

## Water Vapor Transmission and Mold

E.031714.v4

A successful installation of wallcovering requires that walls are not subject to moisture accumulation. Proper building design and construction can prevent moisture accumulation. In all cases an experienced professional should be consulted to determine the permeability requirements for that building and moisture accumulation must be corrected before installing any wallcovering.

Vinyl wallcovering with its closed film surface has no moisture permeability (does not breath). The permeability of vinyl can be increased only through perforation of the vinyl film. The Tapetex wallcoverings do not have a sealed surface layer and therefore the permeability to allow moisture to pass through is extremely high and let the wallcovering breath. A determining factor in subtropical and tropical climate zones.

Permeability measures the amount of water vapor (moisture) passing through a material in a certain time. The degree of permeability is expressed in units called Perms. The higher the Perms level the more moisture can pass through. The US Perms value for vinyl wallcovering is 1. The tests on Tapetex Wall Materials show excellent ratings on the breathability. Below you find the results on the different groups of quality.

### **SGS, USA, did test the Tapetex Wall Materials as per the test-method:**

ASTM E96-12, Method B, Water Vapor Transmission Rate (WVTR)

### **The Tapetex Wall Materials were arranged in 7 compositions:**

#### **1. Tapetex woven textiles of cellulosic fibres (linen, cotton, viscose)**

on a paper backing of 70% woodpulp reinforced with 30% polyester.

Tested quality 68-2031

Test-report SGS : 4581819PP02R1, dated February 18, 2020

Test-results : US Perms Rating 55.3

#### **2. Tapetex woven textiles of cellulosic fibres (linen, cotton, viscose) and synthetic fibres (polyester, nylon)**

on a paper backing of 70% woodpulp reinforced with 30% polyester.

Tested quality 68-1991

Test-report SGS : 4581819PP01R1, dated February 18, 2020

Test-results : US Perms Rating 49.4

#### **3. Tapetex woven textiles of animal fibres (silk, wool)**

on a paper backing of 70% woodpulp reinforced with 30% polyester and with a maximum weight of approx. 450 gr/m<sup>2</sup> (13.3 oz/sq/yd). Tested quality 66-1521.

Test-report SGS : 3975416P01, dated May 6, 2016

Test-results : US Perms Rating 46.7

#### **4. Tapetex woven textiles of animal fibres (silk, wool) and synthetic fibres (polyester, nylon)**

on a paper backing of 70% woodpulp reinforced with 30% polyester and with a maximum weight of approx. 450 gr/m<sup>2</sup> (13.3 oz/sq/yd). Tested quality 66-1436.

Test-report SGS : 3975416P01, dated May 6, 2016

Test-results : US Perms Rating 40.6

**5. Tapetex woven textiles of synthetic fibres (polyester, nylon)**

on a paper backing of 70% woodpulp reinforced with 30% polyester and with a maximum weight of approx. 450 gr/m<sup>2</sup> (13.3 oz/sq/yd). Tested quality 66-1648.

Test-report SGS : 3975416P01, dated May 6, 2016

Test-results : US Perms Rating 43.8

**6. Tapetex one-layer nonwoven of cellulosic and polyester fibres**

with a maximum weight of approx. 260 gr/m<sup>2</sup> (7.67 oz/sq/yd).

Test-report SGS : 4273203 PP01, dated February 26, 2018

Test-results : US Perms Rating 93.8

**7. Tapetex multi-layer nonwoven of cellulosic and polyester fibres**

with a maximum weight of approx. 400 gr/m<sup>2</sup> (11.80 oz/sq/yd).

Test-report SGS : 4273203 PP02, dated February 26, 2018

Test-results : US Perms Rating 35.0