During refurbishment of Viennese buildings that have been erected around 1900 an important aspect is to enhance the impact sound insulation of the old wooden floors. Usually the floors are wood beam floors and the uppermost floor is a massive wooden floor called Dippelbaumdecke. Two important measures are taken to increase the impact sound insulation to achieve the minimum requirement of LnTw≤48dB. The paper describes the design of an optimal suspended ceiling to avoid additional measures and as an alternative the impact of an additional thin concrete floor on top of the Dippelbaum-floor to achieve minimum floor heights. As the thin concrete floor has a much larger area than the rooms below the measured results showed a big influence of concrete floor area on the impact sound level.