



**TIHUK UNIVERSITY**

**FACULTY OF ENGINEERING**

**Department of INTERIOR DESIGN**

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# **INDS 414 SUSTAINABILITY and the INTERIOR ENVIRONMENT**

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**MSc in Sustainable Building Technology**

## *Week 2 : **Design for healthy environments***



## **Design for healthy environments**

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**

According to the US Environmental Protection Agency, indoor air pollution is one of the five biggest environmental threats to public health. Indoor air pollution is the result of products and materials with high levels of toxic emissions. For example, furniture or equipment that has been treated with harmful chemicals releases dangerous toxins in the air. Designers should look for materials with low emissions of VOC (volatile organic compounds) and other air pollutants.

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.

carpet tiles, made from 100 % regenerated ECONYL® yarn, are specifically designed to capture and retain fine dust. As a result, they contribute to lower air pollution in the environment and reduce the risk of health problems.



With regular, sustainable carpet cleaning, the room environment remains healthy and free of germs and allergens contained in dust particles.

Carpets are also excellent sound insulators, they help to reduce noise by absorbing sound vibrations—an important benefit to the well-being of occupants and residents.



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.

**Biophilic design** is a type of design that recognizes this need to include natural elements into our buildings and interiors and aims to restore the connection between humans and nature.

As nouns the difference between *phobia* and *philia* is that phobia is an irrational or obsessive fear or anxiety, usually of or about something particular while philia is friendship (translating greek" ).

Some health conditions and illnesses have been linked to the quality of the indoor environment, including colds, headaches, respiratory illnesses, musculoskeletal disorders, back pain, and symptoms of SBS.

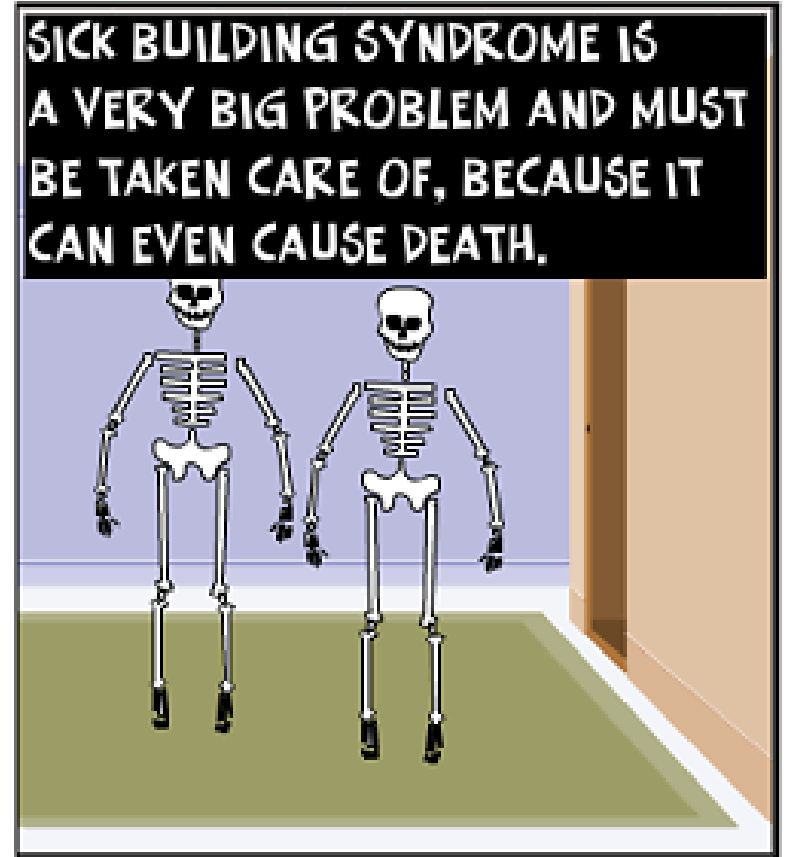
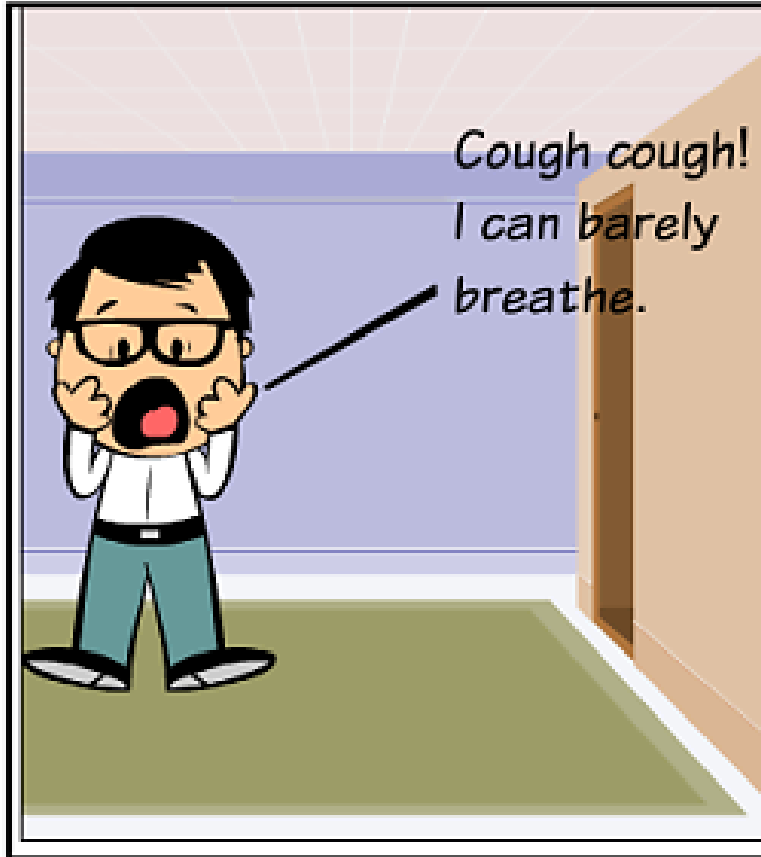
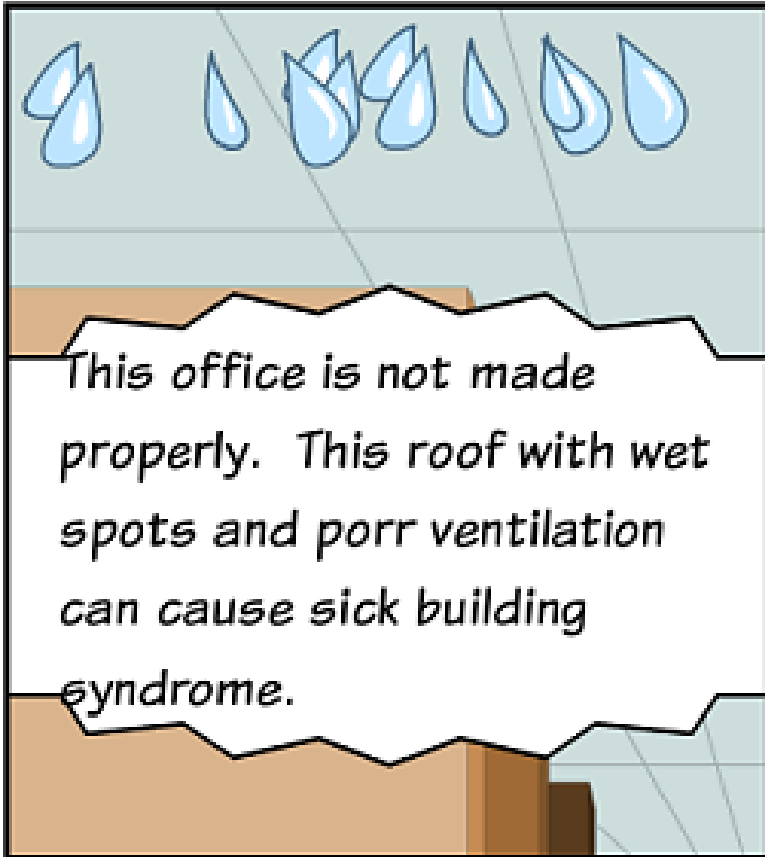
## **SBS: Sick building syndrome:**

Sick building syndrome is the name for symptoms you only get while in a particular building, usually an office.

### SICK BUILDING SYNDROME



**SICK BUILDING SYNDROME - BY 12RHANDLEY**



## Possible symptoms include:

headaches

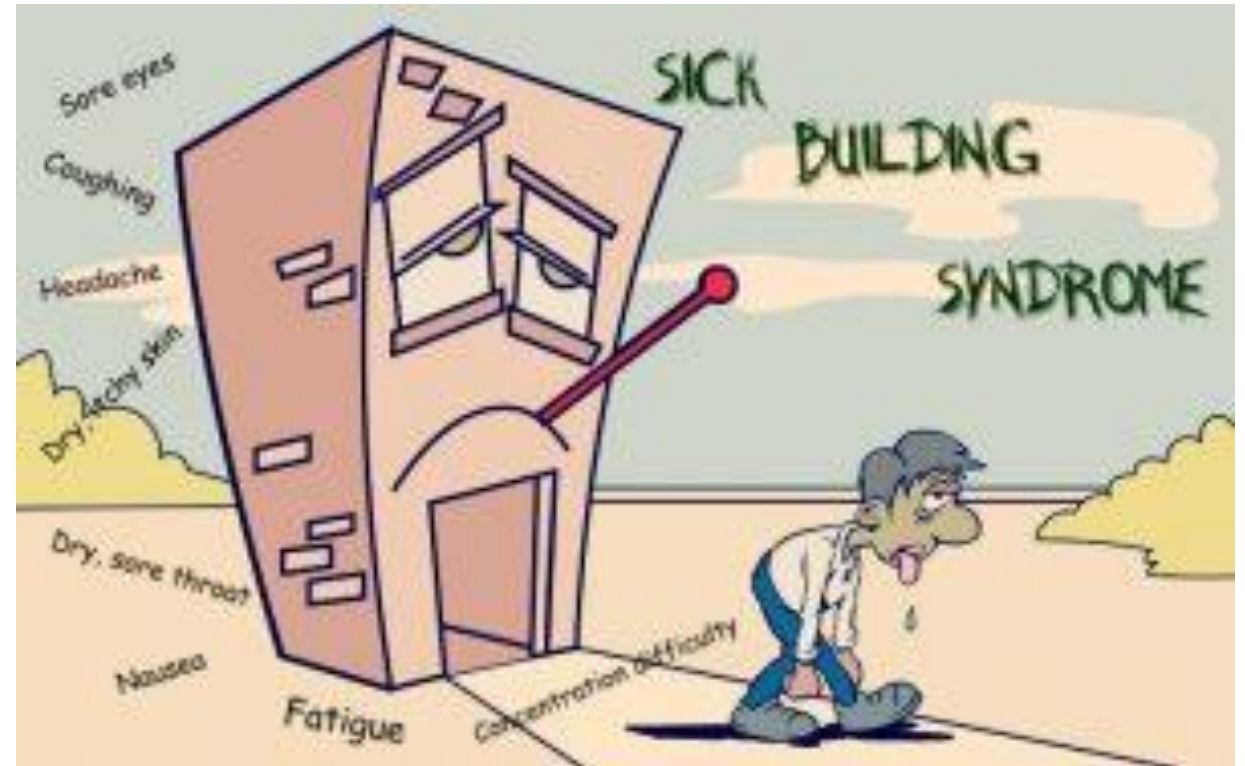
blocked or runny nose

dry, itchy skin

dry, sore eyes

rashes

tiredness and difficulty concentrating



## **How to ease the symptoms yourself:**

It might help to:

- open windows to improve ventilation, if you can

- not set the temperature too high (aim for about 19C) 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.

