

NEW SELF-STANDING FAMILY TENT

THE BACKGROUND

For decades, UNHCR has been confronted with the challenge of delivering emergency shelter in a timely and efficient manner. While tents are often considered to be expensive and having a limited lifespan, they also provide lifesaving assistance and can be rapidly delivered and installed. In 2013 alone, UNHCR distributed more than 117,000 tents worldwide.

UNHCR continues to strive for greater efficiency in responding to people's ever-growing shelter needs. Therefore, since 2009, UNHCR together with the International Federation of Red Cross and Red Crescent Societies (IFRC) and the International Committee of the Red Cross (ICRC) has invested considerable effort in research and development aimed at increasing the quality and performance of tents.



THE PROCESS

Given the evolving nature of shelter technology and materials, research and development projects in the sector have to be continuous, vibrant and flexible. Testing, quality control and visual inspection of products remains at the forefront of UNHCR's response.

In 2013, UNHCR, IFRC and ICRC proceeded with field testing of three different tent designs (Dome Tents, Hexagonal Tents and Umbrella Square Tents) in three respective locations: Burkina Faso, Burundi and Tanzania.

In Burkina Faso, UNHCR and its partners studied the benefits and drawbacks of each tent with regard to its ventilation, insulation, resilience to extreme weather conditions, space, as well as its cultural suitability and the beneficiary preferences.

The outcome of the field tests undertaken by the three agencies led to the development of the NEW SELF-STANDING FAMILY TENT with an improved design of the dome tent and new technical specifications.



THE OUTCOME

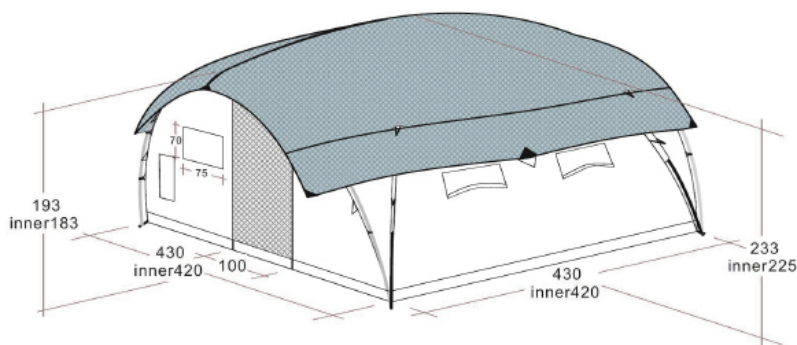
THE NEW SELF-STANDING FAMILY TENT PROVIDES:

- Enhanced Protection and thermal comfort
- Enhanced Privacy
- Enhanced beneficiary satisfaction
- Lighter weight material
- Self-supporting structure
- Fire retardant properties

CHARACTERISTICS COMPARISON

REQUIREMENTS	STANDARD FAMILY TENT	SELF-STANDING FAMILY TENT
Weight	56 kg (without shade net)	45 kg (including shade net)
Synthetic Material	Poly-cotton	PE and Polyester canvas
Winterization	Available and in use	Current winterization kits adaptable to new tent
Self-Supporting	Requires pegs and guy ropes to stand	Fully self-standing without pegs and guy ropes (these are required to secure the shade net)
Fire retardant	Poly-cotton is flammable	Development of the fire retardant tarpaulin is on-going
Cost (average)	\$ 400	\$ 400

THE DESIGN



IMPROVED DESIGN: the dome tent enhances living space and comfort.

SELF-SUPPORTING STRUCTURE: the tent is self-standing and self-tensioning.

SHADE NET: drastically increases the thermal performance of tents in hot climates.

INNER PARTITION: divides the tent into two inner autonomous spaces, providing families with an additional degree of privacy.

OUTER TENT: provides good protection against dust, wind, rain, snow, insects and small fauna.

WINTERIZATION KITS: the current winterization kits can be adapted to the new design to ensure thermal comfort in extreme conditions and a better protection against cold weather.

THE WAY FORWARD / NEXT STEPS

In 2014, UNHCR together with IFRC and ICRC will undertake the field testing of 30 self-standing family tents in different locations with varying climatic conditions. In addition to further assessing the technical performance of these tents, beneficiary acceptance and potential design modifications will be surveyed.

In parallel, efforts to improve the fire retardant properties of the tent will continue to ensure the safety and protection of people of concern using innovative technology and materials.

The technical specifications of the self-standing family tent will subsequently be revised to reflect the field test findings.