

# Türkiye Earthquake Shading for Containers

### Introduction

This guidance offers advice to beneficiaries and agencies aiding households living in sub-standard conditions in some types of container cities in the earthquake-affected regions of Turkiye. The purpose of seasonally-related assistance is to support vulnerable households cope with extreme summer temperatures. The guidance provides a simple and low-budget shading solution for containers and how to install it properly.

#### **Description of the system:**

A canopy is mounted along the side of the container where the door stands, forming a verandah in front of it. The canopy uses ropes as a supporting system, and the ropes are fixed between two facing plastic sheeting (with eyelets that can speed up the processes). The laying of the ropes takes place through hook anchor bolts directly fixed to the container walls.

#### Criteria:

- 1- The structure should be adaptable to various conditions in which prefab containers are situated.
- 2- Minimize field operations, ideally enabling households to manage them independently.
- 3- The occupants of containers should have maximum freedom to adopt and modify the proposed system.

## Introduction

#### Required materials for 1 container:

- 4/8 hook anchor bolts + washers and nuts.
- 20m nylon/hemp rope (1")
- 30m polypropylene/hemp rope (1/2")
- 4.50 x 3.00 shading sheet (Plastic sheet, shading net or alternatives.







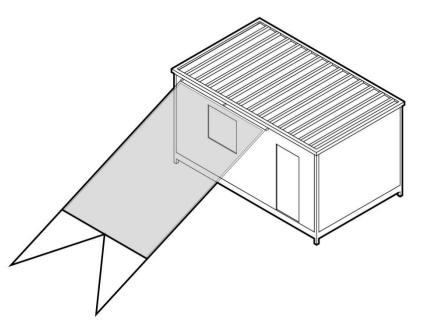
#### **Structural considerations:**

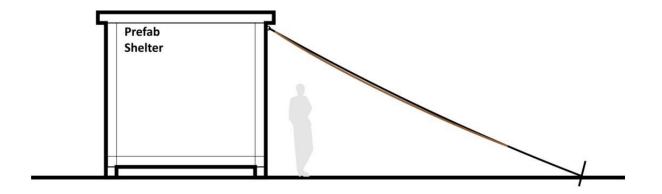
To enhance system flexibility, the proposal suggests attaching hooks directly to the sandwich panels. To mitigate the risk of failure, ensure careful connection and use suitable washers. It's important to note that the canopy is not a tensile structure; it should be kept loose.

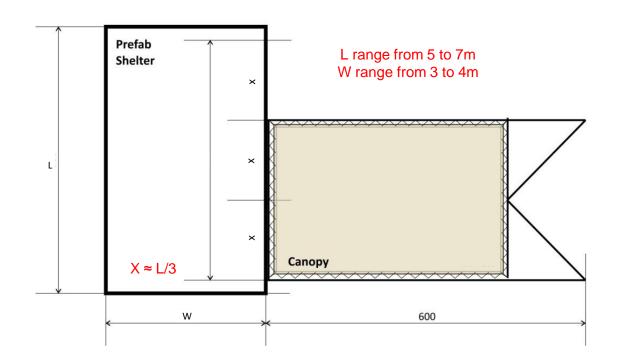
## Single Shelter Canopy

In principle, each container is equipped with four hooks, ropes, and the shading sheet.

The canopy only provides a shaded open space. It is not an additional room, even if it can be part of a 'customization' of the shelter. The canopy is not waterproof, and it is advisable to have it dismantled during winter where the risk of it being blown away by the wind is higher.





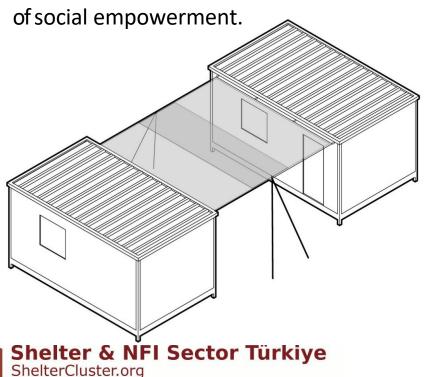




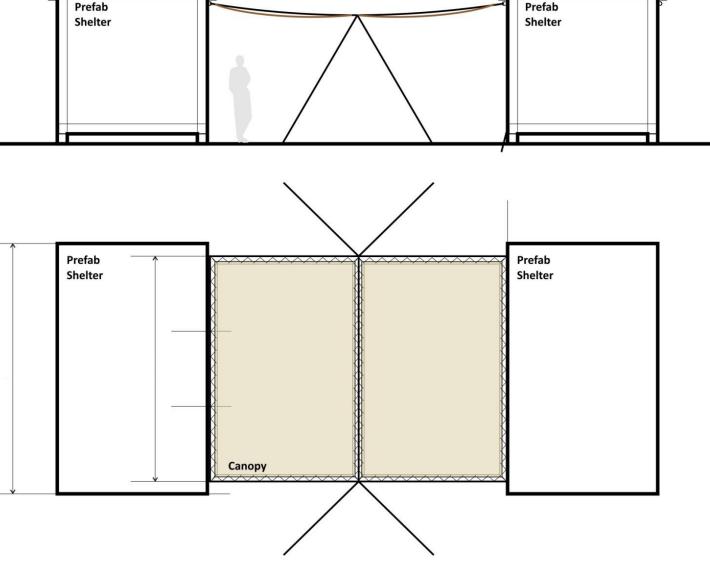
## Double-Shelter Canopy

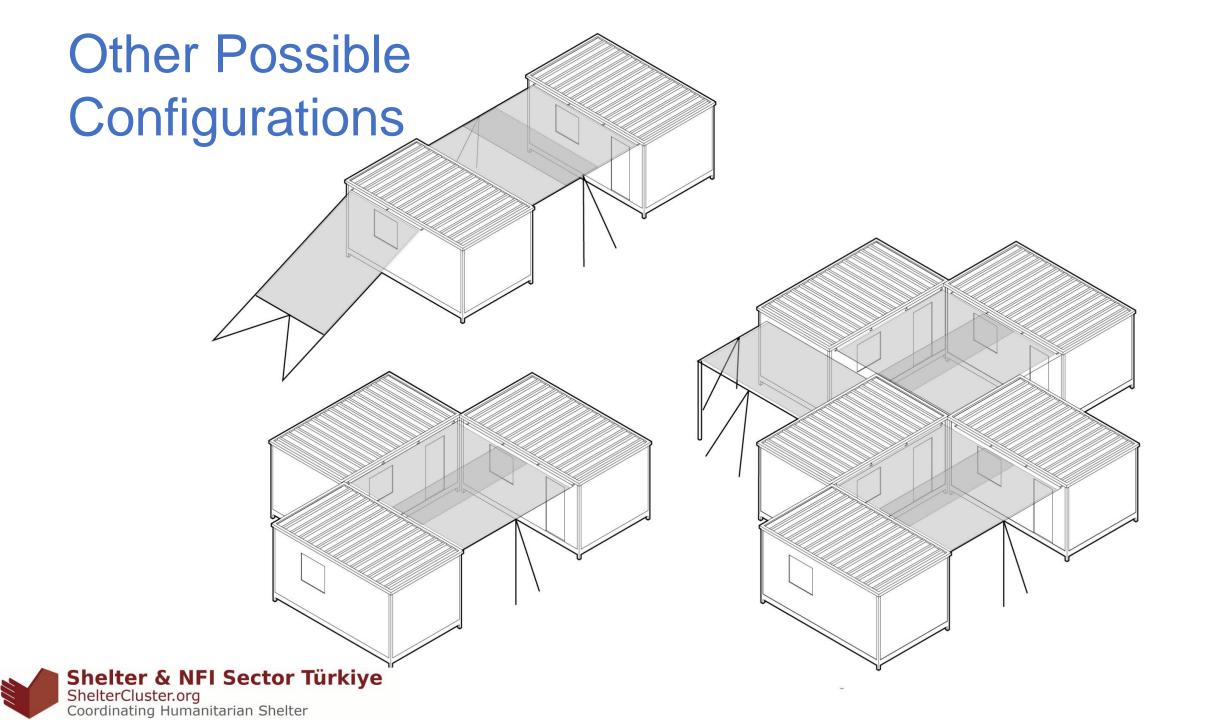
By combining two individual canopies more opportunities could be emerged; the total amount of used material is the same as the combination of the two singles.

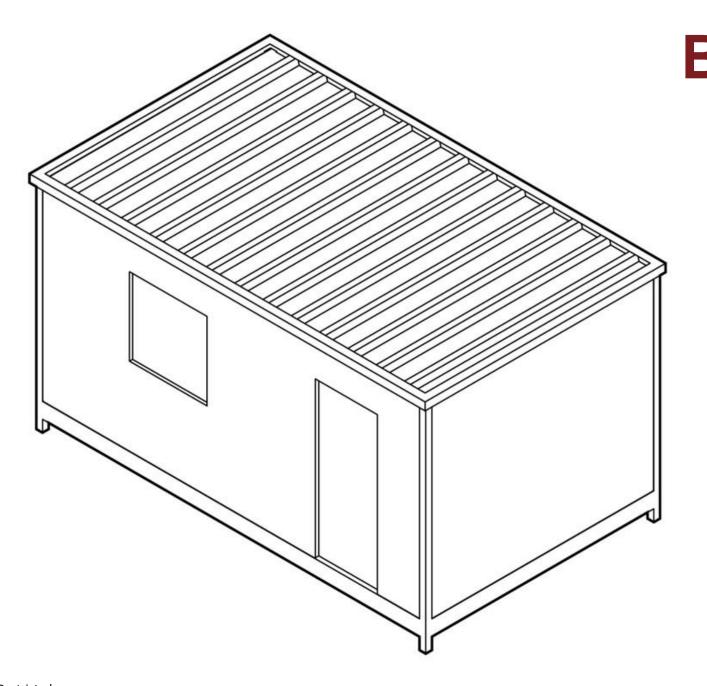
It is important to intend the summer intervention as related to each container; however, whereas there are the conditions to achieve a larger benefit connecting two or more shelters the idea is to promote it as a form



Coordinating Humanitarian Shelter







BoQ and Assembly Phases
Single kit for 1 container



# Bill of Quantities for Single Kit:

Item	Quantity	Price TL	Total price TL
U-shaped anchor bolt	3	100	300
Ground anchor	3	60	200
Nylon rope (1")	20m	500	500
Nylon rope (1/2")	30m	500	500
Total Cost			1500 TL (47 USD)

