Willingness to Purchase and Pay a Price Premium for an Apartment with Exterior Green Walls

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Abstract : One of the emerging trends in construction is installing an exterior "green wall" (GW). GW is an overarching and most common term for various techniques of incorporating greenery into buildings' vertical elements, mainly facades. This green infrastructure yields numerous benefits for the urban environment, the public, and the buildings' tenants and users, such as enhancing air quality and biodiversity, managing stormwater runoff, mitigating urban heat island and climate change, improving urban aesthetics and mental wellbeing, improving indoor comfort conditions, and saving energy. Yet, the penetration rate of GWs into the construction market, especially into the housing sector, is still very slow. Furthermore, the research regarding prospective homebuyers' willingness to purchase and to pay a price premium for GW apartment is scarce and does not refer to newly built buildings and to specific GW types. This research aims to narrow these knowledge gaps by exploring the willingness of prospective homebuyers in Israel to purchase a newly built apartment with a hydroponic living wall, the size of the PP that they would be willing to pay for it, and the various factors- knowledge-related, concern, economic, and personal- that influence these motivations. A nationwide online survey was conducted among a sample of 514 adults using a structured guestionnaire. Findings show that despite low familiarity with GWs and strong concerns about various kinds of nuisance, technical issues, and maintenance costs, potential homebuyers express a relatively high willingness to purchase and to pay a significant price premium for such an apartment. Study findings can contribute to better understanding of the maturity of the housing market in Israel to adopt GWs and to better tailoring of intervention tools for increasing GWs' uptake among potential homebuyers.

Keywords : green façade, green wall, living wall, willingness to pay

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