Sick Building Syndrome SBS

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Outline

- What is SBS?
- Symptoms of SBS
- The Cause SBS and BRI’s
- Indoor Air Quality IAQ
- Designing for Healthy Environment
- How could you reduce the effect of SBS?
- Psychological effects of Space, Light and Color
Buildings have a direct effect on our emotion
Sick Building Syndrome SBS

SBS is a term used to describe the sickness or comfortableness that people suffer when they spend time inside a particular building.
Symptoms

- Eye, Nose, Throat irritation
- Dry Cough
- Dizziness
- Nausea
- Itchy Skin
- Difficulty concentrating
- Experience sensitivity to odors
- Fatigue
- Headaches
Causes of Sick Building Syndrome

- Inadequate ventilation is one the most often cited reasons.
- Common chemical contaminants inside the building are found in paint, carpeting, cleaning, and upholstered furniture. These chemicals can emit volatile organic compounds (VOCs).
- Common chemical contaminants from outside of the building can include exhaust from motor vehicles and other industrial plants in the area.
- Poor Indoor Air Quality - Design
Indoor Air Quality

Indoor Air Quality (IAQ) refers to the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants. Understanding and controlling common pollutants indoors can help reduce your risk of indoor health concerns.
A study in Europe shows that 1 out of 6 people are living and/or working in unhealthy buildings.

The BESA reports 70% of workers complaining of poor indoor air that negatively impacts their productivity and health.

According to the US Environmental Protection Agency, indoor air pollution is one of the five biggest environmental threats to public health.
Designing for Healthy Environment

People spend most of their time indoors; in offices, schools, at home, etc. Although we’ve saved it for last, considering the **health of an environment should be at the top of the interior designer’s priority list**. There are several factors to keep in mind when trying to design healthy spaces, such as the

- quality of the air
- heating
- ventilation
- lighting
- acoustics
To improve indoor air quality, it’s important that the air in a room can regularly circulate and remain fresh. **Plants act as natural air filters**, and – contrary to common beliefs – so do carpets. Carpets improve air quality by trapping the dust particles from the air and holding them until vacuumed.
Exposure to natural light is another beneficial aspect for both physical and psychological health. This is especially relevant for workplaces, as natural light reduces stress and increases productivity. In fact, being surrounded by elements from nature (or ones that mimic nature) has a calming effect in general.
A study of daylighting in schools showed that children learn 20-26% faster in natural daylight.

Contact with nature has been found to enhance healing and recovery from illness and major surgical procedures, including direct contact (e.g., natural lighting, vegetation)
How could you reduce the effect of SBS?

Open windows to improve ventilation, if you can
Not set the temperature too high (aim for about 19°C) and don’t change it lots of times during the day
Try to reduce workplace stress take regular screen breaks if you use a computer
Go outside for some fresh air during lunchtime and other breaks
Try these things to see if your symptoms improve
Psychological Effects of Space, Light, and Color

“We shape our buildings; thereafter they shape us.” - Winston Churchill

Architecture can control the way people live, the way they think and the way they feel. By defining the function of your space and meeting your users’ needs, you design an effective building, for each building should be designed first and foremost around their occupants.

How can architecture affect our moods and thoughts?
Space

Space control people’s movements, creating a flow from element to element, telling people where to look, what to read and what’s important. When designing interior spaces, the function of the space, the time people will spend in it, and the mood you want the space to evoke should be taken into consideration.

Generally open spaces are more positive and inviting, on the other hand, closed or tight spaces have a more negative impact.
Light

“Without light we see nothing, without light we are nothing”. Light offers everything apparent, defines its meaning and proves its existence. Light plays a great role in architecture and our psychological behaviours. This is why designers need to study where they should open more windows and use more light.
Colors

Color not only influence our moods but also change architectural perspectives; making us feel that a space is widened or expanded. Depending on the emotions you want to bring, you choose your color paints. For example, in hospitals the color green is often used, for which it is the most comfortable color to the eye and helps healing mentally.
Conclusion

True design provides healthy environment
References


Thanks You
Any Question?