

Prevalence of Plastic Use in Building and Construction: An Analysis of 250 Common Building Materials

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Abstract : Building and construction is the second largest plastic user behind packaging, accounting for 16% of plastic production. Building and construction is also by far the largest user of one of the most impactful plastics, polyvinyl chloride (aka vinyl or PVC), accounting for 69% of PVC production. Building materials also have an outsized contribution to plastic pollution, including microplastic pollution. Yet building materials are often overlooked in plastic waste and pollution reduction efforts. Habitable will present a plastics and petrochemical analysis of over 250 common building material types and demonstrate how changes to building material selection towards safer, renewable, and lower carbon materials can reduce global consumption of plastics and associated pollution.

Keywords : building materials, feneline communities, microplastics, safer alternatives, embodied carbon, life cycle analysis, petrochemicals, green chemistry

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