Summary of the Research Report

To investigate typical concentrations of mold in undamaged floor structures, material samples were taken from available floor structures and examined for possible contamination. Regardless of the specific location of the investigation rooms within buildings, microbial contamination was partially detected. Insulation samples taken from the middle of rooms were less contaminated than those taken from edge joints and near penetrations. Floor structures in restrooms, bathrooms, and kitchens were more frequently affected by mold compared to those in other living spaces.

A fundamental requirement for mold growth is moisture, which may have been introduced through normal use, accidents, or leaks in water-bearing pipes. In isolated cases, insulation layers of bathroom floor areas were found to be completely contaminated. Lower temperatures near exterior walls of older buildings with minimal thermal protection standards can be a cause of increased moisture.

Although microbial contamination in the main areas of floor structures is rare, it is common at edges, leading to mold in floor structures being classified as a typical characteristic.

Even though no impairments to indoor hygiene were evident in the rooms or their interior surfaces prior to the investigations, despite findings in the floor structures, the edges of floor structures with microbial contamination can be disinfected as a precaution using standard methods. Additionally, screed edge joints or connection joints can be sealed against convection. For example, the joints can be covered or filled with sealing tapes or sealants.