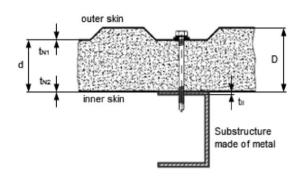
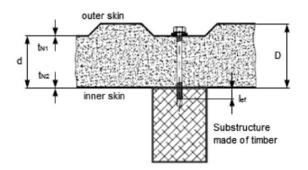
Page 8 of European Technical Assessment DRAFT ETA-13/0179 of 1 September 2017

English translation prepared by DIBt



Examples of execution of a connection





Materials and dimensions

Design relevant materials and dimensions are indicated in the Annexes of the fastening screws:

Fastener Material of the fastening screw Washer Material of the sealing washer

Component I Material of the sandwich panel (outer skin and inner skin)

Component II Material of the substructure

D, d Thickness of component I

 $\begin{array}{ll} t_{\text{N1}} & \text{Thickness of the outer skin of component I} \\ t_{\text{N2}} & \text{Thickness of the inner skin of component I} \\ t_{\text{II}} & \text{Thickness of component II made of metal} \end{array}$

lef Effective screw-in length in component II made of timber (without drill point)

d_{dp} Pre-drill diameter of component I and component II

The thickness tII corresponds to the load-bearing screw-in length of the fastening screw in component II, if the load-bearing screw-in length does not cover the entire component thickness.

Performance characteristics

The design relevant performance characteristics of a connection are indicated in the Annexes of the fastening screws:

 $N_{R,k}$ Characteristic value of tension resistance $V_{R,k}$ Characteristic value of shear resistance

Maximum allowed head displacement of the fastening screw

In some cases component-specific performance characteristics are indicated for an individual calculation of the design relevant performance characteristics of a connection:

N_{B,l,k} Characteristic value of pull-through resistance for the outer skin of component I

N_{R,II,k} Characteristic value of pull-out resistance for component II

V_{R,I,k} Characteristic value of hole bearing resistance for the inner skin of component I

V_{R,II,k} Characteristic value of hole bearing resistance for component II

M_{y.Rk} Characteristic value of yield moment of the fastening screw (for component II made of timber)

f_{ax,k} Characteristic value of withdrawal strength for component II made of timber Characteristic value of embedding strength for component II made of timber

Terms and explanations	
Fastening screws for sandwich panels	Annex 1

Z19169.17 8.06.02-25/15