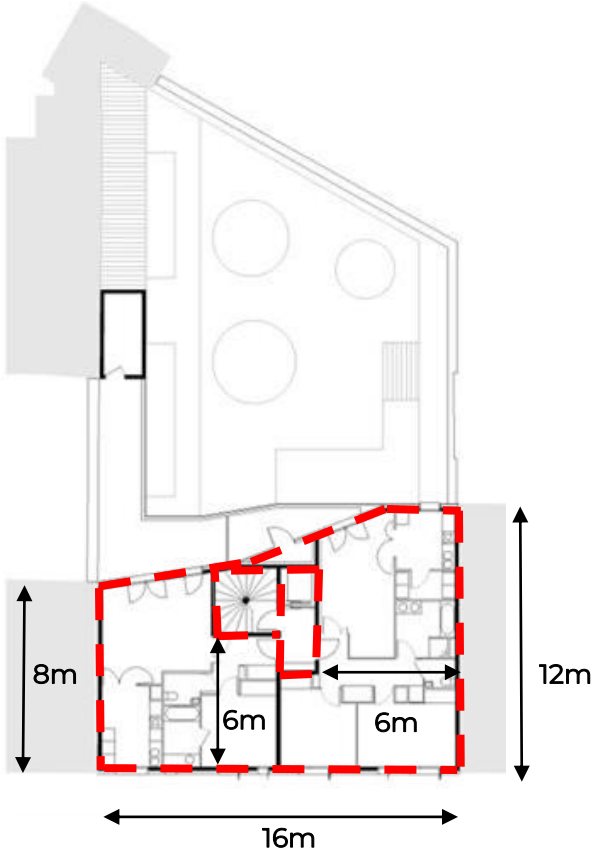


# Social Housing in Pantin

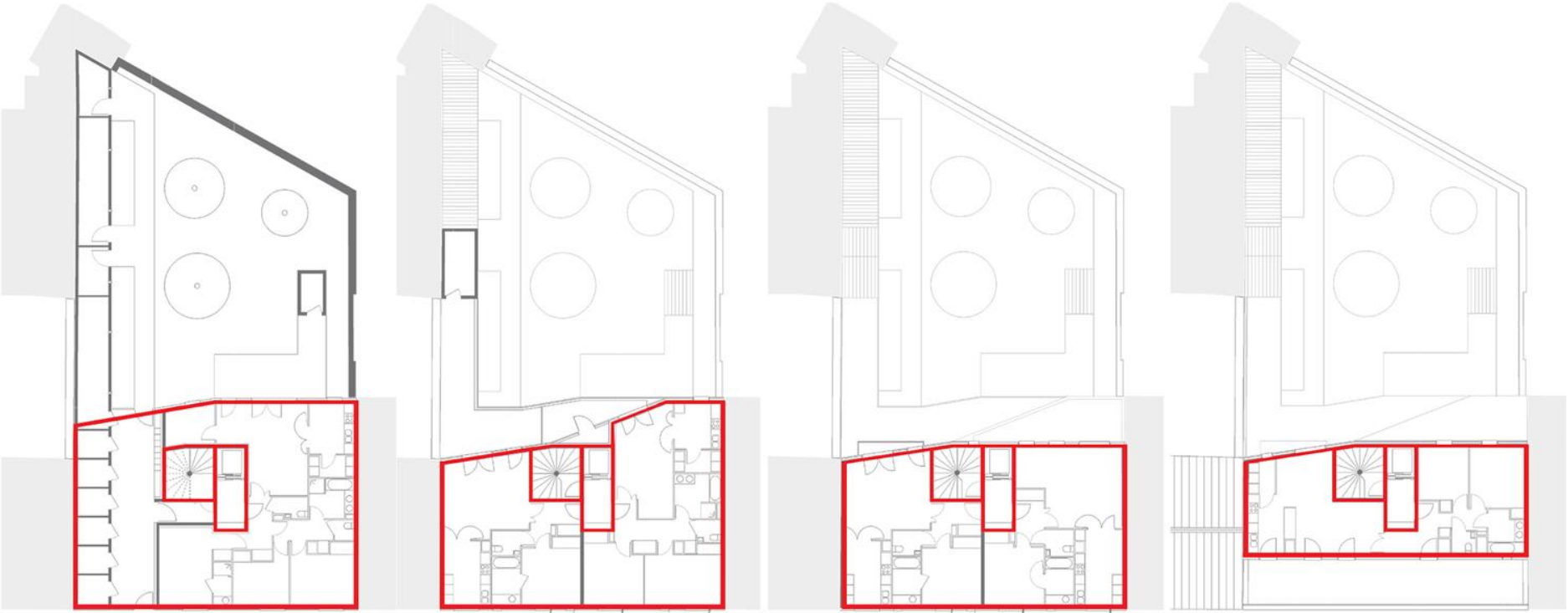
10 rue Berthier, Pantin, France

Structural Analysis  
Group 9

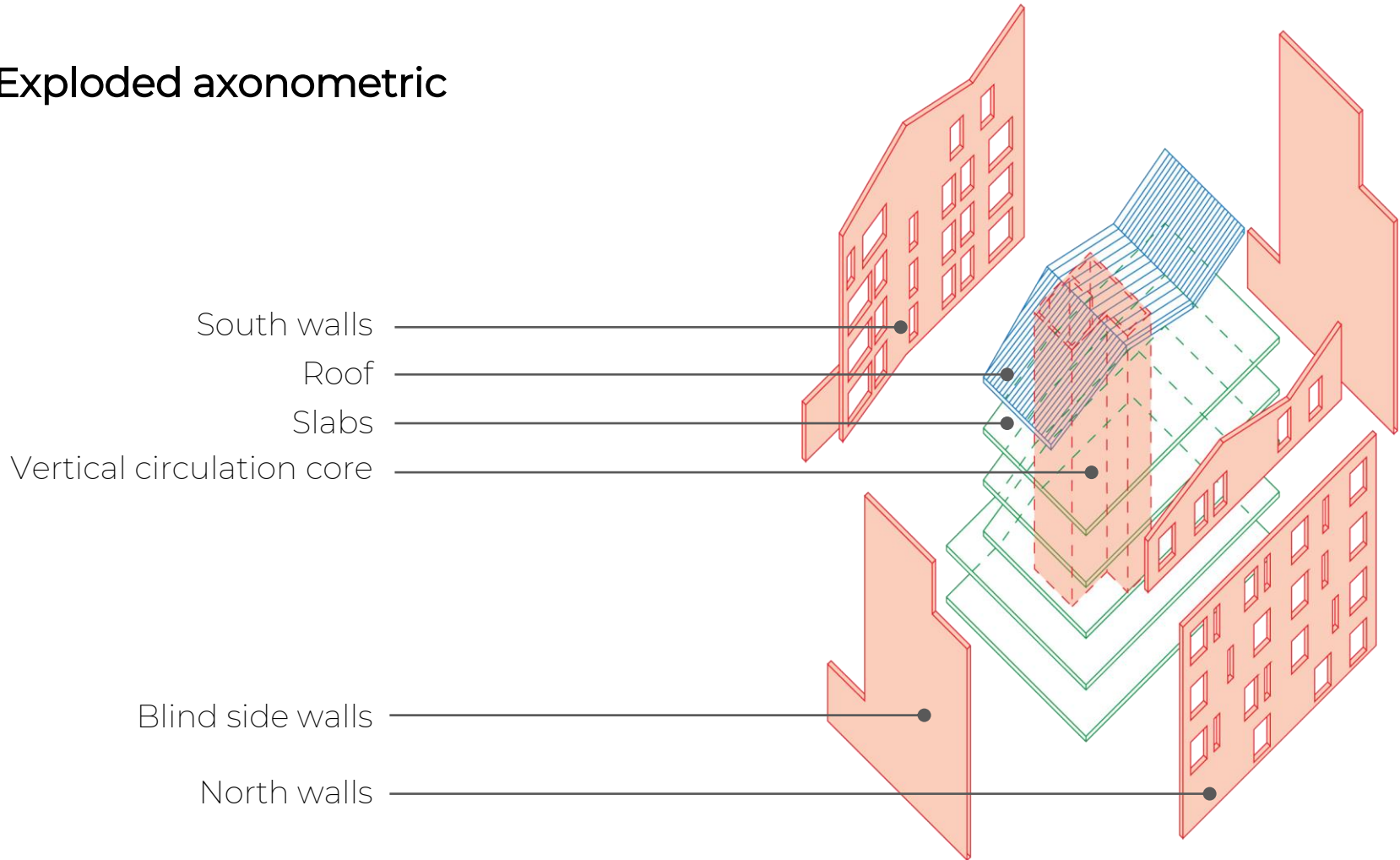
# General structure overview



# Structural wall



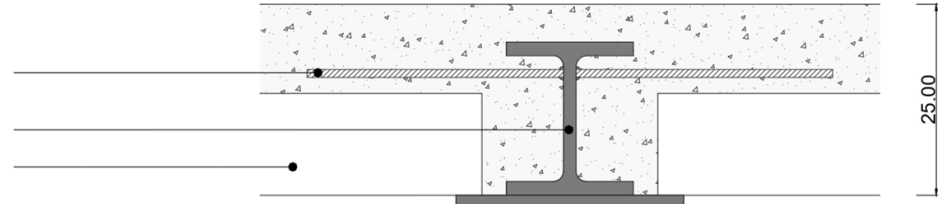
# Exploded axonometric



# Slab typology

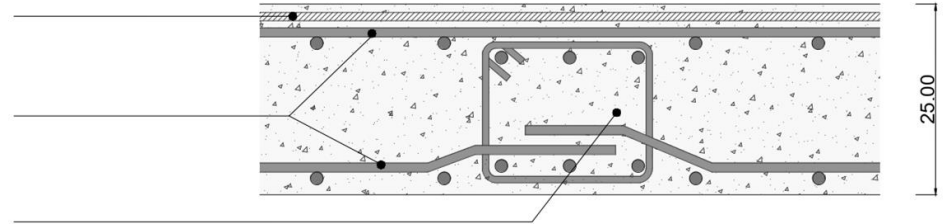
Dowel reinforcement (through profile)  
Steel profile  
Slab voids

SLIM FLOOR (up to 14m distance)



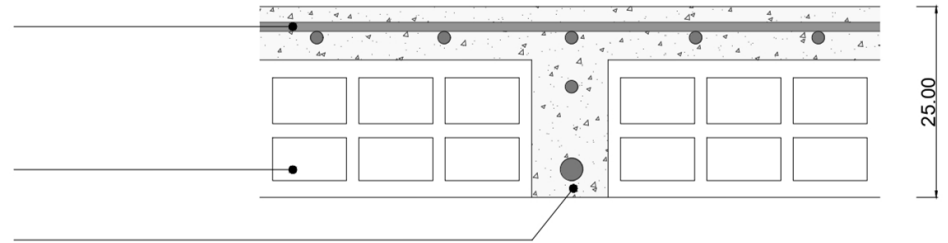
Slab reinforcement mesh + Negative reinforcement  
Slab bottom/top reinforcement bars  
Inner beam with reinforcement bars

SOLID SLAB (up to 8m distance)



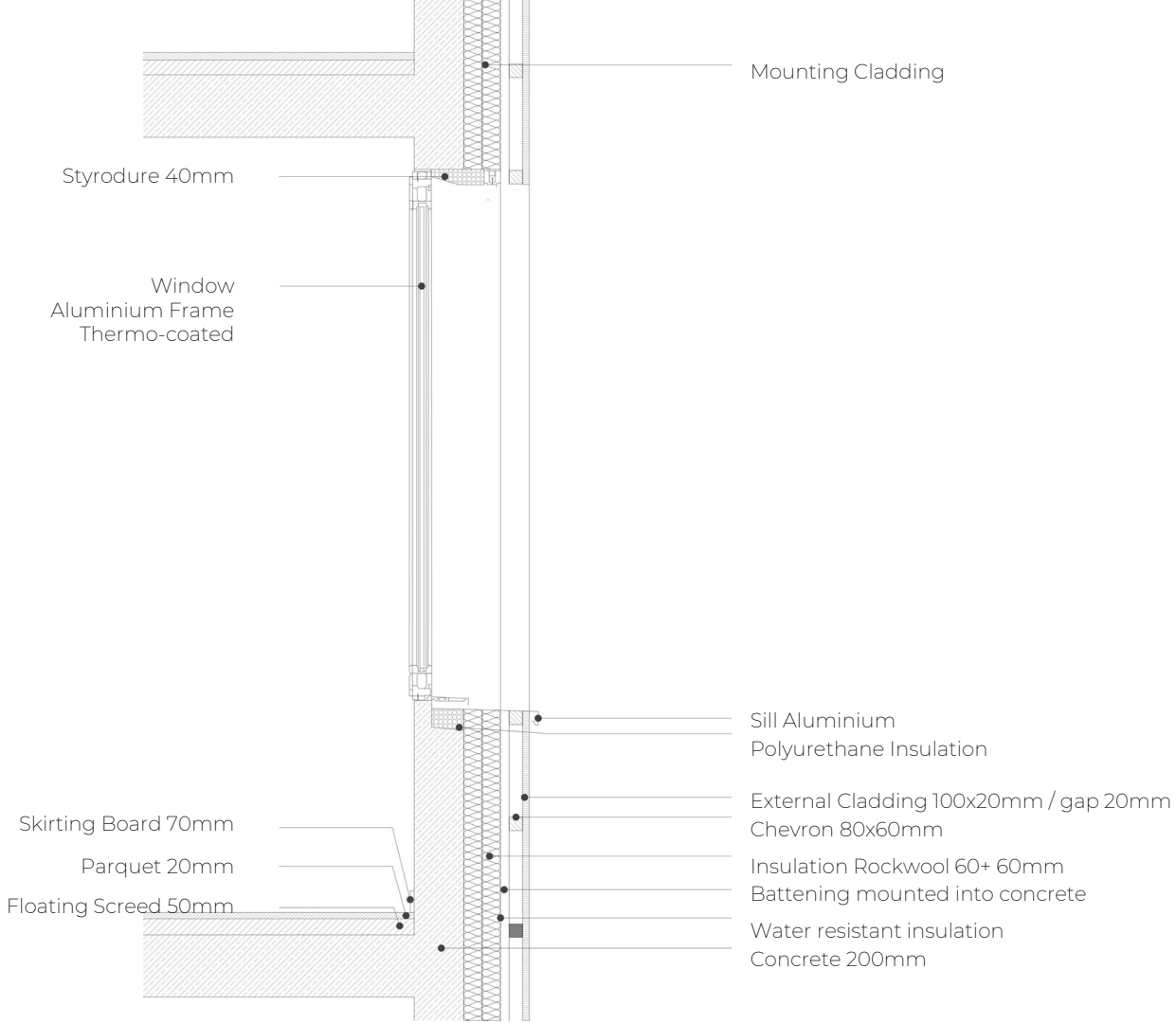
Slab reinforcement mesh  
Lighten element  
Ribs bottom/top reinforcement bars

LIGHTENED SLAB / RIBBED SLAB  
(up to: 6m - 12m)



# Detail

## South Facade



R-Value  
 $U=1/U$



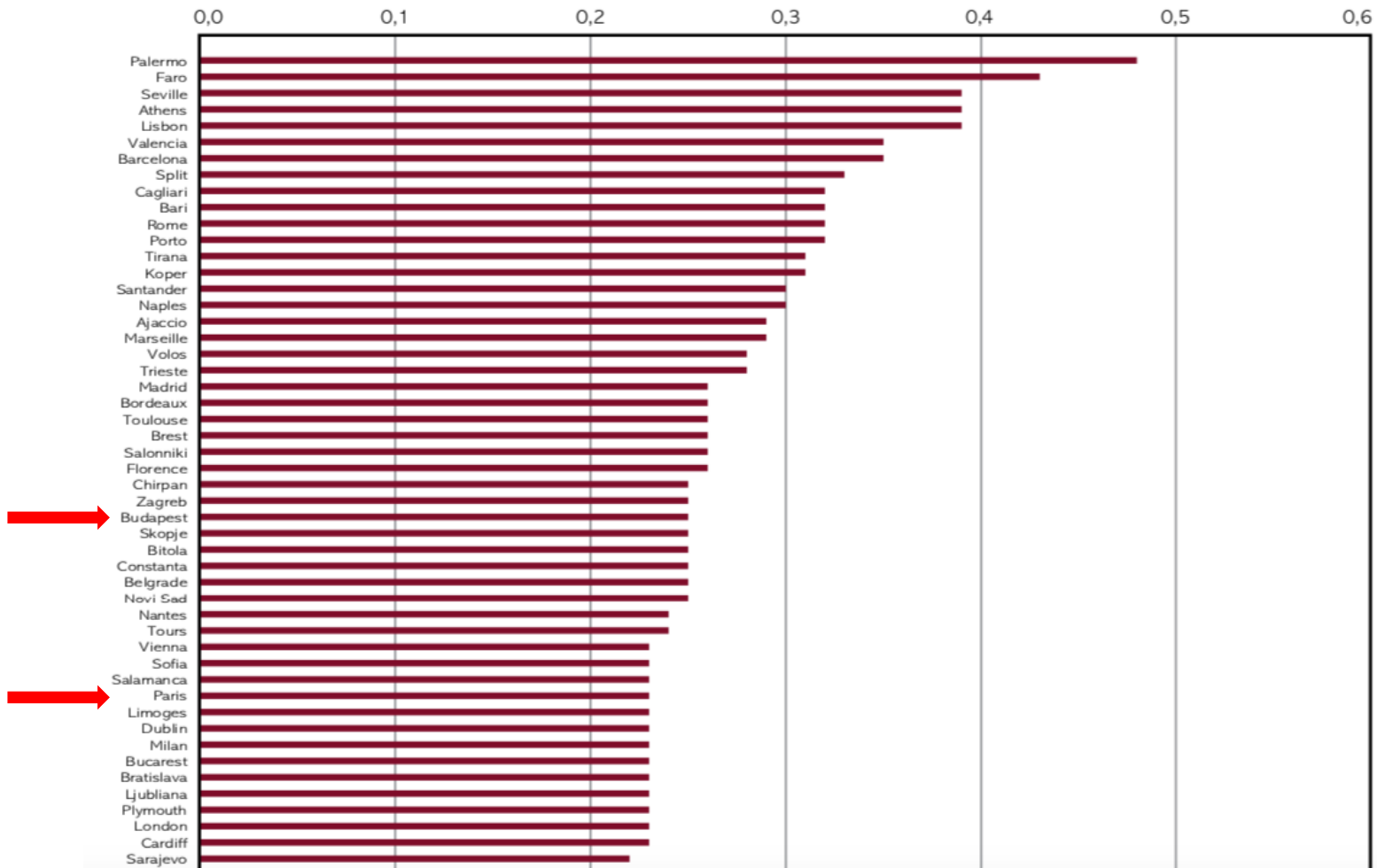
## RÉFÉRENCES ET CONDITIONNEMENT

Référence	Dimensions L x l x e (mm)	Résistance thermique (m <sup>2</sup> .K/W)	Nombre de pièces/ colis	Nombre de m <sup>2</sup> / colis	Nombre de colis/ palette	Nombre de pièces/ palette	Nombre de m <sup>2</sup> / palette	Camion tautliner m <sup>2</sup> / chargement (20 palettes)	Classe de produit	Code EAN
105332	1350 x 600 x 40	1,10	16	12,96	12	192	155,52	3 110,40	A	3 53731 0094339
129799	1350 x 600 x 50	1,40	12	9,72	12	144	116,64	2 332,80	A	3 53731 0100382
133152	1350 x 600 x 60	1,70	10	8,10	12	120	97,20	1 944,00	A	3 53731 0101631
100516	1350 x 600 x 70	2,00	8	6,48	12	96	77,76	1 555,20	A	3 53731 0086020
100517	1350 x 600 x 80	2,25	8	6,48	12	96	77,76	1 555,20	A	3 53731 0086037
100538	1350 x 600 x 100	2,85	6	4,86	12	72	58,32	1 166,40	A	3 53731 0086051
100541	1350 x 600 x 120	3,40	5	4,05	12	60	48,60	972,00	A	3 53731 0086068
102713	1350 x 600 x 130	3,70	5	4,05	12	60	48,60	972,00	A	3 53731 0093608
234513	1350 x 600 x 140	4,00	5	4,05	12	60	48,60	972,00	A	3 53731 1011496
100545	1350 x 600 x 150	4,25	4	3,24	12	48	38,88	777,60	A	3 53731 0086082
100547	1350 x 600 x 160	4,55	4	3,24	12	48	38,88	777,60	A	3 53731 0086099
234514	1350 x 600 x 180	5,10	4	3,24	12	48	38,88	777,60	A	3 53731 1011502
100555	1350 x 600 x 200	5,70	3	2,43	12	36	29,16	583,20	A	3 53731 0086136

U-Value  
 $U=1/R$

Overview U-value-recommendations walls [W/m<sup>2</sup> K]

U-value [W/m<sup>2</sup> K]





## Construction system



Form concrete walls



Poured concrete slab

## Façades materials



White plaster  
(north façade body)



White varnished brick  
(north façade base)



Larch slatted wood covering  
(south façade)

## Aging of the wooden façade



New build wooden façade



Rain, wind and sun effect on the non protected façade

# Windows and shutters materials



White aluminium  
window frame



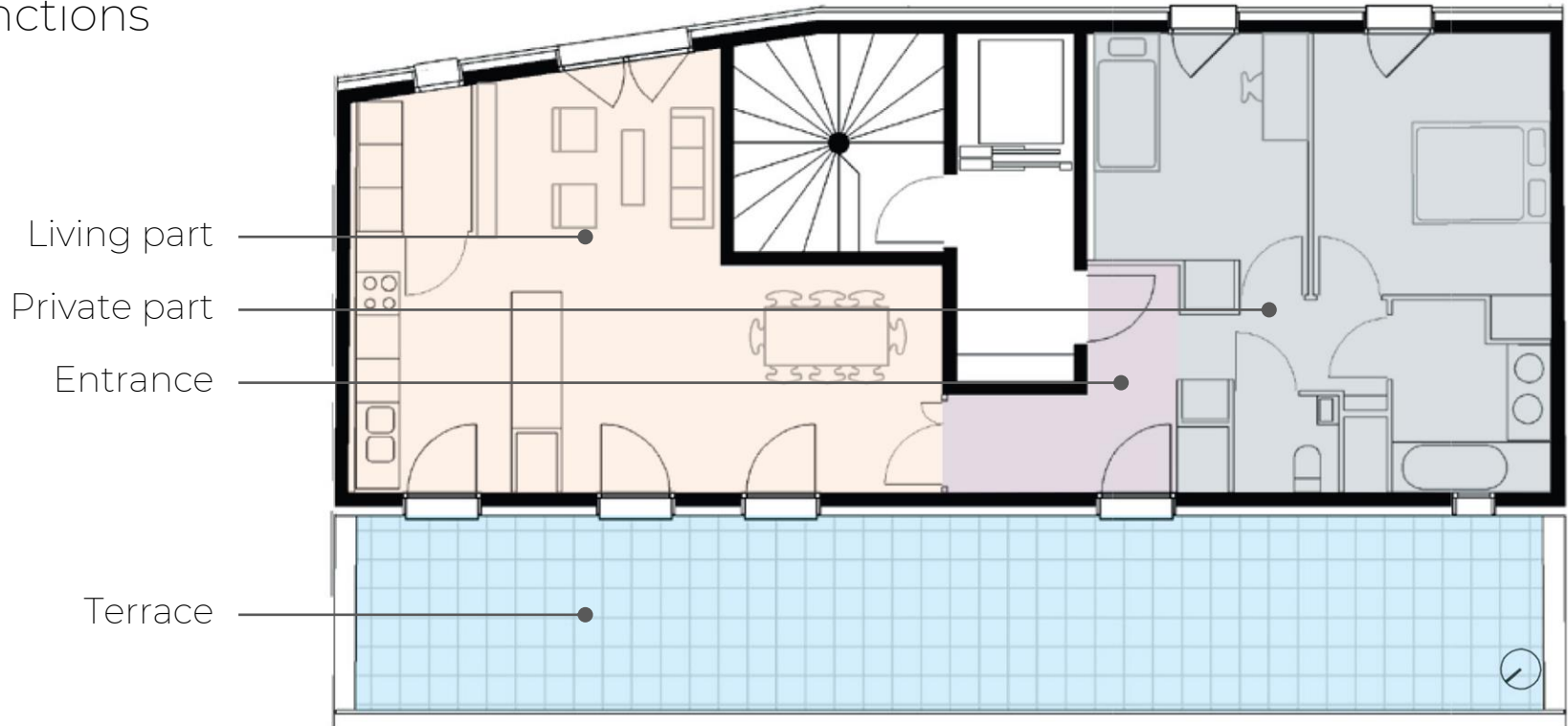
White aluminium shutter



Larch slatted wood shutter  
Steel frame

# Apartment analysis

## Functions



# Apartment analysis

## Qualities

South warm light

Acoustic insulation  
against the elevator

Natural ventilation

North white and  
continual light

Integrated closets

