

## Water Vapor Transmission and Mold

E.031714.v5

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 8 compositions:**

#### **1. Tapetex woven textiles of cellulosic fibers (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 fibers (linen, cotton, viscose) and synthetic fibers (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 fibers (silk, wool)**

on a paper backing of 70% woodpulp reinforced with 30% polyester. Tested quality 69-2351.  
Test-report SGS : 01042-23, dated August 21, 2023.  
Test-results : US Perms Rating 59.4

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

on a paper backing of 70% woodpulp reinforced with 30% polyester. Tested quality 69-2341.  
Test-report SGS : 01043-23, dated August 21, 2023.  
Test-results : US Perms Rating 57.4

**5. Tapetex woven textiles of animal fibers (silk, wool) and cellulosic fibers (linen, cotton, viscose)**

on a paper backing of 70% woodpulp reinforced with 30% polyester. Tested quality 69-2422.

Test-report SGS : 01044-23, dated August 21, 2023.

Test-results : US Perms Rating 63.7

**6. Tapetex woven textiles of synthetic fibers (polyester, nylon)**

on a paper backing of 70% woodpulp reinforced with 30% polyester. Tested quality 66-1648.

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

Test-results : US Perms Rating 43.8

**7. Tapetex one-layer nonwoven of cellulosic and polyester fibers**

Tested quality 67-1771.

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

Test-results : US Perms Rating 93.8

**8. Tapetex multi-layer nonwoven of cellulosic and polyester fibers**

Tested quality 67-1791.

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

Test-results : US Perms Rating 35.0