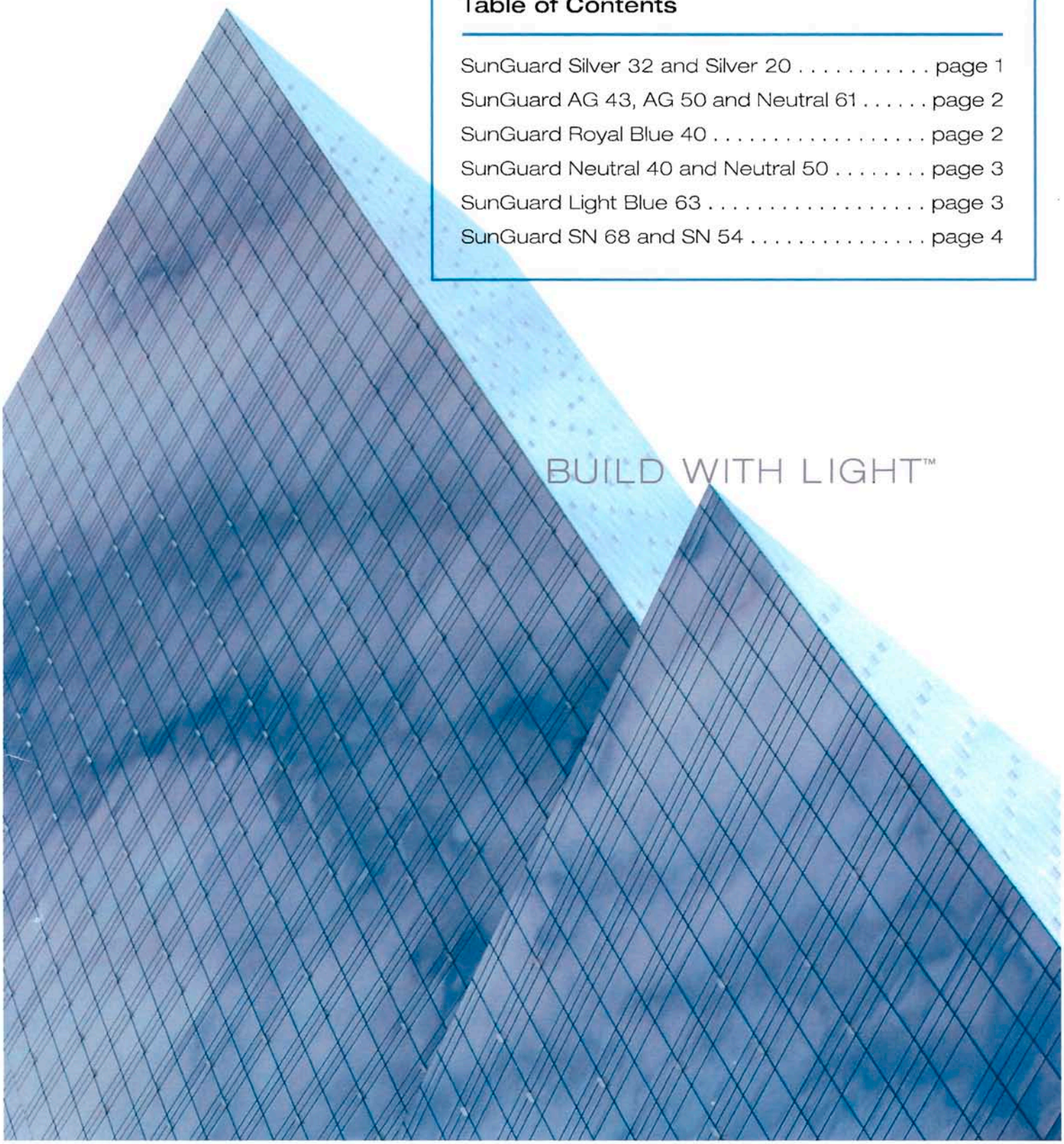
SUNGUARD®
GUARDIAN ADVANCED ARCHITECTURAL GLASS

SYRACUSE GLASS COMPANY

PERFORMANCE COMPARISON TABLES

Table of Contents



SUNGUARD®
GUARDIAN ADVANCED ARCHITECTURAL GLASS

SOLAR SERIES PERFORMANCE COMPARISON

SunGuard Silver 32

1" Insulating Units Performance Data - 6mm / 12mm air / 6mm - coating on #2 surface									
			Visible Light						
			Trans-	Reflectance		Shading	Solar Heat Gain	U-Value	Light to Solar Gain
Manufacturer	Product	Substrate	mittance %	Out %	In %	Coefficient	Coefficient	Winter	(LSG)
Guardian	**SunGuard Silver 32**	**Clear/Clear**	**29**	**22**	**21**	**.35**	**.31**	**.42**	**.94**
Viracon	Solarscreen VT1-30	Clear/Clear	27	17	30	.34	.29	.43	.94
Guardian	**SunGuard Silver 32**	**Green/Clear**	**24**	**17**	**21**	**.27**	**.24**	**.42**	**1.00**
Viracon	Solarscreen VT2-30	Green/Clear	23	13	31	.27	.23	.43	1.00

SunGuard Silver 20

1" Insulating Units Performance Data - 6mm / 12mm air / 6mm - coating on #2 surface									
			Visible Light						
			Trans-	Reflectance		Shading	Solar Heat Gain	U-Value	Light to Solar Gain
Manufacturer	Product	Substrate	mittance %	Out %	In %	Coefficient	Coefficient	Winter	(LSG)
Guardian	**SunGuard Silver 20**	**Clear/Clear**	**18**	**31**	**27**	**.24**	**.21**	**.39**	**.84**
Viracon	Solarscreen VY1-20	Clear/Clear	18	27	35	.28	.24	.42	.76
Guardian	**SunGuard Silver 20**	**Green/Clear**	**15**	**24**	**27**	**.21**	**.19**	**.39**	**.82**
Viracon	Solarscreen VY2-20	Green/Clear	16	22	35	.24	.21	.42	.74

Notes:

· All coatings on the #2 surface unless otherwise noted.

· The Guardian SunGuard performance values shown are nominal and subject to manufacturing tolerances. Performance data are calculated in accordance with the LBNL Window 5.2 computer analysis using an air mass of 1.5. Guardian reserves the right to change product performance characteristics without notice or obligation.

· Performance data from other glass companies are based on available public information. Products shown are not exact visual matches. Glass samples should be obtained to determine similarity of products in appearance.

SUNGUARD®
GUARDIAN ADVANCED ARCHITECTURAL GLASS

HIGH PERFORMANCE SERIES PERFORMANCE COMPARISON

SunGuard AG 43, AG 50 & Neutral 61

1" Insulating Units Performance Data - 6mm / 12mm air / 6mm - coating on #2 surface									
			Visible Light						
			Trans-	Reflectance		Shading	Solar Heat Gain	U-Value	Light to Solar Gain
Manufacturer	Product	Substrate	mittance %	Out %	In %	Coefficient	Coefficient	Winter	(LSG)
Guardian	**SunGuard AG 43**	**Clear/Clear**	**41**	**30**	**15**	**.33**	**.29**	**.31**	**1.39**
	SunGuard AG 50	**Clear/Clear**	**50**	**28**	**18**	**.38**	**.33**	**.30**	**1.51**
	SunGuard Neutral 61 *	**Clear/Clear**	**61**	**20**	**15**	**.45**	**.40**	**.30**	**1.53**
Viracon	VRE 1-38	Clear/Clear	36	44	21	.27	.23	.30	1.57
	VRE 1-46	Clear/Clear	43	34	15	.33	.28	.30	1.53
	VRE 1-59	Clear/Clear	53	30	19	.39	.33	.30	1.60
	VRE 1-67	Clear/Clear	60	29	25	.43	.38	.30	1.57
PPG	Solarban 80	Clear/Clear	47	32	36	.27	.23	.29	2.04
Guardian	**SunGuard AG 43**	**Green/Clear**	**35**	**23**	**14**	**.26**	**.23**	**.31**	**1.52**
	SunGuard AG 50	**Green/Clear**	**43**	**21**	**18**	**.29**	**.25**	**.30**	**1.67**
	SunGuard Neutral 61 *	**Green/Clear**	**51**	**15**	**14**	**.34**	**.30**	**.30**	**1.74**
Viracon	VRE 2-38	Green/Clear	30	35	21	.22	.19	.30	1.60
	VRE 2-46	Green/Clear	36	26	15	.26	.23	.30	1.57
	VRE 2-59	Green/Clear	44	23	19	.30	.26	.30	1.70
	VRE 2-67	Green/Clear	50	22	24	.33	.28	.30	1.79

* Neutral 61 was formerly called NP 61

SunGuard Royal Blue 40

1" Insulating Units Performance Data - 6mm / 12mm air / 6mm - coating on #2 surface									
			Visible Light						
			Trans-	Reflectance		Shading	Solar Heat Gain	U-Value	Light to Solar Gain
Manufacturer	Product	Substrate	mittance %	Out %	In %	Coefficient	Coefficient	Winter	(LSG)
Guardian	**SunGuard Royal Blue 40**	**Clear/Clear**	**38**	**24**	**18**	**.36**	**.31**	**.31**	**1.21**
Viracon	Solarscreen VE5-52	Blue/Clear	32	9	10	.32	.28	.32	1.14
	Solarscreen VT1-40	Clear/Clear	36	12	26	.43	.37	.44	0.98
Guardian	**SunGuard Royal Blue 40**	**Green/Clear**	**32**	**19**	**17**	**.26**	**.23**	**.31**	**1.40**
Viracon	Solarscreen VE2-52	Green/Clear	43	12	11	.34	.29	.32	1.50
	Solarscreen VT2-40	Green/Clear	31	10	26	.33	.28	.44	1.09

Notes:

· All coatings on the #2 surface unless otherwise noted.

· The Guardian SunGuard performance values shown are nominal and subject to manufacturing tolerances. Performance data are calculated in accordance with the LBNL Window 5.2 computer analysis using an air mass of 1.5. Guardian reserves the right to change product performance characteristics without notice or obligation.

· Performance data from other glass companies are based on available public information. Products shown are not exact visual matches. Glass samples should be obtained to determine similarity of products in appearance.

SUNGUARD®
GUARDIAN ADVANCED ARCHITECTURAL GLASS

HIGH PERFORMANCE SERIES PERFORMANCE COMPARISON

SunGuard Neutral 40 & Neutral 50

1" Insulating Units Performance Data - 6mm / 12mm air / 6mm - coating on #2 surface									
			Visible Light						
			Trans-	Reflectance		Shading	Solar Heat Gain	U-Value	Light to Solar Gain
Manufacturer	Product	Substrate	mittance %	Out %	In %	Coefficient	Coefficient	Winter	(LSG)
Guardian	**SunGuard Neutral 40 ***	**Clear/Clear**	**40**	**20**	**12**	**.37**	**.32**	**.33**	**1.25**
Viracon	Solarscreen VE1-40	Clear/Clear	36	15	19	.32	.28	.31	1.30
	Solarscreen VE1-42	Clear/Clear	37	19	14	.36	.31	.31	1.20
Guardian	**SunGuard Neutral 40 ***	**Green/Clear**	**34**	**16**	**12**	**.27**	**.24**	**.33**	**1.39**
Viracon	Solarscreen VE2-40	Green/Clear	32	12	19	.26	.21	.31	1.44
	Solarscreen VE2-42	Green/Clear	31	15	14	.27	.23	.31	1.37
Guardian	**SunGuard Neutral 50 ***	**Clear/Clear**	**50**	**16**	**11**	**.45**	**.39**	**.33**	**1.28**
Viracon	Solarscreen VE1-52	Clear/Clear	50	16	11	.46	.40	.32	1.24
	Solarscreen VE1-55	Clear/Clear	47	11	16	.40	.35	.31	1.34
Pilkington	Solar E**	Clear/Clear	53	11	15	.51	.45	.33	1.17
Guardian	**SunGuard Neutral 50 ***	**Green/Clear**	**42**	**13**	**10**	**.32**	**.28**	**.33**	**1.49**
Viracon	Solarscreen VE2-52	Green/Clear	43	12	11	.34	.29	.32	1.50
	Solarscreen VE2-55	Green/Clear	40	10	16	.30	.26	.31	1.53

* Neutral 40 was formerly called LE 40, Neutral 50 was formerly called LE 50

SunGuard Light Blue 63

1" Insulating Units Performance Data - 6mm / 12mm air / 6mm									
			Visible Light						
			Trans-	Reflectance		Shading	Solar Heat Gain	U-Value	Light to Solar Gain
Manufacturer	Product	Substrate	mittance %	Out %	In %	Coefficient	Coefficient	Winter	(LSG)
Guardian	**SunGuard Light Blue 63 ***	**Clear/Clear**	**62**	**15**	**12**	**.59**	**.51**	**.34**	**1.20**
Viracon	VE1-85	Clear/Clear	72	12	13	.61	.53	.31	1.37
Pilkington	Energy Advantage**	Clear/Clear	73	16	17	.71	.62	.33	1.20
PPG	Sungate 500**	Clear/Clear	74	16	17	.71	.62	.35	1.19
Guardian	**SunGuard Light Blue 63 ***	**Green/Clear**	**52**	**12**	**12**	**.39**	**.35**	**.34**	**1.51**
Viracon	VE2-85	Green/Clear	62	10	12	.44	.38	.31	1.64

* Light Blue 63 was formerly called LE 63

** Denotes pyrolytic coating

Notes:

· All coatings on the #2 surface unless otherwise noted.

· The Guardian SunGuard performance values shown are nominal and subject to manufacturing tolerances. Performance data are calculated in accordance with the LBNL Window 5.2 computer analysis using an air mass of 1.5. Guardian reserves the right to change product performance characteristics without notice or obligation.

· Performance data from other glass companies are based on available public information. Products shown are not exact visual matches. Glass samples should be obtained to determine similarity of products in appearance.

SUNGUARD®
GUARDIAN ADVANCED ARCHITECTURAL GLASS

SUPERNEUTRAL SERIES PERFORMANCE COMPARISON

SunGuard SN 54 & SN 68

1" Insulating Units Performance Data - 6mm / 12mm air / 6mm									
			Visible Light						
			Trans-	Reflectance		Shading	Solar Heat Gain	U-Value	Light to Solar Gain
Manufacturer	Product	Substrate	mittance %	Out %	In %	Coefficient	Coefficient	Winter	(LSG)
Guardian	**SunGuard SN 54**	**Clear/Clear**	**54**	**13**	**18**	**.32**	**.28**	**.29**	**1.91**
	SunGuard SN 68	**Clear/Clear**	**68**	**11**	**12**	**.43**	**.38**	**.29**	**1.80**
Viracon	VE1-2M	Clear/Clear	67	11	12	.43	.37	.29	1.82
	VNE1-63	Clear/Clear	62	10	11	.32	.28	.29	2.23
	VRE1-54	Clear/Clear	48	32	16	.36	.31	.30	1.60
PPG	Solarban 60	Clear/Clear	70	11	12	.44	.38	.29	1.84
	Solarban 70	Starphire/Clear	64	11	12	.31	.27	.28	2.37
AFG	Comfort Ti-R	Clear/Clear	66	19	21	.50	.43	.29	1.53
	Comfort Ti-AC 36	Clear/Clear	66	11	12	.41	.36	.29	1.83
	Comfort Ti-AC 40	Clear/Clear	68	10	12	.44	.39	.29	1.77
Guardian	**SunGuard SN 54**	**Green/Clear**	**46**	**10**	**18**	**.27**	**.24**	**.29**	**1.88**
	SunGuard SN 68	**Green/Clear**	**58**	**9**	**12**	**.34**	**.30**	**.29**	**1.90**
Viracon	VE2-2M	Green/Clear	58	9	11	.35	.31	.29	1.86
	VNE2-63	Green/Clear	52	9	11	.29	.25	.29	2.08
	VRE2-54	Green/Clear	40	24	16	.28	.24	.30	1.60

Notes:

· All coatings on the #2 surface unless otherwise noted.

· The Guardian SunGuard performance values shown are nominal and subject to manufacturing tolerances. Performance data are calculated in accordance with the LBNL Window 5.2 computer analysis using an air mass of 1.5. Guardian reserves the right to change product performance characteristics without notice or obligation.

· Performance data from other glass companies are based on available public information. Products shown are not exact visual matches. Glass samples should be obtained to determine similarity of products in appearance.