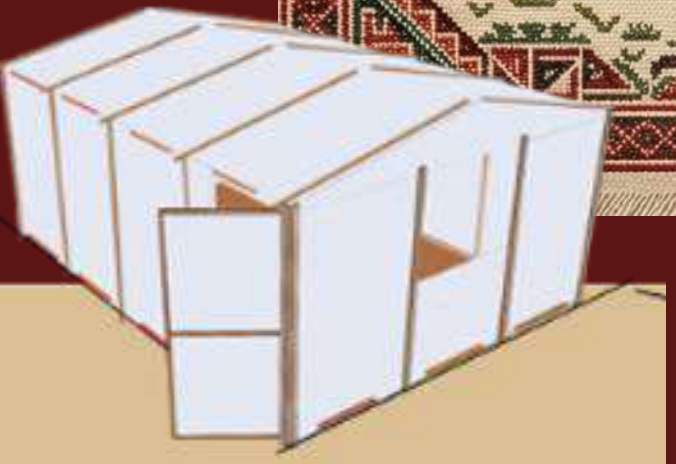
TSA TWG presents

معرض مجموعة أدوات للأوى الطارئ

Emergency Shelter Kit (ESK) Showcase

PALESTINE
SHELTER CLUSTER
Coordinating Humanitarian Shelter and Settlements



ESK SHOWCASE | APRIL 2026

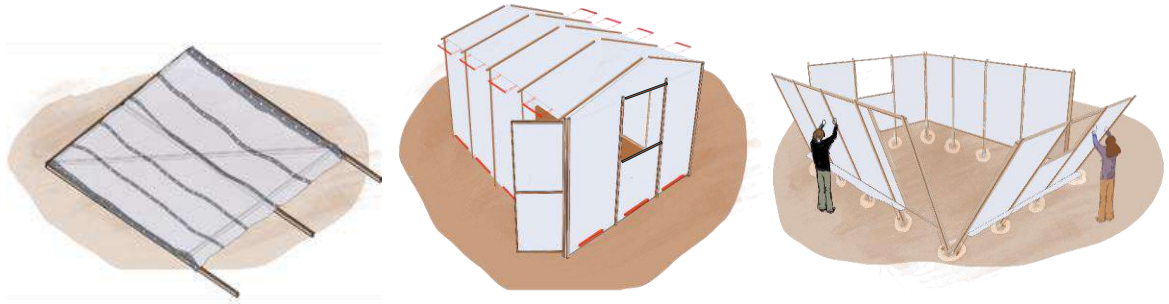
- **Recapping SC ESK development**
  5 minutes
- **Partners' ESK presentations**
  6-8 minutes each X 5
- **Technical discussion and next steps**
  15 minutes
- **Planning SC Joint ESK visit**

EMERGENCY SHELTER KIT

The modular shelter design is a temporary, robust, panel-based structure that allows for easy extension to meet varying household space needs. The current design provides only living space that households can adapt to their needs.

It can be quickly dismantled and transported, making it suitable for temporary settings.

Installation of the **17 sq.m.** shelter, which accommodates up to **5 people**, typically takes around **1 day** with **one skilled and two unskilled workers**. This shelter can also be constructed through a household-led approach. However, vulnerable households, especially those requiring physical assistance, may face challenges in self-installation. The design can be modified for different household needs.



ESK SHOWCASE | APRIL 2026

Presentations

NRC
PARC-CARE
CRS

Discussion I

PARC-Shelter Box
PHC-IOM

Discussion II

EMERGENCY SHELTER KIT

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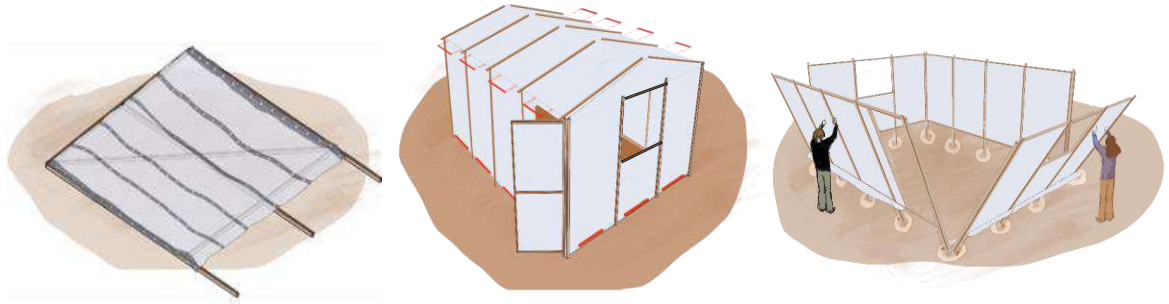


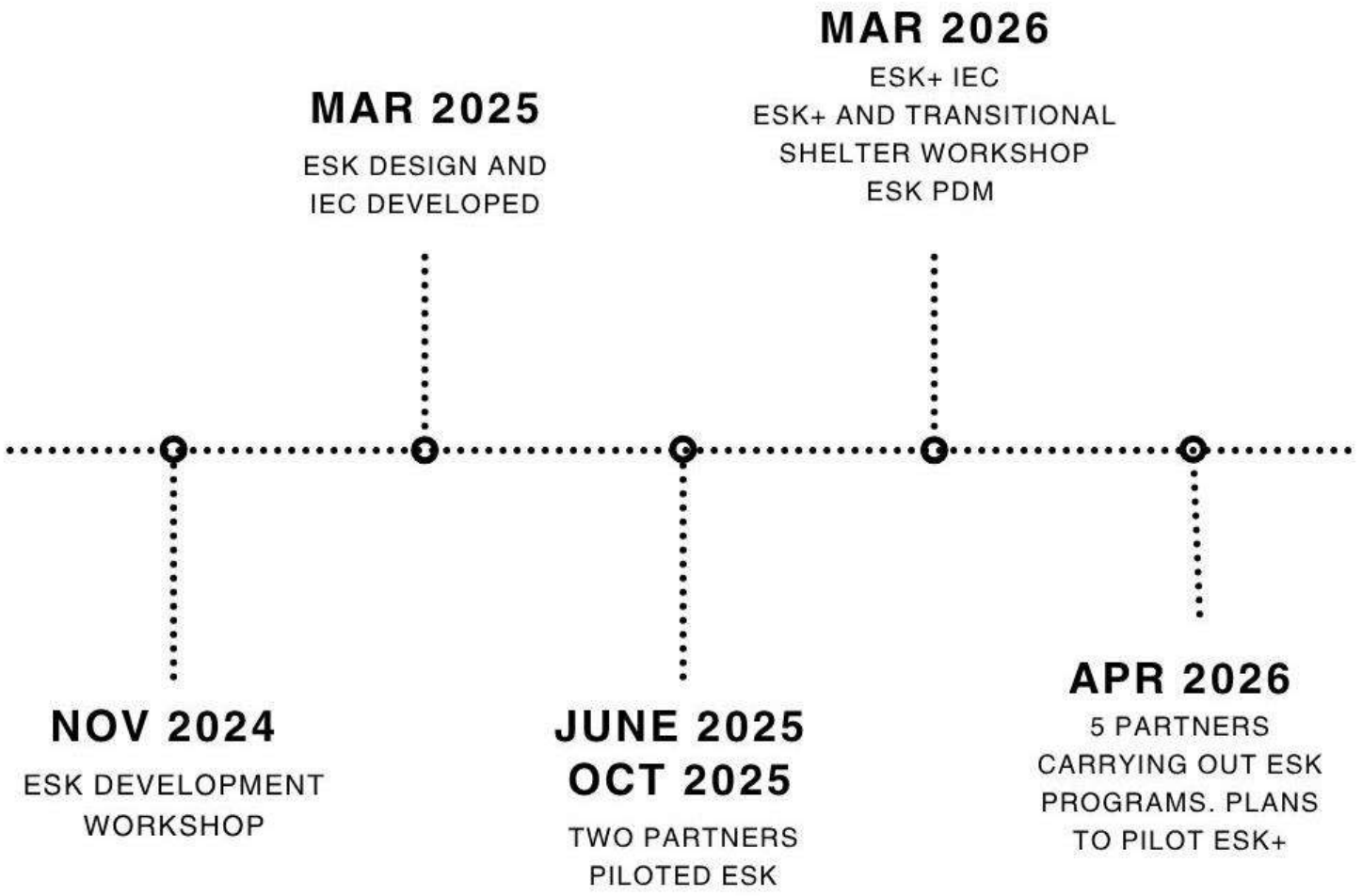
HOUSEKEEPING

- We would like to have time for technical discussion,
  please follow the suggested time of 8 minutes per presentation.

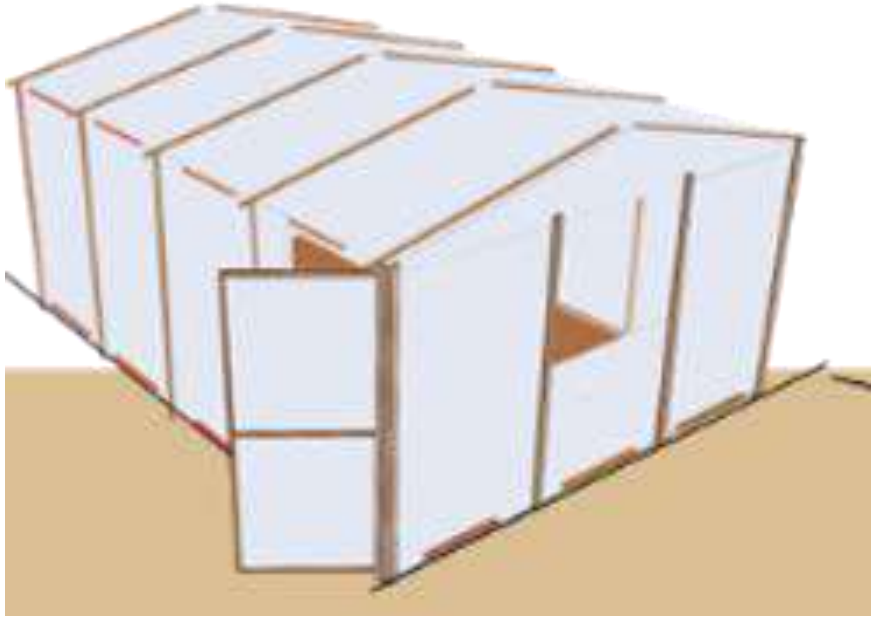
- Please continue to add your questions in the chat box, they will be picked up during the discussion.

- Possibility to have translation to Arabic as needed.

Shelter Cluster Gaza's ESK

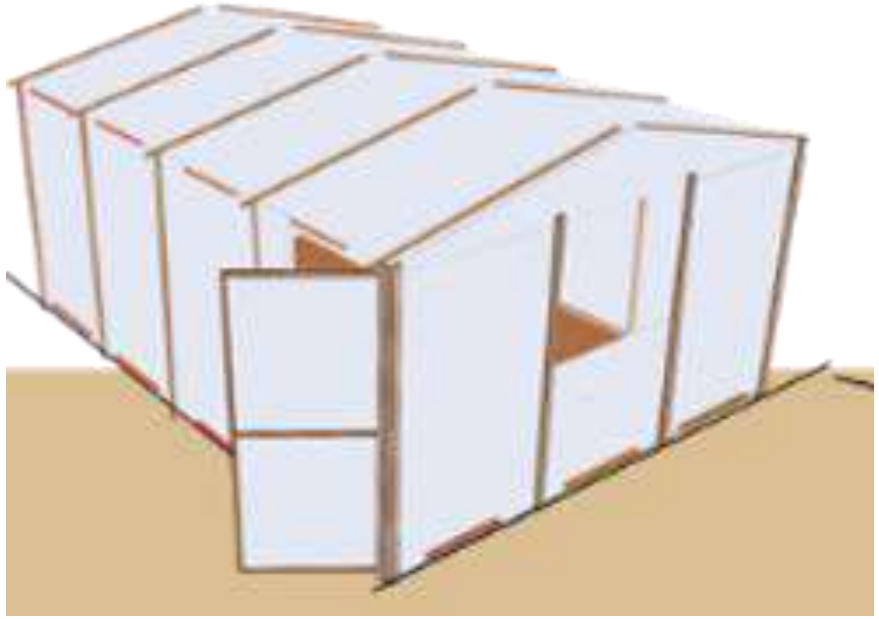


Why continue to advocate for ESK as emergency shelter for Gaza?



ESK as an incremental bridge from tents towards improved emergency and transitional shelters

Why continue to advocate for ESK as emergency shelter for Gaza?



ESK as an advocacy instrument to allow entry of materials, to diversify shelter material entry.

NRC

NORWEGIAN
REFUGEE COUNCIL

NORWEGIAN REFUGEE COUNCIL

Norwegian Refugee Council NRC

INTRODUCTION TO YOUR ESK PROJECT

Number of ESKs completed:
40 new installations + 290 Repair ESK.

Number of ESKs planned, and when is implementation planned for?:
1900 full ESK and 550 repair ESK.
Implementation during May – August 2026

Geographic location in Gaza (mention governorate and broad areas):
MA, KY, Gaza

Site or scattered locations or both? **Both**

ESK PACKAGE CONTENTS

1900 Full IOM ESK Package.
40 ESK for installing new temporary shelters.
290 ESK for repairing substandard temporary shelters.
550 ESK for repairing substandard temporary shelter and partially damaged housing units.

Which items most challenging to procure internally for ESK?

Wooden patterns, all sizes.
Installation tools, especially hammers and handsaws.
Small size nails
The Sealing off materials comes only through the humanitarian pipelines, local procurement contribute in inflation of prices and encourage looting of humanitarian materials.

ESK PACKAGE CONTENTS - Continue
Local ESK custom kits procured by NRC

1. Full framing Kit

#	Item	Description	Unit	Quantity	Unit Cost (USD) per item	Total Cost (USD)	Detailed Specs	Picture
1.1	Batten, 50x50mm	Pine or fir tree wood of density of P<0.5 g/cm3, class C27 according to MGB 520001, treated against insects, termite and mold, free from pests and rot, size 50x50mm, 3m long	piece	6.00	75.00	450.00	Framing specs'	
1.2	Batten, 25x50mm	Pine or fir tree wood of density of P<0.5 g/cm3, class C27 according to MGB 520001, treated against insects, termite and mold, free from pests and rot, size 25x50mm, 3.9m long	piece	21.00	33.75	708.75	Framing specs'	
1.3	Timber Nails, 40mm	Hot galvanized iron, for wood, 40mm, (1.1/2"), bagged	kg	0.50	22.50	11.25	Framing specs'	
1.4	Timber Nails, 60mm	Hot galvanized iron, for wood, 60mm (3"), bagged	kg	0.50	22.50	11.25	Framing specs'	
	Kit type	Kit composition	Unit	Quantity	Unit Cost (USD) per kit	Total Cost (USD)	Detailed Specs	
	Full framing kit under Ocha project 2438	The complete kit should consist of items: 1.1, 1.2, 1.3, 1.4 as per the above quantities and specs	kit	40.00	1,181.25	47,250.00	N/A	

1. Sealing off Kit (SOK)

#	Item	Description	Unit	Quantity	Unit Cost (USD) per item	Total Cost (USD)	Detailed Specs	Picture
1.1	Stretched polyester fabric, with a width of 2.8 meters	Stretched polyester fabric coated with PVC (Opaque/Blockout) with a width of 2.8 meters, in a color that is UV-stabilized and resistant to fading under direct sunlight as specified by the supervising engineer. The fabric shall be properly tensioned to ensure smooth coverage of the tent surface and secured using galvanized steel screws, 80 mm in length, with galvanized washers (rounded) at regular intervals of 40 cm or as directed by the supervising engineer to maintain durability and proper alignment.	M	26.00	23.33	606.67	Cladding specs'	
1.2	Plastic Sheet	Polyethylene Transparent Plastic Sheet (Nylon), 0.15 mm thick, to cover the entire roof area of the temporary shelter, following best practices and the instructions below: - The plastic sheet shall be fully spread over the entire roof of the temporary shelter, with a peripheral flap of 10 cm width along the full perimeter of the roof. The flap shall be fixed using galvanized steel screws, 30 mm in length, with galvanized washers (rounded), at regular intervals of 40 cm or as otherwise directed by the supervising engineer. - Where multiple sheets are required, the joints shall have a minimum overlap of 30 cm to ensure watertightness. All joints shall be field-tested after installation to confirm the absence of weak points or water leakage.	M2	93.00	2.69	223.57	Cladding specs'	
1.3	Timber Nails, 20mm	Hot galvanized iron, for wood, 20mm, bagged	Kg	0.25	30.30	7.58	Cladding specs'	
	Kit type	Kit composition	Unit	Quantity	Unit Cost (USD) per kit	Total Cost (USD)	Detailed Specs	
	Sealing off kit (SOK) under Ocha project 2438	The complete kit should consist of items: 1.1, 1.2, 1.3 as per the above quantities and specs	kit	40.00	837.81	33,512.46	N/A	

2. Repairing Framing Kit

#	Item	Description	Unit	Quantity	Unit Cost (USD) per item	Total Cost (USD)	Detailed Specs	Picture
2.1	Batten, 50x50mm	Pine or fir tree wood of density of P<0.5 g/cm3, class C27 according to MGB 520001, treated against insects, termite and mold, free from pests and rot, size 50x50mm, 3m long	piece	2.00	75.00	150.00	Framing specs'	
2.2	Batten, 25x50mm	Pine or fir tree wood of density of P<0.5 g/cm3, class C27 according to MGB 520001, treated against insects, termite and mold, free from pests and rot, size 25x50mm, 3.9m long	piece	7.00	33.75	236.25	Framing specs'	
2.3	Timber Nails, 40mm	Hot galvanized iron, for wood, 40mm, (1.1/2"), bagged	kg	0.25	45.00	11.25	Framing specs'	
2.4	Timber Nails, 60mm	Hot galvanized iron, for wood, 60mm (3"), bagged	kg	0.25	45.00	11.25	Framing specs'	
2.5	Hammer	Claw hammer with wooden or plastic handle (overall weight 700-800g)	piece	1.00	37.50	37.50	Tools specs'	
2.6	Handsaw	Temper handsaw, length 55cm, with wooden or plastic handle	piece	1.00	18.75	18.75	Tools specs'	
2.7	Measuring tape	Measuring tape, Length: 5 m, Width: 19 mm, Metric/Imperial	piece	1.00	9.38	9.38	Tools specs'	
	Kit type	Kit composition	Unit	Quantity	Unit Cost (USD) per kit	Total Cost (USD)	Detailed Specs	
	Repairing Framing kit under Ocha project 2438	The complete kit should consist of items: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7 as per the above quantities and specs	kit	250.00	465.00	116,250.00	N/A	

TARGETING CRITERIA

How was shelter and social vulnerability assessed?

A combination of shelter gaps, including poor framing and poor cladding, and social vulnerability, including family size, gender/age of the family breadwinner, disability, and protection concerns.

MODALITY

household/ contractor-led/ other?

Include whether cash for work is provided to HHs.

- Cash-For-work for new installation
- Through the targeted households with technical support from field staff and IEC materials.

MONITORING

PDM findings and HH perception of ESK

- ESK offers flexibility in its design to better accommodate the needs and priorities of displaced families.
- ESK allows families to adjust the roof height, enhancing ventilation.
- The wooden structure is used to install roof lighting, designate one side for food preparation, and hang clothing.

INTERCLUSTER

Any integration with WASH/Site improvements?

- The ESK enhances site layout by adjusting personal living areas for better conditions and wellbeing.

Temporary shelters using ESK: Pros and cons

- The ESK (Emergency Shelter Kit) enables **greater involvement of women in decision-making** related to the design of shelters, particularly regarding privacy concerns.
- Adopting the **ESK helps to reduce feelings of displacement compared to using tents.**
- The ESK provides users with more control over the installation of windows and doors, catering to specific needs such as proper ventilation, lighting, and privacy requirements. Additionally, the **inclusion of internal partitions enhances privacy.**
- Installing the tarpaulin sheets with 30 cm embedded in the floor prevents rainwater from leaking into the makeshift shelter and offers increased stability during windstorms.
- The emergency shelters made from ESK are **not suitable for frequent relocations**, as they require time to install and deteriorate when dismantled.
- The **ESK components are not fire-resistant**, which has led to frequent fire accidents, resulting in the deaths of at least two adults and three children during the last winter season. In addition to these tragic fatalities, there have been many injuries and significant property losses, particularly as the fires spread to nearby shelters.
- **Limited quantities of framing materials in Gaza**, along with the denial of entry permits and increased consumption driven by humanitarian needs and private sector recovery, have all contributed to significant inflation in prices.

Providing technical support and community engagement

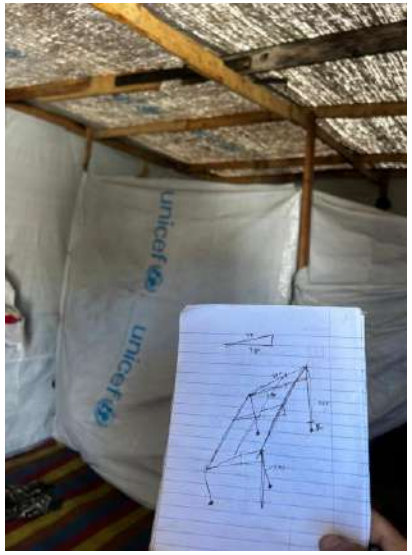
- An orientation session was conducted for the NRC shelter contingent workers (engineers) and local partner staff (BLDA engineers and workers) on the following topics:
    - How to coordinate with beneficiaries and ensure their active participation in the repair or complete installation process.
    - Introduction to the proper use and guidelines for the full makeshift and repair kit.
- Gather insights from displaced families about their experiences installing temporary shelters during the conflict, how they adapted these shelters to meet their needs, and utilized available resources to reduce costs.


NRC
المجلس النرويجي
للاجئين
Field Worker
عامل ميداني


قبل


يمد


After


unicef


Before


PARC
الإغاثة الزراعية الفلسطينية
1983


care®

PARC in partnership with CARE International

INTRODUCTION TO YOUR ESK PROJECT

The Emergency Shelter Kit (ESK) project provides timely, life-saving shelter support to vulnerable internally displaced and returnee households, with particular attention to women and girls. It aims to improve immediate living conditions by helping families create safer, more dignified, and protected shelter environments in line with Shelter Cluster standards and protection-sensitive approaches.

Number of ESKs completed: 127 ESKs

Number of ESKs planned and when is implementation planned for? The activity was successfully implemented, with the distribution of 127 packages completed on March 10, 2026.

Geographic location in Gaza (mention governorate and broad areas): Gaza Governorate / Gaza City – Sheikh Radwan Area

Site or scattered locations or both? Scattered locations in Sheikh Radwan Area.

ESK PACKAGE CONTENTS

PACKAGE-1(ESK Kit)

- Battens
- Timber Nails
- Tool kit: (Handsaw, Claw Hammer, measuring tape
- Ropes
- Tarpaulins
- Plastic film
- Rubber Adhesive tape

Which items most challenging to procure internally for ESK?

- Timber and structural components, especially.

TARGETING CRITERIA

Shelter and social vulnerability were assessed through field visits, observations, and interviews with beneficiaries, based on clear criteria related to housing conditions and household situation.

MODALITY

The activity was household-led, with beneficiaries responsible for implementation, and no cash for work was provided.

TECHNICAL ASSISTANCE

Technical assistance was provided by the engineering team through field visits and guidance to beneficiaries.

MONITORING

The distribution process was monitored to ensure proper delivery and that the targeted beneficiaries were reached. The results of the assessment during distribution showed that beneficiaries had a positive perception of the ESK activity, PDM shall be done soon.

INTERCLUSTER

No integration during the implementation.

ADDITIONAL INFORMATION

ESK design

ESK assistance is designed as a rapid, protection-sensitive shelter response informed by rapid needs assessment and aligned with Shelter Cluster Shelter and Non-Food Item standards.

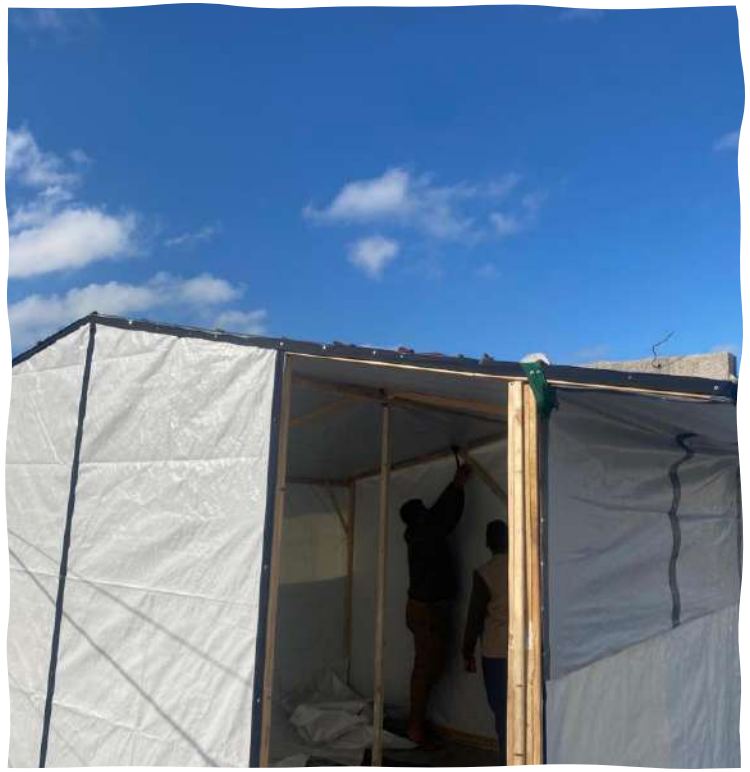
ESK implementation

ESK implementation follows a structured process including beneficiary verification, procurement, quality monitoring, delivery to the warehouse, coordinated distribution, and documented follow-up actions.

ESK monitoring

ESK monitoring includes oversight of distribution processes, follow-up documentation, and post-distribution monitoring to assess accountability, effectiveness, and response quality.

PHOTOS OF IMPLEMENTATION and FINAL ESK



PHOTOS OF IMPLEMENTATION and FINAL ESK

CRS
CATHOLIC RELIEF SERVICES

Catholic Relief Service CRS

INTRODUCTION TO YOUR ESK PROJECT

Number of ESKs completed: **10**

Number of ESKs planned and when is implementation planned for?: **500 (April-May 2026)**

Geographic location in Gaza (mention governorate and broad areas): **North Gaza (Al-Salateen neighborhood), Khan Younis (Tabareya area)**

Site or scattered locations or both? **Site**

ESK PACKAGE CONTENTS

Framing Kit
1- Timber poles 2.5X5X240cm (94 piece)
2- 5cm Nails (2Kg)

SoK
1- Plastic sheeting (50m2)
2- Tarpaulin (5 Tarps)
3- 6mm Rope (30m)
4- Duct tape (2 piece)

Toolkit
1- Shovel
2- Hammer 0.45kg.
3- Measuring tape.
4- Handsaw.
5- Tie wires.
6- Needle
7- Scalpel

TARGETING CRITERIA

- HH selected based on technical assessment for the shelter including the frames and cladding condition.
- HH with enough space to implement the ES.
- HH live in governmental/Public land, otherwise “No Concern” from the landowner needed.

Additional vulnerability criteria applied, e.g Female headed household, PWD, People with chronic illness and family size.

MODALITY

Contractor led approach.

TECHNICAL ASSISTANCE

SC customed IEC were provided to selected HHs on how to install ESK, additional support on how to maintain the ES using the provided toolkit.

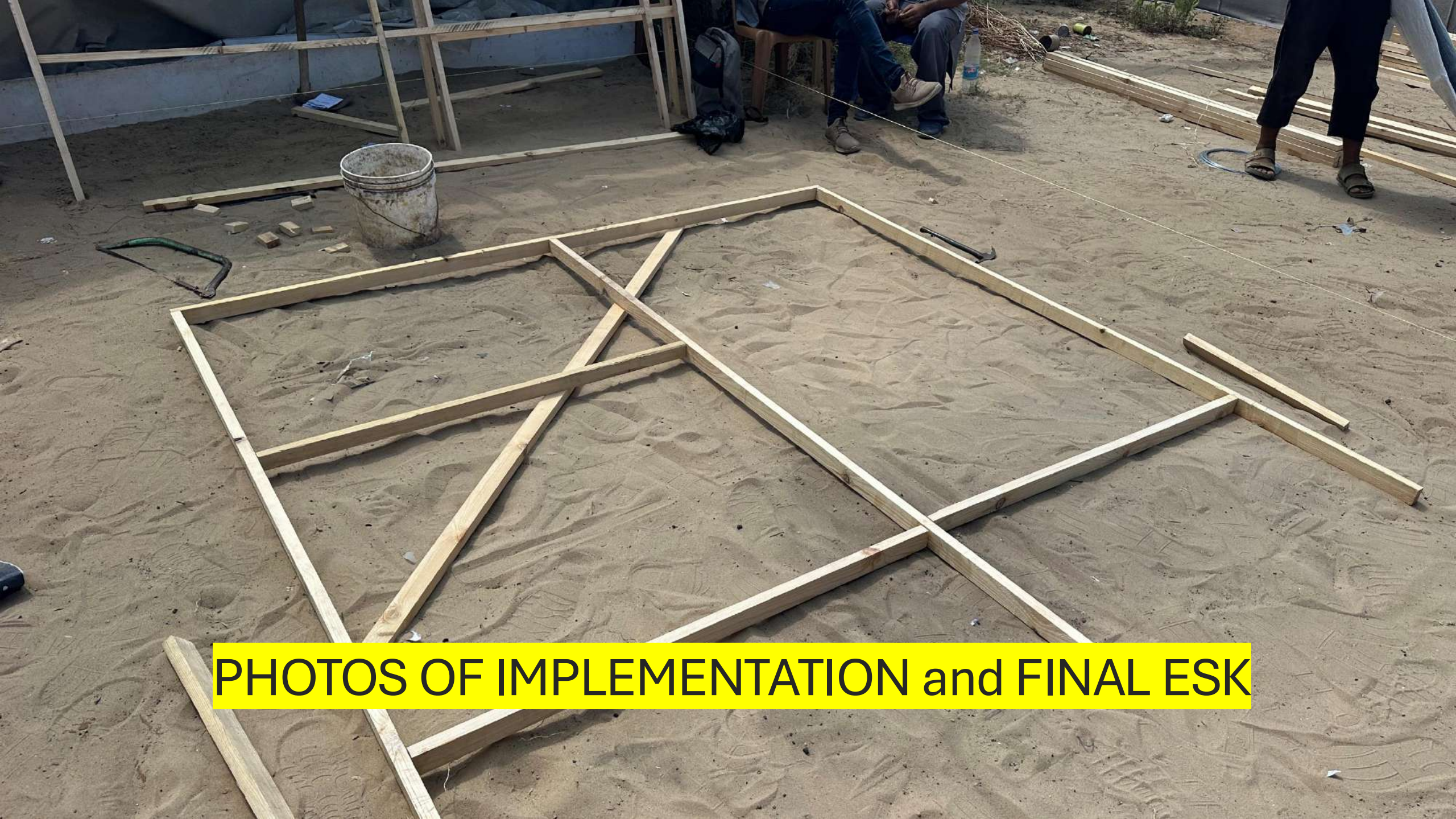
MONITORING

1- 100% of households reported being either satisfied or neutral with the quality of shelter assistance received.

2- Most respondents (80%) reported that their basic shelter needs were met to a good extent, with an additional 10% indicating a high extent and 10% to some extent.

INTERCLUSTER

HH mobile latrine/ HH.


PHOTOS OF IMPLEMENTATION and FINAL ESK


CRS
CATHOLIC RELIEF SERVICES
خدمات الإغاثة الكاثوليكية


Three weeks after ESK installation

Discussion

1) Considerations of cash-for-work for household-led ESK implementation

2) Performance of ESK compared to tents – did you monitor after rain and sandstorms?

PARC

الإغاثة الزراعية الفلسطينية

1983

ShelterBox

AGENCY NAME: PARC in partnership with ShelterBox

INTRODUCTION TO YOUR ESK PROJECT

The ESK project supports IDPs in Gaza by upgrading unsafe and degraded shelters. It improves safety, weather protection, and dignity through standardized solutions targeting the most vulnerable households. The approach combines technical improvements, community engagement, and Cash-for-Work (CFW) for efficient and scalable delivery.

Number of ESKs completed: 10 ESKs (pilot phase)

Number of ESKs planned and when is implementation planned for?: Approximately 830 households planned for scale-up following pilot validation (22/4/2026 implementation phase)

Geographic location in Gaza (mention governorate and broad areas): Gaza City (Al-Ta'awun / Al-Ihsan) and Khan Younis (Al-Hawooz), makeshift sites

Site or scattered locations or both? Site-based intervention with mostly blanket coverage

ESK PACKAGE CONTENTS

PACKAGE-1(New Tent (ESK) Installation)

- Structural frame (wooden/metal components)
- Tarpaulin (roof and sidewall covering)
- Groundsheet for flooring
- Anchoring materials
- Internal reinforcement materials

Other packages

PACKAGE-2 (Cooking Area)

- Timber Battens (25 × 50 mm)
- Sun-Reflective Tarpaulin (Staple Pins)
- 60 mm Timber Nails

PACKAGE-3 (Adaptations for persons with disabilities - PWD)

Which items most challenging to procure internally for ESK?

- Tarpaulin and shelter-grade materials
- Timber and structural components specially **(5x5 and 5x2.5 Timber Battens)**

TARGETING CRITERIA

- Sites and then HH-level shelter needs assessment
- Technical assessment (engineer-based)
  - Structural stability
  - Roofing condition
  - Anchoring and safety
- Social vulnerability criteria
  - Persons with disabilities
  - Elderly
  - Female/Child-headed households
  - Large families/overcrowding
- Priority given to
  - Severely deteriorated shelters

MODALITY

Supplier-based delivery with Cash-for-Work (CFW) and household/ community engagement

TECHNICAL ASSISTANCE

- Direct supervision by PARC engineers
- Implementation by skilled and unskilled workers
- On-site guidance
- **For vulnerable HHs**
  - Additional CFW support for PWD adaptations
  - Tailored adjustments based on needs
  - Distribution of IEC materials (ESK, fire safety, and AAP)

MONITORING

PIM was conducted immediately after implementation (10 HHs)

- **Key findings**

100% improved structural safety
100% improved weather protection
100% improved privacy
100% reduction in fire risk (perception)
Shelter technical score: **1.7 / 5 (Good)**

- **Beneficiary perception:**

100% overall satisfied (90% very satisfied out of them)
100% feel safer

INTERCLUSTER

- Limited integration during pilot phase

Findings

- WASH conditions remain poor (3.8 / 5)
- No direct WASH intervention was included

Recommendation

- Integrate WASH components during scale-up
- Improve
  - Drainage
  - Sanitation
  - Water access

Addressing WASH Gaps – Actions Taken

As part of its response to the identified WASH challenges in the targeted sites, PARC has taken practical actions to improve conditions on the ground. These include the following implemented activities:

- **Installation of Water Tap stands in AL Hawoz Camp in Khan Younis to improve hygiene practices.**
- **Planning to provide NFIs support for all targeted households in the targeted locations in Gaza and Khanyounis through other resources.**
- **PARC will allocate approximately $15,000 for community-based WASH interventions at the site level.**

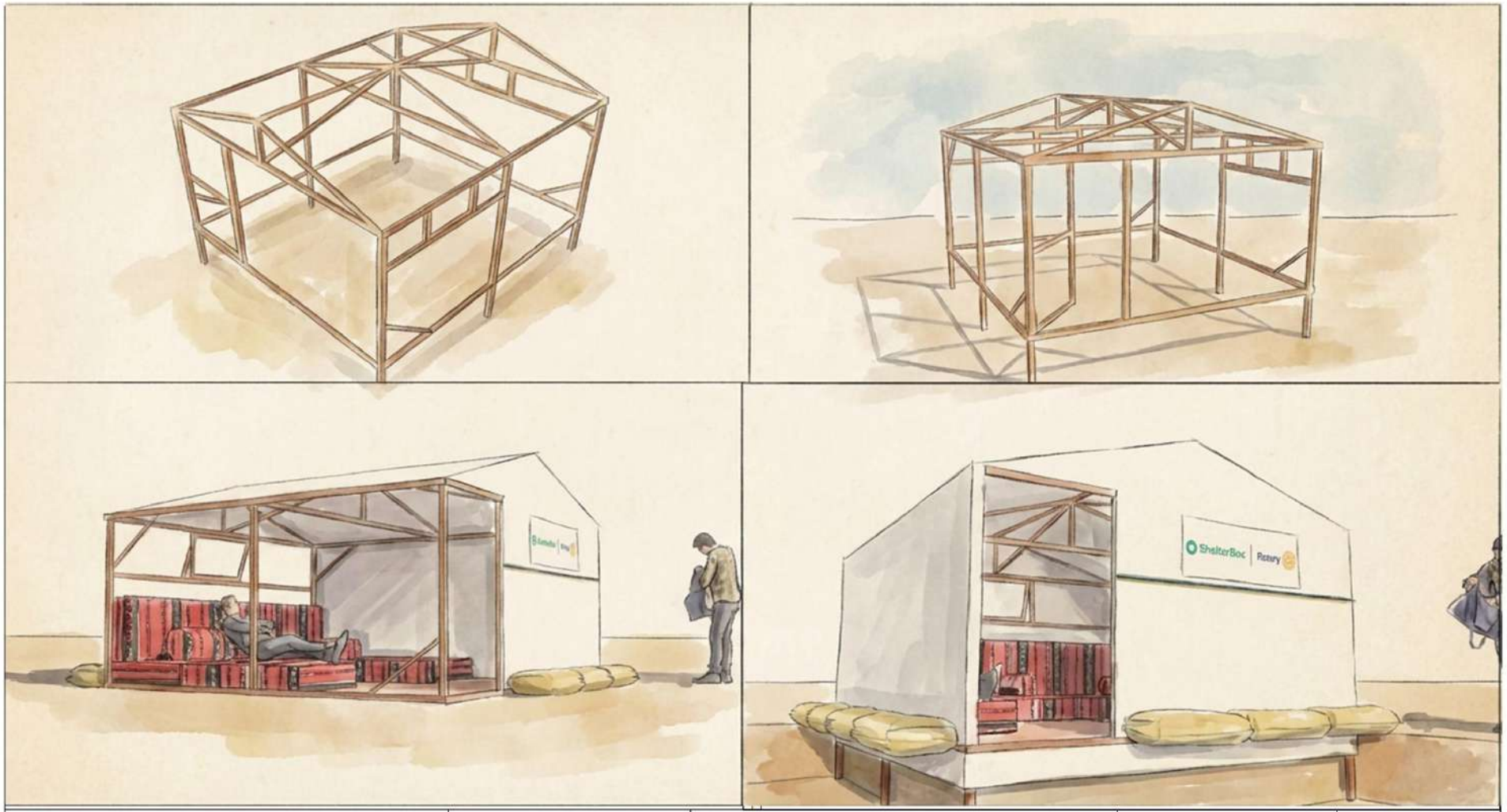
These actions aim to improve WASH conditions and reduce pressure on the site, contributing to safer and more dignified living conditions for affected households.

ADDITIONAL INFORMATION

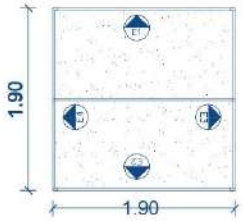
- **Key Achievements**
  - Effective targeting of highly vulnerable households
  - Strong technical performance
  - High beneficiary satisfaction
  - Rapid and efficient implementation model
- **Key Gaps Identified:**
  - Internal privacy separation
  - Fire safety systems (extinguishers, awareness)
  - Accessibility for PWD not standardized
  - Limited awareness on shelter maintenance
- **Key Message**

The intervention is effective, relevant, and ready for scale-up with targeted technical and programmatic improvements.

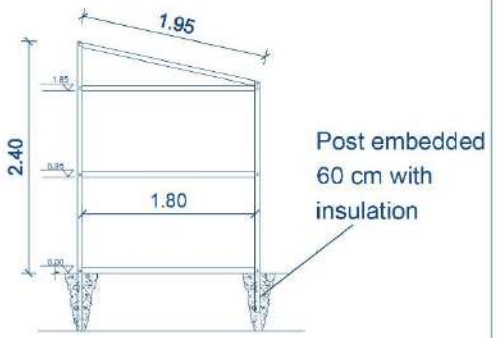
PHOTOS OF FINAL ESK DESIGN



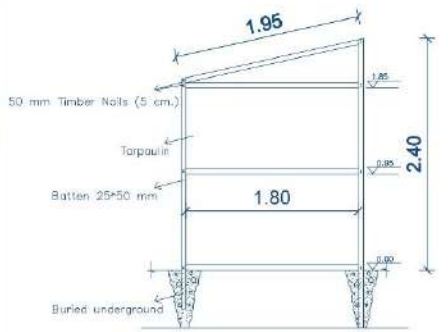
PHOTOS OF FINAL ESK DESIGN (Cooking Area)



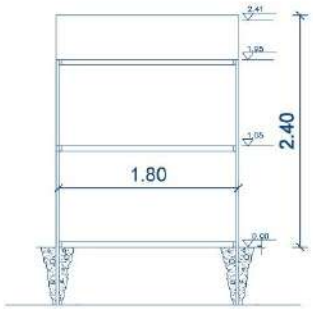
Plan



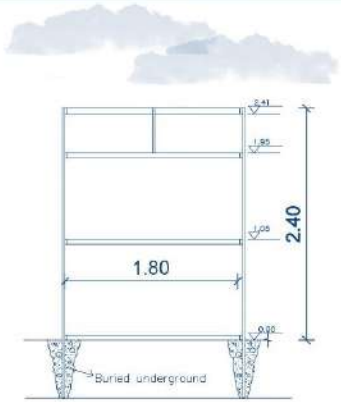
Elevation 1



Elevation 2



Elevation 3



Elevation 4

Item No.	Item	Description	Unit	Qty
1	Batten 50×25mm	2.4m long *.Pine or fir tree wood of class C16	MR	33
2	50mm Timber Nails 6(cm.)	Hot galvanised iron ,for wood	Kg	0.50
3	Tarpaulin 6×4(m)	Woven plastic ,available in sizes of 6x 4 meters , 5x 4meters ,or as a roll of 4meters width.	No.	1
4	Staple strip for stapler	IFRC/IOM/UNHCR standard woven plastic 4(x 6m)	No.	3

ShelterBox | Rotary

PARC working in partnership with ShelterBox

Note :All timber used is 50 × 25 mm

***Tarpaulin fixed using staples**

2026 -2025
Kitchent
Scale 1:50

PHOTOS OF IEC MATERIALS

Shelter Improvement Guide

Technical Standards and Practical Guidelines

ShelterBox | Rotary

Introduction :

This Shelter Improvement Guide provides practical technical standards to support humanitarian shelter response in Gaza, enhancing safety, dignity, and context-appropriate solutions for affected families.field teams and organizations working in shelter response.

IMPROVEMENT
SHELTER
GUIDELINES

SHELTER
is not just a roof–it is life, safety, and dignity for every family

Guide Contents

- Shelter Tool Kit
- Construction Guidelines
- Winter and Summer Recommendations
- Fire-Safe Shelter

Shelter Improvement Guide

Technical Standards and Practical Guidelines

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IMPROVEMENT
SHELTER
GUIDELINES

This document was prepared by :

ShelterBox Rotary

Shelter Improvement Guide

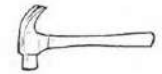
Technical Standards and Practical Guidelines

Guide Contents

Shelter Tool Kit

1-Tools Used to Build the Shelter (Equipment)

CLAW HAMMER - Quantity 1
For driving and removing nails, and for working with other tools to make joints.

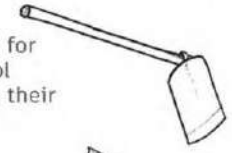


Measuring Tape - Quantity 1
Metal measuring tape with a length of 3 meters, graduated in centimeters.

Utility Knife / Craft Knife - Quantity 1
Suitable for light tasks, used for precise cutting of tents or other materials,
easy to use and safe when handled properly.

SHOVEL - Quantity 1
The shovel is useful when preparing the foundation of a shelter. it can also be used for digging trenches around the shelter if is raining.

HOE - Quantity 1
The hoe can be used to prepare the ground for a shelter. it can be used as an everyday tool when disaster affected people re-establish their livelihoods.



HANDSAW - Quantity 1
The handsaw is for cutting timber to required size. Do not use on metal or other hard materials.

1 Shelter Tool Kit
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This document was prepared by : ShelterBox Rotary

PHOTOS OF IEC MATERIALS

Shelter Improvement Guide

Technical Standards and Practical Guidelines

Guide **Contents**

Shelter Tool Kit

2-Materials that Make Up the Shelter (Components)

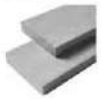
TARPAULIN - 4m * 6m

Tarpaulins are made of woven plastic. they are the key component of the shelter kit. they can be used for roofing, walls and floor covering.

Structural Timber

Construction timber pieces measuring 5 cm × 5 cm with variable lengths, of excellent quality and free from defects.

Construction timber pieces measuring 2.5 cm × 5 cm with variable lengths , of excellent quality and free from defects.



NAILS

These are 60 mm long, simple nails for building with timber

ROPE

A universal fixing with many uses, such as binding timbers together, stabilising structures or fixing tarpaulin in place.

Hinges

Durable metal hinges used for securing doors and windows, ensuring smooth and long-lasting operation.

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Shelter Tool Kit

BOM Technical **Bill of Material** (BOM) for One Shelter

Materials that Make Up the Shelter (Components) - *(For one shelter unit)*

Item No.	Item-Description	Unit	Qty
1	Batten 5cm*5cm - 240cm long	piece	6
2	Batten 2.5cm*5cm - 400cm long	piece	5
3	Batten 2.5cm*5cm - 360cm long	piece	6
4	Batten 2.5cm*5cm - 200cm long	piece	13
5	Batten 2.5cm*5cm - 150cm long	piece	3
6	Batten 2.5cm*5cm - 100cm long	piece	3
7	Batten 2.5cm*5cm - 70cm long	piece	4
8	Batten 2.5cm*5cm - 50cm long	piece	7
9	Batten 2.5cm*5cm - 40cm long	piece	4
10	Sand Bags	No	25
11	Tarpaulin-(6*4)m	No	4
12	Door hinges	No	7
13	Sliding bolt	No	3
14	Strap strip	No	7
15	6cm Timber Nails	kg	0.75

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Shelter Improvement Guide

Technical Standards and Practical Guidelines

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Construction Guidelines

- This section is dedicated to the practical aspect.
- The goal is to build a "safe" shelter, not just a "quick" one.
- Focus on using local materials to enhance the structural strength.

Construction Method

Key Pre-Building Tips

1. Site **Preparation**

Choose **high** ground to avoid flooding. Use the shovel and hoe to dig 20cm deep drainage trenches around the shelter to redirect **rainwater**.

2. Foundations & **Frame**

Main posts must be buried at least 30cm deep.

It is essential to add **diagonal** bracing (X-shape) to the sides of the frame to prevent it from collapsing under wind pressure.

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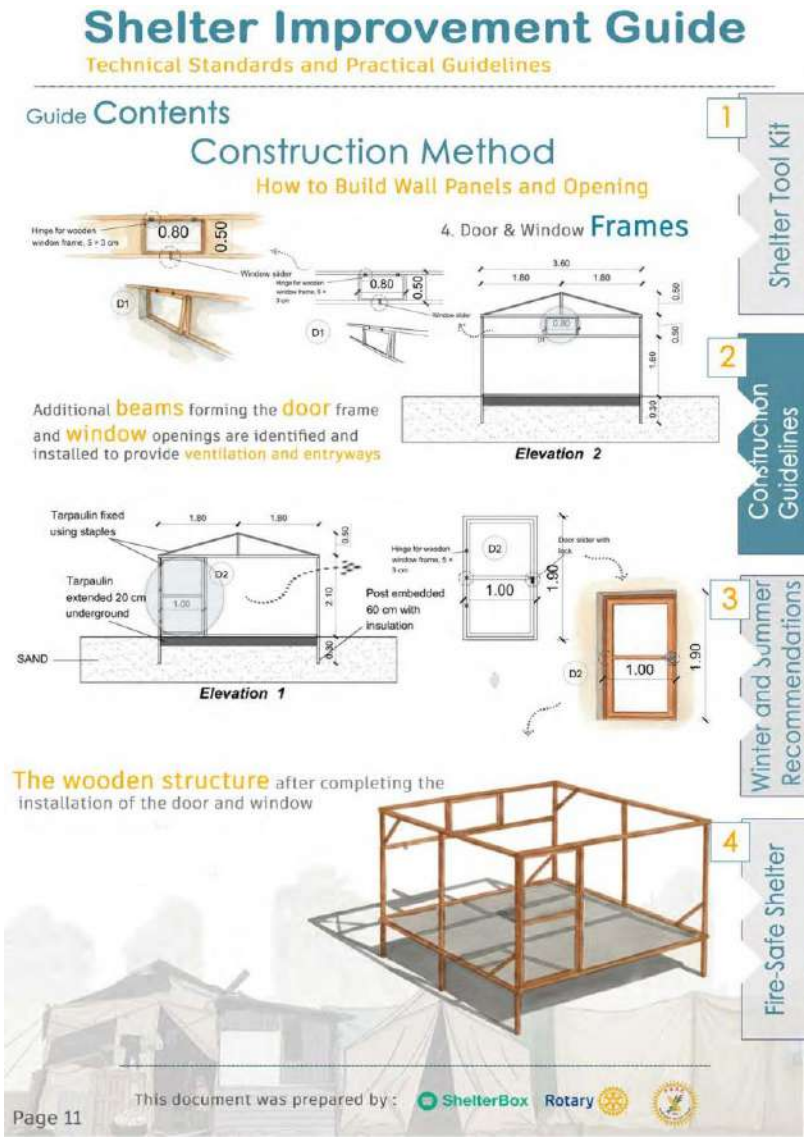
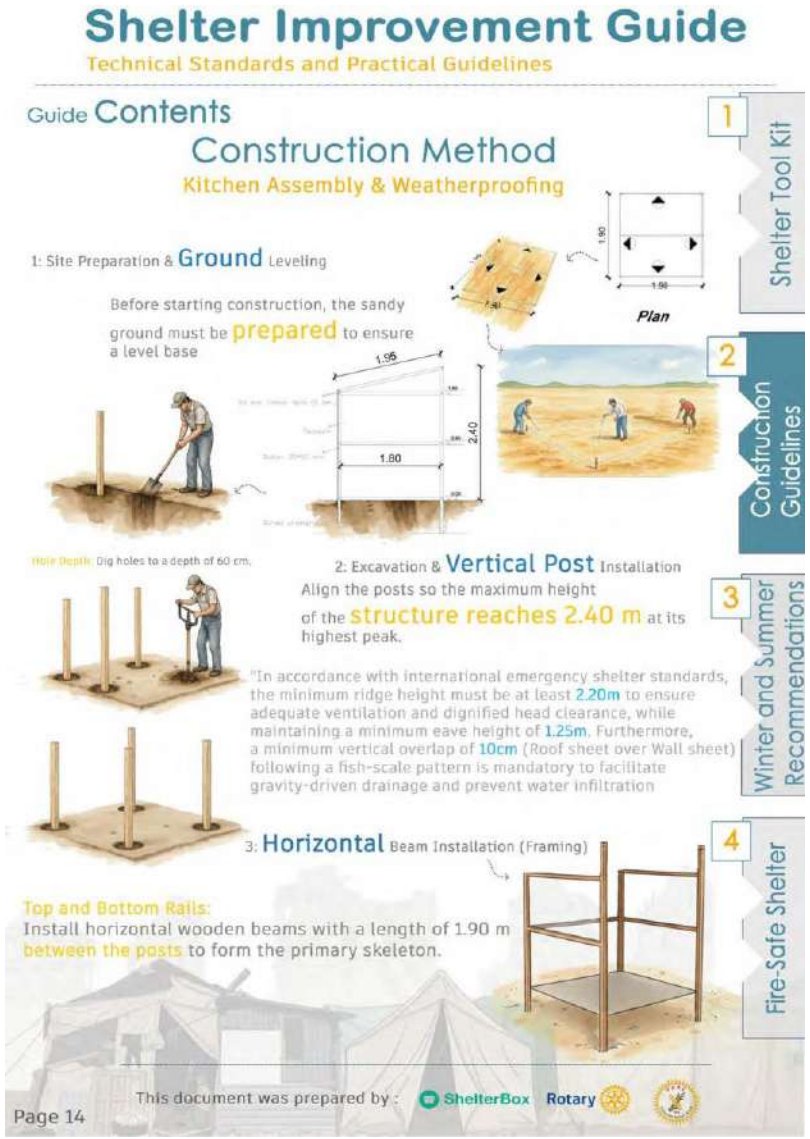
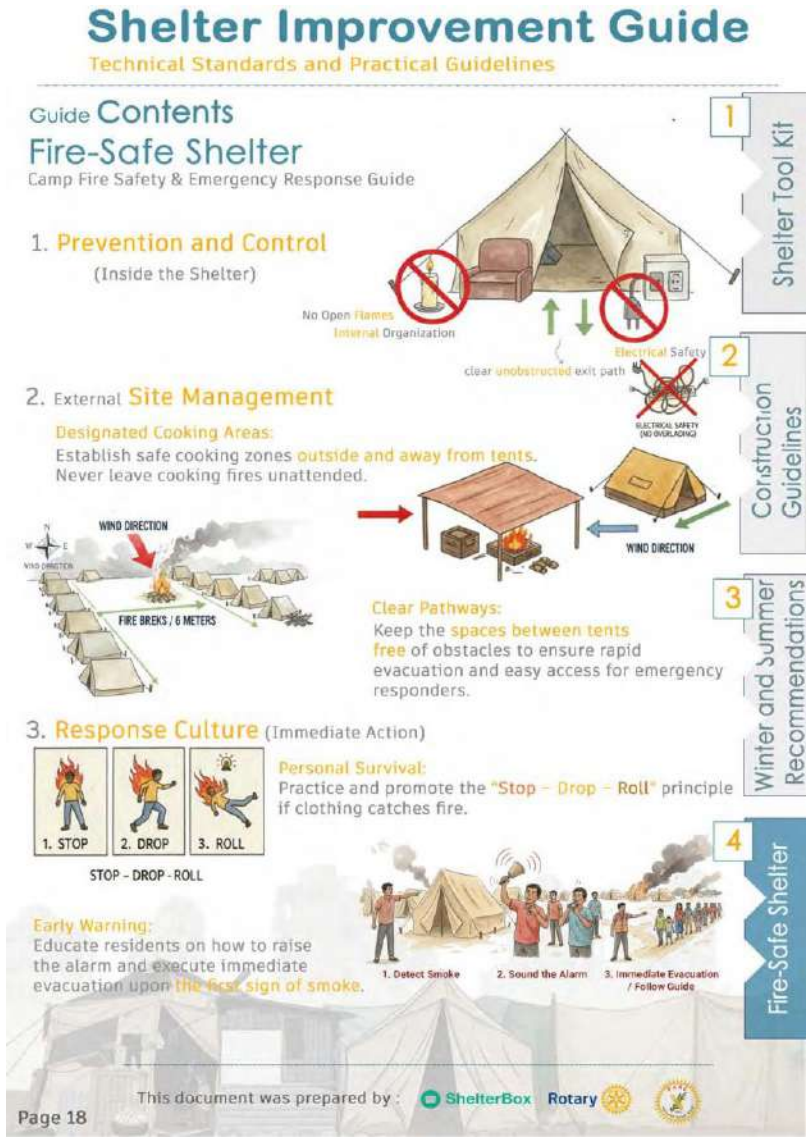
PHOTOS OF IEC MATERIALS







PHOTOS OF IMPLEMENTATION and FINAL ESK

PHOTOS OF IMPLEMENTATION and FINAL ESK

المجلس الفلسطيني للإسكان
Palestinian Housing Council

IOM • OIM

Palestinian Housing Council-
International Organization for Immigration
PHC-IOM

Objective: This project aims to deliver a humanitarian initiative to re-shelter affected families using sustainable local materials and safe construction techniques.

Context and Approach: In response to the acute humanitarian crisis of thousands of displaced people living in fragile shelter conditions, PHC developed the " LAB unit" to manufacturing locally made shelter units from ***wood& metal Pallets***. These structures provide durable-safer shelter within the absence of privacy and dignity caused by deteriorated tents and make-shifts.

Strategic Goal: The project seeks to provide rapid and effective solutions to improve shelter conditions for IDPs, while supporting local labor and enhancing community capacity to respond to emergencies.

Which items most challenging to procure internally for ESK?

All ESKs contents are challenging to procure in regard to the local market price, unstable fluctuations, shortage of availability of items.

INTRODUCTION TO YOUR ESK PROJECT

PHC started the ESK model as a pilot within its partnership with IOM producing (4m*4m) shelter units using re-purposed wooden & metal pallets used to transferring NFIs and tents. The main objective of the ESK is supporting the IDPs to return their native locations and areas. PHC produced three models as follows:

1. (4m*4m) model: was planned to reach 288; 10 metal units out of which, and all units has been completed by end of February 2026.
2. (6m*6m) Pilot Wooden model: Is planned to reach 190 units by May 2026.
3. (6m*6m) model using wooden pallets and tarps for installation and anchoring.

PHC is implementing across all Gaza localities across all governorates; North Gaza, Gaza, Deir El Balah, Khan Yunis, and Rafah- Al Mawasi targets displacement sites; make shift, and collective centers, scattered locations, and neighborhoods.

TARGETING CRITERIA

PHC applies HH- level assessment including both shelter& vulnerability criteria.

Shelter Criteria are:

- HHs lack of safe& inadequate shelter; make-shift or tent.
- HH not received Sheter tarps or tents last 6 months at least.
- HHs their houses are completely demolished or with high level of destruction and risk.

Vulnerability Criteria: targeted HHs are prioritized as the following criteria:

- HHs with large family size ≥6 member
- Women headed HHs are prioritized
- HHs including PWDs, elderly, patients(Chronic Disease)
- HHs with a high dependency ratio of children and elderly)
- HHs lack of source of income and hosted by other families
- HHS hosted by other families and lacks privacy and at risk of family/ local conflicts

MODALITY

PHC applies a comprised modality contracting local contractor, under engineering planning of units and supervision of production in the so-called " PHC LAB".

Integrated with CfW supported in partners with Palestinian Employment Fund- PEF.

TECHNICAL ASSISTANCE

PHC Engineers keep following up on the construction and installation of ESK units to ensure matching planned technical specifications and dimensions.

For installation, PHC transfers the ESK frame parts to HH location where being installed by engineers and skilled workers within technical guidance.

HHs are provided verbal technical guidance by expert engineer through home visit education them about disassembly/reassembly of ESK.

Further ESK manual disseminated including ESK content, disassembly/reassembly instructions, transferring instructions, shelter protection messages, and PHC- IOM Contact & CFRM Channels.

MONITORING

Monitoring is implemented participatory by IOM- implementing PDM& PHC implementing HH perception of ESK.

PHC monitoring resulted by recording high satisfaction of HHs received the locally made ESK models, reflecting durability, privacy, dignity, and improved living conditions.

INTERCLUSTER

WASH& site improvement gaps resulted in assessment is being planned and transformed on HH- level. These includes latrine/ SATO provision and installation, advanced with technical guidance provided by PHC engineers, provision of WASH item such hygiene kits, Buckets, Jerrycans, hand Washing stations, Water tanks, as available.

4m*4m wooden Model

A total of 278 temporary shelter units were implemented using reclaimed wooden panels, which were rehabilitated and processed to meet the requirements of ESK unit construction in accordance with the approved technical specifications.

These units were installed across all governorates of the Gaza Strip, benefiting 278 households with a total of approximately 1,600 individuals, thereby providing rapid and effective shelter solutions for the targeted beneficiaries

- **Components**

- 4 Tarps (4×6 m): Main covering material for weather protection.
- 9-10 pallets of standards measures (1*1 Ms)
- Angle Iron (25x25x3 mm, galvanized): Used for reinforcement and structura l joints.
- Rope (15 m): Used for securing the tent and anchoring.
- Wood Glue (white): For additional bonding of wooden components.
- Galvanized Screws.

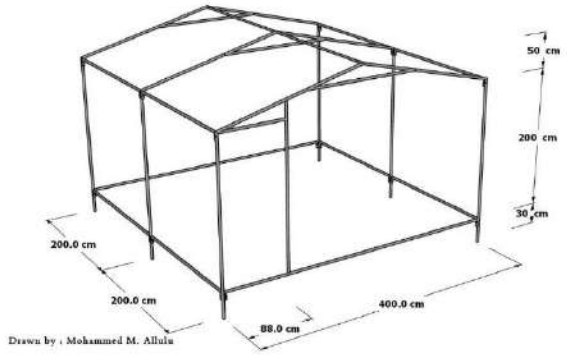
4m*4m Metal Model

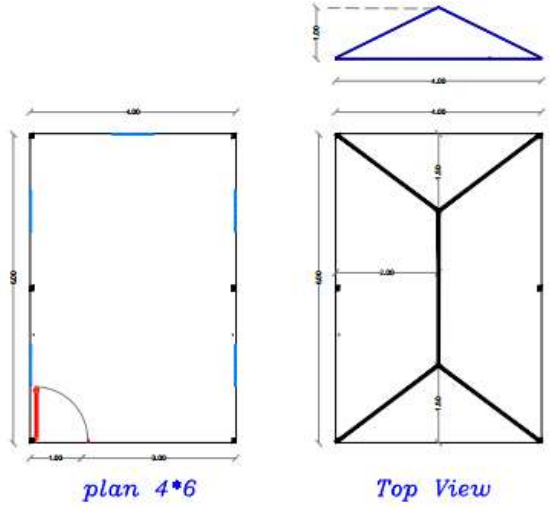
A set of 4m*4m metal-structured -ESK unit prototypes was developed by the engineering team of the Palestinian Housing Council, utilizing available recycled steel. A total of 10 units were constructed with varying designs and sizes to test and evaluate their functionality, strengths, durability and resistance.

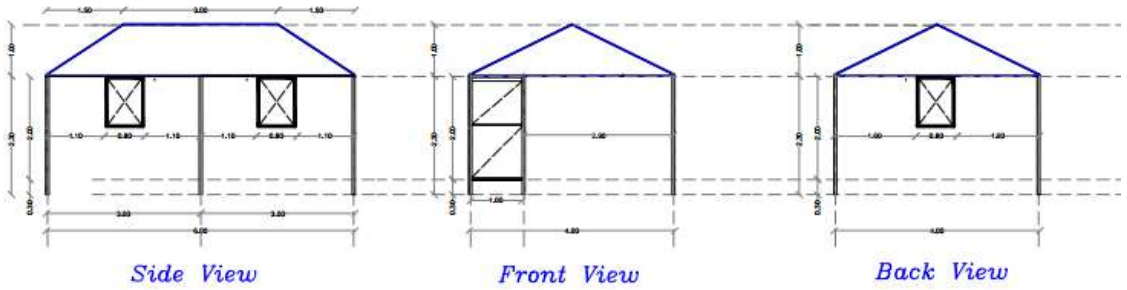
Components

1. 7-8 steel pallets producing about 66 meters of steel linear meters.
2. 4 tarps with standards measures (4*6 Ms)
3. Metal framing Components:

- Truss
- Central Post / Stanchio
- Top Chord of the Truss
- Side Chord / Lateral Beam







Metal Structured ESK

4m*4m

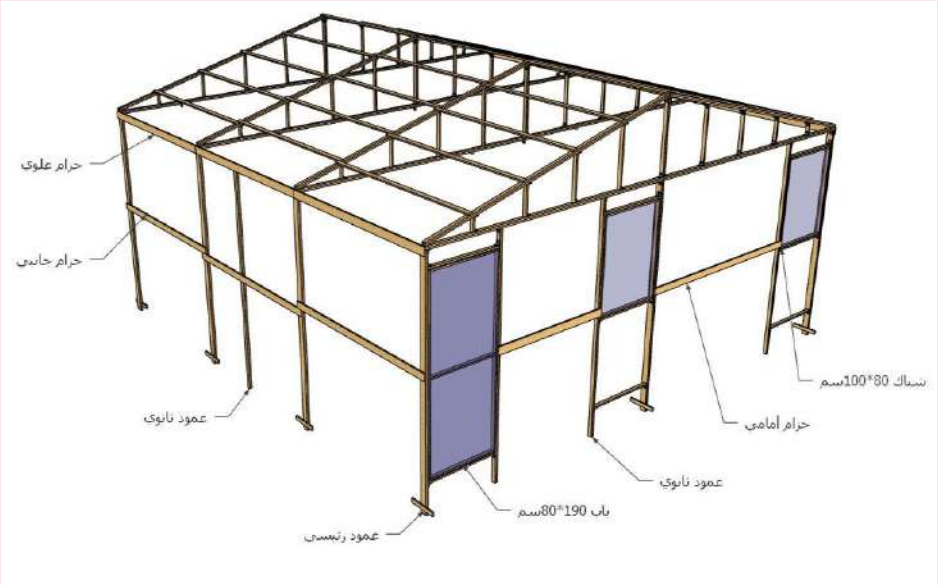
6m*6m **wooden Model**

PHC adopted and applied the " Trial Approach" in designing the ESK model with examining its weaknesses and strengths, . A trial model produced first and examined its durability, resistance, weather hazards resistance, and loads capacity. Based on results of examination, PHC shelter engineers kept modifications reaching the final approved ESK product with best technical specifications and design.

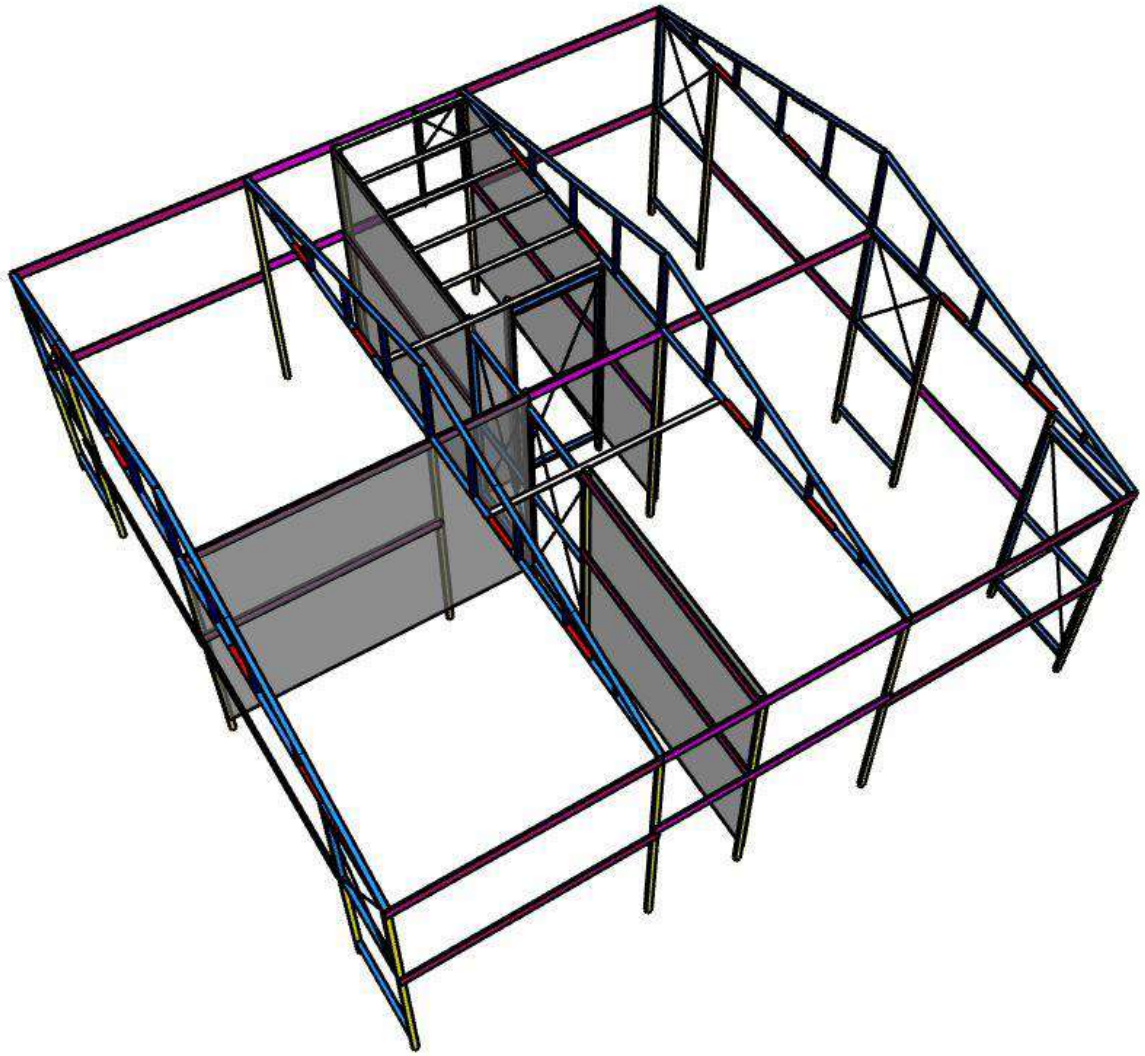
A layout was developed of each ESK unit with **a total of 36 m^2** tailored to accommodate the larger average family size ensuring privacy& dignity. The design includes internal portions including:

- 2 bedrooms(2.80m*3m)
- Bathroom(1.20m*2m)
- Kitchen (3m*2m)
- Living Room (3m*3.20m)

6m*6m **Model Layout& Components(Yousuf add)**



PHOTOS OF IMPLEMENTATION and FINAL ESK (6m*6m)



PHOTOS OF IMPLEMENTATION and FINAL ESK

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Performance:

- The structure stability and leakage has been checked after each storm.
- Shelters remained stable, no signs of leakage.
- Next step: Conducting PDM through PDM for 200 shelters.

Discussion

3) Household perception of ESK implementation so far

4) Scalability of ESK in a fluctuating market and with access constraints

5) How can cluster support partners' ESK implementation and advocacy efforts?

NEXT STEPS....

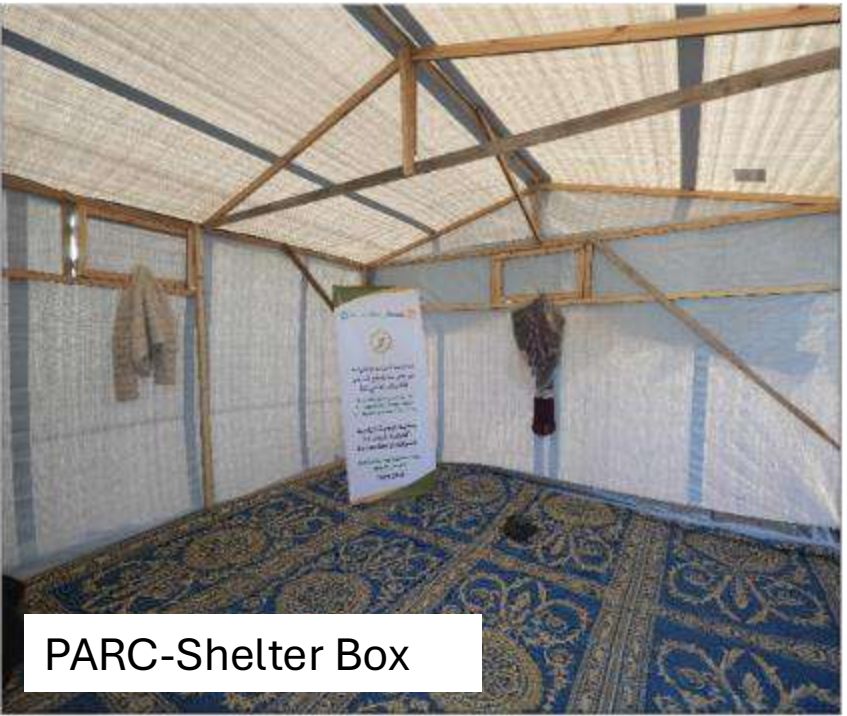
SC joint ESK visits

- Agenda to learn lessons, observe technical quality and exchange ideas.
- Partner interest and bandwidth to visit ESK.
- Focal Point to coordinate visits
- Partners and locations (only for completed ESK)
    - **NRC:** MA, KY, Gaza
    - **CRS** :ESK pilot: Khan Younis
      Next implementation: Gaza City, Khan Younis
    - **PARC – CARE:** Gaza City
    - **PARC – Shelter Box** :Gaza City and KY
    - **IOM – PHC:** KY and Gaza


CRS


NRC


PARC-CARE


PARC-Shelter Box


PHC-IOM


PHC-IOM