



Competence centre for eco-efficient and durable wood based materials and products

Development of novel bio based panels for use in internal door manufacture

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Aim

Technical Objectives

Sound Reduction Index (SRI) ≥ 38 dBA

(Goal: above 40 dBA for a door thickness below 45mm)

Thermal insulation U-value ≤ 1.6 W/m²K

Fire-proofing resistance IE2 90-C5

Weight Below 90kg

Price range: €400-450



Material selection

Wood

Composite panels

Natural fibres

Sheeps wool

Soundproofing



Testing

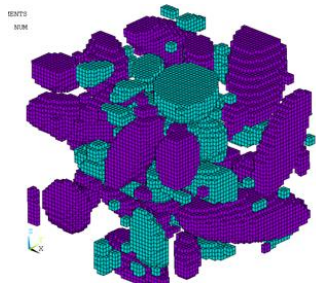
Matrix analysis

Performance

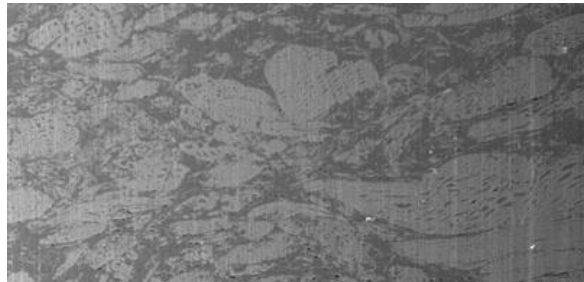
Fire testing

Acoustics

Modelling



Did we succeed???



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