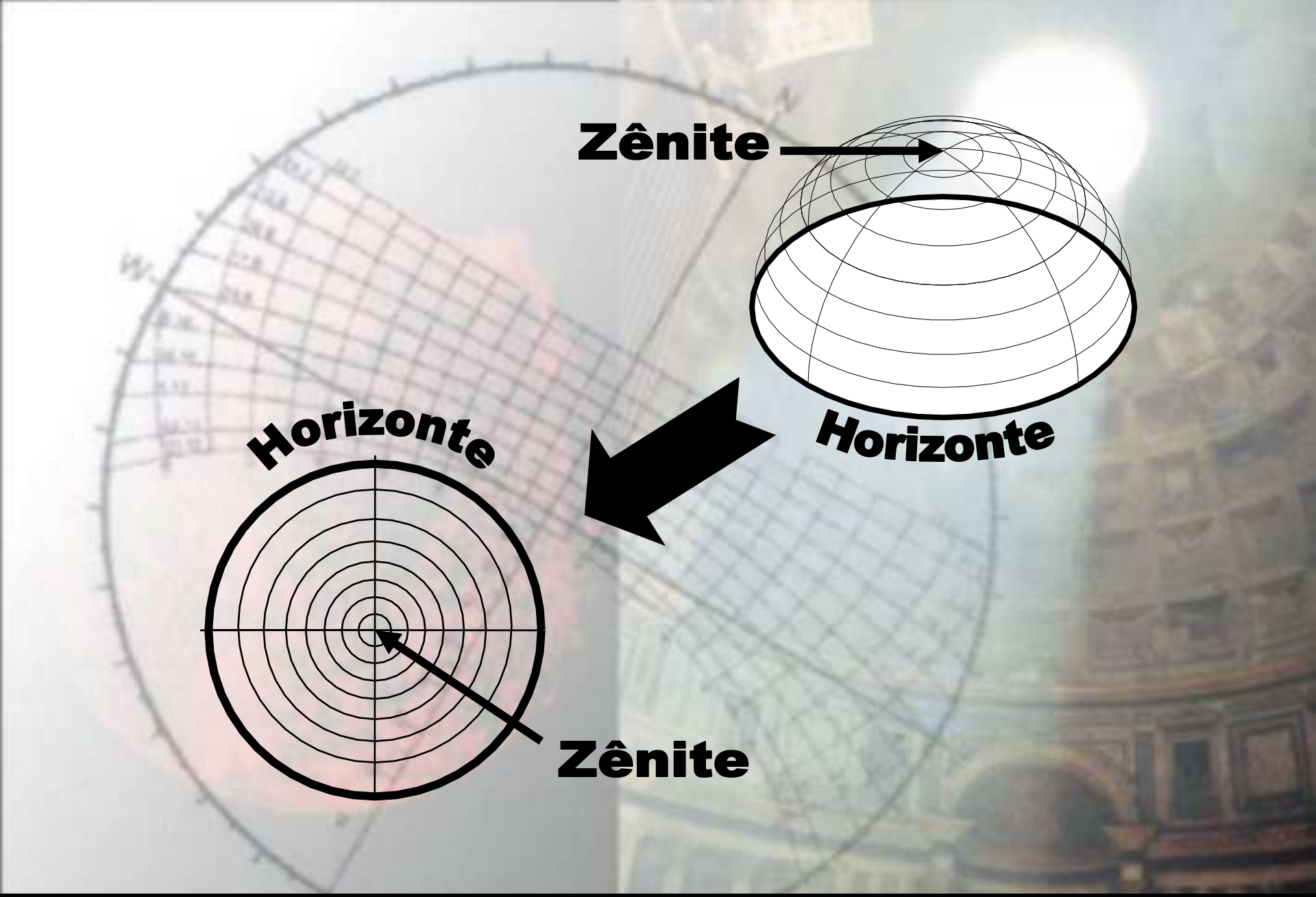
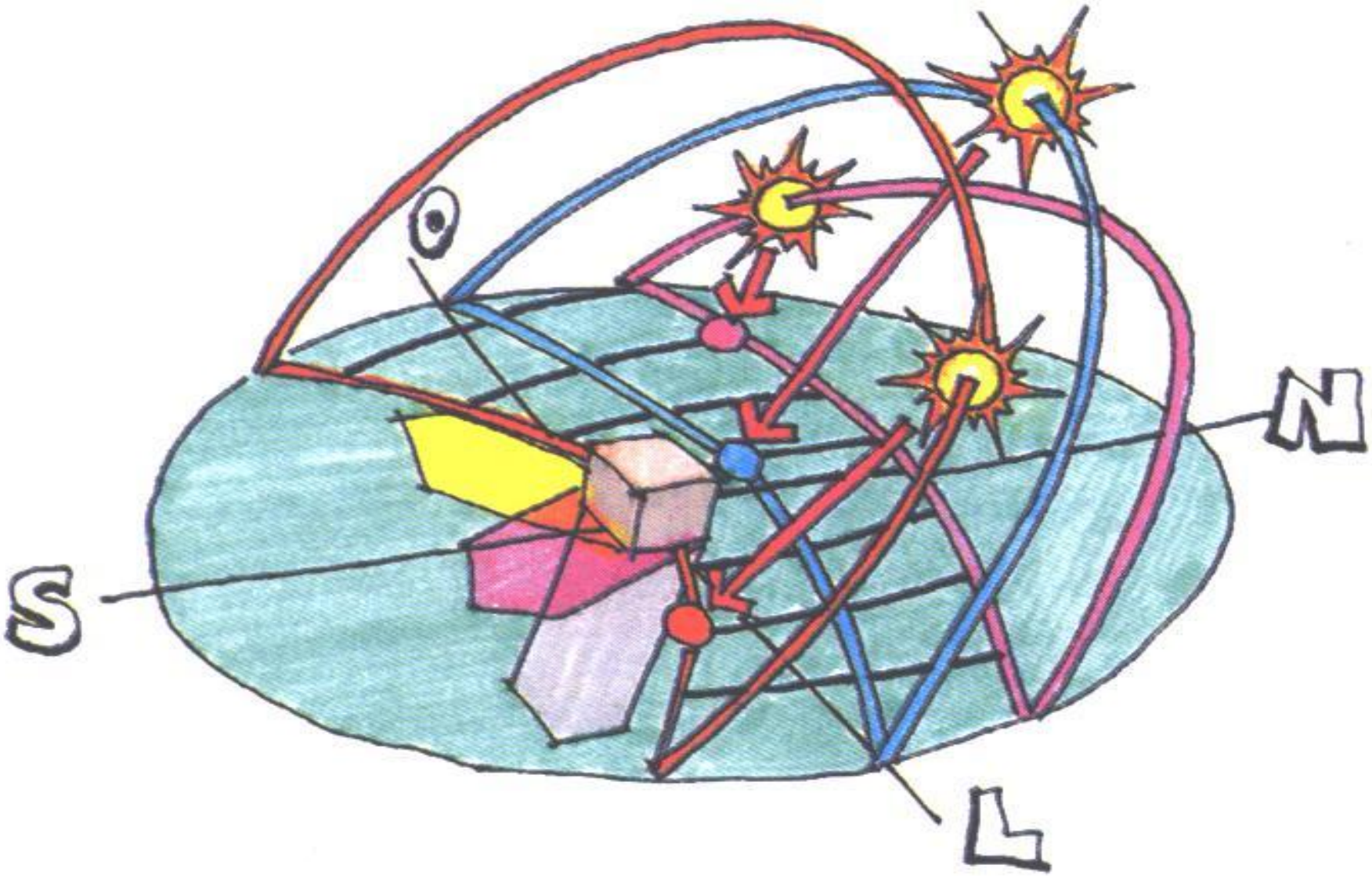
Mascaramento do Entorno e Insolação

- **Locação de equipamentos que precisam receber ou serem protegidos do sol;**
- **Orientação/ posicionamento dos cômodos e das aberturas;**
- **Sombreamento do entorno;**
- **Dimensionamento das proteções;**



projeção estereográfica



encontrando o sol

máscara do entorno

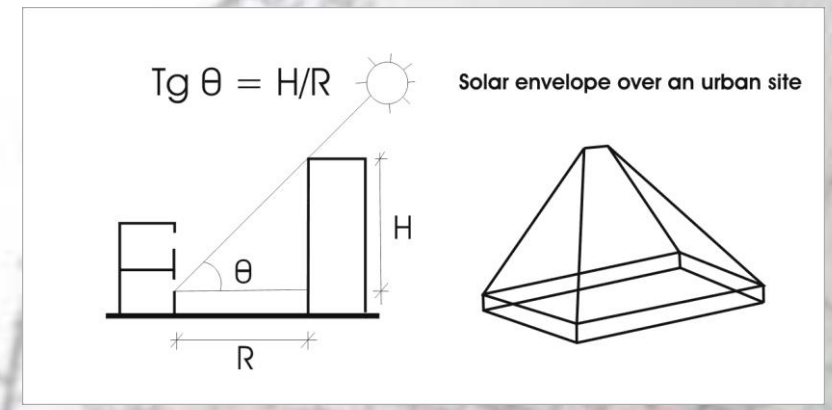
máscara do entorno

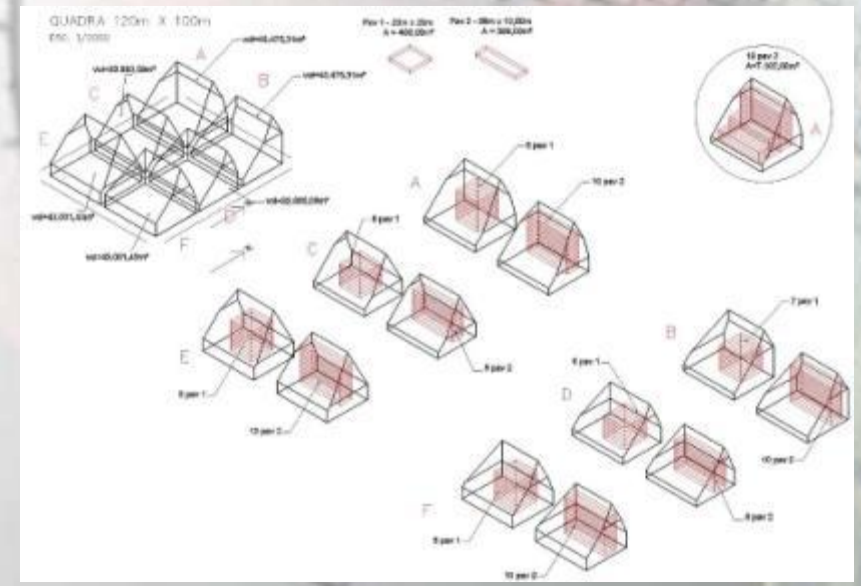
máscara do entorno

máscara do entorno

Impacto de Edifícios Altos

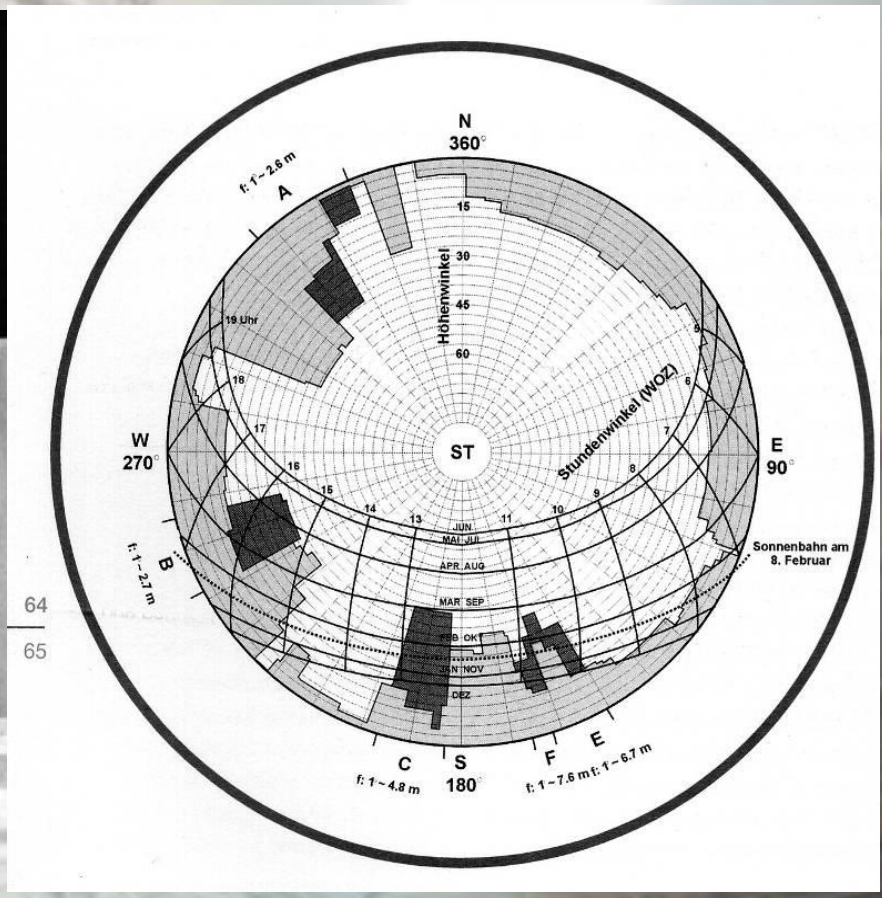
Envelope Solar





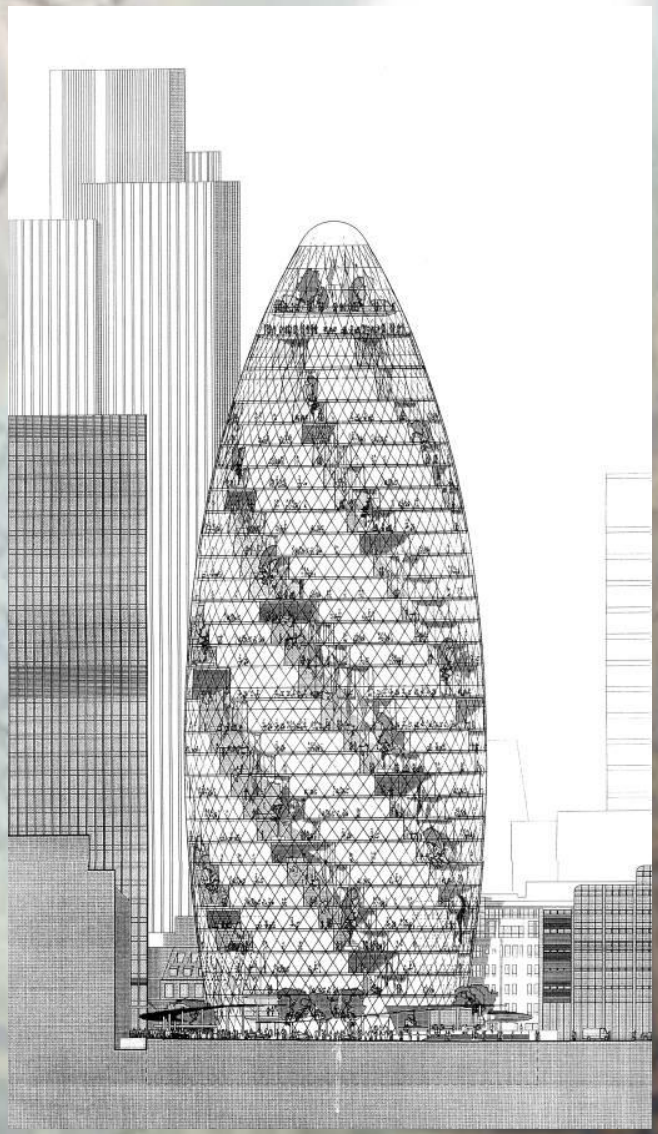
Ruas de Manhatan – acesso restrito à luz (céu) e ao sol

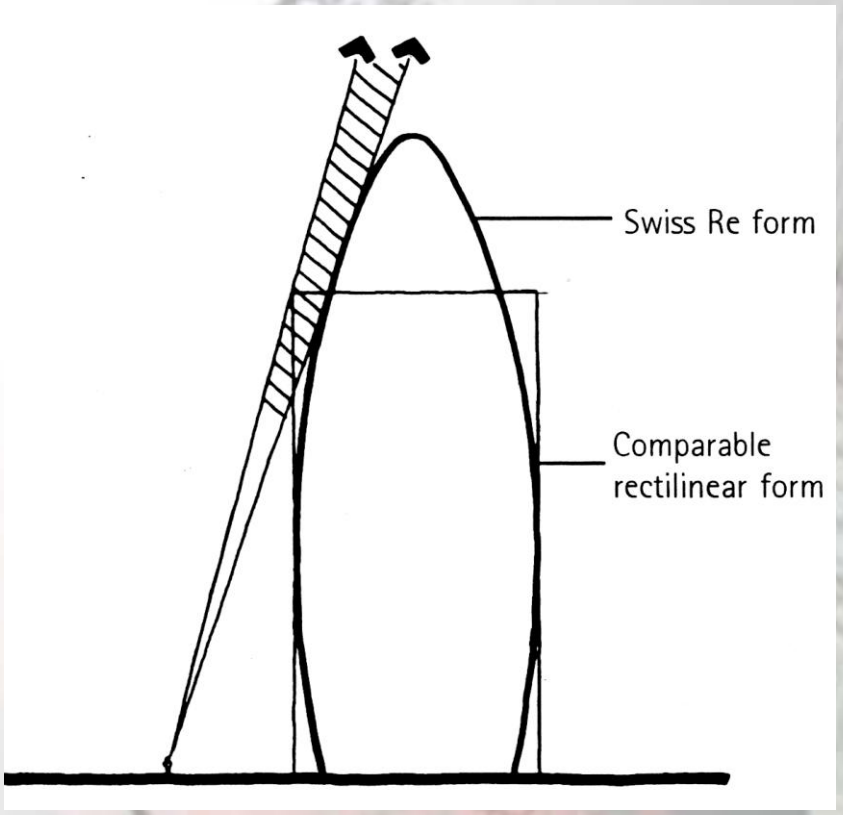
Rotterdam, masterplan of tall buildings - criteria for solar access and daylight

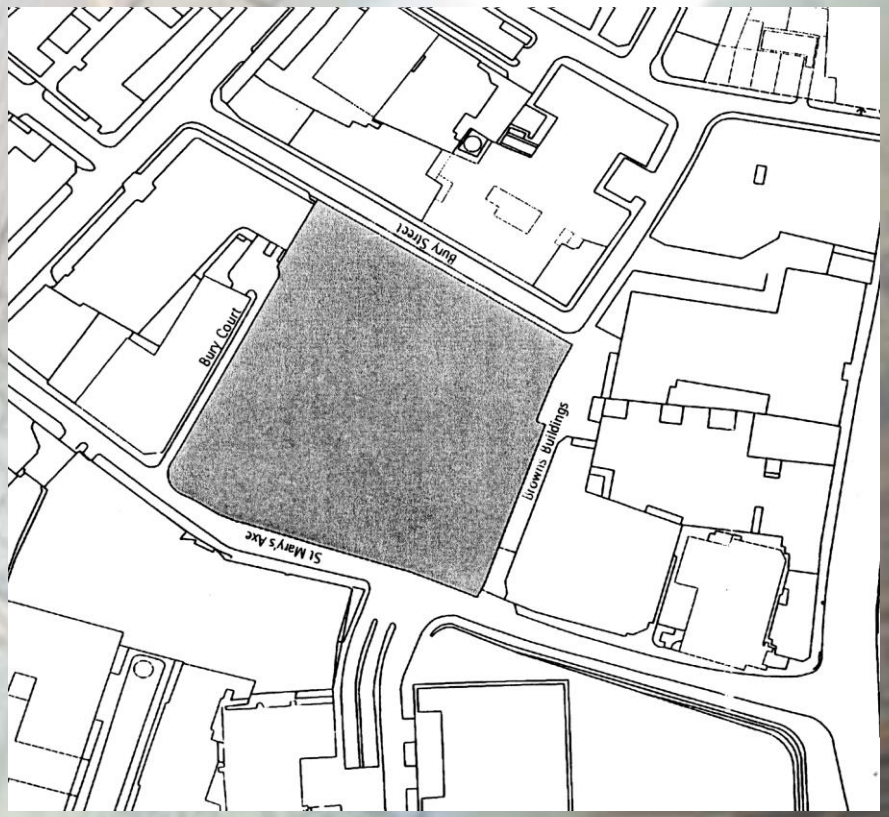


Frankfurt , masterplan for tall buildings - criteria for solar access and daylight

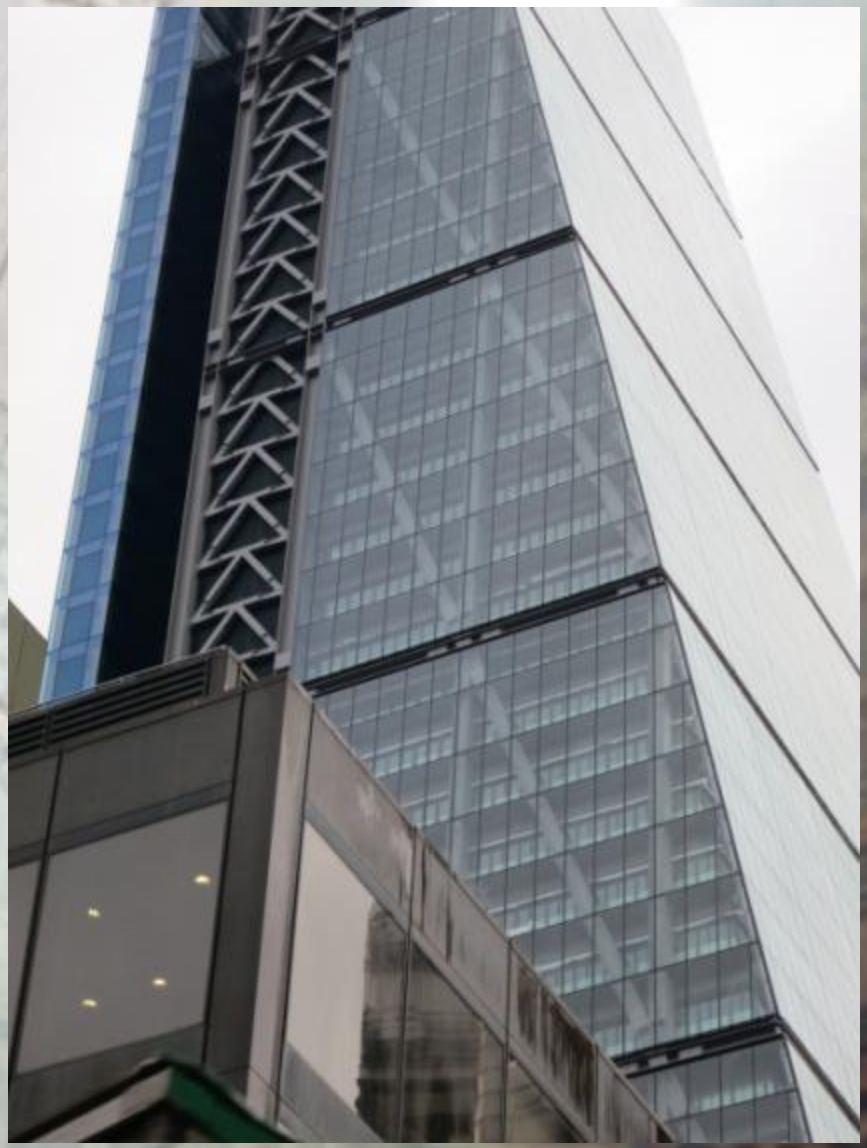
30th Saint Mary Axe, London

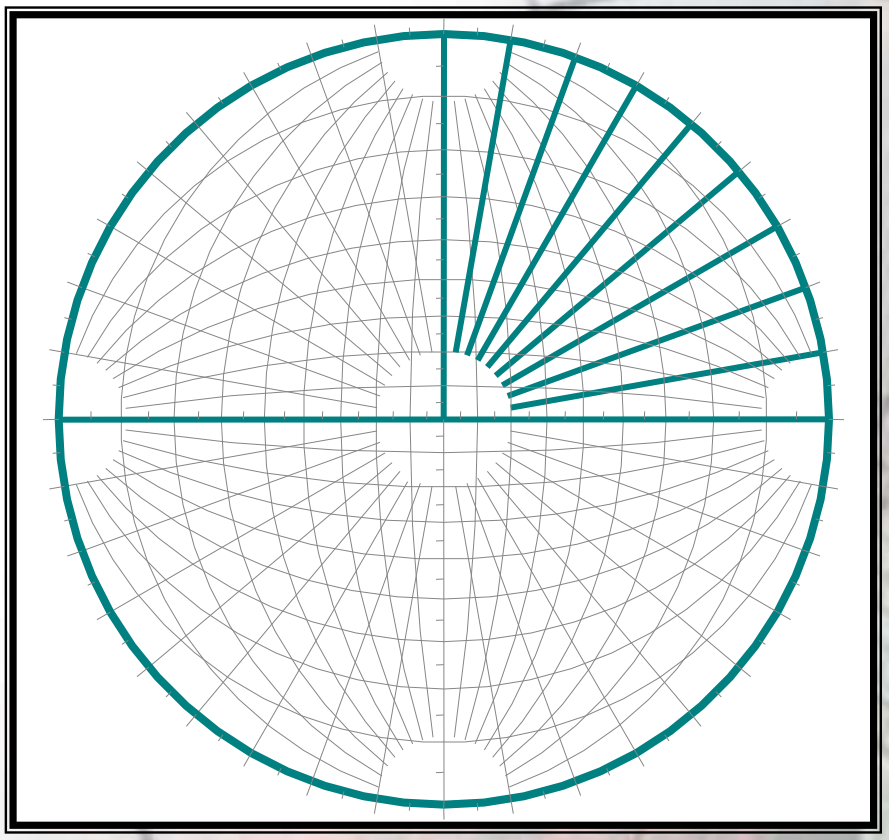



Swiss Re form
Comparable
rectilinear form

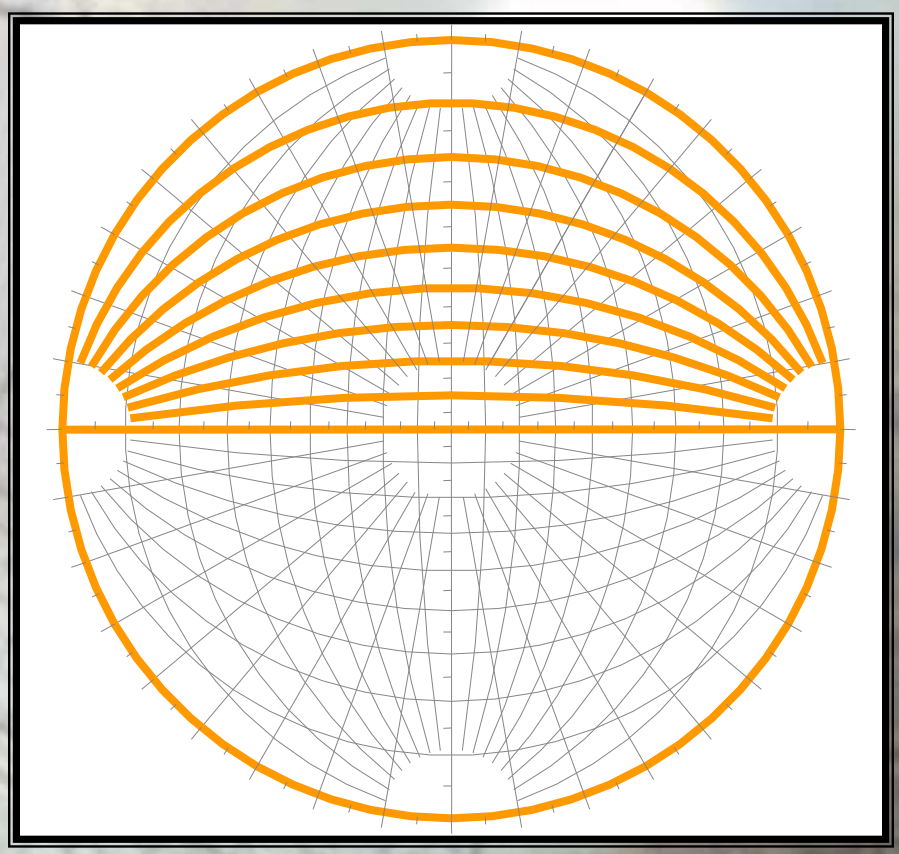

Bury Street
Bury Court
St Mary's Axe
Leadenhall Buildings

Leadenhall, Londres



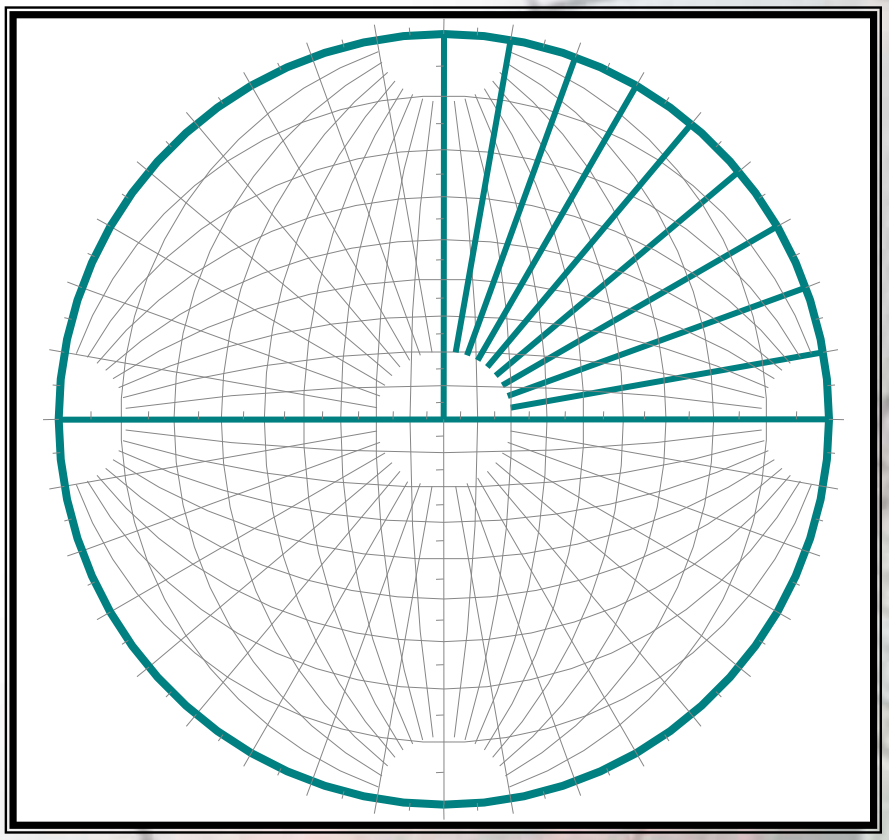


Ângulos β
Linhas verticais

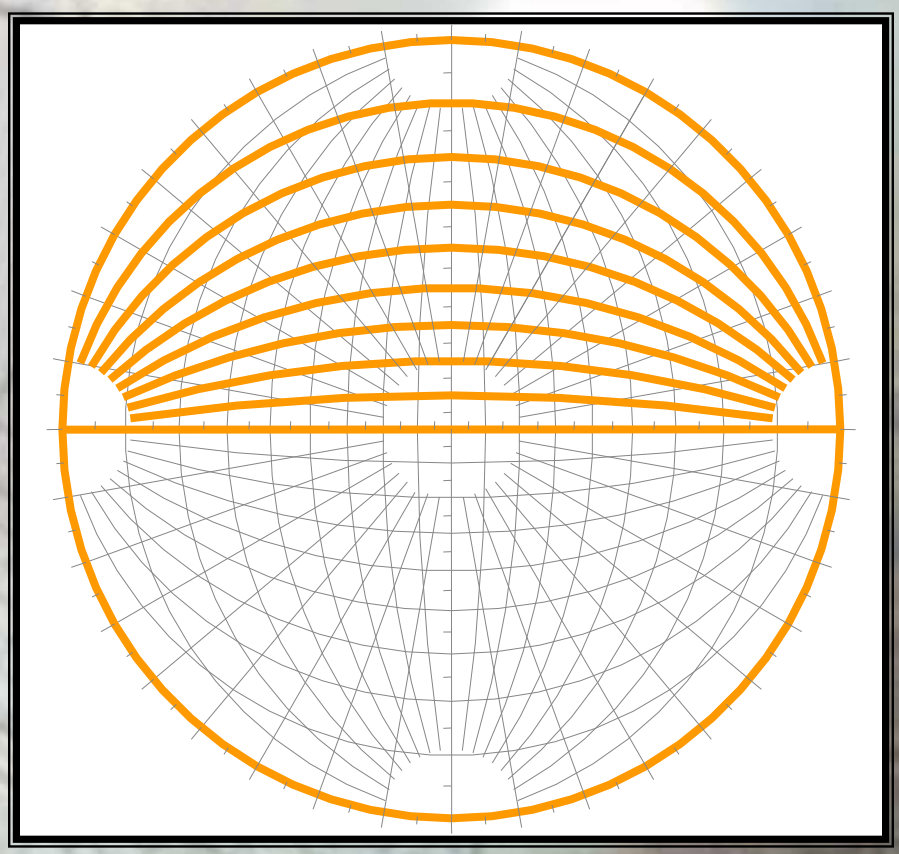


Ângulos α
Linhas horizontais

máscara do entorno



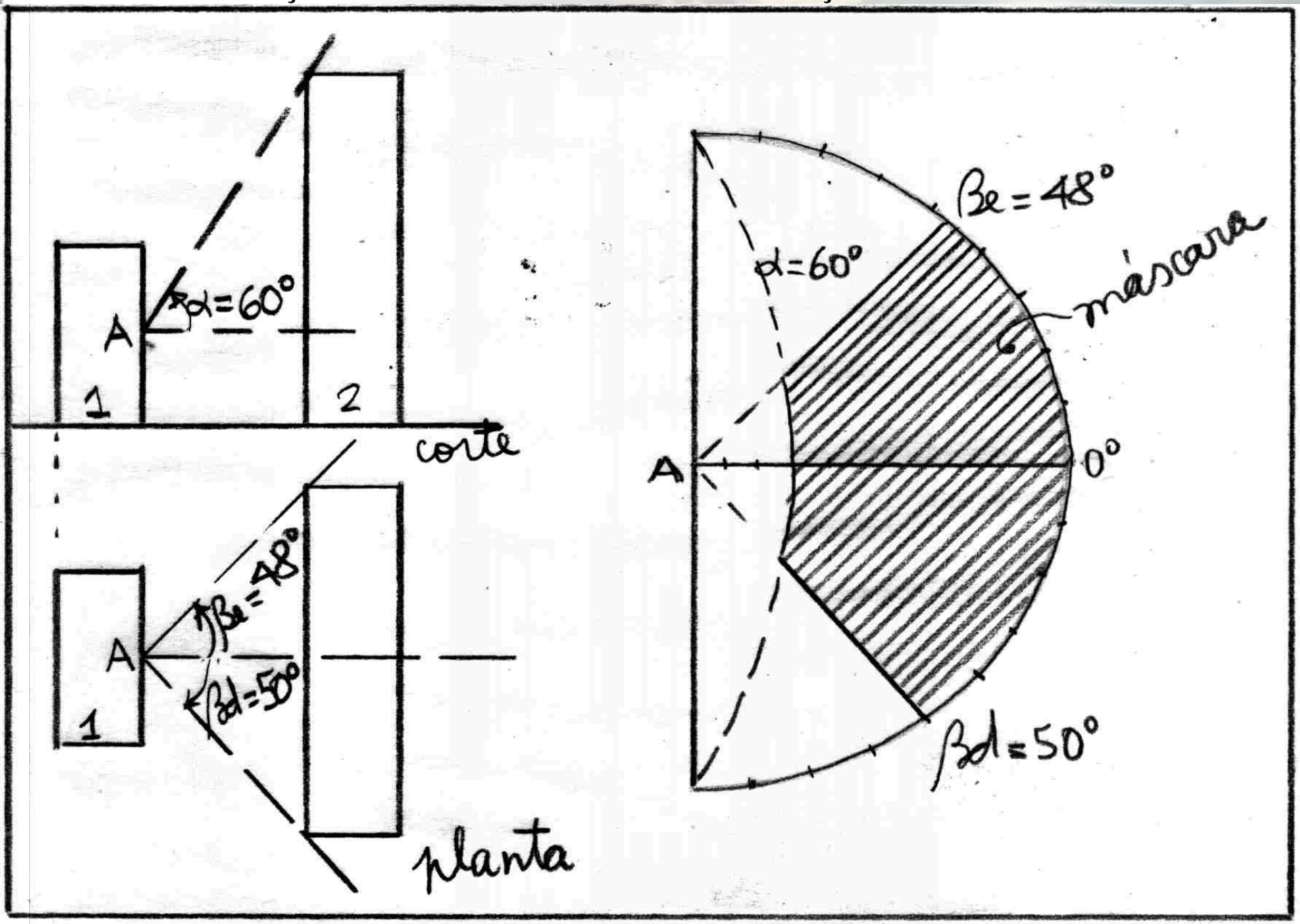
Ângulos β
Linhas verticais

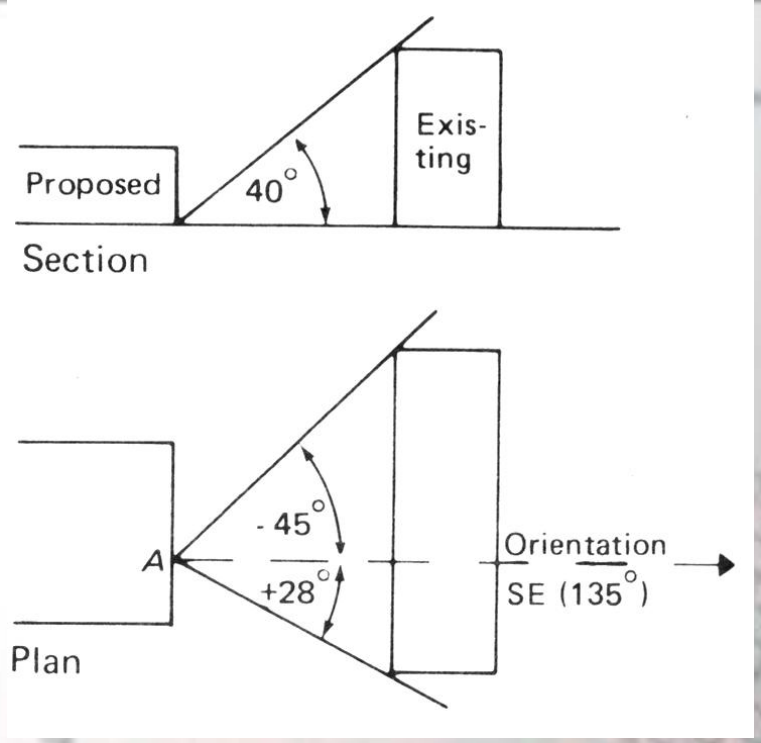


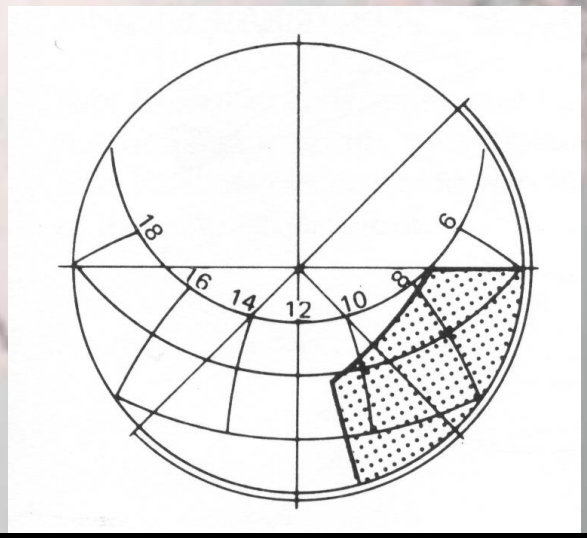
Ângulos α
Linhas horizontais

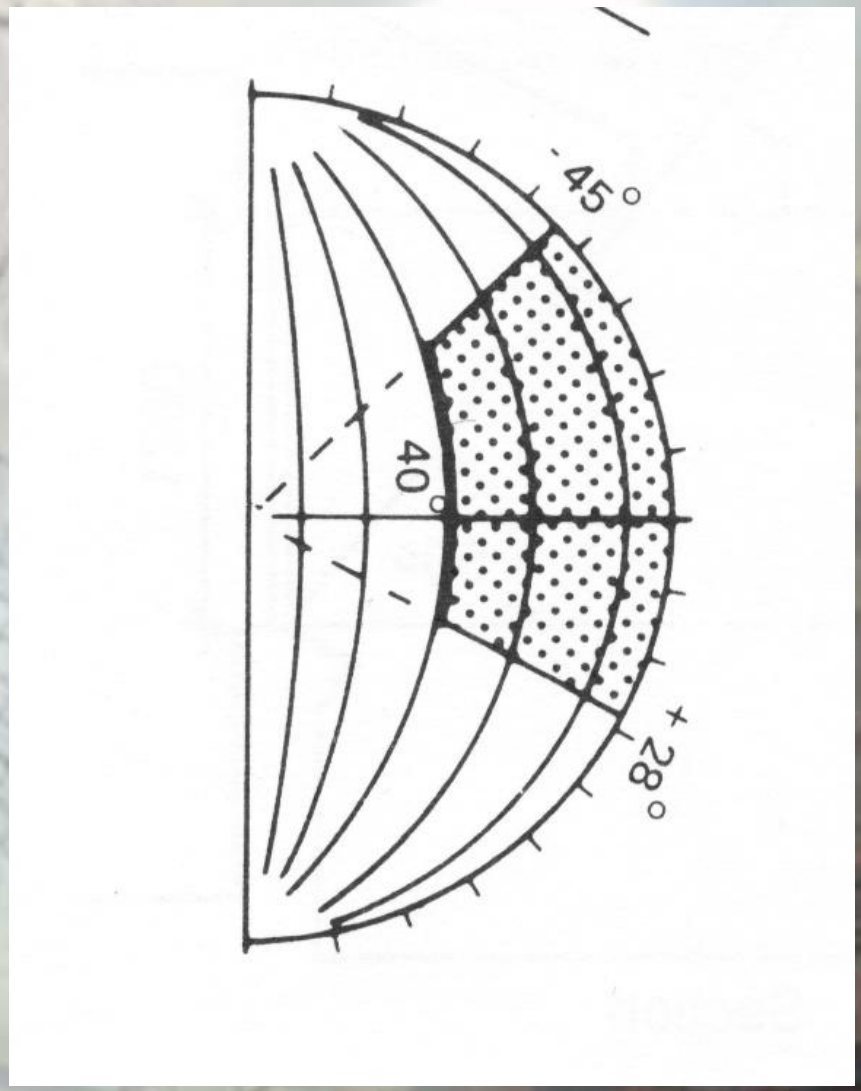
máscara do entorno

TRAÇADO DE MÁSCARAS DE OBSTRUÇÕES EXTERNAS

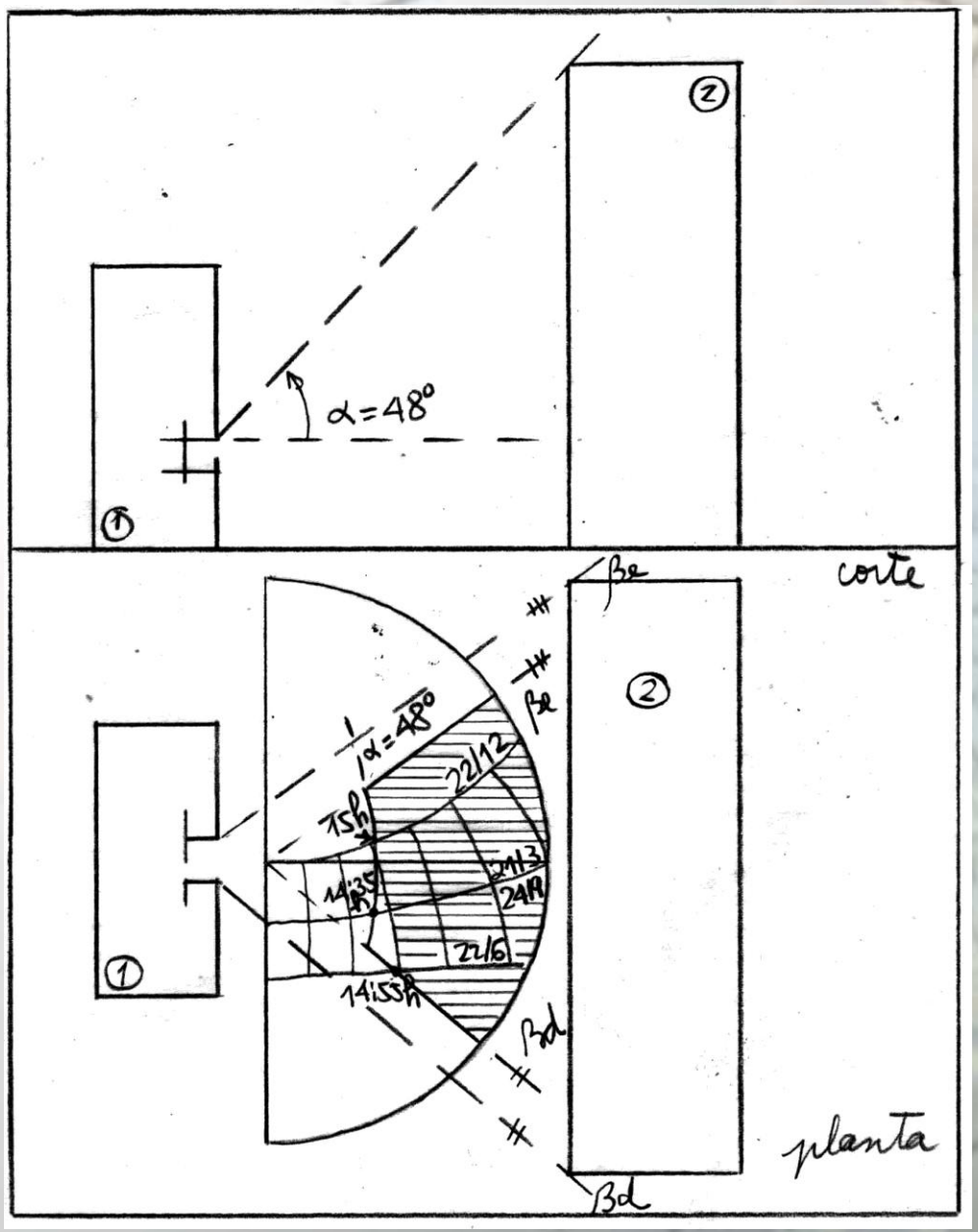




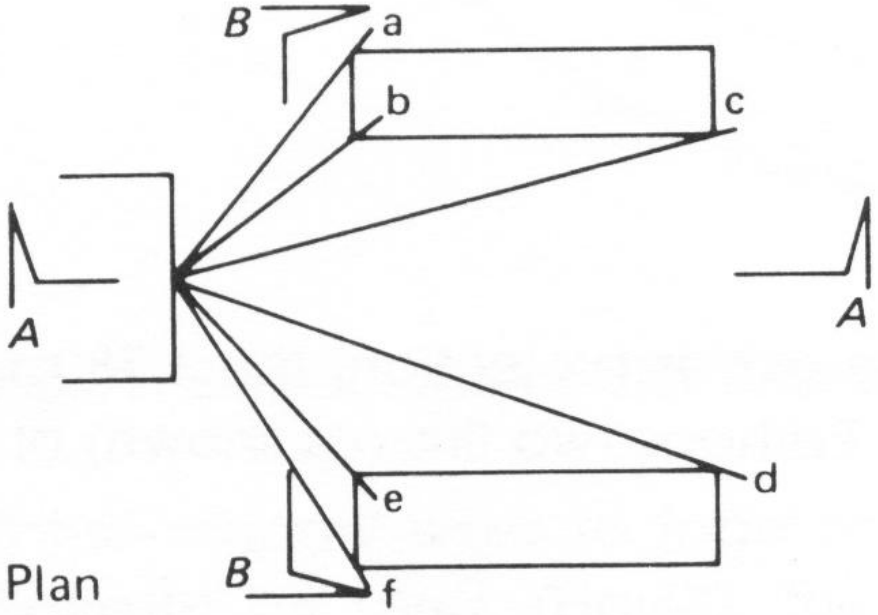


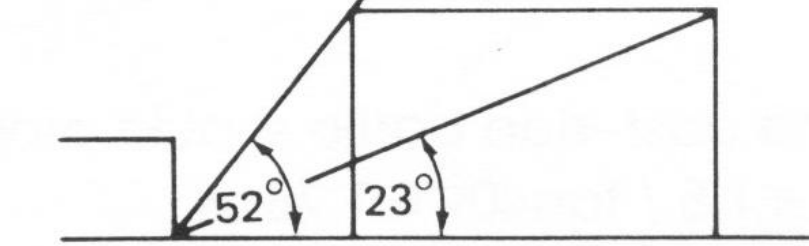


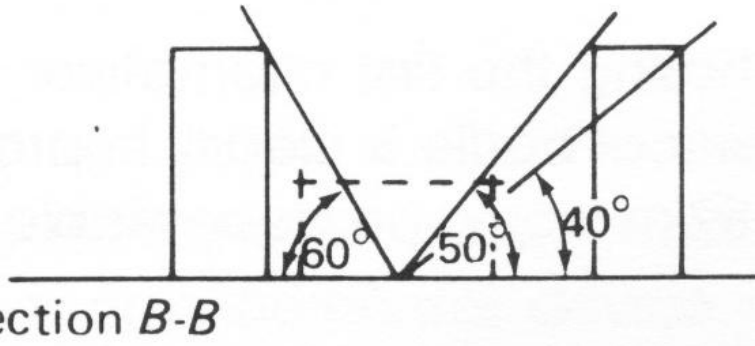
mascara de um prédio

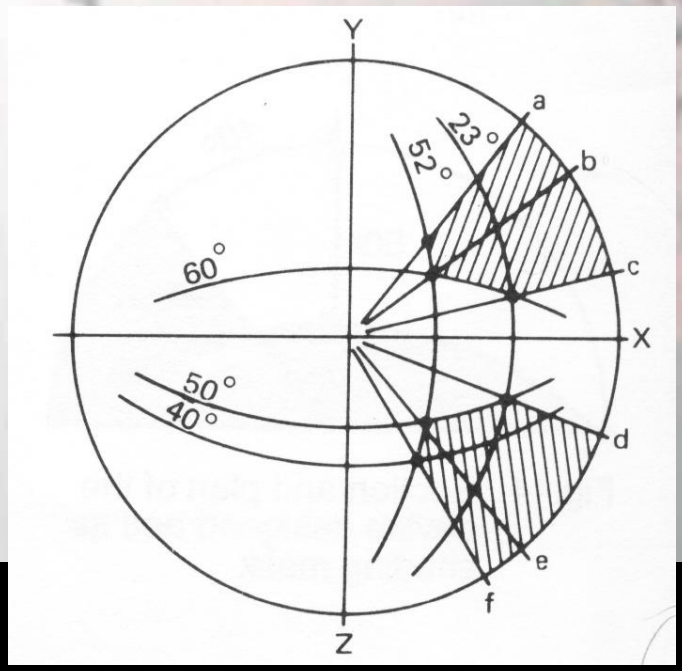


Máscara produzida por um prédio, considerando a janela inteira de um compartimento

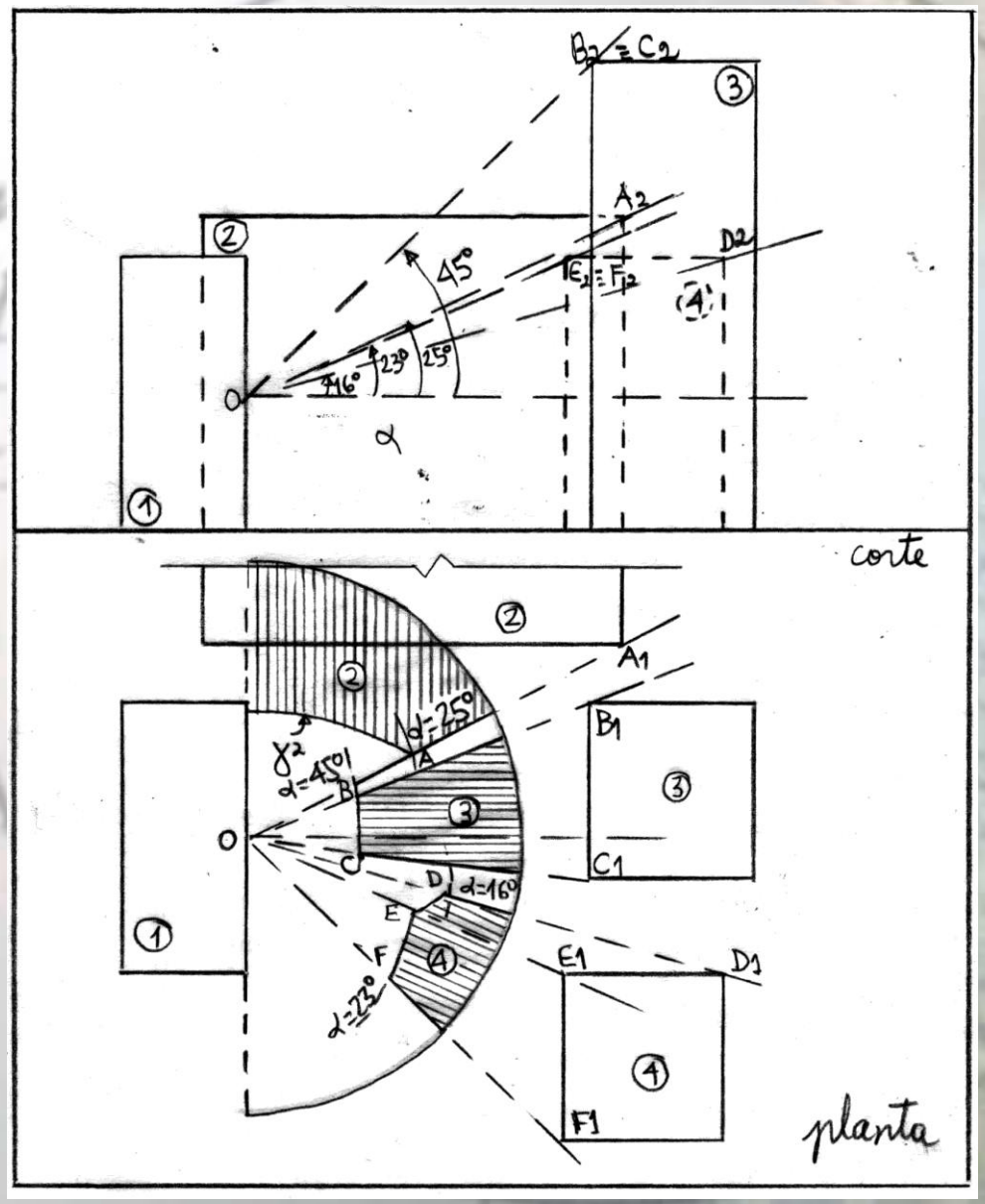




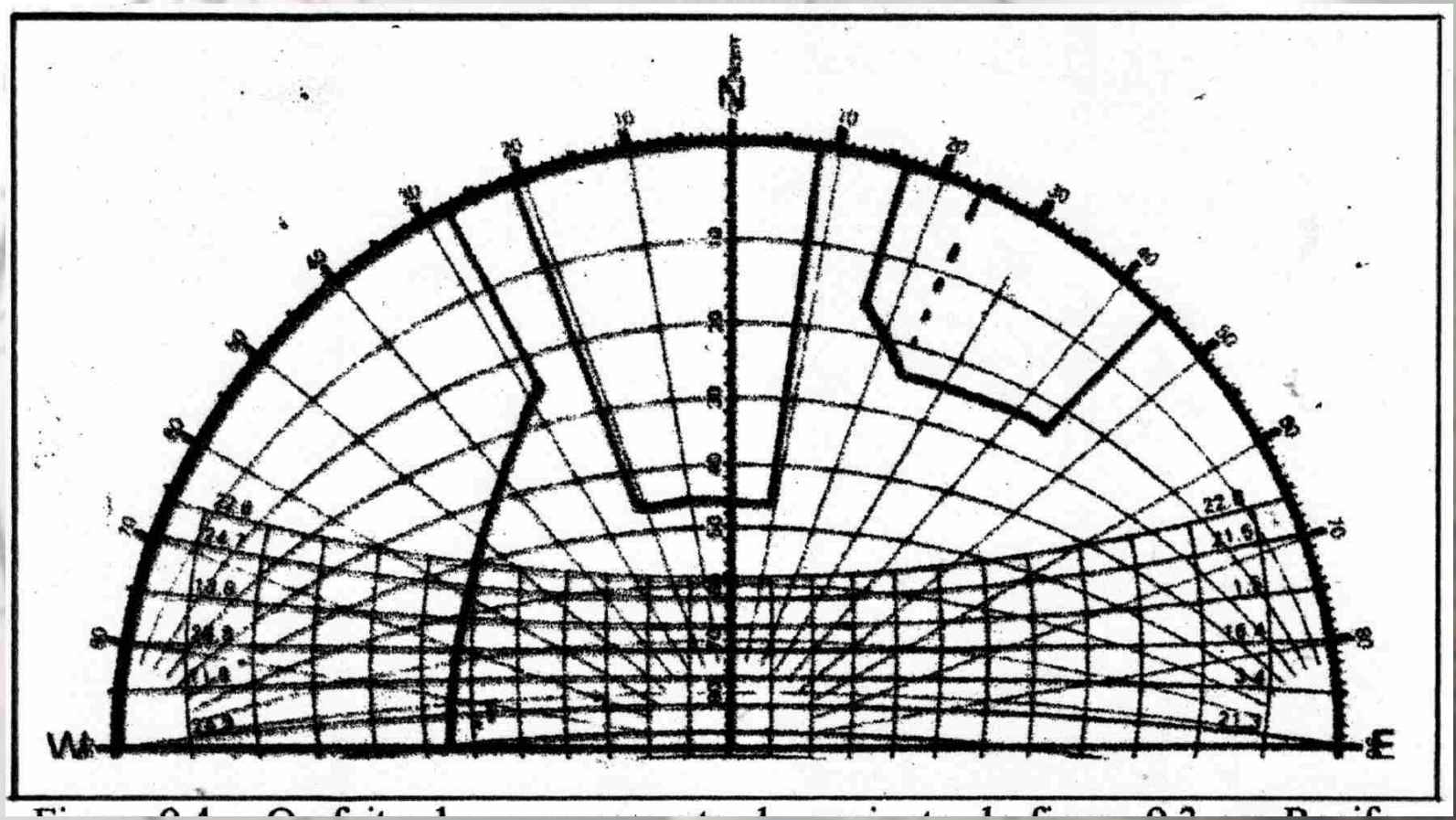




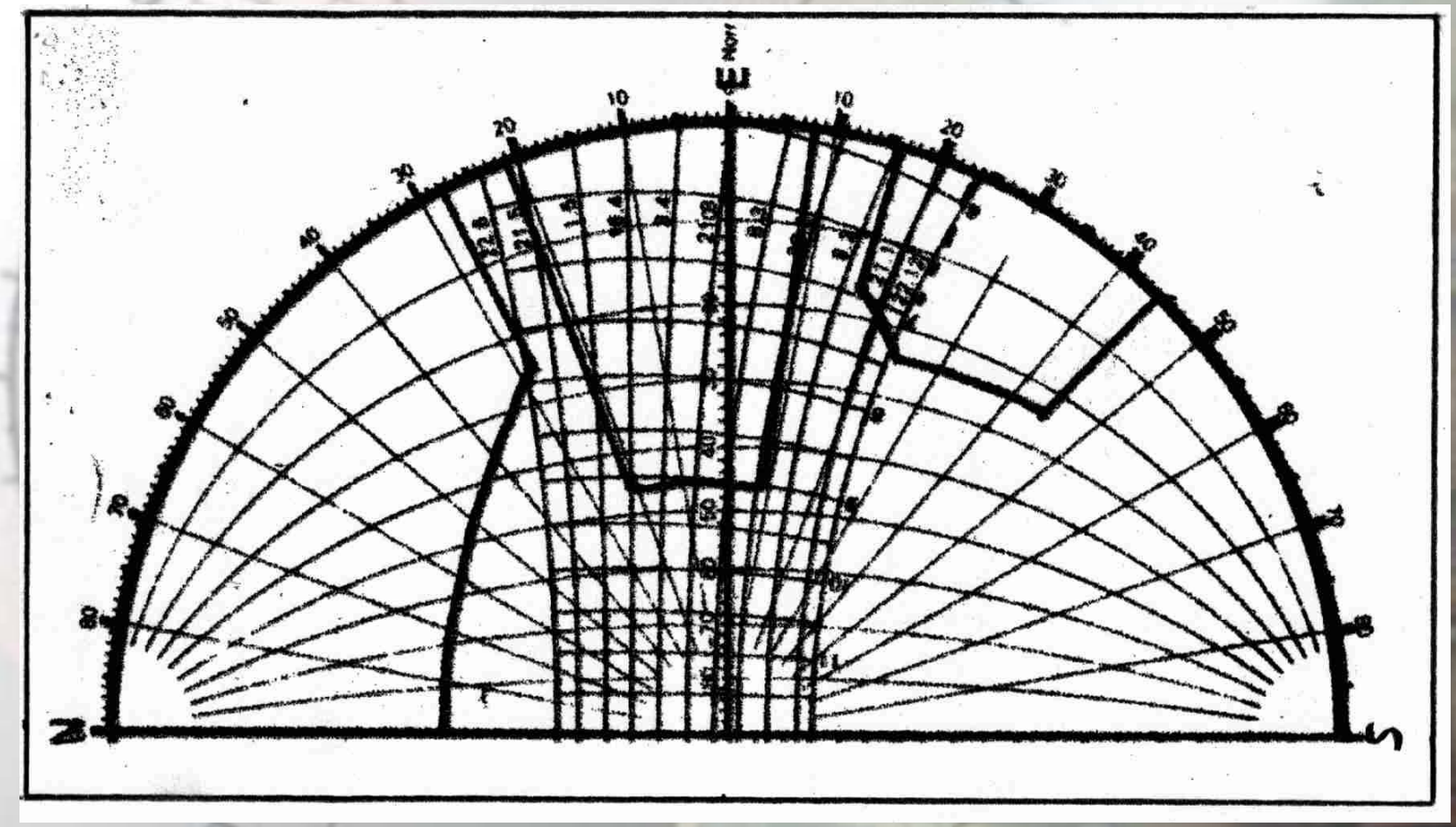
mascara de um prédio



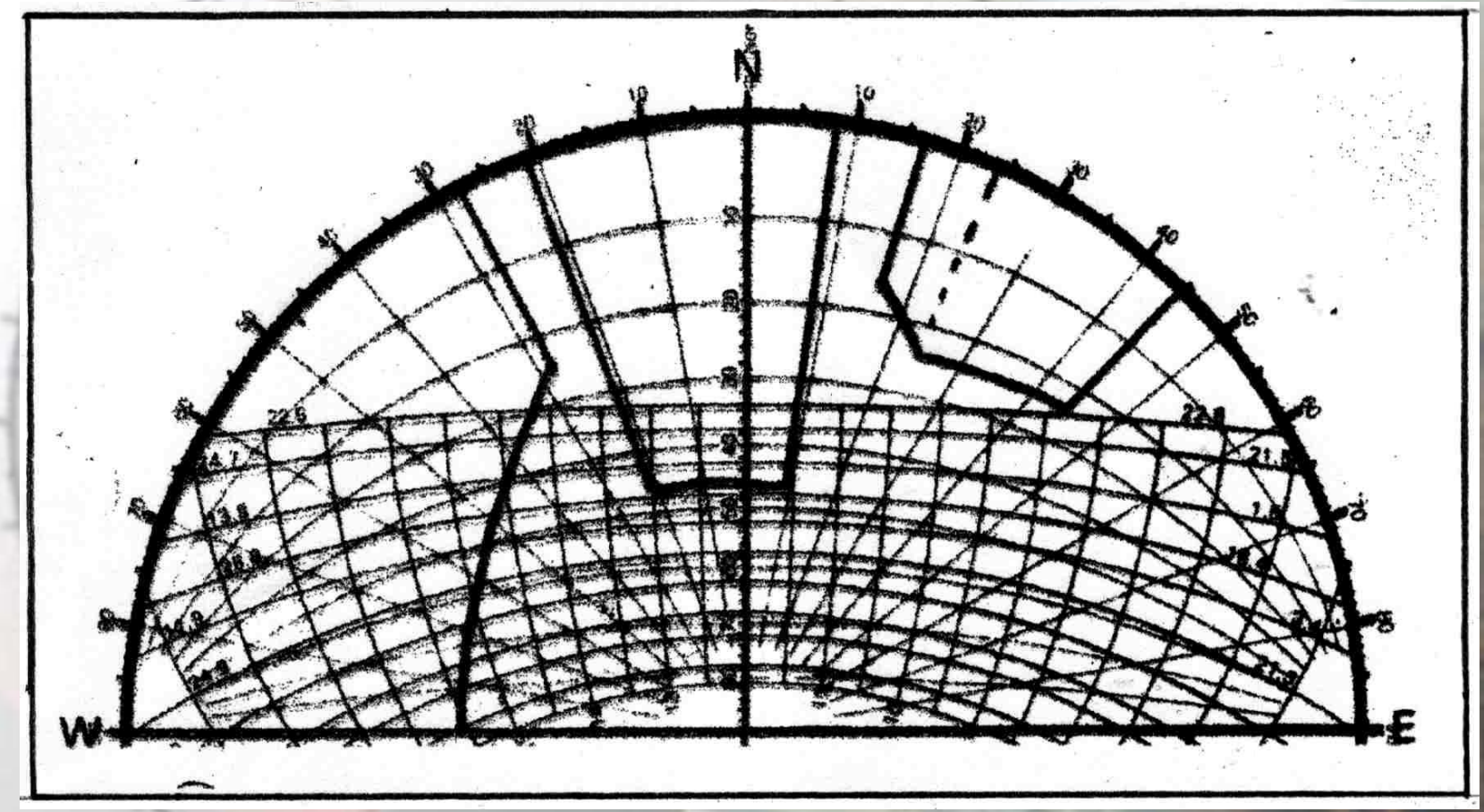
Máscara produzida por 3 prédios, p/ observador no ponto O



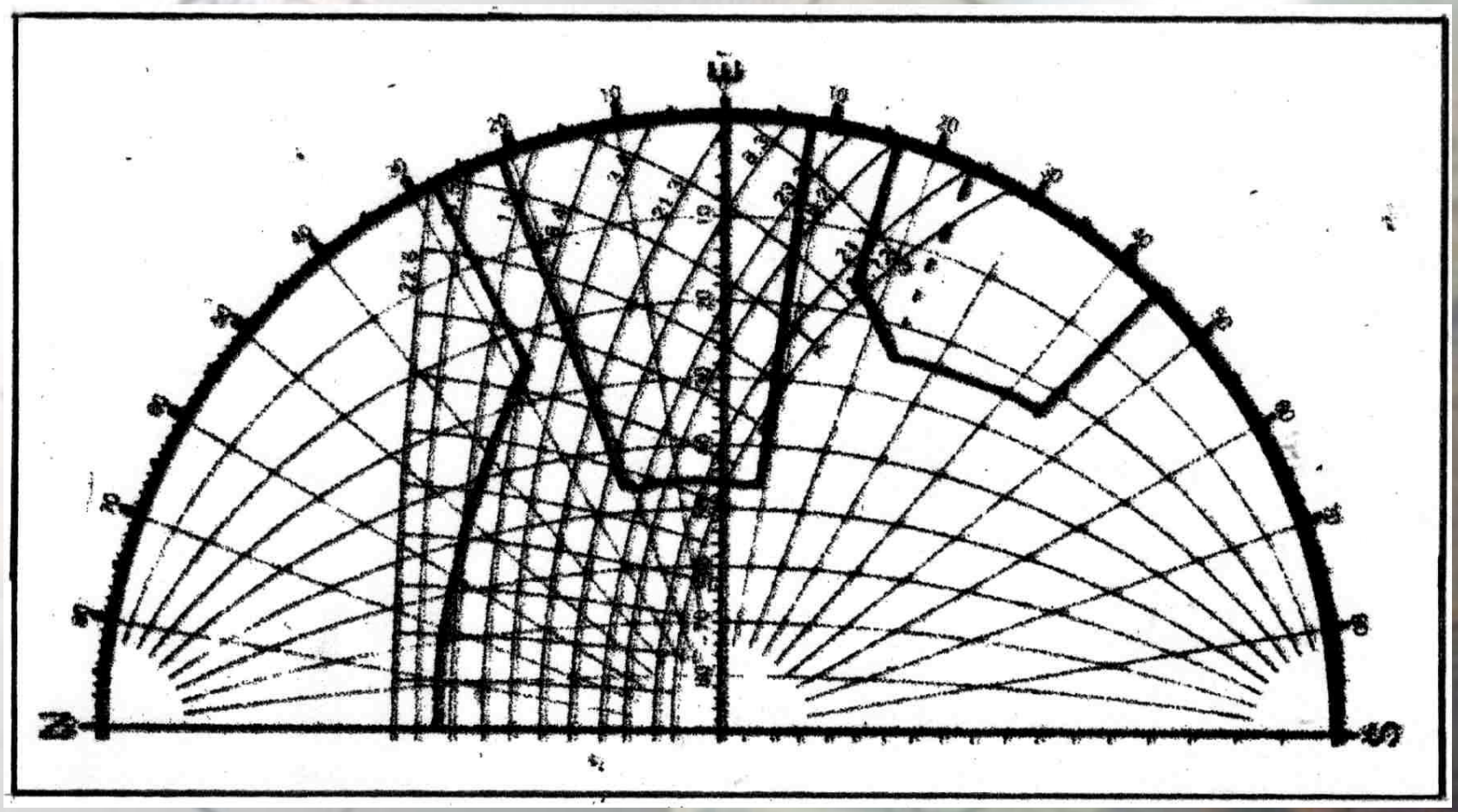
O efeito do mascaramento do conjunto da figura anterior em Recife, fachada norte



Idem, para fachada leste

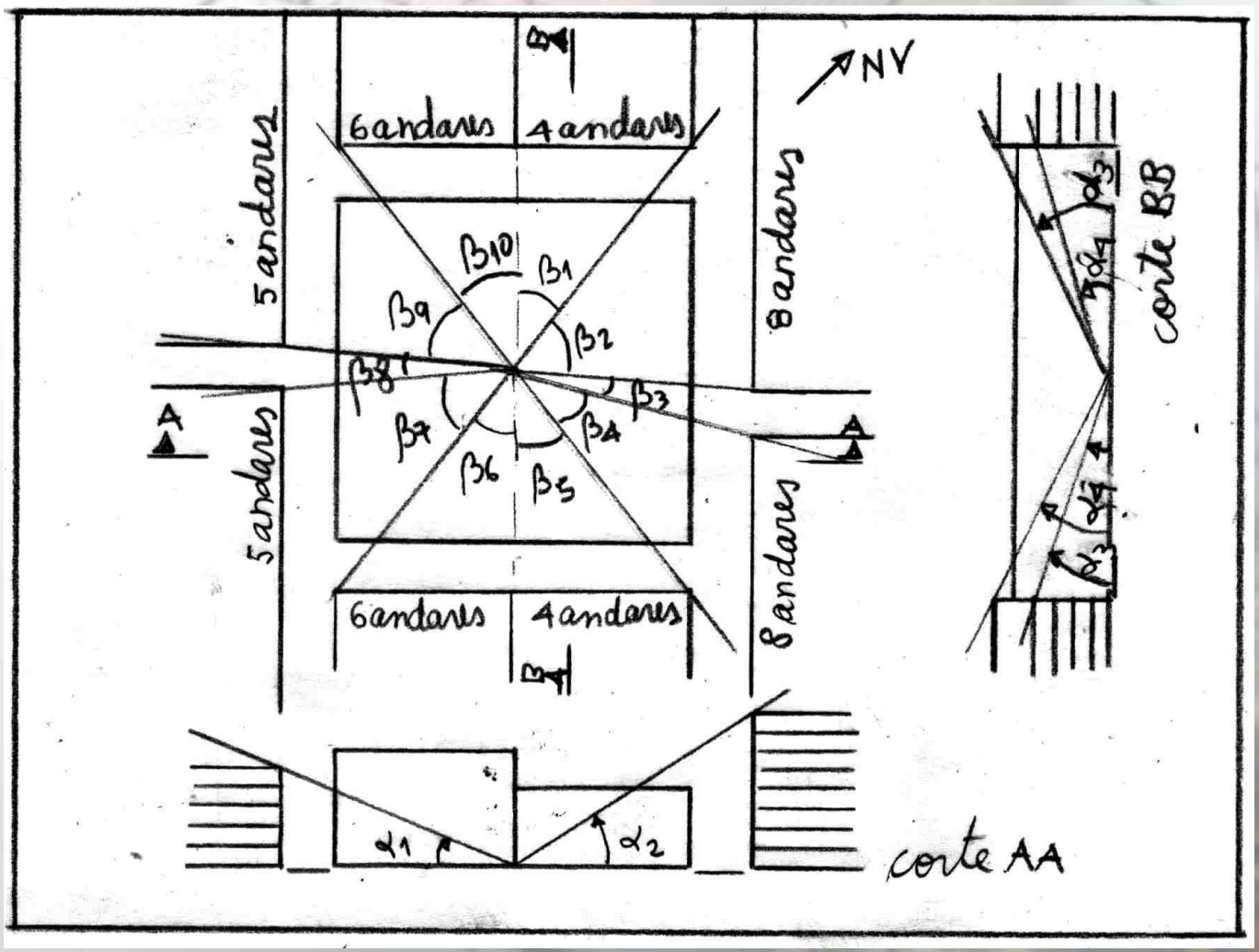


O efeito do mascaramento do mesmo conjunto em Pelotas, RS, fachada norte

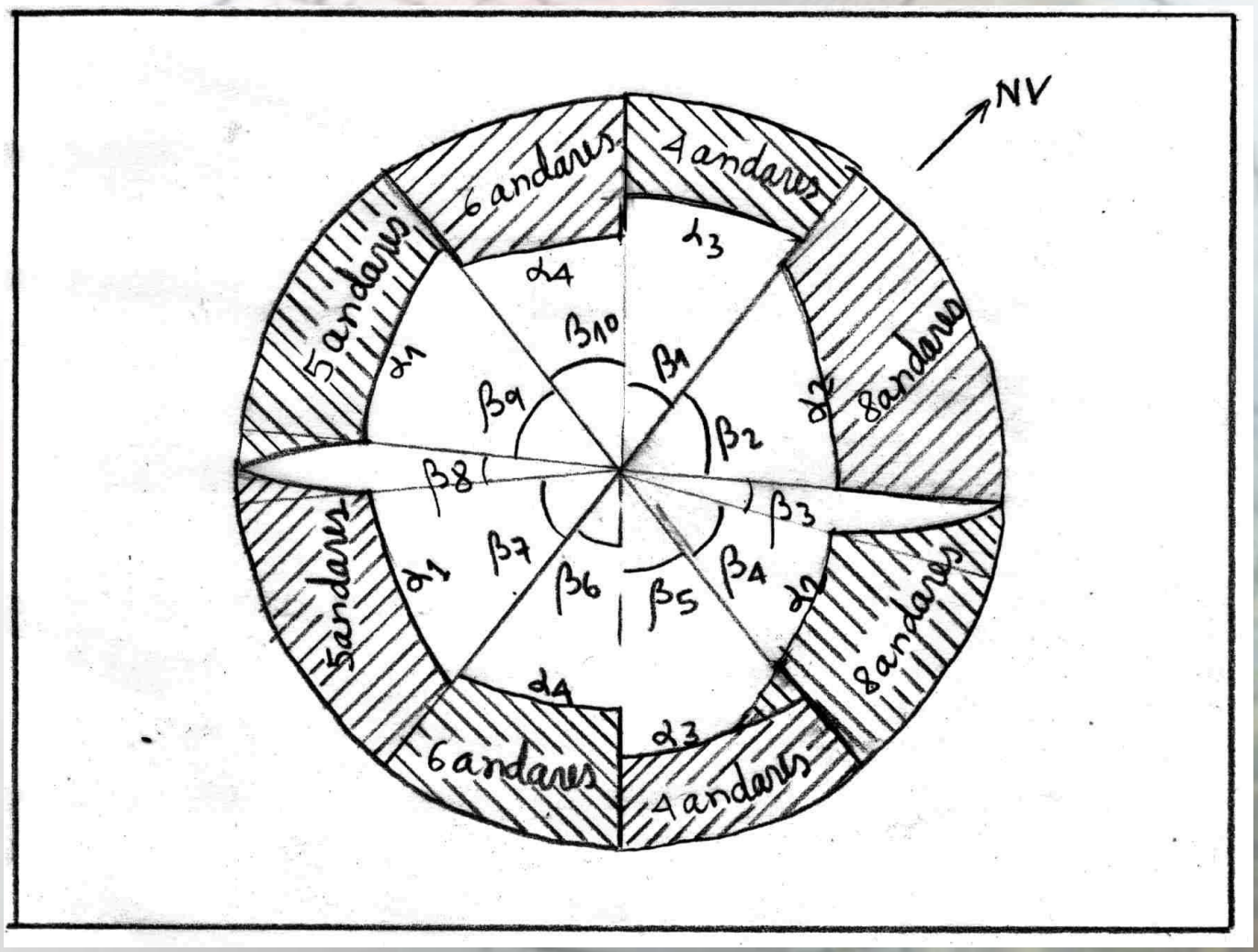


Idem, fachada leste

MÁSCARA – PRAÇA

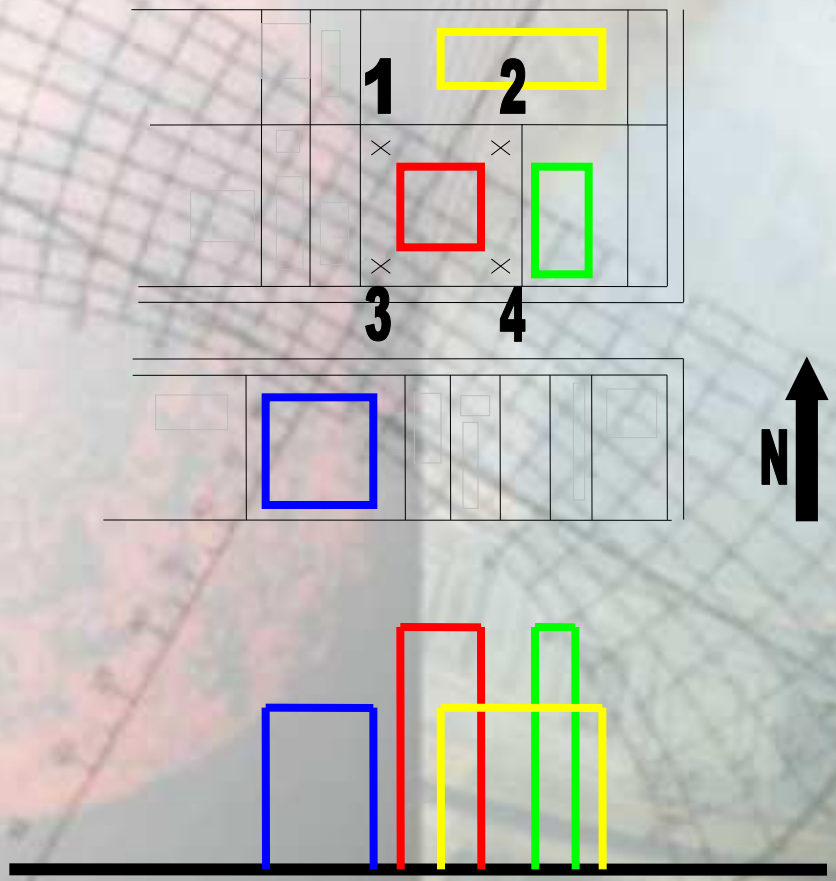


Praça, em planta e cortes, com ângulos α e β determinados

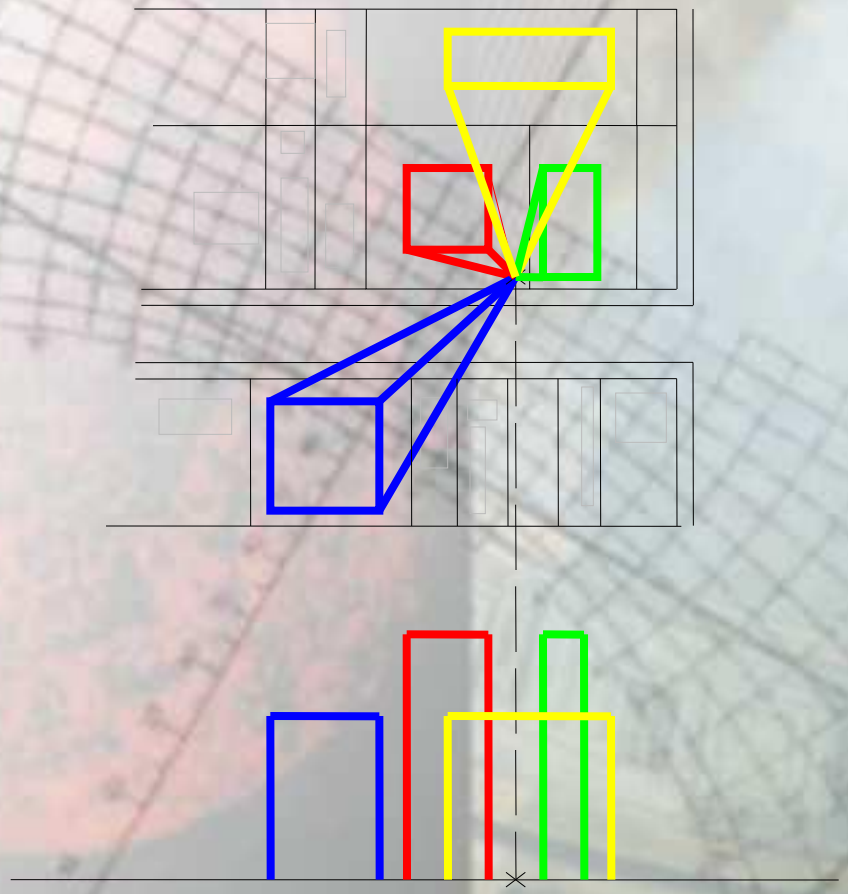


Máscara das edificações representadas por edifícios situados no contorno de uma praça, com observador no centro

- **Onde colocar a piscina deste edifício?**

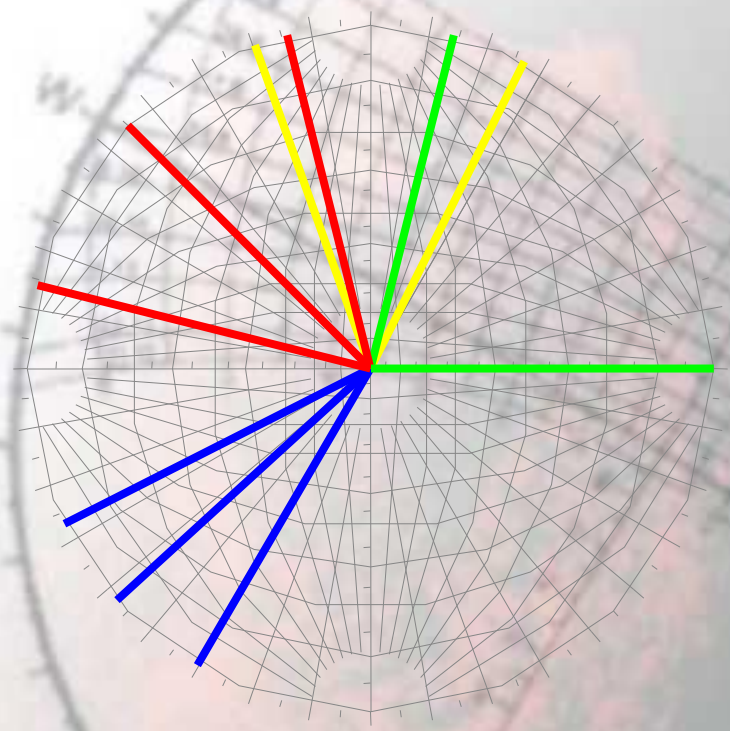


1. Marcar os ângulos β na planta



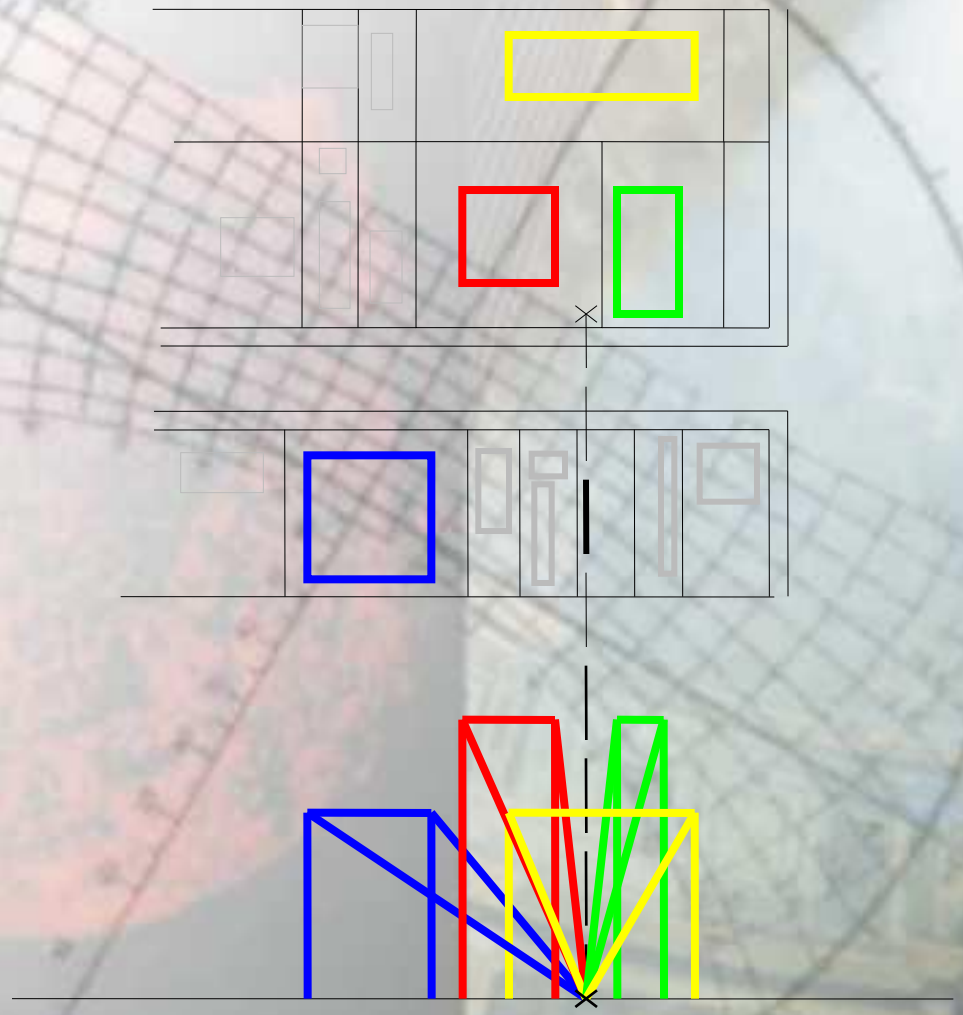
máscara do entorno

2. Traçar os ângulos β no transferidor



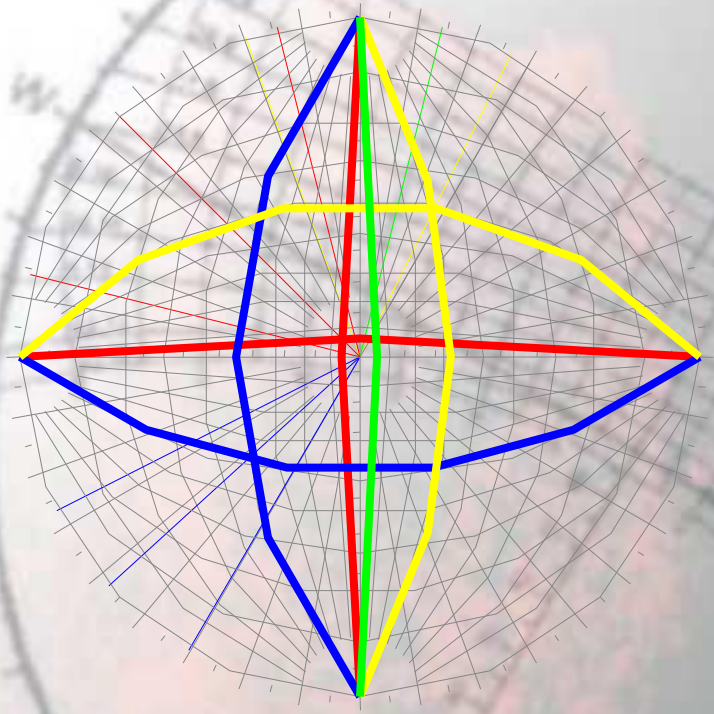
máscara do entorno

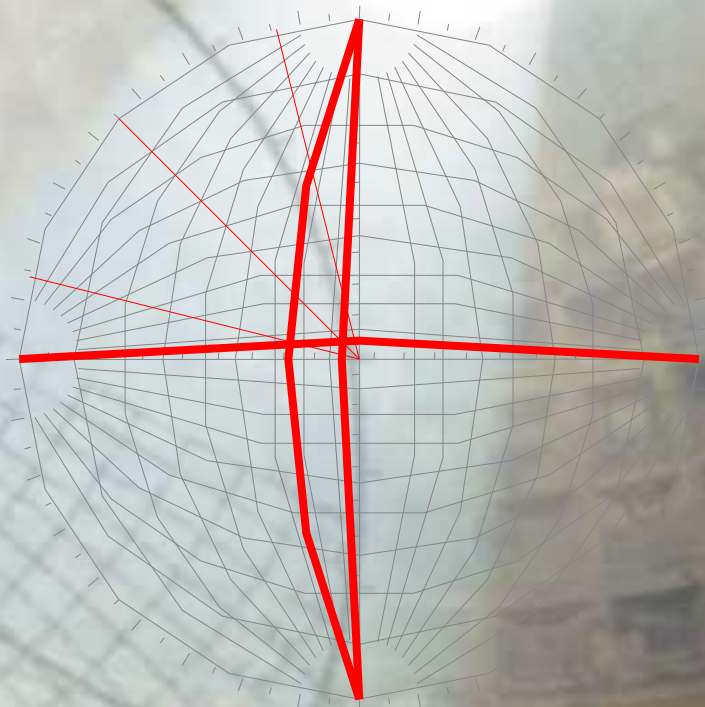
3. Marcar os ângulos α no corte



máscara do entorno

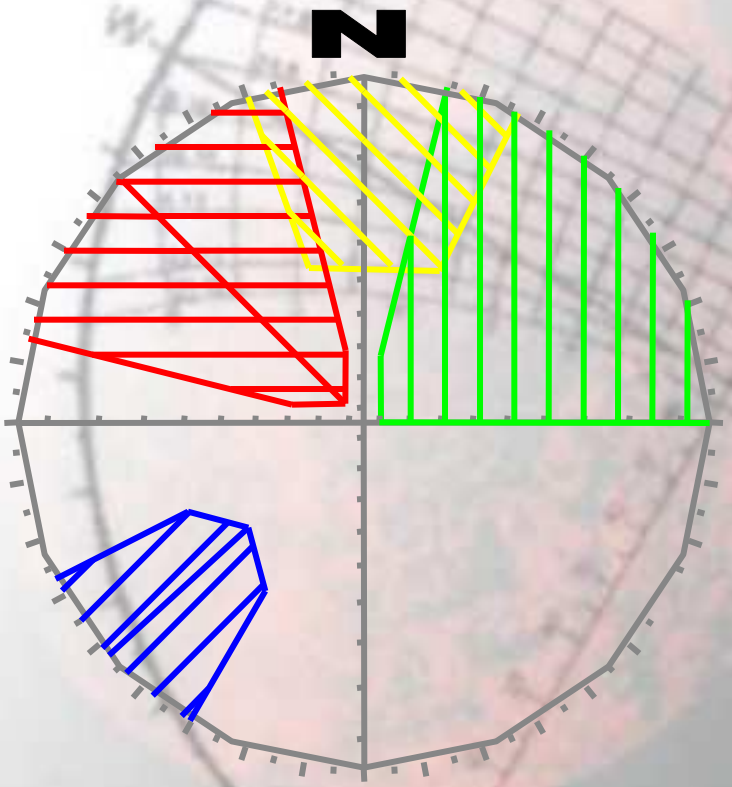
4. Marcar os ângulos α no transferidor

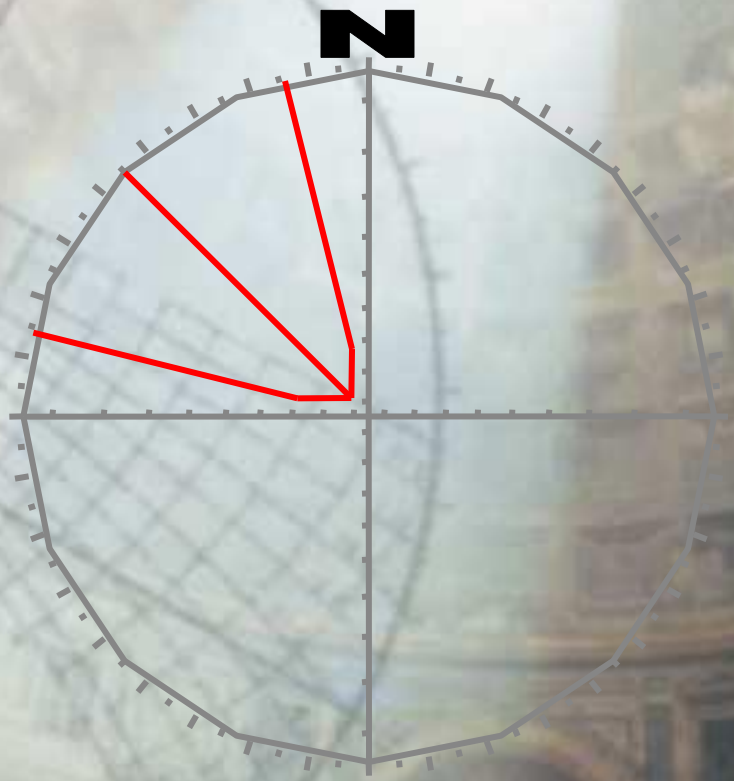




máscara do entorno

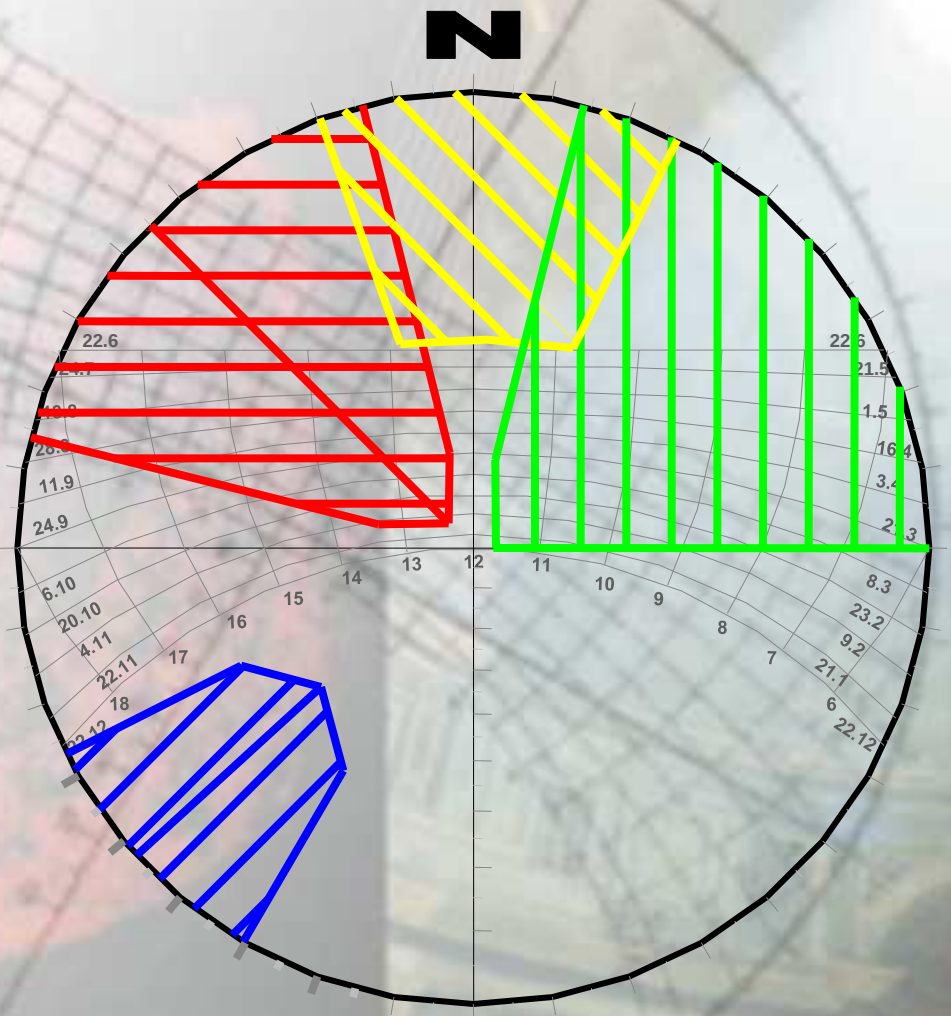
5. Apagar as linhas extras e marcar o norte da máscara





máscara do entorno

6. Sobrepor à carta solar



máscara do entorno