Carpet Has Many Healthy Benefits. Indoor air quality (IAQ) has impacted the built environment since the days of dirt floors and mud huts. But IAQ is not just a millennia's old issue. Poor air quality can affect academic performance in schools, productivity in office environments, and health outcomes in hospitals, clinics, and residential care facilities. As one of the most abundant finishes in the built environment, flooring can positively impact IAQ. And despite what some may think, carpet has been shown to be particularly effective at keeping contaminants out of the air.

Insights on Wellness & Flooring: Indoor Air Quality

inform.

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Poor air quality can affect performance, productivity, and health.

How do contaminants enter indoor environments? Dirt, contaminants, and allergens can be tracked in on footwear. Or they can be transmitted as aerosolized droplets when a person coughs or sneezes. Coughing or sneezing creates a "personal cloud" of potentially contaminated droplets, which eventually settle into the floor.

Breathing Zone Analysis

Height of Airborne Particulates





What happens after contaminants settle into the floor? Contaminants can be resuspended into the breathing zone from the floor by foot traffic. Research has shown that soft surfaces such as carpet and textile composite flooring are more effective than hard surfaces at inhibiting re-suspension of contaminants. Environmental experts have concluded that carpet can actually improve indoor air quality because it captures and holds dirt, contaminants and allergens that would otherwise become airborne.

Does cleaning help reduce contaminants that could become airborne? Regular, proper maintenance of flooring is important to controlling the spread of contaminants in the air. Simple cleaning removes dirt, soils, and other impurities. Sanitizers can reduce pathogens on a surface by at least 99.9%. However, hard surface flooring is more difficult to sanitize than carpet or textile composite flooring. Despite sanitization, remaining particles on hard surface flooring can potentially form a contaminated bio-film.

Room Air hard surface Sampling 300 Study 250 Foot Traffic Dust Emissions (µg/m³) 200 150 100 50 textile composite flooring ELAPSED TIME

> CARPET AND RUG INSTITUTE (2018) CARPET AND INDOOR AIR QUALITY, RETRIEVED MAY 2020 FROM HTTPS://CARPET-RUG.ORG/RESOURCES/TECHNICAL-BULLETINS-AND-PAPERS/#ENVIRONMENTAL-AND-SAFETY

CENTERS FOR DISEASE CONTROL AND PREVENTION. (2020) HOW TO CLEAN AND DISINFECT SCHOOLS TO HELP SLOW THE SPREAD OF FLU, ACCESSED APRIL 22 AT HTTPS://WWW.CDC.GOV/FLU/SCHOOL/CLEANING.HTM LANKFORD M., COLLINS S., YOUNGBERG L., ROONEY D.M., WARREN J., NOSKIN G. (2007) LIMITING THE SPREAD OF INFECTION IN THE HEALTH CARE ENVIRONMENT. COALITION FOR HEALTH ENVIRONMENTS RESEARCH AND THE CENTER FOR HEALTH DESIGN.

LUEDTKE A. (2003) FLOOR COVERINGS DUST AND AIRBORNE CONTAMINANTS. INTERNATIONAL E-JOURNAL OF FLOORING SCIENCES. AUGUST.



PO Box 2207 Dalton, Georgia 30722 U.S.A. 800.451.1250 efcontractflooring.com