

arquitetura e urbanismo | UFRGS  
trabalho de conclusão de curso  
acadêmica laura witter zimmer  
orientador prof. leandro manenti  
coorientadora prof. eliane constantinou  
2019/1

ACOLHER

AMPARAR

INTEGRAR

COLETIVO HABITACIONAL DO IMIGRANTE  
PARA A CIDADE DE PORTO ALEGRE / RS





LAZZO

CASA Maria

Baker & U

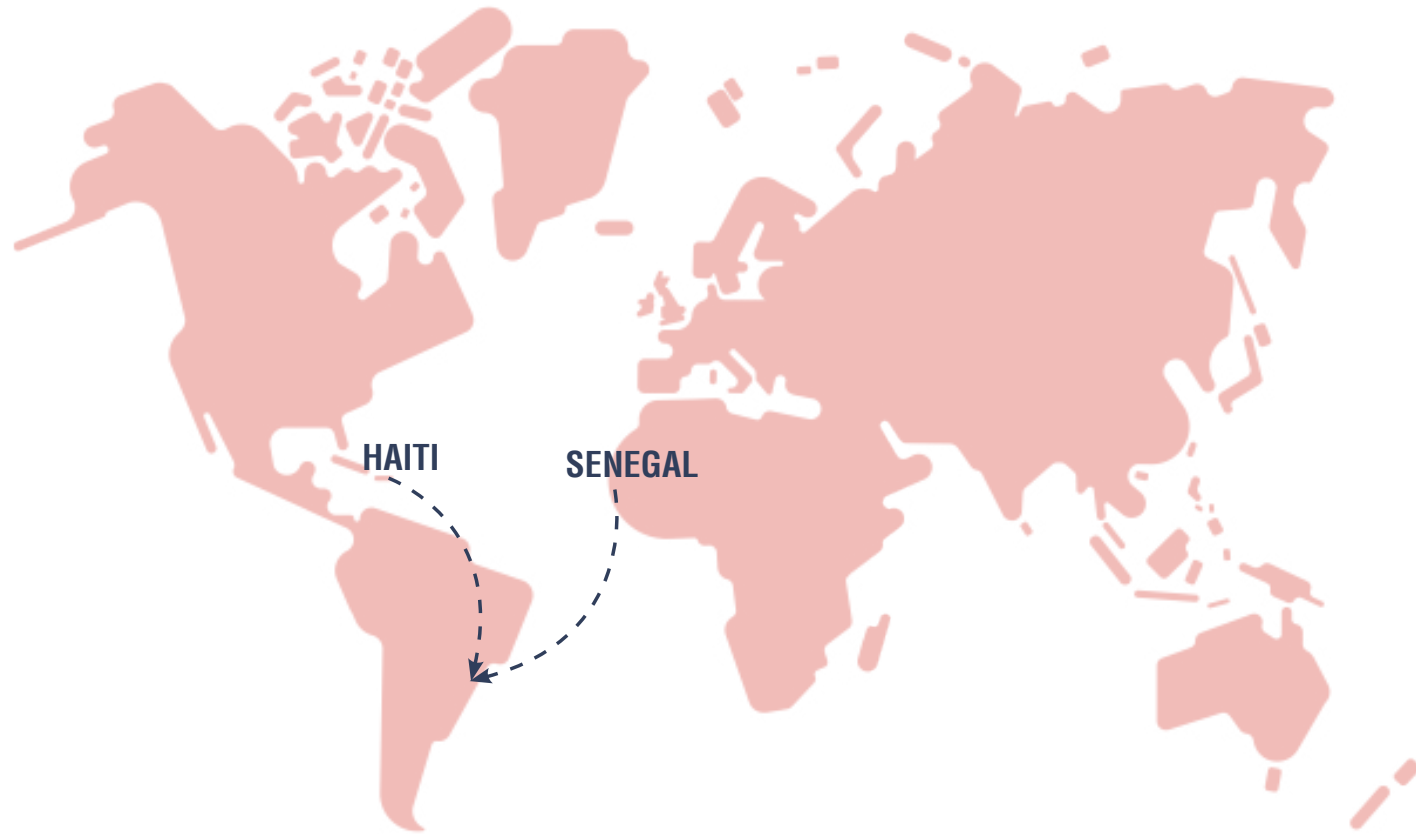
XEROX  
FOTOS  
3x4

Droga Raia

TONIO

TONIO

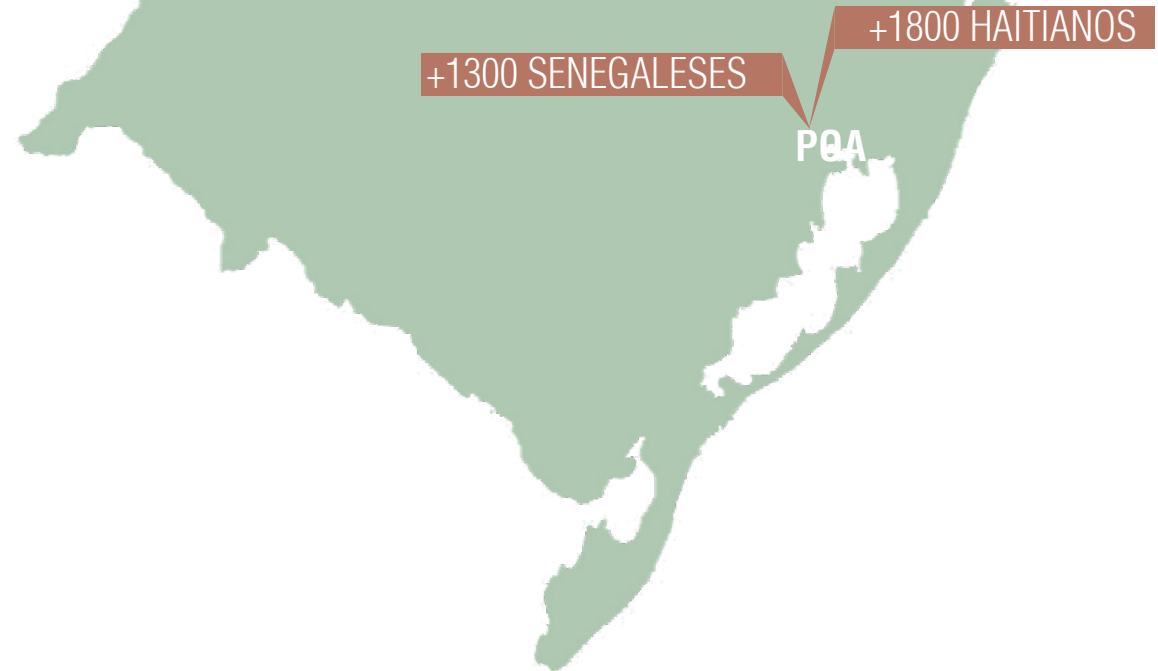
2010-2019





# +13.000

HAITIANOS E SENEGALESES NO RS



// **3100 imigrantes** em Porto Alegre (2017)

// busca de trabalho e **melhoria de vida**

// inserção no mercado **informal**





//submoradias

//habitações compartilhadas com 8-10 pessoas

//más condições de habitabilidade e salubridade

//ocupações irregulares - ocupação progresso (2014-2018)







**ACOLHER**

// referência ao imigrante recém chegado  
//alojamento emergencial  
//assistência inicial

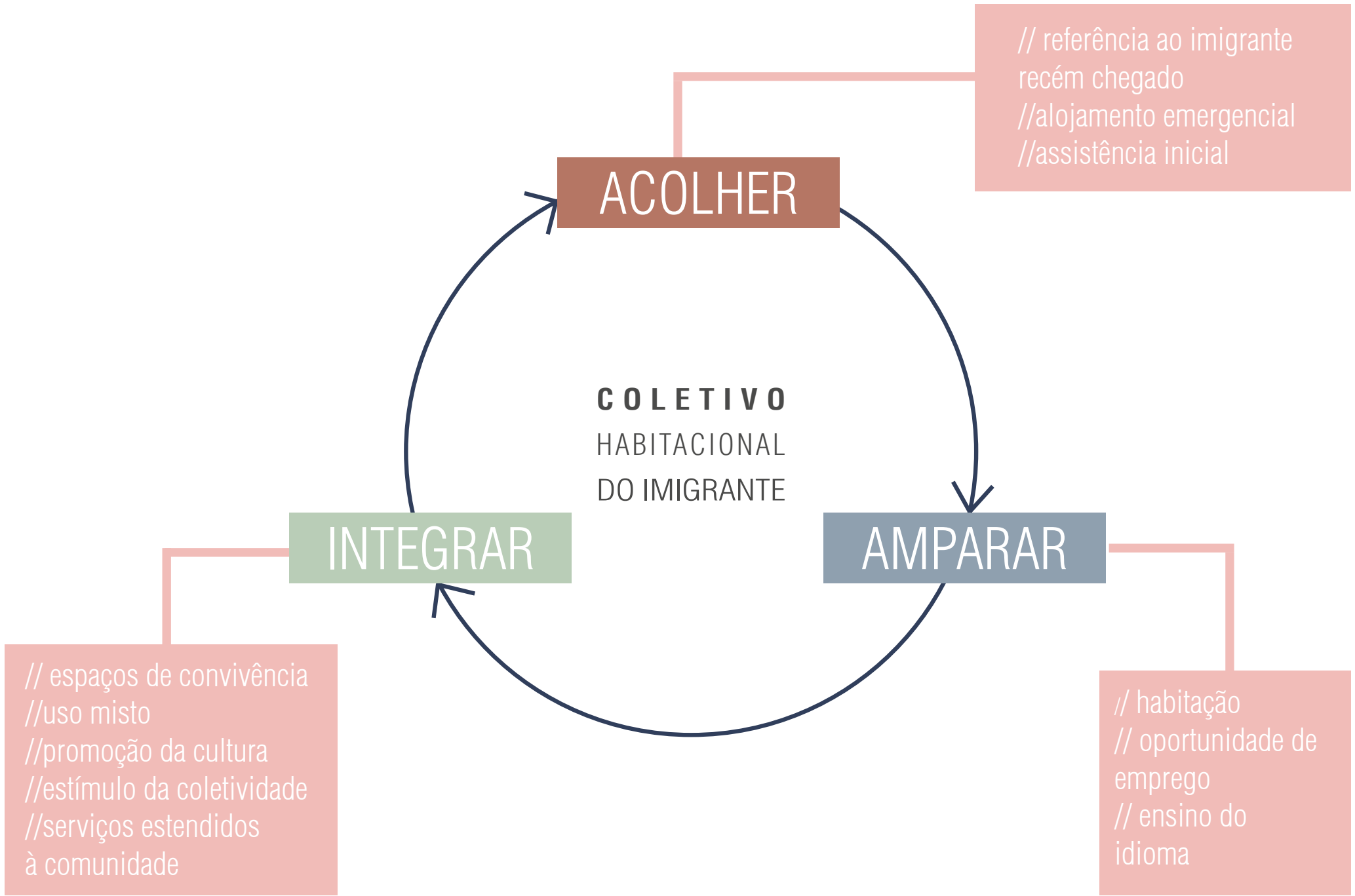
**COLETIVO**  
HABITACIONAL  
DO IMIGRANTE

**AMPARAR**

// habitação  
// oportunidade de emprego  
// ensino do idioma

**INTEGRAR**

// espaços de convivência  
//uso misto  
//promoção da cultura  
//estímulo da coletividade  
//serviços estendidos à comunidade







**repensar** a produção social  
de moradia no brasil

// locais afastados do centro

// pouca infraestrutura urbana

// grandes conjuntos

// apenas uma tipologia

// má ambiência urbana

// inexistência de espaços de convivência

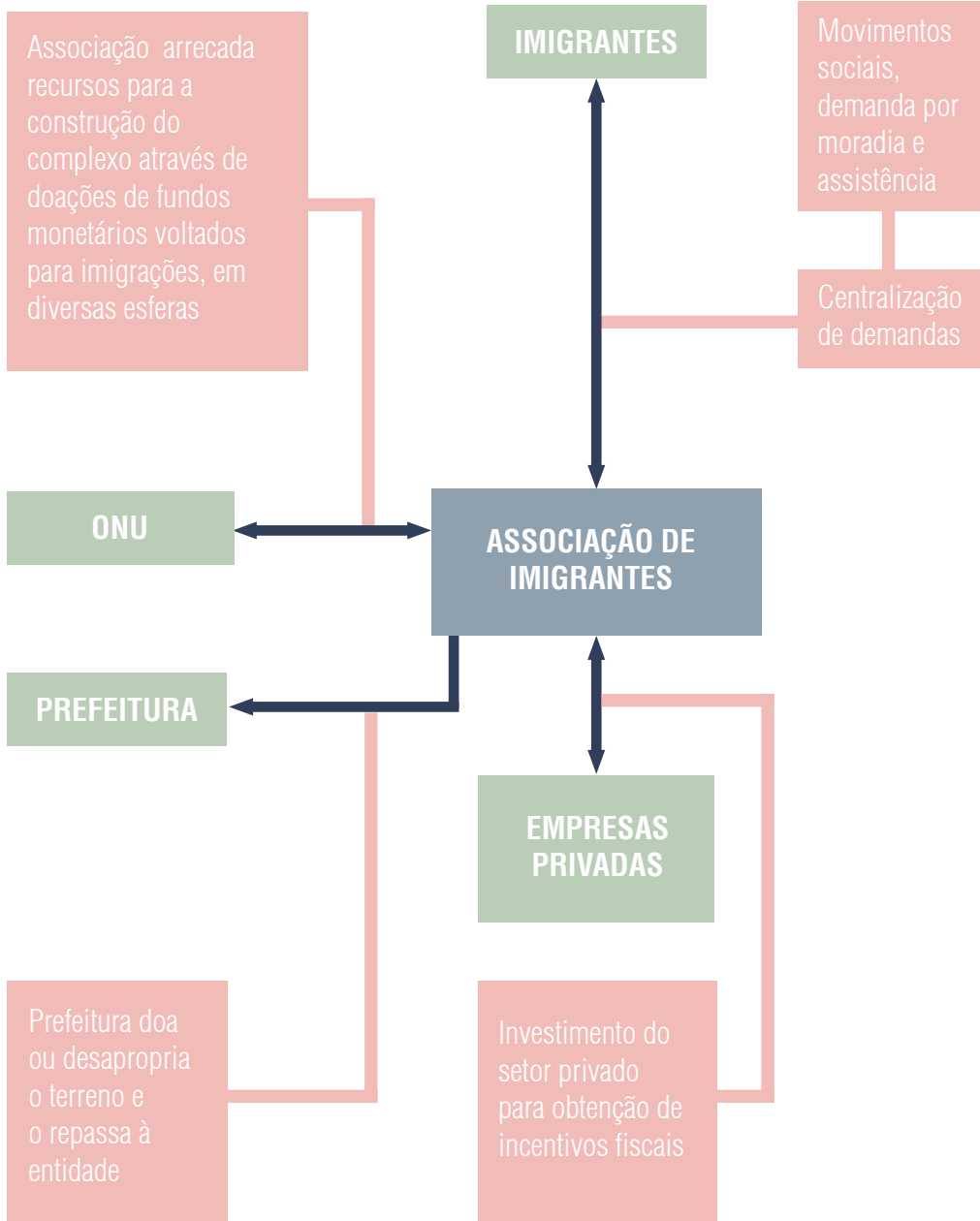
// produto do mercado imobiliário - lucro

// projetos de baixa qualidade arquitetônica

// pouca preocupação com o usuário

// apenas um modelo de programa habitacional - financiamento

// locais de segregação e vulnerabilidade social





# PROGRAMA

atividades



## HABITAÇÃO

UNIDADES PRIVADAS



## SEDE ASSOCIAÇÃO

ALOJAMENTO  
ADMINISTRAÇÃO  
APOIO



## COMÉRCIO

BARES  
RESTAURANTE  
LOJAS  
APOIO



## RELIGIÃO

ESPAÇO ECUMÊNICO



## EDUCAÇÃO

ESCOLA DE IDIOMAS  
CRECHE  
APOIO



## ESPORTES

QUADRA RECREATIVA  
ACADEMIA  
APOIO



## CULTURA

EXPOSIÇÕES  
EVENTOS  
APOIO



## ESPAÇOS DE CONVIVÊNCIA

PRAÇA  
HORTA COLETIVA  
TERRAÇOS











Guaíba  
Canoas  
Aeroporto









DEVRAK

XAP  
XAN

KKKEY

## DENSIDADES BRUTAS

Anexo 4

Área de ocupação intensiva

**CÓDIGO 17** | corredor de centralidade e urbanidade

SOLO PRIVADO: 385 hab/ha | 110 econ/ha

SOLO CRIADO: 105 hab/ha | 30 econ/ha

TOTAL: 490 hab/ha | 140 econ/ha

## GRUPAMENTO DE ATIVIDADES

Anexo 5.1

**CÓDIGO 05** | mista 02, centro histórico

## ÍNDICES DE APROVEITAMENTO

Anexo 6

**CÓDIGO 17**

ÍNDICE DE APROVEITAMENTO (IA): 1,9

SOLO CRIADO (SC): sim

TRANS. POT. CONSTRUTIVO (TPC): sim

IA MÁXIMO: 3,0

QUOTA IDEAL: 75m<sup>2</sup>

## RÉGIME VOLUMÉTRICO

Anexo 7.1

**CÓDIGO 09**

ALTURA MÁXIMA: 42m

DIVISA: 18,00m

BASE: 9,0m

TAXA DE OCUPAÇÃO: 75%

## APLICAÇÃO AO TERRENO

ÁREA: **6465,0m<sup>2</sup>**

ÁREA ADENSÁVEL: **12208,5m<sup>2</sup>**

ÁREA NÃO-ADENSÁVEL: **6144,75m<sup>2</sup>**

ÁREA MÁXIMA CONSTRUÍDA: **18425,25m<sup>2</sup>**

# TERRENO

PDDUA

R. Almirante Tamandaré

R. Voluntários da Pátria



# TERRENO

situação atual



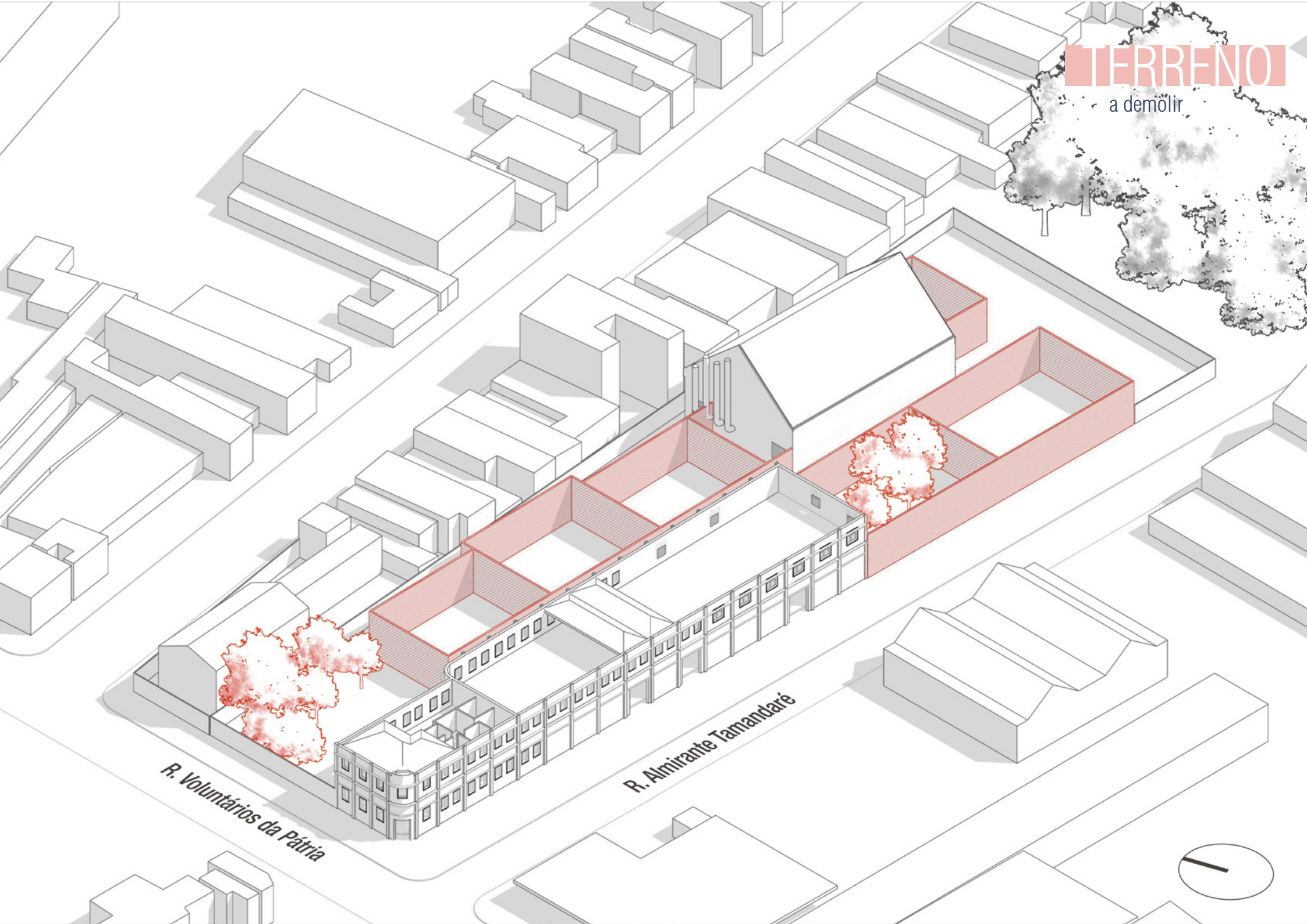
R. Voluntários da Pátria

R. Almirante Tamandaré





**TERRENO**  
a demolir



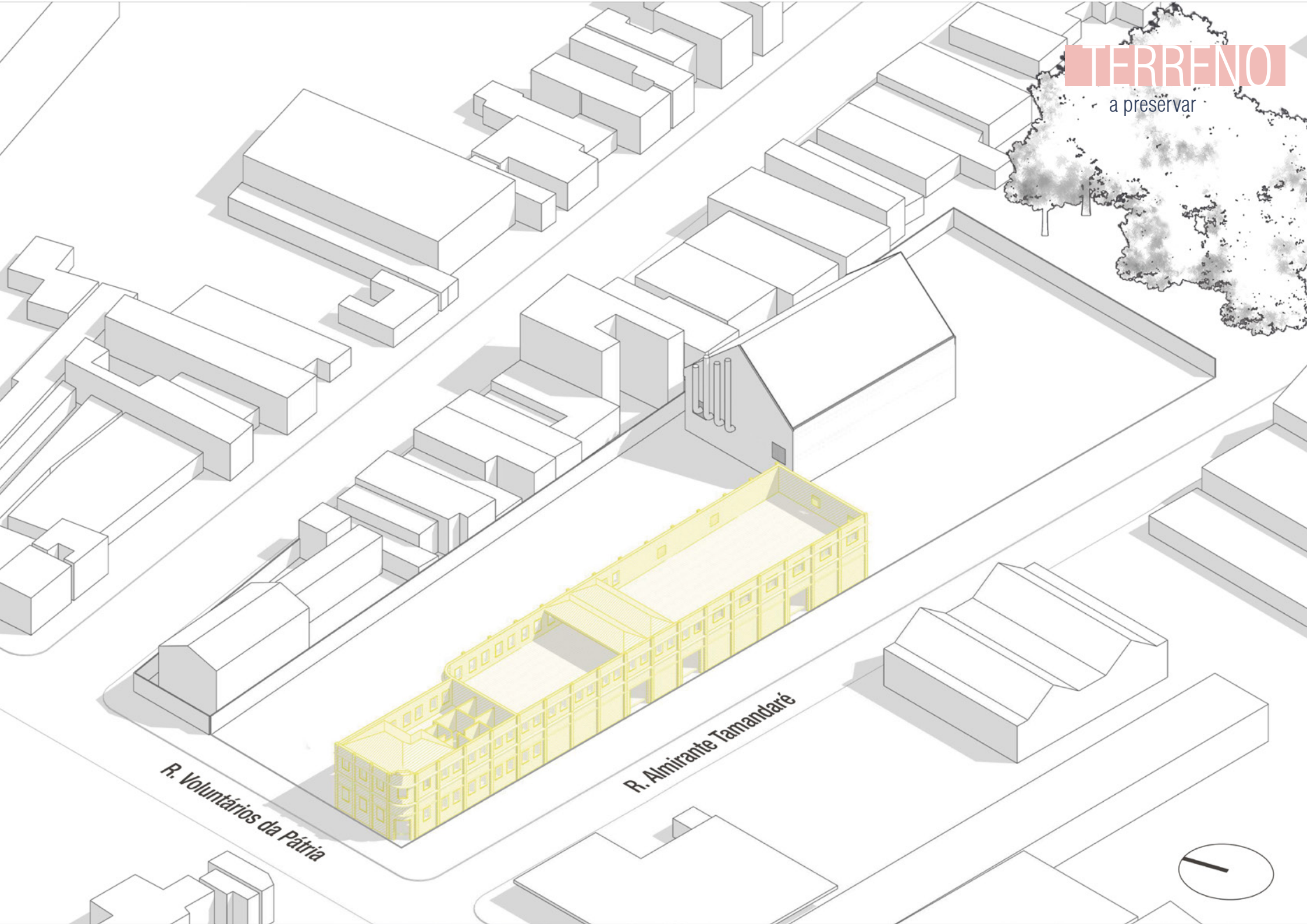
*R. Voluntários da Pátria*

*R. Almirante Tamandaré*



# TERRENO

a preservar



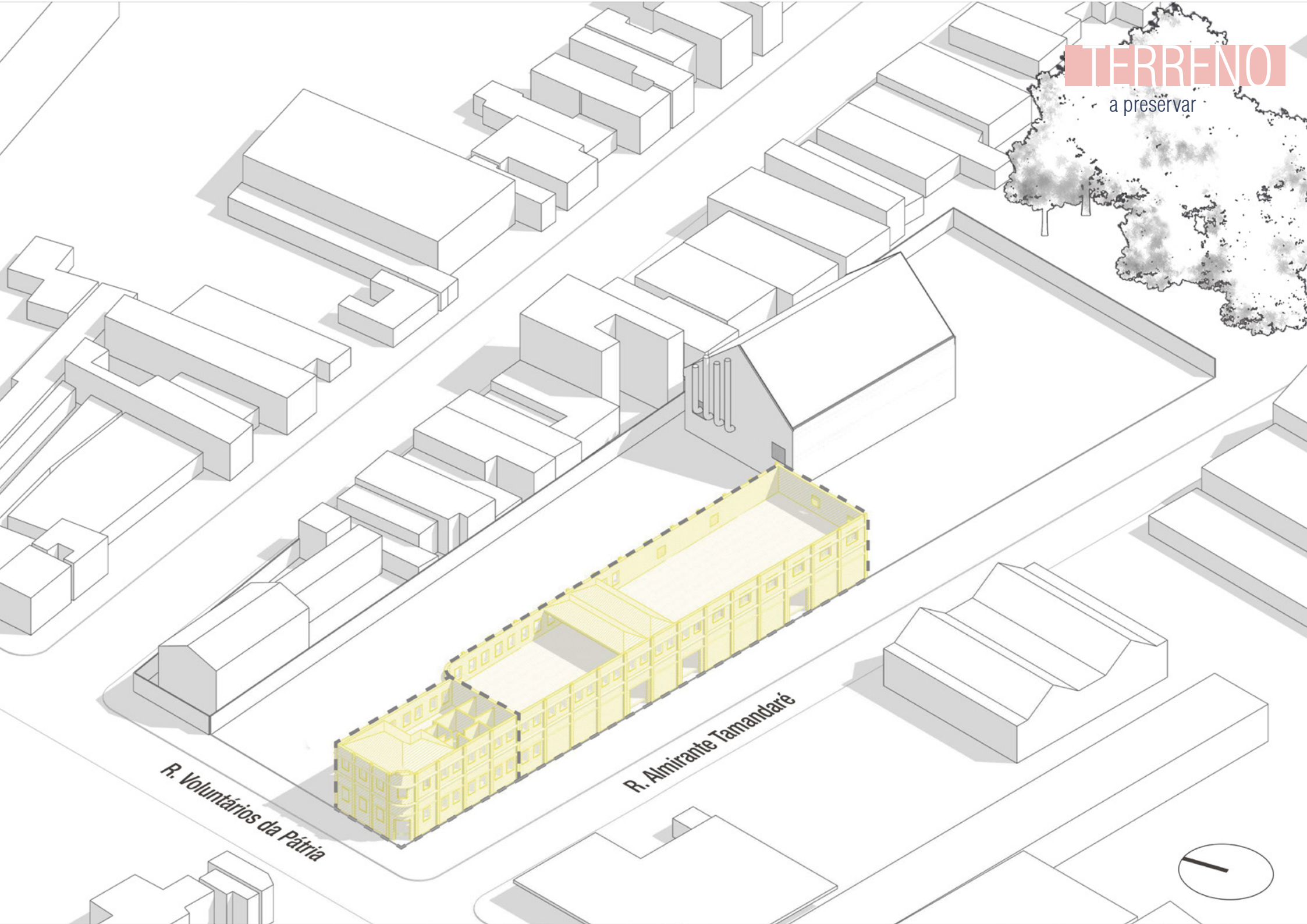
*R. Voluntários da Pátria*

*R. Almirante Tamandaré*



# TERRENO

a preservar



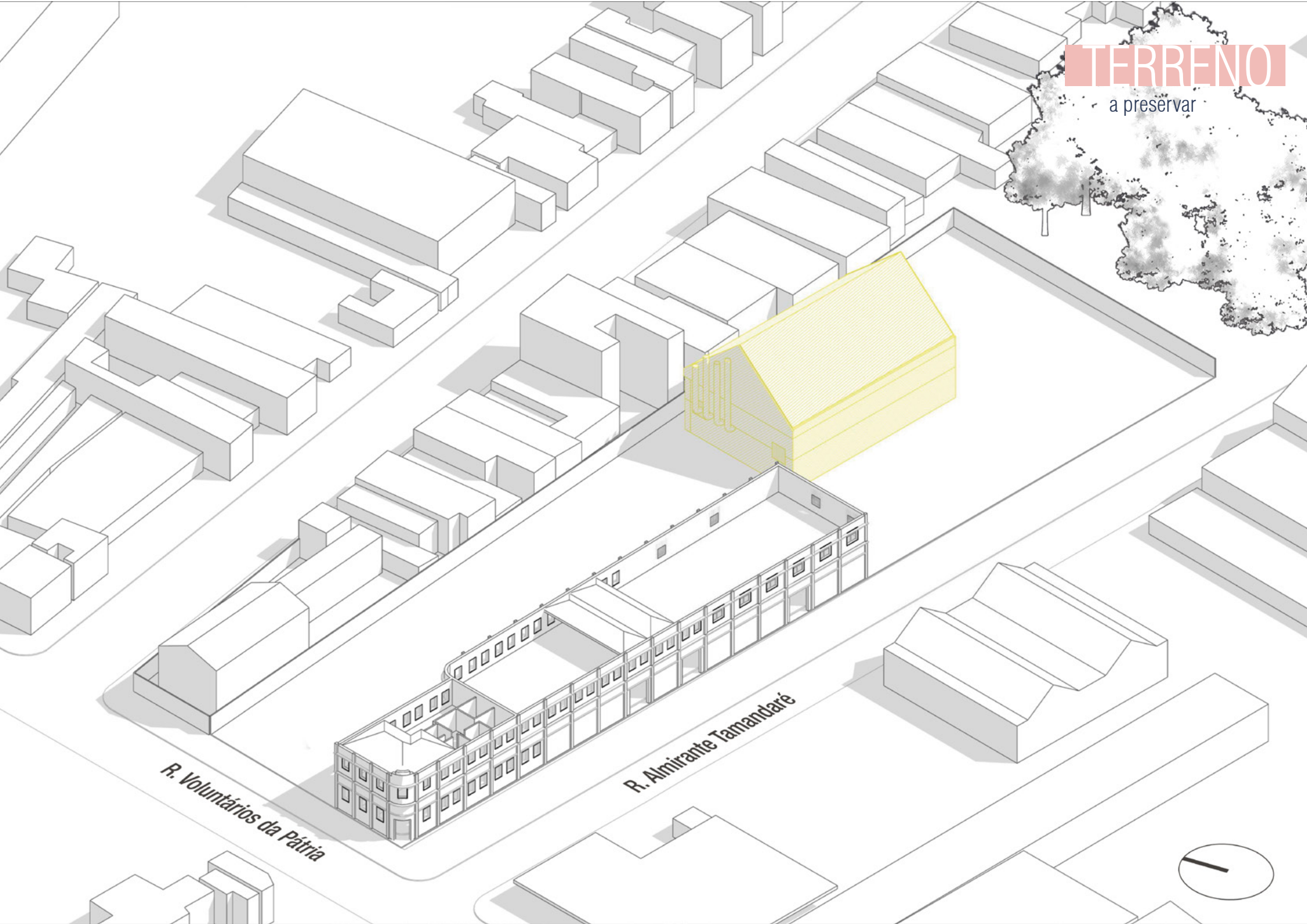
R. Voluntários da Pátria

R. Almirante Tamandaré



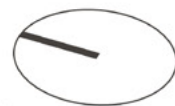
TERRENO

a preservar



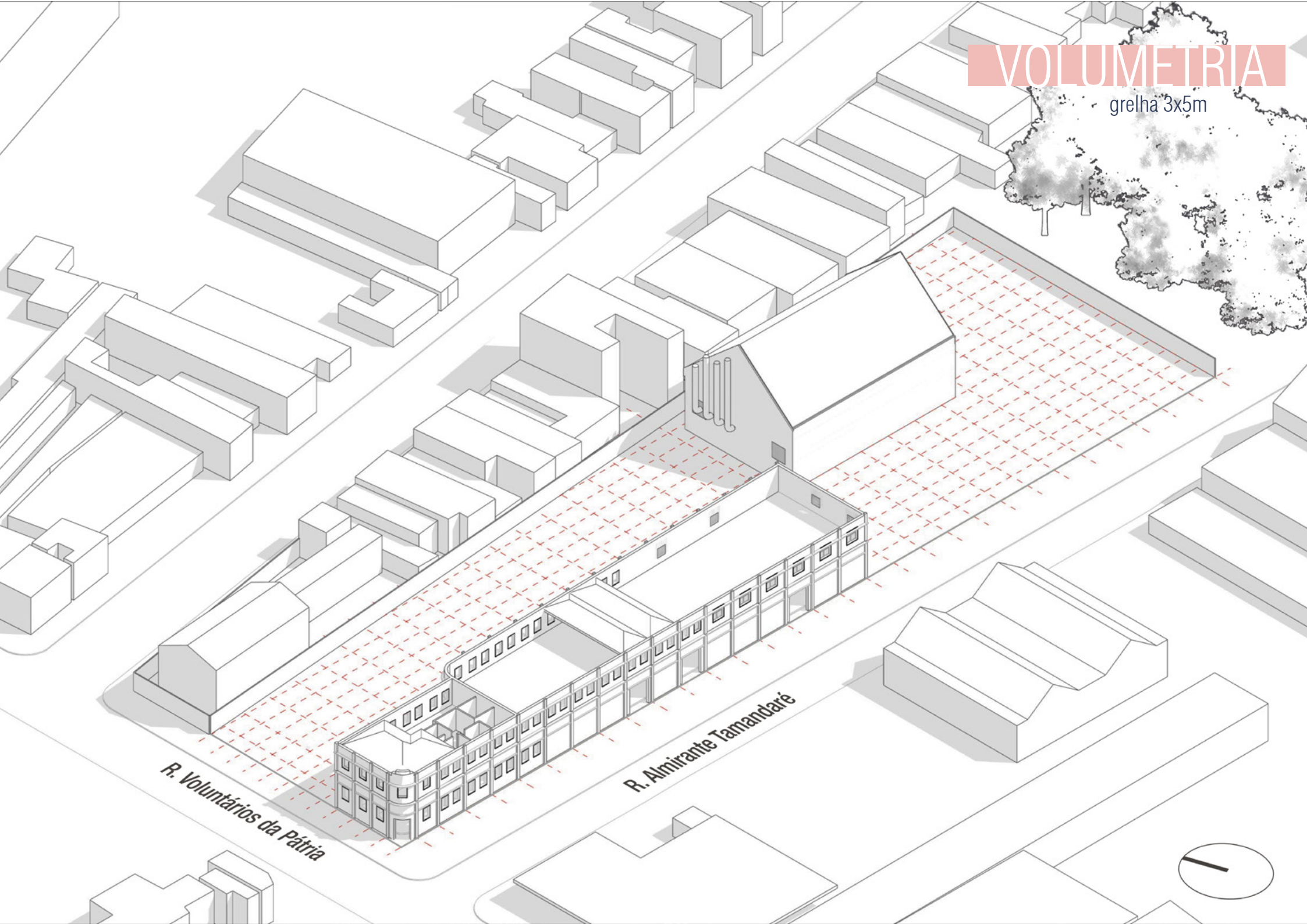
R. Voluntários da Pátria

R. Almirante Tamandaré



# VOLUMETRIA

grelha 3x5m



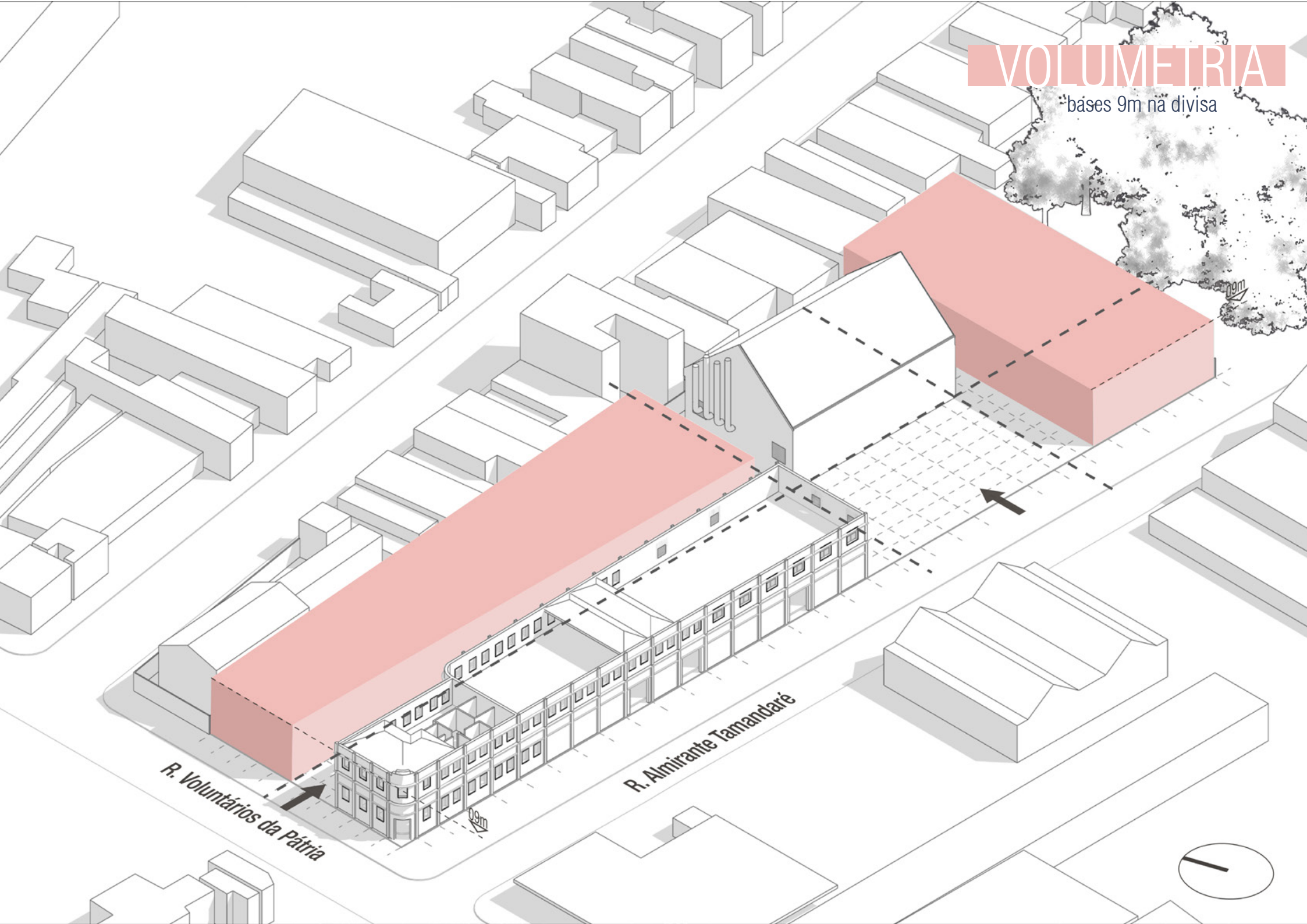
R. Voluntários da Pátria

R. Almirante Tamandaré



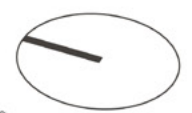
# VOLUMETRIA

bases 9m na divisa



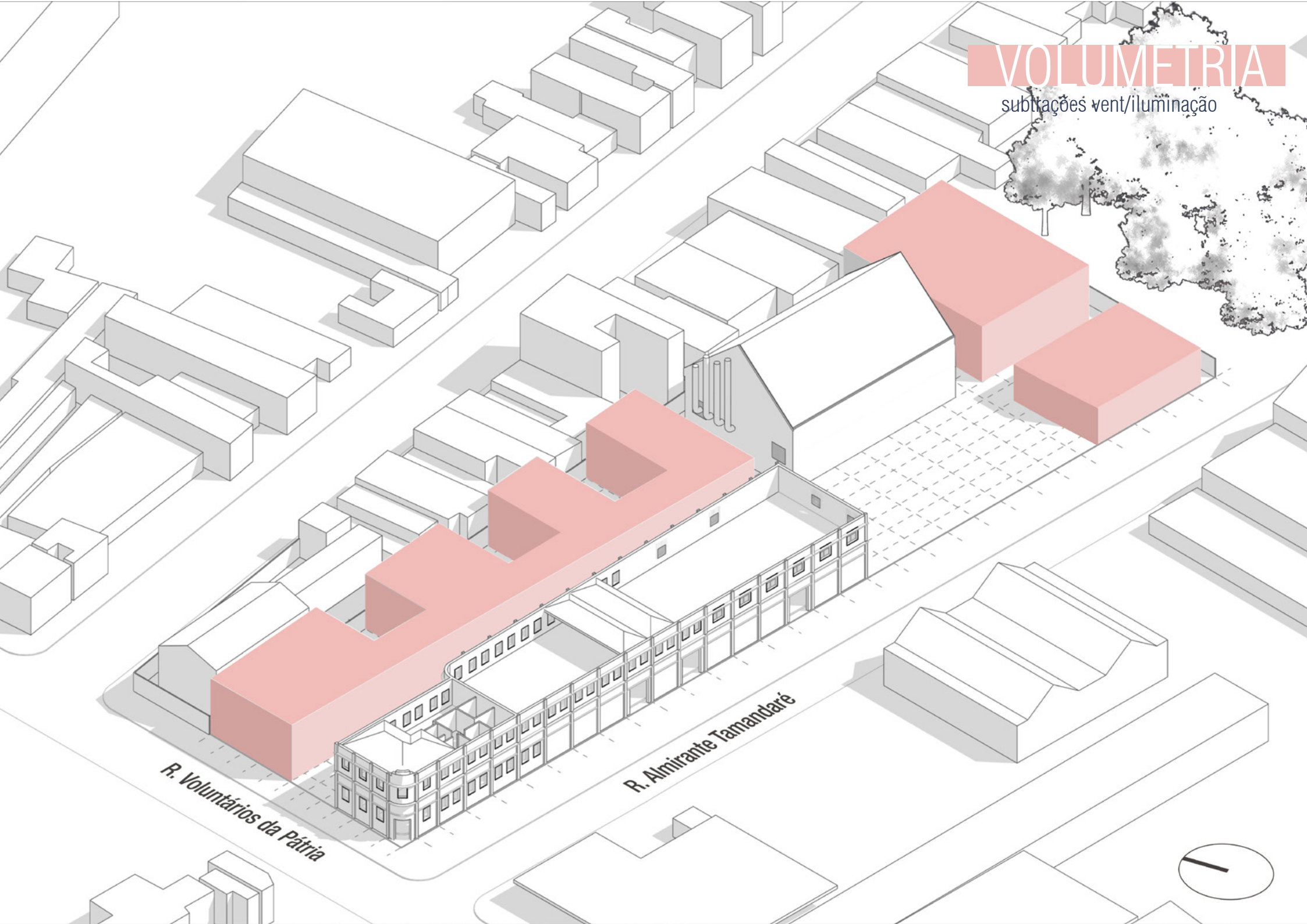
R. Voluntários da Pátria

R. Almirante Tamandaré



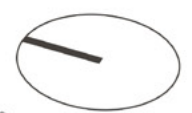
# VOLUMETRIA

substituições vent/iluminação



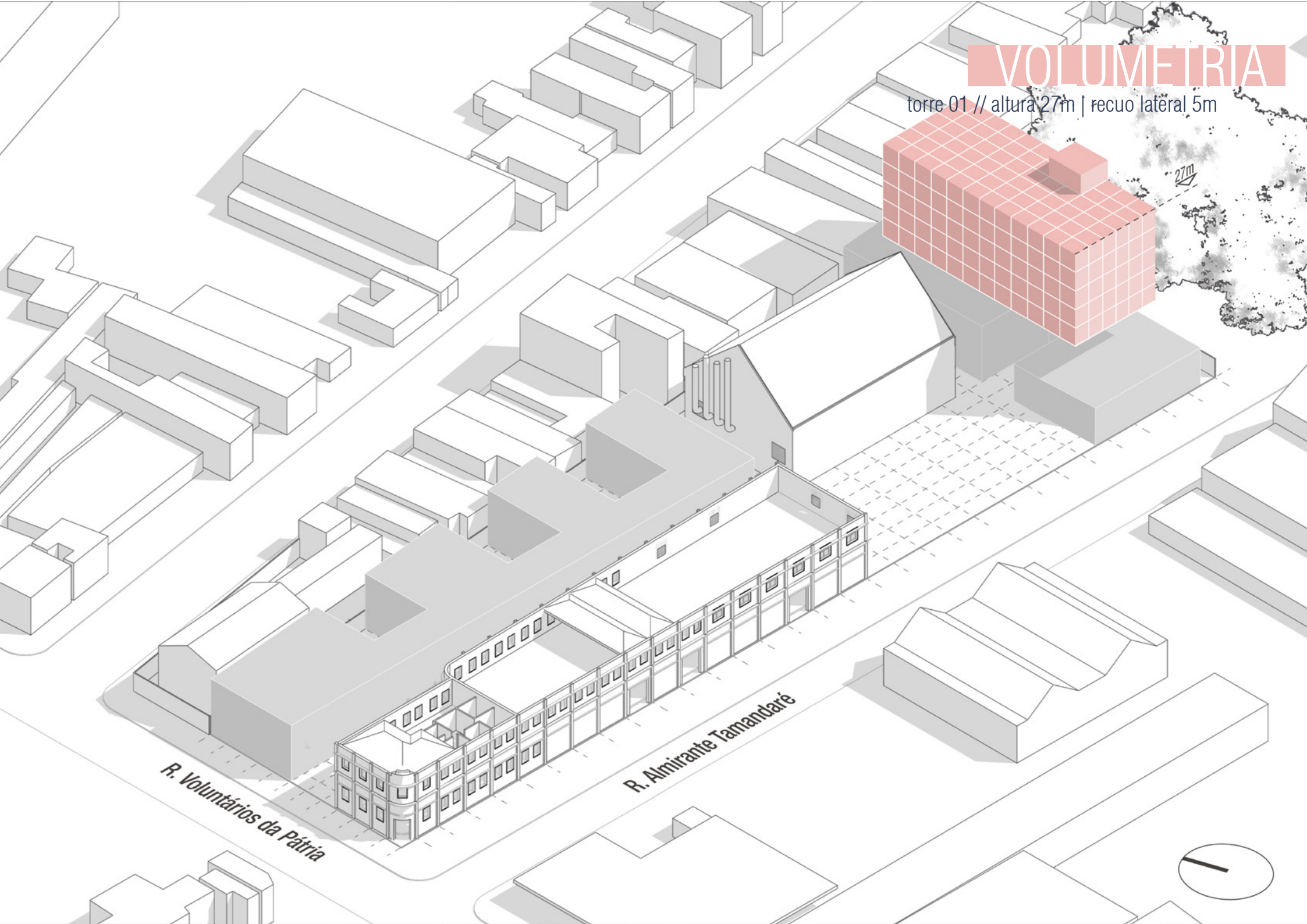
R. Voluntários da Pátria

R. Almirante Tamandaré



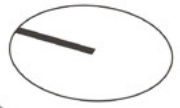
# VOLUMETRIA

torre 01 // altura 27m | recuo lateral 5m



R. Voluntários da Pátria

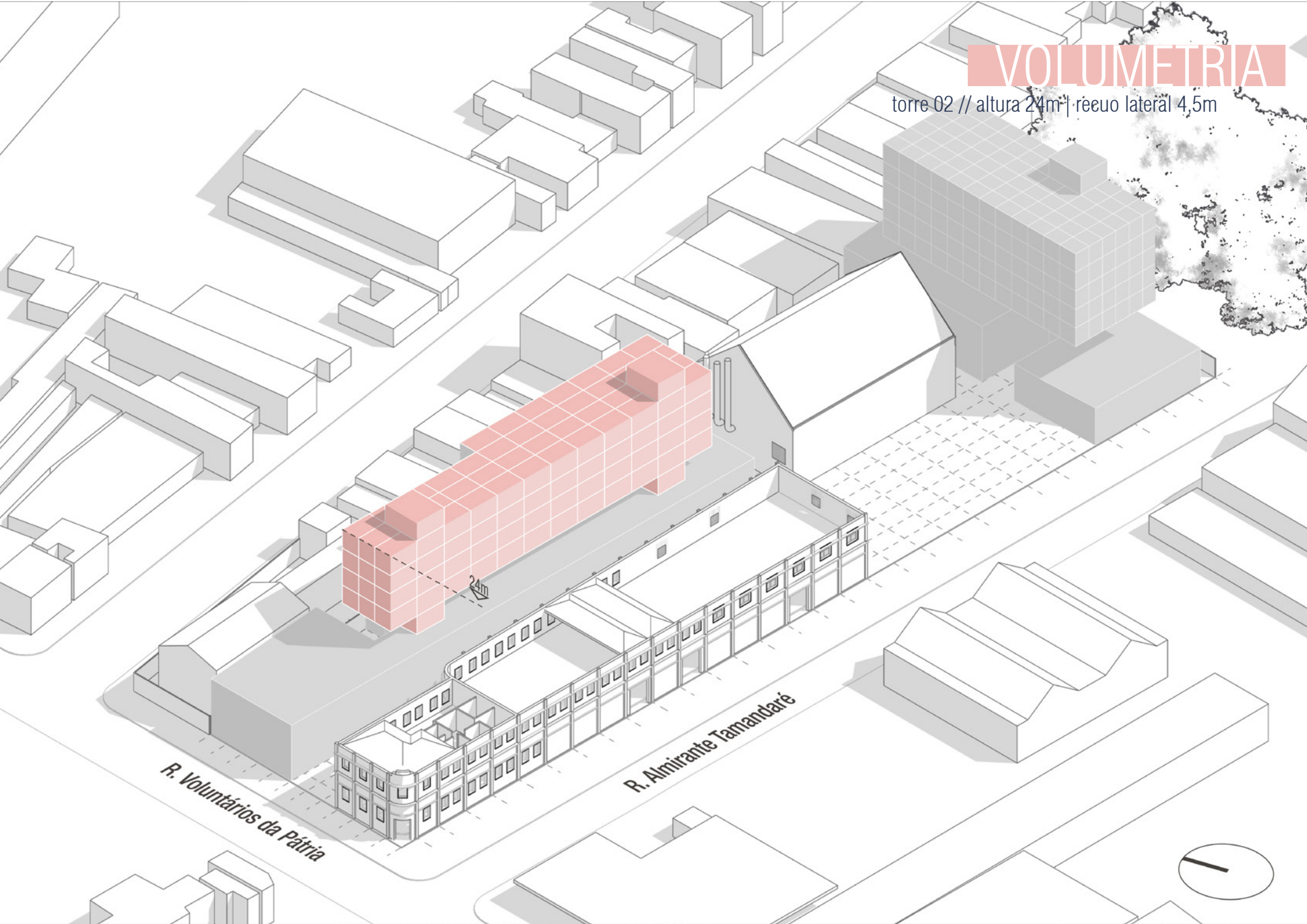
R. Almirante Tamandaré





# VOLUMETRIA

torre 02 // altura 24m | réceo lateral 4,5m



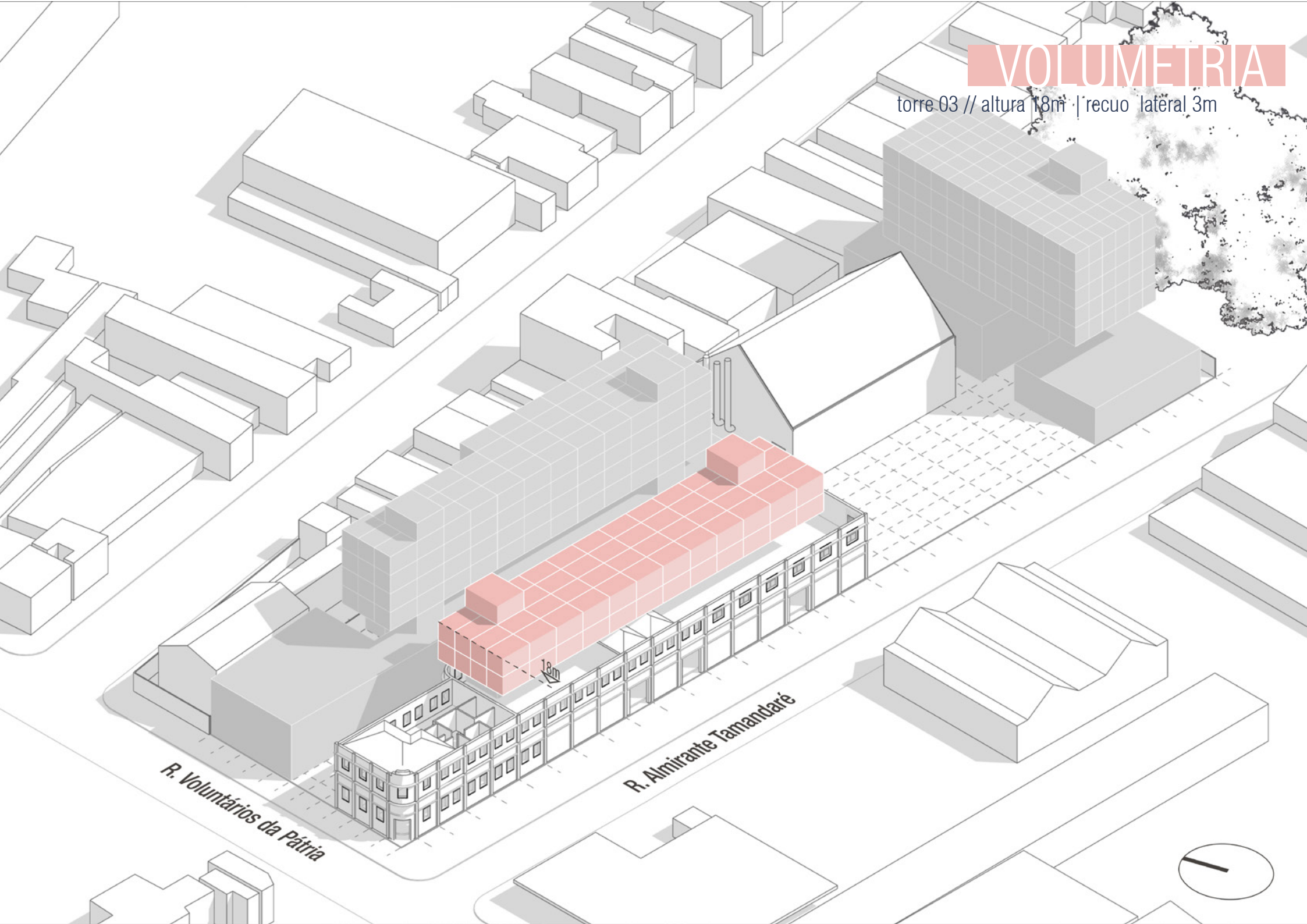
R. Voluntários da Pátria

R. Almirante Tamandaré



# VOLUMETRIA

torre 03 // altura 18m // recuo lateral 3m



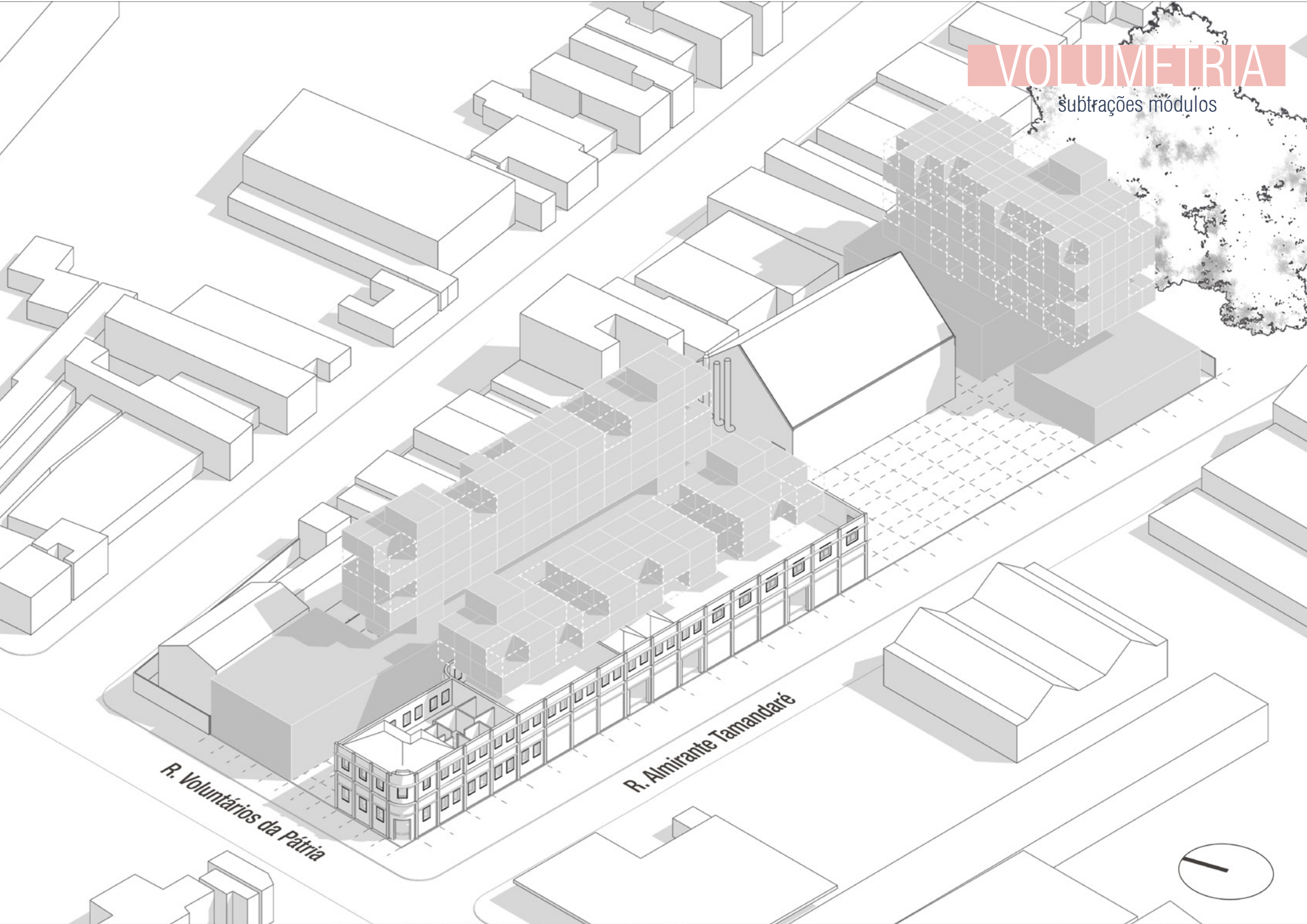
R. Voluntários da Pátria

R. Almirante Tamandaré



# VOLUMETRIA

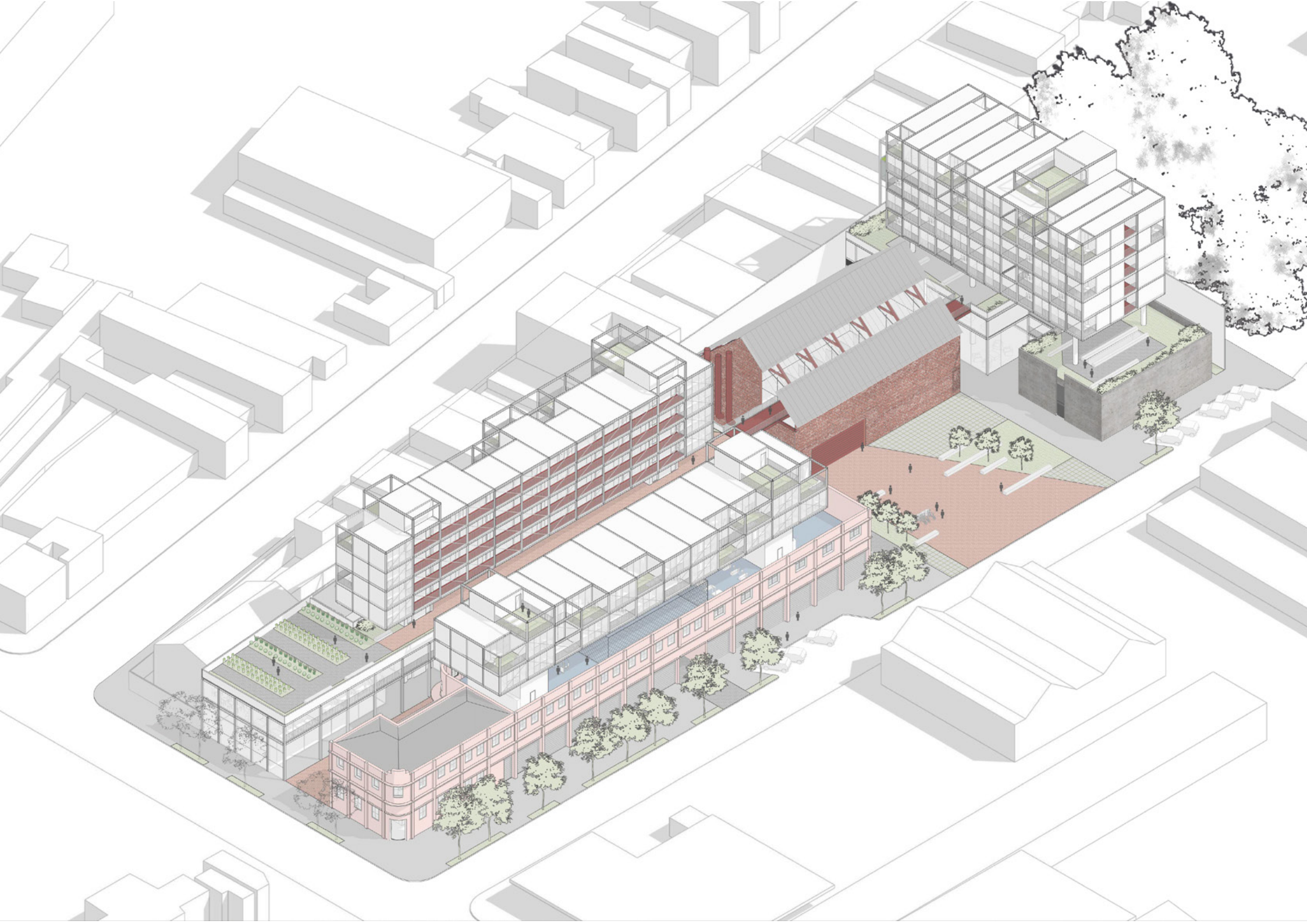
subtrações módulos



R. Voluntários da Pátria

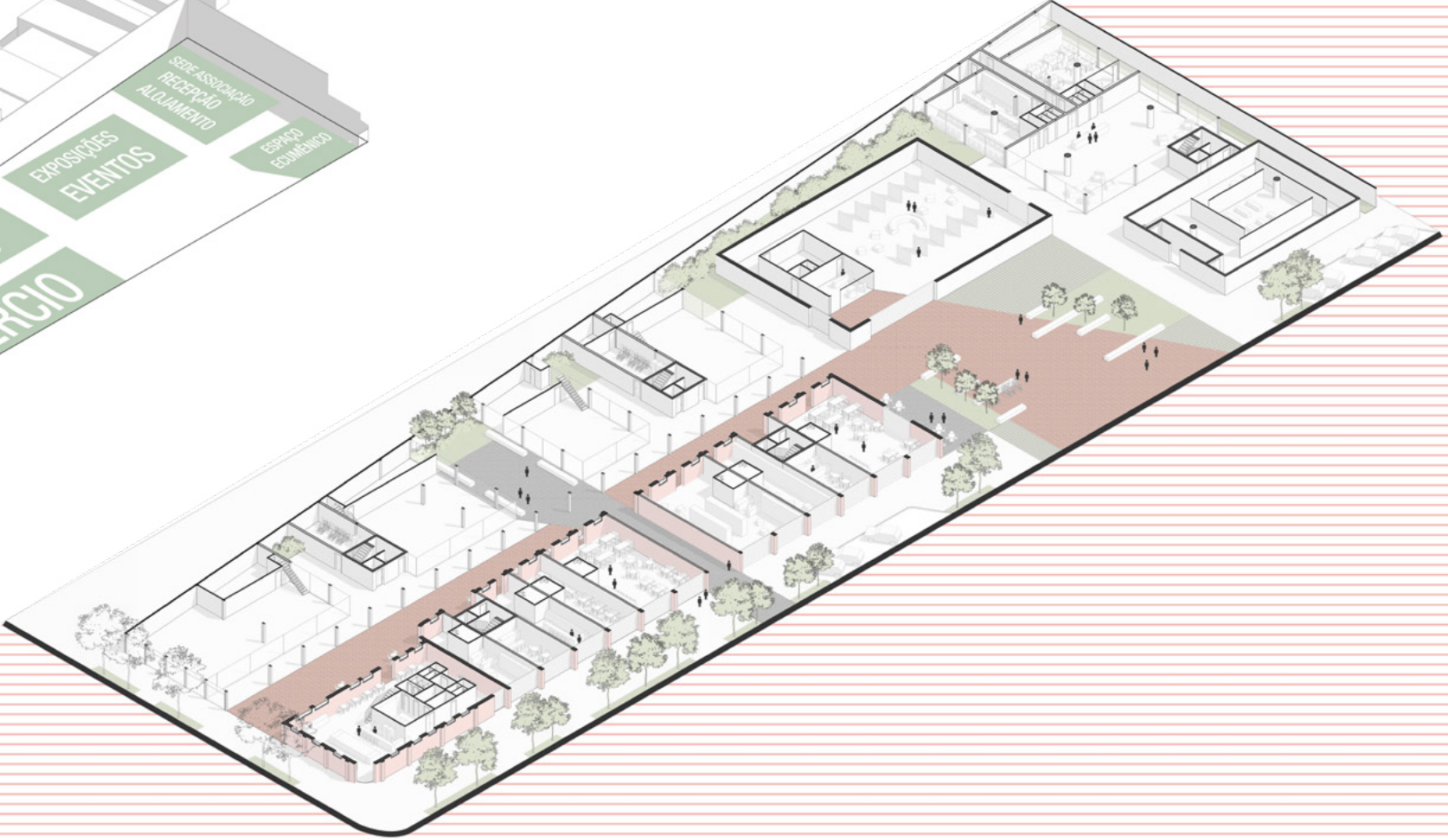
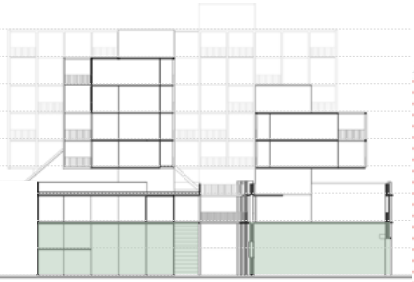
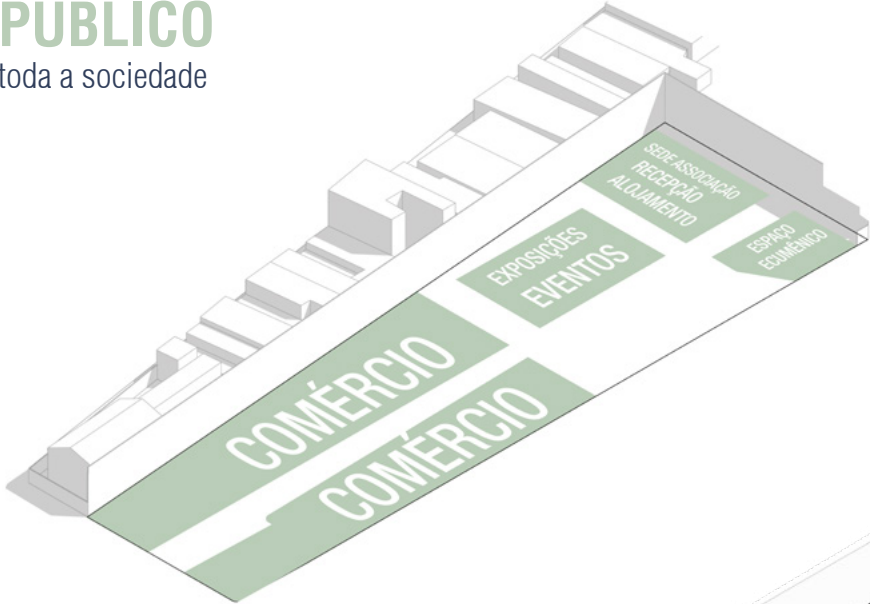
R. Almirante Tamandaré





## PÚBLICO

toda a sociedade

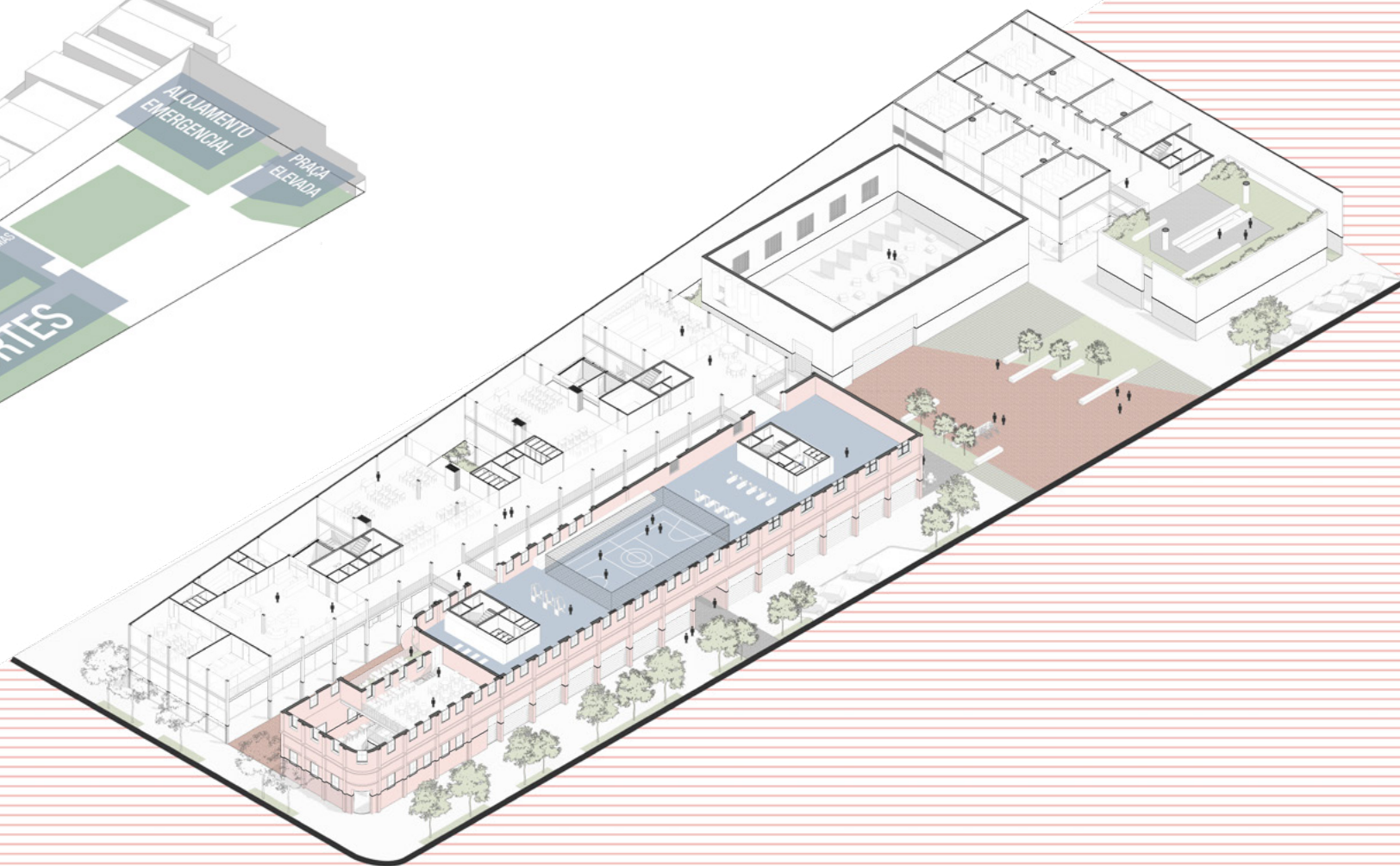
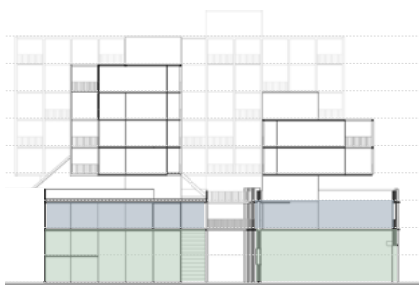
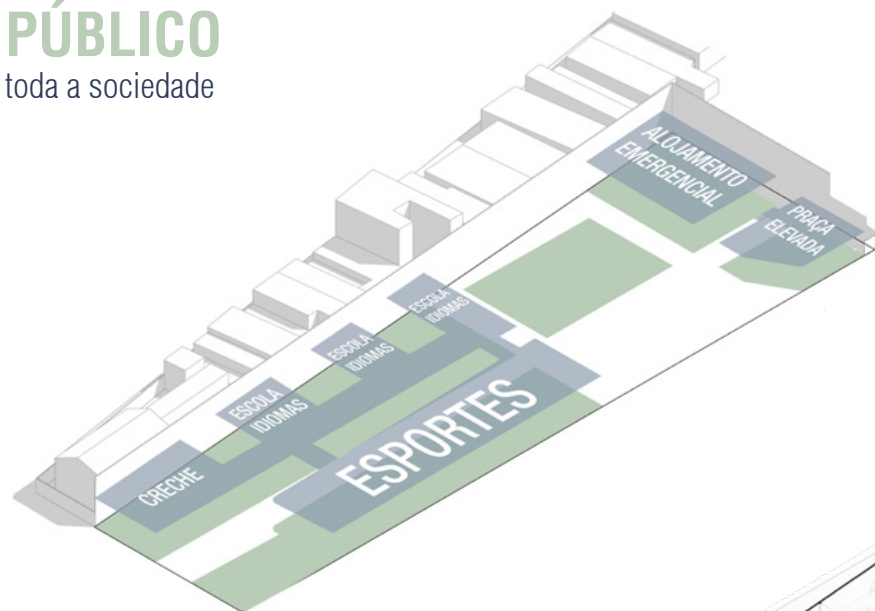


## SEMIPÚBLICO

toda a sociedade mediante controle

## PÚBLICO

toda a sociedade



## COLETIVO PRIVADO

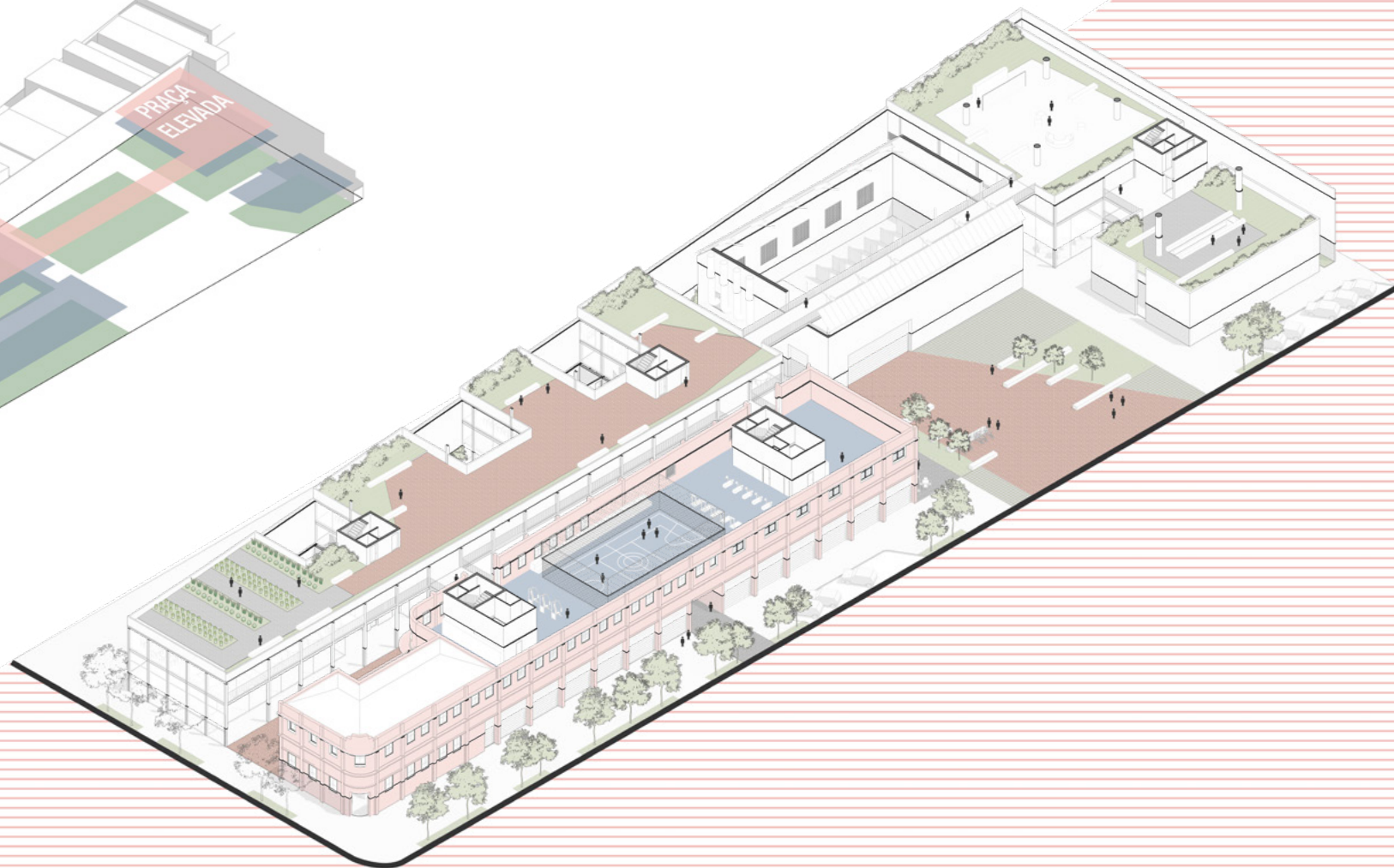
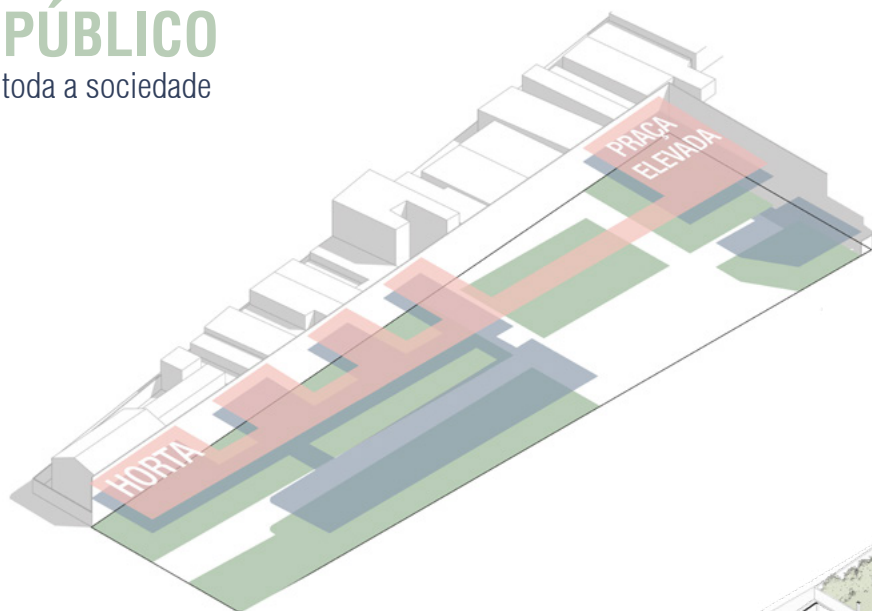
todos os moradores

## SEMIPÚBLICO

toda a sociedade mediante controle

## PÚBLICO

toda a sociedade



# PRIVADO

proprietário

# COLETIVO PRIVADO

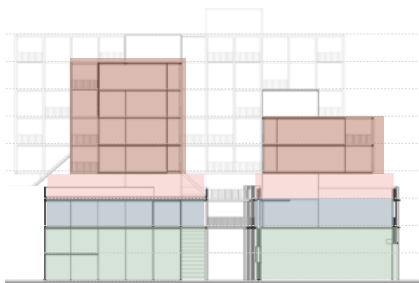
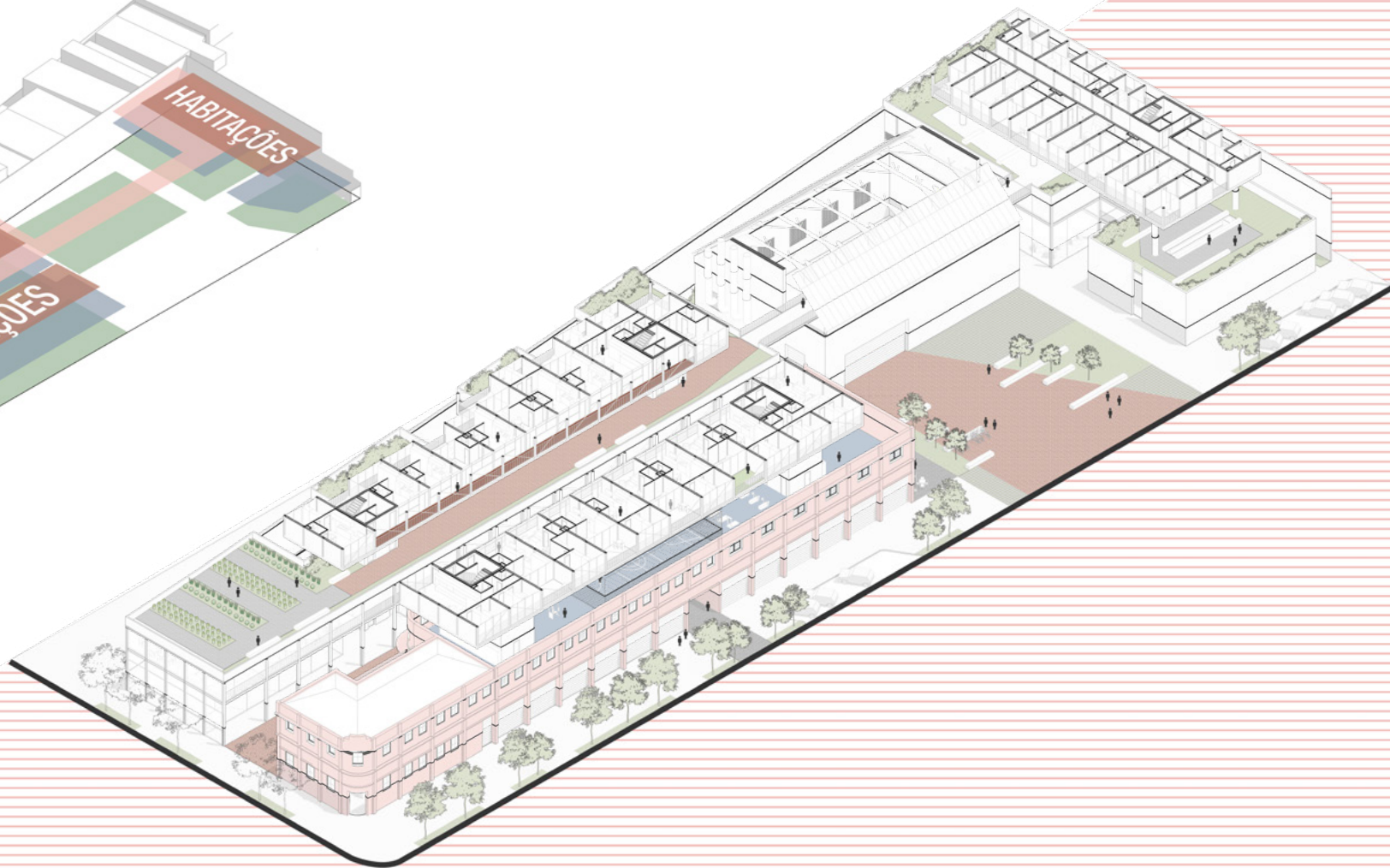
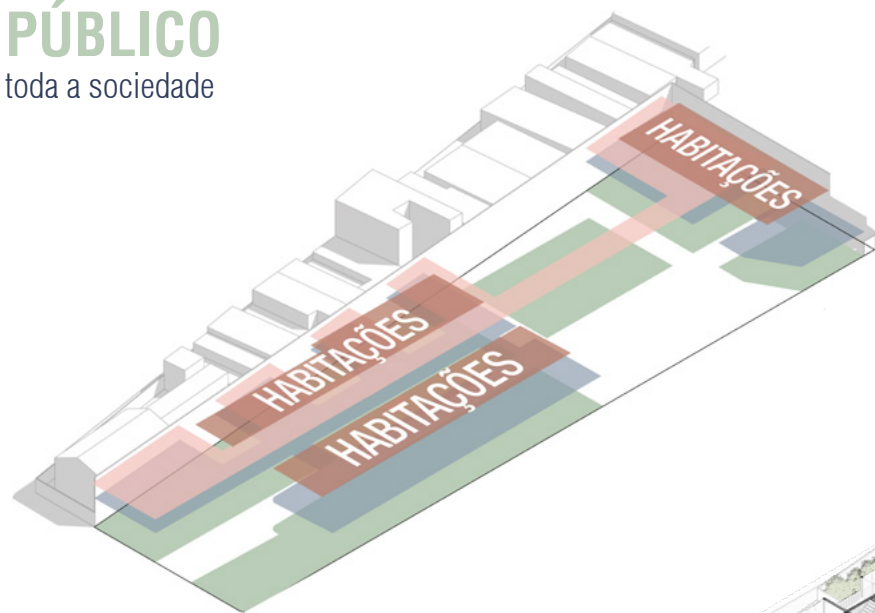
todos os moradores

# SEMIPÚBLICO

toda a sociedade mediante controle

# PÚBLICO

toda a sociedade





# PRIVADO

proprietário

# COLETIVO PRIVADO

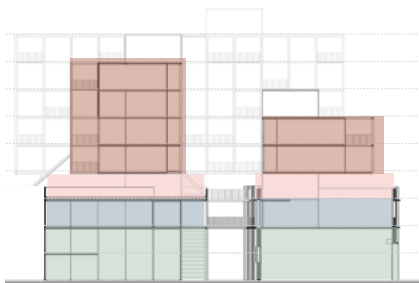
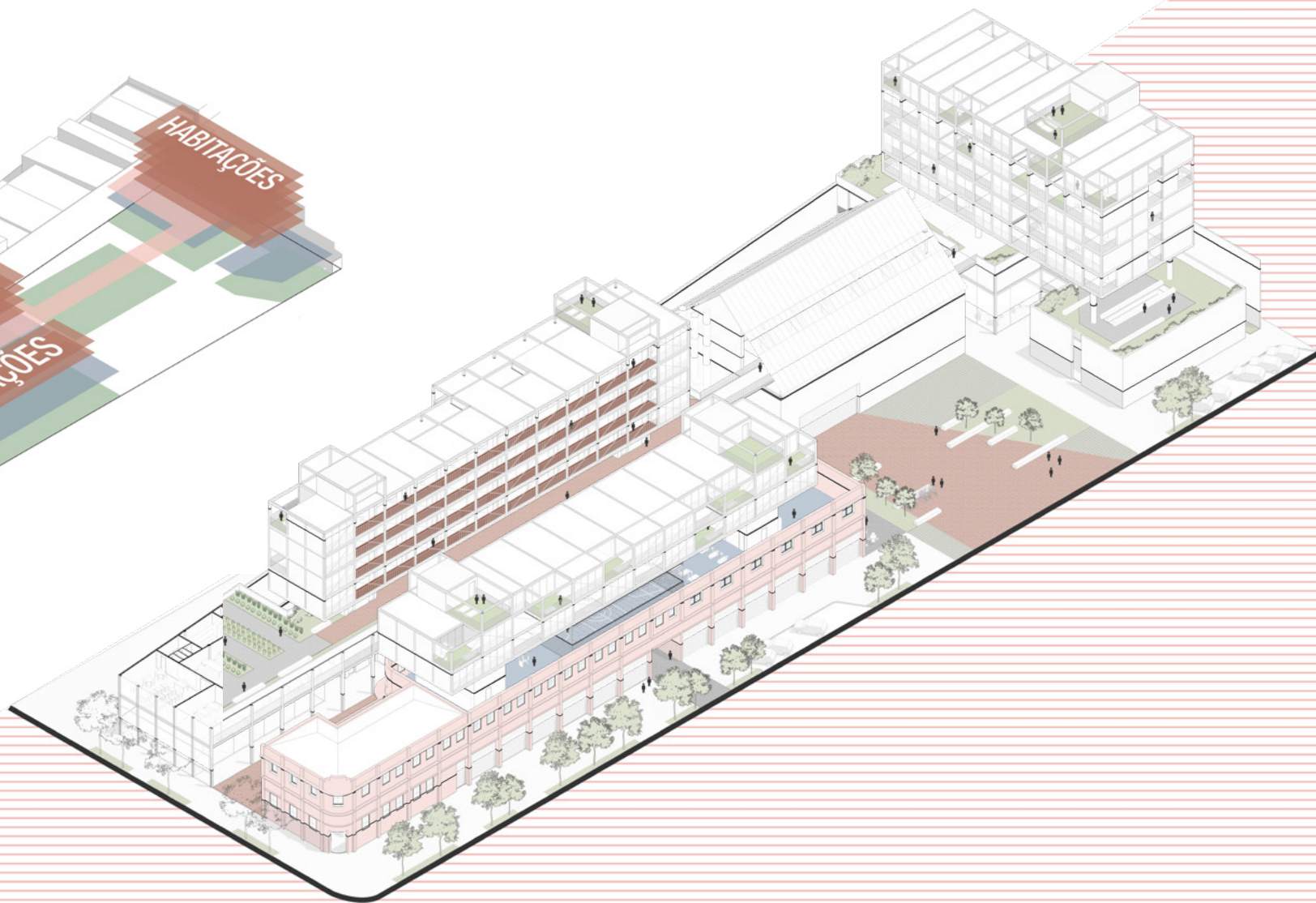
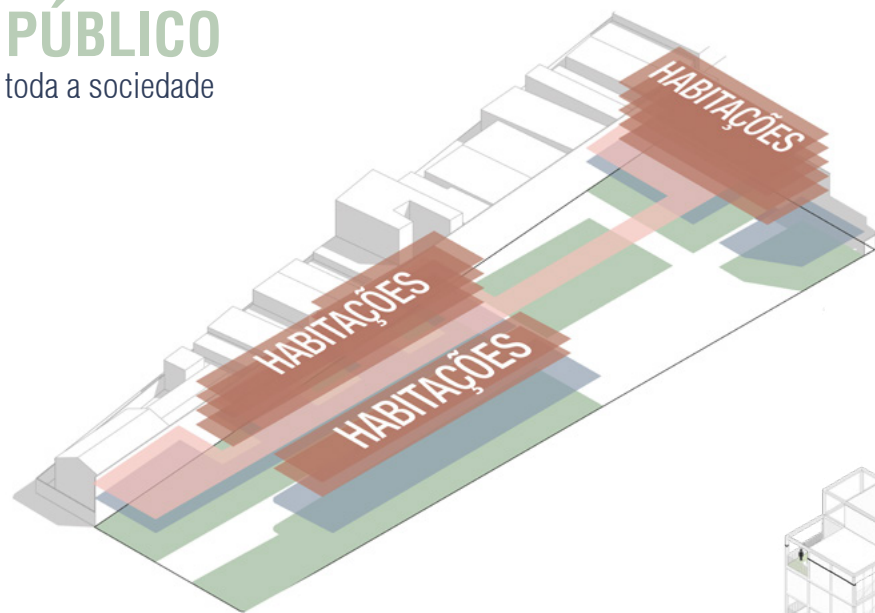
todos os moradores

# SEMIPÚBLICO

toda a sociedade mediante controle

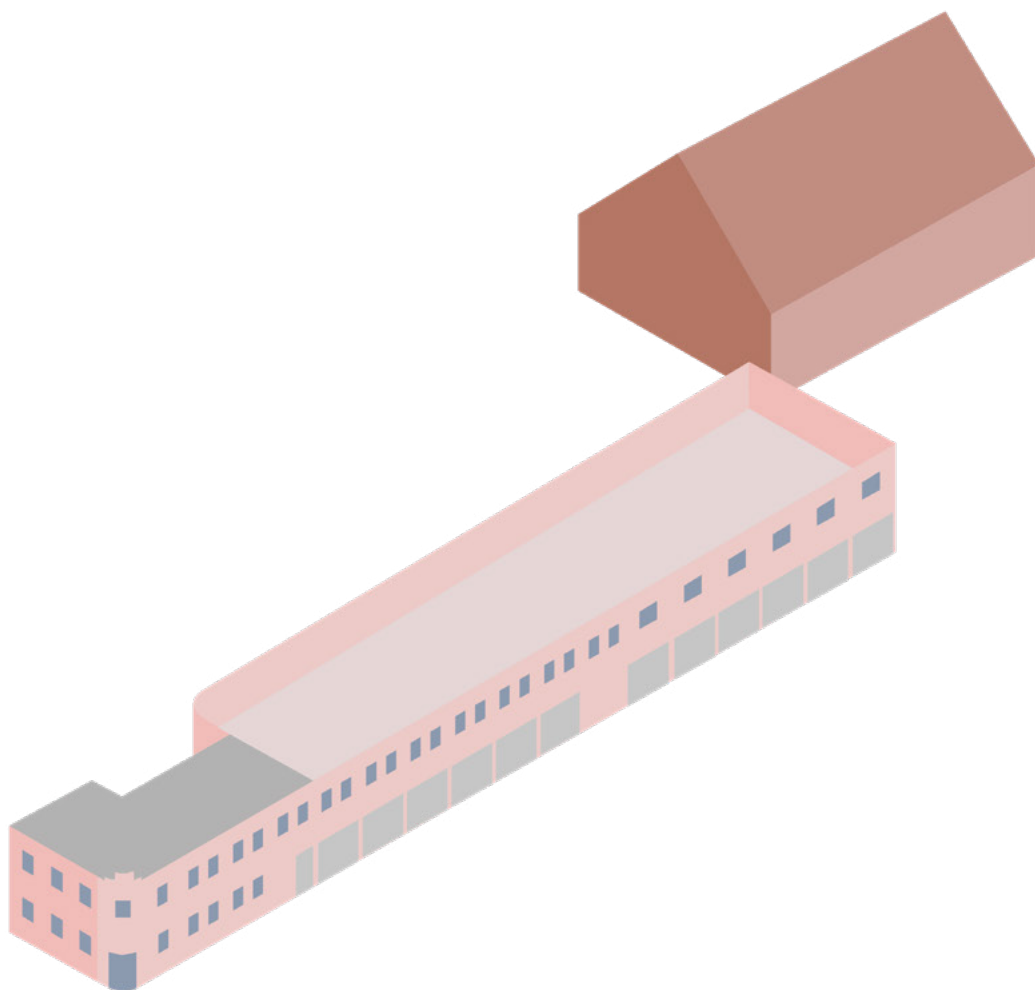
# PÚBLICO

toda a sociedade



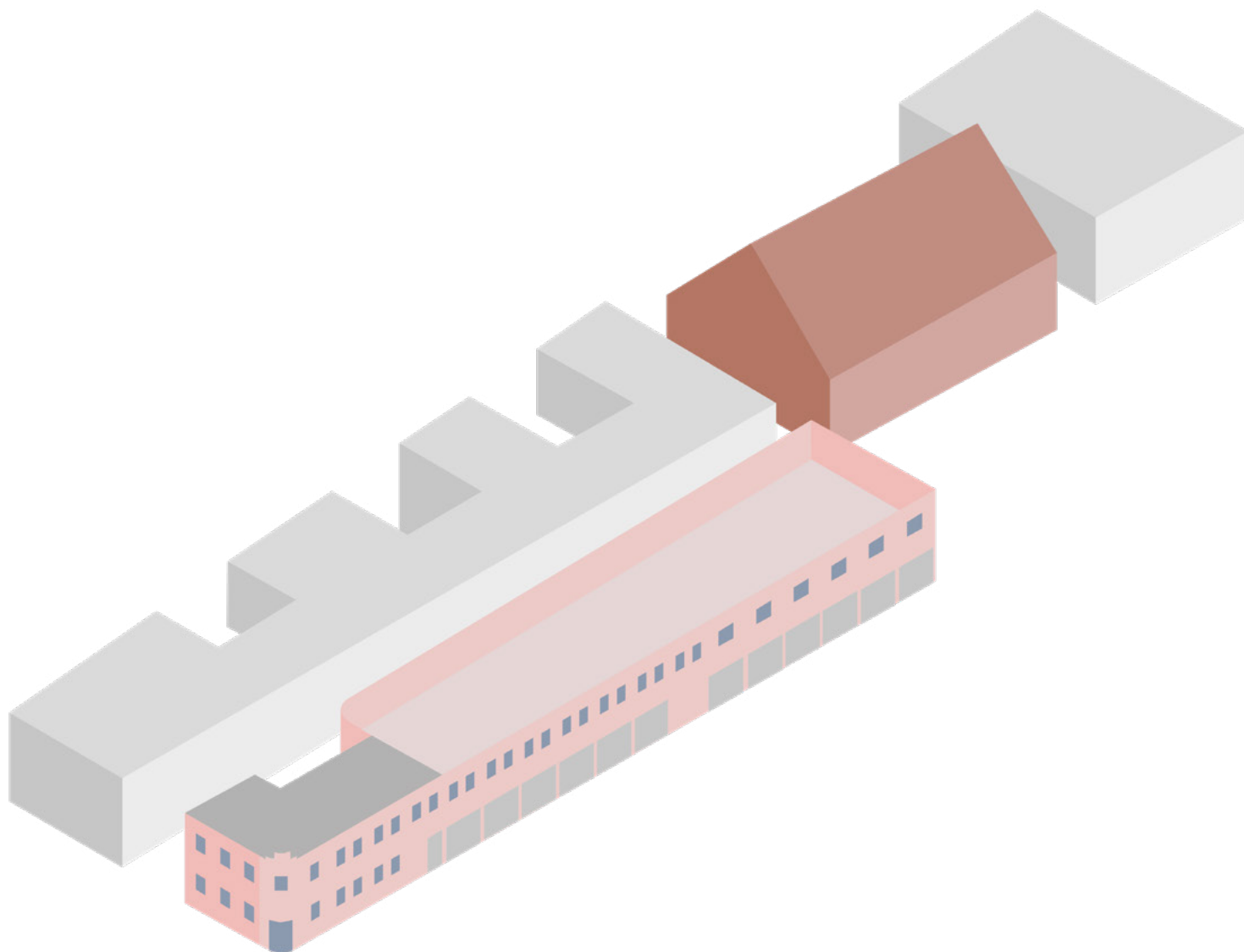
# ESTRUTURA

estruturas preexistentes



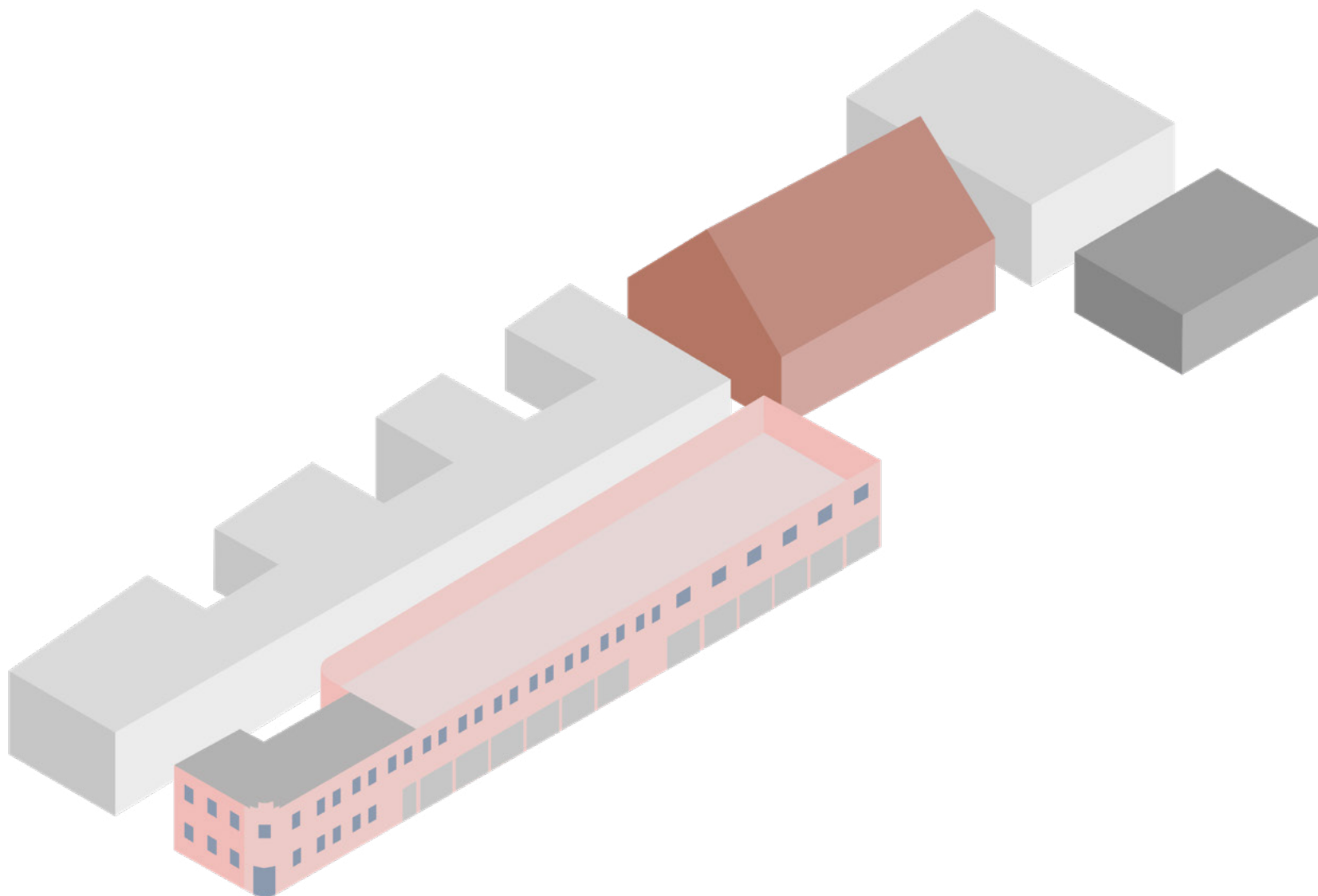
# ESTRUTURA

bases // estrutura metálica



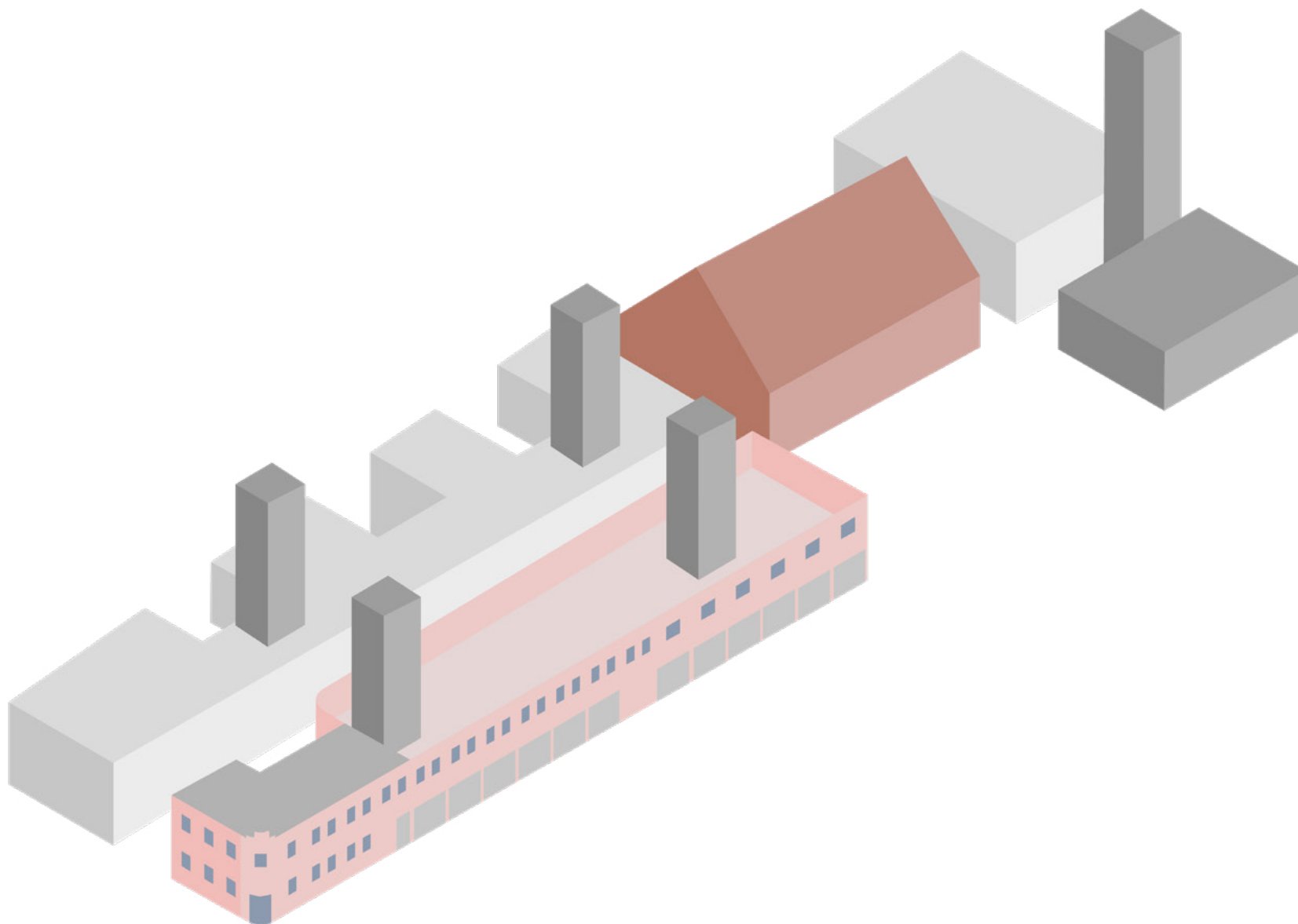
# ESTRUTURA

espaço ecumênico // concreto armado



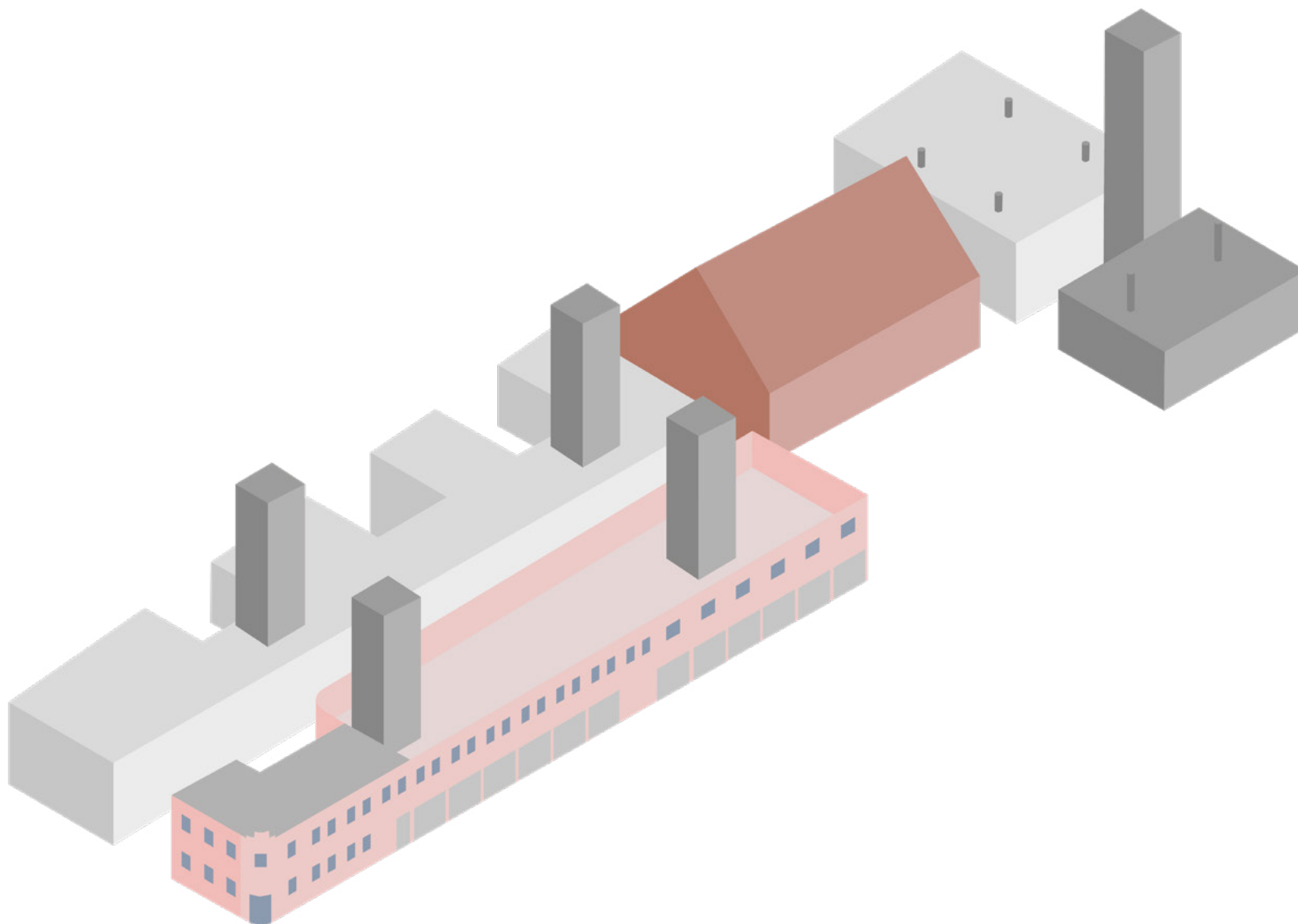
# ESTRUTURA

núcleos de circulação vertical // concreto armado



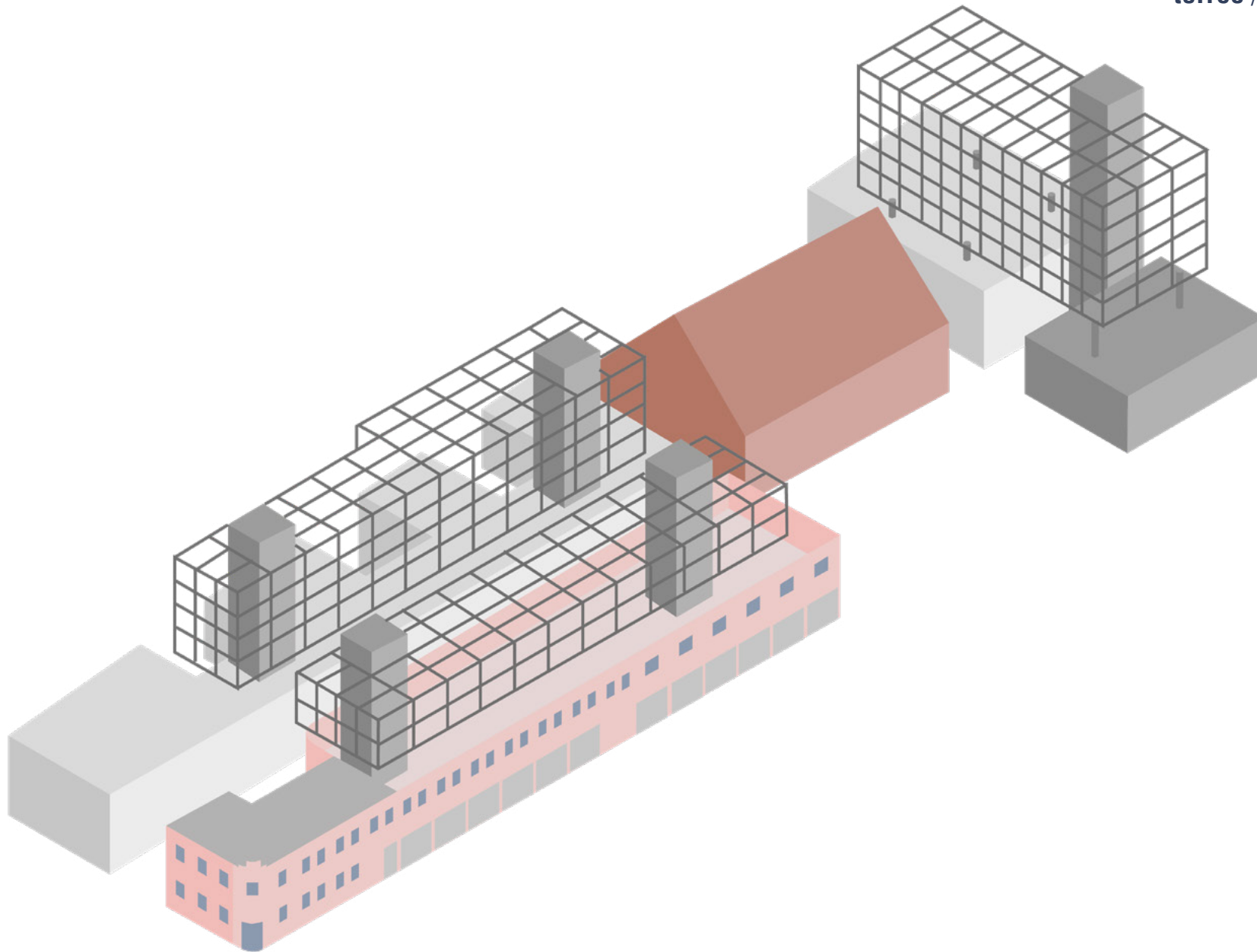
# ESTRUTURA

**pilares auxiliares** // concreto armado



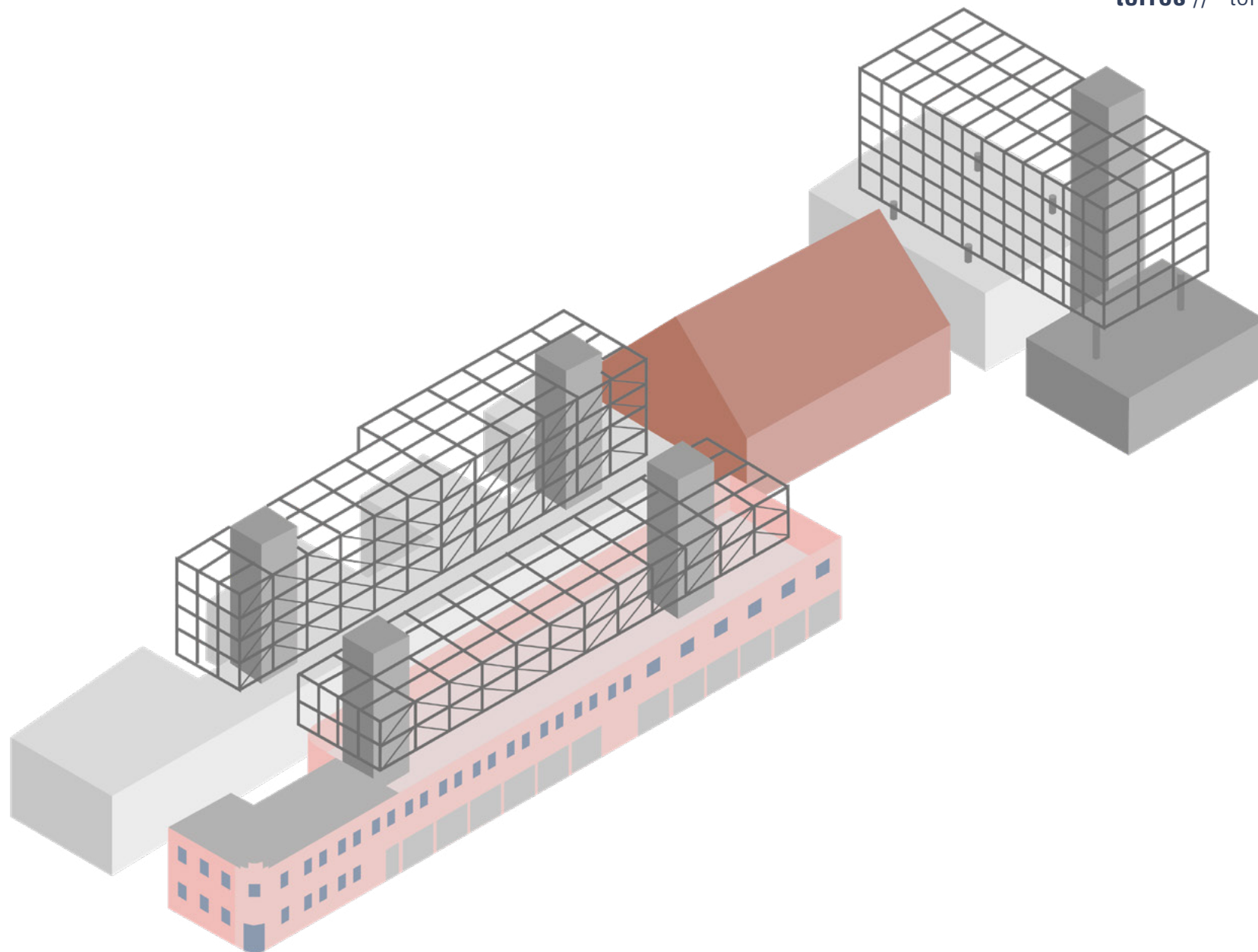
# ESTRUTURA

torres // estrutura metálica



# ESTRUTURA

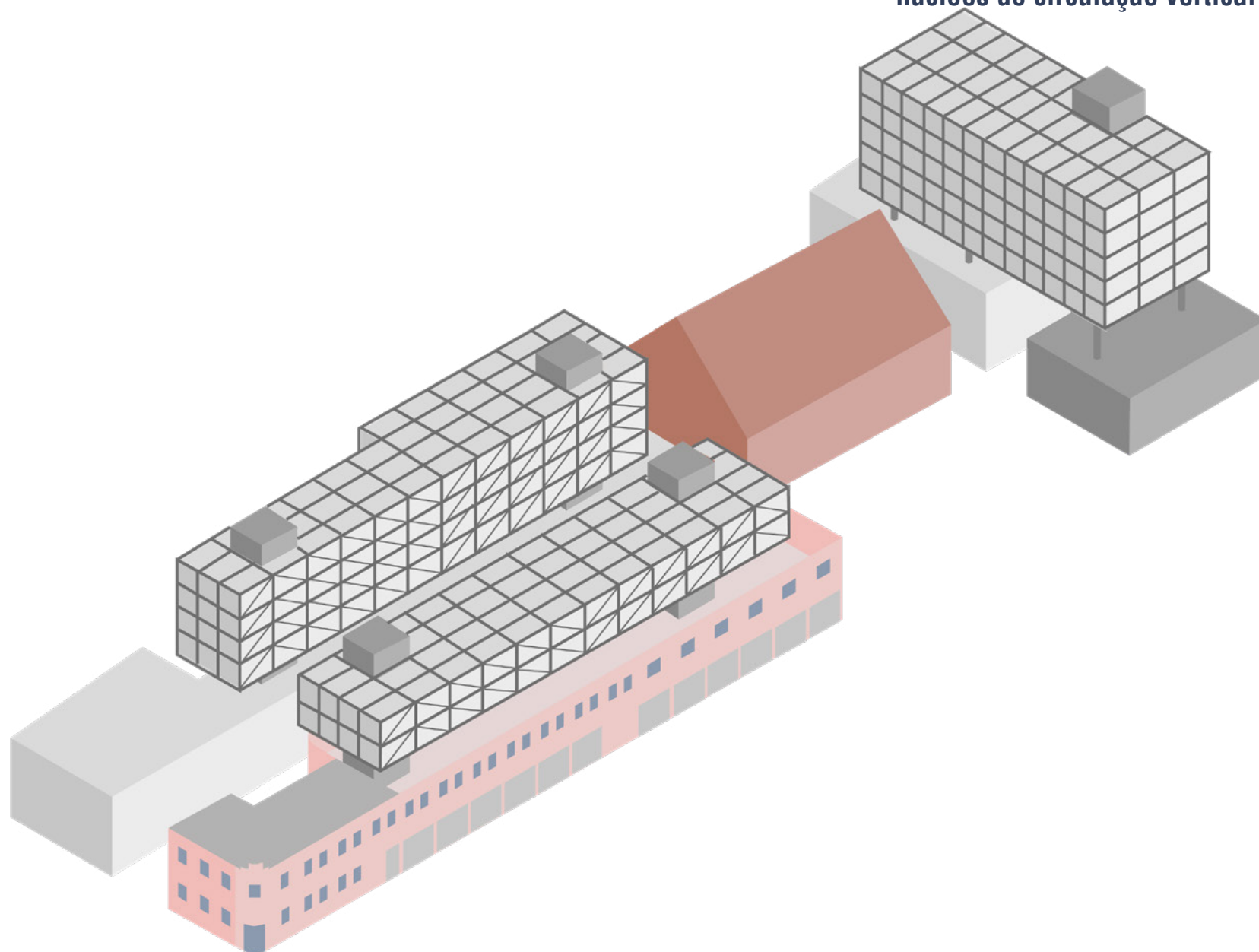
torres // torres 1 e 3 atirantadas





# ESTRUTURA

núcleos de circulação vertical // concreto armado







planta baixa térreo 



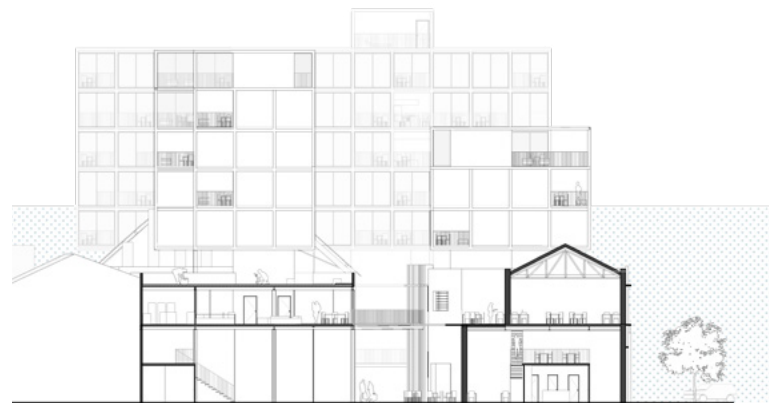
seção longitudinal A 



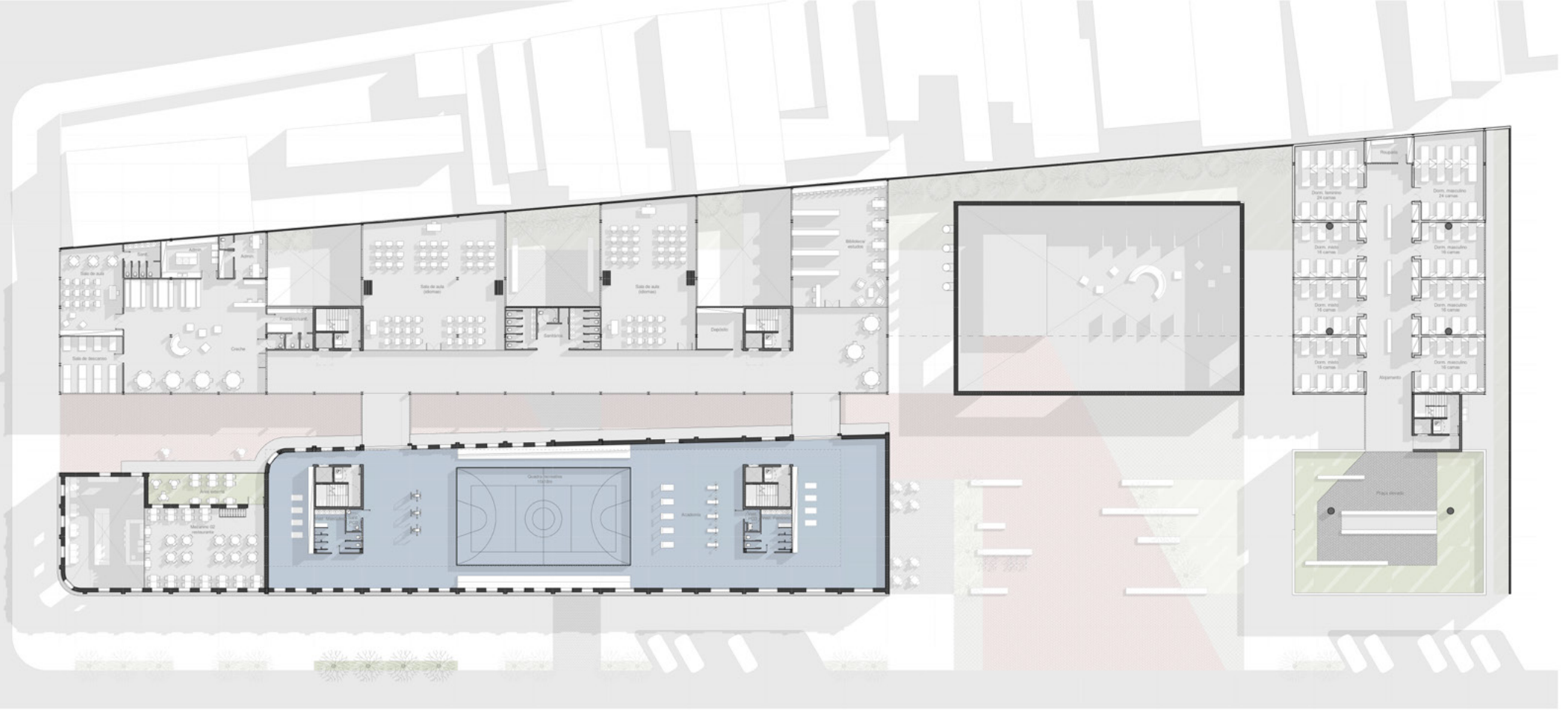




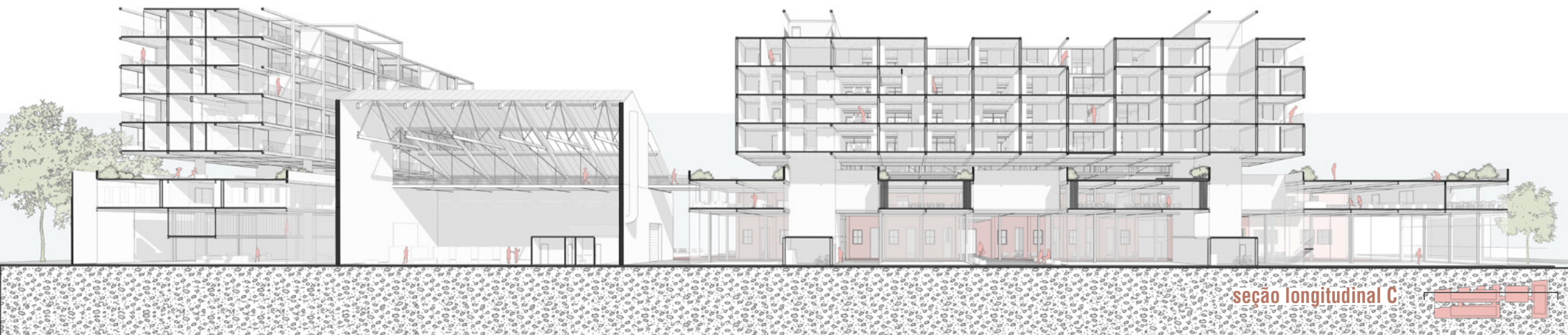
planta baixa 2º pavimento 



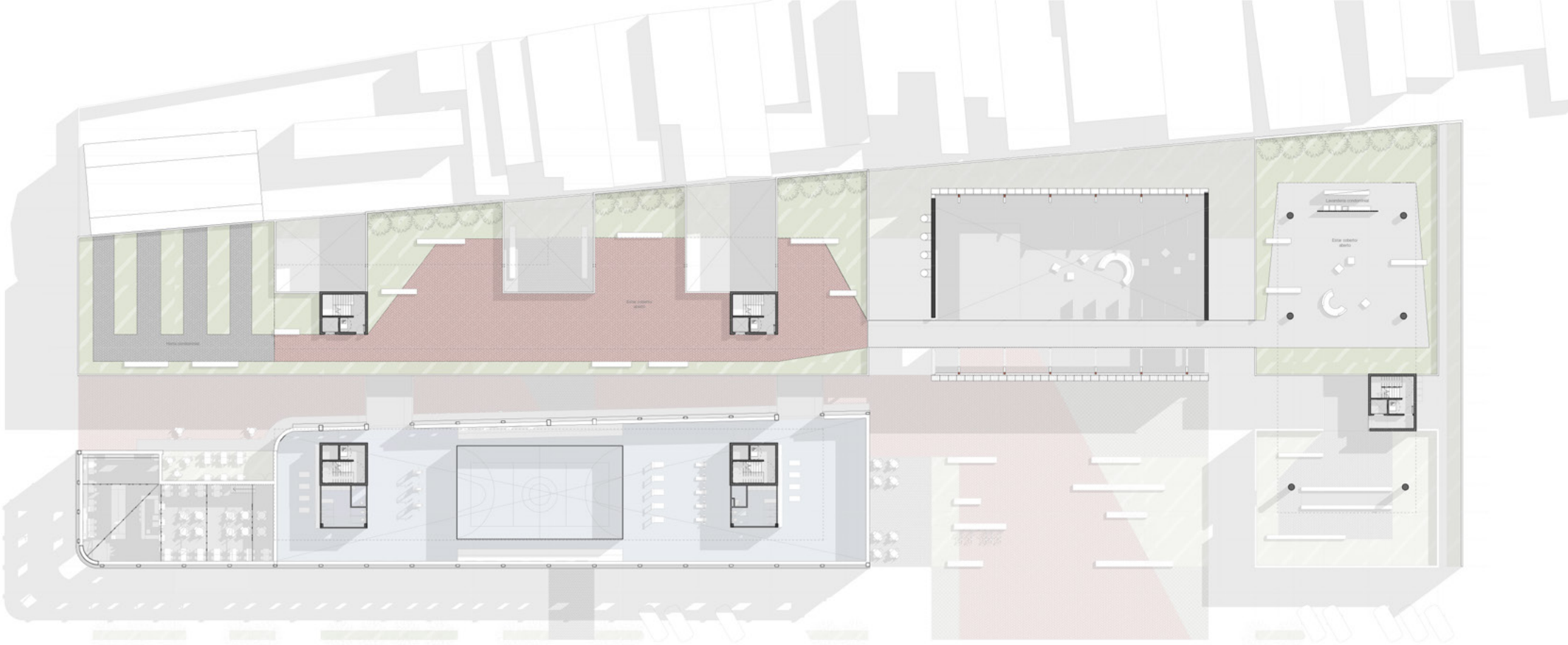
seção transversal B 



planta baixa 3º pavimento 



seção longitudinal C 



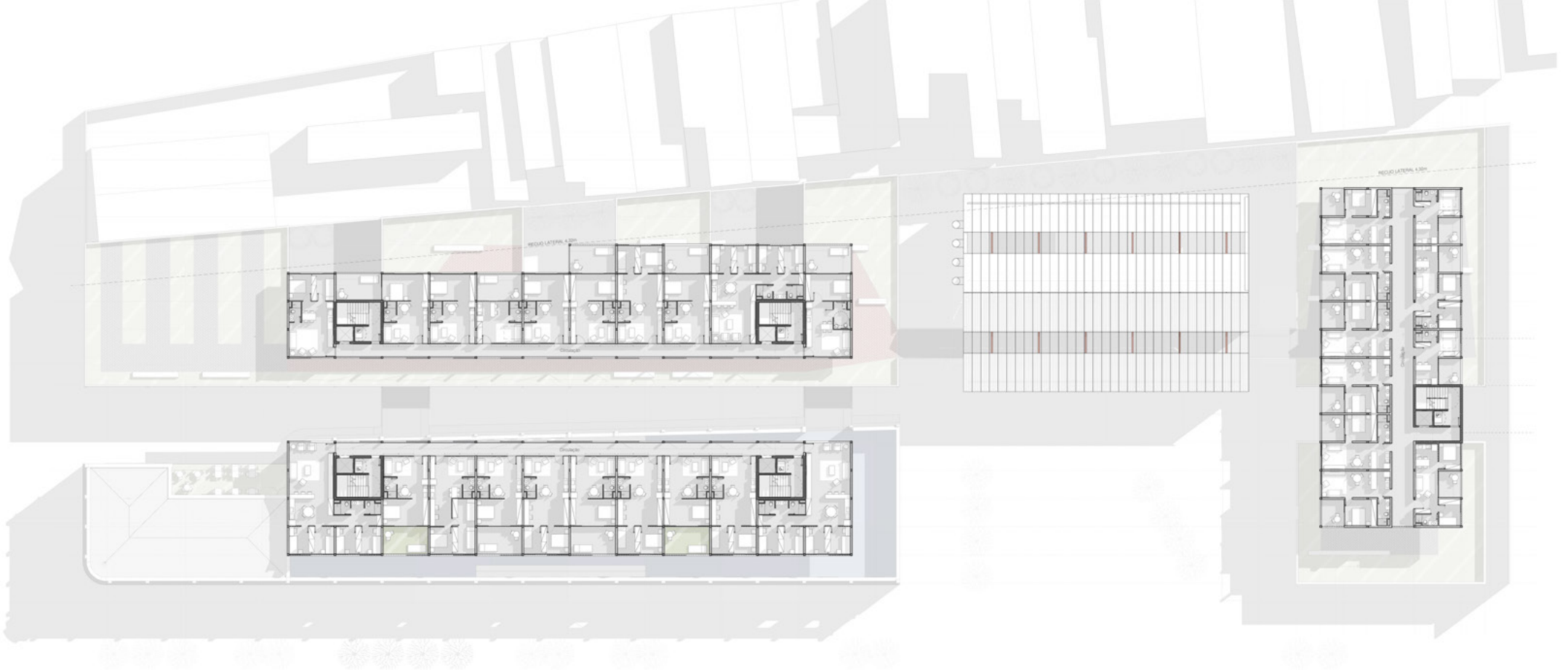
planta baixa 4° pavimento 



seção longitudinal D 







planta baixa 5° pavimento 



seção transversal E

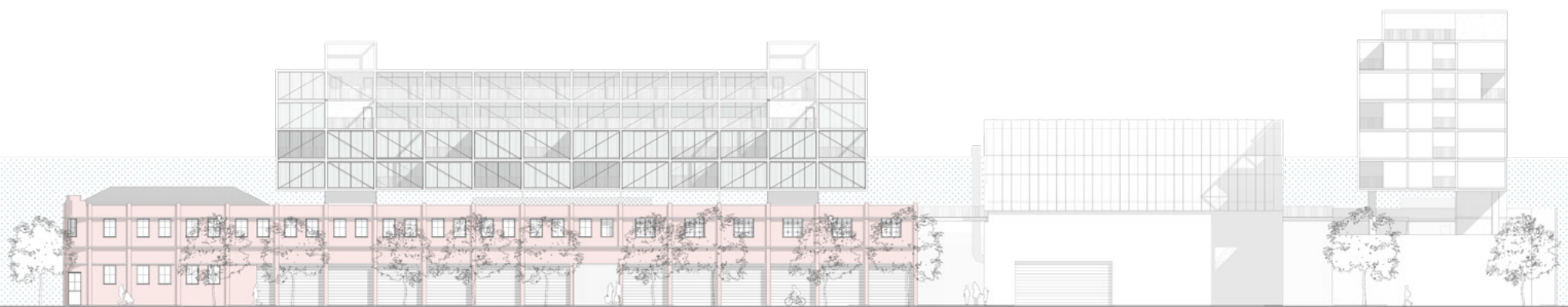


fachada rua voluntários da pátria





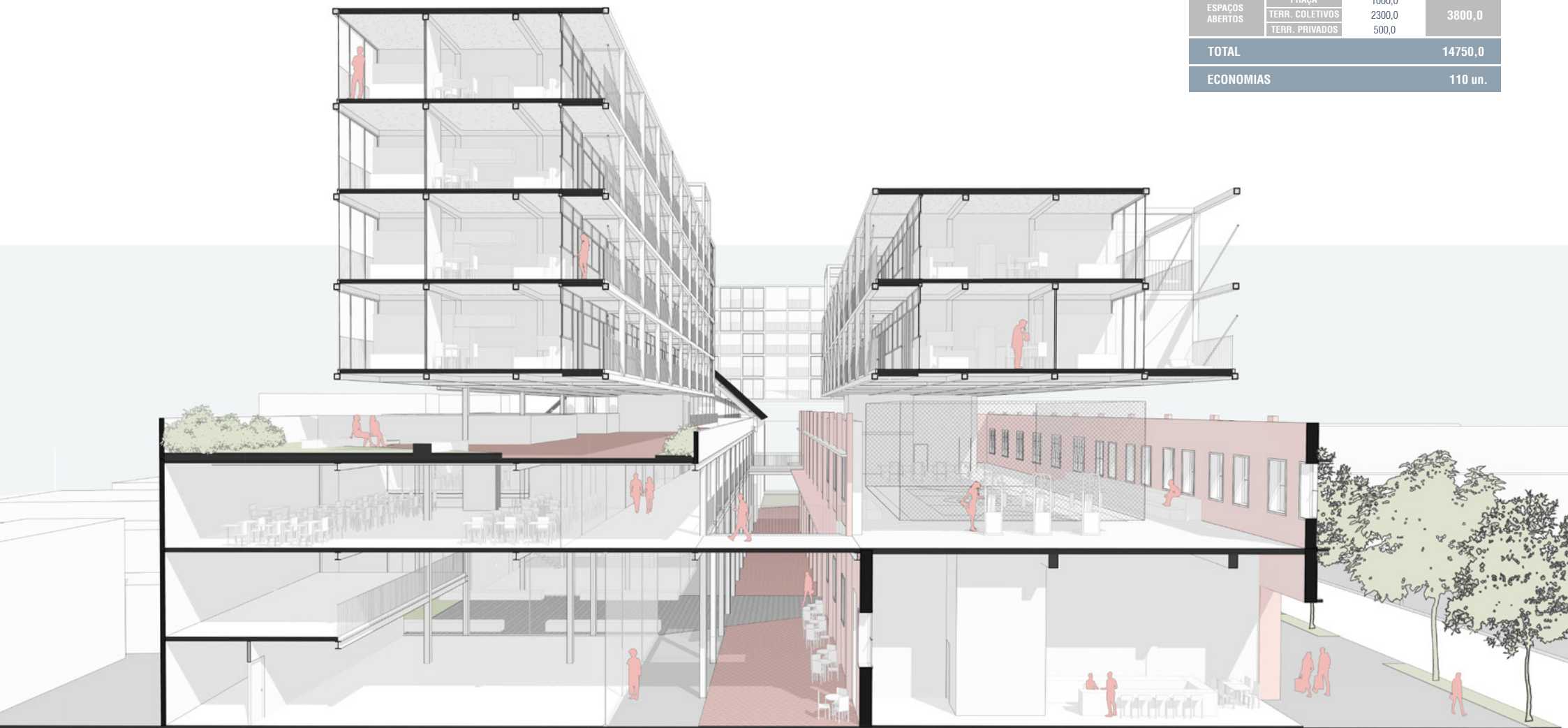
planta de cobertura 



fachada rua almirante tamandaré



PROGRAMA	ÁREAS PARCIAIS (m²)	ÁREAS TOTAIS (m²)
HABITAÇÃO	UNIDADES	3650,0
	CIRCULAÇÕES	950,0
ASSOCIAÇÃO IMIGRANTES	SEDE	400,0
	ALOJAMENTO	850,0
	LOJAS E BARES	1750,0
COMÉRCIO	RESTAURANTE	350,0
RELIGIÃO	ESP. ECUMÊNICO	300,0
EDUCAÇÃO	CRECHE	400,0
	ESCOLA IDIOMAS	800,0
CULTURA	EXPOSIÇÕES	550,0
	APOIO	50,0
ESPORTE	QUADRA RECREATIVA	200
	ACADEMIA	700
ESPAÇOS ABERTOS	PRAÇA	1000,0
	TERR. COLETIVOS	2300,0
	TERR. PRIVADOS	500,0
<b>TOTAL</b>		<b>14750,0</b>
<b>ECONOMIAS</b>		<b>110 un.</b>

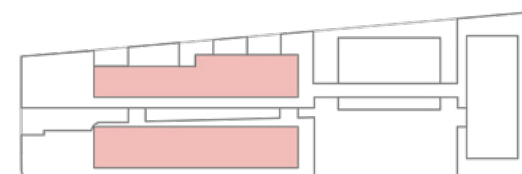
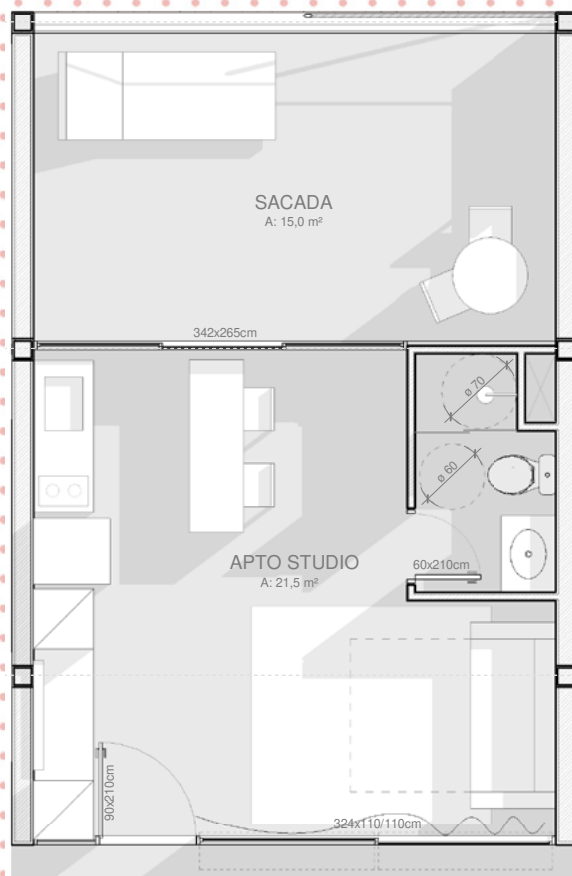


seção transversal F



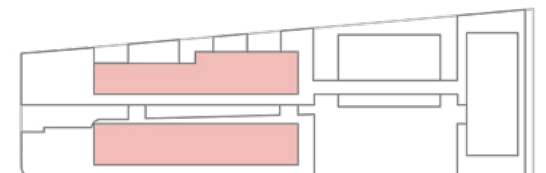
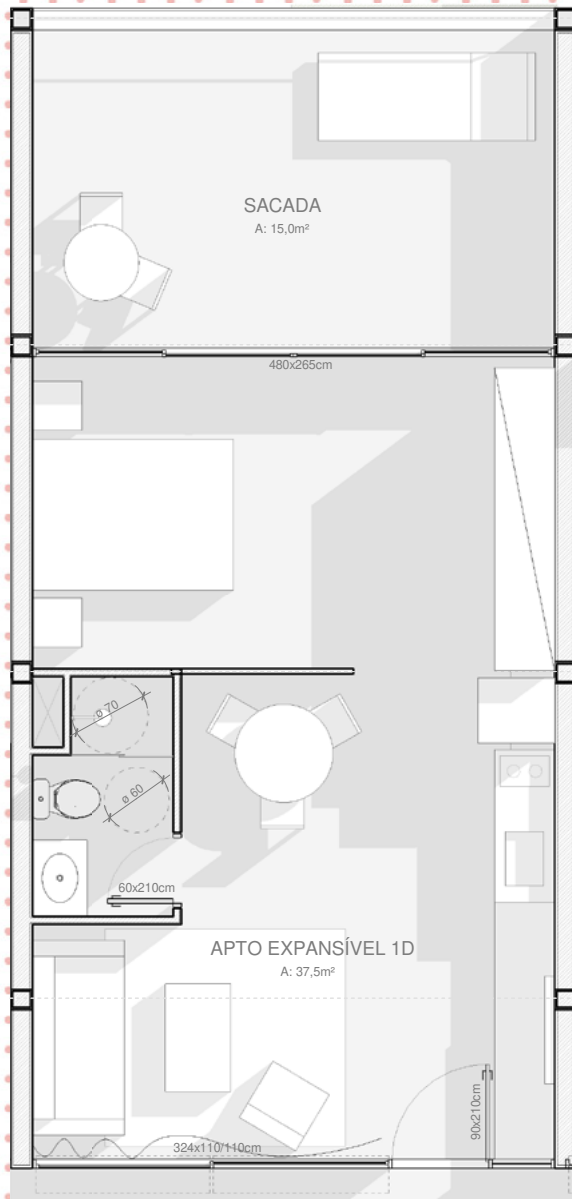
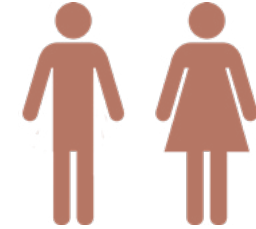
# TIPOLOGIAS

studio // 21,5m<sup>2</sup>



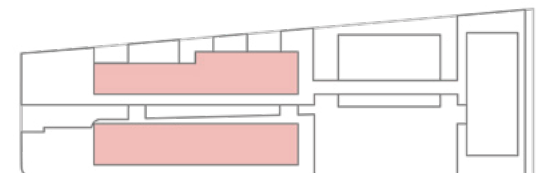
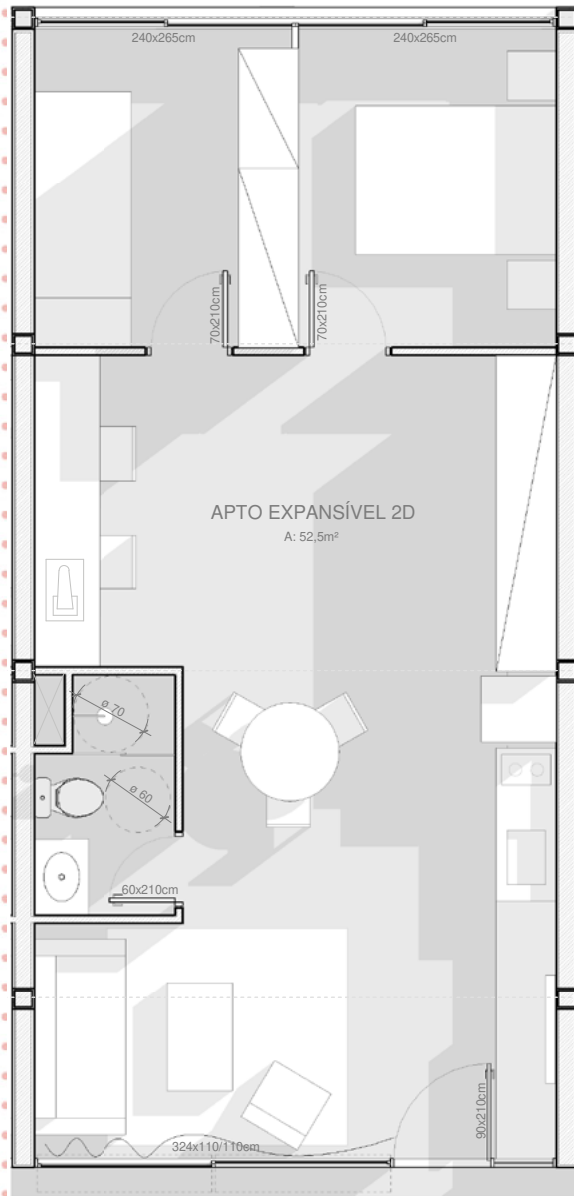
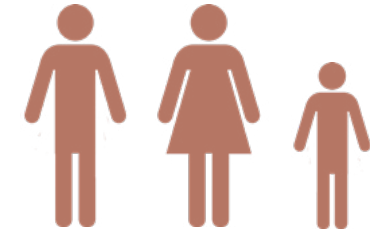
# TIPOLOGIAS

**1D expansível // 37,5m<sup>2</sup>**



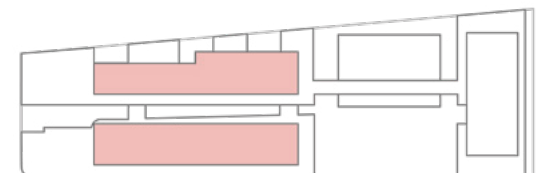
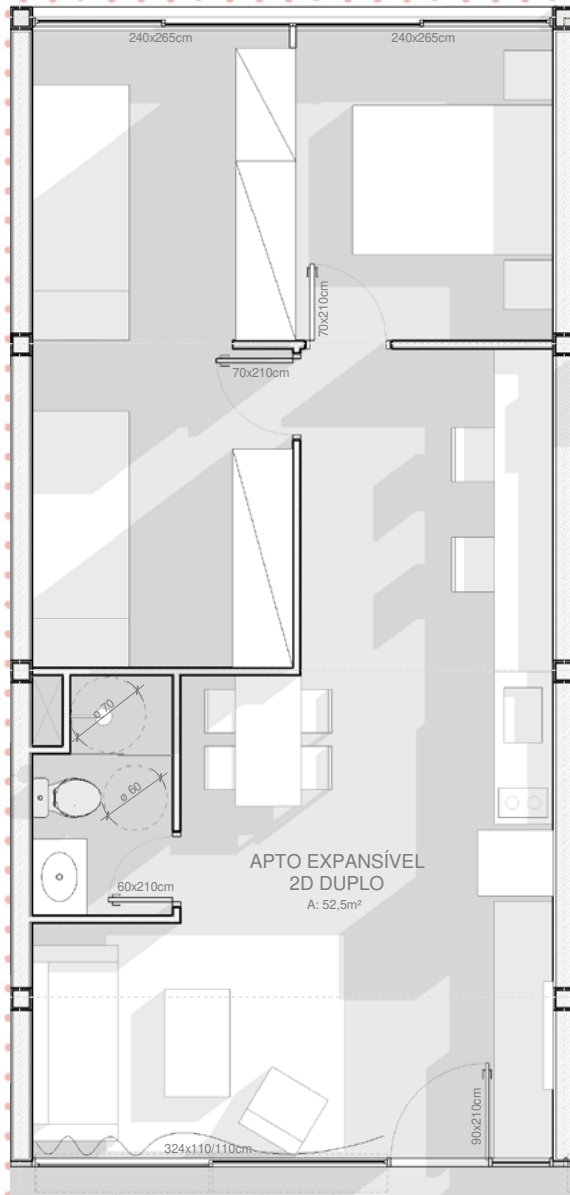
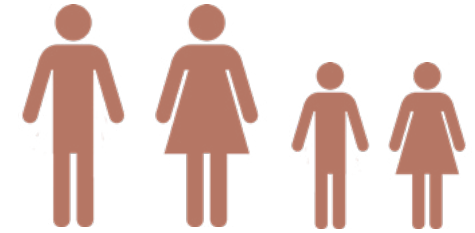
# TIPOLOGIAS

2D expansível // 52,5m<sup>2</sup>



# TIPOLOGIAS

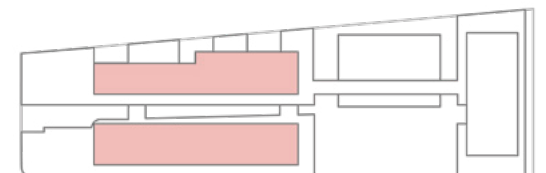
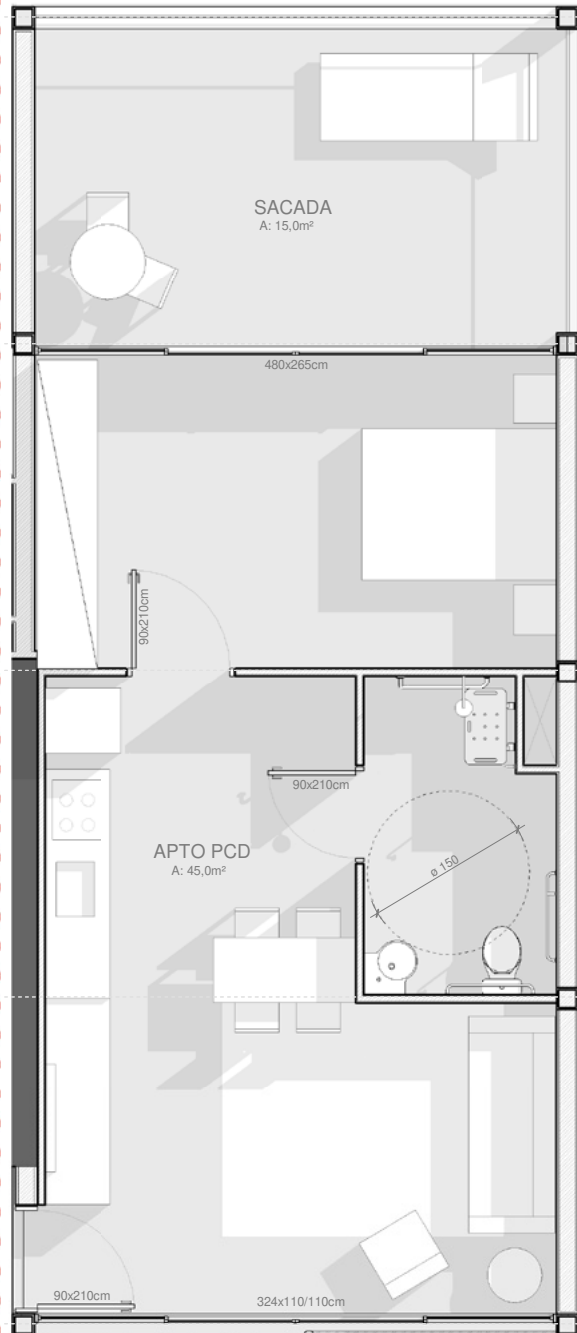
2D duplo [expandido] // 52,5m<sup>2</sup>





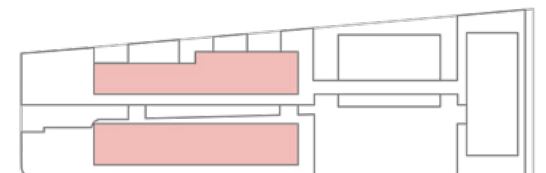
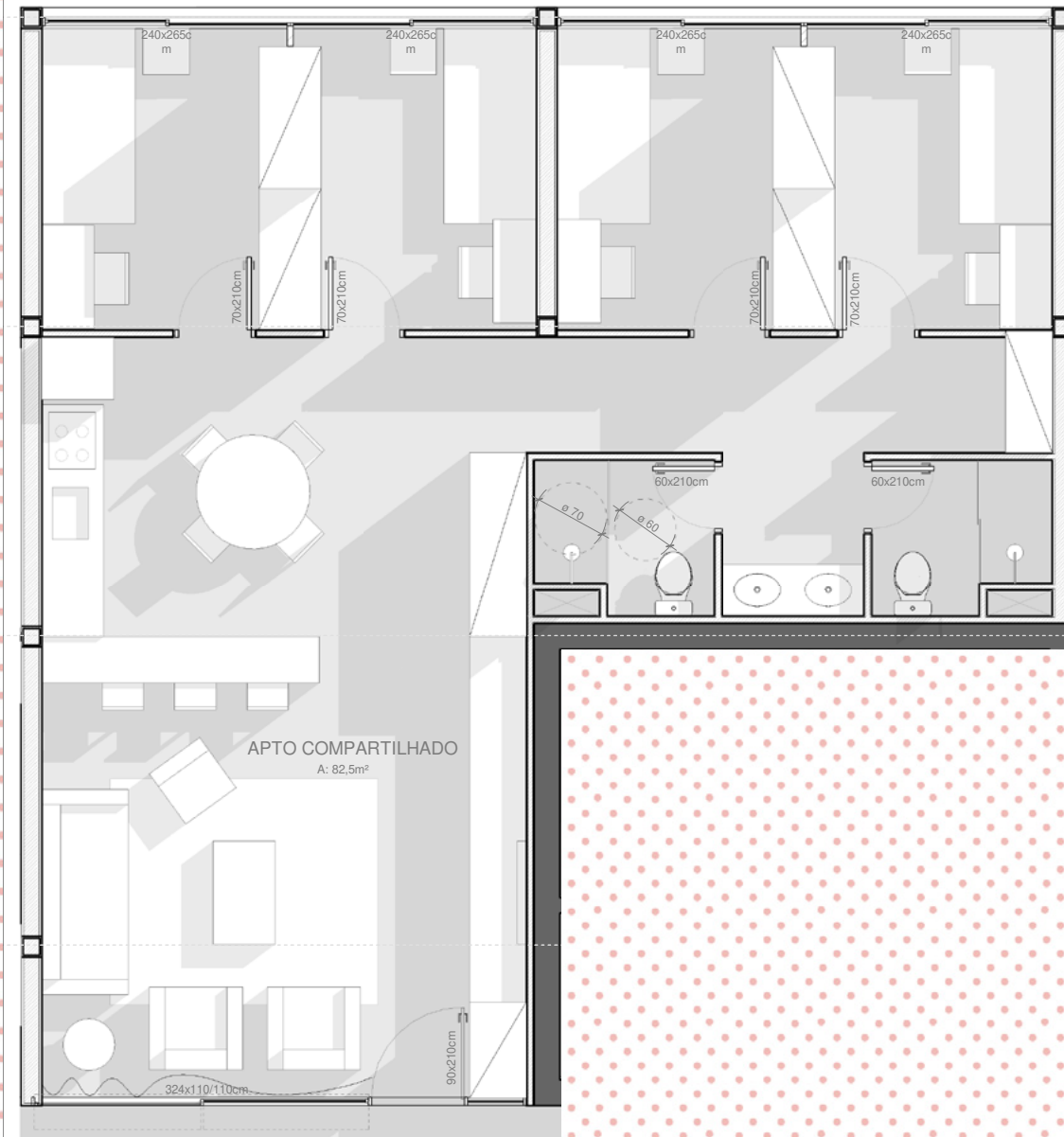
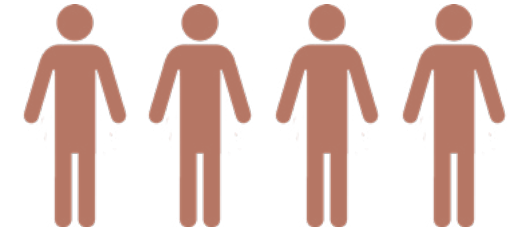
# TIPOLOGIAS

1D adaptado PCD // 45,0m<sup>2</sup>



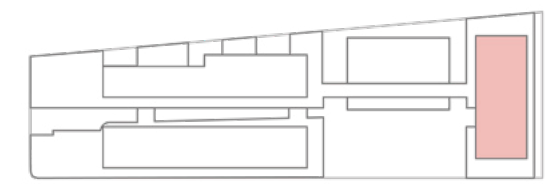
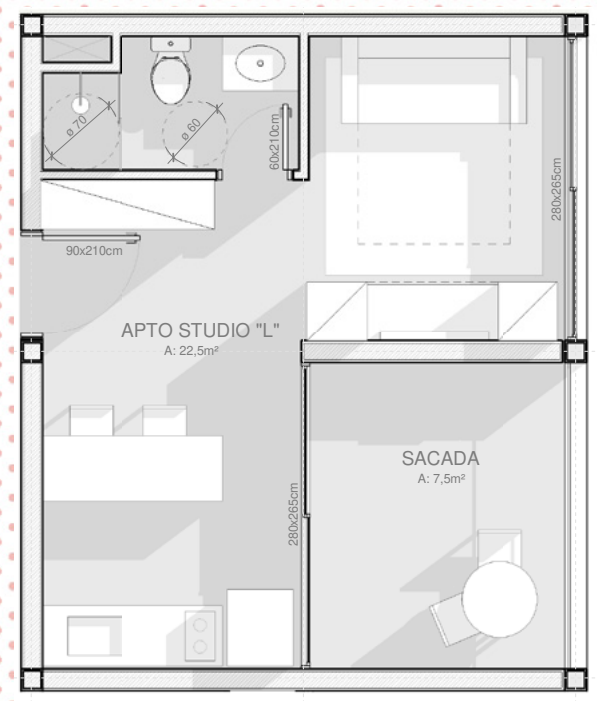
# TIPOLOGIAS

apto compartilhado // 82,5m<sup>2</sup>



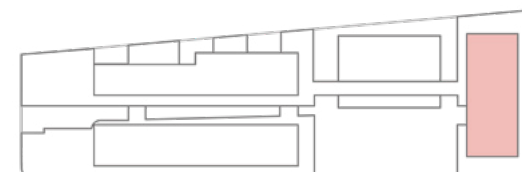
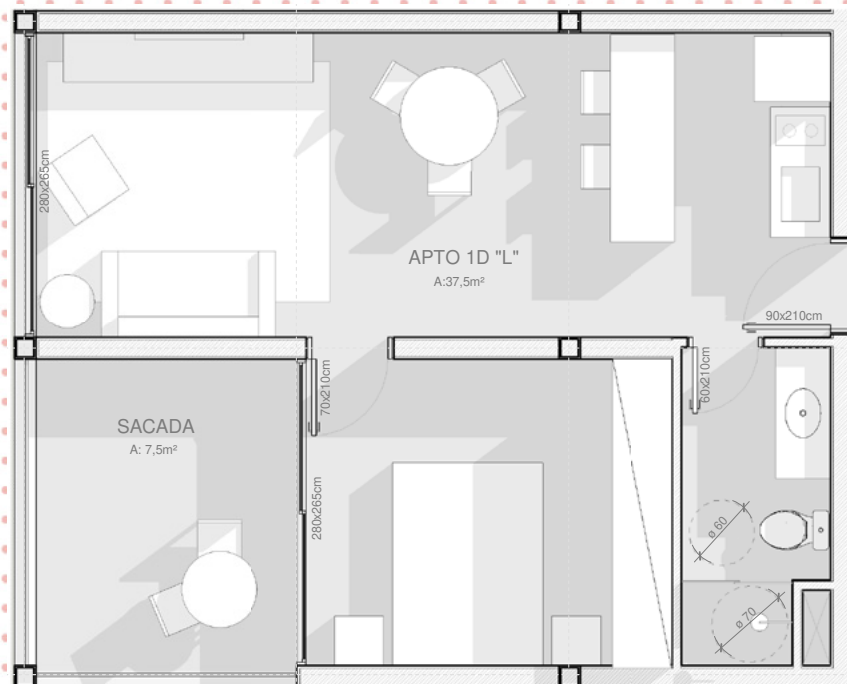
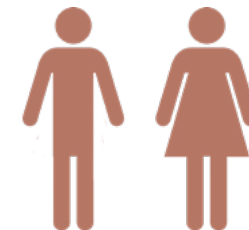
# TIPOLOGIAS

studio "L" // 22,5m<sup>2</sup>



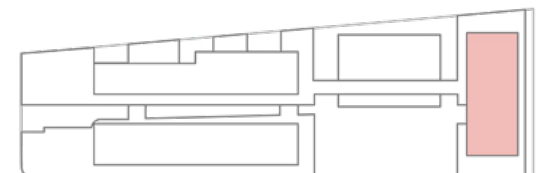
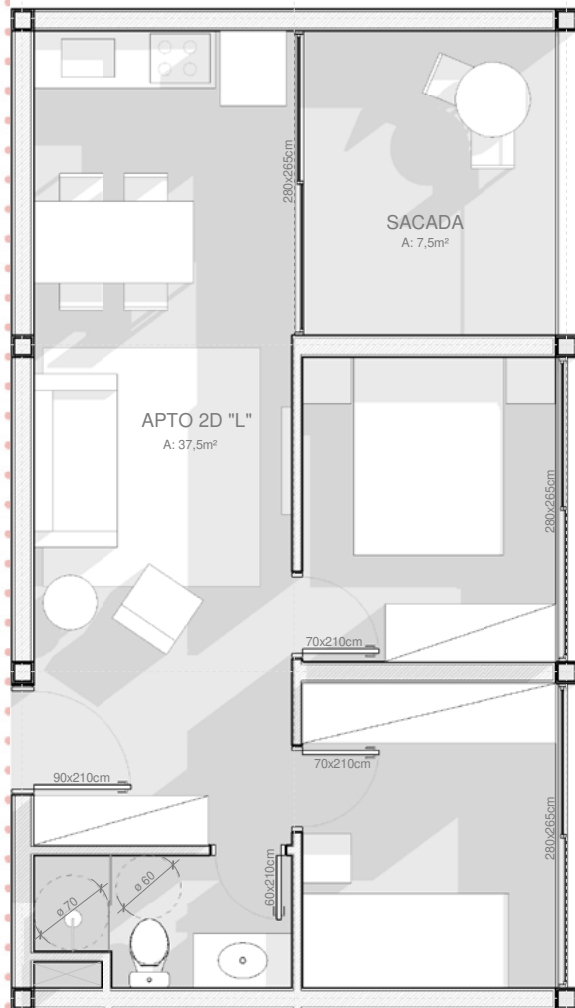
# TIPOLOGIAS

1D "L" // 37,5m<sup>2</sup>



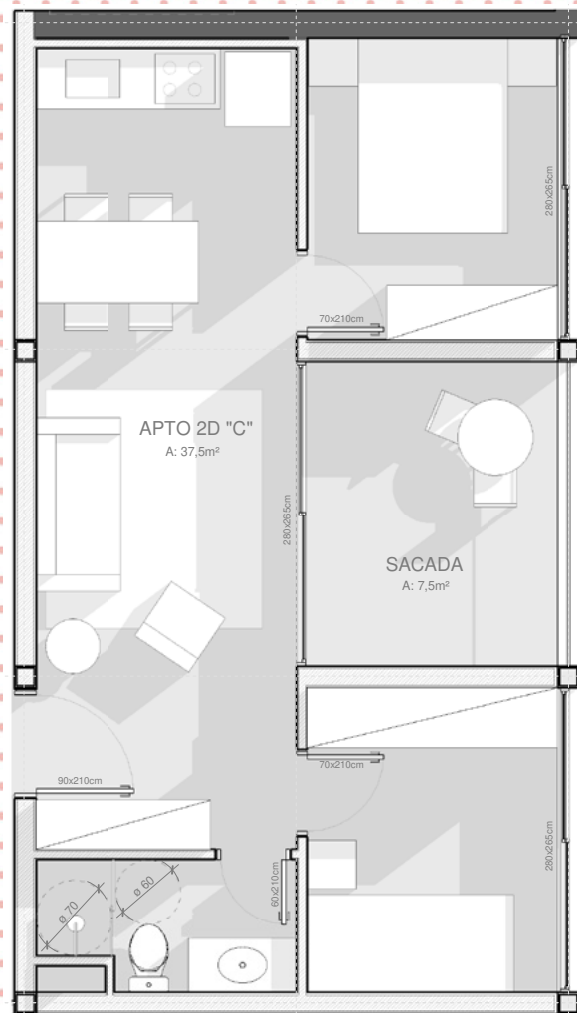
# TIPOLOGIAS

2D "L" // 37,5m<sup>2</sup>



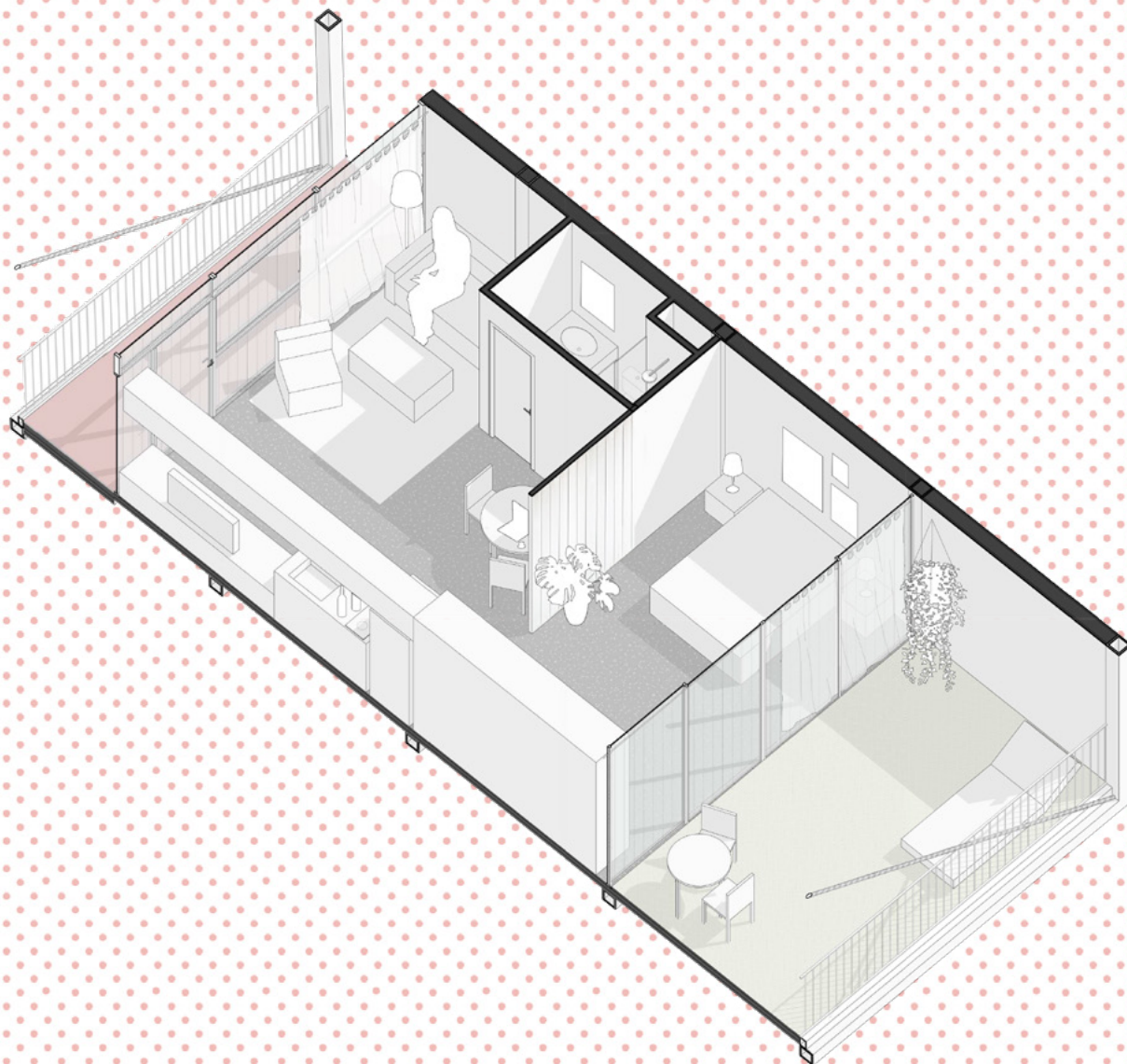
# TIPOLOGIAS

2D "C" // 37,5m<sup>2</sup>





# 1D expansível



# EXPANSOES

1D expansível // 37,5m<sup>2</sup>

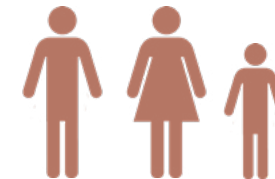
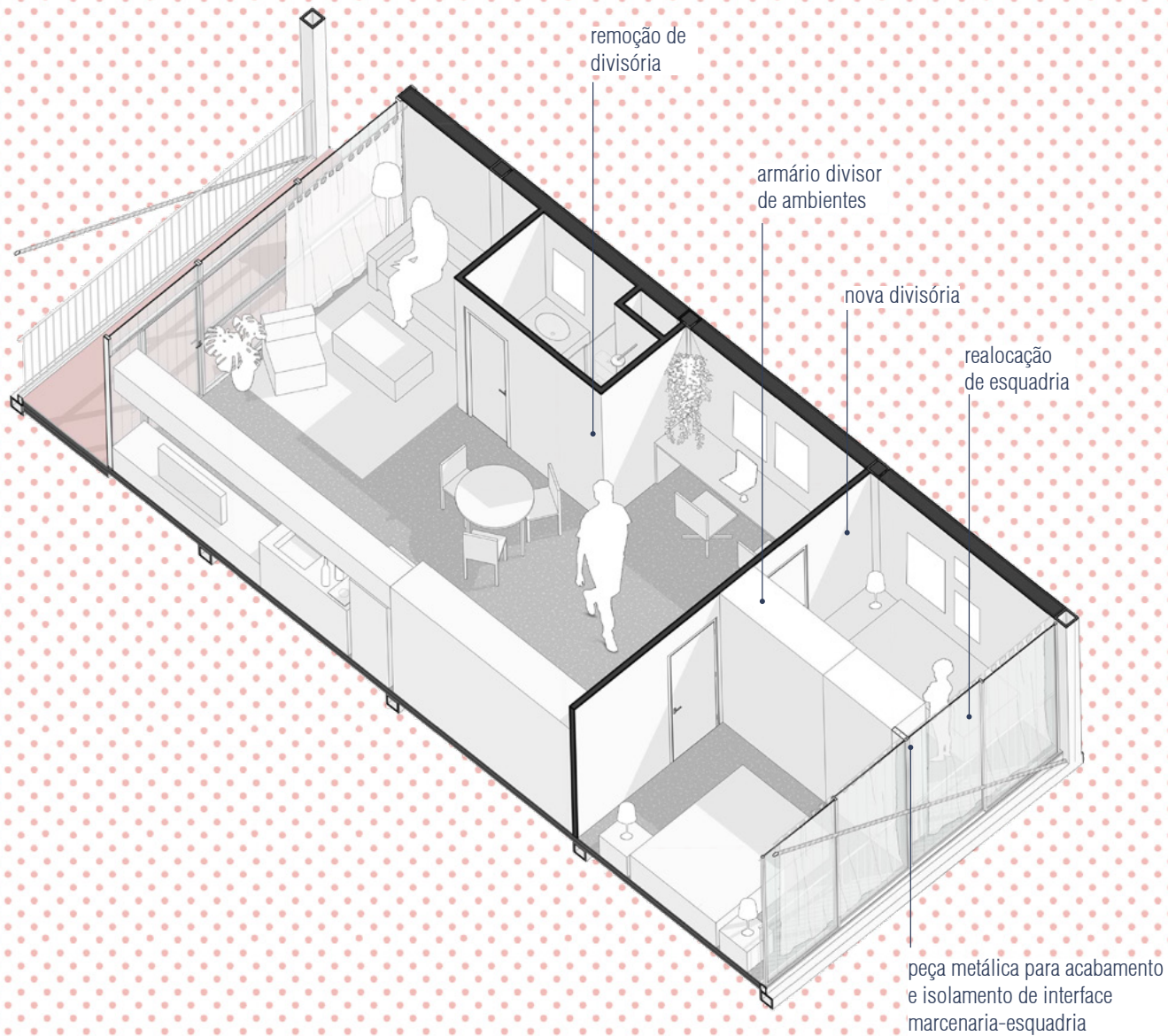




# EXPANSOES

2D [expandido] // 52,5m<sup>2</sup>

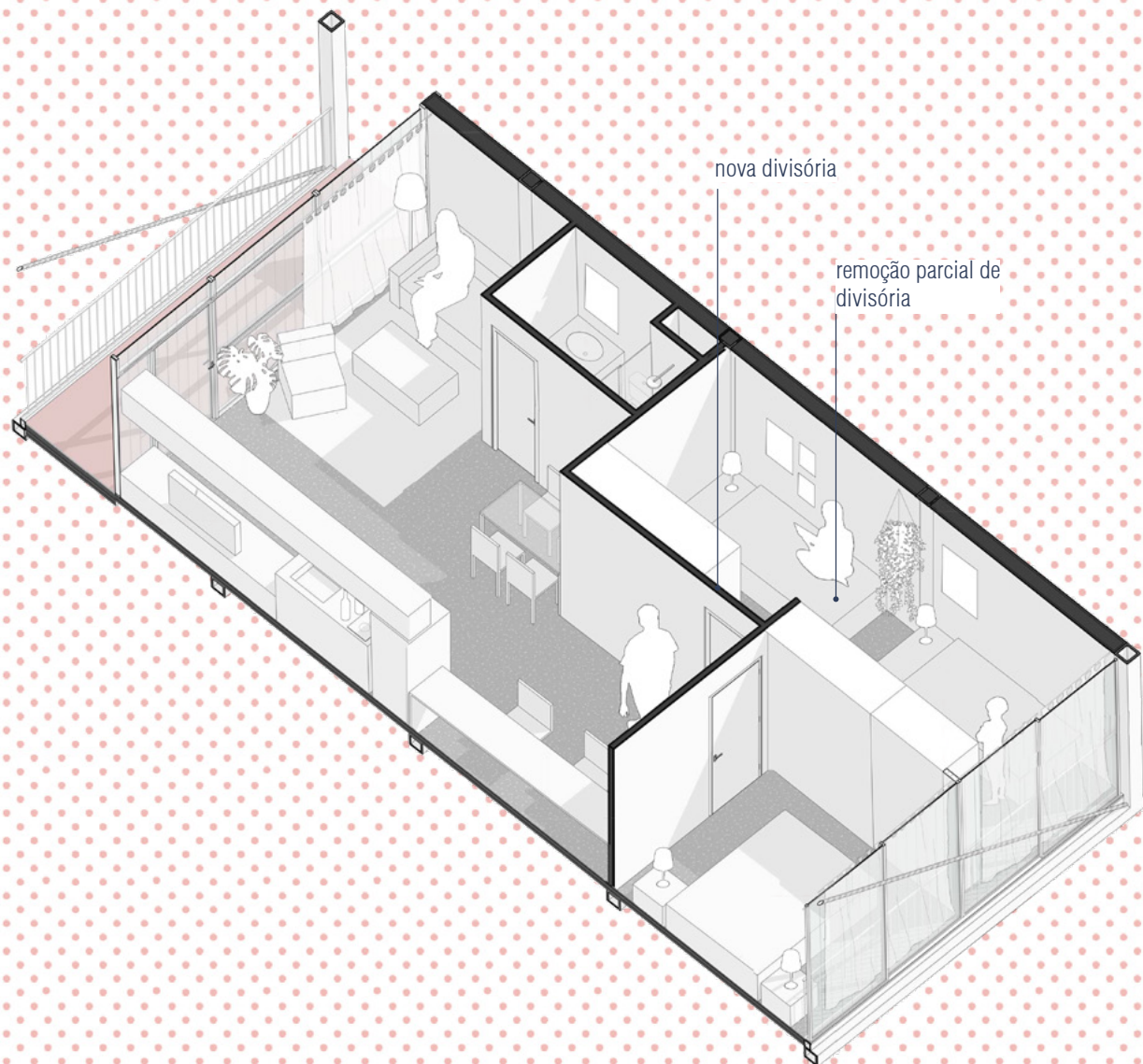
## 2D [expandido]



# EXPANSOES

2D duplo [expandido] // 52,5m<sup>2</sup>

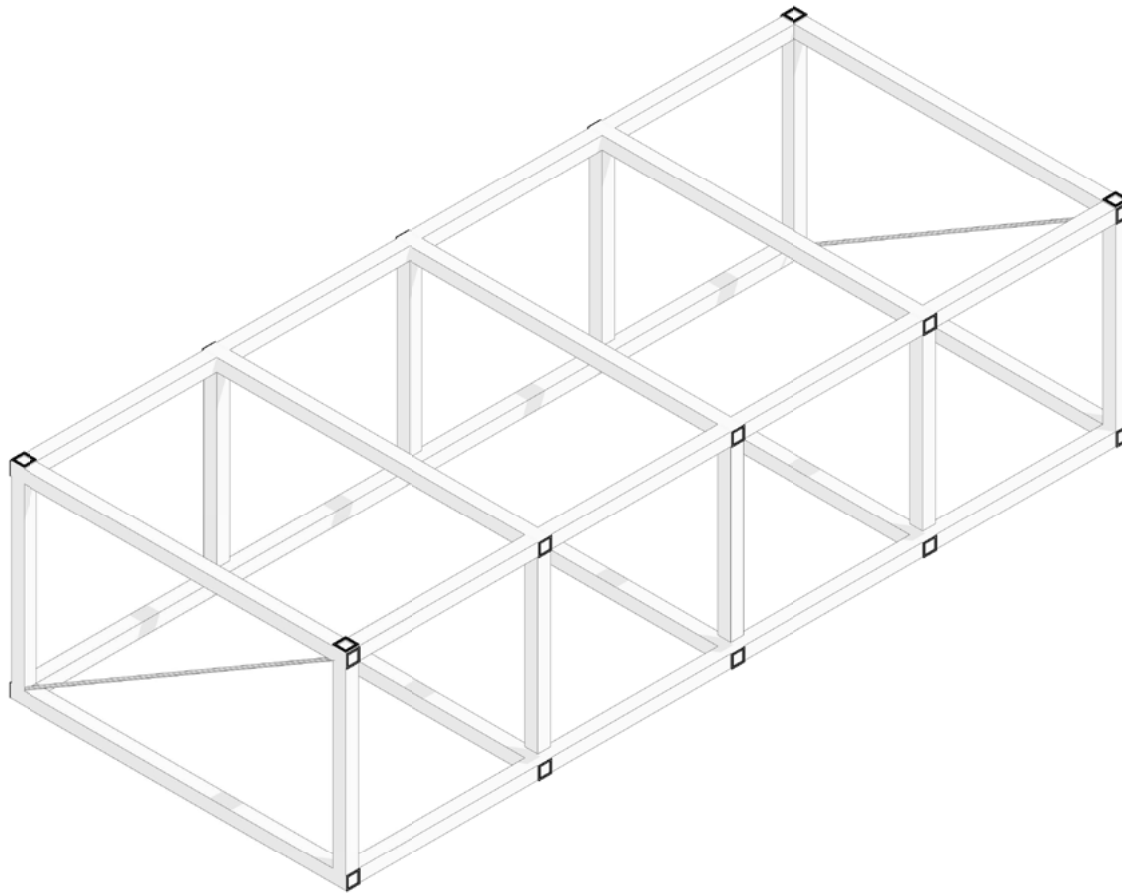
## 2D duplo [expandido]





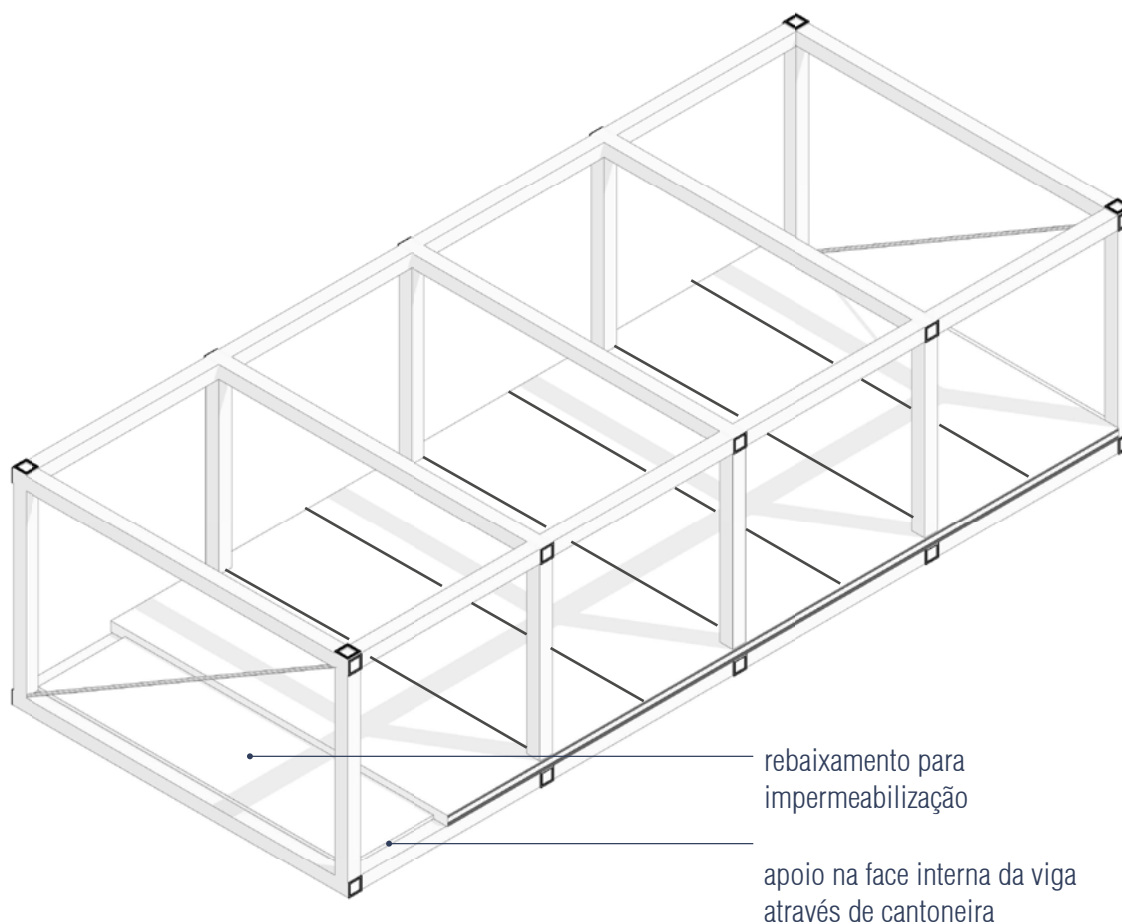
# ESTRUTURA + ENVOLTORIA | MÓDULO

**estrutura metálica** // viga + pilares + tirantes



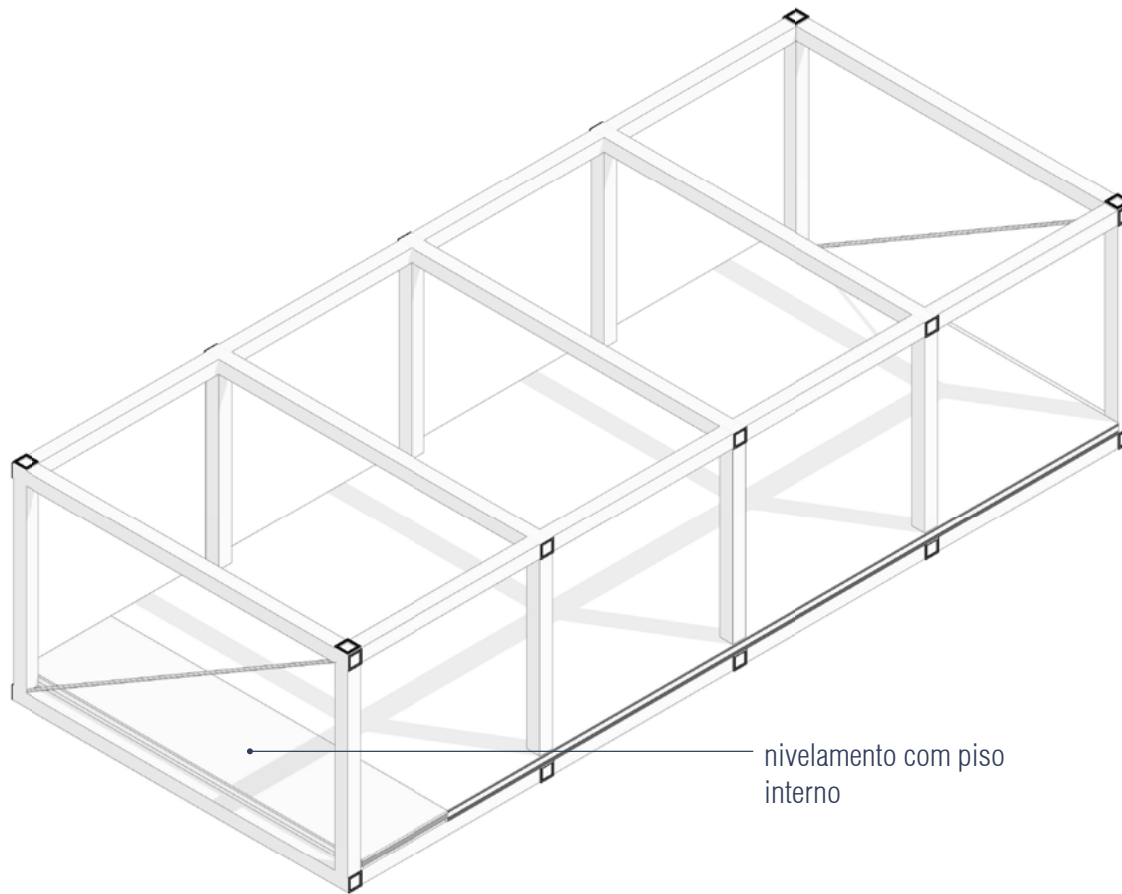
# ESTRUTURA + ENVOLTORIA | MÓDULO

laje treliçada com EPS // peças modulares 1,50 x 5,00m



# ESTRUTURA + ENVOLTORIA | MÓDULO

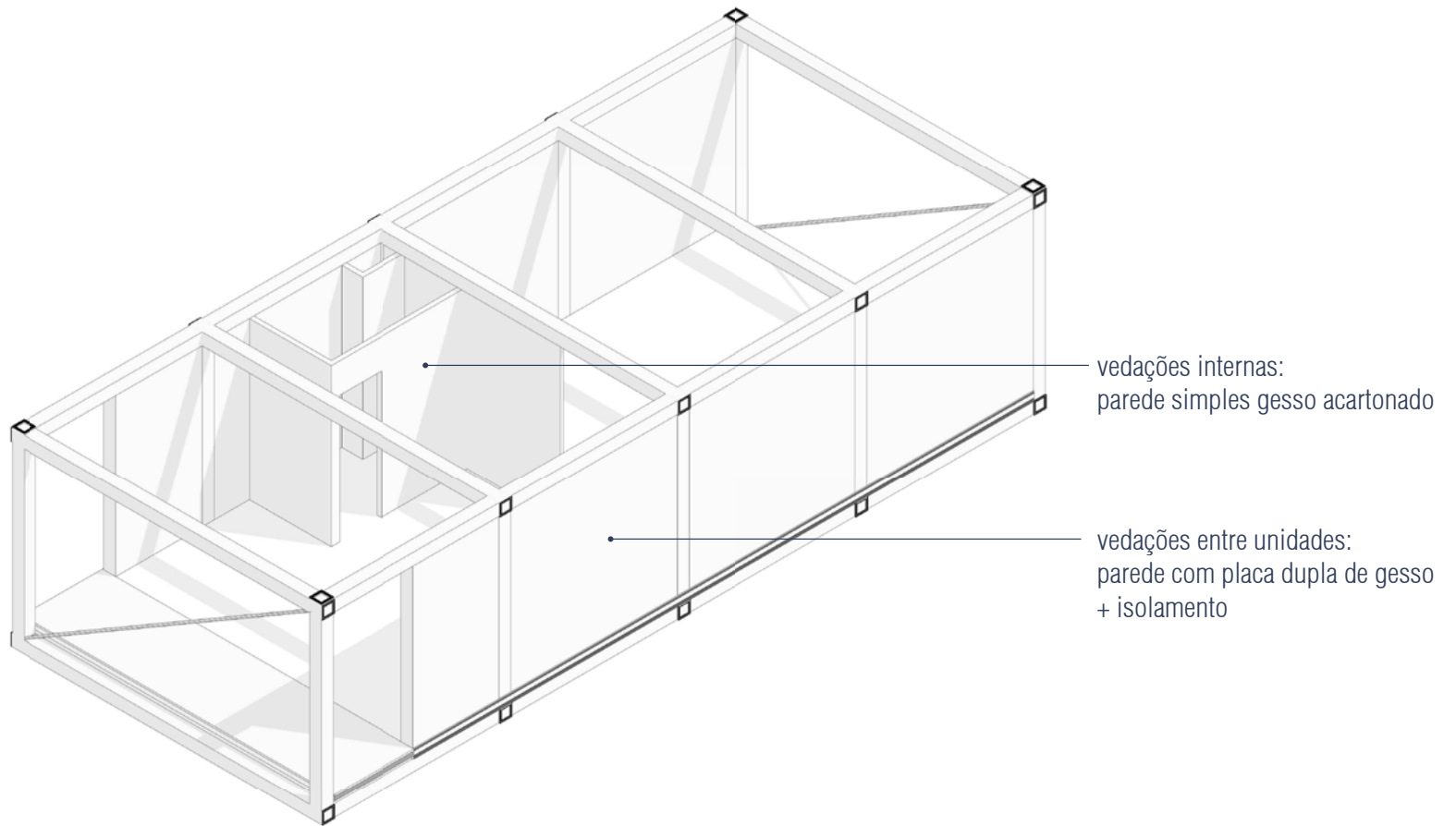
laje treliçada com EPS // peças modulares 1,50 x 5,00m



• nivelamento com piso interno

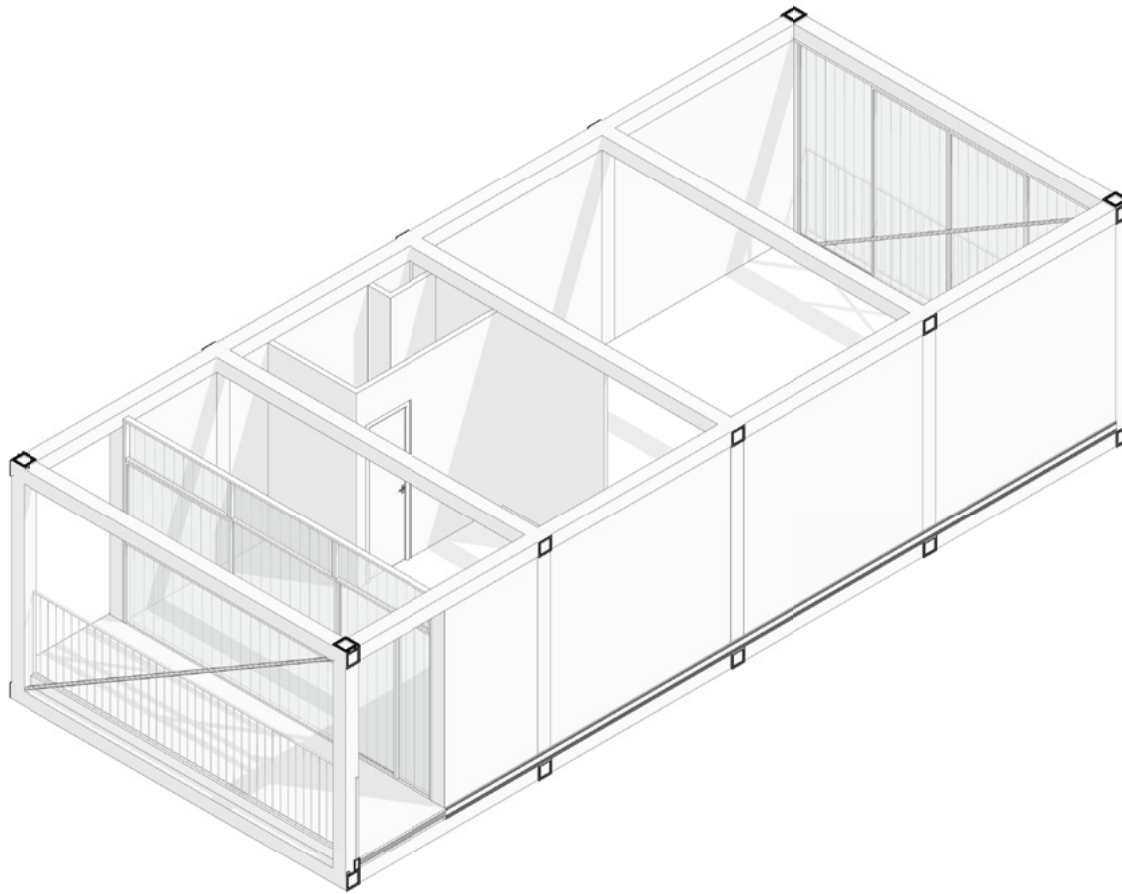
# ESTRUTURA + ENVOLTORIA | MÓDULO

vedações // gesso acartonado



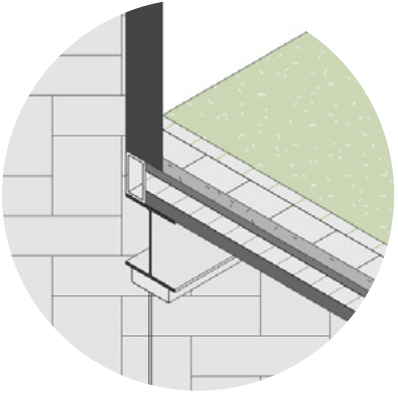
# ESTRUTURA + ENVOLTORIA | MÓDULO

**esquadrias** // policarbonato alveolar

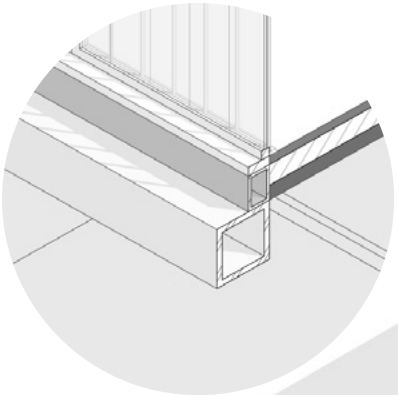




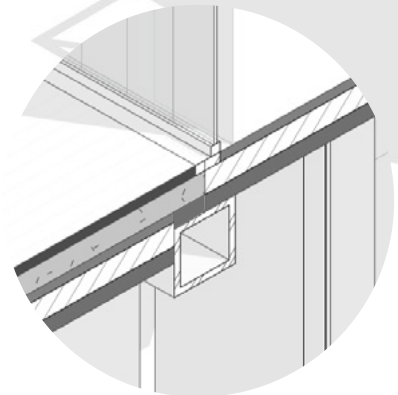
**01** // impermeabilização terraços



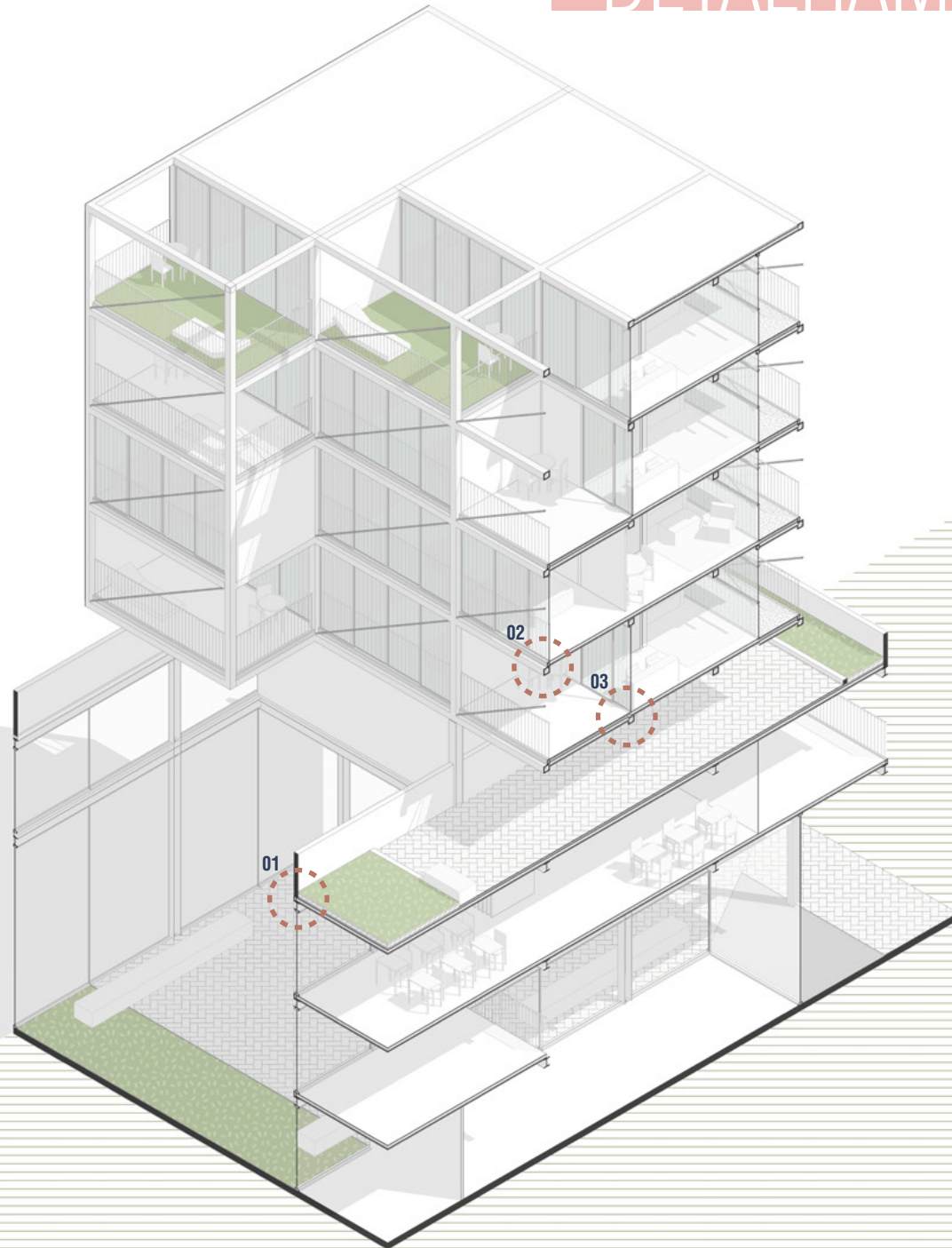
**02** // interface estrutura x sacadas



**03** // interface int x ext unidades com sacada



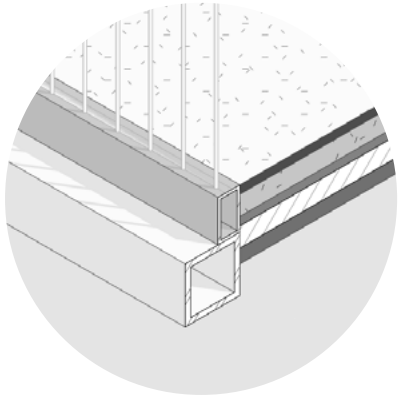
# DETALHAMENTOS



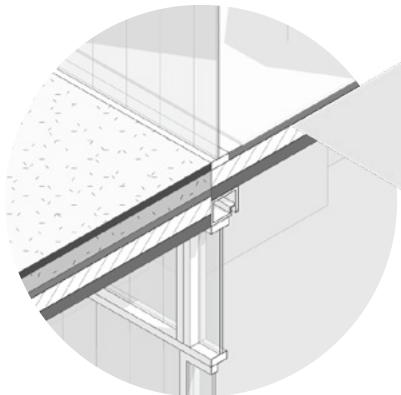
04 // intervenção preexistências - fixação das passarelas



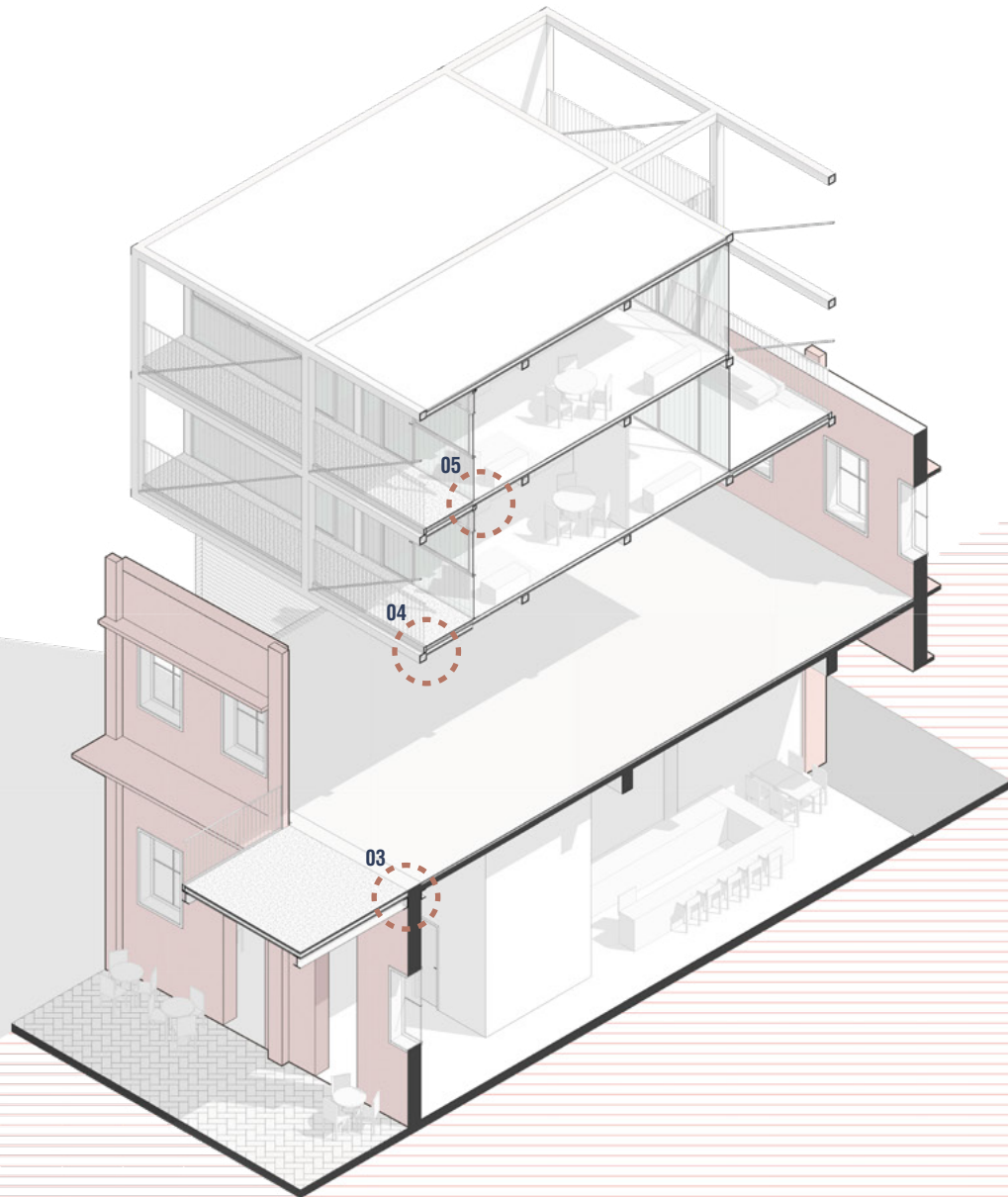
05 // interface estrutura x circulação



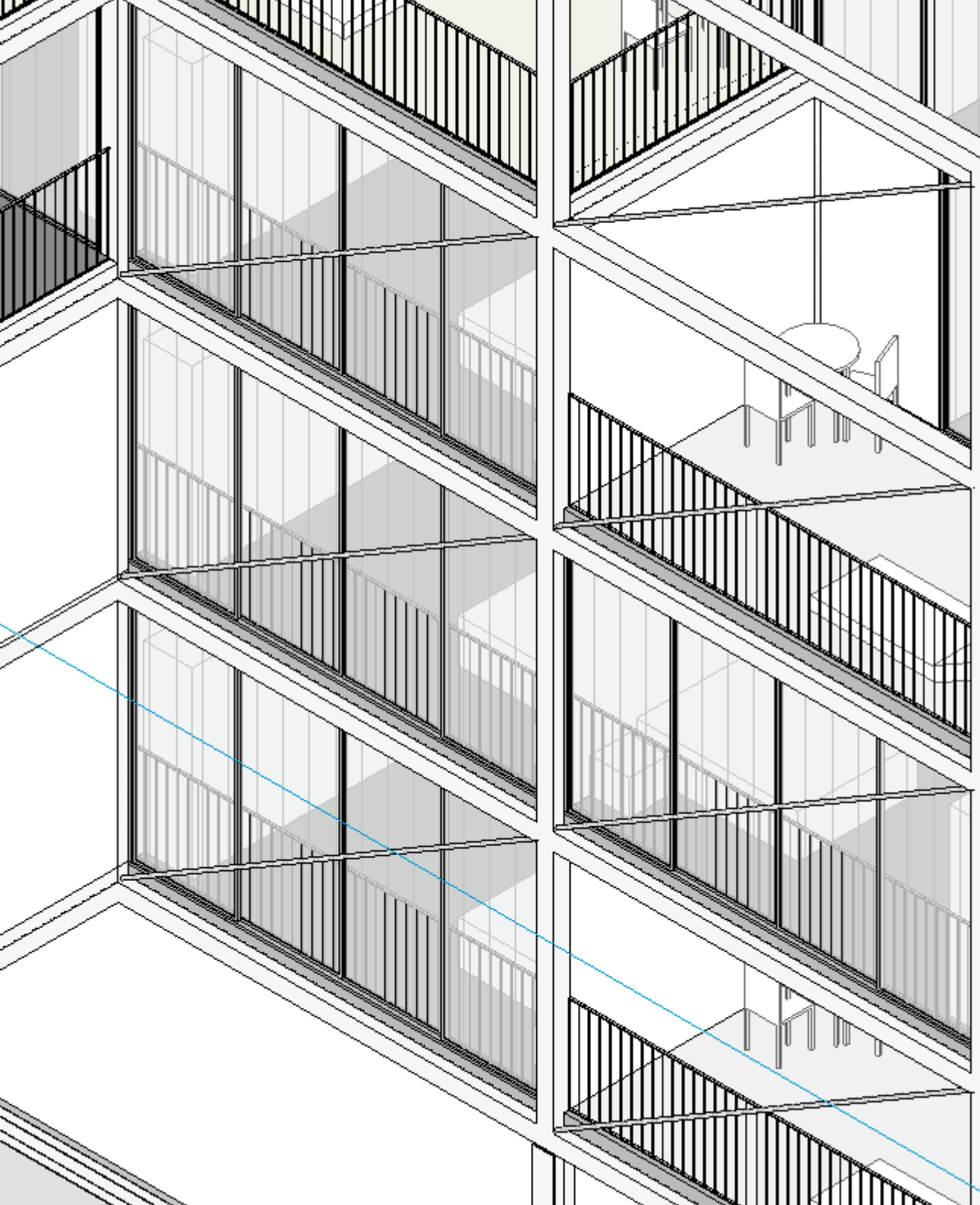
06 // interface unidades x circulação



# DETALHAMENTOS



# DETALHAMENTOS



## **agradecimentos especiais**

orientador e coorientadora profs. leandro manenti e eliane constantinou

banca avaliadora profs. ana carolina pelegri, betina martau, bruno César de mello e convidado externo prof. pablo graça

convidado externo prof. pablo graça

guilherme moraes silva

cristiano selbach carneiro

à minha família e amigos pela compreensão durante os momentos de ausência

# **OBRIGADA!**

