



Abrasion resistance



of Vinyl Sheets, Tiles & Carpet Tiles

Use below data as a performance index to judge the durability against abrasion by walking with shoes.

The surface of floorings is abraded by traffic of walking and cart with casters. Sands brought by shoes from outdoor may also affect.

Abrasion will cause not only the damage of flooring, but also bad appearance by the dirt stuck on its surface, though it depends on traffic and maintenance.

Vinyl Sheets & Tiles

Category	Product name	Thickness (mm)	Evaluation
Vinyl sheet	HITOE GRANZA	2.0	A
	HITOE FINE	2.0	A
	NONWAXLEUM NW (TS7000's)	2.0	A
	NONWAXLEUM NW (TS5000's)	2.0	A
	New STANLOAD	2.0	A
	MATURE NW	2.0	B
	HOSPILEUM NW	2.0	B
	FLOORLEUM PLAIN/MARBLE NW	2.0	B
	FLOORLEUM Premier NW series *1	2.0	B
	OPELEUM	2.0	B
	CHEMICAL-RESISTANT SUPER K SHEET NW	2.0	B
	CHEMICAL-RESISTANT SUPER K SHEET EXCELLA NW	2.0	B
	NS AQUATREAD	2.0	B
	NS FLATY	2.0	B
	SF FLOOR NW	2.8	B
	SF FLOOR NW 3.5mm (made to order)	3.5	B
Vinyl tile	CARESAFE NW	4.5	B
	Deodorant NS TOWARE NW	2.0	C
	MATICO V	2.0	B
	FASOL PLUS	3.0	B
	LOOSELAY MASTER NW-EX	5.0	B
	ROYAL WOOD / ROYAL STONE	3.0	C
	E-CLEAN NW-EX	3.0	D
Others	LOOSELAY 40 NW-EX	4.0	D
	LOOSELAY 50 NW-EX	5.0	D
	Linoleum	2.5	B

*1: series consists of FLOORLEUM SOILUD NW, LATTICE NW, FLAKE NW, NATTY NW.

The less abrasion indicates high durability against abrasion.

Carpet Tiles

Category	Product name	Thickness (mm)	Abrasion(mg)	Evaluation
Carpet tile	GA-8900	6.0	35.4	a
	CORENTE V GX-9300V	6.5	45.2	a
	DC-1100 (Dust Control)	10.0	54.3	a
	GA-100	6.5	70.4	a

*BCF Nylon has superior durability against abrasion.

Vinyl Sheets & Tiles

[Criteria for Evaluation]

Rank	Result (rev.)	Guide for uses
A	≥ 15,000	Commercial Use (Heavy duty)
B	5,000~15,000	Commercial use on ground floor without entrance mat
C	2,000~5,500	Commercial use on ground floor with entrance mat
D	≤ 2,500	Commercial & Residential use

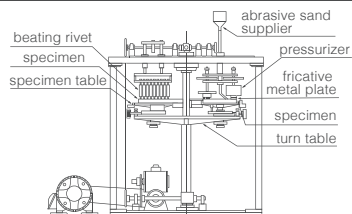
● Guide for Evaluating the Data

Bigger number of effective abrasive revolution indicates stronger abrasion resistance. Categorized into A, B, C & D based on each test result.

● Test Method

Abrasion resistance test (JIS A 1454)

Maximum number of revolution = wear layer/abraded depth x 1,000rev. Drop sand on the specimen fixed on the revolving plate. Rotate 1,000 rev. with the abrasion of steel plate, steel brush, and tapping tool as attachments. Compare the thickness before and after testing.



Carpet Tiles

[Criteria for Evaluation]

Rank	
a	Highly durable
b	Durable
c	Ordinary

● Guide for Evaluating the Data

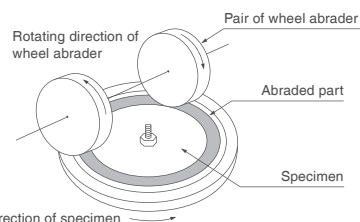
The less abraded weight is, the more durability the pile has.

● Test Method

Abrasion resistance test (JIS L 1021-11)

Put the wheel-shaped weight abradant on the circular specimen of 130mm diameter and rotate the specimen table. Measure the weight decreased by abrasion through rotational motion.

Weight: 1kg/wheel
Rev.: 1,000



*All the testing was conducted by TOLI's in-house labs unless otherwise specified. The data shows actual test results, not guaranteed value.