

QSE Working Group



Unified Technical Specifications: Inner Liner for the Geodesic Family Tent 18m²

Nonconformities classification: Critical: **C**; Major: **M**; Minor: **m**

	Characteristics	Non conformities classification	QC type	AQL	Requirements
	Instruction for testing				All test pieces for tensile and tear tests should be cut parallel to the direction of the fibres, in warp and in weft. The fibres should run from one end to the other end of each test piece. Dimensional tolerance: Unless otherwise specified, a maximum tolerance of +/- 1% is accepted on all dimensions. A product is deemed acceptable only if the same sample passes all criteria.
1. Specifications: Materials					
1.1 Specifications for the inner tent liner canvas	1. Composition	C	Ok/Nok	0	ISO1833; Polyester fabric, preferably recycled polyester, or polycotton cotton: 40%(±10), polyester: 60%(±10) preferably from recycled origin.
	Use of recycled material	n/a			Depending on the terms of the contract, using material from recycled origin can be either mandatory or preferred. As described by the Circular Plastic Alliance of the EU commission in EN 45557 and the US Federal Trade Commission Green Guides in accordance with ISO14021 principles, recycled plastic includes post-industrial recycled (PIR) and post-consumer recycled (PCR), it excludes reworked material. In this last case, even though using waste from the same production is accepted, it does not count as material from recycled origin. Note that PCR is preferred to PIR.
	2. Specific weight	M	Measurement	4,0	ISO3801; 130g/m² ±15% in finished state. net weight
	3. Colour	m	Measurement	6,5	White or whitish
	4. Finishing	m	Measurement	6,5	Soft-touch and pleasant feel fibre yarn fabric (similar to cotton fabric)
	5. Water-vapour permeability	M	Measurement	4,0	ISO17229; Minimum 2000g/m²/24h.
	6. Tensile strength	M	Measurement	4,0	ISO13934-1; Warp and weft 300N minimum.
	7. Tear resistance, started	M	Measurement	4,0	ISO13937-2; Warp and weft 20N minimum.
	8. For polycotton only. Tensile strength resistance after exposure to micro-organisms	M	Measurement	4,0	Under ISO 13934-1 after BS6085 (soil burial - 14 days). Apply on 10 test pieces of plain canvas30% maximum strength-loss on minimum required value and 50% maximum strength-loss on original value of the same product. 5 test pieces in warp direction, 5 test pieces in weft
9. Flame retardant under CPAI84	C	Measurement	0,0	Pass CPAI84 section 6. Ageing under ISO4892-2, type A, 180 hours.	
1.2 Specifications for the mosquito net	1. Material	C	Ok/Nok	0	ISO1833; Polyester
	2. Fabrication	M	Measurement	4,0	ISO8388; Warp knitted
	3. Mesh size	M	Measurement	4,0	20 to 25 holes/cm²
	4.Openness	M	Measurement	4,0	Minimum 55%
	5. Shrinkage	M	Measurement	4,0	ISO5077; 5% maximum
	6. Bursting strength	M	Measurement	4,0	ISO13938; 600kPa minimum
	7. Bursting strength after exposure to UV and moisturizing (climatic simulation).	M	Measurement	4,0	Exposure in a climatic chamber under ISO 4892-2, type A, 180 hours, followed by bursting test under ISO13938 50% maximum strength-loss on original value of the same product, <u>and</u> not less than 420kPa Number of test pieces: 3 test pieces of each type.

2. Specifications: Characteristics of the inner tent liner				
2.1. General description	M	Ok/Nok	4,0	The inner tent liner hangs inside the main tent; it covers the entire inner surface of the tent, apart from the ground.
	M	Ok/Nok	4,0	The inner tent liner has 6 windows, 2 doors, and 2 ventilation corresponding to the main tent windows, doors and ventilations. Accessing the ventilation shutters of the main tent is possible through the inner liner ventilation openings.
	M	Ok/Nok	4,0	At the center of the liner roof, a slot is provided to allow passing the main tent central anchoring system (see Tent specification 3.4).
2.2. Inner tent liner dimensions	M	Measurement	4,0	The inner tent liner, when hooked to the main tent, must have a centre height of 220 cm. All dimensions are designed to ensure a 10cm air gap between the main tent and the inner tent liner.
	M	Ok/Nok	4,0	At the bottom of the walls, the liner is attached to the main tent in order to have a proper tensioning.
2.3. Inner doors	M	Measurement	4,0	Each door opening is 0,9m wide and 1.7m high. The door panels are made with the same polyester material.
	M	Measurement	4,0	The doors are closing with 2 vertical zippers, with 10cm overlapping on each side. Loop and hooks system must be provided to keep the door opened when rolled up.
2.4. Inner tent liner suspension system	M	Measurement	4,0	The inner tent liner is attached to the main tent with Velcro brackets and plastic buckles, located along each pipe, and at 100mm above the ground level. There are 42 Velcro straps provided on the inner liner, corresponding to the position of the 42 plastic buckles of the main tent (see main tent specification).
2.5. Inner tent liner ventilation system	M	Measurement	4,0	The inner tent liner has 2 triangular vents of 850mm length x 550mm height, made of mosquito netting. The vents are located on both sides of the tent matching with the main tent vents. They can be opened and closed with zippers on two sides. These vents have shutters made of the same material as the inner tent liner, closing with zippers. Pictures 1 and 2
2.6. Inner tent liner windows	M	Measurement	4,0	The inner tent liner has 6 windows of equal size and location with the main tent windows. These windows have a fixed mosquito net. The windows can be closed with flaps, made of the same material as the inner tent liner, opening downwards and closing with a 25mm Velcro strip on three sides. side windows: Pictures 3 and 4; gable windows: pictures 5 and 6
2.7. Accessories inside the inner tent liner	M	Measurement	4,0	To hang light-weight items, four 20mm-hooks (mounted on 20mm webbing) are available. These hooks are located under the two diagonal cross arches, where the highest inner tent liner hook connecting to the main tent is located. Pictures 7 and 8
	M	Measurement	4,0	Six pouches, made of inner liner material, of 250 x 300mm inner dimension, are available inside the inner tent liner under each window. Picture 9
	M	Measurement	4,0	Four A5 pouches made of net are available under the transversal arch, at 500mm from either side of the centre of the roof. Picture 9
	M	Ok/Nok	4,0	The 10 pouches are stitched on their upper edge and hang freely.
2.8. Inner partition	M	Measurement	4,0	One partition divides the inner tent liner into two equal spaces. It runs from either side to the opposite side. The partition is made of the same polyester material, and is stitched to the inner tent liner along the roof line that goes from the left corner to the right corner (laying on the floor with 20cm). They can open in the centre (overlapping of 30cm). Each half-partition can be maintained open with a pair of laces or loop and hook system. Pictures 10 to 13
2.9. Chimney reinforcement	M	Measurement	4,0	A chimney reinforcement (non-perforated) must be located on one side of the tent, matching with the chimney patch of the main tent, with same material and same dimensions. The tent fabric is removed and replaced with the chimney patch.
	M	Measurement	4,0	Velcro is available all around to position the liner chimney patch with the tent chimney patch.
2.10. Fire safety information	M	Ok/Nok	4	Fire safety information must be available inside the inner tent liner. This must be printed with durable print on a piece of a piece of strong material of 15cm x 20cm stitched inside the inner tent liner next to the chimney protection. Picture 14
2.11. Manufacturer identification	M	Ok/Nok	4,0	Made with a strong material tag of 10x10cm with durable print, and stitched inside the tent liner, in a vertical seam at a corner. The tag should include the manufacturer's name and the batch number and the recycling sign for Polyester.

Picture 1



Picture 2



Picture 3



Picture 4



Picture 5



Picture 6



Picture 7



Picture 8



Picture 9



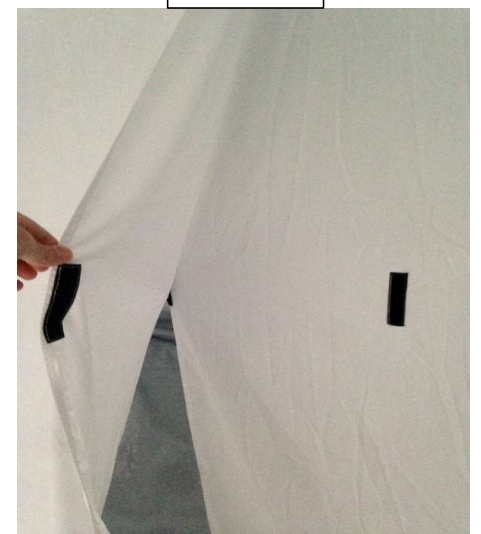
Picture 10



Picture 11



Picture 12



Picture 13



Picture 14

The tent is Flame Retardant to an extend that allows 4 minutes evacuation time. Don't use open fire in the tent. use a stove with flue pipes. Place the stove away from the walls. floor protection is mandatory. Cut a cross in the fireproof fabric patch to pass the flue pipe and cut away the plastic layer. Always maintain some ventilation, especially when the stove is in use. Do not lock the doors when people are inside the tent.	الخيمة مصنوعة من مادة مقاومة للاشتعال تتيح لكم أربع دقائق للإخلاء. لا تشعلوا نارا داخل الخيمة مباشرة. بل استعمالوا موقدًا بمدخنة. ابتعدوا الموقد عن جدران الخيمة واستخدموا عازلا لحماية أرضية الخيمة. القطعو نسيج الخيمة المضاد للحريق في شكل + لتعريض أنبوب مدخنة الموقد وتخلصوا من الطبقة المصنوعة من البلاستيك. احرصوا على ضمان حد أدنى من التهوية دائما، وخصوصا عند استخدام الموقد. لا تكتفوا مدخل الخيمة بقلع عند وجود أشخاص داخل الخيمة.
Tente traitée retardateur de feu, laissant un temps d'évacuation de 4 minutes. Ne pas utiliser de feu ouvert dans la tente, mais un poêle avec cheminée. Écarter le poêle des parois et utiliser obligatoirement une protection de sol. Découper le tissu anti-feu en croix pour passer le tuyau, supprimer la partie en matière plastique. Toujours maintenir une ventilation minimale, surtout quand le poêle est allumé. Ne pas fermer la tente avec les cadenas si quelqu'un se trouve à l'intérieur.	Tienda retardante de fuego ofreciendo 4 minutos para evacuar el sitio. Nunca haces fuego abierto en la tienda, usa una estufa con chimenea. Aleja la estufa de las paredes y protege obligatoriamente el suelo. Corte una cruz en la tela antifuego para pasar la chimenea, y elimine el plástico. Mantenga siempre una ventilación, particularmente cuando se usa la estufa. Nunca cierre las puertas con candado si alguien esta a dentro.



**Caution
Fire risk**