# – YOUR – CHECKLIST

# LIGHT BULB CHECKLIST

# **CHOOSE THE RIGHT COLOUR TEMPERATURE (K)**

How warm or cool do you want the colour of your lighting to be? What is the appropriate Kelvin rating (K)?

#### WARM LIGHTING:

- Appears soft and intimate Works well for relaxing settings like restaurants,
- boutiques and spas Has a low colour temperature, typically in the 2000K - 3000K range

#### **COOL LIGHTING:**

- Appears brighter and crisper
- Works well for clinical settings like a doctor's office
- Has a high colour temperature, in the 5000K+ threshold



Be sure to take the time to consider how your choice of colour temperature will impact the look and feel of your space.

## CHOOSE THE RIGHT COLOUR RENDERING INDEX (CRI)

CRI is important especially when you're trying to showcase a product. Art galleries, butchers, hair salons and clothing stores all want their product's real colours to be noticed.

#### **RUNNING FROM 0 - 100**

The CRI provides a measurement of how accurately natural colours will appear under a bulb. The closer to 100, the more accurate the colour will appear.

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## **CHOOSE THE RIGHT BULB BRIGHTNESS**

How do you assess how bright or dim a light source will be?

Many people are accustomed to looking at a bulb's WATTAGE (W) when assessing brightness. In reality, we measure a bulb's brightness in LUMENS (Im), and we measure the level of energy consumption it takes to produce that brightness in WATTS.

A traditional **60W** incandescent bulb produces around **800Im**. To achieve the same level of brightness, an LED bulb requires only around **6-8W** of energy. The brightest commercially available LED bulb is rated at **2500Im**.



Understanding this distinction between watts and lumens is also helpful when assessing a bulb's efficiency, something we'll look at in the final section on ENERGY MANAGEMENT.



There are many different types of lights. Some are designated for interior versus exterior use, and some even have ballasts that require installation by a certified lighting professional. Above all, be aware that various bulbs only work in certain lighting fixtures. Whether your bulbs need to be twisted in, clipped into a pin socket, or any other fixture - make sure they can be properly installed.

# **INSTALLATION CHECKLIST**

## **CHECK FOR GLARE**

How can I reduce the impact of glare in my workspace?

Glare is caused by bad lighting placement. Be cognizant of your work station location relative to sources of ficial and natural light.

## **CHECK FOR UNIFORMITY**

Lighting fixture placement and spacing has a dramatic impact on how dark or bright a space is. How do you ensure proper lighting design and coverage throughout your space?

Consider whether the type of lighting your are installing works with the environment you're trying to create:

#### TASK ORIENTED

Focused lighting, like the lamp on your desk.

#### **OVERHEAD LIGHTING**

Lighting above you that typically illuminates an

- lake the time to assess how your lighting is positioned and where some areas for improvement exist
- Uniform lighting is as much about creating a pleasurable atmosphere for your customers as it is about creating a safe environment for your team
- The height or distance of a lighting source from your task space really matters. An overhead light will have a much more intense impact in a space with 10 foot ceilings versus one with 30 foot ceilings



## CHECK IF YOU CAN USE NATURAL LIGHT

Not all your light has to come from bulbs! See if your workspace provides natural lighting opportunities.

# LIGHTING CONTROLS CHECKLIST

### CHECK THE BULB EFFICIENCY

How energy efficient are the bulbs I want to use?

- The efficiency of a light bulb is measured in lumens per watt (lm/W)
- Look for bulbs with a high lumens per watt ratio. A higher Im/W ratio means you get more light output for the same amount of energy
- A lower total wattage means greater energy savings overall

#### How can I be sure the bulbs I'm choosing have a good energy efficiency rating?

An LED light can have anywhere between 70-150 lm/W compared to the traditional incandescent bulb that has anywhere from 10-17 lm/W

#### CHECK FOR AUTOMATION TECHNOLOGIES

What smart technologies and tools are available to help make my lighting more energy efficient?



Automation technologies like timers and applications for your smart phone can be extremely useful to make sure your lighting systems are working for you only when you need them



Motion sensors can be connected with your lighting system so lights are toggled on or off as you enter or leave a room



Dimmers can fine tune lighting output to your specific need



Observe your space and try to identify the energy consumption trends and/or habits that take place. Use that information to inform what smart technology you choose to deploy

## HAVE QUESTIONS OR LOOKING TO GET STARTED ON A PROJECT? Contact your local hydro company or visit saveonenergy.ca



Save on Energy is powered by the Independent Electricity System Operator and offered by your local hydro company.