## SAUDI ARABIAN STANDARD ORGANIZATION

**SASO** 

**Woven Carpets Used for Masjids**DRAFT NO 30465/2017

### **Woven Carpets Used for Masjids**

#### 1- SCOPE AND FIELD OF APPLICATION

This SASO standard specifies machine-made woven carpets with cut loop piles for use in Masjids.

#### 2- COMPLEMENTARY REFERENCES

- 2.1 Standard to be approved by SASO on "Methods of Testing Woven Carpets used for Masjids".
- 2.2 GSO 535 "Machine-made Textile Floor Coverings :Sampling and Preparing Specimens for Physical Tests".
- 2.3 SASO 2778 GSO1956 "Harmful substances used in textile products".
- 2.4 SASO 1173-GSO863 "Identification Label for Textile Products".

#### 3- DEFINITIONS

- 3.1 Pile: The part of a carpet consisting of textile yarns or fibres, cut or looped, projecting from the substrate and acting as a use surface.
- 3.2 Substrate: A construction integral with the pile which serves as a support for the use-surface.

#### 4- REQUIREMENTS

The following requirements should be fulfilled in a finished woven carpet:

- 4.1 The pile yarn should be made from 100% Acrylic or 100% Wool; or 80% Wool-20% Nylon or 100% Thermal polypropylene.
- 4.2 Carpets should be on form of continuous or discontinuous rolls of width not less than 120 cm and not more than 130 cm in order to avoid the contacts of prayers on sequential rows.
- 4.3 Physical and mechanical properties of the finished carpet should be as specified in Table 1.

TABLE 1
Physical properties of finished carpets

Property	100%Wool	Blended wool	100% Acrylic	100%Polypropylene thermal treated
Pile mass above the substrate g/m2 (min)	2500	1800	1800	2000
Pile height mm(min)	10	10	10	10
Total carpet thickness mm(min)	12	12	12	12
Tuft withdrawal force N	5	5	5	5

(min)				
Number of tufts /m²(min)	375000	375000	375000	375000
Loss in thickness under dynamic load(%)(max)	30	30	30	30
Dimensional change due to	0.8(Shrinkage)	0.8(Shrinkage)	0.8(Shrinkage)	0.8 (Shrinkage)
effects of varied water and heat conditions (%) (max)	0.4(extension)	0.4(extension)	0.4(extension)	0.4 (extension)
Oil and fat content (%)(max)	1	1	1	1
Max. distance of the damaged area in the flammability test (cm)	6	6	6	6
Maximum potential difference Results from electrostatic charges (walking test) (kV.)	3	3	3	3
Fiber of content	100%	80% wool- 20% Navlon	100%	100%



# 4.4 Color fastness requirements of the dyed pile yarns should as specified in Table 2.

TABLE 2
Colour Fastness Requirements of Pile Yarns

Color fastness to light (blue scale) min.	5
Color fastness to crocking ( grey scale) min.  Dry  Wet	4 3-4
Color change due to water wetting (Grey scale)	4
Friction due to organic solvents (Gray scale)	4



- 4.5 The width and length of the woven carpet should not be less than that indicated in the identification label.
- The back of the carpet should be coated with latex or any other suitable coating. The backcoating shall be evenly spread with no build-up at the selvedges of the carpet and shall ensure a fray resistant finish to cut edges.
- 4.7 All seams should be machine sewn at carpet edges with threads matching the predominant color of the carpet.
- 4.8 Carpet should be dyed by one or more colors; and it should contain two parallel lines spaced  $25 \pm 2$  cm to ascertain the locations of prayers foots in order to get straight prayer rows.
- 4.9 The carpet should be free from any defects that might affect the appearance, durability and serviceability:
  - Visible stains or dirties.
  - Ornamentation used in design not objected with Islamic rules.
  - Unevenness of weaving structure or design affecting appearance.
  - Unevenness on carpet surface.
  - Missing areas of pile.
  - Holes or tear through to back.
  - Unevenness of hem and edges.
  - Unevenness of back coating.
  - 4.10 The carpet shall be free from substances likely to harm human body and environment according to SASO 2778 GSO1956 "Harmful substances used in textile products".
  - 4.11 When wool is used as pile yarn, the yarn shall be treated to resist moth.

#### 5- PACKAGING

The following shall be considered on packing:

- 5.1 Each carpet piece shall be tightly rolled in warp direction with its pile face inside.
- 5.2 The rolls shall be wrapped using adequate packing materials.
- 5.3 The packing material shall be strong, moisture-proof, non-staining and of sufficient size to completely cover the package with adequate overlapping which will not allow foreign matter to reach the carpet.

#### 6- MARKING

- A label shall be securely attached to one of the corners on the back of the rolled carpet, indelibly and clearly marked in Arabic or Arabic and English with the following information:
- 6.1.1 Name of the product;
- 6.1.2 Manufacturer's name and/or trademark;
- 6.1.3 Width and length;

- 6.1.4 Content of fiber;
- 6.1.5 Care label of carpet and storage method;
- 6.1.6 Country of origin;
- 6.1.7 Pile thickness and weight;

#### 7- SAMPLING

Sampling shall be as follows unless otherwise agreed upon.

- 7.1 The consignment shall be divided into lots, so that each lot contain the quantity (number) of woven carpet of the same composition, size, colour and construction particulars.
- 7.2 Woven carpets rolls shall be taken from the lot at random for testing. The sample size shall be in accordance with Table 3.

TABLE 3
Sample Size

Lot size (carpet roll)	Sample size (carpet roll)		
Up to 50	2		
51 to 250	3		
251 to 1200	5		
1201 and above	8		

7.3 Specimens shall be cut from the carpet according to the method specified in the Gulf standard mentioned in 2.2

#### 8- TESTING

Tests shall be carried out according to the SASO Standard mentioned in 2.1.

#### 8.1 Tests

The representative samples drawn according to item (7.1), shall be subjected to the following tests:

- 8.1.1 Visual inspection (carpet defects).
- 8.1.2 Measurement of width and length.
- 8.1.3 Determination of mass of pile yarn per unit area.
- 8.1.4 Determination of number of tufts per unit area (length-width).
- 8.1.5 Determination of thickness pile height above the substrate.
- 8.1.6 Determination of tuft withdrawal force.
- 8.1.7 Determination of thickness loss under dynamic loading.
- 8.1.8 Determination of dimensional change due to the effect of varied water and heat conditions.
- 8.1.9 Determination of colour fastness to light.

- 8.1.10 Determination of colour fastness to crocking.
- 8.1.11 Determination of colour fastness to water.
- 8.1.12 Determination of oil and fat content of the pile yarn.
- 8.1.13 Determination of content of fiber.
- 8.1.14 Determination of thickness of pile.
- 8.1.15 Determination of flammability.
- 8.1.16 Determination of potential difference results from electrostatic charges.
- 8.1.17 Determination of resistance to attack by clothes moth.

#### 9- RULES OF ACCEPTANCE AND REJECTION

- 9.1 Each consignment of woven carpets shall be accompanied by a certificate indicating its compliance with the requirements of the present SASO standard.
- 9.2 The lot shall be considered conforming to the requirements of this standard if the samples representing it pass all the tests specified in this standard, otherwise, it shall be considered non-conforming.

