KEY CONCEPT: ARTIFICIAL ROOT SYSTEM

Material Use:
- Thermochromatic Dye Coating
- Memory Metal Rods
- Porous Membrane
- Microencapsulating Phase-Change Material
- Cool Air (retrieved from the ground)
- CO₂ (released to the air as vapor)
- Bio-based Plastic (Vegemat)
- Porous Membrane
The Bajadas are south-facing gentle slopes, which account for porous soil compositions, ideal for low depth water excavation. Structures are meant to be deployed by local humanitarian organizations. In accordance with average dehydration distances in arid environments, shelters should be erected approximately within 20 miles of one another.

1. Carried around in backpacks, the detailed tubes are connected by 3-way components.
2. Tubes are connected to create a structural mesh...
3. which is then formed... to allow an above ground shelter and an underground "root" surface.
4. The skeletal structure is covered by a pressuresensitive quilt.
Since 1994, more than 2,200 migrants have died of heat stroke, dehydration or freezing temperatures while trying to cross the Sonoran Desert.
BODY ORIENTED DESIGN

The structure consists of individual human size capsules clustered to form an outer skin.

Humidified capsules

Artificial root system

Ground level