

Summary of STEP& WALL Wear, Resistance and Indentation (Brinell) Tests:

- **WEAR RESISTANCE USING THE FALLING SAND METHOD:**

The wear requirements of floor covering according to the use intensity are indicated at EN 14354:2017” Wood-based panels - Wood veneer floor coverings” as:

INTENSITY OF USE	DOMESTIC			COMMERCIAL		
	Moderate	General	Heavy	Moderate	General	Heavy
Wear resistance cycles number (thickness face ≤ 1mm)	1 000 cycles		2 000 cycles	4 000 cycles	6 000 cycles	

OPENED PORE PROCESS AIDIMME reference 1806222-01.

CHARACTERISTIC	RESULT
Wear resistance. Abrasion to the support. (cycles)	1 700

CLOSED PORE PROCESS / A AIDIMME reference 1806222-02.

CHARACTERISTIC	RESULT
Wear resistance. Abrasion to the support. (cycles)	5 500

From this results we can conclude that Brushed pore (open) is recommended for General Domestic use and Closed pore for General Commercial use.

- **RESISTANCE TO IDENTATION. BRINELL HARDNESS.**

A steel ball of 10mm diameter is placed on the surface sample as a charge. Then a force is applied that increases progressively so that the nominal value of 1kN is reached in a time of 15 seconds. Load force is maintained at this value for 25 seconds.

Two diameters of the residual footprint are measured, perpendicular to each other, one in the direction of the fiber and another perpendicular to it.

Closed Pore Process / A

Indentation / Brinell hardness (N/mm ²) *	42.7 (3.3)
Indentation / Brinell hardness (lbf/in ²)	6 193

PSI is 6193 (lbf/in²)

IMPACT RESISTANCE

The test specimen is placed in the plate of a free-fall tester and covered with a sheet of carbon paper with its coated face in contact and a drop height of 60 cm is adjusted.

The steel ball (324 g = 0.71 pounds) (42.8 mm = 1.68") is released avoiding multiple impacts.

The maximum height at which there are no cracks or imprints greater than 10mm (2/5") diameter is determined.

The impact requirements of floor covering according to the use intensity are indicated at EN 14354:2017" Wood-based panels - Wood veneer floor coverings" as:

INTENSITY OF USE	DOMESTIC			COMMERCIAL		
	Moderate	General	Heavy	Moderate	General	Heavy
Resistance to impact	EC 0	EC1		EC2	EC 3	

Intensity of use class (EN 14354:2017)

Elasticity classification	Fall height (mm)			
	≥ 800	≥ 1 000	≥ 1 200	≥ 1 400
	EC0	EC1	EC2	EC3

Impact resistance	
Fall height (mm)	1 000
Fall height (in)	39.37
Elasticity	EC1

From this test we can conclude that we could drop a 0.71 pound and 1.68" ball to a Closed pore Step&Wall floor from 39.37" (1 m) without seeing cracks or imprints bigger than 2/5".

