climate design & slabs

- heating: concrete core activation
- electricity: raised floor
- ventilation: false ceiling
- local cooling: cooling ceiling
- solar power: panels

construction & slabs

- office: roof green
- office: solar panels
- office: skylight

construction modularity slab

* solar energy: amount of solar panels = 1820m2, system size: 193.22 kW-DC (amount of energy in full sun)

Array tilt angle 15 degrees, Energy output: 177.125 kWh/yr, which roughly provides 75% energy, required for the offices
variables: 15 kWh/m2/yr, 14919m2, low-end with correction for low estimation

construction & council hall

- beam structure: skylight
two beam structure connecting inner to outer column rowPublic ramp, situated between inner and outer column row, system of beams petliggers en hoedliggers

- biaxial floor, supported by beams bubbledeck
- short and long span hollowcore, supported by beams bubbledeck
- columns f/ biaxial floor
- rigid core, elevators & stairs
- T shaped columns, parking
- beam structure: skylight
- truss beam structure connecting inner to outer column row
- skeleton of beams connected to inner column row & the diagrid structure
- petliggers en hoedliggers
- system of beams connected to inner column row & the diagrid structure

- loadbearing precast concrete elements
- hollow core slab, auditoria
- loadbearing precast concrete elements
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- loadbearing precast concrete elements

United Nations Environmental Council; A.G. Gaydadjiev - 1315153; SADD Strategic Architectural Design Development
details concrete facade: 1/5

1. Solar panel installation system
2. Reveal flashing
3. Formed profile
4. Horizontal concrete panel framing
5. Concrete panel anchor
6. Waterproof layer
7. Steel window framing with integrated thermal bridge 140mm x 10mm
8. Steel window flashing with integrated thermal bridge
9. Steel profile for purposes of window framing
10. Ventilation gap with backing
11. Moisture repellent layer
12. Insulation 120mm, rockwool
13. Prefabricated Hollow Core slab, HVP150, kanaalplaatvloer
14. Prefabricated hollow core slab, HVP150, kanaalplaatvloer
15. Prefabricated hollow core slab, HVP150, kanaalplaatvloer
16. Ventilation gap with backing
17. Soundabsorbing plastered cooling ceiling (offices)
18. Air servicing in corridors
19. Gains for vertical connection of prefab elements
20. Concrete core activation in prefab elements
21. Structural concrete core activation in prefab elements