



UIA2020RIO

27th World Congress of Architects

Project Name:
Authors:
Country:

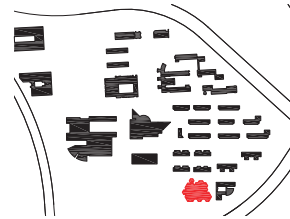
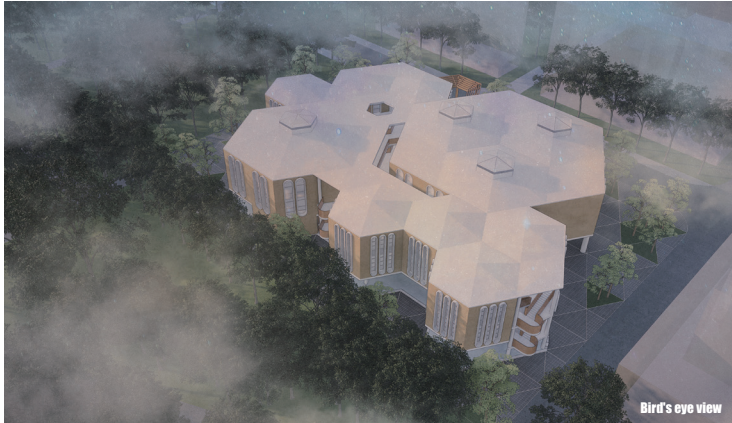
Honeycomb & Earth Buildings

FJUT Student activity center

Learn from nature . Update old technology

CWXD Architectural Firm Wenxing Chen

CHINA



Building area: 7276.79 m²
Coverage: 2977.38 m²
Number of floors: 3 F
Building height: 18.55 m

General Plan



1. CONSTRUCTION LOGIC BASED ON HONEYCOMB

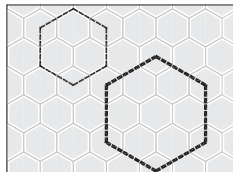
Hexagonal hives allow bees to enclose the largest area with the least amount of material.

Similarly, hexagonal space requires the least amount of enclosure materials under the same building area. Save material is one of the foundations of sustainable development.



2. MODERN APPLICATION OF FUJIAN EARTH BUILDING

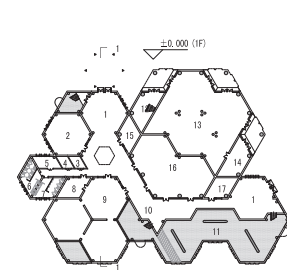
The 400-thick rammed earth wall can make the building adapt to the environment and keep the suitable indoor temperature and humidity all the year round, thus canceling the air conditioning system and reducing the building energy consumption.



3. COMBINATION OF ORGANIC GROWTH

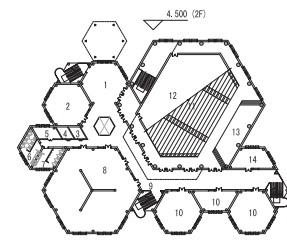
The minimum hexagonal element with 7 m axis edge length is concluded. Three basic hexagonal elements are combined to form a large hexagon, and seven basic hexagonal elements are combined to form a larger hexagon.

The combination of architectural space is like the organic growth of animals and plants in nature.



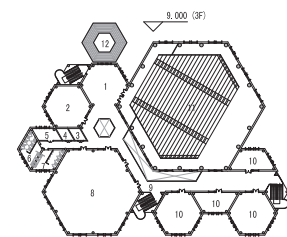
1. Lobby
2. Chess and Card Room
3. Strong electricity
4. Weak current
5. Pump room
6. Girls
7. Male Guard
8. Preparatory Room
9. Exhibition Room
10. Walkway
11. Shallow pools
12. Auditorium Hall
13. Stores
14. Warehouse
15. Equipment Room
16. Dance Room
17. Water treatment room

Floor 1



1. Hall
2. Table Tennis Room
3. Strong electricity
4. Weak current
5. Equipment Room
6. Girls
7. Male Guard
8. Fitness room
9. Walkway
10. Association
11. Report Room
12. Warehouse
13. Stage
14. Lounge

Floor 2



1. Hall
2. Chorus Room
3. Strong electricity
4. Weak current
5. Equipment Room
6. Girls
7. Male Guard
8. Multifunctional Room
9. Walkway
10. Association
11. Report Room
12. Main entrance device

Floor 3



1. Main entrance device
2. Lobby
3. Exhibition Room
4. Hall
5. Fitness room
6. Multifunctional Room

1-1 Profile

All the worlds. Just one world
Architecture 21

