| International Organization for Migration (IOM) The UN Migration Agency | **AQL**<br>**Definitions, penalties, Corrective Action Plan and Quality Control rules.** | IOMQC-AQLS00V8<br>Ver1.0 Rev 2<br>30.11.2022 |
|---|---|---|

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

## Definitions:

**Critical nonconformity** : Any discrepancy which might harm an user or makes it impossible to use the product properly is considered to be critical. Lots with Critical discrepancy are subject to refusal.

**Major nonconformity** : Any discrepancy which makes the use of the product less efficient than expected is considered to be major. Lots with Major discrepancies can be accepted.

**Minor nonconformity** : Any discrepancy which does not have an influence on the performance of the product is considered to be minor. Lots with Minor discrepancies can be accepted.

## Non-Conformities classification and related penalties:

**Corrective action plan must be implemented by the vendor on its processes, addressing root causes of occurrence (production) and of non-detection of the nonconformity (QC).**

**Critical: (AQL 0)**

Nonconforming characteristic (number of nonconforming items ≥ Rejection number. ISO-2859-1) implies a penalty of 10% of the value of the total PO per each critical non-conformity to be charged to the supplier. Determination of lot acceptability is to be decided by IOM.

**Major:** (AQL 4.0)

Nonconforming characteristic (number of nonconforming items ≥ Rejection number. ISO-2859-1) implies 0.5% penalty of the value of the total PO per each major non-conformity to be charged to the supplier. Determination of lot acceptability is to be decided by IOM.

**Minor:** (AQL 6.5)

Nonconforming characteristic (number of nonconforming items ≥ Rejection number. ISO-2859-1) implies implies 0.25% penalty of the value of the total PO per each minor non-conformity to be charged to the supplier. Determination of lot acceptability is to be decided by IOM.

## Quality Control and Acceptance Quality Level

**- The AQLs herein are after IFRC/ICRC with additional parameters on IOM markings and required packaging.**

- The Method of testing is drawn from ISO-2859-1 International Standards (table1: Sample size code letters, and table 2-A: Single sampling plans for normal inspection). The samples will be taken randomly by the buyer from the delivered items and then inspected.

- The buyer can decide either to inspect the lot at IOM QC laboratory or to use an inspection company for analysis, or both. Transport to laboratory and analysis cost for lab testing are at expense of IOM.

- The vendor can contest the results of the Quality Control done at IOM warehouses by requesting a lab testing. In this case transport to laboratory and analysis cost for lab testing are at expense of the seller.

- **Nonconformity**: non-fulfilment of a specified characteristic requirement.

- **Nonconforming item**: item with one or more nonconformities.

- **Lot**: definite amount of some product, material or service, collected together.

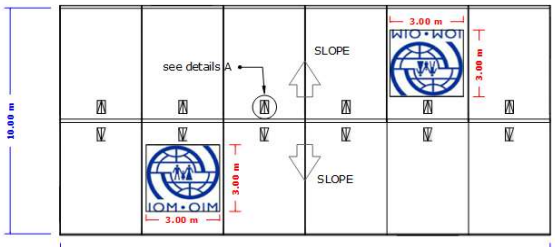
- **Sample**: set of one or more items taken from a lot and intended to provide information on the lot.

| | AQL Mobile Storage Unit (MSU)<br>Specifications and Quality Control | | | | IOMQC-AQLS00V8<br>Ver1.0 Rev 1<br>16.11.2022 |
|---|---|---|---|---|---|
| Nonconformities classification: Critical: **C**; Major: **M**; Minor: **m** | | | | | |
| **Items** | **Characteristics** | Nonconformities classification | **QC type** | **AQL** | **QC Inspection at IOM warehouses and lab testing<br>Unless otherwise specified, a maximum tolerance of +/- 1% is accepted on all dimensions.** |
| 1. Specifications for all tent components made of PVC sheet (roof, walls, mud-flaps, ground sheet, shade-fly, and other sheetcomponents) | 1.Material for the cover | C | Ok/Nok | 0 | Polyvinyl Chloride (PVC) coated polyester as per ISO1833 |
| | 2. Cover characteristics | M | Ok/Nok | 4 | Fire retardant, fully waterproof, and rot-proof, UV resistance of minimum 6 years in the strongest sun exposure condition (up to 20 years in nothern countries. Ropes will have to be replaced after some years in the sun. |
| | 3.Coating colour | m | Ok/Nok | 6.5 | RAL 9010 |
| | 4. Tear Strength (N) | M | Measurement | 4 | Minimum 250N under DIN53363 or ISO 4674, with a test piece of 200x200mm as described in ISO4674 |
| | 5 UV resistance measured as remaining tensile strength after UV | 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 notless than 475N. |
| | 6. Weight | M | Measurement | 4 | 700.0 g/m$^2$ +/-0.5% in finished state under ISO3801 |
| | 7. Seams and stitching | M | Measurement | 4 | All seams that are subject to possible tension must be double lock stitched or double row binding, waterproof<br>The stitches can be waterproofed with tape on the inner side where required.<br>Stitching produces strong, long-lasting, neat and professional looking seams.<br>The stitch count as well as UV and rot-proof sewing threads must be appropriate and suited to the fabric. Stitching must provide strong,<br>waterproof seams with at least the same lifespan as the tent.<br>The seams must be oriented to facilitate the unimpeded runoff of rain: avoid creating water lines or water pockets.<br>Wherever possible, the colour of the sewing thread should be compatible with the fabric colour |
| | 8. Flame retardant | C | Ok/Nok | 0 | according to EN13501, through FR Test EN13823 Minimum class D, s2, d2.Minimum time to reach large wing external edge: 4minutes (LFS) |
| 2 Specifications for the waterproofing | 1 Water-penetration resistance | M | Measurement | 4 | 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. Rain-penetration resistance | M | Measurement | 4 | 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. |
| 3<br>Specifications for the frame components | 1. Weight | M | Measurement | 4 | Max individual part weight is 50kg |
| | 2. Materials | M | Ok/Nok | 4 | Aluminum box profiles and hot-dipped galvanised hardware that are fully HF welded |
| | 3. Wind Load (kN/m2) | M | Measurement | 4 | Minimum 0.6 |
| | 4. Snow Load (kN/m2) | M | Measurement | 4 | Minimum 0.75 under ISO8937 (snow load for camping tent). |
| 4. Dimensions / erecting system | 5. Dimensions, Ridge height (m) | M | Measurement | 4 | 5.5 +/-0.5%. |
| | 6. Dimensions, Side wall height (m) | M | Measurement | 4 | 3.3 +/-0.5%. |
| | 7. Dimensions, Width (m) | M | Measurement | 4 | 10 |
| | 8. Dimensions, Length (m) | M | Measurement | 4 | 24 or 32 as required |
| | 9. Unit volume bulk (m3) | M | Measurement | 4 | 600 |
| 5. Ventilation | Ventilation openings | M | Ok/Nok | 4 | Passive Ventilation System at gable ends with 4 total openings above vehicle doors with sealable covers and insect mesh, and in the roof cover with small vents at the top on both sides in all sections |
| 6 Doors | 1 Dimensions, Doors height (m) | M | Measurement | 4 | Minimum 4.0 |
| | 2 Dimensions, Doors width (m) | M | Measurement | 4 | Minimum 4.5 |
| | 3 Number of doors | M | Measurement | 4 | 2 |
| | 4 Material | M | Ok/Nok | 4 | same material of PVC coated polyester located at both ends<br>that are vehicle (sliding) type |
| 7 Feet/baseplates | Requirements | M | Ok/Nok | 4 | Adjustable feet/baseplates to level the MSU on uneven ground |
| 8 Ballast anchors | Requirements | M | Ok/Nok | 4 | A series of ballast anchors to seal the structure at ground level |
| 9 Assembly and carry of parts | Requirements | M | Ok/Nok | 4 | Each individual component can be comfortably handled by a maximum of two people undertaking installation using only tools provided by the contractor. |
| 10 Installation instructions | Requirements | m | Ok/Nok | 6.5 | The MSU shall be provided with clear installation instructions and colour coded or other suitable system for identification of connecting parts on site. |
| 11 Tool kit | Requirements | m | Ok/Nok | 6.5 | Ladder, spade, sledgehammer, measuring tape, polyester rope, working gloves, set of spanners for bolts, spikes extractor with gear ratio. |
| 12. Repair kit | Requirements | m | Ok/Nok | 6.5 | Polyurethane Adhesive type of glue with peel strength of 180N>5cm, and extra patch with dimension of 21cm×35cm made of same material as the rest of the MSU cover |
| 13. Set-up instruction | Requirements | m | Ok/Nok | 6.5 | 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. |
| 14. Manufacturer identification | Requirements | m | Ok/Nok | 6.5 | 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 |
| 15. Lighting system and electrical system | Requirements | M | Ok/Nok | 4 | Lighting system: Lighting system with floor level illuminance of 150 lux |

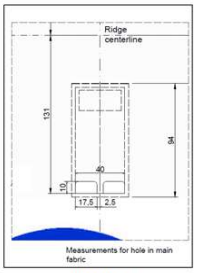
| 4. Optional accessories | | | | | |
|---|---|---|---|---|---|
| 16. Fire alarm system | Requirements | M | Ok/Nok | 4 | One fire alarm system |
| 17. Mechanical ventilation system | Requirements | M | Ok/Nok | 4 | A heavy duty, in-line, high efficiency air exchange ventilation system. The system shall be placed internally at the midpoint of the MSU at roof level to distribute air within the MSU. Contractor to provide full details within its offer regarding how and where the ventilation system would be fixed to the MSU; routing of cabling, sealed when not in use to prevent insect entry. |
| 18. Renewable energy system | Requirements | M | Ok/Nok | 4 | A renewable energy system that will meet the minimum load requirement for the lighting system, fire alarm system, and mechanical ventilation systems and shall include a battery bank. |
| 19. Electrical system | Requirements | M | Ok/Nok | 4 | Electrical System: Any optional electrical systems shall be suitable for connection to either 220V-50hz systems. Electrical goods shall be provided complete with all fittings necessary to connect them to mains/generators/PV systems via standard electrical power connections. |
| 19 Packaging | Requirements | M | Ok/Nok | 4 | Goods delivered should arrive with appropriate packaging that allows IOM staff to process the offloading, inspection, location and preparation for its rapid dispatch. All Goods should be delivered packed, wrapped, strapped and palletized on Euro pallets or other pallets not exceeding the maximum height of 1.1m, according to the weight of the pallet. Materials used for packaging shall be reduced where possible, specifically plastics, to ensure a more environmentally friendly product. |
| | 1st package | M | Ok/Nok | 4 | **Must contain the following:**<br>7x Roof cover, 4x Logo banner<br>1x Roof cover for logo, 113 x 80 x 127 (dimension)<br>2x Gable cover with sliding door, 690 kg (weight)<br>4x Gate cover, 1.148 cbm (volume) |
| | 2nd package | M | Ok/Nok | 4 | **Must contain the following:**<br>bolts and nuts 550 kg (weight)<br>113 x 80 x 74 (dimension) 0.668 cbm (volume) |
| | 3rd package | M | Ok/Nok | 4 | **Must contain the following:**<br>18x Half truss, 1x Lifting fork for purlins<br>24x Purlins, 365 x 64 x 50 (dimension)<br>16x Wall tension bars, 435 kg (weight)<br>4x Gable columns, 1.168 cbm (volume) |
| | 4th package | M | Ok/Nok | 4 | **Must contain the following:**<br>corner joints 437 x 31 x 25 (dimension)<br>2x Gate assembly, 95 kg (weight)<br>2x Gable tension bar right, 0.338 cbm (volume)<br>2x Gable tension bar left |
| | 5th package | M | Ok/Nok | 4 | **Must contain the following:**<br>corner joints 422 x 40 x 8 (dimension)<br>1 x ladder 7 kg (weight)<br>0.135 cbm (volume) |
| 20. Marking | On the package | m | Ok/Nok | 6.5 | The buyer's markings (clearly readable) must be printed on the outside indelible ink: Marking as per Purchase Order. |
| | Logos | m | Ok/Nok | 6.5 | Labels: Banners that can be attached or printed directly on tent fabric.<br>Label dimensions: refer to logo placement below<br>Number of labels: 6 |

**Reference Drawing**

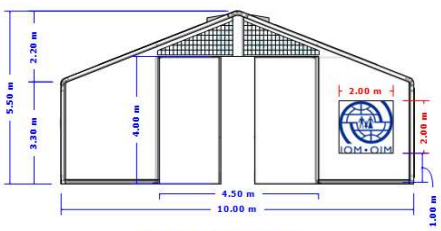

MOBILE STORAGE UNIT (MSU)



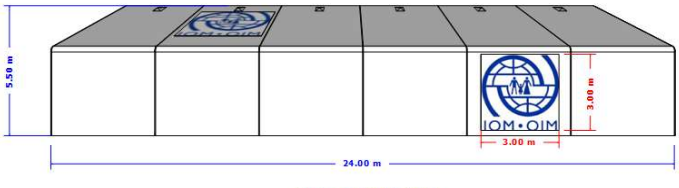

TOP VIEW




DETAILS A




FRONT ELEVATION




SIDE ELEVATION