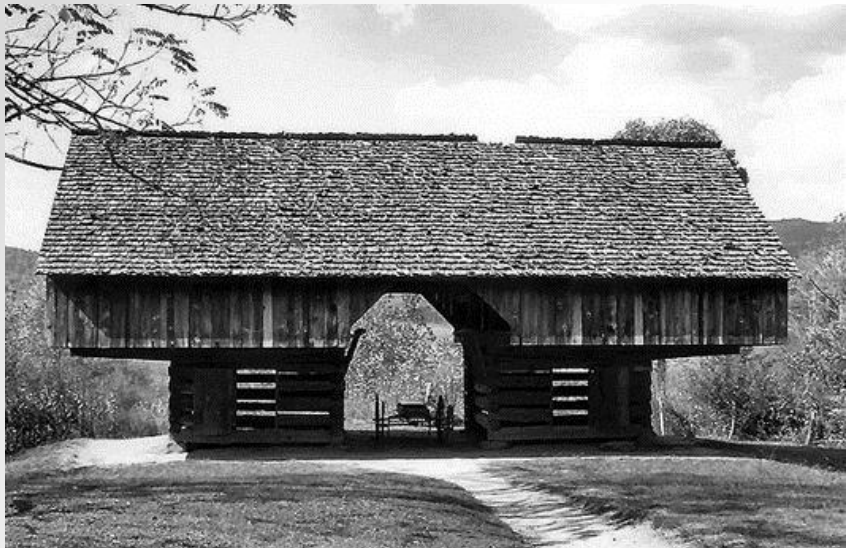
Living Light

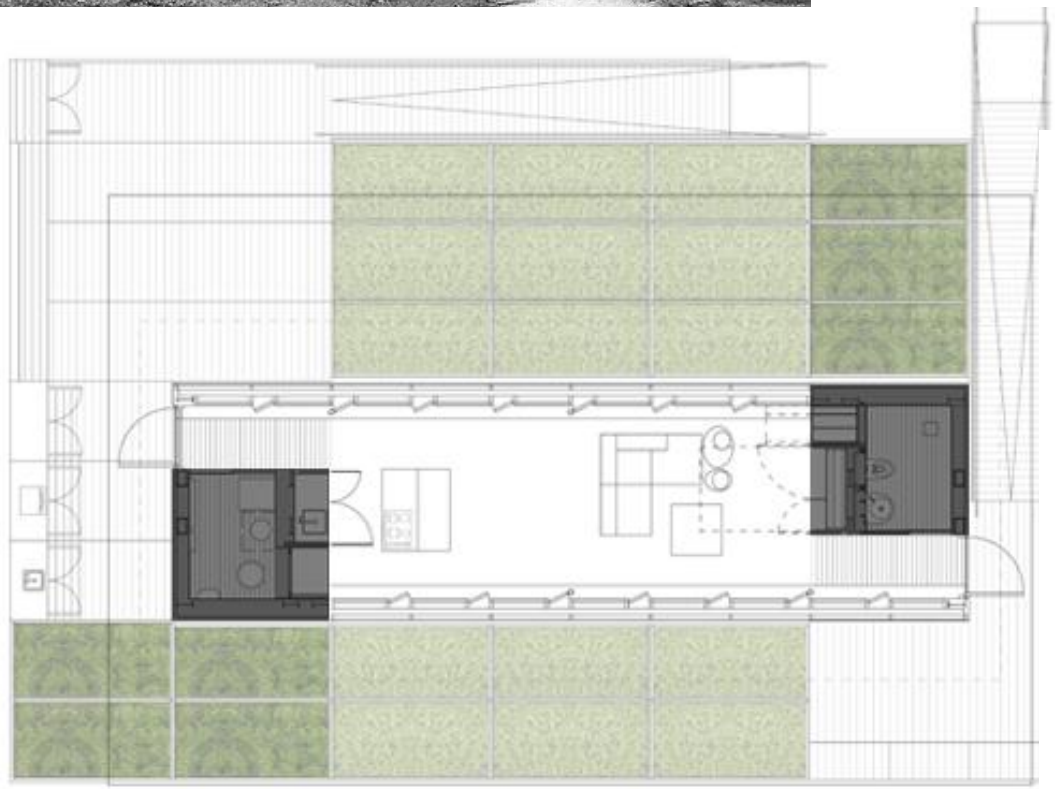
The University of Tennessee

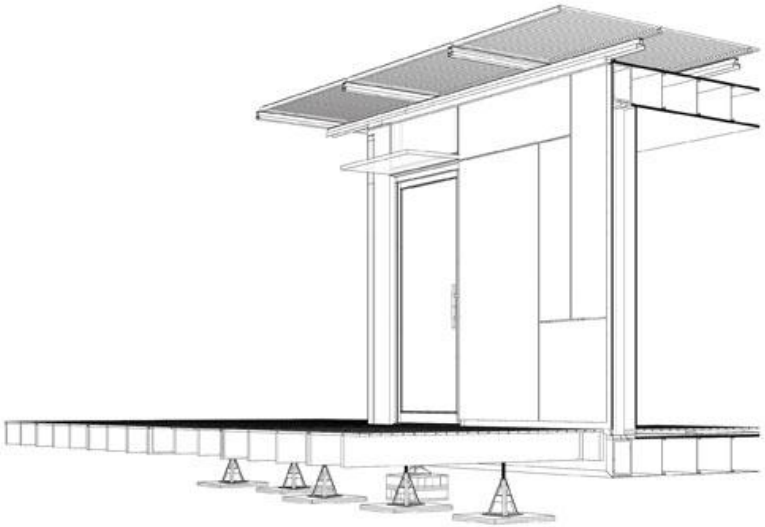
Cheng Lin



Design Concept

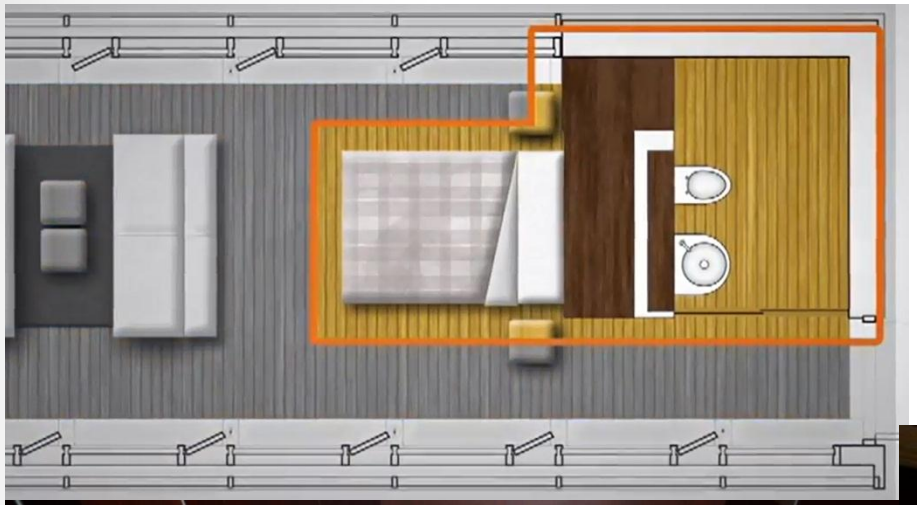
- Pushes cores to the side
- Maximize open space
- Look uncluttered



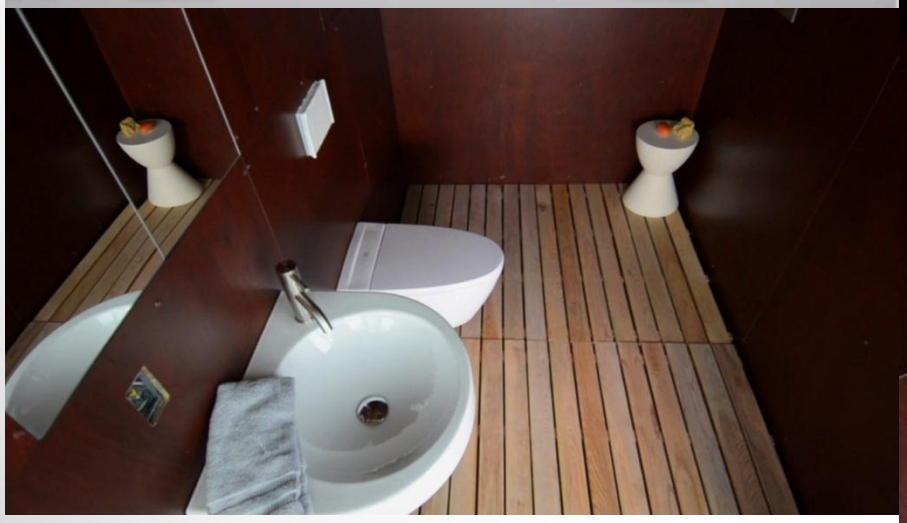


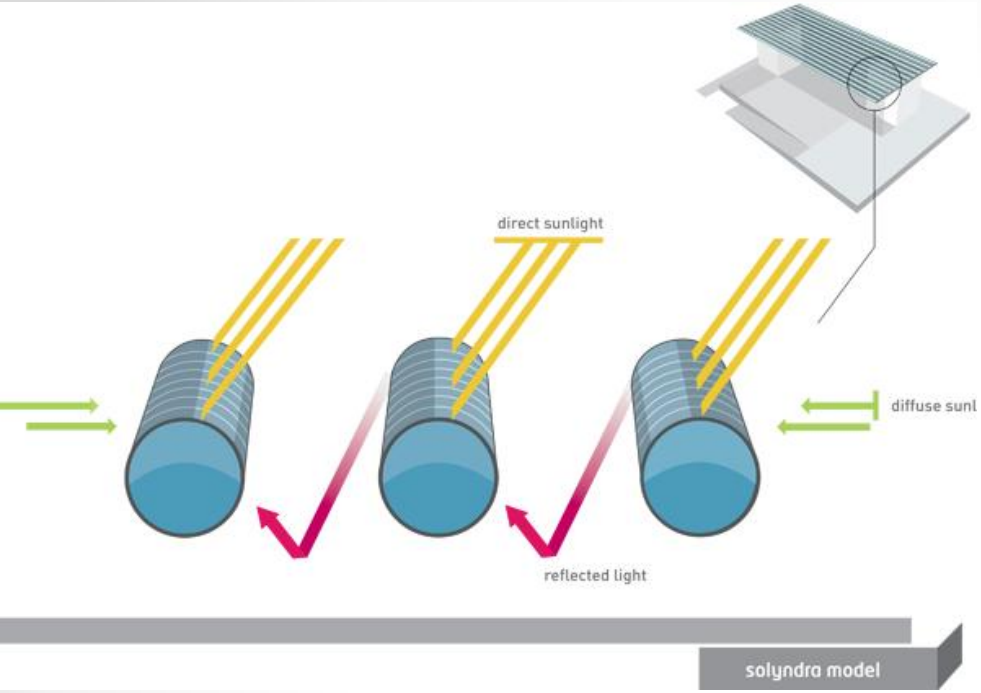
core wall detail

Private Core



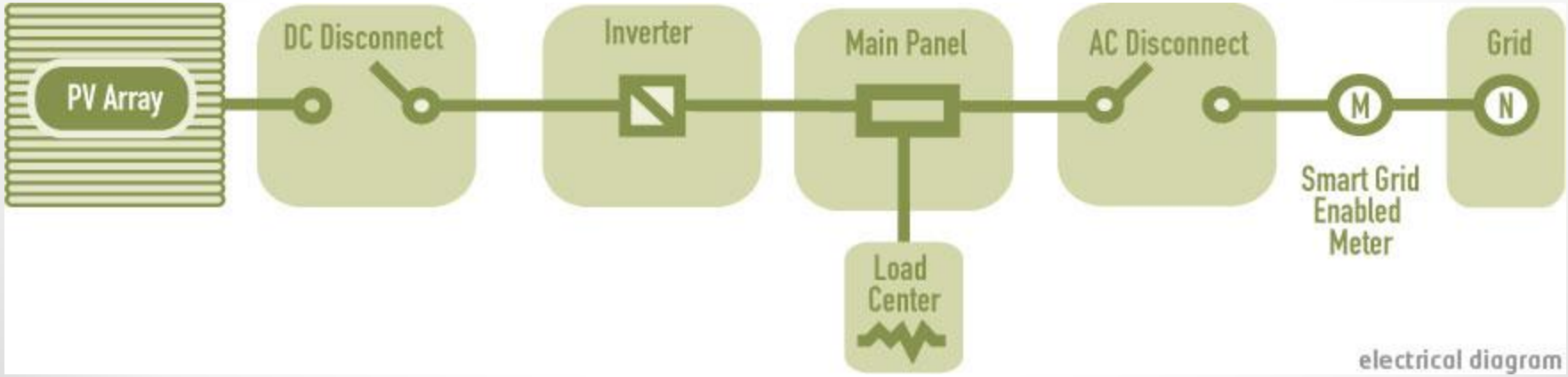
- Bathroom
- Closet
- Bed
- Television





Photovoltaic

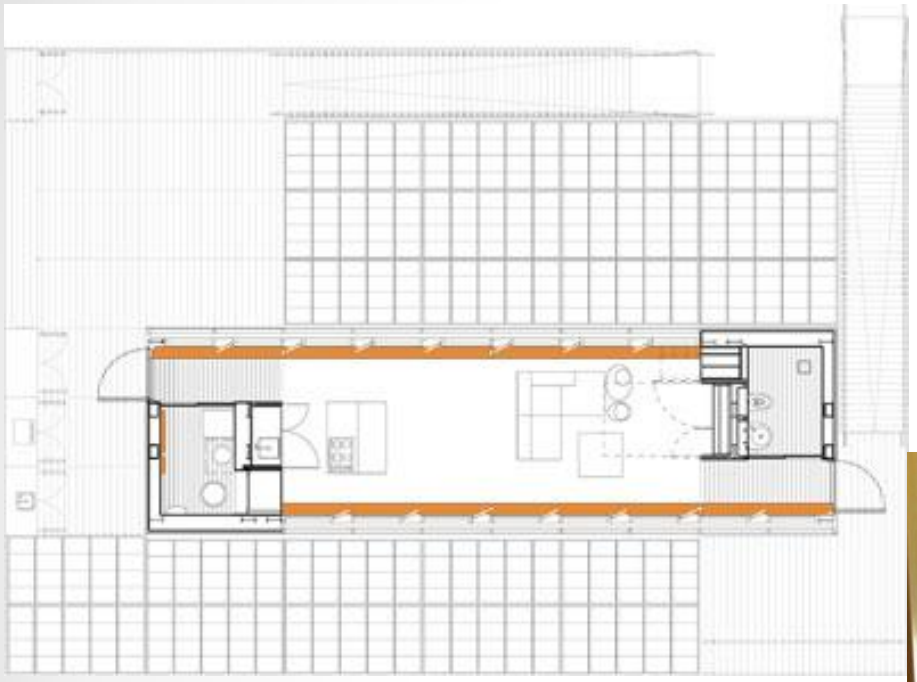
- Cylinder shape
- Capture 360˚ surface
- 10.9 Kw



Double Façade System

- Motorized horizontal blinds
- Ventilation in between
- Less noise
- Privacy
- Transparent
- Reduce wind load

Natural Lighting



- Take advantage of the natural sunlight
- Long span of glass
- Transparency for views

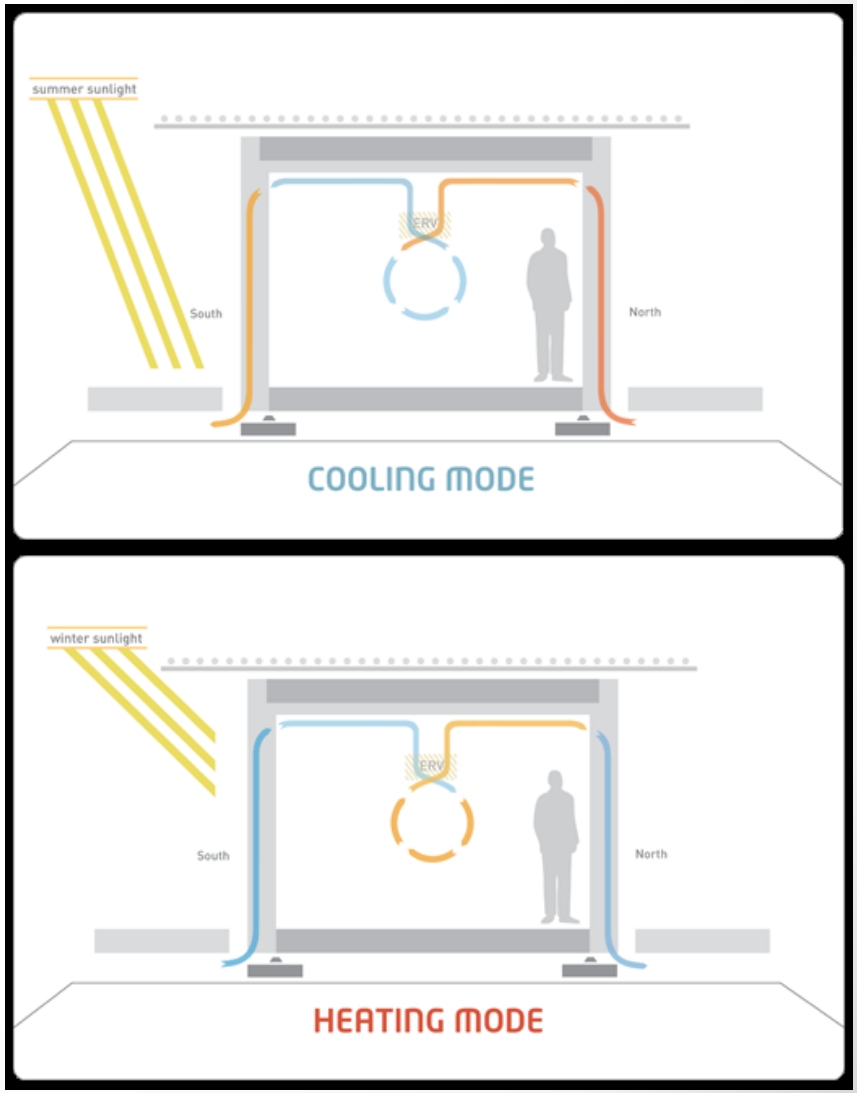
Artificial Lighting

- LED
- Lights are in the double facade in Ceiling and Floor
- Reduce Glare
- Visual Comfort
- Theater Effect

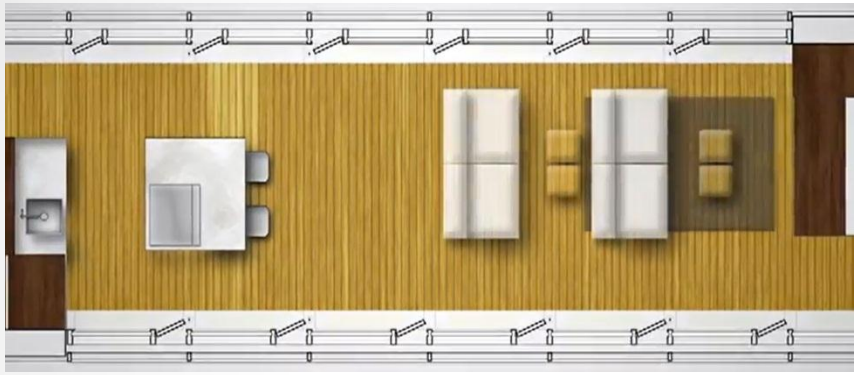
led strip lighting

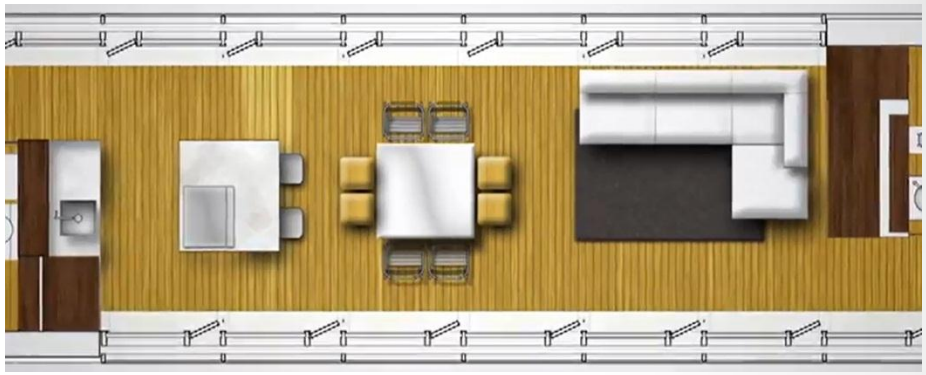
ERV

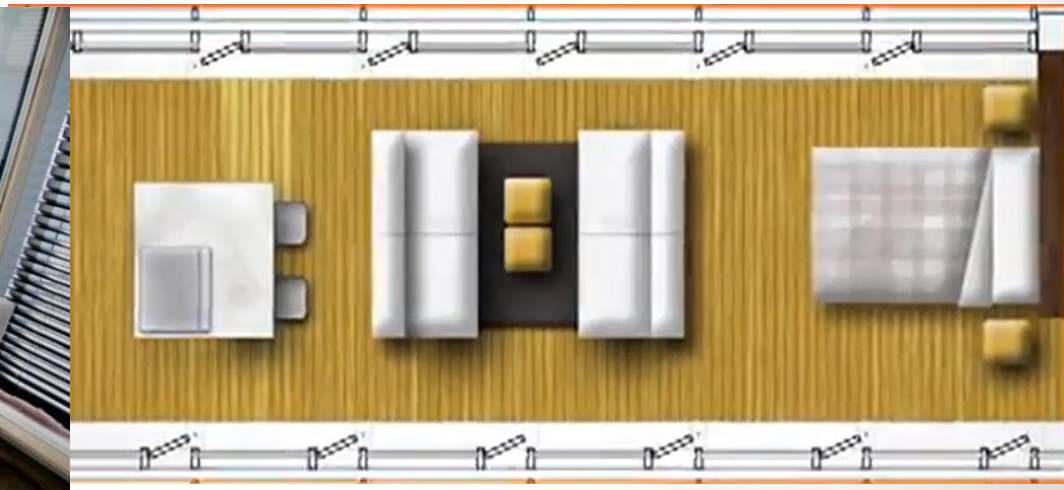
- Venting
- Use pre heated or pre cool air
- Reduce humidity



Modular Furniture







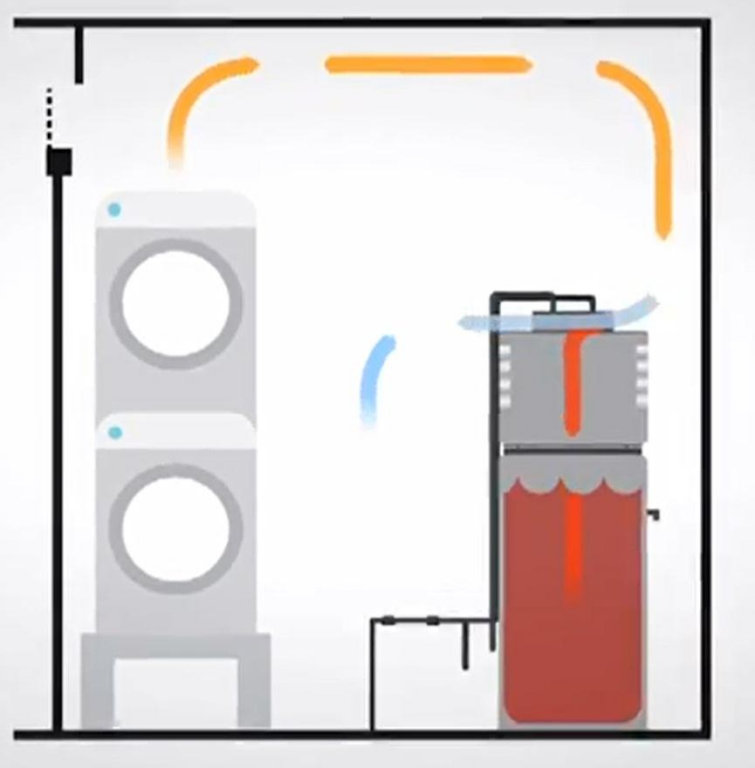
http://www.zoom-room.com/how-it-works/

Utility Core

- Kitchen sink
- Water tank
- Washer/Dryer
- Cabinets

Water Tank

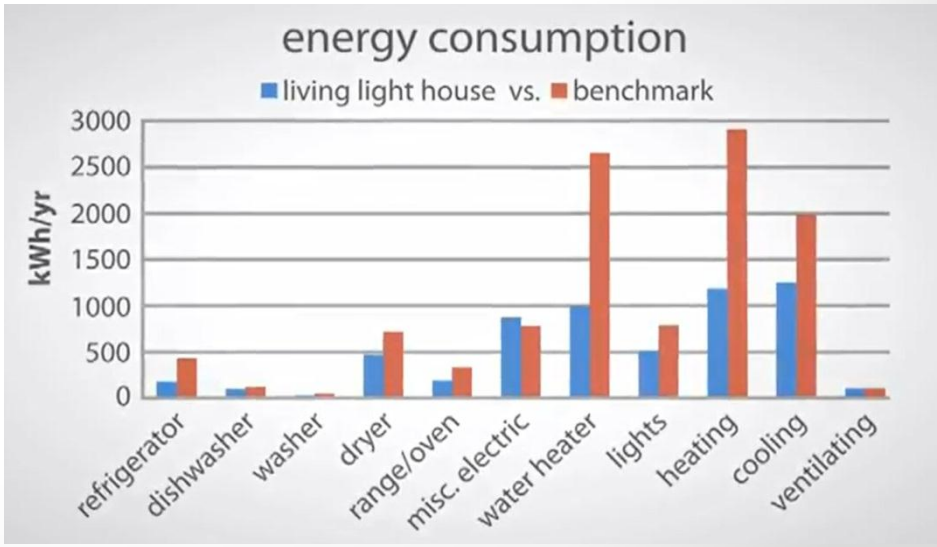
- Gather surrounding heat
- Cools and dehumidifies the air



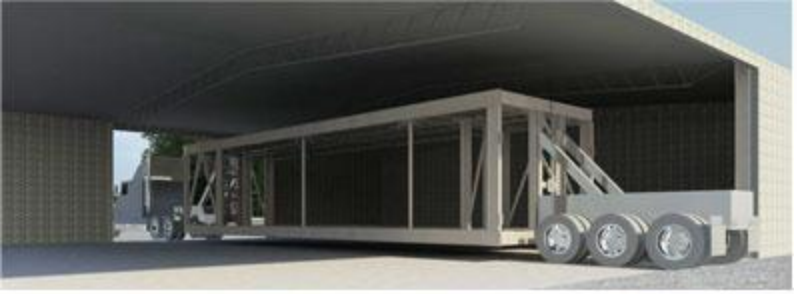
http://products.geappliances.com/MarketingObjectRetrieval/Dispatcher?RequestType=PDF&Name=380107_geh50dn_r4.pdf

Control

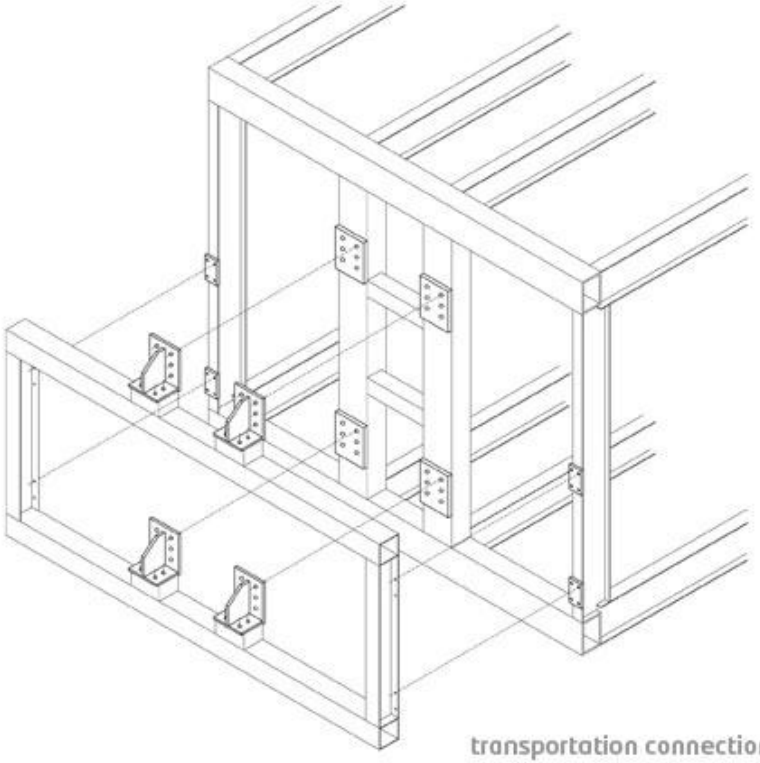
- Monitor energy usage
- Controls blinds
- Control light
- Control Tempurature



Transportation

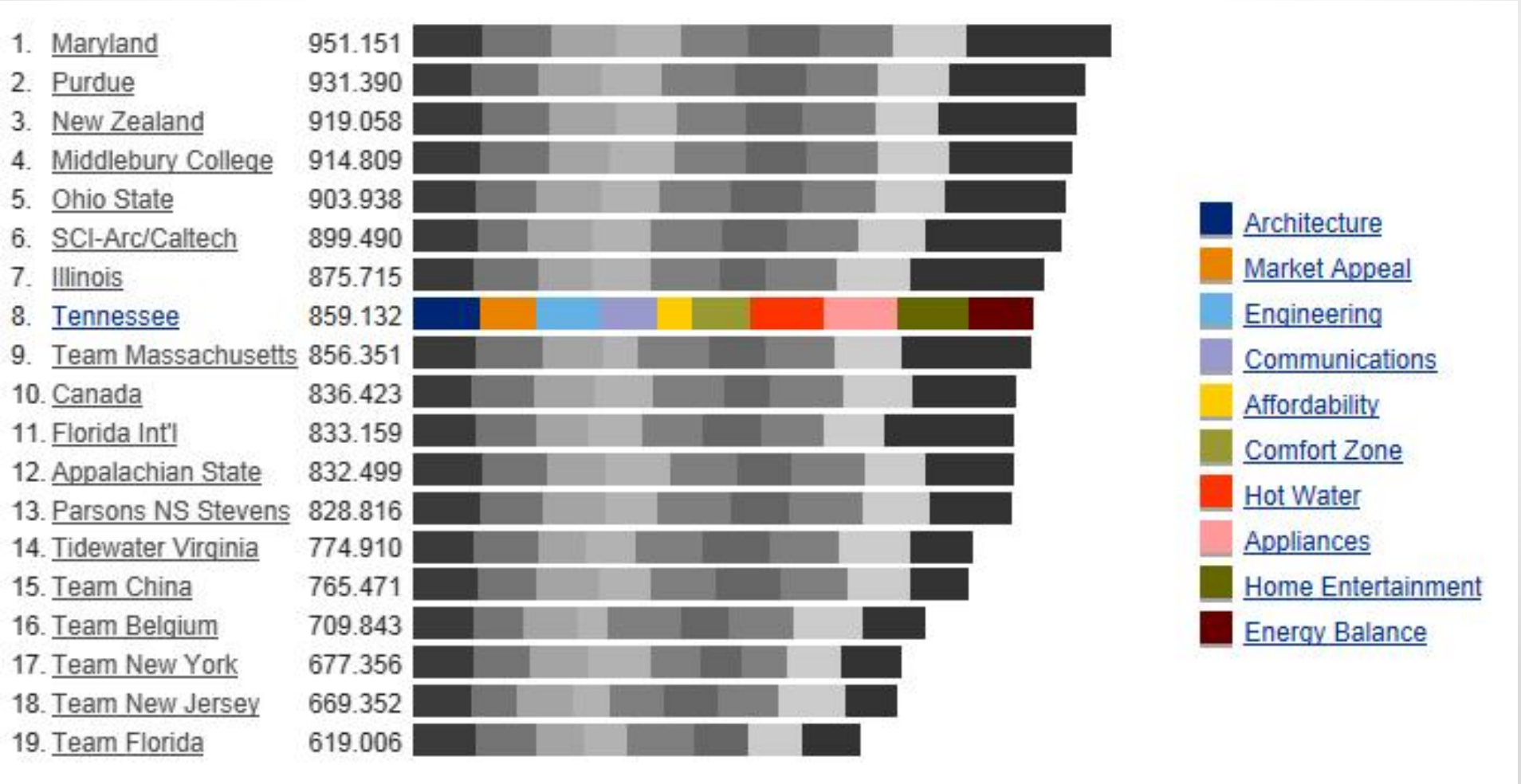


structure attached to trailer



transportation connection

Results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5. Ohio State 903.938
6. SCI-Arc/Caltech 899.490
7. Illinois 875.715
8. Tennessee 859.132
9. Team Massachusetts 856.351
10. Canada 836.423
11. Florida Int'l 833.159
12. Appalachian State 832.499
13. Parsons NS Stevens 828.816
14. Tidewater Virginia 774.910
15. Team China 765.471
16. Team Belgium 709.843
17. Team New York 677.356
18. Team New Jersey 669.352
19. Team Florida 619.006
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