

Table 9.1 Reflectances of common materials found in buildings and some paint colours

Materials	Reflectance	Paint colours and BS 4800 code	Reflectance
White paper	0.8	White 00E55	0.85
Stainless steel	0.4	Pale cream 10C31	0.81
Cement screed	0.4	Light grey 00A01	0.68
Light carpet	0.3	Strong yellow 10E53	0.64
Light oak veneer	0.4	Mid grey 00A05	0.45
Teak veneer	0.2	Strong green 14E53	0.22
Dark oak veneer	0.1	Strong red 04E53	0.18
Quarry tiles	0.1	Strong blue 18E53	0.15
Window glass	0.1	Dark grey 10A11	0.14
Dark carpet	0.1	Dark brown 08C39	0.10
		Dark red-purple 02C39	0.10
		Black 00E53	0.05

There is much to be said for the use of high reflectance surface finishes of neutral or low chroma colour, particularly in small offices. Surface finishes of this type increase the inter-reflected component of the illumination thereby diminishing shadows and reducing the probability that the occupants will experience discomfort glare or be annoyed by veiling reflections.

For indirect lighting (see Section 9.4), it is important to provide a high ceiling cavity reflectance free from colour. Failure to do this will result in an inefficient installation producing coloured light. It is also desirable to use large areas of high reflectance on the walls to enhance the inter-reflected component of the illumination, with small areas of colour to offset the blandness of indirect lighting.

For direct/indirect lighting (see Section 9.4), a high ceiling cavity reflectance free from colour is again desirable to ensure the efficiency of the indirect lighting. However, there is no need to have a high floor cavity reflectance as the ceiling is illuminated by the indirect lighting.

For general guidance, Table 9.2 recommends the range of reflectances for the most common surfaces in an office.

Surface	Reflectance
Ceiling	> 0.7
Walls	0.5–0.7
Partitions	0.4–0.7
Floor	0.1–0.3
Furniture	0.2–0.5
Window blinds	0.4–0.6

Table 9.2

Recommended reflectance ranges for common office surfaces