

# UNHCR Environmentally Friendly Procurement

## DOCUMENT VERSION

This is the first version of this item with enhanced sustainability attributes, representing UNHCR's ongoing commitment to advancing the environmental, technical, social, and economic sustainability of relief items, as of **December 10, 2024**.

## CANVAS ROLL MATERIAL

Providing material assistance to forcibly displaced populations is fundamental to UNHCR's protection mandate. In an emergency, the Canvas Roll Material for Hot and Dry Climatic Conditions are one of the essential items that UNHCR distributes as part of the assistance to the affected populations. It is designed to be used in hot and dry climatic conditions, without humidity and moisture. The provision of canvas materials is a life-saving measure in many situations.

## END USERS

UNHCR is mandated to protect and assist refugees, forcibly displaced communities, and stateless people. The product with this specification will be used by the people we protect, primarily in emergencies. The end users include people of all ages ranging from infants to older persons, persons with disabilities, and pregnant women. Therefore, the supplier needs to understand and study the needs of forcibly displaced populations, especially in emergencies, to ensure an innovative and sustainable product design that is user-centered.

## SUSTAINABLE SUPPLY CHAIN

For UNHCR to fulfill its mandate, it is imperative to minimize the environmental footprint of humanitarian assistance. Our approach to a sustainable end-to-end supply chain includes planning, sourcing, material, manufacturing processes, procurement, delivery, and lifecycle management of goods.

A holistic assessment of sustainable products includes but is not limited to, the following criteria:

- The product design follows Universal Design principles that are user-friendly and accessible<sup>1</sup>.
- Manufacturing processes take into consideration the protection of the environment and respect for social standards<sup>2</sup>.
- Products are made from sustainable materials, and through sustainable mechanisms.
- Packaging is made from sustainable material, ideally with a second-life purpose.
- All unnecessary single-use plastic is removed<sup>3</sup>.
- Packaging, palletizing, and load ability of transport units are optimized.
- Products are recyclable.
- A life cycle analysis, including GHG emission factors, is performed for all products.
- The geographical distribution of the supplier base is diversified to ensure the proximity of product delivery.

## PREFERENCE

Preference will be given to a product that is most user-friendly and has the highest overall sustainability elements that satisfy technical specifications. Please see the Sustainability Procurement Indicators from the United Nations Global Market that we comply with.

1 <https://universaldesign.ie/what-is-universal-design/the-7-principles/>

2 Suppliers to demonstrate the application of ISO 14001:2015: Environmental managing systems, ISO 9001:2015: Quality Management systems, ISO 26000: Guidance on social responsibility

3 <https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability>

Item Application Sample



General Information and Description

This canvas material is designed to be used in hot and dry climatic conditions, without humidity and moisture.

Weight and Volume

**Specific weight:** 640-680 g/m<sup>2</sup> ±1% in finished state.

**Weight per roll:** 67.2 to 71.4 kg.

**Volume per roll:** 0.140 m<sup>3</sup>.

Optimal Shipping / Container Information

20' DC – 205 rolls of 70 meters each.

40' DC – 365 rolls of 70 meters each.

40' HC – 365 rolls of 70 meters each.

CRI Pallet Details

Fumigated as per IPSM 15 standard. Dimensions (L x W x H): 1150 x 770 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. For further information please refer to section "Tetrapack Packaging".

Manufacturer Marking

Every Canvas Roll Material for Hot and Dry Climatic Conditions 1.5 x 70 m should include a tag stitched to the side. See the reference to a graphic example of a tag given in the section "Graphic Reference for the Tag". The tag should include the following:

- UNHCR logo
- Produced for UNHCR by the manufacturer's name
- a unique reference batch number
- the date of manufacturing
- material composition (type of material(s)) and the ratio of each material in the product
- certified sustainability claim/eco-labelling
- information related to the reuse/recyclability of the item
- QR code to a page assigned by the UNHCR

No company logo should be included with the manufacturer's marking.

**The final marking on the tag, letter size, and design needs to be approved by the UNHCR before production.**

Expected Life Span

Minimum one year, used in hot dry climatic conditions without humidity and moisture.

Packing

Primary packaging

Packaged in rolls measuring 1.5 m x 70 m (with an effective width of 1.5m), each roll is individually enclosed in craft paper and then polyethylene, before being wrapped in hessian cloth secured with plastic straps. Straps crafted from recycled materials are encouraged. Each roll, one per bale, spans exactly 70 metres, with joints permitted along this length, up to a maximum of 2 joints. Circular hardboards (recycled) safeguard both ends of the canvas roll. While various packing methods are acceptable, preference is given to innovative, eco-friendly packaging that ensures product safety, optimize load capacity in pallets or containers, ideally serving a second-life purpose and minimizing waste. Canvas rolls can be packed in a bag made of water-resistant materials.



**Secondary packaging** - No secondary packaging needed.

Tertiary packaging

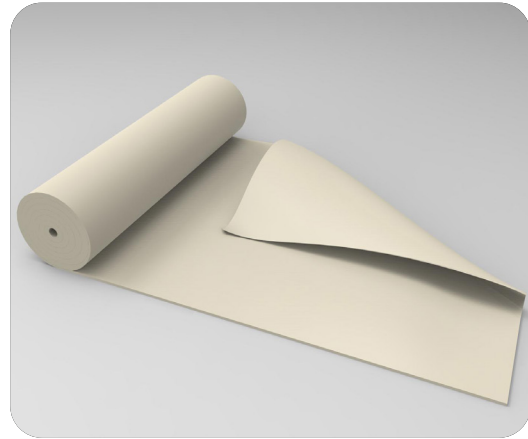
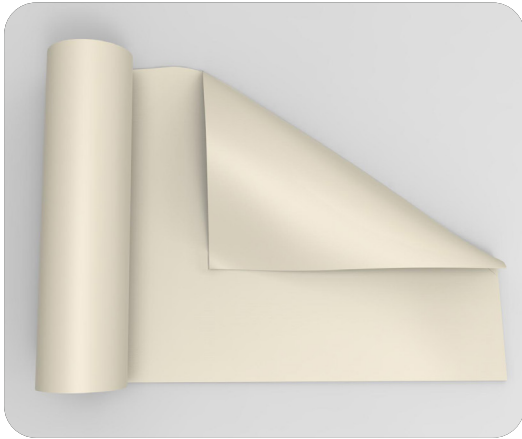
Packed rolls can be palletized, requiring wrapping in a water-tight material, preferably made of, or containing sustainable materials, such as recycled plastic or reusable materials (i.e., tarpaulins). Packaging must guarantee protection against damage, including water and moisture. Innovative sustainable solutions are preferred, while compostable or bio-plastics should be avoided, and efforts should be made to increase recycled content.

**SPECIFICATIONS FOR CANVAS ROLL MATERIAL FOR HOT AND DRY CLIMATIC CONDITIONS 1.5 M X 70 M**

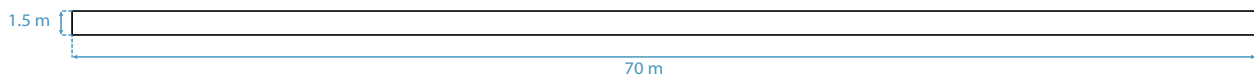
The canvas material must align with specified characteristics and adhere to ISO 10966, unless otherwise indicated below. It should be devoid of defects that may compromise strength, waterproofness, and durability. Any chemicals or additives applied to the canvas material must be non-toxic, complying with international health standards to ensure there is no risk to human health.

Denomination and norms	Required minimum values
1. Composition, ISO 1833	<p>Canvas Roll Material consists of 90% cotton (water and rot proof) and 10% polyamide or polyester. The Canvas Roll Material may include post-consumer recycled (PCR) cotton and PCR polyamide or polyester without compromising quality and durability of the product. The target amount of PCR cotton in canvas is 15%, the target amount of PCR polyamide or polyester – 10%. A higher percentage of recycled materials will also be considered.</p> <p>The canvas material must be in accordance with the specified characteristics and with ISO 10966 - Textiles – Fabric for tents – Specifications.</p>
2. Canvas sheet size	<p><b>Effective Width:</b> 1.50 m <math>\pm 3\%</math> with no more than 3% dimensional variation when soaking in water, ISO 7771.</p> <p><b>Length:</b> 70 m <math>\pm 0.5\%</math> with no more than 3% dimensional variation when soaking in water, ISO 7771.</p>
3. Specific weight (g/m <sup>2</sup> ), ISO 3801	640-680 g/m <sup>2</sup> $\pm 1\%$ in finished state.
4. Weave density	<p><b>In Warp:</b> 46/48 threads per square inch.</p> <p><b>In Weft:</b> 26/28 threads per square inch.</p>
5. Color	Natural cotton color, beige sable/ natural beige (not dyed). Other colors except green/military, green/brown and various khaki colors.
6. Water vapor permeability, ISO17229	Minimum 2000 g/m <sup>2</sup> /24h.
7. Tensile strength (N), ISO 13934-1 (BS 13934-1)	<p><b>Warp:</b> Minimum of 1600 N.</p> <p><b>Weft:</b> Minimum of 1250 N.</p> <p>To apply on 10 test pieces of plain canvas.</p> <p>For plain canvas test: 5 test pieces in warp 5 test pieces in weft.</p>
8. Tear resistance (N) - Started, ISO 9073-4	Minimum of 60 N in Warp and Weft.
9. Water penetration resistance, ISO 81	<p>Test pieces of plain canvas.</p> <p>30 hPa minimum, with increasing speed at 100 mm per minute.</p>
5.b. Tensile strength (N), ISO 13934-1	<p>To apply on 10 test pieces of plain canvas and 10 test pieces with seams.</p> <p>Warp and Weft 650 N minimum.</p> <p>For each type of test: 5 test pieces in warp 5 test pieces in weft.</p>
6. Tear resistance (N), Started ISO 9073-4	Warp and Weft 40 N minimum.
7. Water penetration resistance, ISO 811	<p>Test pieces of plain canvas.</p> <p>20 hPa minimum, with increasing speed at 100 mm per minute.</p>
10. Resistance to micro-organisms on tensile strength under, ISO 13934-1 after BS6085 (soil burial - 12 days)	Maximum 30% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product.
11. Efficiency of water-repellent treatments after soaking in water	<p>Same test as point 10 on samples soaked in water in point 12.</p> <p>30 hPa minimum, increasing speed at 100 mm per minute.</p>
12. Efficiency of fungicides product after soaking in water	<p>Same test as point 13 on samples soaked in water in point 12.</p> <p>Maximum 10% of additional loss as compared with the result from point 10.</p> <p>For each type of test: 5 test pieces in warp 5 test pieces in weft.</p>
13. Tensile strength after exposure to UV and moisturizing (climatic simulation)	<p>Exposure in a climatic chamber under ISO 4892-2, type A, 360 hours, followed by tensile test under ISO 13934-1.</p> <p>Maximum 10% of strength loss on minimum required value and maximum 50% strength loss on original value of the same product.</p> <p>For each type of test: 3 test pieces in warp and 3 test pieces in weft.</p>

Graphic Reference



Graphic Reference



Shipping Marks

**Supplier's and manufacturer's logos are prohibited.** Shipping marks on the primary packaging, limited to an A4 page, shall be printed in non-toxic black indelible ink, on unlaminated paper. Other sustainable materials for printing shipping marks are highly encouraged. Shipping marks must remain readable, well-fixed, and clearly legible after a minimum of ten handlings. It shall include the specified information as detailed in the "Shipping Marks" section of the relevant Goods PO, which typically include:

UNHCR Logo

UNHCR Item Name and Item Number:

PO Number:

PO Quantity:

Consignor (Supplier & Manufacturer):

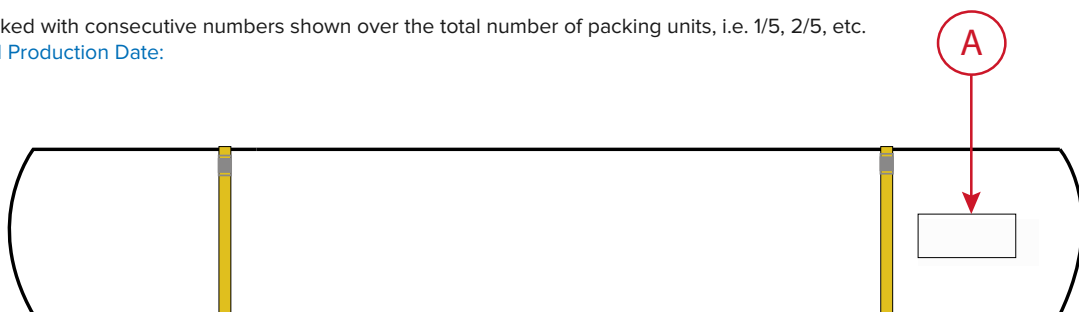
Consignee:

Country of Origin:

Destination:

**Packing Units:** Marked with consecutive numbers shown over the total number of packing units, i.e. 1/5, 2/5, etc.

**Batch Number and Production Date:**



Marking Techniques

- Laser engraving
- Printing with water-based ink
- Printing on sustainable sticky tapes
- No harmful ink/colouring should be used

### Graphic Reference for the Tag

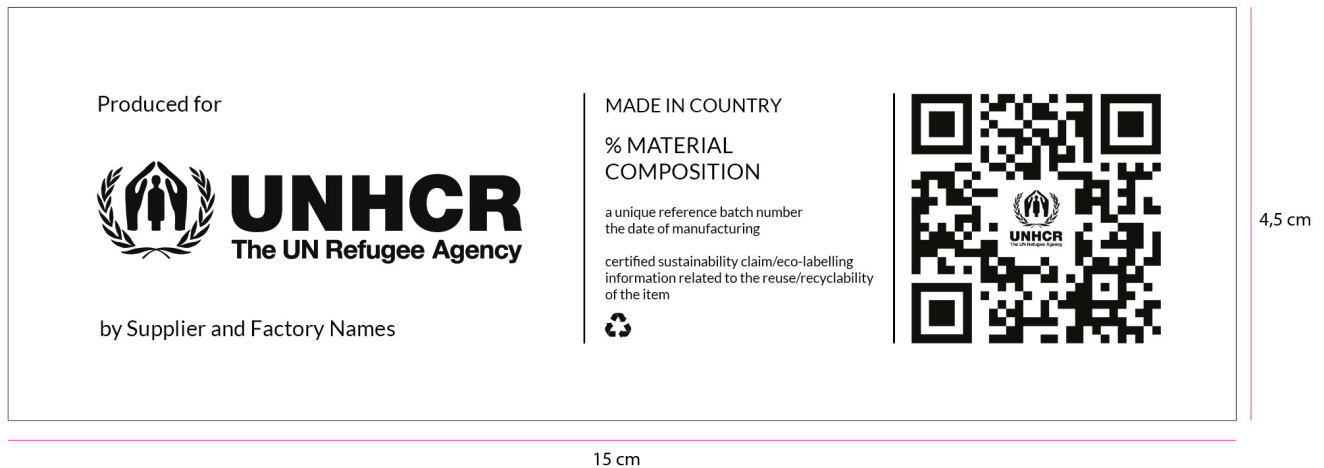
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### UNHCR Logo Application Reference

#### Horizontal logo



#### Minimum size

