

Testing

Brinell hardness test

This is a British Standard (Brinell EN 1534:2000), defining a hardness value for different wood species. It is based around a given value of 100 for oak, rating other species as softer or harder.

Brinell Table

A 10mm steel ball is pressed against the surface of the test sample with a force of 100kg. This produces an indentation in the wood, which is measured and used to calculate the hardness rating based on an average number of readings.

The table below shows typical Brinell test results for many of the popular wood species — the higher the reading, the harder it is.

Species	Relative Hardness	Brinell Hardness
Ash	105	4.1
Douglas Fir	50	2.7
Oak	100	3.9
Walnut	90	3.5

Slip test

As a requirement for a Hilton Hotels contract, we carried out slip tests on the two main finishes we supply:

Hardwax oil finish

Pendulum (BS7976) in dry conditions	Low slip risk
Pendulum (BS7076) in water wet conditions Current Rz reading	11.5
Estimated Rz threshold for low slip risk	20

Lacquered finish

Pendulum (BS7976) in dry conditions	Low slip risk
Pendulum (BS7076) in water wet conditions Current Rz reading	6.2
Estimated Rz threshold for low slip risk	12