

# GUIDANCE NOTE ON TRANSITIONAL SHELTER SOLUTIONS

## 1.0 INTRODUCTION

In light of ensuring effective, efficient, and relevant delivery of shelter assistance to meet critical needs of vulnerable displacement affected population in North-East Nigeria.

The Shelter/NFI and CCCM sector, in close collaboration with partners and relevant government authorities developed this guidance note to provide partners with the most effective and practical step-by-step procedures for implementing transitional shelter.

The usual response by shelter partners has been the emergency shelter kits, emergency shelter (Bama Types), transitional shelter (Dikwa Model), and Reinforced/Emergency shelter (Bakasi Model). That response has many advantages including delivery timeline (easy and fast to deploy). The usual lifespan of an emergency shelter ranges between 0–6 month and six months -to- one year; depending on the panel of response option. Internally Displaced Persons (IDPs) living in low-income neighborhoods, camp settlements, informal settlements and host communities continue to live in dire situation.

The dwellings were often done with emergency shelter materials which are ill-suited to protect people from harsh weather. As stated, IDPs shelter are not sufficiently waterproofed and contains leaks, lack of insulation, termite destruction, etc.

It is always a challenge to support shelter response for affected population over this period, shelter provided to Internally displaced persons during the time must meet reasonable quality standards to last several years, offering populations affected a safe, secure, healthy and dignified living condition.

Returnees face a wide range of difficulties upon return i.e. meeting basic needs such as shelter. To ensure that, their basic needs to shelter solution and rehabilitation of damaged shelters to embed them in their communities and encourage them to remain.

Observed and assessed inadequate shelters since the inception of returns in key hot-spot areas across the BAY states has negatively impacted health and livelihoods, thus constraining reconstruction and recovery.

These documents will clearly define transitional shelter solutions to assist the shelter sector and partners in selecting the best responses in targeted geographical areas and helping on the best way to implement an effective transitional shelter program.

### 1.1 Transitional shelter solution

**Definition:** provides a habitable covered living space and a secure, healthy living environment, with privacy and dignity, to those within it, during the period between a conflict or natural disaster and the achievement of a durable shelter solution. <sup>1</sup>

Transitional shelter solutions should be durable enough to last the entire transition period until reconstruction is complete and should be able to upgrade or relocated to different sites. It should be simple techniques and rapid construction methods appropriate to the environment and community with which it is being implemented.

### **1.1.1 Panels of response options adopted in North-Eastern Nigeria:**

**1.1.2.1 Rehabilitation of damaged shelter:** the provision of shelter building materials including labour fees to support rehabilitation of transitional shelters, in order to improve long-term usage of constructed transitional shelters. This will include adapted reinforcement of construction and maintenance training including the provision of construction tools. Refer to the categories of damage on pages 4 to 5

**1.1.2.2 New construction (Mud house):** the provision of shelter building materials including labour fees to support new construction of transitional shelters. The design and composition of the transitional shelter will accordingly be in line with Sphere standards and shelter/NFI/CCCM guidelines with specific attention to local standards in order to maintain cultural harmony and easy maintenance. Refer to the different mud design on pages 6 to 10

## **2 Implementation of transitional shelter solution**

### **2.1 Community involvement and Participation**

This concept prioritizes the local building practices and materials in shelter construction. The assumption is that local communities know best what materials work for their local environment, what shelter design is most appropriate for the culture and climatic context, and how to maintain shelters built in these ways.

### **2.2 Beneficiary selection:**

Transparent communication with stakeholder is an important aspect of beneficiary selection, it can be done through forming committee among the stakeholders. This gives information regarding the beneficiary identification process, covering the starting with the selection criteria agreement, it then describes the selection procedure, the then balance between the number of selected beneficiaries and the level of assistance. Beneficiaries should be identified through an assessment which includes socio-economic criteria, and results in the selection of highly vulnerable families unable to undertake repairs or construction without assistance. Failing to undertake and communicate this fundamental step risks creating tensions between communities, with families not selected for the transitional solution response. Thus, it is critical to involve specialist staff trained in protection and socio-economic assessments that can determine vulnerabilities and communicate to families and local leaders the selection process.

#### **2.2.1 Target Group for transitional shelter solution:**

Based on the finding from a comprehensive need assessment, the shelter sector will coordinate and prioritize the effective delivery of transitional shelter solution to the following categories of displacement-affected population.

- Returnees with severely damaged houses
- IDPs in Urban or Pre-urban area
- IDPS willing to integrate locally
- Vulnerable community members hosting IDP families
- Vulnerable IDPs in camps for exceptional cases

### **3.0 Transitional Shelter Implementation**

#### **3.1 Engagement**

The first activity in the implementation of a transitional shelter program is engagement. Engagement is essential in developing a coordinated response. All stakeholders involved in the emergency should be identified and engagement should be made, either through the Shelter/NFI and CCCM sector. Stakeholder involved is the Coordinating agency, Affected population, Government, INGO's, LGNO and Donors.

#### **3.2 Appropriateness of transitional shelter:**

It is crucial to determine how circumstances and the implementation of a transitional shelter solution is appropriate. Transitional shelter may be chosen as an appropriate response method for several reasons. Common factors contributing to the appropriateness of a transitional shelter solution include resolving land and tenure; lengthy duration of permanent reconstruction should be put into considered a durable solution.

#### **3.3 Implementation modalities**

The coping mechanisms of potential beneficiaries should be taken into consideration when targeting beneficiaries and planning for transitional solution only those families who are unable of meeting their own minimum shelter needs should be prioritized for assistance. Carrying out repairs or construction could be done through different modalities but should contribute to local economies by engaging in local capacities, skilled workers or cash-for-work.

#### **3.4 Quality Control:**

In the humanitarian context, quality control is primarily necessary to ensure the durability of the support to beneficiaries. It is essential to identify crucial factors influencing quality to avoid quality control becoming a burden for the transitional shelter project. One of the main issues concerning quality control in the context of transitional shelter is to ensure the accuracy of materials specifications used. It is necessary to verify all specifications before the procurement process starts to ensure that appropriate items are delivered.

Technicality, to achieve an excellent transitional shelter solution, the partner should provide technical support during the implementation period. Especially in significant responses and where self-help and community labour are selected to ensure that shelters are constructed according to minimum standards. Partners are encouraged to develop a double line quality control mechanism; one with the project manager and the other one with an external review.

#### **3.5 Housing Land and Property (HLP):**

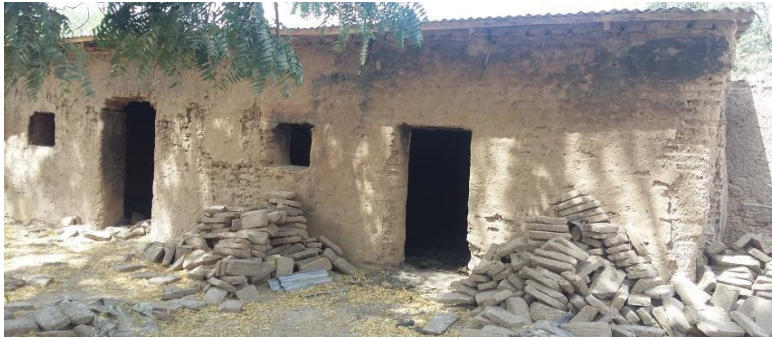

HLP will systemically be integrated into the transitional shelter solution to prevent disputes related to land and ensure tenure security. The team will verify the landowners of the targeted plots before any construction. The attention to be given to the most vulnerable among the targeted beneficiaries for legal acquisition of land and tenure plots. The team can achieve the work in collaboration with the HLP working group to provide technical support to local leaders, government authorities, and landowners to establish the minimum terms before the construction.


#### **3.6 Post construction monitoring:**

After the transitional solution, the team should conduct post-construction monitoring to have feedback on the implementation to improve the intervention where necessary.

**Rehabilitation of damaged shelter: Categories of Damage**

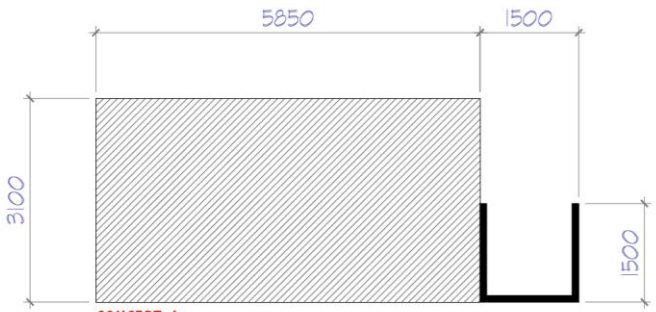
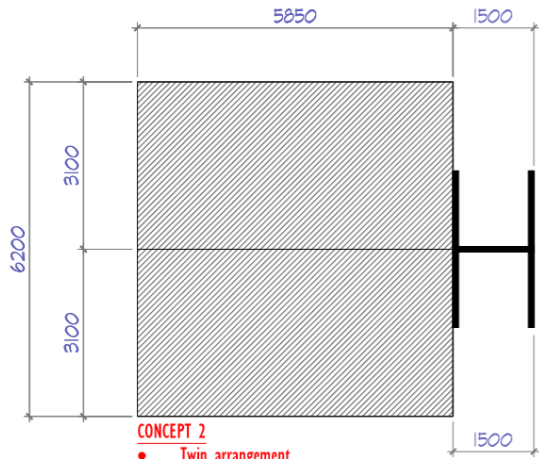
To assess the level of damage and the detailed nature of it, the different type of damages were put into three (3) categories:

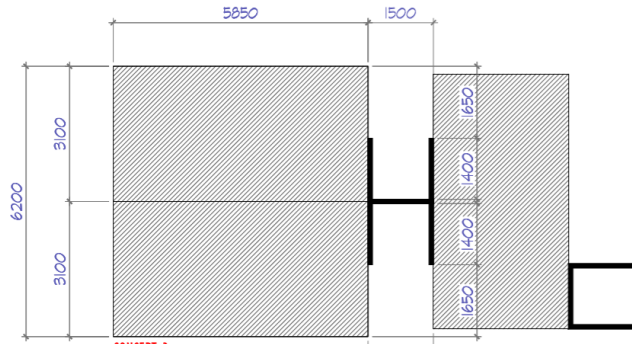
Category of Damage	Level of damage illustration
<p><b>Category 1 (Light repair)</b></p> <p>This damage category highlights upright buildings with existing four walls and roofs but lacking essentials housing components such as windows, doors, and proper flooring.</p> <p>Based on the categorized scale of damage for light repair, which ranges from 5% to 25%, if the nature of the damage is within or below <b>USD 101.4</b> and reflects the various repair components of category 1, then it's qualified as a light repair. The significant repair needs for this category usually range from windows, doors, and flooring; however, this might vary depending on individual household damage situation (e.g. Damage index for the roof only is 25%).</p>	 <p>Showing typical damage situation that warrants light repair of category 1</p>
<p><b>Category 2 (Medium repair)</b></p> <p>This damage category focuses on buildings with existing four walls but without essential components such as Roof, doors, windows, minor wall cracks, and Proper floor. This damage category is tagged to require a medium level of repair if the nature of damage incurred to a building falls between 25% to 50% (referring to the damage scale index). The total repair cost is between <b>USD 10.4 to USD 185</b>.</p>	 <p>Showing typical damage situation that warrants light repair of category 2</p>

<p><b>Category 3 (Major repair)</b></p>	
<p>This category reflects buildings that have incurred significant damage that affects 30 – 50% of four walls, no roof, window, doors, and require flooring. However, if the damage index is between 50% – 90% and requires up to <b>USD 292</b> to fix, it is classified under the significant repair category. However, in cases where a building is not structurally stable, it should provide an alternate shelter solution (e.g. Transitional Shelter) to support vulnerable families.</p>	 <p>Showing typical damage situation that warrants light repair of category 3</p>

Concept and Design of Transitional Shelter Solutions – Mud

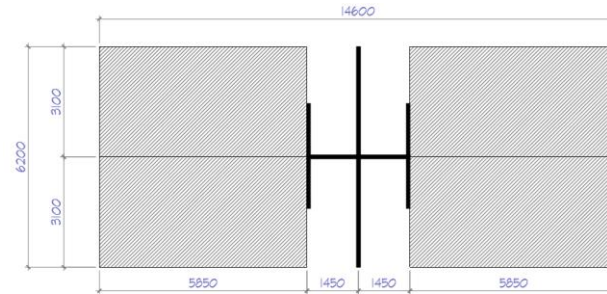
Concept Arrangement:

Concept arrangement	Remark
<p data-bbox="159 443 945 483"><b>Concept 1 (Standalone arrangement)</b></p>  <p data-bbox="315 820 420 844"><b>CONCEPT 1</b></p> <ul data-bbox="315 844 777 958" style="list-style-type: none"> <li>• Stand alone arrangement</li> <li>• No perimeter wall construction cost/time/effort saved</li> <li>• No "between shelter space" saved</li> <li>• C.G.I. clad cooking area</li> </ul>	 <p data-bbox="1134 974 1239 998"><b>CONCEPT 2</b></p> <ul data-bbox="1134 998 1533 1120" style="list-style-type: none"> <li>• Twin arrangement</li> <li>• 33% perimeter wall construction cost/time/effort saved</li> <li>• 33% "between shelter space" for 2 shelters saved (more space for more shelters)</li> <li>• C.G.I. clad cooking area</li> </ul>



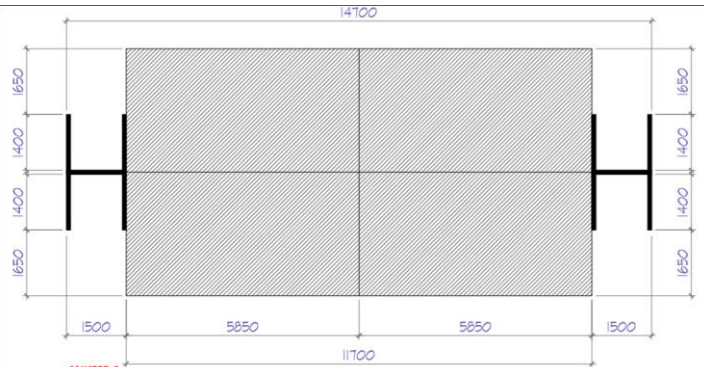
**CONCEPT 3**

- Triple arrangement
- 11% perimeter wall construction cost/time/effort saved (for 3 shelters)
- 40% "between shelter space" (for 3 shelters) saved (more space for more shelters)
- Recessed covered and screened shelter access areas for 2 shelters
- C.G.I. clad cooking area



**CONCEPT 4**

- Quadruple arrangement
- 33% perimeter wall construction cost/time/effort saved (for 4 shelters)
- 20% "between shelter space" (for 4 shelters) saved (more space for more shelters)
- Recessed covered and screened shelter access areas for 4 shelters
- Better ventilation solution for quadruple arrangements
- C.G.I. clad cooking area

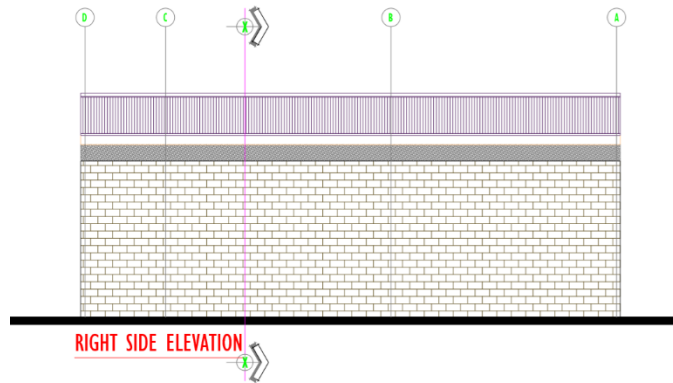
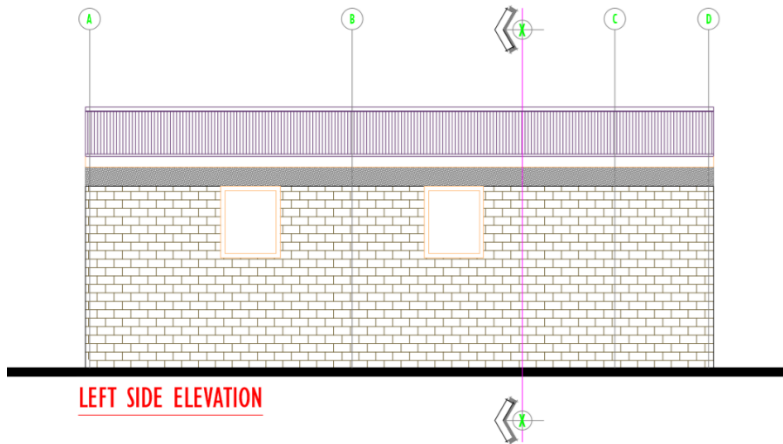
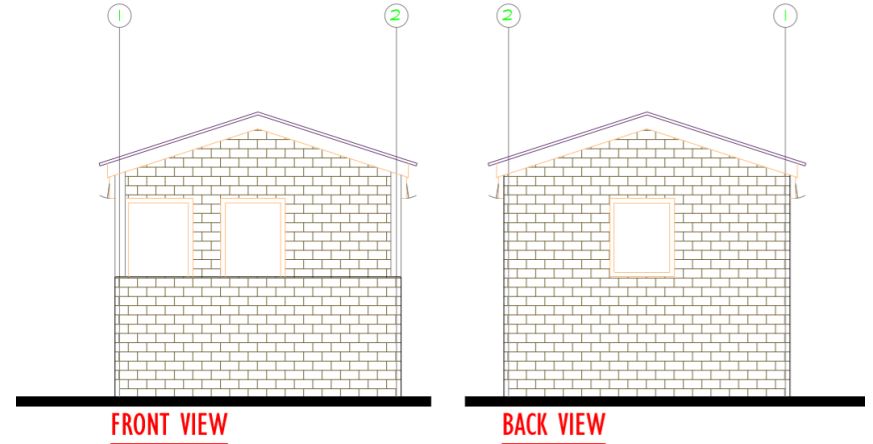
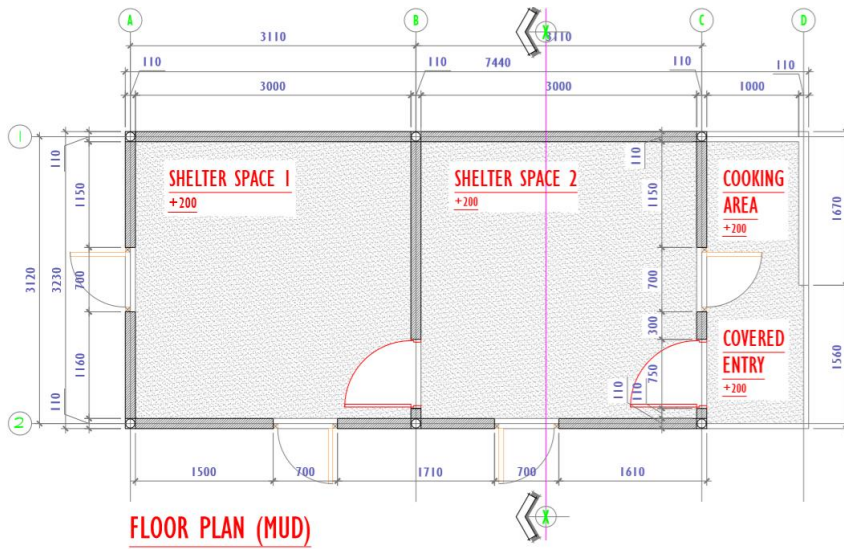


**CONCEPT 5**

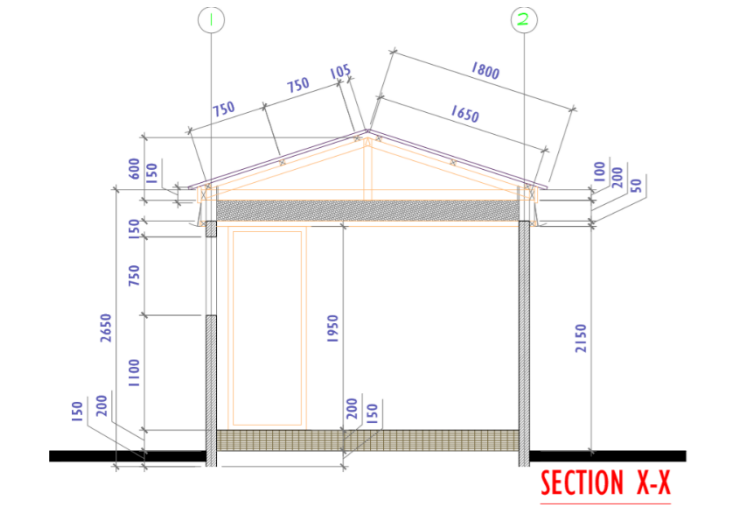
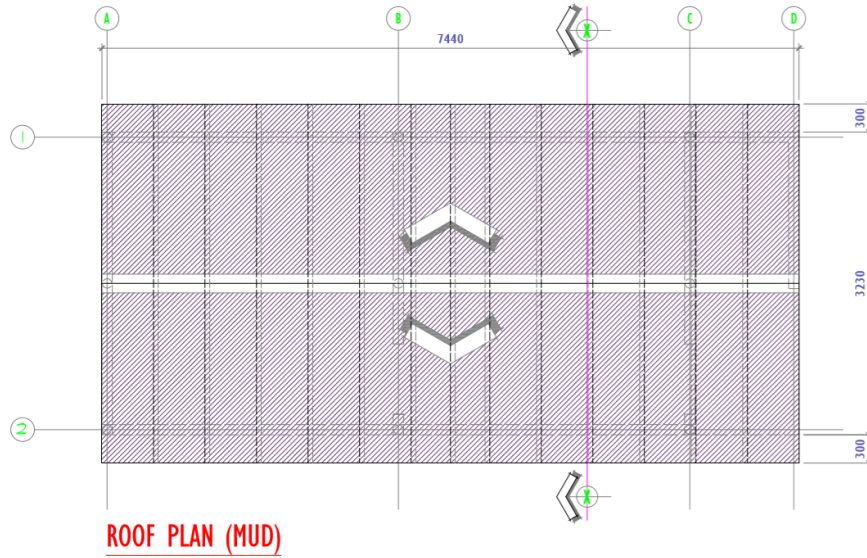
- Quadruple arrangement
- 33% perimeter wall construction cost/time/effort saved (for 4 shelters)
- 20% "between shelter space" (for 4 shelters) saved (more space for more shelters)
- Recessed covered and screened shelter access areas for 4 shelters
- C.G.I. clad cooking area

May 2021

**Design**



May 2021



**Picture prototype of transitional shelter solutions Constructed**



**Type 1: Completely Mud brick**

**Cost: USD 878.47**



**Type 2: Half Tarpaulin + Half Mud brick**

**Cost: USD 618.47**

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**Type 3: Plywood**

**Cost: USD 615.47**



**Type 4: PVC**

**Cost: USD 639.47**



**Type 5: Tarpaulin and Plank**

**Cost: USD 541.47**

Bill of Quantities for New Mud Brick construction

Transitional Shelter (Mud brick – 3m x 6m) With Cement Sand Plaster.									
								Exchange Rate	: 362.27
S/N	Item	Quantity	Unit	Unit Cost (NGN)	Total Cost (NGN)	Unit Cost (USD)	Total Cost (USD)	Beneficiary Contribution (USD)	Actual cost
<b>A</b>	<b>Construction Materials:</b>	-	-	-	-	-	-	-	-
1	CGI Sheet (1.8m x 0.875m x 0.20mm thick)	2.75	Bundles	25,000.00	68,750.00	69.01	189.78	0.00	189.78
2	0.35mm*400mm wide*4m length metal ridge cap.	2.00	pcs	4,500.00	9,000.00	12.42	24.84	0.00	24.84
3	Termite treated 50mm x 100mm x 3.4m Timber Rafters (Obeche)	22.00	pcs	1,200.00	26,400.00	3.31	72.87	0.00	72.87
4	Termite treated 50mm x 100mm x 3.4m Termite treated Timber Tie (Obeche)	11.00	pcs	1,200.00	13,200.00	3.31	36.44	0.00	36.44
5	Termite treated 50mm x 75mm x 3.4m Timber purlins (Obeche)	30.00	pcs	850.00	25,500.00	2.35	70.39	0.00	70.39
6	Termite treated 50mm x 100mm x 3.4m Timber Wall plate. (Obeche)	6.00	pcs	1,200.00	7,200.00	3.31	19.87	0.00	19.87
7	Termite treated 50mm x 75mm x 3.4m Timber for Door frames.	6.00	pcs	850.00	5,100.00	2.35	14.08	0.00	14.08
8	Termite treated 50mm x 75mm x 3.4m Timbers for main doors	6.00	pcs	850.00	5,100.00	2.35	14.08	0.00	14.08
9	Termite treated 50mm x 75mm x 3.4m Timber windows.	6.00	pcs	850.00	5,100.00	2.35	14.08	0.00	14.08
10	Termite treated 25mm x 250mm x 3.6m fascia boards	8.00	pcs	2,500.00	20,000.00	6.90	55.21	0.00	55.21
11	100 mm (4 inch) Door hinges	2.00	Pair	500.00	1,000.00	1.38	2.76	0.00	2.76
12	Door latches (Inside and outside)	2.00	Pairs	200.00	400.00	0.55	1.10	0.00	1.10
13	100 mm (4 inch) Window hinges	3.00	Pair	200.00	600.00	0.55	1.66	0.00	1.66

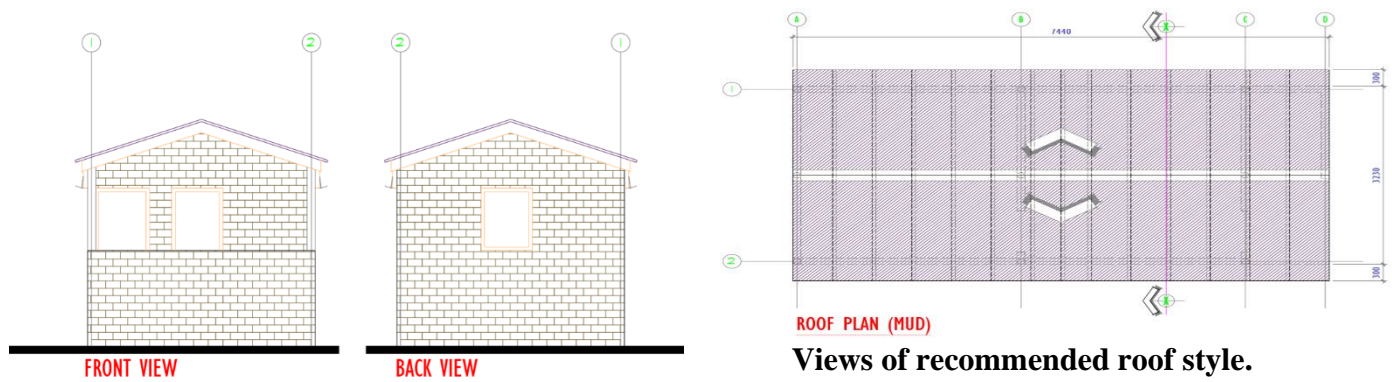
14	100mm (4 inches) Towel bolts for doors and windows	5.00	Nos	200.00	1,000.00	0.55	2.76	0.00	2.76
15	1m standard length of metal strip (Langalanga)	20.00	pcs	150.00	3,000.00	0.41	8.28	0.00	8.28
16	100mm (4 inch) timber nails	15.00	Kg	500.00	7,500.00	1.38	20.70	0.00	20.70
17	75mm (3 inch) timber nails	10.00	Kg	500.00	5,000.00	1.38	13.80	0.00	13.80
18	35mm (1/2 inch) timber nails	10.00	Kg	500.00	5,000.00	1.38	13.80	0.00	13.80
19	Roofing nails	2.50	Packets	3,000.00	7,500.00	8.28	20.70	0.00	20.70
20	Mud block in size 300mm*150mm*100mm thick.	1,500.00	pcs	20.00	30,000.00	0.06	82.81	82.81	0.00
22	Plaster sand to mix in the production of cement sand wall plaster.	6.00	CuM	1,800.00	10,800.00	4.97	29.81		29.81
23	50 kg Cement, to be used in the production of local plaster mix and bonding of mud blocks.	3.00	Bags	3,000.00	9,000.00	8.28	24.84	0.00	24.84
25	Azara Timber. For poles at Kitchen.	4.00	length	800.00	3,200.00	2.21	8.83	0.00	8.83
	<b>Sub-Total</b>				<b>269,350.00</b>		<b>743.51</b>		<b>660.70</b>
<b>B.</b>	<b>Labour: (5 workers per shelter)</b>								
26	Carpentry	1.00	Item	12,500.00	12,500.00	34.50	34.50	34.50	0.00
27	Masonry	1.00	Item	12,500.00	12,500.00	34.50	34.50	34.50	0.00
28	Unskilled labor and other miscellaneous cost (water)	3.00	Item	7,500.00	22,500.00	20.70	62.11	62.11	0.00
					<b>47,500.00</b>		<b>131.12</b>	=	<b>0.01</b>
	<b>Grand Total for 1 Shelter</b>				<b>316,850.00</b>		<b>874.62</b>		<b>660.70</b>

### Summary

Sustainable intervention often takes several years before it completely deteriorates. The emergency shelter provided to displaced persons has a shorter life span, and the displaced population has fewer resources to maintain their shelter. Transitional shelter with a good quality standard is advisable to last for several years to support the people affected by displacement. The usual response has been the distribution of tents or kits of basic shelter materials and tools, and this response is not intended to offer shelter over the long term.

### Recommendation:

The sector recommends Type 1 – completely mud for any proposed transitional shelter new construction because it helps maintain relatively heat even temperature inside the shelter. Besides, it easy to use, with no skilled workers required for wall construction, fire resistance, and environmental appropriateness. For the roofing, the recommended one is a gable roof because it can withstand wind. It is also known of their longevity, durability, and maintenance are often less than a flat roof. In addition, the implementing partner will provide some construction materials as specified in the BOQ, technical support, and monitors the construction activities. At the same time, the beneficiaries selected will contribute to delivering mud bricks, the cost for labor, and another miscellaneous contextual cost.



Views of recommended roof style.

[https://www.ifrc.org/PageFiles/95751/B.d.03.%20Guidelines%20for%20Post%20Disaster%20Housing%20%20version%201\\_OXFAM%20GB.pdf](https://www.ifrc.org/PageFiles/95751/B.d.03.%20Guidelines%20for%20Post%20Disaster%20Housing%20%20version%201_OXFAM%20GB.pdf)