11 Ease of walking on
(ease of leg fatigue)

Leg fatigue by walking depends on footwear & flooring. If flooring is too soft or hard, we cannot walk in comfort. Appropriate hardness of flooring makes walking comfortable and decreases the leg fatigue.

Ease of walking on each flooring

Product Name				Overall Thickness (mm)	Sensory Value*	Evaluation
Vinyl Sheets	NW	FS	NONWAXLEUM NW (TS7000 series)	2.0	1.5	C
			NONWAXLEUM NW (TS5000 series)	2.0	1.5	C
			MATURE NW	2.0	1.6	C
			DEODORANT NS TOWARE NW	2.0	1.5	C
			FLOORLEUM SOILUD NW	2.0	1.4	B
			FLOORLEUM LATTICE NW	2.0	1.4	B
			FLOORLEUM FLAKE NW	2.0	1.4	B
			FLOORLEUM NATTY NW	2.0	1.4	B
		HS	SF FLOOR NW	2.8	1.8	B
			SF FLOOR NW + UNDERLAYSHEET	7.3	2.6	B
			SF FLOOR NW 3.5MM (made-to-order product)	3.5	1.9	B
			SF FLOOR NW 3.5MM + UNDERLAY SHEET	8.0	2.7	B
			HOSPILEUM NW	2.0	1.6	C
			HOSPILEUM NW + UNDERLAYSHEET	6.5	2.4	B
		FS	FLOORLEUM PLAIN NW/MARBLE NW	2.0	1.5	C
			ANTIBACTERIAL FLOORLEUM PLAIN/MARBLE	2.0	1.5	C
			ANTIBACTERIAL FLOORLEUM PLAIN/MARBLE + UNDERLAY SHEET	6.5	2.3	B
			OPELEUM	2.0	1.4	C
			FLOORLEUM RITTI EMBOSS	2.0 (salient)	1.6	C
			SUPER K SHEET	2.0	1.5	C
			SUPER K SHEET EXCELLA	2.0	1.5	C
			NS4400AQUATREAD	2.0	1.5	C
		HS	NS FLATTY	2.0	1.6	C
			BATHNA ARTI	2.8	2.1	B
			BATHNA FLORE	3.5	2.2	B
			BATHNA REALDESIGN	4.0	1.9	B
Vinyl Tiles	NW	FT	E-CLEAN PREMIUM NW	3.0	1.2	D
			ROYAL WOOD / ROYAL STONE	3.0	1.2	D
		KT	MATICO V	2.0	1.2	D
			FASOLPLUS	3.0	1.2	D
	NW	FOA	LL FREE 40 NW-EX	4.0	1.7	C
			LL FREE EXCELLA (made-to-order product)	5.0	1.7	C
Carpet Tiles			GA-100	6.5	4.0	A
			GA-8900	6.0	3.7	A
			GA-100+ UNDERLAY SHEET FOR CARPET TILES	10.5	4.5	A
			GA-8900+ UNDERLAY SHEET FOR CARPET TILES	10.0	4.5	A
Others			Linoleum	2.5	1.0	D
			Coated floor (flat type)	-	1.0	D
			Cork tile	5.0	1.7	C
			Wood floor	12.0	1.4	C

FS heterogeneous vinyl sheet
HS heterogeneous vinyl sheet with foamed layer
FT heterogeneous vinyl tile
KT vinyl composition tile
FOA vinyl loose lay tile

[Criteria for Evaluation]

Rank	Sensory value	Guideline
A	3 ≤	Almost no feel fatigued
B	1.8 ≤	Nearly no feel fatigued
C	1.3 ≤	Slightly feel fatigued
D	< 1.3	Feel fatigued

Guidelines for Evaluating the Data;

The bigger sensory value is, the less fatigue is.

Test Method;

sensory value by walkers / Independent test by TOLI

Walkers consist of 32 men and 5 women at the age of 18-62.
Let them firstly walk on carpet tile and linoleum respectively with usual walking shoes on, and have the criteria of sensory value of 4 when walking on GA100 carpet tile and sensory value of 1 when walking on linoleum sheet floor, then let them evaluate each floor covering by sensory value of 1-4.

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