

VISTAWEAVE

Solar Properties

USA STANDARD TESTED TO ASHRAE 74-73

ASHRAE 74-73 : Method of Measuring Solar-Optical Properties of Materials

	Ts	Rs	As	Tv	Tuv	O-f	Shading Coefficients (Sc)		
							3mm Cl.	6mm Cl.	6mm H.A.
VISTAWEAVE + 95									
Ash grey	13	30	57	14	7	5	0.58	0.55	0.43
Basalt	6	7	87	11	7	5	0.73	0.68	0.50
Cappuccino	15	37	48	17	6	5	0.44	0.41	0.36
Caramel	8	13	80	12	6	5	0.64	0.60	0.43
Charcoal	6	5	89	10	6	5	0.73	0.69	0.51
Chinaberry	6	8	86	10	6	5	0.70	0.67	0.49
Classic Cream	9	10	75	15	6	5	0.49	0.43	0.38
Cobalt	5	7	88	9	6	5	0.70	0.67	0.50
Cocoa	7	8	87	17	7	5	0.71	0.68	0.50
Congo	6	10	84	45	7	5	0.68	0.64	0.47
Copper	8	20	72	35	6	5	0.62	0.55	0.46
Dune	15	38	48	14	7	5	0.50	0.48	0.41
Ebony	7	4	89	10	6	5	0.74	0.70	0.51
Fed Green	7	9	84	12	6	5	0.60	0.55	0.44
Flint	6	5	89	10	6	5	0.73	0.69	0.51
Grecian Gold	10	23	67	46	7	5	0.61	0.58	0.46
Green Tea	14	36	50	15	7	5	0.53	0.52	0.41
Gunmetal	6	6	88	10	6	5	0.72	0.68	0.50
Ironstone	6	6	88	10	6	5	0.73	0.69	0.51
Jasper	1	12	81	12	7	5	0.38	0.66	0.49
Mist	12	30	58	14	7	5	0.58	0.55	0.43
Oyster	16	50	34	17	7	5	0.44	0.43	0.38
Paperback	7	8	84	11	6	5	0.70	0.67	0.48
Pepper	7	9	84	10	6	5	0.71	0.68	0.49
Pewter	7	14	79	11	7	5	0.68	0.65	0.48
Porcelain	18	61	21	19	6	5	0.38	0.38	0.34
Shale Grey	16	45	37	17	7	5	0.42	0.40	0.36
Snow	22	64	14	21	7	5	0.36	0.36	0.33
Steel blue	6	8	86	9	6	5	0.70	0.67	0.50
Storm	7	13	79	11	7	5	0.68	0.65	0.48
Surf Mist	18	61	20	19	6	5	0.38	0.38	0.34
Taupe	12	24	64	14	7	5	0.60	0.58	0.46
Wallaby	8	9	79	13	6	5	0.70	0.68	0.50
Windspray	11	26	62	14	6	5	0.67	0.54	0.43
Woodland Grey	7	8	89	12	6	5	0.71	0.67	0.49
VISTAWEAVE + 99									
Cappuccino	7	18	75	7	1	1	0.53	0.54	0.42
Caramel	7	18	75	7	1	1	0.51	0.61	0.42
Charcoal	3	14	86	3	1	1	0.58	0.70	0.50
Classic Cream	1	31	50	10	1	1	0.41	0.41	0.38
Ebony	2	13	95	2	1	1	0.61	0.73	0.53
Gunmetal	5	15	81	6	1	1	0.50	0.64	0.41
Paperback	9	20	75	8	2	1	0.43	0.51	0.33
Storm	7	16	77	6	1	1	0.48	0.69	0.43
Woodland Grey	9	33	58	8	2	1	0.39	0.42	0.37
VISTAWEAVE + STRIPE									
T044	20	50	30	31	9	12	0.67	0.54	0.43
T113	21	56	23	19	9	12	0.67	0.54	0.43
T115	13	25	62	15	8	12	0.49	0.43	0.38
T232	18	39	43	20	8	12	0.73	0.68	0.50
T294	20	49	31	23	9	12	0.70	0.67	0.48
T832	23	58	19	22	9	12	0.42	0.40	0.36

VISTAWEAVE

SOLAR PROPERTY EXPLANATIONS

Solar properties are important when selecting screenfabrics, as the efficiency of the fabric depends on the colour chosen. When advising a customer on the fabric that they should use, there are a number of factors that should be considered. All Vistaweave fabrics are tested in the USA by Matrix Inc. When these tests are conducted the fabric and the glass are tested together. Here are the explanations of the solar property test results.

Ts (Solar Transmittance)

The amount of energy transmitted through the fabric.

Rs (Solar Reflection)

The proportion of solar energy that is reflected by the fabric. The lighter the colour the better the reflection. E.g. Solar View White reflects 64%, while Black reflects only 6%.

As (Solar Absorbance)

The proportion of solar energy that is absorbed by the fabric. The darker the fabric the more solar energy that is absorbed by the fabric. Note: the sum of transmittance, absorbance and reflection always = 100% (Ts + As + Rs = 100%).

Tuv

The amount of UV that is transmitted through a fabric. A Tuv of 7 means that 93% of the UV is blocked. This is important when considering protection of flooring, furnishing fabrics and furniture against fading.

Tv

The amount of glare a person receives through the fabric. The green Building Council rating system requires a Tv of less than 10. Glare increases in winter when the angle of the sun is lower.

O-F (Openness Factor)

This measures the proportion of holes in a woven fabric. 5% openness = 5% holes in 1 sqm. The more open the more solar heat admitted through the fabric. Openness also affects the degree of visibility.

SC (Shading Coefficient)

Defines the sun control capabilities of the glazing system and is expressed as the ratio of solar heat gain. The 3mm and 6mm refers to the glass thickness. CL refers to standard 'clear' glass and HA refers to 'heat resistant' (tinted) glass. This is utilised in the calculation of solar heat gain and the total heat gain of the glazing material or glazing system.

Some other things to note:

1. In summer heat gain through a glass window can be as much as 87%, while in winter heat loss can be up to 49%.
2. Depending on the colour chosen, the temperature in a room can be lowered by 5 to 15 degrees C in summer and can reduce the need for air conditioning by 25-30%. This is a considerable saving in power consumption and also aiding the reduction in greenhouse gas emission.
3. Dark colours give a better view, while light colours offer more efficient heat protection.



Goodearl  Bailey

Established 1886

Sydney | P 02 9316 1300 | E sales@goodearlandbailey.com.au
goodearlandbailey.com.au