

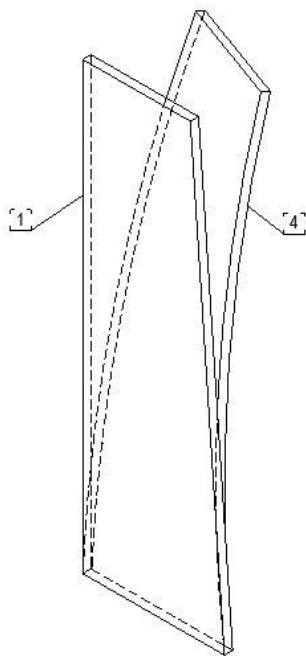
USING SELF-LOCKING CARPENTRY JOINTS IN PLYWOOD TO MODEL DRAGON SKIN SHELL AND ITS STRENGTH PROPERTIES

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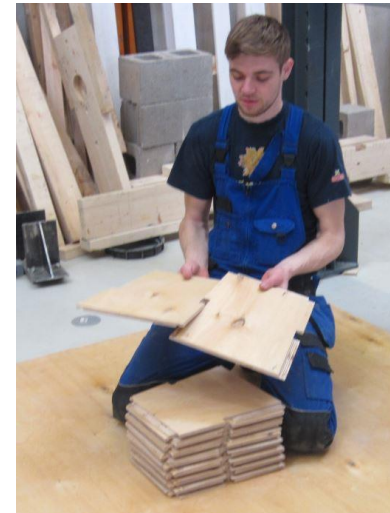
How to use simple flat plywood for two-curved structures?



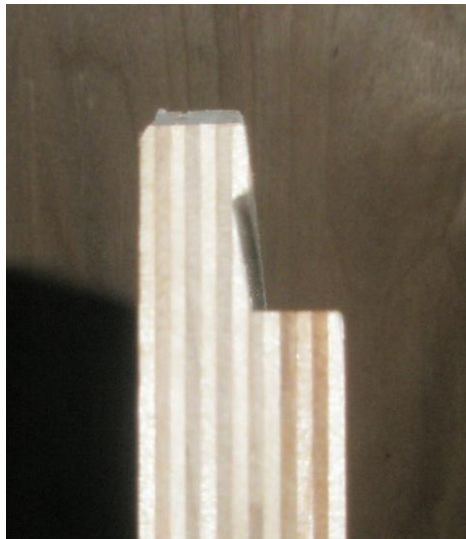
Curved surface can be formed with help of:

METHOD

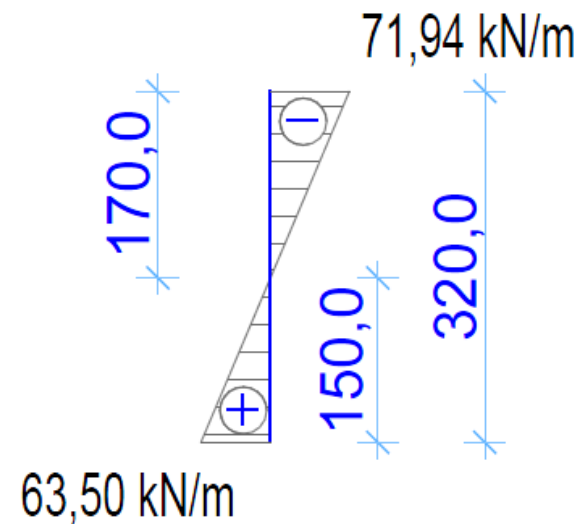
- correct geometry of lamellae
- under squinted scarf-joint for connections



RESULTS



- Shear strength of under squinted scarf-joint was $2,30 \text{ N/mm}^2$ (Seliste V., Teppand T. 2011)
- Shear strength (mean) of glue-connection in plywood from $3,92 \text{ N/mm}^2$ (Siim K. 2011).



- Compressive test of lower (A) level of dome-shell and calculated distributed forces (Turk T. et al 2015).



**THANK YOU FOR YOUR
ATTENTION!**

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