



Improper lighting can impact employee health

Improper lighting in the workspace results in tired eyes, headaches and pain in the upper back. An audit of the illumination in your office space could be what you need to reduce these common employee complaints, and enhance staff productivity.

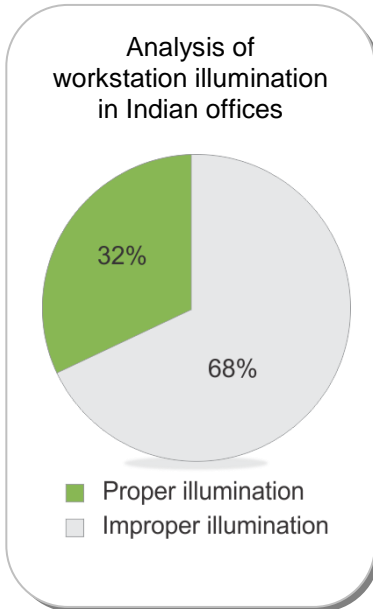
Wellness@work is a Godrej Interio initiative committed to helping improve the health of employees in modern workspaces.

Godrej Interio Ergonomics Cell

Background

A recent study conducted by Godrej Interio revealed that improper illumination in office spaces is the root cause behind common employee complaints such as fatigued eyes and common headaches. While natural light and glass walls are the norm in modern offices, it is important to ensure employees have appropriate lighting at all times.

To better understand the impact of illumination on employee health, the Godrej Interio Ergonomics Cell conducted a research over last few months in corporate across India. The research consisted of observing and analyzing the work profiles, illumination and health of 248 individuals in various organizations. The root-cause analysis done at the end of the research revealed that 68% of workstations are plagued by improper illumination in Indian offices.



Shreekant, a 35 year old finance professional, working in an MNC, recently shifted to his company's new Head Office building, in the suburbs of a metro. His new workstation near the glass facade allows him natural sunlight and a relaxing view. As for his work, his job requires him to work continuously on his laptop.

After 7 months at the new office, he developed a complaint of recurring sore eyes and frequent headaches, inspite of medication. During a chat with a colleague, he realized that the problem of fatigued eyes and headache is quite common in this new office. The problem seems to be something related to the new workspace. To better understand the problem in Shreekant's office and similar cases being reported across corporates, Godrej Interio Ergonomics Cell commenced a research to understand the impact of illumination in these new offices.

*(*According to the research conducted by Godrej Interio Ergonomics Cell team, 68% of the workstations had improper illumination. Of this lot, 58% had 'not enough' illumination while the other 42% were marked by excessive illumination.)*



Different work profiles have different illumination requirements.

Research shows in most offices, the varied illumination needs are often clubbed together, and an averagely acceptable level of lighting is provided in a given space. This may not always be the optimal lighting solution.

Better understanding of illumination needed

In closed spaces, light (availability & type) is a key factor influencing the sense of health and well-being among the inhabitants of a built space. But this factor is often under-estimated or not fully understood by those planning the office spaces.

The GI research also revealed that the problems related to illumination are fairly widespread across Indian offices, with the main causes being :

- Lack of adequate information among employees and concerned management personnel on optimal illumination levels required for different work profiles.
- Lack of awareness about the subject of illumination among the employees.

Understanding office illumination needs

A workspace typically consists of general interaction areas such as lobbies, reception areas, canteens etc. and workstations. The lighting requirement of both these areas are varied. General office areas are lit with dim ambient lighting, supplemented by focused task lighting in certain areas; workstations are illumined by soft ambient light overhead and layered task lighting at the workstation.

Direct light should ideally be reserved for reading and handling paperwork in offices, all other areas should ideally be lit by indirect light that reduces chances of glaring light and reflections.



Improper illumination is at the root of several common nagging health problems in workspaces today.

RESEARCH DIAGNOSIS

Problems caused by improper illumination

The common problems caused by improper (insufficient or excessive) illumination include:

- * Headache
- * Eye irritation
- * Dry eyes
- * Sore neck
- * Pain in upper back muscles.

As we are all well aware, over time, these physical conditions tend to significantly impact and lower employee productivity. Accordingly, these should be addressed at the earliest.

How to measure Workspace Illumination Levels

Measuring and correcting Workspace Illumination Levels can be managed using a gadget called LUX Meter. The ideal illumination levels in the office work-spaces should be around 250 LUX to 500 LUX.

How can employees reduce the discomfort of illumination at work

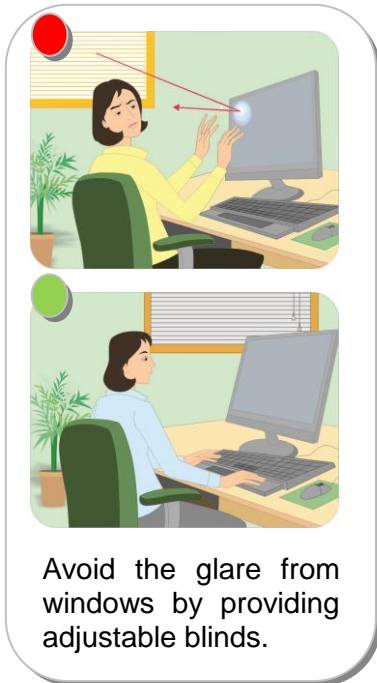
With more and more offices being designed to let in natural light, glare and too much of bright light is a common problem that needs to be addressed. Here are a few guidelines that can make the illumination in your workspace more ergonomic and comfortable.



Optimum lighting is a blend of ambient and task lighting.

Illumination (lux, lumen/m ²)	Activity
100-150	Working areas where visual tasks are only occasionally performed
150	Warehouses, Homes, Theaters, Archives
250	Easy Office Work, Classes
500	Normal Office Work, PC Work, Study Library, Groceries, Show Rooms, Laboratories
750	Supermarkets, Mechanical Workshops, Office Landscapes
1,000	Normal Drawing Work, Detailed Mechanical Workshops, Operation Theatres
1500-2000	Detailed Drawing Work, Very Detailed Mechanical Works
5000-10000	Performance of very prolonged and exacting visual tasks

Data source: engineeringtoolbox.com



Avoid the glare from windows by providing adjustable blinds.

TIPS FOR REDUCING COMMON ILLUMINATION

RELATED PROBLEMS

Overhead lighting

- Use filters to diffuse overhead lighting.
- Dim overhead lights.
- **Recommended level of light in offices 300 - 500 lux** is not a must. It applies in situations where there is no task lamp in use.

Windows and walls

While daylight adds a sense of freshness to the space, too much of bright light, reflecting off the walls or monitor screens can lead to eye fatigue.

Reduce the bright lights by:

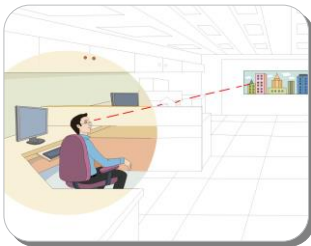
- Covering windows with adjustable blinds.
- Using matte finishes on walls, floors and furniture.

Monitor placement

Most people spend long hours on their computers during the work day.

Depending on the ambient lighting in and around your workstation, follow these guidelines to minimize headaches and tired eyes.

- Adjust monitor brightness and contrast according to your preference.
- Use a light colour for the background.
- Place the monitor parallel to the light source.
- Angle the monitor away from lights and windows.
- Make sure that the task lamp illuminates the document and not the monitor.



Every 20 minutes look away from the screen for 20 seconds: follow 20-20-20 rule. Look at something that is about 20 feet or more away.

WELLNESS TIPS RECOMMENDATIONS

Keep your eyes healthy

Focusing your eyes on objects at the same distance and angle for prolonged periods of time can contribute to eye strain.

- Every 20 minutes look away from the screen for 20 seconds : follow 20-20- 20 rule. Look at something that is about 20 feet or more away.
- Consciously shift your focus from close objects to distant objects.
- Blink several times even as you concentrate.

Improve the illumination in your workspace

- Strike the right balance between natural light and artificial light.
- Conduct an expert illumination audit.
- Assess the different lighting needs of the various work-profiles in your office.
- Equip your various spaces with optimal illumination levels.
- Improve employee health and productivity.

Expert inputs on illumination can help you make the best use of your physical space while minimizing related discomfort of the employees.

To know more and receive free wellness tips, do mail us at wellness@godrej.com