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Executive Summary of Research Report

This research project investigated screeds that are intended to be dry. From a hygienic perspective, these do not differ from such floor constructions that are intended to be moist, where no drying is performed, and from which no risks to indoor hygiene arise.

The present research project has shown that there is no transfer of microbial contaminations from layers beneath screeds, such as those in insulation layers, to indoor spaces via convective means, through the so-called pumping effect. Contaminations can only transfer from contaminated edge areas, which are particularly common in cases of water damage. This is especially true with materials such as gypsum plasters, woodchip wallpapers, dispersion paint coatings, and in lightweight construction walls with cardboard-laminated gypsum boards, leading to microbial growth from the edges into the indoor air.

The disinfectant cleaning of screed edges, usually conducted when preserving moisture-damaged screeds, can effectively prevent the release of fungal spores. Furthermore, sealing the screed edge joints with convectively dense measures, such as using joint tapes or permanent sealants to bridge or fill them, can permanently prevent hygienic subsequent burdens on the indoor air.

Thus, screeds can be retained after water damage, and the drying of floor constructions is feasible from technical, medical, and indoor hygiene perspectives. These measures ensure no negative consequences for indoor air quality.