

# SUFFICIENT CONDITIONS FOR PERFECT MIXED TILINGS

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ABSTRACT. We develop a method to study sufficient conditions for perfect mixed tilings. Our framework allows the embedding of bounded degree graphs  $H$  with components of sublinear order. As a corollary, we recover and extend the work of Kühn and Osthus regarding sufficient minimum degree conditions for perfect  $F$ -tilings (for an arbitrary fixed graph  $F$ ) by replacing the  $F$ -tiling with the aforementioned graphs  $H$ . Moreover, we obtain analogous results for degree sequences and in the setting of uniformly dense graphs. Finally, we asymptotically resolve a conjecture of Komlós in a strong sense.

Joint work with Eoin Hurley and Felix Joos.