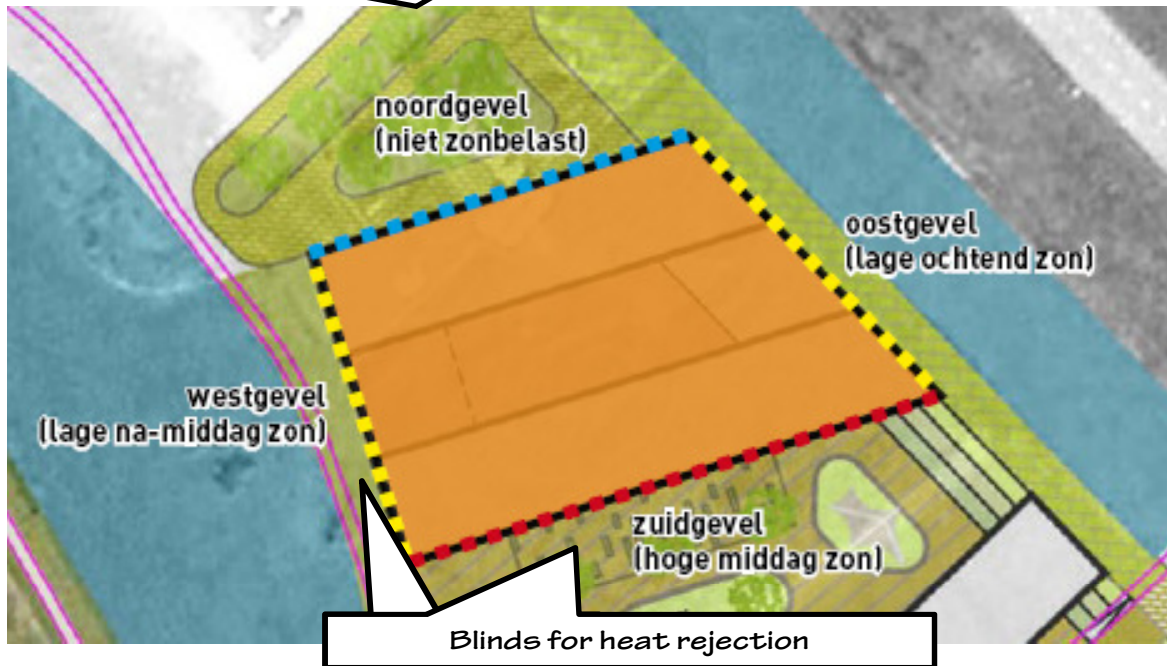


TNT GREEN OFFICE

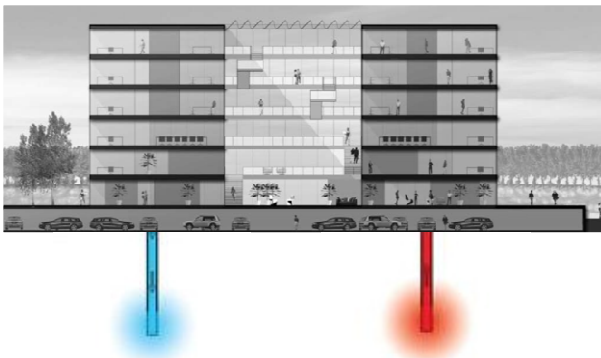


RELATING TO THE ENVIRONMENT

Complete transparency to maximize daylight entrance

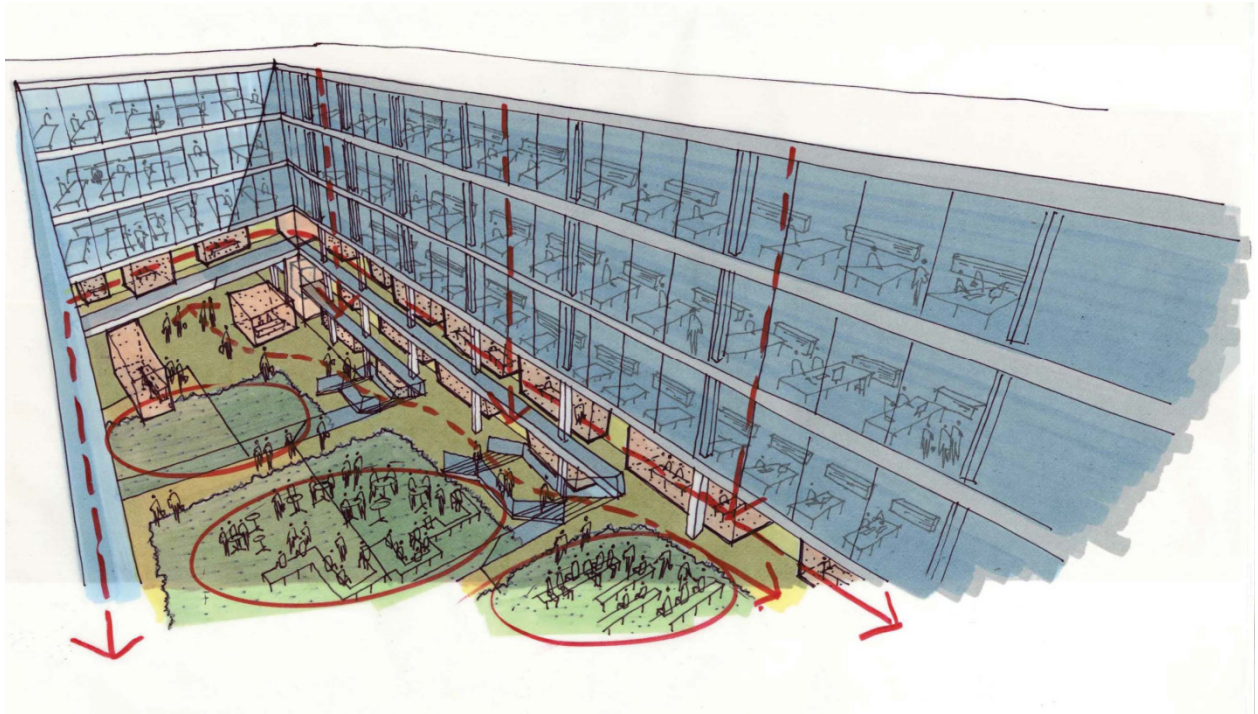


The position of the building has resulted in different facades in order to maximize the performance of each facade.

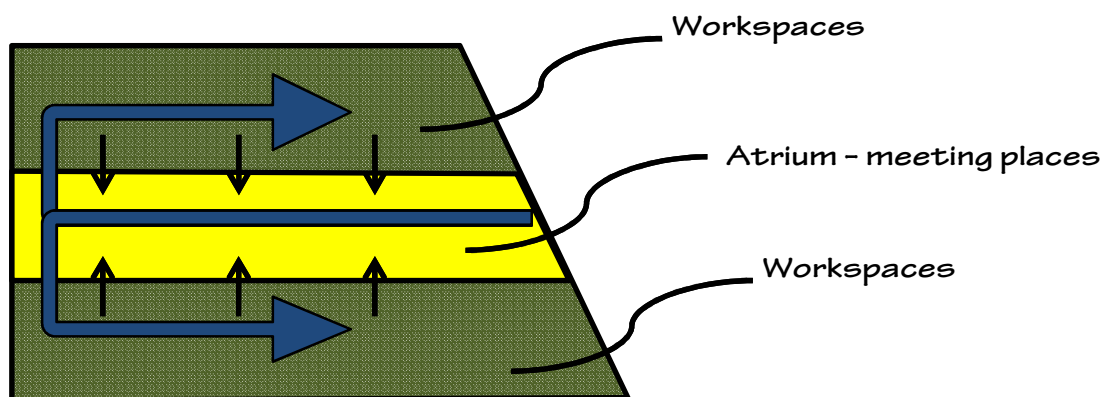


The surplus of heat in the summer and the surplus of cold in the winter are stored in the ground below in an heat/cold storage. The stored heat is used in the winter to warm the building up and the stored cold to cool the building down in the summer.

DEFINING SPACE



Inside the building the spaces are connected by an atrium, which is built in the axis of the building and therefore connecting most spaces with each other. The atrium allows people to move between floors and each floor has it's own meeting place. Also , each office is connected to the atrium, allowing it to view over the atrium and in that way is connected to the spine of the building.

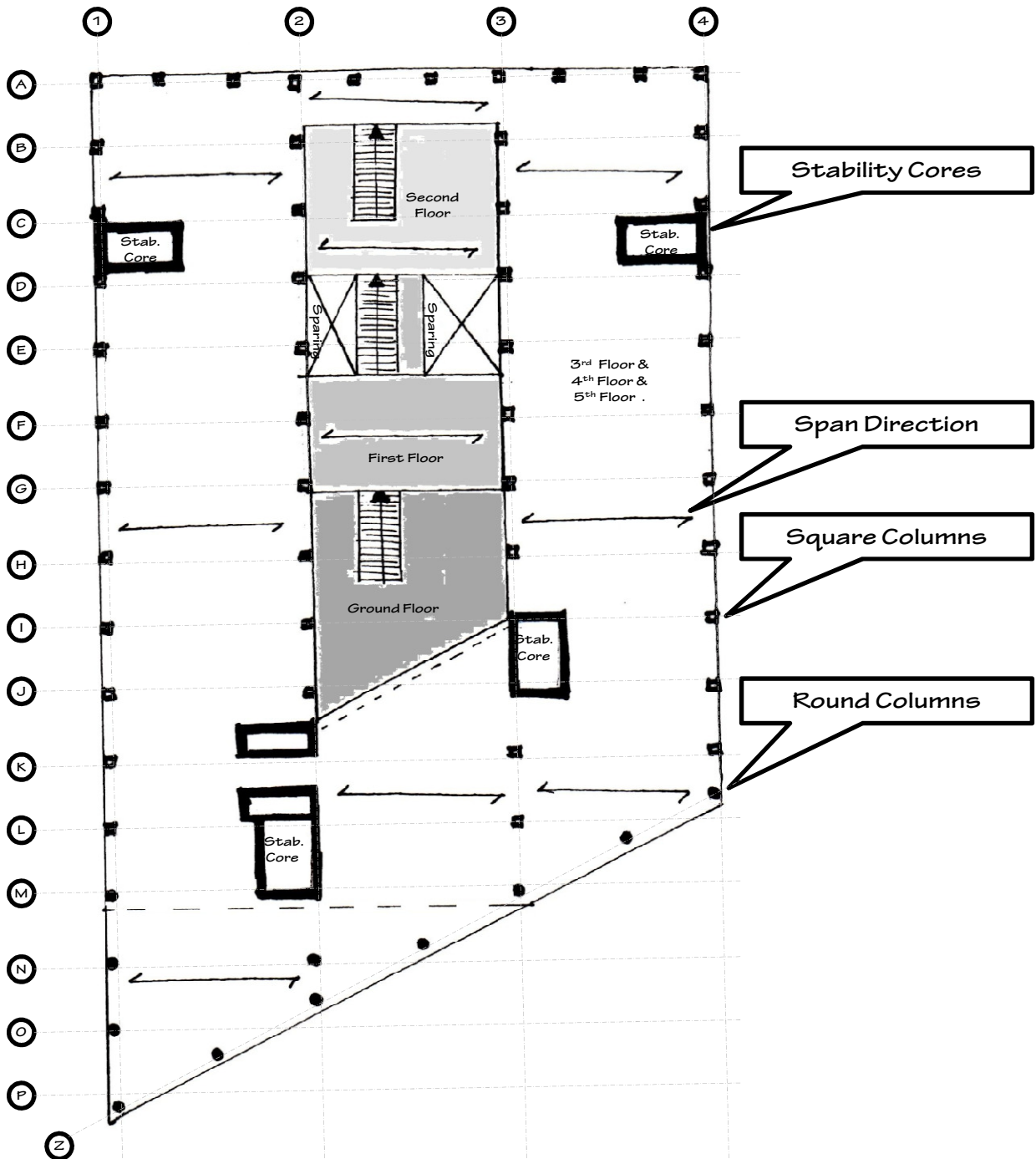


STRENGTH & STABILITY

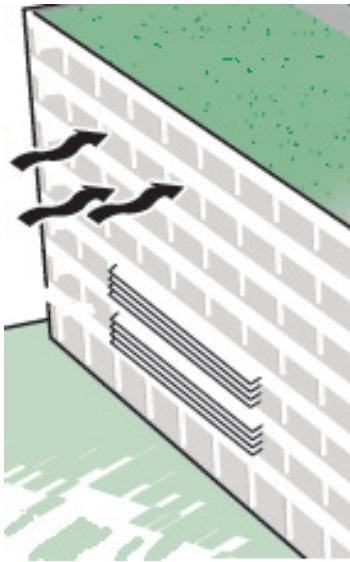
The strength and stability of the building is obtained by the construction frame. The structure consists of a series of columns on different patterns.

The structure of the building is designed for flexibility. The spans are large and that creates a column-free space, creating a large free format.

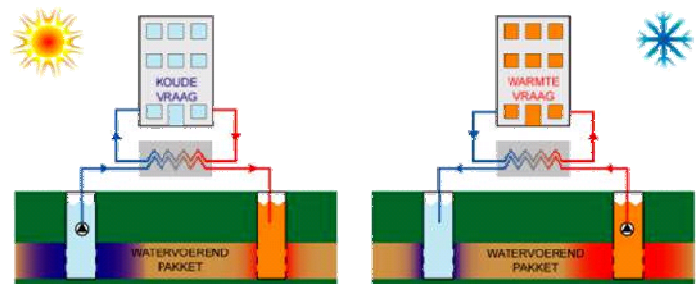
The stability is achieved by staircases serving as core stability and by the floors in the centre of the building that connect the floorplans.



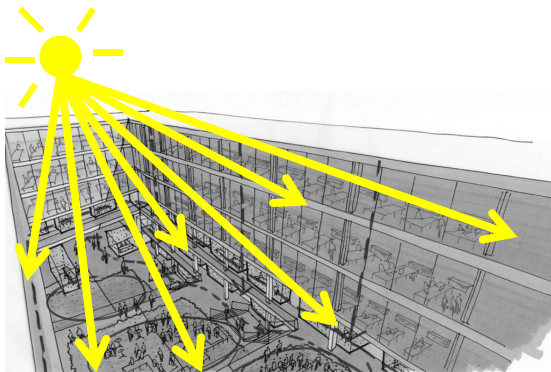
COMFORT



Employees are able to open the windows, to allow natural ventilation

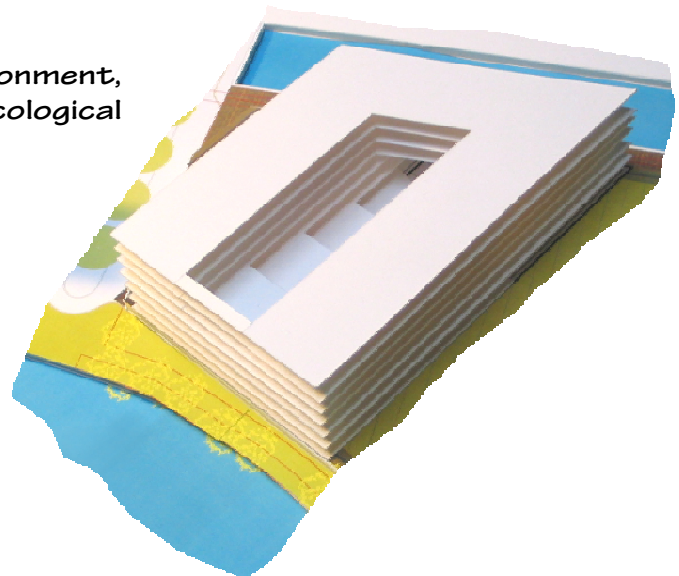


Indoor climate is controlled by heating & cooling storages in the ground which results in comfortable workspaces.



Daylight is able to come through the roof of the atrium, which will light up the offices connected to the atrium. This way, the offices will have light from both the atrium and the facade.

Situated in a ecofriendly environment, having view over existing ecological waterzones.



EFFICIENT & EFFECTIVE USE OF MATERIAL



Application of a Moss-sedum roof

Inside the building, employees will be sitting on C2C chairs. 95% of this chair can be recycled, making it an efficient and durable object.



The facade's are not structural, (able to replace the facades after some time)



Two facades were compared with each other. The most efficient & effective one was facade no. 2. Although facade 1 scores higher on light joining in and in the use of space (extra 2% used ground), the building would get much expensiver and lose much energy on heating up cold air coming in from the buildings.

Use of materials:

- Emission-free materials
- Over 40% coming from local industry
- Over 20% recycled materials
- Slim building construction existing from I-frames and canal floors
- Only FSC-certified wood used

EFFICIENT & EFFECTIVE USE OF ENERGY

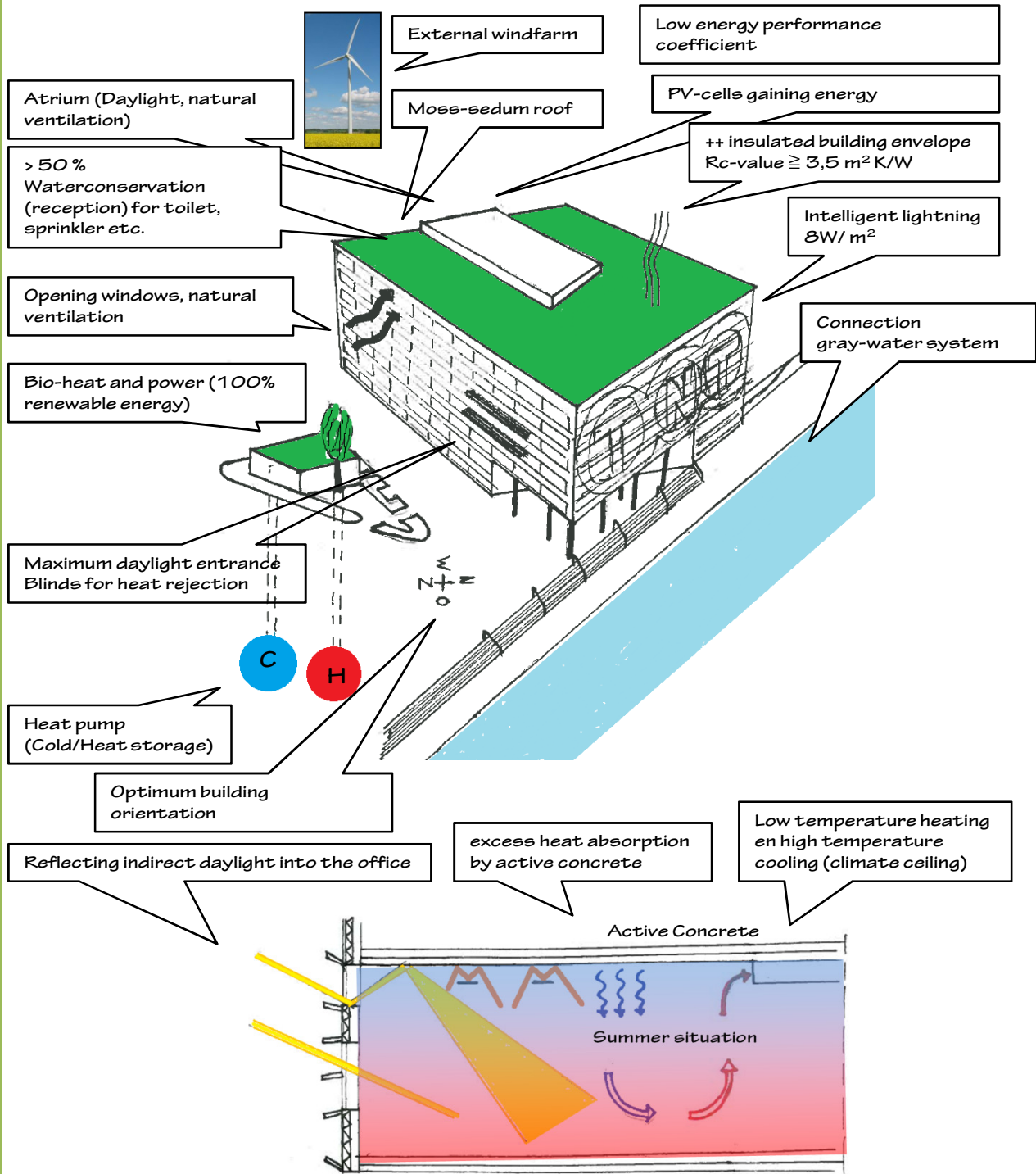
The efficient and effective use of energy is achieved with the methods which you can see in the overviews below.

The TNT Green Office is assessed with three main criteria:

LEED: Platinum Certificate

Green Certificate: Very Durable

GreenCalc: ≥ 1000 points



FLEXIBILITY & ADAPTABILITY

The flexibility is maximized by a column-free span. An image with the column structure is shown below. The green area is completely flexible, the black squares are the columns.

There is shown that all the floors are column free. The 3th, 4th & 5th floors are (flex-)workplaces.

The building is fully adjustable with a reclassification or change of function.



The sketch below shows the column free and flexible space in the TNT Green Office Building

