

# SERKO HALI HISTORY AND QUALITY STANDARDS

Established in 1958 by our founder, the late Osman KALAYCIOĞLU, with the production of handmade carpets, Serko Halı started to produce machine-made carpets after the establishment of the yarn and weaving facility in the 1970s.

Our carpets made of pure wool for our mosques are quality registered by the International Wool Secretariat (IWS) and produced under the "Woolmark" certificate. As Serko Hall, we offer the coloring options requested by our customers to our mosques by using Islamic Compliance, classical Ottoman Motifs and patterns suitable for modern architecture in the carpets we produce.

As Serko Halı Industry, the compatibility of our carpets with human health is as important to us as the quality of our carpets. The world's first "anti-bacterial mosque carpet" developed by Serko Halı was produced by Serko Halı. In this way, we have added anti-bacterial properties to the carpets we have produced and renewed the Serko Halı assurance again.

In 2009, Serko Hall was granted a certificate of non-flammability in carpets by the Textile and Flooring Institute of Aachen University (TFI AACHEN) in Germany, and our carpets have the "Fireproof Carpet" certificate.

In 2012, it was certified as "Flame Retardant and Suitable for Indoor Use" by "Pojarnaya Sertifikatsionnaya Kompaniya Limited Company" in Moscow, Russia and has achieved the highest degree of fireproof carpet compliance recognized by the Russian Government. Only Serko Halı has this certificate issued by the Russian State among the companies producing wool carpets in Turkey.

The production of carpets in Serko Hall starts with the shipment of wool, which is the first step of carpet production, from our integrated facilities, the wool is processed as yarn, dyed as yarn (hank) in our dye house and completed with the weaving of carpets on our own computerized looms. As Serko Hall family, we realize the sales of our carpets directly from our factory by producing the highest and right quality for our customers.

As Serko Hall Industry, the satisfaction of our customers as well as the quality of our carpets and our references is a motto for our company...

# WHY SERKO WOOL MOSQUE AND HOTEL CARPETS

When you think of mosque carpets, "Serko Wool Mosque Carpets" comes to mind. Serko Wool Mosque carpets provide a completely healthy and comfortable worship and living environment. We can briefly list the advantages of wool mosque carpets produced by Serko Hall in terms of preference and usage.

- Wool Carpet is a living natural fiber whose colors shine and become beautiful as you use it, that does not smell.
- · Wool fiber is highly resistant to abrasion.
- The ignition rate of wool carpet in the face of fire is lower than other carpets (acrylic, polypropylene and others) and its non-flammable feature has been certified by tests.
- · Wool carpets used indoors absorb excess moisture in the space and return it when necessary.
- Wool carpet attracts less dust than acrylic and polypropylene carpets.
- Wool carpets do not crush and easily recover even if heavy objects are moved.
- Wool carpet does not cause static electricity that occurs in synthetic carpets.
- Wool carpets do not smell, do not contain odors and have sound absorbing acoustic regulating properties.
- · Wool carpets are easy to clean with natural or white soap.
- Wool is the most expensive of carpet fibers and is therefore only used in luxury carpets and area rugs.
- Wool carpets, which have very good abrasion resistance, are the most resistant carpets that can withstand heavy usage conditions in terms of lifetime.
- · Wool, a fiber that is also highly resistant to flammability, does not produce static energy.
- The performance of wool fiber in stain protection is as high as that of polyamide fiber.
- Wool carpets are the most suitable carpets to be used in places without shoes due to their softness and comfort and high performance in durability.

# SERKO MOSQUE AND HOTEL CARPETS TECHNICAL SPECIFICATIONS

**QUALITY OF THE YARNS USED IN OUR CARPETS:** Made of 100% wool produced according to Woolmark standards.

**QUALITY STANDARD AND LICENSE NO:** Our carpets are produced with international WOOLMARK license. Our license number is 0219TU10W.

**FIREPROOFING:** Our carpets are registered with a flame retardant certificate as they meet the Bfl-SI flame retardant requirements according to the EN 13501 norm of the University of Aachen, Germany. Registered with KM2 Certificate by Poyorna Laboratories of Russia.

**DEGREE OF LIGHT FASTNESS:** Buzzi Woolmark laboratories determined as 5 according to IWS TM 133 method.

**DETERMINATION OF DEGREE OF DURABILITY:** Buzzi Woolmark Laboratories rated 4/5 according to IWS TM 247 method.

**TOTAL WEIGHT:** I m2 weight of our carpets is 3500-4000-4500-5000 gr(+-%3).

PILE HEIGHT: Pile heights of our carpets are 8mm - 13mm.

**TOTAL HEIGHT:** The total height of our carpets is 10mm - 15mm.

**WEAVING DENSITY:** The number of loop ends on Im2 of our carpets varies between 260.000 and 350.000 loop ends.

**BACK COATING:** We use back coating materials produced by CHT company. The finishing material we use is 500 gr/m2.

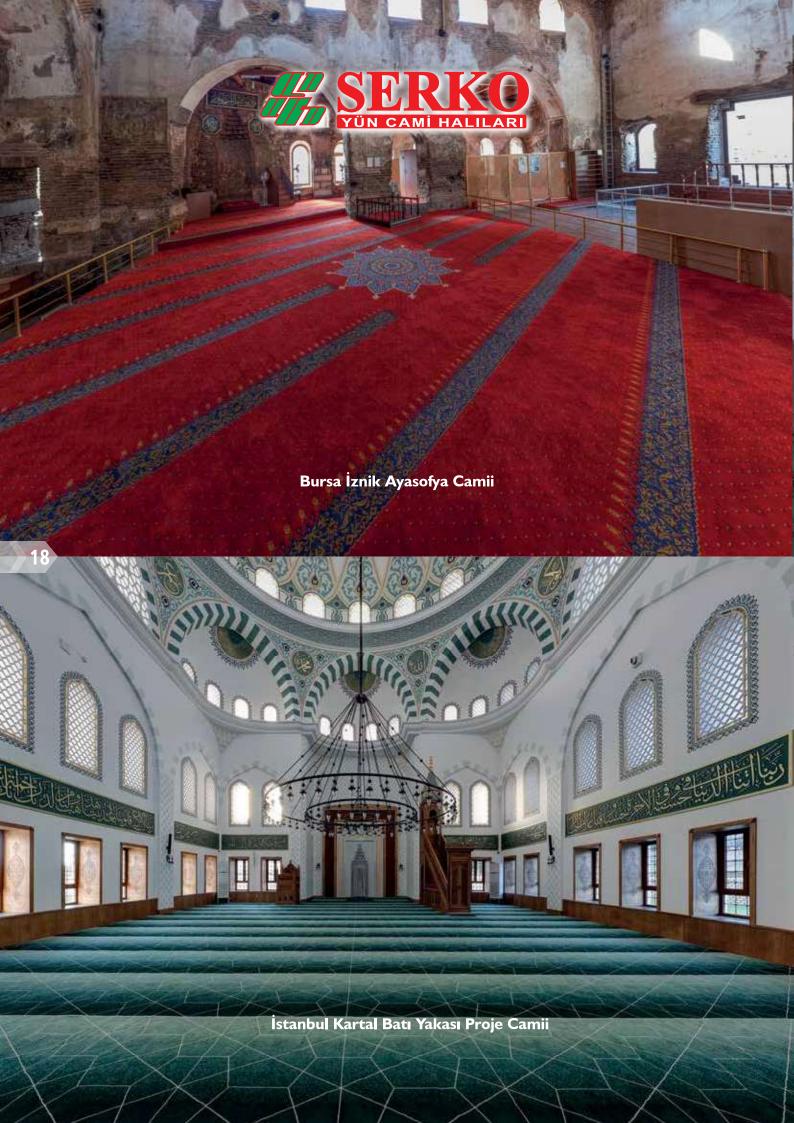
**MOTH INEDIBILITY:** During dyeing, our wool was treated with BAYER EULAN SPA 01 to prevent moth bites.

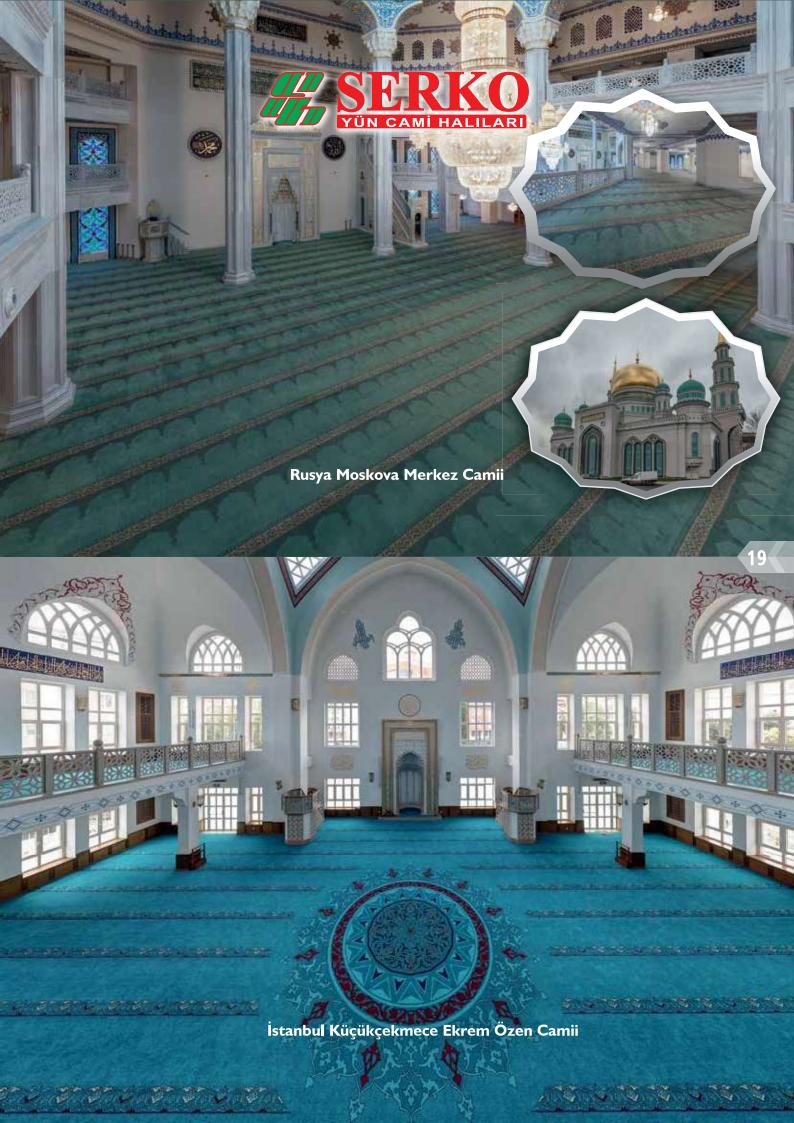
**ANTIBACTERIAL PROTECTION:** Our carpets are given anti-bacterial protection feature by using Busan Industrial Chemicals Bacterial drug during production.

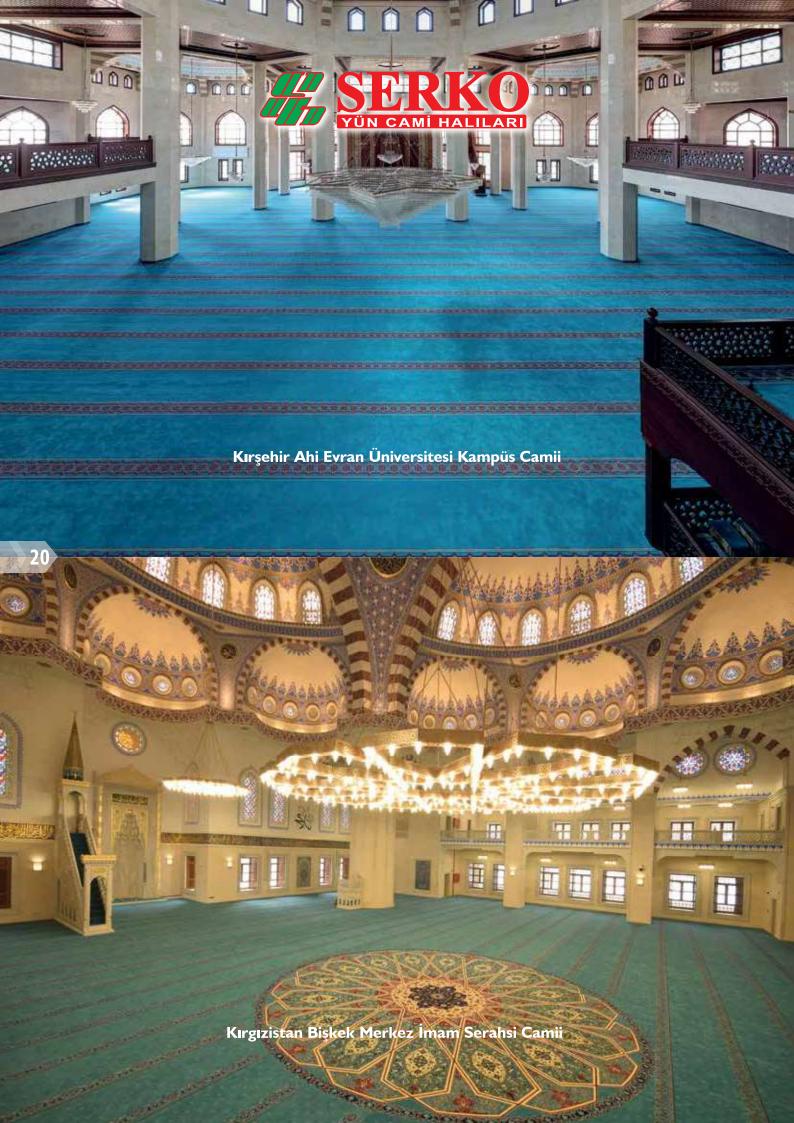
**YARN DYEING MATERIAL:** In the manufacture of our carpets, our yarns are dyed with reactive dyes belonging to the Swiss company "Bezema".

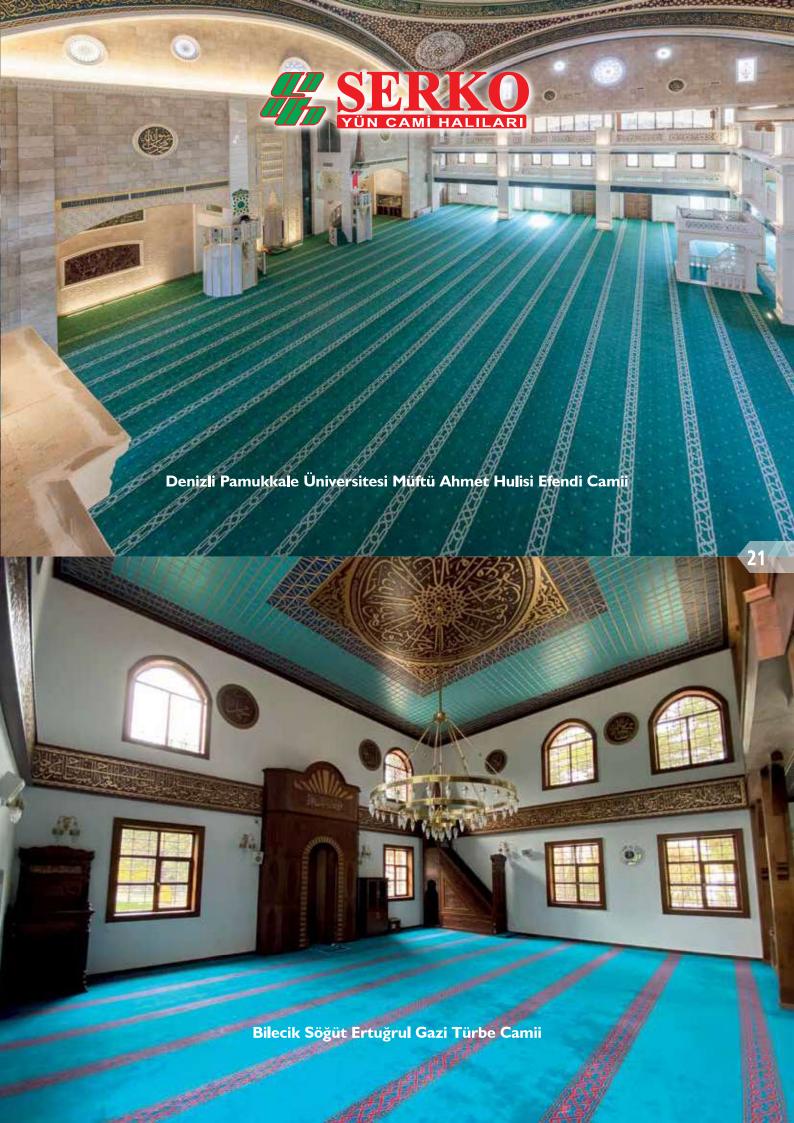
**SHADOWING:** Temporary or permanent shadowing rarely occurs in carpets woven with face to face weaving. Temporary shadowing occurs when walking, placing objects on the carpet or rubbing a brush on the carpet and the shadowing improves over time. Permanent shadowing is caused by the loop pile ends turning in the opposite direction. This cannot be considered a manufacturing defect and the manufacturer cannot be held liable for shadowing.

**WARRANTY:** As Serko Hali, we provide a 2-year warranty certificate for the carpets we produce.















Charlottenburger Allee 52568 Aachen Gormany Fon +49,241,5678 00 Fax +49,241,9579 200

# Report No. 410779-02 Fire Behaviour Classification according to EN 13501-1:2010

This fire behaviour classification report defines the classification of the construction product "Sample carpet (100 % wool)" in accordance with the procedures according to EN 13501-12010.

| Construction product  |                            |
|---|----------------------------|
| Sample designation  | Sample carpet (100 % wool) |
| Sample designation Type of manufacture Type of surface Fare composition of use surface Type of backing TFI reference no | woven                      |
| Type of surface   | cut pile                   |
| Fibre composition of use surface  | 100 % wool                 |
| Type of backing   | finish                     |
| TFI reference no  | 11-05-0034                 |
| Order date  | 02.05.2011                 |

The construction product is entirely described in the test report mentioned under section 3 and its annex KT.







410779-02



# Test Reports and Test Results Used for the Classification

Construction

| testing body                             | Ordered by | product                   | lest report No. | lest methods   |
|--|------------|---------------------------|-----------------|--|
| Textiles &<br>Flooring<br>Institute GmbH | SERKO HALI | textile floor<br>covering | 410779-01       | EN ISO 9239-<br>1:2010<br>EN ISO 11925-<br>2:2010<br>(15s ignition time) |

# 3.2 Test Results

|              | Test                       |                               | Number   | Test    | results                         |
|--------------|----------------------------|-------------------------------|----------|---------|---------------------------------|
|              | methods                    | Characteristics               | of tests | average | requirements<br>fulfilled (Y/N) |
| u C          | EN ISO                     | critical radiant flux (kW/m²) | 3        | 9,1     |                                 |
| construction | 9239-1:2010                | smoke development (% x min)   |          | 74      |                                 |
| oo ld        | EN ISO<br>11925-<br>2:2010 | charred distance<br>≤ 150 mm  | 6        |         | Y                               |

# 4 Classification and Application

4.1 Reference
This classification is performed according to EN 13501-1:2010.

With regard to the fire behaviour, the tested construction product is classified as

Additionally, with regard to the smoke development, the tested construction product is classified:.....

Thus, the construction products tested obtain the following classifi

| Burning behaviour |   | Smoke de | evelopment |      |                     |
|-------------------|---|----------|------------|------|---------------------|
| B <sub>ff</sub>   | - | s        | 1          | i.e. | B <sub>II</sub> -s1 |
|                   |   |          |            |      |                     |







410779-02



4.3 End-Use Application
The classification is only valid for the construction product as described under sections 2. and 3, used as a horizontal floor covering installed on a mineral substrate according to EN 19238:2010, using adhesives or not.

Provided that the construction product is marked with the CE-label according to system 3 attestation of conformity, the following declaration shall be enclosed:

'The classification assigned to the construction product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE-marking under the Construction Products Directive.

The manufacture has made a declaration, which is held on file. This confirms that the product's design requires no specific processes, procedures or stages (e.g., no addition of file). The specific processes, procedures or stages (e.g., no addition of file) that are aimed at enhancing the fire potentiation of organization content, or addition of fillers) that are aimed at enhancing the fire potentiation in criter to obtain the classification achieved. As a consequence the manufacture has concluded that systems a detectable in support a detailed in support a detectable in support a detailed in support and attention is provided that systems a detailed in support and attention is provided that systems a detailed in support and attention is provided that systems a detailed in support and attention is provided at the system of attention and attention is provided at the system of attention is provided at the system of attention is provided at the system of attention and attention is provided at the system of attention attention and attention is provided at the system of attention attention attention at the system of the systems and attention attention

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.



present document is provided with a qualified onic signature and is valid without autograph

The present test report is established to the best of our knowledge. Only the entire report shall be reproduced. Under no clicumstances, extracts shall be used. Furthermore, we apply the "General Terms and Conditions for the Execution of Contracts" of the relate 8 Patricin plantate Graftial, also with regard to the order execution.

| Sperimen Auchies | FRB 8157Acches | FR



RP 410779-01



Reaction to fire tests for floorings according to EN ISO 9239-1:2010. Part 1: Determination of the burning behaviour using a radiant heat source

the during behaviour using a radiant near source. Determination of the burning behaviour using a radiant heat source: This test method is used for assessing the wind-opposed burning behaviour and the spread of finme on hotizontally mounted floor coverings exposed to a heat flux radiant gradient in a test chamber, when ignited with a plot fame.

The test specimen were installed loose laid on a mineral substrate according to EN 13338-2010 (thickness (8 ± 2) mm, density (1.300 ± 200) kg/m²).
The test specimen were conditioned for 11 days according to ISO 554:1976 (temperature (23 ± 2) °C. relative humidity (50 ± 5) %).





| Society | Page | Page



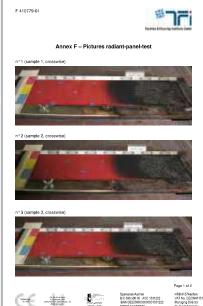
# 3 Test results

| 50 mm mark (mm)                      | best fi   | ax lkW/m | el  |      | time. | at which |       | hame fi<br>mark f |       | ached |       |
|--------------------------------------|-----------|----------|-----|------|-------|----------|-------|-------------------|-------|-------|-------|
|                                      |           |          |     | -    |       |          |       | ole n°            |       |       |       |
|                                      | 1         |          |     | - 01 | 1     | 0.       | 2     | 0                 | 13    | n     | 94    |
|                                      | 1         |          |     | 85m  | ole 1 | sam      | plo 2 | 8977              | ple 3 | sam   | ple 1 |
| 100                                  |           | 11       |     | 25   |       | 2:       |       | 2:                |       |       | 05    |
| 150                                  |           | 10,5     |     | 2:   |       |          | 15    |                   | 15    |       | 15    |
| 200                                  |           | 9,7      |     | 2:   | 30    | 2:       | 25    | 2:                | 30    | 2     | 30    |
| 250                                  |           | 8,6      |     |      | _     |          | _     |                   |       |       |       |
| 300                                  |           | 7.5      |     |      |       |          | _     |                   |       |       |       |
| 350                                  |           | 6,4      |     |      |       |          |       |                   | -     |       |       |
| 400                                  |           | 5,3      |     |      |       |          |       |                   |       |       |       |
| 450                                  |           | 4,5      |     |      |       |          |       |                   |       |       |       |
| 500                                  |           | 3,7      |     |      | _     |          |       |                   |       |       |       |
| 560                                  |           | 3,1      |     |      | _     |          |       |                   |       |       |       |
| 600                                  |           | 2,7      |     |      | _     |          |       |                   |       |       |       |
| 650                                  |           | 2.3      |     |      |       |          |       |                   |       |       |       |
| 700                                  |           | 1,9      |     |      | _     |          | -     |                   | -     |       |       |
| 750                                  |           | 1,7      |     |      |       |          |       |                   |       |       |       |
| 800                                  |           | 1,5      |     |      |       |          |       |                   | -     |       |       |
| 850                                  |           | 1,3      |     |      |       |          |       |                   | -     |       |       |
| 900                                  |           | 1,1      |     |      |       |          |       |                   |       |       |       |
| HF-10 [mm / kW/mm²]                  | R (1:3) = | 230      | 9,1 | 240  | 8,8   | 237      | 8,1   | 220               | 9,3   | 250   | 9,3   |
| HF-20 [mm / kW/mm²]                  | X (1-3) = |          |     |      |       |          |       |                   |       |       |       |
| HF-30 [mm / kW/mm/]                  | x (1-3) = | -        |     | -    | -     |          | -     | -                 |       | -     | -     |
| extinguished after 30 min [yes / no] |           |          |     | - 0  |       |          | 0     |                   | 10    |       | 10    |
| lame extinguished after [min:s]      |           |          |     |      | 55    |          | 55    |                   | :45   |       | :15   |
| max. burnt distance [mm]             | R (1-3) = |          | 30  | 24   |       |          | 30    |                   | 20    |       | 20    |
| CHF [kW/m²]                          | X (1-3) = |          | Ų1  | 8    |       | 9        |       |                   | ,3    |       | ,3    |
| max. Eight attenuation (%)           | X (1:3) = |          | 5   | 2    |       |          | 8     | - 3               |       |       | 5     |
| smoke development (% x min)          | X (1-3) = | 1        | 4   |      | 5     |          | 3     |                   | 7     |       | 8     |
|                                      |           |          |     |      |       |          |       |                   |       |       |       |

material singes up to a distance of 300 mm during a pre-radiation time of 2 minutes





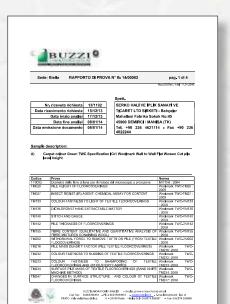


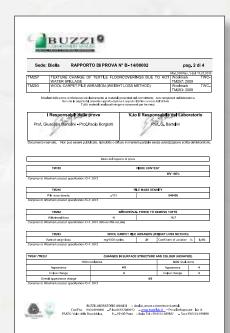


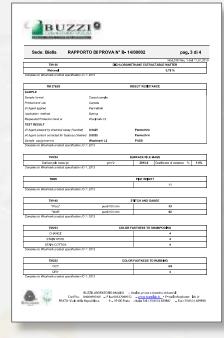


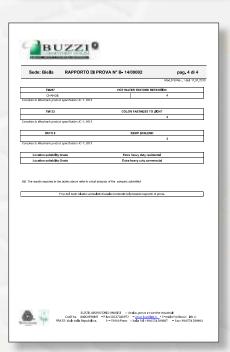


Sparkasse Aachen BLC 390 500 00 - AVC 1331222 BAN DE2239000000001331222





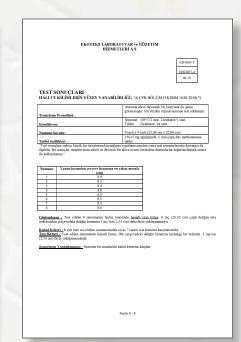


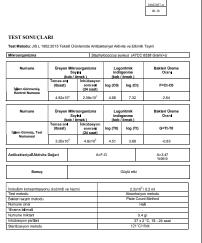






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| TEST SONUÇLARI  |   |   |
| ELYAF ANALÍZÍ: ISO 1833 (Metot : 1<br>"ISO 1833-1-2006, ISO 1833-2-2006, ISO 1833-1<br>ISO 1833-12-2006, ISO 1833-16-2006, ISO 1833-  | 2006. ISO 1833-4:2017. ISO 1833-  | 6:2007, ISO 1833-7:2017, ISO 1833-11:20<br>33-26:2013° kimywal metollaruidan yuka |
| belirtilenler uygulanmıştır.<br>Her bir elyaf teşiilinde, aşağıda belirtilen ilgili tic.<br>Asutat için 969, əkrilik için 962, pannık için 968.5,<br>viskozimedal için 9413, metaliklimetalizə elyaf için | ni nem değeri alınmıştır.<br>poliamid için %65.75, poliaster için %<br>1%2, elastedien için %0, polipropile | id. 5, elastan için %d. 5, yün/angora için %d<br>n için %2.                       |
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EKOTEKS LABORATUVAR ve GÖZETİM HİZMETLERİ A.Ş

Sayfa 6 / 8