

# Technical Data Sheet - KERADECK 4500 T



**Nordic Waterproofing Oy**  
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**13, 16<sup>1)</sup>**  
003.CPR.15510



Reinforced bitumen sheets for waterproofing of concrete bridge decks and other trafficked areas of concrete EN 14695

Reinforced bitumen sheets for roof waterproofing EN 13707

Bitumen damp proof sheets including basement tanking sheet EN 13969

Product description	
Use	Sheet for bridges , underlay sheet in built-up roofing, bitumen damp proof sheet
Application	Bonding onto the substrate by melting the undersurface of the membrane and the protective film with a blowtorch. Applying with mechanical fastening, when necessary
Reinforcement	Reinforced polyester
Coating	SBS modified bitumen
Surfacing	Sand
Bottom surfacing	Thermofusible film and torch-on elastomer bitumen

Characteristic	Method	Unit	Nominal value	minimum	maximum
Length	EN 1848-1	m	8	-	-
Width	EN 1848-1	m	1	0,995	1,005
Mass per unit area	EN 1849-1	g/m <sup>2</sup>	4500	4275	-
Nominal thickness	EN 1849-1	mm	3,9	3,7	4,1
Straightness	EN 1848-1	mm / m	pass		16/8
Visual defects	EN 1850-1	-	no defects		
Declaration of performance			003.CPR.15510		
AVCP- class			2+		
Certificate of factory production control			0809-CPR-1030		

Fire properties	Method	Classification	Fireclass			
Reaction to fire	EN ISO 11925-2	EN 13501-1	NPD			
External fire performance	ENV 1187 <sup>2)</sup>	EN 13501-5	B <sub>ROOF</sub> (t2)			

Characteristic	Method	Unit	EN 14695	EN 13707	EN 13969	minimum	maximum
Watertightness	EN 1928 B	kPa		pass	pass	300	
Resistance to dynamic water pressure	EN 14694		pass				
Tensile strength - in longitudinal direction - in transverse direction	EN 12311-1	N/ 50 mm N/ 50 mm	1000 800	750 550	750 550	600 400	900 700
Elongation - in longitudinal direction - in transverse direction	EN 12311-1	% %	40 40	40 40	40 40	25 25	55 55
Nail shank tear resistance - in longitudinal direction - in transverse direction	EN 12310-1	N N		250 300	250 300	150 150	350 450
Bond strength +23/+8 °C to concrete to epoxy	EN 13596	N/mm <sup>2</sup> N/mm <sup>2</sup>	≥ 1,0/ 1,2 ≥ 0,7/ 1,5			≥ 0,5/ 1,0 ≥ 0,5/ 1,0	
Crack bridging ability -20 °C	EN 14224	°C	pass			-20	
Shear strength	EN 13653	N/mm <sup>2</sup>	≥ 0,30			≥ 0,15	
Resistance to compaction of an asphalt layer	EN 14692		pass				
Resistance to static loading	EN 12370 A EN 12370 B	kg kg		25		20	
Resistance to impact	EN 12691	mm		1750	1750	1000	
Shear resistance of joints	EN 12317-1	N/50 mm		800		600	1000
Durability*							
* Watertightness	EN 1296/1928 B	kPa			pass	60	
* Chemical resistance	EN 1847/1928				NPD		
* Pliability - surface - bottom	EN 1296/1109	°C °C		-15 -10		-10 0	
* Flow resistance at elevated temperature	EN 1296/1110	°C		80	80	80	

Characteristic	Method	Unit	EN 14695	EN 13707	EN 13969	minimum	maximum	
Pliability - surface - bottom	EN 1109	°C	-20 -20	-20 -20	-20 -20	-20 -10		
Flow resistance at elevated temperature	EN 1110	°C		80	80	80		
Adhesion of granules	EN 12039	%		NPD				
Dimensional Stability	EN 1107-2	%		0,3	0,3		0,6	
Dangerous substances <sup>3),4)</sup>			No dangerous substances					
1) EN 14695 2)see: <a href="http://www.kerabit.fi">www.kerabit.fi</a> 3) No asbestos or coal tar constituents 4) In the absence of European harmonized test methods, verification and declaration on release/content has to be done taking into account national provisions in the place of use					NPD = no performance determined *tested after ageing			V3 3/16

Structure	Product	Material need	Package size
Primer or epoxy	Kerabit KBL 20/100	about 100 g/m <sup>2</sup>	20 liter
	Gremmler1403 R or similar epoxy	brush 2 times, total about 1600 g/m <sup>2</sup>	-
Bitumen sheet	Keradeck 4500 UT		1 x 8 m
Bitumen sheet	Keradeck 5200 T		1 x 8 m