Tecnodeck®

THE HIGH TECH WOOD COMPOSITE

www.tecnodeck.net

TECNODECK PROFILES

TECHNICAL FEATURES

01/2022

Tecnodeck®
THE HIGH TECH WOOD COMPOSITE
www.tecnodeck.net

TECNODECK PROFILES

AVAILABLE COLORS

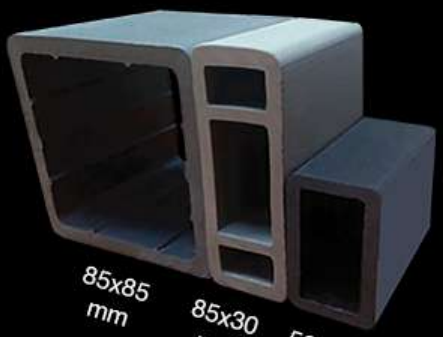
TROPICAL BROWN

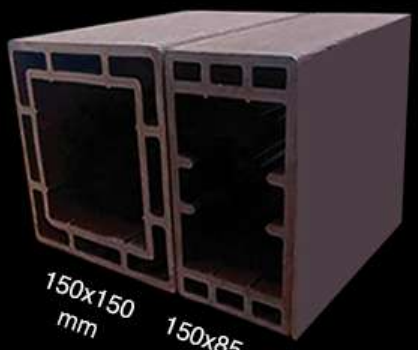
SAND BROWN

WHITE SHADE

URBAN GREY

VULCANO BLACK





NEW OPTIONAL PROFILES

Wing Profile
150x33 mm

30x30 mm
50x50 mm
100x25 mm
100x50 mm
150x50 mm
200x80 mm
300x100 mm

ARCHITECTONIC PROFILES

THE USE OF THE TECNODECK ARCHITECTONIC PROFILES REQUEST A PROPER TECHNICAL STUDY

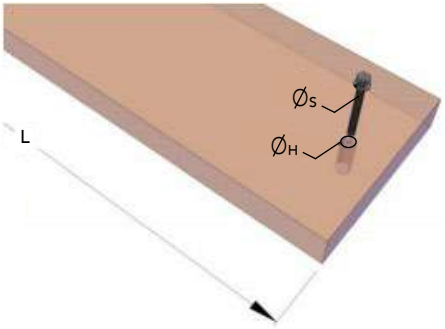
BASIC MOUNTING RULES

- Tecnodeck profiles in most of the cases must work together with metal reinforcement profiles.
- The fixation of Tecnodeck profiles must be made always to the metal reinforcement profiles and never to the composite profiles. All holes in WPC must be to pass and having a larger diameter than the screw hole that passes through it, so that the screw will never be a constraint for WPC. The composite hole diameter should be larger than the screw diameter at 2 mm/profile meter (at 20°C).
  The tightening of the screws at the composite should never crush the composite profile and must allow the free movement of the profile.

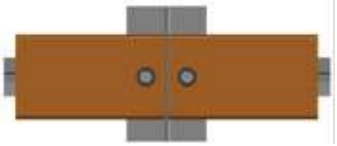
$$Ø_H = \frac{2x\ L\ (mm)}{1000} + Ø_S$$

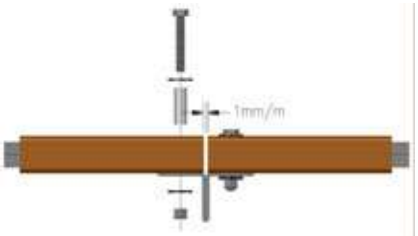
Example: for screws with $Ø_S$ 4.8 mm on 3000 mm length profiles

$$Ø_H = \frac{2x3000}{1000} + 4.8 \simeq Ø\ 11\ mm$$

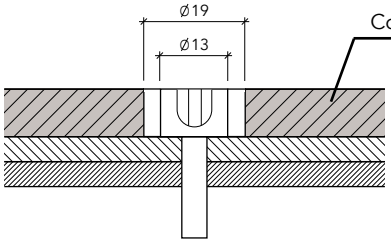


- A distance between the top ends of a profile and rigid obstacles is required (between walls or similar) at the rate of 1 mm/ml (at 20°C).
- Please validate the fixations with Tecnodeck Technical Department.
- Any type of assembly not specified, must be previously approved by Tecnodeck.
- Tecnodeck will not assume any responsability by mounts and fixation not specified by us.
- For quantities, bespoke profiles are possible under request.
- When fixing profiles with screws, the inner structural profile needs a 1 mm/m (at 20°C) gape between top profiles.



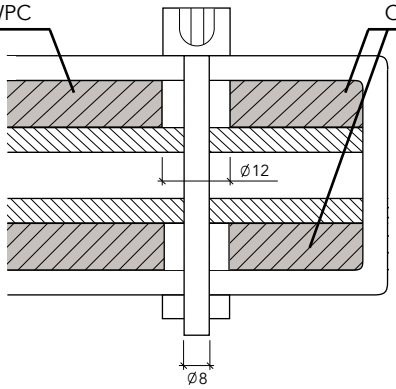


Ex: $Ø_S$ = Ø screw head M8 = Ø 13 mm
Board Length = 3000 mm



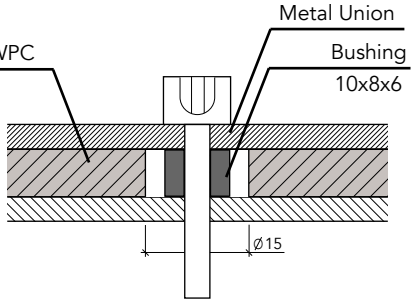
$$Ø_H = \frac{2x\ 3000\ mm}{1000} + 13 = Ø\ 19\ mm$$

Ex: $Ø_S$ = Ø screw body M8 = Ø 8 mm
Board Length = 2000 mm



$$Ø_H = \frac{2x\ 2000\ mm}{1000} + 8 = Ø\ 12\ mm$$

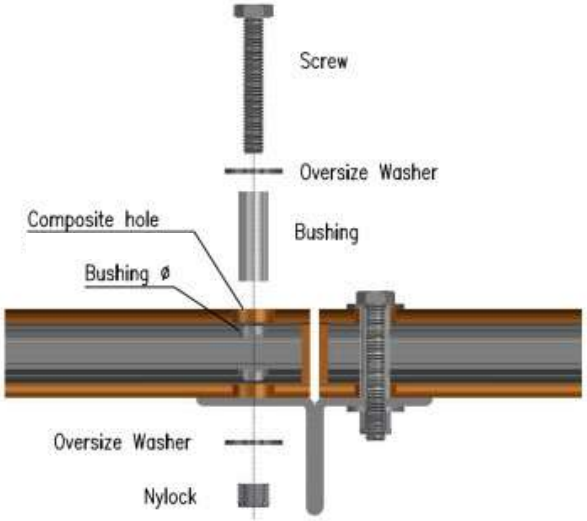
Ex: $Ø_S$ = bushing Ø = 10 Ø mm
Board Length = 2500 mm

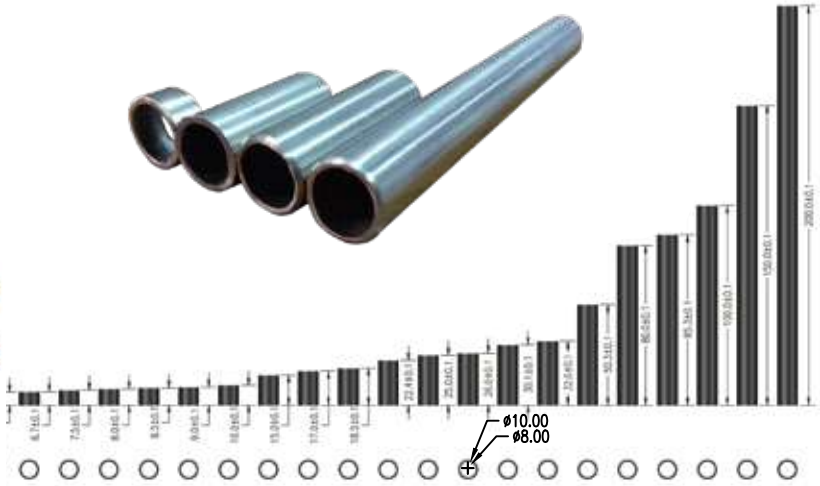


$$Ø_H = 2x\ \frac{2500\ mm}{1000} + 10 = Ø\ 15\ mm$$

BASIC MOUNTING RULES

TECNODECK BUSHINGS





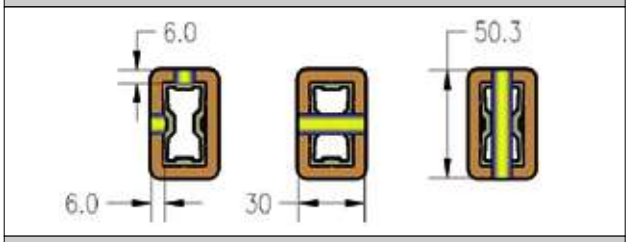
- use a inner bushing to prevent smashing WPC profile
- protect the WPC with oversize washers
- consider WPC hole diameter as shown on previous page
- structural profile hole diameter equal to bushing outside diameter
- all these parameters must be considered in any WPC profile, such as 30x30mm, 50x30 mm, 50x50mm, 85x30 mm, 85x85 mm, 100x25 mm,100x50 mm, 150x50 mm, 150x85 mm, 150x150 mm, 200x80 mm and 300x100 mm - if in any doubt, please contact Tecnodeck

BUSHING Ø10xØ8xL (mm)	PROFILES													
	WPC 30x30	WPC 50x30	WPC 50x50	WPC 85x30	WPC 85x85	WPC 2x 85x85	WPC 100x25	WPC 100x50	WPC 150x33 W	WPC 150x50	WPC 150x85	WPC 150x150	WPC 200x80	WPC 300x100
5.0	X													
5.2				X			X							
6.0		X	X	X										
6.5								X	X					
6.7			X											
7.5										X				
8.0										X				
8.5					X	X								X
9.0													X	
10.0													X	X
15.0										X				
17.0						X								
18.5											X			
22.4				X										
25.0							X				X			X
26.0												X		
30.1	X	X		X										
32.0									X					
50.3		X	X					X		X				
80.0													X	
85.0				X	X	X					X			
100.0							X	X						X
150.0										X	X	X		
200.0													X	

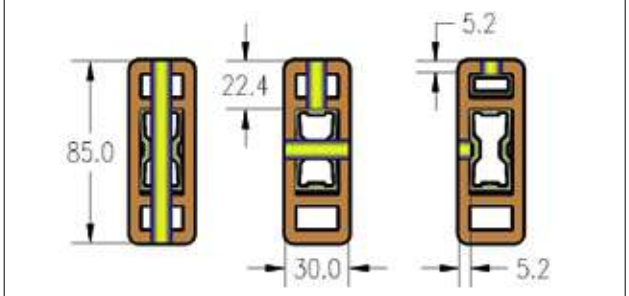
BASIC MOUNTING RULES

TECNODECK BUSHINGS

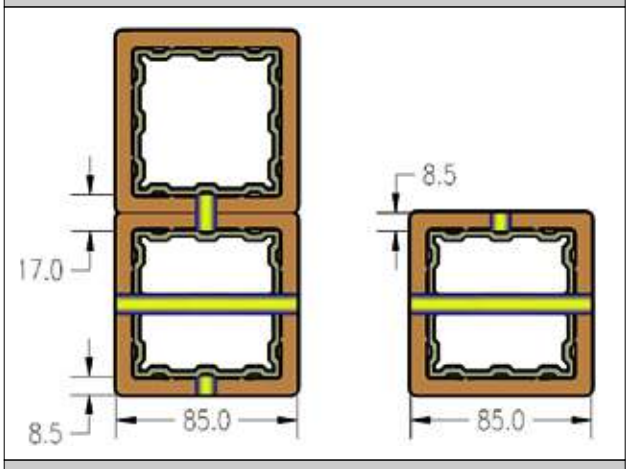
WPC 50x30



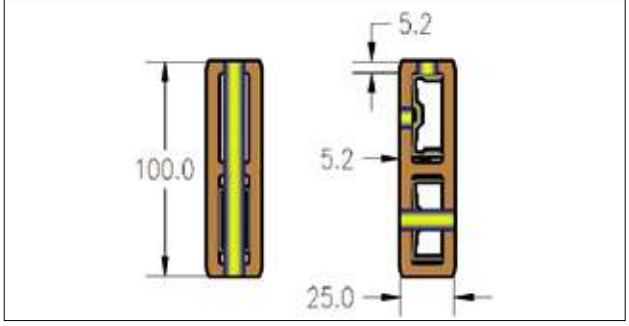
WPC 85x30



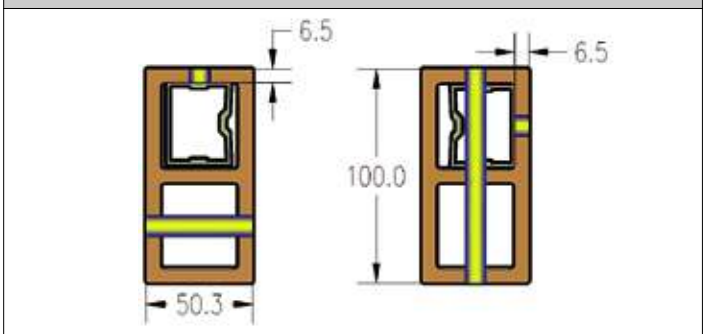
WPC 2x 85x85 ; WPC 85x85



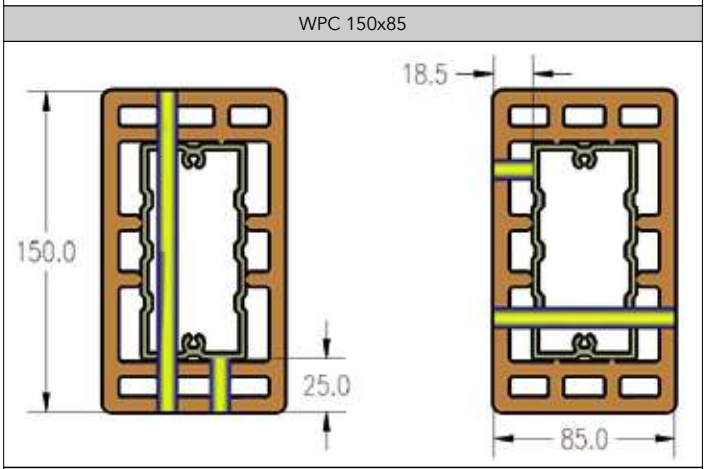
WPC 100x25



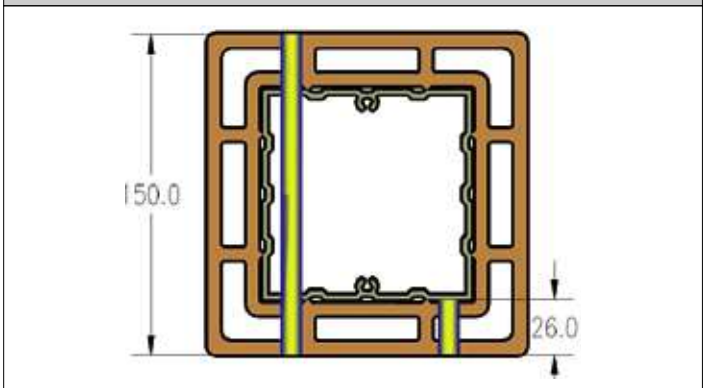
WPC 100x50



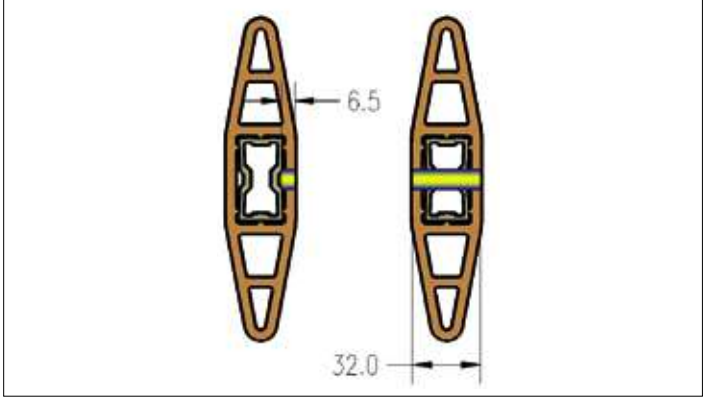
WPC 150x85



WPC 150x150



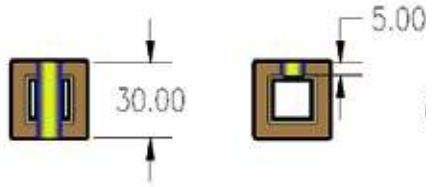
WPC 150x33



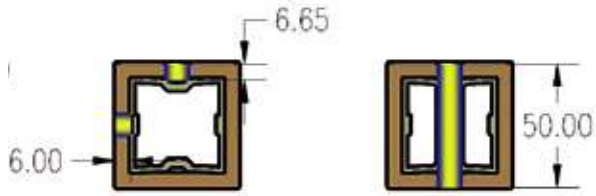
BASIC MOUNTING RULES

TECNODECK BUSHINGS

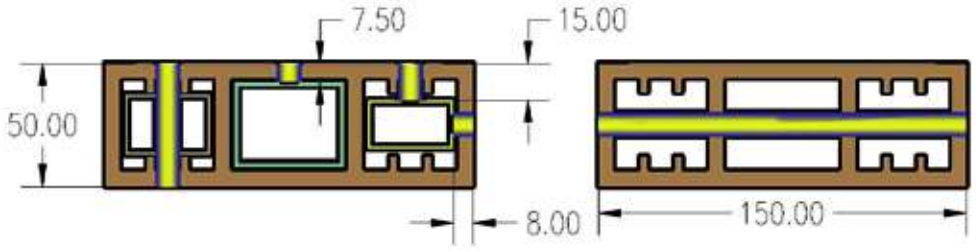
WPC 30x30



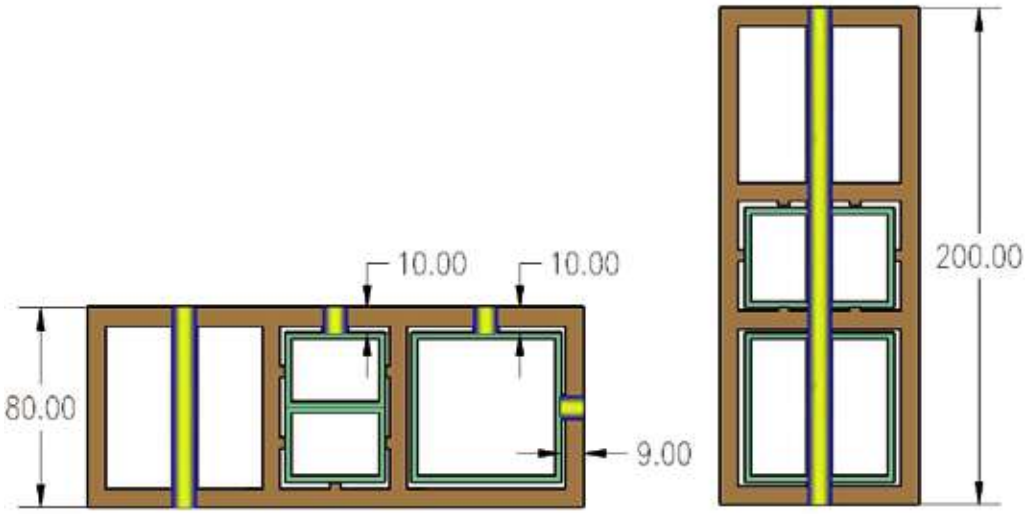
WPC 50x50



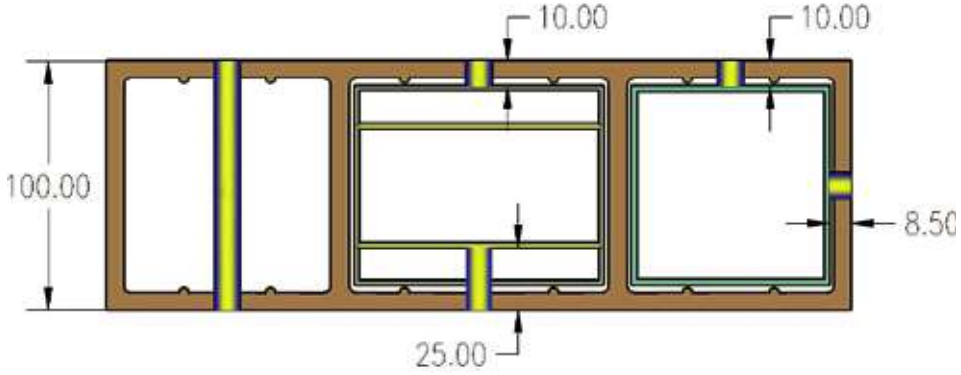
WPC 150x50



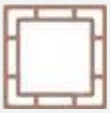
WPC 200x80



WPC 300x100



BASIC MOUNTING RULES

		WPC PROFILES							
		WPC 50x30	WPC 85x30	WPC 85x85	WPC 100x25	WPC 100x50	WPC 150x85	WPC 150x150	WPC 150x33 W
									
ALUMINUM PROFILES	ALU	ALU 38x20	ALU 38x20	ALU 68x68 	ALU 38x10	ALU 38x30 	ALU 100x48 	ALU 98x98 	ALU 38x20
	ALU-U	ALU-U 38x20	ALU-U 38x20						ALU-U 38x20

		WPC PROFILES				
		WPC 30x30	WPC 50x50	WPC 150x50	WPC 200x80	WPC 300x100
						
ALUMINUM PROFILES	ALU	ALU 20x20	ALU 38x38 	ALU 35x20	ALU 40x60 	ALU 80x80 
				ALU 45x35	ALU 60x60 	ALU 100x50 
	ST-U			ST-U 35x25 	ST-U 40x60 	ST-U 80x80 
				ST-U 45x35	ST-U 60x60 	ST-U 100x50 

Structural profiles

	WITH INTERIOR REINFORCEMENT - ALUMINIUM PROFILE ALU											
	Profile Position	Alu Profile	L=3M defletion (mm)		L=4M defletion (mm)		L=5M defletion (mm)		L=5.5M defletion (mm)		L=6M defletion (mm)	
WPC 150x150 + Alu 98x98			1	L/3504	3	L/1478	7	L/757	10	L/569	14	L/438
			1	L/3631	3	L/1532	6	L/784	9	L/589	13	L/454
WPC 150x85 + Alu 100x48			1	L/3440	3	L/1451	7	L/743	10	L/558	14	L/430
			1	L/2258	4	L/953	10	L/488	15	L/366	21	L/282
			3	L/1077	9	L/454	22	L/233				
WPC 85x85 + Alu 68x68			1	L/2271	4	L/958	10	L/491	15	L/369	21	L/284
			1	L/2268	4	L/957	10	L/490	15	L/368	21	L/284

BASIC MOUNTING RULES

Non structural profiles

	WITH INTERIOR REINFORCEMENT - ALUMINIUM PROFILE ALU															
	Profile Position	Alu Profile	L=1.5M defletion (mm)		L=2M defletion (mm)		L=2.5M defletion (mm)		L=3M defletion (mm)		L=3.5M defletion (mm)		L=4M defletion (mm)		L=4.5M defletion (mm)	
WPC WING PROFILE 150x33 + Alu 38x20			0.4	L/4102	1	L/1730	3	L/886	6	L/513	11	L/323	19	L/216		
			0.6	L/2385	2	L/1006	5	L/515	10	L/298						
			2.1	L/711	7	L/300										
WPC 100x50 + Alu 38x30			0.3	L/5925	1	L/2499	2	L/1280	4	L/741	8	L/466	13	L/312	21	L/219
			0.4	L/4258	1	L/1796	3	L/920	6	L/532	10	L/335	18	L/225		
			0.6	L/2592	2	L/1093	5	L/560	9	L/324	17	L/204				
WPC 100x25 + Alu 38x10			0.3	L/5091	1	L/2148	2	L/1100	5	L/636	9	L/401	15	L/268		
			0.5	L/2765	2	L/1166	4	L/597	9	L/346	16	L/218				
			3.4	L/438												
WPC 85x30 + Alu 38x20			0.3	L/5003	1	L/2110	2	L/1081	5	L/625	9	L/394	15	L/264		
			0.5	L/3059	2	L/1291	4	L/661	7	L/382	15	L/241				
			1.3	L/1167	4	L/492	10	L/252								
WPC 50x30 + Alu 38x20			0.3	L/4520	1	L/1907	3	L/976	5	L/565	10	L/356	17	L/238		
			0.5	L/2967	2	L/1252	4	L/641	8	L/371	15	L/234				
			1	L/1487	3	L/627	8	L/321								

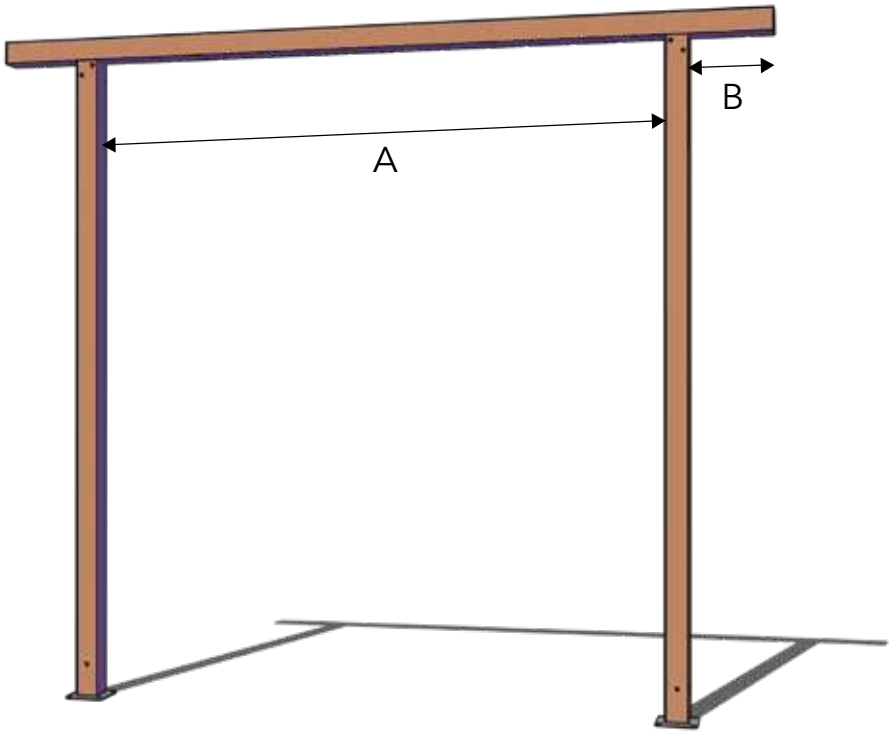
	WITH INTERIOR REINFORCEMENT - ALUMINIUM PROFILE ALU-U															
	Profile Position	Alu-U Profile	L=1.5M defletion (mm)		L=2M defletion (mm)		L=2.5M defletion (mm)		L=3M defletion (mm)		L=3.5M defletion (mm)		L=4M defletion (mm)		L=4.5M defletion (mm)	
WPC WING PROFILE 150x33 + Alu-U 38x20			0.4	L/4014	1	L/1693	3	L/867	6	L/502	11	L/316	19	L/212		
			0.7	L/2187	2	L/923	5	L/472	11	L/273						
			4	L/366												
WPC 85x30 + Alu-U 38x20			0.3	L/4968	1	L/2096	2	L/1073	5	L/621	9	L/391	15	L/262		
			0.5	L/2856	2	L/1205	4	L/617	8	L/357	16	L/225				
			2	L/743	6	L/314										
WPC 50x30 + Alu-U 38x20			0.3	L/4402	1	L/1857	3	L/951	5	L/550	10	L/347	17	L/232		
			0.6	L/2651	2	L/1119	4	L/573	9	L/331	17	L/209				
			1.7	L/901	5	L/380										

BASIC MOUNTING RULES

Non structural profiles

	NO REINFORCEMENT (*)		
	Profile Position	Max. Span (A) mm	Max. Span (B) mm
WPC 150x150		1.700	475
		1.700	475
WPC 150x85		1.700	475
		1.500	430
		1.300	365
WPC 85x85		1.300	370
		1.300	370
WPC WING PROFILE		1.300	365
		1.100	310
		600	173
WPC 100x50		1.300	375
		1.200	340
		1.000	285
WPC 100x25		1.300	365
		1.100	313
		700	200
WPC 85x30		1.200	345
		1.060	300
		760	215
WPC 50x30		900	270
		880	250
		750	220

(*) - Not a structural element



BASIC MOUNTING RULES

Non structural complementary profiles

	WITH INTERIOR REINFORCEMENT - ALUMINIUM PROFILE ALU																	
	Profile Position	Alu Profile	L=1.5M defletion (mm)		L=2M defletion (mm)		L=2.5M defletion (mm)		L=3M defletion (mm)		L=3.5M defletion (mm)		L=4M defletion (mm)		L=4.5M defletion (mm)		L=5M defletion (mm)	
WPC 200x80 + Alu 60x40			0,1	L/19456	0,2	L/8208	1	L/4202	1	L/2432	2	L/1531	4	L/1026	6	L/721	10	L/525
			0,1	L/12707	0,4	L/5361	1	L/2745	2	L/1588	4	L/1000	6	L/670	10	L/471	15	L/343
			0,3	L/5957	0,8	L/2513	2	L/1287	4	L/745	8	L/469	13	L/314	20	L/221		
WPC 150x50 + Alu 45x35			0,1	L/11202	0,4	L/4726	1	L/2420	2	L/1400	4	L/882	7	L/591	11	L/415	17	L/302
			0,2	L/7309	1	L/3884	2	L/1579	3	L/914	6	L/575	10	L/385	17	L/271		
			0,4	L/3416	1	L/1441	3	L/738	7	L/427	13	L/269						
WPC 50x50 + Alu 38x38			0,3	L/5035	1	L/2124	2	L/1088	5	L/629	9	L/396	15	L/266				
			0,3	L/5035	1	L/2124	2	L/1088	5	L/629	9	L/397	15	L/266				
WPC 30x30 + Alu 20x20			0,9	L/1699	3	L/717	7	L/367	14	L/212								
			0,9	L/1699	3	L/717	7	L/367	14	L/212								

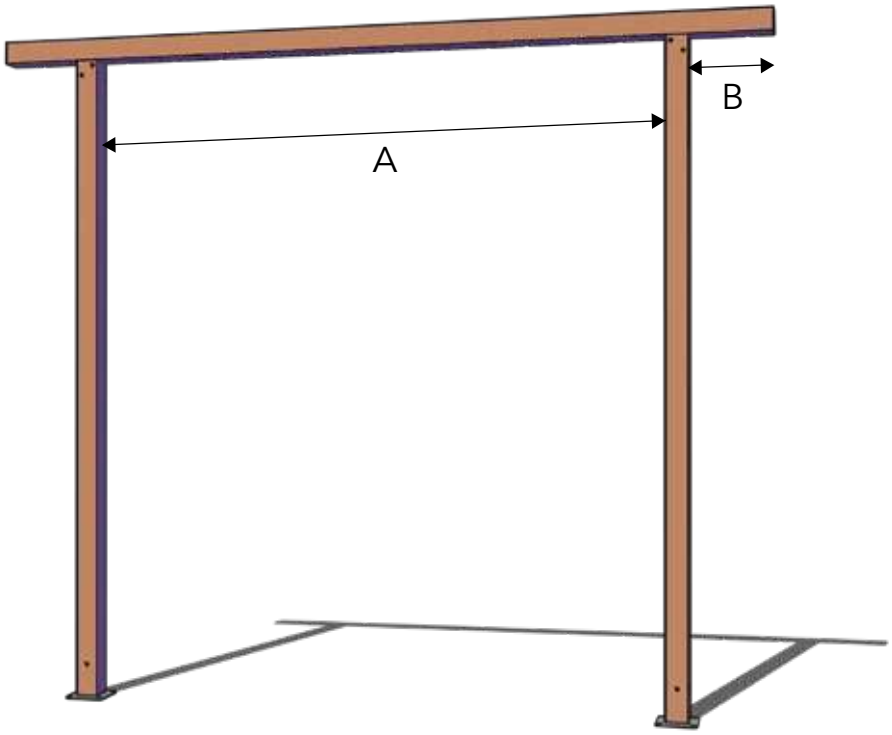
	WITH INTERIOR REINFORCEMENT - ALUMINIUM PROFILE ALU															
	Profile Position	Alu Profile	L=3M defletion (mm)		L=3.5M defletion (mm)		L=4M defletion (mm)		L=4.5M defletion (mm)		L=5M defletion (mm)		L=5.5M defletion (mm)		L=6.0M defletion (mm)	
WPC 300x100 + Alu 100x40			0,5	L/5537	1	L/3487	2	L/440	3	L/1641	4	L/1196	6	L/899	9	L/692
			0,9	L/3290	2	L/2072	3	L/1388	5	L/975	7	L/711	10	L/534	15	L/411
			2,9	L/1044	5	L/657	9	L/440	15	L/309	22	L/226				

BASIC MOUNTING RULES

Non structural complementary profiles

	NO REINFORCEMENT (*)		
	Profile Position	Max. Span (A) mm	Max. Span (B) mm
WPC 300x100		2.290	650
		1.990	570
		1.480	420
WPC 200x80		1.860	530
		1.640	470
		1.300	370
WPC 150x50		1.600	455
		1.400	400
		1.010	287,5
WPC 50x50		1.000	285
		1.000	285
WPC 30x30		790	222,5
		790	222,5

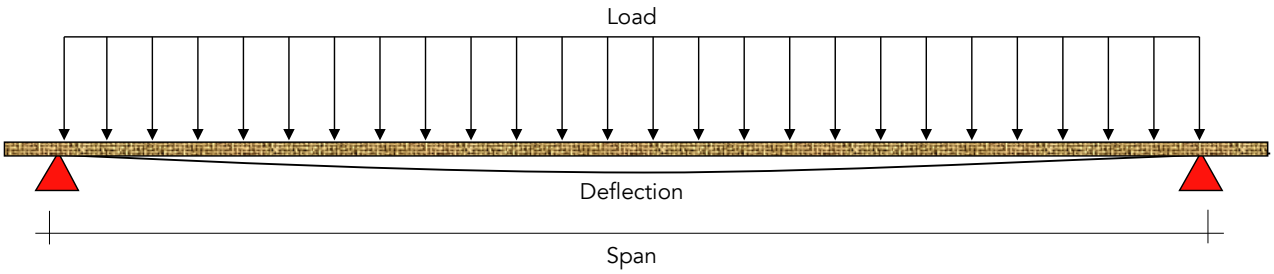
(*) - Not a structural element



BASIC MOUNTING RULES

Maximum load uniformly distributed (for L/200 deflection)

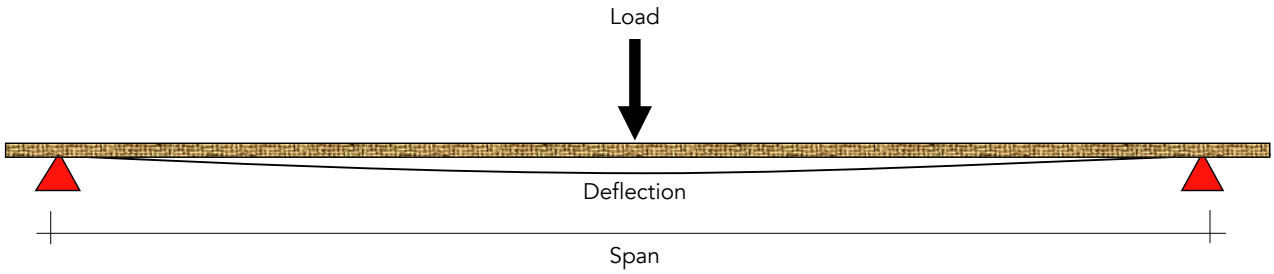
L/200	Span 3.0ml defletion 15mm	Span 3.5ml defletion 18mm	Span 4.0ml defletion 20mm	Span 4.5ml defletion 23mm	Span 5.0ml defletion 25mm	Span 5.5ml defletion 28mm	Span 6.0ml defletion 30mm
Profile	Load (kg/ml)	Load (kg/ml)	Load (kg/ml)	Load (kg/ml)	Load (kg/ml)	Load (kg/ml)	Load (kg/ml)
WPC 150x150 Alu 98x98 	185	112	71	46	31	20	13
WPC 150x85 Alu 100x48 	126	76	48	32	21	14	8
WPC 85x150 Alu 48x100 	34	18	9	4	1	———	———
WPC 170x85 2x Alu 68x68 	326	202	132	90	63	45	32
WPC 85x170 2x Alu 68x68 	123	74	46	30	19	12	7
WPC 85x85 Alu 68x68 	47	28	17	10	6	3	1



BASIC MOUNTING RULES

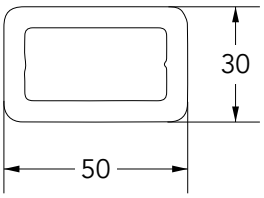
Maximum central and concentrated load (for L/200 deflection)

L/200	Span 3.0ml defletion 15mm	Span 3.5ml defletion 18mm	Span 4.0ml defletion 20mm	Span 4.5ml defletion 23mm	Span 5.0ml defletion 25mm	Span 5.5ml defletion 28mm	Span 6.0ml defletion 30mm
Profile	Load (kg)	Load (kg)	Load (kg)	Load (kg)	Load (kg)	Load (kg)	Load (kg)
WPC 150x150 Alu 98x98	346	245	178	131	97	70	49
WPC 150x85 Alu 100x48	237	168	122	90	66	48	33
WPC 85x150 Alu 48x100	64	40	24	13	3	———	———
WPC 170x85 2x Alu 68x68	612	442	331	253	197	155	122
WPC 85x170 2x Alu 68x68	231	162	116	84	60	42	27
WPC 85x85 Alu 68x68	89	62	43	30	21	13	7

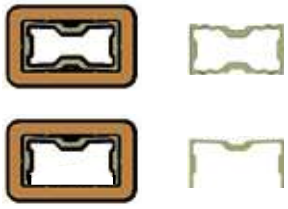


TECHNICAL FEATURES

TECNODECK PROFILE 50x30 mm



	TECNODECK PROFILE 50x30 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	0.940 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU, ALU-U PROFILES 38x20 mm

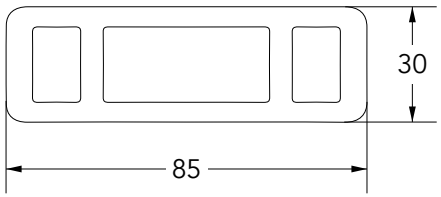
Aloy	6060 T6
Weight ALU (kg/ml)	0.540
Weight ALU-U (kg/ml)	0.361
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
These features are only for information purposes, and the manufaturer may change them without previous notice.

TECHNICAL FEATURES

TECNODECK PROFILE 85x30 mm



	TECNODECK PROFILE 85x30 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	1.530 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	
Standard material	Not tested
Fire retardant material (Test according to the norm EN 13501-1)	Class B fl - s1 (Horizontal) Class C s3 - d0 (Vertical)

TECNODECK ALU, ALU-U PROFILES 38x20 mm

Aloy	6060 T6
Weight ALU (kg/ml)	0.540
Weight ALU-U (kg/ml)	0.361
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

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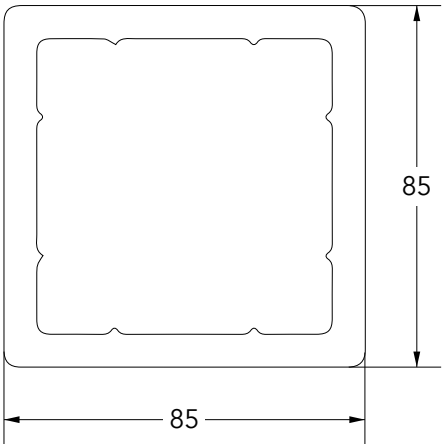
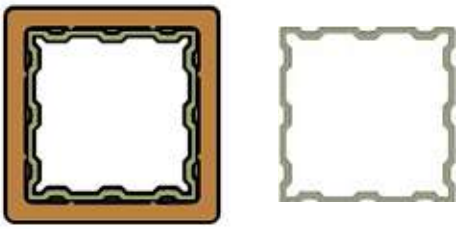
TECHNICAL FEATURES

TECNODECK PROFILE 85x85 mm



	TECNODECK PROFILE 85x85 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	2.860 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU PROFILE 68x68 mm

Aloy	6060 T6
Weight (kg/ml)	1.703
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
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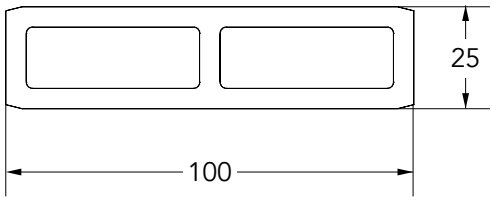
TECHNICAL FEATURES

TECNODECK PROFILE 100x25 mm



	TECNODECK PROFILE 100x25 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	1.620 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested

TECNODECK ALU 38x10 PROFILE

Aloy	6060 T6
Weight ALU (kg/ml)	0.400
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
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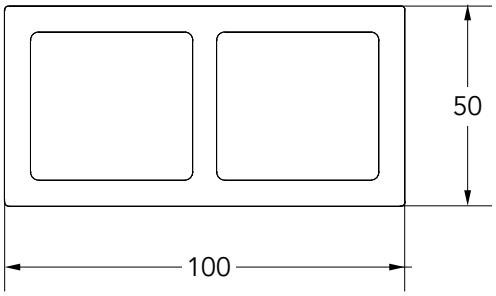
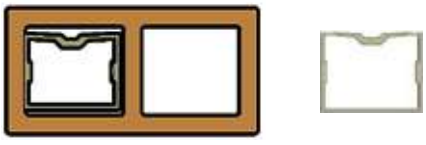
TECHNICAL FEATURES

TECNODECK PROFILE 100x50 mm



	TECNODECK PROFILE 100x50 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	2.610 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU PROFILE 38x30 mm

Aloy	6060 T6
Weight (kg/ml)	0.530
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
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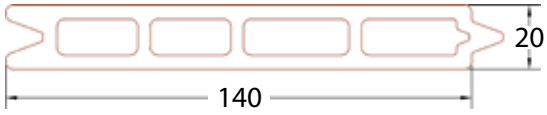
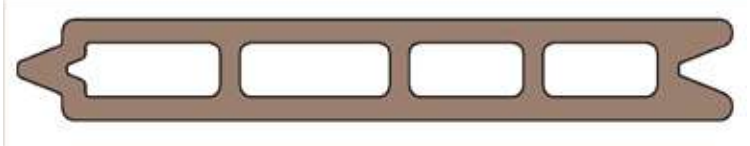
TECHNICAL FEATURES

TECNODECK PROFILE 140x20 mm



	TECNODECK PROFILE 140x20 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	2.060 (+/- 5%)
Standard Length (m)	2
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested

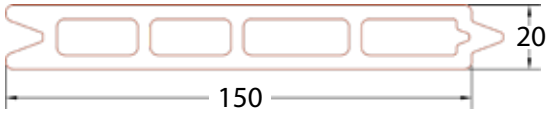


Notes:

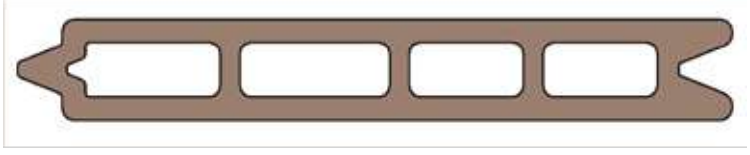
The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
These features are only for information purposes, and the manufaturer may change them without previous notice.

TECHNICAL FEATURES

TECNODECK PROFILE 150x20 mm
NEW PROFILE!



	TECNODECK PROFILE 150x20 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	2.186 (+/- 5%)
Standard Length (m)	2
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested

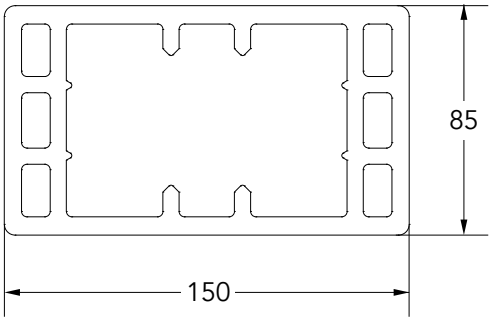


Notes:

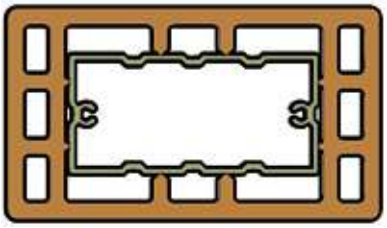
The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
These features are only for information purposes, and the manufaturer may change them without previous notice.

TECHNICAL FEATURES

TECNODECK PROFILE 150x85 mm



	TECNODECK PROFILE 150x85 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	5.790 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU PROFILE 100x48 mm

Aloy	6060 T6
Weight (kg/ml)	2.034
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

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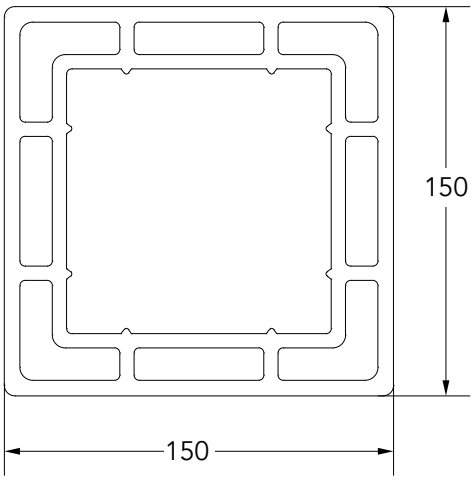
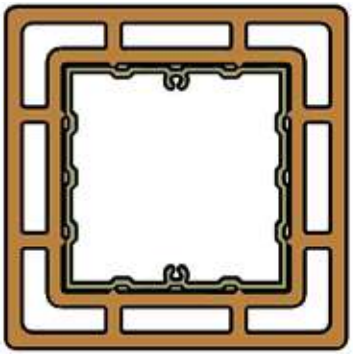
TECHNICAL FEATURES

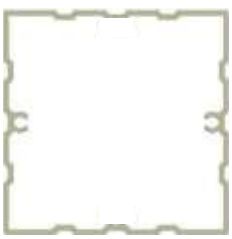
TECNODECK PROFILE 150x150 mm



TECNODECK PROFILE 150x150 mm

Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	8.550 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested





TECNODECK ALU PROFILE 98x98 mm

Aloy	6060 T6
Weight (kg/ml)	2.646
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
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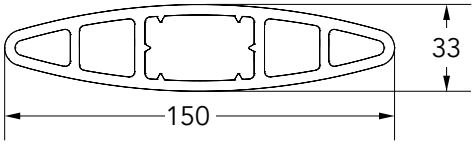
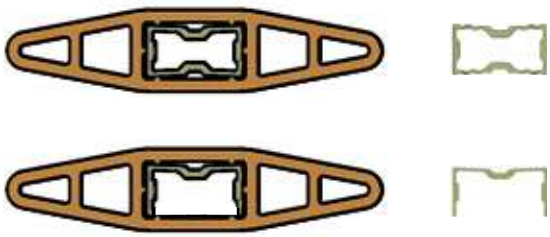
TECHNICAL FEATURES

TECNODECK WING PROFILE 150x33 mm



	TECNODECK WING PROFILE 150x33 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	2.230 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU, ALU-U 38x20 mm PROFILES

Aloy	6060 T6
Weight ALU (kg/ml)	0.540
Weight ALU-U (kg/ml)	0.361
Density (kg/dm)^3	2.7
Tensile strengh Mpa	190
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

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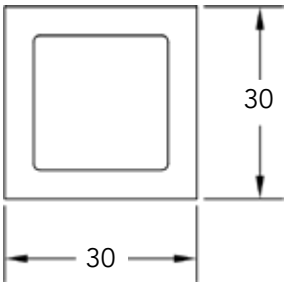
TECHNICAL FEATURES

TECNODECK PROFILE 30x30 mm



	TECNODECK PROFILE 30x30 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	0.534 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	2400
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested

TECNODECK ALU 20x20 mm PROFILE

Aloy	6060 T6
Weight ALU (kg/ml)	0.361
Density (kg/dm)^3	7,9
Tensile strengh Mpa	300
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

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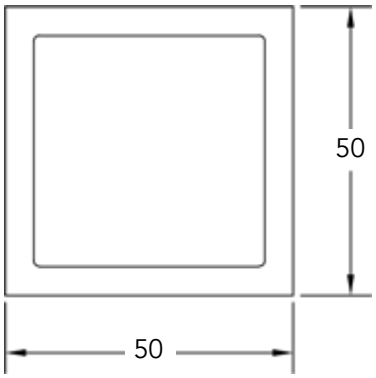
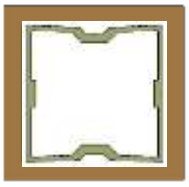
TECHNICAL FEATURES

TECNODECK PROFILE 50X50 mm



	TECNODECK PROFILE 50X50 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	1.152 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	2400
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU 38x38 mm PROFILE

Aloy	6060 T6
Weight ALU (kg/ml)	0.656
Weight ALU-U (kg/ml)	1.697
Density (kg/dm)^3	7,9
Tensile strengh Mpa	300
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

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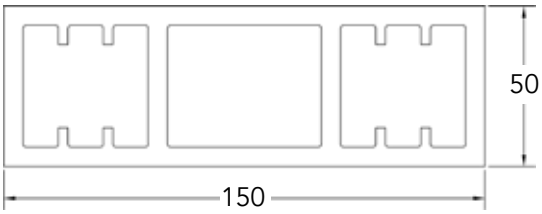
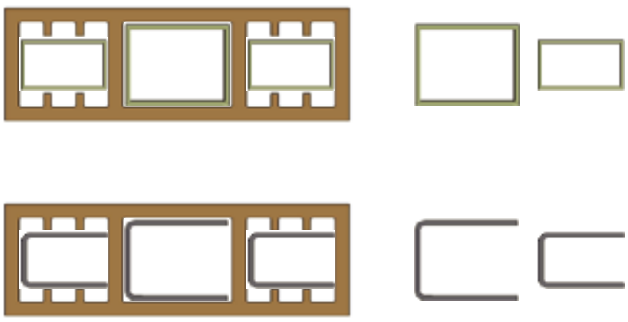
TECHNICAL FEATURES

TECNODECK PROFILE 150X50 mm



	TECNODECK PROFILE 150X50 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	1.152 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	2400
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU, ALU-U 35x20 mm + 45x35 mm PROFILES

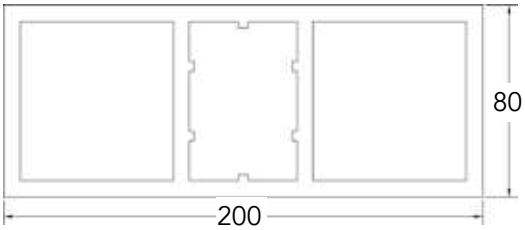
Aloy	6060 T6
Weight ALU (kg/ml)	0.395 / 0.821
Weight ALU-U (kg/ml)	1,397 / 1,871
Density (kg/dm)^3	7,9
Tensile strengh Mpa	300
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

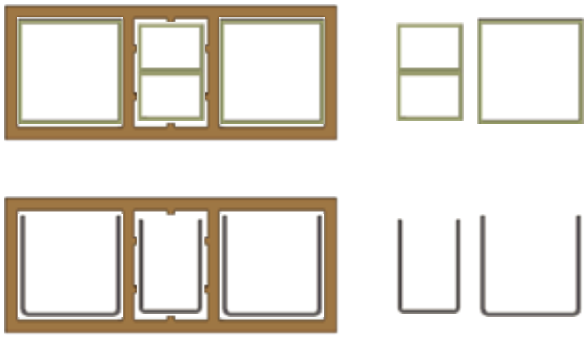
The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
These features are only for information purposes, and the manufaturer may change them without previous notice.

TECHNICAL FEATURES

TECNODECK PROFILE 200X80 mm



	TECNODECK PROFILE 200X80 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	1.152 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	2400
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU, ALU-U 40x60 mm + 60x60 mm PROFILES

Aloy	6060 T6
Weight ALU (kg/ml)	1.426 / 1.253
Weight ALU-U (kg/ml)	2,424 / 2,732
Density (kg/dm)^3	7,9
Tensile strengh Mpa	300
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

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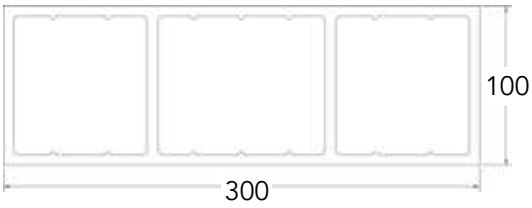
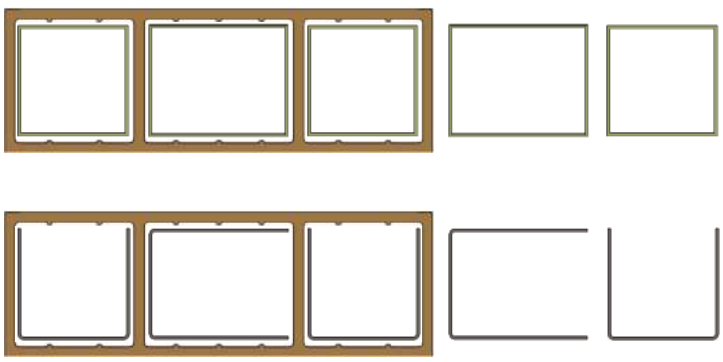
TECHNICAL FEATURES

TECNODECK PROFILE 300X100 mm



	TECNODECK PROFILE 300X100 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/ml)	1.152 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	2400
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested



TECNODECK ALU, ALU-U 80x80 mm + 100x50 mm PROFILES

Aloy	6060 T6
Weight ALU (kg/ml)	1.685 / 1.423
Weight ALU-U (kg/ml)	3.688 / 4.320
Density (kg/dm)^3	7,9
Tensile strengh Mpa	300
Ultimate tensile strengh Mpa	150
Vickers hardness	60
Modulus of elasticity Mpa	70 000
Modulus of rigidity Mpa	27 000

Notes:

The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
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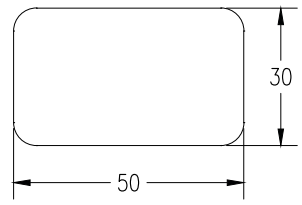
TECHNICAL FEATURES

TECNODECK CAP G 50x30 mm



	TECNODECK CAP G 50x30 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/un)	0.018 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested

Notes:

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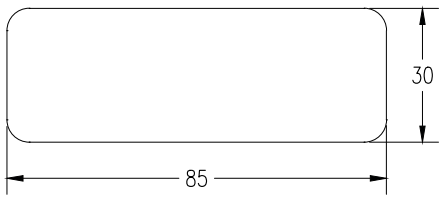
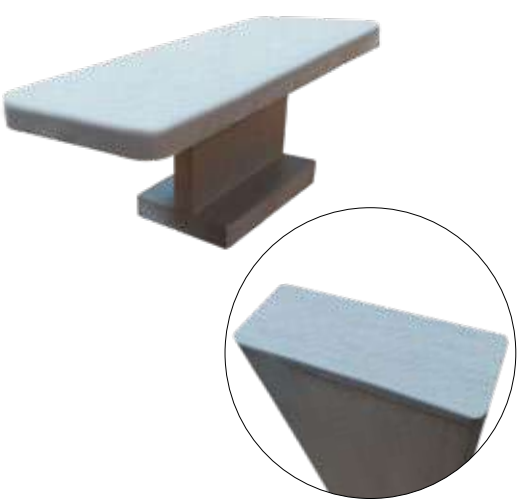
TECHNICAL FEATURES

TECNODECK CAP G 85x30 mm





	TECNODECK CAP G 85x30 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/un)	0.027 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested

Notes:

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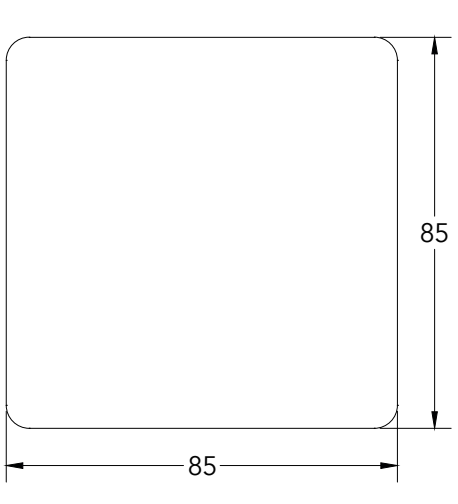
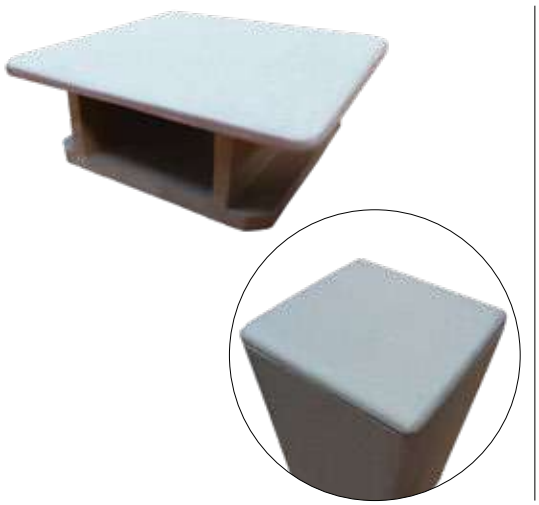
TECHNICAL FEATURES

TECNODECK CAP G 85x85 mm





	TECNODECK CAP G 85x85 mm
Density EN ISO 1183-1 (g/cm^3)	1.33
Weight (kg/un)	0.092 (+/- 5%)
Influence of moisture, EN 317	
Water absorption (%)	0.50
Thickness swelling (%)	0.20
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, EN 310 (N/mm^2) (Distance between supports 500 mm)	3500
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	41.4x10^{-6}
Fire Behaviour	Not tested

Notes:

The Tecnodeck profiles dimensions have a tolerance of (+-) 1 mm.
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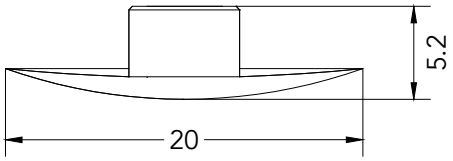
TECHNICAL FEATURES

SCREW COVER M8



	SCREW COVER M8
Density EN ISO 1183-1 (g/cm^3)	0.96
Weight (g/un)	0.251 (+/- 5%)
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity	1000
Thermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	2x10^{-4}
Material	PP - Polyethylene
Fire Behaviour	Not tested

Notes:

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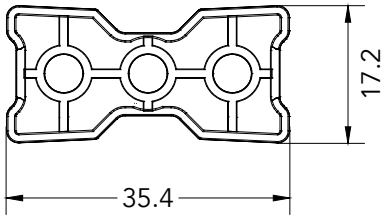
TECHNICAL FEATURES

UNION PA-H 35x17x20



BLACK

	UNION PA-H 35x17x20
Density EN ISO 1183-1 (g/cm^3)	1.14
Weight (kg/un)	0.005 (+/- 5%)
Influence of moisture, EN 62	
Water absorption 24h/96h (23°C) (%)	0.3/0.6
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, ISO 527-2 (Mpa)	3000
hermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	70x10^{-6}
Material	PAG - Polyamide G
Fire Behaviour	Not tested

Notes:

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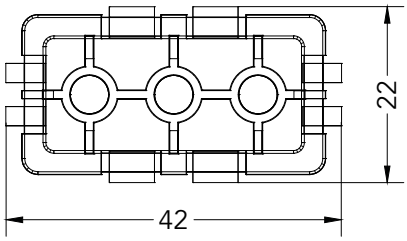
TECHNICAL FEATURES

UNION PA 42x22x40



BLACK

	UNION PA 42x22x40
Density EN ISO 1183-1 (g/cm^3)	1.14
Weight (kg/un)	0.015 (+/- 5%)
Influence of moisture, EN 62	
Water absorption 24h/96h (23°C) (%)	0.3/0.6
Content and release of dangerous substances	contains no dangerous substances
Modulus of elasticity in bending, ISO 527-2 (Mpa)	3000
hermal expansion coefficient (K^{-1}) ISO 11359 (-40°C, 80°C)	8x10^{-5}
Material	PA6 - Polyamide 6
Fire Behaviour	Not tested

Notes:

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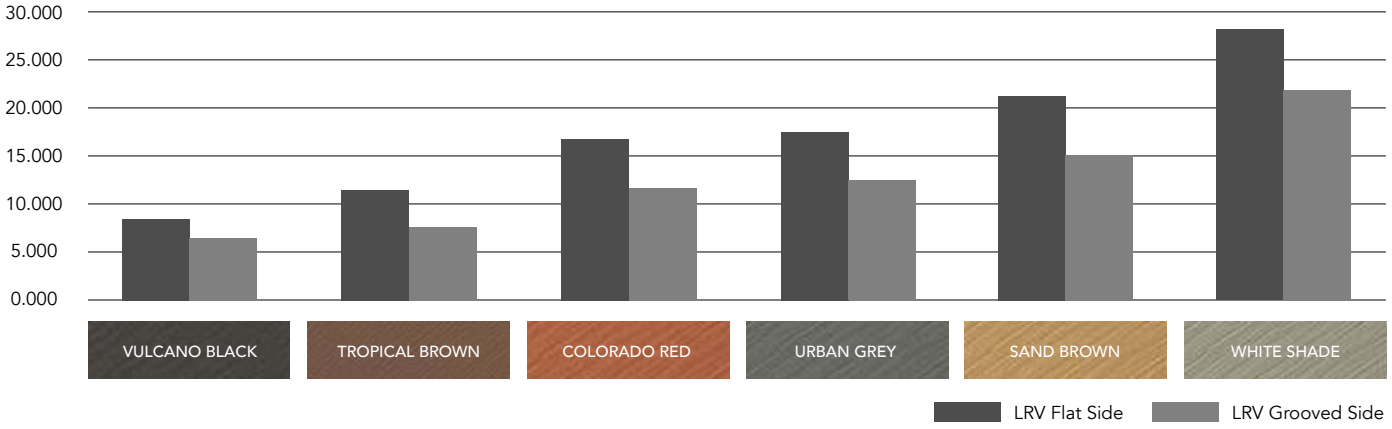
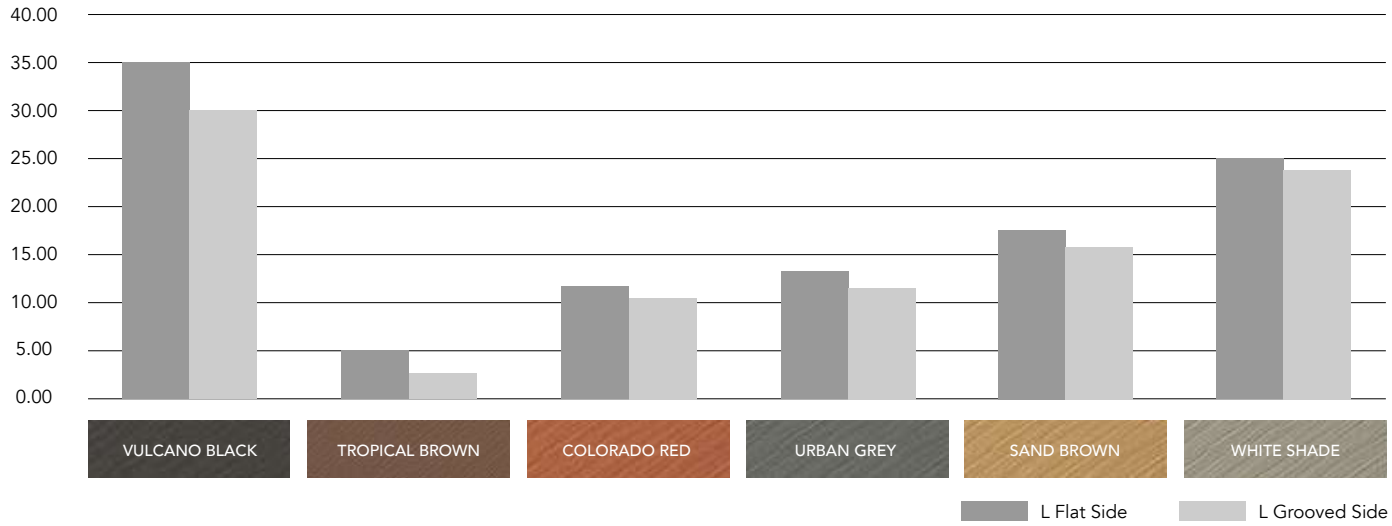
TECHNICAL FEATURES

Tecnodeck Light Reflectance Value - LRV



Tecnodeck Lightness Value - L



Tecnodeck Light Reflectance Value - LRV

Light Reflectance Value, or LRV, measures the amount of visible or usable light that reflects from a surface.
Is expressed as a percentage from 0 to 100, where the 0 value being perfect absorbing black and 100 value being perfect reflecting white.

Tecnodeck Lightness Value - L

The Lightness Value, or L, will give an idea how light or dark the colour of a surface is.
The Darkest black as L=0 and the brightest white as L=100.

	Light Reflectance Value - LRV		Lightness Value - L	
	LRV Flat Side	LRV Grooved Side	L Flat Side	L Grooved Side
VULCANO BLACK	8,562	6,372	35,13	30,33
TROPICAL BROWN	11,235	7,382	4,85	2,33
COLORADO RED	15,872	11,817	11,68	10,59
URBAN GREY	17,310	12,413	13,52	11,53
SAND BROWN	20,732	15,340	17,53	15,76
WHITE SHADE	28,143	22,185	24,89	23,89

TECHNICAL FEATURES

SRI - Solar Reflectance Index

SRI is a value that incorporates both solar reflectance (SR) and emittance (TE) in a single value to represent a material's temperature in the sun.
SRI quantifies how hot a surface would get in proportion to standard black and standard white surfaces. It is calculated using equations based on previously measured values of solar reflectance and emittance as laid out in the American Society for Testing and Materials Standard E 1980.

SR - Solar Reflectance

Solar reflectance is a measure of the ability of a surface material to reflect sunlight - including the visible, infrared, and ultraviolet wave lengths - on a scale of 0 to 1. Solar reflectance is also called "albedo".

TE - Thermal Emissivity

The ratio of the rate of radiant heat energy emitted by a body at a given temperature to the rate of radiant heat energy emitted by a black body under same conditions (temperature and surroundings).The emittance of amaterial refers to its ability to release absorbed heat. Scientists use a number between 0 and 1, or 0% and 100%, to express emittance.
With the exception of metals, most construction materials have emittances above 0.85 (85%).

	SRI - Solar Reflectance Index					
Convection Coefficient (Wm-2K-1)	5		12		30	
COLOR	Average	Standard deviation	Average	Standard deviation	Average	Standard deviation
VULCANO BLACK	1,70	0,15	2,58	0,14	3,34	0,12
TROPICAL BROWN	5,02	0,02	6,00	0,03	6,84	0,05
URBAN GREY	7,83	0,19	9,02	0,18	10,01	0,18
SAND BROWN	20,25	0,16	21,79	0,17	23,00	0,17
WHITE SHADE	27,25	0,33	29,43	0,31	30,74	0,29

Avarage SRI according to ASTM E903-12, for each sample type for different natural convection coefficient values for air.

- The calculated SRI for three convective coefficients of 5, 12, 30 W · m–2· K–1, corresponding to low- (0 to 2 ms-1), medium- (2 to 6 ms-1) and high-wind (6 to 10 ms-1) conditions, respectively.

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