Dulux PROFESSIONAL

HUMAN CENTRIC DESIGN

THROUGH COLOUR AND PAINT

FOR OFFICES, HEALTHCARE AND EDUCATION

AkzoNobel

COLOR DESIGN OPPORTUNITIES

Color design in public spaces is challenging, however colors applied in the right way provide strong opportunities. Designing color schemes for spaces happens in the context of settings and situations and our reaction to color is strongly influenced by light, its neighboring colors and other environmental factors *1. Studies show that the impact of color in spaces depends upon individuals' sensitivity towards the environment, their color preference and time of exposure to interior colors. Also, physiological factors such age, eye fatigue and visual- and color deficiency play a role in space perception *2. Yet we believe it is it possible to give direction and suggestions for color combinations that work in different areas and that benefit the all users.

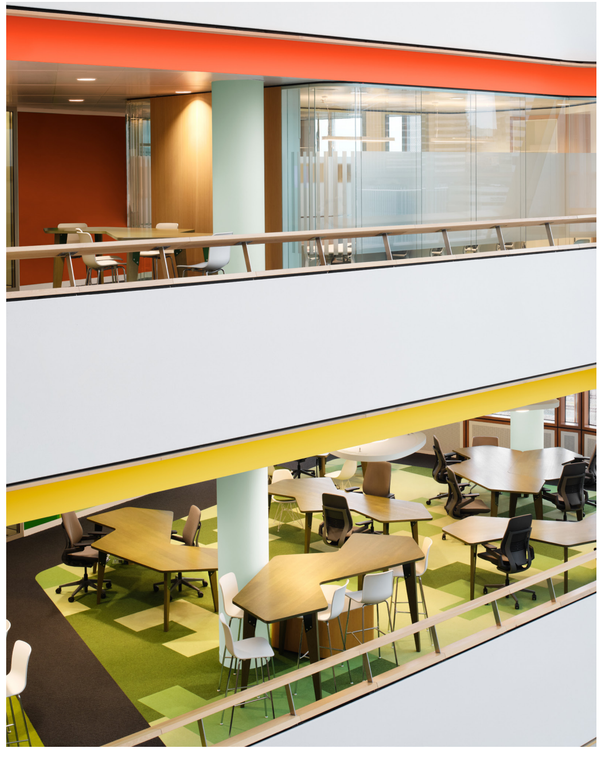
Based on these insights and research we designed this brochure with easy to apply color-palettes for offices, education and healthcare environments. We share our color-knowledge to help you improve the lives of your customers and their users.

* Source 1: https://www.cleverclassroomsdesign.co.uk/reports-guidance
* Source 2: Cholour and lighting in hospital design, Dalke and others, Kingston University (2006) https://eprints.kingston.ac.uk/id/eprint/23109/

BRINGING SURFACES TO LIFE

Well-designed spaces can impact our behavior and feeling of well-being. The use of color plays a vital role, the color approach can vary per space and highly depends on the needs of the users in that specific space. We believe that there is an additional, underutilized dimension to building design —color this element considers more than building function and aesthetics.

For all kinds of spaces, lifestyles and life-stages, we offer color and paint solutions for comfortable environments that improve the feeling of wellbeing. As well as safe-guarding national treasures and icons, you can expect us to consider the desired user-experience of a building. Whether working on a school redevelopment, a work-place refurbishment, or a new hospital construction project – we will help you deliver product- and color specification that focuses on the user's experience. We are taking up the challenge of 21st century living and offer help to building-owners to deal with trends affect-ing human health and performance. As well as environ-mental sustainability, social sustainability remains high on our agenda. The built environment, architecture, can play an important role in enhancing individual well-be-ing. As a result, we believe that it's our role to inspire to high quality building design through color.



HUMAN CENTERED DESIGN

With our People. Planet. Paint. approach to sustainability, we want to play a positive role in creating a brighter, more sustainable future for our planet and our communities. Our mission is to add color to people's lives. We do this by creating harmony between spaces and the people living or working within them.

We believe in optimized building design that enables people to thrive. We are committed to finding new possibilities for working in partnership with others to deliver innovative, high quality, sustainable solutions to our customers – enabling us all to continue to thrive and feel productive, despite the ever-growing demands on our daily life. This requires a fresh look at interior spaces and building design. Research has shown that color can elevate spaces. This brochure gives you the color-insights and color-rational you need to make a space, a place where people can be more produc-tive, better focused, more at ease, or better supported. We believe that well executed color design promotes enhanced well-being and productivity. In everything we do, we try to focus on the experience of the user of buildings as part of our human- or occupant centered design approach.In this brochure we will help you to develop color design-solutions that can improve the overall experience of all users.

THE SPACE TO SPACE APROACH

The importance of the human-, functional- and corporate design objectives may vary per space and highly depends on the needs of the users in that specific space. Good color design provides color schemes that can be applied to support the purpose of the spaces and how people use them, while maintaining a unified design for the building as a whole *3. For example, when you enter a hospital, it is important that you can easily find your way, while in a waiting room you want to feel at ease. At the same time these spaces need to feel connected, the color-approach has to come from the same design-idea. Our color palettes for various spaces within one building cater for the need of the specific space and connect the spaces at the same time.

* Source 3: Color, Environment, and Human Response, Frank H. Mahnke, Van Nostrand Reinold, NY, USA, 1996

HUMAN FACTOR

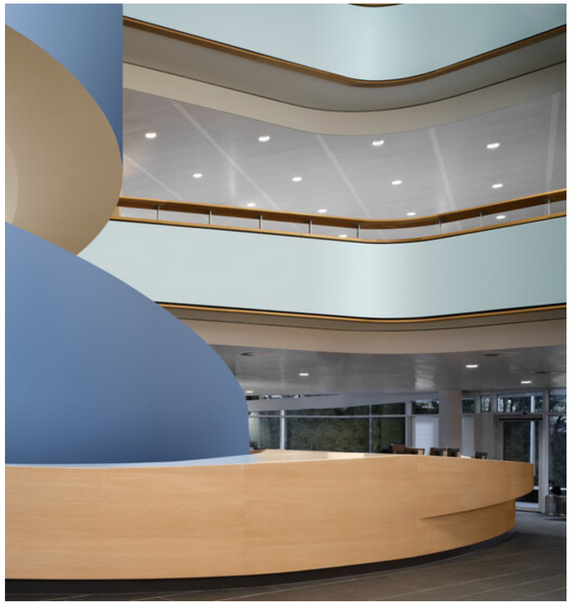
improve the overall experience of all users of the building

FUNCTIONAL FACTOR

manage spaces, while also improving navigation and orientation

CORPORATE FACTOR

image-building, reputation and ambiance of the building



THE SPACE TO SPACE APROACH
KNOWING YOUR USER

Whatever project you are working on, we advise to take the following color design considerations into account:

Knowing the user:
Our reaction to color is related to our perception which is an interpretation of the user of the space and his sense of well-being. Knowing the user, whether they are employees, pupils, patient or visitors is vital.

Design for all:
Whenever color is used for the coding of information, color deficiency should be considered. "Design for all" means inclusive design that takes color- and visually deficiency in consideration.

Involve the user:
General redecoration can have an enormous effect on appearance, boost morale and raise interest, especially if you involve the users of the building in the color design process. This will make them co-owners of the design.

In this brochure we provide you with research-based color-schemes and detailed color-information for office spaces, education environments and healthcare facilities. Based on the scientific insights and the space-to-space approach, we designed color-palettes for various sectors, spaces and user-moments. The easy-to-use palettes show you the best colors and color-combinations for ceilings, walls and accent-areas.

AVOIDING COMMON DESIGN MISTAKES

Color design decisions can be challenging. Below some examples and tips that illustrate that, taking the right color decisions, is more easy using this brochure

1. WAY FINDING

Lack of color contrast between the critical surfaces; walls, floor and doors can make it more difficult for those with visual impairments to navigate unfamiliar spaces. Add accents to make sure users can find their way, using color as signage with the right contrast improves navigation.

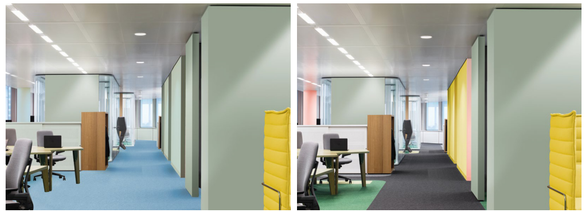
2. CONTRAST

A clinical, white room environment can cause glare, impacting negatively on concentration, where color on the wall can aid focus. This brochure will help you to select the right colors to avoid over-stimulation. While at the same time improving the indoor environment.

3. LIGHT REFLECTION VALUES

Color on handrails, carpets and pillars should contrast with the wall color with at least a minimum difference of 30 points of Light Reflectance Value. The LRV expresses the percentage of light that is reflected from a surface. To improve safety, it's important areas differentiate from each other. Color is an easy way to do this.

4. ZONING



Creating a distinct contrast between walls and floor supports navigation for those with visual impairments and this clearly defined walkway adds a smart finish to the fresh and upbeat office design, where zones are created through wall and furniture color.

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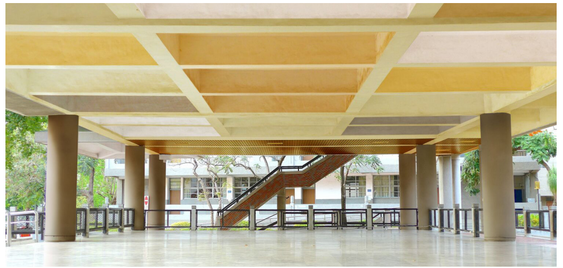

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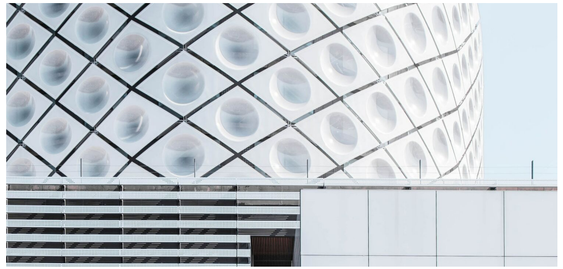

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DESIGNING FOR OFFICES

DESIGNING FOR OFFICES

CHALLENGE

We spend much of our day in workplaces designed to let our minds thrive. Well-being in an office environment often stems from employee satisfaction as well as working together with others and being part of a team. In the past the well-being and health of employees in context of the office environment were, hardly considered. Now more and more business managers recognize that the conditions in the workplace influence the people who work there. Several studies statistically show that office environments affect our well-being, motivation, job satisfaction and operational productivity.

Source: BRE. Biophilic Office

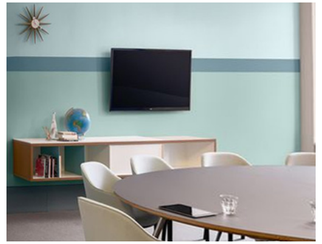
COLOR SOLUTION

Lighting, climate, natural elements, acoustics, flooring, visual ergonomics and floor space efficiency, have to be considered in relation to color. Health and wellbeing gains can be achieved through expert application of color and design and use of products that reduce VOC emissions. Where it comes to color-design in office environments, there are options to consider. Tonal color combinations tend to be more tranquil, compared to combining two different hues. Muted colors create comfortable environments. Lighter shades make spaces appear bigger. Matt finishing avoids reflected glare and uncontrolled brightness. Rhythmic color arrangements produce variety in large open spaces. We designed color palettes to illustrate this, identify the type of space and use the color options of the Offices Color Palette for ideas and inspiration.

1 Color design can be used as an image factor. First impressions count! Overall appearance and the way a company presents itself can has an impact on visitors.

2 Use color in corridors – this can be particularly helpful for wayfinding, especially as the trend continues to rent office space in large shared buildings.

3 Identify what you want to improve, the type of space and use the color options of the Offices Color Palette for ideas and inspiration.



OFFICES **COMMUNAL SPACES**

ceiling & wall

G9.13.85 83YY 80/18	E8.07.77 10YY 65/095	D5.03.82 70YR 74/045	D4.04.71 67YR 56/055	GN.01.88 83YY 88/033

wall

F8.31.69 45YY 51/365	E4.29.62 98YR 41/326	D2.10.70 59YR 53/163	B0.07.55 90RR 31/100	F6.06.69 40YY 51/084
F6.60.70 39YY 52/691	E0.50.50 75YR 27/487	C4.40.50 28YR 25/461	Z2.32.26 30RR 10/321	CN.02.47 04YR 24/029

accent & feature wall

F6.60.60 37YY 38/594	D0.47.33 50YR 12/406	C3.56.32 17YR 13/463	Z9.19.20 48RR 08/146	CN.01.23 62RR 09/009

Public spaces are not only designed for communal activities, but also as a first impression to visitors. These areas include meeting and conference rooms, as well as receptions, cafeterias and lounges. Colors should be inviting & welcoming, complemented with colors reflecting the workplace's culture & identity. Different colors can be helpful in defining separate departments, floors and to differentiate various facilities. Bold colors attract attention and can provide visual directions and focus in corridors.

OFFICES **WORKSPACES**

ceiling & wall

F5.04.85 41YY 82/071	GN.02.90 65YY 90/062	J9.07.78 50GY 66/111	S1.05.82 90BG 72/063	ON.00.90 81YR 85/004

wall

F1.11.77 20YY 63/149	G1.13.79 54YY 71/171	H7.18.71 10GY 54/238	S6.15.65 08BB 46/152	ON.00.78 17GY 68/005
D5.13.72 70YR 56/190	F7.25.70 41YY 53/306	H7.15.53 10GY 29/158	T0.20.40 18BB 19/153	SN.02.67 95BG 49/025

accent & feature wall

C3.46.30 21YR 13/383	F1.64.54 20YY 28/613	H2.50.60 88YY 38/53	S6.30.20 10BB 07/150	ON.01.26 26BB 10/008

Space-efficient designs, colors, ergonomics & functionality are necessary for office workspaces. Yet the correct color balance is essential for standard work-stations where intense focus is needed. Ideally, no more than two different hues should be combined. Paler colors, in general, are a good choice for workplaces. Soft yellow, sandstone, pale orange, soft green and blue green are always appropriate. Don't forget to use saturated accent colors though, they can help enliven plain workplaces as accents.

OFFICES **INDIVIDUAL WORKING SPACE**

ceiling & wall

J0.05.85 99YY 77/080	LN.02.77 94GY 66/038	S0.05.85 82BG 79/062	T5.04.81 30BB 73/052	ON.00.86 75GY 81/005

wall

H1.21.68 90YY 48/255	N6.08.70 68GG 53/098	S0.09.71 83BG 55/097	U1.06.71 50BB 54/079	ON.00.69 49GG 52/001

accent & feature wall

H8.12.61 10GY 39/136	P1.24.61 90GG 38/242	R5.21.61 69BG 40/190	T3.14.55 32BB 33/133	S0.05.45 95BG 23/044
J0.50.50 21GY 28/472	P0.50.40 78GG 19/378	S9.30.40 15BB 19/227	U0.20.20 52BB 08/128	T7.05.25 42BB 09/032

Private workplaces are where individuals have their privacy to concentrate on their tasks. These spaces require soft or mid-tone colors to encourage focus and concentration. Because of its tranquil, calm and natural qualities, green, especially pale green, along with blue green provides a good environment for tasks involving high concentration. In contrast, large amounts of vibrant colors should be avoided.

OFFICES **SUPPORT AREA**

ceiling & wall

CN.02.88 93YR 86/030	HN.02.88 77YY 86/032	RN.01.85 56BG 81/023	UN.03.81 70BB 73/035	ON.00.83 13GY 77/016

wall

CN.02.76 30YR 63/031	G4.05.77 64YY 65/071	LN.02.67 80GY 50/031	VN.02.67 10RB 47/036	ON.00.76 88BG 62/005

accent & feature wall

E0.60.50 76YR 27/558	F5.72.71 34YY 55/802	K2.60.40 59GY 20/482	Y1.22.29 90RB 12/225	ON.00.50 31BG 26/004
C2.59.33 19YR 13/558	H2.60.60 91YY 40/628	S7.51.34 10BB 13/362	V3.34.18 91BB 07/263	ON.00.10 81YR 06/003

Support areas are often centrally located within workplaces. Such areas should be easily identifiable & accessible to everyone in the workplace. This can be attained by high contrast in both lightness and color intensity. Bold colors can help with the navigation & organization of these spaces. The light, neutral colors help illuminate dim spaces such as archives and parking.

DESIGNING FOR EDUCATION

Intro | Offices | Education | Healthcare | Product information

DESIGNING FOR EDUCATION

CHALLENGE

Schools, colleges and universities are unique places. They must support learning and stimulate the senses, yet allow for concentration. Increasingly, learning environments must additionally balance that requirement to be more robust and inspiring, with the need to provide safe and nurturing environments that are flexible enough to support complex behavioral needs and provide the sense of well-being.

COLOR SOLUTION

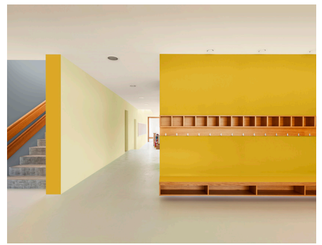
We aim to help students to thrive through the power of their environment. Well-designed schools influence the behavior, motivation and performance of their users and impacts feelings of happiness and excitement. We worked closely with the Sussex University to identify the impact of color on children's performance in school *6,*7. The outcome of this scientific study has been used to design our color schemes. For various spaces in education-environments. Hallways, classrooms as well as sports areas and even staff-rooms, they all have different color requirements to make them well performing spaces for their users to thrive. Next to easy to use color-palettes our products ensure durability and wash-ability, qualities that are an immediate priority for the hard-wearing common areas, such as atriums and corridors, that experience high foot traffic.

* Source 6: The effect of colour on children's cognitive performance. Brooker, A., & Franklin, A. University of Sussex (2015). http://www.sussex.ac.uk/psychology/colour/projects
* Source 7: A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning, Building an Environment 59 678-689, P. Barret et. Al University of Salford, 2013

1 Use the Education Color Palette, identify the type of space, review the color and product options selected for that space. Don't forget to involve the users.

2 Intense red significantly hurts performance of students (by approx. 6%) and should be avoided in classrooms. Overuse of white can cause glare, making concentration more difficult. Use mid-tone colors behind whiteboards whilst keeping other walls neutral, this will help focus attention on the learning wall.

3 Color provides an excellent element for way finding. Different corridors, classroom pods, clusters or wings of a building can be color-coded to help children develop a sense of location in a large school.



EDUCATION **CORRIDORS**

ceiling & wall

DN.03.85
50YR 83/040

F9.04.83
53YY 77/064

LN.00.86
50GG 83/011

ON.01.86
50RB 83/005

GN.00.88
93YY 89/012

wall

C0.04.78
21YR 67/074

G4.15.84
63YY 79/219

M3.08.82
30GG 75/111

R6.11.74
70BG 59/124

SN.00.76
30BB 62/004

accent & feature wall

A5.27.27
70RR 10/250

F6.60.70
39YY 52/691

L1.38.56
90GY 33/408

S9.35.56
11BB 35/316

SN.02.58
12BB 35/025

C6.59.36
30YR 15/550

E8.58.54
10YY 30/560

H2.50.70
93YY 52/598

T4.36.27
30BB 11/244

ON.00.31
87YR 12/005

In corridors, colors chosen must ease navigation and aid recognition. Colors used to differentiate critical surfaces should vary by at least 30 points in their light reflectance values for optimal clarity. Different corridors or wings of a building can be color-coded to help users develop a sense of location in a large school. At the same time, colors can give a school its distinctive personality and identity, especially at the entrance.

EDUCATION **AUDITORIUM**

ceiling & wall

ON.01.87
30BB 83/001

TN.02.82
04BB 75/027

WN.02.82
23RB 76/036

ZN.00.87
99YR 80/020

C7.04.83
50YR 78/064

wall

R9.06.73
85BG 59/064

T0.10.70
14BB 55/113

W2.04.69
30RB 50/072

A5.04.73
70RR 57/070

C6.22.61
38YR 40/290

Q4.20.38
30BG 16/133

T4.20.39
30BB 17/158

W4.13.37
30RB 16/144

Z9.24.26
50RR 10/229

B9.50.36
10YR 15/500

accent & feature wall

M9.18.13
50GG 05/063

T0.30.20
22BB 08/161

U3.15.11
66BB 06/077

Z9.19.12
52RR 06/105

B7.53.22
01YR 09/386

School events, theatrical performances or presentations, the auditorium serves many functions and purposes. As assembly space for mass gatherings, the atmosphere in auditoriums needs to be warm, inviting and comfortable. Warm neutrals in combination with darker colors, such as purple, navy, dark red or green make the space look and feel more intimate. In addition, textures and materials in the auditorium, even the amount of glass used, help define the visual experience within the space.

EDUCATION **CLASSROOMS**

ceiling & wall

DN.00.87
60YR 83/026

F6.03.86
40YY 83/043

HN.02.85
89YY 80/039

S1.05.81
67GY 40/437

UN.00.87
30BB 83/013

wall

E0.10.80
86YR 70/136

G1.13.79
54YY 71/171

K0.05.77
50GY 65/084

S1.12.72
90BG 56/125

WN.01.77
30RB 64/030

E8.40.60
04YY 39/480

F9.43.74
50YY 60/538

J3.23.69
30GY 51/294

T0.10.60
10BB 39/100

W2.04.59
30RB 36/055

accent & feature wall

E0.60.50
76YR 27/558

F4.6763
30YY 41/700

K5.38.62
67GY 40/437

U0.24.39
50BB 18/216

W9.10.32
50RB 13/107

Classrooms have to accommodate many students through their times of learning and reflecting. Such spaces have to encourage focus and concentration. For classrooms subdued colors work best. Warm, earthy tones reduce anxiety, while soft, muted cool colors enhance concentration. Avoid overuse of deeply saturated bright hues as this will create too much stimulation as children will have a hard time focusing. Use color behind whiteboards whilst keeping other walls neutral. This will help focus attention on the learning wall.

EDUCATION **ART CLASS**

ceiling & wall

T4.05.83
29BB 75/065

RN.01.85
56BG 81/023

NN.01.85
70GG 83/023

J9.03.86
50GY 83/060

ON.00.88
00NN 83/000

wall

T0.10.70
14BB 55/113

R7.04.78
61BG 68/049

N9.05.83
75GG 77/065

J9.07.73
50GY 57/096

UN.02.76
70BB 64/035

T3.14.55
32BB 33/133

R4.05.62
70BG 40/050

N6.08.70
68GG 53/098

J0.05.65
20GY 46/067

RN.01.61
50BG 38/011

accent & feature wall

U6.09.35
70BB 15/081

S2.13.39
90BG 17/090

P1.21.54
90GG 30/195

K0.05.47
52GY 24/050

ON.00.10
50BG 38/012

Academic research shows there is a tendency for blue and green to enhance creativity & originality. Light, minimal, neutral but inspiring colors work well since displays of students' artistic endeavors are what bring art rooms to life. Of all the rooms in a school, the art room should have the windows to the best view to inspire learning and creativity. Bright white walls are best avoided because they reflect light, which causes strain and fatigue on the eyes.

EDUCATION **SPORTS FACILITIES**

ceiling & wall

SN.00.81
30BB 72/003

PN.02.82
85GG 76/039

HO.01.86
30GY 83/021

GO.03.81
90YY 73/040

GN.00.85
81YY 81/016

wall

TN.01.71
30BB 53/012

Q5.04.72
30BG 56/045

HN.02.77
96YY 66/036

G5.07.77
70YY 65/090

GO.05.75
54YY 63/072

RN.01.38
03BB 17/015

S1.09.41
93BG 18/066

J0.10.60
12GY 39/101

G5.13.66
70YY 46/160

F3.17.59
30YY 36/185

accent & feature wall

G0.60.70
50YY 53/687

R5.29.55
92YY 51/593

H2.49.69
92YY 51/593

D2.50.50
48YR 26/519

B2.40.40
88RR 18/464

Sports give students a balance between their physical health and intellectual development, at the same time stimulating students' determination and healthy competitive spirit. There are no hard and fast rules on color for sports facilities, however, avoid bright white in large areas which may lead to visual discomfort. Using cool, unobtrusive tones is one key tip. Large expanses of vivid color can be too distracting in such a hectic environment. Using split colors for the upper and lower sections of the walls helps with visibility.

EDUCATION **STAFF ROOM**

ceiling & wall

G3.03.87
67YY 88/044

F0.03.87
20YY 83/038

FN.01.86
40YY 83/021

LN.01.82
10GG 72/022

SN.02.77
84BG 66/028

wall

F4.06.78
30YY 67/084

D6.07.77
75YR 64/102

F0.06.64
20YY 43/083

J2.04.59
37GY 38/050

S0.05.45
95BG 23/044

E8.20.60
11YY 37/219

D2.20.50
57YR 27/226

F2.10.40
21YY 18/079

ON.01.26
26BB 10/008

T0.10.20
20BB 08/051

accent & feature wall

F6.45.56
40YY 34/446

C4.40.50
57YR 27/226

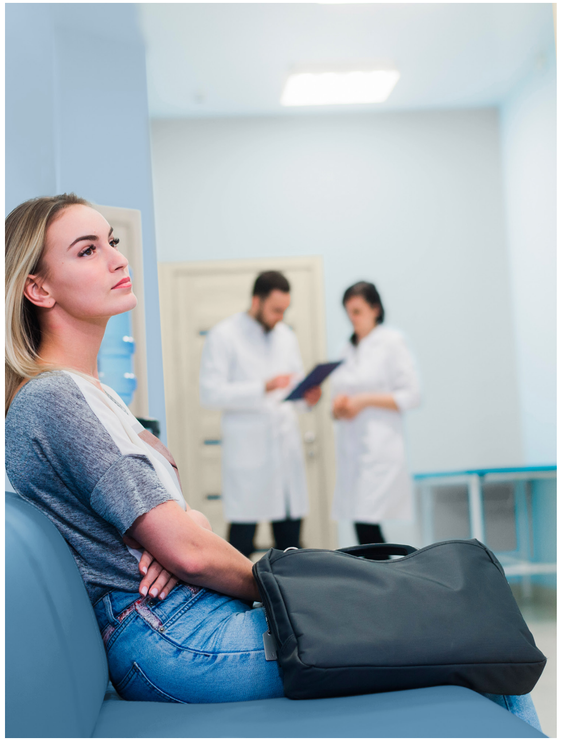
B1.18.51
90RR 28/245

J9.21.65
50GY 44/248

P2.15.51
90GG 28/133

When class ends, not only do students need their space for rest & play, teachers need their own space too. Relaxing, restful and uplifting colors in staff rooms keep teachers motivated to see students through their learning journeys. Accent colors help spark a sense of energy in spaces within staff rooms. By managing contrast in lighting and color you can create a space that stands apart from other spaces, giving teachers the opportunity to step out their daily environment for a while.

DESIGNING FOR HEALTHCARE



Intro | Offices | Education | Healthcare | Product information

DESIGNING FOR HEALTHCARE

CHALLENGE

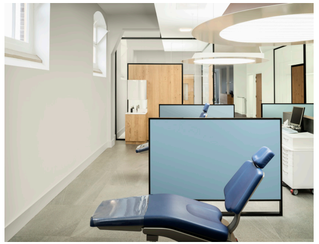
The past years a lot of research has been done to the hospital's visual environment in order to find solutions for problems related to the quality of healthcare facilities. Think of the growing healthcare consumption (partly due to aging), patient recovery as well as the motivation, recruitment and retention of hospital staff. Aesthetics and environment quality are considered to be increasingly important. Cold, formal, inaccessible antiseptic hospital environments are more and more replaced by more friendly and welcoming, attractive areas with color, variety and interest for patients, staff and visitors.

COLOR SOLUTION

When applied with the users' needs in mind, color can improve patient's quality of life, reduce feelings of stress and anxiety aiding recovery. In more practical ways color can be an invaluable tool, aiding wayfinding and navigation *8,*9. Optimal and appropriate color design, but also lighting, materials, art, planting, interior climate and acoustics can contribute to an environment that promotes a sense of well-being for all users of the building. Healthcare spaces need to be friendly and visually attractive, where the well-being of patients is enhanced, staff feel more motivated and visitors are greeted with a warm welcome.

* Source 8: Color and Lighting in hospital design, Hilary Dalke e.o. Color and Lighting in hospital design, article Optics & Laser Technology 38, Elsevier Science, 2006 article Optics & Laser Technology 38, Elsevier Science, 2006
* Source 9: Color Communication in architectural space, G. Meerwein, B. Rodeck and F.H. Mahnke,Birkhäuser Verslag AG, Basel, Switserland, 2007
* Source 10: https://www.duluxtradepaintexpert.co.uk/en/advice/knowledge/creating-colour-contrast-line-equality-act-guidelines

1 Using the Healthcare Color Palette, identify the type of space, review the color and product options selected for that space. Don't forget to involve users.



2 Colors can be used to differentiate between facilities. Clear colors with contrast, such as red, blue and yellow, are useful for zoning between different levels and spaces. Use a strong color at the reception to help guests identify it as a prominent point in the facility.

3 Elderly may have eyesight difficulty in differentiating between green and blue. Create contrast, a minimum of 30 points difference in light reflectance values is especially helpful for theelderly and visually impaired *10.

HEALTHCARE **COMMUNAL SPACE**

ceiling & wall

MN.02.87
36GG 87/038

HN.02.88
77YY 86/032

G3.04.83
67YY 82/072

E0.03.83
98YR 78/041

LN.00.87
11GY 85/016

P0.04.83
95GG 78/054

H0.09.80
83YY 72/129

F8.25.77
45YY 65/334

D6.07.77
75YR 64/102

G0.03.86
90GG 83/011

accent & feature wall

Q3.16.65
30BG 43/163

G3.42.59
61YY 39/443

F6.60.70
39YY 52/691

D3.32.55
60YR 31/368

G0.05.70
46YY 53/062

P7.32.45
10BG 22/248

H3.30.60
95YY 39/329

F6.60.60
37YY 38/594

C4.50.40
22YR 18/488

ON.00.45
28GG 22/002

RECEPTION & CORRIDORS

Highly visible, welcoming entrance lobbies and receptions help put anxious patients and visitors at ease. A comfortable environment with a sense of open space that is easy to navigate. Clear wayfinding signs, with contrasting colors also help guests easily access different spaces within a healthcare facility. Accessibility can be improved by using high contrast in colors.

HEALTHCARE **COMMUNAL SPACE**

ceiling & wall

S1.05.81
89BG 72/060

JN.02.83
30GY 76/017

E7.05.80
08YY 72/077

AN.02.77
67RR 66/044

LN.00.87
11GY 85/016

wall

T0.10.70
14BB 55/113

G4.05.77
64YY 65/071

F1.11.72
20YY 55/151

C0.10.60
12YR 40/146

G0.03.86
90GG 83/011

S8.23.53
10BB 30/203

G3.42.59
61YY 39/443

E8.55.45
99YR 23/456

B6.20.50
04YR 27/258

G0.05.70
46YY 53/062

accent & feature wall

S0.40.20
88BG 08/179

J9.21.41
50GY 18/178

D2.10.30
54YR 12/074

C3.39.26
23YR 10/308

ON.00.45
28GG 22/002

WAITING AREAS

When in physical discomfort and with tensions running high, comfortable and reassuring waiting rooms can help reduce anxiety and stress. Simple domestic colors, combined with neutrals and some lively effects and decorative ornaments, create a more intimate environment that makes visitors feel at ease.

HEALTHCARE **COMMUNAL SPACE**

ceiling & wall

UN.02.85
39BB 81/032

MN.01.86
45GY 83/023

JN.00.88
30GY 88/014

E8.03.85
21YY 82/053

LN.00.87
11GY 85/016

wall

WN.02.72
30RB 56/036

J5.03.71
45GY 55/052

F6.14.78
40YY 67/196

E4.10.76
00YY 62/144

G0.03.86
90GG 83/011

U6.09.58
70BB 35/108

J9.10.64
50GY 43/12

F6.35.68
40YY 49/408

D6.38.51
70YR 27/404

G0.05.70
46YY 53/062

accent & feature wall

V0.28.18
83BB 07/202

M9.21.31
51GG 12/132

F4.49.46
30YY 21/43

D6.49.39
62YR 18/397

ON.00.45
28GG 22/002

RESTAURANT

The restaurant in healthcare facilities should possess a different atmosphere compared to other areas in the building. An open and inviting restaurant attracts visitors. While its decor must complement the healthcare facility, soft lighting paired with brighter colors that are not too saturated are ideal. Since this is a place where visitors can relax and eat, the colors suport an air of warmth and informality.

HEALTHCARE **PATIENT ROOMS**

ceiling & wall

T3.03.81
30BB 72/040

S9.03.81
10BB 73/039

F8.07.85
45YY 82/098

CN.01.87
30YR 83/023

LN.00.87
11GY 85/016

wall

T5.07.77
30BB 63/084

R7.04.78
61BG 68/049

E7.07.79
10YY 68/110

C9.03.77
50YR 65/056

G0.03.86
90GG 83/011

U1.09.60
54BB 39/103

Q5.04.72
30BG 56/045

E8.30.60
10YY 38/316

B7.10.59
10YR 37/143

G0.05.70
46YY 53/062

accent & feature wall

U6.31.25
70BB 09/241

R6.14.65
70BG 44/129

E0.50.50
75YR 27/487

B6.30.40
04YR 18/324

ON.00.45
28GG 22/002

PATIENT ROOMS

Calm and comfortable patient rooms are a safe haven to retreat to for rest and recovery. Colors have to be carefully selected and light delicately positioned. In general, limit the use of high intensity hues on large areas to help accurate visual diagnosis and to avoid overwhelming visual stimulation. Minimize bright green in patient rooms because it causes an unflatteringly skin reflection. Soft tones combined with some color accents are ideal.

HEALTHCARE **PATIENT ROOMS**

ceiling & wall

N9.04.86 90GG 83/057	G4.08.88 66YY 88/114	F2.05.87 23YY 86/081	BN.03.87 18YR 83/042	LN.00.87 11GY 85/016

wall

N8.09.81 79GG 75/125	G3.46.83 62YY 78/618	E1.12.76 90YR 64/166	B1.07.76 90RR 62/124	G0.03.86 90GG 83/011
Q0.20.73 17BG 60/228	H1.33.74 90YY 58/424	D9.47.54 80YR 31/508	C3.41.53 26YR 30/511	G0.05.70 46YY 53/062

accent & feature wall

Q5.44.49 37BG 26/349	K2.30.50 57GY 28/292	C4.75.30 16YR 13/558	A0.41.28 55RR 11/401	ON.00.45 28GG 22/002

PEDIATRY

Children often are fearful of medical treatments. Pediatric units have to breath an air of familiarity and comfort for children to cope with the unfamiliarity of their situation. Such an environment and, for example, a play area, can give children the comfort & security they need to calm their nerves and to soothe their ailments. Colors can either be clear and bright or warm and varied. Avoid using bright yellow for baby units since it reduces the ability to detect signs of jaundice.

HEALTHCARE **PATIENT ROOMS**

ceiling & wall

H0.01.86 30GY 83/021	MN.00.86 90GG 83/011	GN.01.88 83YY 88/033	HN.02.88 77YY 86/032	LN.00.87 11GY 85/016

wall

SN.02.77 84BG 66/028	K0.03.81 70GY 72/025	F9.04.83 53YY 77/064	DN.01.82 50YR 73/022	G0.03.86 90GG 83/011
S0.05.65 90BG 44/049	KN.01.74 79GY 59/017	G5.09.78 70YY 66/130	C0.03.77 30YR 64/044	G0.05.70 46YY 53/062

accent & feature wall

T4.20.39 30BB 17/15	L0.10.60 79GY 36/106	F3.24.57 30YY 35/249	B7.10.59 10YR 37/143	ON.00.45 28GG 22/002

INTENSIVE CARE

Intensive Care Units need utmost care & attention. Soft lighting, controlled by dimmers, creates a restful area with minimal visual clutter. While wall colors should be kept neutral and light with either a flat or matt finishing, some color accents may be used sparingly in selected areas to avoid monotony. The environment must be kept clean, safe & restful for the patient, while also supporting advanced medical equipment to function smoothly. Avoid bright white since it could create glare.

HEALTHCARE **TREATMENT ROOMS**

ceiling & wall

UN.02.86
59BB 81/022

SN.00.86
50BG 83/009

GN.00.88
93YY 89/012

EN.00.87
60YR 83/009

LN.00.87
11GY 85/016

wall

UN.02.76
70BB 64/035

G1.06.80
58YY 72/095

J0.05.85
99YY 77/080

EN.01.81
10YY 72/021

G0.03.86
90GG 83/011

U5.06.67
70BB 49/082

F8.18.76
45YY 63/251

N7.04.73
74GG 60/059

E7.03.76
10YY 64/048

G0.05.70
46YY 53/062

accent & feature wall

U0.23.51
50BB 27/232

F8.31.69
45YY 51/365

P8.12.61
10BG 38/119

E0.15.55
85YR 32/167

ON.00.45
28GG 22/002

CONSULTATION ROOMS

The color choice for consultation rooms depends greatly on the purpose, function and type of treatment or therapy. Patients usually come for a short consultation or treatment. The space is often small. Hence, the use of light colors is recommended to make the room appear more spacious. Friendly, light and pale colors are generally a good choice for consultation rooms. However, apply bolder accents to uplift the mood, eliminate monotony and add some positivity for both patients and staff.

HEALTHCARE **TREATMENT ROOMS**

ceiling & wall

L0.03.86
30GG 83/025

E8.07.83
17YY 79/105

FN.01.85
50YY 49/191

CN.00.88
50RR 83/006

LN.00.87
11GY 85/016

wall

L0.04.78
77GY 68/066

F0.15.79
20YY 67/216

F7.07.86
44YY 80/106

ZN.02.80
26RR 73/037

G0.03.86
90GG 83/011

P8.10.66
10BG 46/112

E8.56.62
10YY 40/608

F9.35.78
50YY 65/454

Z9.06.69
50RR 51/109

G0.05.70
46YY 53/062

accent & feature wall

T1.23.25
27BB 10/138

E0.62.53
80YR 28/650

F4.54.66
30YY 46/608

B5.51.34
00YR 15/510

ON.00.45
28GG 22/002

ACTIVE TREATMENT ROOM

The active therapy or treatment room should stimulate the patient to recover, by doing physical exercises. More saturated colors can be applied in active treatment rooms. Stimulating color-hues like intense red, orange and yellow will encourage patients to actively participate in their treatment's process and progress. In spaces were patients are in therapy to regain the ability to walk, floors could be divided into sections of different hues, which could activate, stimulate and show their daily progress.

HEALTHCARE **TREATMENT ROOMS**

ceiling & wall

QN.02.82 72BG 75/023	MN.00.86 90GG 83/011	KN.02.86 90GY 83/033	H3.04.85 94YY 83/072	LN.00.87 11GY 85/016

wall

Q2.04.81 30BG 72/051	N0.03.77 50GG 63/042	L2.04.81 90GY 73/059	H6.05.78 16GY 66/078	G0.03.86 90GG 83/011
R6.06.73 70BG 56/061	N6.08.70 68GG 53/098	K9.09.72 79GY 57/120	H9.09.69 13GY 52/120	G0.05.70 46YY 53/062

accent & feature wall

T0.20.40 18BB 19/153	P8.16.50 10BG 26/134	L1.11.53 90GY 29/121	H6.20.49 08GY 26/190	ON.00.45 28GG 22/002

OPERATING ROOM

Operating theaters often are blue green, almost, everywhere in the world. There is a functional reason behind this. A monochromatic color scheme, made up primarily of either green or blue, reduces visual strain caused by prolonged visual concentration on the wound. Green colors are ideal because they neutralizes the afterimage caused by blood red and minimizes glare owing to the intense light emitted from operating lamps.

HEALTHCARE **STAFF ROOM**

ceiling & wall

SN.01.85 06BB 79/016	KN.01.85 63GY 83/021	G3.03.84 64YY 83/058	EN.01.81 10YY 72/021	LN.00.87 11GY 85/016

wall

S2.04.76 90BG 63/043	LN.02.77 94GY 66/038	G1.06.80 58YY 72/095	F4.04.73 30YY 56/060	G0.03.86 90GG 83/011
R4.05.62 70BG 40/050	L0.04.65 90GY 46/056	F0.20.61 20YY 38/225	E7.10.53 10YY 30/106	G0.05.70 46YY 53/062

accent & feature wall

T0.10.40 18BB 18/075	J3.19.55 30GY 31/202	F2.50.50 20YY 27/426	C8.42.29 39YR 11/342	ON.00.45 28GG 22/002

STAFF ROOM

Not only do patients need their space for resting and recovering, staff too needs their space. Especially when performing under high pressure it is important to be able to withdraw from time to time. Relaxing, restful and uplifting staff rooms keep healthcare professionals motivated to see patients through their speedy recoveries. Contrast in color and lighting help staff differentiate between their work and rest places. Health matters for both patients and staff.

DESIGNING FOR DEMENTIA & AGED CARE

CHALLENGE

Dementia is one of the major causes of disability and dependency among older people. Worldwide, around 50 million people have dementia and every year, there are nearly 10 million new cases. The estimated proportion of the general population, aged 60 and over, with dementia is between 5-8% *11. Dementia has a physical, psychological, social, and economic impact, not only on people with dementia, but also on their carers, families and society at large. With numbers set to rise to over 152 million people with dementia by 2050, there is an increasingly urgent need to provide living spaces that provide wellbeing and comfort for dementia-patients.

COLOR SOLUTION

It is important that interior designs are created which consider and embrace all users of the facility including staff. From the ambiance to functional use, good color design can create a comfortable and safer place and make a valuable contribution to the well-being of its users. In the palette, colors have been selected and combined to enable enough color and contrast of critical surfaces, minimizing the risk of trips and falls. The contemporary color-palettes reinforce a sense of dignity, instill positive personal connections and provide stimulation within the space *12,* 13.

* Source 11: WHO, Sept 2021 https://www.who.int/news-room/fact-sheets/detail/dementia
* Source 12: https://www.alzheimers.org.uk/sites/default/files/migrate/downloads/making_your_home_dementia_friendly.pdf
* Source 13: Dulux Trade Dementia Friendly Colour Palette and Design Guide www.duluxtradepaintexpert.co.uk/contact

1 Color can be used to improve how a space functions; use contrasting colors on the door and adjacent walls to help residents to identify spaces they can enter. Conversely, paint a door and the surrounding wall the same color to minimize stand-out, discouraging access to restricted areas.

2 Use the Dementia Color Palette, identify the type of space, review the color and product options selected for that space. Don't forget to involve the users.

3 Very white or shiny flooring should be avoided because the reflected light can disturb or dazzle someone with dementia. Also avoid very dark flooring or mats which can look like a hole in the floor.

HEALTHCARE **DEMENTIA**

ceiling & wall

SN.02.85
02BB 81/030

ON.01.86
50RB 83/005

XN.01.84
74RR 76/023

F3.04.86
20YY 83/063

FN.01.86
40YY 83/021

wall

T5.07.77
30BB 63/084

W0.04.78
16RB 69/065

B7.03.77
19YR 67/058

F0.10.80
20YY 70/138

FN.01.79
30YY 68/024

U0.11.50
50BB 26/105

Z2.07.54
30RR 30/103

B8.35.45
07YR 21/415

E4.34.45
93YR 22/305

E4.05.55
02YY 32/054

accent & feature wall

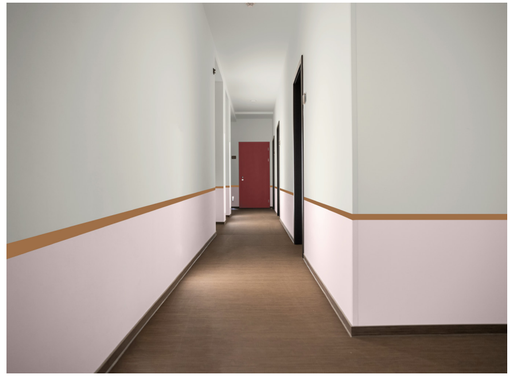
U0.20.20
52BB 08/128

A0.31.23
54RR 09/276

B9.42.20
05YR 08/272

C3.13.14
18YR 05/072

F1.03.27
20YY 11/017



CORRIDORS

Design-for-all, “inclusive design” within any care-environment encourages the application of color and color-design that enables occupants to have greater confidence to move around independently within a space. Colors have been selected and combined to enable enough color and contrast of critical surfaces, minimizing the risk of trips and falls. Within a care home, critical surfaces (walls, floors and doors) should be defined and have contrast between them. The recommendation is a minimum of 30 points of light reflectance (LRV).

HEALTHCARE **DEMENTIA**

ceiling & wall

L1.03.86
10GG 83/018

ON.00.86
75GY 81/005

EN.02.90
14YY 88/041

CN.00.88
50RR 83/006

FN.01.86
40YY 83/021

wall

Q2.04.81
30BG 72/051

K6.05.81
70GY 73/074

G0.05.75
54YY 63/072

E7.05.80
08YY 72/077

FN.01.79
30YY 68/024

P8.16.50
10BG 26/134

H7.15.53
10GY 29/158

E4.30.50
98YR 26/291

C3.12.54
30YR 31/154

E4.05.55
02YY 32/054

accent & feature wall

R2.22.18
70BG 07/086

H8.21.30
14GY 12/129

E3.18.18
00YY 07/093

B6.38.18
09YR 05/305

F1.03.27
20YY 11/017

BEDROOMS

Color can be used within the design-solution as way of reinforcing positive personal connections and to provide stimulation within the space. We all enjoy being in places that are interesting and vibrant and make us feel secure. Colors reduce feelings of stress or anxiety. For bedrooms the main wall colors should be kept soft and light. Feature wall colors are often used for aesthetic purposes, however they can also help with highlighting obstacles, i.e. pillars, handrails, radiators and can also aid with way finding. It is important to apply the color and contrast guidelines to these surfaces.

HEALTHCARE **DEMENTIA**

ceiling & wall

F8.03.85
43YY 81/051

G4.04.88
57YY 86/073

EN.02.88
11YY 85/042

CN.00.86
10YR 83/015

FN.01.86
40YY 83/021

wall

G5.07.77
70YY 65/090

G2.16.81
60YY 72/225

E0.10.80
86YR 70/136

BN.02.77
90RR 64/036

FN.01.79
30YY 68/024

H1.30.50
87YY 27/274

F6.55.54
34YY 31/502

D6.38.51
70YR 27/404

A4.07.48
70RR 24/096

E4.05.55
02YY 32/054

accent & feature wall

K2.16.16
50GY 06/077

F8.37.27
45YY 11/200

D0.47.33
50YR 12406

Y7.12.21
10RR 08/100

F1.03.27
20YY 11/017

COMMUNAL SPACES

The communal area is the space where residents spend a large part of the day. A warm homely atmosphere where people feel comfortable and at ease is important. Try to include some materials that are soft, natural and textured, giving a comforting homely depth and softness to the space. Creating contrast to highlight critical surfaces remain the first priority, but another is to remember that furniture also needs to have contrast with the surrounding walls and floor. For example, use contrasing background or floor colors behind chairs and tables to avoid any confusion and to prevent trips and bumps occurring.

Product Information