


Thuy Le Portfolio



YOUR TIME IS LIMITED,
SO DON'T WASTE IT
LIVING SOMEONE ELSE'S LIFE. 8
DON'T BE TRAPPED BY DOGMA,
WHICH IS LIVING WITH THE RESULTS
OF OTHER PEOPLE'S THINKING. 3
DON'T LET THE NOISE OF OTHERS' OPINIONS
DROWN OUT YOUR OWN INNER VOICE. 2
AND MOST IMPORTANT,
HAVE THE COURAGE TO FOLLOW
YOUR HEART AND INTUITION.
THEY SOMEHOW ALREADY KNOW
WHAT YOU TRULY WANT TO BECOME.
EVERYTHING ELSE IS SECONDARY 1

Evaluating Lighting by Thuy Le

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INSTRUCTOR: CHRISTOPHER, W.



Lighting Design Project I

Collecting photographs : contrast lighting (3), Glare (3), Natural lighting (2), Ambient 4), Task (4), Accent (4),

Decorative Lighting (4). Below are the brief explanation of why each photo fits to the environment.



<http://www.contrastlighting.com/en/video>

CONTRAST LIGHTING

When we want to create the mood or highlighting the value masterpiece in the room, we will choose contrast lighting. It depends on how and what we want to illuminate and the function of the light source. Being able to differentiate between different degrees of whiteness serves to determine distinct applications. we can choose the right color temperature for the atmosphere you wish to create in your room or create a strong contrast lighting in different area of the room.

Contrast Lighting offers a large choice of lighting fixtures and a versatile selection of light sources.

1. Incandescent tungsten halogen lamps: PAR20, GU10 and MR16.
2. Fluorescent and compact fluorescent lamps last a long time and are available in a wide range of color temperatures for an even greater number of potential applications.
3. HID lamps are among the most efficient light sources on the market and are used primarily for commercial and industrial applications.
4. LED lamps, the technology of the future, have a very long lifespan making them perfect to use in hard to reach places.

3 examples of Contrast in Lighting

Contrast Lighting I

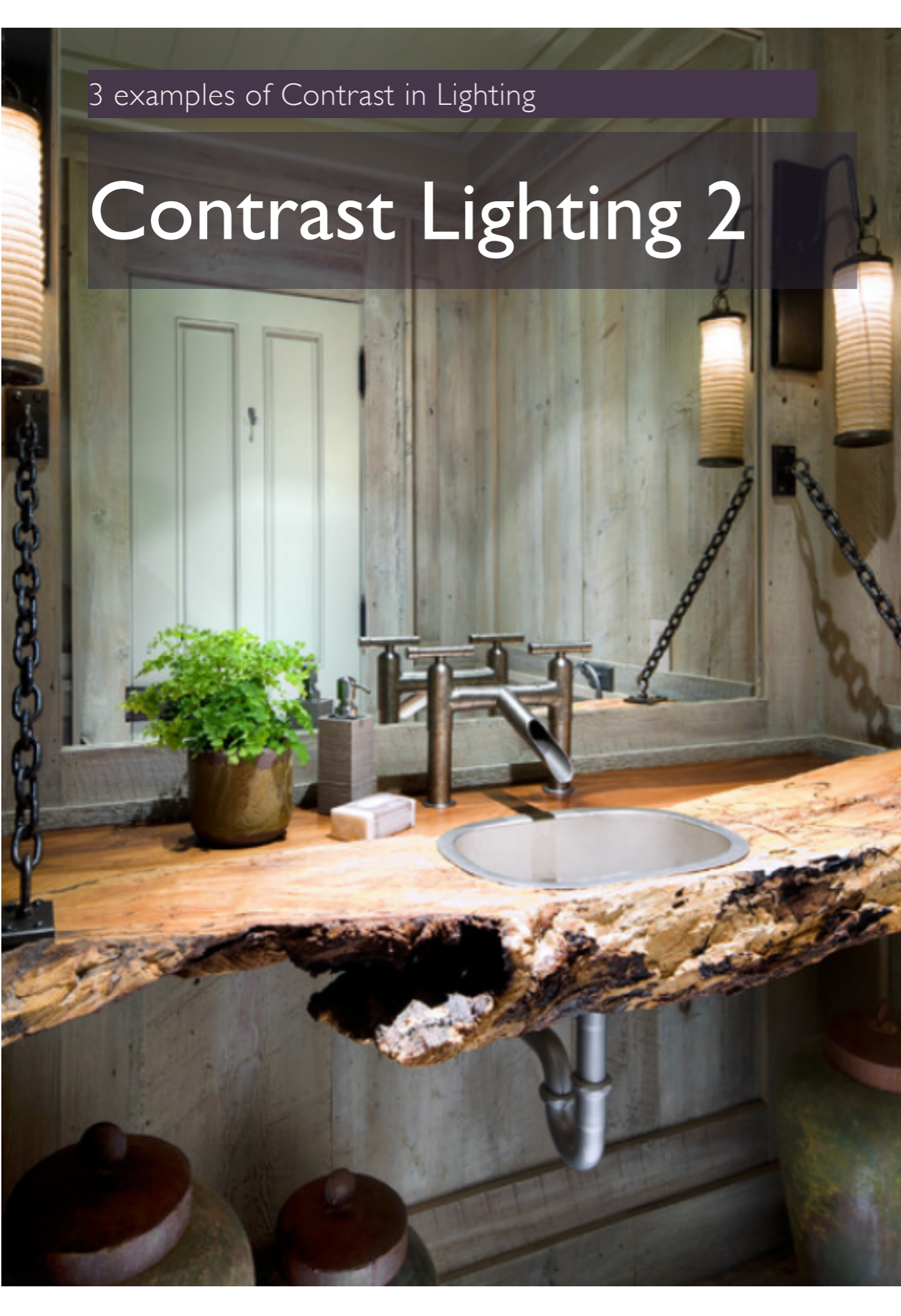


DESCRIPTION CONTRAST 3:1

1. Low contrast lighting creates a uniform illumination, in which all elements attract the same attention.
2. ratio 3:1

In the photo, the luminaire guides our eyes to the end of the hallway. The lights on the ceiling lead us from one end to another end of the hallway and our eyes stick to the wall at the end because the bright light shines the artwork on the wall and the piece of furniture also get attention because of the strong contrast when the light hits on the object. The shadow, highlighting spot and cast shadow help to bring up all the beauty of the edges, the curves and details of the artwork.

Contrast Lighting 2



DESCRIPTION HIGH CONTRAST 5:1

1. The brighter lit elements stand out from the darker background and become focal points in the composition.
2. Great to show off beautiful Art works.
3. Bright in background create silhouette .
4. Create dramatic smoochy atmosphere.
5. Create the personality style.

In this photo, the lighting from the wall works as task lighting and some light on the ceiling bring hit direct to the sink which create the strong highlight on the sink . the contrast ratio is 5:1 and below the sink has a very weak light . The cast shadow under the sink got the contrast 1:7, stand out the details and the beauty of the nature piece of wood. The design of this bathroom has a perfect balance in color composition with the triangle green from the green plant, the vase rustic green vase under the sink and the light green door.

3 examples of Contrast in Lighting

Contrast Lighting 3

DESCRIPTION LOW CONTRAST 1:1 - 3:1

1. Bright light from nature light from the window 1:1
2. Addition task light at the pendant lighting
3. Pleasant, active mood.
4. Comfortable brightness level for the eyes.
5. Ambient light is perfect for the kitchen.

The nature light from the window lit the bright and pleasant mood in this kitchen. The day light come direct to the room with the soft warm color temperature. The light hit direct to the countertop create the freshness on the white cabinet and the reflection from the ceiling to the sink highlight the the faucet. The lighting can adjust more ambient light with the pendant lighting at the dinning table and the countertop. Those tasks light hold the light in some important activities for the family members where they can eat or preparing food and enjoy the healthy food in this kitchen.



<http://www.contrastlighting.com/en/video>

NATURAL LIGHTING

For natural lighting of interior spaces by admitting sunlight.

Daylighting is the practice of placing windows or other openings and reflective surfaces so that during the day natural light provides effective internal lighting. Particular attention is given to daylighting while designing a building when the aim is to maximize visual comfort or to reduce energy use. Energy savings can be achieved either from the reduced use of artificial (electric) lighting or from passive solar heating or cooling. Artificial lighting energy use can be reduced by simply installing fewer electric lights because daylight is present, or by dimming/switching electric lights automatically in re-

sponse to the presence of daylight, a process known as daylight harvesting.

2 examples of Natural Lighting

Natural Lighting I



DESCRIPTION NATURE LIGHT

1. Natural source as sunlight, daylight, moonlight.
2. Incident light = Reflecting light
3. Lit by daylight, not sunlight
4. daylight colors = truest colors
5. Art studios, restaurants, museums, salons, kitchens need plenty of daylight in the interior design.

In this photo, the daylight lit the bright and cheerful light in the room. From the windows and the door, all the lights reach to the bedroom in the morning and bring the energy level of the room in high level. The painting also helps to set the good mood in the morning or the atmosphere of the room will dim down into the drama cozy mood with the light from the fireplace and the decoration light. The painting will dim down the color tone in the night , it is a clever effect in the illuminate of the art work with lighting set up.

2 examples of Natural Lighting

Natural Lighting 2



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In this photo, the windows give all the maximum natural light for the kitchen. Few layers of light add the quality of light in different activities. Such as the chandelier at the dining table is perfect to set up at night to create the romantic mood. The two pendants luminaire at the counter top are great source for preparing food for dinner or the light at the stoves are very useful to see colors when cooking food. More over, some small recessed luminaries to create the ambient mood in the room. It helps to keep the ratio 3:1 if needed. Use the dimmer with LED



<http://www.contrastlighting.com/en/video>

GLARES

Glare is the result of such an excessive contrast in brightness that our eyes can not adjust.

Glare is much more than just reflection, blinds the eyes from seeing details.

A luminaire (lighting fixture) emits light in one of three directions : downward, upward or multidirectional.

Downward light from a properly designed luminaire has a restricted angular spread, direct glare is prevented by both this restricted spread and the shade of the human eyebrow.

Upward light usually covers a large area of the ceiling: the light reflected from the ceiling is of low luminance and is unlikely to cause distracting glare.

Multidirectional light is emitted in all directions, but it cannot emit much of its output sideways without causing objectionable glare.

Direct Glare



DESCRIPTION DIRECT GLARE

1. Direct Glare is caused by the light source being in line with our field of vision.
2. Downward light from a properly designed luminaire has a restricted angular spread, direct glare is prevented by both this restricted spread and the shade of the human eyebrow.

In the photo, the daylight come direct to the bathroom in the morning. The mirror might create the direct glare if the person who sit in the bath tub look direct to the window. However, the window brings ambient light in the bathroom in the morning. Some task lights will substitute in the night time.

Disability Glare



DESCRIPTION DISABILITY GLARE

1. **Discomfort Glare** is glare which is distracting or uncomfortable, which interferes with the perception of visual information required to satisfy biological needs, but which does not significantly reduce the ability to see information needed for activities.
2. **Disability Glare** is glare which reduces the ability to perceive the visual information needed for a particular activity. Disability glare is caused by light scattered within the eye, causing a haze of veiling luminance that decreases contrast and reduces visibility.

In this photo, the reflection from the sun light to the glass of the painting on the table cause the indirect glare. Moreover, the indirect light will reflect on the glass of the painting and the computer screen, too. Probably the Interior Design wants to use the small closet as a workspace as a quiet study room ?!; However it must cause many discomfortable for the eyes and Physically and mentally creates the feeling of being stuck in a tiny space with short distance to the wall. Solution, L shape extension folding table use the value space outside the closet and avoid to face direct to the disability glare.

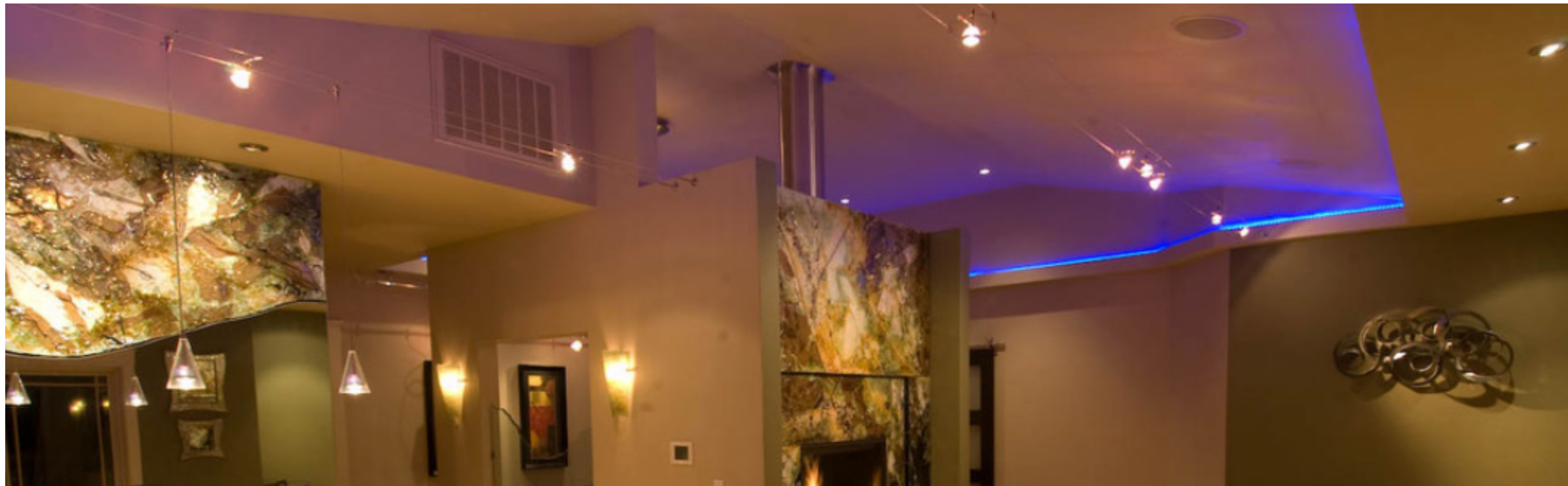
Indirect Glare



DESCRIPTION OF INDIRECT GLARE

1. The sun bound the light from the door to the floor and bound to the ceiling.
2. Some ray sun light get reflection from the windows and bound to the ceiling and some light come direct from the window to the counter top.

In the morning, when the sun come up in the North (at the back yard). The kitchen get reflection from the sun light on the top of the ceiling and shoot the light in the counter top and the floor. The counter top is not only get the light direct from the window, but also get the reflection from the ceiling. The sun light comes from the North, the color of the light has a soft cool color, therefore the light in the kitchen will have a very bright pleasant light in the morning.



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LAYERED LIGHTING

The practice of layered light uses different classifications of light, or layers, to provide good illumination and design flexibility.

There are four general classifications of light named for their primary function in a lighting design: Ambient, Task, Accent and Decorative

Ceiling adjustable spotlights with canopy are perfect for accent lighting. Complete directional spot lights let you add layers to the space by directing lights at different objects such as art, pictures or collectibles.

You can also create a spot light by combining adjustable spot head with a canopy of your choice. You can use single port canopy or

multi port canopy to built your own ceiling spot light. Fast jack system allows allows a designer or homeowner to easily install, change or adjust the lighting scenario to fit changing moods and seasons.

Play of lights, shadows and lighting and volumetric effects. Movable parts that generate and reflect light on the walls, while also acting as a decorative element. The Set collection transforms into a surface wall lamp. Whether positioned on the wall of a small room or a large hotel or office entrance hall, it plays an excellent lighting and decorative purpose. Highlighting the beautiful modeling artwork at the ceiling or piece of furniture also an option.

Ambient I

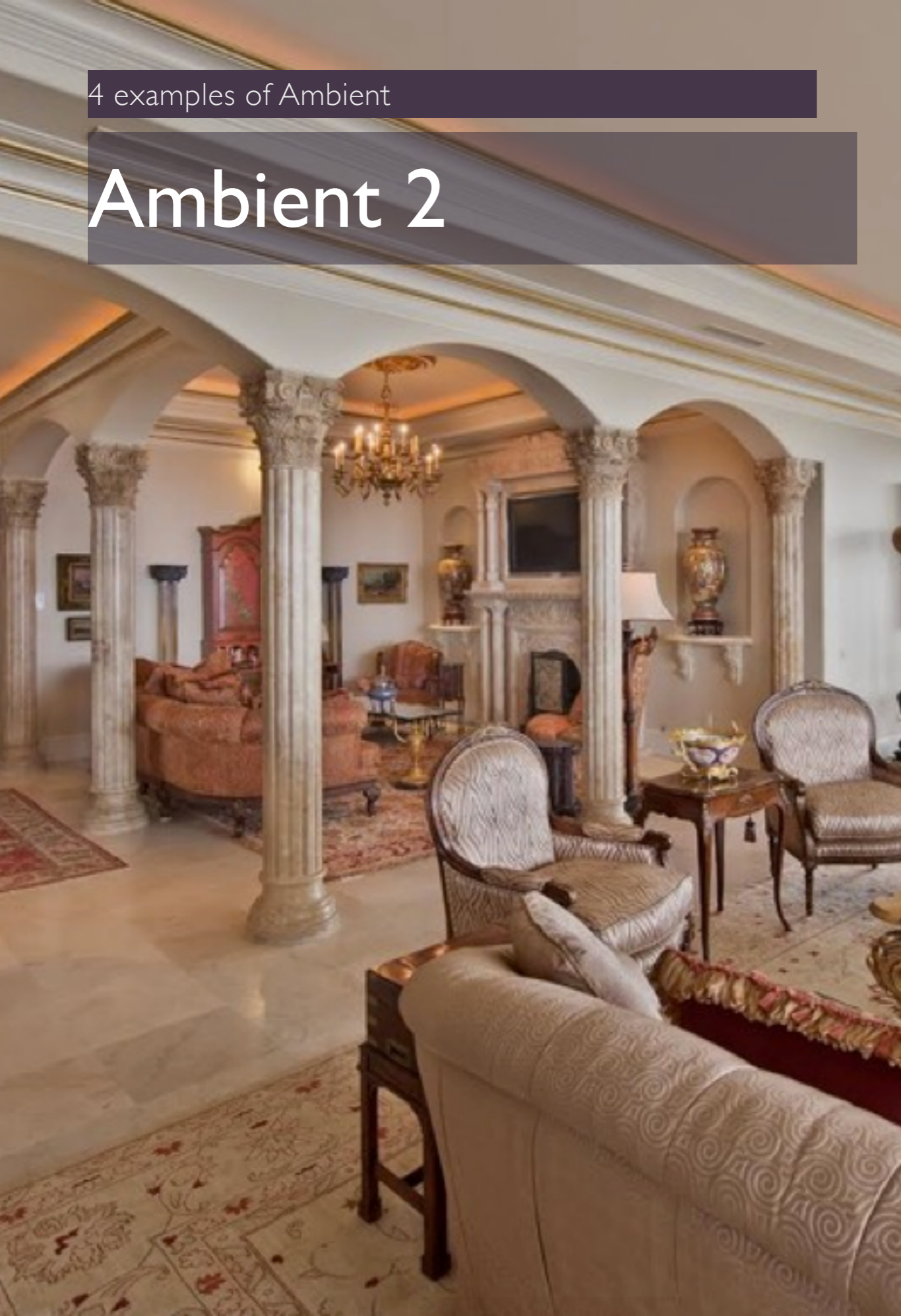


DESCRIPTION AMBIENT

1. General Light, uniform, good visibility and safety
2. Hidden illuminate, soft shadow.
3. diffused or indirect, reflecting gently of surfaces with no direct glare.
4. If daylight is used as ambient light, some artificial substitute must be used at night to maintain the general illumination level

In this photo, the room use recessed lights balance the luminaire of all room. The interior design want to create the ambient effect in this environment. It helps to make the area more spacial when the light spread evenly not higher than the ratio 3:1. The mood glare spread out from some recessed lamps and the stand lamps highlight some artworks or some important objects in the rooms make the rooms are more lively. However, the low contrast lighting keep the rooms look pleasant with this ambient lighting design.

Ambient 2



KEYS OF AMBIENT LIGHTING

1. Hidden Luminaire
2. Equal balance luminaire in the room
3. Daylight is used as ambient light some artificial substitute must be used at night to maintain the general illumination level.

In this photo, the LED Tape lights run along the trim of the ceiling creates the ambient mood in this mansion. of the open space in many session of the house. The lighting spread the light evenly. The natural light is used as ambient light. The chandelier and fireplace must be used to substitute in a small area without natural light. The ambient lighting design make the room more spacial in both opened & closed space. Perfectly, the set up of the furniture in the rooms invite different activities in a warm atmosphere. Members of the family can join as a group or feel comfortable to the quiet zone. Using the warm daylight color temperature is perfect in this house.

Ambient 3



DESCRIPTION AMBIENT LIGHTING

1. Hidden from view
2. Diffused or indirect, reflecting gently off of the surfaces with no direct glare
3. Equal balance luminaire in the room
4. Daylight is used as ambient light some artificial substitute must be used at night to maintain the general illumination level.

In this photo, the Interior designer clever use two skylight to access the natural light source. One use to keep the green, healthy affect in the room and safe the electricity use. The ambient atmosphere is perfect, even thought some artificial light will substitute during night time. Some layers of luminaire will use as task light at the sink area and the bath tub. The ratio 5:1 helps to create the relaxation mood in this environment.

Ambient 4



DESCRIPTION AMBIENT LIGHT

1. General light
2. uniform light that fill an environment allowing good visibility and safety.
3. does not light any specific area
4. soften shadow, comfortable level of brightness

In this photo, the ambient atmosphere spread evenly in all corners of the room. The room has many open door and window for the daylight access to the room. Needless to say more, this bed room is perfect for those who love nature and use the nature light very efficiency.

Task I



DESCRIPTION TASK LIGHTING

1. Focal light is used for lighting specific purposes or activities
2. Directional and local in its effects
3. Flexible and controllable with dimmer or switch
4. Creating more lights within the ambient light
5. Contrast ratio < 3:1
6. work well in individual station

In this photo, the black hanging lamp on the top of the wall uses very clever with its function. The luminaire can use to write, read on the black wall, also can use to read and write on the table. The alternate white table lamp is perfect on the table as well. The task lighting uses perfectly well in the black and white library theme for this small tiny space.

Task 2



DESCRIPTION TASK LIGHTING

1. Lighting for specific purpose or activities
2. Flexible and controllable
3. Create islands of light
4. Contrast ratio should not > 3:1

In this photo, the luminaire uses to light up the studio. There are three session along the wall has it owns hidden light to light up the roll of material, glass table and drawers.

In the middle counter top, the chandelier has a set of lighting. It hangs to high. If the Interior Designer replaces with the long track lighting for the counter top. The task lighting must be perfect in this small studio. Contrast ratio < 3:1.

Task 2



DESCRIPTION TASK LIGHT

1. Task light works well in work space when individual stations can be set to the desired settings.
2. Can be used in larger quantities to provide ambient light itself, but there is a loss of contrast and evenness.
3. Determine to use of task lighting, one must first determine the task that uses it

In this photo, the interior design use this small space for reading books and relax. The decoration lights highlight the pillows as an invitation. The warm color temperature set the comfort feeling as a quiet moment. The reflection of the daylight from the window create a strong shadow and cast shadow on the drawers under the resting place where to keep the books. The decoration lights add more light from the window 's lights give a good light source for reading.

Task 3

DESCRIPTION TASK LIGHT

1. Work well spaces where individual station can be set to the desired settings.
2. Comment source of Glare so the angle of incidence should be carefully set
3. The use of task lighting, one must first determine the task that uses it.

In this standing shower, the lighting set very clever and function with 2 purposes. The first two warm recessed halogen lights will keep the user feel warm when sitting on the bench for relaxing. While the blue rays of LED light set will create the mood of relaxing with the cool color temperature. The reflection and glares are perfect okay to keep the room more interesting when the blue color bound here and there.

Accent I



DESCRIPTION ACCENT LIGHT

1. Strong contrast on each light set
2. Focus on one spot and architectural features
3. discrete and not visible
4. not lighting for activities
5. lighting for stationary
6. dim able light
7. Brightest in any light in the room

In the photo, there are 3 styles of accent lighting : the lighting set at the head of the bed, the ball light and the vase light on the table. The Designer use them very skillful as a theme of “Tea ceremony in Japan” as the decoration of the room when they light up, they all have strong contrast and very bright in the room. When we get in the room, all of the light catch our eyes and force us to take a look on each light. The charming waves of the warm river light at the headboard catch our eyes first, then we move our eyes to look at the ball as a soft moon light and when we sit on the chair drink tea. The lighting create the harmony and the mood of relaxation in the Japanese style.

Accent 2



DESCRIPTION ACCENT LIGHTING

1. Strong contrast to individual items
2. Focus attention on what is being lit
3. Direct our eye to see what we want the viewer focus to look at.
4. Cast shadow, shadow used to create the sense of depth.

In this photo, the accent light is the window artworks. It forces us to look at and see the details on the objects. The shadow and cast shadow of the light bright up the details with the thin, thick, deep or shallow lines in the artworks. The beauty of this accent lighting is the strong contrast of colors and lines. The light create the texture and color move from one color to another color on each panel.

Accent 3



DESCRIPTION ACCENT LIGHT

1. Lighting on the art work, not bright enough to make
2. spot light on each painting or sculpture
3. The Angle of incidence should be carefully set.

In this bath room, the accent lights are installing in the wall as an artworks. The light come out from behind give the strong contrast colors from the art works made by iron cast. Bring up all the details when the light bright up when the contrast ratio 5:1. With the support from the recess lights as a task lighting, they lift up the brightness in the room. They are main source to give the function

Accent 4



DESCRIPTION ACCENT LIGHT

1. Strong contrast to individual items
2. Focus attention on what is being lit
3. Direct our eye to see what we want the viewer focus to look at.

In this photo, the bar environment has a perfect lighting design. The interior designer use the accent light to capture the beauty of the wine rack on the wall. The light track at the bar station crystallizes the glasses with different shapes. The eyes of the viewers will move quickly to the three vases on the top of the fireplace and the spot light invites the viewer rest to the comfortable chair with the bottle of the wine. Little tough of green flower bouquet and tiny decoration piece on the small table bound the green light to the warm color light on the ceiling. It will reduce the strong yellowness colors of the accent light in the room, calmer the eyes of the viewers.

Decorative I



DESCRIPTION DECORATIVE LIGHTING

1. ornamental in nature, designed to light itself.
2. playful light set
3. Lit the light from behind is essential decorative light
4. decorative light lit sign or sculpture
5. Strong contrast between decorative lighting and background
6. attention art work
7. combination of many layers of light.

In the photo, the chandelier looks very playful as the bubble bath . Some task lighting help to bring more light in the bath room. It creates the ambient lighting. The charm of this bathroom is the designer only use a touch of decorative lighting create the beautiful light including some soft light from the shadow the ceiling and the wall above the white bath tub. The nature maple hard wood on the wall and the chair are perfect pair in the room. Simple, elegant and playful are the keys in this design.

Decorative 2



DESCRIPTION DECORATING LIGHT

1. ornamental in nature, designed to light itself.
2. playful light set
3. Lit the light from behind is essential decorative light
4. decorative light lit sign or sculpture
5. Strong contrast between decorative lighting and background
6. attention art work
7. combination of many layers of light.

In this photo, the decoration lighting set play a role as an ornament. It looks very playful and interesting. The candle lights are used as decoration light , too. The green theme play well with some small flower arrangement on the table.

Decorative 3

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1. ornamental in nature, designed to light itself.
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5. Strong contrast between decorative lighting and background
6. attention art work

In this photo, the artist Brian Coleman creates the beautiful art work by colored glass. They are xenon, phosphorescence electricity. It has a beautiful shape and can decor in any room. Great for the bar, cocktail room or home theater.

4 examples of Decorative Lighting



DESCRIPTION DECORATIVE LIGHT

1. Decorate as an Art Work
2. Light up and play with the reflection on the table
3. Just use as decoration, not design for functional purpose.
4. Interesting look

In this photo, the dining room has a beautiful decoration lighting set. The crystal balls with different shapes spread the lights from the light sources of the 3 main lamps. the reflection of the light on the table spread out in an interesting shape. The ceiling get an interesting color composition when the light spread out around from the decoration light.