



Spring Formula (SF) paper for mattress springs wrapping

TD-CZOO-16-03-13-P

Technical specification

PARAMETER			Unit	PARAMETER VALUE			TEST METHOD
Basis weight			g/m ²	130	140	155	PN-ISO 536
		Tolerance		±3,5	±4	±4	
Tensile strength	MD	typical min	kN/m	12,5 12,0	13,3 12,7	14,7 13,4	ISO 1924-3
	CD	typical min		5,4 5,0	5,6 5,2	6,5 5,8	
Strain at break	MD	typical min	%	10,5 9,0	11,5 10,5	11,6 10,8	
	CD	typical min		8,5 8,0	8,5 8,0	8,5 8,0	
Tensile Energy Absorption (TEA)	MD	typical min	J/m ²	690 620	750 700	840 780	ISO 1924-3
	CD	typical min		350 310	360 330	420 370	
Tear strength index	MD	typical min	mNm ² /g	13,0 11,5	14,0 13,0	14,0 13,0	PN-EN-21974
	CD	typical min		19,0 17,0	20,0 18,0	21,0 19,0	
Water absorption, Cobb ₆₀		max	g/m ²	28			PN-ISO 535
Moisture		max	%	7,5±1,5			PN-ISO 287

Measure conditions: relative moisture 50 ± 2% ; temperature 23 ± 1°C (PN-EN 20187)
Minimal values are guaranteed.

MD – Machine Direction
CD – Cross Direction

Technical information

1. Number of breaks in a reel: max 3. All breaks pasted and marked on the head of reel in red.
2. Diameter of reels: min 60 cm, max 125 cm.
3. Cutting tolerance ± 2 mm.
4. Core diameter: 7.6 cm ± 1 mm or 7.0 cm ± 1 mm.
5. Cores are secured with plugs.
6. Reels are not wrapped. Six outer layers make a wrapping of a reel. Other kinds of packing available.
7. Standard marking of reel:
 - two labels on the horizontal surface
 - the number of reel on the reel head

8. Recommendations regarding paper storage:

Paper should be stored in a dry, roofed and airy store. Before used in production, it needs to be left in conditions similar to those of its converting process for some time. This period depends on the paper reel volume and difference of temperatures between the production hall and the store. So, if a paper reel has a volume of over 1,5m³ ($\phi > 1$ m, L > 2m) and difference between temperatures amounts to over 30 °C, the storage time should be ca 5 days. Smaller volumes of paper reels and lower differences of temperatures require a shorter storage period. Compliance with the above conditions will significantly improve paper convertibility.

9. Production of **Spring Formula** is certified in accordance with ISO 9001 quality management system, ISO 14001 environmental management system and OHSAS 18001 safety management system.
10. Above specification TD-CZOO-16-03-13-P is valid from 01.03.2013 until the next one is issued. It replaces TD-CZOO-16-02-12-P.
11. Other than mentioned above parameters and technical information to be agreed separately.



Stora Enso Poland S.A.
ul. I Armii Wojska Polskiego 21
07-401 Ostrołęka
Tel. +4829 7640000
Fax +4829 7640002
www.storaenso.com/poland

Biuro Marketingu i Sprzedaży
Tel. +48 29 7640700
+48 29 7640390
Fax +48 29 7640336
+48 29 7640272
marketing.pl@storaenso.com