

Solver Paints

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PRODUCT INFORMATION

SS-107

LIGHT REFLECTANCE VALUE

We have published this bulletin on LIGHT REFLECTANCE as a Technical service to assist you in correct use of colour. The purpose is to explain why the light reflectance of colours is important in colour scheming.

1. WHAT IS LIGHT REFLECTANCE?

Light reflectance is the percentage of light actually reflected back by a particular colour. Hence dazzling white or restful green, etc.

2. HOW DOES IT CAUSE EYE STRAIN?

By causing the pupil of the eye to undergo excessive dilation and contraction. For example, a person subjected to an environment of widely diverging light reflectance will suffer considerable eye strain when looking from one colour to the other during the course of the day.

3. WHAT ARE THE SIDE EFFECTS?

Fatigue, headaches, nervous strain and loss of production.

4. HOW DO WE SOLVE THE PROBLEM?

By painting the environment with SOLVER colours of similar light reflectance value. A difference in brightness of up to 20% is not regarded as excessive and is acceptable.

5. DO WE HAVE TO REVERT TO DULLNESS?

No, definitely not! It is possible to have two bright, directly contrasting colours with almost the same reflectance value. Factories, offices, homes, etc., can still be bright and cheerful WITHOUT being a hidden health hazard. White and Cream shades, etc., have the highest light reflectance values. Consequently, if the contrast with machinery, production line or work table, etc., is excessive, they should only be used on ceilings or wall areas above the normal field of vision. Alternatively, the total work environment should be of a harmonious light reflectance value.

6. DOES REFLECTANCE VALUE VARY WITH METHOD OF LIGHTING?

Yes! The reflectance differs noticeably with all forms of lighting - Daylight, Incandescent and Fluorescent. The figures shown in the chart are the average for each colour taken over the three.



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SOLVER COLOUR HARMONY LIGHT REFLECTANCE CHART

COLOUR & NO.	AVERAGE % REFLECT	COLOUR & NO.	AVERAGE % REFLECT	COLOUR & NO.	AVERAGE % REFLECT
ANTIQUE WHITE 2222	83	ESKIMO 2331	80	NUT BROWN 2728	14
ASPEN 2371	81	ETERNITY 2601	81	OCEAN BEACH 2132	77
AUTUMN PINK 2094	63	EVERLASTING 2602	76	OLD IVORY 2221	86
AZTEC GOLD 2236	55	FIRESTONE 2738	25	OLYMPIC GOLD 2146	24
BABY BLUE 2502	82	GOLDEN LIME 2275	53	OREGANO 2228	18
BEACH PEBBLE 2124	59	GREEN NOOK 2256	47	OUT OF THE BLUE 2508	7
BEDROCK 2665	46	GYPSY GREEN 2324	52	PALOMA 2156	55
BEEFLENUIT 2698	14	HAZE 2662	74	PAMPAS GRASS 2253	68
BISCUIT 2095	55	HEMP 2235	63	PAPYRUS 2754	61
BISHOP RED 2038	11	HEYSEN GOLD 2208	47	PARCHMENT 2651	81
BLUE GREY 2532	68	HOUND DOG 2598	6	RAFFIA 2224	67
BRANDY SNAP 2128	16	IGLOO 2351	76	RAINFORREST 2268	16
BUMBLEBEE 2703	65	INTERMEZZO 2711	79	RHAPSODY 2531	75
BURNOUS 2154	73	JULES 2112	76	ROMANY GREEN 2323	65
BUTTERCUP 2203	80	KAKADU 2238	21	ROSE WHITE 2081	78
CANTINA 2575	45	KENTUCKY 2356	29	SATSUMA 2054	53
CARDINAL 2618	12	KOALA 2646	35	SCROLL IVORY 2752	70
CASTOR BEAN 2695	37	LACE CREAM 2712	67	SHERBET 2171	84
CHAMPAGNE 2164	74	LARKSPUR 2316	47	SORRENTO 2225	60
CHANTILLY 2263	69	LIMELIGHT 2301	78	SPARTACUS 2468	8
CLOUD 2355	53	LOAM WHITE 2721	78	SPIRIT GREY 2782	75
CLOUDY SKY 2765	54	LOCUST 2353	63	SPRING SONNET 2062	74
COLD STEEL 2467	13	LORRY 2226	48	STONE WHITE 2731	79
CONFETTI 2053	64	MACADAMIA 2588	6	STRAW 2202	83
COOL BEIGE 2592	78	MAUVE PINK 2071	75	STUCCO 2735	55
CORNSILK 2153	79	MELON GLOW 2105	60	SUGAR CANE 2734	65
COUNTRY BLUE 2485	31	MESA RED 2057	16	SWAN LAKE 2361	84
CREAM BEIGE 2722	73	MINK 2597	15	SWEET CREAM 2172	82
CREAM STONE 2131	84	MINUET 2501	85	TANGO 2106	39
CUMULUS 2791	80	MOCCASIN 2134	61	VENUS PINK 2605	54
DAMASK 2092	78	MOLDAU 2338	13	VIBRANT GREEN 2388	21
DELPHINIUM 2504	68	MOONLIGHT 2142	86	WATERCOLOUR 2321	79
DERWENT 2437	19	MORNING GREY 2783	63	WATERCRESS 2314	73
DIADEM 2434	58	MOROCCO TAN 2707	25	WHITE ASPARAGUS 2251	77
DOVETAIL 2663	65	MUSK 2691	81	WHITE RICE 2241	85
DRESDEN BLUE 2441	76	NEUTRAL 2121	78	ZEPHYR 2453	61

The above will be of interest to architects, decorators, industrial psychologists, master painters, etc. It is important to understand that use of light reflectance principles in no way inhibits bright, colourful or cheerful schemes. What it does allow is correct balance of colour intensity that creates better harmony for better living and/or working.

SOLVER PAINTS can colour in your world and the name of our Wall Finishes Colour Card says it all:-

SOLVER COLOUR HARMONY

Please do not hesitate to contact our Architect Services Consultant or Technical Department if you wish to discuss any aspect of this important subject further.

CHANGES SINCE LAST ISSUE:



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