

Declaration of Performance

Annex III of regulation (EU) Nr. 305/2011



Zemseal® fully-bonded membrane

Crack-bridging, pressurized water-tight and tracking-proof sub-structure waterproofing system for high usage requirements



1.	Product Type: Unique identification code of the product type	Zemseal [®] fully-bonded membrane
2.	Type: Batch or serial number or any other element allowing identification of the construction product as required under Article 11(4)	Zemseal® 05, Zemseal® 08 und Zemseal® 12
		Batch number: Refer to product label
3.	Intended Use: Or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer	Water pressure-tight composite sealing and vapor barrier for concrete structures according to EN 1992 or as a primary sealing layer in combination with concrete, conforming to EN 13967
4.	Name, registered trade name: Or registered trade mark and contact address of the manufacturer as required under Article 11(5)	Zemseal® fully-bonded membrane
		Max Frank GmbH & Co. KG, Mitterweg 1, 94339 Leiblfing, Germany
5.	Contact address: Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2)	Not relevant (see 4)
6.	AVCP: System or systems of assessment and verification of constancy of performance (AVCP) of the construction product as set out in CPR, Annex V	System 2+
7.	Notified body (hEN): In case of the declaration of performance (DoP) concerning a construction product covered by a harmonized standard	MFPA für das Bauwesen Leipzig GmbH 0800-CPR-16022-1
8.	Notified body (ETA:) In case of the declaration of performance concerning a construction product for which a European Technical Assessment (ETA) has been issued	not applicable



Basic Characteristics Declared Performance	9. Declared Pe	rformance:		
product declaration according to EN 13967	Basic Char	acteristics	Declared Performance	
thickness: total value Zemseal® 05 Zemseal® 08 Zemseal® 08 Zemseal® 08 Zemseal® 1,0 mm +/- 0,15 mm water-tightness EN 1928 B (24h/500 kPa) Impact resistance EN 12691 (method A – hard surface) Zemseal® 05 Zemseal® 08 Zemseal® 08 Zemseal® 12 350 mm Resistance to static loading EN 12730 (method B – hard surface) Zemseal® 05 Zemseal® 06 Zemseal® 05 Zemseal® 06 Zemseal® 05 Zemseal® 08 Zemseal® 05 Zemseal® 08 Zemseal® 08 Zemseal® 08 Zemseal® 08 Zemseal® 12 35 kg Zemseal® 08 Zemseal® 12 35 kg Zemseal® 08 Zemseal® 12 36 kg Zemseal® 12 37 kg Zemseal® 12 38 kg Zemseal® 12 39 kg Zemseal® 12 30 kg Zemseal® 1	basic mater	ial	polypropylene (PP)	
Zemseal® 05 0,8 mm +/- 0,15 mm Zemseal® 12 1,0 mm +/- 0,15 mm water-tightness EN 1928 B (24h/500 kPa) 5 bar (50 m water column) Impact resistance EN 12691 (method A – hard surface) Zemseal® 05 > 350 mm Zemseal® 08 > 500 mm Zemseal® 12 > 650 mm Resistance to static loading EN 12730 (method B – hard surface) Zemseal® 08 ≥ 40 kg Zemseal® 08 ≥ 45 kg Zemseal® 12 ≥ 45 kg vapor resistance S-value according to EN 1931 B Zemseal® 05 > 233 Zemseal® 06 > 280 Zemseal® 07 > 305 tear resistance EN 12310-1 (nail shaft) Zemseal® 05 Zemseal® 05 L > 280 N / Q > 360 N Zemseal® 08 > 280 Zemseal® 09 L > 430 N / Q > 520 N Zemseal® 12 > 305 joint shear resistance EN 12310-2 (ass E L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed	product dec	laration	according to EN 13967	
Zemseal® 08 1,0 mm +/- 0,15 mm Zemseal® 12 1,2 mm +/- 0,15 mm water-tightness EN 1928 B (24h/500 kPa) 5 bar (50 m water column) Impact resistance EN 12691 (method A – hard surface) Zemseal® 05 > 350 mm Zemseal® 08 > 500 mm Zemseal® 12 > 650 mm Resistance to static loading EN 12730 (method B – hard surface) Zemseal® 08 ≥ 40 kg Zemseal® 08 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance S-value according to EN 1931 B Zemseal® 08 > 280 Zemseal® 08 > 280 Zemseal® 08 > 280 Zemseal® 05 L > 280 N / Q > 360 N Zemseal® 08 L > 280 N / Q > 520 N Zemseal® 09 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N Joint shear resistance EN 12317-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°				
Zemseal® 12 1,2 mm +/- 0,15 mm water-tightness EN 1928 B (24h/500 kPa) 5 bar (50 m water column) Impact resistance EN 12691 (method A – hard surface) Zemseal® 05 > 350 mm Zemseal® 08 > 500 mm Zemseal® 12 > 650 mm Resistance to static loading EN 12730 (method B – hard surface) Zemseal® 05 ≥ 35 kg Zemseal® 08 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance Si-value according to EN 1931 B Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) 2 280 N / Q > 360 N Zemseal® 05 L > 280 N / Q > 520 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / O > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof			0,8 mm +/- 0,15 mm	
water-tightness EN 1928 B (24h/500 kPa) 5 bar (50 m water column) Impact resistance EN 12691 (method A – hard surface) Zemseal® 05 > 350 mm Zemseal® 08 > 500 mm Zemseal® 12 > 650 mm Resistance to static loading EN 12730 (method B – hard surface) Zemseal® 05 ≥ 35 kg Zemseal® 08 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance Se-value according to EN 1931 B Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 08 > 280 Zemseal® 08 > 280 Zemseal® 08 > 280 Zemseal® 08 L > 280 N / Q > 360 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1847 / EN 1928 B passed pitumen compatibility EN 1548 passed pitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C <tr< td=""><td></td><td></td><td>1,0 mm +/- 0,15 mm</td><td></td></tr<>			1,0 mm +/- 0,15 mm	
Impact resistance	Zemseal® 1	2	1,2 mm +/- 0,15 mm	
EN 12691 (method A – hard surface) Zemseal® 05	water-tightn	ess EN 1928 B (24h/500 kPa)	5 bar (50 m water column)	
Zemseal® 12 > 500 mm Zemseal® 12 > 650 mm Resistance to static loading EN 12730 (method B – hard surface) 2 25 kg Zemseal® 05 ≥ 35 kg Zemseal® 08 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance 3 2 45 kg Vapor resistance > 233 Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) 2 280 N / Q > 360 N Zemseal® 05 L > 280 N / Q > 520 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	EN 12691 (ı	method A – hard surface)		
Zemseal® 12 > 650 mm Resistance to static loading EN 12730 (method B − hard surface) 2 35 kg Zemseal® 05 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance S₀-value according to EN 1931 B > 233 Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) Zemseal® 05 Zemseal® 05 L > 280 N / Q > 360 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05 5			> 350 mm	
Resistance to static loading EN 12730 (method B − hard surface) Zemseal® 05 Zemseal® 08 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance S ₀ -value according to EN 1931 B Zemseal® 08 ≥ 233 Zemseal® 08 ≥ 280 Zemseal® 12 ≥ 305 Zemseal® 12 ≥ 305 tear resistance EN12310-1 (nail shaft) Zemseal® 05 L > 280 N / Q > 360 N Zemseal® 05 L > 430 N / Q > 360 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN12317-2 ≥ 260 N/ 50mm fire behavior ENISO 11925-2 durability water tightness after artificial ageing EN 1928 B / EN 1296 against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and EAD 17-03-0378-06.05			> 500 mm	
EN 12730 (method B – hard surface) Zemseal® 05 ≥ 35 kg Zemseal® 12 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance S _d -value according to EN 1931 B Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) Zemseal® 05 L > 280 N / Q > 360 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N Zemseal® 12 L > 450 N / Q > 580 N Zemseal® 12 L > 450 N / Q > 580 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N / 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 against chemicals EN 1847 / EN 1928 B processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05			> 650 mm	
Zemseal® 08 ≥ 40 kg Zemseal® 12 ≥ 45 kg vapor resistance S _d -value according to EN 1931 B Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) Zemseal® 08	EN 12730 (ı	method B – hard surface)		
Zemseal® 12 ≥ 45 kg vapor resistance Sd-value according to EN 1931 B Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) L > 280 N / Q > 360 N Zemseal® 05 L > 280 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N Joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior ENISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05			≥ 35 kg	
vapor resistance Sd-value according to EN 1931 B Zemseal® 05 > 233 Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN12310-1 (nail shaft) L > 280 N / Q > 360 N Zemseal® 05 L > 430 N / Q > 520 N Zemseal® 08 L > 450 N / Q > 580 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN12317-2 > 260 N/ 50mm fire behavior ENISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05			≥ 40 kg	
Sd-value according to EN 1931 B Zemseal® 05 > 280 Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) L > 280 N / Q > 360 N Zemseal® 05 L > 430 N / Q > 520 N Zemseal® 08 L > 450 N / Q > 580 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05 EAD 17-03-0378-06.05	Zemseal® 1	2	≥ 45 kg	
Zemseal® 08 > 280 Zemseal® 12 > 305 tear resistance EN12310-1 (nail shaft) L > 280 N / Q > 360 N Zemseal® 05 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN12317-2 > 260 N/ 50mm fire behavior ENISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05 EAD 17-03-0378-06.05				
Zemseal® 12 > 305 tear resistance EN 12310-1 (nail shaft) Zemseal® 05 L > 280 N / Q > 360 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05 ≤ 25 mm	Zemseal® 0	5	> 233	
tear resistance EN12310-1 (nail shaft) Zemseal® 05 Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 durability water tightness after artificial ageing EN 1928 B / EN 1296 against chemicals EN 1847 / EN 1928 B bitumen compatibility EN 1548 passed processing temperature (ambient / air) tracking-proof according to EN 12390-8 and EAD 17-03-0378-06.05			> 280	
Zemseal® 05 L > 280 N / Q > 360 N Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05 ≤ 25 mm	Zemseal [®] 1	2	> 305	
Zemseal® 08 L > 430 N / Q > 520 N Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN12317-2 > 260 N/ 50mm fire behavior ENISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05 ≤ 25 mm	tear resistar	nce EN 12310-1 (nail shaft)		
Zemseal® 12 L > 450 N / Q > 580 N joint shear resistance EN 12317-2 > 260 N/ 50mm fire behavior EN ISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 against chemicals EN 1847 / EN 1928 B bitumen compatibility EN 1548 processing temperature (ambient / air) tracking-proof according to EN 12390-8 and EAD 17-03-0378-06.05	Zemseal® 0	5	L > 280 N / Q > 360 N	
joint shear resistance EN12317-2 > 260 N/ 50mm fire behavior ENISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	Zemseal® 0	8	L > 430 N / Q > 520 N	
fire behavior ENISO 11925-2 class E durability water tightness after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	Zemseal® 1	2	L > 450 N / Q > 580 N	
durability water tightness after artificial ageing EN 1928 B / EN 1296 against chemicals EN 1847 / EN 1928 B bitumen compatibility EN 1548 processing temperature (ambient / air) tracking-proof according to EN 12390-8 and EAD 17-03-0378-06.05	joint shear r	esistance EN 12317-2	> 260 N/ 50mm	
after artificial ageing EN 1928 B / EN 1296 passed against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	fire behavio	r ENISO 11925-2	class E	
against chemicals EN 1847 / EN 1928 B passed bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	durability wa	ater tightness		
bitumen compatibility EN 1548 passed processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	after artificia	al ageing EN 1928 B / EN 1296	passed	
processing temperature (ambient / air) 0° to +45°C tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	against che	micals EN 1847 / EN 1928 B	passed	
tracking-proof according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	bitumen cor	npatibility EN 1548	passed	
according to EN 12390-8 and ≤ 25 mm EAD 17-03-0378-06.05	processing	temperature (ambient / air)	0° to +45°C	
dangerous substances no	according to	EN 12390-8 and	≤ 25 mm	
	dangerous	substances	no	



10. Declaration:

The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance (DoP) is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by

Dipl.-Ing. B.Sc. Moritz Michel

Head of Technology and Innovation

Leiblfing, 14th January 2020