



International Organization for Migration (IOM)
The UN Migration Agency

AQL Geodesic Tents Specifications and Quality

IOMQC-AQLS00V9
Ver9.0
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Nonconformities classification: Critical: **C**; Major: **M**; Minor: **m**

Items	Characteristics	Nonconformities classification	QC type	AQL	QC Inspection at IOM warehouses and lab testing Unless otherwise specified, a maximum tolerance of +/- 1% is accepted on all dimensions.
1. Specifications: Materials					
1.1 Specifications for all tent components made of PE sheet (roof, walls, mud-flaps, ground sheet, shade-fly, and other PE sheet components)	1. Material for the base fabric	C	Ok/Nok	0	Woven high-density polyethylene (HDPE) black fibres
	2. Material for the coating	C	Ok/Nok	0	White low density polyethylene (LDPE) coating on both sides
	3. Tear strength at state of origin	M	Measurement	4	Under ISO4674-1B 2003, with a test piece of 200x200mm as described in ISO 4674 annex B. Minimum 100N
	4. Tensile strength at state of origin	M	Measurement	4	Under ISO1421-1_1998. Minimum 500N and 15% to 35% elongation in warp and weft
	5. UV resistance measured as remaining tensile strength after UV exposure.	M	Measurement	4	Tested with ISO1421-1 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak). Minimum 80% of the original value of the actual product, AND not less than 475N.
	6. Weight	M	Measurement	4	Under ISO3801. 190g/m ² ± 20g net weight
	7. Flame retardant	C	Ok/Nok	0	EN13823+A1. Minimum class D, s2, d2. Minimum time to reach large wing external edge: 4minutes (LFS)
	8. L.a.b Coordinates	M	Measurement	4	Under ISO105J01 for the white coating colour. Minimum L : 82"a" value between -1.7 and +1.5"b" value between -4.5 and 0
	9. Opacity	M	Measurement	4	Measured as minimum reflection and maximum transmission, in the range of visible light and near infrareds. Measured under ISO 13468-1. Values should be measured respectively from 350 to 750nm, and from 750 to 2500nm wavelength. The final result is the average of the averages in each range. Minimum total reflection: 35% Maximum total reflexion: 50% Maximum total transmission : 5%
1.2 Specifications for the waterproofing of the tent	1. Water-penetration resistance	C	Measurement	0	ISO811 . The test pieces include seams. Seams tapes are positioned on the inner face of the tent (opposite to the water). 30hPa minimum, increasing speed at 100mm per minute
	2. Efficiency of waterproofing tape after UV and moisturizing.	C	Measurement	0	Exposure in a climatic chamber under ISO4892-2, type A, 360 hours. Expose the outer side of the tent to the UV. The test pieces include seams. Seams tapes are positioned on the inner face of the tent (opposite to the UV and to the water). 30hPa minimum, increasing speed at 100mm per minute.
	3. Rain-penetration resistance	C	Ok/Nok	0	ISO5912:2003 The test piece is the complete tent with the shade-fly in place. (attention: ISO5912:2011 does not apply). There should be no water penetrating inside the tent, including through capillarity action. Apply procedure as per point 4.2.11 in ISO5912:2003 and point 5.6 plus following: A visual control from the inside of the tent, while the artificial rain is on, must be done after 2h and 5h, with the complete tent. The test operator should ensure that the set up of the test will not create condensation inside the tent that could be interpreted as leakages.
	1. Material, colour	M	Ok/Nok	4	ISO1833 polyester canvas, red or blue.
	2. Weight	M	Measurement	4	ISO3801 125 g/m ² +/-20%

1.3 Specifications for the pipe sleeves material	Nonconforming characteristic (number of nonconforming items \geq Rejection number. ISO-2859-1) implies 2 times without penalties, third time a penalty of 0.5% of the value of the total PO, fourth time 1 %, and + 0.5% at every occurrence for the duration of the contract per each nonconforming characteristic. >10% of nonconforming items is subject to lot refusal.	M	Measurement	4	ISO13937-2Minimum 50N
	4. Tensile strength	M	Measurement	4	ISO13934-1Minimum warp: 900NMinimum weft: 500N
	5. Tensile strength after exposure to UV and moisturizing.	M	Measurement	4	Exposure in a climatic chamber under ISO4892-2, type A, 360hours, followed by tensile test under ISO13934-1..50% maximum strength-loss on original value of the same product and not less than:Warp: 630N Weft: 350N Number of test pieces: 3 test pieces in warp direction, and 3 test pieces in weft.
1.4 Specifications for the mosquito nets	1. Material	C	Ok/Nok	0	ISO1833 Polyester
	2. Fabrication	C	Ok/Nok	0	ISO8388 Warp knitted or woven fabric
	3. Mesh size	M	Measurement	4	20 to 25 holes/cm ²
	4.Openness	M	Measurement	4	Minimum 55%
	5. Shrinkage	M	Measurement	4	ISO5077 5% maximum
	6. Bursting strength	M	Measurement	4	SO13938 600kPa minimum
	7. Bursting strength after exposure to UV and moisturizing (climatic simulation).	M	Measurement	4	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, and not less than 420kPa. Number of test pieces: 3
1.5 Specifications for the outer- tent guy points	1. Material composition	C	Ok/Nok	0	Polyethylene, polypropylene or polyester ropes, Polyester straps, steel rings, elastic device.
	2. Tensile strength ISO13934 on the 6 main guy point lower parts. Includes: Rope loop, elastic device, metallic ring, snap-hook, one rope section. The test pieces should be submitted to 2 blank extensions to 3000N before doing the measurement test itself.	M	Measurement	4	3000N minimum resistance for the complete guy point. Sliding of the guy-runner not permitted. Number of test pieces: 2 Extension of the elastic to the maximum of the limiter should be reached under a traction force between 700N and 1000N
	3. UV resistance in percentage of tensile strength-loss.	M	Measurement	4	ISO13934 after exposure in a climatic chamber under ISO4892-2, type A, 360hours, on the bottom part of the guy points. Includes: Rope loop, elastic device, metallic ring, snap hook, one rope section. 50% maximum strength-loss on original value of the same product and not less than 2000N. Number of test pieces: 1 Extension of the elastic to the maximum of the limiter should be reached under a traction force between 500N and 1000N

	4. Tensile strength ISO13934 on the 16 tent guy point attachments to the tent and on the 14 tent guy point attachments to the shade fly. Includes: The entire PVC reinforcement, strap, buckle, eyelet, runner, one rope section of 6mm.	M	Measurement	4	1400N minimum Number of test pieces: 3
	5. Colour	M	Ok/Nok	4	Black ropes and straps, galvanized steel, red plastic tensioning runners, or hard wood runners.
1.6 Specifications for the outer- tent guy point reinforcements	1. Material	C	Ok/Nok	0	White PVC coated polyester 540g/m ² +/-15%, with PES 175g/m ² +/-15%
	2. Tensile strength	M	Measurement	4	ISO1421-1 2000N minimum warp and weft
	3. Tear strength	M	Measurement	4	ISO 4674-1 (method B) 300N minimum warp and weft
	4. Tensile strength	M	Measurement	4	ISO1421-1 after UV exposure in a climatic chamber under ISO 4892-2, type A, 360 hours 50% maximum strength-loss on original value of the same product and not less than 1000N in warp and weft.
	5. Tear strength	M	Measurement	4	ISO 4674-1 (method B) after UV exposure in a climatic chamber under ISO 4892-2, type A, 360 hours 50% maximum strength-loss on original value of the same product and not less than 150N in warp and weft.
1.7 Specifications for the outer- tent secondary attachment points	1 Tear strength	M	Measurement	4	ISO13934 of the 20 secondary brackets for attachments points to pipes, Velcro system or hook system. Test piece includes: The entire PVC reinforcement, strap with Velcro or hooks. The traction must be applied with an 18mm diameter hook simulating the tent pipe(This can be a short pipe of 18mm with a rope passing through). The attachment point is closed around the 18mm hook as it is when in use. Minimum 250N
1.8 Specifications for the frame components	1. Type of aluminium:	M	Measurement	4	6061 T6 or higher strength alloy
	2. Tensile strength:	M	Measurement	4	Minimum 310 N/mm ²
	3. Yield strength:	M	Measurement	4	Minimum 280 N/mm ²
	4. Young's Modulus:	M	Measurement	4	69000 N/mm ² +/- 5%
	5. Pipe dimensions for the main pipes:	M	Measurement	4	Outer diameter: 18.50mm +/-0.5mm Thickness: 1.2 mm (+/-1%)
	6. Pipe dimensions for the 100mm connectors:	M	Measurement	4	Outer diameter adapted to main pipe Thickness: 1.5 mm (+/- 1%)
	7. Pipe dimensions for the tent pole repair splint:	M	Measurement	4	Inner diameter adapted to main pipe Thickness: 1.2mm (+/- 1%) Length: 200mm
	8. Elastic rope dimension	M	Measurement	4	Diameter: 3.3mm, length: 6.1m, +/-15%
	9. Elastic rope recovery factor Tensile strength Type	M	Ok/Nok	4	Elastic rope recovery factor: 60% ±5% Tensile strength: minimum 100N Type; 10 strands cold weather resistant
1.9 Specifications for hammer	1. Type:	m	Ok/Nok	6.5	Sledge hammer, 1kg head, 30cm total length, wooden handle. In accordance with ISO 15601 and the specification listed below
	2. Handle:	m	Ok/Nok	6.5	No chips, rough surfaces, holes or knots. Smooth surface. Strong dry flexible wood. Handle to have a counter-conical shape (like a hoe) that retains the handle without added parts Moisture minimum 10% and maximum 15%, under ISO 3130.
	3. Pull apart test:	M	Ok/Nok	4	Clamp head in a vice jaw after two series of 25 vigorous blows from varying delivery angles. Apply traction of 500N while trying to pull out the handle; there should be no damage to the hammer's head or handle, and the handle should remain firmly attached to the head.

1.10 Specifications for other accessories	1. Zip fasteners	M	Measurement	4	Minimum 700N lateral traction under ISO 5912
	2. T pegs	M	Ok/Nok	4	The peg being clamped vertically in its middle in a vice jaw, it must resist 25 vigorous hammer blows delivered straight vertically on its top, without breaking or bending.
2. General points for finished product					
	2.1. Seams and stitching	M	Ok/Nok	4	All seams that are subject to possible tension must be double lock stitched or double row binding, waterproof The stitches can be waterproofed with tape on the inner side where required. Stitching produces strong, long-lasting, neat and professional looking seams. The stitch count as well as UV and rot-proof sewing threads must be appropriate and suited to the fabric. Stitching must provide strong, waterproof seams with at least the same lifespan as the tent. The seams must be oriented to facilitate the unimpeded runoff of rain: avoid creating water lines or water pockets. Wherever possible, the colour of the sewing thread should be compatible with the fabric colour
	2.2. Ropes, webbing bands, toggles, loops, reinforcement nettings and all other accessories	M	Ok/Nok	4	All ropes and webbing bands must be heat cut. All ropes are knotted to the tent at the factory. All of the above-mentioned items must be rot-proof and UV-proof (to the same degree as the tent canvas to which they are sewn). All accessories attachments must be waterproof. . Laces or loops of the main tent and shade-fly can be made of the PE material or PVC material of the tent.
	2.3. Eyelets	M	Ok/Nok	4	All metal eyelets must be rustproof and correctly placed, with an inner diameter adapted to the intended use.
	2.4. Metal rings	M	Ok/Nok	4	All metal rings and snap-hooks must be rustproof galvanized, and the rings must be closed with strong welding.
	2.5. Long-term storage	M	Ok/Nok	4	The tent must be treated and packed in such a way that the tent can be stored for a 5-year minimum under proper storage conditions without any damage or reduction in performance, including in tropical countries with high level of moisture. The tent must be manufactured and packed in clean and appropriate conditions to avoid contamination from soil, dust and other contaminants. Storage on pallets allowing air circulation is recommended.
3. Specifications: Characteristics of the outer tent with ground sheet					
3.0. General description of the main tent-fly		Views		Pictures 1 - 8	
3.1. General description of the main tent-fly	Type	M	Ok/Nok	4	The tent has an hexagonal footprint. The tent must be comprised of several PE cloth sections, forming the general shape of the tent. The seams must run from the top centre down to the floor level, avoiding horizontal lines when possible. The outer tent must be supported by 5 identical cross arches. It is secured with 10 guy line systems attached on 16 reinforced attachment points. Outside of the tent, on the six sides, the bottom of the wall is extended with mud-flaps lying horizontally on the ground with 250mm horizontal part. On the horizontal part of the mud flaps, there is a continuous pocket of 150mm width, all around, except before the doors, made with the same PE material stitched on top of the flap. There are holes of 20mm every 0.5m at the pleat to allow water to run off from these pockets. The pockets sides are stitched in order to divide the side length in 3 equal parts on the short panels, and 5 equal parts on the long panels. Pictures 9 - 10

3.2. Dimensions / erecting system	Outer dimensions, Centre height:	M	Measurement	4	2.40m
	Outer dimensions, Width:	M	Measurement	4	4.33m
	Outer dimensions, Length:	M	Measurement	4	5.58m
	Outer dimensions, Doors height:	M	Measurement	4	1.80m
	Erection system	M	Ok/Nok	4	<p>The tent is suspended to the pipes and maintained in position by 100mm high sleeves to insert the pipes.</p> <p>There are two continuous sleeves for the cross arches pipes. The ends of the sleeves are located at 1800 mm above the ground. There is one median sleeve, interrupted at the centre of the tent. The ends of the sleeve are located at 1800 mm above the ground.</p> <p>At both ends of each pipe sleeve, there is a 100mm Velcro all around to attach the shade-fly.</p> <p>The two sloped pipes are attached to the tent with eight sleeve sections of 100mm each, positioned every approx.300mm for the upper part.</p> <p>These sleeve sections are carrying a 50mm Velcro all around to attach the shade-fly. Pictures 11-12</p>
3.3 Anchoring system, outer guy lines	Requirements	M	Ok/Nok	4	<p>The pipe-ends are inserted into eyelets on each side or into 4 foot plates in the corners. Foot plates with a webbing loop large enough to insert one man-foot (easy for setup). Picture 13</p>
		M	Ok/Nok	4	<p>The 2 reinforcements carrying the 3 side eyelets for connecting the pipes are made of PVC as per 1.7. with minimum 300mm long stitched to the tent. Pictures 14-15</p>
		M	Ok/Nok	4	<p>The section of pipes corresponding to the walls are attached to the tent with straps, and secured with Velcro.</p> <p>The attachment points to the tent are reinforced with PVC coated Polyester pieces to enable the proper tensile strength as per part 1.7. and distribute the stress on the stitching of the guy point to the tent. Main points with minimum 200mm insertion length in the seams. Secondary points with minimum 100mm insertion length in the seams. Pictures 16</p>
		M	Ok/Nok	4	<p>There are 16 main Velcro brackets supporting the 16 guy ropes. There are 20 secondary Velcro bracket systems.</p> <p>The 4 straps where the pipes are crossing are longer to enable attaching the pipes together. Pictures 17-25</p>
		M	Ok/Nok	4	<p>Tolerance for guy points position: +/-5%, the dimensions are measured from the ground level to the centre of the guy point component.</p> <p>Ten guy lines attached to 6 metal pegs, including:</p> <ul style="list-style-type: none"> - Six main guy lines positioned in the six corners of the tent. They split each into two attachment points to the tent, 4 on the corners are located at 1.4m and at 0.6m from the pipe ends; and 2 on the sides are located at 0.85m and 1.55m from the pipe end. - Four secondary guy lines attached to the sloped pipes located at 1.4m from the pipe ends. <p>These 10 guy lines are attached to the tent with sixteen 40mm webbing, forming the 16 main Velcro brackets. These 10 guy lines are made with 16 pieces of rope. Picture 26</p>

3.4. Anchoring system, inner central	Requirements	M	Ok/Nok	4	<p>In addition to the outside anchoring points, there is an inner central anchoring point. This is made with a webbing loop passing around the three pipes crossing at the top of the tent. This loop is accessible from inside the tent, to attach to a heavy weight placed in the centre of the tent floor.</p> <p>This heavy weight can be made with the tent bag filled with stones, gravels, sand, earth, etc.</p> <p>The loop is made of 40mm red webbing that hangs freely around the 3 pipe-sleeves, and is accessible from inside the tent through a slot-opening in the roof centre. This loop must withstand minimum 2000N traction. Pictures 27 tent. Pictures 14-15</p>
3.5. Guy point elastic system description	Requirements	M	Ok/Nok	4	<p>The guy points must be reinforced in such way to pass the tensile test as per part 1.6. On the bottom end of the six guy lines there are elastic shock absorbers, with extension limiters and rope loops to connect to the pegs. The elastic buckle length is 100mm minimum to 120mm maximum. The extension limiter dimension allows 100mm extension to the elastic.</p> <p>Each elastic shock absorber is providing with one snap-hook to connect the secondary guy lines and the shade-fly ropes. All guy ropes should be rolled and placed under the nearest window flap for packing, to facilitate the setting up of the tent. Pictures 28-29</p>
3.6. Groundsheet	Requirements	M	Ok/Nok	4	<p>The integrated bath-tub groundsheet must be made of PE woven fabric. The seam attaching the groundsheet to the sides of the tent must be 200mm above the floor.</p> <p>There are six tensioning points located at every tent corner, made with 40mm webbing, sawn in the corners of the ground sheet, at the ground level. These tensioning points are carrying the foot plates where the frame pipes are connected.</p> <p>To avoid water infiltration all stitched seams must be waterproofed.</p>
3.7.Windows	Requirements	M	Ok/Nok	4	<p>The tent has six windows. Two are located on each side of the tent, and one next to each door.</p> <p>The inside dimensions of the side wall windows must be 500mm wide by 500mm high. The lower edge of the windows must be situated 500mm above the ground.</p> <p>The windows are made with a fixed mosquito net as per 1.4. These windows are protected outside with a 700mm x 700mm shutter rolling upwards. The window flaps are made of PE sheet as per 1.1. Loops and plastic hooks or toggles are provided to keep the flap open when rolled up, and closed with Velcro on three sides.</p> <p>Ropes are available at the flap lower corners for connection to pegs when opened.</p> <p>The inside dimensions of the windows next to the doors must be 500mm wide by 500mm high. The lower edge of the windows must be situated 1050mm above the ground. These windows are made of fixed clear translucent UV proof plastic film, with a shutter inside, made of PE. Picture 30</p>

3.8. Ventilation	Requirements	M	Ok/Nok	4	<p>The tent has two ventilation openings, at the top of the tent roof, in the roof sections above the doors. These vents are made in the form of a triangle that can open and close from inside, with an inner flap. The length x height dimensions of each vent is 850mm x 550mm. The flap closes with a 25mm-wide Velcro on the two sides that open. The flap can be opened and rolled with one hook and one loop. The top corner of each vent is located at 200mm from the roof centre.</p> <p>A 100mm diameter foam roll is positioned at the bottom edge of the vent to keep the shade fly at a distance from the tent roof.</p> <p>The ventilation closes with fixed large holes mosquito net as per 1.4.</p>
3.9. Doors	Requirements	M	Ok/Nok	4	<p>The two doors are located on the centre of both tent gables. Size: 0.9m width x 1.70m high.</p> <p>The door flaps of 1.15m are made with same material as the tent. Each door closes with 2 vertically oriented zippers, one on each side. The bottom of the door flap is extended with a 200mm flap lying horizontally on the ground.</p> <p>A loop and hook system is provided at the top of the door to maintain it rolled up.</p> <p>The flap is secured with 6 Velcro systems of 50mm each, equally spaced on each door side.</p> <p>At the bottom of the doors, on each lower corner of each door, on the inside, loops are available to attach to the short T-pegs. The loops have the exact length to reach the ground level. The loops are made of 25mm webbing. The door zippers can be locked with small padlocks to eyelets provided at the bottom of the doors, on the mud flap. Picture 31.</p> <p>The doors are provided with mosquitonets as per 1.4, that can be closed with two vertical zippers, and maintain open with loops and hooks at the top of the door. The netting door is located on the inner side of the tent.</p> <p>Both the door flap and the door netting are closing with a Velcro on the full width at the bottom.</p>
3.10. Accessories inside the tent	Requirements	M	Ok/Nok	4	<p>Six pouches, made of same PE material, of 250 x 300mm inner dimension, are available inside the tent under each window.</p> <p>Two pouches of 100 x 150mm made of net are available under the transversal arch, at 500mm from either side of the centre of the roof. These 8 pouches are stitched on their upper edge and hang freely.</p> <p>One inner partition made of the same PE material is provided to divide the tent into two equal spaces. It is made with two similar half-partitions, hanging from the tent inner fixations (see 3.11). It opens in the center and can be folded away on the tent side. Four pairs of strings are provided to keep the half-partitions folded away.</p>
3.11. Optional inner liner attachment system	Requirements	M	Ok/Nok	5	<p>Inside the tent 36 attachment points are provided to attach the optional inner tent. These attachment points are made with rectangular plastic buckles with a 20mm slot. Picture 32</p>

3.12 Chimney reinforcement	Requirements	M	Ok/Nok	4	<p>One chimney reinforcement (non-perforated) must be located on one side of the tent, between the tent corner and the door, at 500mm from the door side. It is positioned on the side of the door where there is no window.</p> <p>The lower edge of the heat-resistant fabric must be 500mm above the ground.</p> <p>Net inner dimensions of the fireproof part: 250mm width x 600mm height.</p> <p>The fire proof patch is located on the inner side of the tent.</p> <p>The tent fabric must not be cut away at the chimney opening. It will be cut away by users only if the chimney patch is used.</p>
3.13 Plastic pouch for integrated in the front and rear window	Requirements	M	Ok/Nok	4	<p>On the inner side of the front and rear window, there must be a document pocket of 200mm high x full width of the window.</p> <p>This pocket also provides the possibility to expose a solar panel safely. Picture 33</p>
3.14 Manufacturer identification	Requirements	m	Ok/Nok	6.5	<p>Made with a strong textile tag of 10x10cm with durable print, and stitched inside the tent, in the vertical seam of one tent corner. The tag should include the manufacturer name, the batch number and production date</p>
3.15. Fire safety information	Requirements	m	Ok/Nok	6.5	<p>Fire safety information must be available inside the tent. This must be printed with durable print on a piece of canvas stitched inside the tent next to the chimney protection. Picture 34. Should include the text in Arabic, English, French, Spanish, and the fire risk sign: Pictures 35 and 36</p>
4. Specifications: Shade-fly					
4.1. Shade-fly description	Requirements	M	Ok/Nok	4	<p>One shade-fly made of 5 sections, stitched together, 100% made of PE sheet as per 1.1.</p> <p>Dimensions: centre part to cover the roof up to the end of the pipe sleeves. Front and rear side flaps of 1.4m width. Left and right side flaps of 1.4m width, and 1.6m in the centre (triangle shape).</p> <p>Ventilation: The shade-fly has 6 vents permanently opened, with fixed sticks to keep the vents opened all time. Top vents is located at 900mm from the roof centre (with overlapping of 200 mm). Pictures 37-39</p>
4.2. Shade-fly attachment points	Requirements	M	Ok/Nok	4	<p>The shade-fly is provided with 14 guy points, made of a 25mm webbing band strongly stitched at each corner.</p> <p>There are 14 ropes provided for the shade-fly, connecting to the snap hooks on the main tent elastic system.</p> <ul style="list-style-type: none"> - Corners of the front and back side extensions: 4 ropes - Corners of the right and left side extensions: 6 ropes - Corners of the cover and central part: 4 ropes <p>The shade-fly is connected to the tent with 6 Velcro systems at each end of the tent pipe sleeves, and 16 Velcro systems to the pipe sleeve sections on sloped pipes. Pictures 40-44</p>

5. Specifications: poles and accessories

5.1 Poles	Requirements	M	Ok/Nok	4	<p>Five pre-shaped aluminium pipes, materials described in part 1. Each arch is made in maximum 15 pieces, linked with an inner elastic system. Length: 8340mm. Colour: natural anodized aluminium grey. Each section should fit together with a male and female 50mm joint, made with a 100mm long inserted pipe crimped into one of the pipes. The sections forming one complete pipe are pre-assembled with an elastic rope. Elastic quality: see part 1. The ends of the pipe must be closed with a threaded plug, with a 13mm diameter pin that fits into the foot plates and the eyelets, and that offer attachment for the inner elastic system. The pin to fit into the foot plates and eyelets has a reduced diameter to avoid coming out. Pictures 45-47</p>
5.2. Ropes/loops/ guy runners	Requirements	M	Ok/Nok	4	<p>The ropes for the 6 main guying points are black, UV treated, diameter 6mm to 8mm with a minimum tensile strength of 3000 N. The ropes for the 24 other guying points are black, UV treated, diameter is 6mm, with a minimum tensile strength of 1400N. All guy ropes lengths are appropriate to attach to pegs located at 1.5m ground distance from each tent corner, plus half of the length for tensioning. Other ropes are black, UV treated, of appropriate length, with a diameter of 4mm. - All ropes must be attached to the tent or the shade-fly at the factory - All ropes must have a securely-knotted loop at one end, to place over the peg or in the snap hook. - All ropes are tensioned by sliding on the tent side, or the shade-fly side, not on the peg side. - Tensioning with hard-wood red guy runners, or preferably metallic red guy runners, pre-mounted on the ropes. - The grain of the wooden runners must run lengthwise in the runner. - Size of the runners: 100 x 35 x 12mm for the wood type, 75 x 40 x 1.5mm for the metallic type. The holes must be adapted to the good running and blocking of the ropes. - The ropes must be threaded through the runners in the position that represents the maximum blocking effect on the ropes as per photo 48.</p>
5.3. Pegs	Requirements	M	Ok/Nok	4	<p>- Six 400mm-pegs, made of T-shaped iron 25 x 25mm and 3mm thick, class 6.8 or above, with a 75mm iron rod of 8mm in diameter welded on top, at the other end, the peg must be cut to form pointed end, the corner next to the top rod must be cut at 60° and smoothed to avoid injuries, The rod produces a 25mm prominence on each side of the peg. The welding ensures strong resistance of the rod to hammering. Pegs are galvanized. - Six Candy-cane pegs 200mm x 10mm diameter. Pictures 49-51</p>
5.4. Accessories	Requirements	m	Ok/Nok	6.5	<p>One 1kg metal hammer with 300mm wooden handle. (see specifications in part 1). One repair kit including: 2 curved needles, 50m stitching thread, 1 spare aluminium pipe section 200mm that fits on the tent pipes by sliding over. Four door padlocks with minimum 3 digits combination.</p>
5.5. Set-up instruction	Requirements	m	Ok/Nok	6.5	<p>One set-up instruction sheet in English, showing step by step set-up information drawings and item content list and information, printed on durable laminated paper or durable fabric (see part 7/1). These instructions should be accessible immediately after opening the tent package.</p>

6. Specifications: Packaging

6.1 Primary Pack	Type	M	Ok/Nok	4	One tent with all its accessories must come packed in one bundle only. The tent bag is made of the same PE material as the one used for the tent. The bag is round in shape with one end opening. It is closed by stitching at factory for transport, and has two laces for closing back after opening. Pictures 52-54
	Total length	m	Measurement	6.5	Must not exceed 1.2m
	Straps	m	Ok/Nok	6.5	The package must be secured with 2 webbing straps on the outside; each strap must have a strong 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, or ladder-lock metallic buckle. The straps are not sewn to the bag. Each strap is secured with 2 loops sewn to the bag to avoid losing the straps. Each strap is forming one handle on each side of the bag.
	Weight	m	Measurement	6.5	Packed-tent weight of the standard version: 48kg +/-5% (min 45.6kg; max 50.4kg)
	Poles and pegs	M	Ok/Nok	4	The aluminium poles must be packed without bag in a way to avoid damaging/staining other items inside the bundle. The pegs must be packed in a separate PE bag to avoid damaging other items inside the bundle. The bag must have a closure system that ensures the pegs remain safely inside during transport and handling. Particular care must be taken when packing the pegs to ensure they will not pierce the bag. There should not be any extra plastic packing material in the package.
	Marking on the bag	m	Ok/Nok	6.5	The buyer's markings (clearly readable) must be printed on the outside indelible ink: Marking as per Purchase Order.
6.2. Secondary pack and transport/storage pack	Type	m	Ok/Nok	6.5	The bags are packed in stackable metallic pallets.
7. Specifications: Instruction					
7.1 Instruction sheet	Requirements	m	Ok/Nok	6.5	Instruction sheet As per document available on Standard Products Catalogue ICRC IFRC online http://itemscatalogue.redcross.int/water-and-habitat--6/shelter-and-construction-materials--21/family-tents-tarpaulins-accessories--35/family-tentgeodesic--HSHETENT11.aspx
7.2. Summary of all the printing requirements	Requirements	m	Ok/Nok	6.5	The following points, already exposed in the specification above, require printing: Manufacturer ID tag Safety information tag Instruction sheet Buyers marking on outer bag

Picture 1 GENERAL VIEW (shade-fly is not represented on this view)



Picture 2 FRONT view (shade-fly is not represented on this view)



Picture 3 SIDE view (shade-fly is not represented on this view)



Picture 4 GENERAL VIEW with shade-fly with 6 vents



Picture 5 GENERAL VIEW



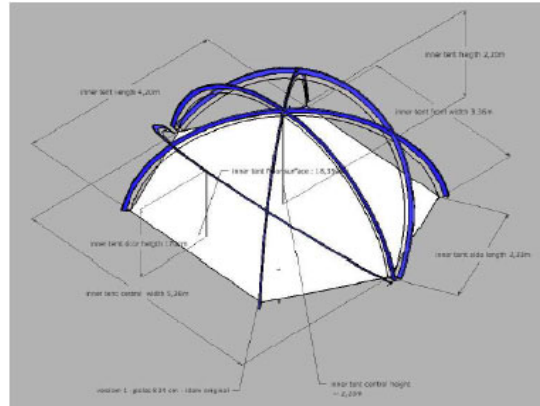
Picture 6 GENERAL FRAME VIEW



Picture 7 GENERAL FRAME VIEW



Picture 8 GENERAL FRAME VIEW with dimensions



Picture 9



Picture 10



Picture 11 Sleeve sections for the sloped pipes

Picture 12 Sleeve sections for the sloped pipes



Picture 13

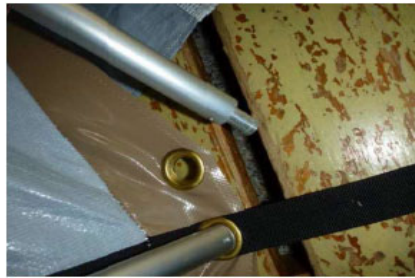


Picture 14

Picture 15



Picture 16



Picture 17



Pictures 18-20 16 Main points:



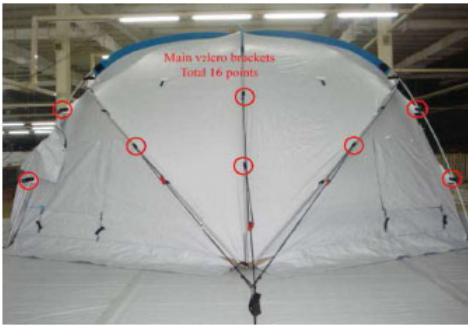
Pictures 21-23 20 Secondary points:



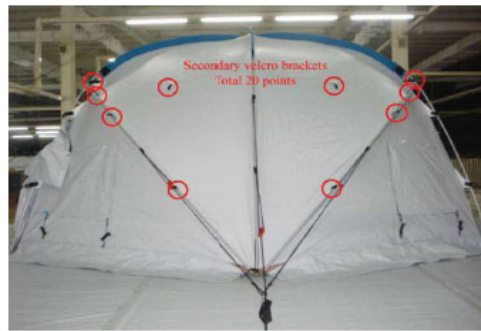
Picture 24



Picture 25



Picture 26



Picture 27



Picture 28



Picture 29

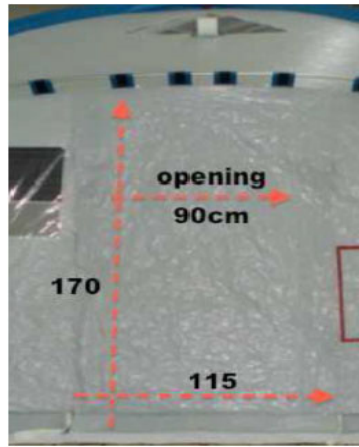
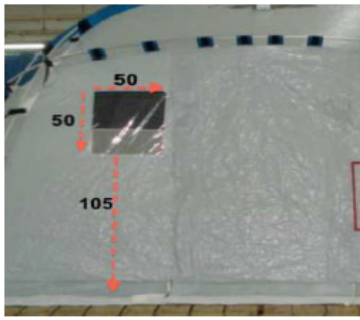


Picture 30



Picture 31

Picture 32



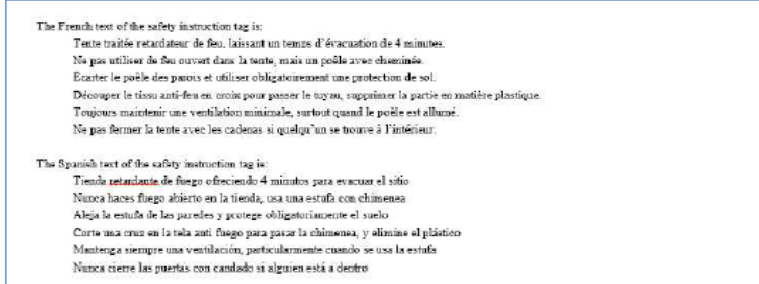
Picture 33

Picture 34



Picture 35

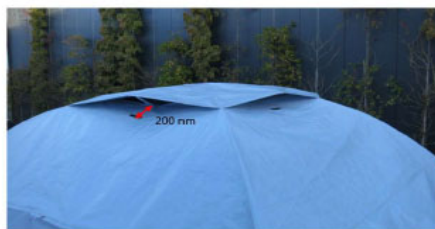
Picture 36



Picture 37 Top vents is located at 900mm from the roof centre

Picture 38 200 mm overlapping

Picture 39



Picture 40

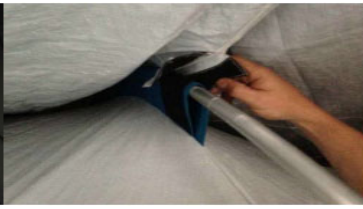
Picture 41-6 Velcro at pipe sleeves ends:

Picture 42-16 Velcro at sleeve section on sloped pipes:

Picture 43 On left and right sides, 4 straps with Velcro are connecting the shade fly to the tent roof.



Picture 44



Picture 45



Picture 46



Picture 47



Picture 48



Picture 49



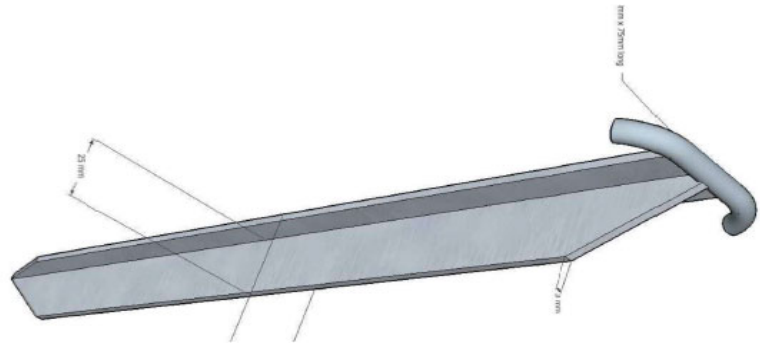
Picture 50



Picture 51

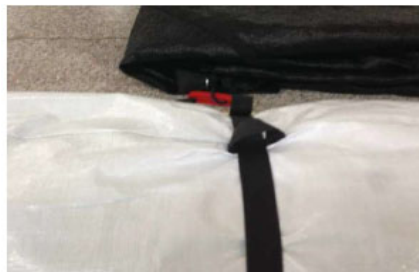


Picture 52



Picture 53

Picture 54



LOGO Placement

COLOUR : PANTONE 286C



Scale: NDTS

Note: 1pcs logo 48.50cm x 130.00cm at below position