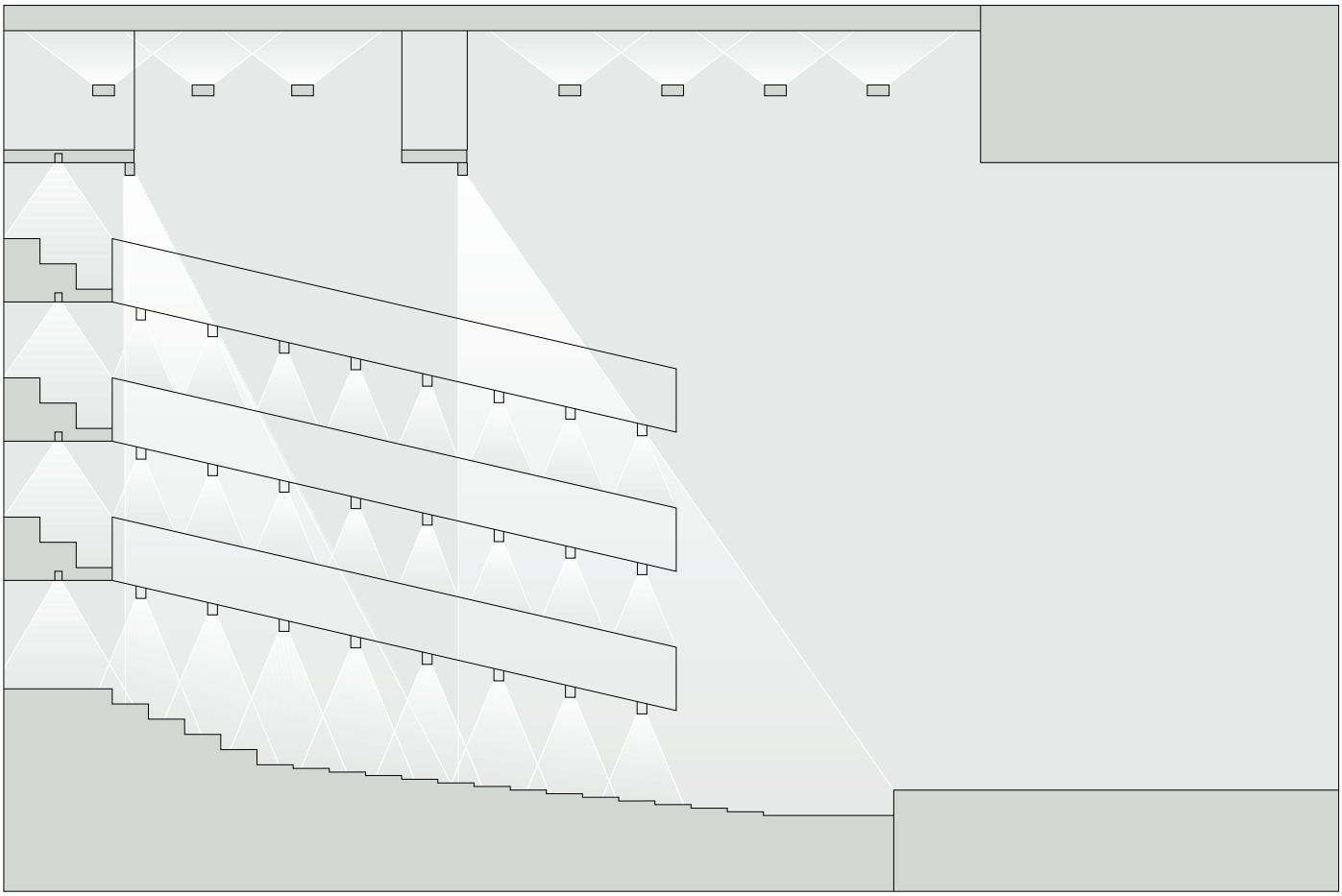
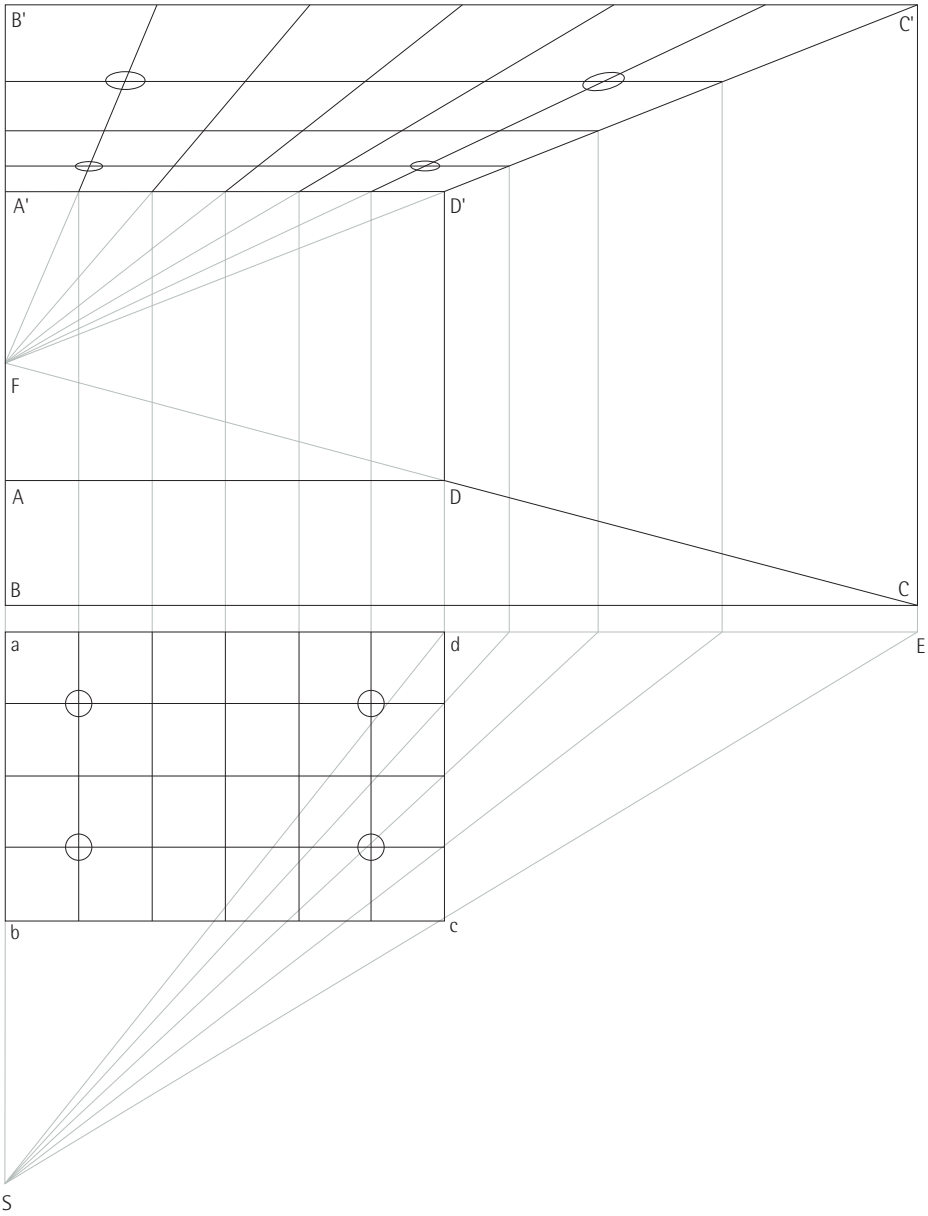


A graphical representation of the lighting concept for the auditorium of a theatre. The light beams are represented by hand-drawn white lines against a grey background. The presentation is confined to the representation of luminaire positions, beam directions and beam spreads.

It conveys a qualitative overall impression of the distribution of light in the space and deliberately provides no quantitative data.



Central perspective: a perspective drawing is to be created from the plan a, b, c, d and the lighting layout entered. First, the observation point S and perspective plane E are selected. For reasons of simplification, the perspective plane is identical to the rear wall of the space, so that heights and distances can be entered to scale on the rear wall of the perspective; the observation point is located on the extension of the left-hand wall. The verticals of the perspective are the result of the projection of points a, b, c, d on the perspective plane. Then the base line AD of the rear wall is selected in the perspective and the room height AA', DD' and the height of the vanishing point AF (in this case eye height of a person seated) are entered to scale. This in turn defines the rear wall. By extending the vanishing lines FD and FD' the right-hand side wall DC and D'C' is defined. The horizontals BC and B'C' complete the perspective as the front base and ceiling lines. Ceiling grid and luminaire positions in the perspective are derived from the straight lines drawn from vanishing point F and from the projection of wall points from observation point S on the perspective plane E.

Perspective construction of a lighting structure (dual-point perspective): observation point S and perspective plane E are also selected first, for reasons of simplification the perspective plane once again lies at the furthermost point to the rear of the plan a, b, c, d. The verticals of the perspective are derived from the projection of points a, b, c, d on the perspective plane, the verticals of the vanishing points from the points of intersection of the parallels to the edges of the plan ba and bc with the perspective plane. Baseline G is then selected and entered to scale in line with vanishing points F_1 and F_2 (eye height of a person standing) together with the height of point D. Lines DA and DC are defined by extending the vanishing lines F_1D and F_2D. The last point in the perspective, B, is defined by extending the vanishing lines F_1A and F_2C.