

Guidance Notes for Delivering and Managing
the Rehabilitation of

COLLECTIVE SHELTERS

In Dar'a and Quneitra, Syria



care[®]



UNHCR
The UN Refugee Agency

ACKNOWLEDGEMENT

This guidance note was developed by CARE International with the assistance of UNHCR as the final product of a strategic shelter assessment conducted in Dar'a and Quneitra, Syria, (March – August 2017).

The lead authors are Osama Alsheikhali (CARE), Naomi Rennard (CARE), Step Haiselden (CARE) and Ian Brightwell (UNHCR), the team would like to thank everyone who was involved in this project for their valuable inputs, feedback and time, with special thanks for UNHCR whose financial and technical support made these guidance notes possible.

October 2017.

TABLE OF CONTENTS

1. INTRODUCTION	4
2. DEFINITION OF A COLLECTIVE SHELTER	4
3. CONSIDERATIONS FOR THE SELECTION OF COLLECTIVE SHELTERS FOR REHABILITATION	5
3.1 Safety and Security	5
3.2 Settlement Stability.....	5
3.3 Access.....	5
3.4 Cost/Benefit Considerations	6
3.5 Housing Land and Property (HLP)	6
3.6 Collective Shelter Type and Level of Damage	6
3.7 Asbestos	6
3.8 Coordination with Stakeholders and Partners.....	7
3.9 Other Considerations	7
4. ASSESSMENTS	7
5. STAKEHOLDER MANAGEMENT	8
5.1 IDPs	8
5.2 Host Community	9
5.3 Local Council	9
6. PROTECTION	10
6.1 Protection Mainstreaming	10
6.2 Housing, Land and Property.....	11
7. CAMP COORDINATION AND CAMP MANAGEMENT (CCCM).....	11
8. SHELTER REHABILITATION TECHNICAL GUIDELINES.....	13
8.1 Structural Soundness and Integrity.....	13
8.2 Building Enclosure & Openings.....	14
8.3 Building Infrastructure	14
8.4 Kitchens, Toilets and Shower Rooms	15
8.5 Electrical Systems for shelters	16
8.6 Building Finishes.....	17
8.7 Solid Waste Management.....	17
9. CONSTRUCTION MANAGEMENT AND MONITORING	18
9.1 Construction Documents	18
9.2 Contractor Selection	18
9.3 Reporting and Monitoring	19
9.4 Project Closing and Evaluation.....	19

ACRONYMS

AC	Alternating Current
BoQ	Bill of Quantities
CCCM	Camp Coordination and Camp Management
CI	Cast Iron
DC	Direct Current
DI	Ductile Iron
GBV	Gender Based Violence
HDPE	High Density Polyethylene
HLP	Housing, Land and Property
IDP	Internally Displaced Person
IEEE	Institute of Electrical and Electronics Engineers
LED	Light-emitting Diode
MoU	Memorandum of Understanding
NFI	Non-food Item
NGO	Non-Governmental Organization
PE	Polyethylene
PV	Photovoltaic
PVC	Polyvinyl Chloride
RC	Reinforced Concrete
RFP	Request for Proposals
SoW	Scope of Work
ToR	Terms of Reference
UNHCR	United Nations High Commissioner for Refugees
uPVC	Unplasticized Polyvinyl Chloride
UV	Ultraviolet
WASH	Water, Sanitation and Hygiene



1. INTRODUCTION

This document provides multi-sector guidance and sets minimum standards for humanitarian agencies making shelter interventions to support displaced households and host communities through the upgrade or rehabilitation of collective shelter collective shelters. The guidance sets out how shelter interventions should be planned, designed and implemented, and is tailored to the specific context of southern Syria, based on recent context assessments, past experience and lessons learnt.



2. DEFINITION OF A COLLECTIVE SHELTER

UNHCR defines collective shelters or collective centres as pre-existing buildings and structures where a large group of displaced people finds shelter for a short time while durable solutions are pursued.¹ A variety of facilities may be used as collective centres; community centres, town halls, hotels, gymnasiums, warehouses, unfinished buildings and disused factories.

In southern Syria, collective shelters are a common shelter modality for IDP households, and are likely to be used for several years. Collective shelters might be publicly or privately owned, and can be either 'active' in a building still used for its original purpose, or 'passive' in a building no longer used for its original purpose



Figure 1 - A Collective shelter in Dar'a - unfinished building - ©CARE

¹ UNHCR Emergency Handbook "Collective Centre Rehabilitation"
<https://emergency.unhcr.org/entry/89574/collective-centre-rehabilitation>



3. CONSIDERATIONS FOR THE SELECTION OF COLLECTIVE SHELTERS FOR REHABILITATION

Prior to the selection of the collective shelters for rehabilitation, it is advisable to conduct a preliminary risk assessment to identify threats to a positive outcome, as well as their likelihood. The risk assessment will inform the 'go/no go' decision for rehabilitation of the collective shelter and should include the following:

3.1 Safety and Security

How safe and secure is the collective shelter from

- Air strikes, bombardment and shelling? Consider the proximity of military bases, checkpoints and gun emplacements.
- Clashes along lines of conflict or shifts in territorial control?
- Health hazards such as sewage, contaminated land, hazardous substances such as asbestos, landmines, unexploded ordinance?

3.2 Settlement Stability

How long IDPs can or will stay in a collective shelter must be considered, as well as whether departing IDPs might be replaced by new arrivals. Information regarding intentions, expectations and risks should be gathered through interviews or focus group discussions with residents, landowners and local leaders. Factors affecting the social stability of the shelter include:

- The intentions and level of authority of the Local Council, either to protect IDP tenure in a collective shelter, or to vacate the shelter and return it to its original purpose.
- The risk of eviction by the property owner.
- The intentions of IDPs and their opportunities to return to their homes.
- Pressure from the host community pressure to return the collective shelter to its original use; for example, to a school at the start of the school year.
- Various push-pull factors for onward displacement of IDPs, including:
 - Employment opportunities in other locations
 - Better safety and security in other sites, including response to the spread (or fear of spread) of disease locally.
 - Better access to livelihoods and services
 - Reunion with other family members

3.3 Access

- Who has access to the collective shelter, as a resident or to deliver services, considering that sex, gender identity, age, or ethnicity can all influence who has access to a collective shelter?
- Can residents access essential services and markets and can those markets be used as a source for shelter rehabilitation materials?
- Can humanitarian agencies have impartial and unhindered access to the collective shelter?

3.4 Cost/Benefit Considerations

Factors to consider to ensure best value-for-money when selecting a collective shelter for rehabilitation:

- The project cost
- The number of IDPs currently residing in the collective shelter
- The number of additional IDPs that would be able to move into the collective shelter

3.5 Housing Land and Property (HLP)

Section 6.2 addresses HLP in shelter interventions in more detail; however, before a collective shelter is considered eligible for rehabilitation, agencies should assess HLP risks, following sector guidance on due diligence. As a minimum, the due-diligence assessment should include triangulating information on the property ownership history and possible disputes, tenure arrangements, security of tenure, host community relations and accepted dispute resolution mechanisms.

3.6 Collective Shelter Type and Level of Damage

Section 8.1 addresses shelter damage issues in detail. A humanitarian actor must have the financial and technical means to ensure that they can rehabilitate a shelter to meet minimum standards. Due to the risks of working on structurally damaged buildings requiring specialized skills and a level of supervision that is impossible to provide through remote management, this guidance recommends that only structurally safe buildings are rehabilitated, in which it is best if the structural integrity is assessed by a specialist (i.e. structural engineer).

3.7 Asbestos

Asbestos is a naturally-occurring, rock-based fibrous mineral that is commonly used for multiple purposes in building construction due to its good insulation and mechanical strength properties. If left undisturbed, asbestos does not represent a health risk, however, exposure to disturbed asbestos, in a damaged building or during construction work for example, can pose serious health risks. The World Health Organization (WHO) has assessed the effect of exposure to asbestos on human health. Inhalation of asbestos fibers has been shown to cause asbestosis, lung cancer and mesothelioma.

If asbestos-containing materials are found or suspected in a potential collective centre they will need to be investigated and possibly removed by a suitably qualified and equipped contractor. Therefore, identify, assess and investigate if the collective shelter contains asbestos materials. If so:

- Ensure that people are adequately informed of the risks of residing in a building containing asbestos.
- Assess the risks of asbestos on IDPs and construction workers

Accordingly, decide whether it is practical or possible to rehabilitate the shelter and whether safe handling of the asbestos is possible.

3.8 Coordination with Stakeholders and Partners

Agencies should consult and liaise with stakeholders such as Local Councils, NGOs operating in the area, property owners, neighbors and IDPs in order to:

- Avoid duplication of responses
- Identify ways to strengthen community cohesion
- Strengthen local HLP rights
- Ensure rehabilitation plans are tailored to the needs of the resident IDPs
- Ensure equitable, safe access to the shelter for men, women, boys and girls

3.9 Other Considerations

- Equal treatment: where other collective shelters are nearby, consider rehabilitating all to a similar standard.
- Protection cases: seek to identify and adapt to the specific needs of highly vulnerable people and ensure that they receive appropriate specialized support.
- Synergies: where possible, integrate other programs along with rehabilitation works and activities. These might include protection monitoring, distributions of core relief items and livelihoods activities, awareness-raising and WASH interventions.
- Collective centres can become high-risk environments for violence and abuse. Women and girls can become target of violence and exploitation, especially if there are perceptions of inequity in access to assistance favoring women, girls or other specific groups.



4. ASSESSMENTS

Following the selection of a collective shelter that meets the eligibility criteria, a participatory assessment should be made, that includes the following actions and considerations. The assessment should be social (e.g. considering gender, dignity and cultural aspects of shelter) and technical, considering the scope of construction work (see section 8 on technical assessments), in order to determine the needs of the IDPs.

- Hold interviews or focus group discussions with resident IDPs, shelter managers or a residents' committee, local council and other relevant stakeholders.
- Develop an understanding of the different roles of men, women, boys and girls in the shelter.



Ensure that interviews and focus group discussions include a balanced representation of women, men and youth.

- Make a photographic record setting a baseline by which to monitor improvements.
- Archive key project documents; floorplans, technical specifications, BoQs.
- Especially where there are multiple buildings, develop a layout map of the site that clarifies which rooms or buildings are used for the collective shelter and their use.
- Avoid collecting data that is unnecessary for the intervention. Store the data securely, and only for as long as is legally required for the project.

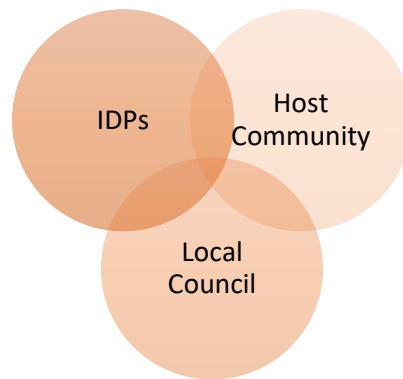
- Rehabilitation work should begin as soon as possible after the assessment is completed; if there is a significant delay between the assessment and the start of works, agencies should verify that the original assessment findings are still valid.



5. STAKEHOLDER MANAGEMENT

A stakeholder is any individual, group or organization that can affect, be affected by or perceive itself to be affected by the rehabilitation project. Managing stakeholders from the early stages of a project can mitigate risks and improve project outcomes, since successful planning, design and completion of an intervention often depends of ensuring stakeholder consultation and support.

The three major stakeholders in collective shelter collective shelter rehabilitation are:



When consulting with stakeholders, keep in mind the different groups within each stakeholder type, as they are not necessarily homogeneous, and views between groups will be different.

5.1 IDPs

The culture and customs of IDPs in collective shelters in Dar'a and Quneitra who have originated from different parts of Syria can vary greatly. For a collective shelter rehabilitation project to be successful, it is very important to inform and consult with resident IDPs.

A participatory approach is essential to consulting with IDPs in the assessment phase and subsequent stages. This should help to identify specific needs, privacy concerns and protection issues whose solutions might be integrated into the project design. Host community members and IDPs may also want and be able to participate in the rehabilitation work itself (see Section 6.1).



Establish mechanisms that allow all sections of IDPs to give their input and feedback

Understanding the management of a shelter and the relationships between residents as well as their needs and current use of the shelter, should help design relevant and well-

placed communal space, utilities and infrastructure for all parties, facilitating fair use of the shelter following the intervention.

5.2 Host Community

The arrival of IDPs into a host community can bring additional strain to an environment already affected by the prolonged conflict. Market prices may increase, as well as the strain on utilities, public resources and employment opportunities, and there may be a negative impact on the community if the presence of a collective shelter limits the use of that site for its original purpose (e.g. a school being closed or having fewer classrooms due to use as a shelter). Consultation with neighbors, private land owners and other members of the host community should help to understand local concerns, which may reveal information about issues including social cohesion and HLP rights including the security of tenure of the IDPs in their collective shelter.

5.3 Local Council

Local councils in non-Government Controlled Areas are de facto authorities, and agencies should exercise caution in how they engage with them, bearing in mind that coordinating with councils may indirectly empower them “as both humanitarian responders and revolutionary political actors.”² The local councils formed throughout Syria in response to context-specific conditions, and their maturity, capacity, efficacy and mandate can vary widely. The membership of these bodies may change over time, and humanitarian actors should take steps to confirm that the Local Councils with whom they engage are viewed as legitimate and credible by the relevant stakeholders. Where this is the case, the following actions are recommended:

- With particular reference to collective shelters, encourage local councils to see the support of humanitarian action and principles as part of their mandate.
- Consult with and seek information and suggestions from the council – for example through interviews with council members – always being very clear that the humanitarian actor has the final say in project decisions.
- Note that local councils may have particularly valuable information relating to project risks.
- Adopt a process of clear and steady interaction with the council, clarifying expectations at each stage, which may be as follows:



² Mercy Corps (2015) “Humanitarian Access Through Local Councils in South and Central Syria.”



6. PROTECTION

6.1 Protection Mainstreaming

It is essential to incorporate protection principles into collective shelter interventions. As a minimum, the following four principles should be considered throughout the intervention. Additional elements of protection mainstreaming can be added, as relevant to the context, agency and the specific intervention.

DO NO HARM AND PRIORITIZE SAFETY AND DIGNITY

- Identify vulnerable individuals and address their specific needs, which may include need for additional space, separated areas, mobility assistance and bathroom access.
- Create well-lit communal spaces.
- Create separate living areas, for each household, and separate sleeping areas for different families, sexes and generations, using opaque walls with a lockable door that respects and ensures privacy and protection.
- Carefully examine risks of violence, especially Gender Based Violence (GBV)*, to boys, girls, men and women in their daily activities.
- Create lockable and separate toilet and shower facilities for each family or for males and females.
- Create multiple escape routes (at least two) for emergency evacuation of buildings, for example, in case of fire. Residents should be familiarized with escape routes and should develop and practice evacuation plans.

PROMOTE PARTICIPATION AND EMPOWERMENT

- In addition to consultation with IDPs and the host community, consider opportunities for their participation in the rehabilitation work, for example through a voucher system or cash-for-work, particularly where IDPs are unemployed, or have construction skills.
- In the design and choice of building materials, use materials and methods that can easily be maintained or upgraded by beneficiaries, improving the sustainability of the intervention.

ENSURE MEANINGFUL ACCESS

- Through consultation and design, tailor common spaces, utilities and sleeping areas to the vulnerabilities of the target group.
- Create equal access to communal spaces and utilities (kitchen, electrical points, bathroom) noting that vulnerable people may require special assistance to achieve equal access.
- For the elderly and people with certain disabilities, reduce distances/stairs from sleeping areas to common spaces and utilities.

PROMOTE ACCOUNTABILITY

- Receiving feedback is valuable to monitoring, evaluation and learning, and is an essential part of accountability to the affected population.
- Throughout the project stages, provide a structured feedback mechanism that is managed by an individual who can treat feedback confidentially, and can take remedial action.
- Note that poorly managed feedback mechanisms can raise unmet expectations and can expose beneficiaries to harm, through confidentiality breaches.

6.2 Housing, Land and Property

The ownership and property management details of collective shelters are crucially important to the likely success of the shelter, and can vary hugely, across public and privately owned properties and endowments. Humanitarian agencies should follow sector guidance on making due diligence checks, to avoid doing harm to the HLP rights of IDPs, host communities or other stakeholders. In summary these checks include identifying and verifying:

- who is the owner of the property and the type of rights they have (i.e. right to use, right to control, right to transfer the property)?
- For how long have IDPs been living in the collective shelter?
- What tenure arrangements, if any, do IDP residents have (how long, how secure, at a cost)? Are there written agreements confirming occupancy?
- What individuals or what kind of group decides who can live in the shelter? What are the selection criteria?
- Even if residents have lived a long time in the shelter, is there still a high eviction risk?
- Have there been any property use disputes between residents or with host community members? If so, how are they resolved?
- What can the humanitarian agency do to identify, mitigate or facilitate resolution of any HLP rights issues arising during or after rehabilitation work?



7. CAMP COORDINATION AND CAMP MANAGEMENT (CCCM)

Given the current context of southern Syria, in particular with the challenge of cross-border remote management, there are no formal camps, and CCCM sector functions for southern Syria are coordinated and managed through the Jordan Hub of the Shelter-NFI working group. Key principles of CCCM should be applied and promoted where possible through collective shelter rehabilitation projects. Developing well-established residents' coordination committees empowers residents and encourages participation in decision-making. They can also serve as an entry point for the delivery of other services including protection.

The Shelter/NFI working group has developed a Memorandum of Understanding (MoU) template for use between Local Councils, Humanitarian Agencies and Residents' Committees. Article 7 of the MoU sets out key points of formation of a residents' committee and their coordination with the Local Council. If a privately owned collective center is being rehabilitated, it is generally important that the property owner is closely connected to the residents' committee, whether through frequent contact with the committee, or participating in committee meetings.

The size of a residents' committee can vary, but the following composition is recommended:

- Minimum size: 4 people (2 men, 2 women)
- Maximum size: 14 people (7 men, 7 women)

- There should be at least one male and one female representative for each group of ten households, with each committee member elected by the households that they will represent.

The main responsibilities of the committee members are to:

- Act as focal points for any issue related to the site
- Liaise between residents and humanitarian service providers
- Ensure effective information dissemination among site residents
- Hold regular community meetings to discuss communal issues
- Support the process of establishing communal rules for the collective shelter
- Coordinate the cleaning, maintenance and repair of communal areas and sanitation facilities
- Report out-of-school children to humanitarian agencies providing education services
- Support fire safety through monitoring of fire safety equipment and awareness
- Report incidents of violence to the relevant authorities
- Assist in the mediation of disputes
- Ensure equal access to communal areas and services for all shelter residents
- Plan communal festivities or recreational activities.



8. SHELTER REHABILITATION TECHNICAL GUIDELINES

The primary construction typology in southern Syria, is reinforced concrete (RC) frames with infill concrete blockwork. The following points are intended to help agencies to meet minimum humanitarian and construction standards through their assessments and interventions. These general points may need to be adjusted to address context-specific issues identified through assessments, due diligence checks or stakeholder consultation.

8.1 Structural Soundness and Integrity

Before rehabilitation, check the quality of the following:

Foundations	Visually inspect for any major shear cracks in interior or exterior walls of the building. (The assessor has to differentiate between regular wall cracks and cracks from foundation settling or damage.)
Columns	Visually inspect for any cracks, holes or other damage.
Beams	Visually inspect for any cracks, holes or other damage.
Slabs (floors)	The floor is often multiple layers – tiled surface over a base of hollow blocks over RC – therefore, look for damage at each layer, differentiating between cracked tiles, cracked blocks and cracked RC.
Rooftop	Visually inspect for cracks, holes or other damage, such as signs of damage to water-proofing
Load-bearing walls (if any)	Visually inspect for any cracks or holes. Note that load-bearing walls are typically found in old buildings – it is important to differentiate between load-bearing walls and partition walls.
Retaining walls	Visually inspect for tilting, and for any cracks, holes or other damage.

It is recommended to carry out the structural assessment of the building through a qualified specialist with experience in construction.

It is advised that structural damage should be an exclusion criterion for shelter work in southern Syria, particularly given the exceptional challenge of remotely managing shelter rehabilitation without any access for supervision. Structural repair works require specialized construction techniques, skilled labor and on-site specialist supervision.

You should consult with residents during your inspection. They could help you to identify damage, and may be able to tell you whether cracks, holes, leaks or other issues are static or continually growing. If the signs of damage to a structural component are gradually worsening, the building should not be considered structurally sound for rehabilitation and should be excluded from the project. Explanation should be given to the stakeholders of the grounds for exclusion and of the danger of rehabilitating the shelter without being able to undertake specialized structural repair.

8.2 Building Enclosure & Openings

External Doors	Replace or maintain the external doors, ensuring that they are lockable. Materials for doors should be strong and durable, preferably metal.
Windows	Replace or maintain windows, ensuring they are properly watertight, openable, lockable, properly sealed, and using a single glazing of plastic glazing which resists vibration damage and should be UV-resistant if possible.
Building Envelope and Facades	External walls should be repaired using 20cm thick hollow concrete blocks, and where using plaster, note that this takes 2-3 days to dry depending on weather. Walls should be waterproof and painted.
Roofing	Repair any defects in the rooftop, filling holes, ensuring good drainage, and protecting the roof against water (see Section 8.3)
Internal Doors	Replace or maintain the internal doors, ensuring that they are opaque, and are lockable from both sides. Aluminum or wood are suggested materials; wood has the advantage of reducing sound.
Internal partitions	Hollow blocks or gypsum board could be used to add partitions and create new shelter units or facilities (e.g. kitchens, toilets), 10cm or 15cm hollow blocks are noted for their durability and sound-proofing.

8.3 Building Infrastructure

Drinking water sources	Identify the main source of drinking water and alternatives. Consider whether WASH conditions can be improved during the shelter rehabilitation.
Drinking water storage	<p>Do not repair damaged water tanks – use new ones.</p> <p>If additional or replacement tanks are required, ideal types include HDPE, PE or galvanized steel, either 1m³ or 2m³ and sealed with a cover. HDPE and PE are preferable for their durability, cost and weight. Water tanks should be placed on the roof (since electricity for pumps is unreliable). If used, galvanized steel tanks must be placed on a steel frame.</p> <p>If a water cistern or storage well is present and is included in the rehabilitation, it is advised to specify this for rainwater harvesting and for non-drinking use only.</p>
Water plumbing	<p>Do not repair damaged water pipes – use new ones</p> <p>If additional or replacement pipes are required, ideal types include HDPE, PE, uPVC or galvanized steel. As much as possible, drinking water pipes should be extended inside the shelter, and when they are outside the shelter, they should be buried underground at least 30cm deep. New pipelines should be tested for leaks when they are laid, and before their trench is filled in (external to the shelter) or they are encased (internal to the shelter). Consider using a system with two pipelines if there is a water heater of any sort.</p>

	Do not bend pipes. Use elbows or T-fittings to change the direction of pipes.
Sewage plumbing	Do not repair damaged wastewater pipes – use new ones. If additional or replacement wastewater pipes are required, ideal types include HDPE, PE, uPVC, DI, CI or steel. Internal wastewater pipelines must be buried under the floor; external wastewater pipelines must be buried at least 60cm underground. For the external wastewater pipeline, manholes should be installed where the pipeline changes direction, or every 30m for a straight pipeline. Each manhole should have an appropriate cover installed by a competent contractor.
Sewage outfall	Sewage plumbing should connect to a nearby wastewater collection network if possible, or should connect to a cesspool or septic tank. Extreme caution is required if assessing a cesspool or septic tank. Do not open the cover under any circumstances and beware of seeping gases Ensure the pool or tank is in good condition, with adequate walls and a proper ground slab and cover. Consider accessibility and other desludging requirements.
Storm water drainage	Assess any damage to roof drainage, checking gutters and that the roof is adequately sealed, with sufficient slope to ensure that rainwater drains away from the building properly. Consider also whether high volumes of rainwater will cause problems to neighbors as it flows away from the property.
Rainwater harvesting	If technically and financially feasible, consider connecting the storm water drainage pipelines to a water storage well.

8.4 Kitchens, Toilets and Shower Rooms

This guidance highlights the crucial role of consultation with property managers/owners and IDPs regarding the suitable rehabilitation and location of kitchen, toilet and shower facilities, particularly with a view to ensuring that vulnerable people have adequate access.

Kitchens	Kitchens should be rehabilitated where possible or, if appropriate, new kitchens should be added; while noting the need for space, clean water and wastewater connections, lighting, ventilation, partitions and finishes In southern Syria where women are mostly responsible for cooking, the design of kitchens should be based on women's preferences taking into account cultural practices such as communal cooking or eating.
Toilets	There should be at least one toilet for 20 people, and at least one lightbulb for each toilet. If a toilet is not housed within the residential building, it must not be more than 50m away.

	<p>Repair existing toilets or install new ones as appropriate, connecting them to the wastewater network and providing electricity to the rooms, and considering the financial and technical feasibility, given the need for space, clean water and wastewater connections, lighting, ventilation, partition and finishing.</p> <p>Consider whether it is most appropriate to segregate toilets by sex or by family, and ensure accessibility of the toilets for children, the elderly and persons with disabilities. If you can offer the option of seated or squatting toilets, seek stakeholder opinion for their preference.</p> <p>Toilets should have an opaque, lockable door, and a new/repaired smooth, washable and durable floor, e.g. ceramic tiles. There should be a means of flushing, (e.g. a flush tank), a means for anal cleansing (e.g. water buckets), and a washbasin for hand washing and personal hygiene.</p>
Washrooms (shower/bathing rooms)	<p>There is no minimum standard for number of washrooms per person. They must have an opaque, lockable door and a minimum of one electric light per room (noting the risk of electricity near water). Consider whether it is most appropriate to segregate washrooms by sex or by family, and ensure accessibility for children, the elderly and persons with disabilities.</p> <p>Repair existing washing facilities or install new ones as appropriate, connecting them to the clean water and wastewater network and providing electricity to the rooms, and considering the financial and technical feasibility and stakeholder views, given the need for space, clean water and wastewater connections, lighting, ventilation, partition and finishing.</p>

8.5 Electrical Systems for shelters

Source of electricity	<p>If the building is connected to an operational and reliable electrical power grid or any other source of electricity, repair or replace any damaged or faulty electrical connections.</p> <p>If the building is not connected, design and construct a solar PV electrical power system. This must include; solar PV panels; a framework holding the panels ideally on the rooftop; wiring to connect to the panels and to electrical storage equipment. For storage, although they are not referenced in international standards (e.g. IEEE) car batteries are commonly used in Syria and previous rehabilitation projects have shown that high-capacity car batteries can be a reliable within a solar system.</p> <p>Solar PV systems are mainly designed to operate <u>lighting fixtures only</u>. If the system will also be used for home appliances, consider using a DC-to-AC electrical inverter.</p>
-----------------------	--

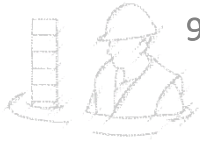
Electrical Fixtures	Repair or replace any damaged, malfunctioning or otherwise dangerous fixtures including sockets, switches, electrical boards, breakers and wiring.
Electrical Safety	All electrical wiring must be either hidden in the walls or covered with PVC conduits which are properly fixed to the walls. For safe placement of switches and plugs, they should be kept above and away from water sources.
Lighting	<p>All shelter units, kitchens, toilets, washrooms, hallways and communal areas must be well lit; at minimum there must be one suitably bright electrical light source per room (including one for each toilet). Communal areas should be bright enough for all people.</p> <p>If issuing new or spare bulbs, consider LED or other energy saving bulbs that are long-lasting, bright and low-energy.</p>

8.6 Building Finishes

Plastering	Cement plastering used to repair damaged walls and ceilings, or used to build new walls, must be completed in 3 layers, with a smooth finishing layer.
Mold	Any elements of the building that have mold or moisture should be treated: cleaning the walls, scraping away and removing infected layers, re-plastering if necessary, and using moisture-resistant paints.
Painting	Paint should be used on unpainted or poorly painted walls and ceiling. Old paint should be scraped away and removed, and water-based paint should be applied in 3 layers.
Tiling	Floor and wall tiling should be repaired in sleeping and communal areas (where appropriate) and in toilets, kitchens and washrooms. Particularly in kitchens and toilets, smooth ceramic tiles are recommended, as they are easier to clean.

8.7 Solid Waste Management

Garbage collection	Shelter projects should try to liaise and integrate with local WASH and solid waste management schemes. Garbage collection containers should be kept distant from shelters. Containers with wheels are recommended.
--------------------	---



9. CONSTRUCTION MANAGEMENT AND MONITORING

9.1 Construction Documents

Before starting rehabilitation work, a comprehensive folder of construction documents should be developed. This should be considered a key stage of the collective shelter rehabilitation. The documents should:

- Create a written record of the plan, as agreed with stakeholders
- Hold the service provider / contractor / builder accountable for their works
- Enable the contractor to make an accurate cost estimate for the works
- Act as technical reference to guide builders
- Aid the supervision and monitoring of the work

Documents must be made to suit the tendering procedure and selection of a contractor. Key components would include:

- Request for Proposal and Terms of Reference
- Conditions of Contract
- Bills of Quantities and Technical Specifications
- Scope of Work Statements
- Site layouts and building plans and schematics and plans

9.2 Contractor Selection

Contractors could be selected through various means including competitive bids or long-term agreements. The following only applies to the steps in a competitive bidding process.

- Publish a Request for Proposals (RFP) or issue a Notice of Invitation to Tender to potential contractors.
- Ensure this includes: terms of reference (ToR), instructions to applicants, conditions of contract, unpriced bills of quantity (BoQ), technical specifications and a clear scope of work (SoW). The bidding process instructions might include performance guarantee arrangements such as a bid bond.
- Terms of reference must include eligibility and qualification criteria, and there should be clear information on what needs to be submitted.
- The process should include these steps:
 - Develop technical and financial evaluation scoring sheets for the bids
 - Receive the bids (completed BOQs and other required documents)
 - Evaluate and score the bids, developing a shortlist if relevant
 - Select preferred contractor and award contract
- Aid the supervision and monitoring of work

Positive qualities that might be scored in the evaluation process include:

- Construction experience in at least three similar projects
- Competent staff members in key roles; project managers, engineers, foremen
- Proven skills in management and reporting

- Clear understanding of the scope of work, and a well-drafted implementation plan
- Positive references attesting to relevant skills and successes

9.3 Reporting and Monitoring

Supervising works, assuring quality and providing documented monitoring and reporting are particularly important in a remotely-managed, cross-border operation. Organizations should consider the following:

- Monitoring and reporting requirements could be included within the contractor selection process.
- Teams supervising or monitoring the works do not need to be based on site, but should be able to visit frequently to monitor and assess quality, and to document and report on progress.
- The contractor should provide progress reports supported by photos. They should also provide updates with relevant information including challenges and planned next steps; these narratives should supplement work plans and programs.

9.4 Project Closing and Evaluation.

Once a shelter rehabilitation has reached practical completion, i.e. the work is close enough to being finished that the residents can make normal use of the collective shelter, the contractor should inform the humanitarian agency, and should coordinate the handover of works to the residents and property managers as appropriate. The humanitarian agency, with the stakeholders, should consider doing the following:

- Jointly develop a snagging list with representatives of the Residents' Committee.
- Conduct a final monitoring and verification visit.
- Facilitating and signing the handover document (certificate of occupancy) when the completely rehabilitated shelter is handed over to the IDPs³
- Arrange for a third-party to do a post-rehabilitation assessment to evaluate the work, measuring not only the quality of rehabilitation, but also the extent to which the works responded to the needs identified by the IDPs and the expectations of the property manager.

³ NRC and CARE developed a certificate that hands over the rehabilitation project to IDPs, which was specially tailored for the southern Syria context.



CARE International Middle East and North
Africa (MENA)
P.O. Box 950793, Amman 11195 Jordan
Address: 6th Circle, Um Uthainah, Ibn Al Roumi
street. Building number 38
Amman, Jordan

UNHCR Jordan
P.O. Box 17101, Amman 11195 Jordan
Address: 319 Wasfi Al-Tal Street, Khalda,
Amman, Jordan