

# SAFETY & SECURITY FILMS | Physical Properties



	Thickness, Inches	Thickness, Micron	Appearance	Structure, plies	Tensile Strength MD	Tensile Strength TD	Break Strength MD	Break Strength TD	Elongation at Break MD	Elongation at Break TD	Peel Strength	Puncture Strength	Tear Strength MD	Tear Strength TD	Tear Strength per inch thickness MD	Tear Strength per inch thickness TD
SCL SR PS2	0.002	50	Clear	Single	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCL SR PS4	0.004	100	Clear	Single	22,732	24,915	93	102	138	106	3.36*	65.1	14.2	13.8	3,454	3,375
SCL SR PS7	0.007	175	Clear	Single	20,450	24,160	149	178	149	129	3.36*	118.0	26.3	26.1	3,656	3,622
SCL SR PS8	0.008	200	Clear	Multi	22,174	31,174	184	255	164	98	3.36*	153.3	27.8	28.6	3,396	3,483
SCL SR PS13	0.013	325	Clear	Multi	19,180	21,643	268	297	171	163	3.36*	212.3	45.9	48.0	3,328	3,475
R20 SR PS5	0.005	125	Silver Reflective	Multi	16,418	21,590	96	123	172	144	3.36*	103.1	17.2	16.5	3,014	2,899
R20 SR PS9	0.009	225	Silver Reflective	Multi	16,070	20,570	166	207	171	137	3.36*	143.4	29.6	28.8	2,964	2,878
DR15 SR PS5	0.005	125	Dark Warm Gray	Multi	17,218	23,334	98	137	148	121	3.36*	91.1	16.4	16.2	2,875	2,837
DR15 SR PS9	0.009	225	Medium Warm Gray	Multi	17,045	22,763	175	237	127	170	3.36*	148.1	29.4	29.3	2,935	2,934
DR25 SR PS5	0.005	125	Dark Warm Gray	Multi	18,440	23,439	109	135	140	135	3.36*	96.2	15.6	15.3	2,733	2,690
DR25 SR PS9	0.009	225	Medium Warm Gray	Multi	17,360	22,204	177	236	176	168	3.36*	146.8	28.9	29.3	2,862	2,904
N1020 SR PS4	0.004	100	Dark Neutral Gray	Multi	18,952	33,884	74.6	118.6	165	161	6.0**	78	11.1	11.7	2,460	2,540
N1020 SR PS8	0.008	200	Dark Neutral Gray	Multi	21,037	32,473	167	260.4	164	161	6.0**	164	29.0	3,270	27.8	3,100
N1040 SR PS4	0.004	100	Medium Neutral Gray	Multi	18,952	33,884	74.6	118.6	165	161	6.0**	78	11.1	11.7	2,460	2,540
N1040 SR PS8	0.008	200	Medium Neutral Gray	Multi	21,037	32,473	167	260.4	164	161	6.0**	164	29.0	3,270	27.8	3,100
N1050 SR PS4	0.004	100	Light Neutral Gray	Multi	18,952	33,884	74.6	118.6	165	161	6.0**	78	11.1	11.7	2,460	2,540
N1050 SR PS8	0.008	200	Light Neutral Gray	Multi	21,037	32,473	167	260.4	164	161	6.0**	164	29.0	3,270	27.8	3,100

Test Methods and Units:

Tensile Strength	ASTM D882	Pounds per square inch, psi
Break Strength	ASTM D882	Pounds force, lbf
Elongation at Break	ASTM D882	Percent, %
Peel Strength	ASTM D3330	Pounds per inch width, lb/in
Puncture Strength	ASTM D4830	Pounds force, lbf
Tear Strength	ASTM D1004	Pounds force
Tear Strength	ASTM D1004	Pounds force per inch thickness, lbf/in

N/A – Data not available

\*Value for SCL SR PS4, new formulation clear safety films, 2018. \*\*Value from previous 4mil safety film testing - films have not yet been reformulated. ASTM D3330 test method requires a 180-degree peel which cannot be achieved with thicker films without peeling the film from the substrate prior to beginning the test. As such, all peel strength values are based on 4mil film tests.

All values above are results from independent lab testing. Test reports available on request. Reported values are taken from representative product samples and are subject to normal manufacturing variances.

SCL SR PS4, SCL SR PS7, SCL SR PS8 and SCL SR PS13 comply with ANSI Z97.1/CPSC impact test requirements. Test reports available on request.

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