



No. A-003-CPR-13

## Declaration of Performance

**1. Type**

Expanded Polystyrene

**2. Identification**

Sundolitt Climate C80F (included C80F-TG and C80F-BE)

**3. Intended use**

Factory made expanded polystyrene (EPS) products - Thermal insulation for buildings.

**4. Manufacturers name and address**

Sundolitt as

Krog Skolevej 3  
7190 Billund

E-mail: [sundolitt.kundeservice@sundolitt.com](mailto:sundolitt.kundeservice@sundolitt.com)

**5. Name and address on authorized representative**

Not relevant.

**6. System of assessment and verification of constancy of performance (AVCP)**

AVCP system 3

**7. Notified body**

Teknologisk Institut – identification number 1235.

ITT test for: Thermal conductivity [Report 09061-64], Compressive strength [Report 1244999], Wateruptake, long term [Report 1251809].

**System**

System 3

**8. Declared Performance**

Essential characteristic		Performance	Note
Tolerances:			DS/EN13163:2012+A2:2016
Thickness		Class T(1)	
Length		Class L(2)	
Width		Class W(2)	
Squariness		Class S(2)	
Flatness		Class P(5)	

Thermal resistance	Thermal resistance ( $R_D$ )	Thickness( $D_N$ Resistance and T)	
		50 mm	1,60 m <sup>2</sup> K/W
		100 mm	3,20 m <sup>2</sup> K/W
		150 mm	4,80 m <sup>2</sup> K/W
		200 mm	6,45 m <sup>2</sup> K/W
		250 mm	8,05 m <sup>2</sup> K/W
	Thermal conductivitet ( $\lambda_D$ )	0,031 W/mK	
Reaction to fire	Reaction to fire	NPD (Euroclass F)	
Durability of reaction to fire against heat, weathering and ageing/degradation	Durability characteristics	No change over time	
Durability of thermal conductivity against heat, weathering and ageing/degradation	Thermal resistance and conductivity	No change over time	
	Durability characteristics	No use. NPD	
Compressive strength	Compressive strength, short term (10% def.) (CS(10))	80 kPa	
Shear- and Bending strength	Bending strength (BS)	125 kPa	
	Shear strength (TR)	60 kPa	acc. Annex F.3*
Durability of compressive strength ageing and degradation	Compressive creep long term (2%) (CC)	24 kPa	acc. Annex F.2*
	Freeze-thaw resistance FTCD/FTCI	No use. NPD	
	Long term thickness reduction (CP)	No use. NPD	
Wateruptake long term	Long term waterabsorption by immersion (WL(T))	5 vol.%	
	Long term water absorption by diffusion (WD(V))	No use. NPD	
Watervapor permeability	Watervapor transmission/	$\mu$ 20 to 40 $\delta$ 0,015 to 0,030	acc. Annex F.4*

	permeability (MU or Z)	mg/(Pa.h.m)	
Impact noise transmission (floors)	Dynamic stiffness	No use. NPD (SD)	
	Thickness $d_L$	No use. NPD Class T	
	Compressability	No use. NPD (CP)	
Continuous glowing combustion		No use. NPD	
Release of dangerous substances to indoor environment		NPD. European test methods under developement.	

\*Reference to DS/EN 13163:2012+A2:2016. NPD = No Performance Determined

9. The performance for Sundolitt Climate C80F is in conformity with the declared performance in point 8 – Declared performance.

This declaration is issued under the sole responsibility of Sundolitt as, Krog Skolevej 3, 7190 Billund.

Signed for and on behalf of Sundolitt as:



Claus Jørgensen, Techn. Chief  
Billund, December 31st 2020

**Sundolitt as**  
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