



الشركة السعودية الأمريكية للزجاج
SAUDI AMERICAN GLASS

K-LITE®

OPTIMA MULTI FUNCTION
LOW - E



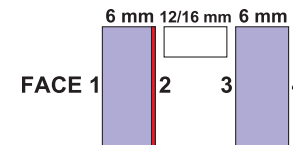
الشركة السعودية الأمريكية للزجاج
SAUDI AMERICAN GLASS

K- LITE PERFORMANCE DATA

24mm (6/12/6) Insulating Glass Units

Optima Multi Function Low-E Coatings

28mm (6/16/6) Insulating Glass Units



DESCRIPTION		Visible Light (%)			Total Solar Energy (%)			AIR FILLED								ARGON FILLED								UV %
Coating	Substrate	Tv	Reflectance		Tsol	Ro	Abs	12MM				16MM				12MM				16MM				
			OUT	IN				SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	
Optima Silver 34	Azurlite	26	22	13	11	11	78	0.18	0.21	1.74	149	0.18	0.21	1.5	143	0.17	0.2	1.45	138	0.17	0.2	1.26	134	10
Optima Silver 36	Azurlite	27	28	23	11	13	76	0.19	0.21	1.64	148	0.18	0.21	1.39	142	0.17	0.2	1.33	137	0.17	0.2	1.13	133	12
Optima Neutral 43	Azurlite	33	11	14	14	7	79	0.23	0.26	1.84	179	0.22	0.25	1.61	173	0.21	0.25	1.57	169	0.21	0.25	1.39	165	17
Optima Silver 47	Azurlite	36	26	37	14	13	73	0.2	0.23	1.56	160	0.2	0.23	1.29	154	0.19	0.22	1.23	148	0.19	0.22	1.02	145	12
Optima Neutral 51	Azurlite	40	12	11	17	8	75	0.25	0.29	1.81	194	0.24	0.28	1.59	188	0.24	0.27	1.54	184	0.23	0.27	1.36	181	19
Optima Neutral 60	Azurlite	46	13	12	19	8	73	0.26	0.3	1.69	205	0.26	0.3	1.45	199	0.25	0.29	1.4	195	0.25	0.29	1.2	191	16
Optima Azura	Azurlite	40	15	14	16	9	75	0.24	0.28	1.83	193	0.24	0.28	1.61	187	0.23	0.27	1.56	183	0.23	0.27	1.38	180	17
Optima Silver 34	Blue Green	29	25	13	14	16	70	0.21	0.24	1.74	167	0.2	0.24	1.5	161	0.2	0.23	1.45	157	0.2	0.23	1.26	153	8
Optima Silver 36	Blue Green	30	33	23	15	18	67	0.22	0.25	1.64	173	0.21	0.25	1.39	167	0.21	0.24	1.33	163	0.21	0.24	1.13	160	10
Optima Neutral 43	Blue Green	37	13	14	18	10	72	0.27	0.31	1.84	208	0.26	0.3	1.61	202	0.26	0.3	1.57	199	0.25	0.29	1.39	195	13
Optima Silver 47	Blue Green	40	31	37	17	19	64	0.23	0.27	1.56	182	0.23	0.26	1.29	176	0.22	0.26	1.23	172	0.22	0.25	1.02	168	10
Optima Neutral 51	Blue Green	44	14	11	22	11	67	0.3	0.34	1.81	230	0.29	0.34	1.59	224	0.29	0.33	1.54	221	0.28	0.33	1.36	217	15
Optima Neutral 60	Blue Green	51	15	12	26	11	63	0.33	0.38	1.69	255	0.33	0.38	1.45	249	0.32	0.37	1.4	246	0.32	0.37	1.2	242	13
Optima Azura	Blue Green	44	17	14	23	12	65	0.3	0.35	1.83	236	0.3	0.35	1.61	231	0.3	0.34	1.56	228	0.29	0.34	1.38	224	13
Optima Silver 34	Blue	22	16	13	12	15	73	0.2	0.23	1.74	157	0.19	0.22	1.5	151	0.19	0.22	1.45	147	0.18	0.21	1.26	144	8
Optima Silver 36	Blue	23	20	23	14	16	70	0.21	0.24	1.64	165	0.2	0.23	1.39	159	0.2	0.23	1.33	155	0.19	0.23	1.13	151	10
Optima Neutral 43	Blue	28	9	14	17	10	73	0.25	0.29	1.84	196	0.24	0.28	1.61	190	0.24	0.28	1.57	187	0.24	0.27	1.39	183	13
Optima Silver 47	Blue	30	19	37	15	18	67	0.21	0.25	1.56	168	0.21	0.24	1.29	162	0.2	0.23	1.23	157	0.2	0.23	1.02	154	10
Optima Neutral 51	Blue	33	10	11	20	10	70	0.28	0.32	1.81	216	0.27	0.31	1.59	210	0.27	0.31	1.54	207	0.26	0.31	1.36	203	15
Optima Neutral 60	Blue	38	10	12	23	10	67	0.31	0.36	1.69	240	0.3	0.35	1.45	234	0.3	0.35	1.4	230	0.3	0.34	1.2	226	13
Optima Azura	Blue	33	11	13	21	11	68	0.29	0.34	1.83	227	0.29	0.33	1.61	222	0.28	0.33	1.56	219	0.28	0.32	1.38	215	13

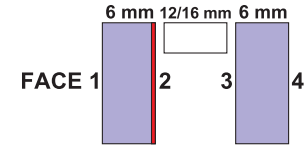
Spectral optical properties have been independently measured at Oxford Brookes University. Integrated visible, solar and thermal optical properties have been calculated in accordance with the requirements of EN 410, ISO 9050 and EN 673. Resultant photometric data are nominal rounded values for the centre of the glass pane. Production and measurement tolerances are in accordance with applicable standards and procedures. Evergreen® is the registered trademark of Pilkington. RHG has been calculated using SC. and U. value to 5 decimal places for accuracy. Azurlite® is the registered trademark of PPG Industries.

K- LITE PERFORMANCE DATA

24mm (6/12/6) Insulating Glass Units

Optima Multi Function Low-E Coatings

28mm (6/16/6) Insulating Glass Units



DESCRIPTION		Visible Light (%)			Total Solar Energy (%)			AIR FILLED								ARGON FILLED								UV %
Coating	Substrate	Tv	Reflectance		Tsol	Ro	Abs	12MM				16MM				12MM				16MM				
			OUT	IN				SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	
Optima Silver 34	Bronze	18	13	13	11	16	73	0.18	0.21	1.74	149	0.18	0.21	1.5	143	0.17	0.2	1.45	139	0.17	0.2	1.26	135	4
Optima Silver 36	Bronze	19	15	23	13	16	71	0.2	0.23	1.64	159	0.19	0.23	1.39	153	0.19	0.22	1.33	149	0.19	0.22	1.13	145	5
Optima Neutral 43	Bronze	23	8	14	15	11	74	0.24	0.27	1.84	186	0.23	0.27	1.61	180	0.23	0.26	1.57	177	0.22	0.26	1.39	173	7
Optima Silver 47	Bronze	25	15	37	13	19	68	0.2	0.23	1.56	157	0.19	0.22	1.29	151	0.19	0.22	1.23	146	0.18	0.21	1.02	143	5
Optima Neutral 51	Bronze	27	8	11	18	11	71	0.26	0.3	1.81	205	0.26	0.3	1.59	200	0.25	0.29	1.54	196	0.25	0.29	1.36	193	8
Optima Neutral 60	Bronze	32	8	12	22	11	67	0.3	0.35	1.69	231	0.29	0.34	1.45	225	0.29	0.33	1.4	222	0.29	0.33	1.2	218	7
Optima Azura	Bronze	28	9	13	20	10	70	0.29	0.33	1.83	223	0.28	0.33	1.61	218	0.28	0.32	1.56	215	0.27	0.32	1.38	211	7
Optima Silver 34	Clear	34	33	14	20	36	44	0.25	0.29	1.74	195	0.24	0.28	1.50	190	0.24	0.28	1.45	188	0.24	0.28	1.26	185	15
Optima Silver 36	Clear	36	44	23	23	39	38	0.28	0.32	1.64	216	0.28	0.32	1.39	212	0.28	0.32	1.33	210	0.27	0.31	1.13	207	18
Optima Neutral 43	Clear	43	16	15	27	22	51	0.34	0.39	1.84	262	0.34	0.39	1.61	257	0.33	0.38	1.57	255	0.33	0.38	1.39	251	24
Optima Silver 47	Clear	47	41	38	24	44	32	0.28	0.32	1.56	217	0.28	0.32	1.29	213	0.28	0.32	1.23	211	0.28	0.32	1.02	208	18
Optima Neutral 51	Clear	51	17	12	32	23	45	0.39	0.45	1.81	296	0.38	0.44	1.59	292	0.38	0.44	1.54	291	0.38	0.44	1.36	287	28
Optima Neutral 60	Clear	60	19	13	39	22	39	0.46	0.53	1.69	346	0.45	0.52	1.45	342	0.45	0.52	1.4	340	0.45	0.52	1.2	337	23
Optima Azura	Clear	53	22	14	35	23	42	0.42	0.49	1.83	320	0.42	0.48	1.61	316	0.42	0.48	1.56	315	0.41	0.48	1.38	312	24
Optima Silver 34	Evergreen	26	21	13	10	11	79	0.18	0.21	1.74	147	0.18	0.21	1.5	141	0.17	0.2	1.45	136	0.17	0.19	1.26	133	4
Optima Silver 36	Evergreen	27	27	23	11	13	76	0.19	0.22	1.64	148	0.18	0.21	1.39	142	0.17	0.2	1.33	137	0.17	0.2	1.13	134	4
Optima Neutral 43	Evergreen	32	11	14	14	7	79	0.22	0.26	1.84	177	0.22	0.25	1.61	171	0.21	0.25	1.57	167	0.21	0.24	1.39	163	6
Optima Silver 47	Evergreen	35	25	37	13	13	74	0.2	0.23	1.56	158	0.19	0.23	1.29	152	0.19	0.22	1.23	147	0.18	0.21	1.02	143	4
Optima Neutral 51	Evergreen	39	12	11	16	8	76	0.24	0.28	1.81	193	0.24	0.28	1.59	187	0.23	0.27	1.54	183	0.23	0.27	1.36	179	7
Optima Neutral 60	Evergreen	45	12	12	19	8	73	0.27	0.31	1.69	207	0.26	0.3	1.45	201	0.25	0.29	1.4	197	0.25	0.29	1.2	193	6
Optima Azura	Evergreen	39	14	14	16	8	76	0.25	0.29	1.83	195	0.24	0.28	1.61	189	0.24	0.27	1.56	185	0.23	0.27	1.38	181	6

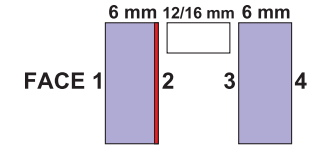
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24mm (6/12/6) Insulating Glass Units

Optima Multi Function Low-E Coatings

28mm (6/16/6) Insulating Glass Units



DESCRIPTION		Visible Light (%)			Total Solar Energy (%)			AIR FILLED								ARGON FILLED								UV %
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			OUT	IN				SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	SF	SC	U Value Summer	RHG	
Optima Silver 34	Green	28	24	13	13	14	73	0.2	0.23	1.74	160	0.19	0.23	1.5	154	0.19	0.22	1.45	150	0.19	0.22	1.26	146	6
Optima Silver 36	Green	30	31	23	14	16	70	0.21	0.24	1.64	165	0.2	0.23	1.39	159	0.2	0.23	1.33	154	0.19	0.23	1.13	151	7
Optima Neutral 43	Green	36	12	14	17	9	74	0.25	0.29	1.84	197	0.24	0.28	1.61	192	0.24	0.28	1.57	188	0.24	0.27	1.39	184	10
Optima Silver 47	Green	38	29	37	16	17	67	0.22	0.26	1.56	174	0.22	0.25	1.29	168	0.21	0.24	1.23	164	0.21	0.24	1.02	160	7
Optima Neutral 51	Green	42	13	11	20	10	70	0.28	0.32	1.81	217	0.27	0.32	1.59	211	0.27	0.31	1.54	208	0.26	0.31	1.36	204	11
Optima Neutral 60	Green	50	14	12	24	10	66	0.31	0.36	1.69	238	0.3	0.35	1.45	233	0.3	0.35	1.4	229	0.3	0.34	1.2	225	10
Optima Azura	Green	43	16	14	21	11	68	0.29	0.33	1.83	224	0.28	0.33	1.61	219	0.28	0.32	1.56	216	0.28	0.32	1.38	212	10
Optima Silver 34	Grey	17	12	13	10	15	75	0.18	0.21	1.74	148	0.18	0.21	1.5	142	0.17	0.2	1.45	137	0.17	0.2	1.26	134	6
Optima Silver 36	Grey	18	14	23	12	15	73	0.2	0.23	1.64	157	0.19	0.22	1.39	151	0.19	0.22	1.33	147	0.18	0.21	1.13	143	7
Optima Neutral 43	Grey	22	7	14	15	10	75	0.23	0.27	1.84	184	0.23	0.26	1.61	178	0.22	0.26	1.57	175	0.22	0.25	1.39	171	9
Optima Silver 47	Grey	23	14	37	13	17	70	0.2	0.23	1.56	155	0.19	0.22	1.29	149	0.18	0.21	1.23	144	0.18	0.21	1.02	141	7
Optima Neutral 51	Grey	26	8	11	17	11	72	0.26	0.3	1.81	203	0.25	0.29	1.59	197	0.25	0.29	1.54	193	0.24	0.28	1.36	190	10
Optima Neutral 60	Grey	30	8	12	21	10	69	0.29	0.34	1.69	227	0.29	0.33	1.45	221	0.28	0.33	1.4	217	0.28	0.32	1.2	213	9
Optima Azura	Grey	26	9	13	19	10	71	0.28	0.32	1.83	218	0.27	0.32	1.61	213	0.27	0.31	1.56	209	0.27	0.31	1.38	206	9

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