

STENZEL'S
INVERTED DOME GUITAR

Sebastian Stenzel

Herewith I proudly present a new concept of soundboard construction, not only, but especially for acoustic guitars with elevated neck, which I call Inverted Dome Guitar, or short, ID Guitar.

The ID Guitar's soundboard has a higher efficiency in sound radiation, regardless which type of soundboard or bracing is used: traditional massive soundboard, Stenzel's Enhanced Wood soundboard or any type of double top or lattice braced top.

For guitars with a traditional soundboard architecture (i.e., a convex doming) an elevated neck brings serious disadvantages, because of the force component pulling the bridge upwards, thus reducing the stabilising effect of the doming. This problem is described in more detail in my article "Some Thoughts on Elevated Neck Guitars"¹.

In the ID Guitar's soundboard architecture, these disadvantages are turned into a positive asset and the pull of the strings is actually helping to stabilise the doming. This allows an even lighter soundboard construction, which increases the efficiency of the soundboard, resulting in a louder guitar with greater modulation capacity, while maintaining the traditional timbre of the guitar.

The idea came to me in 2022, but it took a while to find the time to test it. A first prototype of the ID Guitar was completed by me on 1st of February 2024. For better comparability, I chose one of the most common wood combinations: spruce soundboard with Indian rosewood back and sides, with a neck from Spanish cedar and I deliberately made the soundboard 0.2 to 0.3 mm thinner than I normally would have done. The concept was proven.

The ID Guitar is protected worldwide by patent 2025110716410021DE. In addition to the few ID guitars I can make myself, a high end, industrially produced model will be made available in 2027 by Reinhardt GmbH² in Tübingen, as well as licences for making ID Guitars.

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¹https://stenzel-guitars.de/resources/pdf/From_a_Luthier's_Notes_Elevated_Neck.pdf

² <https://www.bestacoustics.eu/en/home>