

# UNHCR Environmentally Friendly Procurement

## DOCUMENT VERSION

This is the third version of the specification for 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 6, 2024**.

## BUCKET, HEAVY DUTY PLASTIC, 14L, WITH TAP, RECYCLED

Providing material assistance to forcibly displaced populations is fundamental to UNHCR's protection mandate. In an emergency, buckets are one of the Core Relief Items that UNHCR distributes as part of the assistance to the affected populations. The food-grade bucket is primarily used in emergencies as a container for water storage, protected from contamination.

## 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 serve, 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 a forcibly displaced population, 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.
- Manufacturing processes take into consideration the protection of the environment and respect for social standards.
- Products are made from sustainable materials and post-consumer-recycled (PCR) materials<sup>1</sup>.
- Packaging is made from sustainable material, ideally with a second-life purpose.
- All unnecessary single-use plastic is removed<sup>2</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 In the absence of PCR materials, pre-consumer (post-industrial) recycled materials are acceptable while cannot be considered part of the target emission reduction.

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

3 <https://www.ungm.org/Shared/KnowledgeCenter/Pages/SustProIndicators>

**Item Application Sample**


<b>Design</b>	<p>A 14L heavy-duty bucket, stackable and round, with a handle, a clipped cover and a cap that is attached to the lid. It should be easy to lift, fill up and pour from, have a good grip with no sharp edges, and be comfortable to carry for the end user. A user-friendly and accessible product design that follows Universal Design Principles.</p> <p>Note that other design solutions can be considered if they comply with the quality requirement and offer a solution for water storage that sustainably protects from pollution.</p>
<b>Capacity</b>	Minimum 14L, ISO volume closest to minimum 14L could be considered.
<b>Weight</b>	<p>Minimum weight for the bucket is 600g if polyethylene (PE) or 550g if polypropylene (PP).</p> <p>Minimum weight for the lid is 150g if PE or 140g if PP.</p> <p>Weight of handle: new, to determine, durable light options welcome.</p>
<b>Material</b>	<p>The bucket and the lid are made of a mixture of virgin and recycled (pre-consumer and/or post-consumer) food-grade plastic (for example, High-Density Polyethylene (HDPE), Low-Density Polyethylene (LDPE), Polypropylene (PP)), which is safe for food and water storage.</p> <p>The target minimum of food-grade recycled plastic in the product is 30%, but a higher and lower percentage will also be considered. Preference will be given to the product that contains the highest amount of food-grade recycled plastic while satisfying the quality and usability requirements of the product.</p> <p>The plastic handle does not need to be food-grade; however, it should ideally be 100% recycled plastic with no colorants added.</p>
<b>Lid</b>	A tight-fitting stackable lid of the same material as the bucket with an attached push-on cap. Easy to fill up and pour with the outlet of 50mm +/- 10% and clip cap on the lid. The bucket can be filled through the cap. The lid can be taken off for periodic cleaning so cannot be too tight.
<b>Tap</b>	<p>Each bucket comes with a loose, sturdy plastic tap, stored at the bottom of each bucket during shipment. At the destination, the tap can be inserted into the designated hole* in the bucket from the outside and secured by tightening the lock nut from the inside. The tap and its connection must be leak tight.</p> <p>*The hole for the tap installation should remain intended but not drilled, punched, or otherwise poked until the bucket is delivered to the end user. Likewise, for the drop test, the bucket should reach the laboratory without a pre-poked tap installation hole, and the drop test should be conducted without the tap installed on the bucket.</p>
<b>Handle</b>	A strong durable handle with an ergonomic grip, which bring comfort to the user's hand.
<b>Dimensions</b>	<p>Height is 300mm +/- 15mm.</p> <p>Top external diameter is 300mm +/-15mm</p> <p>Bottom external diameter is 240mm +/-12mm.</p> <p>If ISO volume standard bucket is offered, dimensions close to these could be considered.</p>
<b>Colors</b>	<p>Additional color pigmentation is prohibited to be introduced to the bucket body, lid or handle. It is essential that the bucket body remains sufficiently light for users to discern the liquid level within. White is the preferred color for the bucket body; however, if sourcing recycled material in pure white proves challenging, incorporating small amounts of colored recycled material is permissible. The lid and handle may be any color not explicitly prohibited.</p> <p>Colors prohibited for the bucket body, lid, and handle include black, red, and military/camouflaged colors. Incorporating small amounts of colored recycled material is allowed. Additionally, drawings are prohibited.</p>
<b>Quality of each part</b>	Strong and durable quality for a long-life span in tough conditions. Food-safe, odorless, and neutral in taste. The bottom of a bucket should be flat with no spikes.
<b>Reinforcement</b>	The top of the bucket is reinforced to prevent ovaling and other deformation. The walls shall meet the bottom of the bucket with a curved surface to prevent dirt accumulation and facilitate cleaning. The bottom must be smooth and spike-free for improved comfort when carried on the head, with a ribbed bottom to prevent damages.

<b>Stackability</b>	The buckets must be designed for stackability, with a shape that facilitates easy separation of each bucket from the stack. To ensure effortless separation, the buckets should feature robust downward extensions of the handle bars or equivalent built-in stacking stops. These elements are essential to prevent the buckets from being tightly pressed together during packaging and transportation.
<b>Compliance</b>	The bucket and all its supplementary parts should not contain toxic elements according to EN 1186-3-9 standard or equivalent international standard for food-grade materials. Shall comply with Regulation (EU) 10/2011 and its amendments or equivalent international standards for food-contact materials.
<b>Lifespan/Shelf life</b>	The life span of the bucket should be a minimum of two years and shelf life should be minimum two years.
<b>Manufacturing defects are not allowed</b>	Note, that manufacturing defects, such as warping, flow lines, burn marks, flashes, etc. which compromise the visual appearance and quality of the bucket and the lid are not allowed.

### Packaging

#### Primary packaging

Reducing plastic waste in the environment: Each individual sleeping mat should have no packaging (zero plastic).

#### Secondary packaging

- An optimal number of products should be packed in export-quality secondary packaging, preferably using sustainable material and its natural color - plastic packaging is forbidden. In case a cardboard is used, it must be unbleached and unlaminated. Inks must be non-toxic and ecologically friendly. Innovative solutions are welcome.
- Filled secondary packaging must resist without any damage to a weight or a pressure of 230 kg applied on a strong, rigid board on top of the box (equivalent weight to 6m high stacking).
- Quantity per secondary packaging: currently 20 pcs; alternative optimal amounts will be considered.
- The packing must guarantee that the buckets will not get stuck together.
- Preference will be given to innovative packaging that does not harm the product, ideally with a second-life purpose, and minimizes packaging waste.
- Ensure that user-friendliness and safety aspects of handling persons are considered in the packaging design.

#### Tertiary packaging

Secondary packaging might be packed on a pallet; in this case, they need to be wrapped in a water-tight material, preferably made of or containing sustainable material, i.e. recycled plastic or reusable material (such as tarpaulins), or other alternatives. Packaging needs to ensure that products are protected from any damage including water and moisture. Innovative sustainable solutions are welcome. Avoid compostable plastics for packaging and increase recycled content wherever possible.

All plastic packaging materials – wrapping films, straps (if any), etc. – must contain a proper recycling code to specify the type of plastic used. Use recycling codes as per ASTM International Resin Identification Coding System (RIC).

#### CRI (UNHCR) Pallets

Dimensions (L x W x H): 1150 mm (+1 cm / -3 cm tolerance) x 770 mm (+/- 1 cm tolerance) x 144 mm.

- One way pallet.
- Heat treatment according to ISPM 15.
- The relevant acceptable standard is: Grade A Stringer Pallets or 9 Block Pallets.
- For more information, please refer to the Pallet guidelines.

### Optimal shipping / Container information

In preparing shipping, the maximum number of items that can fit into a transport unit must be considered. The container layout plan will be defined on the purchase order.

20' DC container (without pallets)  
 40' DC container (without pallets)  
 40' HC container (without pallets)  
 20' DC container (with pallets)  
 40' DC container (with pallets)  
 40' HC container (with pallets)

The final number of transport units and the maximum height of loaded pallets, if palletized, will be specified in the purchase order.

### Manufacturer's marking

The product should include the following data:

- Manufacturer identification molded on the bucket.
- Manufacturing month and year molded on the bucket.
- Unique reference batch number
- Certified sustainability claim/eco-labelling
- Recycling identification symbol and code (as per ASTM International Resin Identification Coding System (RIC))

Supplier's and manufacturer's logos are prohibited. The final marking on the bucket and design needs to be approved by UNHCR before production.

### Marking on the secondary packaging

Supplier's and manufacturer's logos are prohibited. Shipping marks on the secondary packaging shall be printed in non-toxic black indelible ink. They must remain readable, well-fixed, and clearly legible after a minimum of ten handlings. In case shipping marks are printed separately on labels instead of being directly printed on the secondary packaging, the labels shall neither be plastic nor laminated and the marks should still be printed in black indelible ink. The marks shall include the specified information as detailed in the "Shipping Marks" section of the relevant Goods PO. Each box made of recycled paper must have a symbol about its recycled nature and the possibility to be recycled (see the figure under Logo and Shipping Marks on Individual Boxes).

### Marking techniques

- Laser engraving
- Printing with water-based ink
- Printing on sustainable sticky tapes

Ink/labelling must be non-toxic and ecologically friendly

**Testing**

**UNHCR will/may carry out tests as its own discretion tests to verify the quality and performance of the item.**

**The following tests are not exhaustive:**

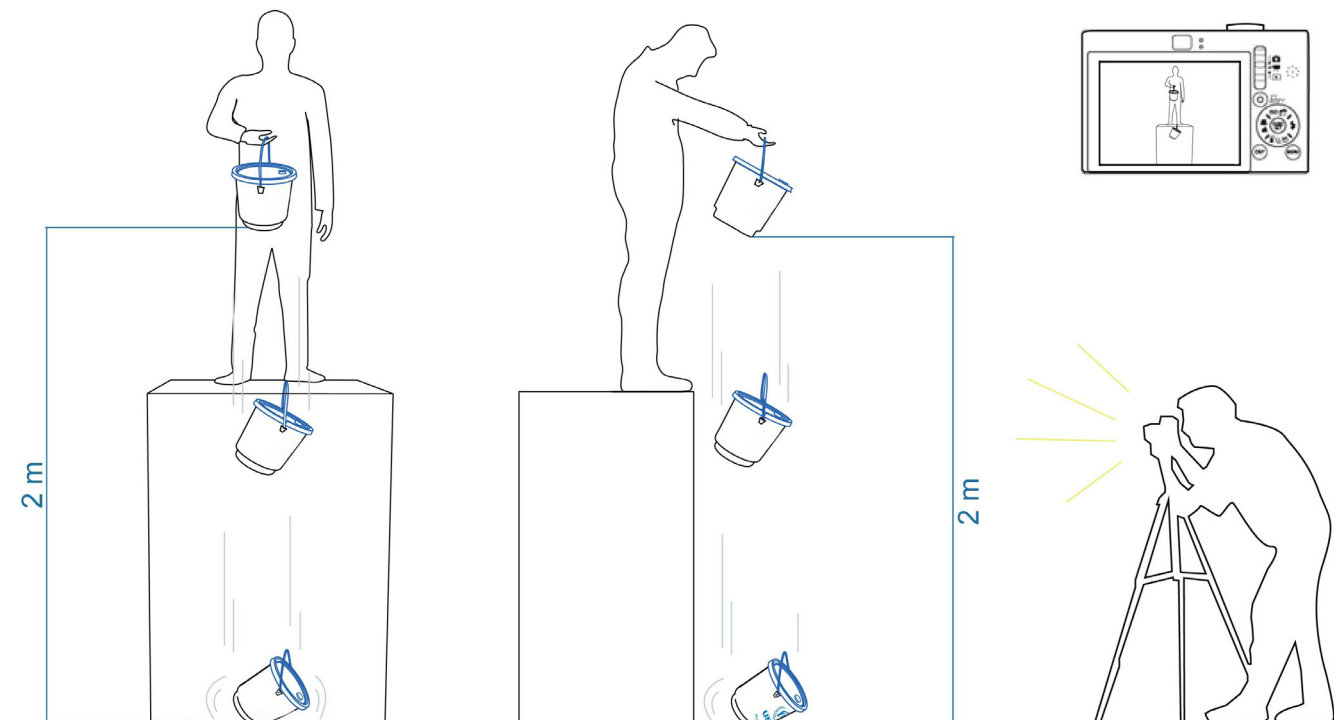
**Lid:** The lid should securely close yet be easy to open and close. To test its performance, the lid must withstand a fall on its side with the maximum volume of water inside. A bucket filled with water is placed on the floor and pushed until it topples over onto its side. The lid must remain intact, and the cap must not open.

**Durability:** Items will be subjected to simulations to verify their ability to withstand various conditions while remaining functional. Durability will be evaluated in field conditions during normal operation.

**Handle:** The handle must also resist 28kg traction in a normal usage position. Other tests but not limited to repeated load test, side load test, dynamic load test and twist test.

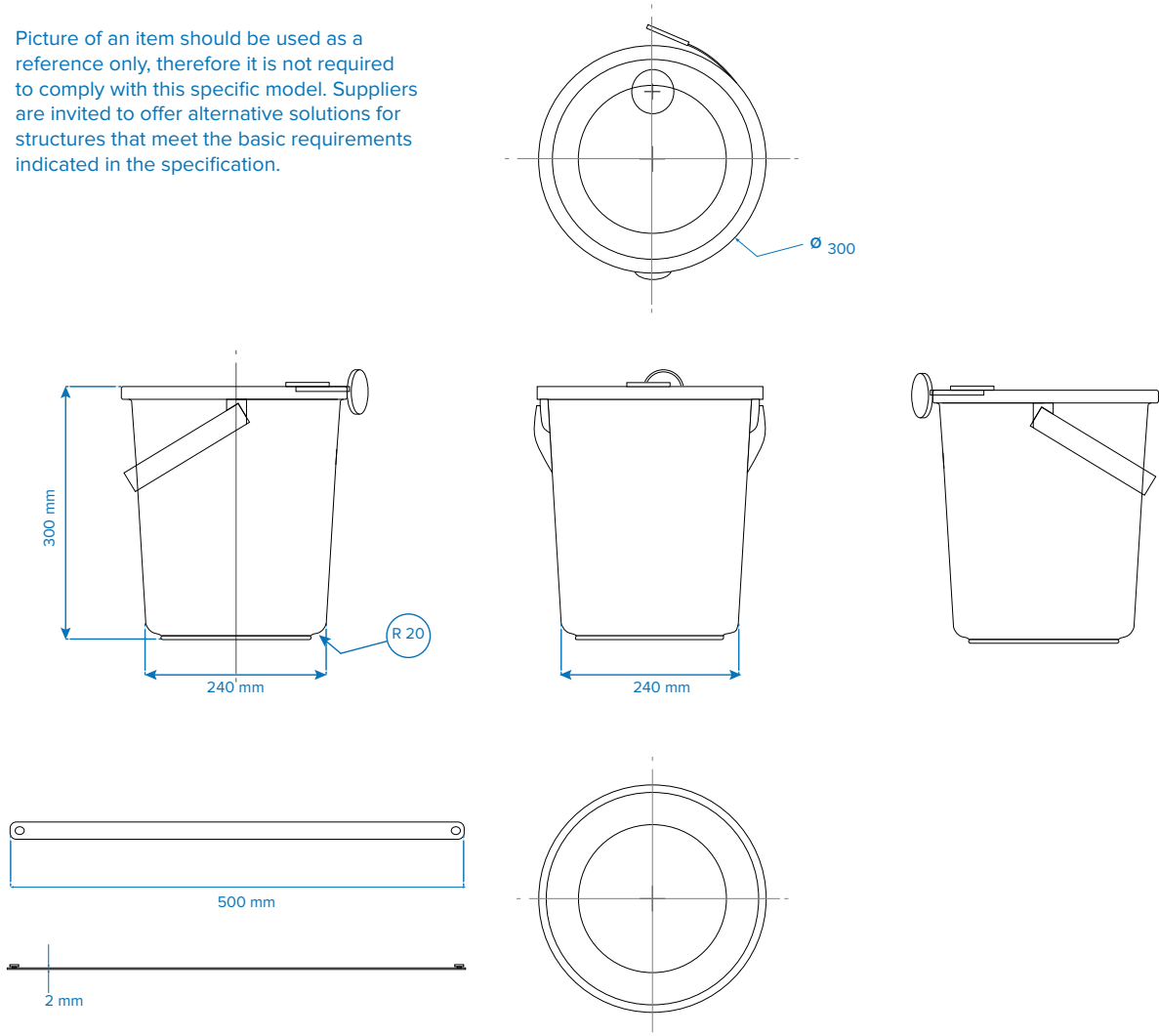
**Flexibility test:** The bucket must return to its original shape without damage after applying pressure on the two sides of the top rim to make them touch one another in the middle.

**Drop test:** The bucket filled with 14L water or 2cm below the top and closed with the lid must resist without damage to two consecutive vertical drops from 2 m high from the bucket bottom to the smooth flat concrete floor. Requirement: the bucket should not break. Remark: the lid opening and deformation without breakage will not be considered a failure. For the drop test, the bucket should reach the laboratory without a pre-poked tap installation hole, and the drop test should be conducted without the tap installed on the bucket.



**Graphic Reference**

Picture of an item should be used as a reference only, therefore it is not required to comply with this specific model. Suppliers are invited to offer alternative solutions for structures that meet the basic requirements indicated in the specification.



**Detailed View**

**Capacity:** 14 L

**Dimensions, ( $\pm 5\%$ ):**

**Height:** 300mm  $\pm 15$ mm

**Top external diameter:** 300mm  $\pm 15$ mm

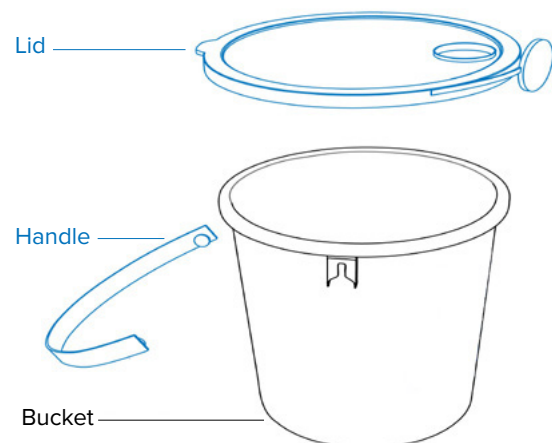
**Bottom external diameter:** 240mm  $\pm 12$ mm If ISO volume standard bucket is offered, dimensions close to these could be considered.

**Minimum Weight:**

Bucket: 600g if PE or 550g if PP

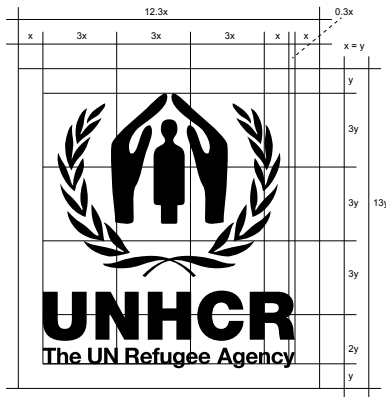
Lid: 150g if PE or 140g if PP

Handle: a new attribute, weight to be determined, durable light options are welcome

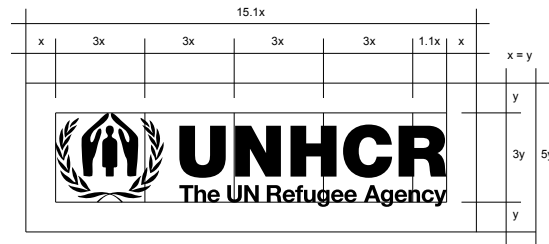




### UNHCR Logo Application Reference



UNHCR Vertical Visibility logo



UNHCR Horizontal Visibility logo

### Logo and Shipping Marks on Bucket Boxes

The front and back of the Transport Carton (the largest surface sides of the carton) should include only the UNHCR visibility vertical logo. The two other opposite sides should include the UNHCR visibility vertical logo with the shipping marks area (below the logo). The top side should include the horizontal visibility logo on one of the closures and the content list on the other closure.



## Logo and Shipping Marks Application Reference



A. Application of the logo and shipping marks for the front and back sides of the Transport Carton:

On the front and the back sides of the Transport Carton, the vertical logo is to be placed centrally, occupying a minimum of 60% surface space and without any image distortions as per Graphic 1.1.

In case of a rectangular shape carton, the UNHCR horizontal visibility logo should be used instead of the UNHCR vertical visibility logo, having a better usage of the surface space (Graphic 1.2).



Graphic 1.1



Graphic 1.2

## Technical Drawing



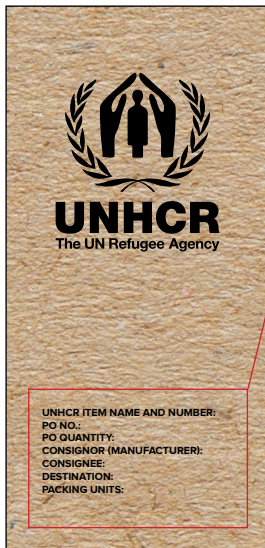
**Logo and Shipping Marks Application Reference**

**B. Application of the logo on the two other opposite sides of the Transport Carton:**

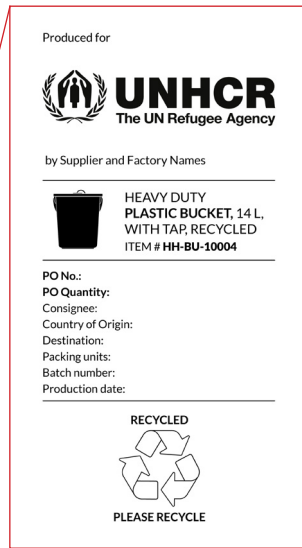
On the two other opposite sides of the Transport Carton, the vertical logo and shipping marks are to be placed centrally, occupying a minimum of 60% surface space (45% for the UNHCR visibility logo and 15% for the shipping marks) without any image distortions, as per Graphic 2.1.

In case of a rectangular shape carton, the UNHCR horizontal visibility logo should be used instead of the UNHCR vertical visibility logo, having a better usage of the surface space (Graphic 2.2) The shipping marks to be placed on the box are typically as follows.

**Important:** In order to respect the integrity of the logo, the shipping marks area should be visually separated from the lower part of the visibility logo and framed with the same indelible ink as the detailed information as per Graphic 2.1.



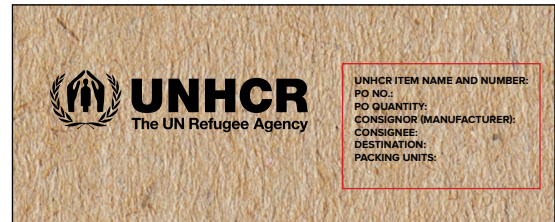
Graphic 2.1



Shipping Marks option 1



Shipping Marks option 2



Graphic 2.2

**Technical Drawing**





**Logo and Shipping Markings Application Reference**

**C. Application of the logo and shipping marks on the top side of the Transport Carton:**

On the top side of the Transport Carton, the UNHCR horizontal logo is to be placed centrally on one of the closures, occupying a minimum of 60% surface space without any image distortions.



Graphic 3

**Technical Drawing**

