promo legno

Normalitá radicale

harquitectes

squadra

4 + 9

inibizione

common places

construire edifici

sentito comune

normalitá radicale

architettura popolare

anonima

costruzione

sostenibilitá

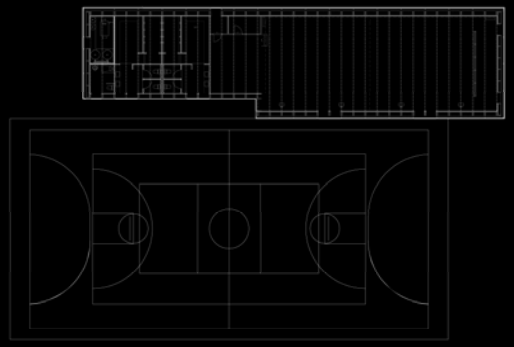
ciclo della vita
dell’edificio

legno

harquitectes

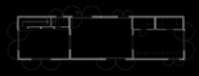
sistema struttura in
legno lamellare
pannelli grandi
formato KLH

palestra scolastica 704

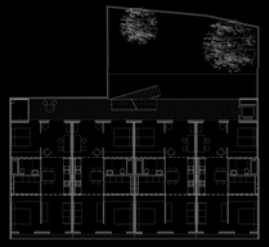


sistema pannello
micro laminato LVL
kerto prefabbricato

casa 205



abitazione comunale 809



uffici 810

palestra scolastica 704

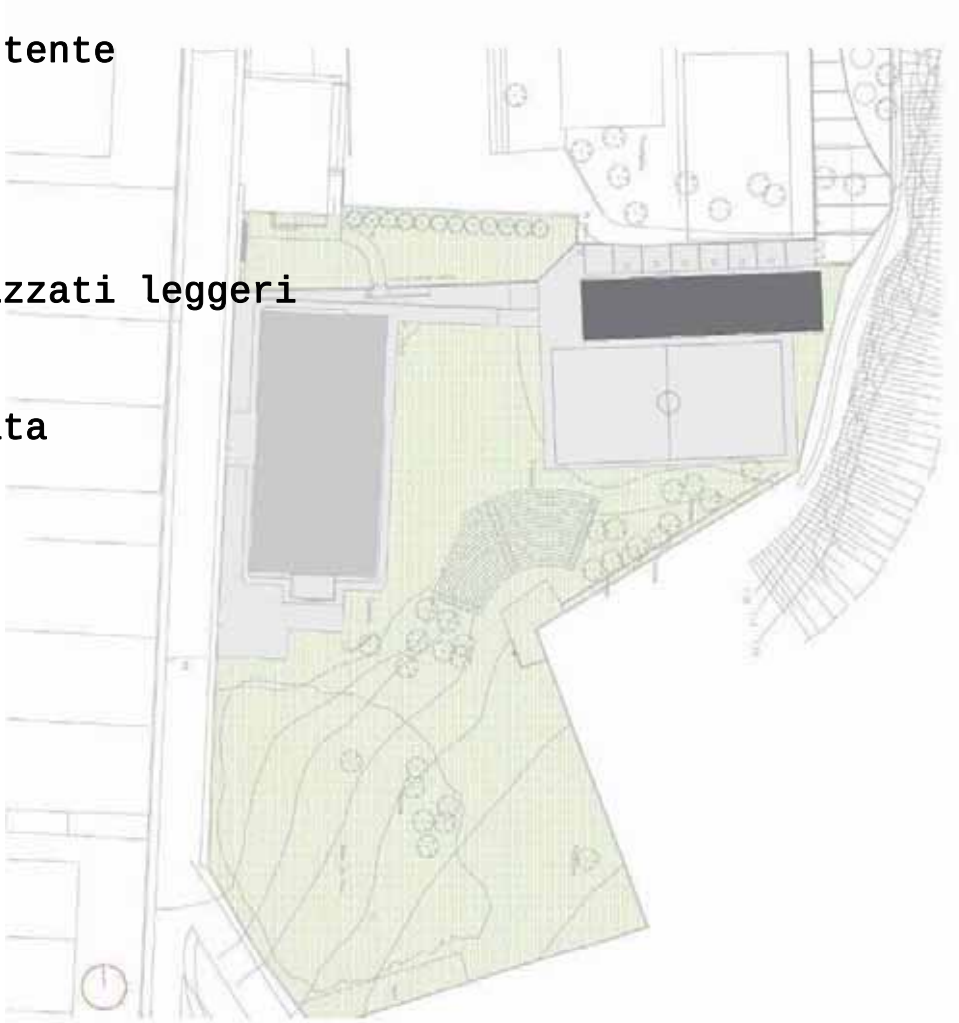
1. palestra isolata dall’edificio esistente

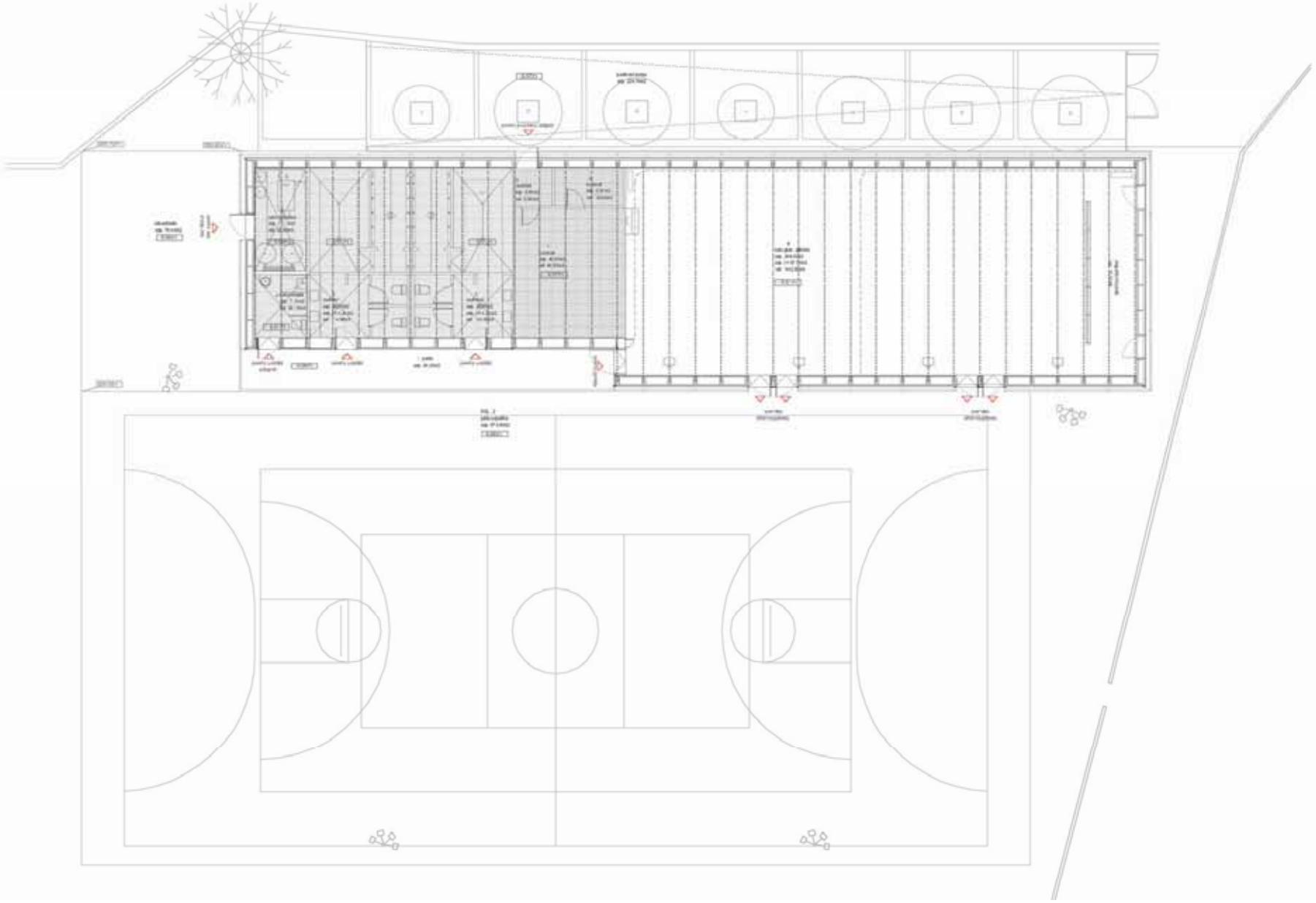
2. ridurre la fase di esecuzione

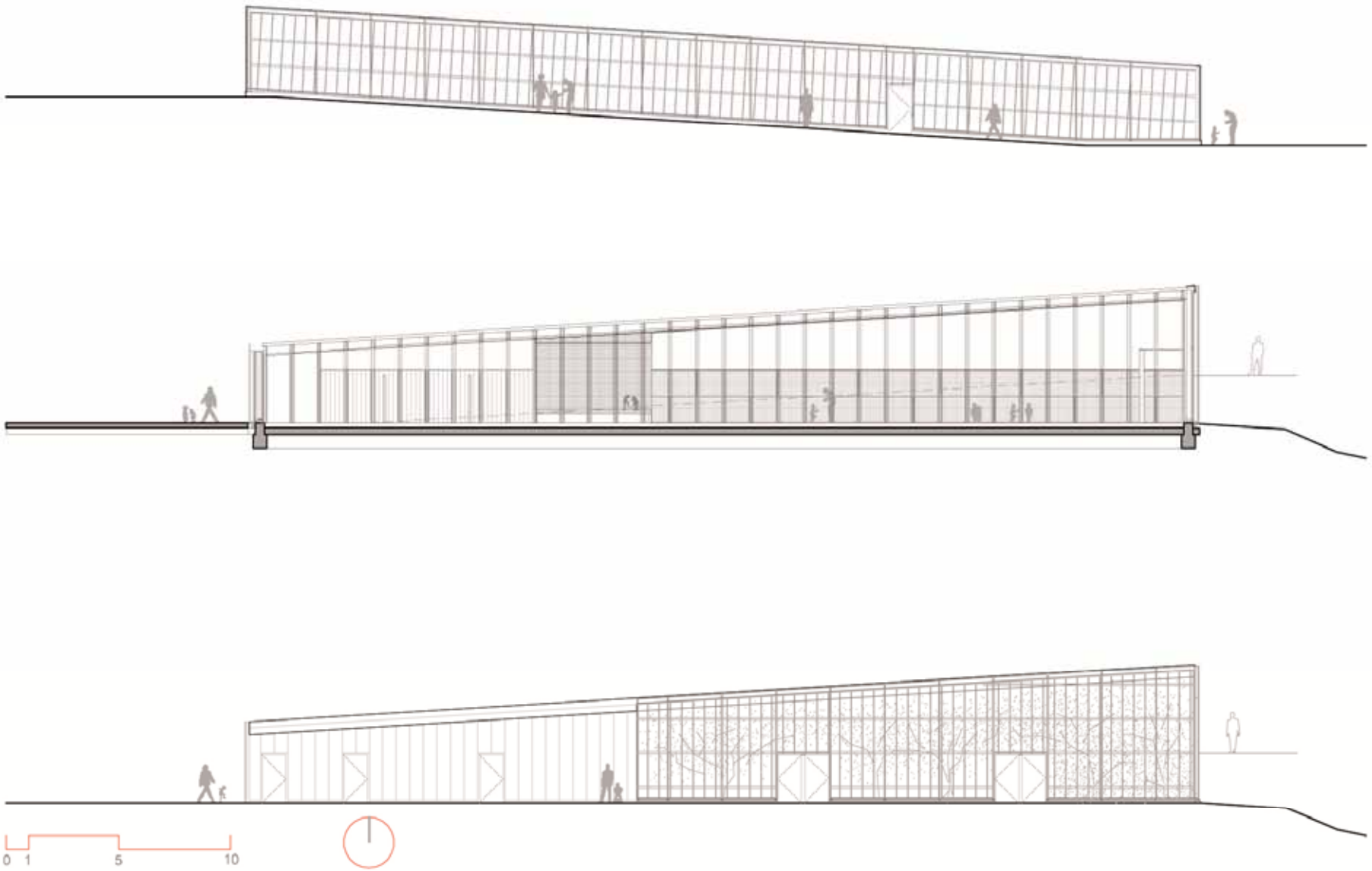
3. sistemi prefabbricati o industrializzati leggeri

4. materiali a bassa energia incorporata

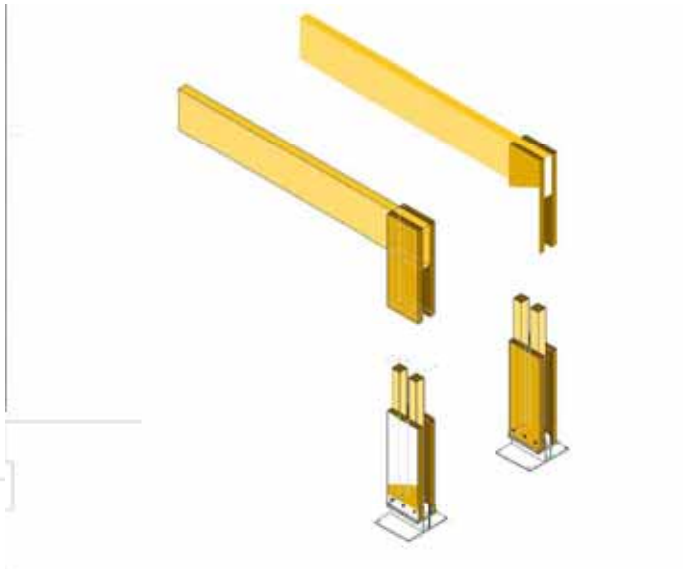
5. sistemi passivi

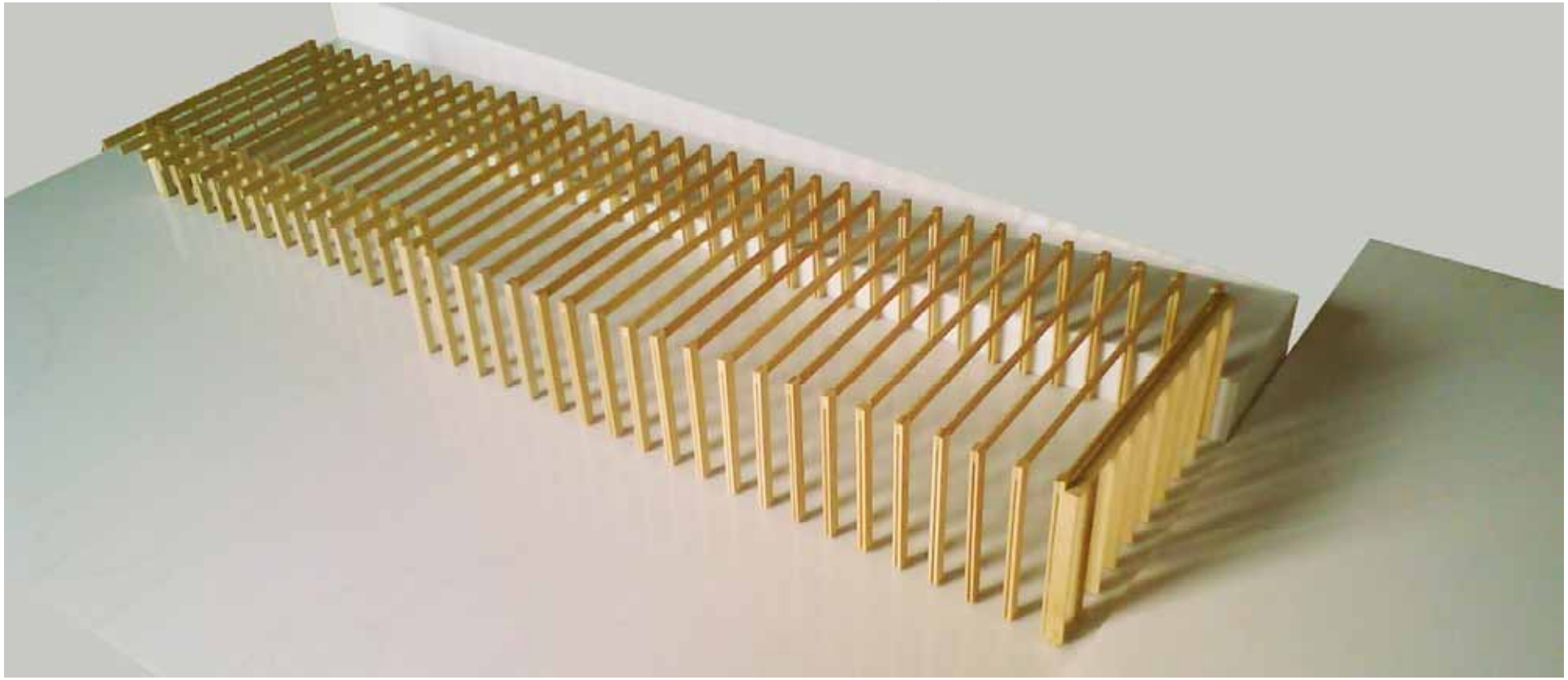


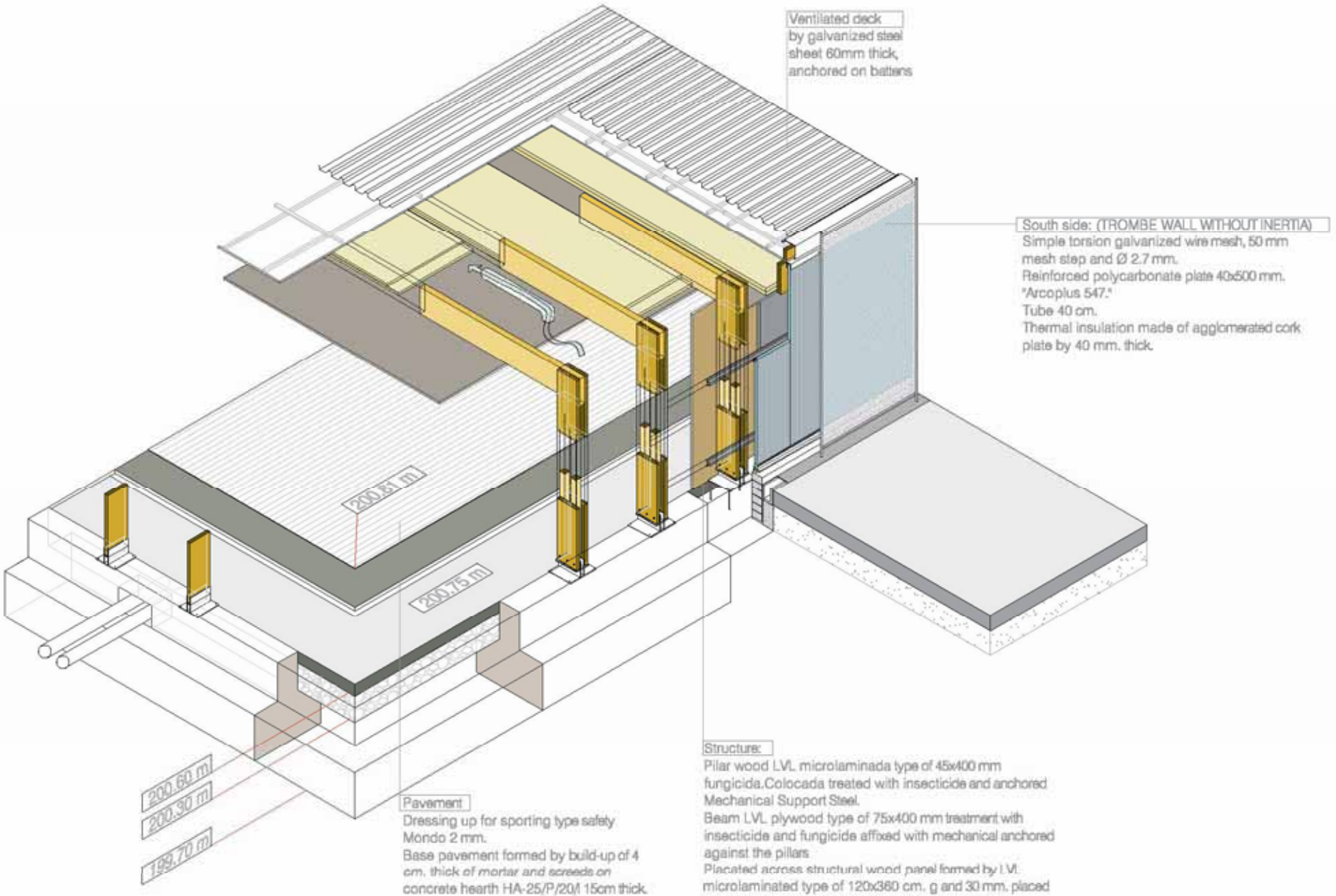


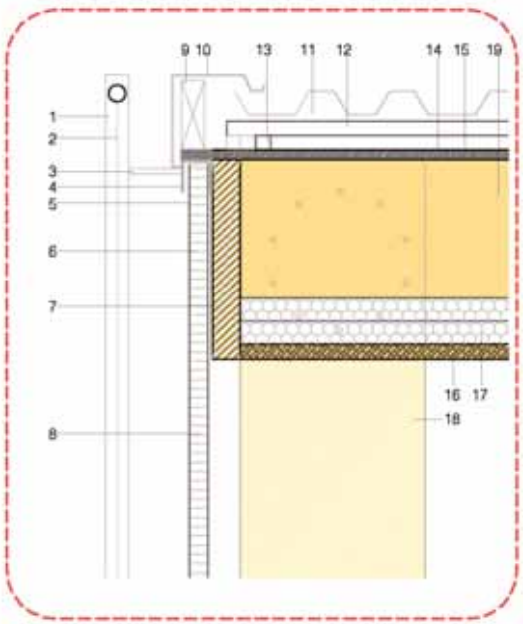

0 1
5
10

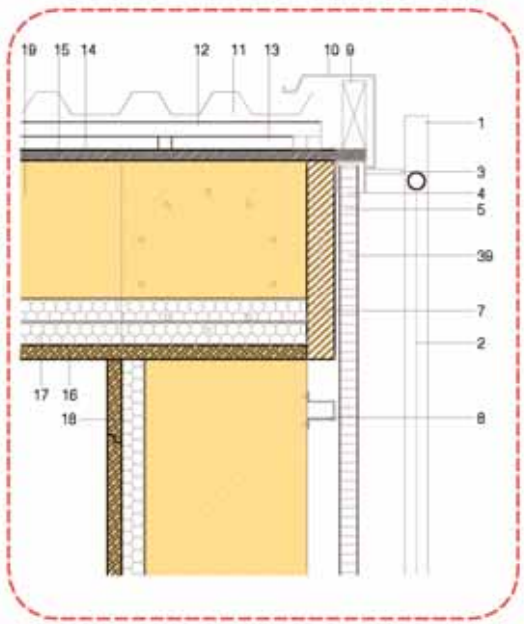
10.06
biga de fusta laminada de 400 x 75 mm
2 plans de fusta laminada 400 x 45 mm
2 plans de fusta laminada 400 x 45 mm
h variable: 3,14 - 5,60 m
3 connectors Ø 16 per plar
3 connectors Ø 16 per plar
4 taca mecânica Ø 16
4 taca mecânica Ø 16
0.12

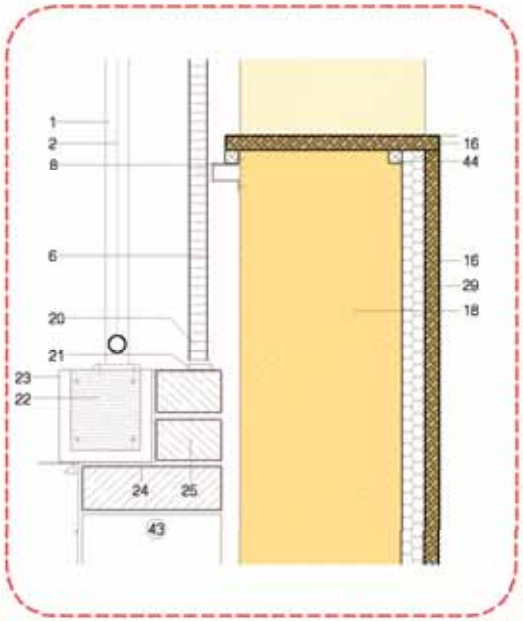


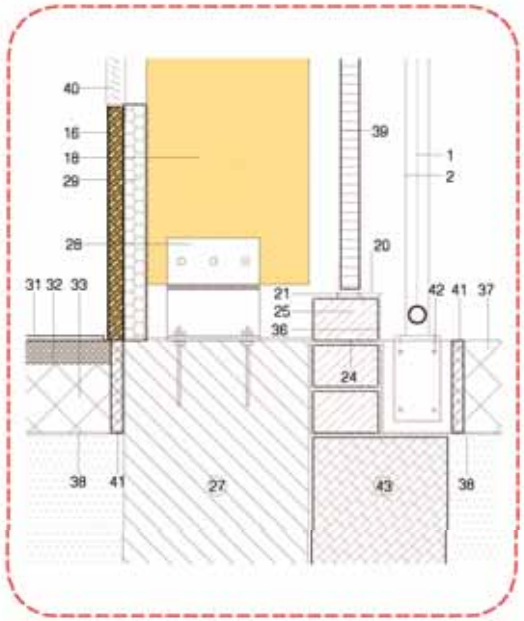


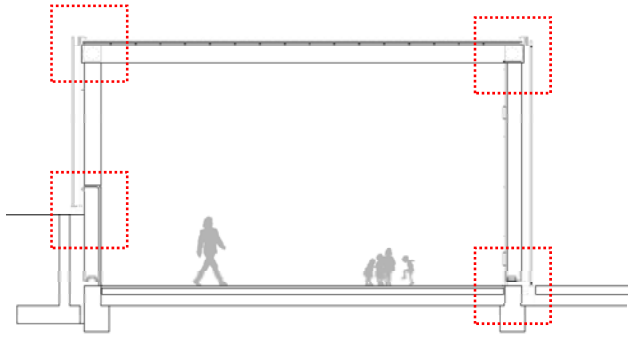

Ventilated deck
by galvanized steel
sheet 60mm thick,
anchored on battens
South side: (TROMBE WALL WITHOUT INERTIA)
Simple torsion galvanized wire mesh, 50 mm
mesh step and Ø 2.7 mm.
Reinforced polycarbonate plate 40x500 mm.
"Arcoplus 547."
Tube 40 cm.
Thermal insulation made of agglomerated cork
plate by 40 mm. thick.
200.51 m
200.75 m
200.60 m
200.30 m
199.70 m
Pavement
Dressing up for sporting type safety
Mondo 2 mm.
Base pavement formed by build-up of 4
cm. thick of mortar and screeds on
concrete hearth HA-25/P/20/I 15cm thick.
Structure:
Pilar wood LVL microlaminada type of 45x400 mm
fungicida.Colocada treated with insecticide and anchored
Mechanical Support Steel.
Beam LVL plywood type of 75x400 mm treatment with
insecticide and fungicide affixed with mechanical anchored
against the pillars
Placated across structural wood panel formed by LVL
microlaminated type of 120x360 cm. g and 30 mm. placed
on the structure with mechanical anchored treatment
insecticide and fungicide.

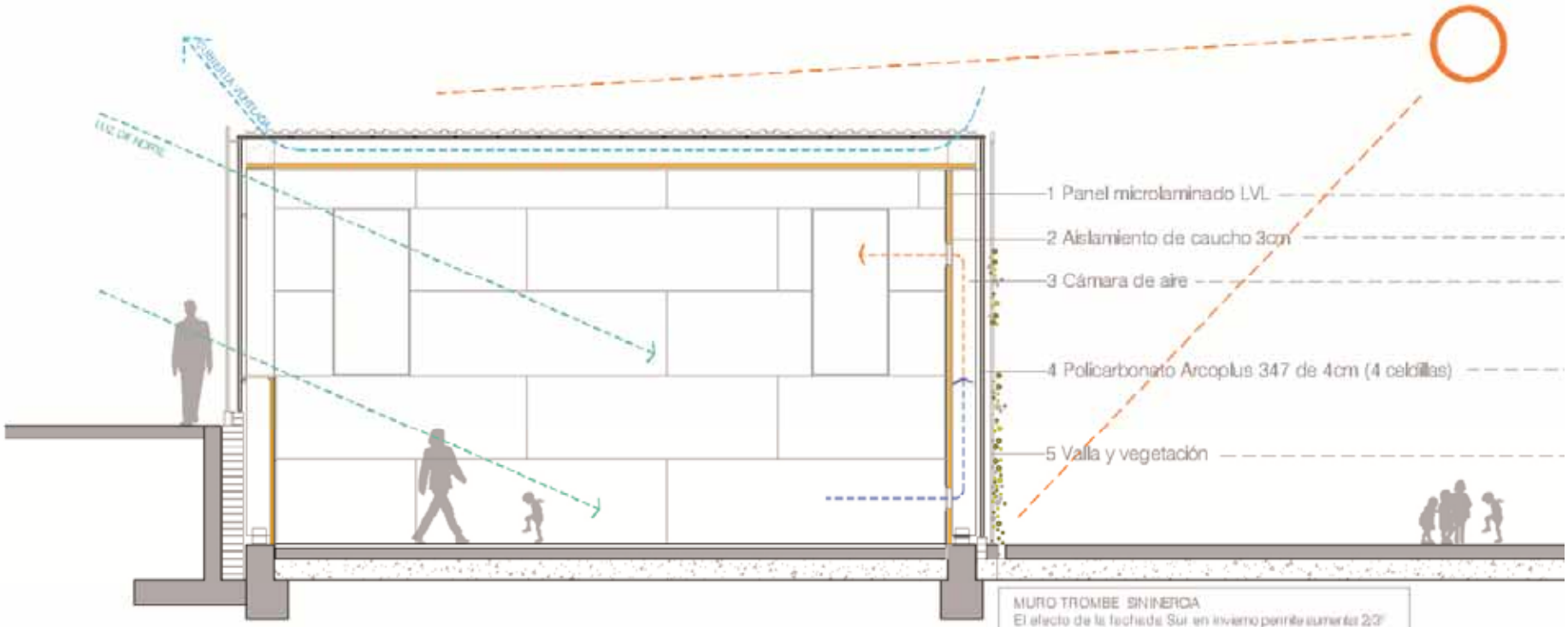

9 10 13 11 12 14 15 19
1
2
3
4
5
6
7
8
16 17
18


19 15 14 12 11 13 10 9
1
3
4
5
39
7
2
8
17 16
18


1
2
8
6
20
21
23
22
24 25
43
16
44
16
29
18


40
16
18
29
28
31 32 33
21
25
36
38 41
27
43
38
39
1
2
20
42 41 37
24




1 Panel microlaminado LVL
2 Aislamiento de caucho 3cm
3 Cámara de aire
4 Policarbonato Arcoplus 347 de 4cm (4 celdillas)
5 Valla y vegetación
MURO TROMBE SIN INERCIA
El efecto de la fachada Sur en invierno permite aumentar 2/3º la temperatura interior en los días de sol reduciendo el consumo de gas del sistema de climatización

processo di costruzione

NEW HOLLAND

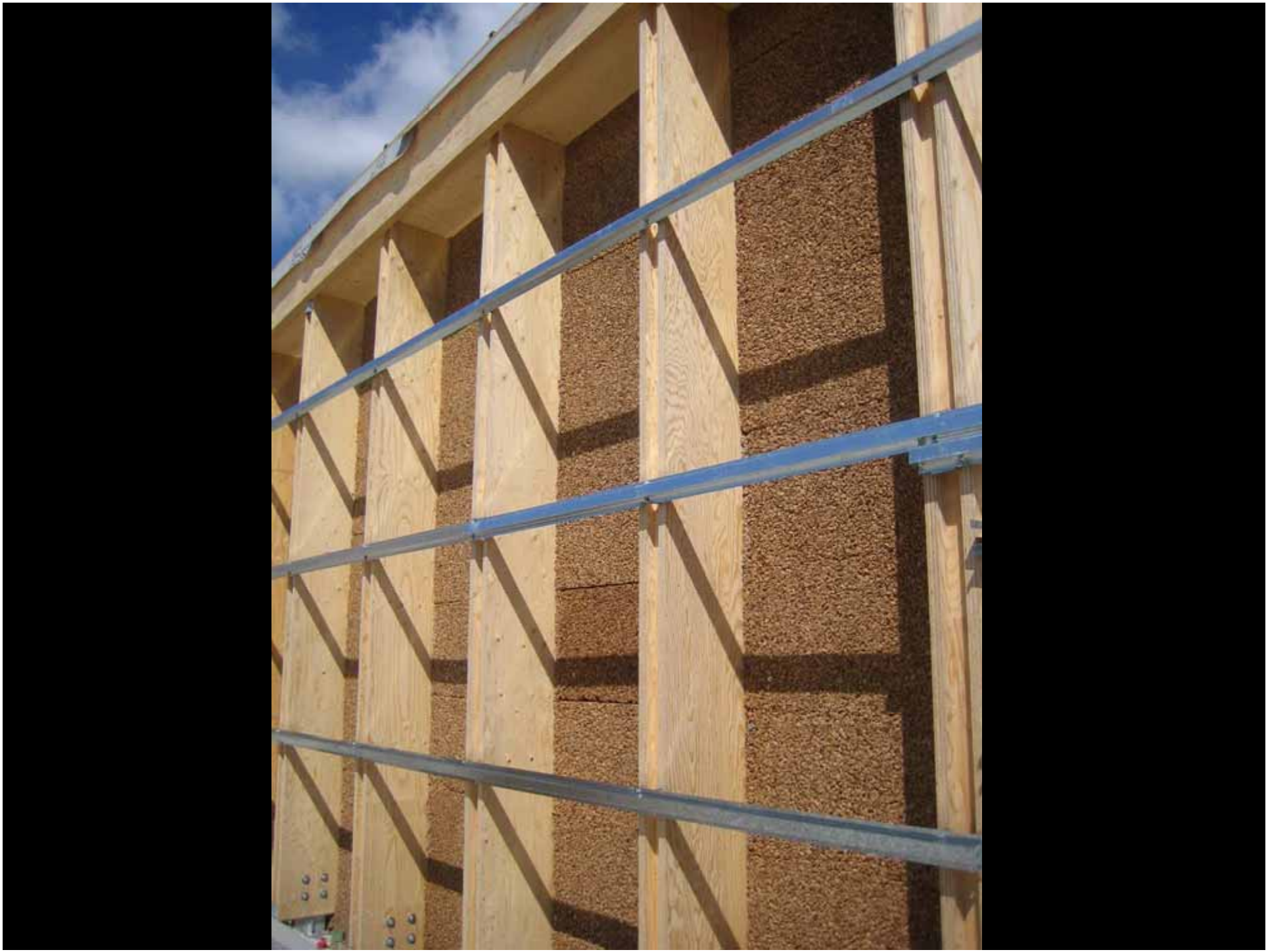
0093 FGJ
SP

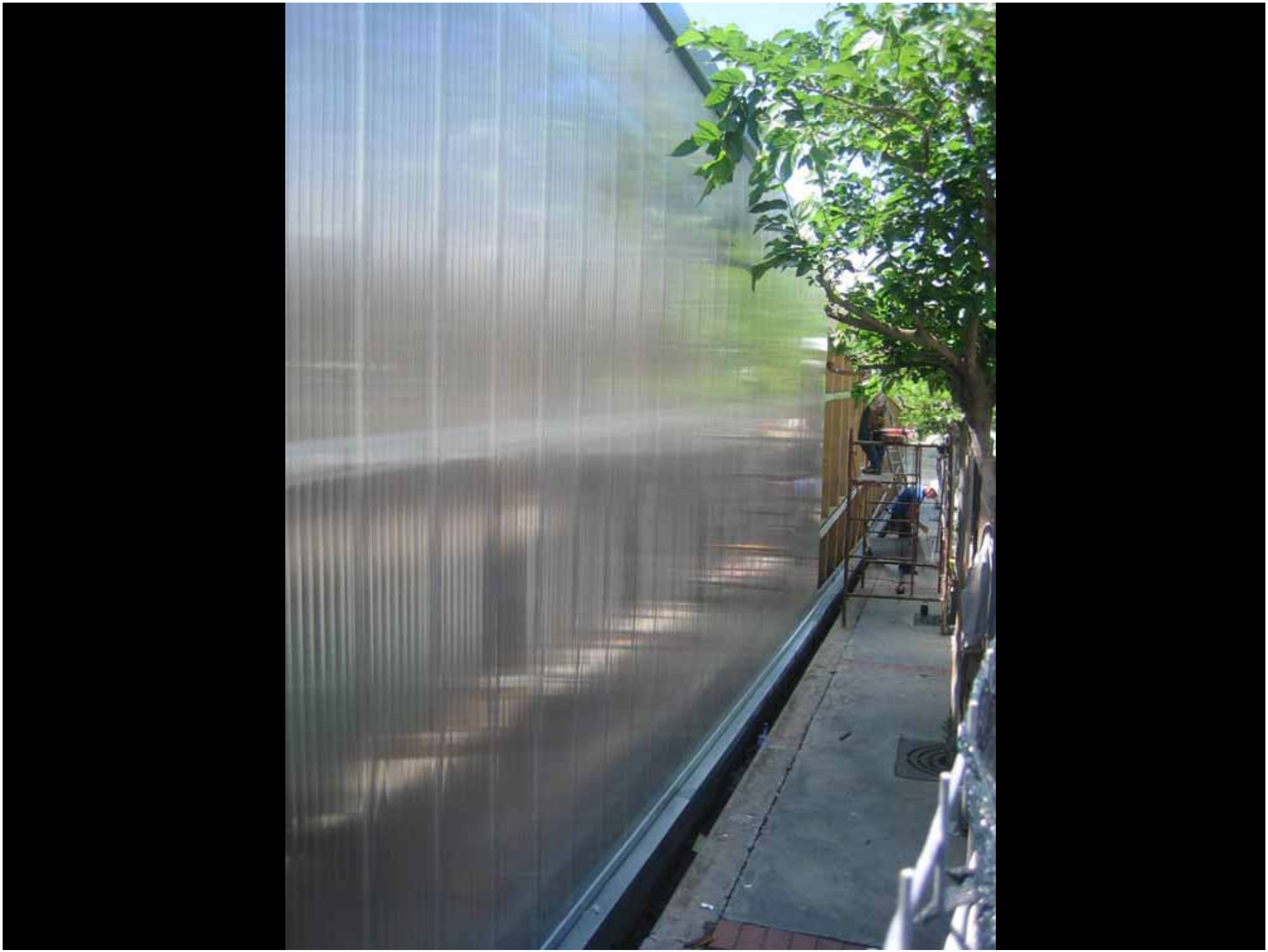
114L
0893FGJ
SP

FLUPICSA
QUICK STEP
FLEXURA

ROCKWOOL

ROCKWOOL
ROCKWOOL
ROCKWOOL
ROCKWOOL
ROCKWOOL





inizio 15-03-2008

02-04-2008

16-04-2008

24-04-2008

15-05-2008

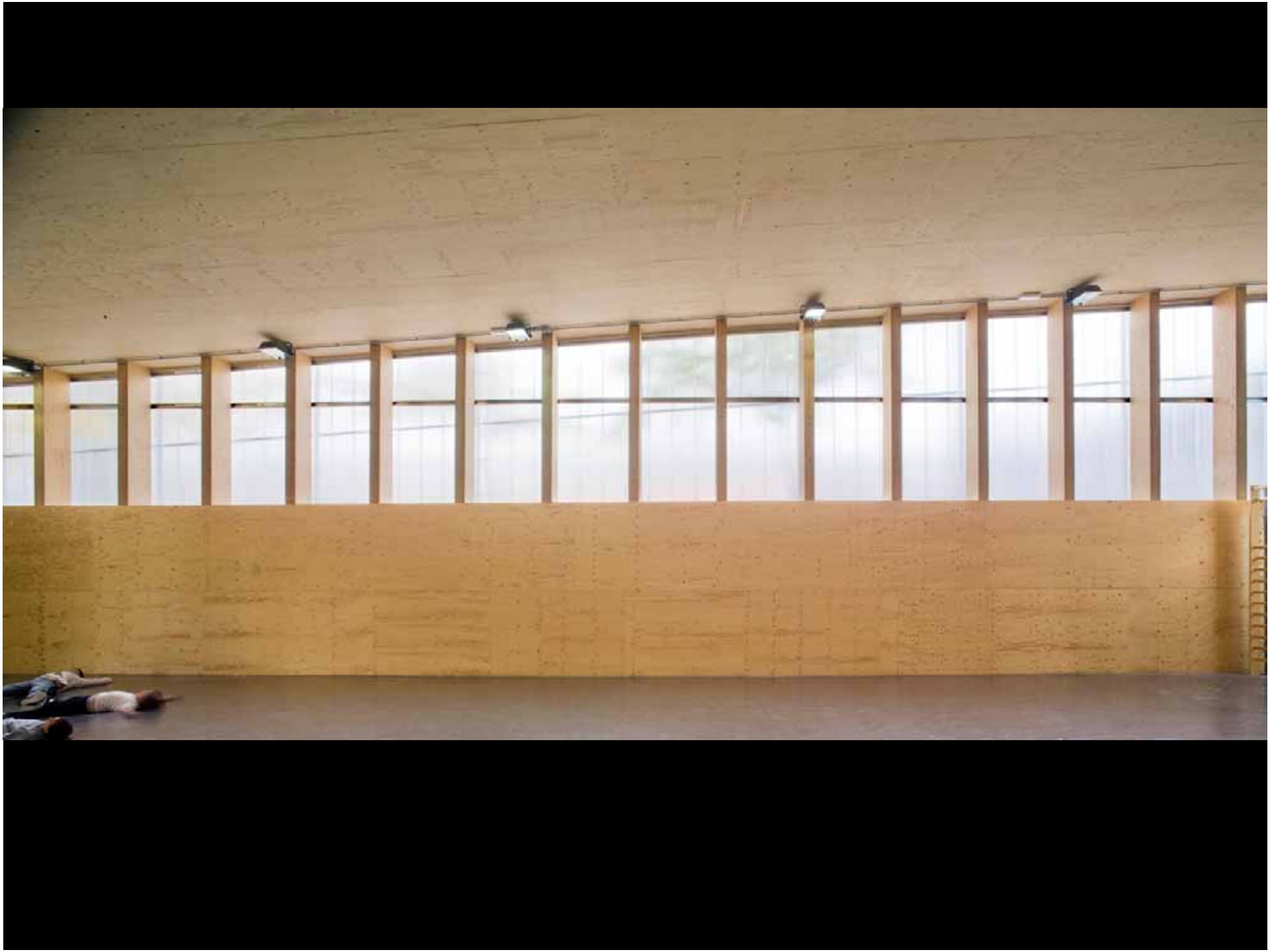
08-06-2008

18-06-2008

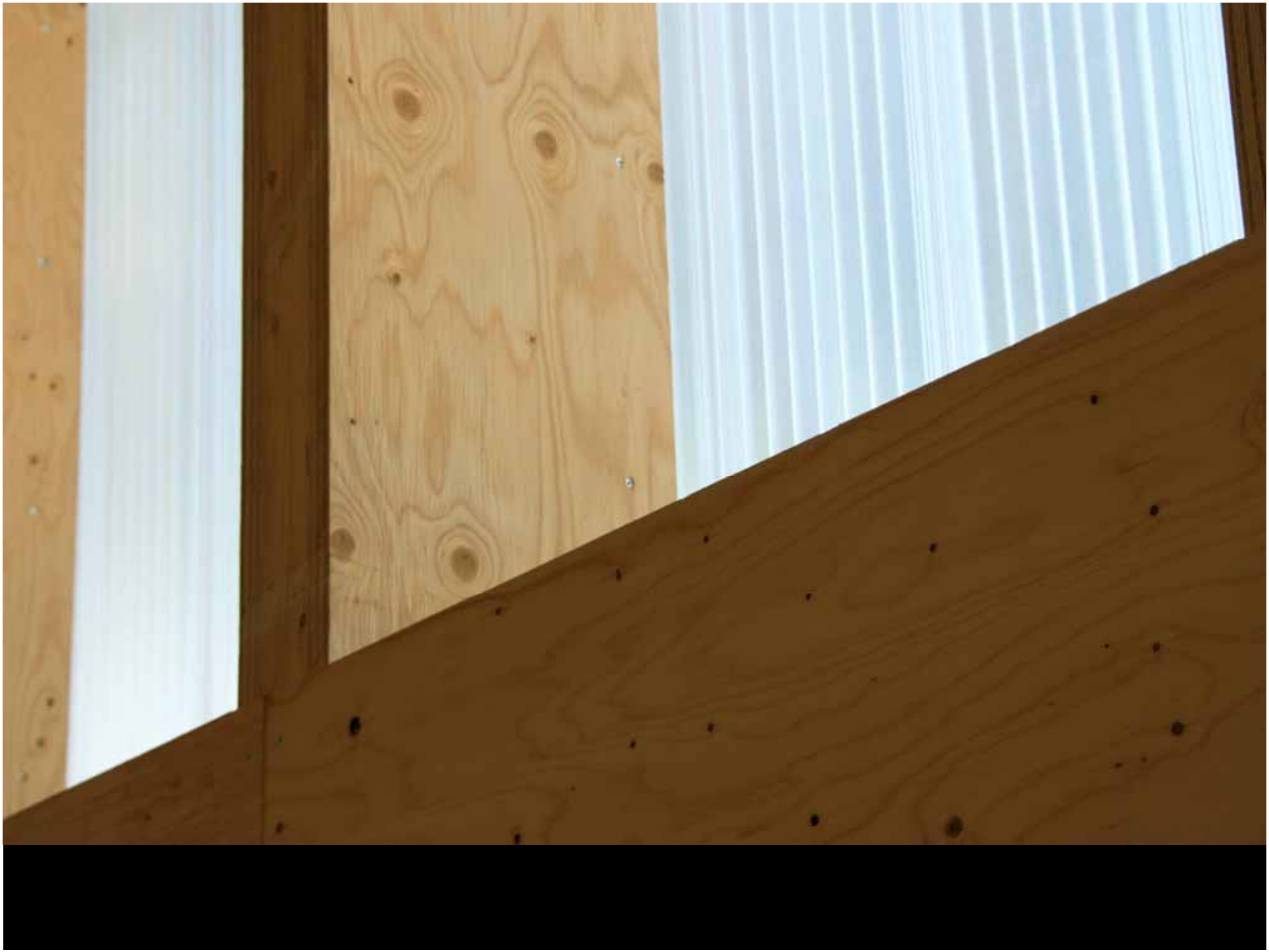
05-07-2008

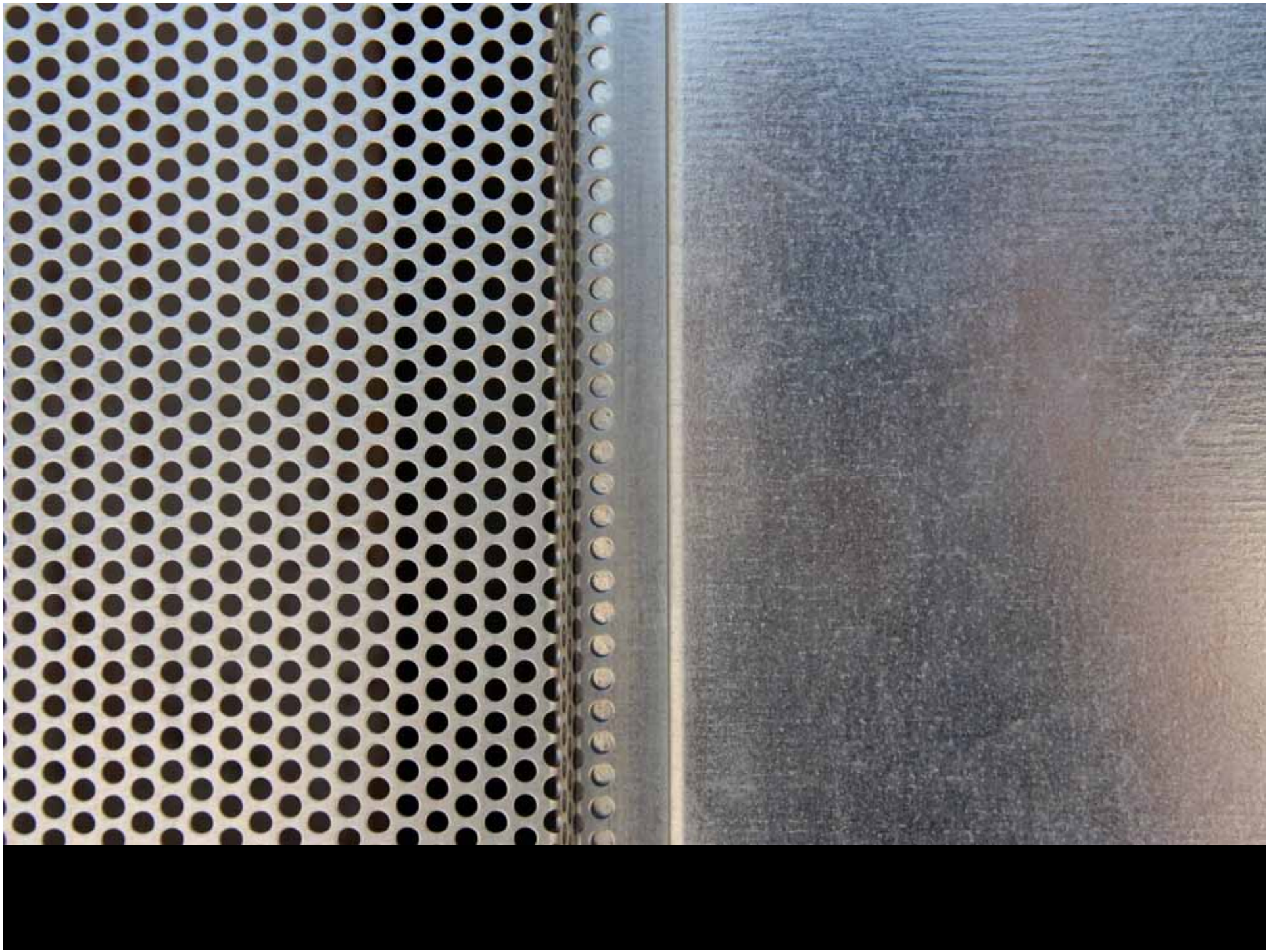
finito 05-09-2008

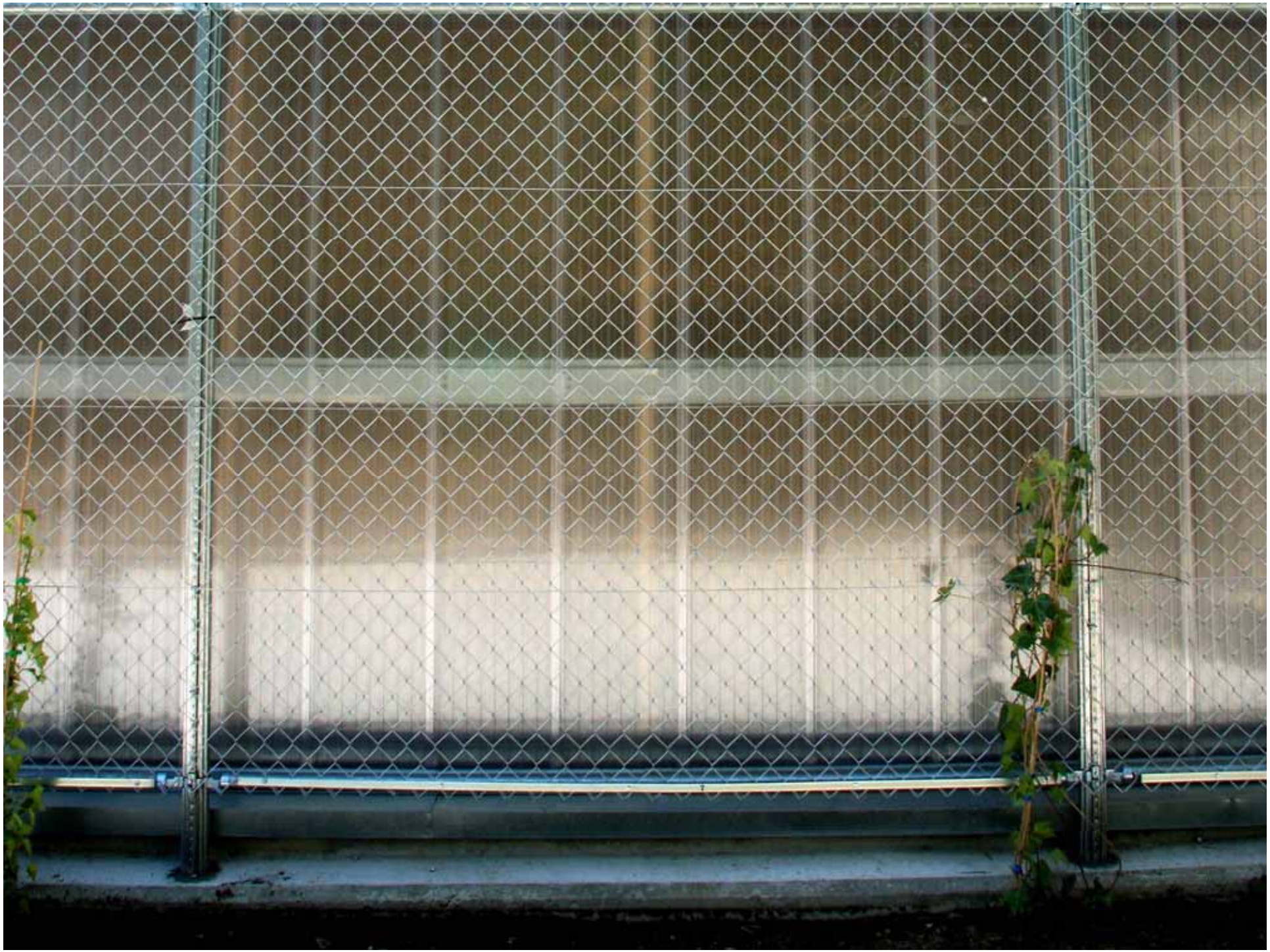
la palestra terminata

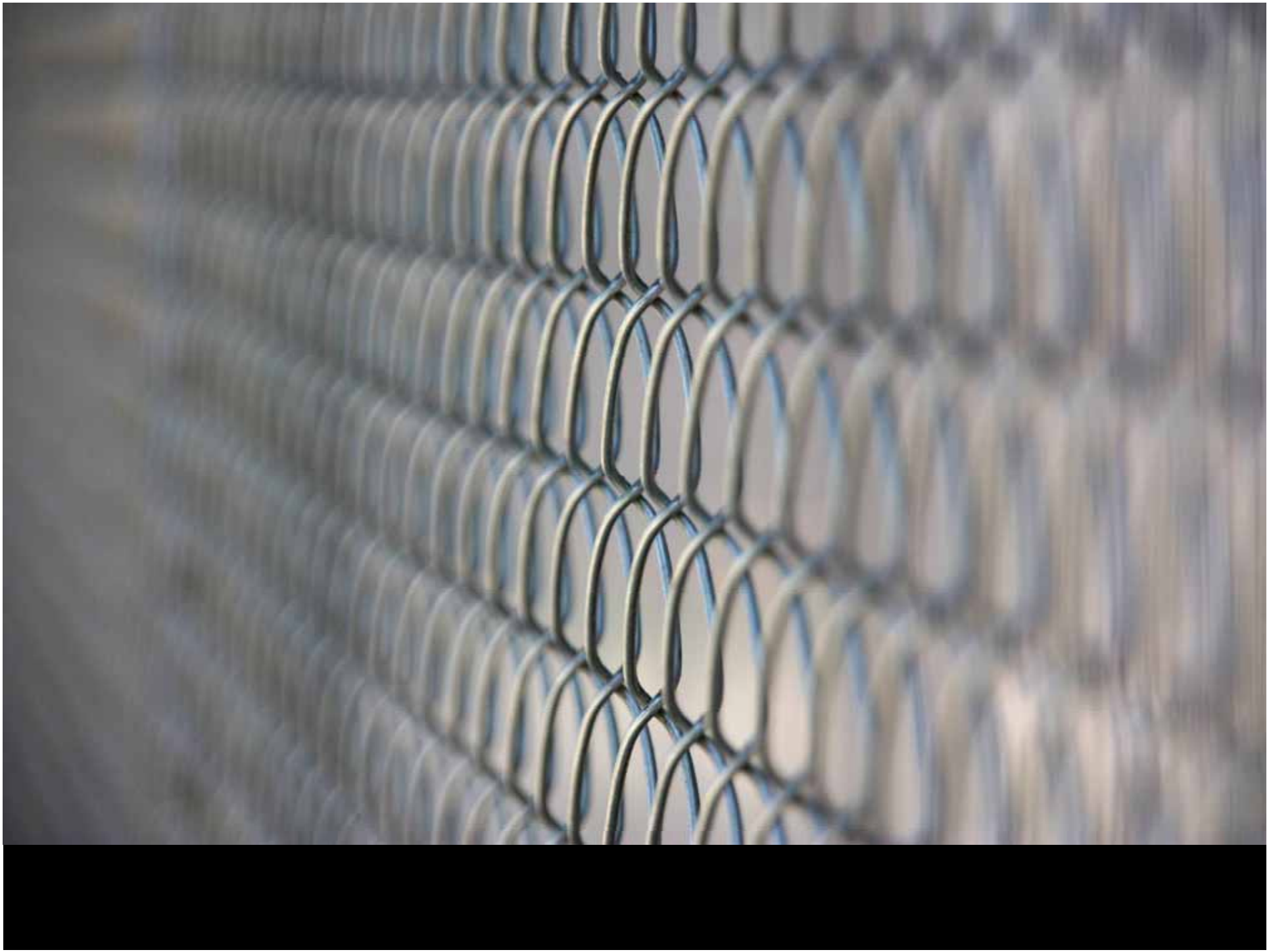


da vicino

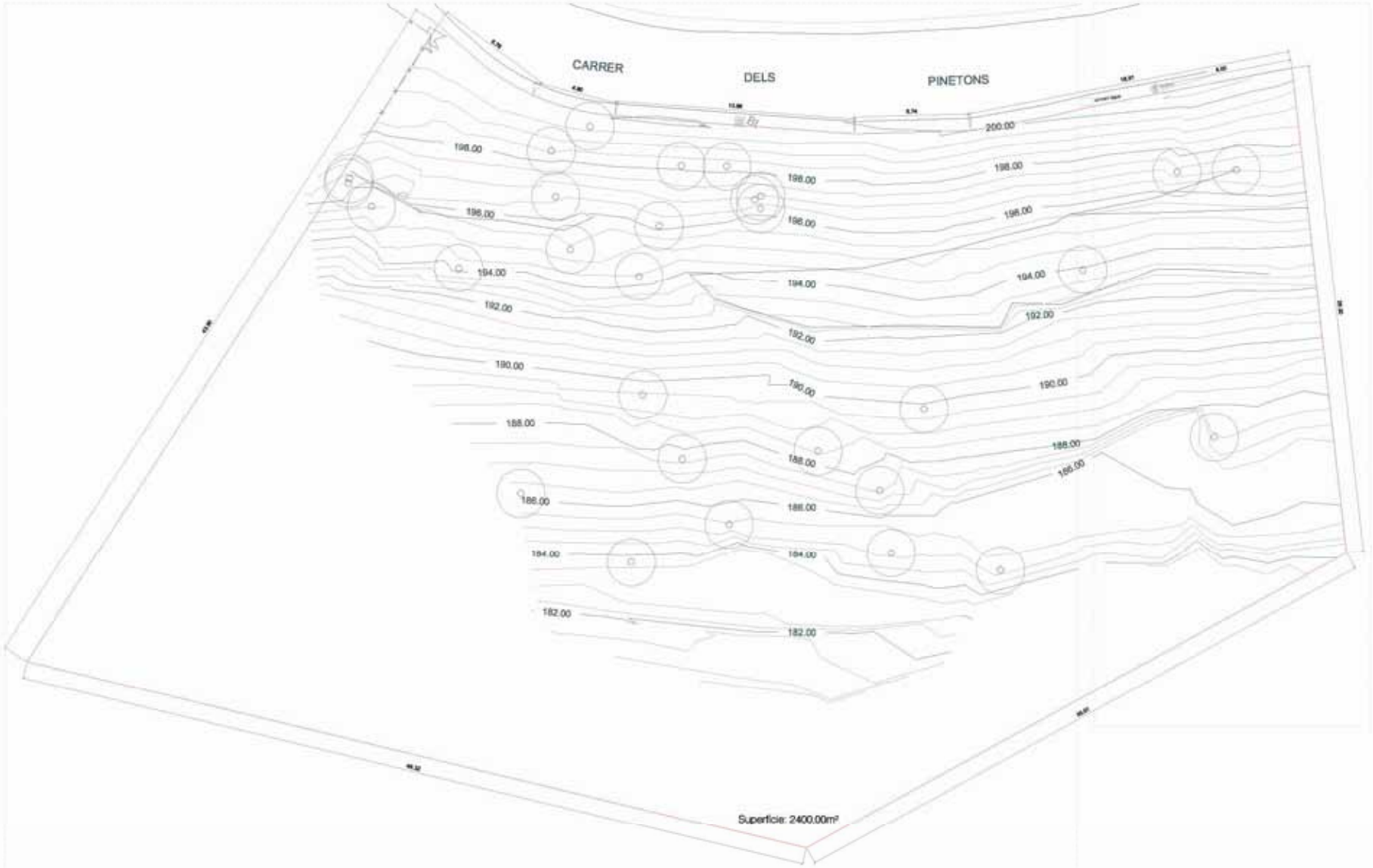




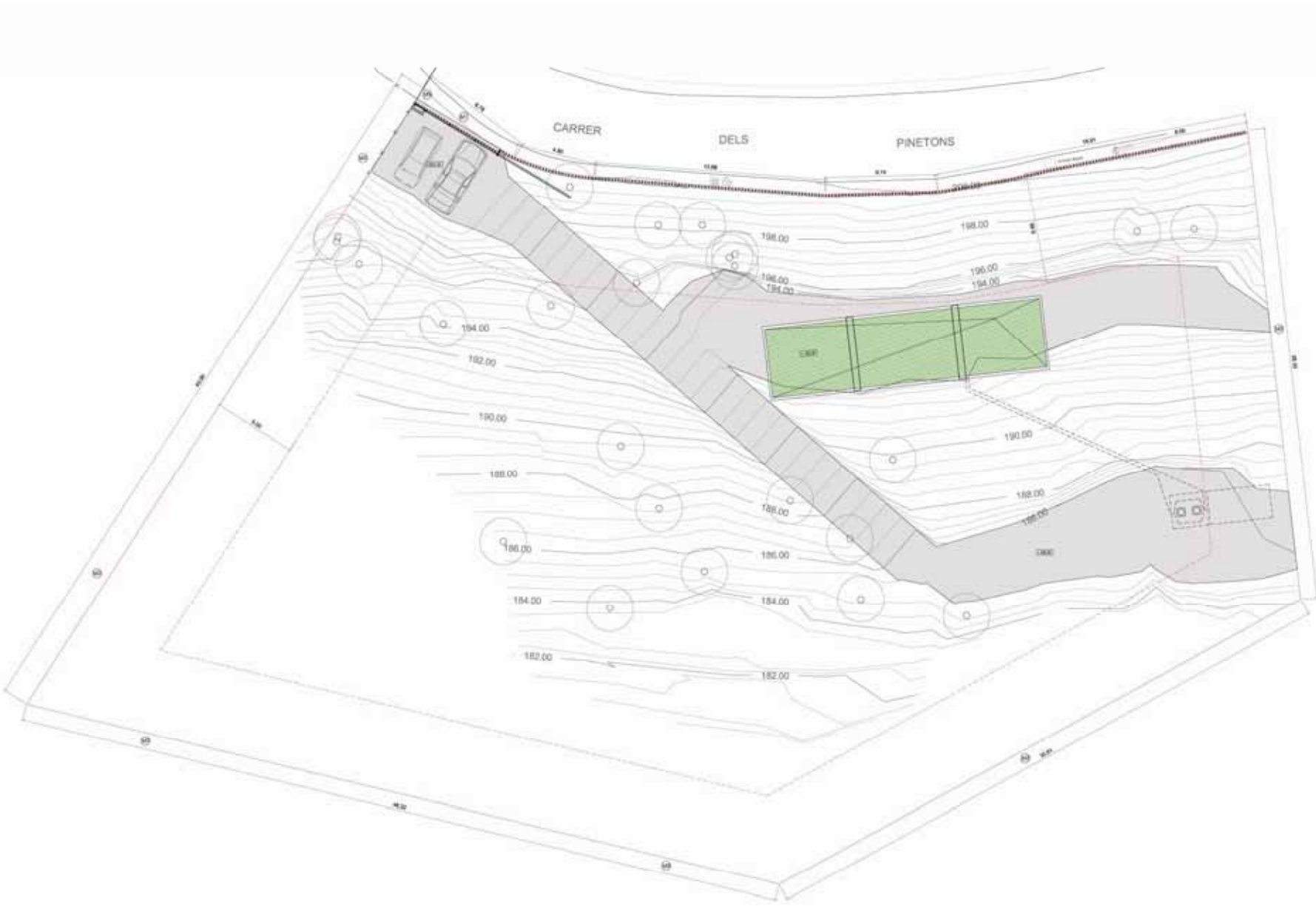




casa 205


CARRER
DELS
PINETONS
200.00
198.00
196.00
194.00
192.00
190.00
188.00
186.00
184.00
182.00
Superficie: 2400.00m²

0
1
3


CARRER
DELS
PINETONS
198.00
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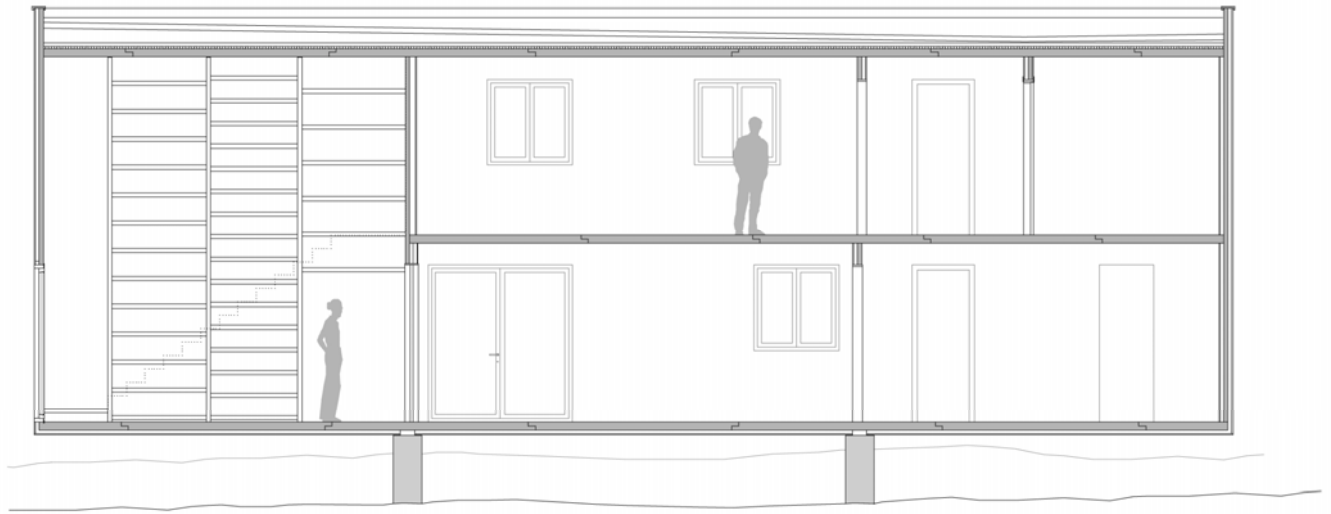
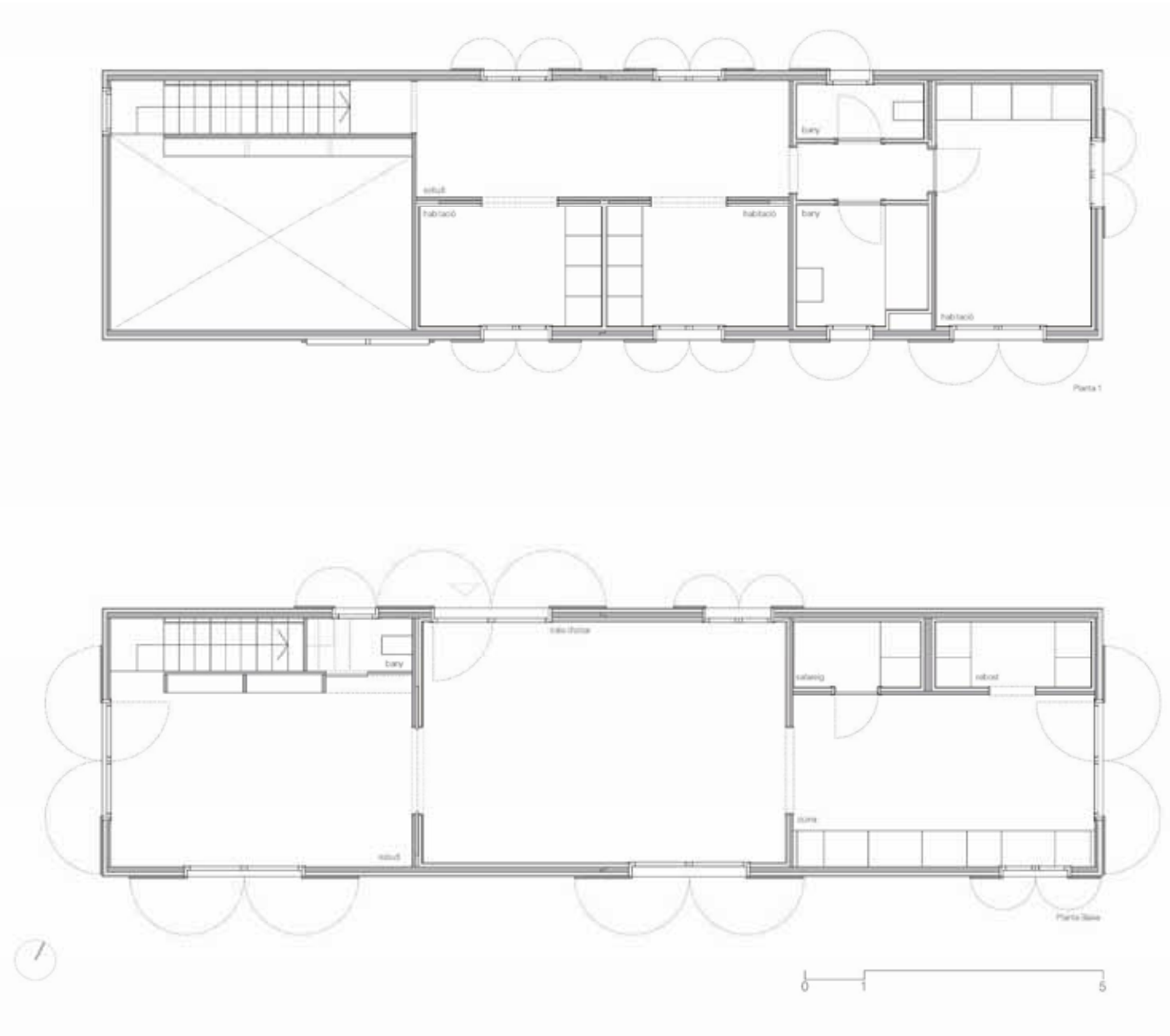
190.00
188.00
186.00
184.00
182.00

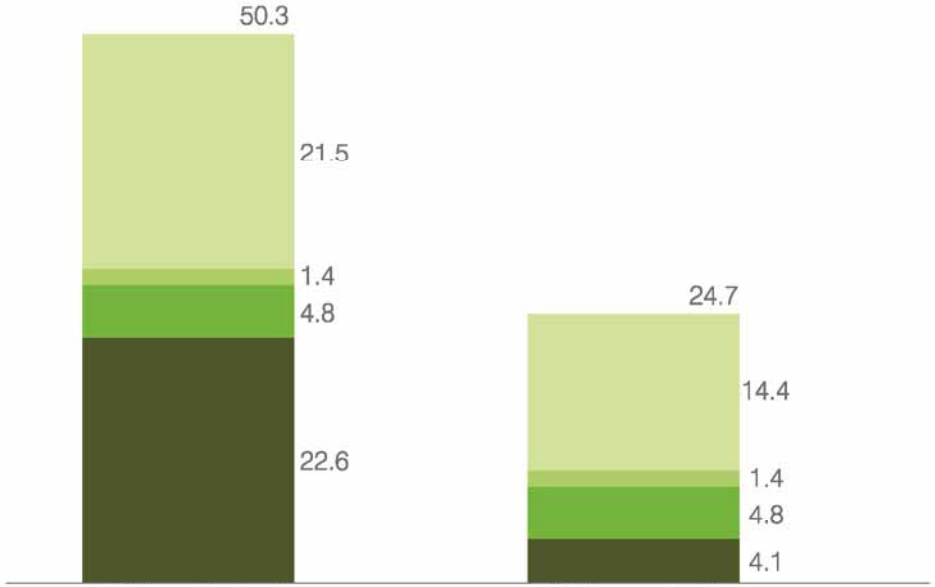


Secció longitudinal


bany
sotuß
habitació
habitació
bany
habitació
Planta 1
bany
sala choca
salaeig
sabost
sotuß
sorra
Planta Baixa
0
1
5

emisiones CO_2

$KgCO_2/m_2$ año
para un ciclo de vida de 50 años



edificio estándard

Datos extraídos del estudio "Factor 10. Reducción de emisiones de CO_2".
Autores: Joan Sabaté - SaAS - Jordina Vidal

- Climatización + ACS
- Iluminación
- Electrodomésticos
- Energia incorporada en los materiales

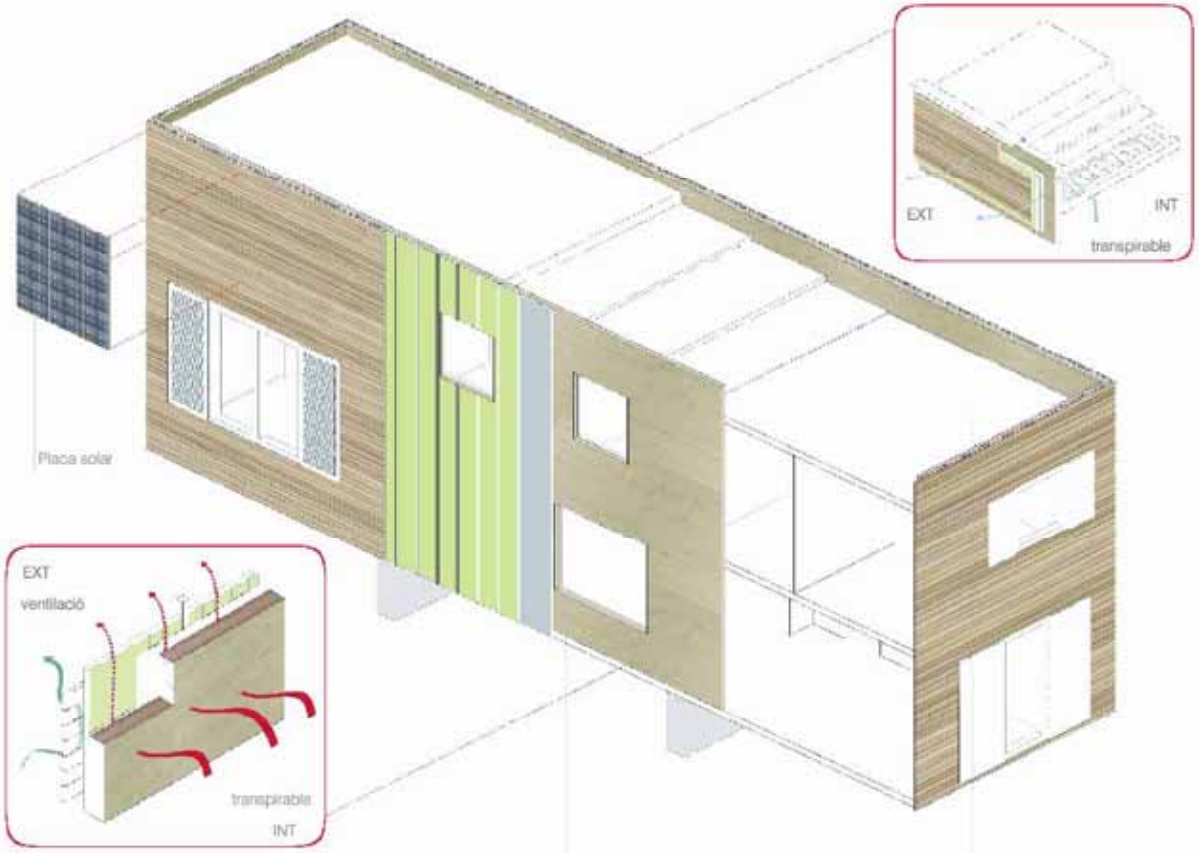
-51%

El edificio reduce un 51% las emisiones de CO_2 respecto un edificio estándard.

edificio construido

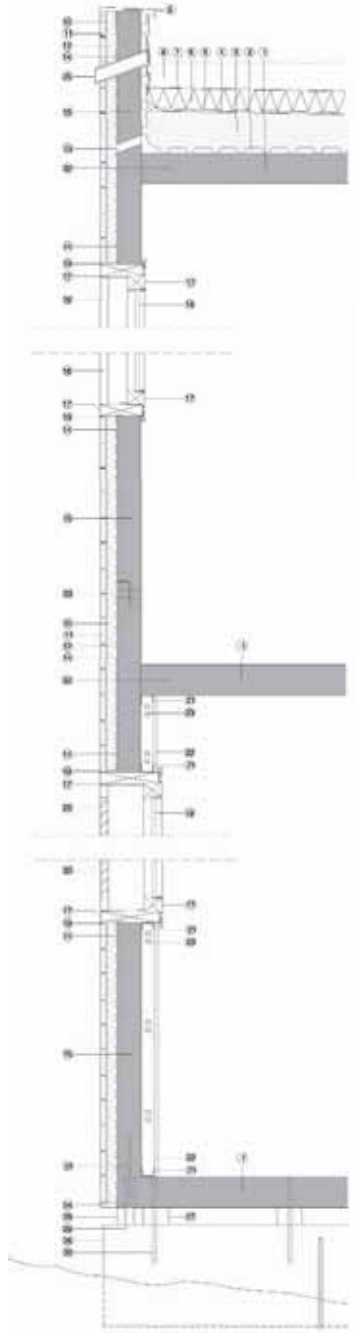
Estimación hecha a partir del análisi de la demanda energética y los consumos reales de la vivienda.

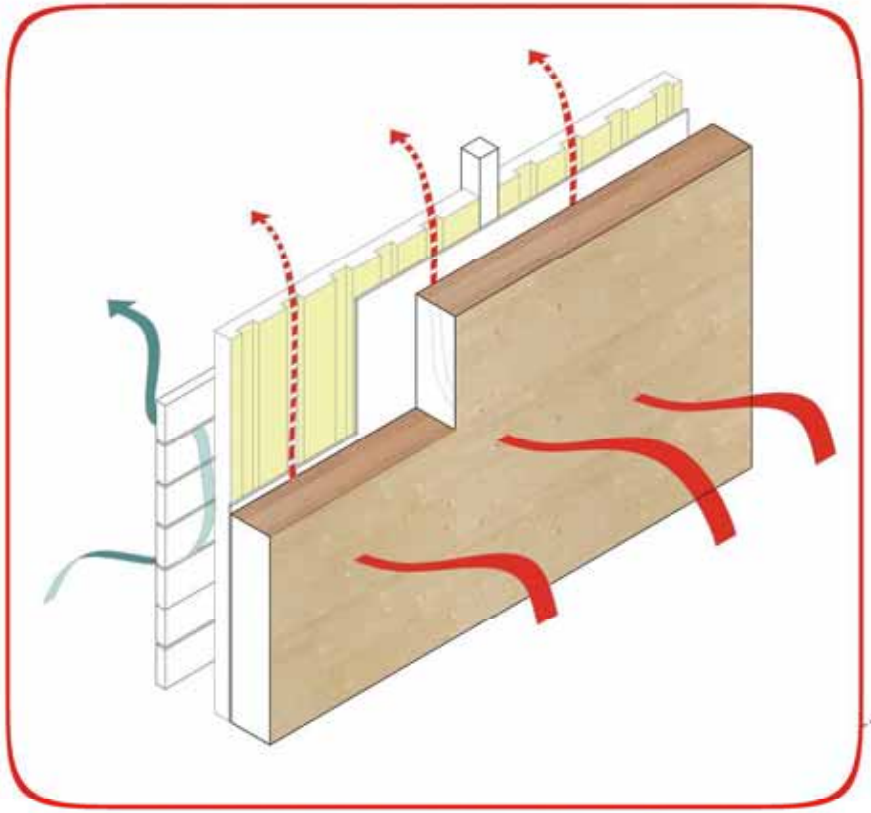
- Reducción de la demanda energética ≈30% sobre CTE por disminución de la transmitancia térmica de los cerramientos y carpintería.
Transmitância media zonas opacas, U= 0.42 W/m²K
Transmitância màxima huecos, U=2.13 W/m²K
- Calefacción mediante estufa de biomasa con soporte de radiadores eléctricos para los días con temperaturas más extremas.
- Estructura y cerramientos con materiales de baja energia incorporada (materiales que para su producción, puesta en obra y recuperación al final de su ciclo de vida se utiliza poca energia y por lo tanto se reducen las emisiones de CO_2).
- Estructura de madera contralaminada tipo KLH, de bajo peso y que permite trabajar todo el edificio como una gran viga, minimizando la cimentación y el movimento de tierras.
- Minimización de superficies con revestimientos.

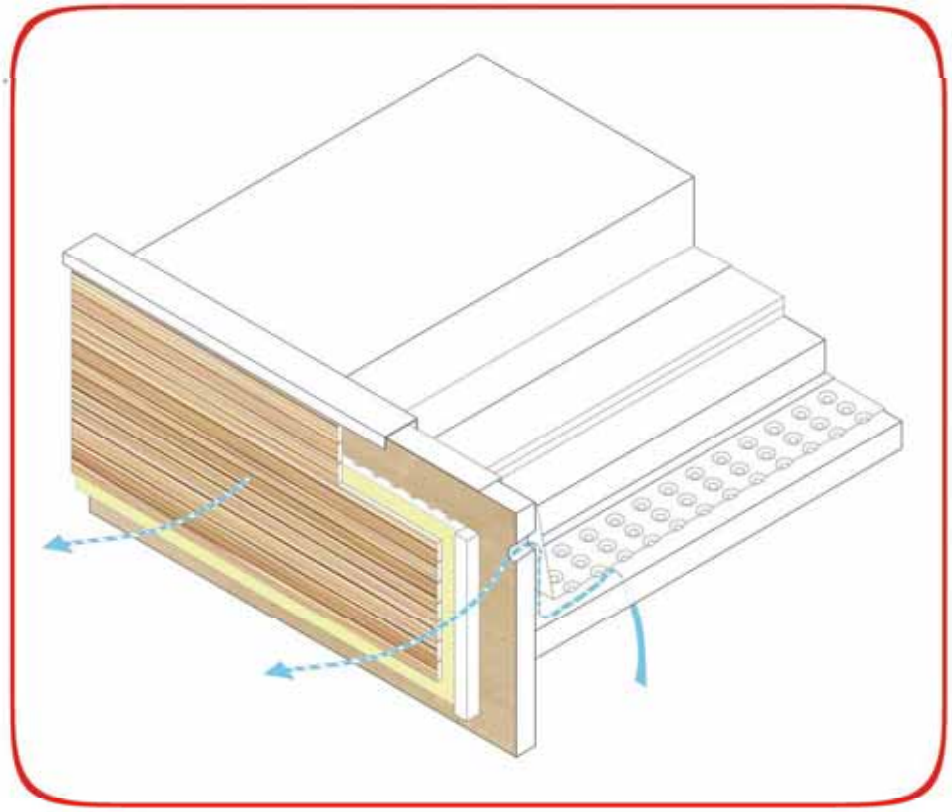


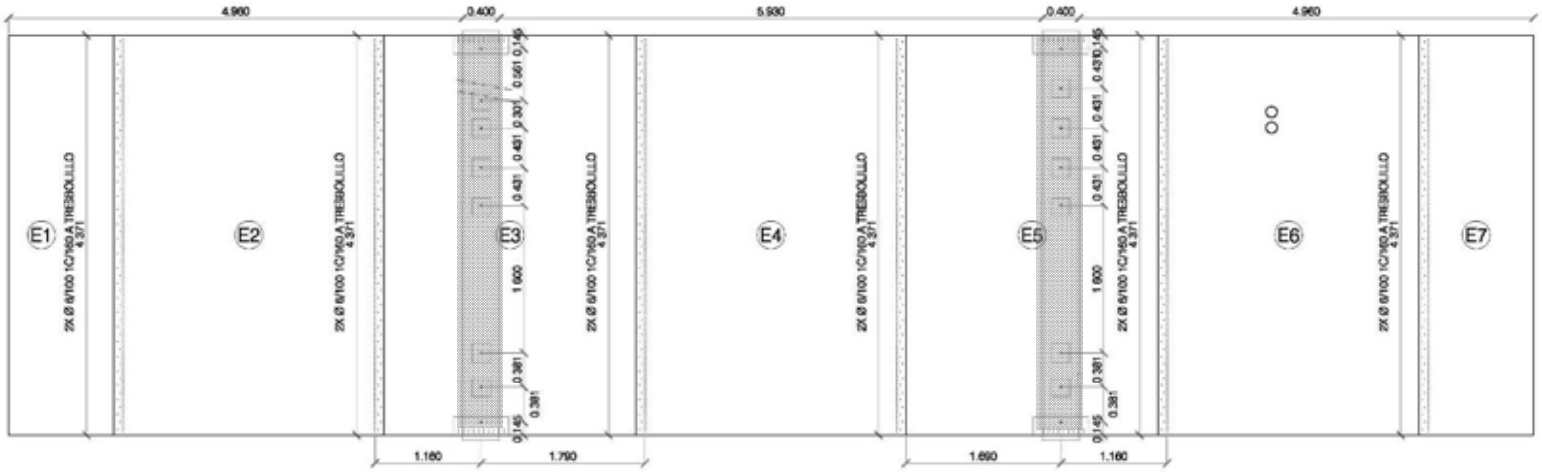
Façana: Panel de fusta laminada d'avet tipus KLH de 9,5 cm / Làmina impermeable i transpirable tipus Tybek /Poliestil extruit de 40mm / Revestiment horitzontal de fusta de pi de Flandes amb tractament tipus Vacsol

Coberta: Forjat massis de fusta laminada d'avet KLH de 12 cm / Membrana drenant de polietilé extruit DRENTEMPER / Formació pendents d'argila expandida amb base de ciment / Feltre sintètic geotèxtil / Membrana impermeable EPDM 1,2mm / Allament de polietilé extruit, 9cm / Feltre sintètic geotèxtil /Capa de grava de 5- 8cm

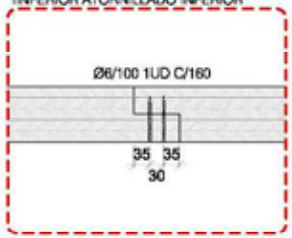




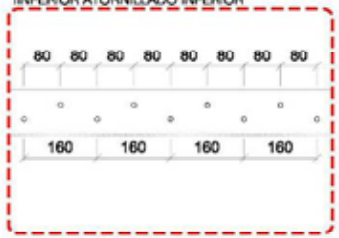




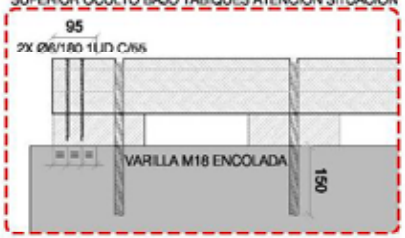
SECCION UNION LOSAS FORJADO INFERIOR ATORNILLADO INFERIOR



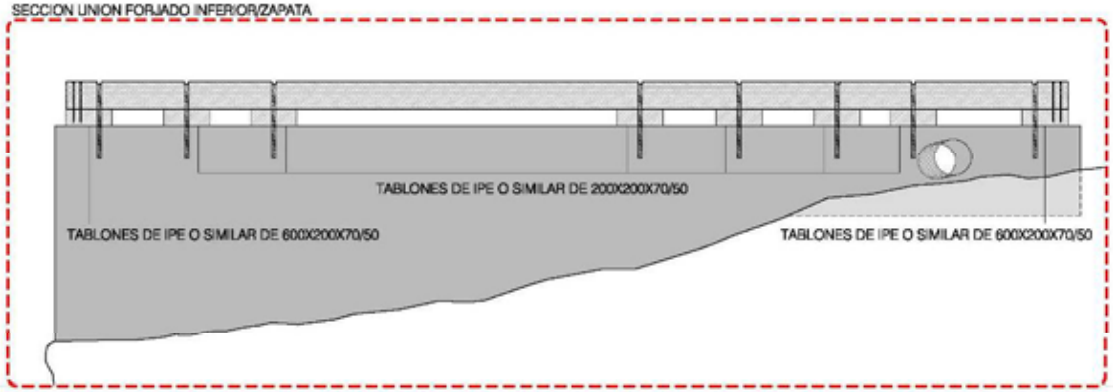
PLANTA UNION LOSAS FORJADO INFERIOR ATORNILLADO INFERIOR



SECCION UNION FORJADO INFERIOR ATORNILLADO SUPERIOR OCULTO BAJO TABIQUES ATENCION SITUACION



SECCION UNION FORJADO INFERIOR/ZAPATA



K 01

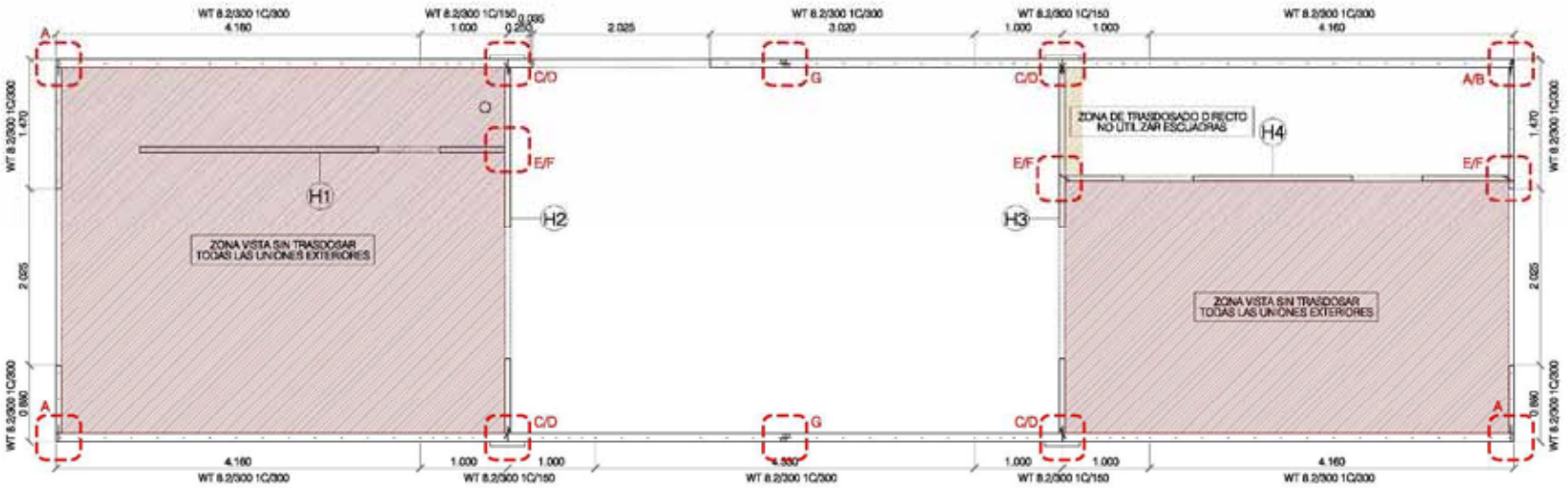
Projecte Executiu. Gener 2008
205. Habitatge Unifamiliar Aïllat
C/ dels Pinetons, parcel·la 8. Vacarisses

Forjado Inferior e:1/50
Detalles e:1/10 i e:1/20

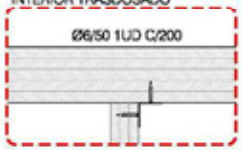
Promotor: Francesc Ortèga I Maria Ferriol

Arquitectes: David Lorente Ibáñez, Josep Ricart Ulldemolins
Xavier Ros Majó, Roger Tudó Gall

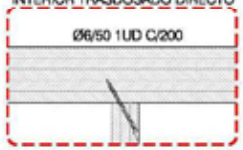
H ARQUITECTES
Montserrat 22, 2n 2a · 08201 Sabadell (Bcn) · T/F. 93 725 00 48 · www.harquitectes.com



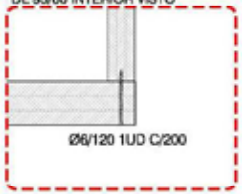
UNION TABIQUE DL60 CON FORJADO INTERIOR TRASDOSADO



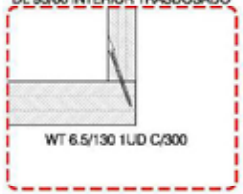
UNION TABIQUE DL60 CON FORJADO INTERIOR TRASDOSADO DIRECTO



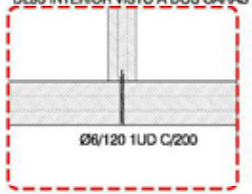
A: UNION DE ESQUINA FACHADA DL 95/60 INTERIOR VISTO



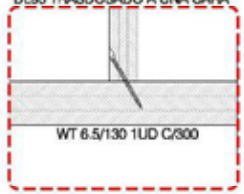
B: UNION DE ESQUINA FACHADA DL 95/60 INTERIOR TRASDOSADO



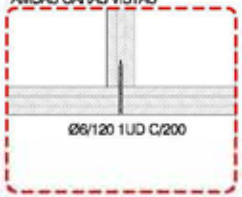
C: UNION TABIQUE DL60 CON FACHADA DL95 INTERIOR VISTO A DOS CARAS



D: UNION TABIQUE DL60 CON FACHADA DL95 TRASDOSADO A UNA CARA

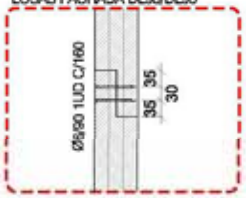


E: UNION TABIQUES INTERIORES DL 60 AMBAS CARAS VISTAS

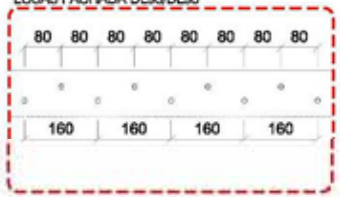


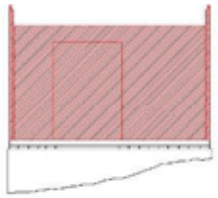
F: UNION TABIQUES INTERIORES DL 60 UNA CARA VISTA

G: SECCION UNION EXTERIOR LOSAS FACHADA DL95/DL95



PLANTA UNION EXTERIOR LOSAS FACHADA DL95/DL95





K 03

Projecte Executiu. Gener 2008
205. Habitatge Unifamiliar Aïllat
C/ dels Pinetons, parcel·la 8. Vacarisses

Union tabiques PB e:1/50
Detalles e:1/10

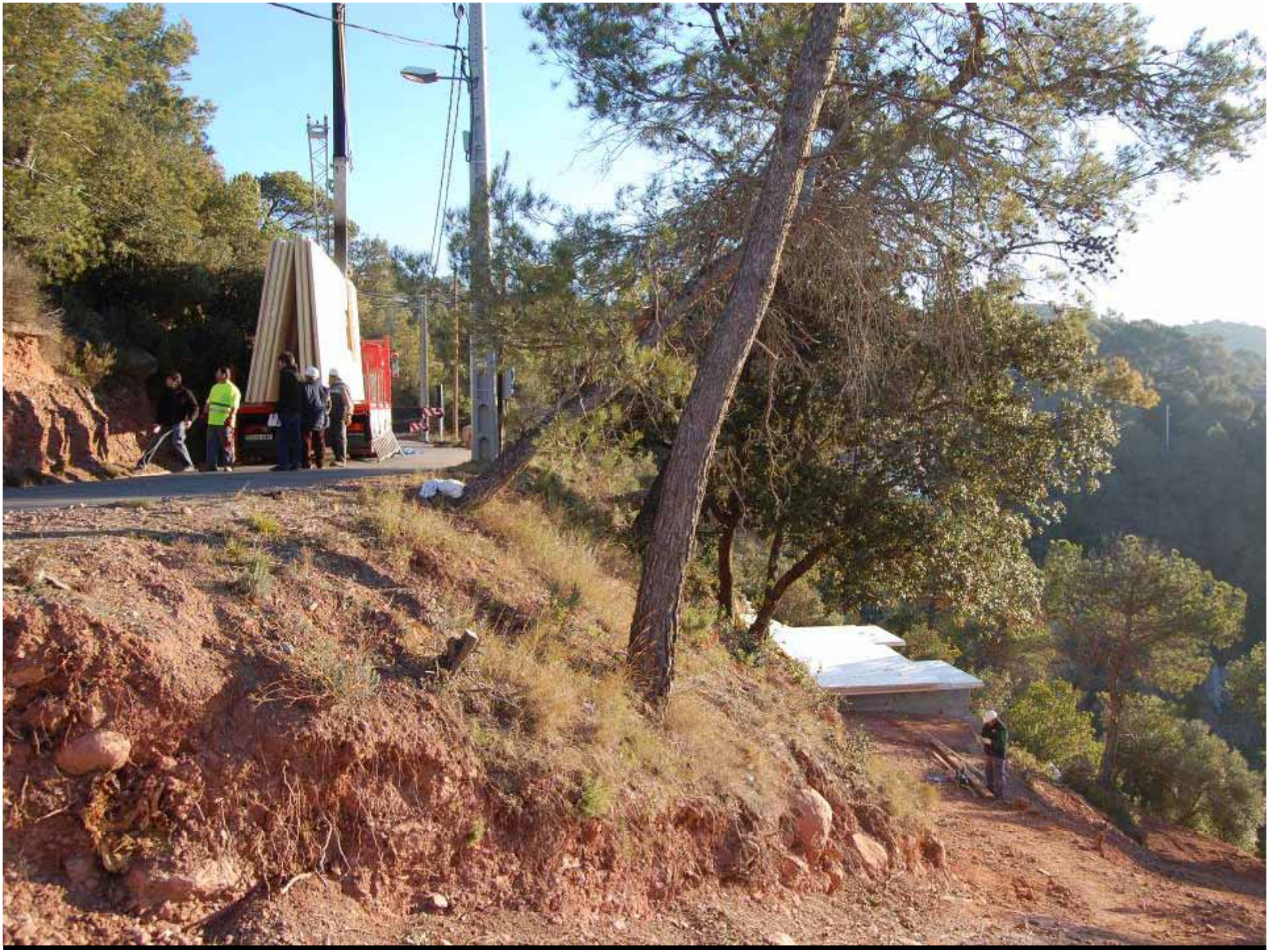
Promotor: Francesc Ortèga I Maria Ferriol

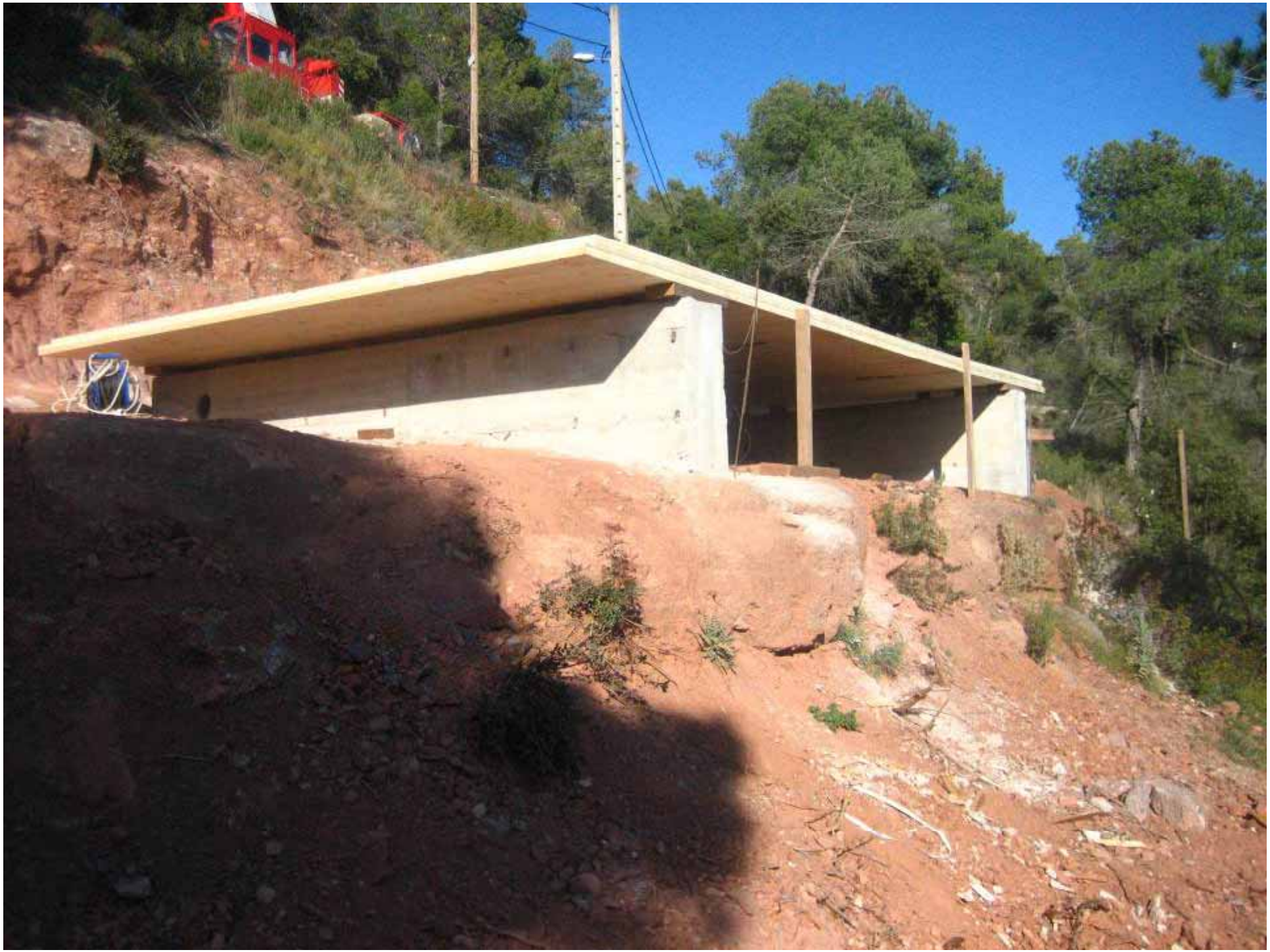
Arquitectes: David Lorente Ibáñez, Josep Ricart Ulldemolins
Xavier Ros Majó, Roger Tudó Gall

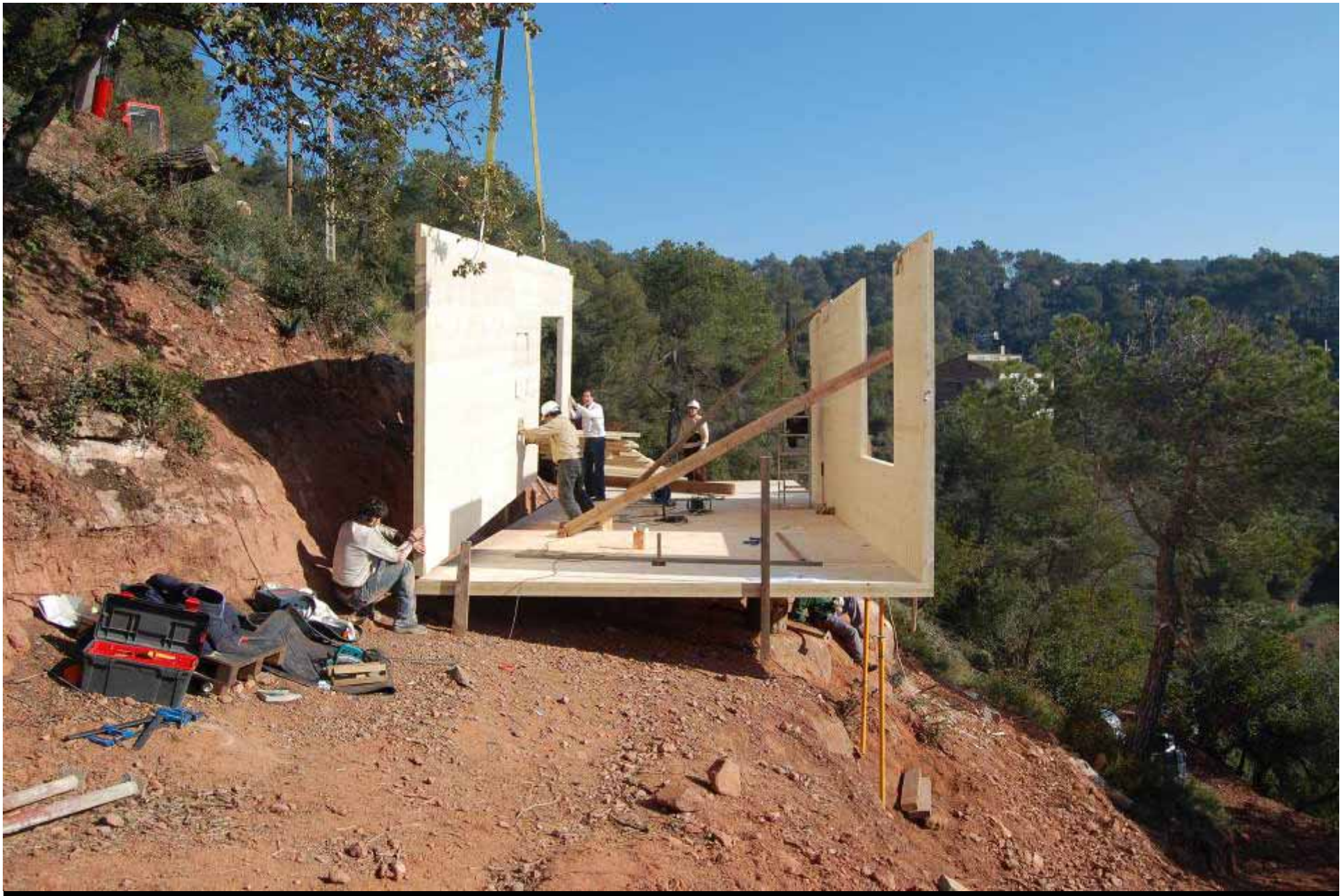
H ARQUITECTES

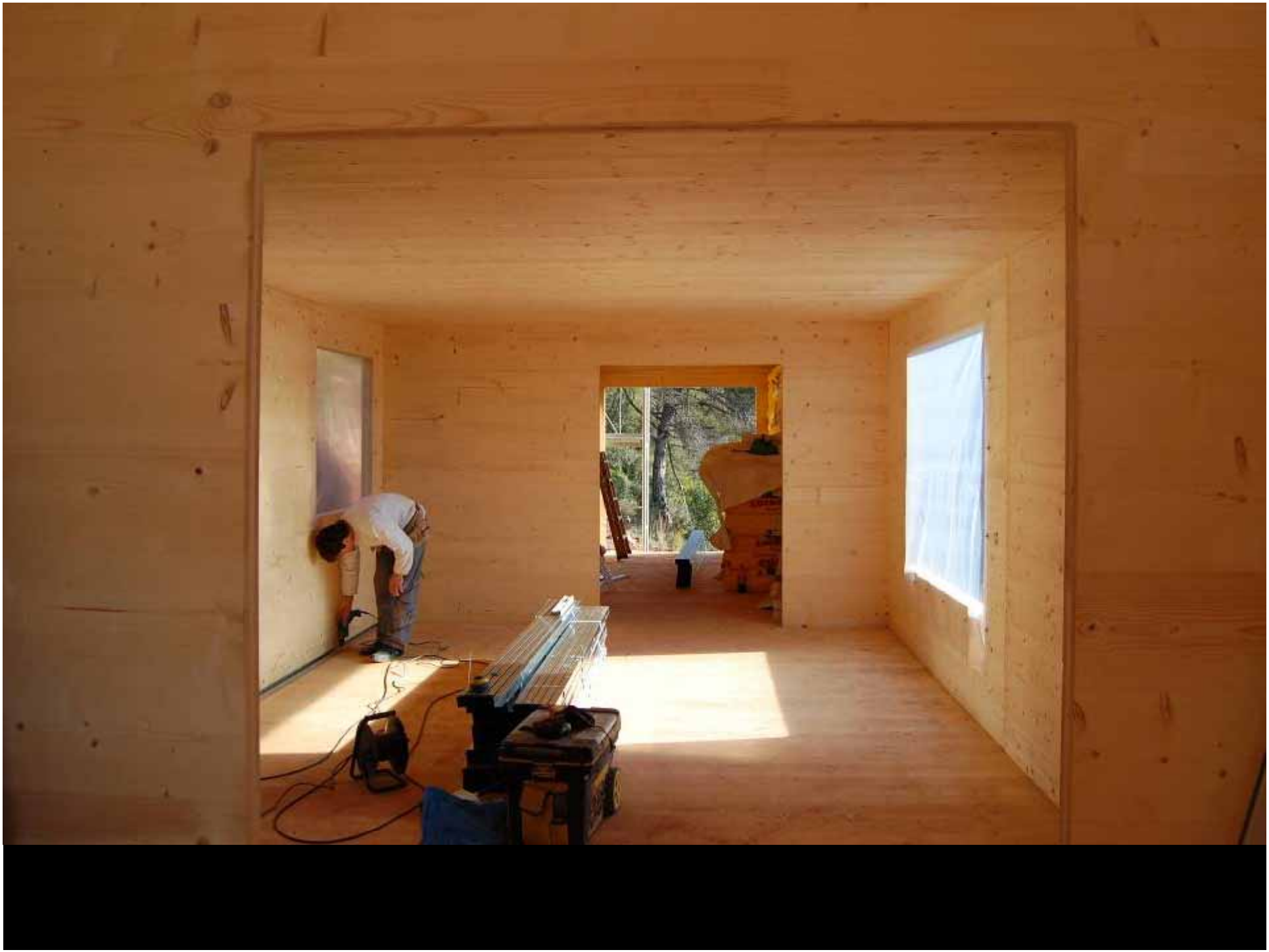
Montserrat 22, 2n 2a · 08201 Sabadell (Bcn) · T/F. 93 725 00 48 · www.harquitectes.com

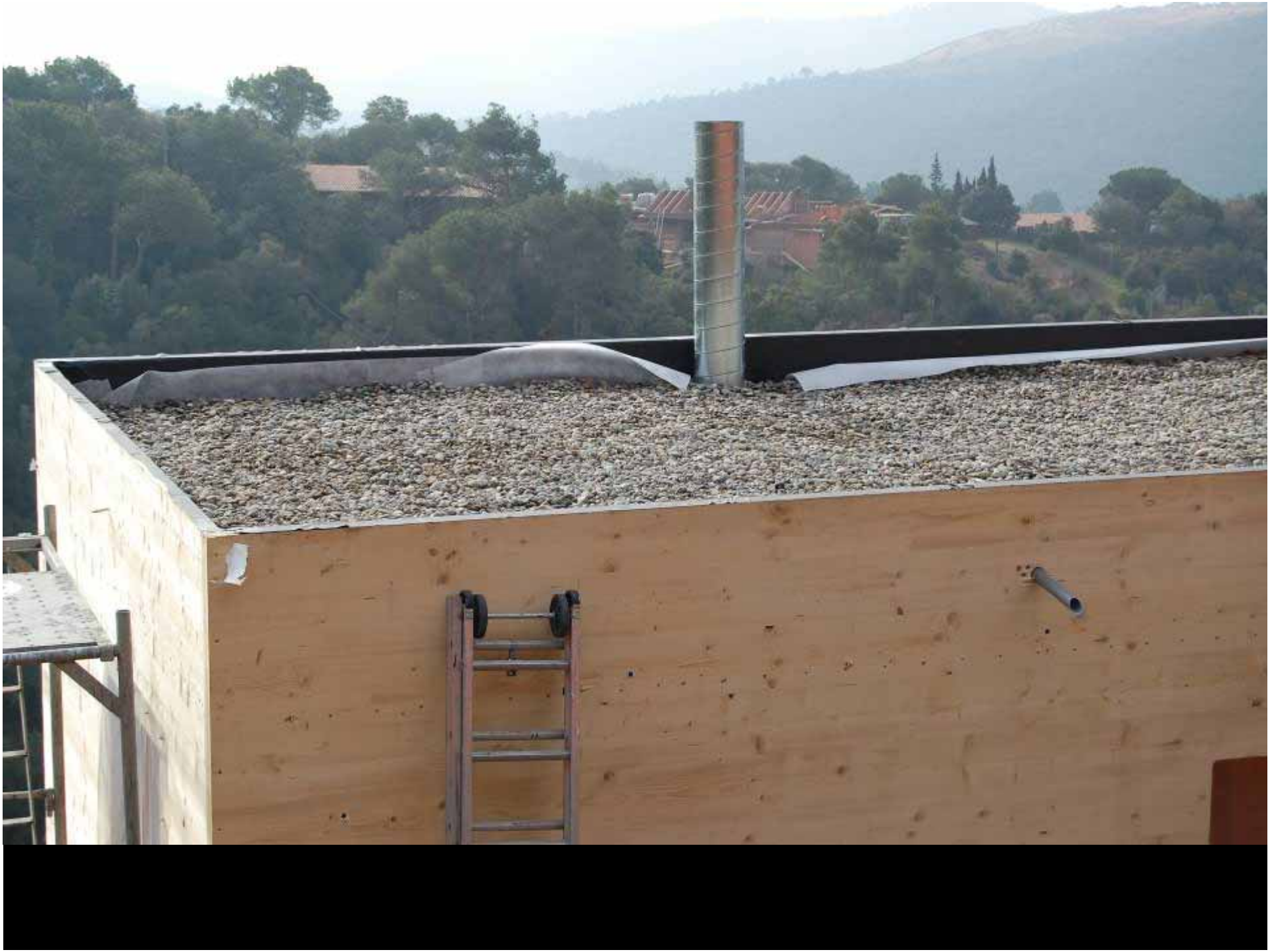
processo di costruzione

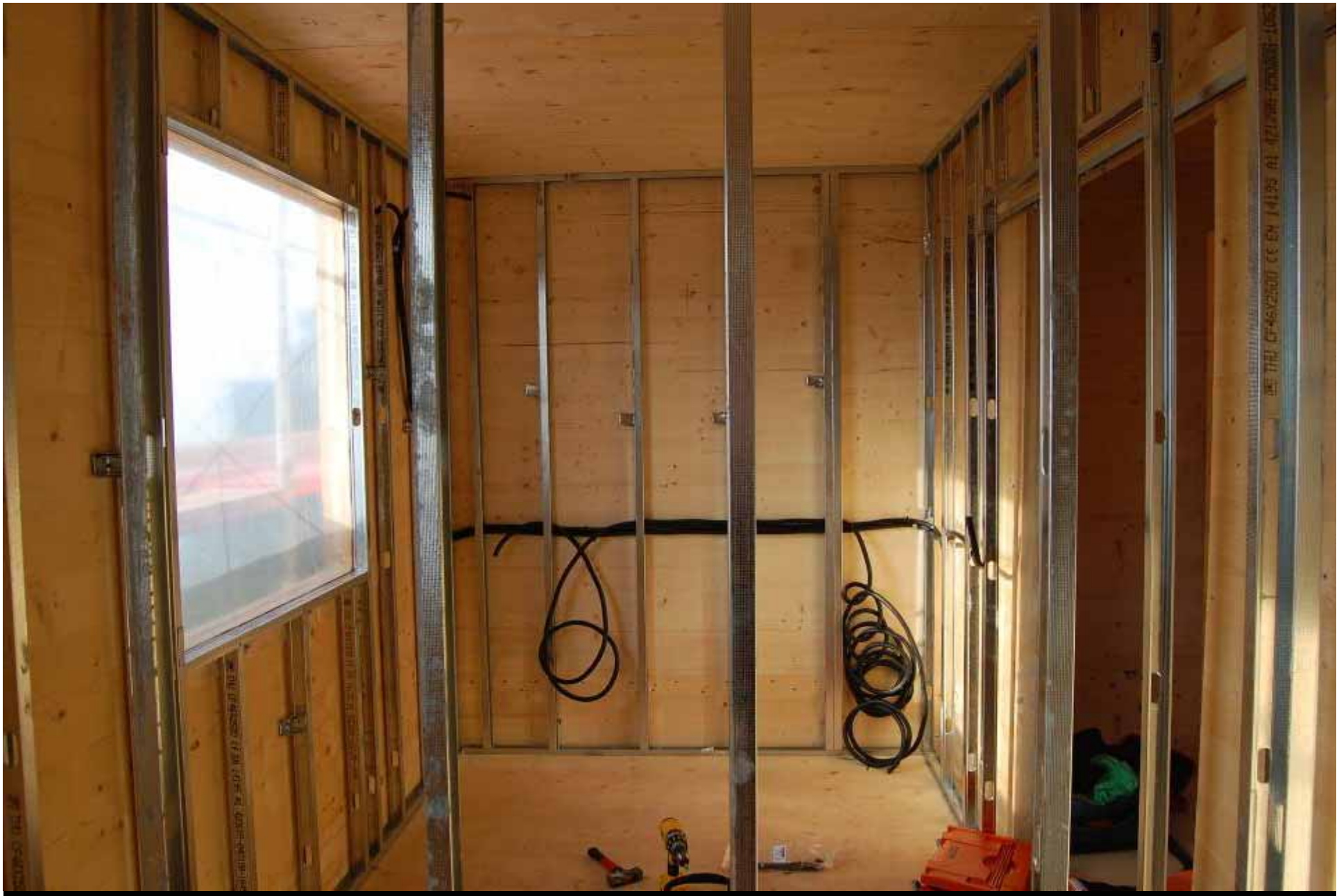


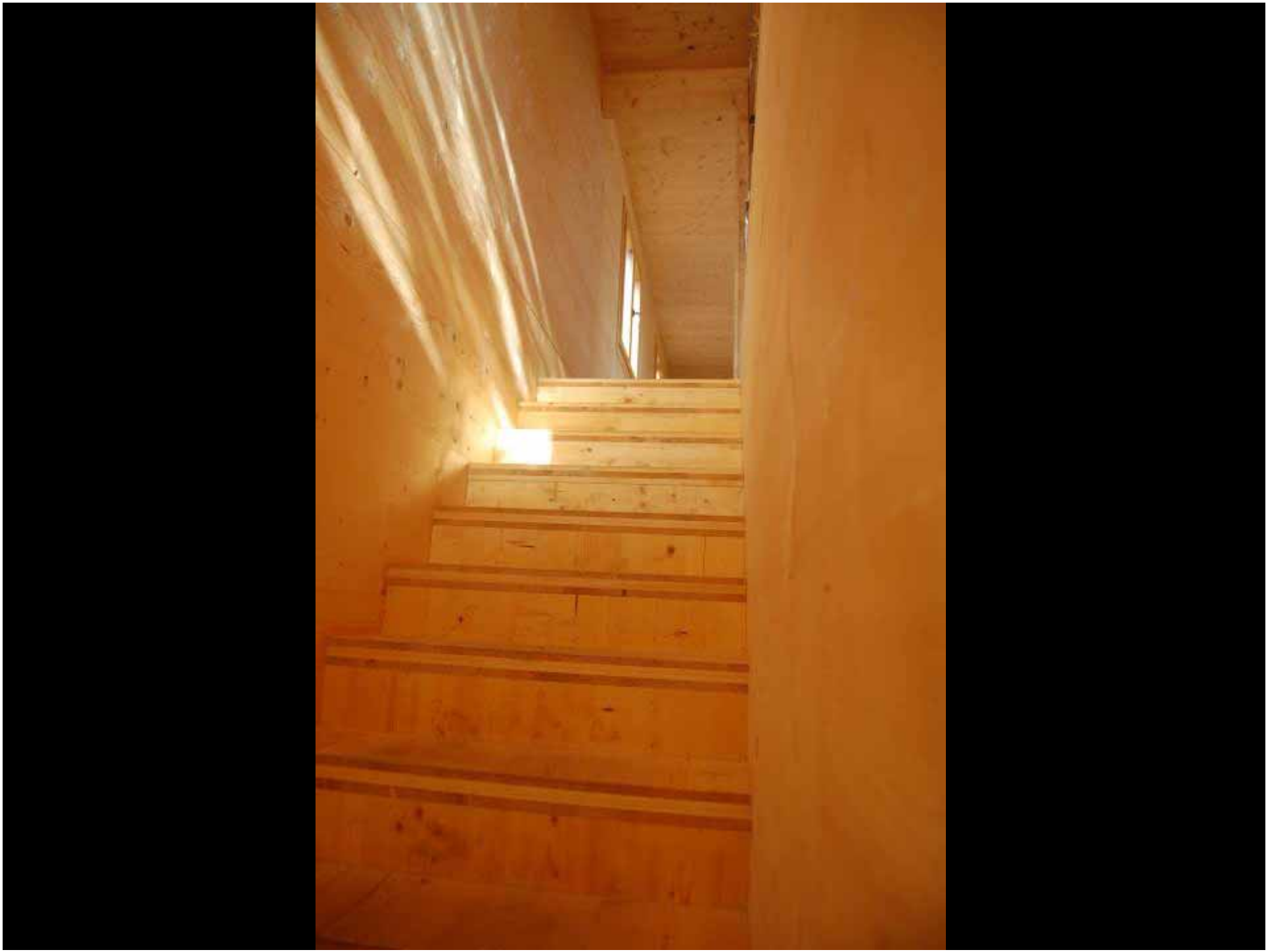




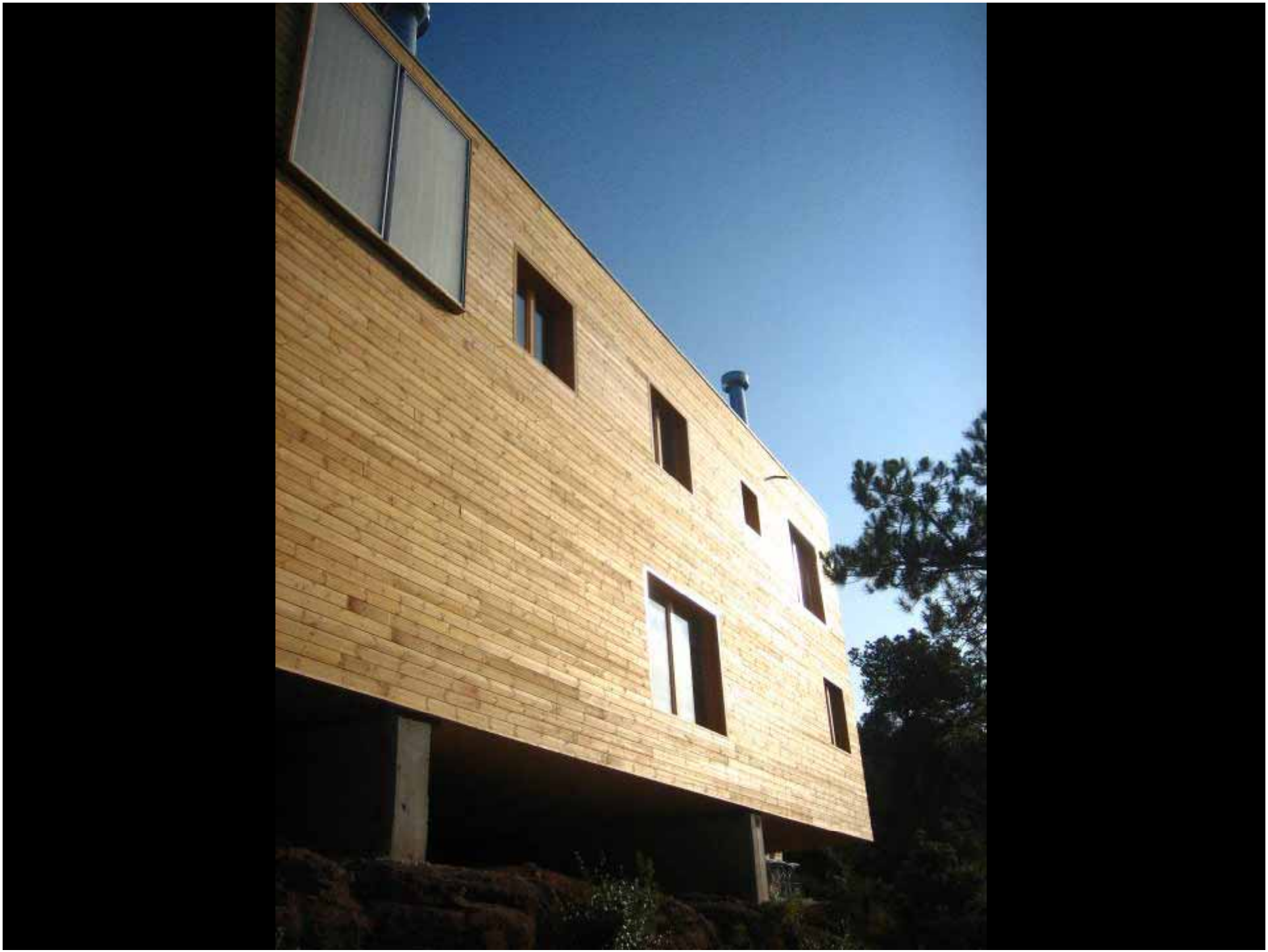




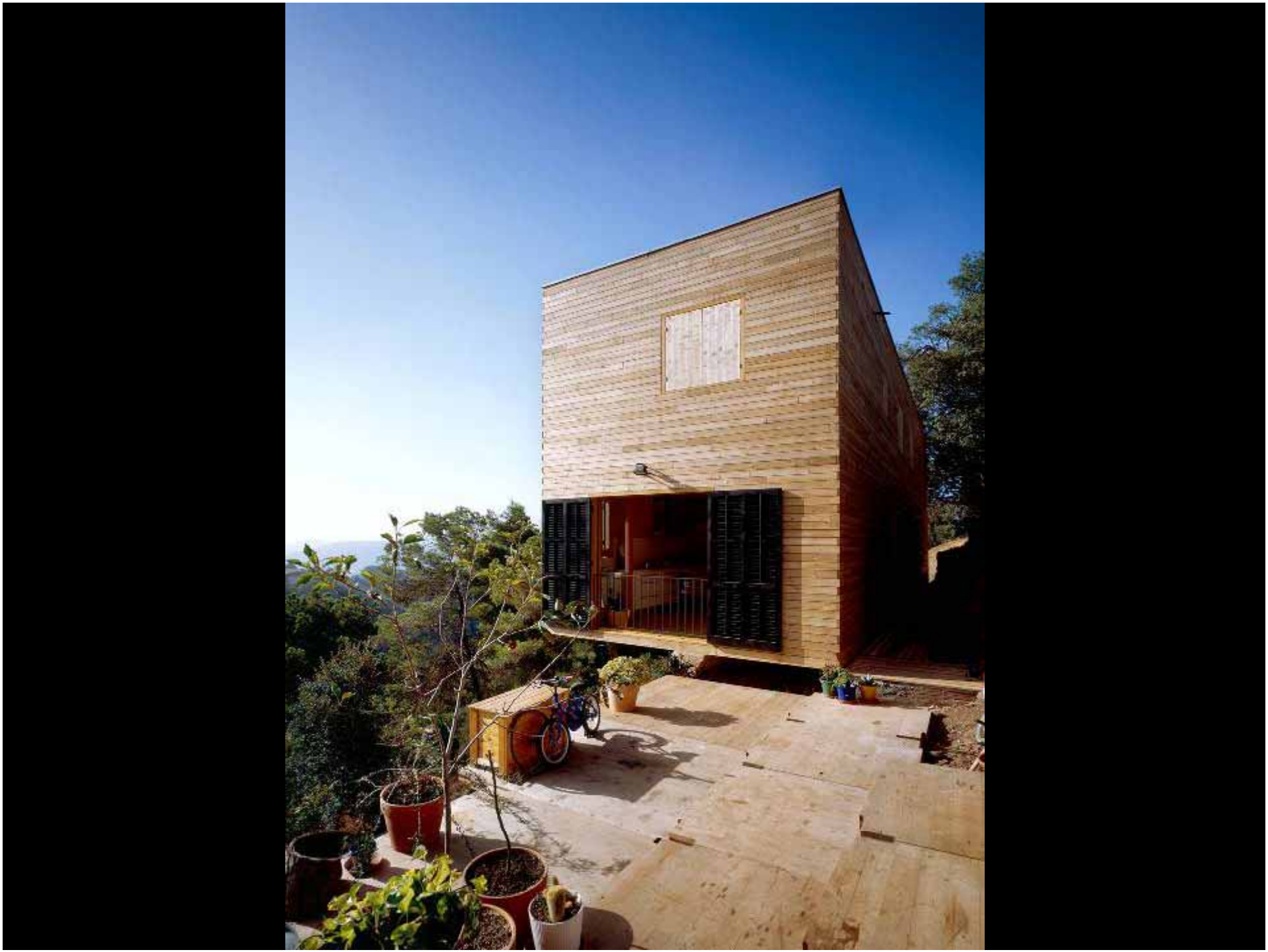


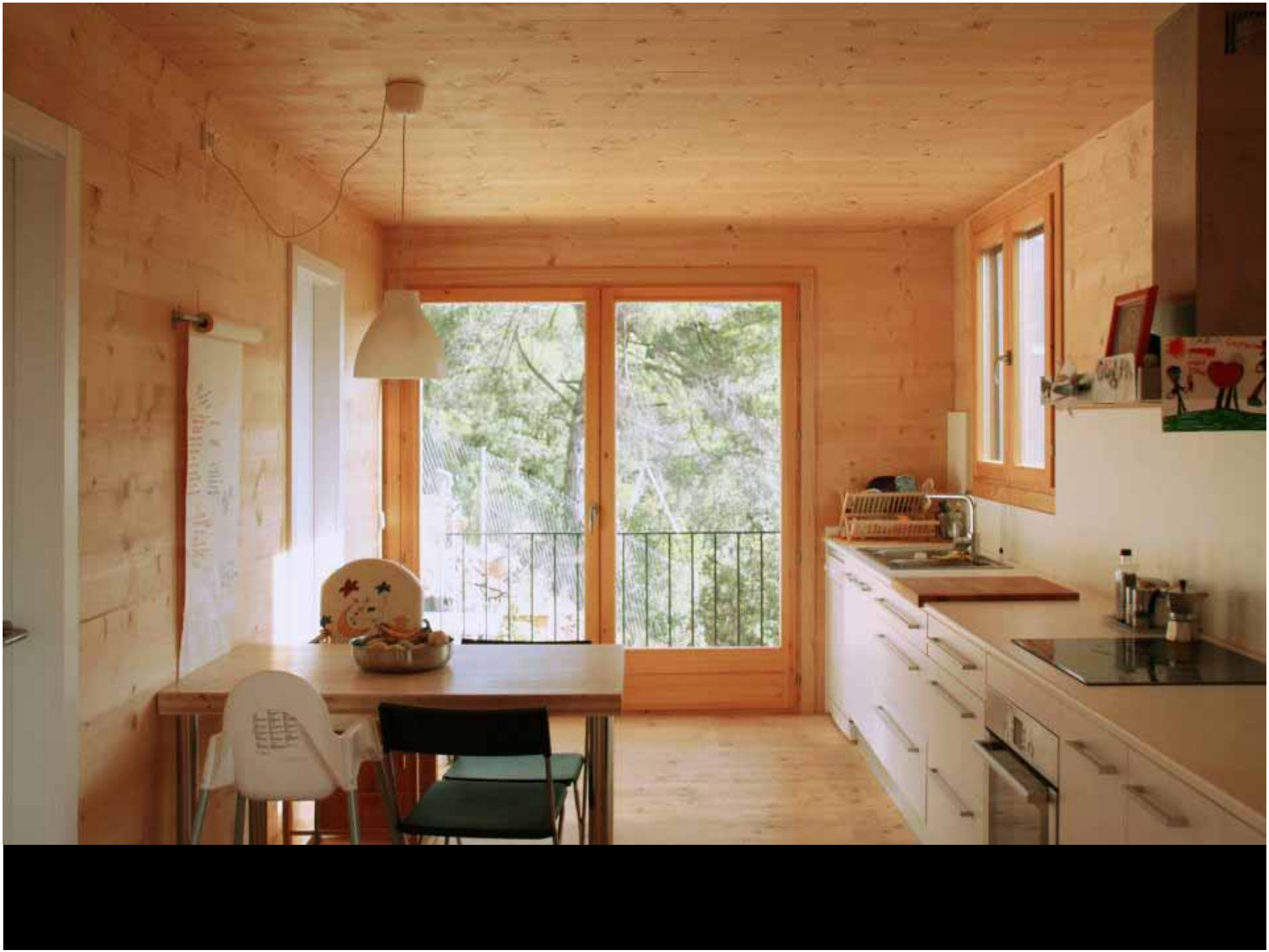


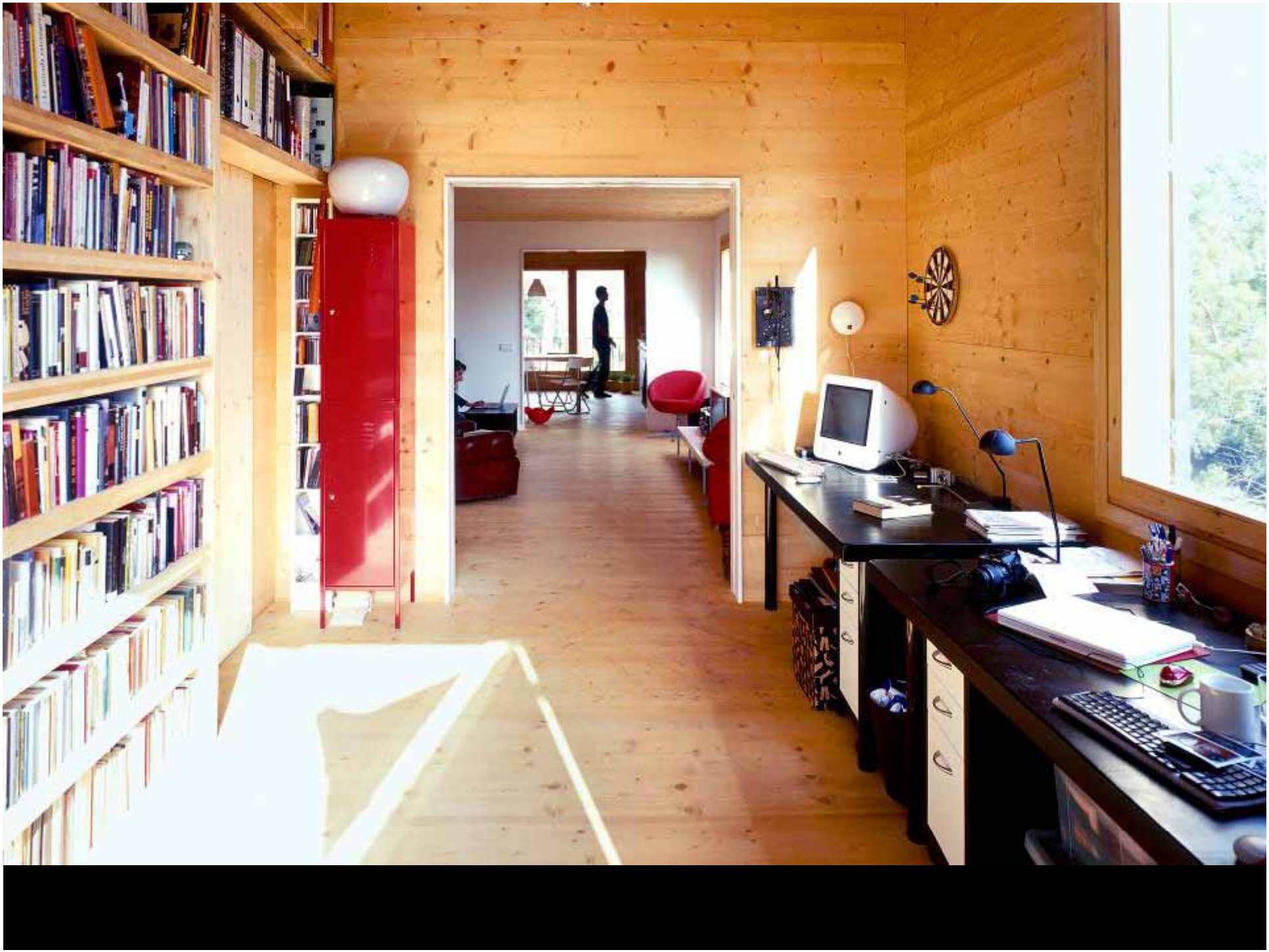
Tyvek

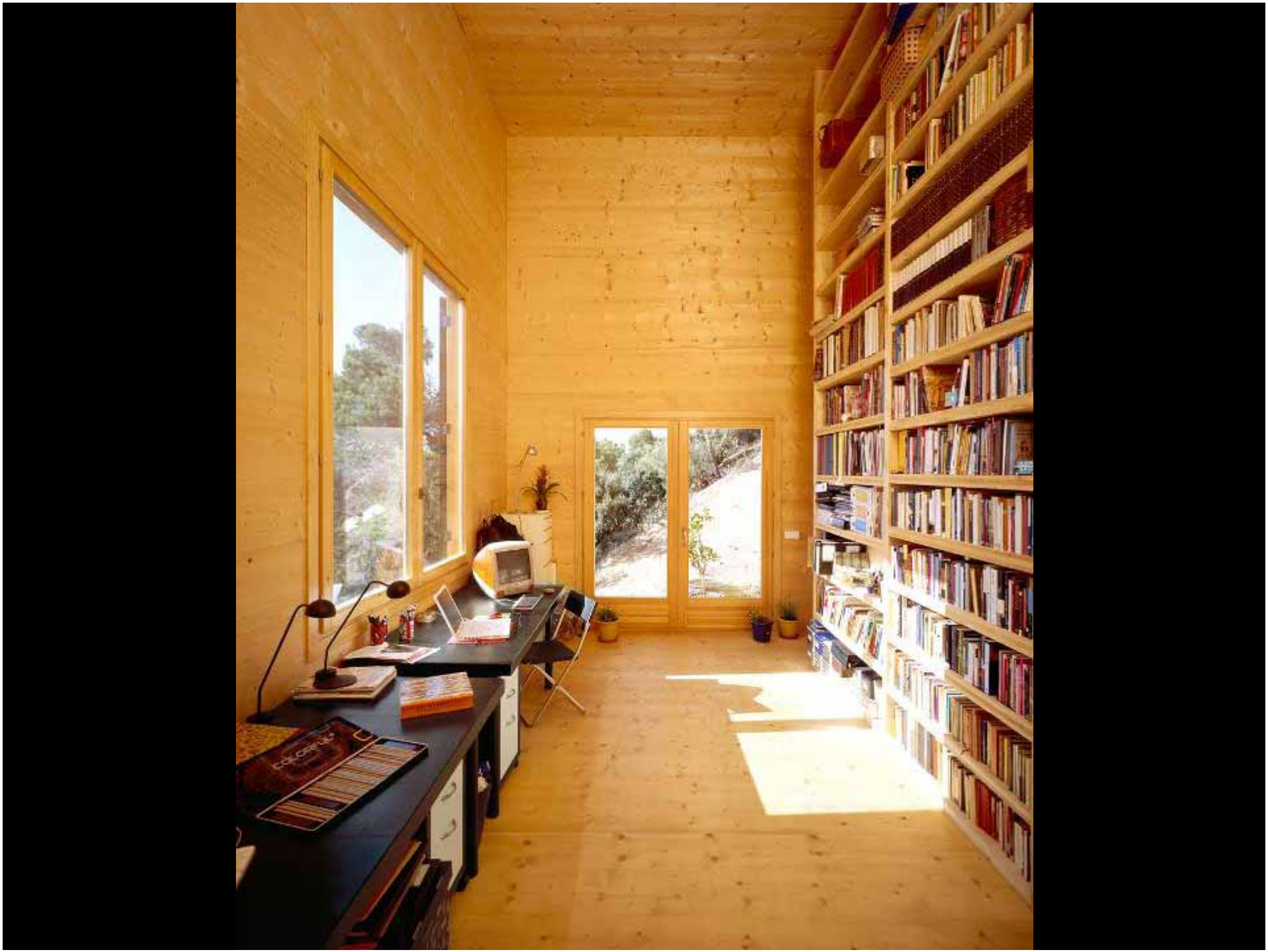


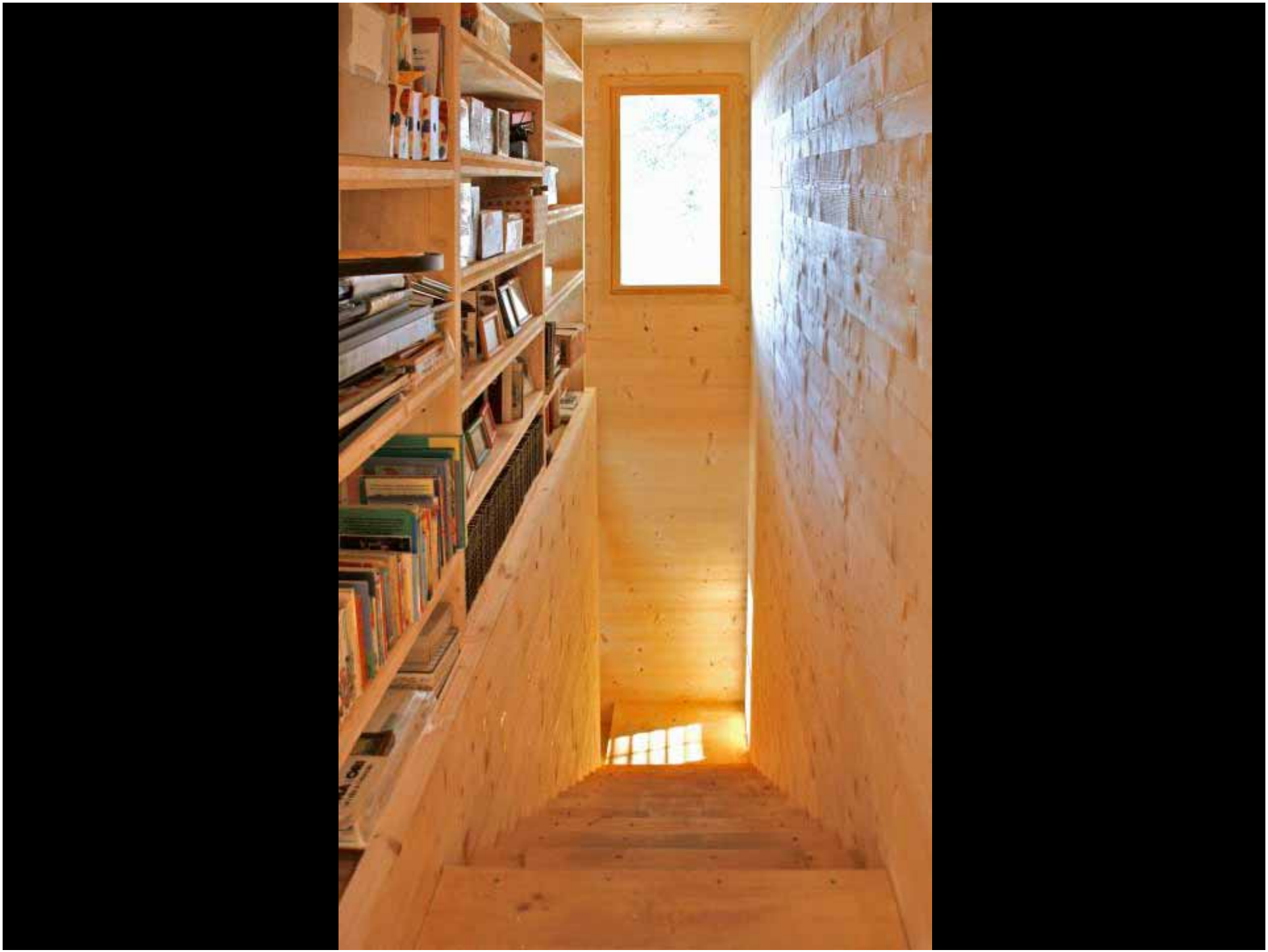
la casa finita

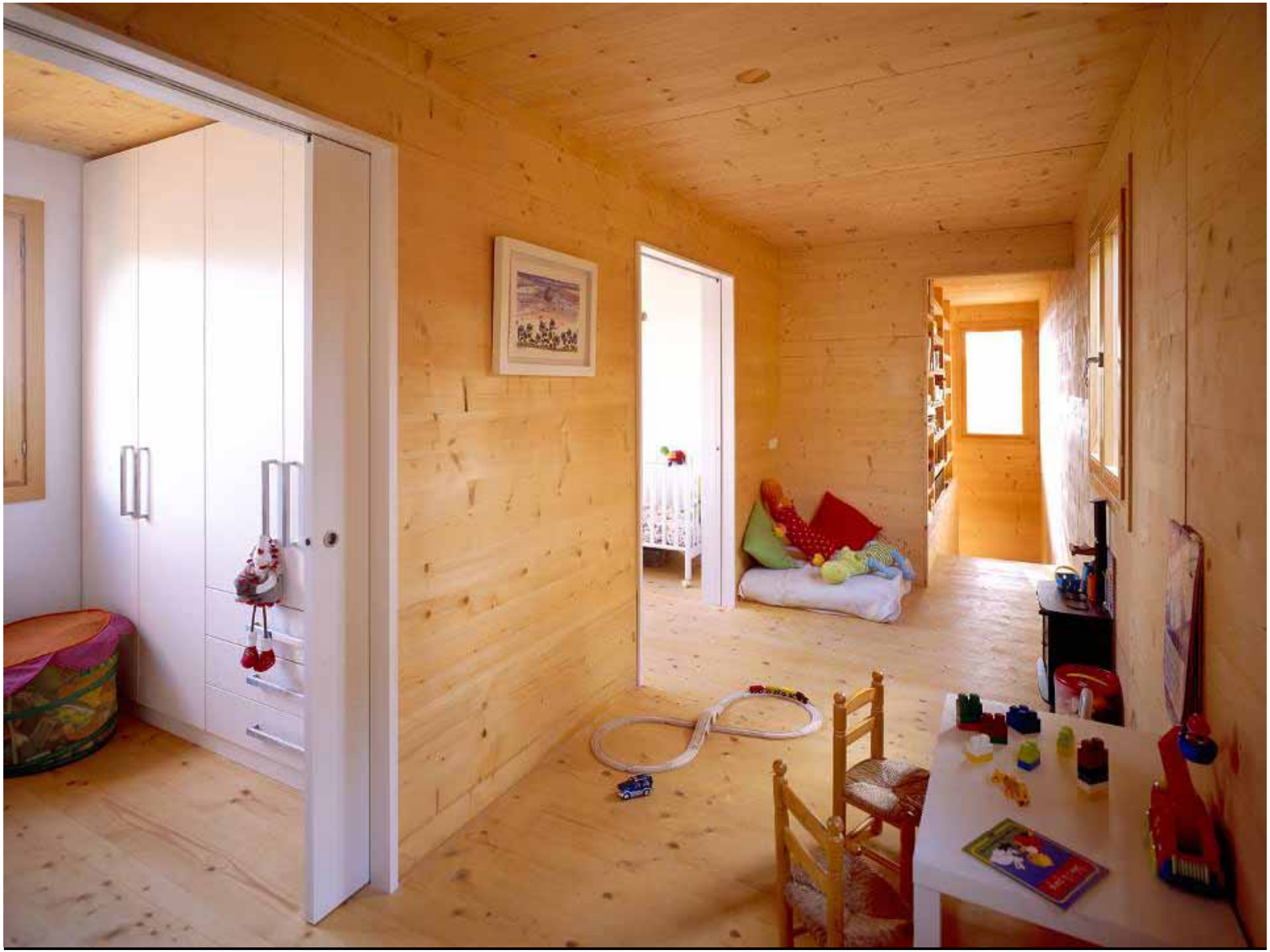




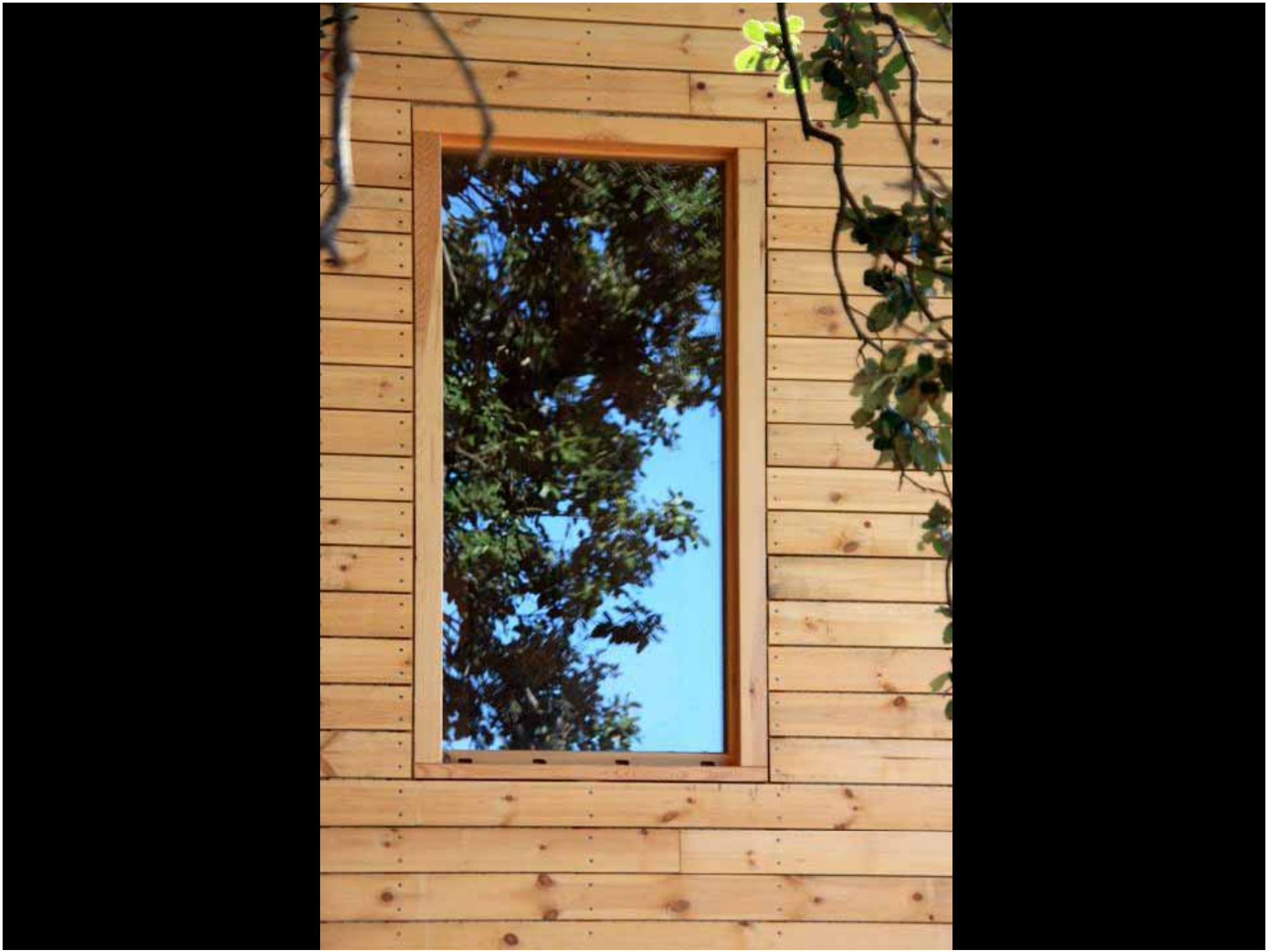


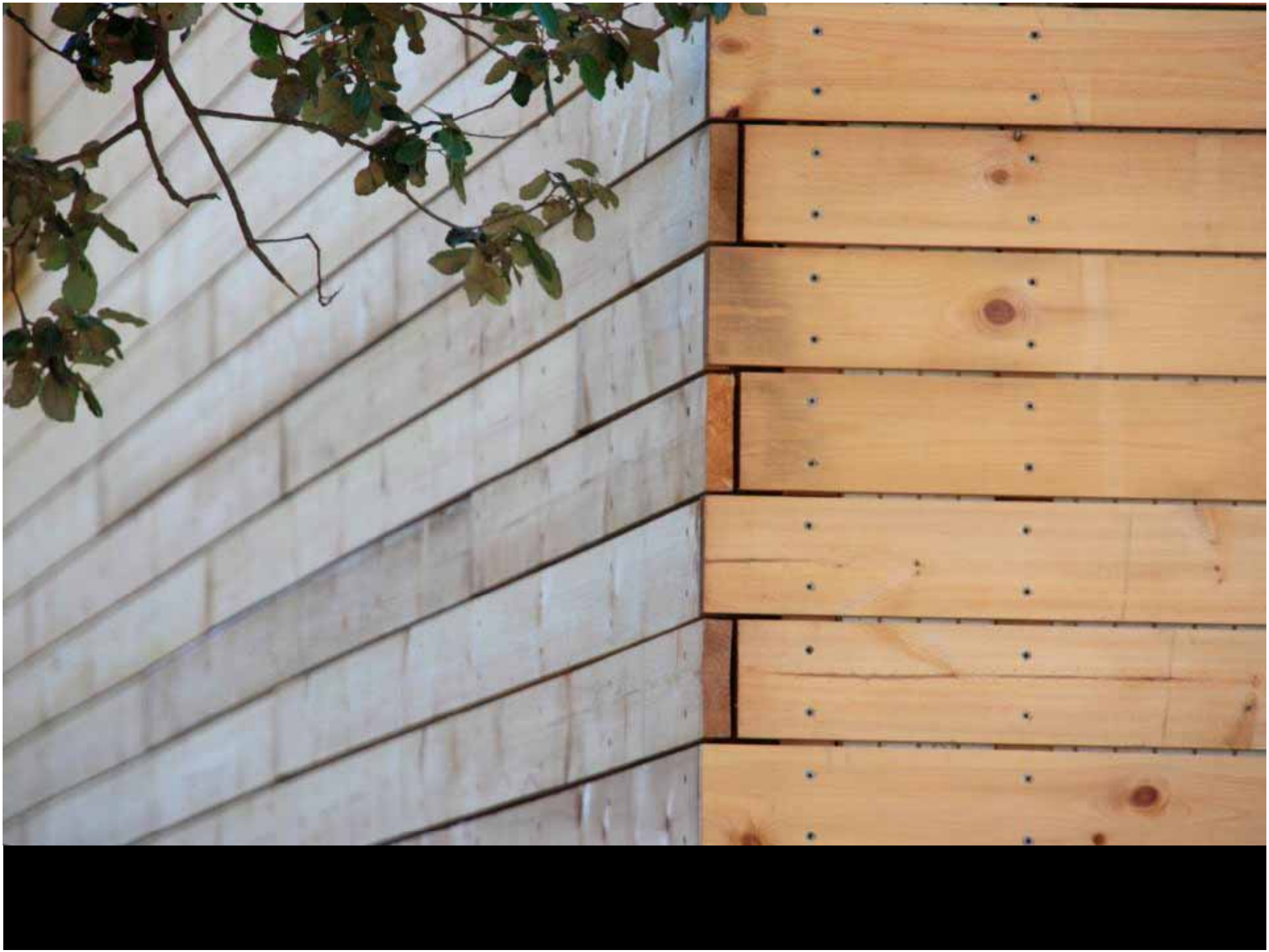




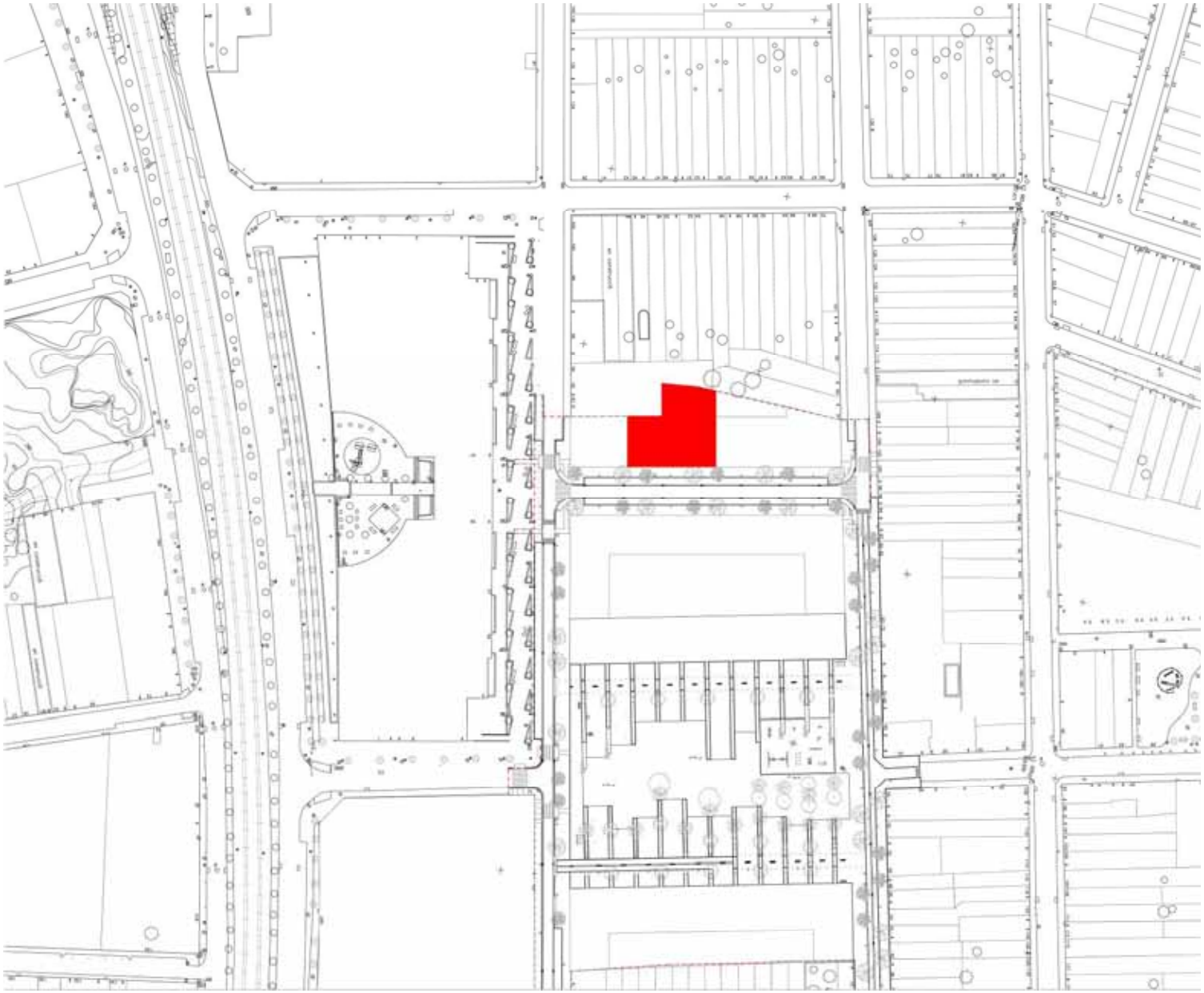


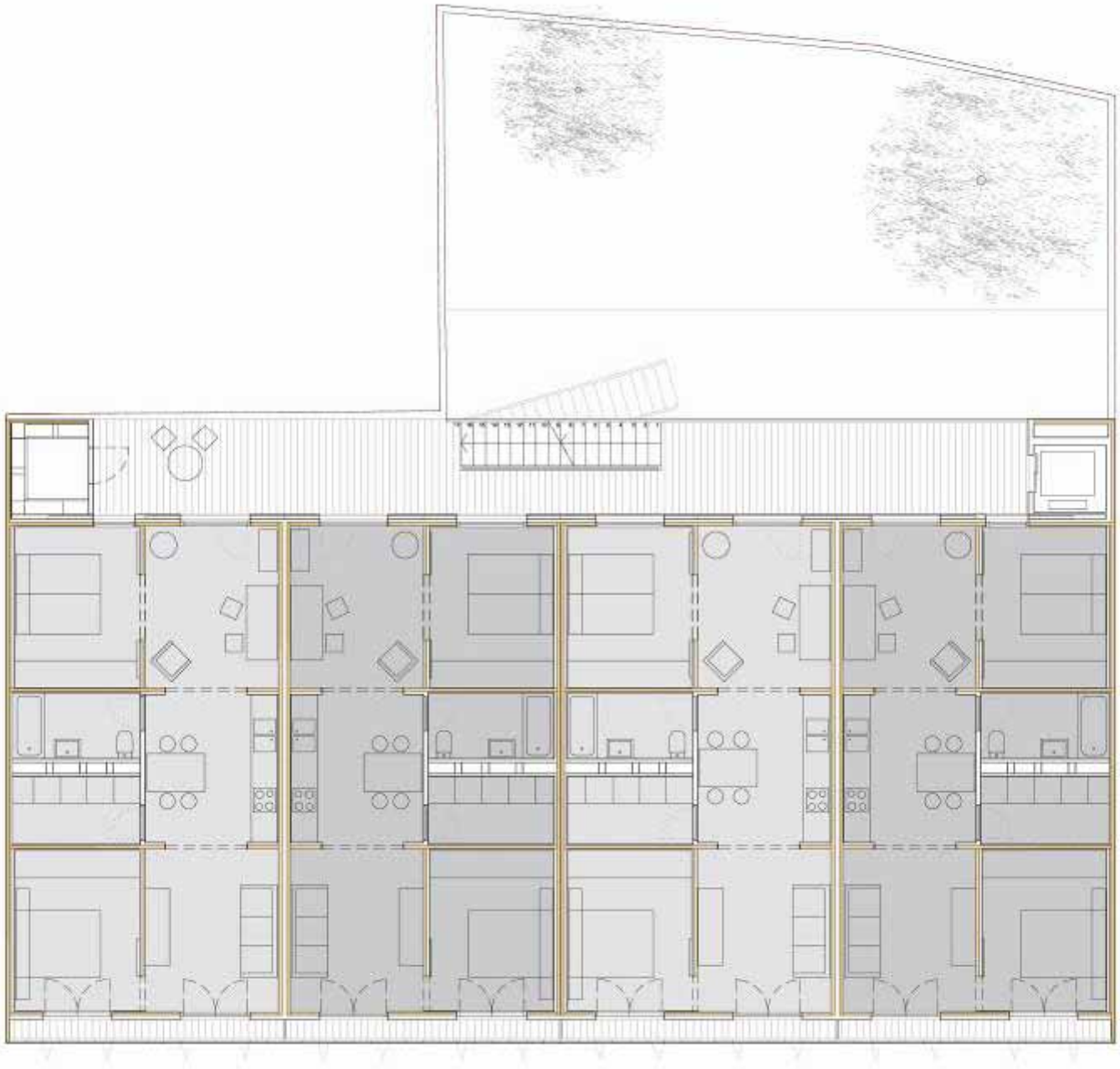
La Reina de las Nieves
Dalí pensaments i anècdotes
UN MÓN FELIÇ
DEL MÉTODO
150
Marius Serra
Verbàlia
ROBERT GRAVES
Emili Teixidor
ARCADI OLIVERES
1
2
14
JAUME CARRÉ
447
Robert B. Parker
Francis S. Fitzgerald
Ireland
Lali Domènech
Las
Zumos, batidos y cócteles
Licores

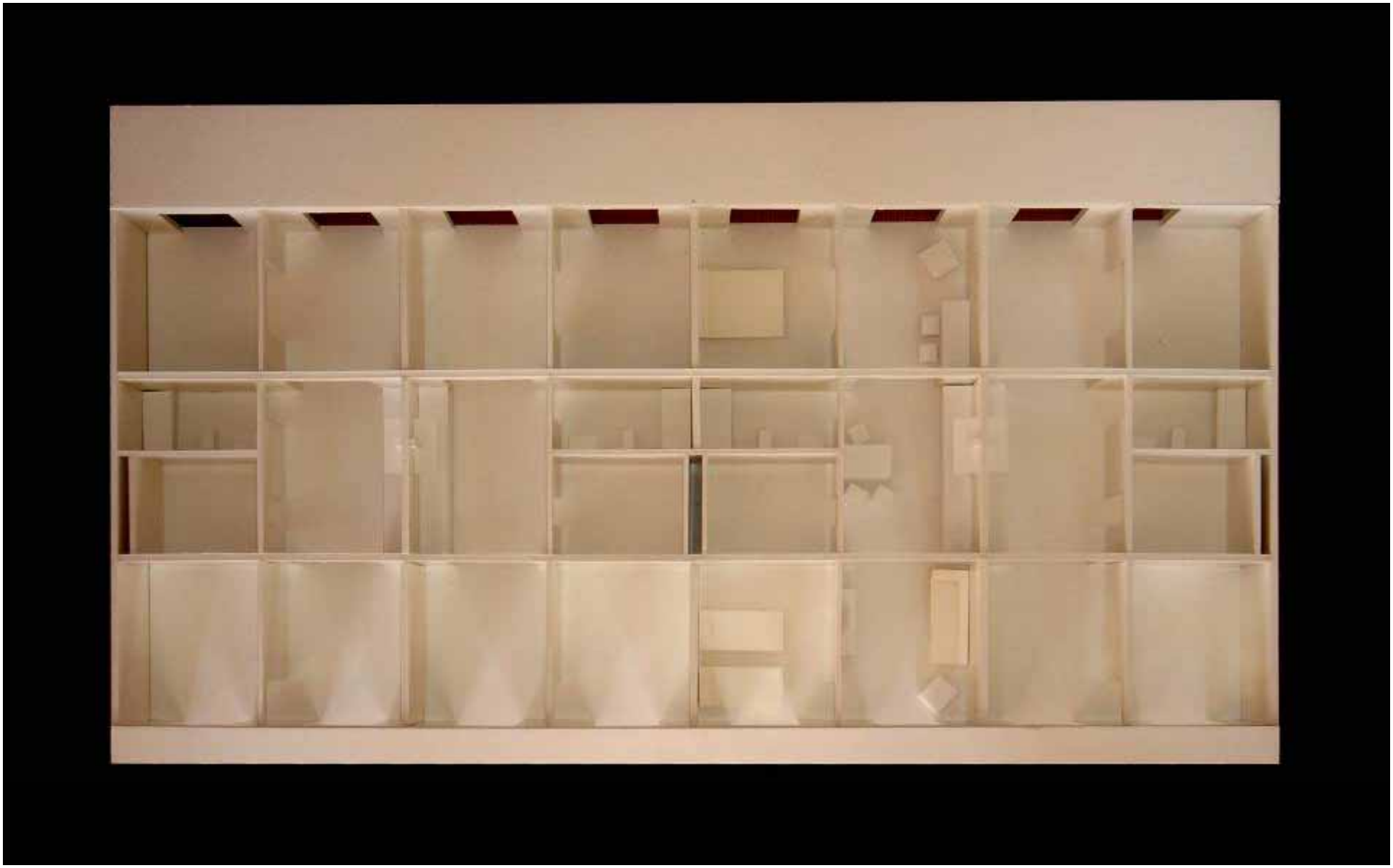




abitazioni comunali 809







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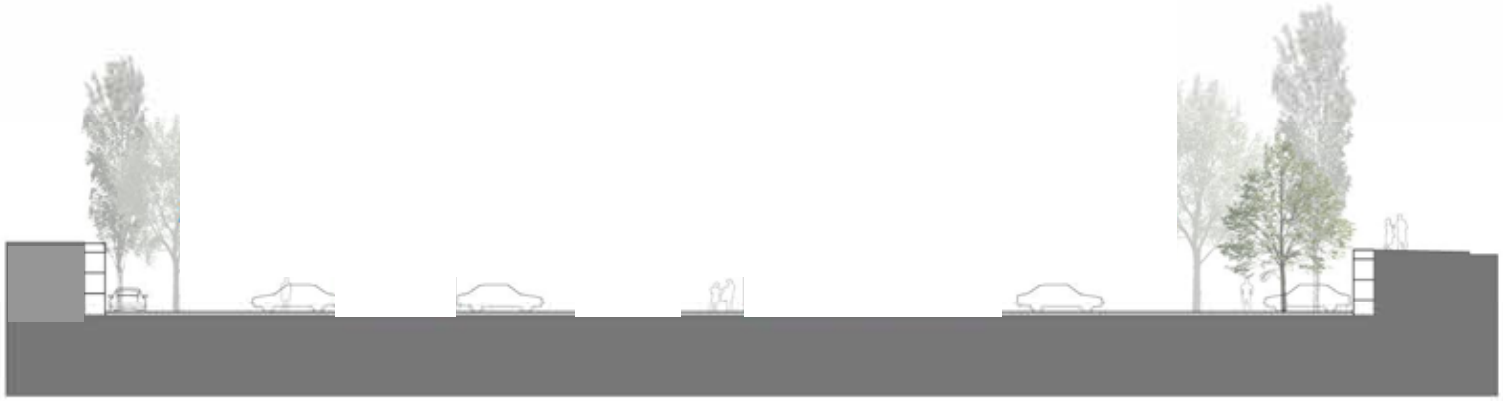
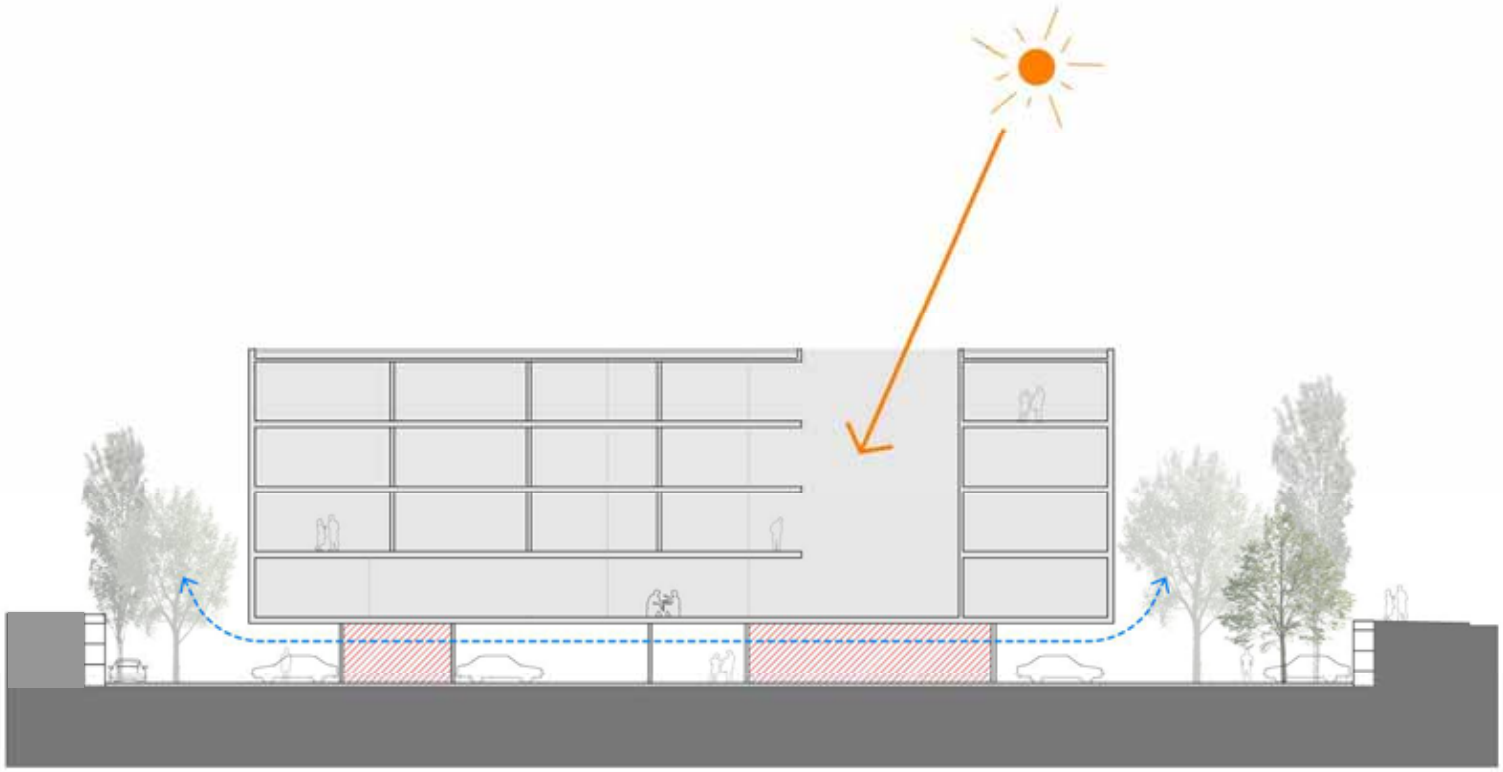
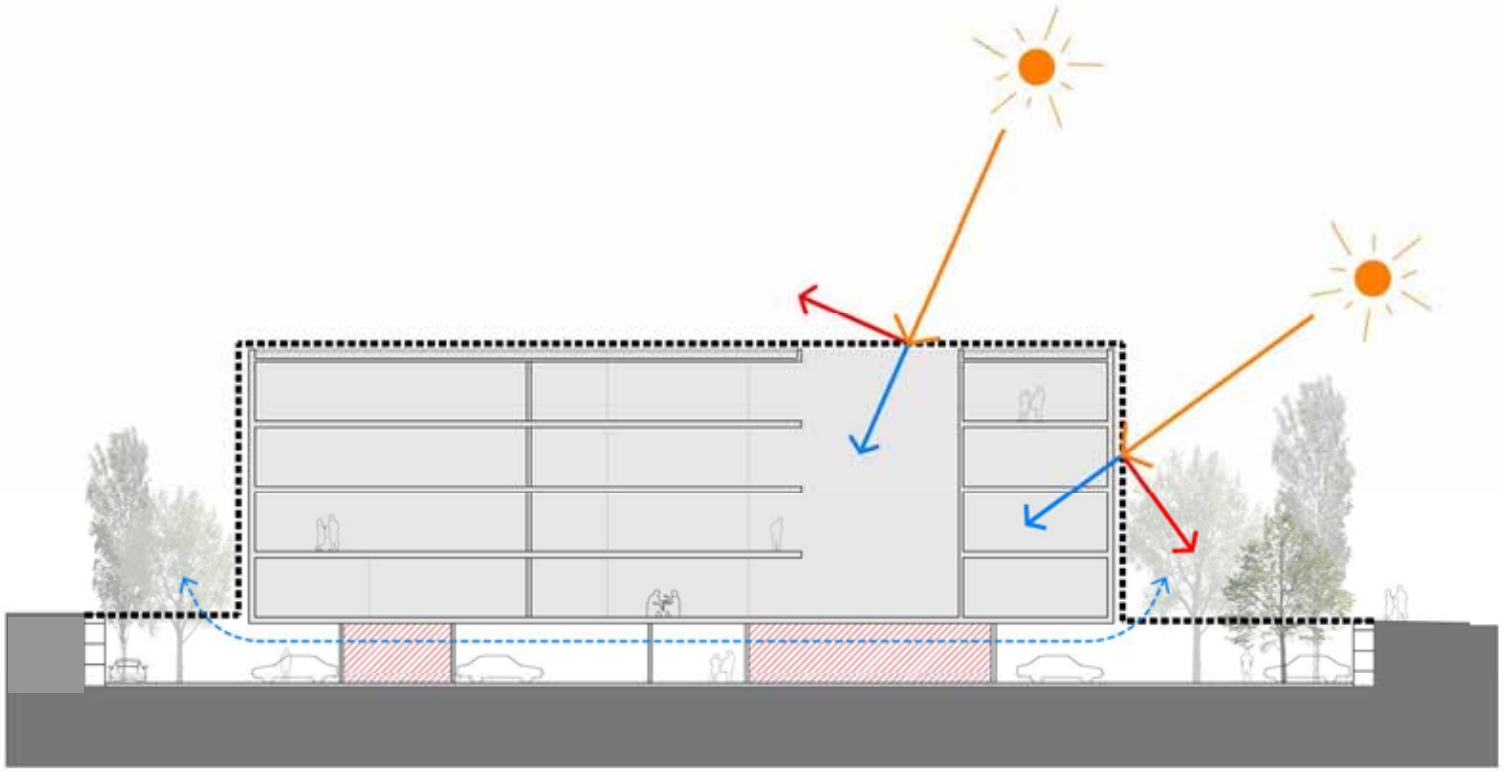
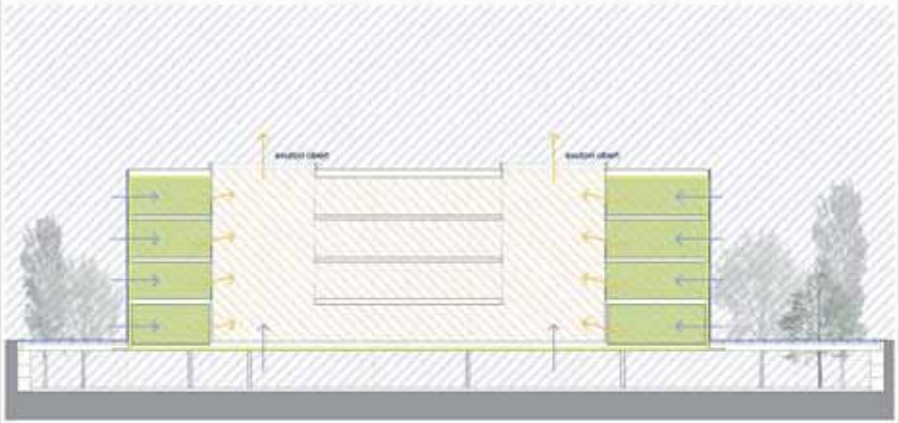
8/9/2008 21:59



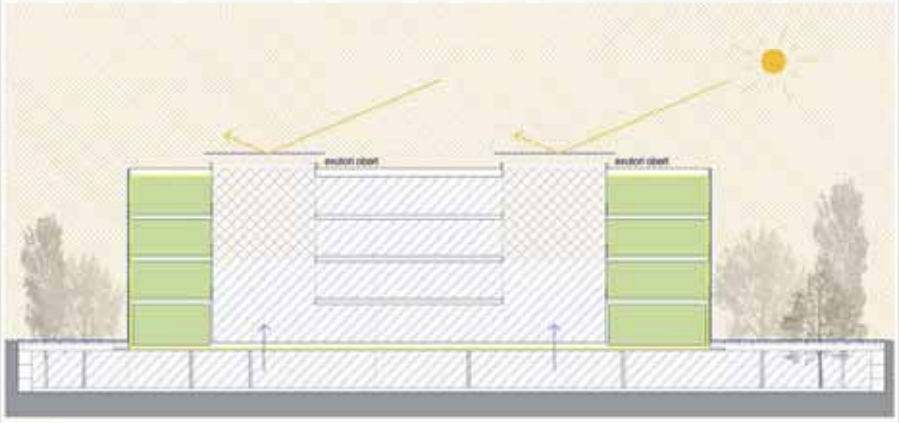




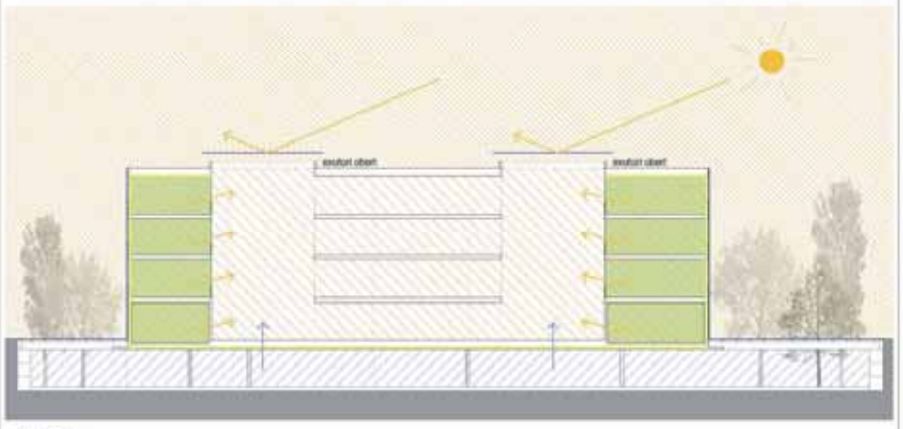


estiu-nit
obrir tots els mecanismes per rebaixar les càrregues internes
Free-cooling

estiu-mati
aillar i tancar tots els mecanismes per evitar guanys energètics
i mantenir la frescor de la nit



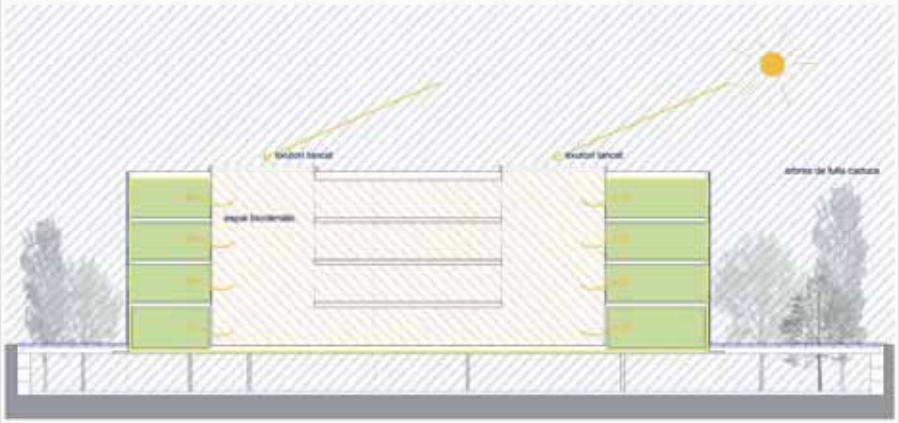
estiu-migdia
aillar i tancar tots els mecanismes per evitar guanys energètics
els patis tindràn control de l'assolejament i una petita ventil.lació que
permeti entrar l'aire fresc del soterrani.



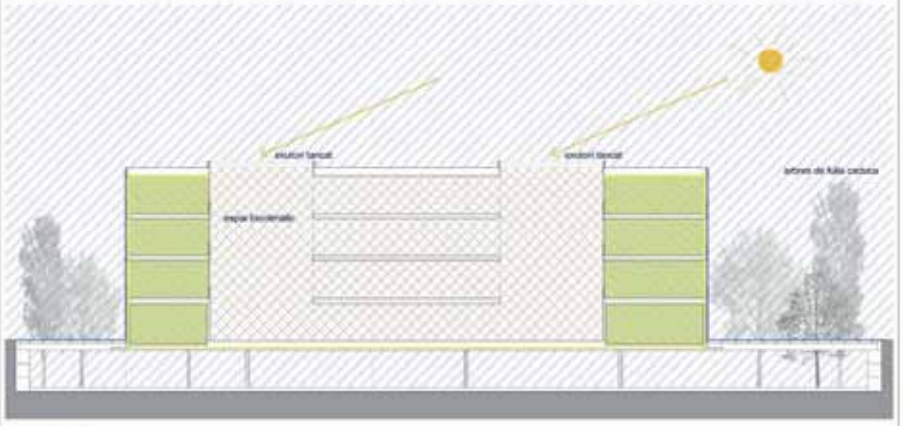
estiu-tarda
aillar i tancar tots els mecanismes de façana i obrir al pati per dissipar
les càrregues internes. Els patis tindràn una temperatura inferior a
l'exterior

hivern-nit
aillar i tancar tots els mecanismes per evitar pèrdues energètiques.

hivern-matí
aillar i tancar tots els mecanismes per evitar pèrdues energètiques
els patis aniràn acumulant guanys de calor

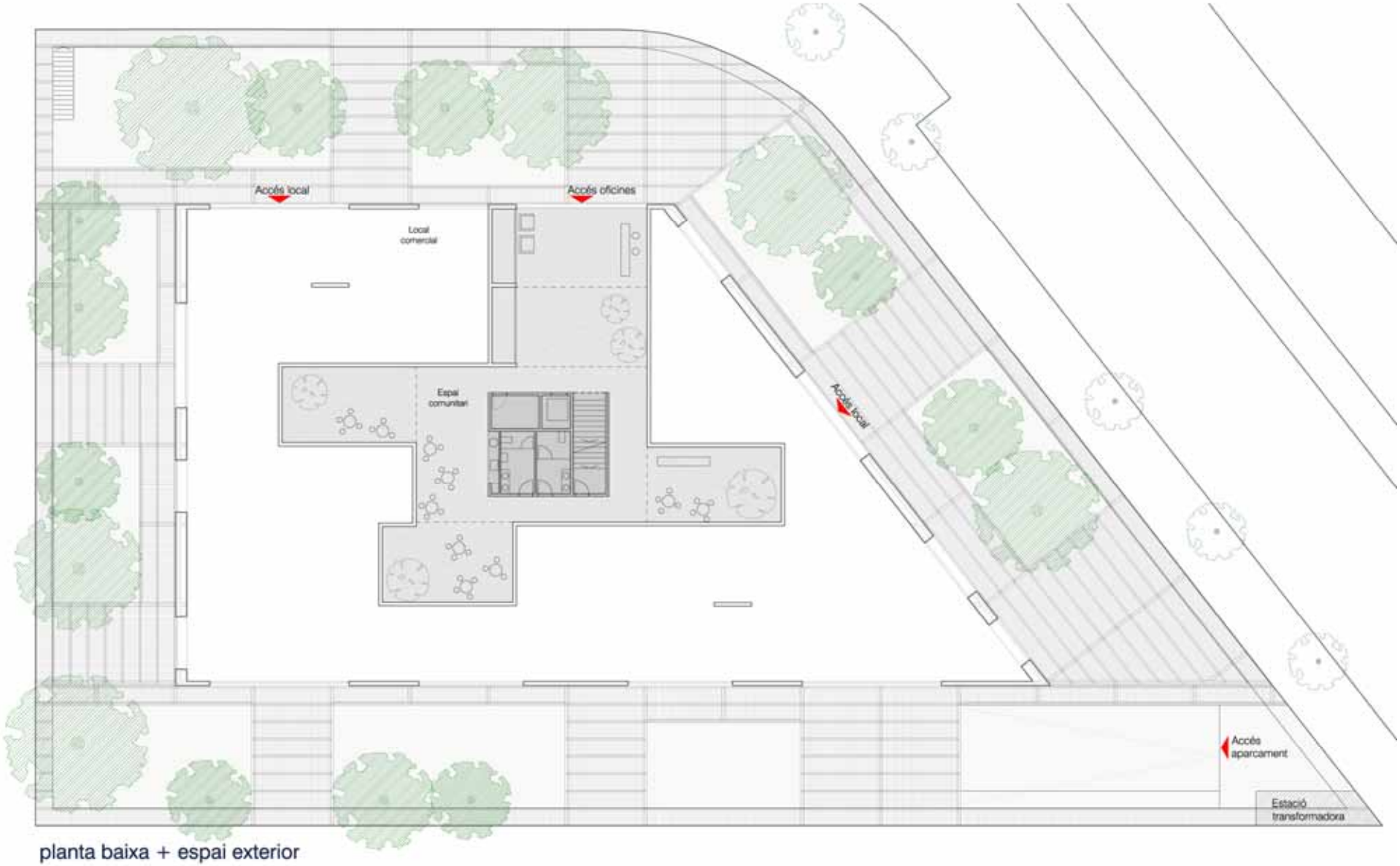


hivern-migdia
aillar i tancar tots els mecanismes externs per evitar pèrdues energètiques i
obrir els patis cap a l'interior per agafar l'energia de l'espai bioclimàtic.

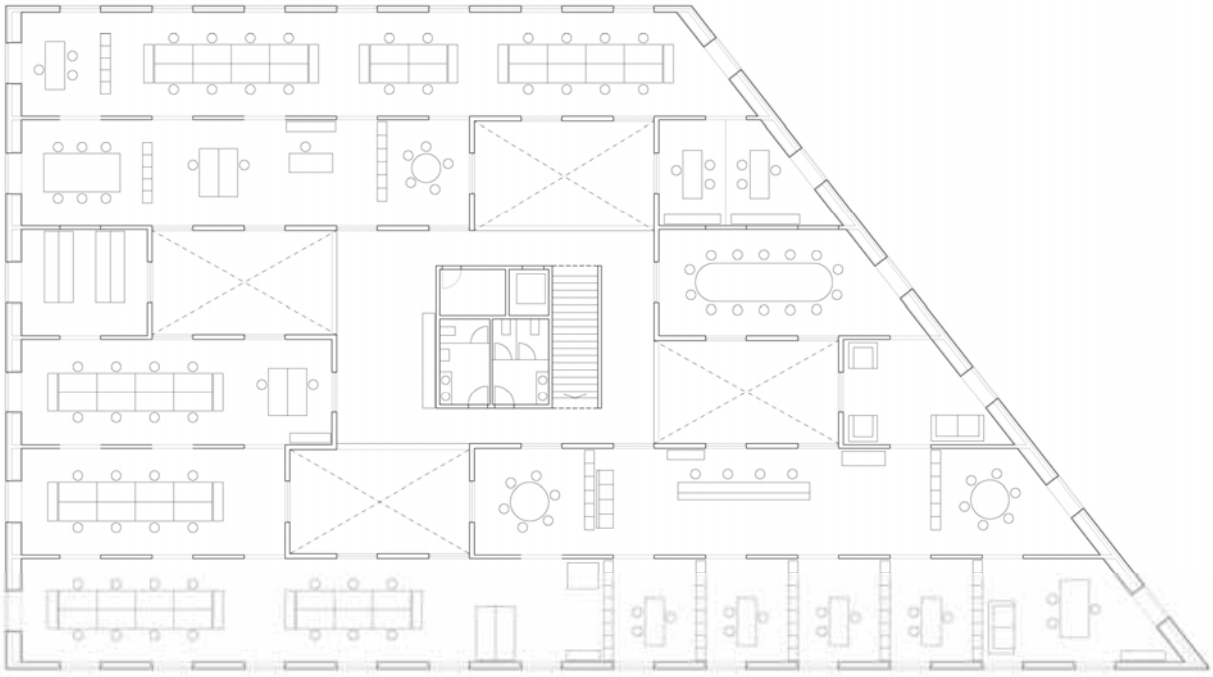


hivern-tarda
aillar i tancar tots els mecanismes per evitar pèrdues energètiques els patis aniràn
perdent calor i els espais calefactats tindràn acumulats les càrregues internes.

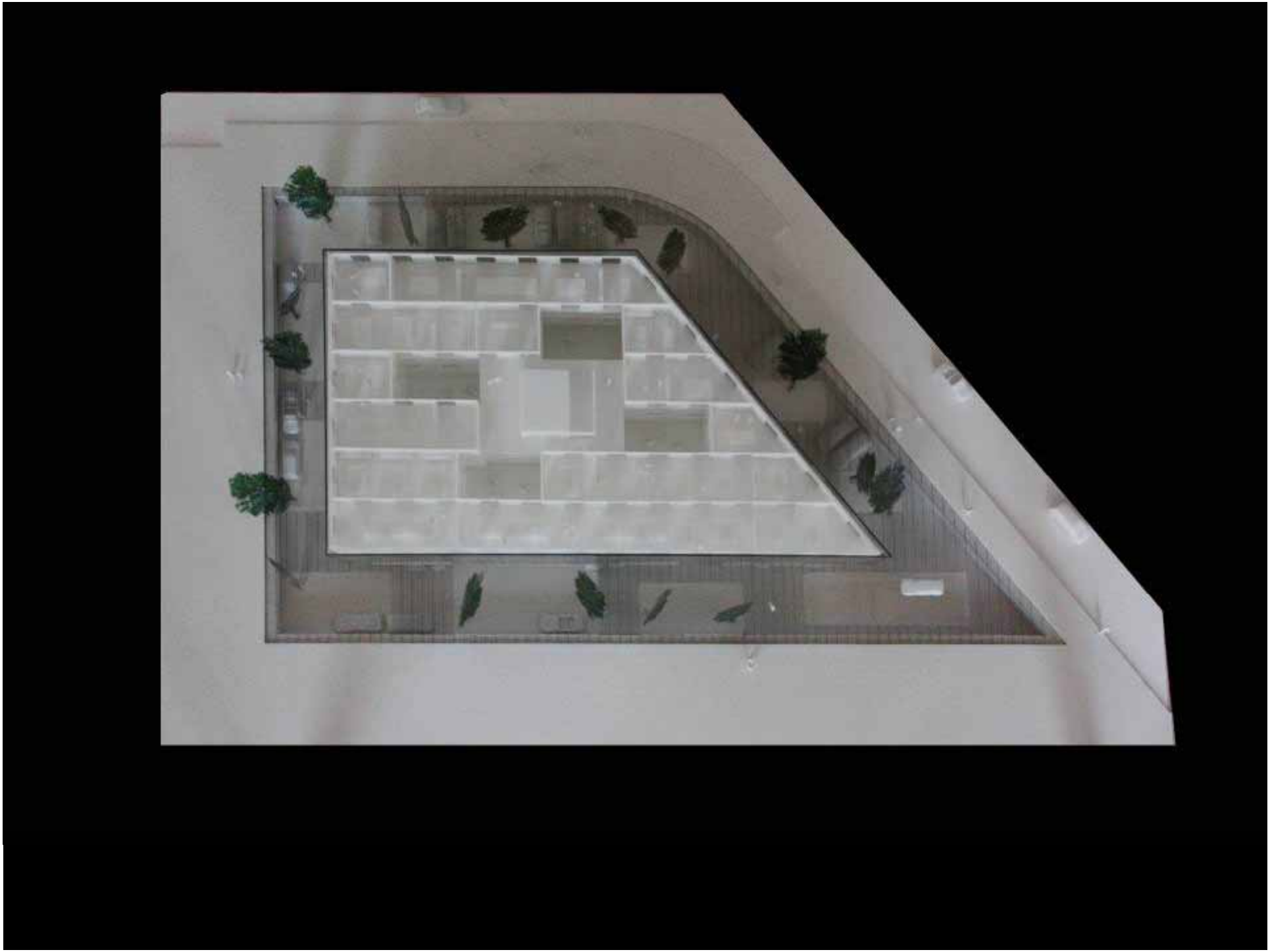
planta soterrani
54 places + 40 places exteriors

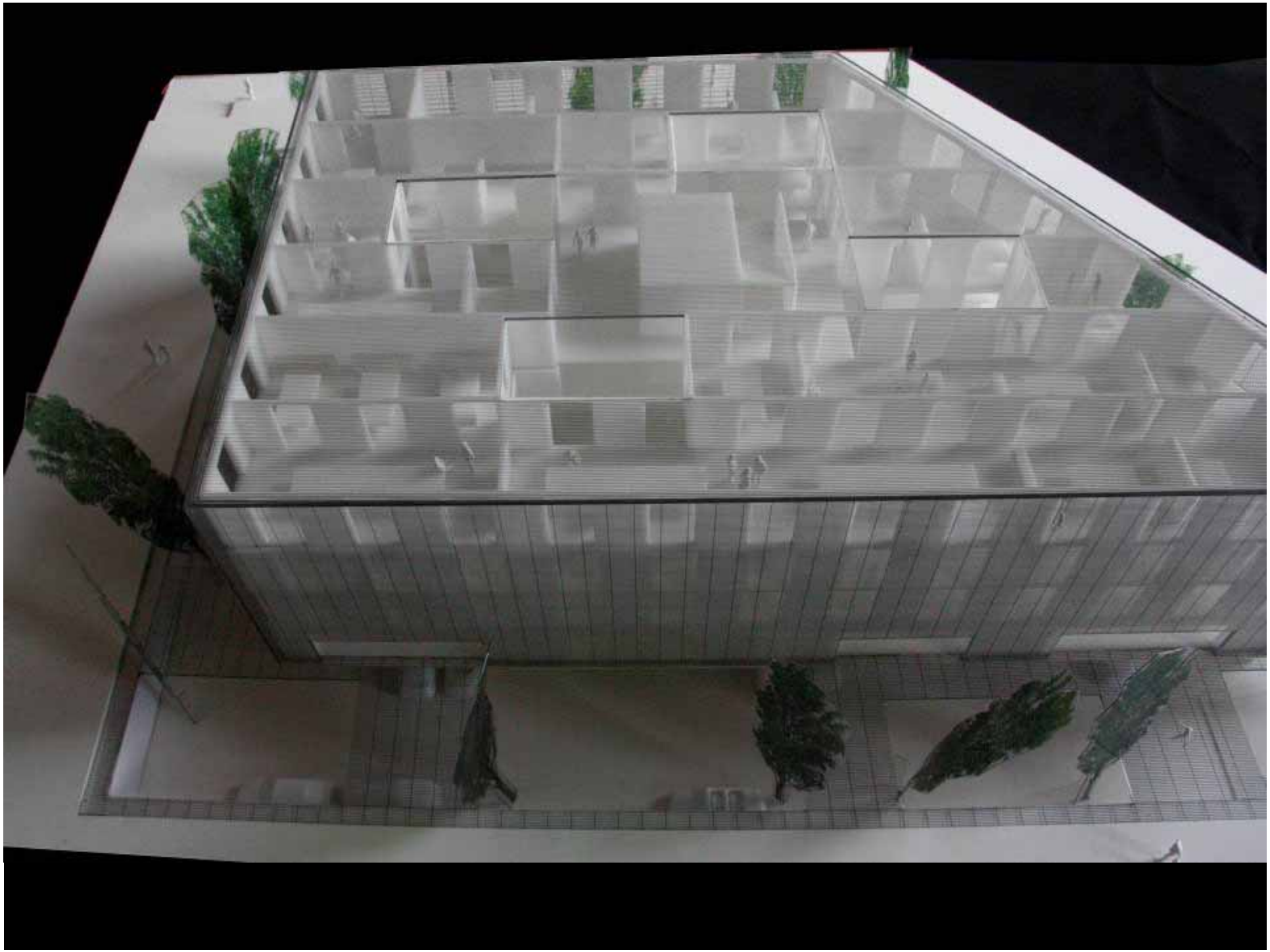


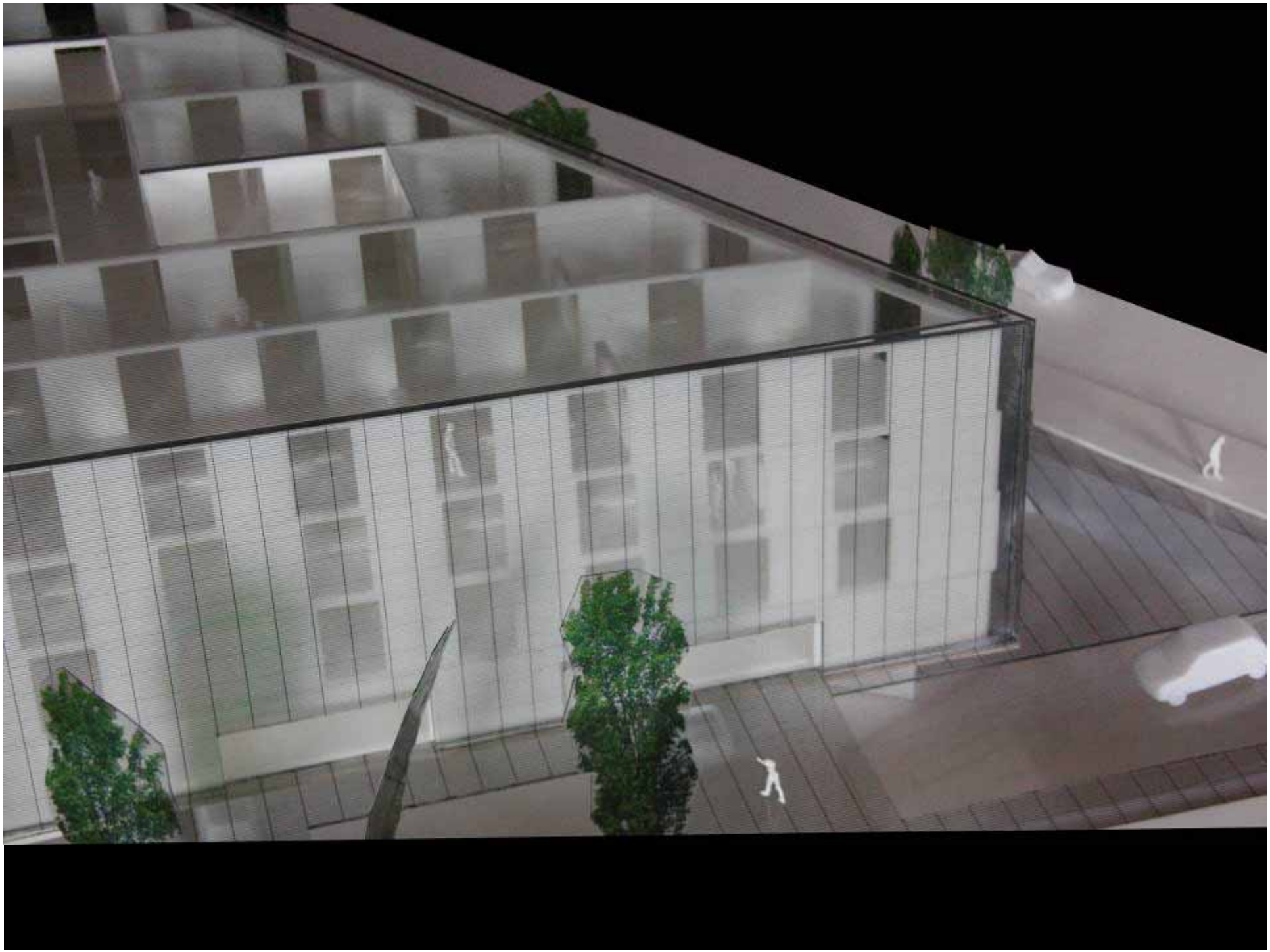
planta baixa + espai exterior

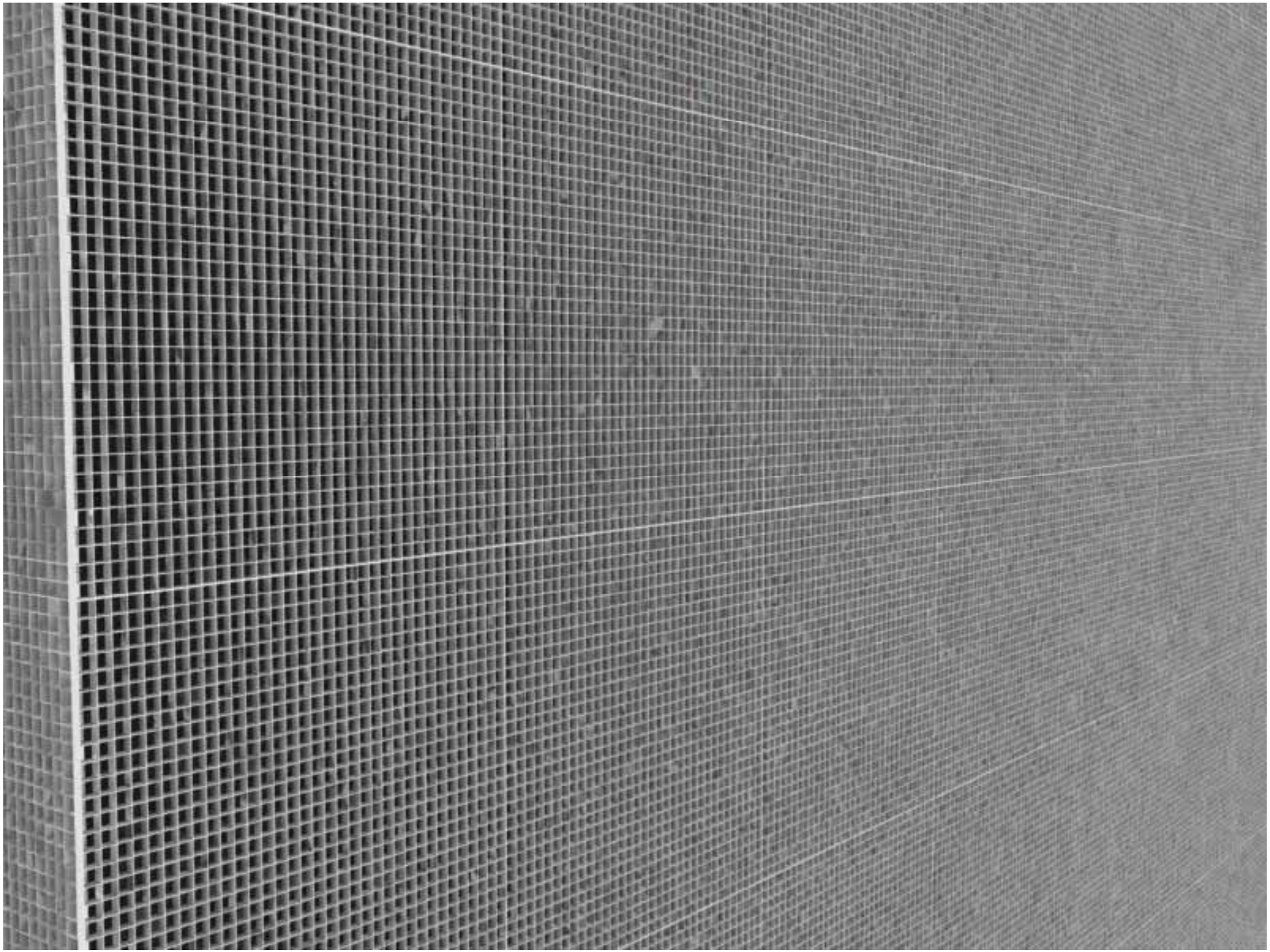


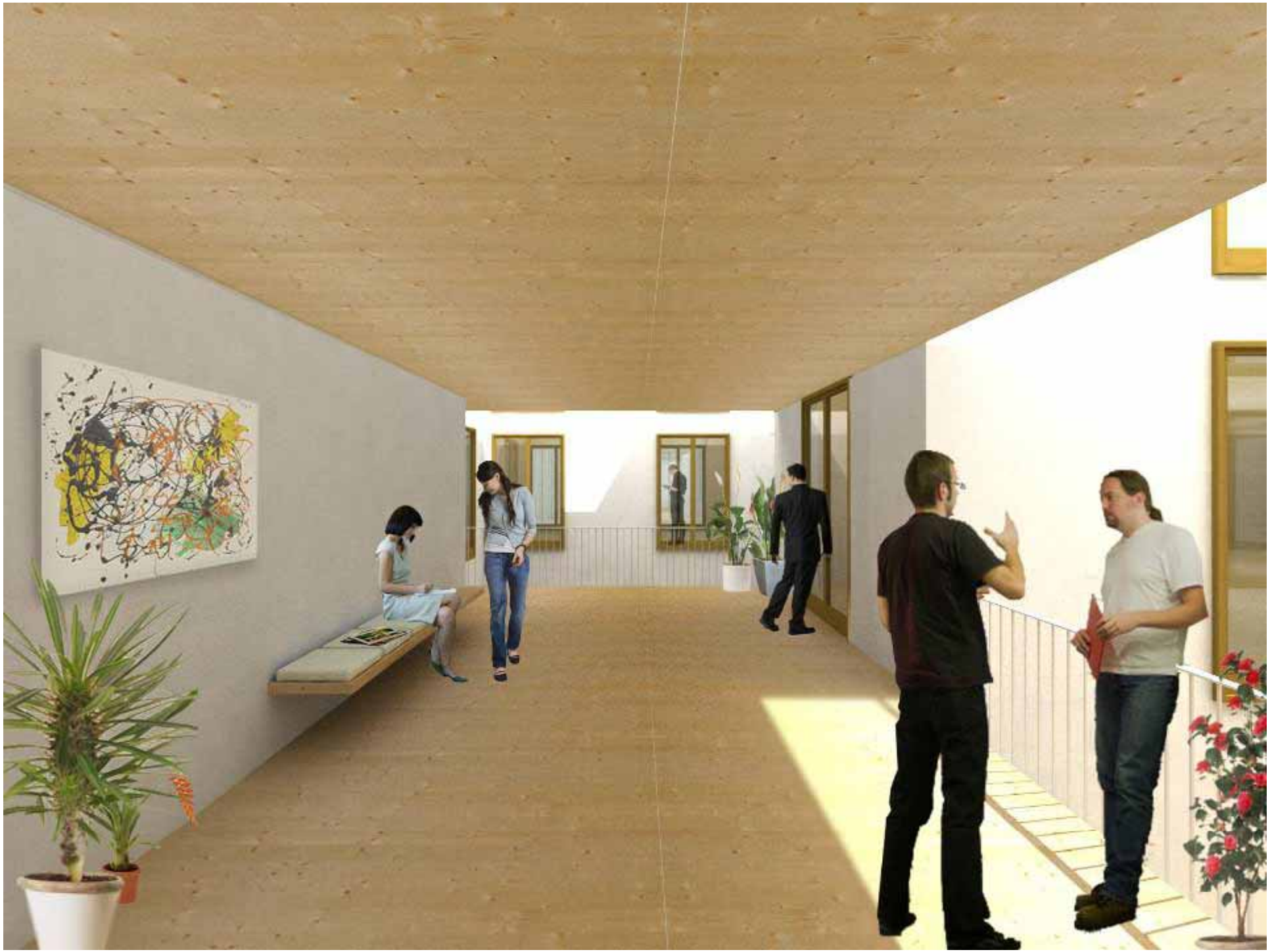
planta primera
Immomodois - Habitatges els Ponts

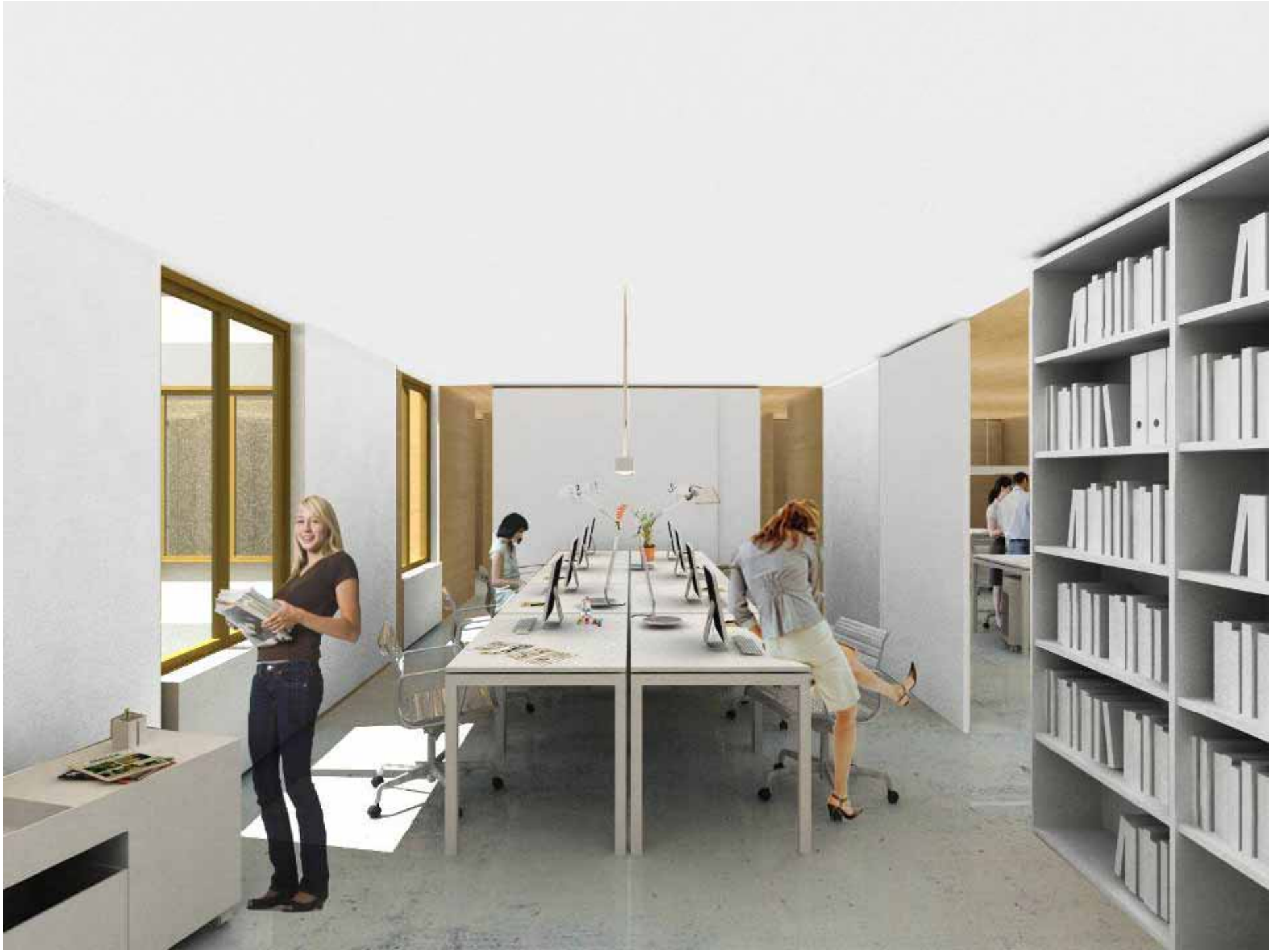












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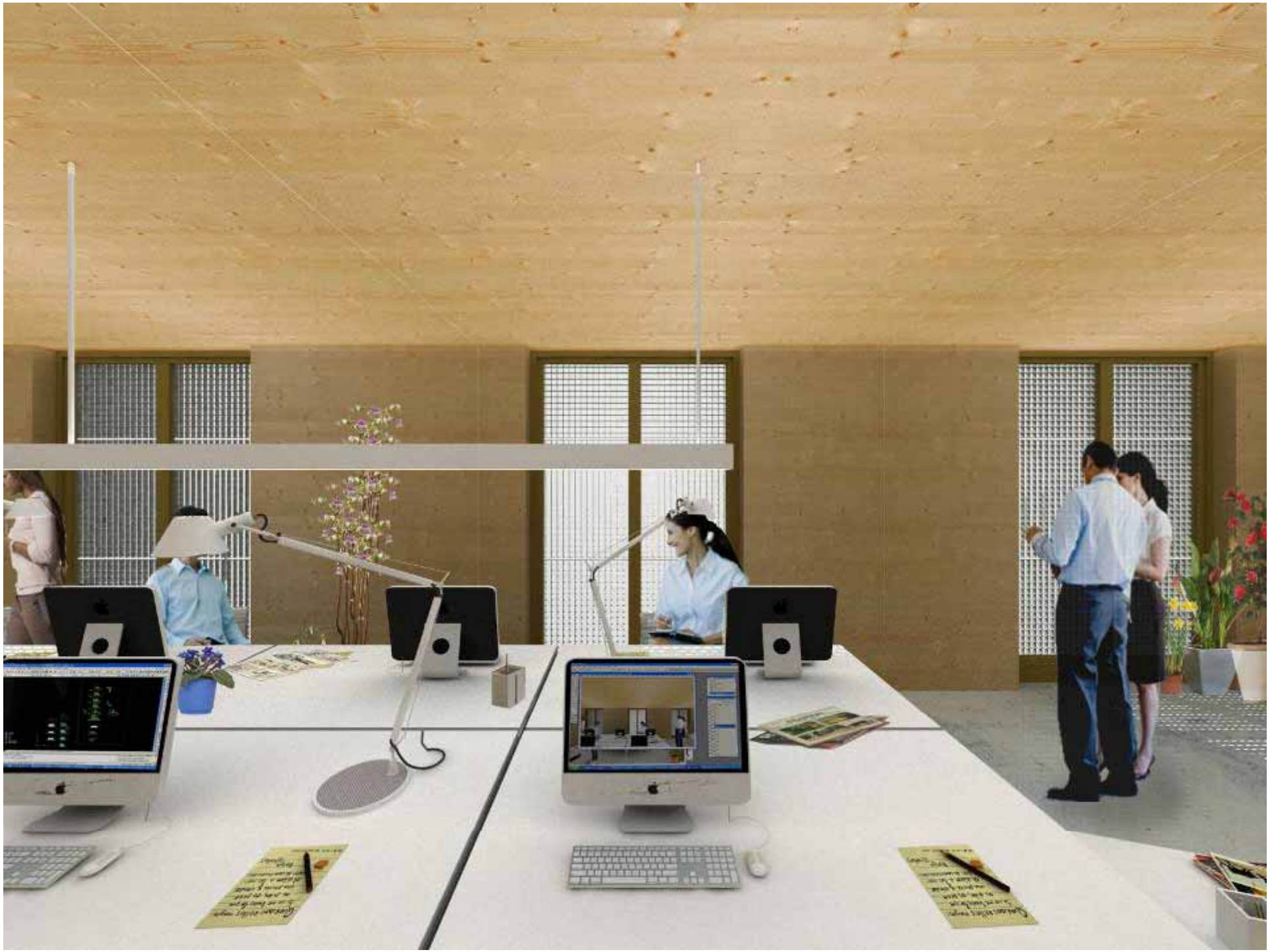

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