

Cox's Bazar Bangladesh: Rohingya Refugee Crisis
Wall Bracing Kit (WBK)
Technical Guidance - Version 1.0 - September 2018



Shelter / NFI Sector

V1 – September 2018

Introduction

During the Shelter Survey conducted by Shelter/NFI Sector partners in July and August 2018, it was observed that most of refugee households are missing bracing in their shelters. It was indicated by refugees that the materials provided in the USK were insufficient and had been utilized for increasing the footprint of their shelters rather than for DRR features. In line with ARUP's technical note #2, both rope bracing and tie down add significantly to the robustness of shelters against wind loading. This is especially important prior to the cyclone season.

The purpose of the Wall Bracing Kit (WBK) is to provide materials and information to increase the wind resistance of existing shelters.

Considerations

Security – Some of the items within the list may require safety and security considerations. It is advisable to consult with communities and authorities prior to planning and distributing the WBK.

Training – To ensure that the WBK is properly used it is essential that the distribution is accompanied with training and technical assistance. Provision of IEC material is advisable but in absence of training is insufficient.

When providing bracing the below checklist can be used:



- 6mm or 8mm rope is used
- Rope is twisted tightly
- At least 2 strands of rope are used
- Bracing of the corner bays of the shelter
- Bracing goes around dowels or through holes
- Wall plate is securely tied to the posts (hole or dowel), at least 2 loops

Distribution – The WBK should be distributed to households that have bracing missing in their shelters. Priority should be given to the shelters that are in high wind risk areas – such as: top of the hills and/or edges of the camps facing the sea. When distributing the WBK it is also strongly advisable to check if the households that are receiving it have properly tied down their shelter (using Tie Down Kit -TDK).

Tie down checklist:

- Corners of tarpaulin are tucked in and securely fastened
- Rope of TDK should be placed at both edges of the roof (gable roof – approximately 1ft from edge)
- Spacing between tie down rope is no more than 6ft
- 6mm rope is used
- Ropes are tied down tightly
- Rope is either tied to sand bags, piece of wood, brick or a metal peg that act like an anchor
- Anchor is placed under the ground (min 2 Ft –it cannot be pulled out of the ground)
- If a peg is used, then it should be situated at an angle relative to the ground level or buried under the ground.
- **If household did not receive a TDK, then TDK and training/technical support is to be provided prior to distribution of WBK.**

NOTE – ALL DIMENSIONS AND SPECIFICATIONS ARE TO BE CONSIDERED IN THE CONTEXT OF AVAILABILITY AND ABILITY TO RESPOND TO EMERGENCY NEEDS. ITEMS SHOULD BE FIT FOR PURPOSE BUT MAY CHANGE BASED ON NEED, CONTEXT AND AVAILABILITY. OPTIONAL ITEMS ARE ENCOURAGED TO SUIT SPECIFIC NEEDS.

Wall Bracing Kit								
Cost BDT 800 – (approximately 10 USD)								
#	Item description	Unit	No.	Unit cost/ BDT	Cost/BDT	Specification description	Picture	Note
1	Rope	25m roll	4	200	800	Polypropylene or similar, diameter: 6-8 mm diameter , preferred colour: black/blue/dark green. Woven with 2 or 3 strands, with the possibility of being unravelled.		Essential
2	Peg	piece	8	1	8	Bamboo peg made of split borak bamboo; 6'' long ½'' thick OR any other material that can function as peg for tensioning of tourniquet.		Optional