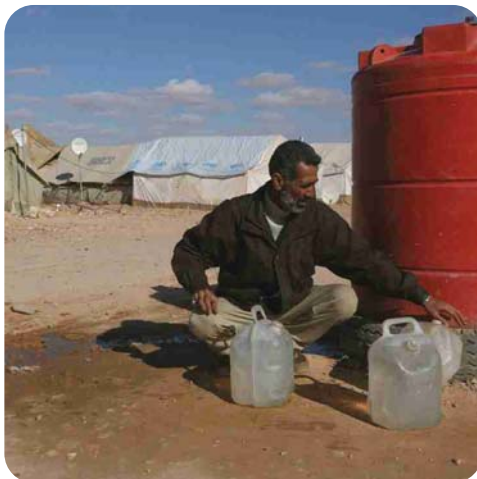


**CORE
RELIEF
ITEMS
CATALOGUE**





UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés



CORE RELIEF ITEMS CATALOGUE

October 2011

Foreword

We present to you the new UNHCR Core Relief Items Catalogue.

The provision of material assistance to refugees, IDPs and persons of concern is fundamental to UNHCR's mandate. The organization continuously works to develop and improve the products provided to populations of concern and to ensure that the delivery of assistance is effective and timely.

Product development and innovation are an important element of UNHCR's work and are carried out in close partnership with other UN agencies, international organizations, such as the International Organization for Migration (IOM), the International Movement of the Red Cross and Red Crescent, Non-Governmental Organizations, as well as the private sector. New or improved products have resulted from this close cooperation. These include the most widely used relief items: the Plastic Tarpaulin Sheet, UNHCR developed with MSF in the 1980s; the Semi-Collapsible Jerry Can, developed by UNHCR during the "Rwanda emergency" in 1995; the Light Weight Emergency Tent developed in 2005 by UNHCR in cooperation with IFRC and MSF. In 2009, cooperation between the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Committee of the Red Cross, (ICRC), UNHCR and the private sector, resulted in the Family Tent made of light weight materials that are resistant and able to withstand severe weather conditions.

To improve the acquisition and effective delivery of relief items, UNHCR designed the Core Relief Items Catalogue. Recognizing the important role that manufacturers and suppliers play in the effective delivery of essential non-food items, the catalogue is intended as a user-friendly tool to facilitate communications with manufacturers and suppliers of non-food items, supporting UNHCR's sourcing, procurement and quality-assurance processes.

The catalogue's target audience includes both internal and external users involved in planning and delivering humanitarian assistance to persons of concern affected by emergencies, both man-made and natural disasters. Among the intended users of this tool, beyond UNHCR staff, are therefore a wide range of partner organizations, such as other UN agencies, donors, national governments, manufacturers, and implementing partners.

The catalogue includes the specifications and quality requirements for 13 standard life-sustaining items such as plastic tarpaulins, family tents, fleece blankets, sleeping mats, kitchen sets, jerry cans and buckets. UNHCR has established international Frame Agreements with a number of manufacturers around the world to secure an effective supply of these core items. Moreover, the organization maintains a stock of these materials in its central emergency stockpiles in Dubai and Copenhagen to ensure their immediate delivery in emergency situations. UNHCR also has regional stocks in Accra, Republic of Ghana and in Isaka, Tanzania.

UNHCR's Core Relief Items Catalogue will be a useful tool for UNHCR operations and the humanitarian community as they endeavor to ensure the timely delivery of the highest quality of assistance to persons of concern worldwide.

The UNHCR Core Relief Items Catalogue is available electronically on the internet (www.unhcr.org/supply/nfi) as well as on CD, and in hard copy format.

Comments and queries about the Core Relief Items Catalogue are welcome and should be directed to HQSMS@unhcr.org.

The Division of Emergency, Security and Supply (DESS)
Geneva, Budapest



UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

Acronyms and abbreviations

CRIC:	Core Relief Items Catalogue
ESC:	Emergency Shelter Cluster (IASC Cluster)
HDPE:	High Density Polyethylene
IASC:	Inter Agency Standing Committee
ICRC:	International Committee of the Red Cross
IDP:	Internally Displaced Person
IP:	Implementing Partner
IFRC:	International Federation of the Red Cross and Red Crescent Societies
ISO:	International Organization for Standardization
LDPE:	Low Density Polyethylene
MSF:	Médecins Sans Frontières
NFI:	Non-Food Items
NGO:	Non-Governmental Organization
PE:	Polyethylene
TOG:	Thermal Resistance of Garment
UN:	United Nations
UNCCS:	United Nations Common Coding System
UNHCR:	United Nations High Commissioner for Refugees
UNICEF:	United Nations Children Fund
WASH:	Water, Sanitation and Hygiene (IASC Cluster)



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Introduction to the UNHCR Core Relief Items Catalogue

The catalogue includes the technical specifications of the relief items most widely used in UNHCR operations around the world to satisfy specific needs of the refugees, IDPs and other people of concern to the organization. It aims to assist managers in selection, sourcing, procurement and quality control processes. The catalogue is also a tool to communicate the requirements of the products to manufacturers and suppliers.

For each of the Core Relief products, the catalogue defines the functional specifications, which are the basic characteristics of the products. The catalogue includes information about the performance requirements of the products, performance specifications, and sets out the technical and physical characteristics of the products.

The items included in the Core Relief Items Catalogue (CRIC) are considered standard and the specifications are generic with the aim to provide a specific function. The graphics and pictures included with the technical specifications of NFI aim to provide clear illustration of the characteristics of respective items but do not intend to endorse a particular brand or a specific manufacturer. The catalogue does not include indicative prices for the items or references to any manufacturers that currently hold frame agreements for the supply of the mentioned products with UNHCR.

Information included on each technical specification

Name: A simple description of the product.

Item No: Includes UNHCR item number code.

Item Application Sample: Shows two pictures illustrating the item / product.

General Description: Provides a short description about what the item will be used for, including the general characteristics of the item.

Expected Life Span: Provides the average length of life of the material or item when being used or while in storage. For example, the newly developed Family Tent has a life span use of 1 year and shelf life span of 5 years.

Shipping/Container Information: Relevant transport information (number of units per 20" and 40" containers), with or without pallets.

Packing: Offers information about international transport packing requirements.

Graphic Designs: Includes various drawings and detailed information on relevant characteristics of individual core NFI, including comprehensive measurements of the products.

Technical Specification: Defines the technical and physical characteristics of the product (dimensions, color, finishing), design details, functional specifications, material properties and ISO standards.

Printing of UNHCR's Logo: Provides detailed information and guidelines required for the printing of UNHCR's visibility logo.

For detailed information regarding the selection, combination of NFI into packages, integration of NFI distribution into wider assistance programs and shelter sector strategies, the Emergency Shelter Cluster completed a booklet that is available at the Shelter Center website at [http://www.sheltercentre.org/sites/default/files/Selecting NFIs for Shelter.pdf](http://www.sheltercentre.org/sites/default/files/Selecting_NFIs_for_Shelter.pdf)

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FAMILY TENT

UNHCR Item No 05353

Item application sample



General Description

The Family Tent has 16 m² main floor area, plus two 3.5m² vestibules, for a total area of 23 m², double-fold with ground sheet.

It is the standard tent used by UNHCR/ICRC/IFRC and suitable for a family of 5 persons, following the recommended minimum living area in hot and temperate climates (3.5 m² per person), and providing additional space for cold climates.

The technical specifications of this tent were developed by shelter specialists, with close technical cooperation between UNHCR, IFRC and ICRC, to guarantee a product fit for human use in all climates, with appropriate outdoor life span, at a minimum cost.

The technical specifications of this tent are generic, ensuring that the product can be manufactured by different suppliers in various countries, with the common technical know-how and standard equipment from the tent industry.

UNHCR purchases Family tents through international tender processes and establishes Frame Agreements (Long Term Agreements) with manufacturers that have completed validation / qualification of Family Tent samples in one of the UNHCR approved laboratories. Family Tents are subject to random and continuous quality control throughout the Frame Agreement duration period.

For the validation / qualification of Family Tent samples, it is advisable to first ensure the adherence to the main material specifications. Information about approved technical laboratories can be obtained from UNHCR Supply Management Service in Budapest.

According to its design, Family Tents should comply with all the technical requirements, criteria and parameters described in this document and as detailed in the technical specifications section.

Information for laboratory testing:

To complete validation / qualification of Family Tent samples, two (02) complete samples are to be sent to one of the UNHCR approved laboratories for testing and make up checking. One sample will be used for material testing and the second for a rain test. A product is acceptable only if all criteria are passed on the same sample.

Weight and Volume

Gross weight per unit: approx. 55.0 kg

Gross volume per unit: approx. 0.20 cbm

Estimated Shipping / Container information

150 units per 20' DC without pallets.

340 units per 40' DC without pallets.

Expected Life Span

Family Tents are designed as a short term shelter solution, particularly in support to emergency situations and is not a substitute for a more permanent shelter. It is expected that **Family tents should have a life span of 1 year, minimum, maintaining its sheltering and waterproofing capacities in all types of climates.**

Shelf-life: the tent has a shelf-life of 5 years, minimum, under normal warehousing conditions, in dry, clean, and ventilated warehouses. It should be elevated from the ground, not piled, stored on pallets and pallet racks, not in containers or in tented warehouses. Tents are sensitive to rain and moisture when packed.

Other types of tents or materials may have a shorter life span, or other faults that are impossible to identify without going through a complete quality validation process.

Packing

One tent with all accessories can be packed into a master bundle. The outer shell and the inner tent are folded in a way to ensure that the ground sheet protects the tent and accessories from dirt and moisture. The master bundle is made of woven polyethylene (PE) fabric of 180 gm identical to the one used on the mud flaps. The maximum total length must not exceed 2250mm, approximate diameter is 400mm in order to have extra space to facilitate re-packing.

The metal poles and metal pegs are packed in 2 separate bags to avoid damaging other items inside the master bundle. Both of these bags are made of the same material as the master bundle. These bags have a closure system that ensures that the accessories will not fall out of the bag during transport and handling. Particular care should be taken when packing the pegs to assure they will not pierce the bag.

The master bundle is closed with 2 webbing straps on the outside, and each strap has a self-locking buckle that will not slide during transport. Each self-locking buckle can be made either with two rectangular buckles of 4mm wire, welded-closed, or with one rectangular buckle and one sliding middle bar, of 4mm steel rod, welded-closed. Each strap has 2 handles, (PE or polyester). These straps are not sewn to the bundle.

Before placing the Family Tent into the master bundle, the tent must be protected with one additional layer made with a piece of polycotton canvas as per the wall canvas minimum, of 2.3m x 1m. This canvas is attached around the bundle with 3 ropes of 1m and 3mm diameter.

The international standard warning sign "**protect from water**" should be printed on the outside of the package. The buyer's markings are printed on the outside in indelible ink.

Note: last updated, 28 March 2011



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FAMILY TENT

UNHCR Item No 05353

Optional Packing

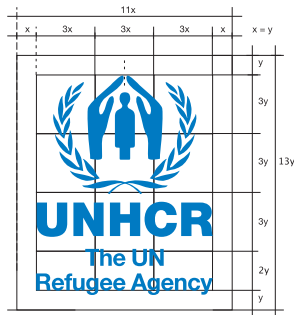
To facilitate loading of Family Tents into pallets, size 120 cm x 80 cm x 15 cm, an optional package is required / accepted where poles are divided into pieces in order to obtain a package of 1.2 m in length.

The package must be a polycotton bag of 1.2m x 0.4m x 0.3m with a zip closure. The bundle must be secured with 2 webbing straps, each with a self-locking buckle that will not slide during transport. Each strap provides 2 handles. The straps must not be sewn to the bag. All other aspects as per standard packaging instructions. The palletized goods must not exceed the length and width of the pallet.

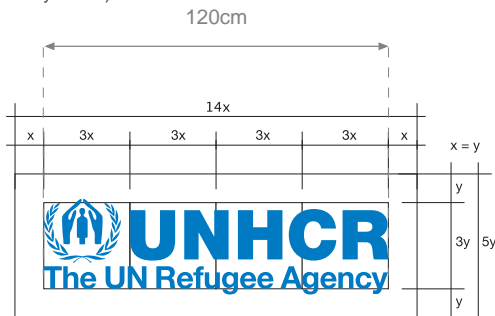
Printing of UNHCR Logo

UNHCR vertical visibility logo on the roof of the tent: vertical visibility logo should be printed in blue indelible ink on **both sides of the roof** and in the **middle** for maximum visibility as showed on the graphic reference in the next page, when using 150 cm material and two seams on the canvas roof (L= 1.35 m and H= 1.65 m), following the "X" and "Y" proportionality rule to avoid distortion on the logo and letterings. **RULE:** Length, **L** = (1 X = 15 cm), so (9 X = 1.35 m). Height, **H** = (1 Y = 15 cm), so (11 Y = 1.65 m)

Alternatively, the vertical visibility logos could be placed diagonally on opposite sides of the roof, when using 200 cm material and a central seam.



UNHCR horizontal visibility logo on both sides next to the tent's doors: UNHCR horizontal visibility logo should be printed in blue indelible ink on both sides of the outer tent on both ends (2) of the tent next to the doors (L= 1.2 m and H = 0.35m). The width of marking must be 120 cm and the height proportionate to the width without any distortion of the logo and letterings (approximately 35 cm).



Typeface (Font) Helvetica Bold. Color specifications for printing: Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M= 45 %, Y=0 %, K=0%.

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every tent should include a tag, stitched inside the tent in one corner seam of one side wall, on the outer tent, 10 cm from the end of the wall, and 10 cm above the line where the canvas joins the PE flap, with the manufacturer identification (letters not higher than 2.5 cm). The tag should include the manufacture's name, a unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Assembling Instruction and content list

Enclosed in the accessory bag, a content list and 1 set-up / assembling instructions sheet in English, printed on durable laminated A4 paper or durable fabric, showing step by step set-up information drawings / photos and tent set up instructions in color.

Repair kit

Should include 1 needle, 20m stitching thread, 3m polyester rope or string of 3mm used to attach the canvas spare piece around the bundle as per point 6/1 Standard package.

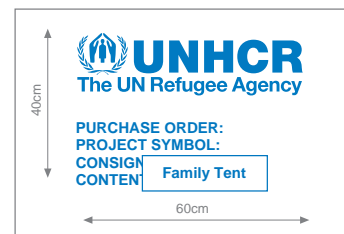
Markings on the Single Bag

Marking of UNHCR logo (50 cm x 15 cm) should be printed in blue indelible ink in color Pantone N° PMS 300C on one side of the single bag.



Shipping Marks

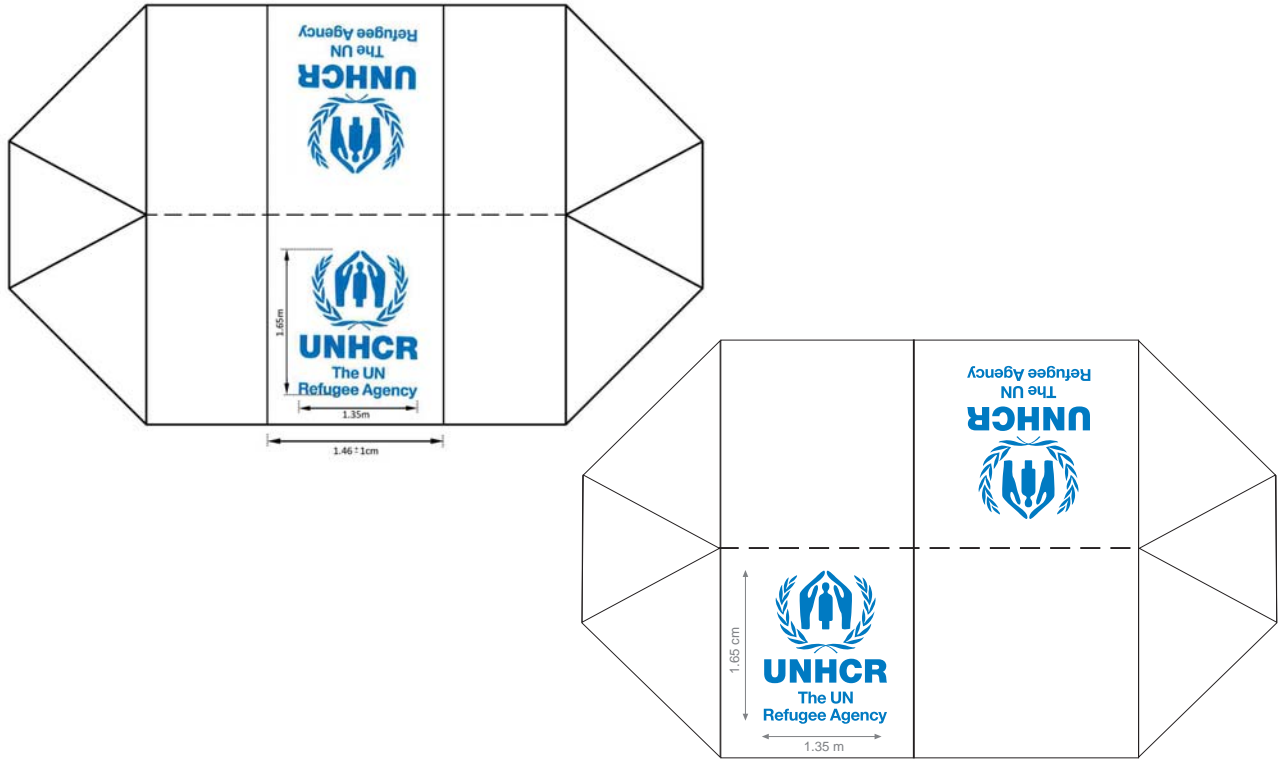
Marking of UNHCR logo should be printed in blue indelible ink in color Pantone N° PMS 300C including the Purchase Order number, Project symbol, Consignee and Content (60 cm x 40 cm) on one side of the polyethylene bag.



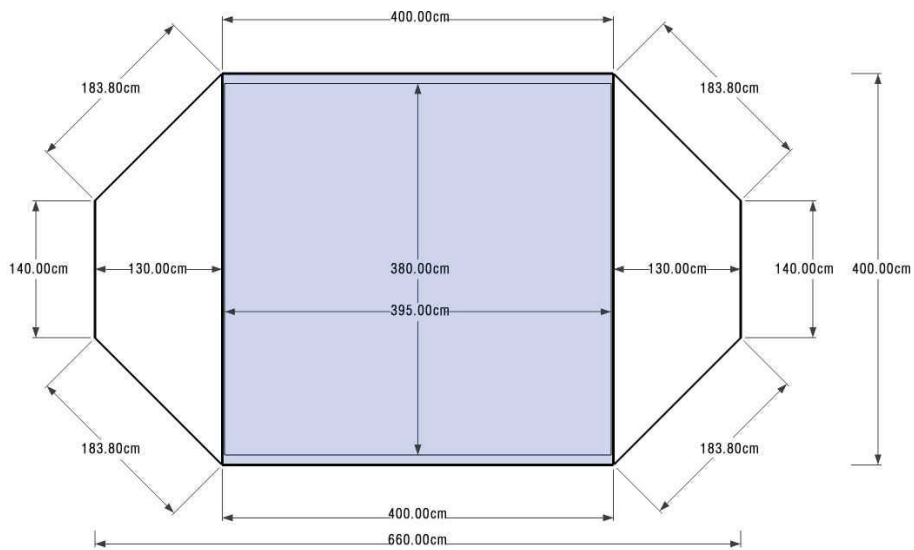


Graphic Reference

UNHCR vertical Logo on the roof of the Family Tent



FAMILY TENT GENERAL VIEW



PLANE VIEW



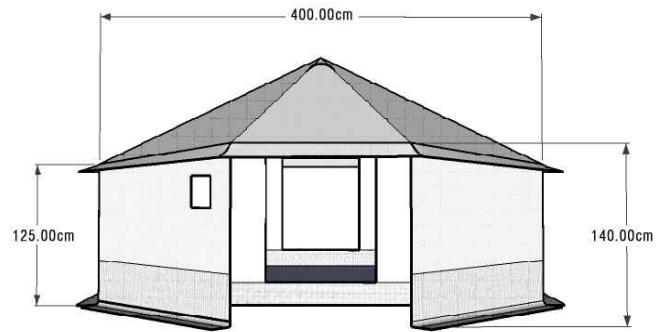
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FAMILY TENT

UNHCR Item No 05353

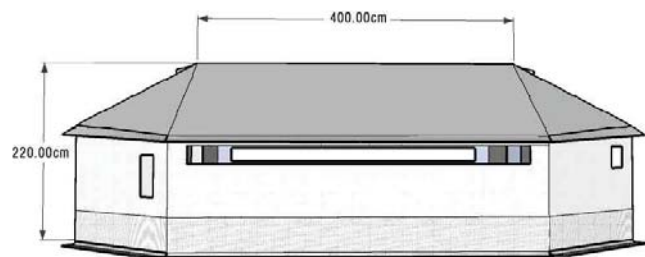
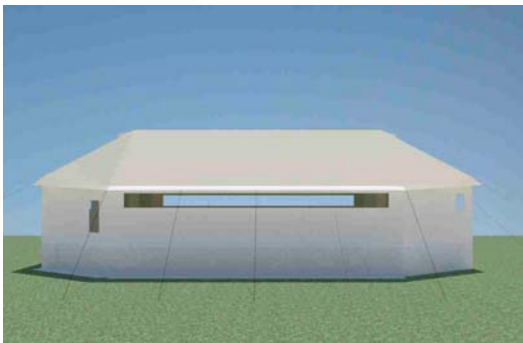
Graphic Reference



FRONT VIEW



REAR VIEW



SIDE VIEW

Technical Specifications

The specifications of the Family Tent are described below according to technical and performance requirements in five parts as follows:

1. **Materials**
2. **General points for the finished product**
3. **Make-up of the outer tent**
4. **Make-up of the inner tent with ground sheet**
5. **Poles and accessories**

TECHNICAL SPECIFICATIONS - PART 1: MATERIALS

All canvas materials for the tent must be in accordance with the specified characteristics and with ISO 10966, if not specified otherwise hereunder.

1.1 SPECIFICATIONS FOR THE OUTER TENT ROOF CANVAS	
Denomination and norms	Required minimum values
1. Composition , ISO1833	Poly-Cotton: (Polyester/Cotton blended fibers yarns). Cotton: 40% (± 10), polyester: 60% (± 10) = Polyester: 50% to 70%, with balance in cotton.
2. Specific weight (g/m ²), ISO 3801	350 g/m ² $\pm 15\%$ in finished state.
3. Color	Natural white, not dyed.
4. Water vapor permeability , ISO17229	Minimum 2000g/m ² /24h.
5. Tensile strength (N), ISO 13934-1 To apply on 10 test pieces of plain canvas. To apply on 5 test pieces with seams, cut from the tent, perpendicular to the seam.	Warp and Weft 850 N minimum. For plain canvas test: 5 test pieces in warp 5 test pieces in weft. On seams, the grab test is applied on 25mm width in the 50 mm sample.
6. Tear resistance (N) - Started, ISO 9073-4	Warp and Weft 60 N minimum.
7. Water penetration resistance , ISO 811 Test pieces of plain canvas.	30 hPa minimum, with increasing speed at 100mm per minute.
8. Rain penetration resistance , ISO5912 Test piece is the complete outer tent only.	Resistance to rain as per point 4.2.11 applying procedure as point 5.6 during 2h on one end and 3h on one side.
9. Dimensional variation when soaking in water, ISO 7771	Maximum 3%.
10. Resistance to micro-organisms on tensile strength under, ISO 13934-1 after BS6085 (soil burial - 28 days). To apply on 10 test pieces of plain canvas and 10 test pieces with seams.	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. For each type of test: 5 test pieces in warp 5 test pieces in weft.

**Technical Specifications****1.1 SPECIFICATIONS FOR THE OUTER TENT ROOF CANVAS**

Denomination and norms	Required minimum values
11. Efficiency of water-repellent treatments after soaking in water. Same test as point 7 on samples soaked in water in point 9.	30 hPa minimum, with increasing speed at 100mm per minute.
12. Efficiency of fungicides product after soaking in water. Same test as point 10 on samples soaked in water in point 9.	Maximum 10% of additional loss as compared with the result from point 10. For each type of test: 5 test pieces in warp 5 test pieces in weft.
13. Tensile strength after exposure to UV and moisturizing (climatic simulation). Exposure in a climatic chamber under ISO4892-2, type A, 360 hours, followed by tensile test under ISO13934-1.	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. For each type of test: 3 test pieces in warp and 3 test pieces in weft
14. Fire resistance/retardancy	CPAI-84, 1980, Section 7 (should pass the test)

1.2 SPECIFICATIONS FOR THE OUTER TENT WALL CANVAS

Denomination and norms	Required minimum values
1. Composition , ISO1833	Polyester/Cotton blended fibers yarns. Cotton: 40%(±10), polyester: 60%(±10) = Polyester: 50% to 70%, balance cotton.
2. Specific weight (g/m2) ISO 3801	200 g/m2 ±10% in finished state.
3. Color	Natural white, not dyed.
4. Water vapor permeability ISO 17229	Minimum 2000g/m2/24h.
5.a. Tensile strength (N) ISO 13934-1 To apply on 10 test pieces of plain canvas. To apply on 5 test pieces with seams, cut from the tent, perpendicular to the seam.	Warp and Weft 650N minimum. For plain canvas test: 5 test pieces in warp 5 test pieces in weft. On seams, the grab test is applied on 25mm width in the 50mm sample.
5.b. Tensile strength (N) ISO 13934-1 To apply on 10 test pieces of plain canvas and 10 test pieces with seams.	Warp and Weft 650N minimum. For each type of test: 5 test pieces in warp 5 test pieces in weft.
6. Tear resistance (N) - Started ISO 9073-4	Warp and Weft 40N minimum.
7. Water penetration resistance ISO 811 Test pieces of plain canvas.	20hPa minimum, with increasing speed at 100mm per minute.



Technical Specifications

1.2 SPECIFICATIONS FOR THE OUTER TENT WALL CANVAS

Denomination and norms	Required minimum values
8. Dimensional variation when soaking in water ISO 7771	Maximum 3%.
9. Resistance to micro-organisms on tensile strength under ISO 13934-1 after BS6085 (soil burial - 28 days). To apply on 10 test pieces of plain canvas and 10 test pieces with seams.	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. For each type of test: 5 test pieces in warp, 5 test pieces in weft.
10. Efficiency of water-repellent treatments after soaking in water. Same test as point 7 on samples soaked in water in point 8.	20hPa minimum, with increasing speed at 100mm per minute.
11. Efficiency of fungicides product after soaking in water. Same test as point 9 on samples soaked in water in point 8.	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. For each type of test: 5 test pieces in warp 5 test pieces in weft.
12. Tensile strength after exposure to UV and moisturizing (climatic simulation). Exposure in a climatic chamber under ISO4892-2, type A, 360hours, followed by tensile test under ISO13934-1.	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. For each type of test: 3 test pieces in warp and 3 test pieces in weft.
13. Fire resistance/retardancy	CPAI-84, 1980, Section 7 (should pass the test).

1.3 SPECIFICATIONS FOR THE INNER TENT CANVAS

Denomination and norms	Required minimum values
1. Composition , ISO1833	Polyester/Cotton blended fibers yarns. Cotton: 40%(±10), polyester: 60%(±10) = Polyester: 50% to 70%, balance cotton or Cotton 100%.
2. Specific weight (g/m2) ISO 3801	130 g/m2 ±10% in finished state.
3. Color	Dyed cream or beige color.
4. Water vapor permeability ISO 17229	Minimum 2000 g/m2/24h.
5. Tensile strength (N) ISO 13934-1	Warp and Weft 300 N minimum.
6. Tear resistance (N) - Started ISO 9073-4	Warp and Weft 20 N minimum.
7. Resistance to micro-organisms on tensile strength under ISO 13934-1 after BS6085 (soil burial - 14 days). To apply on 10 test pieces of plain canvas and 10 test pieces with seams.	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. 5 test pieces in warp, 5 test pieces in weft.
8. Fire resistance/retardancy	CPAI-84, 1980, Section 7 (should pass the test).



Technical Specifications

1.4 SPECIFICATIONS FOR THE PE FABRIC FOR THE MUD FLAPS

The specification of the standard UNHCR plastic sheeting can also apply with the fire retardancy as mentioned below.

Denomination and norms	Required minimum values
1. Composition	Woven high-density polyethylene black fibers fabric laminated on both sides with low density polyethylene coating.
2. Specific weight (g/m2) ISO 3801	180gr/m2±5%
3.a. Tensile strength (N) ISO 13934-1 To apply on 10 test pieces of plain PE fabric. To apply on 5 test pieces with seams, cut from the tent, perpendicularly to the seam, at the junction of PE and canvas.	Warp and Weft 650 N minimum. Elongation 15% to 25%. For plain PE fabric test: 5 test pieces in warp 5 test pieces in weft. On seams, the grab test is applied on 25mm width in the 50mm sample.
3.b. Tensile strength (N) ISO 1421 To apply on 10 test pieces of plain canvas and 10 test pieces with seams of one side wall canvas, one side PE mud flap.	Warp 650N minimum Weft 650N minimum for each type of test: 5 test pieces in warp 5 test pieces in weft.
4. Tear resistance (N) - ISO 4674 (A2)	Warp 100N minimum Weft 100N minimum.
5. Resistance to micro-organisms	Insensitive to micro-organisms. Not to be tested.
6. Resistance to UV in percentage of tensile strength loss under ISO1421 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak)	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. 5 test pieces in weft 5 test pieces in warp
7. Color	White if made with IFRC/ICRC/UNHCR standard plastic sheeting. Or other colors except green/military green/brown and various khaki colors.
8. Fire resistance/retardancy	CPAI-84, 1980, Section 6 (should pass the test).

1.5 SPECIFICATIONS FOR THE PE FABRIC FOR THE GROUND SHEET

The specification of the standard UNHCR plastic sheeting can also apply with the fire retardancy as mentioned below.

Denomination and norms	Required minimum values
1. Composition	Woven polyethylene fabric coated on both sides with low density polyethylene.
2. Specific weight (g/m2) ISO 3801	180gr/m2±5%.
3. Tensile strength (N) ISO 1421	Warp 300 N minimum Weft 300N minimum.
4. Tear resistance (N) - ISO 4674 (A2)	Warp 60 N minimum Weft 60N minimum.
5. Resistance to micro-organisms	Insensitive to micro-organisms. Not to be tested.

**Technical Specifications****1.5 SPECIFICATIONS FOR THE PE FABRIC FOR THE GROUND SHEET**

The specification of the standard UNHCR plastic sheeting also apply with the fire retardancy as mentioned below.

Denomination and norms	Required minimum values
6. Water penetration resistance ISO 811 Test pieces of plain canvas.	20 hPa minimum.
7. Resistance to UV in percentage of tensile strength loss under ISO1421 after 300 hours UV under ASTM G53/94 (UVB 313 nm peak)	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. 5 test pieces in weft 5 test pieces in warp.
8. Color	White if made with UNHCR standard plastic sheeting. Or other colors except green/military green/brown and various kaki colors.
9. Fire resistance/retardancy	CPAI-84, 1980, Section 6 (should pass the test).

1.6 SPECIFICATIONS FOR THE MOSQUITO NET FOR DOORS, WINDOWS, VENTILATION OPENINGS, INNER AND OUTER TENTS

All mosquito nets must be treated with long lasting insecticide in accordance to WHO standards and purchased from / manufactured by a fully qualified WHOPES approved mosquito net manufacturer.

Denomination and norms	Required minimum values
1. Material ISO1833	Polyester 100%, or PE 100%
2. Fabric ISO8388	Warp knitted.
3. Denier	75/100 for the polyester and 100 to 150 for the PE
4. Filament	Multi-filament 36 or higher for the polyester and Monofilament for the PE
5. Mesh size	25 holes/cm ² (156 holes/inch ²)
6. Weight ISO3801	30 to 40 g/m ² for polyester and Min 38 g/m ² for PE depending of denier.
7. Shrinkage ISO5077	5% maximum.
8. Bursting strength ISO 1393 8	250 kPa minimum for polyester and 320 kPa minimum for PE
9. Bursting strength after exposure to UV and moisturizing (climatic simulation) ISO 1393 8 Exposure in a climatic chamber under ISO 4892-2, type A, 360 hours, followed by bursting test under ISO 13938	30% maximum strength-loss on minimum required value and 50% maximum strength-loss on original value of the same product. Number of test pieces: 3 test pieces
10. Treatment	Long lasting insecticide: WHOPES recommended
11. Concentration of insecticide	WHOPES recommended
12. Target level of concentration	WHOPES approved
13. Color	White

**Technical Specifications****1.7 SPECIFICATIONS FOR THE GUYING POINTS OF THE OUTER TENT**

Denomination and norms	Required minimum values
1. Material composition	Polyethylene/Polypropylene/Polyester ropes. Polyester straps. Steel rings. Elastic device.
2. Tensile strength (N) ISO 13934 on samples taking the complete guying point assembly including the entire reinforcement pieces. See note here under.	3000N minimum for the 6 side points (3 test pieces). 1400N minimum for the 4 other points (2 test pieces). Elongation of the elastic device under 1000N: minimum 50mm, maximum 100mm.
3. Resistance to UV in percentage of tensile strength loss after exposure in a climatic chamber under ISO4892-2, type A, 360 hours.	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. 1 test piece at 1400N 1 test piece at 3000N.
4. Color	Black ropes and straps. Galvanized steel.

Note for point N°2: Sample size: width 300mm x length 500mm. Sample to be cut at the centre guy line for the side point (500mm length is with eave included). Samples to be cut on the top corner of the outer doors for the other points.

Samples to be folded in order to fit into the traction apparatus with the entire width of the canvas being submitted to the traction when clamped in the apparatus jaw. The sample must include: the tent roof canvas, the reinforcement of the canvas, the strap, the ring, the elastic device, the buckle, the runner and a sufficient part of the guy rope (the ring and the runner do not need to be included in the UV test).

The traction must be applied between the tent roof canvas and the guy rope.

1.8 SPECIFICATIONS FOR THE HAMMER

Denomination and norms	Required minimum values
Type:	Sledge hammer, 1 kg head, with 30 cm wooden handle. In accordance with ISO15601 and below specification.
Handle:	No chip, rough surface, holes, knots. Smooth surface. Dry and strong flexible wood. Handle adjusted to head in order to protrude on other side of the head, and be blocked with a metal wedge or be a conical shape (like hoes). Moisture minimum 10%, maximum 15%, under ISO3130.
Pull apart test:	After two series of 25 vigorous blows with varying delivery angle, apply traction of 500N trying to pull out the handle, head being fixed in a jaw, this should not create any damage to the hammer head and the handle, and the handle should remain firmly attached to the head.

**Technical Specifications****TECHNICAL SPECIFICATIONS - PART 2: GENERAL POINTS FOR THE FINISHED PRODUCT****2.1 Performances:**

The final product must be able to withstand 75 km/h wind, to be strongly attached to the ground and tensioned without any damages.

When closed, the tent must give a good protection against dust, wind, rain, snow, insects and small crawling fauna.

Minimum roof load to be 300N/m² under ISO8937 (snow load for camping tent).

The recommended final packed tent weight is approximately 55kg.

2.2 Seams and stitching:

All seams subject to possible tension are double-lock stitched and water-proofed. Stitching should produce strong, long lasting, neat and professional looking seams.

The stitch count as well as UV and rot-proof sewing threads are appropriate and adapted to each fabric. It allows for strong waterproof seams with at least the same life span as the tent.

The seams are always oriented in order to let the rain run freely, to avoid retaining water lines or water pockets. Wherever possible, the color of the sewing thread is adapted to the fabric color.

2.3 Ropes, webbing bands, toggles, loops, reinforcement nettings, and all other accessories:

All ropes and webbing bands are heat cut. All ropes are knotted to the tent from the factory. All above mentioned items are rot-proof and UV-proof at least as much as the tent canvas which they are sewn to. No webbing or rope is sewn through a stitch going from outside the tent to inside the tent to avoid water penetration by capillarity, or are made of waterproof materials. Laces or loops can also be made of the same canvas as the tent roof/wall for the outer tent loops, and of the same canvas they are sewn to for the inner tent loops.

2.4 Zipper fasteners:

All the zipper fasteners should conform to a resistance of 700N lateral traction under ISO5912.

2.5 Eyelets:

All metal eyelets should be rustproof and correctly placed, reinforced with a fabric patch and of a minimum 10mm inner diameter.

2.6 Metal rings:

All metal rings should be rustproof galvanized and closed by welding.

2.7 Dimensional tolerance:

Unless otherwise specified, a tolerance of maximum +/- 3% is accepted on all dimensions.

2.8 Long storage (Shelf life):

The tent is treated and packed in such a way that it can be stored up to minimum of 5 years in proper storage conditions without any damage or performance reduction. The tent should be stored elevated from the ground (on pallets and pallet racks) in a dry, clean and ventilated warehouse.

The tent must be manufactured and packed in clean and appropriate conditions to avoid contamination from soil dust and other contaminants.

Technical Specifications

TECHNICAL SPECIFICATIONS - PART 3: MAKE-UP OF OUTER TENT

3.1 General Description of Outer tent:

The outer tent is made of several cloth sections which form the general shape of the tent. The seams run from the ridge down to the roof edges, perpendicular to the ridge line. The outer tent is supported by 3 upright poles + 1 ridge beam, 6 side poles and 4 door poles, 3 guy ropes on each side and 2 guy ropes at each end. The attachment points of each guy rope are reinforced.

3.2 Dimensions / erecting system:

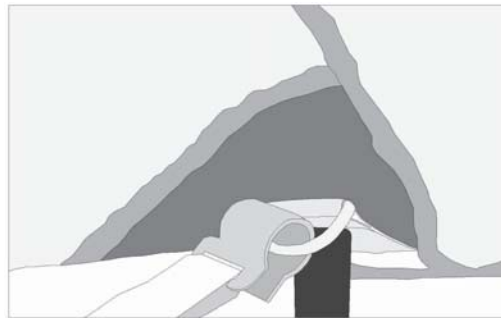
- Centre height: 2.2m
- Width: 4m
- Ridge length: 4m
- Side wall height: 1.25m
- Door height: 1.4m
- Centre base length: 6.5m

The outer tent is placed over the ridge beam which is held by 3 upright poles, one at each end of ridge beam, and one at the centre of the ridge beam. The outer tent is maintained in position on the ridge pipe with 2 canvas sleeves of 100mm long, closed by Velcro on full 100mm length, one sleeve at each end of the ridge, at 200mm from the end.

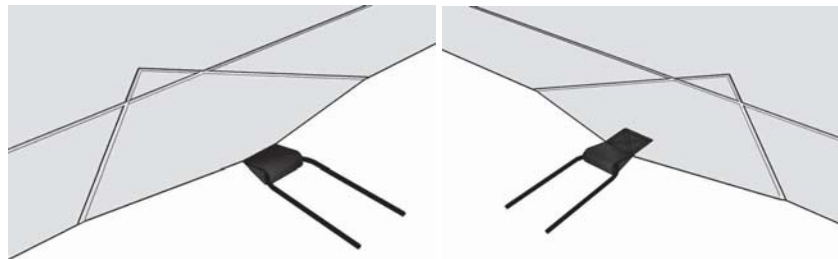
The side walls are held by 6 side poles with a metal hook on top to hook into the eyelet of the webbing band (25 mm wide) placed on the inside of the wall top. Side wall poles do not protrude through the outer tent. The hook at the top of the side poles to be as flat as possible. The front and back vestibules are held by 2 poles placed at the top corners of the doors, with pins going into the corresponding eyelets on the roof edge, through the guying point webbing.

3.3 Reinforcements:

The 10 roof guying points are made of 50mm wide polyester straps, sewn to the eave in extension of the roof. The eave is made with a double fold of the roof canvas, of 200mm width, running all around the tent roof, including above the doors. The eave is part of the roof panel, without interruption of the canvas. On the 6 side guying points an additional layer of PVC coated canvas is added on the inside to protect against abrasion from the top of the pole.



In addition, the 6 side guy points have a second triangular piece of canvas of 300mm side length sewn to the roof, from the edge of the eave.



The entire length of the ridge is reinforced on the inside with a 150mm strap of same fabric as the roof. The attachment sleeves for the ridge pipe are sewn to this reinforcement.

Technical Specifications

TECHNICAL SPECIFICATIONS - PART 3: MAKE-UP OUTER TENT

3.4 Attachment System (guy lines):

The outer tent is anchored to the ground using 10 guy lines which are attached to 10 metal pegs.

Each guying point on both sides presents a loop made of 50mm wide webbing. The length of the webbing allows, when folded double, the creation of a loop of minimum 30mm long, to be stitched to the tent with a strong Z sewing on minimum 50mm long.

The webbings for the guying points at the door poles are longer, in order to cover the pole top and to have the eyelet in the webbing.

The webbing loops are placed perpendicular to the tent edge on the sides, at 30° angle in the corners, and in the alignment of the vestibules roof shape at both ends.

10 metal rings are attached to the loops with an elastic device. The ropes pass into the 10 metal rings. When tensioning, the ropes slide in the metal rings.

At the other end, the ropes have a fixed knotted loop to place over the peg.

The attachment points are made in such a way that they comply with resistance specified in chapter 1.7.

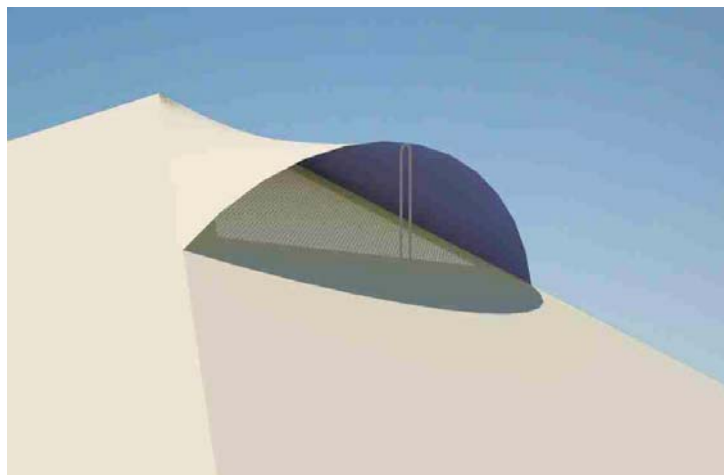
3.5 Side windows

The outer tent has 2 long windows with mosquito netting and a rain flap running on both sides of the tent. The inside dimensions of the windows are 3600mm wide and 300mm high and the top edge of the window is placed 100mm below the roof of the tent. The window openings are reinforced either with strong reinforcement netting (large holes strong plastic net) or with standard netting and strips of 20mm poly-cotton webbing that reinforce the window horizontally (1 webbing) and vertically (7 webbings). These webbings are sewn to the edges of the tent opening and to the mosquito netting. The window flap is 3960mm wide x 400mm high. The flap is stitched 50mm above the top of the window. The flap is held by 25 mm Velcro webbing which is placed along the length of the vertical sides and bottom and at a 25mm distance from the window opening. Loops and plastic toggles or hooks are used to keep the flap open when it is rolled up.

3.6 Ventilation 1/2 cones on top of the vestibules:

The outer tent has 2 ventilation openings in front and back with reinforcement netting and a rain flap. These vents are triangular and are placed at the top of both vestibules. The inside dimensions of the vents are 250mm wide and 300mm high. The vent flaps are made in such a way that they are distanced from the ventilation opening when open, making a V2 cone shape of 250mm in its middle. The flap can be closed with a 25mm Velcro attached to the full width.

The vent openings are reinforced either with strong reinforcement netting (large holes strong plastic net), or with standard netting and with two strips of 20mm cotton or polyester webbing that bisects the vent horizontally and vertically. These webbings are sewn to the edges of the vent opening and to the netting.



Technical Specifications

TECHNICAL SPECIFICATIONS - PART 3: MAKE-UP OUTER TENT

3.7 Outer Tent Doors:

Size: 1.3m width x 1.4m high.

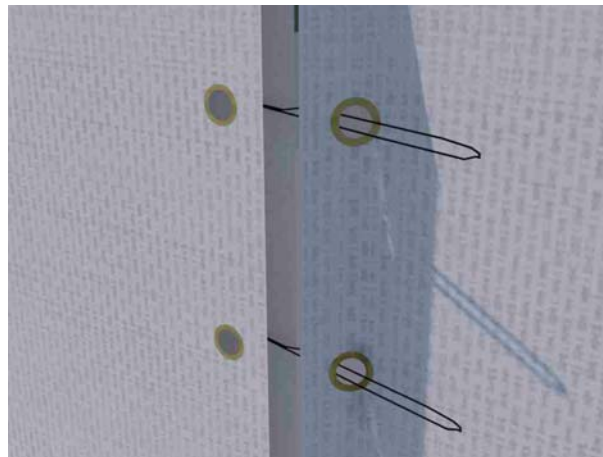
Door flaps are 1.4m width x 1.6m high:

- Upper part 1.4m width x 0.9m high is made of canvas.
- Lower part 1.4m width x 0.7m high is made of woven PE fabric.

The vestibule doors can be used as awnings by moving the front door poles to the 2 eyelets placed at the bottom of the door, in the corners. The rolled up door is held up by 2 loops and 2 plastic toggles or hooks.

The doors can be closed by means of a lacing/loop system. The loops are made of 4mm rope or canvas strips (7 loops and eyelets per door side). For each lace/loop system, a toggle or a hook is placed in order to attach the last loop.

The lacing/loop system is protected by a double 50mm flap to prevent rain and drafts. Each door has one side closable from inside and the other side closable from outside.



3.8 Side walls, vestibule walls, mud flaps:

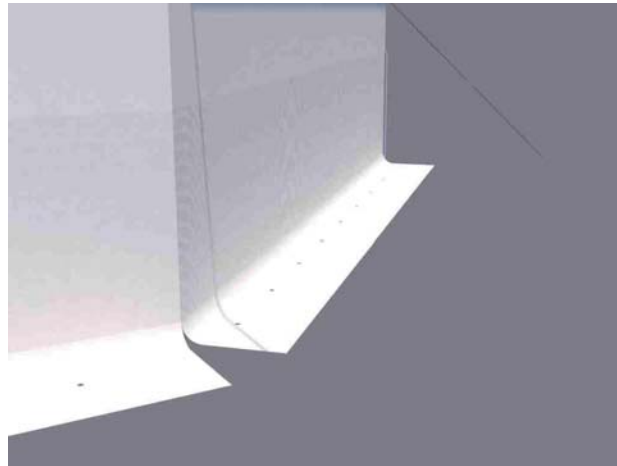
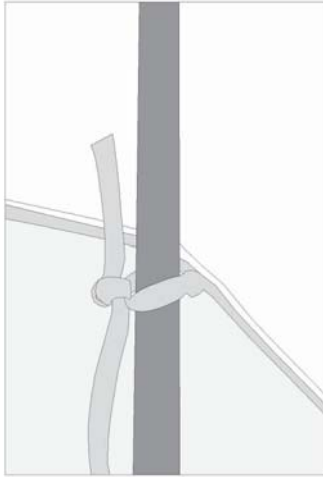
Total height 1.45 m corresponding to 1.25 m vertical plus 0.2 m on the ground.

The upper part (0.75m) of the walls is made of Polyester Cotton fabric, lower part (0.7m) of PE fabric. The mud flaps are equipped with 22 eyelets (7 on each side including corners, 2 on each vestibule side), placed on a line reinforced with a full length 50mm webbing sewn or heat-sealed to the mud flap at floor level, on the inside. Stitch length and thread to be appropriate for the materials to prevent tearing of the mud flap along the stitching (not applicable if heat-sealed).

The outer tent is attached to the side poles, with webbings or canvas strings stitched on the inner side of the outer tent, where the PE joins the poly-cotton, in front of each side pole and door pole (10 points at total).

Technical Specifications

TECHNICAL SPECIFICATIONS - PART 3: MAKE-UP OUTER TENT



The vestibule walls are made in the same way, to complete the outer tent between the doors and the side walls. One of the vestibule walls carries the chimney hole.

3.9 Chimney reinforcement:

A chimney reinforcement with a non-perforated opening is placed at 0.5m from one corner, on one end of the tent, between the corner of one side wall and the corner of one tent door. This is made of heat resistant fabric (minimum 900°C). It is the type of fabric that keeps the fibers tight when cut.

The lower edge of the opening is 500mm above the ground, where the canvas joins the PE part.

Inside dimensions: 250mm width x 800mm height.

The chimney flap is 350mm wide x 850mm high. The flap is stitched at the bottom at the lower edge of the chimney opening. The flap is held by 25 mm Velcro webbing which is placed along the entire vertical sides and upper end at a 25mm distance from the chimney opening.

The tent fabric is cut away completely at the position of the chimney opening. The edges of the Chimney opening are hemmed stitched to the inside.



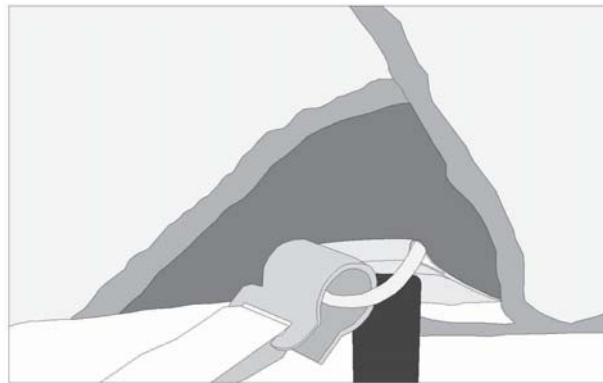


Technical Specifications

TECHNICAL SPECIFICATIONS - PART 3: MAKE-UP OF OUTER TENT

3.10 other accessories:

4 loops of 30mm each are placed on the inside of the tent in places where inner tent doors have corresponding toggles, at the top of the inner tent door zips (see inner tent door description). 10 D-rings (25mm x 4mm thickness), inside the outer tent, to allow the inner tent to be hooked to these D-rings (see inner tent description point 4/4): 6 are placed in the webbings at the top of each side-pole's position, 4 are placed in intermediate position.



6 D-rings placed on 25mm webbing are sewn at floor level to the mud flap, inside, to hook the inner tent attachment strings.

3.11 Plastic for document pouch:

On the outside of each left hand vestibule wall there will be a clear plastic document sleeve. The material will be UV stabilized polyurethane transparent plastic with a minimum thickness of 0.15mm. The lower edge of the sleeve will be 800mm above the ground. The sleeve will have an opening on the left side with the other three sides sewn with two rows of stitching to the tent. The inside dimensions of the sleeve after sewing will be 230mm high and 310mm wide.



Technical Specifications

TECHNICAL SPECIFICATIONS PART - 4: MAKE-UP OF INNER TENT WITH GROUND SHEET

4.1 General description:

The inner tent is square in shape and is hanging inside the outer tent structure. All dimensions are meant to allow a 10cm air gap between the outer tent and the inner tent.

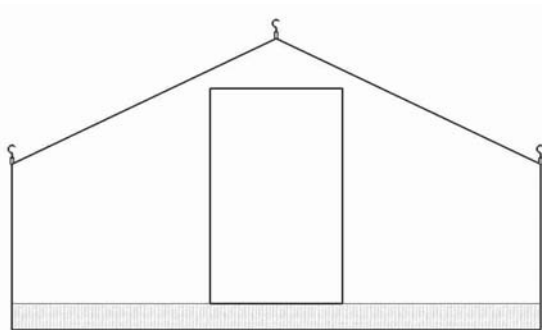
At the ground sheet level it is hooked to the outer tent D-rings with 6 elastic webbings and plastic hooks of 20mm width.

The inner tent shall be partitioned with the same material in the middle dividing the tent into two equal segments in shorter transverse direction.

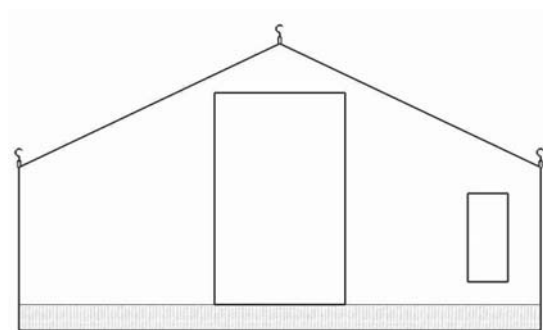
The inner tent has a chimney reinforcement, 2 windows, 2 doors and 2 vents. The bath tub ground sheet (floor) is made of woven PE fabric sewn to the inner tent and extends up the sides of the wall to assure that the inside remains waterproof. No stitching is allowed at the lower part of the groundsheet to assure 100% waterproofing.



RIDGE



INNER TENT FRONT



INNER TENT REAR

Technical Specifications

TECHNICAL SPECIFICATIONS PART - 4: MAKE-UP OF INNER TENT WITH GROUND SHEET

4.2 Inner Tent Dimensions:

The inner tent, when hooked to the outer tent has a center height of 2.1m, a width of 3.8m, a wall height of 1.15m and a base length of 3.95m.

4.3 Inner Doors:

Each door opening is 1m wide and at 1.75m high from the floor (1.55m measured from the upper edge of the ground sheet).

The door panels (1.1m wide) are placed in the center of the front and rear walls.

The doors are made of the same material as the tent and close with polyester n°10 coil zipper fasteners at the 2 vertical sides. The zipper fasteners can be opened from the inside and outside.

The doors have a 200mm PE flap at the bottom, made of same material as the ground sheet.

Black UV stabilized ropes or canvas laces with plastic toggles or hooks are used to keep the door opened when rolled up.

Mosquito nets (1.1m wide) are placed on the inside of the doors. The 2 vertical sides are closed with n°10 polyester coil zipper fasteners. The bottom edge of the mosquito flap closes with one piece of 25mm Velcro along the entire width.

To facilitate the door closing:

- 2 elastic webbing loops of 80mm with toggles or hooks are placed at the top of each door side aligned with the zippers. They attach to the corresponding 3cm loops available inside the outer tent.

- 2 webbing loops with eyelets are placed at the bottom of each door side aligned with the zippers. They are used to attach the tent to the ground with pegs of 6mm x 230mm. The webbing loops are stitched into the seam where the PE joins the fabric, and are 200mm long.



Technical Specifications

TECHNICAL SPECIFICATIONS PART - 4: MAKE-UP OF INNER TENT WITH GROUND SHEET

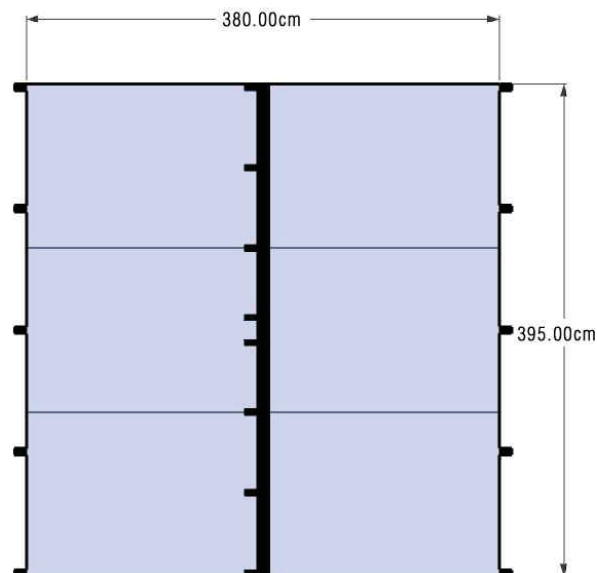
4.4 Inner Tent Suspension System:

The inner tent is placed between the 2 end upright poles. It is attached (knotted) to these poles by 2 strings or strips of 25mm by 200mm long at each end.

The inner tent is suspended from the ridge pipe with 8 galvanized 4mm wire hooks mounted on 8 webbing loops of 50mm wide. The total length of the loops including the metal hook is 100mm. One at each end, two in the centre at 100mm from the centre pole gap, and the 4 others equally spaced each side. The side walls of the inner tent are hooked with strong plastic or metal hooks mounted on webbing loops to the corresponding D-rings of the outer tent inside, at the top of each side pole and in the intermediate positions. The loops are made of non elastic 25mm wide webbing bands and the finished length including the hook is 100mm. 5 hooks in total per side.

The elastic webbing bands for the bottom of the walls are stitched to the tent in the seam where the PE and fabric are joined.

The inner tent has 28 loops of 20mm, made of canvas, for the attachment of the optional inner lining or the optional inner partition. The loops are placed in the inside of the inner tent at every place where the inner tent is attached to the outer tent or to the frame, plus 2 loops at the bottom of each door where the webbings for the ground attachment are placed (8 at the ridge, 5 at the top of each side wall, 3 at the bottom of each side wall, 2 at the base of each door).



4.5 Inner Tent Ventilation System:

The inner tent has 2 triangular vents at each gable top, made of mosquito net and reinforced with 20mm webbings. The triangle is 750mm x 300mm (all space from the ridge to the top of each door).

The ventilation system can be closed with a flap opening downwards, and sealed with 25mm Velcro on all sides.

4.6 Inner Tent Windows:

The inner tent has 2 windows, of same size and same reinforcement, corresponding to the outer tent windows. The flap made of same material as the inner tent is placed inside and opens downwards. It closes with 25mm Velcro on all sides, and hangs freely when open.

4.7 Accessories Inside the Inner Tent:

To hang light weight properties, 3 hooks of 20mm mounted on webbing and 1 pouch of 150 x 200mm made of netting material sewn on 3 sides are sewn inside the inner tent at the ridge. The pouch hangs from the ridge at the place of the 2nd ridge hook; the 3 hooks are placed at the level of the 3rd, 6th and 7th ridge hooks.



Technical Specifications

TECHNICAL SPECIFICATIONS PART - 4: MAKE-UP OF INNER TENT WITH GROUND SHEET

4.8 Ground Sheet:

The integrated ground sheet is made of PE woven fabric. The seam that attaches the ground sheet to the sides of the inner tent is 200mm above the floor. To avoid water infiltration, no stitching seams are allowed in the groundsheet. All seams to be welded by heat sealing and have a 25mm overlap. A reinforcement patch of 150 x 150mm of the same material in the centre of the groundsheet to be glued or sealed, to avoid the centre pole damaging the groundsheet.

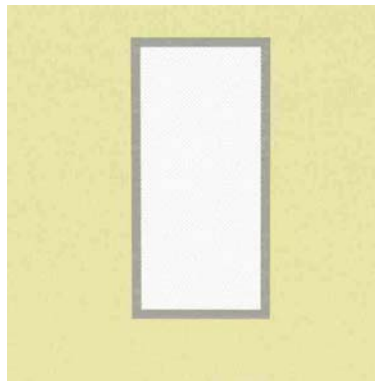
4.9 Chimney Reinforcement:

A chimney reinforcement with non-perforated opening is placed at 0.5m from one corner, on one end of the tent, between the corner of one side wall and the corner of one tent door. This is made of heat resistant fabric (minimum 900°C).

Inside dimensions: 250mm width x 800 height.

The lower edge of the opening is 300mm above the ground.

The tent fabric is to be cut away completely at the position of the chimney opening. The edges of the opening are hemmed stitched.



4.10 Inner partition:

One partition running from either side of the centre pole to the side walls, constructed from 2 half-partitions, stitched together at the top. The partition is attached to the loops on the inner tent at the roof and wall levels with 6 pairs of string, and to the centre pole with 2 pairs of string. The partition can be maintained open with 2 additional pair of string.



Technical Specifications

TECHNICAL SPECIFICATIONS PART - 5: POLES AND ACCESSORIES

5.1 Poles:

Each section should be fitted together by a male / female joint of 100mm made with an inserted pipe point-welded or crimped into one of the pipes (not to be made with press-reduced pipe diameter).

Ridge beam:

4m long, with minimum outer diameter 30mm galvanized or painted steel pipe, minimum 1.2mm wall thickness, in 2 pieces or 4 pieces depending on type of packaging.

The ends of the ridge beam to be reinforced with 2 short pipes of 27.5mm outer diameter and 100mm long, inserted and point welded at both ends of the ridge.

22.5 mm holes drilled at 20mm from both ends for upright poles to fit in.

The ends of the ridge beam to be protected with a non-sharp, non-cutting plastic cap.

Upright Poles:

2 upright poles of 2200mm each (end plug included), with minimum outer diameter 25mm galvanized or painted steel pipe minimum 1.2mm wall thickness, comes in one piece or in two pieces depending of the type of packaging. These 2 poles have a narrowed diameter of 21.5 mm by 40mm long at the top end (end plug included), to insert into the ridge. The top end of these 2 poles to have a plastic bushing protruding in order to protect from the edges of the pipe.

1 central upright poles of 2170m each (size without U-bracket), with minimum outer diameter 30mm galvanized or painted steel pipe minimum 1.2mm wall thickness, comes in one piece or in two pieces depending of the type of packaging. This pole comes with a U-shaped metal bracket of 30mm long.

The base of the 2 upright poles must have a round metal or plastic base-plate of 50mm diameter.

The base of the central pole must have a soft flexible plastic or rubber base plate a minimum 50mm in diameter that will protect and avoid damage to the ground sheet while keeping proper stability.

Side poles:

6 side poles of 1.25m with minimum outer diameter 19mm painted or galvanized steel pipes minimum 1mm wall thickness, in one piece or in two pieces depending of the type of packaging. Each pole comes with a bended 20 to 30mm pin on top in form of a flat hook.

4 door poles of 1.4m with minimum outer diameter 19mm painted or galvanized steel pipes minimum 1mm wall thickness, in one piece or in two pieces depending of the type of packaging.

The 4 door poles come with a 50mm pin at the top.

Side poles and door poles base plates are made with a round piece of plastic of 40mm diameter, with a pin of 20 to 30mm long pointing downward.

5.2 Ropes/loops/ guy runners:

6 ropes, black, UV treated, 3m long each, 8mm diameter, with a minimum tensile strength of 300 kg.

4 ropes, black, UV treated, 3m long each, 6mm diameter, with a minimum tensile strength of 140 kg.

All ropes to be passed in the rings of the tent from factory.

All ropes to have a securely knotted loop at one end, to place over the peg.

Hard wood or strong UV proof plastic guy runners, red color, already mounted on the ropes.



Technical Specifications

TECHNICAL SPECIFICATIONS PART - 5: POLES AND ACCESSORIES

The grain of the wood runners to run lengthwise on the runner.

Size of the runners: 100x35x12mm, holes to be the same as the diameter of the rope.

The ropes are passed in the runners in a way that makes the maximum blocking effect on the ropes.



5.3 Pegs and accessories:

6 pegs of 350mm long made of angled iron 25x25mm, 3mm thick, with an iron rod of 50mm long and 6mm diameter welded on the top. On one end, both wings of the angled iron are cut at a 45° angle to form a pointed end. On the other end, both wings of the angled iron are pressed together to touch each other, and the 6mm rod is welded on top of that end. The 6mm rod produces a 25mm prominence slightly bended downwards. These 6 pegs have 2 slots on each side, not opposite, to improve grip in soft ground. The width of the slots is approximately 3mm; the depth is maximum 3mm. Pegs are painted or galvanized.



4 pegs of 300mm long after bending, made of iron rebar 10mm diameter, with a hook bended on one end, "candy cane" shape, or a cross shape, painted or galvanized.

26 pegs of 230mm long, made of iron bar 6mm diameter, with a round or cross shaped head on one end, to avoid damaging the mud flap when pushed in the eyelets, painted or galvanized.

1 metal hammer of 1kg with 300mm wooden handle. (See specification part 1).



Item application sample



General Description

Reinforced plastic tarpaulin in sheets of 4 x 5 meters was developed by an international research project and designed for long outdoor use in all climates. Plastic Tarpaulins are to be used in support to humanitarian operations, for temporary shelter and are recommended for individual (family) shelter protection.

Technical Specification

Tarpaulin Size: the finished size of each sheet is 4 x 5 meters +/- 1 %.

Effective area: 20.00 m2.

Material: made of woven high-density black polyethylene (HDPE) fibers, warp x weft, laminated on both sides with low density polyethylene (LDPE) coating, with reinforced rims by heat sealing on all sides, (or 2 sides heat sealing and 2 sides double stitching), and a 5 millimeters diameter PE or PP rope on the edge, inside the hem. 1000 denier minimum.

Material weight: minimum 190 gr/m2 +/-20g/m2.

Tensile strength: minimum 600 N both directions of warp and weft (BS 2576, 50 mm grab test, or equivalent).

Tear strength: minimum 100 N both directions (BS 4303 wing tear or equivalent) or under ISO 4674 (A2).

UV Resistance: stabilized against ultraviolet rays and excess heat for long outdoor exposure. Maximum 5% loss on original tensile strength under ISO 1421 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak).

Welding: Only one (01) is allowed along the middle of the sheet, length wise. Minimum resistance is 80 % of the original tarpaulin tensile strength in the weft under ISO 1421 plus additional procedure.

Reinforcement eyelets: Provided with aluminum eyelets or equivalent on four sheet sides of the single sheets at 100 cm +/-5cm centre to centre, providing very strong fixation points.

Flammability: CPAI 84-1995, section 6. (Should pass the test).

Color: white sun reflective on both sides. Inner black fibers to ensure opacity.

Weight and Volume

Gross weight per piece: approx. 4.27 Kg

Gross weight per bale: approx. 21.35 Kg

Gross volume per bale: approx. 0.0450 cbm

Packing

Plastic tarpaulin sheets are packed in bales of 5 pieces and secured with polyester straps.

Estimated Shipping / Container Information

3.500 pieces / sheets per 20'DC (without pallets).

5.500 pieces / sheets per 40' DC (without pallets).

2.200 pieces / sheets per 20' DC (with pallets).

4.600 pieces / sheets per 40' DC (with pallets).

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every tarpaulin sheet 4x5 m should include a tag stitched in hem, with the manufacturer identification (letters not higher than 2.5 cm). The tag should include the manufacturer's name, unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Expected Life Span

It is expected that Reinforced Plastic Tarpaulin will maintain sheltering and waterproof capacities for one year under the strongest weather conditions.

Reference Information

For additional information about the use of this product see:

<http://www.plastic-sheeting.org>

<http://www.sheltercentre.org/library>

Printing of UNHCR Logo

A line of six UNHCR logos must be printed on both sides of the sheet, across the five meter side, placed one meter from the bottom edge of the five-meter side. **Typeface:** (Font) Helvetica Bold. **Color specifications for printing:** Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M= 45 %, Y=0 %, K=0%. For UNHCR visibility logo printing purposes details, see the Reinforced Plastic Tarpaulin Graphic and the UNHCR Logo Application reference available on the next page, where size of logo is 45 cm wide and 55 cm height.

Alternatively, the number of logos on the line may be reduced to 4, with a proportional increment on the size of the logo to 50 cm wide x 60 cm height.

Note: Last updated, 08 March 2011



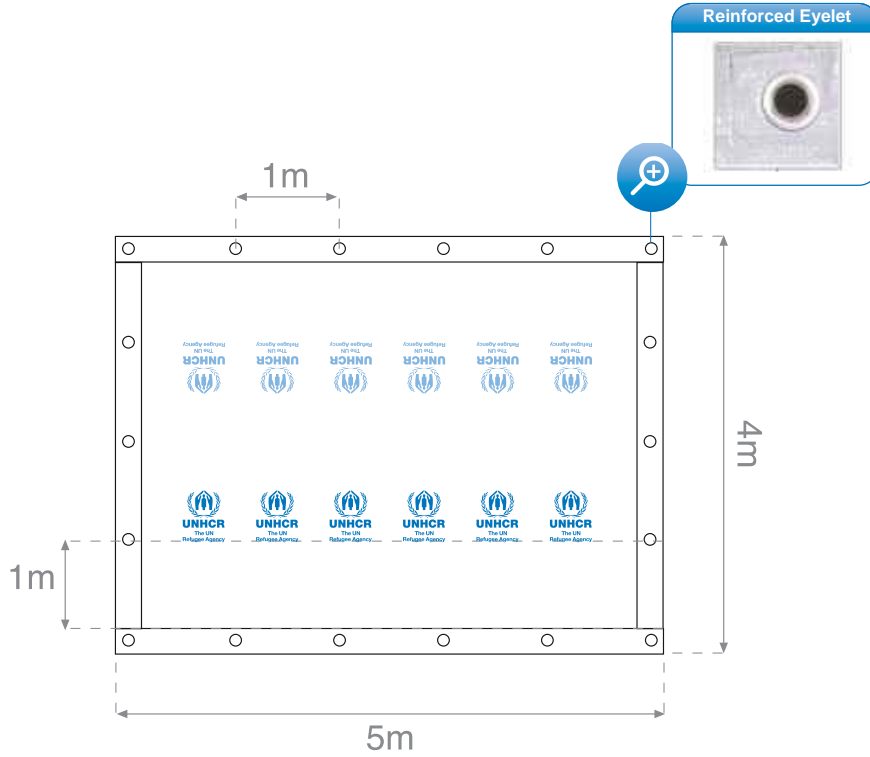
UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

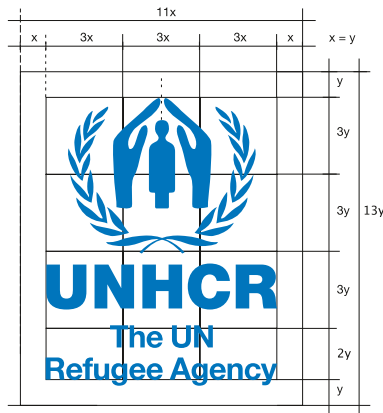
**REINFORCED PLASTIC TARPULIN
(IN SHEETS 4x5 m)**

UNHCR Item No 02617 / UNCCS Code No 271612

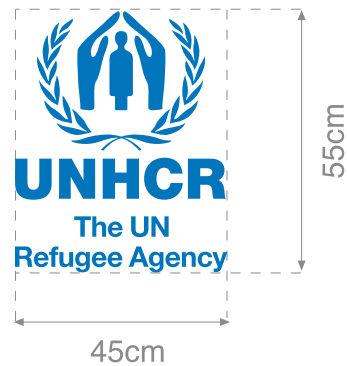
Graphic Reference



UNHCR Logo Application Reference



Logo Application Reference



Logo Application Size



UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

REINFORCED PLASTIC TARPAULIN

(4 x 50 m)

UNHCR Item No 03153 / UNCCS Code No 271616

Item application sample



General Description

Reinforced plastic tarpaulin in bales or rolls of 4 x 50 meters was developed by an international research project and designed for long outdoor use in all climates and to be used for simple temporary community shelter protection. Several other uses include, covering damaged structures, upgrading of tents and shelters, building of latrine's fencing, health centers, ground sheet or food mound protection.

Technical Specification

Finished size for each plastic bale or roll: 4 X 50 meters +/- 1 %.

Material: made of woven high-density black polyethylene (HDPE) fibers, warp x weft, laminated on both sides with low density polyethylene (LDPE) coating.

Material weight: minimum 190 gr/m2 +/-20g/m2.

Tensile strength: minimum 600 N both directions of warp and weft (BS 2576, 50 mm grab test, or equivalent).

Tear strength: minimum 100 N both directions (BS 4303 wing tear or equivalent) or under ISO 4674 (A2).

UV Resistance: stabilized against ultraviolet rays and excess heat for long outdoor exposure. Maximum 5% loss on original tensile strength under ISO 1421 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak).

Welding: Only one (01) is allowed along the middle of the sheet, length wise. Minimum resistance is 80 % of the original tarpaulin tensile strength in the weft under ISO 1421 plus additional procedure.

Flammability:CPAI 84-1995, section 6. (Should pass the test).

Color: white sun reflective on both sides. Inner black fibers to ensure opacity.

Weight and Volume

Gross weight per piece / bale: approx. 38.0 kg

Gross volume per piece / bale: approx. 0.140 cbm

Packing in Bales

The 4 x 50 m tarpaulins are packed individually on 80 x 40 cm bales (for maximum loading capacity on Euro pallets), folded in the middle and tied. Wrapped in polyethylene, sealed with a polyester band.

Optional Packing in Rolls

The 4 x 50 m tarpaulins are centre folded lengthwise and tightly rolled. Wrapped in polyethylene, sealed with a polyester band.

Estimated Shipping / Container Information

350 bales per 20' DC (without pallets).
600 bales per 40' DC (without pallets).

264 bales per 20' DC (with pallets).
552 bales per 40' DC (with pallets).

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every tarpaulin sheet 4x50 m should include a tag stitched in hem, with the manufacturer identification (letters not higher than 2.5 cm). The tag should include the manufacturer's name, unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Expected Life Span

It is expected that Reinforced Plastic Tarpaulin in bales or rolls 4 x 50 m will maintain sheltering and waterproof capacities for one year under the strongest tropical conditions.

Reference Information

For additional information about the use of this product see:

<http://www.plastic-sheeting.org>
<http://www.sheltercentre.org/library>

Printing of UNHCR Logo

A line with UNHCR logos must be printed on both sides of the plastic bale or roll, placed one meter from the bottom edge of the long side on the tarpaulin. **Typeface:** (Font) Helvetica Bold. **Color specifications for printing:** Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M= 45 %, Y=0 %, K=0%. For UNHCR visibility logo printing purposes details, see the Reinforced Plastic Tarpaulin Graphic and the UNHCR Logo Application reference available on the next page, where size of logo is 45 cm wide and 55 cm height. Alternatively, the size of the logo could be 50 cm wide x 60 cm height. The distance (space) between each logo should be no longer than 60 cm or shorter than 40 cm.

Note: Last updated, 08 March 2011



UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

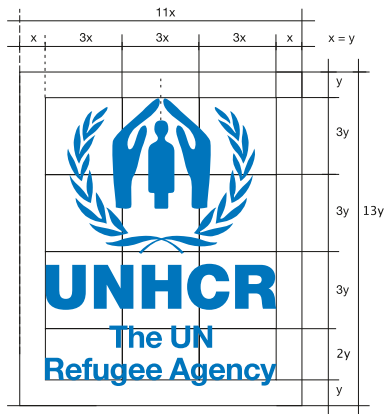
REINFORCED PLASTIC TARPULIN
(4 x 50 m)

UNHCR Item No 03153 / UNCCS Code No 271616

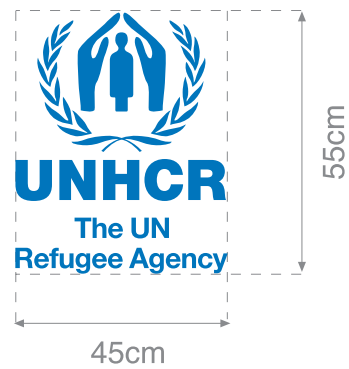
Graphic Reference



UNHCR Logo Application Reference



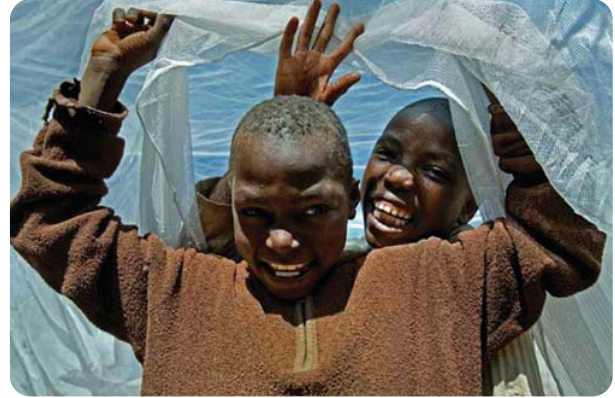
Logo Application Reference



Logo Application Size



Item application sample



General Description

Long Lasting Insecticidal Nets (LLIN's), treated with WHOPEs (WHO Pesticide Evaluation Scheme) recommended insecticide, provide effective protection against mosquitoes and other insects and are essential for UNHCR's malaria control strategy.

The specifications of LLIN depend of its material composition and as per WHO recommendation the most commonly used are made of 100 % Polyethylene (PE) or 100 % Polyester (PES).

Rectangular mosquito net (180 cm length x 160 cm width x 150 cm height) +/- 5 %.

Packing and Labeling

Mosquito Net, Polyester:

Packing Unit (PU): Bale / Number of pieces per PU: 100

Mosquito Net, Polyethylene:

Packing Unit (PU): Bale / Number of pieces per PU: 50

Labeling: Long Lasting Insecticidal Nets should be packed individually in a printed plastic bag, containing the following information:

1. Size:
2. Manufacturer name:
3. Brand name:
4. Fiber:
5. Standard pictograms for washing (ISO 3758): Gentle wash at no more than 30°C. No bleaching, no use of a drying machine, no ironing and no dry cleaning.
6. Denier:
7. Flammability:
8. Use and precautionary instructions:
9. Name of insecticide used and formulation.
10. Expected effective life of treatment after exposure.

Estimated Shipping / Container Information

Mosquito Net, Polyester:

19,500 pieces / 195 bales per 20' DC container (without pallets).

40,000 pieces / 400 bales per 40' DC container (without pallets).

44,000 pieces / 440 bales per 40' HC container (without pallets).

Mosquito Net, Polyethylene:

11,300 pieces / 226 bales per 20' DC container (without pallets).

23,500 pieces / 470 bales per 40' DC container (without pallets).

27,000 pieces / 540 bales per 40' HC container (without pallets).

Pallet Details

Wooden EURO pallet (EUR 1). Dimensions (W x L x H): 800 x 1200 x 144 mm. Fumigated as per ISPM 15 standard. Maximum height of packed the pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every unit should include a tag, stitched in the hem, with the manufacturer's identification (letters not higher than 1.5 cm). The tag should include the manufacturer's name, unique reference batch number and the date of manufacture. No company logo should be included with the manufacturer's marking.

Expected Life Span

It is expected that Long Lasting Insecticidal Nets will have a life span on the average of 3 to 5 years according to the use, the type and the fabric origin.

Note: Last updated, 08 March 2011



Technical Specifications for Polyethylene and Polyester Nets

Must be WHOPES approved (full or interim).

Mosquito Net, POLYETHYLENE

Material: (composition ISO1833) Polyethylene (PE) 100%
Fabrication: (construction ISO 8388) Warp knitted
Size: 180 x 160 x 150 cm
Denier: (ISO 2060, DUPRO) 100 - 150
Filament: Mono-filament
Netting mesh size: Min. 56 holes / inch²
Weight: Min. 38 g/m², depending of denier
Shrinkage: (ISO 5077/ISO 6330 - 8A at 30 C, flat dry) +/- 5%
Bursting strength: (ISO13938-1 or ISO 13938-2): Min. 250 kPa for net material and seams.
Fire safety: (16 CFR part 1610): Class 1
Color: Preferably white, blue or green
Treatment: Long lasting insecticide (3 to 5 years)
Insecticide: WHOPES recommended
Concentration of insecticide: WHOPES recommended
Target level of concentration: WHOPES recommended

Mosquito Net, POLYESTER

Material: (composition ISO1833) Polyester (PES) 100%
Fabrication: (construction ISO 8388) Warp knitted
Size: 180 x 160 x 150 cm
Denier: (ISO 2060, DUPRO) 75 - 100
Filament: Multi-filament 36 or higher
Netting mesh size: Min. 25 holes/cm² (156 holes/inch²)
Weight: (ISO 3801) 30 or 40 gr/m² depending of denier
Shrinkage: (ISO 5077/ISO 6330 - 8A at 30 C, flat dry) +/- 5%
Bursting strength: (ISO13938) 250 kPa minimum
Fire safety: (16 CFR part 1610): Class 1
Color: Preferably white, blue or green
Treatment: Long lasting insecticide (3 to 5 years)
Insecticide: WHOPES recommended
Concentration of insecticide: WHOPES recommended
Target level of concentration: WHOPES recommended

NET LABEL

Nets are to be labeled with indelible ink or stitched to the net as follow:

1. Manufacturers name, without logo:
2. Date of production:
3. Unique batch number:
4. Fiber:
5. Size: (length x width x height) in cm.
6. Name of insecticide used and formulation.
7. **Standard pictograms and instructions for washing and drying, according to ISO 3758:** Gentle Wash at 30°C. No bleaching. No drying machine. No ironing. No dry cleaning.



The presented pictograms in text: Avoid frequent washing, but if required, wash gently and do not do bleaching. Avoid exposure to the sun.



Item application sample



General Information and Description

Blankets are used to provide insulation / protection against loss of body temperature, according to the requirements imposed by climate / temperature conditions. The insulation capacity of a blanket depends on two factors:

- a) **The Thermal Resistance of Garments (TOG)**, a measurement of how well a material resists heat flow, where the higher the TOG rating, the better the insulation. It has to be noted that the TOG does not depend only on the weight or the raw material, but also on the fiber quality, the type of weaving or knitting, and fiber raising.
- b) **The Air Permeability of the Material**, where low air permeability will ensure protection from draughts, while inherent breatheability allows evacuation of body perspiration.

Considerations for the selection of blankets and quilts:

Medium thermal blanket: a blanket with 2.5 TOG is the minimum for outdoor use. Blankets with 2.5 TOG are also appropriate for indoor use without a heater. Medium thermal blankets are recommended for refugee camp situations in hot or mild cold climates / temperatures. It should be noted that even in hot countries, nights could be cold. Higher TOG values would be required for colder climates.

High thermal blanket: a blanket with 4.0 TOG is the minimum for indoor use in cold climates.

Outdoor use of blankets: when considering outdoor use of blankets, where there is no wind, in a 10°C temperature, the TOG requirement for blanket is 4.0.

At 0°C temperature, the TOG requirement is 6.0. At -10°C temperature, the TOG requirement is 8.0 and at -20°C temperature, the TOG requirement is 9.5. Taking into consideration that part of the insulation would come from the clothing; the rest should come from the blanket.

Low thermal blanket: a blanket with 1.5 TOG is considered a low thermal blanket, which is only appropriate for indoor use, on a bed, in a house with heating facilities. As a practical reference, a person resting indoor at 20 °C requires a total insulation of TOG 1.5. Low Thermal blankets are not included in UNHCR Frame Agreements, as they are not suitable for outdoor use.

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every blanket should include a tag, stitched in the hem, with the manufacturer identification (letters not higher than 2.5 cm). The tag should include the manufacturer's name, a unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Packing

Synthetic blankets are packed in bales of 20 pieces and the gross weight per bale is 32 Kg.

Bale dimensions: length approx. 0.8 m, width approx. 0.5 m and the height will depend of the thickness of the blankets at free state.

Bale wrapping: Bales to be wrapped in a water-tight micro perforated plastic film and covered with a polypropylene or jute woven bag. Compressed and strapped with 5 straps (2 lengthwise, 3 crosswise).

Bale compression: the height of the bales to be compressed by maximum 40% from free state to final compressed and strapped state. So, if the bale is 1m high at free state, it should be compressed to a height of 0.6m at final and strapped state.

Estimated Shipping / Container Information

Number of blankets per bale = 20
Number of bales per Euro Pallet = 4
Number of Blankets per pallet = 80

2640 blankets per 20' DC container (without pallets).
5280 blankets per 40' DC container (without pallets).
6600 blankets per 40' HQ container (without pallets).

2400 blankets per 20' DC container (with pallets).
4800 blankets per 40' DC container (with pallets).
4800 blankets per 40' HQ container (with pallets).

Printing of UNHCR Logo

UNHCR visibility logo should be stitched as a label or inserted / printed / heat embossed on the blanket, placing the (long lasting) logo on the center of the blanket or in one corner. The size of the logo on the center of the blanket should be 40 cm width and 48.88 cm height, and 20 cm width and 24.44 height when placing the logo on a corner of the blanket.

The color of the logo should be white or blue, contrasting with the background of the blanket. Color specifications for blue printing: Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M= 45 %, Y=0 %, K=0%. Typeface: (Font) Helvetica Bold.

Note: Last updated, 08 March 2011

**TECHNICAL SPECIFICATIONS****Important Requirement Regarding Laboratory Testing Conditions:**

Specification under the normal textile test conditioning ISO139, 65% moisture and 20°C for 24h.

Samples for testing purpose: samples of blankets must be from compressed bales and all criteria to be passed on the same sample.

Samples of compressed bales to be prepared with only 5 blankets folded once more than in normal bales, at 40% compression ratio, and to remain compressed for one week minimum before testing.

Denomination and norms	Required minimum values
1. Material:	Synthetic blankets are made of virgin fibers from polyester or acrylic materials. Some cotton may be included in the yarns.
2. Make:	Knitted or woven, dry raised both sides.
3. Content: ISO 1833 on dry weight	100% virgin polyester and/or acrylic fibers or polyester/cotton.
4. Dimensions / Size:	150 x 200cm +3%/-1%. To be taken on flat stabilized sample, without folds.
5. Weight:	350 to 670g/m ² Weight determined by total weight/total surface.
6. Thickness: ISO 5084	3mm minimum (1KPa on 2000mm ²).
7. Tensile strength: ISO13934-1	250N warp and weft minimum.
8. Tensile strength loss after washing: ISO13934-1 and ISO 6330	Maximum 5% warp and weft after 3 consecutive machine washing at 30°C and one flat drying.
9. Shrinkage: maxi. ISO 6330	Maximum 5% warp and weft after 3 consecutive machine washing at 30°C and one flat drying.
10. Weight loss after washing:	Maximum 5% after 3 consecutive machine washing at 30°C and one flat drying.
11. Thermal resistance: ISO 5085-1	TOG 2.5 (or 0.25m ² .K/W) minimum, rounded to the nearest 0.1, passed on samples picked from compressed bales after 3 consecutive machine washing at 30°C and one flat drying.
12. Resistance to air flow: ISO9237 under 100Pa pressure drop	Maximum 1000 L/m ² /s.
13. Finish:	Whipped seam at 10mm from the edge with 10 to 13 stitches/10cm or stitched ribbon or hemmed on 4 sides.
14. Organoleptic test:	No bad smell, not irritating to the skin, no dust. 4<pH<9. Free from harmful VOC (Volatile Organic Components). Fit for human use.
15. Fire resistance: ISO12952-1&2	Resistance to cigarette - No ignition
16. Fire resistance: ISO12952-3&4	Resistance to flame - No ignition
17. Colors:	Other than black, red, or white, dark uniform color (i.e. dark blue, grey or brown).



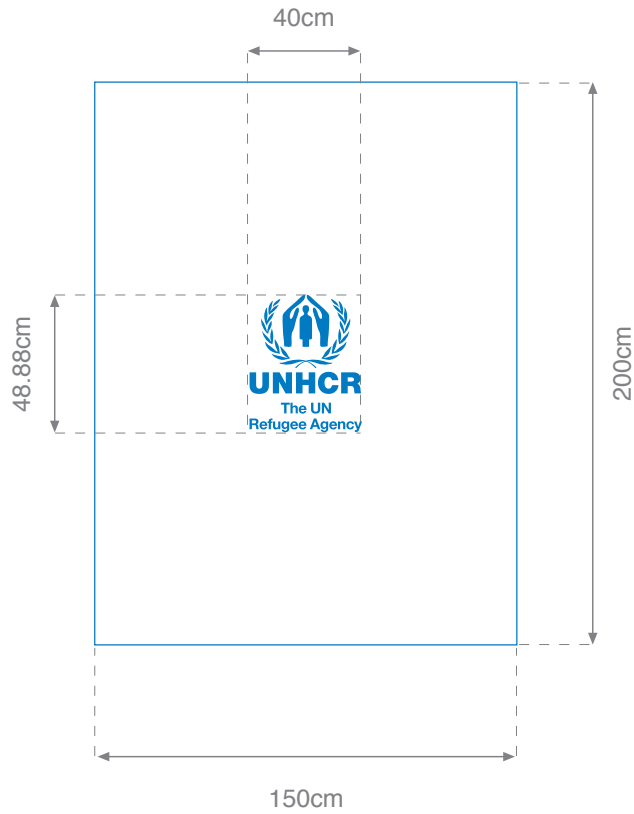
UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

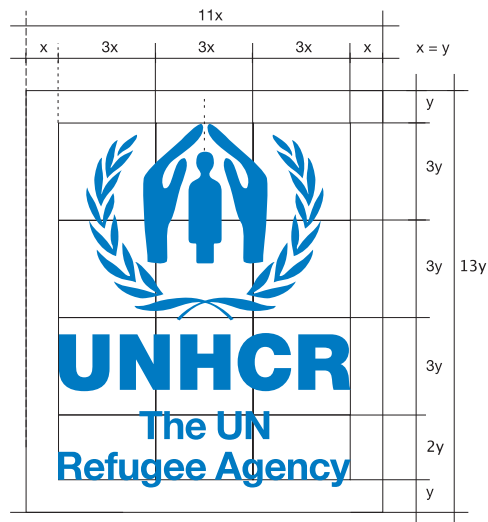
BLANKET, SYNTHETIC (Fleece)
1.5 x 2 m, Medium Thermal

UNHCR Item No 05787

Graphic Reference



UNHCR Logo Application Reference





Item application sample



General Information and Description

Blankets are used to provide insulation / protection against loss of body temperature, according to the requirements imposed by climate / temperature conditions. The insulation capacity of a blanket depends on two factors:

- a) **The Thermal Resistance of Garments (TOG)**, a measurement of how well a material resists heat flow, where the higher the TOG rating, the better the insulation. It has to be noted that the TOG does not depend only on the weight or the raw material, but also on the fiber quality, the type of weaving or knitting, and fiber raising.
- b) **The Air Permeability of the Material**, where low air permeability will ensure protection from draughts, while inherent breatheability allows evacuation of body perspiration.

Considerations for the selection of blankets and quilts:

Medium thermal blanket: a blanket with 2.5 TOG is the minimum for **outdoor** use. Blankets with 2.5 TOG are also appropriate for **indoor** use without a heater. Medium thermal blankets are recommended for refugee camp situations in hot or mild cold climates / temperatures. It should be noted that even in hot countries, nights could be cold. Higher TOG values would be required for colder climates.

High thermal blanket: a blanket with 4.0 TOG is the minimum for indoor use in cold climates.

Outdoor use of blankets: when considering outdoor use of blankets, where there is no wind, in a 10°C temperature, the TOG requirement for blanket is 4.0.

At 0°C temperature, the TOG requirement is 6.0. At -10°C temperature, the TOG requirement is 8.0 and at -20°C temperature, the TOG requirement is 9.5. Taking into consideration that part of the insulation would come from the clothing; the rest should come from the blanket.

Low thermal blanket: a blanket with 1.5 TOG is considered a low thermal blanket, which is only appropriate for **indoor** use, on a bed, in a house with heating facilities. As a practical reference, a person resting **indoor** at 20 °C requires a total insulation of TOG 1.5. Low Thermal blankets are not included in UNHCR Frame Agreements, as they are not suitable for outdoor use.

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every blanket should include a tag, stitched in the hem, with the manufacturer identification (letters not higher than 2.5 cm). The tag should include the manufacturer's name, a unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Packing

High Thermal Synthetic Blankets are packed in bales of 15 pieces and the gross weight per bale is 30 KG.

Bale dimensions: length approx. 0.8 m, width approx. 0.5 m and the height will depend of the thickness of the blankets at free state.

Bale wrapping: Bales to be wrapped in a water-tight micro perforated plastic film and covered with a polypropylene or jute woven bag. Compressed and strapped with 5 straps (2 lengthwise, 3 crosswise).

Bale compression: the height of the bales to be compressed by maximum 40% from free state to final compressed and strapped state. So, if the bale is 1m high at free state, it should be compressed to a height of 0.6m at final and strapped state.

Estimated Shipping / Container Information

- 1620 blankets per 20' DC container (without pallets).
- 3240 blankets per 40' DC container (without pallets).
- 3705 blankets per 40' HQ container (without pallets).

- 1260 blankets per 20' DC container (with pallets).
- 2700 blankets per 40' DC container (with pallets).
- 2700 blankets per 40' HQ container (with pallets).

Printing of UNHCR Logo

UNHCR visibility logo should be stitched as a label or inserted / printed / heat embossed on the blanket, placing the (long lasting) logo on the center of the blanket or in one corner. The size of the logo on the center of the blanket should be 40 cm width and 48.88 cm height, and 20 cm width and 24.44 height when placing the logo on a corner of the blanket.

The color of the logo should be white or blue, contrasting with the background of the blanket. Color specifications for blue printing: Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M= 45 %, Y=0 %, K=0%. Typeface: (Font) Helvetica Bold.

Note: Last updated, 08 March 2011

**TECHNICAL SPECIFICATIONS****Important Requirement Regarding Laboratory Testing Conditions:**

Specification under the normal textile test conditioning ISO139, 65% moisture and 20°C for 24h.

Samples for testing purpose: samples of blankets must be from compressed bales and all criteria to be passed on the same sample.

Samples of compressed bales to be prepared with only 5 blankets folded once more than in normal bales, at 40% compression ratio, and to remain compressed for one week minimum before testing.

Denomination and norms	Required minimum values
1. Material:	Synthetic blankets are made of virgin fibers from polyester or acrylic materials. Some cotton may be included in the yarns.
2. Make:	Knitted or woven, dry raised both sides.
3. Content: ISO 1833 on dry weight	100% virgin polyester and/or acrylic fibers or polyester/cotton.
4. Dimensions / Size:	150 x 200cm +3%/-1%. To be taken on flat stabilized sample, without folds.
5. Weight:	500 to 850g/m ² Weight determined by total weight/total surface.
6. Thickness: ISO 5084	5mm minimum (1KPa on 2000mm ²)
7. Tensile strength: ISO13934-1	250N warp and weft minimum.
8. Tensile strength loss after washing: ISO13934-1 and ISO 6330	Maximum 5% warp and weft after 3 consecutive machine washing at 30°C and one flat drying.
9. Shrinkage: maxi. ISO 6330	Maximum 5% warp and weft after 3 consecutive machine washing at 30°C and one flat drying.
10. Weight loss after washing:	Maximum 5% after 3 consecutive machine washing at 30°C and one flat drying.
11. Thermal resistance: ISO 5085-1	TOG 4.0 (or 0.25m ² .K/W) minimum, rounded to the nearest 0.1, passed on samples picked from compressed bales after 3 consecutive machine washing at 30°C and one flat drying.
12. Resistance to air flow: ISO9237 under 100Pa pressure drop	Maximum 1000 L/m ² /s.
13. Finish:	Whipped seam at 10mm from the edge with 10 to 13 stitches/10cm or stitched ribbon or hemmed on 4 sides.
14. Organoleptic test:	No bad smell, not irritating to the skin, no dust. 4<pH<9. Free from harmful VOC (Volatile Organic Components). Fit for human use.
15. Fire resistance: ISO12952-1&2	Resistance to cigarette - No ignition
16. Fire resistance: ISO12952-3&4	Resistance to flame - No ignition
17. Colors:	Other than black, red, or white, dark uniform color (i.e. dark blue, grey or brown).



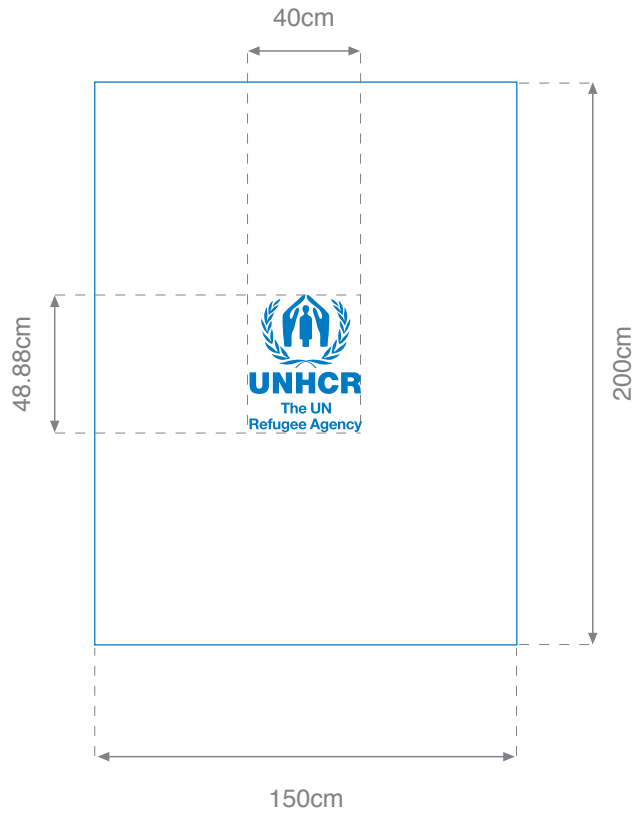
UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

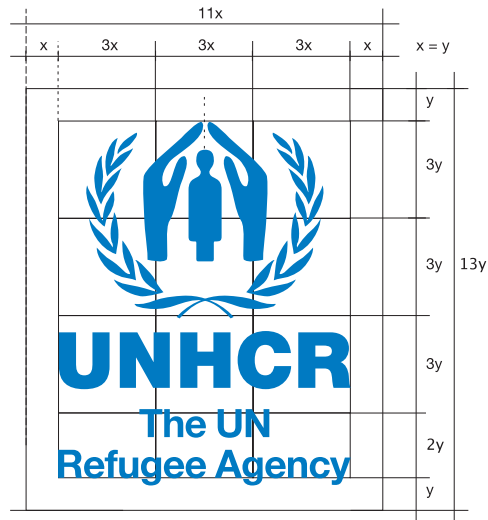
BLANKET, SYNTHETIC (Fleece)
1.5 x 2 m, High Thermal

UNHCR Item No 05786

Graphic Reference



UNHCR Logo Application Reference





Item application sample



General Description

Synthetic sleeping mats are used to sleep on and must be waterproof, tear proof and material trim finished.

Technical Specification

Material: The mats should be from 100% synthetic yarns from virgin or recycle raw material. Recycle raw materials would be preferable for ecological considerations. Synthetic sleeping mats that are made from recycle materials must not contain fillers, like calcium carbonate or any other.

The synthetic yarns in a tightly woven 2/2 twill structure, using a monofilament or multifilament warp and thick tape PP or polyester yarn in weft. The end widths are to be secured with a woven, bias-binding tape with stitches, through the fabric of the mat.

Sleeping mat size: 1.8 x 0.9 meters.

Sleeping mat area: 1.62m².

Weight: 0.500 Kg / m² Minimum +/- 5 %.

Color: Assorted colors.

Packing

Sleeping mats are packed in polypropylene bales of 25 pieces and firmly secured with 4 strong straps.

Weight of packing unit: 20.25 Kg

Note: It is important that the binding is secure and durable to prevent fraying of the mat which would result in rapid disintegration of the structure.

Estimated Shipping / Container Information

5.500 pieces per 20' DC container (without pallets).

11.000 pieces per 40' DC container (without pallets).

4.500 pieces per 20' DC container (with pallets).

9.000 pieces per 40' DC container (with pallets).

Pallet Details

Wooden EURO pallet (EUR 1). Dimensions (W x L x H): 800 x 1200 x 144 mm. Fumigated as per ISPM 15 standard. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every unit should include a tag, stitched in the hem, with the manufacturer's identification (letters not higher than 1.5 cm). The tag should include the manufacturer's name, unique reference batch number and the date of manufacture. No company logo should be included with the manufacturer's marking.

Expected Life Span

It is expected that sleeping mats will last for 12 months of use under hard tropical conditions.

Printing of UNHCR Logo

UNHCR visibility logo must be printed or woven in the middle and across the long side of the mat for maximum visibility. The wide of the marking must be 120 cm minimum and the height proportionate to the width without any distortion to the logo and letterings (approximately 35 cm).

Typeface: (font) Helvetica Bond. **Color specifications for printing UNHCR logo:** White or Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M = 45 %, Y = 0 %, K = 0 % or white. The applied color of UNHCR logo (white or blue) should be in contrast with the overall color of the mat.

Note: Last updated, 08 March 2011



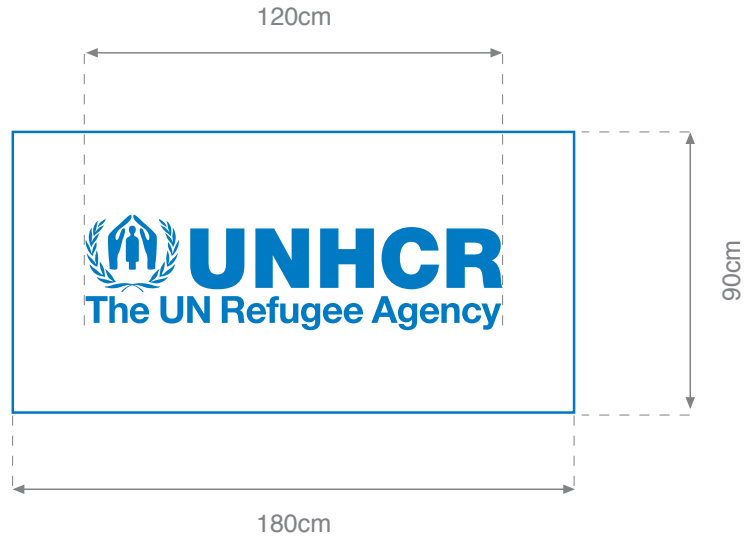
UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

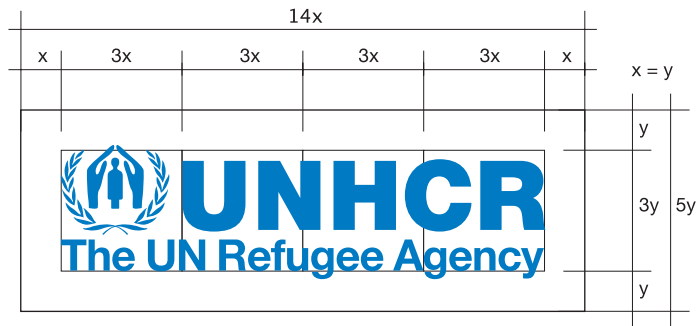
SYNTHETIC SLEEPING MAT

UNHCR Item No 02020 / UNCCS Code No 271657

Graphic Reference



UNHCR Logo Application Reference



Item application sample



General Description

Sanitary material for use by females (Cloth). 100 % cotton flannel highly absorbent from bleached or unbleached material.

Estimated Shipping / Container Information

39.750 m2 per 20' DC container (without pallets).
79.5900 m2 per 40' DC container (without pallets).

23.100 m2 per 20' DC container (with pallets).
79.500 m2 per 40' DC container (with pallets).

Technical Specification

Material: 100% cotton flannel.
Weight: 170 - 180 g/m2
Thickness: before pressing the bale, the thickness is 0.55 mm
Width: 1.5 meter
Warp: Min. 21 (threads per cm)
Weft: Min. 18.5 (threads per cm)
Yarn: 30 tex. in warp and 50 tex. in weft
PH: 6-8.5
Color: natural
Raised/combed on both sides

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Packing

Sanitary material for female use should be packed in bales 1.5 m wide x 100 m long. So the total quantity per bale is 150 m2.

Note: Last updated, 08 March 2011



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Haut Commissariat des Nations Unies pour les réfugiés

HEAVY DUTY PLASTIC BUCKET 10 L

UNHCR Item No 00100 / UNCCS Code No 369424

Item application sample



General Description

The 10 liter capacity, heavy duty, non-collapsible plastic bucket with lid is a family or individual drinking water container for general household use. Stackable, made of food grade High Density Polyethylene, HDPE or Polypropylene. Strong and durable quality for a long-life span in tough conditions.

Technical Specification

Material: made of food grade HDPE or polypropylene, containing no toxic elements according to EN 1186-3-9 standard.

Capacity: 10 liters.

Weight: 500 g (+/- 5%).

Handle: Plastic or metal, easy to carry by hand with a strong flat handle (i.e. without sharp edges) and a roller grip strongly fixed to the bucket.

Lid: the bucket is supplied with a lid that should be able to close tight, but easy to open and close.

Impact resistance / Drop test: the heavy duty plastic bucket must be impact resistant on a hard surface. To ensure minimum quality standard the bucket must resist at least to two (02) consecutive drops from 2,5 m high, containing maximum volume of water (10 liters) at 20 oC, without any damages.

Flexibility test: the bucket must resist pressure on the two sides to make them touch one another in the middle. **Handle test:** If made of plastic, the handle must resist folding flat on the cover, pushed on left end, and pushed on right end. In all cases, the handle must also resist to 28kg traction in normal usage position. **Lid closing test:** the lid should be able to close tight, but easy to open and close.

Color: white or blue.

Packing

Pieces per carton: 24.

Volume of the carton: 30 x 30 x 96.5 cm.

24 buckets are to be stacked inside the carton and respective lids should be placed inside the box.

Estimated Shipping / Container Information

6.888 pieces per 20' DC container (without pallets).

14.112 pieces per 40' DC container (without pallets).

15,792 pieces per 40' HC container (without pallets).

3.168 pieces per 20' DC container (with pallets).

6.624 pieces per 40' DC container (with pallets).

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every unit should include the manufacturer's identification mould, at 5 cm above the bottom with letters not higher than 1.5 cm and on the opposite side of the UNHCR logo. The marking should include the manufacturer's name, unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Printing of UNHCR Logo

UNHCR visibility logo printed on the bucket, placed in the center and on the two sides of the bucket. White logos should be printed in blue buckets and blue logos should be printed in white buckets.

Color specifications for blue printing: Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M= 45 %, Y=0 %, K=0%. Typeface (Font) Helvetica Bold.

UNHCR vertical and horizontal logotypes could be printed. In the case of vertical logotype, the size of the logotype should be 15 cm width and 18.33 cm height, proportionate to the width without any distortion to the logo and letterings, as per included logo application reference. In the case of the horizontal logotype, the size of the logotype should be 20 cm width and 5.00 cm height, proportionate to the width without any distortion to the logo and letterings.

Note: Last updated, 08 March 2011



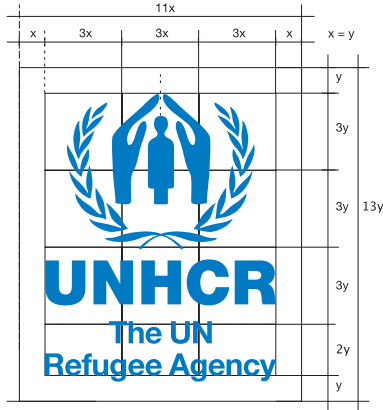
UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

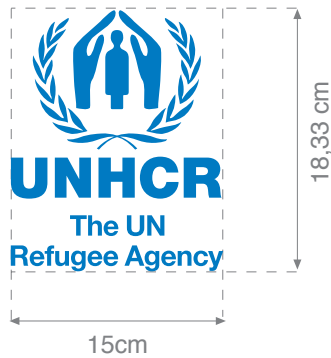
HEAVY DUTY PLASTIC BUCKET 10 L

UNHCR Item No 00100 / UNCCS Code No 369424

UNHCR Logo Application Reference



Vertical Application



Logo Application Size



UNHCR

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Haut Commissariat des Nations Unies pour les réfugiés

HEAVY DUTY PLASTIC BUCKET 15 L

UNHCR Item No 04165

Item application sample



General Description

The 15 liter capacity, heavy duty, non-collapsible plastic bucket with lid is a family or individual drinking water container for general household use. Stackable, made of food grade High Density Polyethylene, HDPE or Polypropylene. Strong and durable quality for a long-life span in tough conditions.

Technical Specification

Material: made of food grade HDPE or polypropylene, containing no toxic elements according to EN 1186-3-9 standard.

Capacity: 15 liters.

Weight: 800 g (+/- 5%).

Handle: plastic or metal, easy to carry by hand with a strong flat handle (i.e. without sharp edges) and a roller grip strongly fixed to the bucket.

Lid: the bucket is supplied with a lid that should be able to close tight, but easy to open and close.

Impact resistance / Drop test: the bucket must be impact resistant when filled and can withstand outdoor equatorial heat. Strong and durable quality for a long life-span in tough conditions.

Flexibility test: The bucket must resist pressure on the two sides to make them touch one another in the middle. **Handle test:** If made of plastic, the handle must resist folding flat on the cover, pushed on left end, and pushed on right end. In all cases, the handle must also resist to 28kg traction in normal usage position. **Lid closing test:** the lid should be able to close tight, but easy to open and close.

Color: white or blue.

Packing

Pieces per carton: 24

Volume of the carton: 35 x 35 x 110 cm

24 buckets are to be staked inside the carton and respective lids should be placed inside the box.

Estimated Shipping / Container Information

4.608 pieces per 20' DC container (without pallets).

9.504 pieces per 40' DC container (without pallets).

10.704 pieces per 40' HC container (without pallets)

2.640 pieces per 20' DC container (with pallets).

5.520 pieces per 40' DC container (with pallets).

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every unit should include the manufacturer's identification mould, at 5 cm above the bottom with letters not higher than 1.5 cm and on the opposite side of the UNHCR logo. The marking should include the manufacturer's name, unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Printing of UNHCR Logo

UNHCR visibility logo printed on the bucket, placed in the center and on the two sides of the bucket. White logos should be printed in blue buckets and blue logos should be printed in white buckets.

Color specifications for blue printing: Pantone Blue 300 or quadrichrome (CMYK). C = 100 %, M= 45 %, Y=0 %, K=0%. Typeface (Font) Helvetica Bold.

UNHCR vertical and horizontal logotypes could be printed. In the case of vertical logotype, the size of the logotype should be 15 cm width and 18.33 cm height, proportionate to the width without any distortion to the logo and letterings, as per included logo application reference. In the case of the horizontal logotype, the size of the logotype should be 20 cm width and 5.00 cm height, proportionate to the width without any distortion to the logo and letterings.

Note: Last updated, 08 March 2011



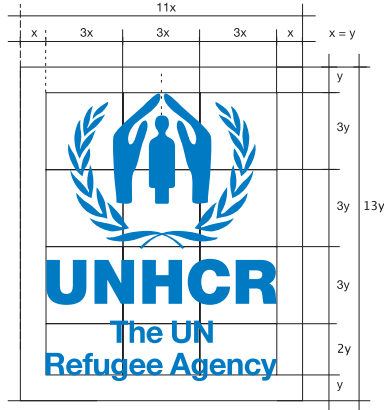
UNHCR

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Haut Commissariat des Nations Unies pour les réfugiés

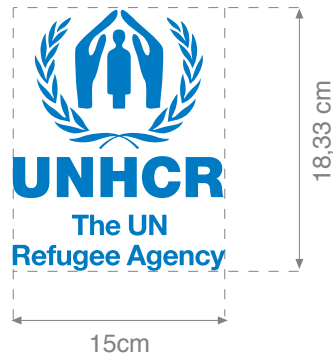
HEAVY DUTY PLASTIC BUCKET 15 L

UNHCR Item No 04165

UNHCR Logo Application Reference



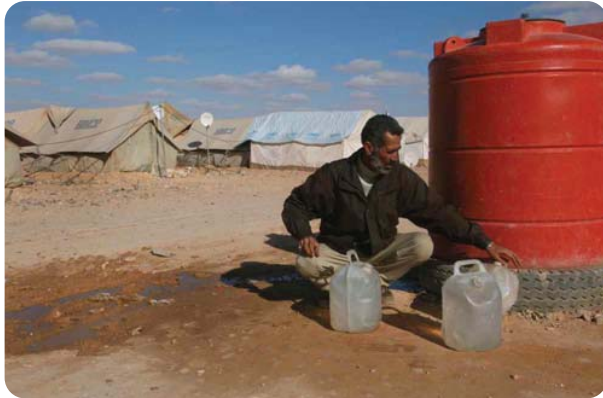
Vertical Application



Logo Application Size



Item application sample



General Description

The 10 liters capacity Semi-Collapsible Jerry Can made of food grade LDPE is a container for general household use for carrying and storing drinking water.

Technical Specification

Capacity: 10 liters.

Weight: 190 – 230 grams

Material: Manufactured of food grade LDPE should not contain toxic elements according to EN 1186-3-9 standard.

Must stand by itself, even when filled with less than 1/4 of its maximum volume.

Operating temperature: can withstand temperatures of -20c to + 50c.

Average thickness: 0.6mm and minimum corner thickness 0.5mm.

Fitted with: with a built-in carrying handle with minimum 9 cm long and 3 cm high, with no sharp edges and a screwable cap for filling and discharge that is linked to the container by polyamide string with diameter of min 1mm and approximately 120 mm length. The inner diameter of cap approx 35 mm.

Impact Resistance / Drop Test: the Semi-Collapsible Jerry Can must be impact resistant on a hard surface when filled with maximum volume of water (10 liters) at 20°C. The complete drop test consists of 10 consecutive drops from 2,5 m high. The jerry can must be elevated, so that the lowest point is at 2,5m from the ground. Test result is expressed as a product ranking according to the number of drops passed without damages or leakage. To be accepted, the jerry can must resist to minimum 3 drops.

Packing

The jerry cans are packed in export quality cartons.

Pieces per carton: 50

Weight of packing unit: 12 kg.

Estimated Shipping / Container Information

10.800 pieces per 20' DC container (without pallets).

21.600 pieces per 40' DC container (without pallets).

8.800 pieces per 20' DC container (with pallets).

20.000 pieces per 40' DC container (with pallets).

Pallet Details

Wooden EURO pallet (EUR 1). Fumigated as per ISPM 15 standard. Dimensions (W x L x H): 800 x 1200 x 144 mm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet.

Manufacturer Marking

Every unit should include the manufacturer's identification mould, at 5 cm above the bottom with letters not higher than 1.5 cm and on the opposite side of the UNHCR logo or on the side distant from UNHCR logo. The marking should include the manufacturer's name, unique reference batch number and date of manufacturing. No company logo should be included with the manufacturer's marking.

Expected Life Span

It is expected that collapsible jerry can will last for six months of use under tropical conditions.

Printing of UNHCR Logo

Embossed on minimum one side with UNHCR visibility logo, as per the included graphic reference.

Note: Last updated, October 2011



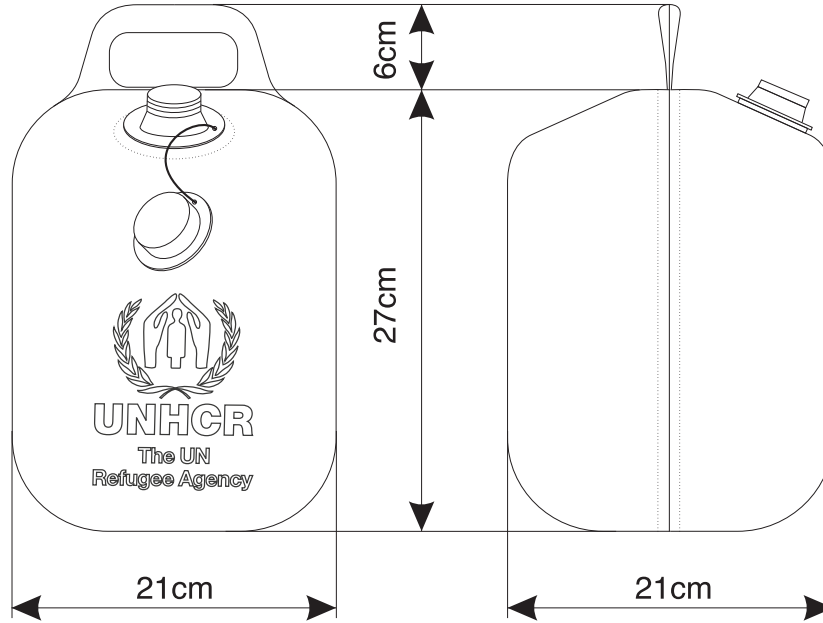
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**SEMI-COLLAPSIBLE JERRY CAN
(water container)**

UNHCR Item No 00096 / UNCCS Code No 369491

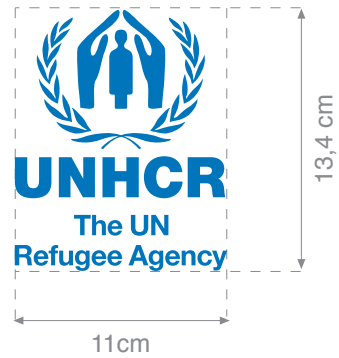
Graphic Reference



UNHCR Logo Application Reference



Logo Application Reference



Logo Application Size



Item Application Sample



General Description

Cooking and serving utensils suitable for a family of 5 people. Kitchen Set composition regularly used in some Asian societies.

All items should be made of stainless steel in line with minimum quality standards included in the Material specifications. Alternatively, only cooking pots and frying pans can be made of aluminium as per material specifications.

Kitchen Set Composition

Each set includes the following items:

- 01 x 7 litres stainless steel or aluminium cooking pot with lid
- 01 x 7 litres black steel wok
- 05 x 1 litre stainless steel bowl
- 05 x stainless steel plates
- 05 x stainless steel cups
- 05 x stainless steel table spoons
- 05 x plastic or bamboo chopsticks
- 01 x kitchen knife with stainless steel blade
- 01 x wooden serving spoon
- 01 x stainless steel scouring pad

Packing and Marking

- Type:** 1 carton box, outer dimensions 0.3 x 0.3 x 0.25m.
- Material:** double-corrugated, export-quality cardboard
- Strength:** withstands 6m-high stacking for more than 48h, and 10 handlings
- Seal:** tape plus 4 plastic 10mm straps
- Name:** KITCHEN SET, type "A"
- Content:** contents listed on the outside of the box
- Alternative:** Food grade plastic packaging (according to EN 1186-3-9), with a cover, that can be re-used for food or water storage is an advantage.

Weight and Volume

Gross volume per kitchen set: approx. 0.032 cbm

Gross volume per export carton (with 04 sets): approx. 5 kg

Comments

The included pictures should be used as a reference, but not as specific models for each item. Manufacturers and suppliers of the Kitchen Set are invited to offer models that respect the given specifications.

Material Specifications

The specifications below indicate the minimum quality standards of stainless steel and aluminium materials.

Stainless Steel:

- Stainless steel must be of ISO type 1.4016 (American grade 430) or of higher quality ISO type 1.4301 (American grade 304).
- Higher-quality stainless steel, such as ISO types 1.4401 or 1.4404, are not required (American grade 316).
- Stainless steel 200 series is acceptable only for plates, cups, bowls and spoons, but not for the cooking items (pots, woks).
- Applicable standard as per EN 10088-1.

Aluminium, as an alternative material for cooking pots and frying pan:

- Aluminium type Al99,0 or above as per publication ISO 209-1 (minimum 99% aluminium).
- Other elements as per EN 602.

Publications with applicable standards:

ISO 209-1: Wrought aluminium and aluminium alloys - Alloys - Chemical composition and forms of products - Part 1: Chemical composition

ISO 602: Aluminium and aluminium alloys - Wrought products - Chemical composition of semi products used for the fabrication of articles for use in contact with food

Black Steel items:

- Black steel, cold-hammered common mild steel

Alternative Plastic Cup:

- Made of food grade according to EN 1186-3-9 standard. Strong and durable quality for a long-life span.

Note: Last updated, 5 October 2011



Technical Specifications per Item

Item 1: COOKING POT, 7 L, with Lid

Capacity: 7 Litres
Material: Stainless steel (or aluminium if specified in contract)
Diameter: min. 27cm, max. 28cm
Thickness: min. 0.8mm (aluminium min. 1.75mm)
Handles: 2 stainless steel handles, attached with strong rivets, bent upward to allow a hanging bar to pass through (aluminium acceptable for aluminium pots)
Lid: min. 0.6mm (aluminium min 1mm) w/ handle
Finish: no sharp edges



Item 2: 1 WOK, 7L, black steel

Capacity: 7 Litres
Material: black steel, protected from rust for storage
min. 37cm, max. 39cm
Thickness: Minimum 1mm
Finish: no sharp edges



Item No 3: 1 x BOWL, 1 L, metallic

Capacity: 1 Litre
Material: Stainless steel
Height: 5 to 7cm
Thickness: min. 0.5mm
Finish: no sharp edges



Item No 4: 5 x PLATE, 0.75L, metallic

Capacity: 0.75 Litres
Material: Stainless steel
Thickness: min. 0.5mm
Diameter: 24 to 25cm
Finish: no sharp edges



Item No 5: 5 x CUP, 0.3L, stainless steel or plastic

Capacity: 0.3 Litres
Material: Stainless steel or plastic
Thickness: Min. 0.5mm
Handle: securely attached with rivets or welded
Finish: no sharp edges



Stainless Steel

Plastic

Item No 6: 5 x SPOON, table, 15ml, stainless steel

Capacity: 15ml
Material: One-piece stainless steel, solid
Length: 20cm
Thickness: min. 1mm
Finish: no sharp edges



Item No 7: 5 x CHOPSTICK, 25cm

Material: plastic or bamboo
Length: 25cm
Thickness: Min. 4 x 4mm
Finish: no sharp edges, rounded at the end



Item No 8: 1 x KNIFE, kitchen, 15cm, stainless steel blade

Material: stainless steel blade, wood or plastic handle
Thickness: blade base min. 1.5mm
Length: blade min. 15cm
Finish: no sharp edges



Item No 9: 1 x SPOON, wooden, stirring, 30cm

Material: hard wood
Thickness: 10mm diameter min. for handle and at the thickest point of the spoon end
Length: 30cm
Finish: no sharp edges



Item No 10: 1 x SCOURING PAD

Material: Stainless steel wire scouring pad





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KITCHEN SET - TYPE A

UNHCR Item No 02039

Reference Picture





UNHCR

United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

KITCHEN SET - TYPE B

UNHCR Item No 02040

Item Application Sample



General Description

Cooking and serving utensils suitable for a family of 5 people. Kitchen Set composition supports African and Western gastronomy.

All items should be made of stainless steel in line with minimum quality standards included in the Material specifications. Alternatively, only cooking pots and frying pan can be made of aluminium as per Material specifications.

Kitchen Set Composition

Each set includes the following items:

- 01 x 7 litres, stainless steel or aluminium cooking pot
- 01 x 2.5 litres, stainless steel frying pan (used as lid for 7L cooking pot)
- 01 x 5 litres, stainless steel or aluminium cooking pot with lid
- 05 x 1 litre, stainless steel bowl
- 05 x stainless steel plates
- 05 x stainless steel cups
- 05 x stainless steel table-spoons
- 05 x stainless steel table-forks
- 05 x stainless steel table-knives
- 01 x kitchen knife with stainless steel blade
- 01 x wooden serving spoon
- 01 x stainless steel scouring pad

Packing and Marking

- Type:** 1 carton box, outer dimensions 0.3 x 0.3 x 0.25m.
- Material:** double-corrugated, export-quality cardboard
- Strength:** withstands 6m-high stacking for more than 48h, and 10 handlings
- Seal:** tape plus 4 plastic 10mm straps
- Name:** KITCHEN SET, type "B"
- Content:** contents listed on the outside of the box
- Alternative:** Food grade plastic packaging (according to EN 1186-3-9), with a cover, that can be re-used for food or water storage is an advantage.

Weight and Volume

Gross volume per kitchen set: approx. 0.022 cbm

Gross volume per export carton (with 04 sets): 4.7 kg

Comments

The included pictures should be used as a reference, but not as specific models for each item. Manufacturers and suppliers of the Kitchen Set are invited to offer models that respect the given specifications.

Material Specifications

The specifications below indicate the minimum quality standards of stainless steel and aluminium materials.

Stainless Steel:

- Stainless steel must be of ISO type 1.4016 (American grade 430) or of higher quality ISO type 1.4301 (American grade 304).
- Higher-quality stainless steel, such as ISO types 1.4401 or 1.4404, are not required (American grade 316).
- Stainless steel 200 series is acceptable only for plates, cups, bowls, spoons, forks and knives, but not for the cooking items (pots, frying pans).
- Applicable standard as per EN 10088-1.

Aluminium, as an alternative material for cooking pots and frying pan:

- Aluminium type Al99,0 or above as per publication ISO 209-1 (minimum 99% aluminium).
- Other elements as per EN 602.

Publications with applicable standards:

ISO 209-1: *Wrought aluminium and aluminium alloys - Alloys - Chemical composition and forms of products - Part 1: Chemical composition*

ISO 602: *Aluminium and aluminium alloys - Wrought products - Chemical composition of semi products used for the fabrication of articles for use in contact with food*

Alternative plastic cup:

- Made of food grade according to EN 1186-3-9 standard. Strong and durable quality for a long-life span.

Note: Last updated, 5 October 2011



Technical Specifications per Item

Item 1: 1 COOKING POT, 7 L (frying pan lid fits)

Capacity: 7 Litres
Material: Stainless steel (or aluminium if specified in contract)
Diameter: min. 27cm, max. 28cm
Thickness: min. 0.8mm(aluminium min.1.75mm)
Handles: 2 stainless steel handles, attached with strong rivets, bent upward to allow a hanging bar to pass through (aluminium acceptable for aluminium pots)
Lid: min. 0.6mm (aluminium min 1mm) w/ handle
Finish: no sharp edges



Item 2: 1 FRYING PAN, 2.5L (used as lid for the 7L cooking pot)

Capacity: 2.5 Litres
Material: stainless steel (or aluminium if specified in contract)
Diameter: adapted as a lid for the 7L cooking pot
Thickness: min. 0.8mm (aluminium min. 1.75 mm)
Handle: 1 detachable stainless steel handle (in aluminium if pan is aluminium)
Finish: no sharp edges



Item No 3: 1 x COOKING POT, 5 L, with Lid

Capacity: 5 Litres
Material: Stainless steel (or aluminium if specified in contract)
Diameter: min. 22cm, max. 24cm
Thickness: min. 0.8mm (aluminium min. 1.75mm)
Handles: 2 stainless steel handles, attached with strong rivets, bent upward to allow a hanging bar to pass through(aluminium handles acceptable for aluminium pot)
Lid: min. 0.6mm (aluminium min. 1mm) with handle
Finish: no sharp edges



Item No 4: 1 x BOWL, 1L, metallic

Capacity: 1 Litre
Material: Stainless steel
Height: 5 to 7cm
Thickness: min. 0.5mm
Finish: no sharp edges



Item No. 5: 5 x PLATE, 0.75L, metallic

Capacity: 0.75 litres
Material: Stainless steel
Thickness: Min. 0.5mm
Diameter: 24 to 25cm
Finish: no sharp edges



Item No 6: 5 x CUP, 0.3l, stainless steel or plastic

Capacity: 0.3 Litres
Material: stainless steel or plastic
Thickness: min. 0.5mm
Handle: securely attached with rivets or welded
Finish: no sharp edges



Item No 7: 5 x SPOON, table, 15ml

Capacity: 15ml
Material: one-piece stainless steel, solid
Length: 20cm
Thickness: Min. 1mm
Finish: no sharp edges



Item No 8: 5 x FORK, table, 20cm,

Material: one-piece stainless steel, solid
Length: 20cm
Thickness: Min. 1.5mm
Finish: no sharp edges



Item No 9: 5 x KNIFE, table, 17cm

Material: one piece stainless steel, solid
Length: 17cm
Thickness: back of the blade 1mm, 1.5mm handle
Finish: no sharp edges



Item No 10: 1 x KNIFE, kitchen,15cm

Material: Stainless steel blade, wood or plastic handle
Thickness: blade base min. 1.5mm
Length: blade min. 15cm
Finish: no sharp edges



Item No 11: 1 x SPOON, wooden, stirring

Material: hard wood
Thickness: 10mm diameter min. for the handle and at the thickest point of the spoon end
Length: 30cm
Finish: no sharp edges



Item No 12: 1 x SCOURING PAD

Material: stainless steel wire scouring pad





Reference Picture





CORE RELIEF ITEMS CATALOGUE

United Nations High Commissioner for Refugees

Case Postale 2500

CH-1211 Genève 2 Dépôt