

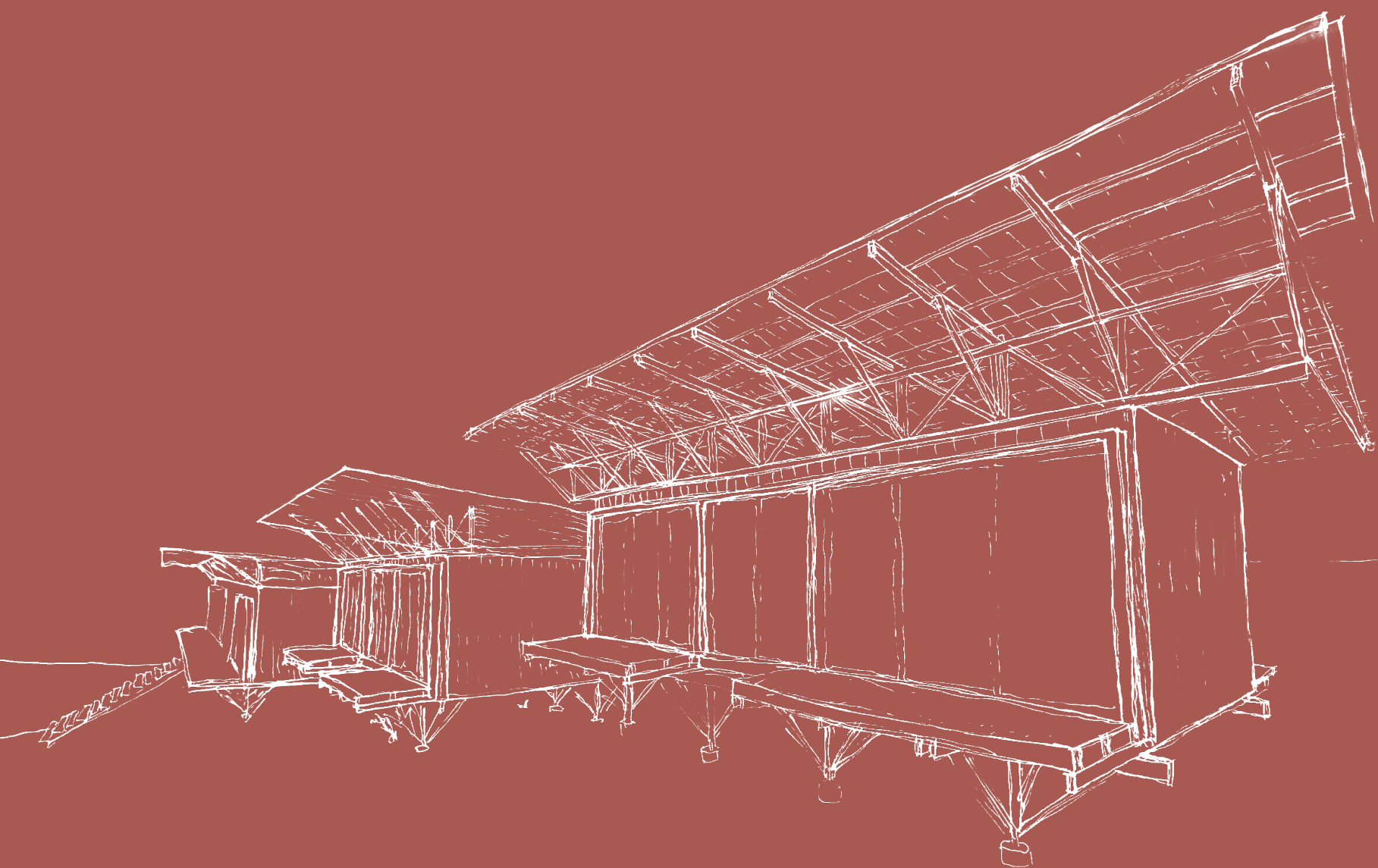
# Bautechniken für ein tropisches Entwicklungsland

IBBTE

Prof. Dipl.-Ing. Peter Schürmann

Betreuer\*in: Andreea Puscasu

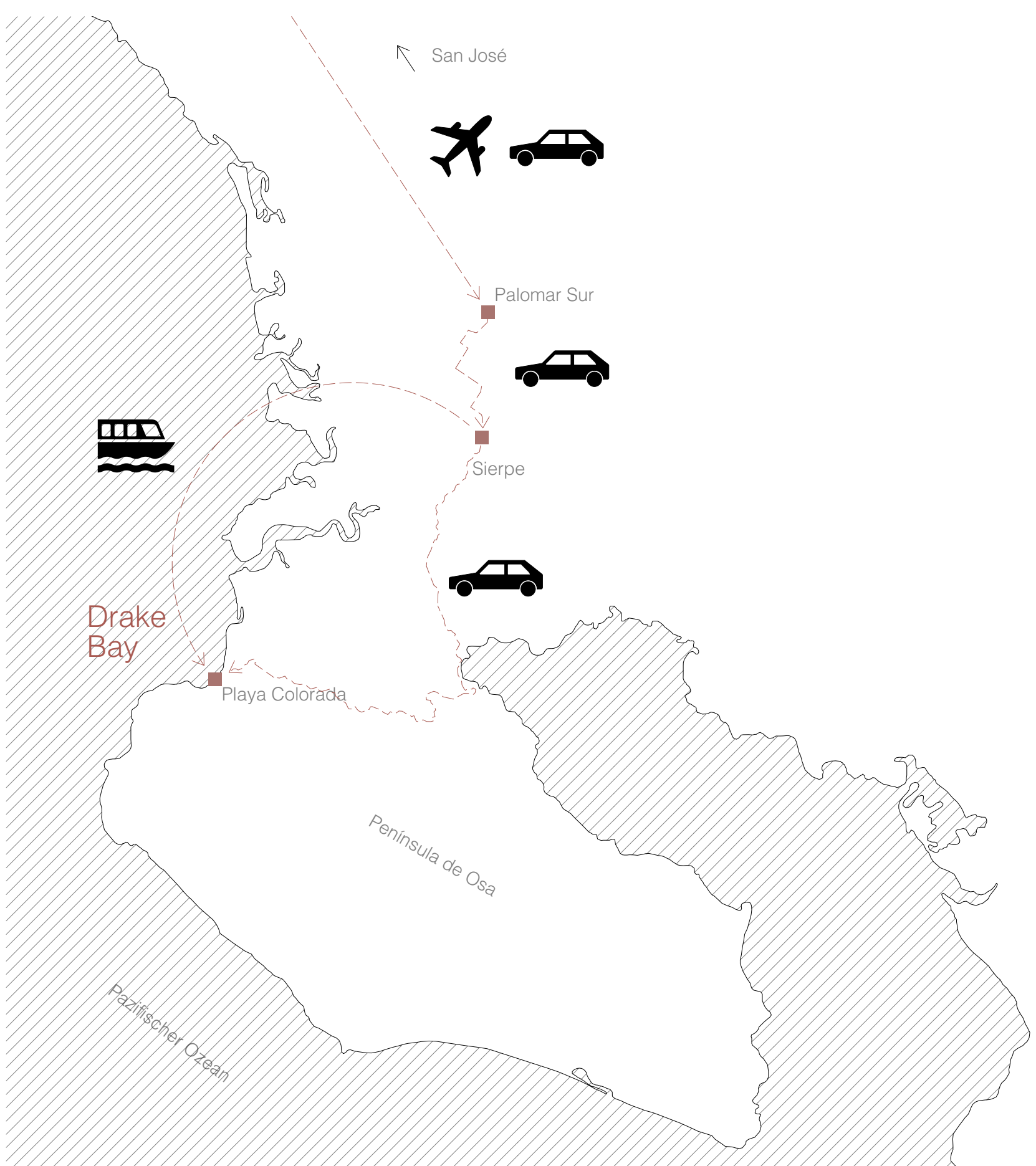
Bearbeiter: Mark Haupt



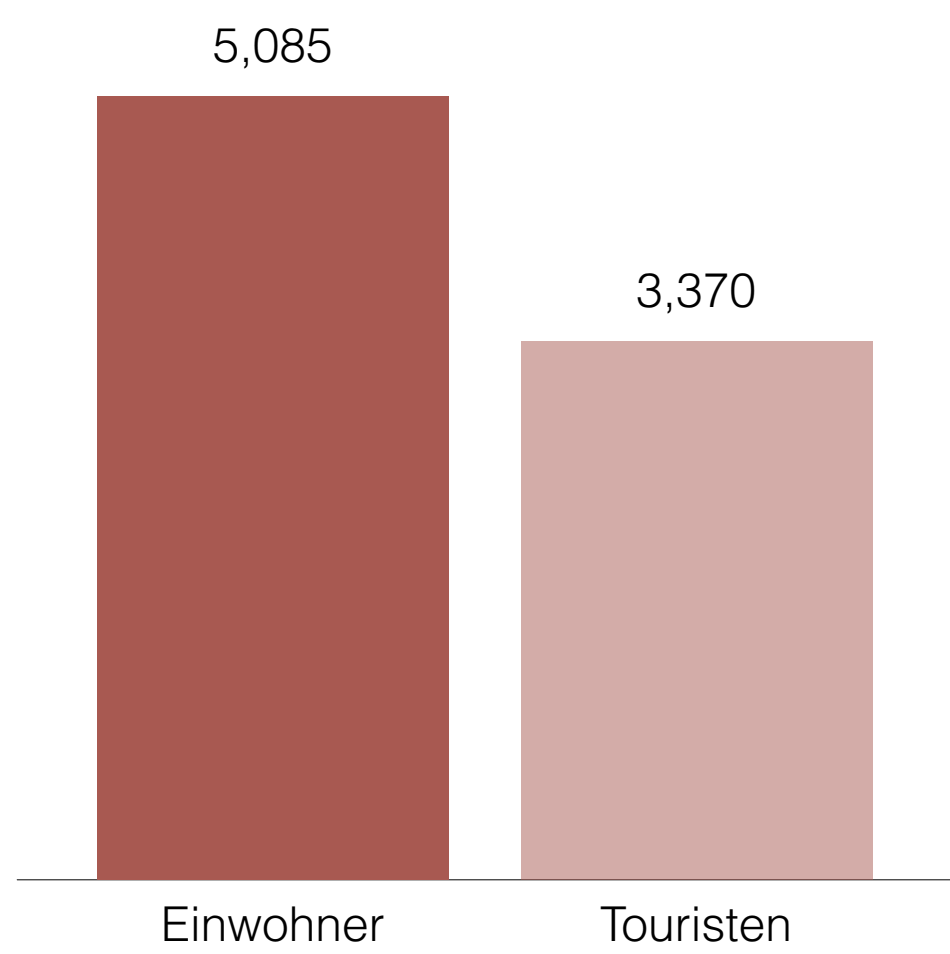
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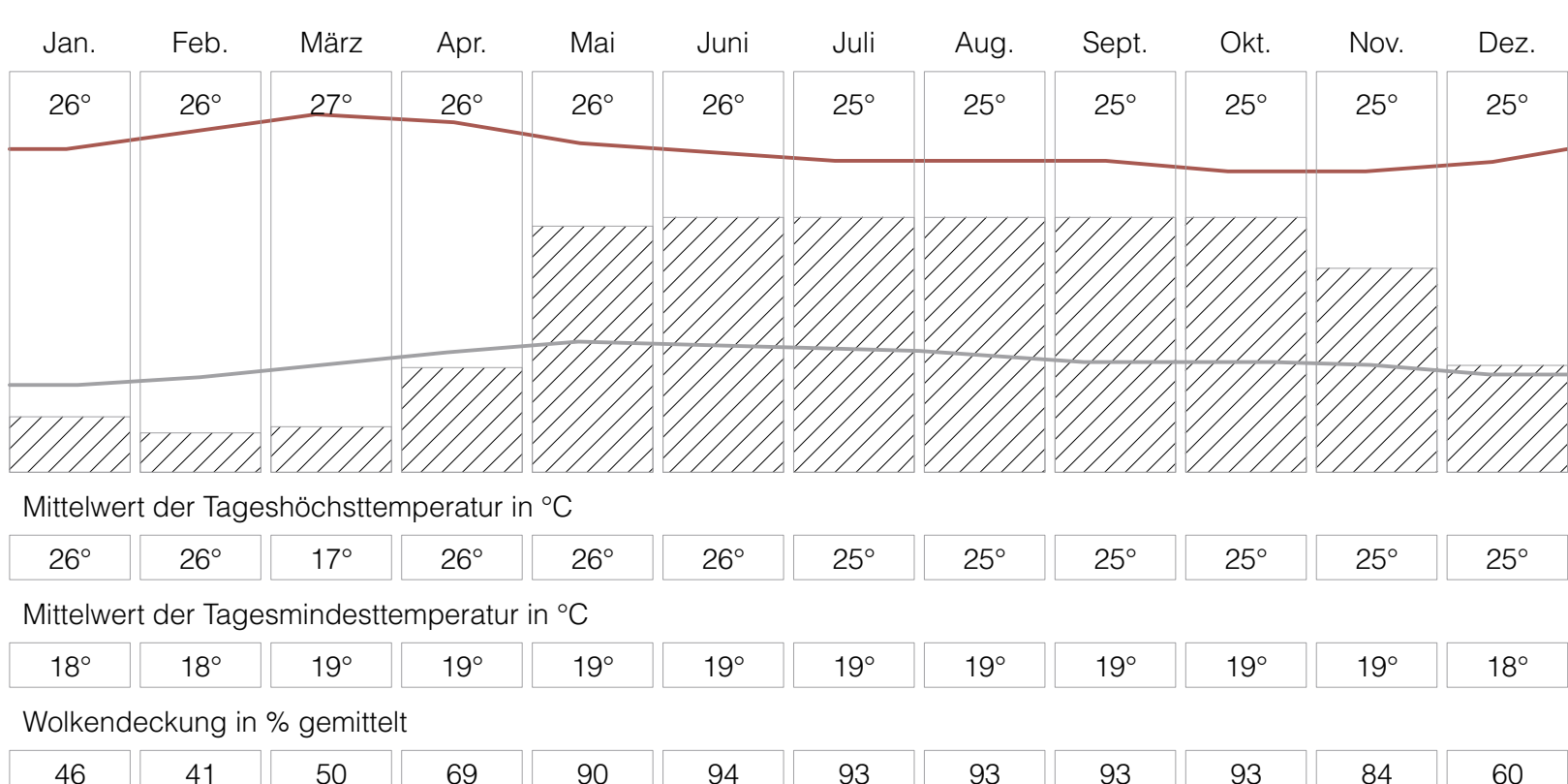
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Verhältnis Zahl der Einwohner Costa Ricas und jährliche Anzahl Touristen, 2019



Klimadaten



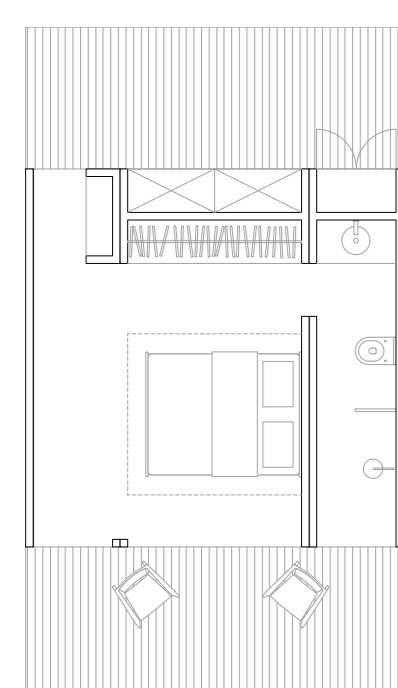


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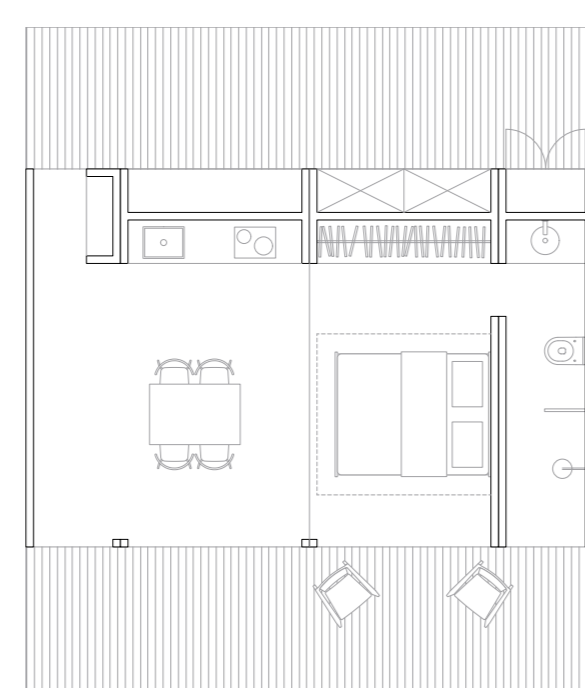
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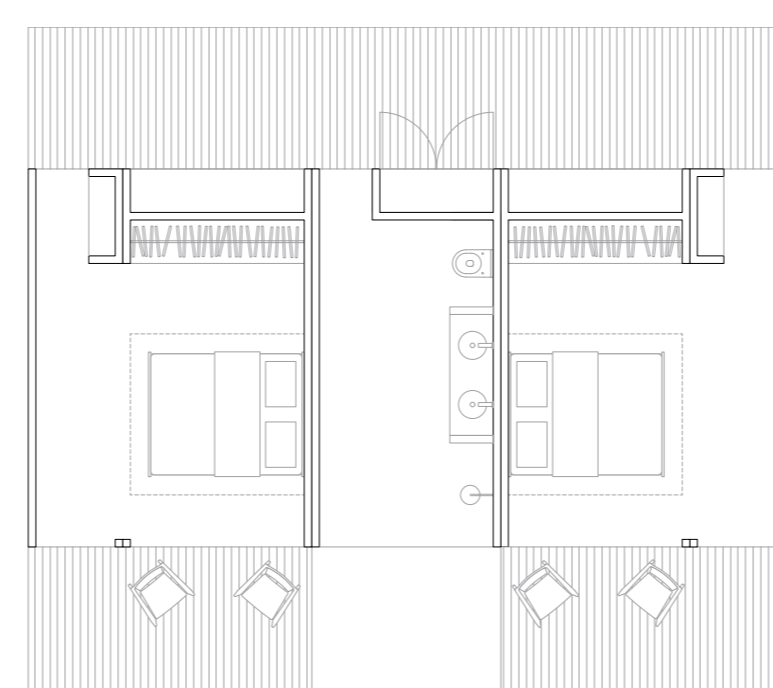
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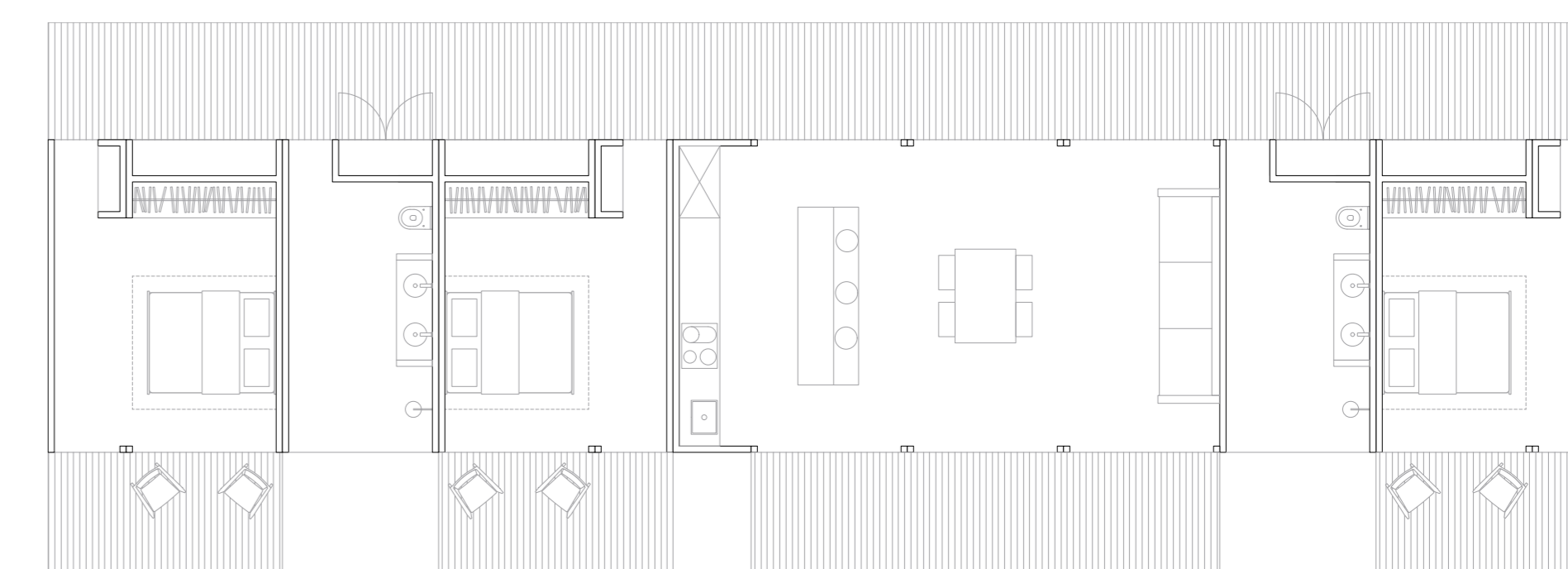
A B A



A B B A



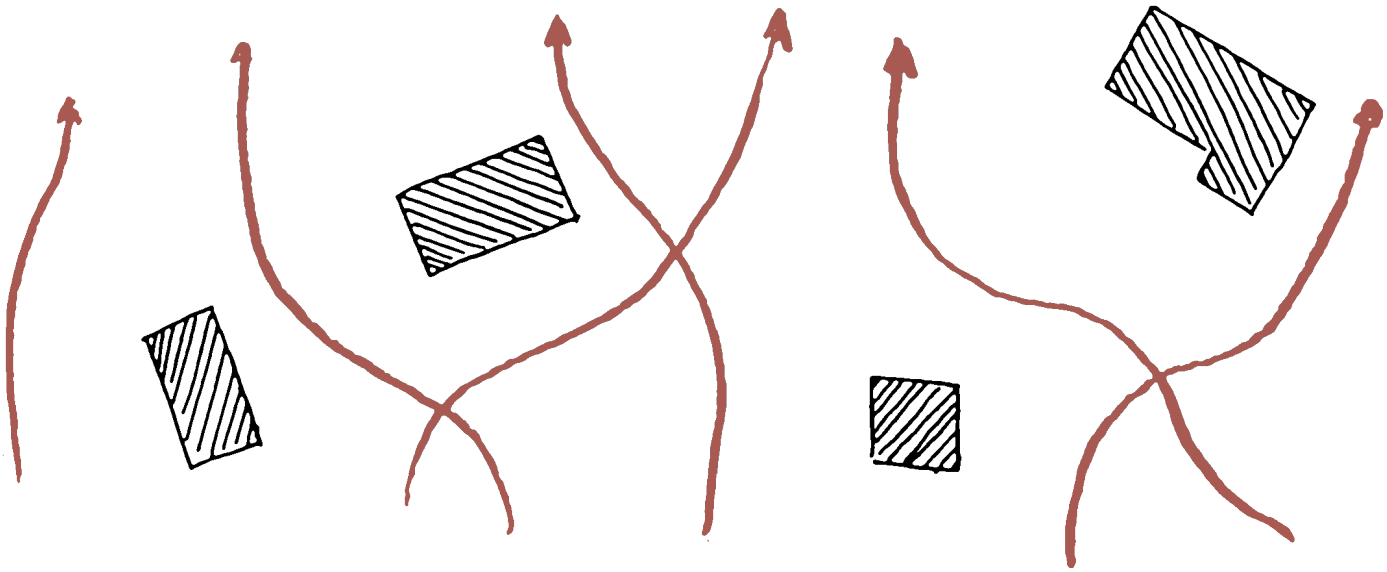
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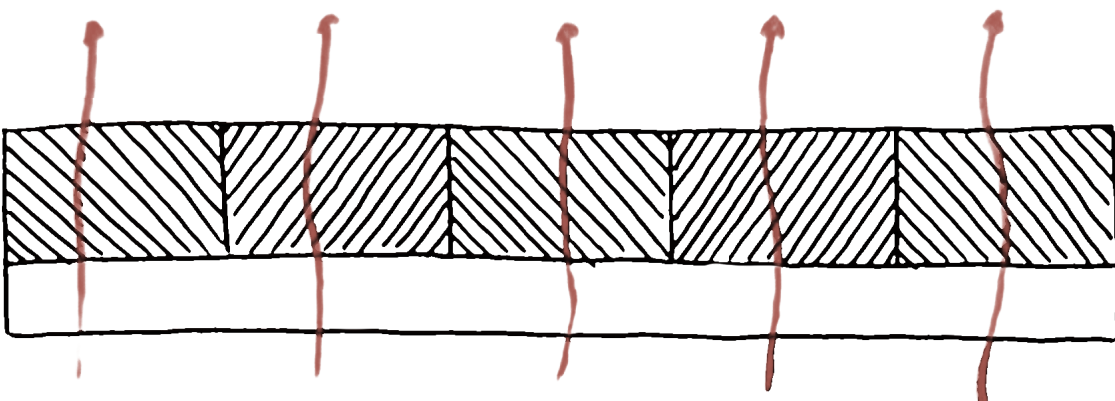
A B B B A A B B B B B A

# Bauprinzipien für tropische Zonen

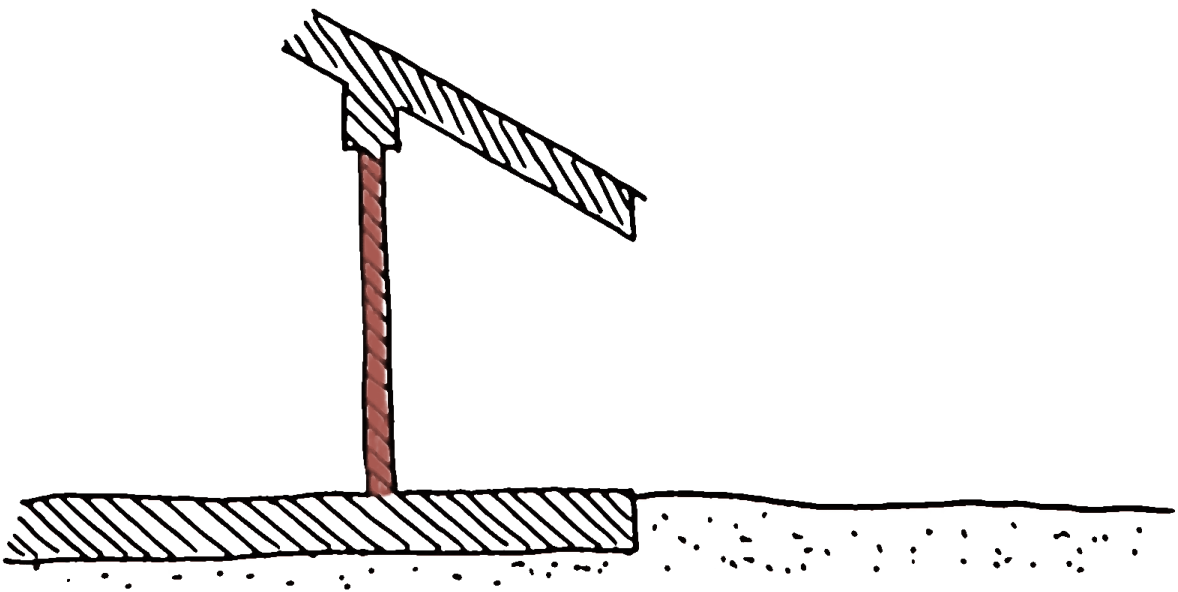
Abstände ●



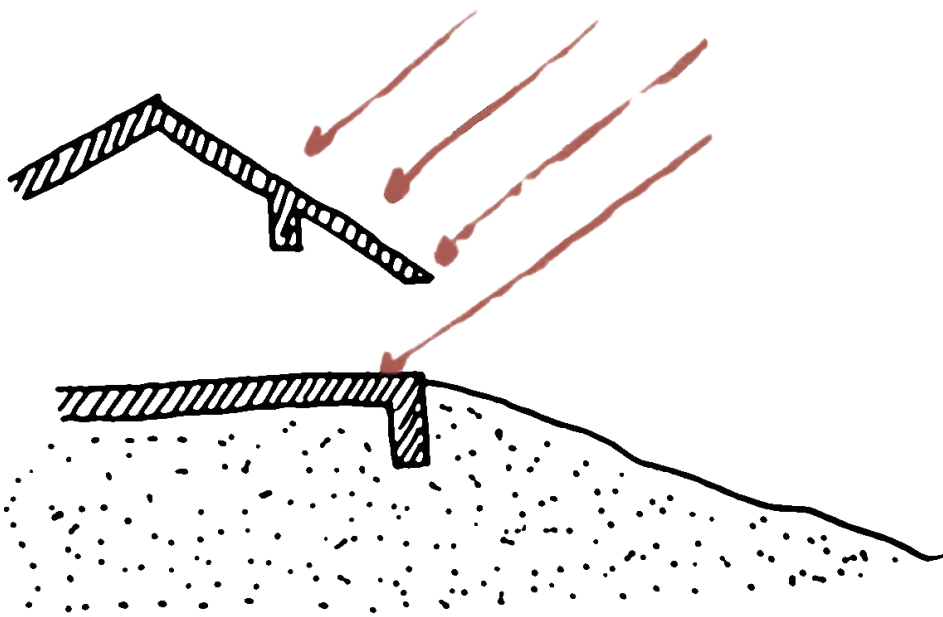
Luftbewegung ●



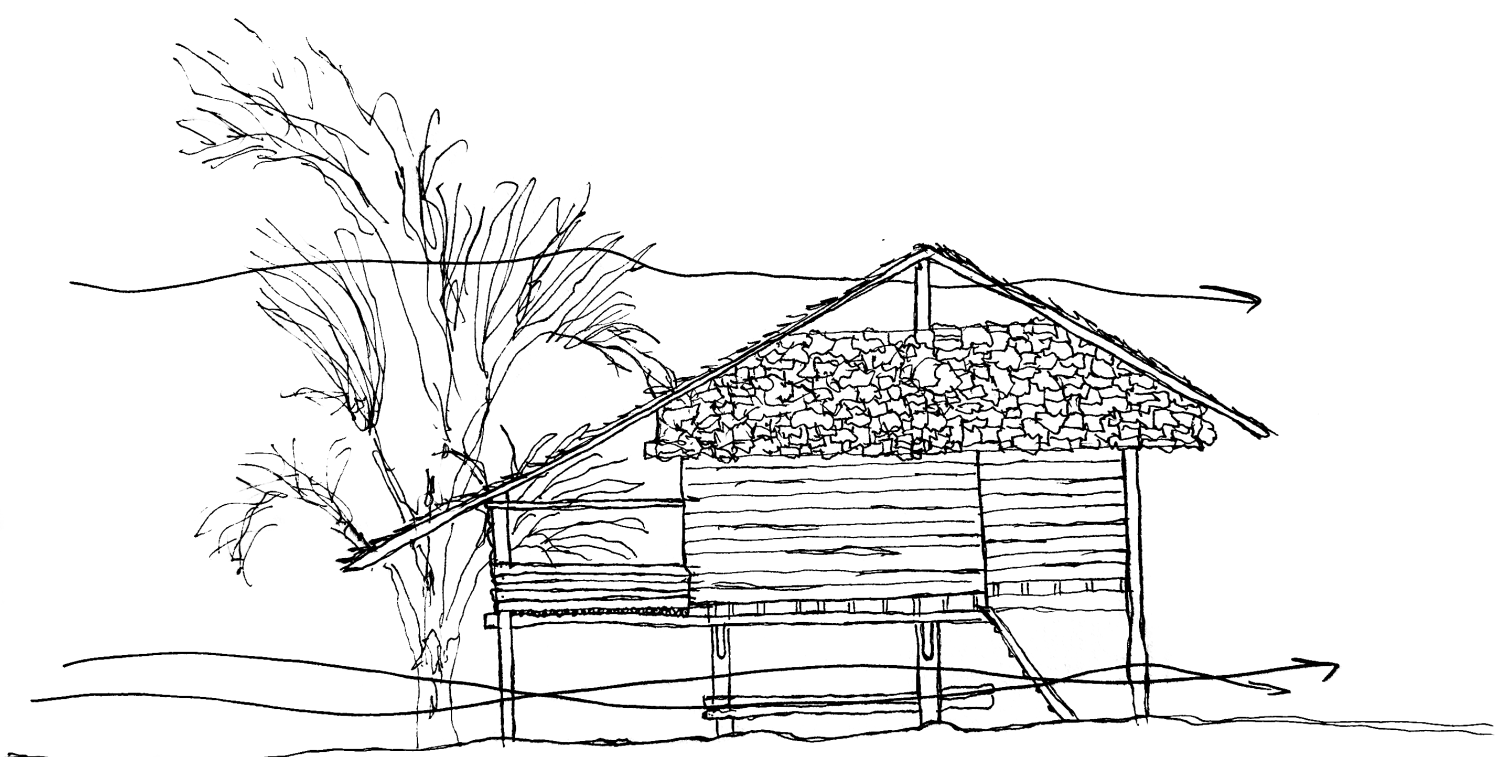
Wände ●

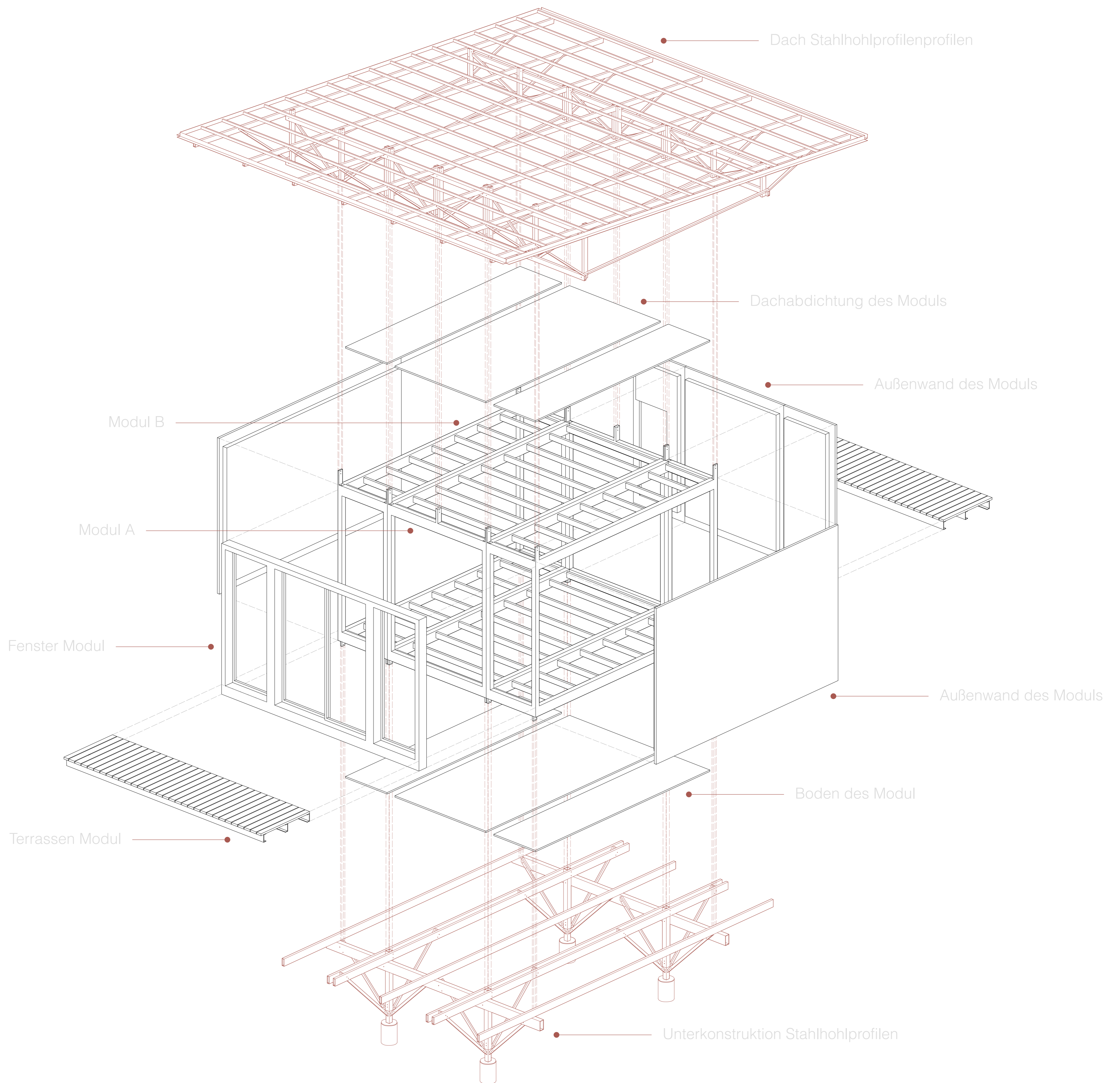


Wandöffnungen ●



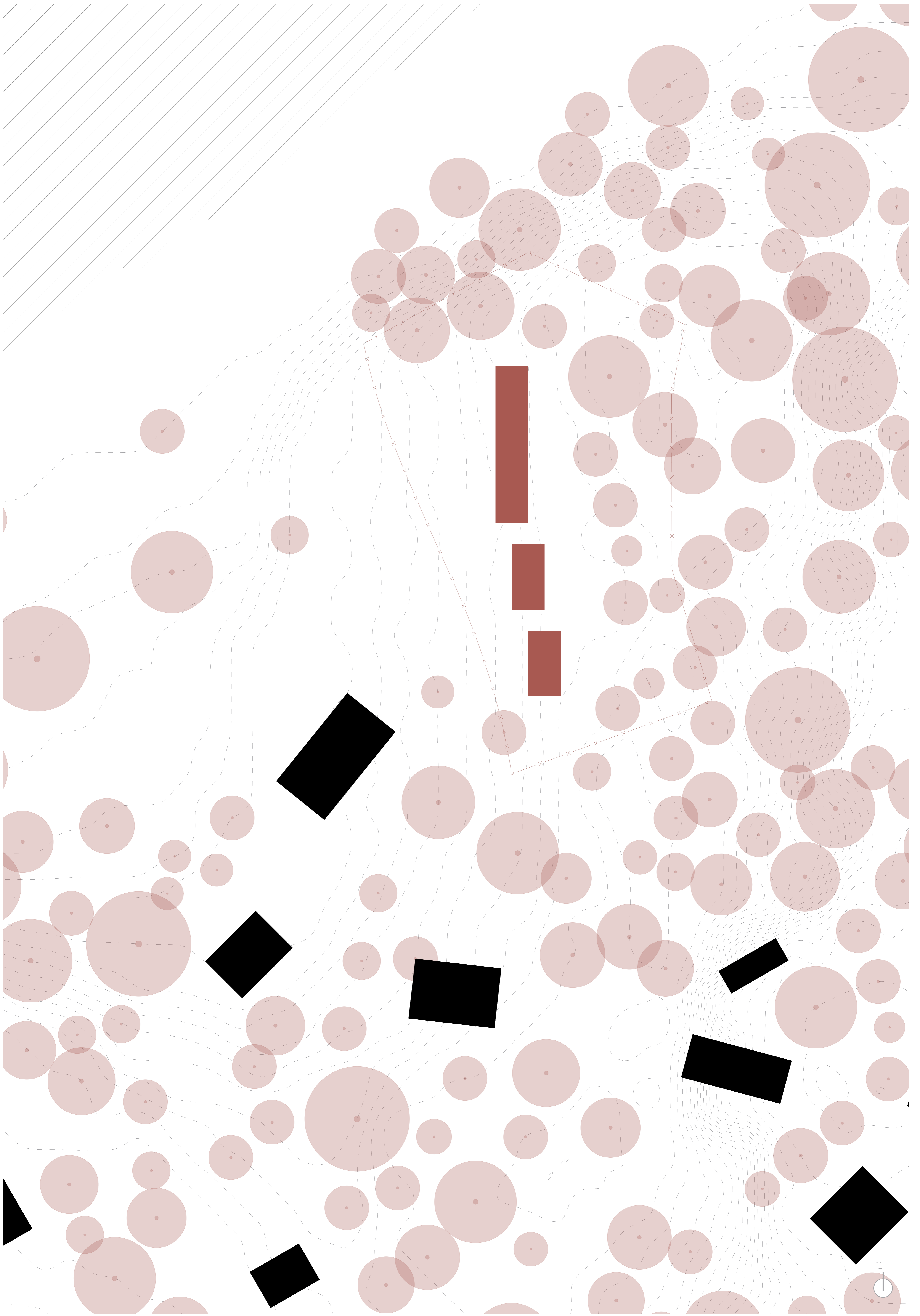
Urtypus Familienhaus Costa Rica ●



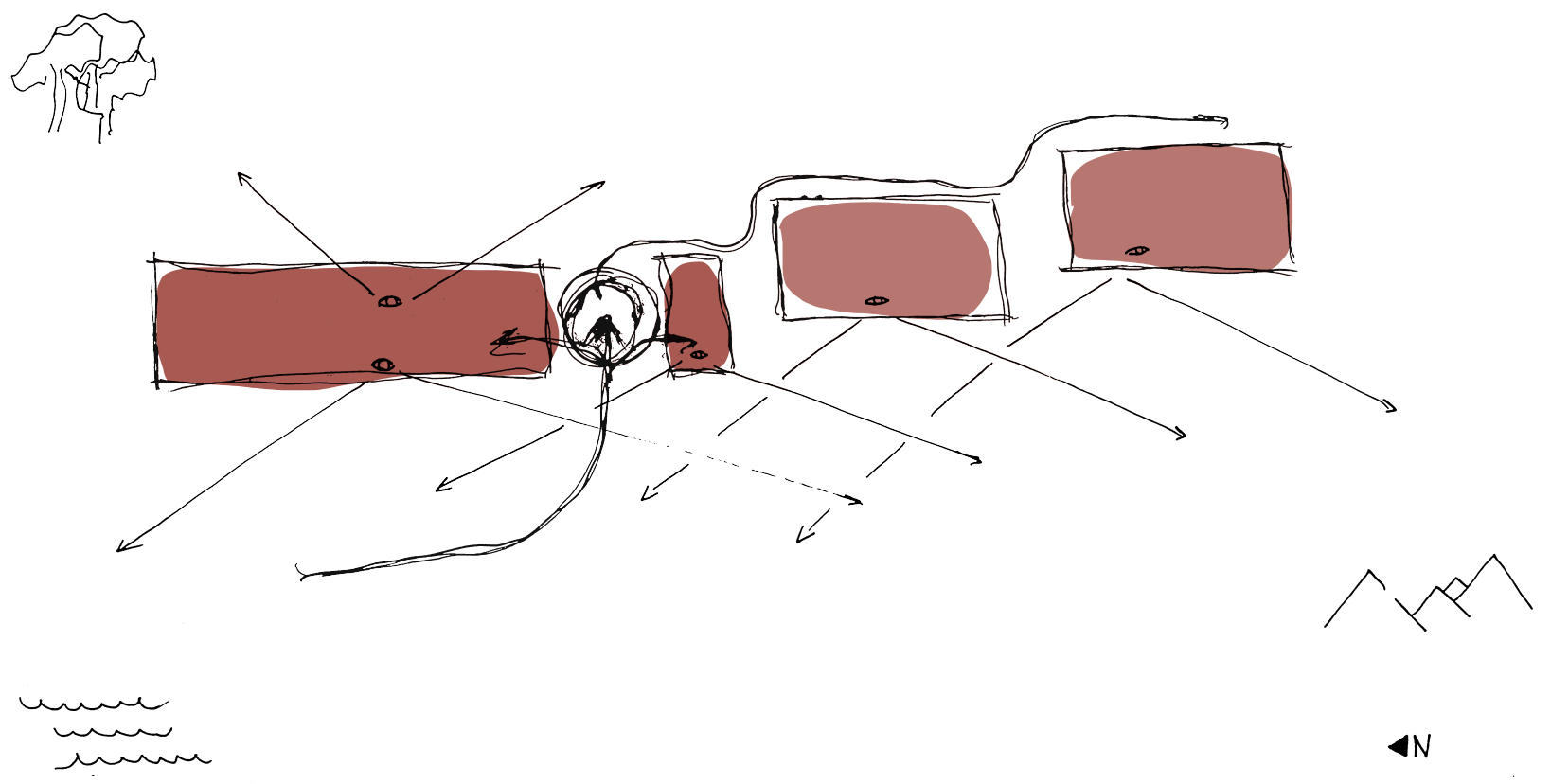


ex situ ●

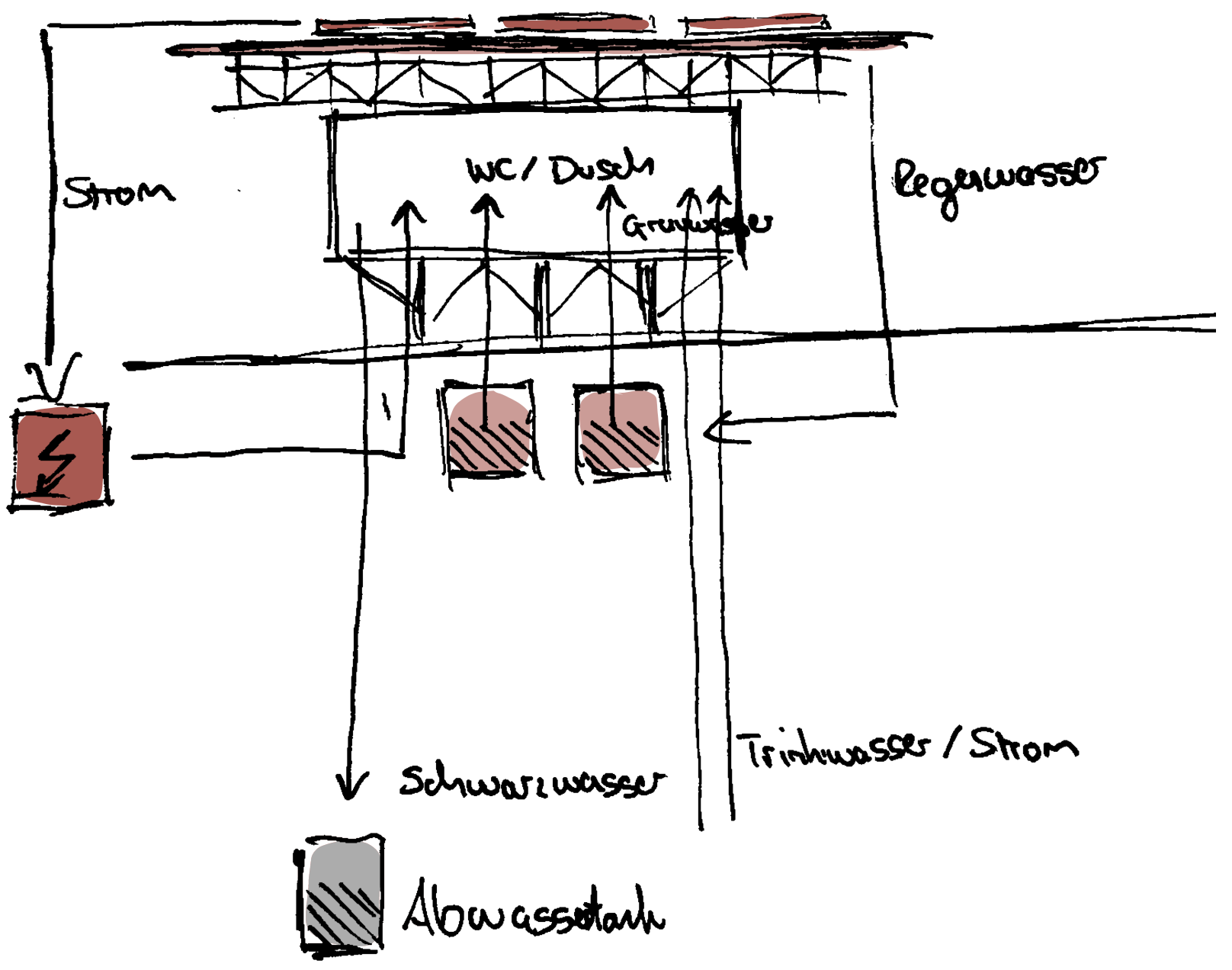
in situ ●



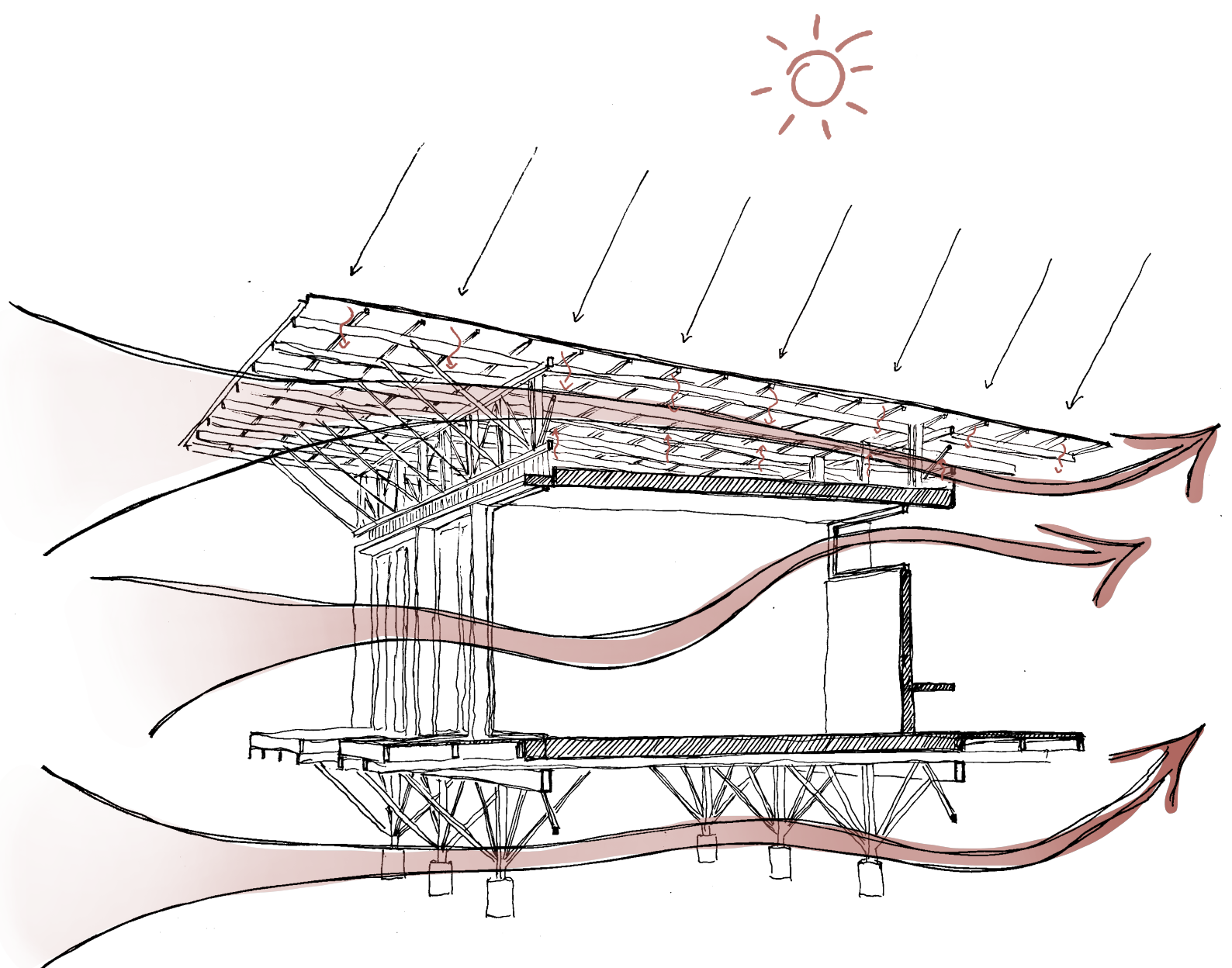
Durchwegungege und Sichtbezüge ●



Gebäudetechnikkonzept ●

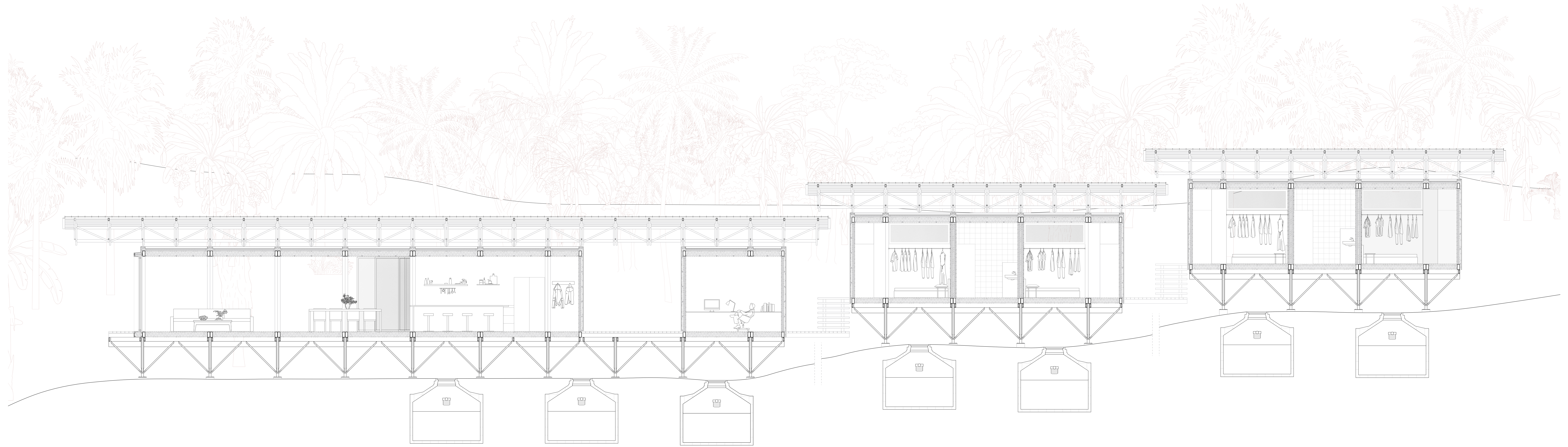


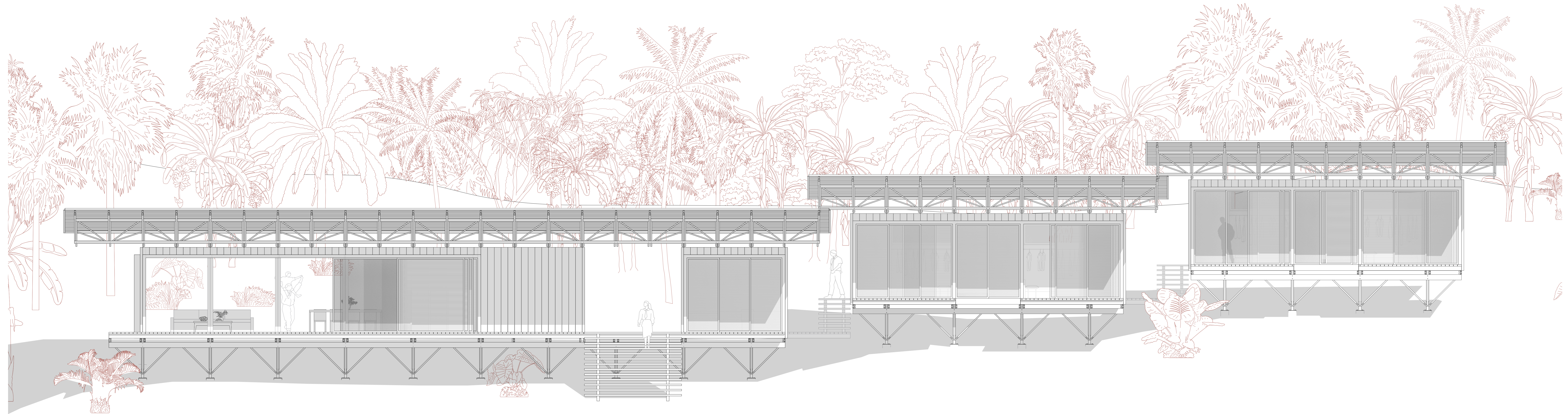
Klimakonzept ●

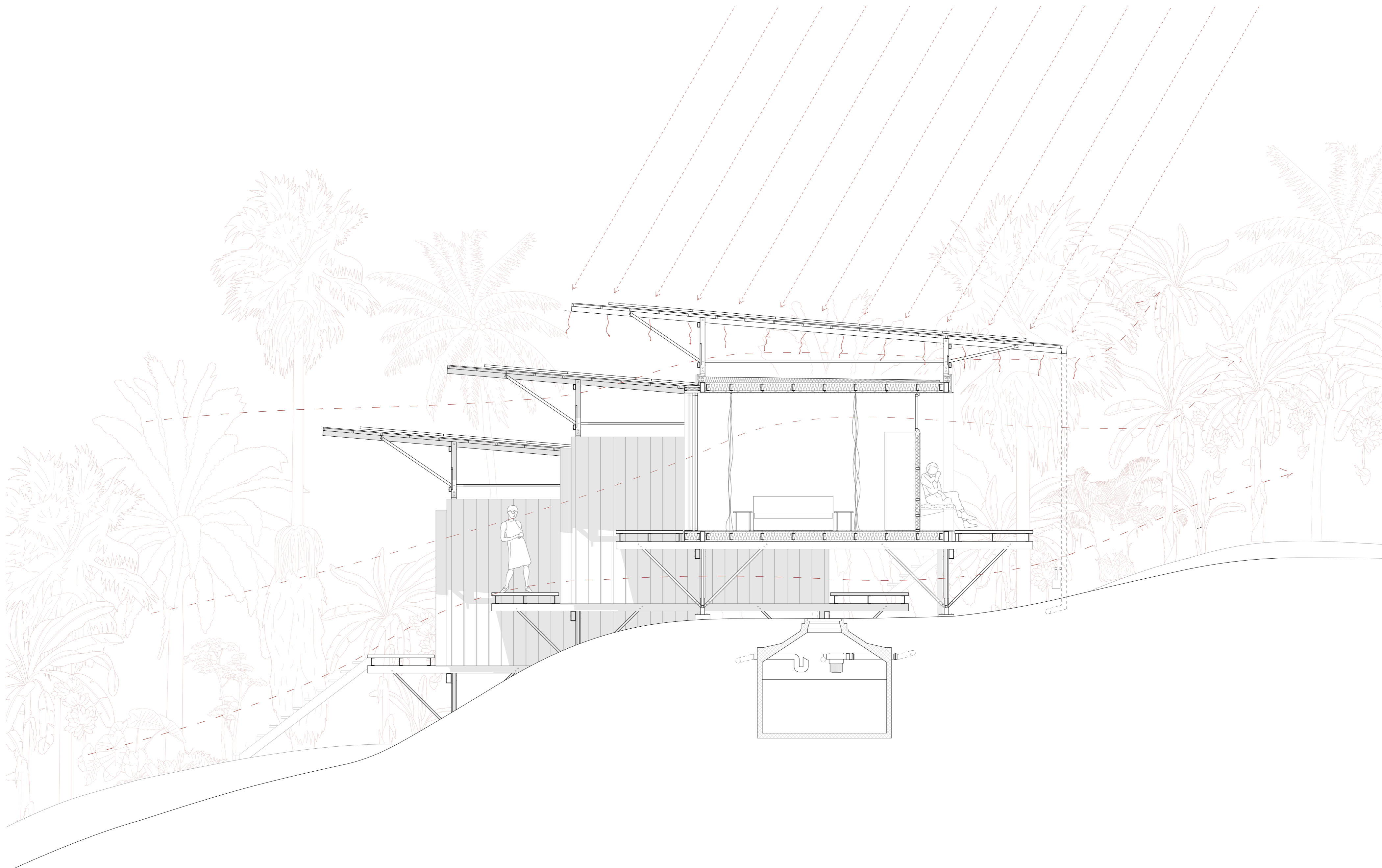














# Fügungen

## Dach ●

Photovoltaik  
UK Photovoltaik  
Stehfalzblech  
Stahlhohlprofil 50x30mm  
Sparren Stahlhohlprofil 100x50  
Fachwerk aus Stahlhohlprofilen:  
Vertikale/Horizontalen: 100x50mm  
Ausfachungen 50x30mm

## Dach/Decken Modul ●

Bitumenbahn 5mm  
Gefälledämmung  
Spanplatte 25mm  
U-Profil (U14)  
Hanfdämmung 140mm  
Dampfsperre  
Holzlattung 40x30mm  
(Installationsebene Elektrik)  
Sperrholzplatte 15mm

## Wandaufbau Modul ●

Stehfalzblech  
Konterlattung 40x30mm  
Unterspannbahn (diffusionsoffen)  
Spanplatte 25mm  
Aussteifungsprofile 75x40mm  
Hanfdämmung 75mm  
Dampfsperre  
Sperrholzplatte 15

## Fenstermodul ●

lackiertes Blech  
Spanplatte 25mm  
U-Profil (U14)  
Spanplatte 25mm  
lackiertes Blech  
Profile für Fenster und Raffstoren  
Schiebefenster und Schieberaffstoren

## Bodenaufbau Modul ●

Sperrholzplatte 15  
Spanplatte 35mm  
U-Profil (U140)  
Hanfdämmung 140mm  
Spanplatte 25mm  
Unterspannbahn (diffusionsoffen)

## Terrassenmodul ●

U Profil (U16)  
Teak Holz aus der Region 50x145mm

## Gründung ●

Horizontalen Stahlhohlprofile  
Querachse 150x100mm  
Horizontalen Stahlhohlprofile  
Längsachse 200x100mm  
Stützen 100x100mm  
Stahlhohlprofile 45° 50x30  
Stahlfuß Sonderanfertigung  
Einzelfundament aus Stahlbeton  
d=300mm

