Abstract. In 2012 Gubeladze (Adv. Math. 2012) introduced the notion of \(k\)-convex-normal polytopes to show that integral polytopes all of whose edges are longer than \(4d(d + 1)\) have the integer decomposition property. In the first part of this paper we show that for lattice polytopes there is no difference between \(k\)- and \((k + 1)\)-convex-normality (for \(k \geq 3\)) and improve the bound to \(2d(d + 1)\). In the second part we extend the definition to pairs of polytopes. Given two rational polytopes \(P\) and \(Q\), where the normal fan of \(P\) is a refinement of the normal fan of \(Q\). If every edge \(e_P\) of \(P\) is at least \(d\) times as long as the corresponding face (edge or vertex) \(e_Q\) of \(Q\), then \((P + Q) \cap \mathbb{Z}^d = (P \cap \mathbb{Z}^d) + (Q \cap \mathbb{Z}^d)\).