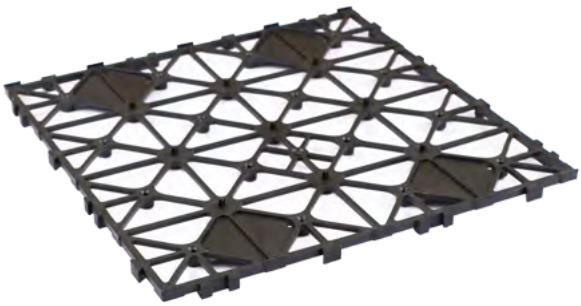
Deck Tile Technical Sheet

Model	Photo	Dimension
Deck Tile		300 x 300 mm (11.8 x 11.8 in)
M4 x 13		M4 x 13 (# 8 x 1/2") 304 Stainless steel
QDG7		308 x 308 x 10.2 mm (12.13 x 12.13 x 0.40 in) TPO

NO.	Property	Test Method	Test results	Remark
1	Brinell hardness	EN15534	8.2N/mm2	
2	Boiling test	EN15534	Water absorption in weigth: 1.10%	
3	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abruption and damage after test	
4	Coefficient Linear Thermal Expansion	ASTM D696	38.9×10^{-6} mm/mm℃	
		EN15534	32.2×10^{-6} K^{-1}	
5	Creep behaviour	EN15534	△ S:4.70mm, △ Sr:2.81mm	Span:350mm
6	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm	
7	Creep Recovery	ASTM D7032	Creep Recovery after 24h: 93%	
8	Degree of chalking	EN15534	Rating 0, no chalking.	
9	Falling mass impact resistance	EN15534	Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.14	
10	Formaldehyde Content	EN717-1	Non Detected	
		ASTM D6007-14	Non Detected	
11	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
12	Heat reversion	EN15534 EN479	Test temperature: 100℃ :0.17%	
13	Heat build-up	EN15534	△ T=-2.7℃	
14	Impact Resistance	ASTM D4226	MFE>396J	
15	Lead Content Test	EUNo.628/2015	Non Detected	
16	Mould resistance	ASTM G21	Rating 0	
17	Moisture Content	EN15534 EN322	0.83%	
18	Moisture resistance under cyclic test conditions	EN15534	Original MOR: 27.4Mpa After exposure, MOR: 24.8Mpa, Decrease: 9.6%.	

NO.	Property	Test Method	Test results	Remark
19	Neutral salt spray test	ASTM B117-2011	After 200 hours tests, there was no visible change appeared on the surface: Front surface: △ E*=1.22, Grey Scale: 4-5 Back surface: △ E*=1.06, Grey Scale: 4-5	
		EN15534 ISO9227	△ E*=1.42, Grey Scale=4 (Exposure 96h)	
20	Pb, Cd, Hg, Cr^{6+}	RoHs-IEC62321	Pb:ND, Cd:ND, Hg:ND, Cr^{6+}:ND	
21	Resistance to scratch test	ISO4586-2	Rate 2	
22	Resistance to indentation	EN15534	Apply 2000N load Brinell hardness: 72Mpa, Rate of elastic recovery: 65%	
23	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure △ E*=1.09, Grey Scale=4-5	
24	Rockwell Hardness	ASTM D785	78.7R	
25	Swelling and water absorption (24hours immersion)	EN15534	① Swelling: 0.06% in thickness, 0.03% in width, 0.03% in length. ② Water absorption: 0.49%	
26	Swelling and water absorption (28days immersion)	EN15534	① Swelling: 0.78% in thickness, 0.07% in width, 0.12% in length. ② Water absorption: 1.66%	
27	SRI Testing	ASTM C1549 ASTM C1371 ASTM E1980	19	
28	Surface Bond quality	EN319	>2.08MPa	
29	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m^2·K)/W	
30	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
31	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, △ E*=3.56	
32	VOC&TVOC	ASTM D5116-11	Non Detected	
33	Water absorption	ASTM D1037-12B(24h)	Water absorption(24h): 0.2%	