

## Minimum requirements for product documentation

<b>Product</b>	<b>Reinforced bitumen sheets for roof waterproofing</b>
<b>Technical specification</b>	<b>NS-EN 13707</b>
<b>Intended use</b>	<b>Built in or covered roofs, such as gravel ballasted roof, on terrace under paving or in green roofs</b>

Conformity system	Characteristic	O	N	F	Classification standard	Test standard	Requirements	Recommendations	
2+	Reaction to fire			x		NS-EN 13501-1 og NS-EN ISO 11925-2	TEK10 ch. 11		
	External fire performance			x <sup>1)</sup>	NS-EN 13501-5 BROOF (t2)	ENV 1187 (t2)	TEK10 ch. 11		
	Length and width	x				NS-EN 1848-1	TEK10 ch. 13		
	Straightness	x				NS-EN 1848-1	TEK10 ch. 13		
	Thickness and weight	x				NS-EN 1849-1	TEK10 ch. 13		
	Visible defects	x				NS-EN 1850-1	TEK10 ch. 13		
	Flexibility at low temperature	x				NS-EN 1109	TEK10 ch. 13	544,203	
	Dimensional stability	x				NS-EN 1107-1	TEK10 ch. 13	544,203	
	Form stability under cyclic temperature				x		NS-EN 1108	TEK10 ch. 13	544203
	Flow resistance at elevated temperature	x					NS-EN 1110	TEK10 ch. 13	544.203
	Adhesion of granules				x		NS-EN 12039	TEK10 ch. 13	544.203
	Resistance to tearing (nail shank)				x		NS-EN 12310-1	TEK10 ch. 13	544,203
	Tensile strength	x					NS-EN 12311-1	TEK10 ch. 13	544,203
	Elongation	x					NS-EN 12311-1	TEK10 ch. 13	544,203
	Joint peel resistance				x		NS-EN 12316-1	TEK10 ch. 13	544,203
	Joint shear resistance	x <sup>2)</sup>					NS-EN 12317-1	TEK10 ch. 13	544,203
Resistance to impact	x					NS-EN 12691:2006	TEK10 ch. 13	544,203	
Resistance to impact at -10C				x		NS-EN 12691:2001	TEK10 ch. 13	544,203	

Resistance to static load	x				NS-EN 12730	TEK10 ch. 13	544,203
Resistance to root penetration	x <sup>3)</sup>				prEN 13948	TEK10 ch. 13	544.803 og 525.306
Hail resistance			x		NS-EN 13583	TEK10 ch. 13	
Heat ageing (UV)		x <sup>4)</sup>			NS-EN 1296	TEK10 ch. 13	544,203
Watertightness	x				NS-EN 1928	TEK10 ch. 13	Water tightness 544,203
Water vapour resistance			x		NS-EN 1931	TEK10 ch. 13	573.430
Watertightness after stretching			x		NS-EN 13897	TEK10 ch. 13	
Wind load			x		EOTA ETAG 006	TEK10 ch. 10	471.043 og TPF information no. 5
Dangerous substances		x				PKL § 3a - duty of substitution. PRF §§ 2-14 REACH Candidate list (among others Antracen)	The list of Priority Substances
Emissions		x				TEK10 § 9-2	NS-EN 15251
Hazardous waste		x				AVF Chapter 11 Appendices 3 a and b	

**Special conditions**

- 1) Documentation of fire classification is obligatory when shets are not completely covered
  - 2) Joint shear resistance is obligatory for all sinlge layer applications.
  - 3) Root penetration is obligatory for sheets used on turfed and green roofs when no other protection is used.
  - 4) Heat ageing is not obligatory for covered sheets according to NS-EN 13707.
- Durability shall be documenteted prior to use in Norwegian buildings.

**Voluntary documentation**

SINTEF Technical Approval

**Abbreviations**

- O** Obligatory according to harmonised technical spesification
- N** Obligatory according to Norwegian legislation
- F** Voluntary according to technical specifications and national regulations in most cases, but may be required depending on the product application in the works
- TEK10** Technical Regulations under the Planning and Building Act
- PKL** Product Control Act
- AVF** Waste Regulations
- PRF** Product Regulations relating to restrictions on the manufacture, import, export, sale and use of chemicals and other products

Status
Valid
Hearing ended
Hearing issued
Proposal