

Tests Report



FLUTED SIDING

Norwegian

UH61

Trims UH50-UH51

Belgian

UH58

Trims UH59-UH60

NewTechWood

CANADA

NO.	Property	Test Method	Test results	Remark
1	Abrasion Resistance	ASTM D4060	33mg(1000cycles)	
2	Brinell hardness	EN15534	8.2N/mm ²	
3	Boiling test	EN15534	Water absorption in weight: 0.49%	
4	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abruption and damage after test	
5	Coefficient Linear Thermal Expansion	ASTM D696	35.6×10 ⁻⁶ mm/mm℃	
		EN15534	34.0×10 ⁻⁶ K ⁻¹	
6	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm	
7	Degree of chalking	EN15534	Rating 0, no chalking.	
8	Fire Resistance	ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300	
9	Formaldehyde Content	EN717-1	Non Dectectable	
		ASTM D6007-14	Non Dectectable	
10	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
11	Heat reversion	EN15534 EN479	Test temperature:100℃ :0.17%	
12	Heat build-up	EN15534	Δ T=-2.7℃	
13	Lead Content Test	EUNo.628/2015	Non Dectectable	
14	Mould resistance	ASTM G21	Rating 0	
15	Moisture Content	EN15534 EN322	0.83%	
16	Neutral salt spray test	ASTM B117-2011	After 200 hours tests, there was no visible change appeared on the surface: Front surface: Δ E*=1.22, Grey Scale: 4-5 Back surface: Δ E*=1.06, Grey Scale: 4-5	
		EN15534 ISO9227	Δ E*=1.42, Grey Sale=4 (Exposure 96h)	

NO.	Property	Test Method	Test results	Remark
17	Pb, Cd, Hg, Cr ⁶⁺	RoHs-IEC62321	Pb:ND, Cd:ND, Hg:ND, Cr ⁶⁺ :ND	
18	Resistance to scratch test	ISO4586-2	Rate 2	
19	Resistance to indentation	EN15534	Apply 2000N load Brinell hardness: 60Mpa, Rate of elastic recovery: 64%	
20	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure $\Delta E^*=1.09$, Grey Sale=4-5	
21	Rockwell Hardness	ASTM D785	78.7R	
22	Swelling and water absorption (24hours immersion)	EN15534-1 EN15534-4	① Swelling: 0.43% in thickness, 0.02% in width, 0.03% in length. ② Water absorption: 0.11%	
23	Swelling and water absorption (28days immersion)	EN15534	① Swelling: 0.67% in thickness, 0.04% in width, 0.07% in length. ② Water absorption: 0.27%	
24	SRI Testing	ASTM C1549 ASTM C1371 ASTM E1980	19	
25	Surface Bond quality	EN319	>2.08MPa	
26	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m ² ·K)/W	
27	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
28	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, $\Delta E^*=3.56$	
29	VOC&TVOC	ASTM D5116-11	Non Dectectable	
30	Water absorption	ASTM D1037	Water absorption(24h): 0.12%	
31	Installation Span	Manufacturers Specification	500mm on center	

Tests Report



FLAT SIDING

Shiplap UH67

Gap Siding
UH58

Shou Sugi Ban
US09

Trims
US44-US45-US56-
US47

NO.	Property	Test Method	Test results	Remark
1	Abrasion Resistance	ASTM D4060	33mg(1000cycles)	
2	Brinell hardness	EN15534	8.2N/mm ²	
3	Boiling test	EN15534	Water absorption in weight: 0.49%	
4	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abruption and damage after test	
5	Coefficient Linear Thermal Expansion	ASTM D696	35.6×10 ⁻⁶ mm/mm ℃	
		EN15534	34.0×10 ⁻⁶ K ⁻¹	
6	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm	
7	Degree of chalking	EN15534	Rating 0, no chalking.	
8	Fire Resistance	ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300	
9	Formaldehyde Content	EN717-1	Non Dectectable	
		ASTM D6007-14	Non Dectectable	
10	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
11	Heat reversion	EN15534 EN479	Test temperature:100 ℃ :0.17%	
12	Heat build-up	EN15534	Δ T=-2.7 ℃	
13	Lead Content Test	EUNo.628/2015	Non Dectectable	
14	Mould resistance	ASTM G21	Rating 0	
15	Moisture Content	EN15534 EN322	0.83%	
16	Neutral salt spray test	ASTM B117-2011	After 200 hours tests, there was no visible change appeared on the surface: Front surface: Δ E*=1.22, Grey Scale: 4-5 Back surface: Δ E*=1.06, Grey Scale: 4-5	
		EN15534 ISO9227	Δ E*=1.42, Grey Sale=4 (Exposure 96h)	

NO.	Property	Test Method	Test results	Remark
17	Pb, Cd, Hg, Cr ⁶⁺	RoHs-IEC62321	Pb:ND, Cd:ND, Hg:ND, Cr ⁶⁺ :ND	
18	Resistance to scratch test	ISO4586-2	Rate 2	
19	Resistance to indentation	EN15534	Apply 2000N load Brinell hardness: 60Mpa, Rate of elastic recovery: 64%	
20	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure $\Delta E^*=1.09$, Grey Sale=4-5	
21	Rockwell Hardness	ASTM D785	78.7R	
22	Swelling and water absorption (24hours immersion)	EN15534-1 EN15534-4	① Swelling: 0.43% in thickness, 0.02% in width, 0.03% in length. ② Water absorption: 0.11%	
23	Swelling and water absorption (28days immersion)	EN15534	① Swelling: 0.67% in thickness, 0.04% in width, 0.07% in length. ② Water absorption: 0.27%	
24	SRI Testing	ASTM C1549 ASTM C1371 ASTM E1980	19	
25	Surface Bond quality	EN319	>2.08MPa	
26	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m ² ·K)/W	
27	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
28	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, $\Delta E^*=3.56$	
29	VOC&TVOC	ASTM D5116-11	Non Dectectable	
30	Water absorption	ASTM D1037	Water absorption(24h): 0.12%	
31	Installation Span	Manufacturers Specification	500mm on center	

Tests Report



DECORATIVE BEAMS

Small
UH17

Medium
UH25

Large
UH26

NO.	Property	Test Method	Test results	Remark
1	Abrasion Resistance	ASTM D4060	33mg(1000cycles)	
2	Brinell hardness	EN15534	8.2N/mm ²	
3	Boiling test	EN15534	Water absorption in weight: 0.49%	
4	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abruption and damage after test	
5	Coefficient Linear Thermal Expansion	ASTM D696	35.6×10 ⁻⁶ mm/mm °C	
		EN15534	34.0×10 ⁻⁶ K ⁻¹	
6	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm	
7	Degree of chalking	EN15534	Rating 0, no chalking.	
8	Formaldehyde Content	EN717-1	Non Dectectable	
		ASTM D6007-14	Non Dectectable	
9	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
10	Heat reversion	EN15534 EN479	Test temperature:100 °C :0.17%	
11	Heat build-up	EN15534	Δ T=-2.7 °C	
12	Lead Content Test	EUNo.628/2015	Non Dectectable	
13	Mould resistance	ASTM G21	Rating 0	
14	Moisture Content	EN15534 EN322	0.83%	
15	Neutral salt spray test	ASTM B117-2011	After 200 hours tests, there was no visible change appeared on the surface: Front surface: Δ E*=1.22, Grey Scale: 4-5 Back surface: Δ E*=1.06, Grey Scale: 4-5	
		EN15534 ISO9227	Δ E*=1.42, Grey Sale=4 (Exposure 96h)	
16	Pb, Cd, Hg, Cr ⁶⁺	RoHs-IEC62321	Pb:ND, Cd:ND, Hg:ND, Cr ⁶⁺ :ND	
17	Resistance to scratch test	ISO4586-2	Rate 2	

NO.	Property	Test Method	Test results	Remark
18	Resistance to indentation	EN15534	Apply 2000N load Brinell hardness: 60Mpa, Rate of elastic recovery: 64%	
19	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure $\Delta E^*=1.09$, Grey Sale=4-5	
20	Rockwell Hardness	ASTM D785	78.7R	
21	Swelling and water absorption (24hours immersion)	EN15534-1 EN15534-4	① Swelling: 0.43% in thickness, 0.02% in width, 0.03% in length. ② Water absorption: 0.11%	
22	Swelling and water absorption (28days immersion)	EN15534	① Swelling: 0.67% in thickness, 0.04% in width, 0.07% in length. ② Water absorption: 0.27%	
23	SRI Testing	ASTM C1549 ASTM C1371 ASTM E1980	19	
24	Surface Bond quality	EN319	>2.08MPa	
25	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m ² ·K)/W	
26	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
27	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, $\Delta E^*=3.56$	
28	VOC&TVOC	ASTM D5116-11	Non Dectectable	
29	Water absorption	ASTM D1037	Water absorption(24h): 0.12%	

Tests Report



**QUICKDECK
TILES**

NewTechWood
CANADA

NO.	Property	Test Method	Test results	Remark
1	Brinell hardness	EN15534	8.2N/mm ²	
2	Boiling test	EN15534	Water absorption in weight: 1.10%	
3	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abrasion and damage after test	
4	Coefficient Linear Thermal Expansion	ASTM D696	38.9×10 ⁻⁶ mm/mm °C	
		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 °C :0.17%	
13	Heat build-up	EN15534	△ T=-2.7 °C	
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: $\Delta E^*=1.22$, Grey Scale: 4-5 Back surface: $\Delta E^*=1.06$, Grey Scale: 4-5	
		EN15534 ISO9227	$\Delta E^*=1.42$, 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 $\Delta E^*=1.09$, 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, $\Delta E^*=3.56$	
32	VOC&TVOC	ASTM D5116-11	Non Detected	
33	Water absorption	ASTM D1037-12B(24h)	Water absorption(24h): 0.2%	

Tests Report



DECKING

BOARD
UH02

FASCIAS
US03-US05-US08

BULLNOSE
US33

NO.	Property	Test Method	Test results	Remark
1	Abrasion resistance	ASTM D4060-10	33mg(1000cycles)	
2	Brinell hardness	EN15534	8.2N/mm ²	
3	Boiling test	EN15534	Water absorption in weight: 1.10%	
4	Bond Strength	EN319	Average Bond Strength>2.3MPa No obvious abruption and damage after test	
5	Coefficient Linear Thermal Expansion	ASTM D696	38.9×10 ⁻⁶ mm/mm °C	
		EN15534	32.2×10 ⁻⁶ K ⁻¹	
6	Creep behaviour	EN15534	△ S:4.70mm, △ Sr:2.81mm	Span:350mm
7	Content of pentachlorophenol	CE (EN14041(2004))	2.99ppm	
8	Creep Recovery	ASTM D7032	Creep Recovery after 24h: 93%	
9	Degree of chalking	EN15534	Rating 0, no chalking.	
10	Fire Resistance	ASTM E84	Flame Spread Index(FSI): 85 Smoke Developed Index(SDI): 300	
11	Falling mass impact resistance	EN15534	Max Crack length(mm): No crack. Max Residual Indentation(mm): 0.14	
12	Formaldehyde Content	EN717-1	Non Dectectable	
		ASTM D6007-14	Non Dectectable	

NO.	Property	Test Method	Test results	Remark
13	Flexural properties	EN15534	Bending Strength: 26.2Mpa, Modulus of elasticity: 3.10Gpa, Maximum load: 4537N, Deflection at 500N: 0.88mm	Span:350mm
		ASTM D6109	MOR:24.8MPa, MOE:3495MPa	Span:368mm
14	Heavy Metal Content	EPA3051	Sb:ND, As:ND, Se:ND, Sn:ND	
15	Heat reversion	EN15534 EN479	Test temperature: 100 °C :0.17%	
16	Heat build-up	EN15534	$\Delta T = -2.7^{\circ}\text{C}$	
17	Impact Resistance	ASTM D4226	MFE>396J	
18	Lead Content Test	EUNo.628/2015	Non Detectable	
19	Mould resistance	ASTM G21	Rating 0	
20	Moisture Content	EN15534 EN322	0.83%	
21	Moisture resistance under cyclic test conditions	EN15534	Original MOR: 27.4Mpa After exposure, MOR: 24.8Mpa, Decrease: 9.6%.	
22	Neutral salt spray test	ASTM B117-2011	After 200 hours tests, there was no visible change appeared on the surface: Front surface: $\Delta E^* = 1.22$, Grey Scale:4-5 Back surface: $\Delta E^* = 1.06$, Grey Scale:4-5	
		EN15534 ISO9227	$\Delta E^* = 1.42$, Grey Sale=4 (Exposure 96h)	
23	Pb, Cd, Hg, Cr ⁶⁺	RoHs-IEC62321	Pb:ND, Cd:ND, Hg:ND, Cr ⁶⁺ :ND	
24	Resistance to scratch test	ISO4586-2	Rate 2	
25	Resistance to indentation	EN15534	Apply 2000N load Brinell hardness: 72Mpa, Rate of elastic recovery: 65%	
26	Resistance to artificial weathering	EN15534 ISO4892-2	After 2000h exposure $\Delta E^* = 1.09$, Grey Sale=4-5	
27	Rockwell Hardness	ASTM D785	78.7R	

NO.	Property	Test Method	Test results	Remark
28	Slip Resistance	AS/NZS 4586	1. Wet Pendulum Testing: Longitudinal:30; Horizontal:42 2. Oil Ramp Testing: Longitudinal:Rating:R11; Horizontal:Rating:R11	
		CENTS12633(2014) CENTS16165(2012)	Pendulum Testing: Dry condition: PTV46 Wet condition: PTV34	
		EN15534-1, EN15534-4	Pendulum test:Longitudinal:44; Horizontal:56 Indination plan test:Angle:25.0°, Rating:Class C	
		DIN51130	Oil-wet ramp test: Angle:19.7° Rating:R11	
		DIN51097	Wet-load ramp test: Front View:Angle:31.2° Rating:C Back View:Angle:29.0° Rating:C	
		EN15534 CEN/TS15676	Pendulum test:Longitudinal:59; Horizontal:69 Indination plan test:Angle:38.2°, Rating:Class C	
29	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%	
30	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%	
31	SRI Testing	ASTM C1549 ASTM C1371 ASTM E1980	19	
32	Surface Bond quality	EN319	>2.08MPa	
33	Thermal Resistance	ASTM C518-2010	Thermal conductivity: 0.1589W/(m·k) Thermal resistance: 0.0830(m ² ·K)/W	
34	Thermal conductivity	CE (EN14041(2004))	0.19738W/m·K	
35	UV Weathering test	ASTM G154	After 3000 hours test, Grey Scale3, ΔE^* =3.56	
36	Uplift Resistance	ICC-ES AC174 ASTM E330	Average ultimate load \geq 427psf	
37	VOC&TVOC	ASTM D5116-11	Non Dectectable	
38	Water absorption	ASTM D1037-12B(24h)	Water absorption(24h): 0.2%	