

The Timber Pavilion of the Vidy Theatre

A Sustainable Pavilion Entirely Made Out of Timber

The pavilion is a double-layered folded plate structure entirely made out of timber, without any screws, nails or adhesive bonding. The double tenon assembly technique developed for this building uses integral mechanical attachments inspired by traditional woodworking joints (see Figure 2). Folded plate structures have the benefit to fulfill both a supporting as well as a covering function, with, in this case, spans ranging from 16 to 20m and a total covered area of 540m². Each arch segment is prefabricated in 3 parts: two walls segments and one roof segment, placed on top of the walls segments (see Figure 1 and Figure 3). Inaugurated in September 2017, the pavilion can accommodate 250 seated people (see Figure 8).



Figure 1. Construction of the timber pavilion of the Vidy-Lausanne theatre: assembly of the first roof segment (18m span) (credits: I. Kramer)

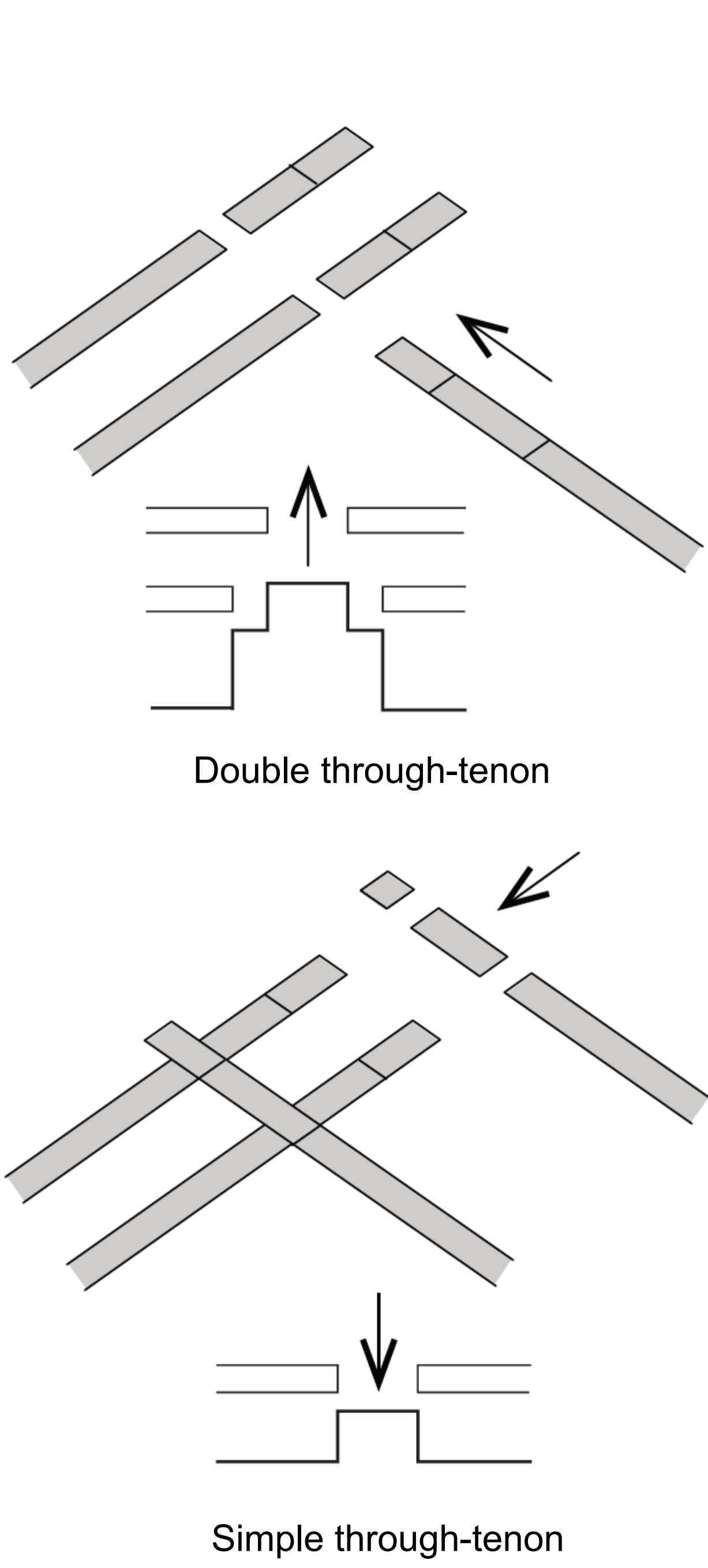


Figure 2. Double-layered folded plate assembly principle

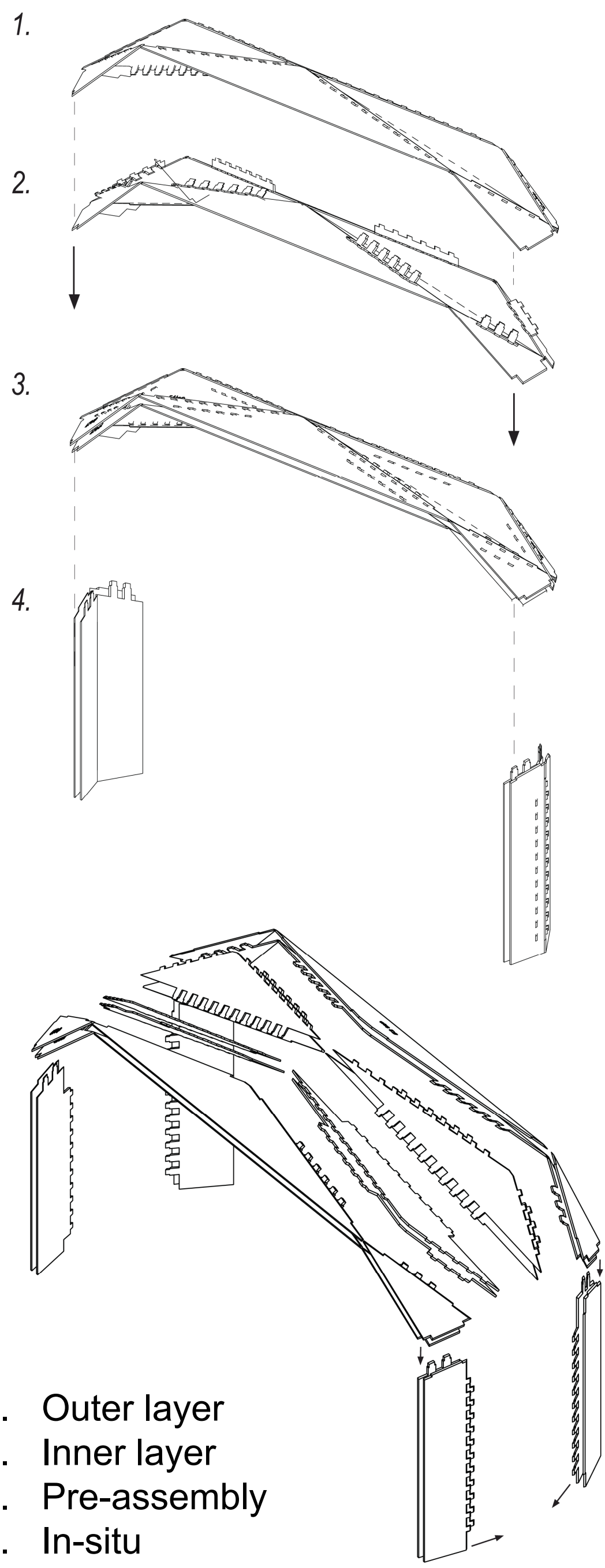


Figure 3. Segments assembly system



Figure 4. Inside of the Vidy-Lausanne theatre (credits: I. Kramer)



Figure 5. Assembly of the integral joints (credits: I. Kramer)



Figure 6. Cutting of the 45mm thick panels (credits: I. Kramer)



Figure 7. Timber pavilion of the Vidy-Lausanne theatre inaugurated in September 2017 (credits: I. Kramer)



Figure 8. Inside of the pavilion of the Vidy-Lausanne theatre inaugurated in September 2017 (credits: C. Wilmart)