

The solar envelope as instrument of regulation of access to the sun: case studies in the city of Campinas SP, Brasil

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This paper presents a study that investigates forms of regulation of access to the sun in the processes of urban planning and project of the building, and aims at the proposal of subsidies for the reformularization and adequacy, or creation of new legislations. The solar envelopes constructed with the aid of CAD tools and other commands of insolation, had served as basis for the attainment of data and analyses of the relations between the urbanistic indexes and the physical characteristics of lands, buildings, neighborhood, densities, insolation and shadowing. Then, were chosen four sites in Campinas City SP, to examine the influence of the legislation on the lots, buildings and environment. The results obtained show that the application of solar envelopes and the introduction of their concepts in the urbanistic legislation will be able to allow the buildings the guaranty of solar access right.

Keywords: solar envelope, urbanistic legislation, insolation, solar rights.