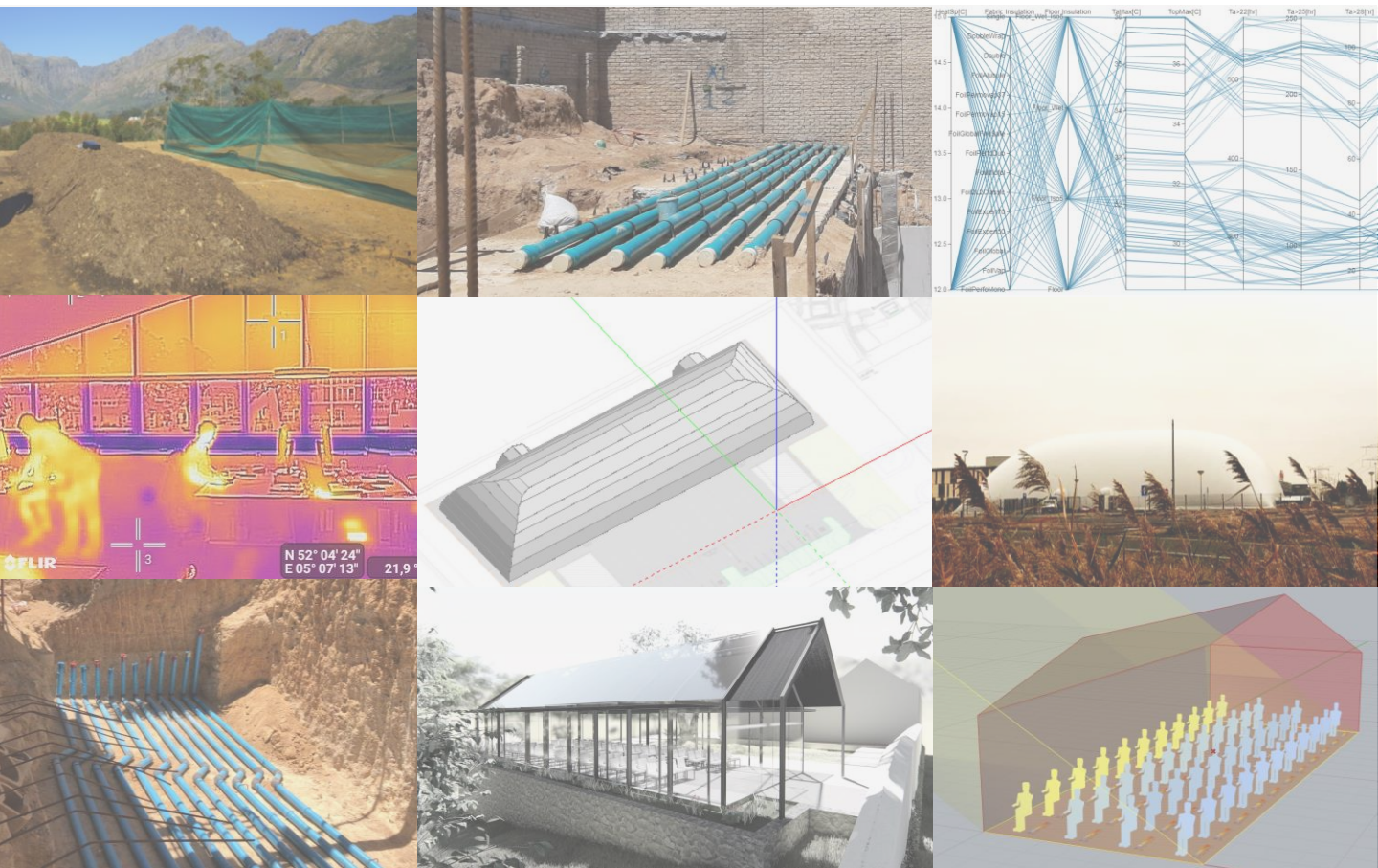


Climetric

Alternative "air-conditioning" strategies that are sustainable, cost less and use less energy.



Low energy design using passive design and low-tech sustainable comfort systems. Sustainable comfort design suited to your design, your local climate and your budget.

Passive Design | System Design | Earth Tubes | TABS | High comfort blinds | Phase Changing Materials | Unique spaces comfort | Parametric financial and technical analysis | Implementation support | SANS 10400 XA | High tech analysis | Measurements

We provide design input and support for specialized sustainable design strategies. These strategies could have significant positive energy and comfort impacts, but usually, fall outside the scope of the expertise of design team members. We can assist with any or all of the stages to include a sustainable strategy in your building design.

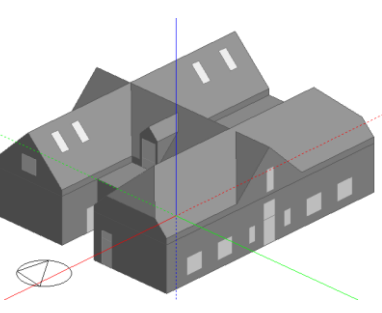
www.climetric.design

What we do

We are sustainable design engineers, who will ensure that your building is designed to be as energy efficient as possible. If, after an optimized passive design, heating and cooling is still required, we will match you with a system that suits your needs and budget.

SANS 10400 XA & Envelope Optimisation

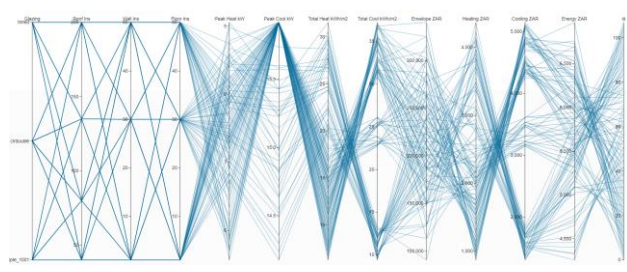
Start off by making your design as comfortable as possible, should no artificial heating or cooling be provided. Whether you are in concept design stage, or have an existing building that is being renovated, we can advise you on how to get the most out of your base design, without breaking the bank.



Thermal Model
(SANS 10400 XA, EPC,
BENG, or applicable
energy code)



100+ design iterations
where building
materials are varied

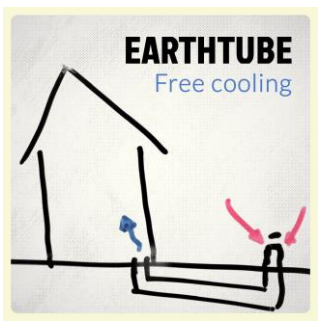


For each design, energy performance and construction costs are obtained, so you can choose the design most suited to your needs.

Low tech heating and cooling

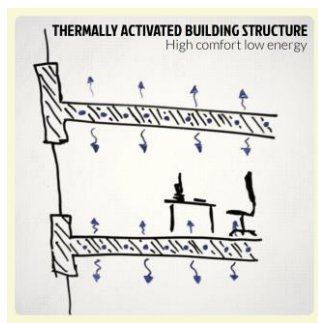
Examples of sustainable design strategies we can investigate for your project include

Earth Tube



Free cooling and heating by using stable ground temperatures. Low tech, low energy, low costs.

Thermally Activated Building Structure



Temper the structure instead of the air. Higher comfort for much less energy.

Phase changing materials



Panels that keep a constant temperature without heating up.

How we do it

Free Design Consultation

Let's sit down and discuss your design. We will provide you with relevant project references, a high level climate analysis to identify opportunities and comfort considerations, and sustainable design concepts that could be relevant to your project. No commitment is required until you are sure that we will add value to the design. Meetings can be in person, or via an online video conference.

You can choose to involve us for any or all of the following services

Passive Design

SANS 10400 XA Rational Design

Rationalise construction cost by using computer simulation to demonstrate your design's compliance to national building regulations. The cost of energy modelling is typically a fraction of savings realized by not installing unnecessarily expensive glass required to comply via the prescriptive compliance route.

Parametric Envelope Optimisation

Iterative modelling of the building envelope, with variations to insulation (walls, floors, roofs), shading and glazing type to determine heating and cooling energy requirements and an envelope cost estimate for each option. Includes a 30 minute consultation to discuss results and choose most suitable option for the client.

System Design

System Concept Design

This is where we get down to the details of engineering your sustainable heating and cooling system. How well will it perform, how much will it cost and what are the operational savings compared to a conventional system? What are the key design parameters for success?

System Detail Design

Compilation of design documentation - schematics and details of system design and control information. System introduction to contractor. Detailed component specification and costs in collaboration with the relevant contractor.

Implementation Support

Design Implementation Support

Communication and liaison with construction team / contractor to ensure that the design is installed correctly. Review of the relevant design team member's drawings (e.g. architect).

Site implementation

Site visits, implementation reviews and reports. System testing and trouble shooting.

Post installation management

System performance and measurement report. First year system tweaking and optimization.

Who we are



Dolf Bakker

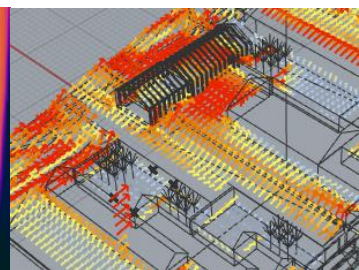
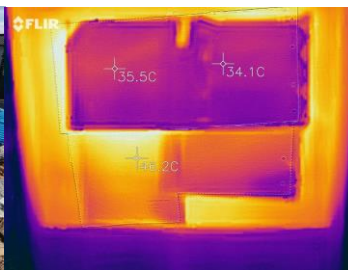
Dolf finished his Master's Degree in Physics of the Built Environment at Eindhoven University of Technology in 2012. After finishing his studies he worked for the mechanical contracting company Imtech Building Services where he specialised in the performance of complex dynamic systems. In 2015 Dolf moved to South Africa to work for PJCarew Consulting as a Green Building Consultant. At PJC, Dolf ran his own Passive and Low Energy design team and implemented passive and sustainable energy efficient systems in various projects in South Africa and in the Netherlands. In end 2018 Dolf left PJC to start Climetric BV. Since the beginning of 2020 Dolf is again based full time in the Netherlands. While working on local projects, Dolf supports the South African projects remotely



Etienne Terblanche

Etienne completed his Industrial Engineering degree at the University of Stellenbosch, South Africa, in 2005. He worked as a consulting engineer at PJCarew Consulting, a Cape Town based passive and low energy design consulting firm. During his time at PJC, he has worked on developing analysis tools, and calculators to aid in decision making in water, climatic, energy and daylight strategies. He also worked on and managed several Green Star Certifications and energy modelling submissions.

In 2015, Etienne started Sustis, a company specializing in South African SANS XA Rational Design modelling. Sustis merged with Climetric in 2018. Etienne is based in Cape Town, South Africa. From here he works on local and supports European projects.



Get in touch...

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The Climetric logo features a green circle with a white dot inside, followed by the word "Climetric" in a bold, black, sans-serif font.