



Caster-moving smoothness



of Vinyl Sheets, Tiles & Carpet Tiles

Use below data as a performance index to compare the smoothness of moving wheeled equipment.

Caster-moving smoothness contributes to the ease of moving stretcher, catering cart, wheel chair & bed with casters, and so forth. It is affected by the size and material of casters, and the resilience of floor coverings. Casters can move smoothly on the harder and less resilient surface of the flooring.

Longer travel distance indicates smoother move of wheeled equipments.

Category	Product name	Travel distance (m/80kg)	Travel distance (m/20kg)	Average figure	Evaluation
Vinyl sheet	NEW STANLOAD	4.4	5.8	5.1	A
	NONWAXLEUM NW (TS 7000's)	4.3	5.6	5.0	A
	CHEMICAL-RESISTANT SUPER K SHEET NW	4.6	5.7	5.2	A
	CHEMICAL-RESISTANT SUPER K SHEET EXCELLA NW	4.6	5.7	5.2	A
	HITOE GRANZA	4.2	5.4	4.8	A
	HITOE FINE	4.2	5.4	4.8	A
	NS FLATY	4.2	5.3	4.8	A
	FLOORLEUM PLAIN/MARBLE NW	4.1	5.3	4.7	A
	NS AQUATREAD	4.1	5.3	4.7	A
	OPELEUM	4.1	5.1	4.6	A
	HOSPILEUM NW	3.8	5.1	4.5	A
	FLOORLEUM Premier NW series *1	4.2	4.4	4.3	A
	SF FLOOR NW	3.5	4.9	4.2	A
	MATURE NW	3.6	4.6	4.1	A
	NONWAXLEUM NW (TS5000's)	3.4	4.6	4.0	A
	Deodorant NS TOWARE NW	3.4	4.6	4.0	A
	SF FLOOR NW 3.5mm (made to order)	3.1	4.3	3.7	B
	BATHNA ARTI	2.4	3.4	2.9	B
	CARESAFE NW	2.7	2.9	2.8	B
	HOSPILEUM NW + Underlay sheet	1.4	2.4	1.9	C
Vinyl tile	TOUGHTTEC TILE	4.0	5.9	5.0	A
	STRAINE	4.5	5.4	5.0	A
	MATICO V	4.4	5.7	5.1	A
	FASOL PLUS	4.4	5.7	4.9	A
	E-CLEAN NW-EX	4.2	5.5	5.1	A
	LOOSELAY MASTER NW-EX	4.4	5.8	5.1	A
	ROYAL WOOD / ROYAL STONE	4.1	5.4	4.8	A
	LOOSELAY 40 NW-EX	4.0	5.3	4.7	A
Carpet tile	LOOSELAY 50 NW-EX	4.0	5.2	4.6	A
	GA-8900	1.0	1.7	1.4	C
	GA-100	0.9	1.2	1.1	C
	GA-8900 + Underlay sheet	0.8	1.3	1.1	C
	GA-100 + Underlay sheet	0.7	1.2	1.0	C
Others	DC-1100 (Dust Control)	0.8	0.9	0.9	D
	Coated floor (flat-surface type)	4.8	6.1	5.5	A
	Cork tile	4.1	5.4	4.8	A
	Wood flooring	4.2	5.3	4.8	A
	Linoleum	4.0	5.1	4.6	A

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

[Criteria for Evaluation]

Rank	Test Result	Guide for uses
A	≥4.0	Can move with a little strength
B	≥2.0	Can move with a pushing strength
C	≥1.2	Continuous strength is needed to keep moving
D	<1.2	Need strong strength to move

● Test Method

Caster-moving smoothness test (Independent test by TOLI)

Let the loaded cart with casters move down a slope of about 10 degrees' inclination. Measure the travelling distance of the cart from the edge of horizontally-laid floor covering to the center point of rear casters of the cart after it has stopped.

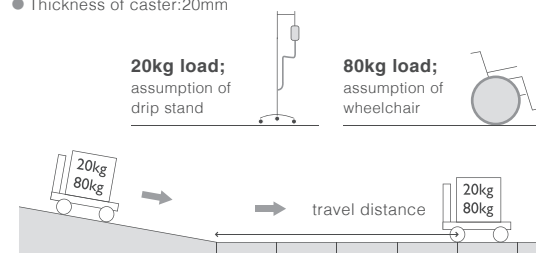
On the assumption of actual usage, the cart is loaded with 20kg or 80kg, and floor carpet tiles are installed in quarter turn. (See Fig. 1)

● Guide for Evaluating the Data

Caster running smoothness is good when **running distance is long**.

Fig.1

- Load:20kg・80kg
- Diameter of caster:100mm
- Thickness of caster:20mm



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