



AGC Europe's coated glass keeps evolving...

Thanks to the right combination of solar and thermal performances, AGC's coated glass has made it possible to combine creativity, aesthetics and façade technology, while addressing today's environmental constraints. It is now time we brought you even more! AGC's main focus is always to provide you with the best coated glass possible, totally understanding your present needs and anticipating your future ones...





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AGC, the European leader in flat glass

AGC Glass Europe^(*) is the European branch of AGC Glass (Asahi Glass). the world's leading producer of flat

The company works with both raw glass (float glass, coated glass, laminated glass and mirrors) and processed glass (glasses for use in construction, the furniture and interior decoration industry, transport and various other industrial sectors).

AGC has production sites throughout Europe, from Spain to Russia. 18 of them produce float glass and there are around 100 production lines. Thanks to its extensive international network, AGC has a commercial presence all over the world.

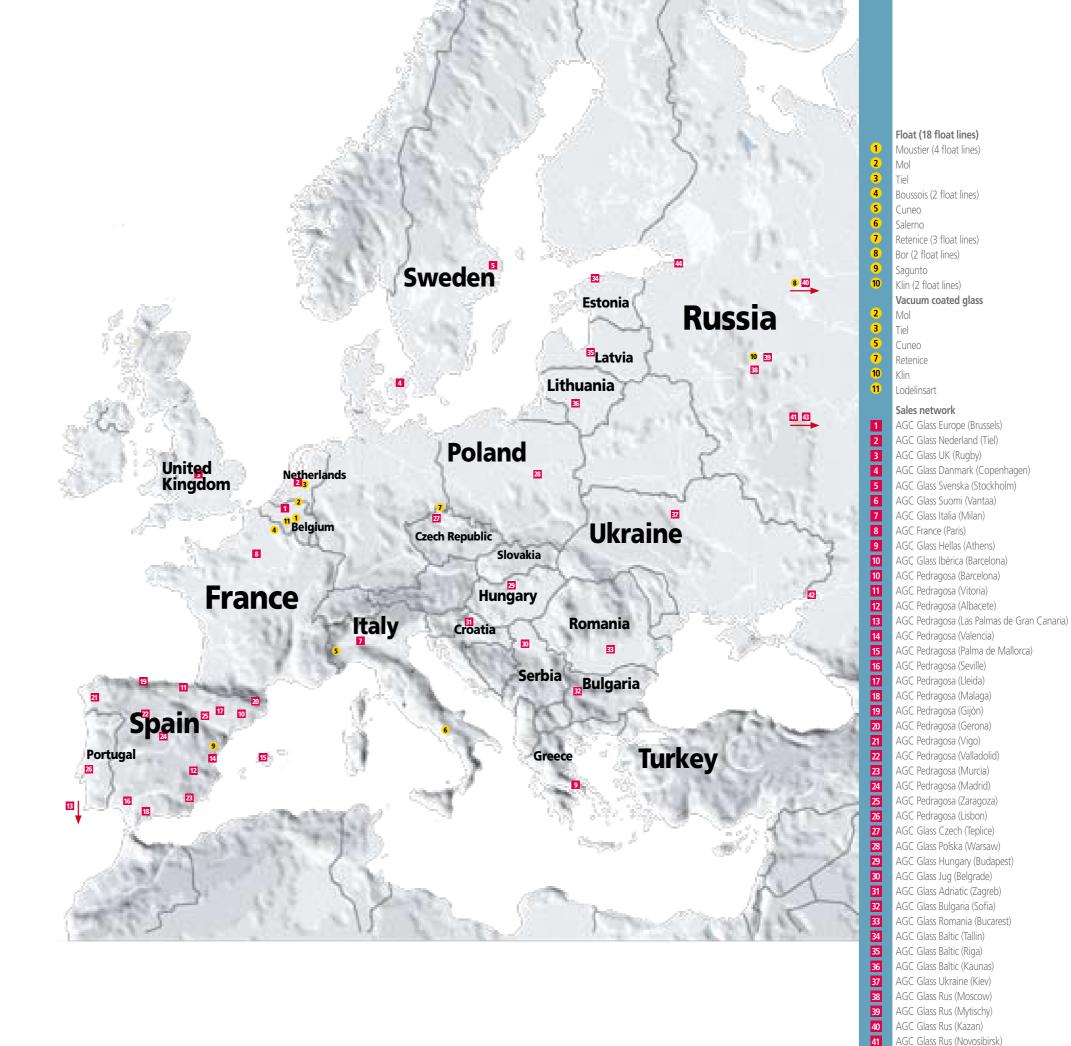
AGC's policy of permanent research has enabled it to become the European leader for up-to-theminute glass technology (coated glass, complex glass etc.).

AGC has created special international teams with a view to meeting the most demanding requirements of architects and designers. The company has a website dedicated to construction and interior design applications (www.yourglass.com) that offers customised services such as calculation tools and references for architectural projects.

Furthermore, the site is available in nine languages – English, French, Spanish, Italian, Dutch, German, Czech, Polish and Russian.

AGC Glass Europe currently employs some 10,700 people.

For more information, go to www.agc-glass.eu.



AGC Glass Rus (Rostov-on-Don) AGC Glass Rus (Yekaterinburg)

AGC Glass Rus (St. Petersburg)



AGC Glass Europe, Europe's leading Cradle-to-Cradle glass manufacturer

AGC is firmly committed to its proactive environmental policy focusing on three key areas: products, production methods and transport.

In 2010, AGC was awarded Cradle-to-Cradle certification for its float glasses and soft coatings ⁽¹⁾ under the Cradle-to-Cradle programme run by the independent organisation MBDC⁽²⁾.

What is Cradle to Cradle?

Cradle to Cradle (C2C) is a rigorous programme run by MBDC to assess how sustainable products are overall, i.e. over their entire lifecycle. The aim of this innovative approach is to certify the products manufactured by those companies with the most environmentally friendly production methods and components. This means gauging sustainability from the first stage of production right to the decomposition of the end products. The programme aims not only to evaluate and certify the quality of products, but also to measure their positive impact on the environmental balance. In other words, the challenge is to model the industry on the principles of nature. This is truly a new industrial revolution! By adopting the philosophy and ethics of C2C, AGC has become a leader in this area of the glass industry. The Group is truly a pioneer in incorporating stringent environmental objectives into its production methods and end products.

For more information, see our environmental report on our corporate site: http://www.agc-glass.eu/.



CERTIFIED

SILVER

⁽¹⁾ Planibel Clear, Planibel Green, Planibel Bronze, Planibel Grey, Planibel Azur, Planibel Dark Blue, Planibel Privablue, Planibel Clearvision and the Top^{N+}, Top N+T, Top 1.0, Energy N, Energy NT, Planibel TRI and Stopray coatings.

⁽²⁾ For more information, go to www.C2Ccertified.com



Main solar control glasses (*)

STOPRAY

Soft-coated glass with maximum solar control and thermal insulation and a neutral appearance.

SUNERGY

Neutral hard-coated glass with solar control and good thermal insulation.

STOPSOL

Hard-coated reflective glass with solar control.

Other architectural products (*)

PLANIBEL CLEAR Clear float glass with a thickness of 2 to 25 mm. Available in clear, Clearvision and Linea Azzura (slightly blue-tinted).

PLANIBEL COLOURED Coloured float glass. Wide range of thicknesses and colours (Bronze, Grey, Green, PrivaBlue, Dark Blue, Azur, Dark Grey).

PLANIBEL LOW-E

Low-emissivity glasses with perfect thermal insulation. The AGC range includes Planibel G, Planibel A, Top^{N+}, Top 1.0, Energy ^N and Tri.

Some of these glasses are also available in a toughenable version.

BLACKPEARL

Hard-coated opacified glass – the perfect solution for spandrels.

COLORBEL

Spandrels coated in opaque enamel that has been vitrified by heat treatment. Used for double or single glazing.

STRATOBEL

Laminated safety glass with one or several PVB interlayers. Stratobel can be assembled with any AGC float glass, including Stopray, Sunergy,

STRATOPHONE

Laminated safety glass with one or several PVB interlayers with better acoustic protection.

PYROBEL – PYROBELITE

Fire-resistant laminated glass.

IMAGIN

Decorative glass – clear glass with a pattern printed on one or both sides. For decorative and architectural applications.



^(*) In some countries, including Belgium, the Netherlands, France, Poland, Slovakia and the Czech Republic, all AGC glasses mentioned above are available as double-glazing.

Unparalleled performance in solar and thermal protection

High performance glazing with numerous coatings of silver applied in a vacuum. The Stopray range offers an array of different colours and different degrees of protection from the sun and light transmission and reflection. The wide variety of options available in this range makes it the perfect solution in any climate conditions and for any aesthetic effect. Moreover, all Stopray glazing has a minimum U_a value.

Benefits

- > Excellent selectivity (LT to SF ratio = max. 2)
- > Can be used in any climate: Stopray offers solar protection in summer and thermal insulation in winter. It is particularly suitable for non-residential buildings with air conditioning as it helps to maintain a pleasant temperature while minimising energy costs
- > Finish: wide choice of colours and levels of light transmission and reflection
- > The appearance of Stopray glasses in Clearvision is even more neutral. A toughenable version is also available.

Performance and range

STOPRAY SOFT-COATED GLASS OFFERING THERMAL INSULATION AND MAXIMUM SOLAR PROTECTION

DOUBLE-GLAZING 6-16-4	(WITH 9	0% ARGON)											
Stopray	Coating			jht mance	Energy performance			Ug	Tamma		Silks-	Edge	Shelf
	Position		LT (%)	LR(%)	SF (%)	EA (%)	sc	Value (W/(m².K))	Tempe- rable	Bendable	creen printing	dolotion	life
Stopray Elite	#2	Neutral	67	14	40	33	0.46	1.1	No	No	No	Yes	3 months
Stopray Safir	#2	Neutral	61	15	35	36	0.40	1.1	No	No	No	Yes	3 months
Stopray Vision 60 T (3)	#2	Neutral	60	14	37	36	0.43	1.0	Yes	Yes	Yes ⁽²⁾	Yes	3 months
Stopray Vision 50	#2	Neutral	50	19	28	42	0.32	1.0	No	No	No	Yes	3 months
Stopray Vision 50 T (3)	#2	Neutral	50	20	31	37	0.36	1.0	Yes	Yes	Yes ⁽²⁾	Yes	3 months
Stopray Vision 36 T (3) NEW	#2	Neutral	36	31	21	40	0.25	1.0	Yes	Yes	Yes ⁽²⁾	Yes	3 months
Stopray Silver	#2	Neutral	43	47	27	27	0.31	1.0	No	No	No	Yes	3 months
Stopray Galaxy on Clearvision	#2	Neutral	41	17	22	43	0.25	1.1	No	No	No	Yes	3 months
Stopray Lime 61 T (3)	#2	Green	61	10	32	63	0.37	1.0	Yes	Yes	Yes ⁽²⁾	Yes	3 months
Stopray Titanium 37 T (3)	#2	Grey	36	6	26	64	0.30	1.0	Yes	Yes	Yes ⁽²⁾	Yes	3 months
Stopray Indigo 48 T (3)	#2	Dark Blue	48	8	29	66	0.33	1.0	Yes	Yes	Yes ⁽²⁾	Yes	3 months

(i) Identical values for a 15 or 16 mm spacer - values according to EN410. - (2) See conditions on www.yourglass.com - (3) This coating must be tempered to reach its final performances and aesthetics.

Stopray
Ultravision 50
will be
commercially
available from
March 2011

Stopray Ultravision 50

Take the best from the sun

Stopray Ultravision 50 is an extremely high performance soft-coated glazing with a new and innovative triple Silver coating applied in a vacuum. The "triple silver soft coating process" gives rise to a new generation of glazing, one that makes the building of tomorrow possible.

Benefits

- > The best from the sun... only:
 Stopray Ultravision 50 allows you to
 maximize the natural light in (L.T. =
 49%) while reducing solar heating to
 the maximum (S.F. = 23%, meaning
 that 77% of the solar heat is kept
 outside); in other words the best
 selectivity in the market (i.e. light
 transmission to solar factor ratio >
 2!).
- > The best insulation: thanks to its U_g -value of 1.0 W/(m^2 .K), enjoy all the benefits of an optimal thermal insulation and the energy savings that go with it.
- > The best comfort: enjoy the unlimited possibilities of large interior spaces naturally illuminated all year long (i.e. a significantly reduced need for protection such as shading systems for example).

- > The best aesthetics: Stopray
 Ultravision 50 is always produced on
 Clearvision, AGC's extra clear vision
 glass, to give it a smooth, pleasing
 and neutral appearance.
- > The best value : such a combination of natural light in and solar energy out will significantly reduce both your lighting and cooling costs the ideal investment.

Applications

Stopray Ultravision 50 has been specifically designed for exterior applications in building façades (such as office buildings, commercial and business buildings).

Additional combinations

Stopray Ultravision 50 can be combined with a wide variety of AGC's glazed products to give way to significant additional features.

- > Safety: the combination with Stratobel, AGC's safety glazing range, allows you to benefit from additional safety advantages.
- > Sound insulation: on request, you can even benefit from high sound insulation performances by having Stopray Ultravision 50 on Stratophone, AGC's sound insulation glazing range.

Performances

Criormances														
DOUBLE-GLAZING 6-16-4 (WITH 90% ARGON) (1)														
Shamara	Coating	Colour	Lig perfor	jht mance	Energy performance			U _g Value	Tempe-	Bendable	Silks-	Edge	Shelf	
Stopray	Position	Colour	LT (%)	LR(%)	SF (%)	EA (%)	SC	(W/(m².K))	rable	вепцаріе	creen printing	deletion	life	
Ultravision 50	#2	Neutral	49	18	23	32	0.27	1.0	No	No	No	Yes	3 months	
Vision 50	#2	Neutral	50	19	28	42	0.32	1.0	No	No	No	Yes	3 months	
Stopray Clearvision 50	#2	Neutral	51	20	29	41	0.33	1.0	No	No	No	Yes	3 months	
Galaxy on Clearvision	#2	Neutral	41	17	22	43	0.25	1.1	No	No	No	Yes	3 months	

⁰ Identical values for a 15 or 16 mm spacer - values according to EN410. - For more info and compositions, please visit www.yourglass.com (Stopray range)





A double glazing with a Ug-value of 0.9 W/(m².K)!

Enjoy the performances of combining AGC's soft and hard coatings... a whole range of 0.9 U_a-value products!

Improving our coated glazed products, in terms of solar control as well as thermal insulation, has always been our main focus. Glass innovation is today more than ever our core activity for you to continually enjoy the most advanced glass technology advantages.

A clear vision of your future needs definitely means anticipating your requirements and that is precisely what we are doing. As a result of this trend, we are proud to announce a world première in glass industry: a new range that will push forward the limits of thermal performances, AGC is launching today its revolutionary "0.9 U_a-value range", a complete range of double glazing units with a U_a-value of 0.9 W/(m².K)!

Product description (double glazing units with 2 AGC coatings)

La The "0.9 U_a-value double glazing units" have been made possible due to the combination of one soft coating (a Stopray with a U_a-value of 1.0 W/ (m².K)) and the well-know AGC's pyrolitic coating Planibel G Fast (in position 4). This combination gives rise to unprecedented advantages such as highly improved thermal performances as well as a better solar factor. Practically speaking, you benefit from more energy savings both in the winter (thanks to the lowest U_a-value in the market) and the summer (lower Solar Factor). In other words, this innovation allows you significant savings as well as more interior comfort the whole year round.

Enjoy the performances of combining AGC's soft and hard coatings...





Performances - Our "0.9" Stopray range

DOUBLE GLAZING 6-16-4 (STOPRAY #2 - PLANIBEL G FAST #4 - 90% ARGON) (1)													
Sharran	Coating	Colour	Light performance		Energy performance			U _g Value	Tempe-	B	Silks- creen	Edge	Shelf
Stopray	Position	Colour	LT (%)	LR(%)	SF (%)	EA (%)	SC	(W/(m².K))	rable	Bendable	printing	deletion	life
Stopray Vision 60 T (2)	#2	Neutral	54	16	36	40	0.41	0.9	Yes	Yes	Yes (3)	Yes	3 months
Stopray Vision 50	#2	Neutral	45	20	27	44	0.31	0.9	No	No	No	Yes	3 months
Stopray Vision 50 T (2)	#2	Neutral	46	22	30	39	0.34	0.9	Yes	Yes	Yes (3)	Yes	3 months
Stopray Vision 36 T (2)	#2	Neutral	33	31	21	40	0.24	0.9	Yes	Yes	Yes (3)	Yes	3 months
Stopray Lime 61 ^{T (2)}	#2	Neutral	55	12	31	65	0.36	0.9	Yes	Yes	Yes (3)	Yes	3 months
Stopray Indigo 48 ^{T (2)}	#2	Neutral	44	9	27	69	0.31	0.9	Yes	Yes	Yes (3)	Yes	3 months
Stopray Titanium 37 ^{T (2)}	#2	Neutral	33	7	25	66	0.29	0.9	Yes	Yes	Yes (3)	Yes	3 months
Stopray Silver	#2	Neutral	40	48	26	29	0.30	0.9	No	No	No	Yes	3 months

⁽¹⁰⁾ Values according to EN410. - ⁽²⁾ This coating must be tempered to reach its final performances and aesthetics. It can not be used annealed. - ⁽³⁾ See conditions on www.yourglass.com For more info and compositions, please visit www.yourglass.com (Stopray range). The combination of Planible G Fast and Stopray coatings will slightly change performances and aesthetics of the Stopray range. In order to reduce risks of scratches and high haze effect AGC strongly suggests to use only Planible G Fast or products made with equivalent 'G Fast technologies'.

Neutrality and selectivity

Sunergy rises to any architectural challenge – even the most difficult. With its low level of reflection and its extremely neutral appearance, Sunergy reflects current aesthetic trends. In addition, it is very easy to process, making it a favourite with glaziers all over the world. It can even be used in complex construction projects, such as projects involving bent glass, heatstrengthened glass, curtain walls, single-pane glazing or silk-screen printed glass.

Sunergy provides a high level of solar protection and good thermal insulation. It is available in Clear, Green, Azur, Dark Blue and Grey.

Benefits

- > Unsurpassed appearance and visual comfort: high degree of light transmission and low level of reflection
- > Especially neutral on clear float glass
- > Interior comfort: excellent thermal insulation coupled with solar control when assembled in Insulating Glazing Unit.
- > Easy to process
- > No limits on architects' creativity: one type of glass can be used for all applications.





Performance and range

i el formance ana	range											
Sunergy	Colour	Light performance		Ene	rgy perform	ance	U _g Value	Tempe-	Bendable	Silks- creen	Edge	Shelf
-		LT(%)	LR(%)	SF(%)	EA(%)	SC	(W/(m².K))	rable		printing	deletion	life
Double glazing 6-16-4 (Sunergy #2	- Top 1.0 #3 - 9											
Clear #2	clear	53	15	37	51	0.43	1.0	yes	yes	yes	no	unlimited
Green #2	green	47	13	29	66	0.33	1.0	yes	yes	yes	no	unlimited
Azur #2	azur	47	13	31	64	0.36	1.0	yes	yes	yes	no	unlimited
Dark Blue #2	dark blue	32	9	22	76	0.25	1.0	yes	yes	yes	no	unlimited
Grey #2	grey	26	7	22	74	0.25	1.0	yes	yes	yes	no	unlimited

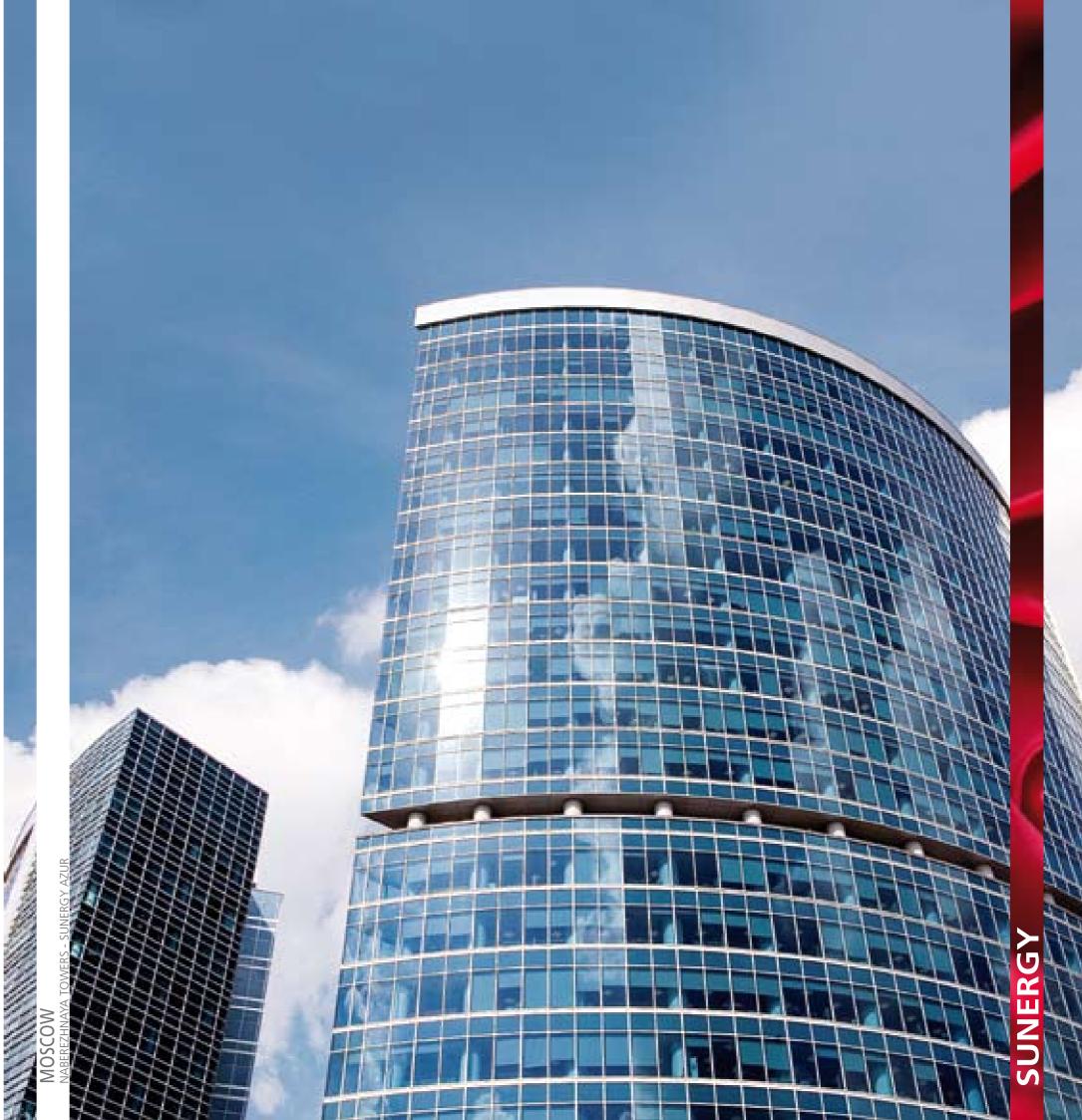
Identical values for a 15 or 16 mm spacer - values according to EN410.

WARSAW
TELBANK EXATEL - SUNERGY AZUR



RIGA DUNTES NAMI - SUNERGY CLEAR





A reflective glass that stands the test of time

For many years now, Stopsol has been the solar control glass preferred by processors, promoters and façade designers all over the world. Its reflection, perfect uniformity and exceptionally hard scratchproof and pollution-resistant coating have all played a major part in creating Stopsol's robust reputation. Processors particularly appreciate its pyrolitic coating, which is easy to toughen, bend and use in single or double glazing.

Stopsol is available in nine colours and three types, making it the perfect glass for any architectural application.

Benefits

- > Reflective glass providing privacy and visual comfort
- > Multiple combinations of solar control and light transmission levels and various colours
- > No limits on architects' creativity: one type of glass can be used for all applications
- > Easy to process.



MOSCOW
APITAL CITY - STOPSOL SUPER

Performance and colourways

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Stopsol	Colour	Light performance		Energy performance			U _g Value	Tempe- rable	Bendable		Edge deletion	Shelf life
		LT (%)	LR(%)	SF(%)	EA (%)	SC	(W/(m ² .K))	Tubic		printing	uciction	1116
Double glazing 6-16-4 (Stop	sol #2 - Top 1.0 #3 - 90	% AR) (1))									
Classic Clear #2	Clear metallic	31	29	27	42	0.31	1.0	Yes	Yes	Yes	No	Unlimited
Classic Grey #2	Metallic grey	15	10	17	73	0.20	1.0	Yes	Yes	Yes	No	Unlimited
Classic Green #2	Metallic green	25	21	17	75	0.20	1.0	Yes	Yes	Yes	No	Unlimited
Classic Bronze #2	Metallic bronze	17	12	18	69	0.21	1.0	Yes	Yes	Yes	No	Unlimited
Supersilver Clear #2	Slightly blue-tinted	51	40	38	22	0.44	1.0	Yes	Yes	Yes	No	Unlimited
Supersilver Grey #2	Metallic steel	24	12	22	67	0.25	1.0	Yes	Yes	Yes	No	Unlimited
Supersilver Green #2	Bright green	42	29	26	62	0.30	1.0	Yes	Yes	Yes	No	Unlimited
Supersilver Dark Blue #2	Bright blue	33	20	23	66	0.26	1.0	Yes	Yes	Yes	No	Unlimited
Silverlight Privablue #2	Vivid blue	22	9	15	82	0.17	1.0	Yes	Yes	Yes	No	Unlimited

Deliberatical values for a 15 or 16 mm spacer - values according to EN410. More values available on www.yourglass.com.

Please be aware that the use of any coating in position 1 requires necessary precautions in relation to installation and maintenance. In locations or projects where maintenance might be difficult, the coating should be used in position 2.





PERFORMANCE OF THE GLASS

PUTRAJAYA
WISMA SUMBER ASLI - STOPSOL CLASSIC DARK BLUE



MOSCOW REGIONAL GOVERNMENT ADMINISTRATION – STOPSOL SUPERSILVER GREY

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