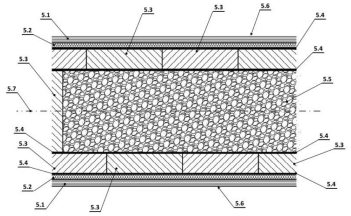
Innovative massive doors



Slika 5.

Innovative massive front door made of reinforced and stabilized oak panel used for general use and construction

The subject invention relates to a technical solution for reinforcing oak panels/slabs where one tries to avoid or reduce the phenomenon of deformation that occurs in differential climate conditions due to different levels of moisture and temperature on certain sides of panels/slabs/doors. This phenomenon is especially present in wooden front doors, but also in other wood products that are located between different climatic conditions. As a result of testing and collected data on deformations, a reinforced and stabilized oak board for general use and construction was constructed as a solution to a technical problem. The middle layer of this panel is made of a frame made of oak elements with insulation material, which is covered with an oak panel on both sides. Between the solid oak board and the oak sticker, a pre-stressed cloth made of glass or carbon fibers is inserted. This technical solution is particularly suitable for use at the boundaries of external and internal use systems (exterior/interior), i.e. in conditions of exposure to differential climate, because the reinforcements in the sublayer allow the migration of moisture and thereby result in negligible deformations of the product. This is especially practical for elements of larger formats, e.g. 1200×2600 mm, where the finished products are placed vertically (entrance doors, facade cladding elements, advertising panels,...), and especially if the direction of the wood fibers is turned horizontally (that is, where the dominant swelling and weighting of wood in width).

Περισσότερες λεπτομέρειες

Πρόκληση η οποία αντιμετωπίζεται

6. Ανάπτυξη της δασικής βιοοικονομίας μέσω κυκλικής χρήσης και προϊόντων προστιθέμενης αξίας

Όνομα χώρου

Έρευνα και ανάπτυξη

Τύπος λύσης

Κυκλικά, βιολογικά προϊόντα

Λέξεις κλειδιά

oak; massive; reinforced; stabilized

Ψηφιακή λύση

όχι

Καινοτομία

Ναι

Χώρα προέλευσης

Κροατία

Κλίμακα της εφαρμογής

Δια-συνοριακό / πολυμερές

Έτος έναρξης και λήξης

2018 - 2022

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REFERENCES AND RESOURCES

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https://spacva.eu

Ιστότοπος έργου

https://spacva.eu/eu-projects/eu-project-spacva-d-d

Αναφορά έργου

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Πηγές

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λογότυπο καλής πρακτικής

λογότυπο επικΕφαλής οργανισμού

Έργο για το οποίο έχει δημιουργηθεί το παρόν φύλλο πληροφοριών

Rosewood 4.0

Ημερομηνία δημοσίευσης

24 Mar 2023

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY