

Addendum #5 to WINDOW 4.1

Optical Data Library #5



*for use with the WINDOW 4.1 Computer Program
including NFRC Certified Data.*

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MASTER

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This data library was created through a collaborative effort between the individual glass and glazing manufacturers and coaters involved, the National Fenestration Rating Council (NFRC), the Primary Glass Manufacturers Council (PGMC), and the Lawrence Berkeley National Laboratory (LBNL). LBNL effort was supported by the Assistant Secretary for Energy Efficiency and Renewable Energy, Office of Building Technology, State and Community Programs, Office of Building Systems of the U.S. Department of Energy under Contract No. DE-AC03-76SF00098.

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Introduction

The enclosed diskette contains optical data for 783 glazing products that can be used with the WINDOW 4.1 energy analysis program. Version #5 of the Optical Data Library supersedes version #4 of the NFRC Spectral Data Library issued in February 1997. There are new files from Guardian, Cardinal, PPG, LOF, Visionwall, Specialty Coatings and Chemicals, and Pilkington. All Marcon extensions (*.MAR) have been changed to Viracon extensions (*.VIR) and their identification numbers have been changed to be contiguous to the original Viracon numbers. The new data structure is summarized in the following table:

Summary of WINDOW Optical Data Library #5

Reserved ID# Range	Manufacturer	Number of Files	Reserved ID # Range	Manufacturer	Number of Files
100-199	Generic Data	5 ¹	2700-2799	3M Corporation	25 ¹
700-1099	AFG Industries	216 ¹	3000-3199	Guardian	15 ¹
1100-1199	DuPont	12 ¹	4000-4199	Pilkington	45 ²
1300-1399	Ford	29 ¹	5000-5299	PPG Industries	123 ²
1500-1599	Southwall Technologies	51 ¹	6000-6199	Viracon	162 ⁴
			7000-7099	Visionwall	1 ²
2000-2099	Cardinal IG	25 ²	8000-8099	Specialty Coatings & Chemical	4 ²
2500-2599	Courtaulds Performance Films	27 ¹	9800-9999	Libbey-Owens- Ford	43 ³

¹ No updates relative to disk #4

² New files relative to disk #4

³ New files replacing old files on disk #4

⁴ Combined with Marcon files on disk #4.

Use of Optical Data for NFRC Simulations

The National Fenestration Rating Council (NFRC) requires, as of April 1, 1996, that all simulations must be carried out using NFRC-certified optical data only. Solar Heat Gain Coefficient and Visible Transmittance must be calculated using spectral transmittance and reflectance in the solar range. U-factor calculations must use spectral or integrated emittance. NFRC-certified spectral data is indicated within the WINDOW 4.1 program by a "#" sign; all other data is designated with a "*" sign. All of the data in the WINDOW 4.1 spectral data library, regardless of NFRC certification, has been measured and calculated in accordance with ASTM and NFRC standard procedures and technically reviewed following the procedures of the NFRC Product Certification Program (PCP), Appendix D: Optical Data. Official NFRC certification, however, and subsequent application of the "#" sign, is a purely administrative matter at the sole discretion of the NFRC in accordance with their established procedures.

Instructions for Loading the Optical Data Files

The optical data is compressed in a self-extracting archive, SPCDAT05.EXE. Expanded, the full library contains 783 files and occupies approximately 5.12 MB of hard-disk space. The GLASS.DAT file needed to run WINDOW 4.1 is compressed in a self-extracting archive GLASSDAT.EXE.

Copy the file GLASSDAT.EXE to the directory C:\W4\W4LIB. Run GLASSDAT.EXE to expand the GLASS.DAT file. Warning: If you have previously customized the glass library in WINDOW 4.1 and you wish to save that information GLASS.DAT, rename the original GLASS.DAT file to GLASS.BAK before expanding the new GLASS.DAT file

Create a directory at the level of C:\W4\W4LIB\SPCDAT named C:\W4\W4LIB\TRANSFER. Copy file SPCDAT05.EXE to the TRANSFER directory. Expand the files using one of the following two options:

1. Run SPCDAT05.EXE. This operation will expand the data files for all manufacturers into the TRANSFER directory.
2. Run SPCDAT05.EXE -D. This operation will expand the files into a set of subdirectories for each manufacturer.

Copy only the needed data from the TRANSFER directory or subdirectories into the SPECDAT directory. Do not create a subdirectory structure under SPECDAT. The fewer files in SPECDAT, the faster WINDOW 4.1 will load and update.

Acknowledgments

The Spectral Data Library was created through a collaborative effort among the involved glazing manufacturers, the National Fenestration Rating Council (NFRC), the Primary Glass Manufacturers Council (PGMC), and the Lawrence Berkeley National Laboratory (LBNL). The LBNL effort was supported by the Assistant Secretary for Energy Efficiency and Renewable Energy, Office of Building Technology, State and Community Programs (BTS), Office of Building Systems of the U.S. Department of Energy under Contract No. DE-AC03-76SF00098.

Generic Uncoated Glass Products

These generic files do not represent measured properties of any particular glass product. They are composed of average spectral data from at least two samples. The purpose of these files is to avoid recalculating performance and generating multiple labels for a window product which may be manufactured using glass from various suppliers. A generic file may be substituted for any of the specific manufacturer files listed in the Description column. Solar Heat Gain Coefficients calculated for a single glazing layer at normal incidence differ by less than 0.05 among each group.

ID #	Generic File	Glass Type	Generic File May Substitute for:	Nominal Thickness (mm)
100	BRONZE_3.D AT	Bronze	BRONZE3.AFG, BRONZE30.FMC, BRONZ3.LOF, SBRNZ_3.PPG	3.0
101	BRONZE_6.D AT	Bronze	BRONZE6.AFG, BRONZE60.FMC, BRONZ6.LOF, SBRNZ_6.PPG	6.0
102	CLEAR_3.DA T	Clear	CLR_3.AFG, CLEAR30.FMC, CLEAR3.LOF, CLR-3.CIG, CLEAR_3.PPG	3.0
103	CLEAR_6.DA T	Clear	CLR_6.AFG, CLEAR60.FMC, CLEAR6.LOF, CLR-6.CIG, CLEAR_6.PPG,	6.0
104	GRAY_3.DAT	Gray	GRAY3.AFG, GRAY30.FMC, GREY3.LOF, SGRAY_3.PPG	3.0

AFG Industries

AFG#	File Name	Glass Type	Coating	Description	Nominal Thickness (Inches)
700	B120.AFG	Clear	Titanium Nitride	Silver-Blue	1/4"
701	B130.AFG	Clear	Titanium Nitride	Silver-Blue	1/4"
702	B140.AFG	Clear	Titanium Nitride	Silver-Blue	1/4"
703	B220.AFG	Green	Titanium Nitride	Silver-Blue	1/4"
704	B230.AFG	Green	Titanium Nitride	Silver-Blue	1/4"
705	B240.AFG	Green	Titanium Nitride	Silver-Blue	1/4"
706	B320.AFG	Gray	Titanium Nitride	Silver-Blue	1/4"
707	B330.AFG	Gray	Titanium Nitride	Silver-Blue	1/4"
708	B340.AFG	Gray	Titanium Nitride	Silver-Blue	1/4"
709	B420.AFG	Bronze	Titanium Nitride	Silver-Blue	1/4"
710	B430.AFG	Bronze	Titanium Nitride	Silver-Blue	1/4"
711	B440.AFG	Bronze	Titanium Nitride	Silver-Blue	1/4"
712	B520.AFG	Blue	Titanium Nitride	Silver-Blue	1/4"
713	B530.AFG	Blue	Titanium Nitride	Silver-Blue	1/4"

AFG#	File Name	Glass Type	Coating	Description	Nominal Thickness (Inches)
714	B540.AFG	Blue	Titanium Nitride	Silver-Blue	1/4"
715	B620.AFG	Blue-green	Titanium Nitride	Silver-Blue	1/4"
716	B630.AFG	Blue-green	Titanium Nitride	Silver-Blue	1/4"
717	B640.AFG	Blue-green	Titanium Nitride	Silver-Blue	1/4"
718	B720.AFG	Azurlite *	Titanium Nitride	Silver-Blue	1/4"
719	B730.AFG	Azurlite *	Titanium Nitride	Silver-Blue	1/4"
720	B740.AFG	Azurlite *	Titanium Nitride	Silver-Blue	1/4"
721	B820.AFG	Evergreen **	Titanium Nitride	Silver-Blue	1/4"
722	B830.AFG	Evergreen **	Titanium Nitride	Silver-Blue	1/4"
723	B840.AFG	Evergreen **	Titanium Nitride	Silver-Blue	1/4"
724	C120.AFG	Clear	Copper	Copper	1/4"
725	C130.AFG	Clear	Copper	Copper	1/4"
726	C145.AFG	Clear	Copper	Copper	1/4"
727	C155.AFG	Clear	Copper	Copper	1/4"
728	C220.AFG	Green	Copper	Copper	1/4"
729	C230.AFG	Green	Copper	Copper	1/4"
730	C245.AFG	Green	Copper	Copper	1/4"
731	C255.AFG	Green	Copper	Copper	1/4"
732	C320.AFG	Gray	Copper	Copper	1/4"
733	C330.AFG	Gray	Copper	Copper	1/4"
734	C345.AFG	Gray	Copper	Copper	1/4"
735	C355.AFG	Gray	Copper	Copper	1/4"
736	C420.AFG	Bronze	Copper	Copper	1/4"
737	C430.AFG	Bronze	Copper	Copper	1/4"
738	C445.AFG	Bronze	Copper	Copper	1/4"
739	C455.AFG	Bronze	Copper	Copper	1/4"
740	C520.AFG	Blue	Copper	Copper	1/4"
741	C530.AFG	Blue	Copper	Copper	1/4"
742	C545.AFG	Blue	Copper	Copper	1/4"
743	C555.AFG	Blue	Copper	Copper	1/4"
744	C620.AFG	Blue-green	Copper	Copper	1/4"
745	C630.AFG	Blue-green	Copper	Copper	1/4"
746	C645.AFG	Blue-green	Copper	Copper	1/4"
747	C655.AFG	Blue-green	Copper	Copper	1/4"
748	C720.AFG	Azurlite *	Copper	Copper	1/4"
749	C730.AFG	Azurlite *	Copper	Copper	1/4"
750	C745.AFG	Azurlite *	Copper	Copper	1/4"
751	C755.AFG	Azurlite *	Copper	Copper	1/4"
752	C820.AFG	Evergreen **	Copper	Copper	1/4"
753	C830.AFG	Evergreen **	Copper	Copper	1/4"

AFG#	File Name	Glass Type	Coating	Description	Nominal Thickness (Inches)
754	C845.AFG	Evergreen **	Copper	Copper	1/4"
755	C855.AFG	Evergreen **	Copper	Copper	1/4"
756	ES140.AFG	Clear	Silver	Low.%T Low E	1/4"
757	ES152.AFG	Clear	Silver	Med.%T Low E	1/4"
758	ES240.AFG	Green	Silver	Low.%T Low E	1/4"
759	ES252.AFG	Green	Silver	Med.%T Low E	1/4"
760	ES340.AFG	Gray	Silver	Low.%T Low E	1/4"
761	ES352.AFG	Gray	Silver	Med.%T Low E	1/4"
762	ES440.AFG	Bronze	Silver	Low.%T Low E	1/4"
763	ES452.AFG	Bronze	Silver	Med.%T Low E	1/4"
764	ES540.AFG	Blue	Silver	Low.%T Low E	1/4"
765	ES552.AFG	Blue	Silver	Med.%T Low E	1/4"
766	ES640.AFG	Blue-green	Silver	Low.%T Low E	1/4"
767	ES652.AFG	Blue-green	Silver	Med.%T Low E	1/4"
768	ES740.AFG	Azurlite *	Silver	Low.%T Low E	1/4"
769	ES752.AFG	Azurlite *	Silver	Med.%T Low E	1/4"
770	ES840.AFG	Evergreen **	Silver	Low.%T Low E	1/4"
771	ES852.AFG	Evergreen **	Silver	Med.%T Low E	1/4"
772	ESB1.AFG	Clear	Silver	Sunbelt Low E	1/4"
773	ESB2.AFG	Green	Silver	Sunbelt Low E	1/4"
774	ESB3.AFG	Gray	Silver	Sunbelt Low E	1/4"
775	ESB4.AFG	Bronze	Silver	Sunbelt Low E	1/4"
776	ESB5.AFG	Blue	Silver	Sunbelt Low E	1/4"
777	ESB6.AFG	Blue-green	Silver	Sunbelt Low E	1/4"
778	ESB7.AFG	Azurlite *	Silver	Sunbelt Low E	1/4"
779	ESB8.AFG	Evergreen **	Silver	Sunbelt Low E	1/4"
780	ESN1.AFG	Clear	Silver	High. %T Low E	1/4"
781	ESN2.AFG	Green	Silver	High. %T Low E	1/4"
782	ESN3.AFG	Gray	Silver	High. %T Low E	1/4"
783	ESN4.AFG	Bronze	Silver	High. %T Low E	1/4"
784	ESN5.AFG	Blue	Silver	High. %T Low E	1/4"
785	ESN6.AFG	Blue-green	Silver	High. %T Low E	1/4"
786	ESN7.AFG	Azurlite *	Silver	High. %T Low E	1/4"
787	ESN8.AFG	Evergreen **	Silver	High. %T Low E	1/4"
788	G108.AFG	Clear	Copper Aluminum	Gold	1/4"
789	G114.AFG	Clear	Copper Aluminum	Gold	1/4"
790	G208.AFG	Green	Copper Aluminum	Gold	1/4"
791	G214.AFG	Green	Copper Aluminum	Gold	1/4"
792	G308.AFG	Gray	Copper Aluminum	Gold	1/4"
793	G314.AFG	Gray	Copper Aluminum	Gold	1/4"

AFG#	File Name	Glass Type	Coating	Description	Nominal Thickness (Inches)
794	G408.AFG	Bronze	Copper Aluminum	Gold	1/4"
795	G414.AFG	Blue	Copper Aluminum	Gold	1/4"
796	G508.AFG	Bronze	Copper Aluminum	Gold	1/4"
797	G514.AFG	Blue	Copper Aluminum	Gold	1/4"
798	G608.AFG	Blue-green	Copper Aluminum	Gold	1/4"
799	G614.AFG	Blue-green	Copper Aluminum	Gold	1/4"
800	G708.AFG	Azurlite *	Copper Aluminum	Gold	1/4"
801	G714.AFG	Azurlite *	Copper Aluminum	Gold	1/4"
802	G808.AFG	Evergreen **	Copper Aluminum	Gold	1/4"
803	G814.AFG	Evergreen **	Copper Aluminum	Gold	1/4"
804	GP108.AFG	Clear	Stainless Steel	Pewter	1/4"
805	GP114.AFG	Clear	Stainless Steel	Pewter	1/4"
806	GP120.AFG	Clear	Stainless Steel	Pewter	1/4"
807	GP208.AFG	Green	Stainless Steel	Pewter	1/4"
808	GP214.AFG	Green	Stainless Steel	Pewter	1/4"
809	GP220.AFG	Green	Stainless Steel	Pewter	1/4"
810	GP308.AFG	Gray	Stainless Steel	Pewter	1/4"
811	GP314.AFG	Gray	Stainless Steel	Pewter	1/4"
812	GP320.AFG	Gray	Stainless Steel	Pewter	1/4"
813	GP408.AFG	Bronze	Stainless Steel	Pewter	1/4"
814	GP414.AFG	Bronze	Stainless Steel	Pewter	1/4"
815	GP420.AFG	Bronze	Stainless Steel	Pewter	1/4"
816	GP508.AFG	Blue	Stainless Steel	Pewter	1/4"
817	GP514.AFG	Blue	Stainless Steel	Pewter	1/4"
818	GP520.AFG	Blue	Stainless Steel	Pewter	1/4"
819	GP608.AFG	Blue-green	Stainless Steel	Pewter	1/4"
820	GP614.AFG	Blue-green	Stainless Steel	Pewter	1/4"
821	GP620.AFG	Blue-green	Stainless Steel	Pewter	1/4"
822	GP708.AFG	Azurlite *	Stainless Steel	Pewter	1/4"
823	GP714.AFG	Azurlite *	Stainless Steel	Pewter	1/4"
824	GP720.AFG	Azurlite *	Stainless Steel	Pewter	1/4"
825	GP808.AFG	Evergreen **	Stainless Steel	Pewter	1/4"
826	GP814.AFG	Evergreen **	Stainless Steel	Pewter	1/4"
827	GP820.AFG	Evergreen **	Stainless Steel	Pewter	1/4"
828	P120.AFG	Clear	Stainless Steel	Pewter	1/4"
829	P130.AFG	Clear	Stainless Steel	Pewter	1/4"
830	P140.AFG	Clear	Stainless Steel	Pewter	1/4"
831	P220.AFG	Green	Stainless Steel	Pewter	1/4"
832	P230.AFG	Green	Stainless Steel	Pewter	1/4"
833	P240.AFG	Green	Stainless Steel	Pewter	1/4"

AFG#	File Name	Glass Type	Coating	Description	Nominal Thickness (Inches)
834	P320.AFG	Gray	Stainless Steel	Pewter	1/4"
835	P330.AFG	Gray	Stainless Steel	Pewter	1/4"
836	P340.AFG	Gray	Stainless Steel	Pewter	1/4"
837	P420.AFG	Bronze	Stainless Steel	Pewter	1/4"
838	P430.AFG	Bronze	Stainless Steel	Pewter	1/4"
839	P440.AFG	Bronze	Stainless Steel	Pewter	1/4"
840	P520.AFG	Blue	Stainless Steel	Pewter	1/4"
841	P530.AFG	Blue	Stainless Steel	Pewter	1/4"
842	P540.AFG	Blue	Stainless Steel	Pewter	1/4"
843	P620.AFG	Blue-green	Stainless Steel	Pewter	1/4"
844	P630.AFG	Blue-green	Stainless Steel	Pewter	1/4"
845	P640.AFG	Blue-green	Stainless Steel	Pewter	1/4"
846	P720.AFG	Azurlite *	Stainless Steel	Pewter	1/4"
847	P730.AFG	Azurlite *	Stainless Steel	Pewter	1/4"
848	P740.AFG	Azurlite *	Stainless Steel	Pewter	1/4"
849	P820.AFG	Evergreen **	Stainless Steel	Pewter	1/4"
850	P830.AFG	Evergreen **	Stainless Steel	Pewter	1/4"
851	P840.AFG	Evergreen **	Stainless Steel	Pewter	1/4"
852	S108.AFG	Clear	Stainless Steel	Bright Silver	1/4"
853	S114.AFG	Clear	Stainless Steel	Bright Silver	1/4"
854	S120.AFG	Clear	Stainless Steel	Bright Silver	1/4"
855	S140.AFG	Clear	Stainless Steel	Bright Silver	1/4"
856	S208.AFG	Green	Stainless Steel	Bright Silver	1/4"
857	S214.AFG	Green	Stainless Steel	Bright Silver	1/4"
858	S220.AFG	Green	Stainless Steel	Bright Silver	1/4"
859	S240.AFG	Green	Stainless Steel	Bright Silver	1/4"
860	S308.AFG	Gray	Stainless Steel	Bright Silver	1/4"
861	S314.AFG	Gray	Stainless Steel	Bright Silver	1/4"
862	S320.AFG	Gray	Stainless Steel	Bright Silver	1/4"
863	S340.AFG	Gray	Stainless Steel	Bright Silver	1/4"
864	S408.AFG	Bronze	Stainless Steel	Bright Silver	1/4"
865	S414.AFG	Bronze	Stainless Steel	Bright Silver	1/4"
866	S420.AFG	Bronze	Stainless Steel	Bright Silver	1/4"
867	S440.AFG	Bronze	Stainless Steel	Bright Silver	1/4"
868	S508.AFG	Blue	Stainless Steel	Bright Silver	1/4"
869	S514.AFG	Blue	Stainless Steel	Bright Silver	1/4"
870	S520.AFG	Blue	Stainless Steel	Bright Silver	1/4"
871	S540.AFG	Blue	Stainless Steel	Bright Silver	1/4"
872	S608.AFG	Blue-green	Stainless Steel	Bright Silver	1/4"
873	S614.AFG	Blue-green	Stainless Steel	Bright Silver	1/4"

AFG#	File Name	Glass Type	Coating	Description	Nominal Thickness (Inches)
874	S620.AFG	Blue-green	Stainless Steel	Bright Silver	1/4"
875	S640.AFG	Blue-green	Stainless Steel	Bright Silver	1/4"
876	S708.AFG	Azurlite *	Stainless Steel	Bright Silver	1/4"
877	S714.AFG	Azurlite *	Stainless Steel	Bright Silver	1/4"
878	S720.AFG	Azurlite *	Stainless Steel	Bright Silver	1/4"
879	S740.AFG	Azurlite *	Stainless Steel	Bright Silver	1/4"
880	S808.AFG	Evergreen **	Stainless Steel	Bright Silver	1/4"
881	S814.AFG	Evergreen **	Stainless Steel	Bright Silver	1/4"
882	S820.AFG	Evergreen **	Stainless Steel	Bright Silver	1/4"
883	S840.AFG	Evergreen **	Stainless Steel	Bright Silver	1/4"
884	CLR_P16.AFG	Clear		P16	0.072
885	CLR_SS.AFG	Clear		Single Strength	0.086
886	CLR_LAMI.AFG	Clear		Lami Strength	0.106
887	CLR_3.AFG	Clear			1/8"
888	CLR_4.AFG	Clear			5/32"
889	CLR_5.AFG	Clear			3/16"
890	CLR_6.AFG	Clear			1/4"
891	CLR_8.AFG	Clear			5/16"
892	CLR_10.AFG	Clear			3/8"
893	CLR_12.AFG	Clear			1/2"
894	BRONZESS.AFG	Bronze		Single Strength	0.090
895	BRONZE_3.AFG	Bronze			1/8"
896	BRONZE_4.AFG	Bronze			5/32"
897	BRONZE_5.AFG	Bronze			3/16"
898	BRONZE_6.AFG	Bronze			1/4"
899	GRAY_3.AFG	Gray			1/8"
900	GRAY_4.AFG	Gray			5/32"
901	GRAY_5.AFG	Gray			3/16"
902	GRAY_6.AFG	Gray			1/4"
903	CMFTE1_2.AFG		Comfort E	Single Strength	0.086
904	CMFTE1_3.AFG		Comfort E		1/8"
905	CMFTE1_5.AFG		Comfort E		3/16"
906	CMFTE2_2.AFG		Comfort E ²	Single Strength	0.086
907	CMFTE2_3.AFG		Comfort E ²		1/8"
908	CMFTE2_4.AFG		Comfort E ²		5/32"
909	CMFTE2_5.AFG		Comfort E ²		3/16"
910	CMFTE2_6.AFG		Comfort E ²		1/4"
911	GREEN_2.AFG	Green		Single Strength	0.090
912	GREEN_3.AFG	Green			1/8"
913	GREEN_5.AFG	Green			3/16"

AFG#	File Name	Glass Type	Coating	Description	Nominal Thickness (Inches)
914	GREEN_6.AFG	Green			1/4"
915	GREEN_12.AFG	Green			1/2"

* Azurlite is a registered trademark of PPG Industries

** Evergreen is a registered trademark of Libbey-Owens-Ford

DuPont Polymer Products

DUP #	File Name	Glass Type (2 Ply)	Butacite Designation	Construction ply+Butacite+ply (mm)	Nominal Thickness of Laminate (mm)
1100	15PVB6.DUP	3 mm Clear	.015 Clear	3+0.38+3	6.38
1101	30PVB6.DUP	3 mm Clear	.030 Clear	3+0.76+3	6.76
1102	60PVB6.DUP	3 mm Clear	.060 Clear	3+1.52+3	7.52
1103	15PVB10.DUP	5 mm Clear	.015 Clear	5+0.38+5	10.38
1104	30PVB10.DUP	5 mm Clear	.030 Clear	5+0.76+5	10.76
1105	60PVB10.DUP	5 mm Clear	.060 Clear	5+1.52+5	11.52
1106	BLUGREEN.DUP	3 mm Clear	#2377300	3+0.76+3	6.76
1108	BZE_LITE.DUP	3 mm Clear	#0637600	3+0.76+3	6.76
1110	BRN_LITE.DUP	3 mm Clear	#0645200	3+0.76+3	6.76
1111	BRN_MEDM.DUP	3 mm Clear	#0365500	3+0.76+3	6.76
1112	BRN_DARK.DUP	3 mm Clear	#0362800	3+0.76+3	6.76
1117	AZURBLUE.DUP	3 mm Clear	#0360900	3+0.76+3	6.76

Ford Motor Company

FMC #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
1300	CLEAR25.FMC	Clear			2.5
1301	CLEAR30.FMC	Clear			3.0
1302	CLEAR40.FMC	Clear			4.0
1303	CLEAR50.FMC	Clear			5.0
1304	CLEAR60.FMC	Clear			6.0
1305	GREEN25.FMC	Sunglas® Green			2.5
1306	GREEN30.FMC	Sunglas® Green			3.0
1307	GREEN40.FMC	Sunglas® Green			4.0
1308	GREEN50.FMC	Sunglas® Green			5.0
1309	GREEN60.FMC	Sunglas® Green			6.0
1310	BRONZE25.FMC	Sunglas® Bronze			2.5
1311	BRONZE30.FMC	Sunglas® Bronze			3.0

FMC #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
1312	BRONZE40.FMC	Sunglas® Bronze			4.0
1313	BRONZE50.FMC	Sunglas® Bronze			5.0
1314	BRONZE60.FMC	Sunglas® Bronze			6.0
1315	GREY25.FMC	Sunglas® Grey			2.5
1316	GREY30.FMC	Sunglas® Grey			3.0
1317	GREY40.FMC	Sunglas® Grey			4.0
1318	GREY50.FMC	Sunglas® Grey			5.0
1319	GREY60.FMC	Sunglas® Grey			6.0
1320	BLUE25.FMC	Sunglas® Blue			2.5
1321	BLUE30.FMC	Sunglas® Blue			3.0
1322	BLUE40.FMC	Sunglas® Blue			4.0
1323	BLUE50.FMC	Sunglas® Blue			5.0
1324	BLUE60.FMC	Sunglas® Blue			6.0
1325	REFLGREY.FMC	Sunglas® Reflective Grey			6.0
1326	REFLBRZ.FMC	Sunglas® Reflective Bronze			6.0
1327	JADEICE.FMC	Sunglas® Jadeice™			6.0
1328	REFLBLUE.FMC	Sunglas® Reflective Blue			6.0

Southwall Technologies, Inc.

SWT #	File Name	Glass Type	Film	Description	Nominal Thickness (Inches)
1500	HM22.SWT		Heat Mirror™22	Suspended Film	0.003
1501	HM33.SWT		Heat Mirror™33	Suspended Film	0.003
1502	HM44.SWT		Heat Mirror™44	Suspended Film	0.003
1503	HM55.SWT		Heat Mirror™55	Suspended Film	0.003
1504	HM66.SWT		Heat Mirror™66	Suspended Film	0.003
1505	HM77.SWT		Heat Mirror™77	Suspended Film	0.003
1506	HM88.SWT		Heat Mirror™88	Suspended Film	0.003

SWT #	File Name	Glass Type	Film	Description	Nominal Thickness (Inches)
1507	HMHPR18.SWT		HM-HPR18	Suspended Film	0.003
1508	HMHPR28.SWT		HM-HPR28	Suspended Film	0.003
1509	HMHPR38.SWT		HM-HPR38	Suspended Film	0.003
1510	HMSC75.SWT		HM-SC75	Suspended Film	0.003
1511	HMTC88.SWT		HM-TC88	Suspended Film	0.003
1512	CSBGRF12.SWT	Blue-Green Reflective			1/2"
1513	CSBRRF12.SWT	Bronze Reflective			1/2"
1514	CSCG06.SWT	Carmel Gray			1/4"
1515	CSCG12.SWT	Carmel Gray			1/2"
1516	CSCLRF12.SWT	Clear Reflective			1/2"
1517	CSGLRF12.SWT	Gold Reflective			1/2"
1518	CSGYRF12.SWT	Gray Reflective			1/2"
1519	CSLESF06.SWT	Low-e Sea Foam Clear			1/4"
1520	CSLESF12.SWT	Low-e Sea Foam Clear			1/2"
1521	CSMB06.SWT	Mojave Bronze			1/4"
1522	CSMB12.SWT	Mojave Bronze			1/2"
1523	CSMG06.SWT	Moss Green			1/4"
1524	CSMG12.SWT	Moss Green			1/2"
1525	CSPB12.SWT	Pacific Blue			1/2"
1526	CSSFC06.SWT	Sea Foam Clear			1/4"
1527	CSSFC12.SWT	Sea Foam Clear			1/2"
1528	CSSG06.SWT	Sierra Green			1/4"
1529	CSSG12.SWT	Sierra Green			1/2"
1530	CSTB06.SWT	Tahoe Green			1/4"
1531	CSTB12.SWT	Tahoe Green			1/2"
1532	CSWWC06.SWT	Water White Crystal			1/4"
1533	CSWWC12.SWT	Water White Crystal			1/2"
1534	SLCLAZ03.SWT	Azurlite * Glass	Solis Clear		1/8"
1535	SLCLAZ06.SWT	Azurlite * Glass	Solis Clear		1/4"

SWT #	File Name	Glass Type	Film	Description	Nominal Thickness (Inches)
1536	SLCLBZ03.SWT	Bronze Glass	Solis Clear		1/8"
1537	SLCLBZ06.SWT	Bronze Glass	Solis Clear		1/4"
1538	SLCLCL03.SWT	Clear Glass	Solis Clear		1/8"
1539	SLCLCL06.SWT	Clear Glass	Solis Clear		1/4"
1540	SLCLEG03.SWT	Evergreen ** Glass	Solis Clear		1/8"
1541	SLCLEG06.SWT	Evergreen ** Glass	Solis Clear		1/4"
1542	SLCLFB06.SWT	Blue Glass	Solis Clear		1/4"
1543	SLCLGN03.SWT	Green Glass	Solis Clear		1/8"
1544	SLCLGN06.SWT	Green Glass	Solis Clear		1/4"
1545	SLCLGY03.SWT	Gray Glass	Solis Clear		1/8"
1546	SLCLGY06.SWT	Gray Glass	Solis Clear		1/4"
1547	SLCLLE06.SWT	Pyrolitic Low-e	Solis Clear		1/4"
1548	SLGYCL03.SWT	Clear Glass	Solis Gray		1/8"
1549	SLGYCL06.SWT	Clear Glass	Solis Gray		1/4"
1550	SOLIS70.SWT		Solis Clear	Film Alone	.002

* Azurlite is a registered trademark of PPG Industries

** Evergreen is a registered trademark of Libbey-Owens-Ford

Cardinal IG

CIG #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
2000	CLR_2.CIG	Clear			2.2
2001	CLR_3.CIG	Clear			3.0
2002	CLR_4.CIG	Clear			4.0
2003	CLR_5.CIG	Clear			5.0
2004	CLR_6.CIG	Clear			6.0
2005	E78_2.CIG	Clear	LoE-78		2.2
2006	E78_3.CIG	Clear	LoE-78		3.0
2007	E78_4.CIG	Clear	LoE-78		4.0
2008	E78_5.CIG	Clear	LoE-78		5.0
2009	E78_6.CIG	Clear	LoE-78		6.0
2010	EE72_2.CIG	Clear	LoE ² -72		2.2
2011	EE72_3.CIG	Clear	LoE ² -72		3.0
2012	EE72_4.CIG	Clear	LoE ² -72		4.0
2013	EE72_5.CIG	Clear	LoE ² -72		5.0
2014	EE72_6.CIG	Clear	LoE ² -72		6.0

CIG #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
2015	SUN45_2.CIG	Clear	LoE SUN-45		2.2
2016	SUN45_3.CIG	Clear	LoE SUN-45		3.0
2017	SUN45_4.CIG	Clear	LoE SUN-45		4.0
2018	SUN45_5.CIG	Clear	LoE SUN-45		5.0
2019	SUN45_6.CIG	Clear	LoE SUN-45		6.0
2020	SUN162_2.CIG				2
2021	SUN162_3.CIG				3
2022	SUN162_4.CIG				4
2023	SUN162_5.CIG				5
2024	SUN162_6.CIG				6

Courtaulds Performance Films

CPF #	File Name	Film Type	Coating	Description	Nominal Thickness (Inches)
2500	DL30GR.CPF	DL-30GR (Green) SR CDF		Deluxe	.0015
2501	N1020B.CPF	N-1020B (Bronze) SR CDF		N (Neutral)	.0015
2502	N1020G.CPF	N-1020 (Gray) SR CDF		N (Neutral)	.0015
2503	N1035B.CPF	N-1035B (Bronze) SR CDF		N (Neutral)	.0015
2504	N1035G.CPF	N-1035 (Gray) SR CDF		N (Neutral)	.0015
2505	N1050B.CPF	N-1050B (Bronze) SR CDF		N (Neutral)	.0015
2506	N1050G.CPF	N-1050 (Gray) SR CDF		N (Neutral)	.0015
2507	NRM.CPF	NRM-PS2 (Frosty)		Non-Reflective	.0015
2508	NRMB.CPF	NRMB-PS2 (Bronze)		Non-Reflective	.0015
2509	NRMBL.CPF	NRMBL-PS2 (Black)		Non-Reflective	.0015
2510	NRMS.CPF	NRMS-PS2 (Silver)		Non-Reflective	.0015
2511	R15B.CPF	R-15B (Bronze) SR CDF		Reflective	.0015
2512	R15BL.CPF	R-15BL (Blue) SR CDF		Reflective	.0015
2513	R15G.CPF	R-15G (Gray) SR CDF		Reflective	.0015
2514	R15GO.CPF	R15GO (Gold) SR CDF		Reflective	.0015
2515	R20.CPF	R-20 (Silver) SR CDF		Reflective	.0015

CPF #	File Name	Film Type	Coating	Description	Nominal Thickness (Inches)
2516	R30B.CPF	R30B (Bronze) SR CDF		Reflective	.0015
2517	R30G.CPF	R-30G (Gray) SR CDF		Reflective	.0015
2518	R50.CPF	R-50 (Silver) SR CDF		Reflective	.0015
2519	SCL_PS4.CPF	SCL SR-PS4 (Clear)		Safety	.0015
2520	SCL_PS7.CPF	SCL SR-PS7 (Clear)		Safety	.0015
2521	SCL_PS11.CPF	SCL SR-PS11 (Clear)		Safety	.0015
2522	V28.CPF	V-28 SR CDF		Vista	.0015
2523	V30.CPF	V-30 SR CDF		Vista	.0015
2524	V38.CPF	V-38 SR CDF		Vista	.0015
2525	V45.CPF	V-45 SR CDF		Vista	.0015
2526	V58.CPF	V-58 SR CDF		Vista	.0015

3M Corporation

MMM #	File Name	Film Type	Coating	Description	Nominal Thickness (Inches)
2700	P19AR.MMM	P19AR		Low e, Silver	.0015
2701	LE20SIAR.MMM	LE20SIARL		Low e, Silver	.0015
2702	LE35AMAR.MMM	LE35AMARL		Low e, Amber	.0015
2703	LE50AMAR.MMM	LE50AMARL		Low e, Amber	.0015
2704	LE30CUAR.MMM	LE30CUARL		Low e, Copper	.0015
2705	RE15SIX.MMM	RE15SIX		Sun Control, Silver	.0015
2706	P18AR.MMM	P18AR		Sun Control, Silver	.0015
2707	RE35AMAR.MMM	RE35AMARL		Sun Control, Amber	.0015
2708	RE20NEAR.MMM	RE20NEARL		Sun Control, Neutral	.0015
2709	RE35NEAR.MMM	RE35NEARL		Sun Control, Neutral	.0015
2710	RE50NEAR.MMM	RE50NEARL		Sun Control, Neutral	.0015
2711	RE70NEAR.MMM	RE70NEARL		Sun Control, Neutral	.0015
2712	RE20BRAR.MMM	RE20BRARL		Sun Control, Bronze	.0015
2713	RE35BRAR.MMM	RE35BRARL		Sun Control, Bronze	.0015
2714	RE50BRAR.MMM	RE50BRARL		Sun Control, Bronze	.0015
2715	RE25SLAR.MMM	RE25SLARL		Sun Control, Slate	.0015
2716	RE35SLAR.MMM	RE35SLARL		Sun Control, Slate	.0015
2717	RE50SLAR.MMM	RE50SLARL		Sun Control, Slate	.0015
2718	PNTHR5.MMM	PNTHR5		Non reflective, Neutral	.0015
2719	PNTHR20.MMM	PNTHR20		Non reflective, Neutral	.001
2720	PNTHR35.MMM	PNTHR35		Non reflective, Neutral	.001
2721	PNTHR50.MMM	PNTHR50		Non reflective, Neutral	.001
2722	S35NEAR.MMM	S35NEARL		Safety, Neutral	.003
2723	SCLAR150.MMM	SCLARL150		Safety, Clear	.002
2724	SCLAR400.MMM	SCLARL400		Safety, Clear	.004

Guardian Industries Glass Products

GRD #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
3100	PPLUS23C.GRD	Clear	Performance Plus	Low-E	2.3
3101	PPLUS30C.GRD	Clear	Performance Plus	Low-E	3
3102	PPLUS30G.GRD	Green	Performance Plus	Low-E	3
3103	PPLUS31B.GRD	Bronze	Performance Plus	Low-E	3.1
3104	PPLUS31Y.GRD	Gray	Performance Plus	Low-E	3.1
3110	LEPPIIC2.GRD	Clear	Performance Plus II	Low-E	2
3111	LEPPIIC3.GRD	Clear	Performance Plus II	Low-E	3
3112	LEPPIIC4.GRD	Clear	Performance Plus II	Low-E	4
3113	LEPPIIC5.GRD	Clear	Performance Plus II	Low-E	5
3114	LEPPIIC6.GRD	Clear	Performance Plus II	Low-E	6
3120	LEPPIIN2.GRD	Green	Performance Plus II	Low-E	2
3121	LEPPIIN3.GRD	Green	Performance Plus II	Low-E	3
3122	LEPPIIN4.GRD	Green	Performance Plus II	Low-E	4
3123	LEPPIIN5.GRD	Green	Performance Plus II	Low-E	5
3124	LEPPIIN6.GRD	Green	Performance Plus II	Low-E	6

Pilkington

PGL #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
4000	ASBLUE6.PGL			Antisun Blue	6
4001	ASBRNZ6.PGL			Antisun Bronze	6
4002	ASGREEN6.PGL			Antisun Green	6
4003	ASGREY6.PGL			Antisun Grey	6
4004	AUDSCN13.PGL			Audioscreen	13
4005	AUDSCN9.PGL			Audioscreen	9
4006	AUDSCN9K.PGL			Audioscreen with Low-E Pilkington K Coating	9
4007	CLEAR10.PGL			Clear Float	10
4008	CLEAR4.PGL			Clear Float	4
4009	CLEAR6.PGL			Clear Float	6
4010	KAPCHM6.PGL			Kappafloat Champagne	6
4011	KAPNEU6.PGL			Kappafloat Neutral	6
4012	KAPOPI6.PGL			Kappafloat Optima Ideal	6
4013	KGLASS6.PGL			Low-E K Glass	6
4014	OPTIWT10.PGL			Optiwhite	10

PGL #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
4015	PYRDUR10.PGL			Pyrodur fire-retardant	10
4016	PYRDUR13.PGL			Pyrodur fire-retardant	13
4017	PYRSTP15.PGL			Pyrostop fire-retardant	15
4017	PYRSTP18.PGL			Pyrostop fire-retardant	18
4019	PYRSTP21.PGL			Pyrostop fire-retardant	21
4020	PYRSTP27.PGL			Pyrostop fire-retardant	27
4021	REFLEC6.PGL			Reflectafloat	6
4022	REFLEX6.PGL			Reflex Mirror	6
4023	SCBL2033.PGL			Suncool Classic Blue 20/33	6
4024	SCBL3039.PGL			Suncool Low Reflection Blue 30/39	6
4025	SCBL4050.PGL			Suncool Classic Blue 40/50	6
4025	SCBR1024.PGL			Suncool Classic Bronz 10/24	6
4027	SCGY3245.PGL			Suncool Classic Grey 32/45	6
4028	SCSV1023.PGL			Suncool Classic Silver 10/33	6
4029	SCSV2034.PGL			Suncool Classic Silver 20/34	6
4030	SCSV3042.PGL			Suncool Classic Silver 30/42	6
4031	SHCL7250.PGL			HP Clear 72/50	6
4032	SHGL5534.PGL			HP Gold 55/34	6
4033	SHPN5950.PGL			HP Neutral 59/50	6
4034	SHSV4733.PGL			HP Silver 47/33	6
4035	SILVER.PGL			Silver Reflective	6
4036	SLBL1937.PGL			Suncool Low Reflection Blue 19/37	6
4037	SLBL2743.PGL			Suncool Low Reflection Blue 27/43	6
4038	SLBZ2343.PGL			Suncool Low Reflection Bronze 23/43	6
4039	SLGN2637.PGL			Suncool Low Reflection Green 26/37	6
4040	SLGN3443.PGL			Suncool Low Reflection Green 34/43	6
4041	SLGY2142.PGL			Suncool Low Reflection Grey 21/42	6
4042	SURMIR6.PGL			Surveillance Mirror	6
4043	UVSCRN7.PGL			UV Screen	7
4044	UVSCRN9.PGL			UV Screen	9

PPG Industries, Inc.

PPG #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
5001	STRPH_3.PPG	STARPHIRE®			3.3
5002	STRPH_4.PPG	STARPHIRE®			4.0
5003	STRPH_5.PPG	STARPHIRE®			5.0

PPG #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
5004	STRPH_6.PPG	STARPHIRE®			6.0
5005	STRPH_8.PPG	STARPHIRE®			9.0
5006	STRPH_10.PPG	STARPHIRE®			10.0
5007	STRPH_12.PPG	STARPHIRE®			12.0
5008	CLEAR_2H.PPG	Clear			2.5
5009	CLEAR_3.PPG	Clear			3.3
5010	CLEAR_4.PPG	Clear			4.0
5011	CLEAR_5.PPG	Clear			5.0
5012	CLEAR_6.PPG	Clear			6.0
5013	CLEAR_8.PPG	Clear			8.0
5014	CLEAR_10.PPG	Clear			10.0
5015	CLEAR_12.PPG	Clear			12.0
5016	SOLEX_2H.PPG	SOLEX®			2.5
5017	SOLEX_3.PPG	SOLEX®			3.3
5018	SOLEX_4.PPG	SOLEX®			4.0
5019	SOLEX_5.PPG	SOLEX®			5.0
5020	SOLEX_6.PPG	SOLEX®			6.0
5021	SOLEX_8.PPG	SOLEX®			8.0
5024	SLGRN_2H.PPG	SOLARGREEN®			2.5
5025	SLGRN_3.PPG	SOLARGREEN®			3.3
5026	SLGRN_4.PPG	SOLARGREEN®			4.0
5027	SLGRN_5.PPG	SOLARGREEN®			5.0
5028	SLGRN_6.PPG	SOLARGREEN®			6.0
5029	SLGRN_8.PPG	SOLARGREEN®			8.0
5032	AZURL_2H.PPG	AZURLITE®			2.5
5033	AZURL_3.PPG	AZURLITE®			3.3
5034	AZURL_4.PPG	AZURLITE®			4.0
5035	AZURL_5.PPG	AZURLITE®			5.0
5036	AZURL_6.PPG	AZURLITE®			6.0
5037	AZURL_8.PPG	AZURLITE®			8.0
5038	AZURL_10.PPG	AZURLITE®			10.0
5040	SBRNZ_2H.PPG	SOLARBRONZE®			2.5
5041	SBRNZ_3.PPG	SOLARBRONZE®			3.3
5042	SBRNZ_4.PPG	SOLARBRONZE®			4.0
5043	SBRNZ_5.PPG	SOLARBRONZE®			5.0
5044	SBRNZ_6.PPG	SOLARBRONZE®			6.0
5045	SBRNZ_8.PPG	SOLARBRONZE®			8.0
5046	SBRNZ_10.PPG	SOLARBRONZE®			10.0
5047	SBRNZ_12.PPG	SOLARBRONZE®			12.0

PPG #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
5049	SGRAY_3.PPG	SOLARGRAY®			3.3
5050	SGRAY_4.PPG	SOLARGRAY®			4.0
5051	SGRAY_5.PPG	SOLARGRAY®			5.0
5052	SGRAY_6.PPG	SOLARGRAY®			6.0
5053	SGRAY_8.PPG	SOLARGRAY®			8.0
5054	SGRAY_10.PPG	SOLARGRAY®			10.0
5055	SGRAY_12.PPG	SOLARGRAY®			12.0
5056	GRLITE_3.PPG	GRAYLITE®			3.3
5057	GRLITE_6.PPG	GRAYLITE®			6.0
5060	GL20_3.PPG	GL20™			3.3
5061	GL20_6.PPG	GL20™			6.0
5064	GL35_3.PPG	GL35™			3.3
5065	GL35_6.PPG	GL35™			6.0
5091	SC_AZ_2.PPG	AZURLITE®	SOLARCOOL®	R1 Coated	2.5
5092	SC_AZ_3.PPG	AZURLITE®	SOLARCOOL®	R1 Coated	3.3
5093	SC_AZ_4.PPG	AZURLITE®	SOLARCOOL®	R1 Coated	4.0
5094	SC_AZ_5.PPG	AZURLITE®	SOLARCOOL®	R1 Coated	5.0
5095	SC_AZ_6.PPG	AZURLITE®	SOLARCOOL®	R1 Coated	6.0
5096	SC_AZ_8.PPG	AZURLITE®	SOLARCOOL®	R1 Coated	8.0
5102	SC_BR_3.PPG	SOLARBRONZE®	SOLARCOOL®	R1 Coated	3.3
5104	SC_BR_4.PPG	SOLARBRONZE®	SOLARCOOL®	R1 Coated	4.0
5106	SC_BR_5.PPG	SOLARBRONZE®	SOLARCOOL®	R1 Coated	5.0
5108	SC_BR_6.PPG	SOLARBRONZE®	SOLARCOOL®	R1 Coated	6.0
5110	SC_BR_8.PPG	SOLARBRONZE®	SOLARCOOL®	R1 Coated	8.0
5112	SC_BR_10.PPG	SOLARBRONZE®	SOLARCOOL®	R1 Coated	10.0
5114	SC_GR_3.PPG	SOLARGRAY®	SOLARCOOL®	R1 Coated	3.3
5116	SC_GR_4.PPG	SOLARGRAY®	SOLARCOOL®	R1 Coated	4.0
5118	SC_GR_5.PPG	SOLARGRAY®	SOLARCOOL®	R1 Coated	5.0
5120	SC_GR_6.PPG	SOLARGRAY®	SOLARCOOL®	R1 Coated	6.0
5122	SC_GR_8.PPG	SOLARGRAY®	SOLARCOOL®	R1 Coated	8.0
5124	SC_GR_10.PPG	SOLARGRAY®	SOLARCOOL®	R1 Coated	10.0
5126	SC_GL_3.PPG	GRAYLITE®	SOLARCOOL®	R1 Coated	3.3
5128	SC_GL_6.PPG	GRAYLITE®	SOLARCOOL®	R1 Coated	6.0
5140	S100CL_2.PPG	Clear	SUNGATE®100	R1 Coated	2.5
5142	S100CL_3.PPG	Clear	SUNGATE® 100	R1 Coated	3.3
5144	S100CL_4.PPG	Clear	SUNGATE® 100	R1 Coated	4.0
5146	S100CL_5.PPG	Clear	SUNGATE® 100	R1 Coated	5.0
5148	S100CL_6.PPG	Clear	SUNGATE® 100	R1 Coated	6.0
5150	S100SX_2.PPG	SOLEX®	SUNGATE® 100	R2 Coated	2.5

PPG #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
5151	S100SX_3.PPG	SOLEX®	SUNGATE® 100	R2 Coated	3.3
5152	S100SX_4.PPG	SOLEX®	SUNGATE® 100	R2 Coated	4.0
5153	S100SX_5.PPG	SOLEX®	SUNGATE® 100	R2 Coated	5.0
5154	S100SX_6.PPG	SOLEX®	SUNGATE® 100	R2 Coated	6.0
5160	S100SN_2.PPG	SOLARGREEN®	SUNGATE® 100	R2 Coated	2.5
5161	S100SN_3.PPG	SOLARGREEN®	SUNGATE® 100	R2 Coated	3.3
5162	S100SN_4.PPG	SOLARGREEN®	SUNGATE® 100	R2 Coated	4.0
5163	S100SN_5.PPG	SOLARGREEN®	SUNGATE® 100	R2 Coated	5.0
5164	S100SN_6.PPG	SOLARGREEN®	SUNGATE® 100	R2 Coated	6.0
5170	S100AZ_2.PPG	AZURLITE®	SUNGATE® 100	R2 Coated	2.5
5171	S100AZ_3.PPG	AZURLITE®	SUNGATE® 100	R2 Coated	3.3
5172	S100AZ_4.PPG	AZURLITE®	SUNGATE® 100	R2 Coated	4.0
5173	S100AZ_5.PPG	AZURLITE®	SUNGATE® 100	R2 Coated	5.0
5174	S100AZ_6.PPG	AZURLITE®	SUNGATE® 100	R2 Coated	6.0
5180	S100BR_2.PPG	SOLARBRONZE®	SUNGATE® 100	R2 Coated	2.5
5181	S100BR_3.PPG	SOLARBRONZE®	SUNGATE® 100	R2 Coated	3.3
5182	S100BR_4.PPG	SOLARBRONZE®	SUNGATE® 100	R2 Coated	4.0
5183	S100BR_5.PPG	SOLARBRONZE®	SUNGATE® 100	R2 Coated	5.0
5184	S100BR_6.PPG	SOLARBRONZE®	SUNGATE® 100	R2 Coated	6.0
5191	S100GR_3.PPG	SOLARGRAY®	SUNGATE® 100	R2 Coated	3.3
5192	S100GR_4.PPG	SOLARGRAY®	SUNGATE® 100	R2 Coated	4.0
5193	S100GR_5.PPG	SOLARGRAY®	SUNGATE® 100	R2 Coated	5.0
5194	S100GR_6.PPG	SOLARGRAY®	SUNGATE® 100	R2 Coated	6.0
5197	S10CDT_3.PPG	CLEAR	SUNGATE® 100 CDT	R2 Coated	3.3
5198	S10CDT_4.PPG	CLEAR	SUNGATE® 100 CDT	R2 Coated	4.0
5199	S10CDT_5.PPG	CLEAR	SUNGATE® 100 CDT	R2 Coated	5.0
5200	S10CDT_6.PPG	CLEAR	SUNGATE® 100 CDT	R2 Coated	6.0
5220	S300CL_2.PPG	Clear	SUNGATE® 300	R1 Coated	2.5
5222	S300CL_3.PPG	Clear	SUNGATE® 300	R1 Coated	3.3
5224	S300CL_4.PPG	Clear	SUNGATE® 300	R1 Coated	4.0
5226	S300CL_5.PPG	Clear	SUNGATE® 300	R1 Coated	5.0
5228	S300CL_6.PPG	Clear	SUNGATE® 300	R1 Coated	6.0
5240	S500CL_2.PPG	Clear	SUNGATE® 500	R1 Coated	2.5
5242	S500CL_3.PPG	Clear	SUNGATE® 500	R1 Coated	3.3
5244	S500CL_4.PPG	Clear	SUNGATE® 500	R1 Coated	4.0
5246	S500CL_5.PPG	Clear	SUNGATE® 500	R1 Coated	5.0

PPG #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
5248	S500CL_6.PPG	Clear	SUNGATE® 500	R1 Coated	6.0
5260	S1000CL2.PPG	Clear	SUNGATE® 1000	R2 Coated	2.5
5261	S1000CL3.PPG	Clear	SUNGATE® 1000	R2 Coated	3.3
5262	S1000CL4.PPG	Clear	SUNGATE® 1000	R2 Coated	4.0
5263	S1000CL5.PPG	Clear	SUNGATE® 1000	R2 Coated	5.0
5264	S1000CL6.PPG	Clear	SUNGATE® 1000	R2 Coated	6.0

Viracon Glass Products

VIR #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
6000	VA113.VIR	Clear	Antique		6.0
6001	VA118.VIR	Clear	Antique		6.0
6002	VA122.VIR	Clear	Antique		6.0
6003	VA135.VIR	Clear	Antique		6.0
6004	VA213.VIR	Green	Antique		6.0
6005	VA218.VIR	Green	Antique		6.0
6006	VA222.VIR	Green	Antique		6.0
6007	VA235.VIR	Green	Antique		6.0
6008	VA313.VIR	Gray	Antique		6.0
6009	VA318.VIR	Gray	Antique		6.0
6010	VA322.VIR	Gray	Antique		6.0
6011	VA335.VIR	Gray	Antique		6.0
6012	VA413.VIR	Bronze	Antique		6.0
6013	VA418.VIR	Bronze	Antique		6.0
6014	VA422.VIR	Bronze	Antique		6.0
6015	VA435.VIR	Bronze	Antique		6.0
6016	VA513.VIR	Blue	Antique		6.0
6017	VA518.VIR	Blue	Antique		6.0
6018	VA522.VIR	Blue	Antique		6.0
6019	VA535.VIR	Blue	Antique		6.0
6020	VA613.VIR	Blue-Green	Antique		6.0
6021	VA618.VIR	Blue-Green	Antique		6.0
6022	VA622.VIR	Blue-Green	Antique		6.0
6023	VA635.VIR	Blue-Green	Antique		6.0
6024	VA713.VIR	Azurlite *	Antique		6.0
6025	VA718.VIR	Azurlite *	Antique		6.0
6026	VA722.VIR	Azurlite *	Antique		6.0
6027	VA735.VIR	Azurlite *	Antique		6.0

VIR #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
6028	VA813.VIR	Evergreen **	Antique		6.0
6029	VA818.VIR	Evergreen **	Antique		6.0
6030	VA822.VIR	Evergreen **	Antique		6.0
6031	VA835.VIR	Evergreen **	Antique		6.0
6032	VB114.VIR	Clear	Blue		6.0
6033	VB120.VIR	Clear	Blue		6.0
6034	VB214.VIR	Green	Blue		6.0
6035	VB220.VIR	Green	Blue		6.0
6036	VB614.VIR	Blue-Green	Blue		6.0
6037	VB620.VIR	Blue-Green	Blue		6.0
6038	VC124.VIR	Clear	Cinnamon		6.0
6039	VC224.VIR	Green	Cinnamon		6.0
6040	VC324.VIR	Gray	Cinnamon		6.0
6041	VC424.VIR	Bronze	Cinnamon		6.0
6042	VC524.VIR	Blue	Cinnamon		6.0
6043	VC624.VIR	Blue-Green	Cinnamon		6.0
6044	VC724.VIR	Azurlite *	Cinnamon		6.0
6045	VC824.VIR	Evergreen **	Cinnamon		6.0
6046	VE12M.VIR	Clear	Low-E		6.0
6047	VE140.VIR	Clear	Low-E		6.0
6048	VE152.VIR	Clear	Low-E		6.0
6049	VE155.VIR	Clear	Low-E		6.0
6050	VE185.VIR	Clear	Low-E		6.0
6051	VE22M.VIR	Green	Low-E		6.0
6052	VE240.VIR	Green	Low-E		6.0
6053	VE252.VIR	Green	Low-E		6.0
6054	VE255.VIR	Green	Low-E		6.0
6055	VE285.VIR	Green	Low-E		6.0
6056	VE32M.VIR	Gray	Low-E		6.0
6057	VE340.VIR	Gray	Low-E		6.0
6058	VE352.VIR	Gray	Low-E		6.0
6059	VE355.VIR	Gray	Low-E		6.0
6060	VE385.VIR	Gray	Low-E		6.0
6061	VE42M.VIR	Bronze	Low-E		6.0
6062	VE440.VIR	Bronze	Low-E		6.0
6063	VE452.VIR	Bronze	Low-E		6.0
6064	VE455.VIR	Bronze	Low-E		6.0
6065	VE485.VIR	Bronze	Low-E		6.0
6066	VE52M.VIR	Blue	Low-E		6.0
6067	VE540.VIR	Blue	Low-E		6.0

VIR #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
6068	VE552.VIR	Blue	Low-E		6.0
6069	VE555.VIR	Blue	Low-E		6.0
6070	VE585.VIR	Blue	Low-E		6.0
6071	VE62M.VIR	Blue-Green	Low-E		6.0
6072	VE640.VIR	Blue-Green	Low-E		6.0
6073	VE652.VIR	Blue-Green	Low-E		6.0
6074	VE655.VIR	Blue-Green	Low-E		6.0
6075	VE685.VIR	Blue-Green	Low-E		6.0
6076	VE72M.VIR	Azurlite *	Low-E		6.0
6077	VE740.VIR	Azurlite *	Low-E		6.0
6078	VE752.VIR	Azurlite *	Low-E		6.0
6079	VE755.VIR	Azurlite *	Low-E		6.0
6080	VE785.VIR	Azurlite *	Low-E		6.0
6081	VE82M.VIR	Evergreen **	Low-E		6.0
6082	VE840.VIR	Evergreen **	Low-E		6.0
6083	VE852.VIR	Evergreen **	Low-E		6.0
6084	VE855.VIR	Evergreen **	Low-E		6.0
6085	VE885.VIR	Evergreen **	Low-E		6.0
6086	VG105.VIR	Clear	Gold		6.0
6087	VG114.VIR	Clear	Gold		6.0
6088	VG120.VIR	Clear	Gold		6.0
6089	VG414.VIR	Bronze	Gold		6.0
6090	VG420.VIR	Bronze	Gold		6.0
6091	VS108.VIR	Clear	Stainless Steel		6.0
6092	VS114.VIR	Clear	Stainless Steel		6.0
6093	VS120.VIR	Clear	Stainless Steel		6.0
6094	VS208.VIR	Green	Stainless Steel		6.0
6095	VS214.VIR	Green	Stainless Steel		6.0
6096	VS220.VIR	Green	Stainless Steel		6.0
6097	VS308.VIR	Gray	Stainless Steel		6.0
6098	VS314.VIR	Gray	Stainless Steel		6.0
6099	VS320.VIR	Gray	Stainless Steel		6.0
6100	VS408.VIR	Bronze	Stainless Steel		6.0
6101	VS414.VIR	Bronze	Stainless Steel		6.0
6102	VS420.VIR	Bronze	Stainless Steel		6.0
6103	VS508.VIR	Blue	Stainless Steel		6.0
6104	VS514.VIR	Blue	Stainless Steel		6.0
6105	VS520.VIR	Blue	Stainless Steel		6.0
6106	VS608.VIR	Blue-Green	Stainless Steel		6.0
6107	VS614.VIR	Blue-Green	Stainless Steel		6.0

VIR #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
6108	VS620.VIR	Blue-Green	Stainless Steel		6.0
6109	VS708.VIR	Azurlite *	Stainless Steel		6.0
6110	VS714.VIR	Azurlite *	Stainless Steel		6.0
6111	VS720.VIR	Azurlite *	Stainless Steel		6.0
6112	VS808.VIR	Evergreen **	Stainless Steel		6.0
6113	VS814.VIR	Evergreen **	Stainless Steel		6.0
6114	VS820.VIR	Evergreen **	Stainless Steel		6.0
6115	VT120.VIR	Clear	Titanium		6.0
6116	VT130.VIR	Clear	Titanium		6.0
6117	VT135.VIR	Clear	Titanium		6.0
6118	VT140.VIR	Clear	Titanium		6.0
6119	VT220.VIR	Green	Titanium		6.0
6120	VT230.VIR	Green	Titanium		6.0
6121	VT235.VIR	Green	Titanium		6.0
6122	VT240.VIR	Green	Titanium		6.0
6123	VT320.VIR	Gray	Titanium		6.0
6124	VT330.VIR	Gray	Titanium		6.0
6125	VT335.VIR	Gray	Titanium		6.0
6126	VT340.VIR	Gray	Titanium		6.0
6127	VT420.VIR	Bronze	Titanium		6.0
6128	VT430.VIR	Bronze	Titanium		6.0
6129	VT435.VIR	Bronze	Titanium		6.0
6130	VT440.VIR	Bronze	Titanium		6.0
6131	VT520.VIR	Blue	Titanium		6.0
6132	VT530.VIR	Blue	Titanium		6.0
6133	VT535.VIR	Blue	Titanium		6.0
6134	VT540.VIR	Blue	Titanium		6.0
6135	VT620.VIR	Blue-Green	Titanium		6.0
6136	VT630.VIR	Blue-Green	Titanium		6.0
6137	VT635.VIR	Blue-Green	Titanium		6.0
6138	VT640.VIR	Blue-Green	Titanium		6.0
6139	VT720.VIR	Azurlite *	Titanium		6.0
6140	VT730.VIR	Azurlite *	Titanium		6.0
6141	VT735.VIR	Azurlite *	Titanium		6.0
6142	VT740.VIR	Azurlite *	Titanium		6.0
6143	VT820.VIR	Evergreen **	Titanium		6.0
6144	VT830.VIR	Evergreen **	Titanium		6.0
6145	VT835.VIR	Evergreen **	Titanium		6.0
6146	VT840.VIR	Evergreen **	Titanium		6.0
6147	E1-2M-	Clear	Low E II		2.5

VIR #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
	25.VIR				
6148	E1-2M-3.VIR	Clear	Low E II		3.0
6149	E1-2M-4.VIR	Clear	Low E II		4.0
6150	E1-2M-5.VIR	Clear	Low E II		5.0
6151	E1-2M-6.VIR	Clear	Low E II		6.0
6152	E1-55-25.VIR	Clear	Southern Low E		2.5
6153	E1-55-3.VIR	Clear	Southern Low E		3.0
6154	E1-55-4.VIR	Clear	Southern Low E		4.0
6155	E1-55-5.VIR	Clear	Southern Low E		5.0
6156	E1-55-6.VIR	Clear	Southern Low E		6.0
6157	E1-85-25.VIR	Clear	Northern Low E		2.5
6158	E1-85-3.VIR	Clear	Northern Low E		3.0
6159	E1-85-4.VIR	Clear	Northern Low E		4.0
6160	E1-85-5.VIR	Clear	Northern Low E		5.0
6161	E1-85-6.VIR	Clear	Northern Low E		6.0

* Azurlite is a registered trademark of PPG Industries

** Evergreen is a registered trademark of Libbey-Owens-Ford

Specialty Coatings & Chemicals

SCC #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
8000	GF23.SCC	Dark Platinum	Flow-on	Non-Reflective	2
8001	GF27.SCC	Smoke	Flow-on	Non-Reflective	2
8002	GK10.SCC	Clear	Flow-on	Non-Reflective	2
8003	GL2000.SCC	Elite Bronze	Flow-on	Non-Reflective	2

Libbey-Owens-Ford

LOF #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
9800	CLEAR2.LOF	Clear			2.5
9801	CLEAR3.LOF	Clear			3
9802	CLEAR4.LOF	Clear			4
9803	CLEAR5.LOF	Clear			5
9804	CLEAR6.LOF	Clear			6
9805	CLEAR8.LOF	Clear			8
9806	CLEAR10.LOF	Clear			10

LOF #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
9807	CLEAR12.LOF	Clear			12
9808	CLEAR16.LOF	Clear			16
9809	CLEAR19.LOF	Clear			19
9810	CLEAR25.LOF	Clear			25
9831	GREY3.LOF	Grey			3
9833	GREY5.LOF	Grey			5
9834	GREY6.LOF	Grey			6
9835	GREY8.LOF	Grey			8
9836	GREY10.LOF	Grey			10
9837	GREY12.LOF	Grey			12
9851	BRONZ3.LOF	Bronze			3
9853	BRONZ5.LOF	Bronze			5
9854	BRONZ6.LOF	Bronze			6
9855	BRONZ8.LOF	Bronze			8
9856	BRONZ10.LOF	Bronze			10
9857	BRONZ12.LOF	Bronze			12
9874	BLGRN6.LOF	Blue-Green			6
9875	BLGRN8.LOF	Blue-Green			8
9876	BLGRN10.LOF	Blue-Green			10
9881	EVGRN3.LOF	Evergreen™			3
9883	EVGRN5.LOF	Evergreen™			5
9884	EVGRN6.LOF	Evergreen™			6
9891	SUPGRY3.LOF	SuperGrey™			3
9893	SUPGRY5.LOF	SuperGrey™			5
9894	SUPGRY6.LOF	SuperGrey™			6
9900	ECLCLR6.LOF	Clear	ECLIPSE ®Clear		6
9901	ECLBLG6.LOF	Blue-Green	ECLIPSE ® Blue-Green		6
9902	ECLGRY6.LOF	Grey	ECLIPSE ®Grey		6
9903	ECLBRZ6.LOF	Bronze	ECLIPSE ®Bronze		6
9904	ECLGLD6.LOF	Clear	ECLIPSE ® Gold		6
9905	MIROPN6.LOF	Grey	MIRROPANE E.P. ®		6
9920	LOW-E_2.LOF	Clear	Energy Advantage ®Low-E		2.5
9921	LOW-E_3.LOF	Clear	Energy Advantage ® Low-E		3
9922	LOW-E_4.LOF	Clear	Energy Advantage ® Low-E		4
9923	LOW-E_5.LOF	Clear	Energy Advantage ® Low-E		5
9924	LOW-E_6.LOF	Clear	Energy Advantage ®		6

LOF #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
			Low-E		

Visionwall Technologies

VTI #	File Name	Glass Type	Coating	Description	Nominal Thickness (mm)
7000	PETUNCTD.VTI				