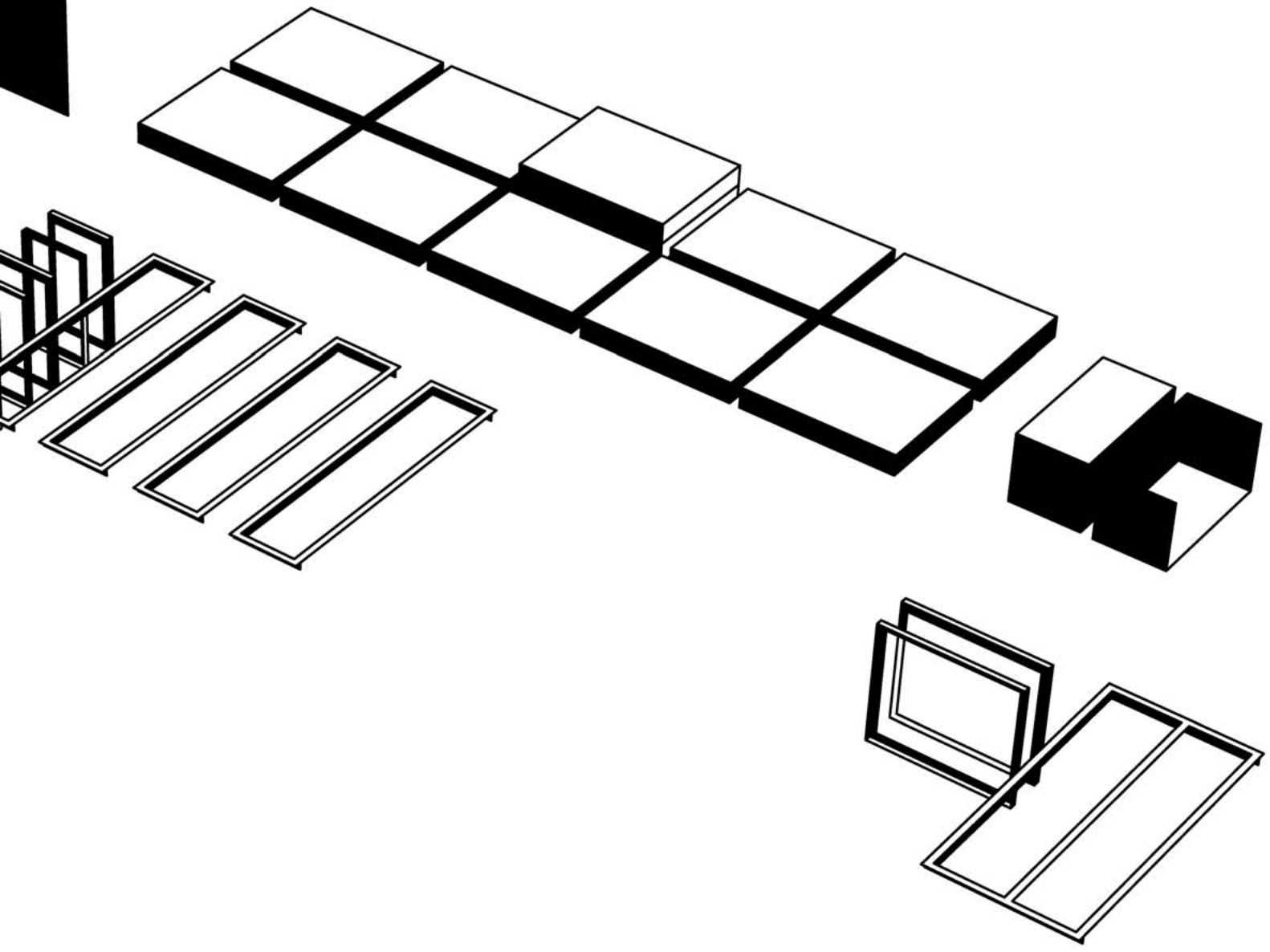
AlpHouse - Building Culture and Energyefficiency

Fair Stand Handbook



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tradition | competence | innovation

KO-FINANZIERT DURCH DEN EUROPÄISCHEN FONDS FÜR REGIONALE ENTWICKLUNG
Investition in Ihre Zukunft
EUROPÄISCHE TERRITORIALE ZUSAMMENARBEIT

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AlpHouse
Alpine Building Culture and Energy Efficiency

AlpHouse is funded by the Alpine Space Programme of the European Union (EU)

and by the Working Group of Alpine Regions (ArgeAlp)

PROJECT PARTNERS:

Handwerkskammer für München und Oberbayern (Leadpartner)

BAUakademie Lehrbauhof Salzburg

Bayerische Architektenkammer, mit Technische Universität München

Chambre de Commerce et d'Industrie de la Drôme, avec Neopolis

Energieinstitut Vorarlberg

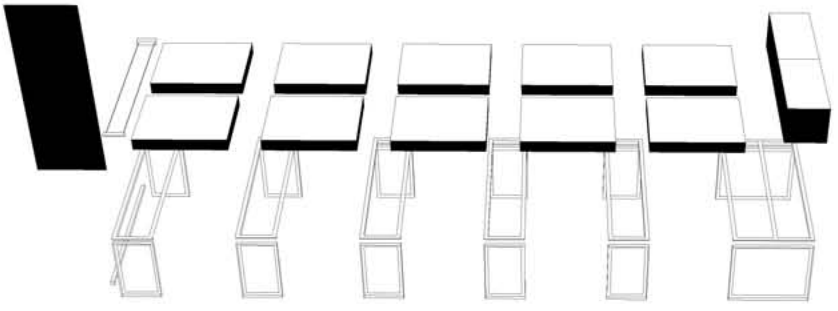
ERSAF Ente Regionale per i Servizi all'Agricoltura e alle Foreste, Regione Lombardia

Région Autonome Vallée d'Aoste – Regione Autonoma Valle d'Aosta avec - con COA Energia Finaosta

Regione del Veneto, Direzione Urbanistica e Paesaggio

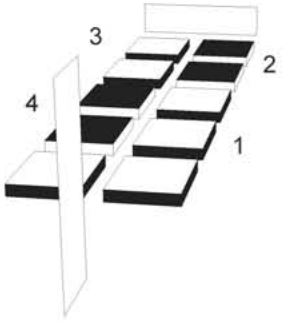
Research Studios Austria Forschungsgesmbh, Studio iSpace

CONTENT



THE ALPHOUSE FAIR STAND

Alpine Building Culture and Energyefficiency



The AlpHouse Fair Stand informs about the transnational project AlpHouse, running from 2009 – 2012. The stand focuses on the analysis work of the project partners in 9 Alpine regions that aims at identifying challenges and chances for a new combination of Alpine building culture and energy efficiency.

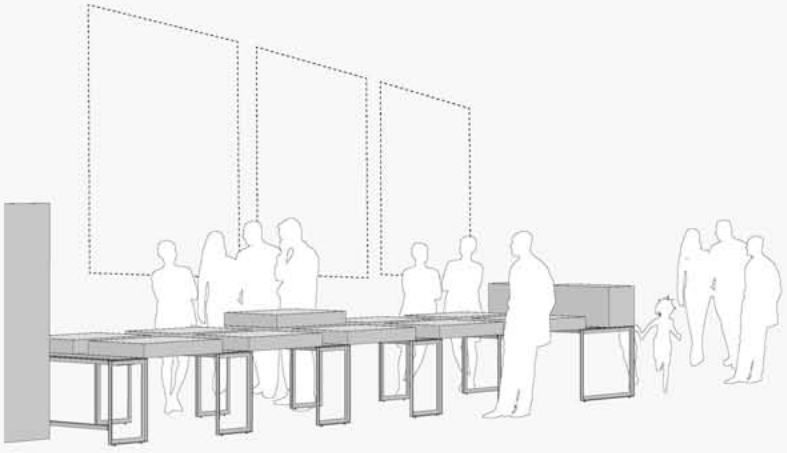
Further project steps of AlpHouse in view of communication and training will be implemented during the tour of our stand throughout the regions of the project partners and on fair trades; the stand itself will accompany a number of events.

AlpHouse Project Aims

The Alpine Space comprises unique natural and cultural landscapes. These have produced a wide range of characteristic building types, which emerged out of a long-term adaption to climatic and geographic conditions. Today they form an important element of the attractiveness of the Alps as a space for living and recreation. If we want to preserve and use this cultural heritage, we must bring it into alignment with the challenges and needs of today. We should try to understand the principles of traditional alpine architecture, integrate them in present-day construction, and develop them further. In this way traditional architecture can also be combined with modern technologies and requirements for energy efficiency.

AlpHouse aims at promoting such a farseeing approach to renovations in the Alpine Space. The project explores and collects knowledge and skills in the various regions and passes them on to craftsmen, architects, planners, and decision makers – so that they can develop individual local solutions oriented towards a common understanding of quality.

The 4 fields of topics:
1 Alpine Building Culture
2 Spatial Strategies
3 Vernacular Intelligence
4 Material Culture and Technology



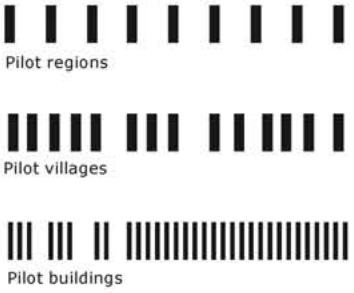
AlpHouse Fair Stand

Education

Crafts

CREATING AWARENESS OF ALPINE BUILDING CULTURE

9 Pilot regions | 15 Pilot villages | 30 Pilot buildings



The alpine space as field of action of alpine building culture is marked by great differences and is formed by buildings, settlements and land use. The term Alpine Building Culture does not dissociate building in the Alps from the adjoining regions; it is about mutual challenges, lying in the geographical escalation of trends and a possible transferability of ideas and procedures.

Similar requirements in extreme climatic and topographic situations and a limited area for settlement have always marked alpine building. Because of cultural factors, micro climates, social and economical conditions, regionally distinct forms of building have arisen: this variety is an essential part of the Alps.,

Material and immaterial values are attached to the existing buildings and settlements and are decisive for local identities and economies, for tourism, and for the ecologic conversion of the Alps as settlement area.
Given that 90 % of the building stock in the Alps has been erected before the introduction of energetic standards, it plays an important role when it comes to introducing renewable energies, in view of generation of energy and energy savings. Nonetheless, AlpHouse emphasises that old buildings have always been orientated to energy questions; and proposes to rediscover this knowledge.

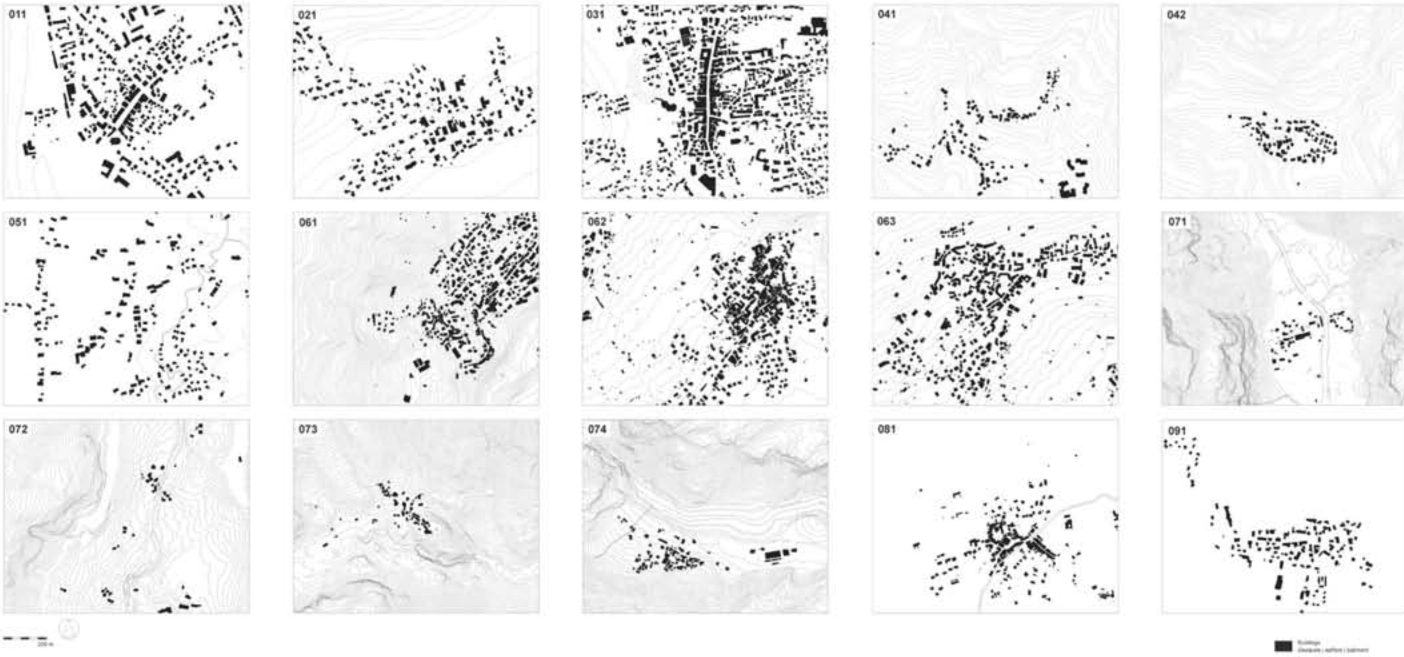
The illustrated pilot buildings are categorized in four groups:

- Vernacular buildings, intensive use
- Buildings of different ages, temporary use
- Buildings of different ages, often post-agrarian, partial use of large volumes
- Residential buildings from the 1950s to the 1970s, intensive use

above:
Scale of Pilots and transferability

To the right:
15 PILOT VILLAGES
Situational challenges and chances for alpine villages

30 PILOT BUILDINGS
Regionally varying focuses of renewal show the differences of the building stock



PV 011 Kuchl
ZOOM Kuchl
PR 01 Tennengau
Pop 2010 6679
MASL 469 m

PV 021 Schleching
ZOOM Schleching
PR 02 Traunstein
Pop 2010 1758
MASL 567 m

PV 031 Murnau
ZOOM Murnau
PR 03 Garmisch-Partenkirchen (D)
Pop 2009 12 198
MASL 688 m

PV 041 Vodo di Cadore
ZOOM Vinigo
PR 04 Northern part of the Province of Belluno
Pop 2010 896
MASL 934 m

PV 042 Selva di Cadore
ZOOM L'Andria
PR 04 Northern part of the Province of Belluno
Pop 2010 518
MASL 1350 m

PV 051 Andelsbuch
ZOOM Andelsbuch
PR 05 Bregenzerwald
Pop 2010 2326
MASL 613 m

PV 061 Chiesa in Valmalenco
ZOOM Chiesa
PR 06 Mountain Community Valtellina di Sondrio
Pop 2010 2661
MASL 960 m

PV 062 Chiuro
ZOOM Chiuro
PR 06 Mountain Community Valtellina di Sondrio
Pop 2010 2546
MASL 390 m

PV 063 Ponte in Valtellina
ZOOM Ponte in Valtellina
PR 06 Mountain Community Valtellina di Sondrio
Pop 2010 2295
MASL 485 m

PV 071 Gressoney-La-Trinité
ZOOM Edelboden inferiore
PR 07 Valle d'Aosta
Pop 2009 814
MASL 1360 m

PV 072 Gressoney-Saint-Jean
ZOOM Dresal, Noversh
PR 07 Valle d'Aosta
Pop 2009 814
MASL 1385 m

PV 073 Champorcher
ZOOM Chateau
PR 07 Valle d'Aosta
Pop 2009 402
MASL 330 m

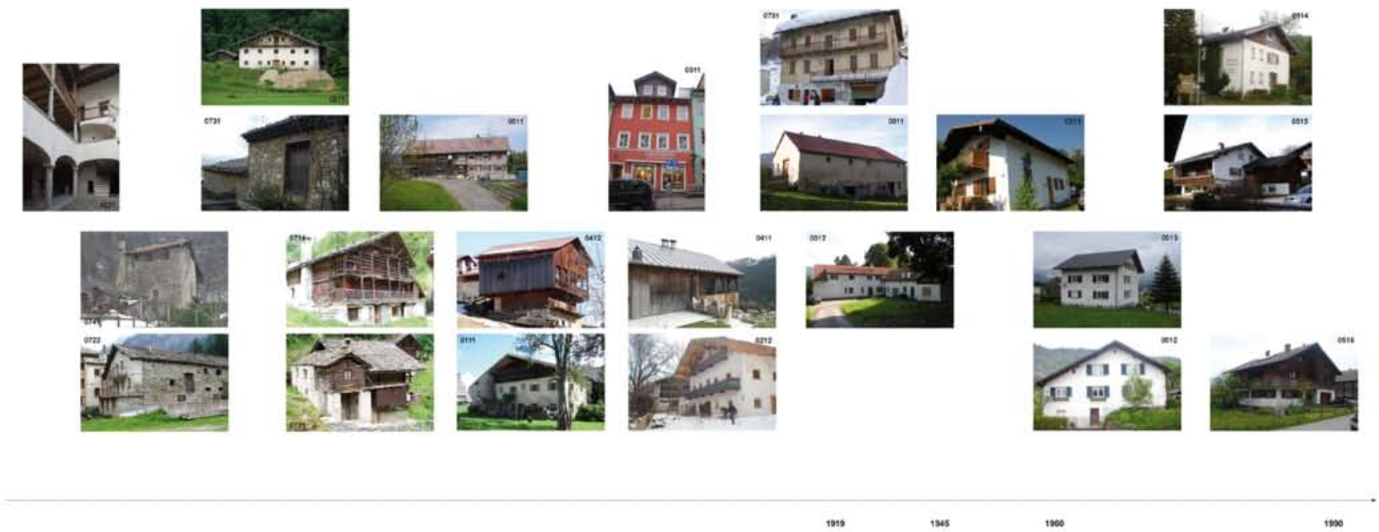
PV 074 Avise
ZOOM Runaz
PR 07 Valle d'Aosta
Pop 2010 333
MASL 775 m

PV 081 Saou
ZOOM Saou
PR 08 Val de d'Drôme
Pop 1999 409
MASL 330 m

PV 091 Vassieux en Vercors
ZOOM Vassieux
PR 09 Vercors
Pop 2007 355 m
MASL 1049 m

Buildings
5 m contour line
River
North
Scale

PV Pilot Village
PR Pilot Region
Pop Population
MASL Meters above sea level



PB 0111 Tennengauer Einhof
PV 011 Kuchl
PR 01 Tennengau (A)
A 1687-1818

PB 0211 Einfirsthof S.
PV 021 Schleching
PR 02 Traunstein (D)
A 1778

PB 0212 Einfirsthof Gasthof E.
PV 021 Schleching
PR 02 Traunstein (D)
A 1650

PB 0213 Haus S.
PV 021 Schleching
PR 02 Traunstein (D)
A 1954

PB 0311 Untermaml
PV 031 Murnau
PR 03 Garmisch-Partenkirchen (D)
A 1952

PB 0312 Malohof
PV 031 Murnau
PR 03 Garmisch-Partenkirchen (D)
A 1925-1954

PB 0411 Casa O.
PV 041 Selva di Cadore
PR 04 Provincia di Belluno, parte settentrionale (I)
A ca. 1070

PB 0412 Tabià
PV 041 Selva di Cadore
PR 04 Provincia di Belluno, parte settentrionale (I)
A 1850-1900

PB 0511 Haus Ritter
PV 051 Andelsbuch
PR 05 Bregenzerwald (A)
A 1960

PB 0512 Haus Ritter
PV 051 Andelsbuch
PR 05 Bregenzerwald (A)
A 1964

PB 0513 Haus Metzler
PV 051 Andelsbuch
PR 05 Bregenzerwald (A)
A 1985

PB 0514 Haus Metzler
PV 051 Andelsbuch
PR 05 Bregenzerwald (A)
A 1970

PB 0515 Haus Wielander
PV 051 Andelsbuch
PR 05 Bregenzerwald (A)
A 1973

PB 0510 Haus Wirth
PV 051 Andelsbuch
PR 05 Bregenzerwald (A)
A 1980

PB 0621 Palazzo Quadrio
PV 062 Chiuro
PR 06 Comunità montana Valtellina di Sondrio (I)
A 1400-1600

PB 0711 Casa Welf
PV 071 Gressoney-La-Trinité
PR 07 Valle d'Aosta (I)
A 1861-1867

PB 0721 Casa Squindo
PV 072 Gressoney-Saint-Jean
PR 07 Valle d'Aosta (I)
A 1500-1600

PB 0722 Casa Alliod
PV 072 Gressoney-Saint-Jean
PR 07 Valle d'Aosta (I)
A

PB 0731 Villa Biamonti
PV 073 Champorcher
PR 07 Valle d'Aosta (I)
1800-1910
A

PB 0741 Casa Clusaz
PV 074 Avise
PR 07 Valle d'Aosta (I)
A

PB 0811 Ferme
PV 081 Saou
PR 08 Val de Drôme (F)
A 1700-1800

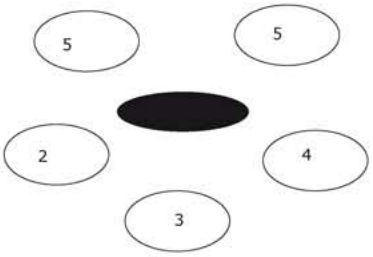
PB 0911 Maison Cecconi
PV 091 Vassieux en Vercors
PR 09 Vercors (F)
A 1969

PB

PB Pilot Building
PV Pilot Village
PR Pilot Region
A Age of buildings

WORKING WITH SPATIAL STRATEGIES

Settlement Development and Energy | Postagrarian Buildings



Houses and settlements in the Alps are complex bodies, formed by utilisation, design, construction and infrastructure. Frequencies, intensities, types and forms of their use will play a more significant role in the future given the demographic changes. Exposition, orientation and compactness will be identified as main subjects for buildings and settlements. Detecting potentials and limits of the building stock and its context is the basis of spatial concepts on different levels: from construction components and their combination, layouts and sections of buildings to villages and valleys. AlpHouse elaborates spatial strategies as a procedure to harness potentials of the existing buildings and settlements and sees at its basis a planning necessity.

The interfaces between planning disciplines, such as architecture, settlement planning, urban and rural development, energy expertise, regional development and also monument preservation have not yet been designed for a coherent operative approach the building stock. The analysed pilots reveal gaps between the procedures on different levels of measures (regions, towns, buildings, and details). AlpHouse proposes to optimise interaction between the actors of building culture as well as a cross-scale planning approach.

Above:
1 Spatial Strategy (Capacity of existing architecture, Context of place, Alternative Concepts)

2 Costs and Timeliens

3 Use; Intesity, frequency and modes

4 Rules, Laws, Incentives

5 Natural Factors (climate, Topography)

6 Construction Material, Processing Factors

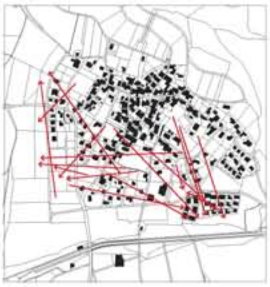
To the right:
SETTLEMENT DEVELOPMENT AND ENERGY
In the village Fläsch a new spatial strategy creates the basis for energy efficiency

POSTAGRARIAN BUILDINGS
The subject of dealing with postagrarian structures, which is of great importance for the Alpine Space, requires spatial concepts

Fläsch
Graubünden - Grischun - Grigioni

Pop 2008 590
MASL 528 m ü. M.

100 m



Land exchange for revision of settlement planning, based on the population's participation

Flächentausch zur Revision der Ortsplanung auf Grundlage der Bürgerbeteiligung

Scambio delle superfici a scopo di revisione della strategia urbanistica sulla base della partecipazione cittadina

Echange de surfaces en vue remanier la planification du village basé sur la participation de la population

Wine farms in the whole village as economic factor

Weinbaubetriebe im ganzen Ort als ökonomischer Faktor

Aziende vinicole nel intero villaggio come fattore economico

Vignerons dans tout le village comme facteur économique

Model Fläsch

50 m

1 Dense expansion clusters: basis for energy efficiency
Neubaucluster
Concentrazione dei siti di ampliamento: base per l'efficienza energetica
Expansion dense: bases de l'efficacité énergétique

2 Post-agrarian buildings: potential of reuse
Postagrarische Bausubstanz: Potential der Wiederverwendung
Edificato storico post-agricolo: potenziale di riqualificazione
Structures postagraires: potentiel de réutilisation

3 Landscape at the inside: new zones for vine and fruit trees
Landschaft im Inneren: die neuen Zonen für Reben und Obstbäume
Paesaggio nell'interno: nuove aree per viti e alberi da frutto
Paysage à l'intérieur: nouvelles zones pour vigne et arbres fruitiers

① ② ③

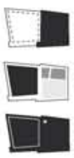
Intervention S
Hall in the barn – microinterventions in the house, as living space

Eingriff S
Wohnhalle in der Scheune – Mikroeingriffe im Wohnteil

Intervento S
Sala nel fienile – interventi minimi nella abitazione

Intervention S
Salle dans la grange – interventions micro dans l'habitation

Haus V., Tschlin (CH), Arch. Verme, 2010



Original shape of house and barn
Raumgestalt von Wohnteil und Scheune
Struttura originale dell'abitazione e del fienile
Composition spatiale de l'habitation et de la grange

Intensity of use
Nutzungsintensität
Intensità del uso
Intensité de l'utilisation

Intensity of climatisation and insulation
Intensität der Klimatisierung und Dämmung
Intensità della climatizzazione e del isolamento
Intensité de la climatisation et insulation

Architectural interventions
Architektonische Eingriffe
Interventi architettonici
Interventions architectoniques

Intervention M
Reshaping of the spatial composition of house and barn, as working and living space

Eingriff M
Wiederherstellen der Raumkonfiguration von Wohnteil und Scheune

Intervento M
Ricreazione della configurazione spaziale di abitazione e fienile

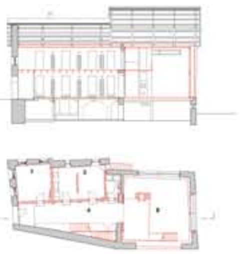
Intervention M
Restauration de la configuration spaciale de la habitation et la grange

Haus B., S'Charl (CH), Arch. Baader, 2001

Original shape of house and barn
Raumgestalt von Wohnteil und Scheune
Struttura originale dell'abitazione e del fienile
Composition spatiale de l'habitation et de la grange

Intensity of use
Nutzungsintensität
Intensità del uso
Intensité de l'utilisation

Intensity of climatisation and insulation
Intensität der Klimatisierung und Dämmung
Intensità della climatizzazione e del isolamento
Intensité de la climatisation et insulation



Architectural interventions
Architektonische Eingriffe
Interventi architettonici
Interventions architectoniques

Intervention L
Replacement of the barn – microintervention in the house, as working and living space

Eingriff S
Wohnhalle in der Scheune – Mikroeingriffe im Wohnteil

Intervento S
Sala nel fienile – interventi minimi nella abitazione

Intervention S
Salle dans la grange – interventions micro dans l'habitation

Casa scura, Fläsch (CH), Arch. Hauenstein, 2007

Original shape of house and barn
Raumgestalt von Wohnteil und Scheune
Struttura originale dell'abitazione e del fienile
Composition spatiale de l'habitation et de la grange

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Architectural interventions
Architektonische Eingriffe
Interventi architettonici
Interventions architectoniques

Intervention S
Comfort module in the barn, gradual adaption as working and living space

Eingriff S
Raumzelle in der Scheune, schrittweise Adaption des Hofs als Lebens- und Arbeitsraum

Intervento S
Elemento abitativo nel fienile, adazione graduale della cascina come abitazione e laboratorio

Intervention S
Elément confortable dans la grange, adaption graduelle de la ferme pour loger e travailler

Pilot building 02/12, Einfirsthof Gasthof E., Schiedning (D)
Project by Sarah Hartmann for Landraum, 2010

Original shape of house and barn
Raumgestalt von Wohnteil und Scheune
Struttura originale dell'abitazione e del fienile
Composition spatiale de l'habitation et de la grange

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Nutzungsintensität
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Architectural interventions
Architektonische Eingriffe
Interventi architettonici
Interventions architectoniques

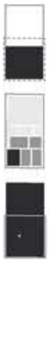
Intervention M
Low-energy standard for the house, outside insulation – barn as flexible working space

Eingriff M
Niedrigenergiestandard beim Wohnteil mit Außendämmung – Scheune als flexibler Raum

Intervento M
Abitazione come casa energetica (casa clima A) – fienile come spazio flessibile

Intervention M
Habitation comme bâtiment de basse consommation – grange comme espace flexible

Pilot building 05/11, Haus Ritter, Andelsbuch (A)
Project by Arch. G. Gruber for DV, 2010



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Raumgestalt von Wohnteil und Scheune
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Composition spatiale de l'habitation et de la grange

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Architectural interventions
Architektonische Eingriffe
Interventi architettonici
Interventions architectoniques

Intervention L
Complete intense use and insulation – adaption for touristic use

Eingriff L
Komplette intensive Nutzung und Dämmung – für touristische Zwecke

Intervento L
Uso turistico intenso e completo, con insulazione „cappotto interno"

Intervention L
Utilisation touristique intense et complète, avec insulation

Pilot building 07/11, Casa Welf, Gressoney-La-Trinité (I)
Project by Arch. L. [illegible] for CCA Energia, 2010

1 Parlor
Stube | stube | pièce

2 Chamber
Kammer | camera | chambre

3 Kitchen
Küche | cucina | cuisine

4 Corridor
Flur | corridoio | corridor

5 Stable
Stall | stalla |étable

6 Barn
Scheune | fienile | grange

Original shape of house and barn
Raumgestalt von Wohnteil und Scheune
Struttura originale dell'abitazione e del fienile
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Architectural interventions
Architektonische Eingriffe
Interventi architettonici
Interventions architectoniques

5 m

UTILISATION OF VERNACULAR INTELLIGENCE

Town Centres and Energy | Vernacular Building Type

AlpHouse considers the buildings and settlements in the Alps as stimulators for cultural and economical aspects of building. This new evaluation concentrates on vernacular buildings and settlements: they can be understood as database of building culture. Vernacular construction offers models of how buildings adapt to climate and topography, how they use energy efficiently and how they harness materials efficiently. This vernacular intelligence has at first nothing to do with building styles but with structural factors on all three project levels:

The regional level with cycle systems and spatial structures,

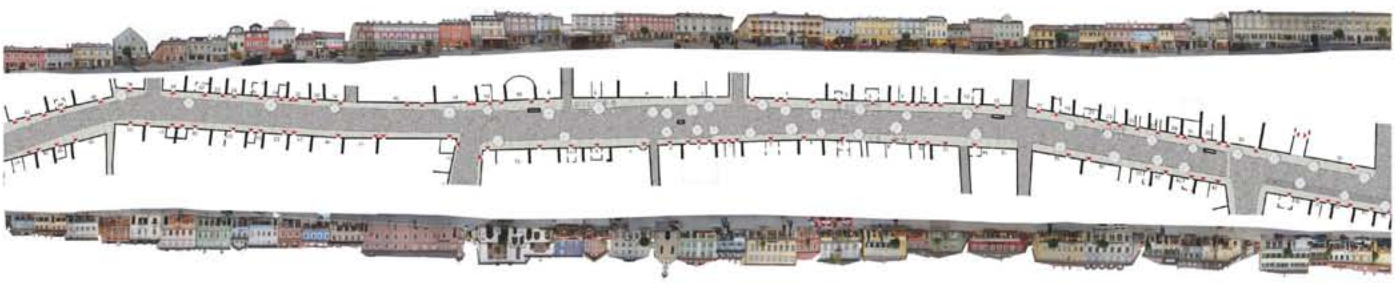
The village level with its compactness and exposition,

The building and detail level with spatial organisation in layouts and sections, with materials and their combination.

The energetic knowledge of vernacular buildings indicates to ask for standards and comfort: it can even stimulate innovations for standardised procedures of energy efficiency.

To the right:
TOWN CENTRES AND ENERGY
The spatial and energetic model of dense central settlement cores

VERNACULAR BUILDING TYPES
The Alps' vernacular buildings are a database of intelligent behaviour towards surroundings and natural forces



Markt in Murnau

Cobbled pavement
Kopfsteinpflaster | acciottolato | pavé inégal

Tiled pavement
Plattenbelag | lastricato | pavement

Entrances
Eingänge | accessi | entrées

PV 081 Saou
PR 08 Val de Drôme
Pop 1999 426
MASL 330 m

PV 011 Kuchl
PR 01 Tennengau
Pop 2010 6678
MASL 468 m

PV 031 Murnau
PR 03 Garmisch-Partenkirchen (D)
Pop 2009 12198
MASL 688 m

Landlots
Parzellierung | divisione in parcelle | lotissement

North
Norden | nord | nord

Scale
Maßstab | scala | échelle

Age of buildings
Gebäudealter | epoca di costruzione | année de construction

< 1919
1919 - 1945
1945 - 1960
1960 - 1980
> 1980

Not specified
Keine Angaben | non determinato | non spécifiée

Alphabetical short cuts
Abkürzungen | abbreviazioni | abréviations

PV Pilot Village
Pilotort | comune pilota | commune pilote

PR Pilot Region
Pilotregion | regione pilota | région pilote

Pop Population
Einwohner | abitanti | habitantes

MASL Meters above sea level
Meter über Normalhöhennull | metri sul livello del mare | mètres au-dessus du niveau de la mer

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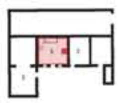
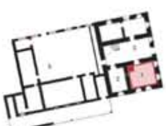
PB 0911 Maison Cecconi
PV 091 Vassieux en Vercors
PR 09 Vercors (F)



PB 0811 Ferme
PV 081 Saou
PR 08 Val de Drôme (F)



PB 0212 Einfirsthof Gasthof E
PV 021 Schleching
PR 02 Traunstein (D)

Groundfloor plans
Erdgeschoß Grundriss | pianta del pianoterra | plan en rez-de-chaussée

Stone construction
Steinkonstruktion | costruzione di pietra | construction en pierre

Wood construction
Holzkonstruktion | costruzione di legno | construction en bois

North
Norden | nord | nord

Scale
Maßstab | scala | échelle

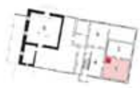
Alphabetical short cuts
Abkürzungen | Abbreviazioni | Abréviations

PB Pilot Village
Pilotort | comune pilota | commune pilote

PV Pilot Region (NUTS 3 or similar)
Pilotregion | regione pilota | région pilote

PR Region (NUTS 2)
Region | regione | région

PB 0111 Tennengauer Einhof
PV 011 Kuchl
PR 01 Tennengau (A)



PB 0511 Haus Ritter
PV 051 Andelsbuch
PR 05 Bregenzerwald (A)

PB 0711 Casa Wolf
PV 071 Gressoney-La-Trinité
PR 07 Valle d'Aosta (I)

PB 0211 Einfirsthof B
PV 021 Schleching
PR 02 Traunstein (D)

PB 0411 Casa D
PV 041 Selva di Cadore
PR 04 Provincia di Belluno, parte settentrionale (I)

The parlor as the central heated room of the house, with its orientation to the south and the stove

Die Stube als zentraler und geheizter Raum: Lage im Grundriss, Ausrichtung nach Süden, Ofen

La stube come stanza centrale e riscaldata, con il suo orientamento verso sud e la stufa

Arrangement de la pièce centrale vers le sud, et le chauffage

1 Parlor
Stube | stube | pièce

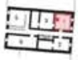
2 Chamber
Kammer | camera | chambre

3 Kitchen
Küche | cucina | cuisine

4 Corridor
Flur | corridoio | corridor

5 Stable
Stall | stalla | étable

6 Barn
Scheune | fienile | grange



PB 0311 Untermarkt
PV 031 Murnau
PR 03 Garmisch-Partenkirchen (D)

Parlor in Lucerne (CH)
Stube | stube | pièce

A Stove
Ofen | stufa | cheminée

B Window
Fenster | finestra | fenêtre

C Table
Tisch | tavolo | table

D Wood paneling
Holzverkleidung | pannelli di legno | boiserie

COMBINING MATERIAL CULTURE AND TECHNOLOGY

The House as System | Material and Region

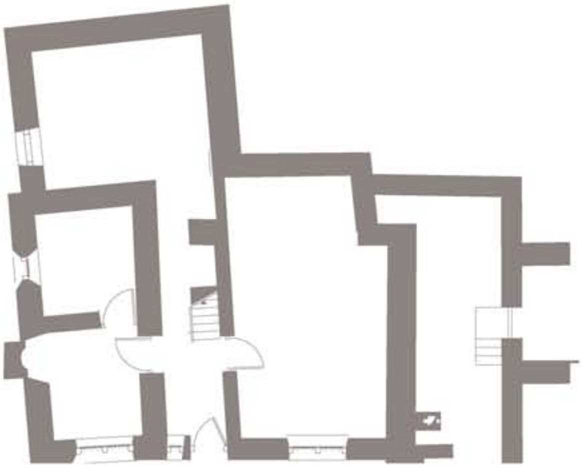
Not all vernacular technologies have survived industrialisation, they have not been fixed standards but a developing field of knowledge and competences. Nowadays lifestyle, ideas of comfort, of public and private space are very different than they have been before 1918. However, the aim of AlpHouse is to re-appropriate vernacular technologies and to reassess them where they are necessary for the building stock. The paradigm of repair is an ecologic process to reduce the use of energy and material – but, what is more, reparation is a cultural value.

The AlpHouse approach can thus be described as counter stream operation: it is about adaption and decisions to use technologies and materials from the field of new constructions (e. g. passive house elements, controls, fabrication methods, tools, etc.), but also about rediscovering vernacular materials and technologies and even their transfer to the field of new construction (e.g. solid wood, chalk, clay).

Because of the differentiated nature of the alpine building stock, a wide spectrum of techniques can be collected and developed: in the areas of structural design, expansion, heating and ventilation, calculation and design tools. They have to correspond to the different steps of energy saving, which can be achieved within the building stock with reasonable financial and ecological effort.

To the right:
THE HOUSE AS SYSTEM
The pilot building Welf in the Aosta Valley demonstrates the importance of joining building elements and spatial complexity

MATERIAL AND REGION
In Vrin the building material wood motivates regional cycle systems



Small models of vernacular pilot buildings: Use of wood and stone

Modelle der vernakulären Pilotgebäude: Die Verwendung von Stein und Holz

Modelli dell'edificio vernacolare pilota: utilizzo di pietra e legno

Modèles des bâtiments pilotes vernaculaires : L'utilisation de pierre et bois

Stone construction
Steinkonstruktion | costruzione di pietra | construction en pierre

Wood construction
Holzkonstruktion | costruzione di legno | construction en bois

North
Norden | nord | nord

Scale
Maßstab | scala | échelle

Abbreviations
Abkürzungen | abbreviazioni | abréviations

PB Pilot Building
Pilotgebäude | edificio pilota | bâtiment pilote

Model: Pilot building House Welf, Gressoney-La-Trinité (Aosta Valley) - Socle of natural stone, and wood log construction
Compared to procedures aiming solely at the optimisation of building elements, the dealing with building stock necessitates a more complex approach. The three-storey House Welf can only be understood and dealt with as system of space, construction and material. The individual factors influence each other, construction physical and energetic aspects are added. The model of the house before renovation and conversion shows the intertwining of the materials wood and stone and their individual structural logic.

Modell: Pilotgebäude Haus Welf, Gressoney-La-Trinité (Valle d'Aosta) - Sockel aus Natursteinmauerwerk, darüber Holz-Blockbau
[illegible]

Modello: Edificio pilota Haus Welf, Gressoney-La-Trinité (Valle d'Aosta) - [illegible] con muratura in pietra naturale, nei piani superiori costruzione con tronchi d'albero
[illegible]

Modèle: Bâtiment pilote Maison Welf, Gressoney-La-Trinité (Vallée d'Aoste) - socle en pierre naturelle, maison en bois en rondins
[illegible]

PB 0111 Tennengauer Einhof

PB 0212 Einfirsthof Gasthof E.

PB 0311 Untermarkt

PB 0411 Casa G.

PB 0511 Haus Ritter

PB 0811 Ferme

PB 0911 Maison Cacconi






Vrin (CH)
Projects of Gion Caminada and vernacular residential and barn buildings: The material wood

Projekte von Gion Caminada und vernakuläre Wohn- und Wirtschaftsgebäude: Das Material Holz

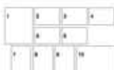
Progetti di Gion Caminada e abitazioni e stalle vernacolari: il legno come materiale da costruzione

Projets de Gion Caminada et maison et étables vernaculaires : Le matériau bois

1 Dwelling 2002 | Wohnhaus | abitazione | logement
2 Casa comunale 1991
3 Dwellings | Wohnhäuser | abitazioni | logements
4 Dwellings | Wohnhäuser | abitazioni | logements
5 Dwelling 2000 | Wohnhaus | abitazione | logement
6 Stable - hayloft | Stallscheune | stalla - fienile | étable - fenil
7 Stable - hayloft | Stallscheune | stalla - fienile | étable - fenil
8 Slaughterhouse1998 | Metzgerei | abbatoir | mattatoio
9 Stiva da morts 2002
10 Casa da Vrin







FAIR STAND TOUR PLAN

Visiting events

For the updated tour plan visit the news section on AlpHouse.eu.

Fair Stand Opening
Klimawoche - Altbautag, public conference
HWK and ByAK | Traunstein (D)

Alpine Space Programme, Mid Term Conference
HWK | Grenoble (F)

PM4 public conference
Neopolis | Valence (F)

Ballenberg Jubilee
Haus Ballenberg | Ballenberg (CH)

Public conference, Exhibition Pilot village analysis
EIV | Andelsbuch (A)

Qualification course architects and planners
COA Energia | Aosta (I)

PM5 public conference
Regione Veneto | Cortina d'Ampezzo (I)

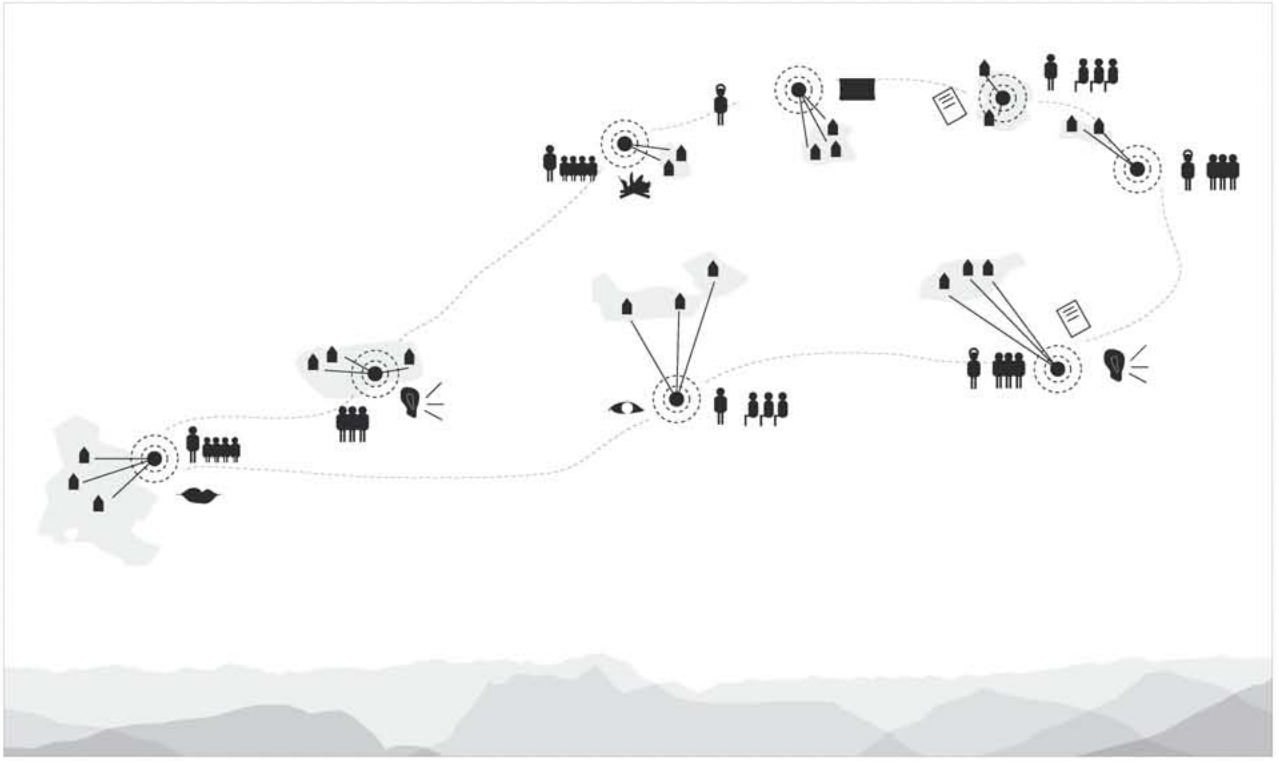
Fair Monumenta
LBH | Salzburg (A)

Exhibition Pilot village analysis
LBH | Kuchl (A)

Fair
Regione Veneto | Longarone (I)

Fair Handwerksmesse
HWK | München D

PM final public conference
HWK and ByAK | München (D)

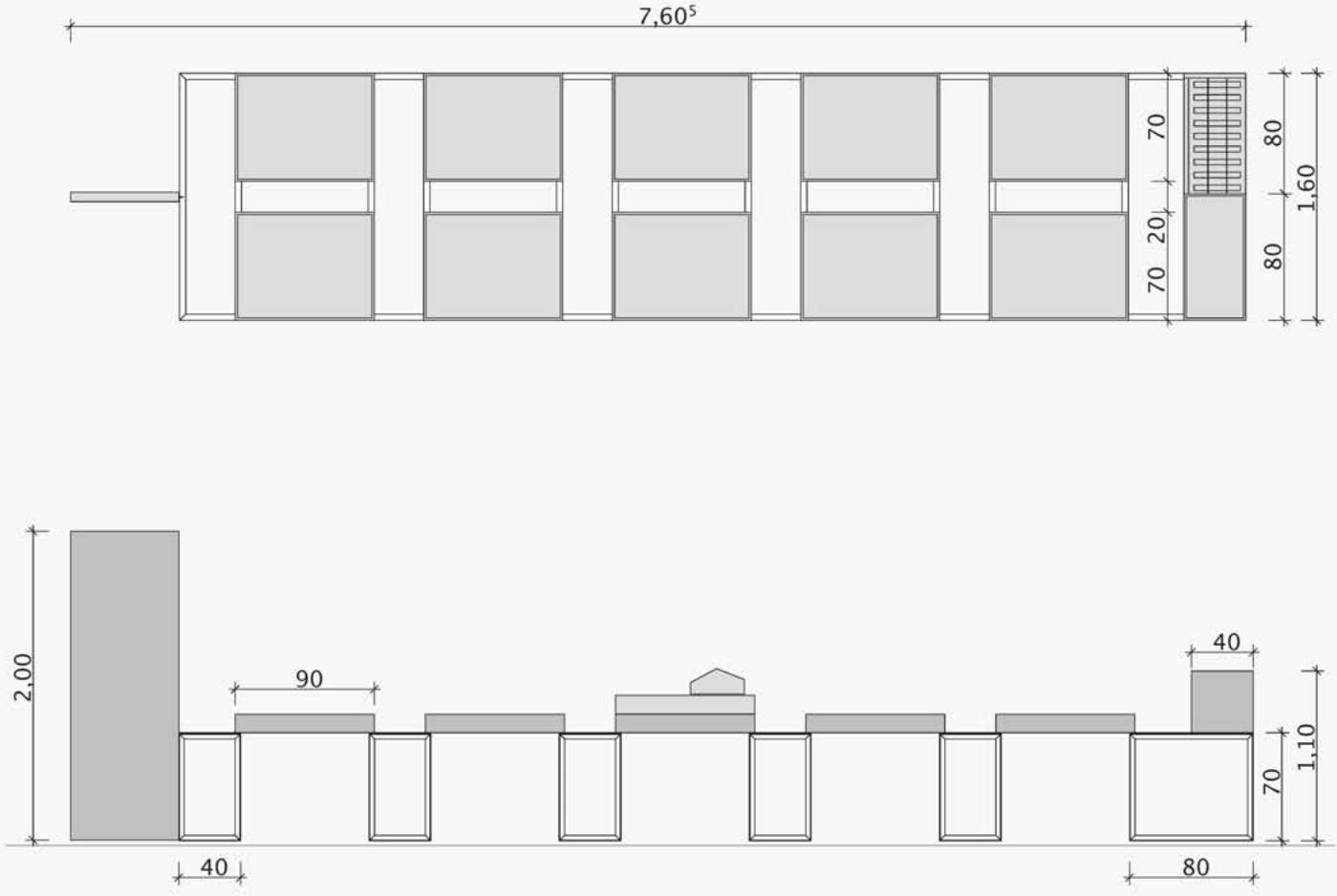


AlpHouse Fair Stand Catalogue, in 4 languages

FACTSHEET

Technical Data

Weight ca.	
160 kg	Wood
140 kg	Steel
300 kg	Total
Measures max.	
1,60 m	Width
7,50 m	Length max. adjustable
2,00	Hight
Parts	
12	Wood
20	Steel frames
1	Stele
48	6 mm Hexagon socket screws (steel -wood)
48	Thin screw nuts (steel-wood)
26	6 mm Hexagon socket screw flat head (steel-steel)
6	Screws Wood 4,5 mm (for BooksBox1 and 2)
25	„Feet" for adjusting the hight
1	Modell "House Welf" inside BooksBox1
Tools	6 mm Hexagon socket screwdriver
	Screw nut tool
	4,5 mm Star head screwdriver
	Water level for adjusting the hight
	Cutter
Transportation	3 EURO-PALETTE
	3 wooden transportation boxes
	Strong broad tape
	Air bubble wrap



AlpHouse Fair Stand measurements in cm

INSTRUCTIONS FOR ASSEMBLING

The AlpHouse Stand Manual

Put the parts out of the transportation boxes.
Fold the aire bubble wrap nicely and keep it for later use.

Step 1 Unwrap and position the steel elements
SPECIAL attention to the first (stele) and the last (booksboxes) steel frames.

Step 2
Steel-steel Two persons screw one steel stand with 6mm hexagon socket screws flat head.

Step 3
Steel -wood Screw the wooden boxes on the steel stands in the right order with 6mm hexagon socket screw.

Steel "feet" Tighten with upper screw nut.
Adjust Hight with lower screw nut.

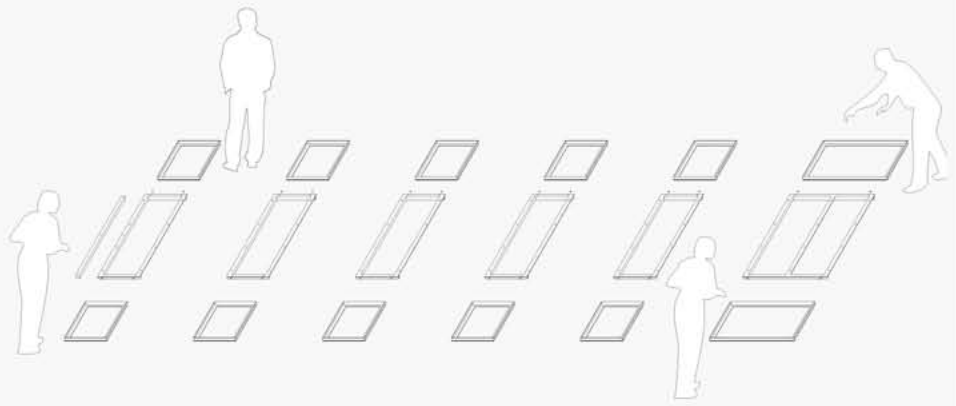
Step 4
Wooden boxes Flip the boards around by putting a stick with a soft top (cloth, paper) through a hole in the bottom of the box and lift the board.

Step 5
Steel -wood Modell board nr. 8
A part of the model is inside BooksBox1.

Finished Stand cannot be moved anymore

When disassembling the AlpHouse Fair Stand, please check if anything is missing.

1.



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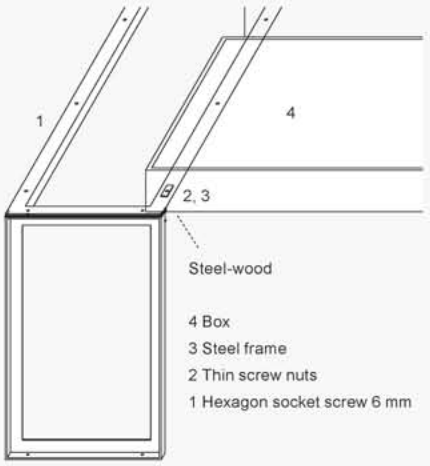

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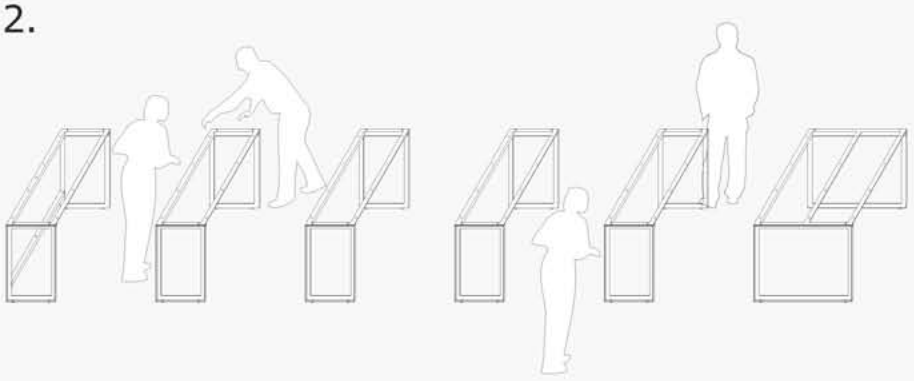
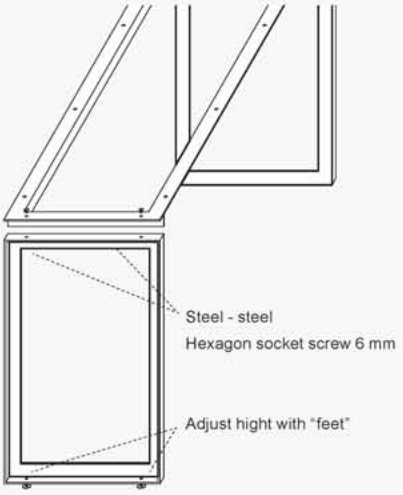
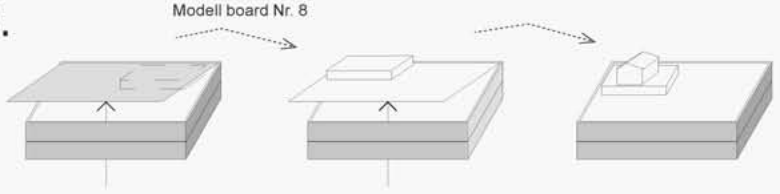


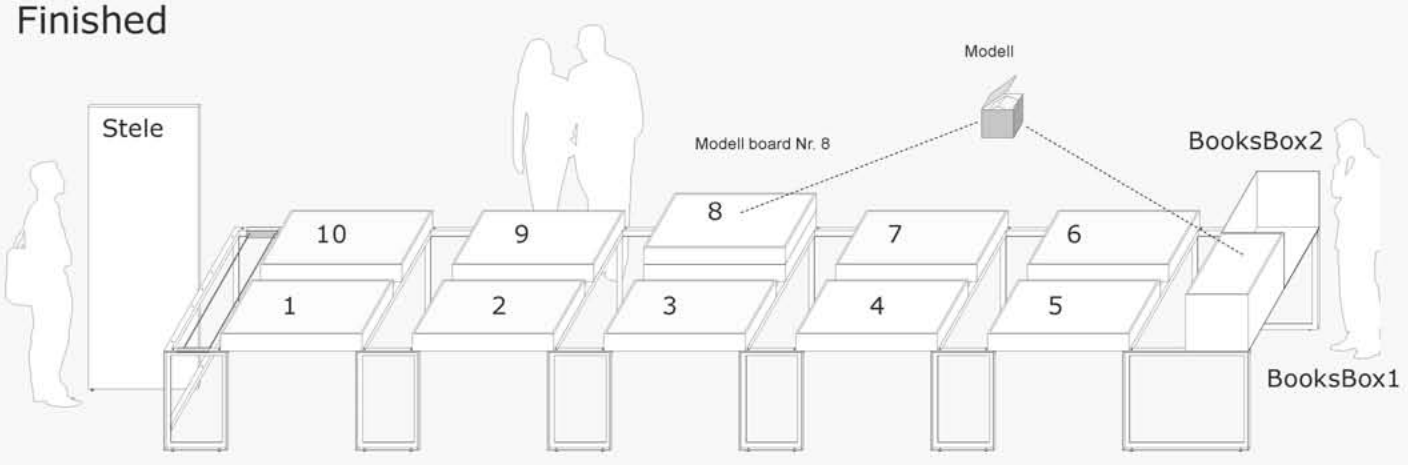


4. Flip board around gently

5.

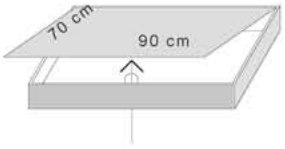


Finished



ADAPTION

Add and change contents



Boards

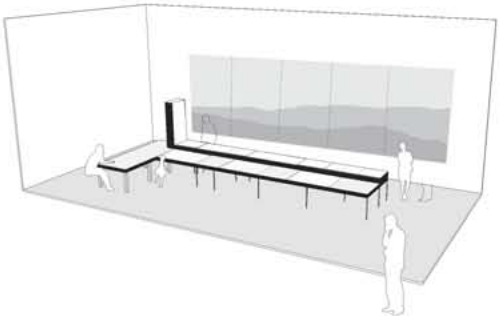
Boards can be replaced and individually designed after having consulted the carpenter from HWK Bildungszentrum Traunstein.

Length 87 cm ca
Width 97 cm ca

Walls and Floors

Detailled plans of Pilot villages and buildings
Photographs
Analysis and development material
Craft work drawings

Local materials and technologies
Adaption of innovative technologies
Building parts and joints



ACTIVITIES

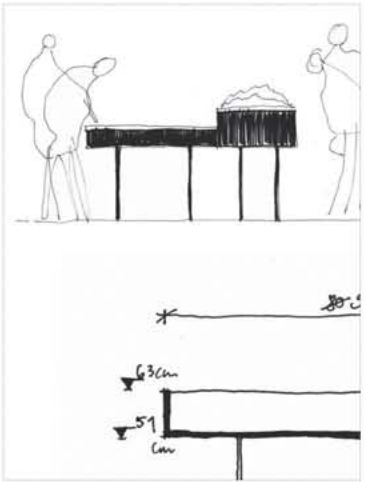
Learn Discuss Adopt Develope

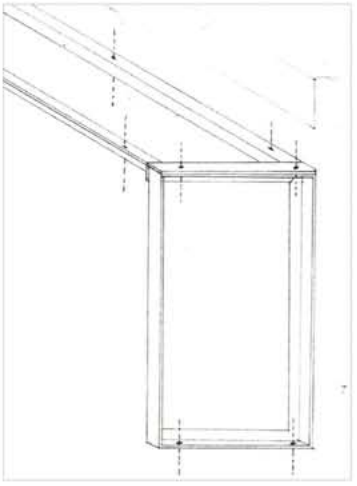
Communication
Presentation
Conference
Exhibition
Lecture
Books
Film
TV

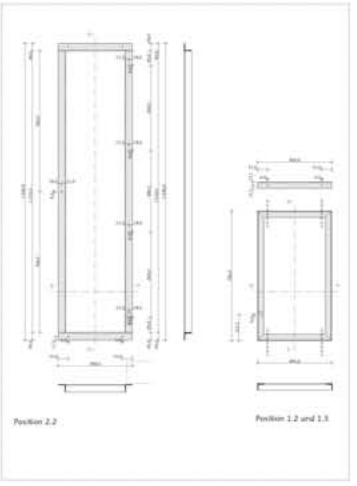
Education
Guided tour to Pilots, best practices
Courses for young people
Courses with experts
Interviews
Research
Games

Crafts
Learning from vernacular constructions
Live building site
On site research

Fair Stand
AlpHouse Approach







Upper row:
October 2010 - June 2011
Concept and design of the AlpHouse Fair Stand
TUM Landraum | München (D)

Lower row:
March - June 2011
Construction of the AlpHouse Fair Stand
HWK Bildungszentrum Traunstein (D)

10.6.2011
Fair Stand opening
Klimawoche - Altbautag, public conference
HWK and ByAK | Traunstein (D)

ALPHOUSE FAIR STAND HANDBOOK

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FAIR STAND TABLES:

9 PILOT REGIONS
edited by RSA iSPACE. Data sources: USGS - GTOPO30 DEM, Alpine Convention - Perimeter GIS data, Alpine Space Programme - Programme area, EuroGeographics for the administrative boundaries - NUTS boundaries, ESRI background data - Country boundaries, AlpHouse project - Region boundaries

14 PILOT VILLAGES
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30 PILOT BUILDINGS
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Handwerkskammer für München und Oberbayern

Bayerische Architektenkammer

Technische Universität München

landraum

Overview of the AlpHouse pilot regions and pilot villages:

XX pilot region

XXX pilot village

01 Tennengau (A)

011 Kuchl

02 Traunstein (D)

021 Schleching

03 Garmisch-Partenkirchen (D)

031 Murnau

04 Provincia di Belluno, parte settentrionale (I)

041 Selva di Cadore

042 Vodo di Cadore

05 Bregenzerwald (A)

051 Andelsbuch

06 Comunità montana Valtellina di Sondrio (I)

061 Chiesa in Valmalenco

062 Chiuro

063 Ponte in Valtellina

07 Vallée d'Aoste - Valle d'Aosta (I)

071 Gressony-La-Trinité

072 Gressony-Saint-Jean

073 Champorcher

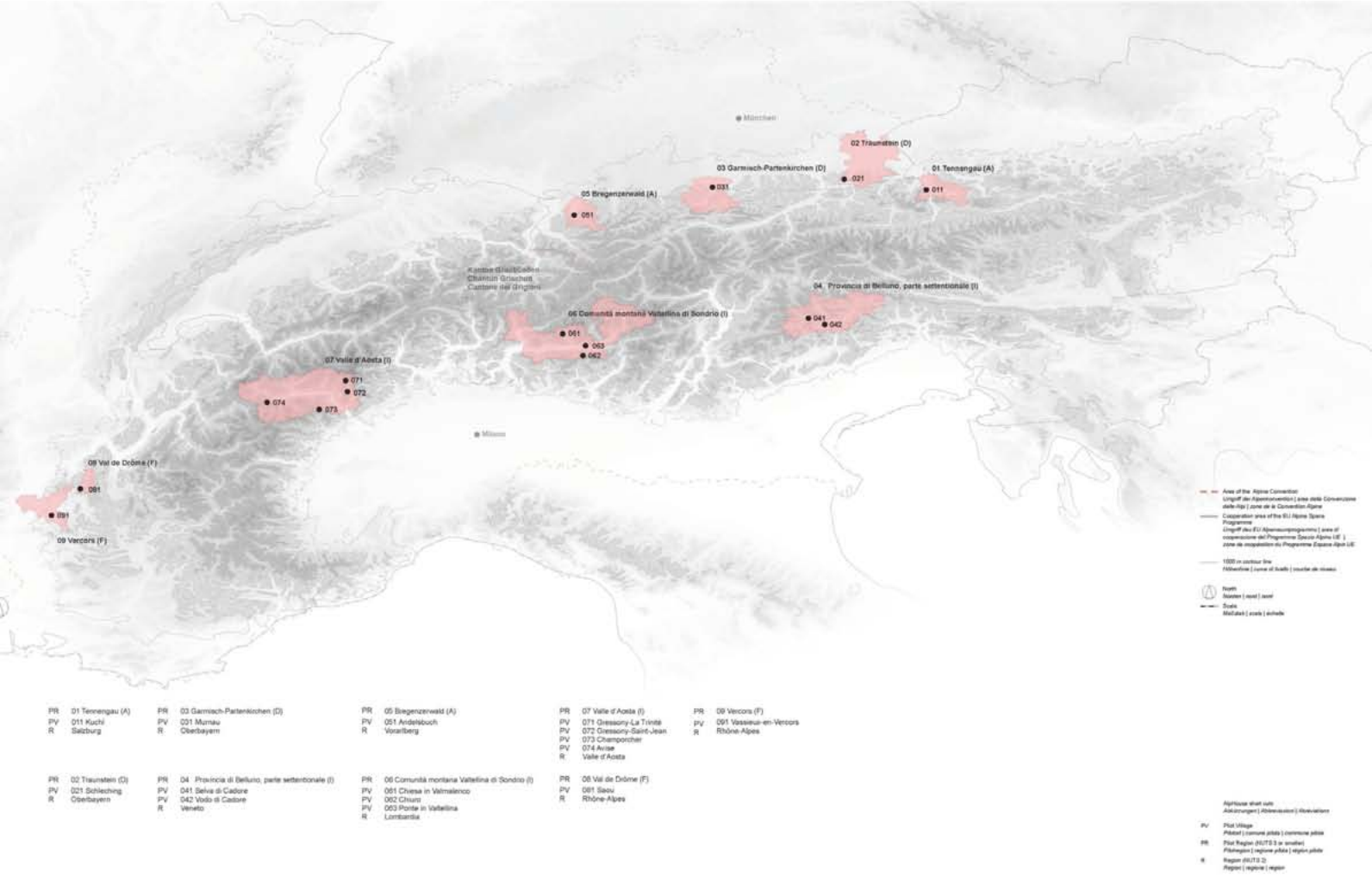
074 Avise

08 Val de Drôme (F)

081 Saou

09 Vercors (F)

091 Vassieux-en-Vercors



PR 01 Tennengau (A)
PV 011 Kuchl
R Salzburg

PR 02 Traunstein (D)
PV 021 Schleching
R Oberbayern

PR 03 Garmisch-Partenkirchen (D)
PV 031 Murnau
R Oberbayern

PR 04 Provincia di Belluno, parte settentrionale (I)
PV 041 Selva di Cadore
PV 042 Vodo di Cadore
R Veneto

PR 05 Bregenzerwald (A)
PV 051 Andelsbuch
R Vorarlberg

PR 06 Comunità montana Valtellina di Sondrio (I)
PV 061 Chiesa in Valmalenco
PV 062 Chiuro
PV 063 Ponte in Valtellina
R Lombardia

PR 07 Valle d'Aosta (I)
PV 071 Gressony-La-Trinité
PV 072 Gressony-Saint-Jean
PV 073 Champorcher
PV 074 Avise
R Valle d'Aosta

PR 08 Val de Drôme (F)
PV 081 Saou
R Rhône-Alpes

PR 09 Vercors (F)
PV 091 Vassieux-en-Vercors
R Rhône-Alpes

AlpHouse short cuts

PV Pilot Village

PR Pilot Region (NUTS 3 or smaller)

R Region (NUTS 2)