

Note: we suggest that this note is either an annex to the Policy or it is incorporated into the introduction.

The objective of this Policy is to achieve net zero carbon by 2030 for all new buildings in the city. The broader goal is to achieve a reduction in the energy consumption and greenhouse gas emissions of the built environment by reworking the way buildings are planned, designed and erected.

In 2011, SANS 10400-XA, 'Energy Usage in Buildings' Regulations, in terms of the National Building Regulations, came into operation to improve the energy efficiency requirements of buildings in South Africa. The National Building Regulations, read with the newly updated draft SANS 10400XA (2020) require that a building shall be deemed to have satisfied the regulations' requirements when such building is designed and constructed in accordance with one of the following requirements:

Description extracted from draft SANS 10400XA (2020)	Category
A. has an orientation, shading, services and building envelope in accordance with SANS 10400 Part XA; or	Prescriptive Route based on SANS 10400 Part XA.
B. Is the subject of a rational design by a competent person, which demonstrates that the energy usage of such building is equivalent to or better than that which would have been achieved by compliance with the requirements of SANS 10400 XA, or	Rational design by a competent person – energy usage is equivalent or better than compliance with SANS 10400 XA.
C. has a theoretical energy usage performance, determined using certified thermal calculation software, less than or equal to that of a reference building in accordance with SANS 10400 Part XA.”	Reference building – using thermal calculation software, a new building has a theoretical usage performance less than or equal to that of a reference building in accordance with SANS 10400 Part XA.

The City's Policy and associated Bylaw only provide two routes of compliance: (1) the **rational design** by a competent person; and (2) the **reference building** route. The Policy does **not** provide an option for the Prescriptive Route as detailed in A above. Although the Prescriptive Route is commonly used by developers and is a necessary route to compliance, the City have not included it as an option as including it will not support the City in meeting its desired targets by 2030. The City accepts the Prescriptive Route as reflecting minimum standards established through national legislation and applicable to every municipality in the country. However, such legislation does not preclude the City from legislating in the area of Building Regulations where the City requires compliance with a higher standard in order to achieve a legitimate purpose. In this case that purpose is the attainment of a higher level of energy efficiency, considering the specific socio-economic, topographical and climatic conditions of the City.

Notwithstanding the above, the City cannot preclude an applicant from pursuing the Prescriptive Route, as it is set out as an option in the National Building Regulations. If the applicant opts to pursue the Prescriptive Route, the application will be compliance with the National Building Regulations but will not meet the requirements of the City's Policy and Bylaw.

To avoid this conflict, the City is actively pursuing other options within their mandated power of compliance to encourage, incentivise or persuade applicants to consider the use of other options other than the Prescriptive Route. In collaboration with the SANS technical committee and the National Treasury, the City will move towards performance-based energy efficiency compliance monitoring. The EUI tables published in this policy, taken from draft SANS 10400XA (2020) thus apply until 2025/2026 and thereafter the standards will be set through a performance-based route. An easy to use building simulation model is being developed and tested for this purpose.

Where buildings do not meet the City's need for progress towards net-zero carbon buildings by 2030 the City will explore additional policy and regulatory mechanisms to attain that standard. In particular the City will prioritise the consideration of land use applications for new buildings that follow the rational design or reference building routes.