

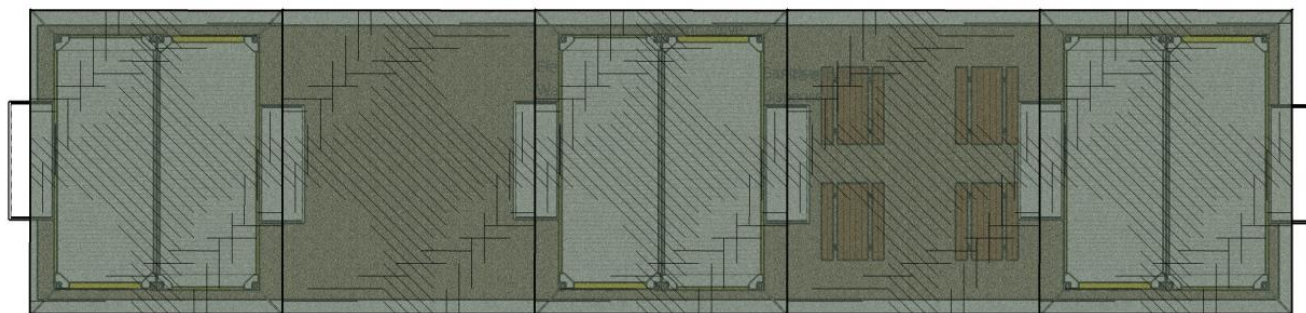
COMMUNAL KITCHEN

Purpose

- Increase dignity, independence and culturally-appropriate, healthy eating habits.
- Reduce high fire risks at sites by preventing PoC from cooking on open fires or self-made brick-insulated stoves at their tents –and increasing compliance with the national fire ban starting May 1st. Fire risk is also very high in the warehouses where people cook with old electric stoves and gas stoves inside the tents that are inside the warehouse.
- Gradually phase out Government's heavy, finite program of delivering 3 pre-prepared meals per day to sites.
- Reduce food wastage at sites, thus decreasing presence of rats/rodents and snakes.
- Strengthen local markets and economies via PoC purchase of ingredients from local supermarkets/vendors.

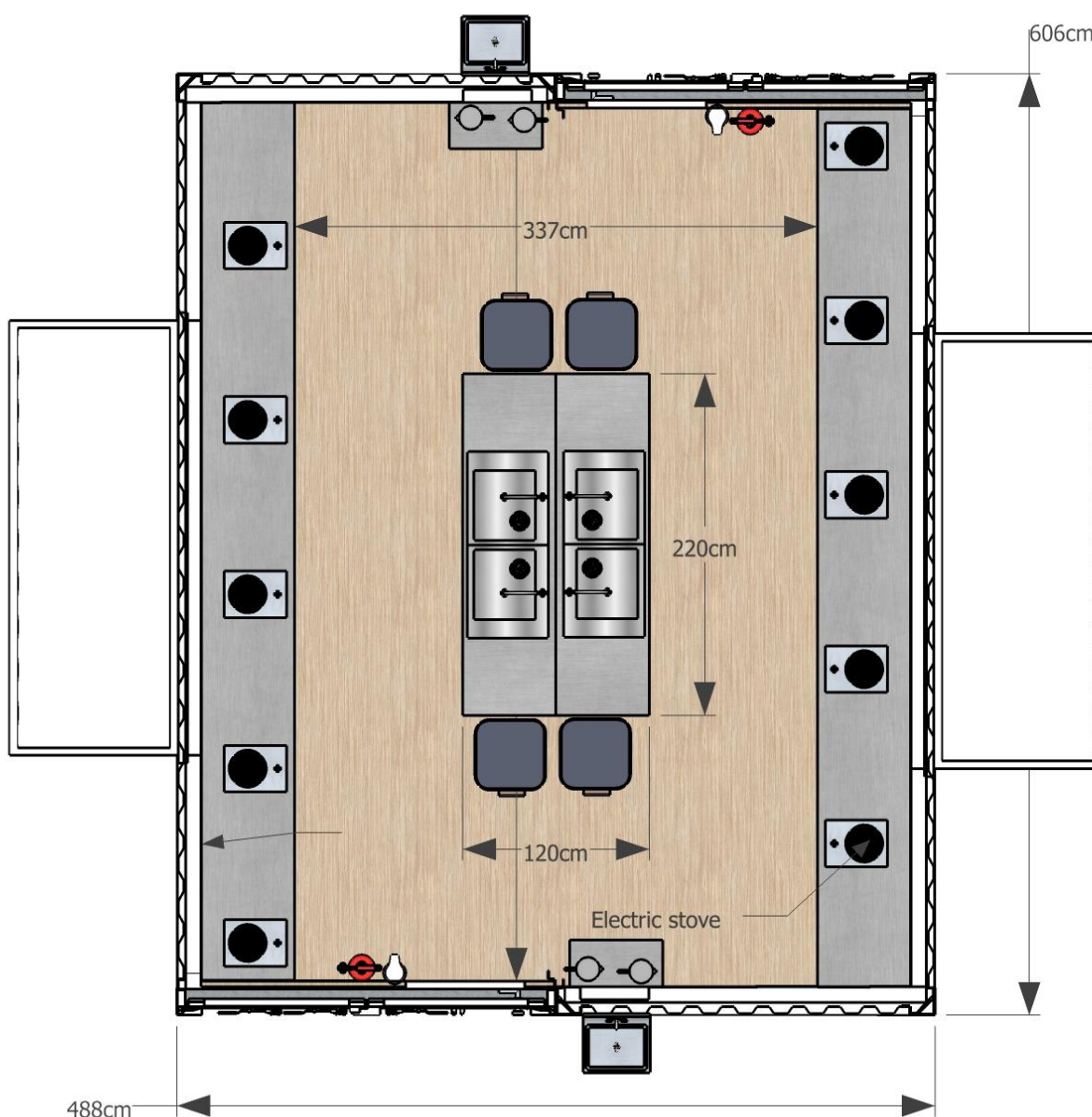
Kitchen unit

- Container-structured unit limited to 10 cooking places to reduce the risk of accident inside the kitchen and also to ensure easy management by the PoCs themselves. Such a kitchen unit would cover the need for 80 families (440 people).
- Minimum 15m from nearest toilet facilities.
- Shading nets between two kitchen to provide shade for children or for eating



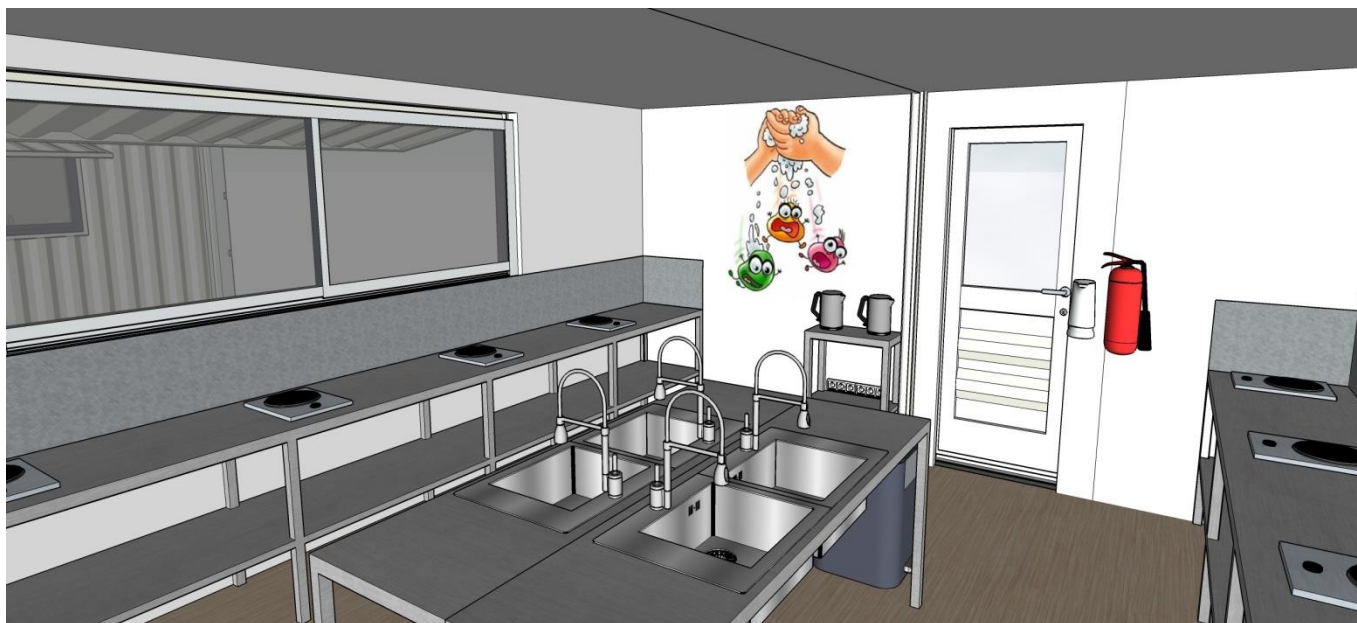
Building

- Two containers (10 feet) put together. The containers could be built outside of the camps then installed on site. They can be moved to another place if site is closed.
- Thermal insulation
- Additional shading net on top of the building 12m x 7,25m (6m x 7,25m on top of the building and 6m x 7,25m between two kitchen to be used as a shading area)



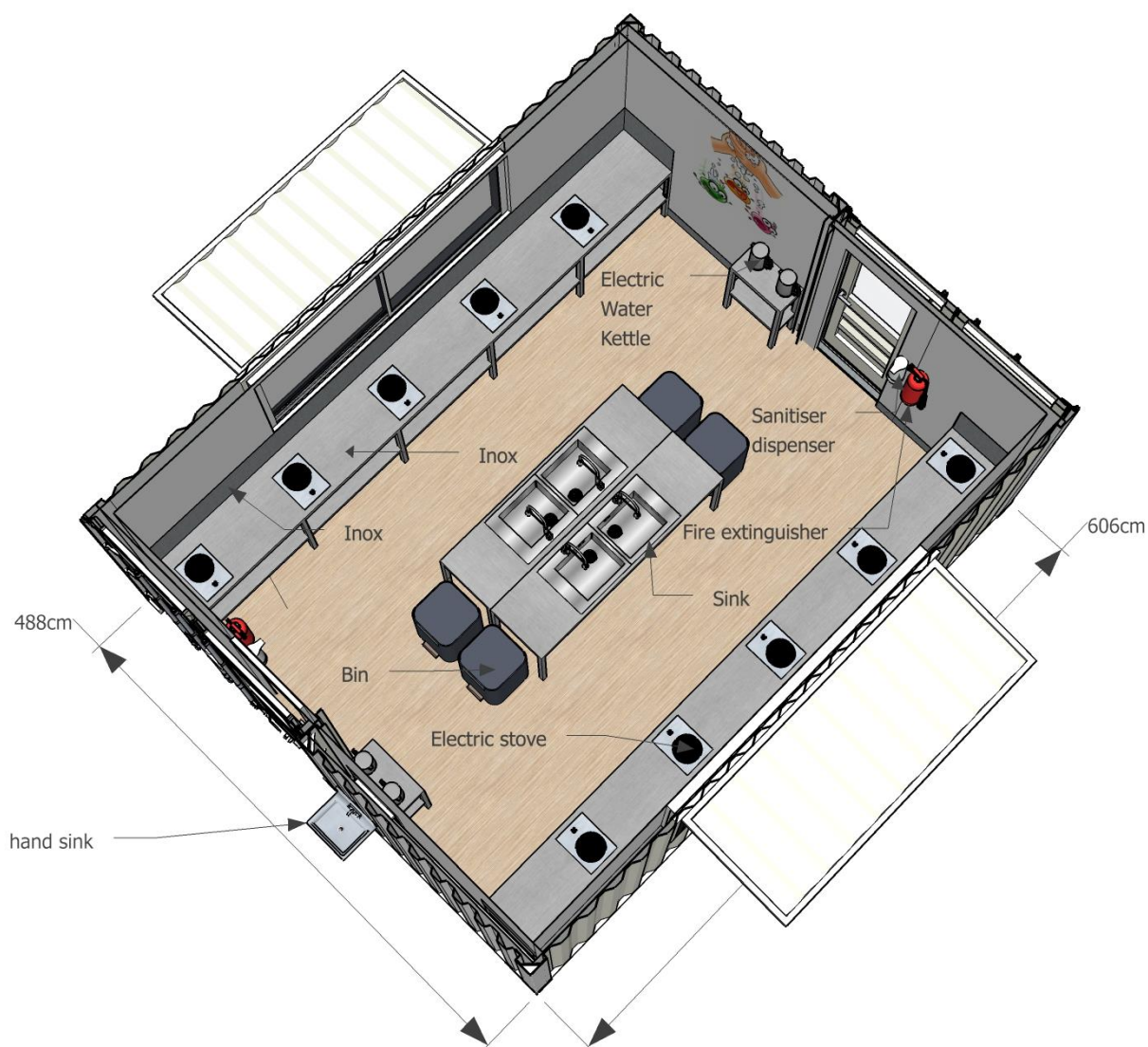
Opening and ventilation

- Two doors and two windows covered in insect-proof mesh for adequate natural ventilation.
- Two mechanical ventilations
- 1 Cooker hood per stove



Equipment

- 10 stoves per kitchen
- 8 Sinks within kitchen units to be used for food preparation, hand and dishwashing only with flow-restricted taps (push pedal system or equivalent). 2 hand sinks next to the entrance of the kitchen for hand washing
- Internal lighting for nighttime use, preferably energy-efficient LEDs.
- 4 bins of 30L capacity – waste to be removed at least once per day.
- 2 sanitizer dispensers
- 4 electric kettles for preparing infant formula.



Safety and management

- Stoves should incorporate timers to prevent risk of being left on once meal preparation has finished.
- 4 fire blankets and 2 fire extinguishers per kitchen unit.
- Each kitchen unit requires a “manager” for the use, maintenance, fire safety monitoring and security of the facility.

Communal Bakery

Bakeries

Bakeries will also be implemented because of the high demand from the refugees. It does not require much time to cook bread which will have a very positive impact on the cost of electricity.

Purpose

- Provide traditional and low cost food (high demand from the PoCs)
- Reduce individual cooking time
- Social activity for women

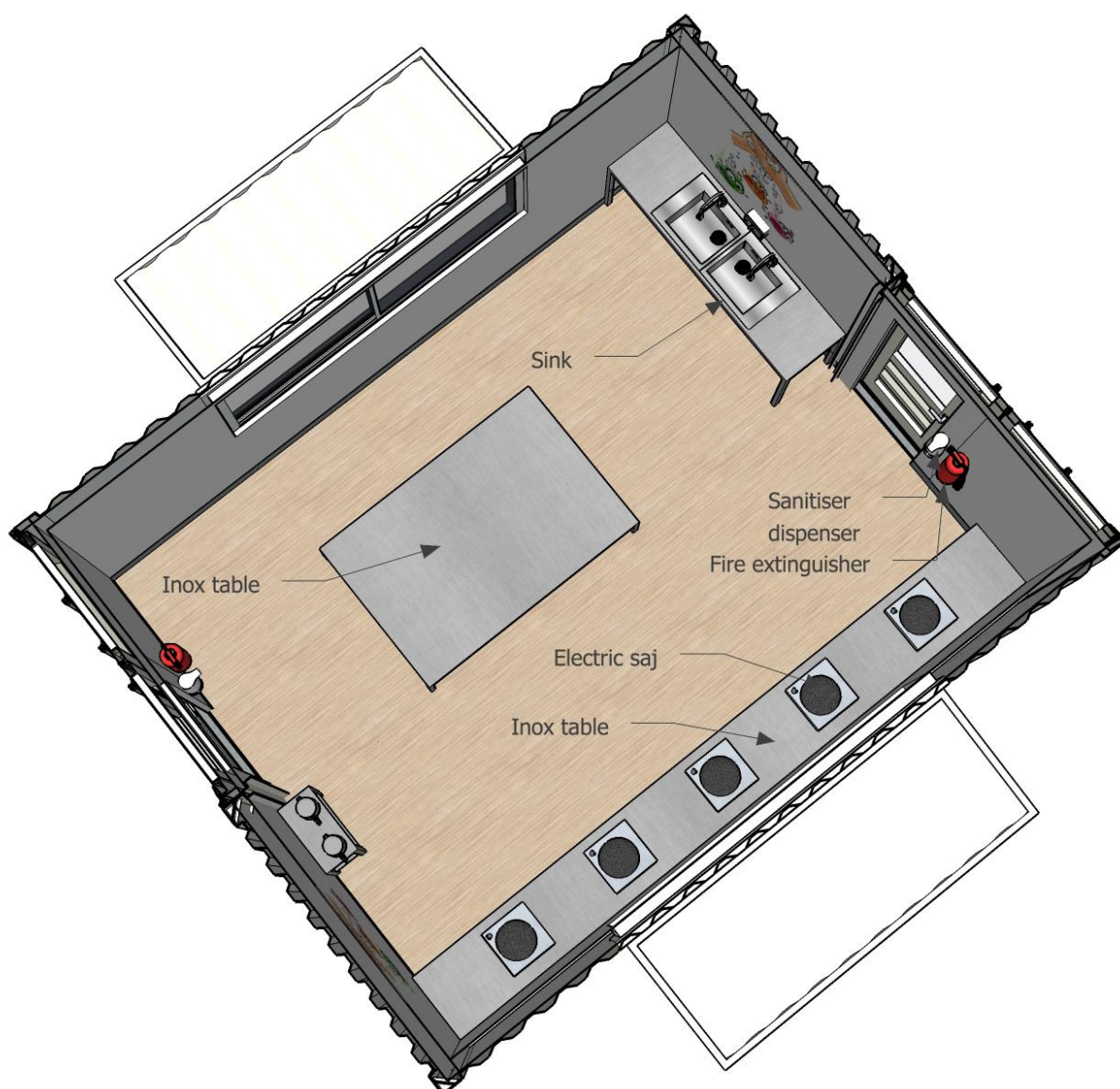
Kitchen unit, Opening and ventilation

Like the communal kitchen



Equipment

- 2 Sinks within kitchen units to be used for food preparation, hand and dishwashing only with flow-restricted taps (push pedal system or equivalent).
- 2 hand sinks next to the entrance of the bakery for hand washing
- 5 saj (traditional stove to cook bread) 1 inox table (40cm high)
- 4 fire blankets and 2 fire extinguishers per bakery.
- 6 power sockets
- 2 water boilers



Justification for equipment

For safety reason, the electric stove is the favourite option.

TYPE OF STOVE	Positives	Negatives
ELECTRICAL HOT PLATE	<ul style="list-style-type: none"> ▪ Lowest fire risk of all cooking fuel. ▪ Little maintenance required. 	<ul style="list-style-type: none"> ▪ Requires significant power supply – 1.5 kW per unit at peak supply. ▪ Cooking time is longer than gas stoves. ▪ Parts are more easily removed and stolen than gas burners. ▪ Uncommon in Afghanistan.
PROPANE GAS BURNER	<ul style="list-style-type: none"> ▪ Quick turnover for meal preparation & less time needed in kitchen space. ▪ All gas suppliers in Greece deliver refills directly to sites. ▪ Cheaper than electric stoves 	<ul style="list-style-type: none"> ▪ Risk of explosion. ▪ Ongoing demand for gas supply. ▪ Space needed for gas cylinders or single large gas tank. ▪ Adequate flame protection must be provided.
BARBEQUES	<ul style="list-style-type: none"> ▪ Requires no power supply. ▪ Used to cook meat 	<ul style="list-style-type: none"> ▪ May not be accepted by site authorities despite being legal during fire ban. The risk is that the people might take the fire wood to cook near their tent.
SADJ (to cook traditional bread)	<ul style="list-style-type: none"> ▪ High demand from refugees, people are used to it and bread is cheap. ▪ Easier for PoC to make bread. ▪ Different type: gas, electric, wood. 	

Segregation of tasks

	NRC	IRC	PoCs
Construction of the containers			
Installation of the containers			
Connection to the electricity network			
Connection to the Water network			
Hygiene Promotion			
Management of the Kitchen			
Cleaning of the Kitchen			
Installation of dumpster and waste management			

Quantities and calculation for Cherso : 4 kitchens and 1 bakery.

1 Additional kitchen could be installed later if necessary

Organisation of the shifts		duration (hours)
open from	6:00 until 22:00	16

Organisation of the kitchen	
Number of family per stove	8
Number of stove per unit	10
Number of family per Kitchen unit	80
Number of people per Kitchen unit	440
Cooking time per day per family (hour)	2.0

Number of kitchen	
Total population	1951
Number of family	355
Number of kitchen required	4.43 → 4

Power required for Cherso		Power (Watt)	Total (Watt)
Number of stoves	40	1,500	60,000
Number of saj	5	1,800	9,000
Number of electric kettle	17	2,400	40,800
			109,800

Quantities and calculation for Oreokastro : 4 kitchen and 1 bakery

Organisation of the shifts		duration (hours)
open from	6:00 until 22:00	16

Organisation of the kitchen	
Number of family per stove	8
Number of stove per unit	10
Number of family per Kitchen unit	80
Cooking time per day per family (hour)	2.0

Number of kitchen	
Total population	1600
Number of family	291
Number of kitchen required	3.64 → 4

Power required for Cherso		Power (Watt)	Total (Watt)
Number of stoves	40	1,500	60,000
Number of sadj	5	1,800	9,000
Number of electric kettle	17	2,400	40,800

