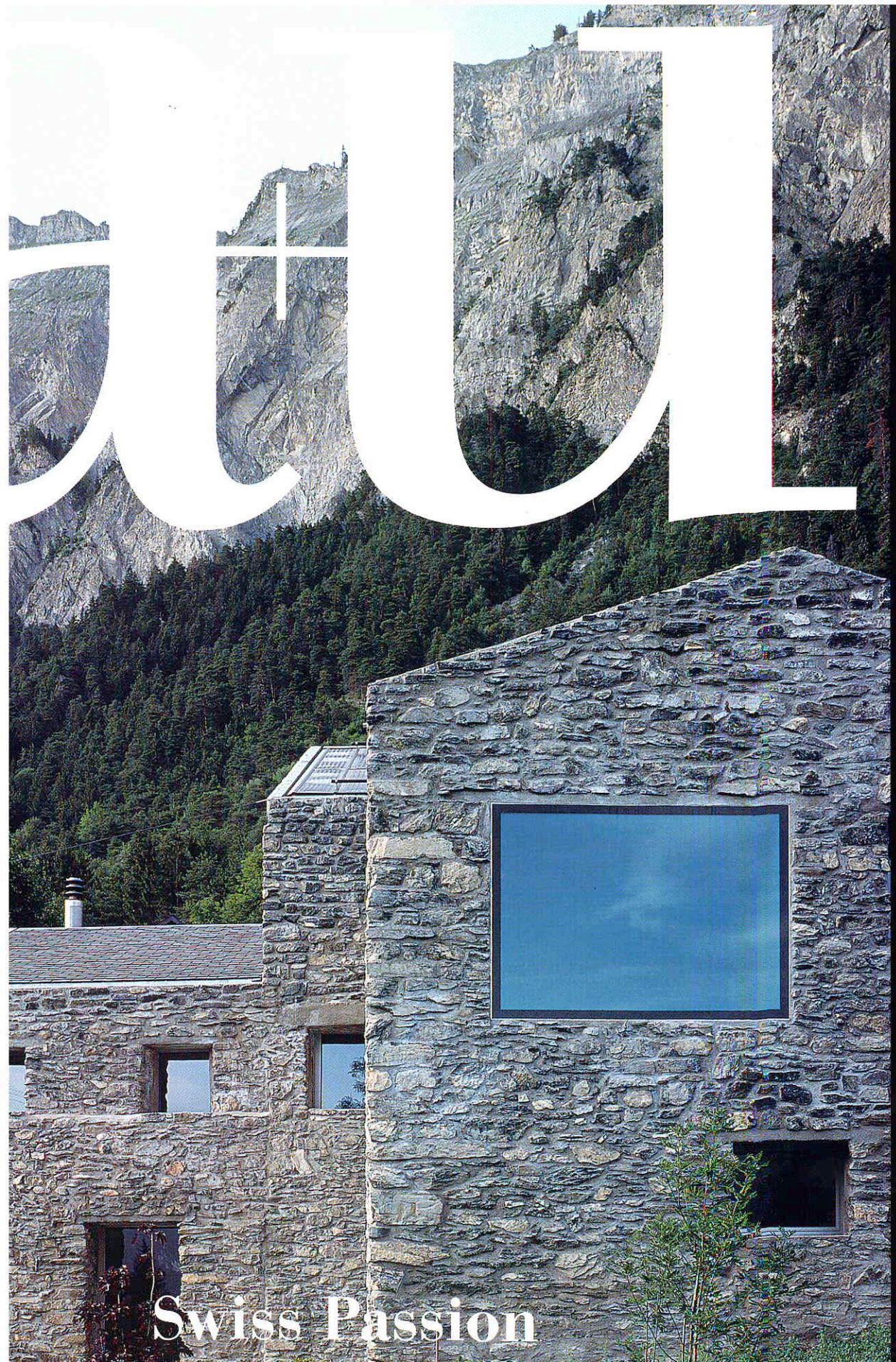


Swiss Passion



# Laurent Savioz Architect

Renovation of a dwelling in Chamoson  
Conthey, Valais, Switzerland 2005

ローラン・サヴィオ・アーキテクト  
シャモソンにある住宅の改修  
スイス、ヴァレ州、コンテ 2005



This building was constructed in stages from 1814 onwards and was used as a rural house. It is made up of three adjacent areas on different levels. On the ground floor it is crossed by an access way which indicates the presence of a former right of way to the next-door building.

The imposing proximity of the rocks and its stone construction lend this building a unity with its surroundings and a very strong mineral character.

The renovation project seeks to maintain and reinforce this character, emphasising the existing stone structure while using concrete for the parts to be replaced, in order to create a completely mineral feel to the whole.

The exterior volume has not been changed. The stone facades have been preserved and lined inside with an insulating layer of concrete based on foamed recycled glass (Misapor). This insulating lining forms the new load-bearing structure, reinforces the old stone walls and provides thermal insulation.

The parts of the facade formerly of timber weatherboarding have been replaced by a monolithic wall of insulating concrete with formwork which reproduces the texture of the former timber.

The former window apertures have been retained and some larger windows added in order to let more natural light into the main interior spaces and to provide views over the surrounding landscape. These new windows are flush with the exterior in order to minimise their impact on the volume of the building, as well as to emphasise and make good use of the substantial thickness of the walls.

With its good thermal insulation, controlled ventilation and energy from renewable sources, this renovation complies with the Swiss "Minergie" energy conservation standard. About 35 % of the annual heating requirement (heating and hot water) is produced by 23 m<sup>2</sup> of solar panels on the roof.

In harmony with the exterior, the interior is formed from unrefined mineral materials – natural stone, exposed concrete and polished screed floors. Only a few elements, such as the kitchen and the sanitary fittings, are in contrast to this character.

建物は1814年以来何段階にもわたってこつこつと建てられてきた、田舎の住居である。敷地は段差のついた3つのエリアにまたがっている。地上階に進入路が貫通していることから、それがかつて隣家の通路として使われていたことがうかがえる。

住宅の間に岩が迫っているうえに住宅そのものが石造なので、周囲との一体感が生まれ、また建物の鉱物質な性格が大いに際立っていた。

今回の改修計画では、この鉱物質の性格を維持・強化することで既存の石の構造を強調しつつ、必要な箇所にはコンクリートを打ち直し、全体を鉱物質な印象に統一することとした。

外観のボリュームには手を入れていない。石づくりの外壁はそのまま残し、壁の内側には再生ガラス発泡材を利用したコンクリート（ミザボール）の絶縁層を設けた。この絶縁層は耐力壁となって古い石壁を補強しつつ、断熱効果も発揮する。

外壁の古い板張り部分はそっくり断熱コンクリート製の一枚壁に交換し、なおかつ型枠には従来の板張りの質感を再現した。

古い窓は残したが、主空間の採光や眺望のために大きめの窓をいくつか追加した。新設の窓は、建物のボリュームへの影響を最小限にとどめるためと、せっかくの壁の厚みを活かし強調するために、外壁と面一に揃えてある。

断熱性の高さ、通気量の確保、再生可能なエネルギー源の利用のおかげで、この改修工事はスイスの省エネルギー規準「ミネルギー」を満たすことになった。屋上にとりつけられた23m<sup>2</sup>のソーラー・パネルにより、年間の必要熱供給量（暖房と温水）の35%が供



pp. 60–61: General view from the south, with old stone walls and new concrete wall. This page, below: General view before renovation. Photo courtesy of the architect. Opposite: Close-up view wall. All photos on pp. 60–68 except as noted by Thomas Jantscher.

60～61頁：南側から見た全景。古い石壁と新しいコンクリートの壁が見える。本頁、下：改修前の建物の全景。右頁：壁面の近景。

#### Credits and Data

Project title: Renovation of a dwelling in Chamoson

Client: Josiane and Michel Roduit

Location: Conthey, Valais, Switzerland

Design: 2003

Construction: 2004–2005

Architect: Laurent Savioz Architect

Works management: Laurent Savioz Architect

Civil engineers: Alpatec SA

HVAC engineer: Tecnoservice SA

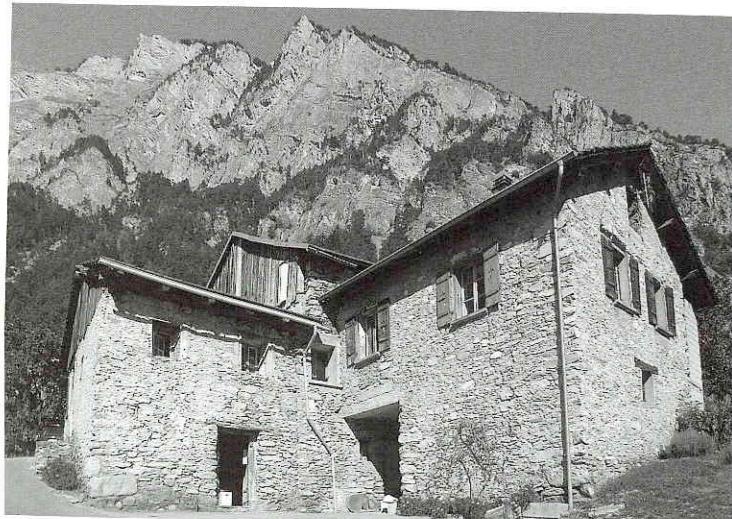
Program: Living/dining room, kitchen, office, WC/shower, bedroom, bathroom, artist's studio, exhibition gallery, cellar, technical facilities.

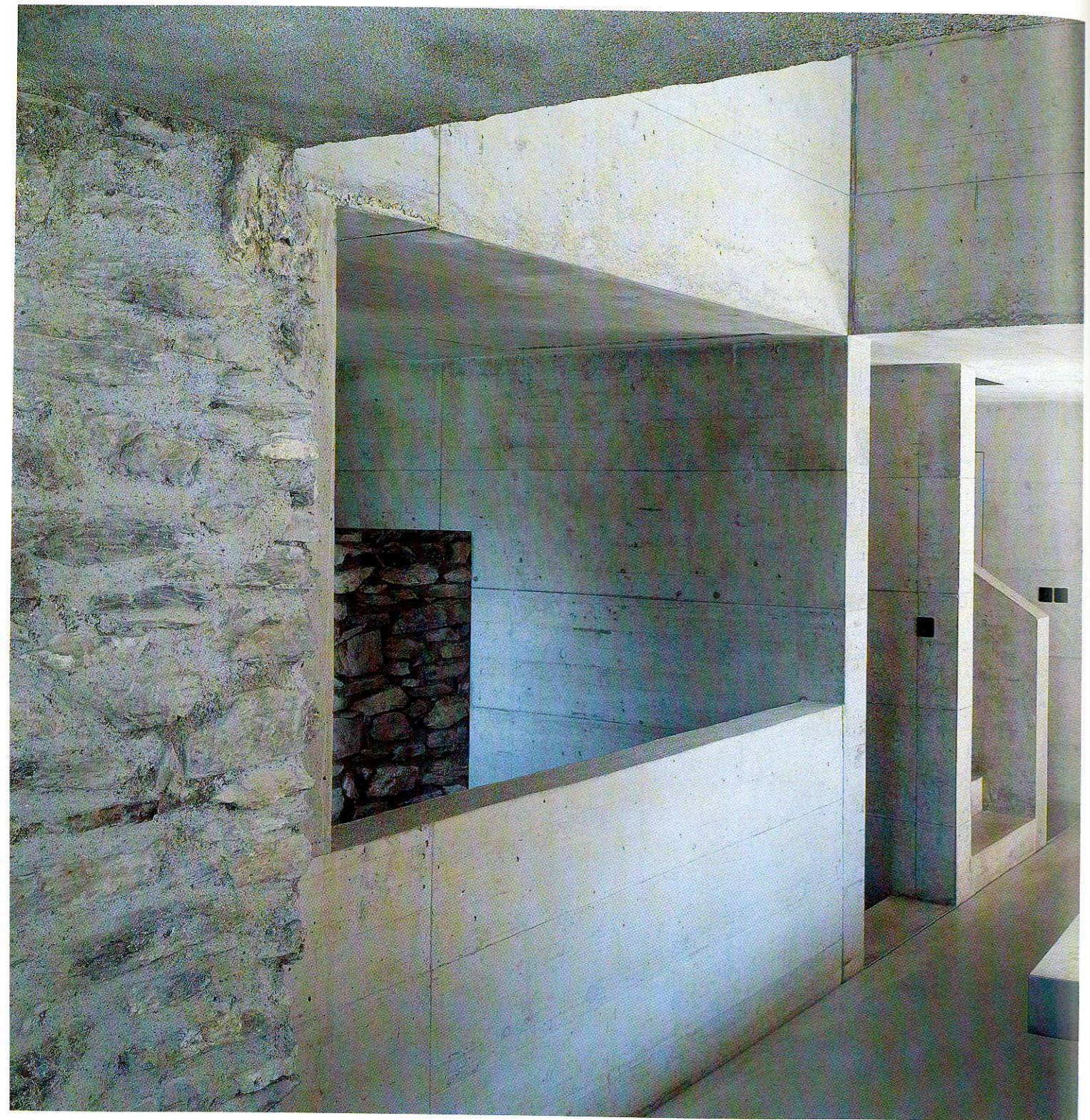
Site area: 318 m<sup>2</sup>

Built area: 172 m<sup>2</sup>

Gross area: 380 m<sup>2</sup>

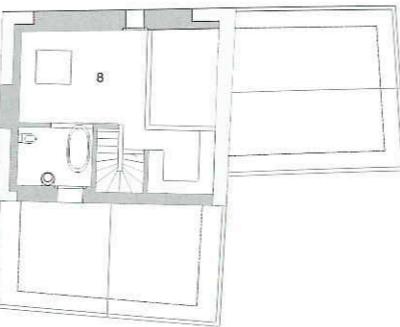
Building volume (SIA II6): 1,130 m<sup>3</sup>



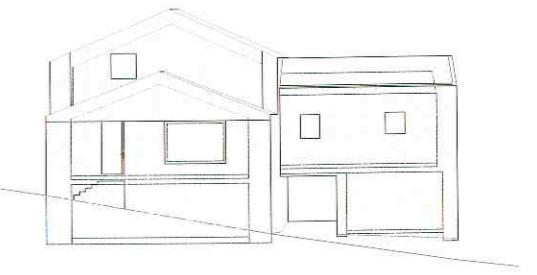


This page: Interior view with old natural stone walls, exposed concrete walls and polished screed floors. p. 67, above: View of the atelier on 2nd floor with monolithic wall on the right. 67, below: View through kitchen toward living room.

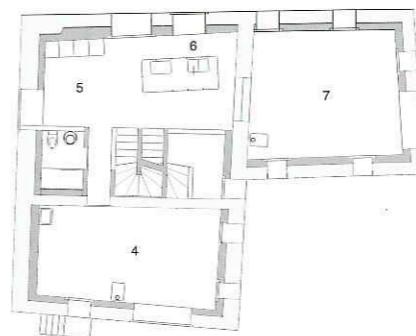
本頁：内観。古い天然石の壁と打ち放しコンクリートの壁、磨きあげられた床が見える。67頁、上：2階にあるアトリエ。右側に分厚い壁が見える。67頁、下：リビング・ルームへと続くキッチンを見る。



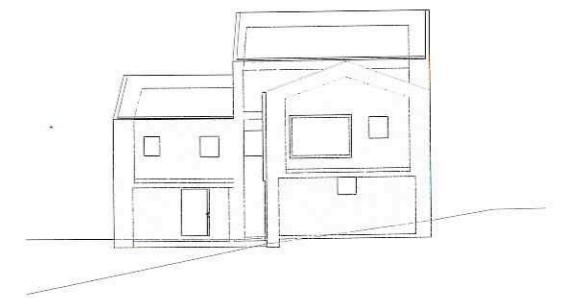
3rd floor plan／3階平面図



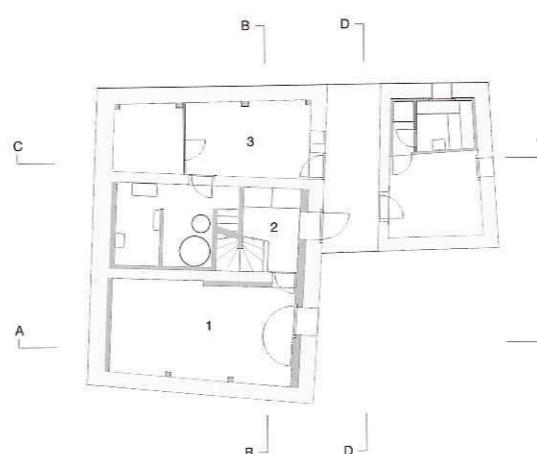
West elevation／西側立面図



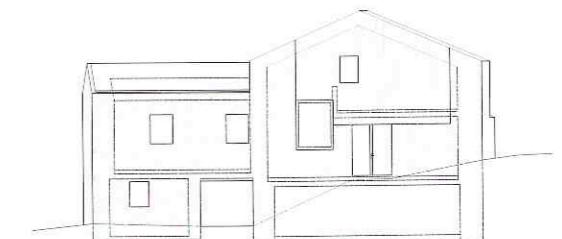
2nd floor plan／2階平面図



South elevation／南側立面図



1st floor plan (scale: 1/300)／1階平面図（縮尺：1/300）



East elevation (scale: 1/300)／東側立面図（縮尺：1/300）

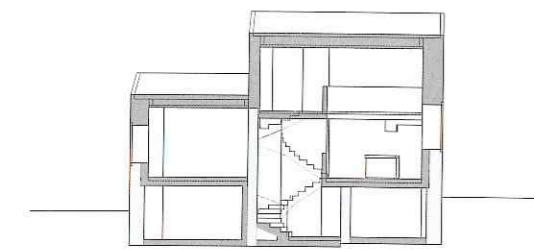
Legend: 1) Gallery, 2) Entrance, 3) Cellar, 4) Atelier, 5) Office, 6) Kitchen, 7) Living / Dining room, 8) Bedroom.  
凡例：1) ギャラリー、2) エントランス、3) 倉庫、4) アトリエ、5) オフィス、6) キッチン、7) リビング／ダイニング・ルーム、8) 寝室。



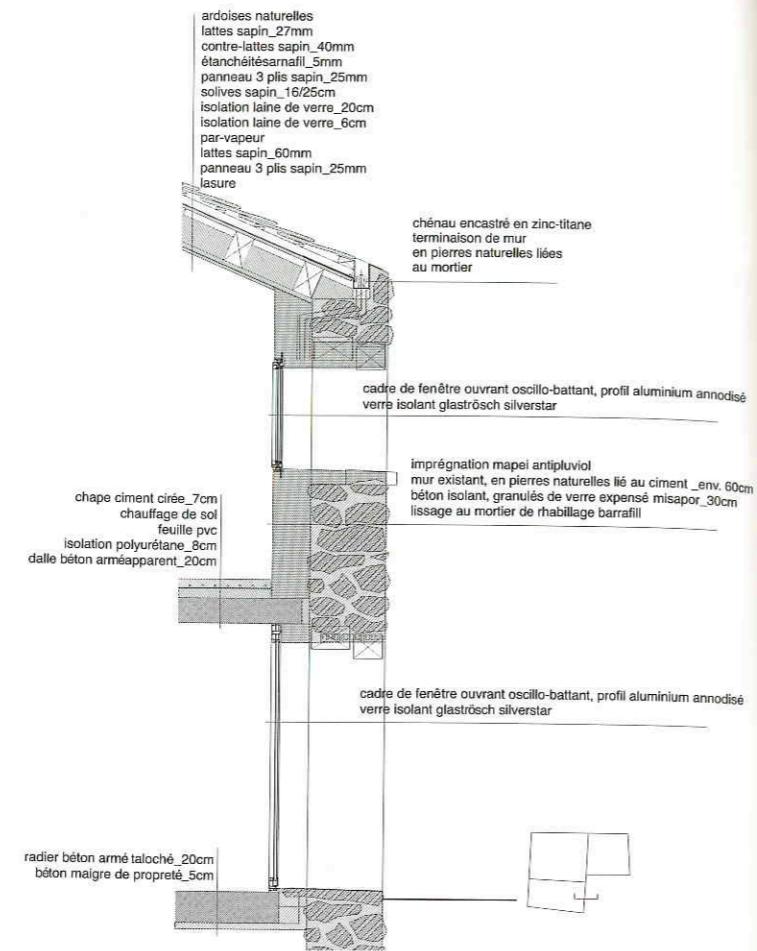
Site plan (scale: 1/2,500)／配置図（縮尺：1/2,500）



Section A/A断面図



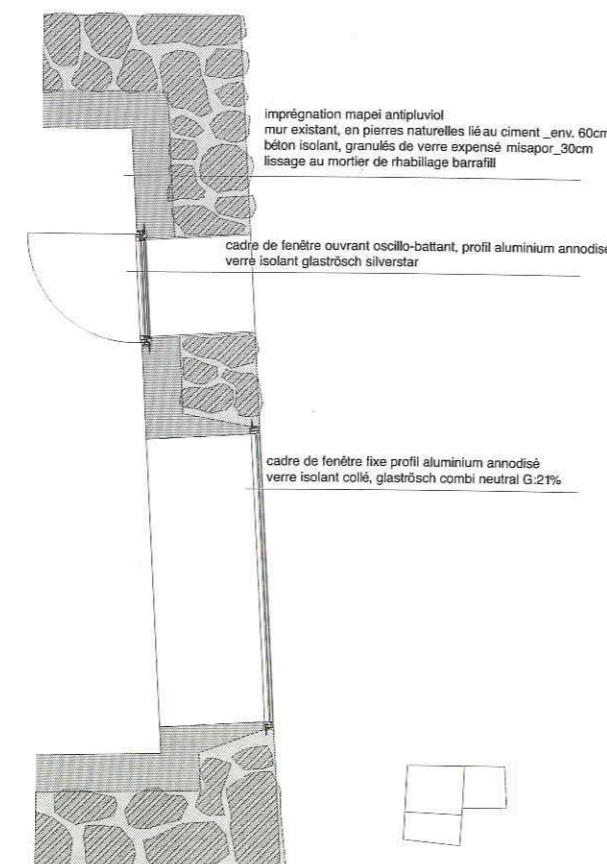
Section B/B断面図



Section detail of wall / 壁面の立断面詳細図



Section C/C断面図



Horizontal section detail of wall (scale: 1/60) / 壁面の平断面詳細図 (縮尺: 1/60)

Section D (scale: 1/300) / D断面図 (縮尺: 1/300)

