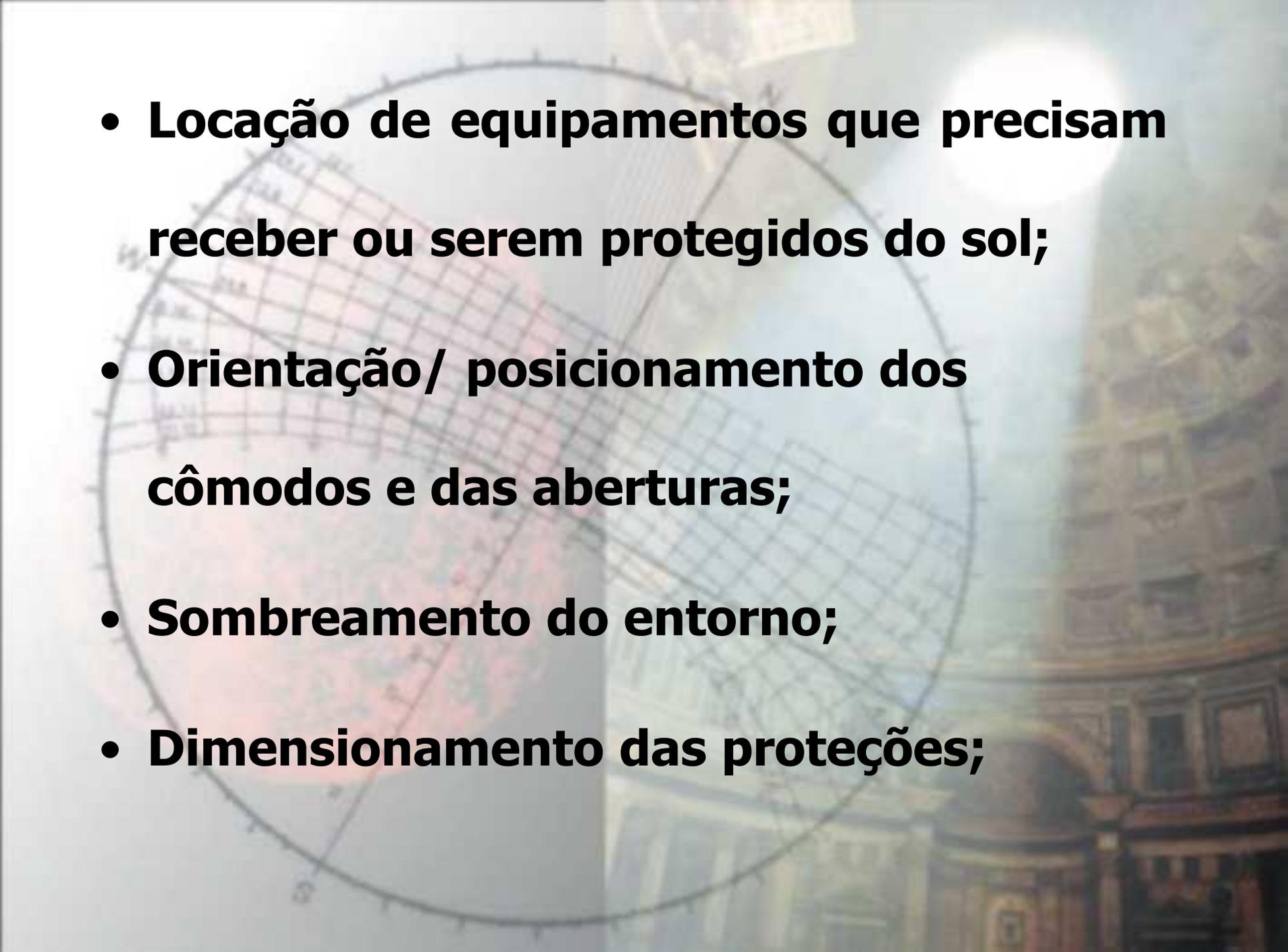
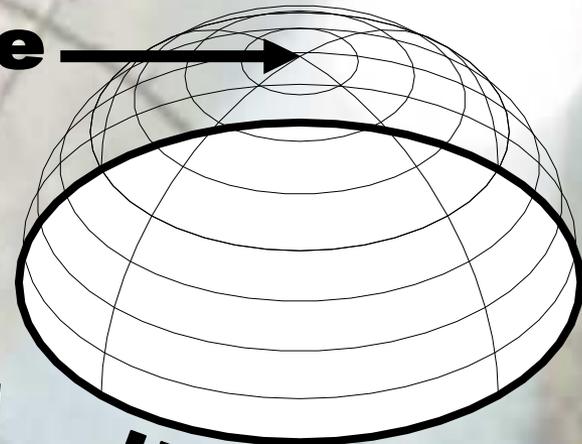


The background features a circular architectural diagram, likely a dome's structural or lighting plan, overlaid on a photograph of a building's interior dome. The diagram includes a grid and various lines, with a red-shaded area on the left side. The photograph shows the ornate, multi-tiered structure of a dome under a bright light source.

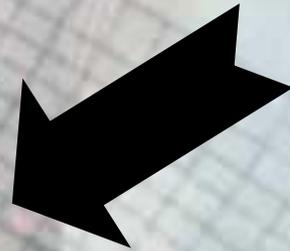
# **Mascaramento do Entorno e Insolação**

- 
- The background of the slide is a composite image. On the left, there is a circular sun path diagram (solar diagram) with a grid of lines representing the sun's trajectory throughout the year. The diagram is semi-transparent and overlaid on a blurred image of a building's facade, which appears to be a classical or neoclassical structure with a prominent dome and arched windows. The overall lighting is bright, suggesting a sunny day.
- **Locação de equipamentos que precisam receber ou serem protegidos do sol;**
  - **Orientação/ posicionamento dos cômodos e das aberturas;**
  - **Sombreamento do entorno;**
  - **Dimensionamento das proteções;**

**Zênite** →



**Horizonte**

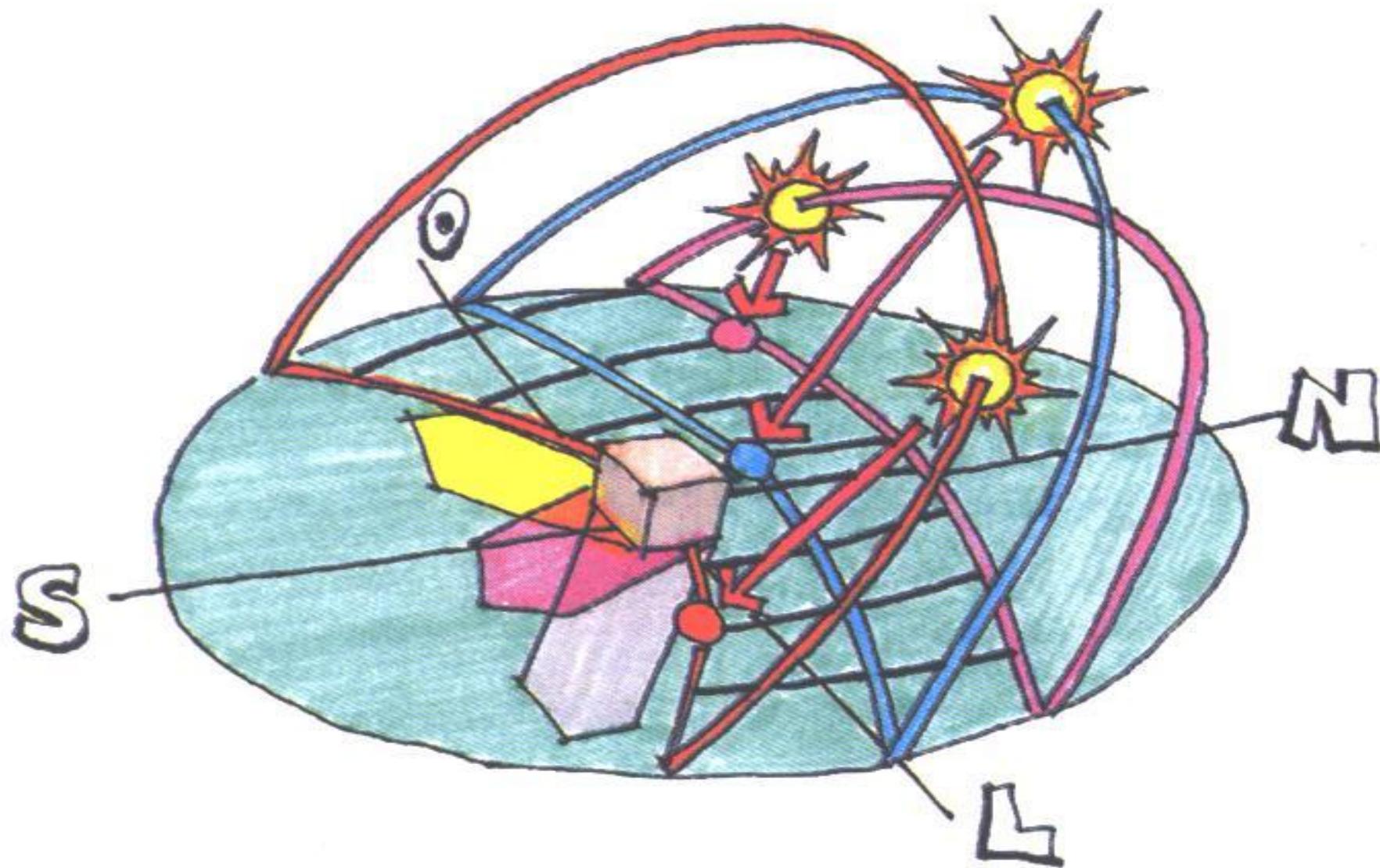


**Horizonte**



**Zênite**

**projeção estereográfica**



encontrando o sol



**máscara do entorno**



**máscara do entorno**



**máscara do entorno**

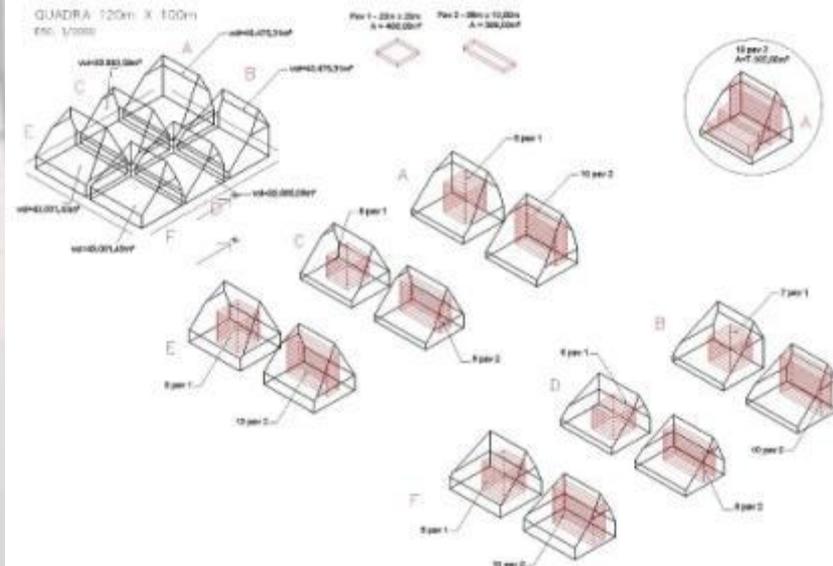
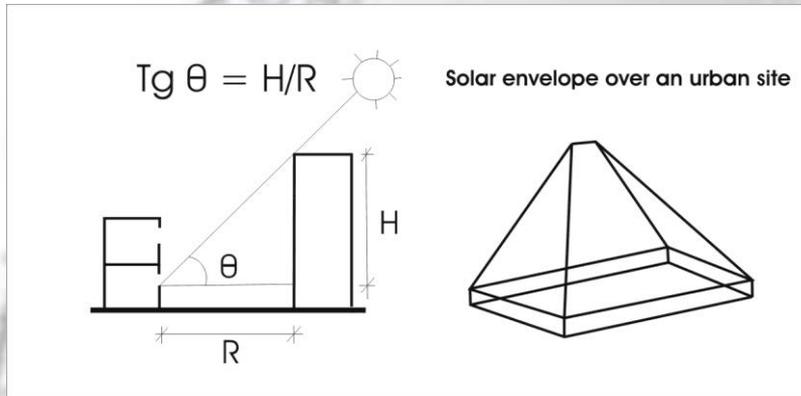


**máscara do entorno**



**Impacto de Edifícios Altos**

# Envelope Solar

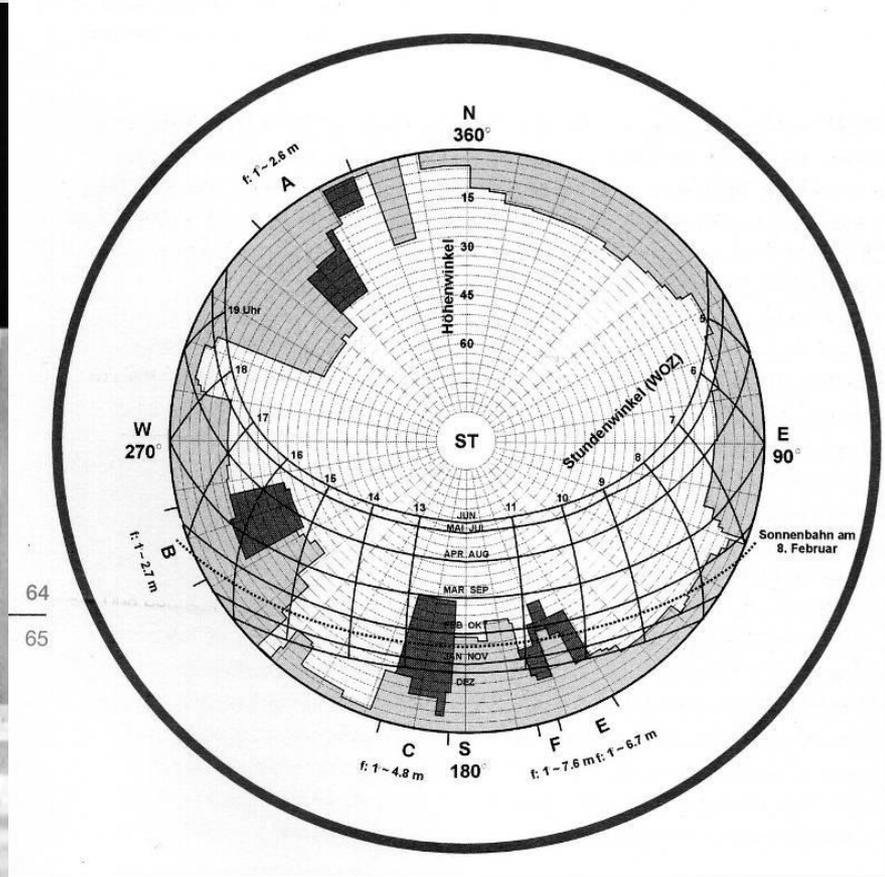




**Ruas de Manhattan – acesso restrito à luz (céu) e ao sol**



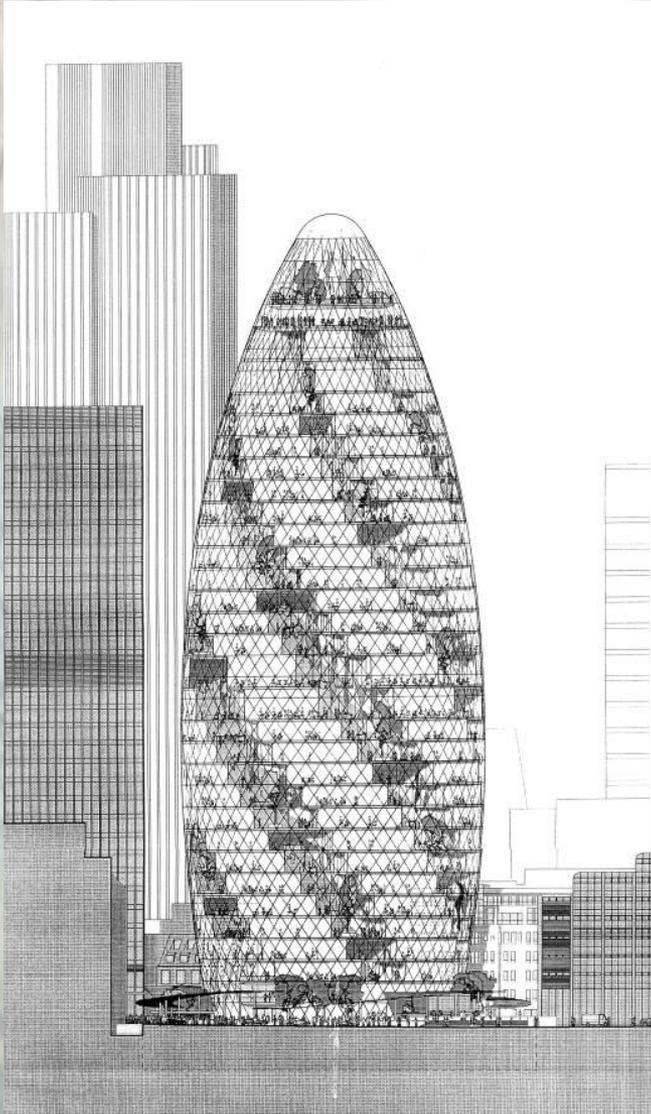
Rotterdam, masterplan of tall buildings - criteria for solar access and daylight

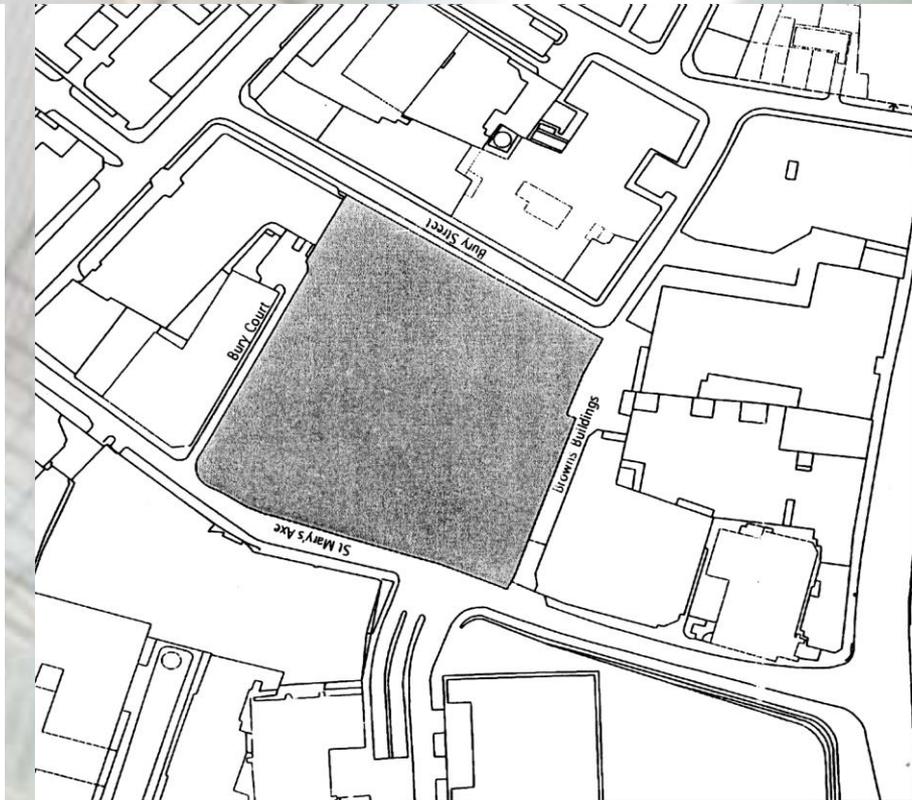
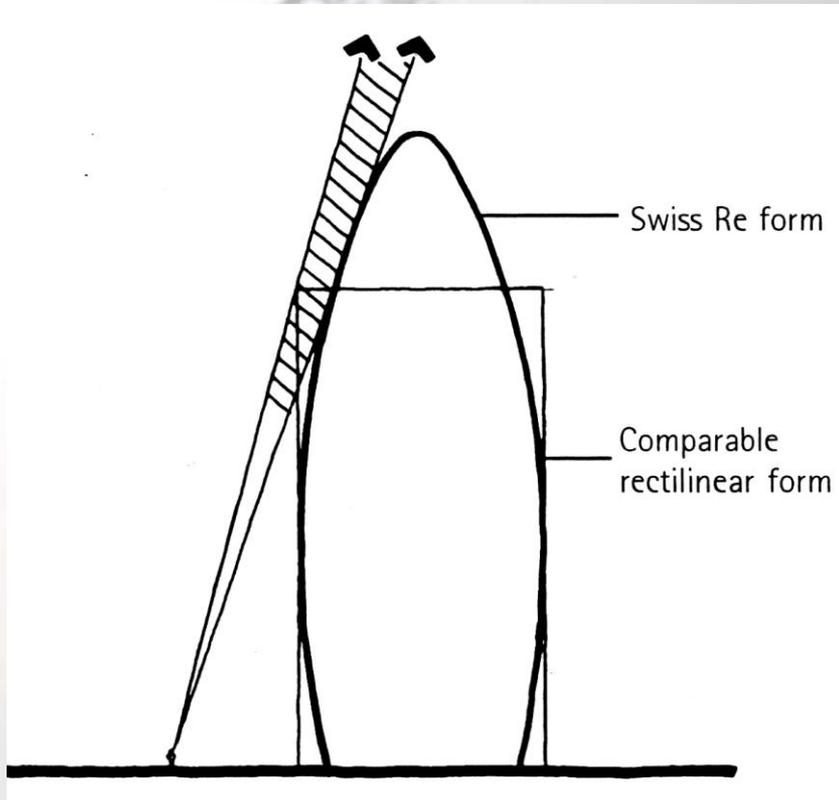


64  
65

Frankfurt , masterplan for tall buildings - criteria for solar access and daylight

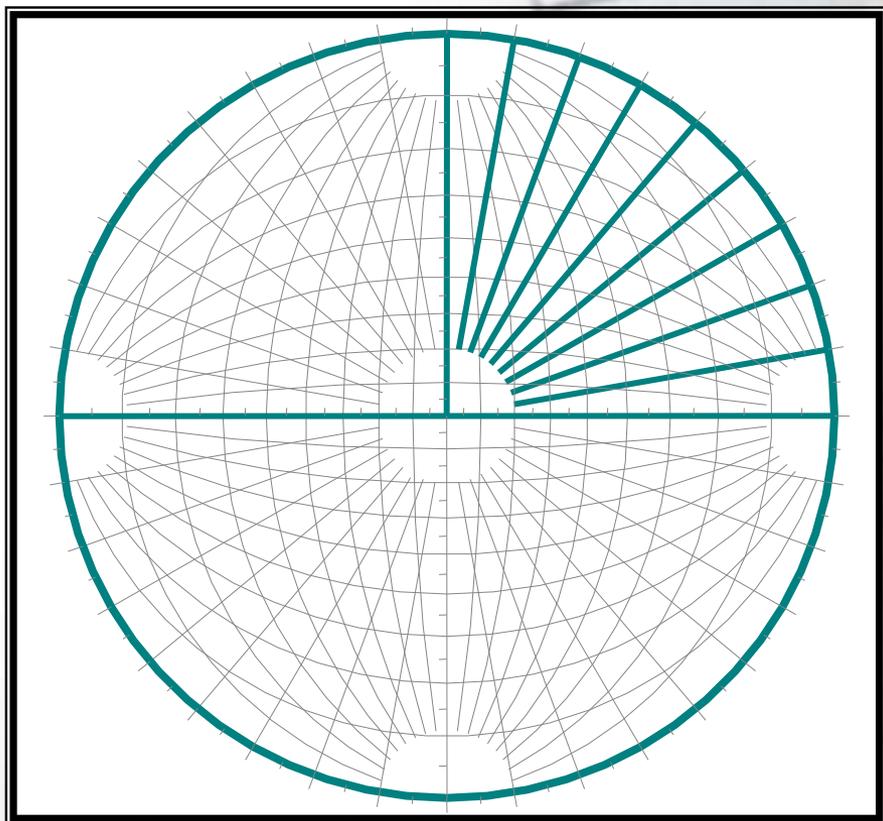
**30th Saint Mary Axe, London**



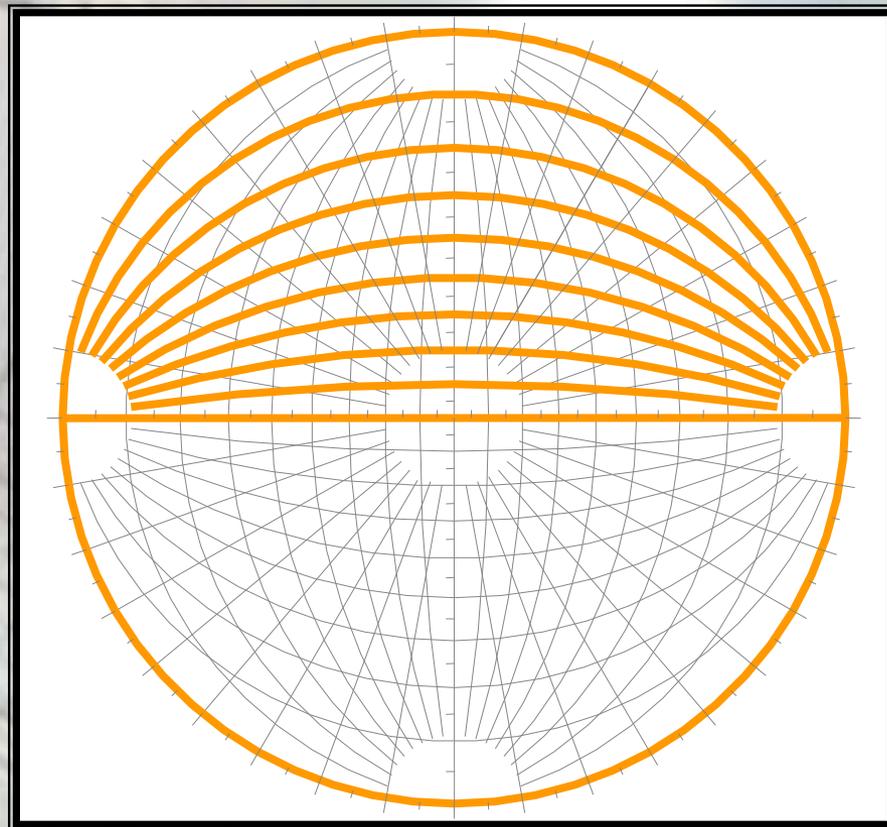


# Leadenhall, Londres



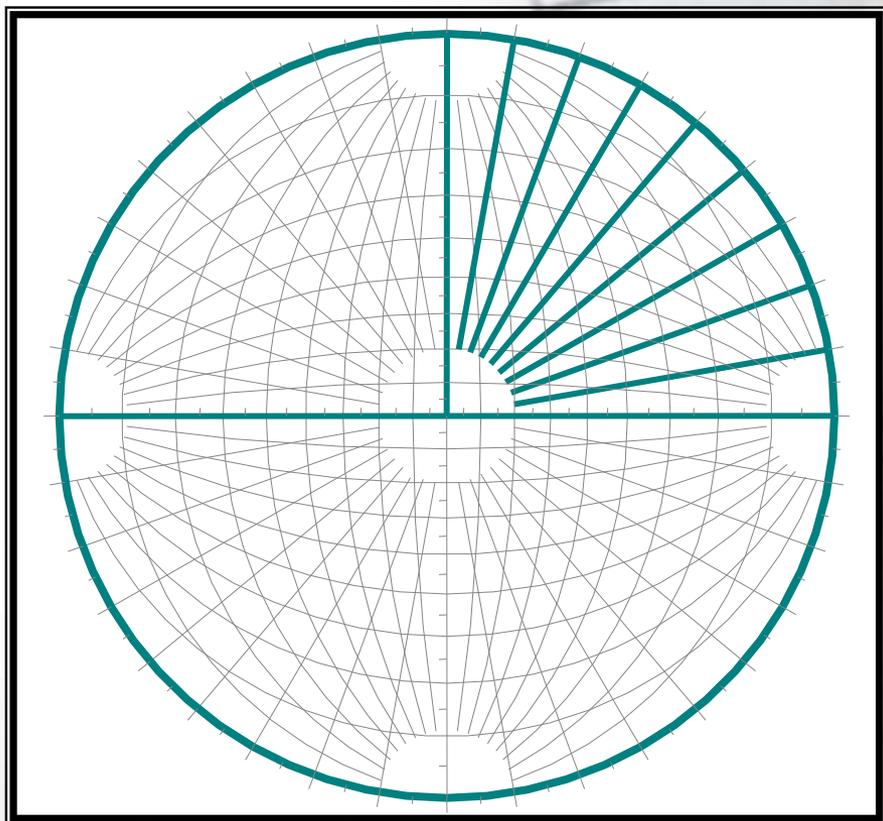


**Ângulos  $\beta$**   
**Linhas verticais**

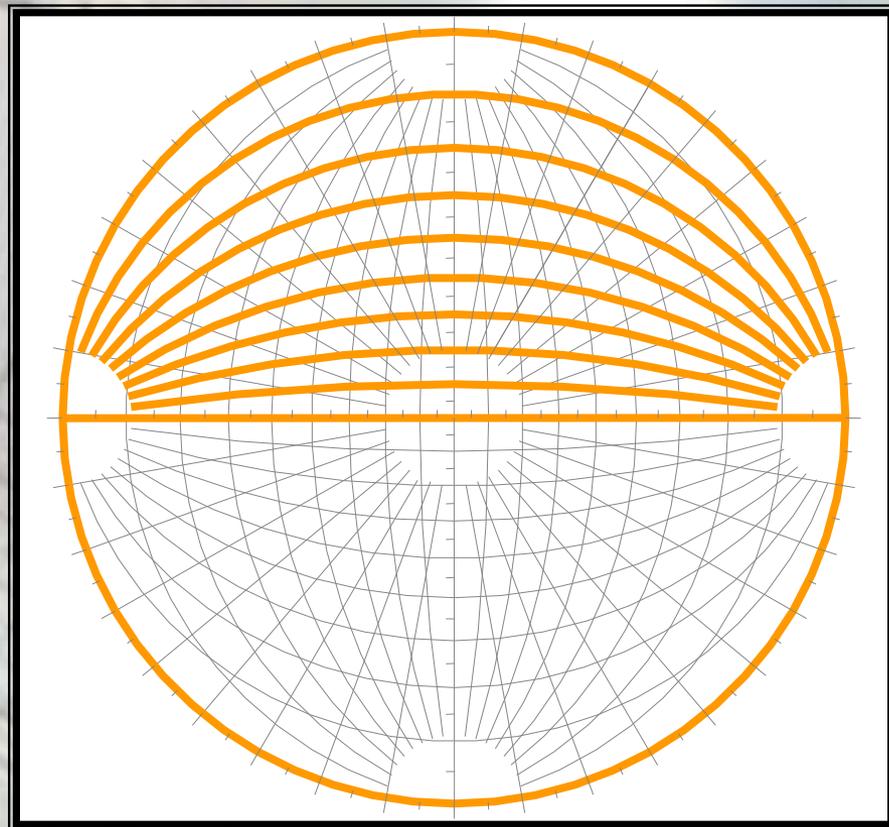


**Ângulos  $\alpha$**   
**Linhas horizontais**

**máscara do entorno**



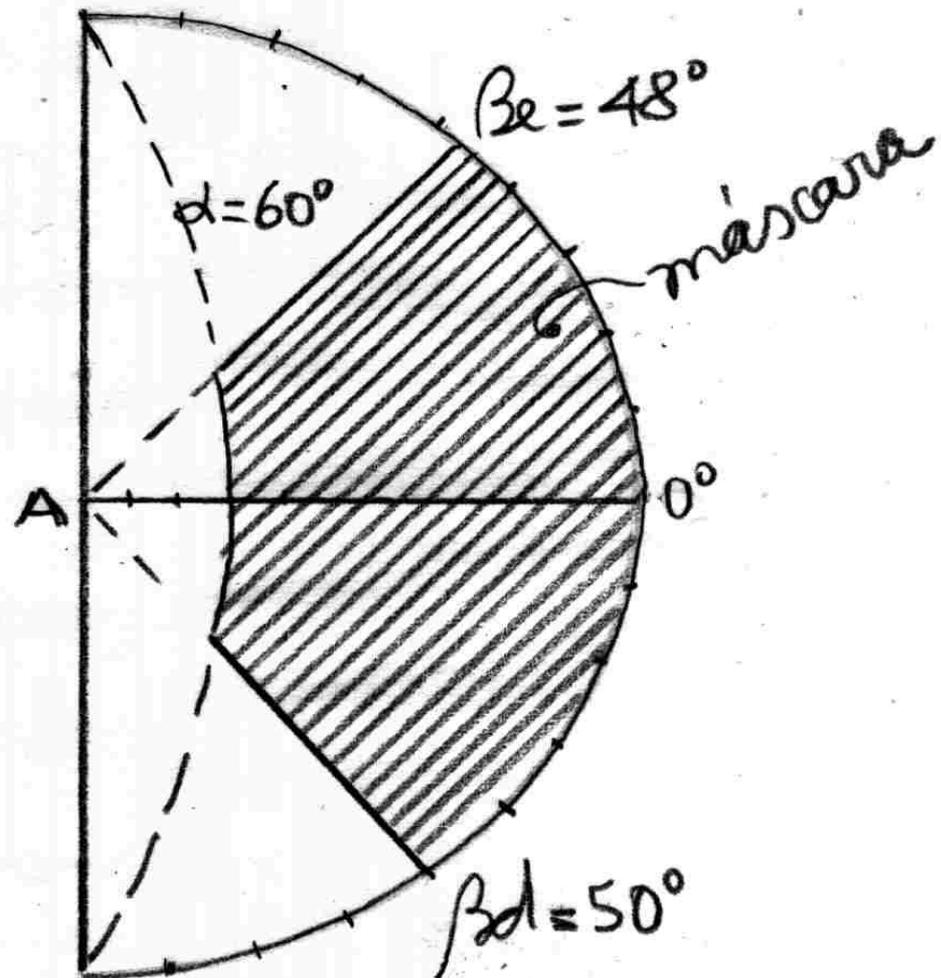
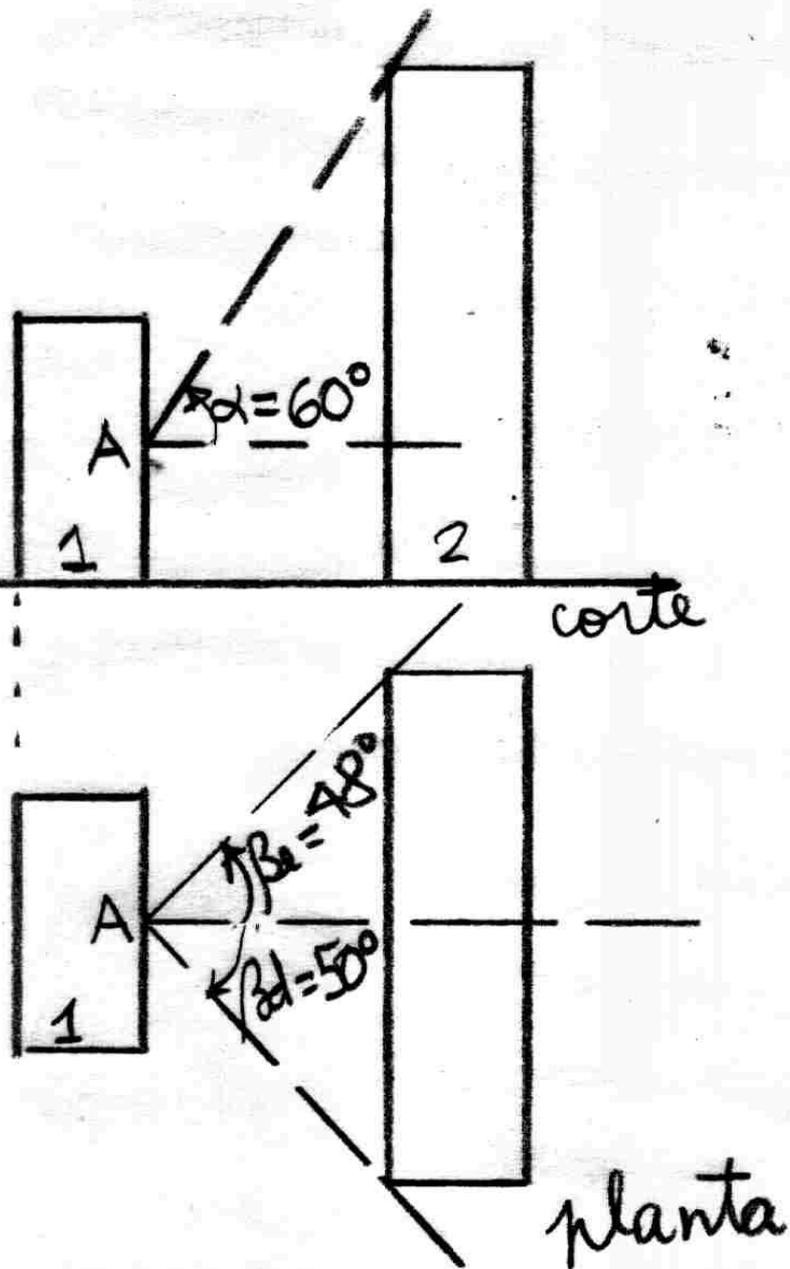
**Ângulos  $\beta$**   
**Linhas verticais**

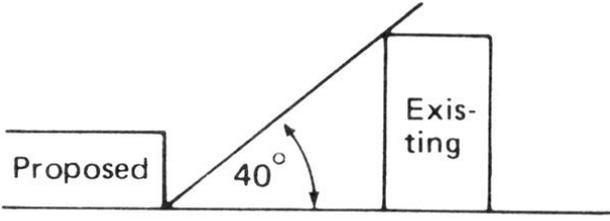
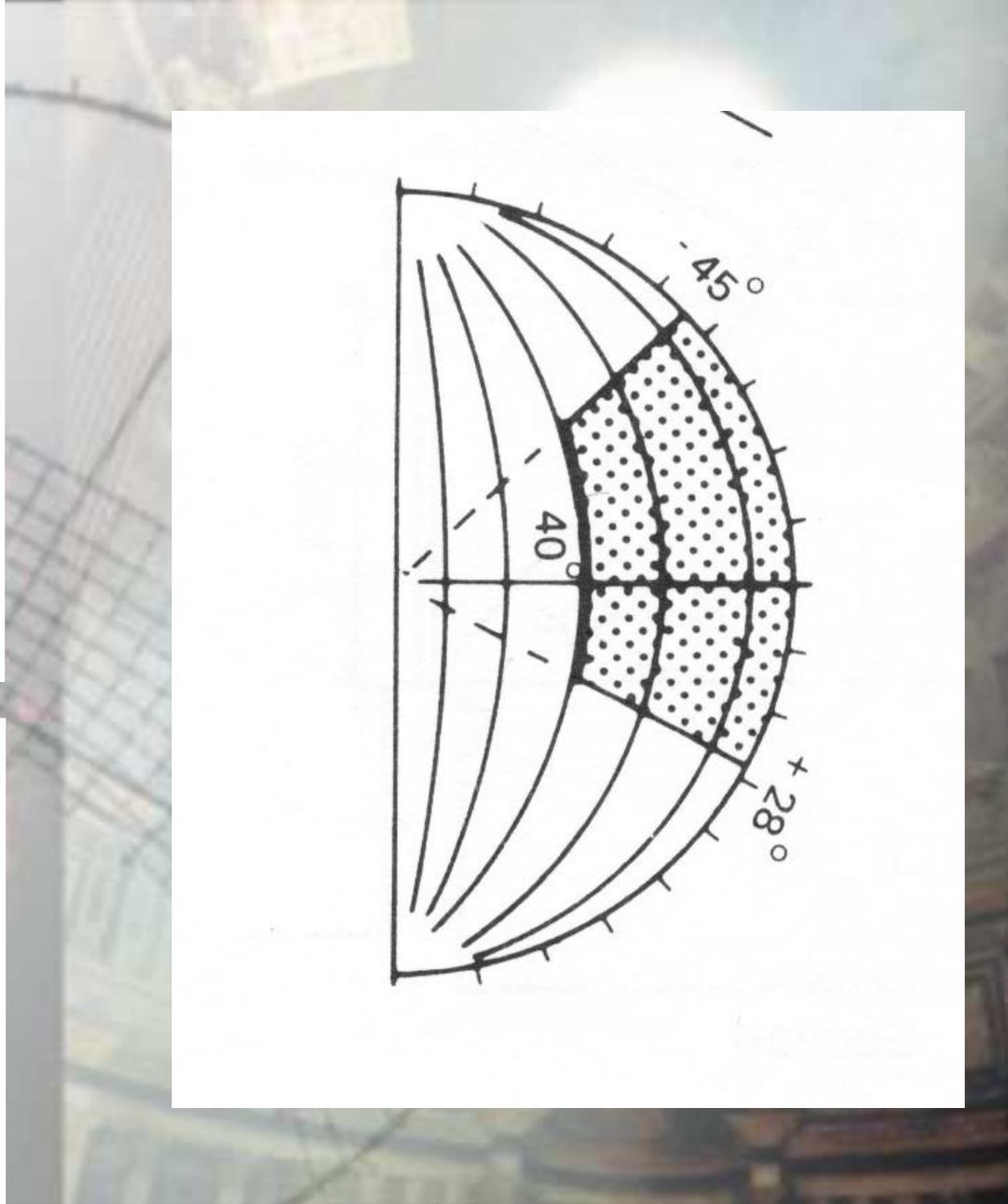


**Ângulos  $\alpha$**   
**Linhas horizontais**

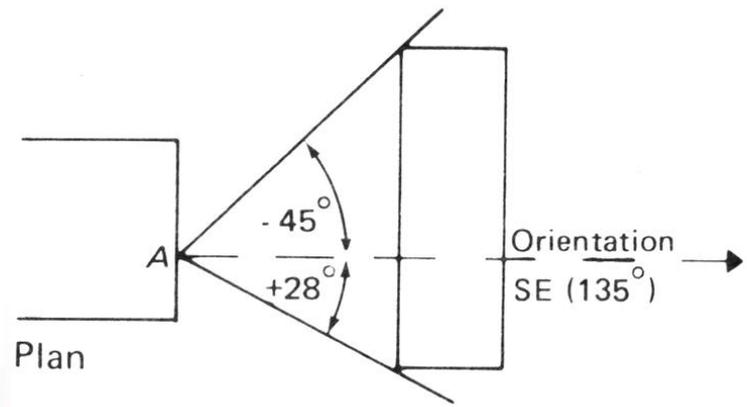
**máscara do entorno**

# TRAÇADO DE MÁSCARAS DE OBSTRUÇÕES EXTERNAS

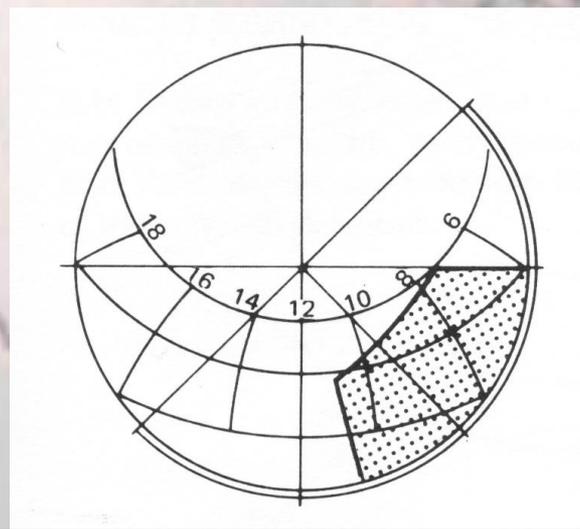
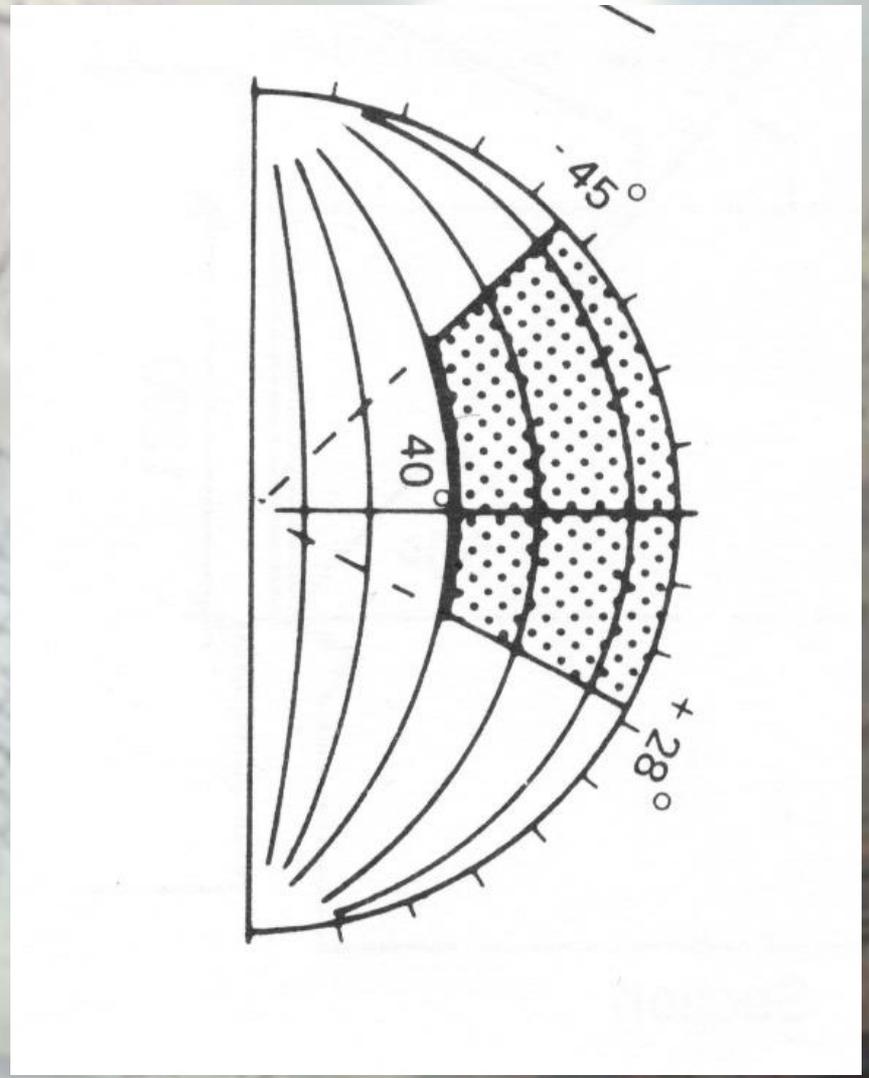




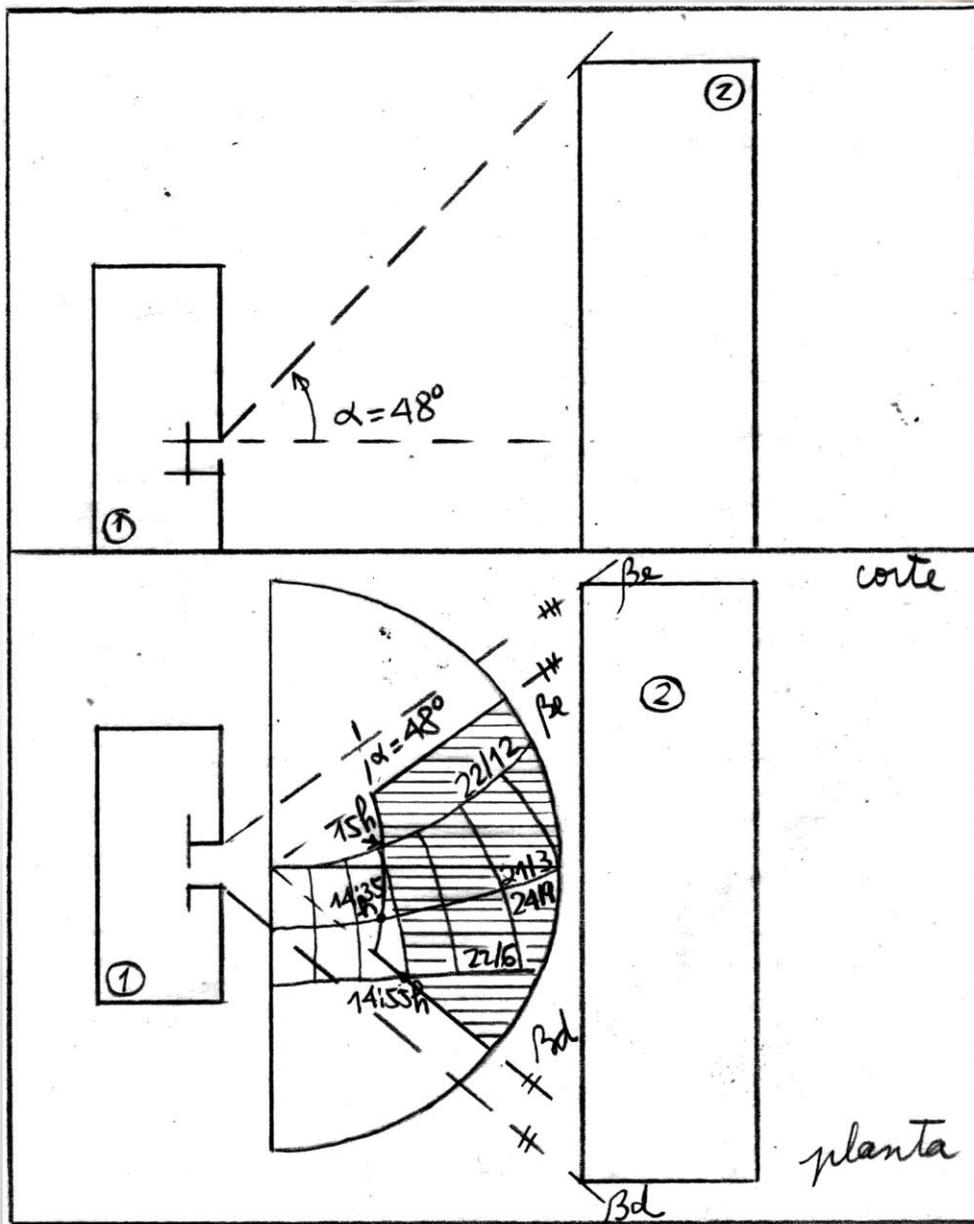
Section



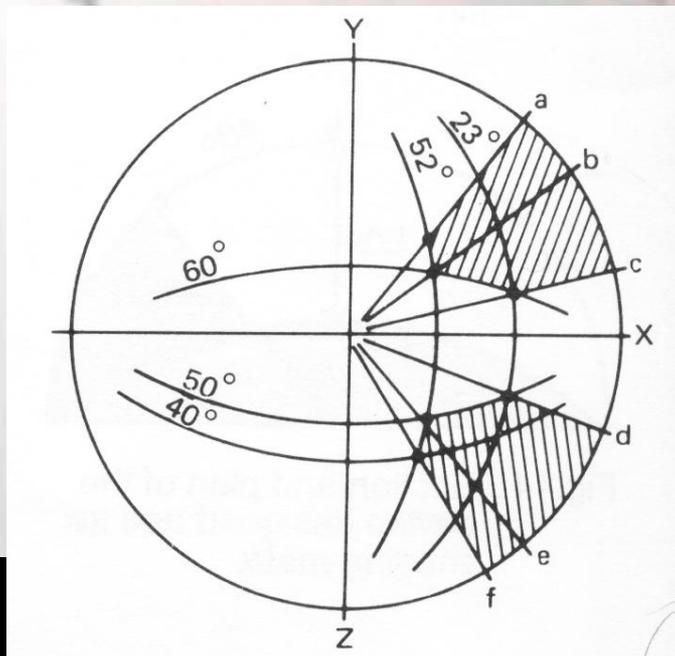
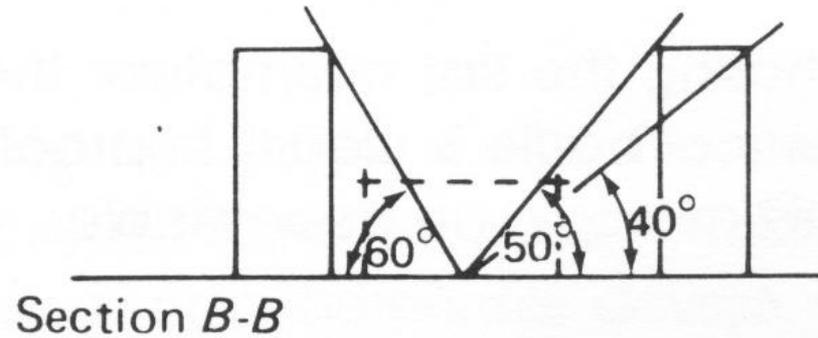
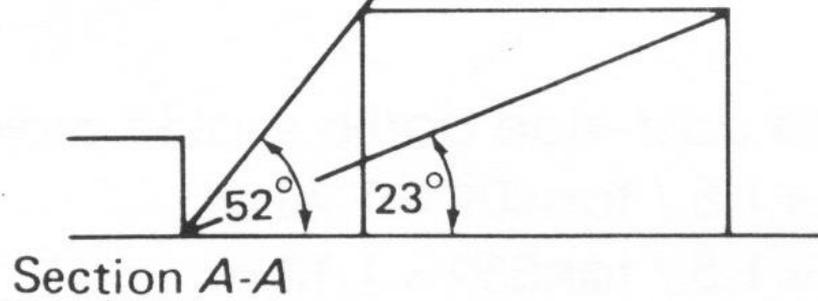
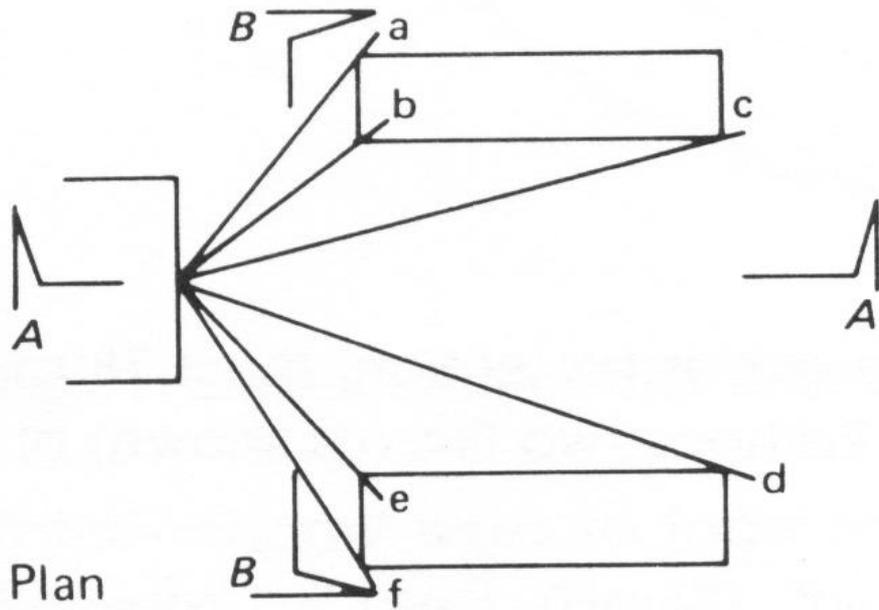
Plan



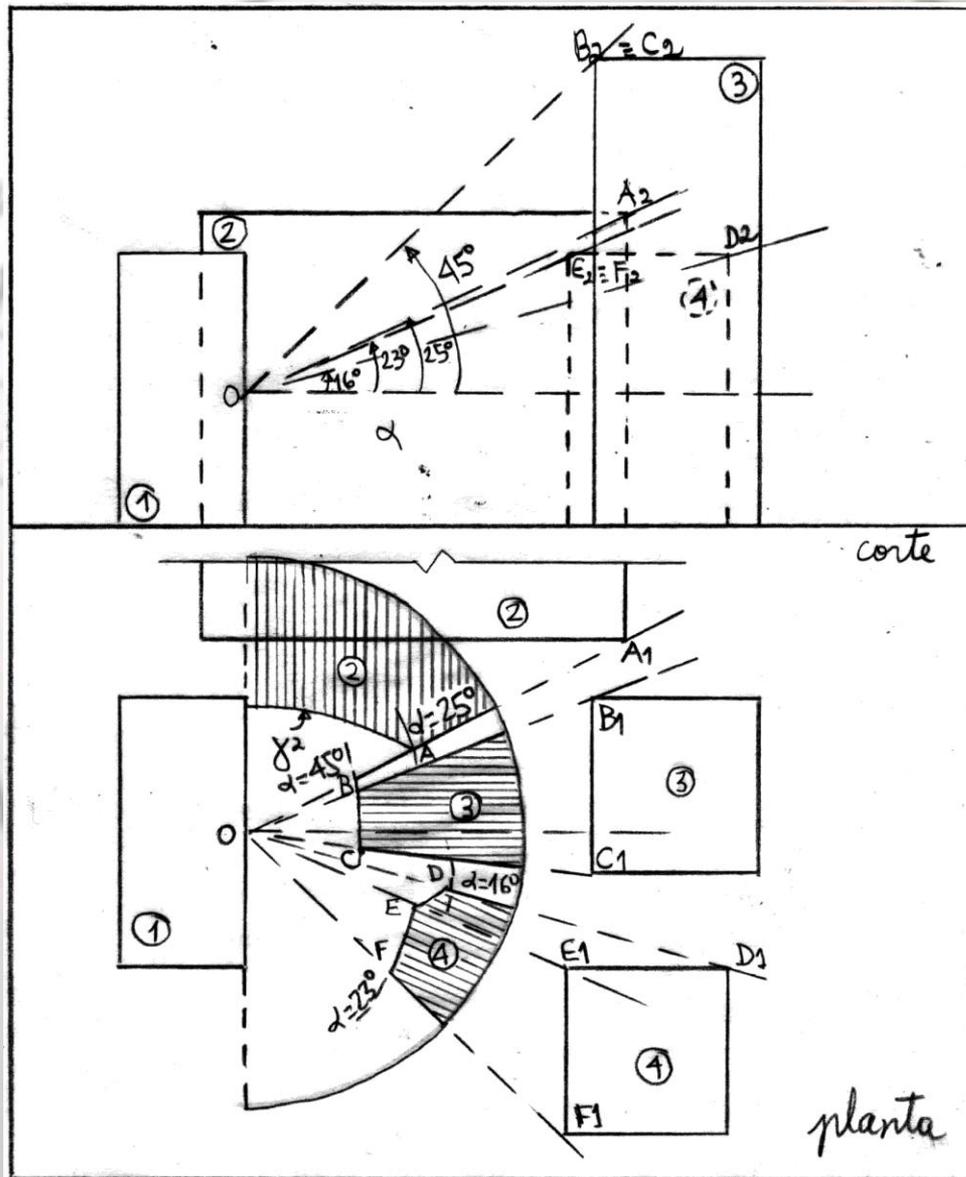
**mascara de um prédio**



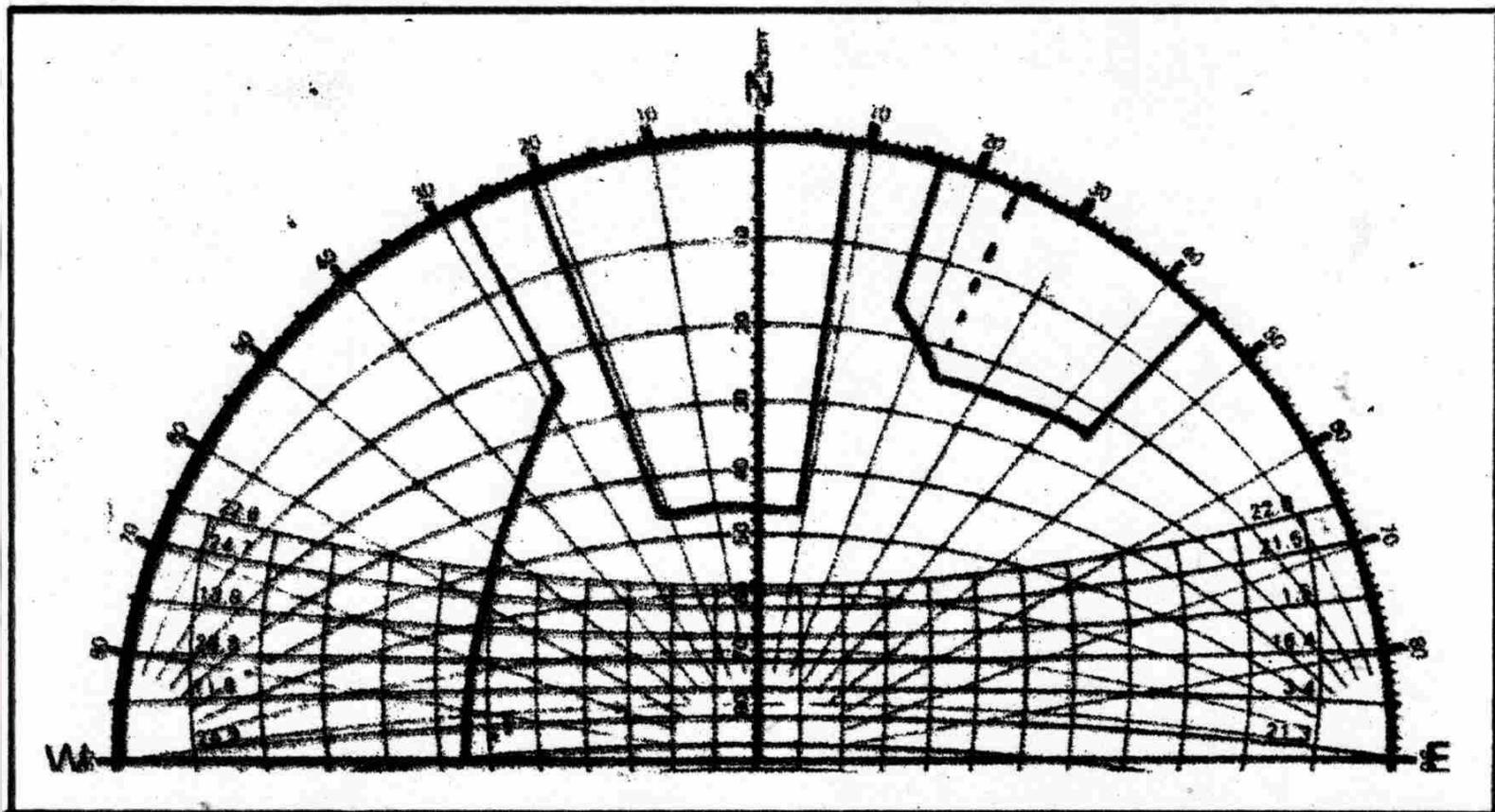
**Máscara produzida por um prédio, considerando a janela inteira de um compartimento**



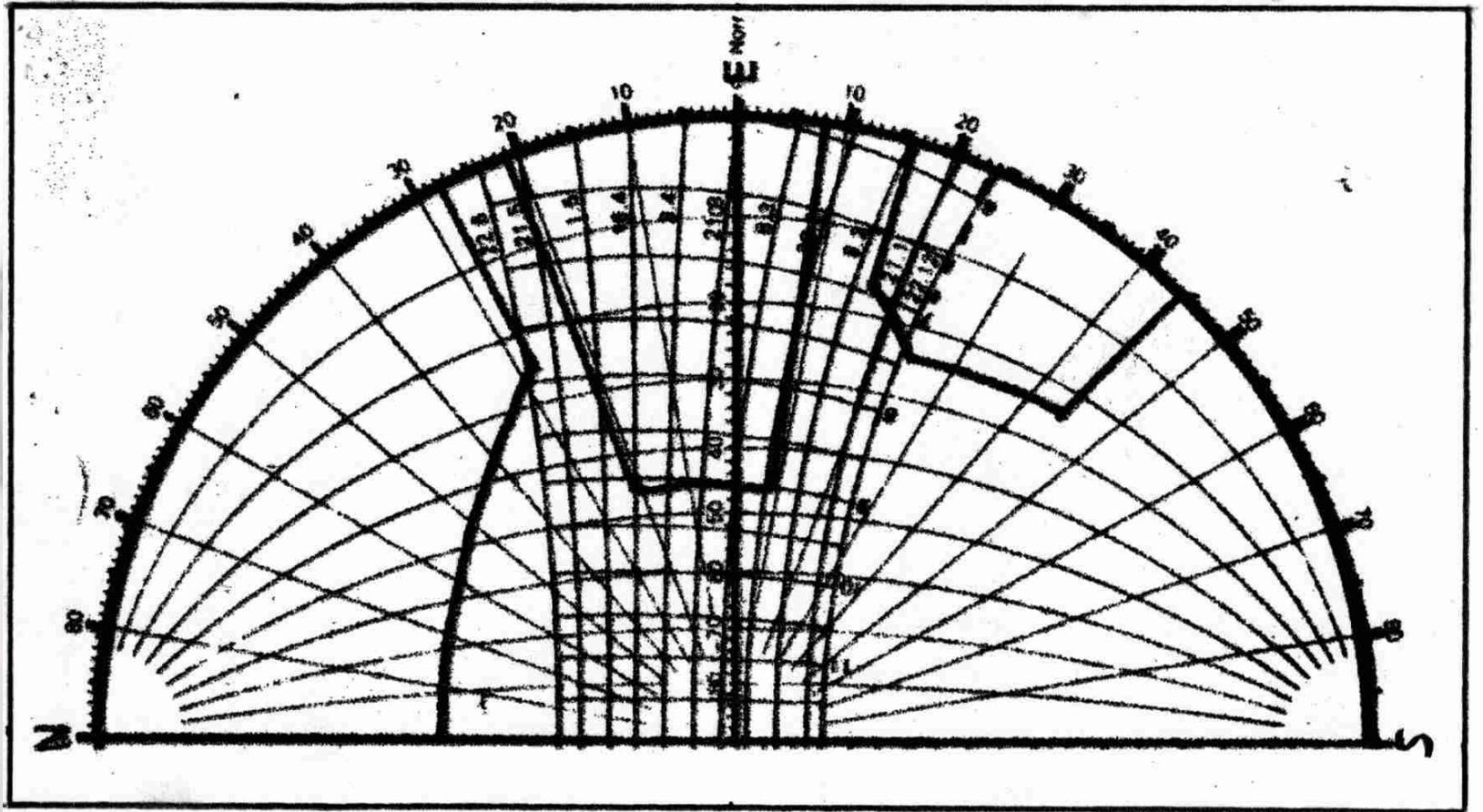
**mascara de um prédio**



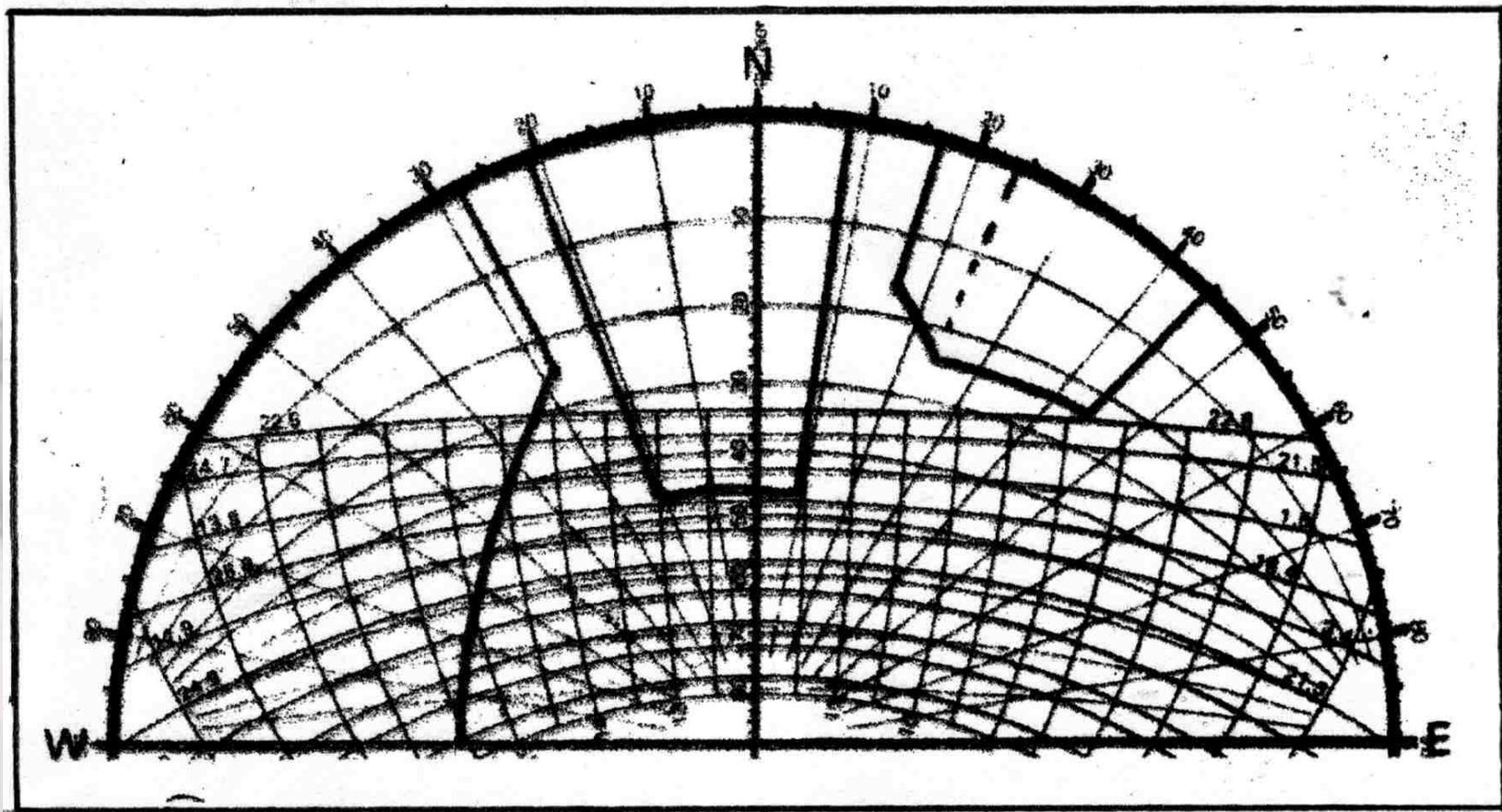
**Máscara produzida por  
3 prédios, p/  
observador no ponto O**



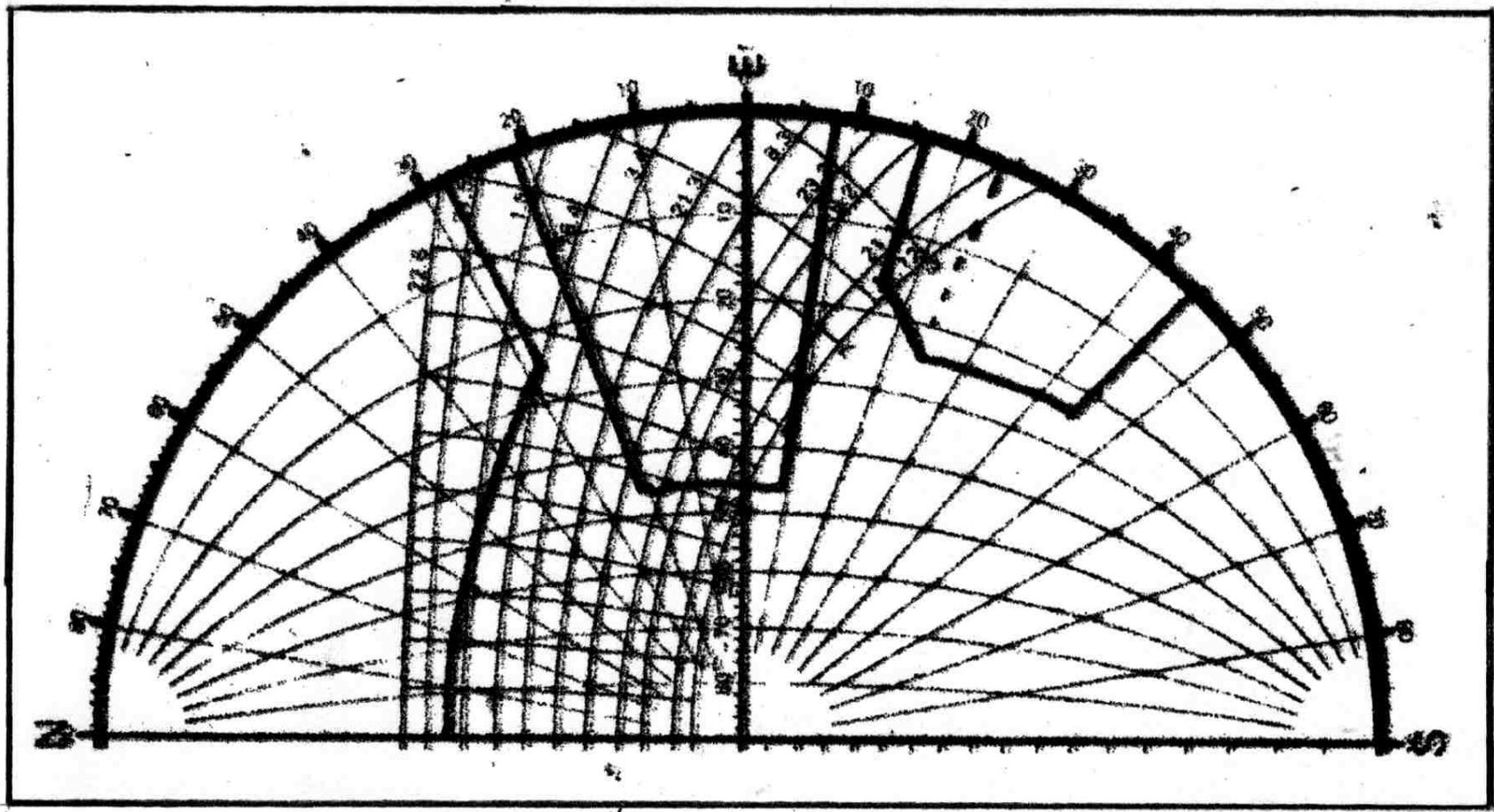
O efeito do mascaramento do conjunto da figura anterior em Recife, fachada norte



Idem, para fachada leste

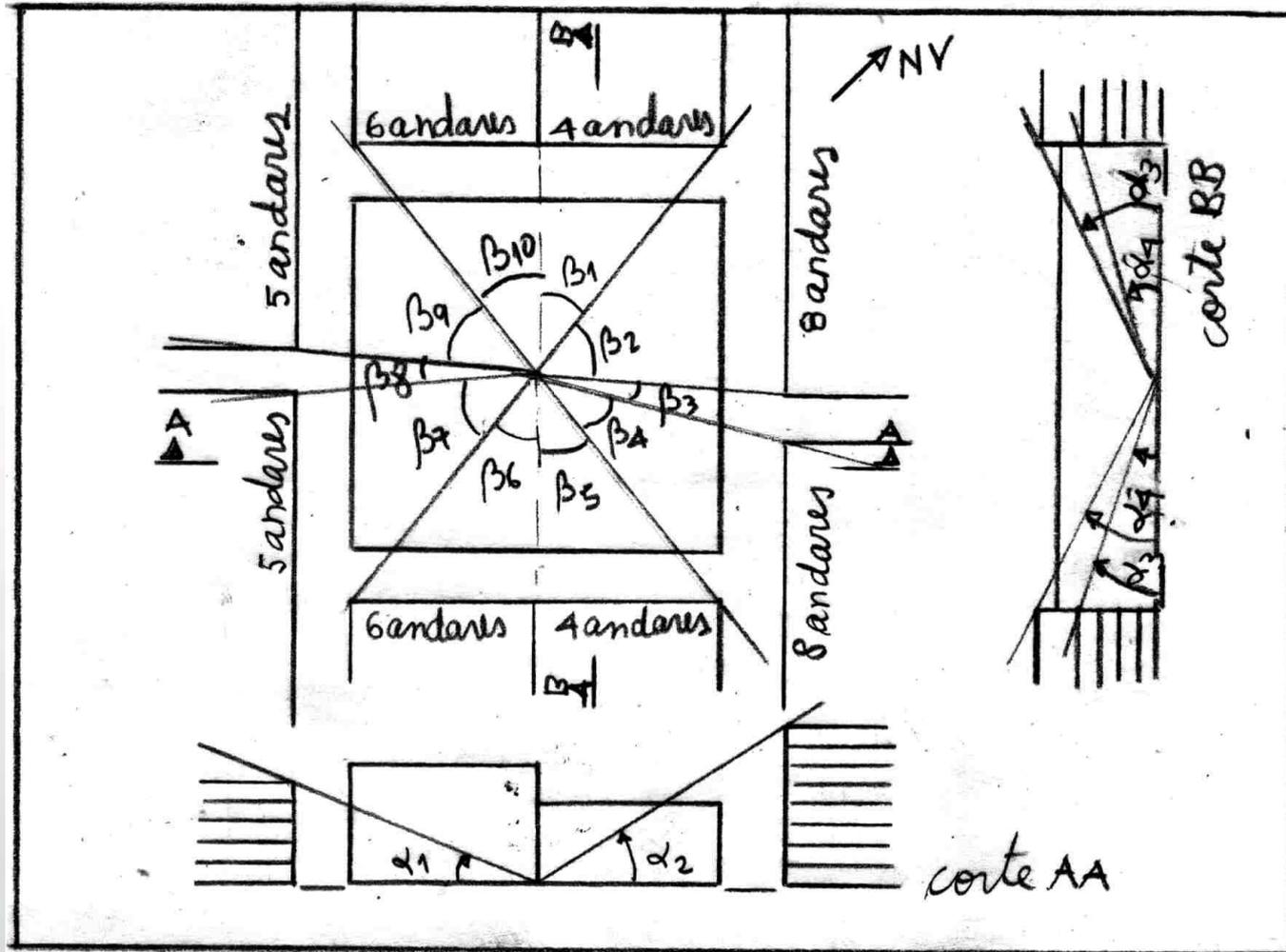


O efeito do mascaramento do mesmo conjunto em Pelotas, RS, fachada norte

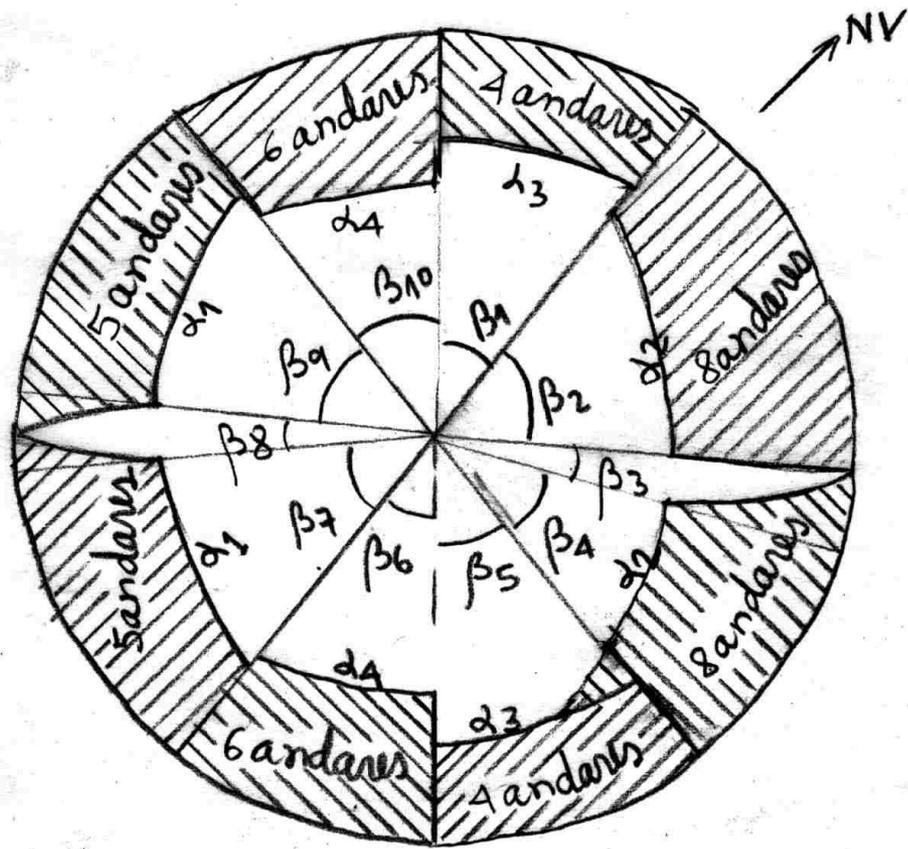


**Idem, fachada leste**

# MÁSCARA – PRAÇA

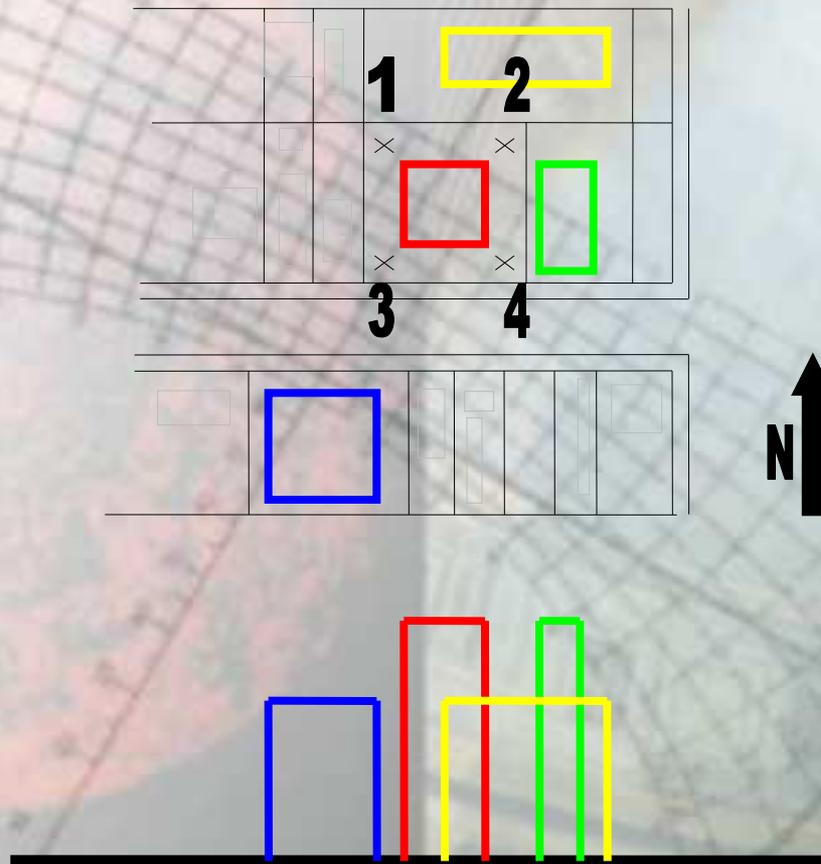


Praça, em planta e cortes, com ângulos  $\alpha$  e  $\beta$  determinados



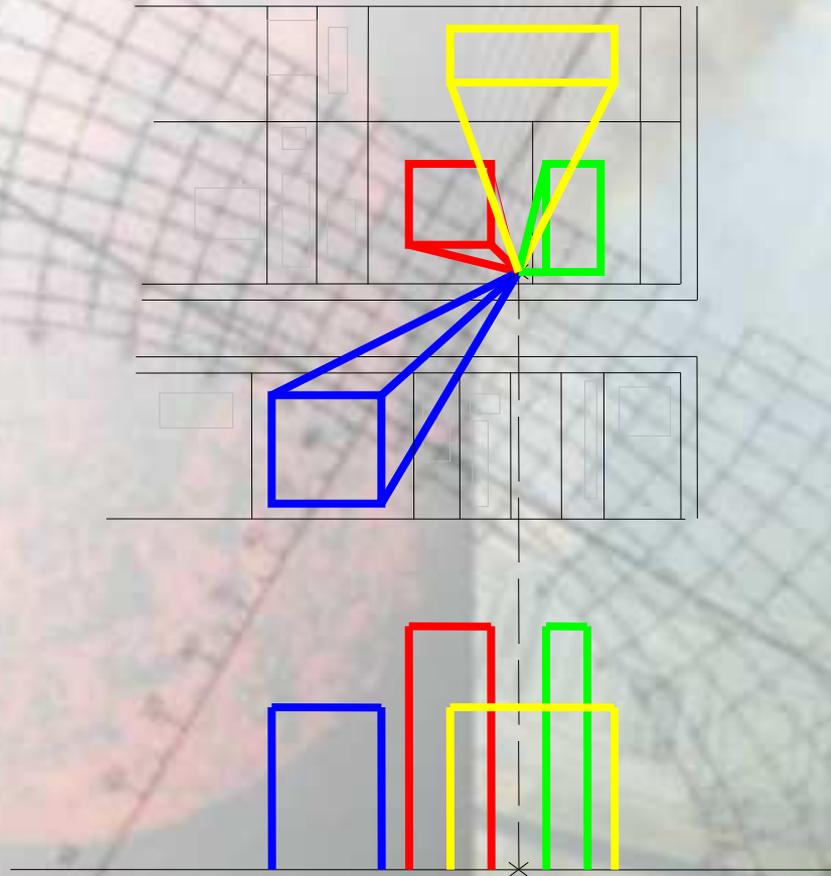
**Máscara das edificações representadas por edifícios situados no contorno de uma praça, com observador no centro**

- Onde colocar a piscina deste edifício?



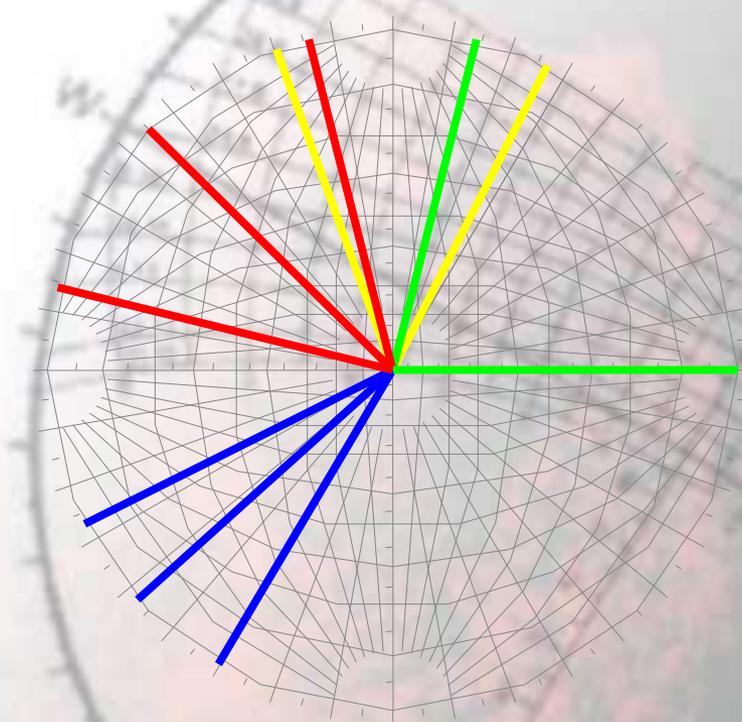
**utilização das cartas solares**

# 1. Marcar os ângulos $\beta$ na planta



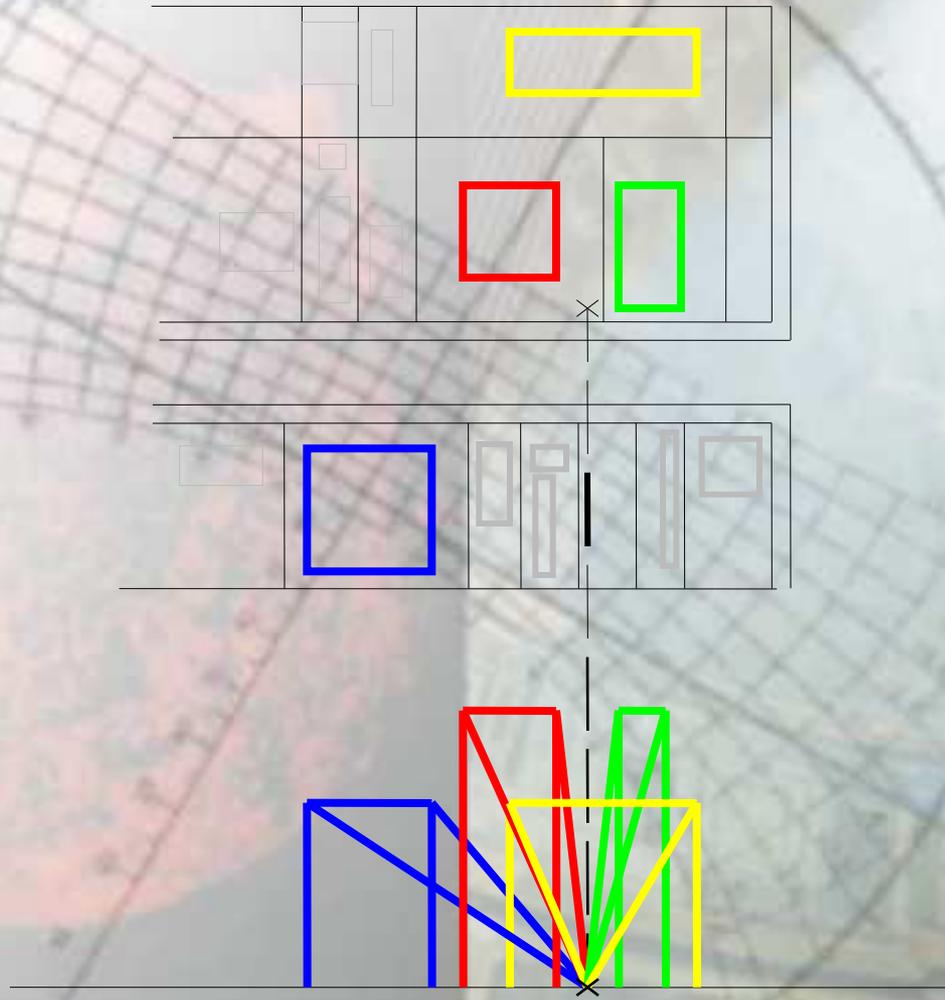
máscara do entorno

## 2. Traçar os ângulos $\beta$ no transferidor



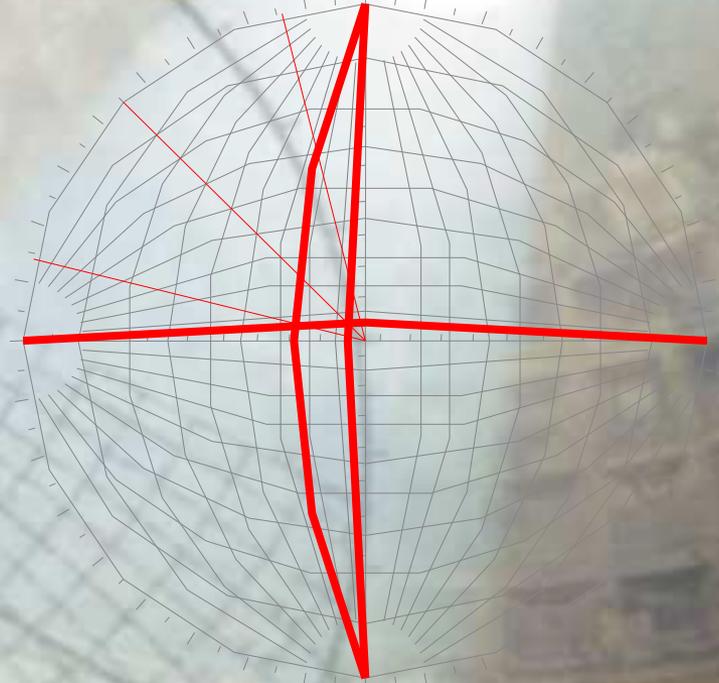
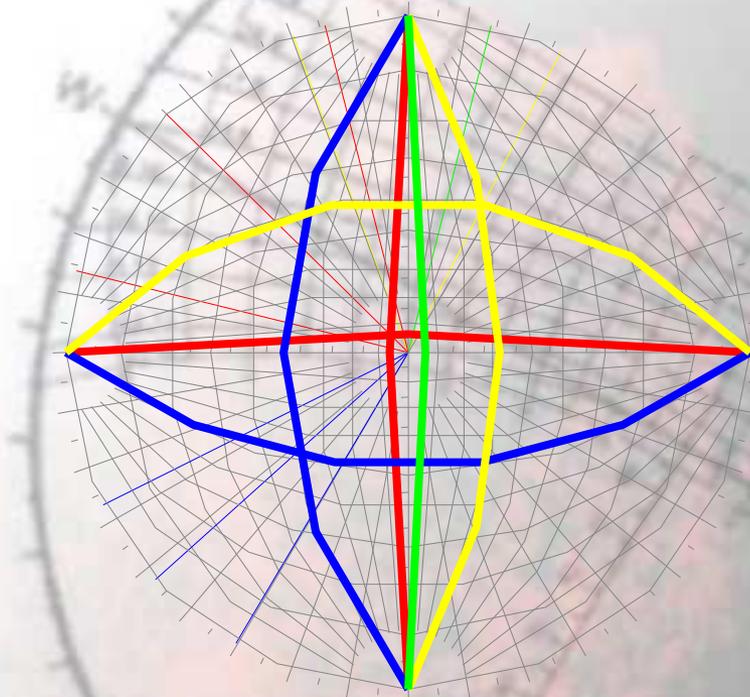
máscara do entorno

### 3. Marcar os ângulos $\alpha$ no corte



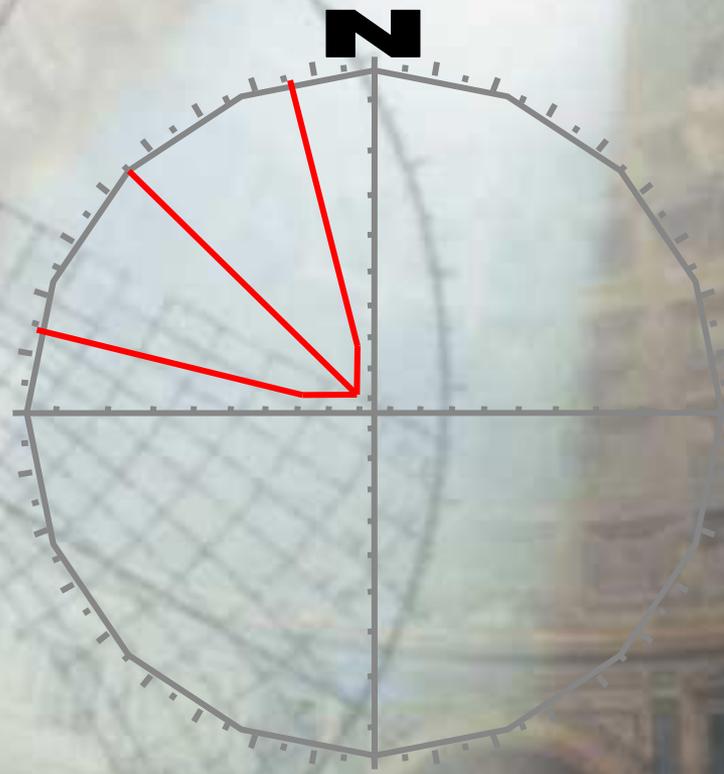
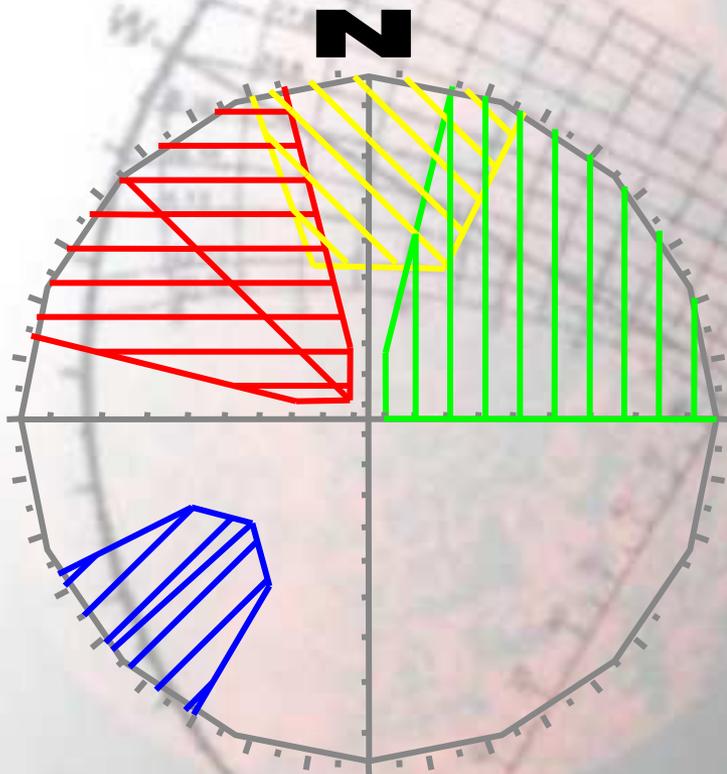
máscara do entorno

## 4. Marcar os ângulos $\alpha$ no transferidor



**máscara do entorno**

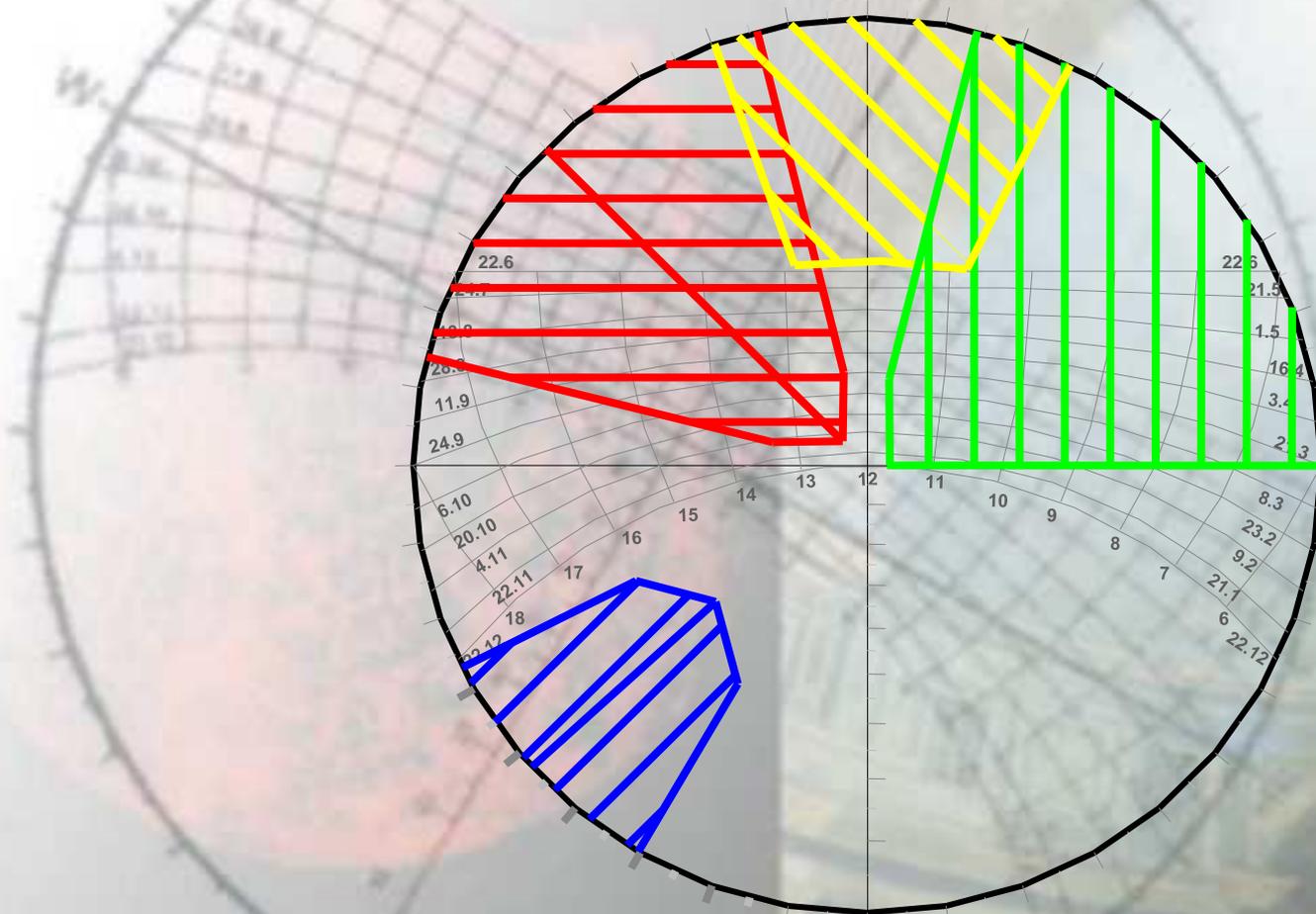
# 5. Apagar as linhas extras e marcar o norte da máscara



máscara do entorno

## 6. Sobrepor à carta solar

**N**



**máscara do entorno**