energy for the building during the winter months and the potential for cooling in the summer.*



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Lågenergihuset i Sisimiut

(ERIK MØLLER)



” *The house was designed to optimize framework energy use with reduced heat loss and an orientation to exploit the sun.*

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Testa Produce (JOHN KOLB)



” *The building features numerous sustainable design elements such as a 70 m tall wind turbine generating roughly 30 % of the building’s power, and a 1 acre vegetated green roof preventing rainwater runoff, releasing oxygen re-sulting in cleaner air, insulating the building, and decreasing heat waste emissions.*



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Pudasjärvi Log Campus (KRISTIAN JÄRVI)



” *A timber structure was selected to prevent the problems found in the old buildings and to guarantee the indoor air quality.*

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Villa Sivakka (LAURI LOUEKARI)



” *Building with logs is a great advantage, providing the appropriate indoor climate and all the while binding hundreds of years of carbon in the heavy walls.*

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Radiomasten, Luleå (BENGT AILI)



” All the one-story complementary buildings have sedum roofs for better water management and a more pleasant environment.

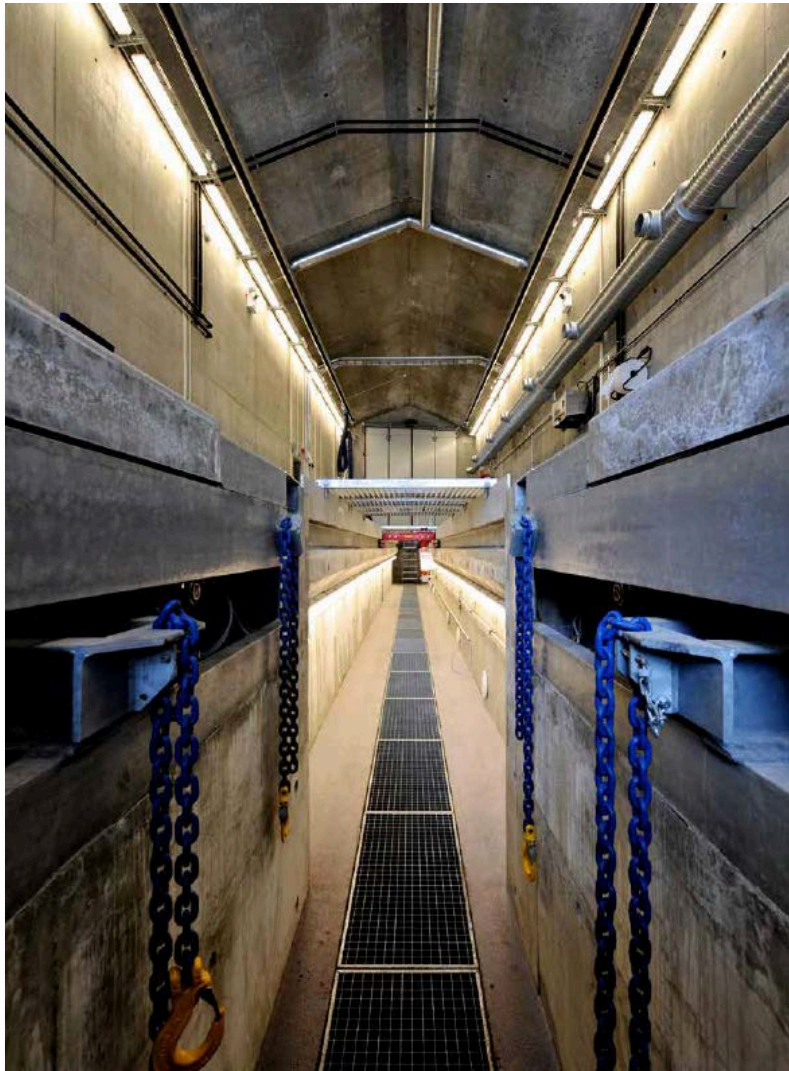


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Gullesfjord weight control station

(EINAR JARMUND)

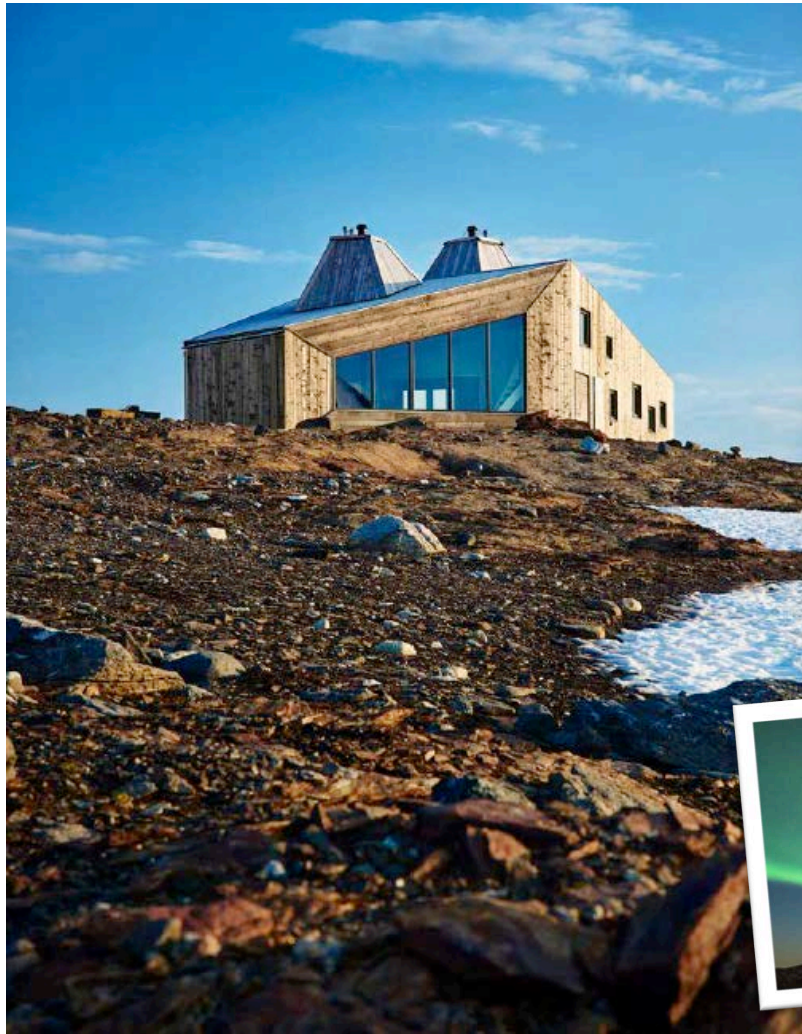


” *The building is fitted out to measure truck weight, accommodating the projected increase in heavy load transportation to the region.*

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Rabothytta (EINAR JARMUND)



” *The façade consists of carved coarse wood details with unplanned surface coatings, treated with ferrous sulfate to a gray natural character.*



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Haparanda Tornio Resecentrum

(ANJA GEIGANT)



” *The building will be able to age in material, color, and shape year after year without being perceived as deteriorating.*

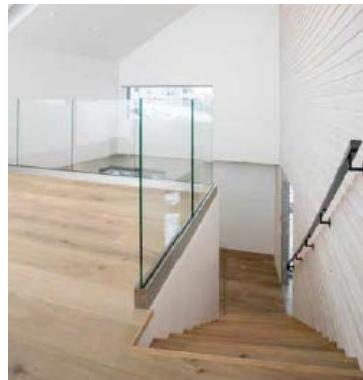
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Visthúsið (SIGURÐUR EINARSSON)



” *Mixed use of materials and a split building mass were part of the masterplan demands.*



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Garaget, Umeå (JOHANNA OLSSON)



” Recycling is the main theme here in terms of sustainability: recycling of a place, a building, and its building components.

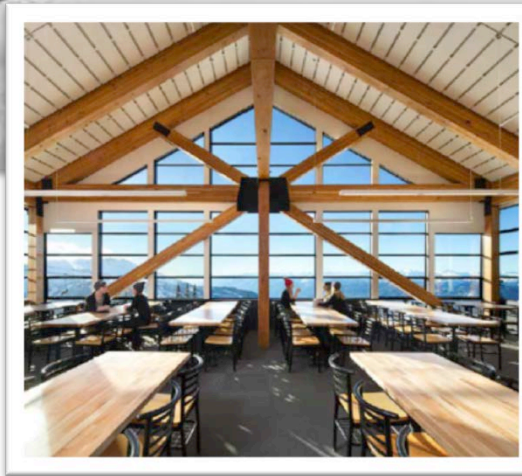


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Whistler Rendezvous renovation

(MICHAEL GREEN)



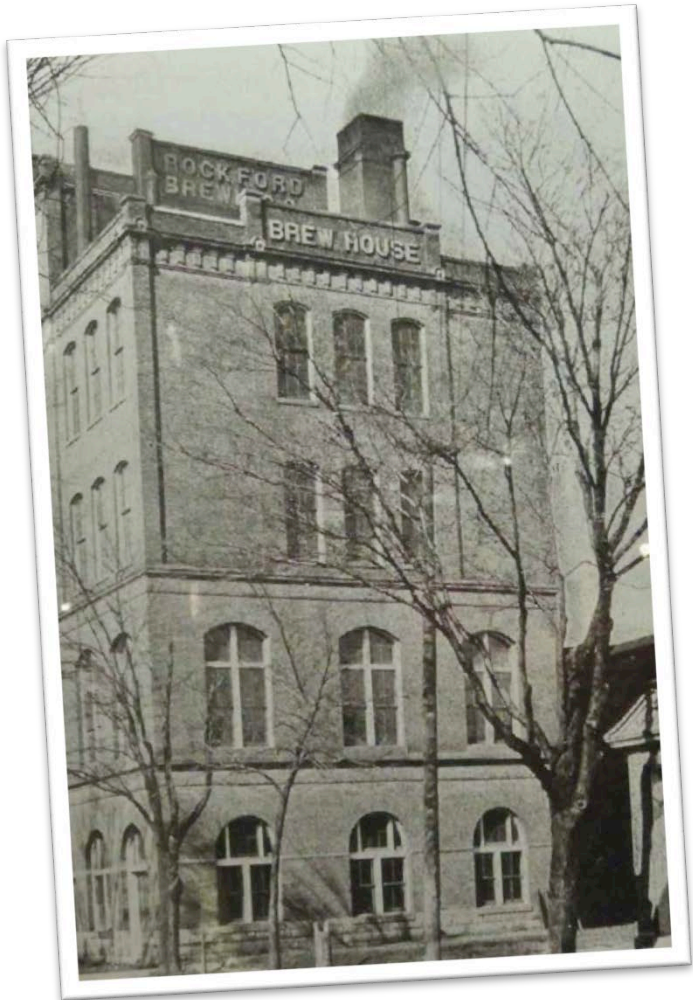
” *The renovation successfully reconfigures existing program functions to improve flow, thereby reducing congestion.*

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Prairie Street Brewhouse

(GARY W ANDERSON)



” Reuse and the renovation of the building began in 2010 and restored its unique architectural features like the tower, former bottling house, malt room, and ice cellar.

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Villa Valtanen (LAURI LOUEKARI)



” *The immediate surroundings contain standing, dead pine trunks, the scars of old forest fires, and fine glacial boulders.*

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Fiskevistet (ULF NORDWALL)



” The site and the characteristics of the items in the exhibition, along with the expectations of the building, meant that tradition and modernism were forced to consolidate and find balance.



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Láddjujávri (ULLA ALBERTS / HANS MURMAN)



” *The restaurant is a warm and cozy shelter after a day in the mountain scenery. The round shape is in the classic Sami tradition, with small windows encouraging togetherness and conversation.*



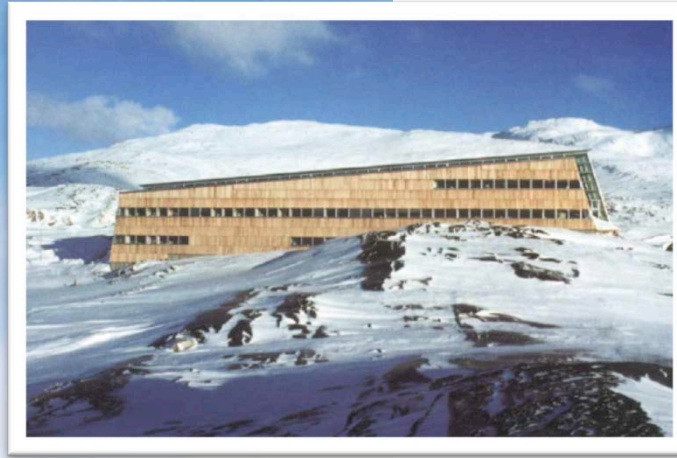
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Greenland Nature Institute

(HENRIK RICHTER DANIELSEN)



” *The building is located on a mountain range in the Siaqqinneq area outside Nuuk and provides a comprehensive and expressive framework for the department’s work with Greenland’s environment and nature.*

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Audain Art Museum

(JOHN AND PATRICIA PATKAU)



” *The form and character of the building and interiors is deliberately restrained. The building itself is understated in its use of local materials, consistent with its landscape.*

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Kivikkokangas (PIA KROGIUS)



”Energy efficiency was addressed by the location of space units in relation to the solar flow and a quadruple building body.



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Icehotel 1.0 (YNGVE BERGKVIST)



” *The ice hotel in Jukkasjärvi is built with natural ice, taken directly from the Torne River. The hotel is rebuilt every year.*



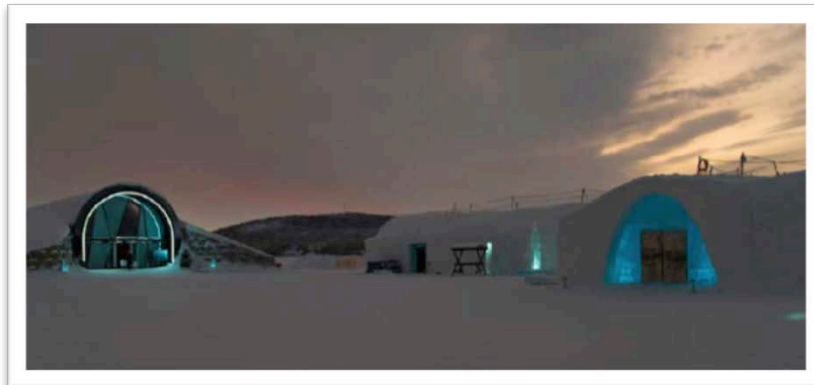
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Icehotel 2.0 (HANS EEK)



” When winter comes, this permanent ice experience becomes part of the classic Icehotel, which is about three times bigger in surface area.

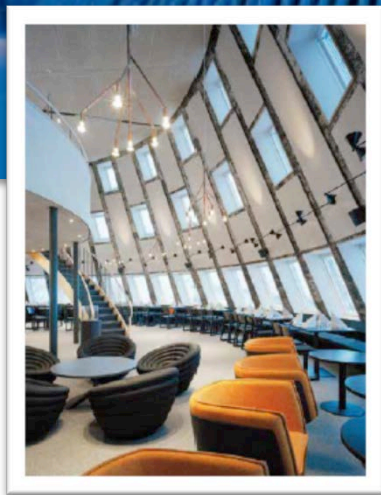


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Restaurang Tusen, Ramundsberget

(ULLA ALBERTS / HANS MURMAN)



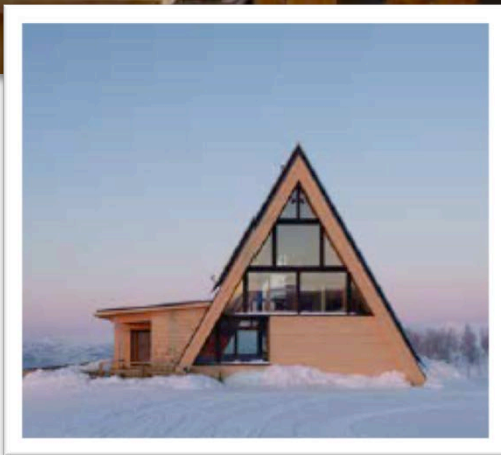
” *The façade material is inspired by, and a product of, the surrounding nature: birch logs stand like a huge protective screen against the icy Nordic winds.*

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Restaurang Björk, Hemavan

(HANS MURMAN)



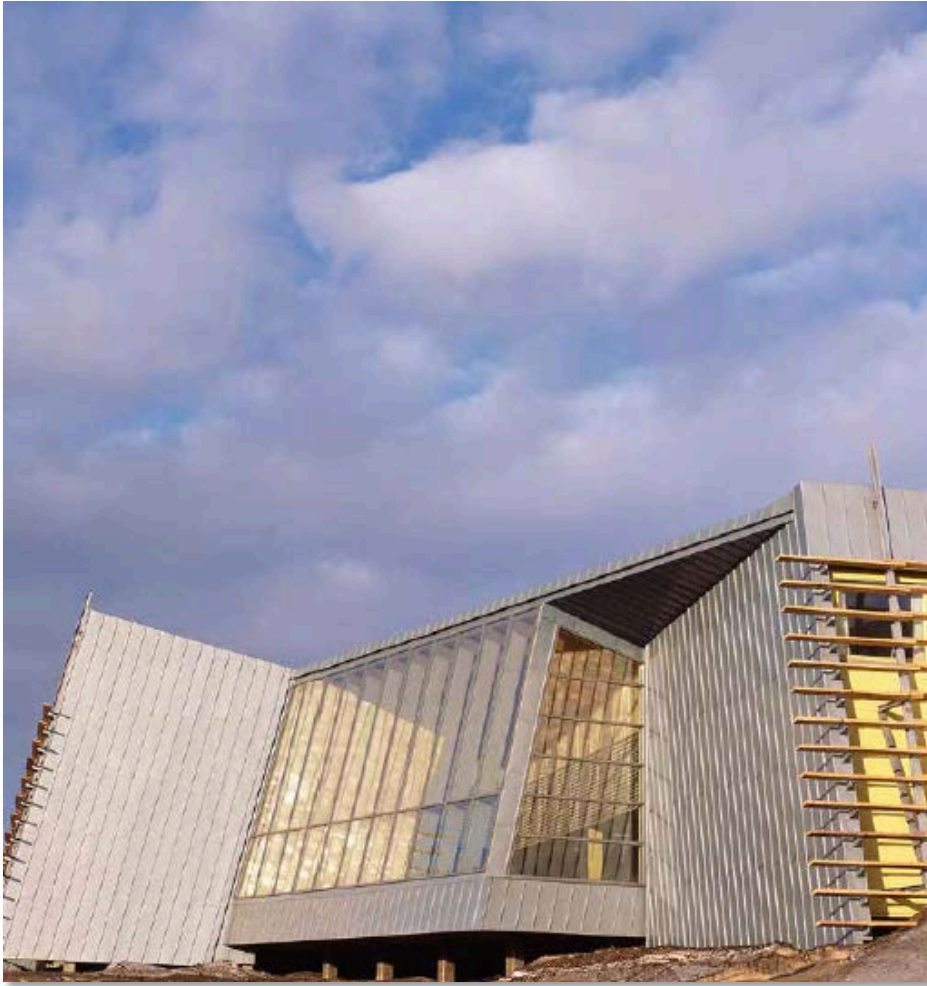
” *The glulam beam structure protrudes from the roof form, highlighting the generous dimensions of the building by allowing these beams to be visible in both the exterior and interior envelope.*

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Administration building for Governor of Svalbard

(EINAR JARMUND / HÅKON VIGSNÆS)



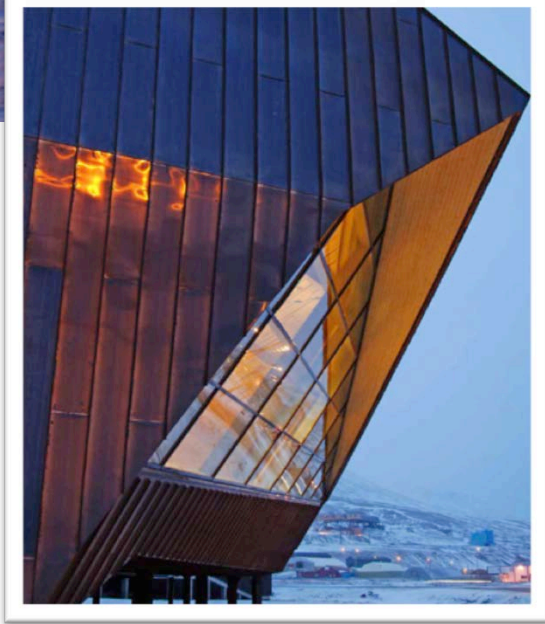
” *The sharp angled planes of the zinc cladding mirror the very fast changing light and weather conditions in the arctic region.*

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Svalbard Science Center

(EINAR JARMUND)



” *An important consideration has been to create vital public spaces and passages in the building, an “interior campus” area providing warm and illuminated meeting places during the dark and cold winter.*

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Hytte Vindheim

(MATRE AASARØD)

” *When snow covers the structure the contrast between architecture and nature becomes blurred, and the roof becomes a man made slope for ski jumping, toboggan runs, and other snow based activities..*



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Talvikangas skola (JANNE PIHLAJANIEMI)



” *The functional solution is based on the concept of an open learning environment, which gives the users good opportunities to organize the use of the spaces in different ways.*

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Kiruna stadshus, Kristallen

(HENNING LARSEN)



” *The new City Hall is part of the first stage of Kiruna’s move. The entire new central area, including surrounding blocks of shops, homes, offices, hotels, and public space, is expected to be completed in 2019.*

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Vadsö grundskola (JOSTEIN RØNSEN)



” *Illuminated elements are used to give the school an exciting experience for the students and to provide a landmark for the municipality’s inhabitants.*

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Vancouver City Hall (MICHAEL GREEN)

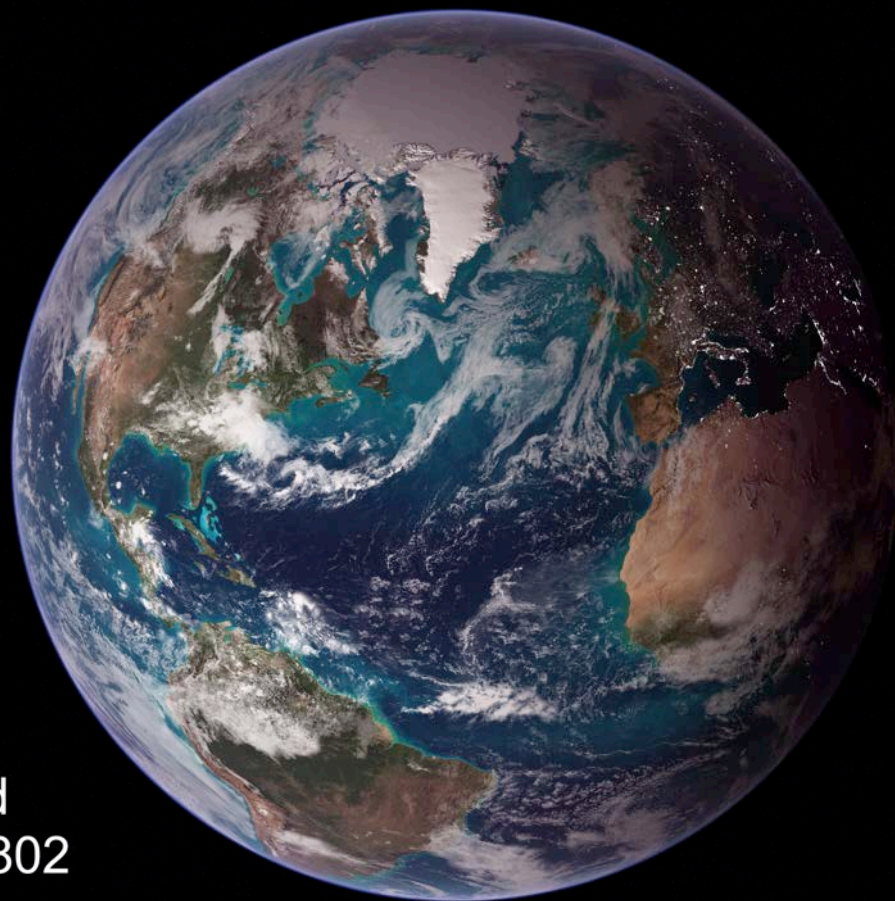


” *The design is open and transparent. The main link between all departments and the public is found in the 67 meter long atrium space.*

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The future will show which projects that will make an imprint on earth, the only home we ever known.



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