

# CERTIFICATE

## PRODUCT

DALLAS prefabricated stair kit (PSK)



## DESCRIPTION

Structural verification of the staircase Dallas product family. The maximum installation height from floor to top tread is 3250 mm and it has a maximum of 13 treads. The tread width is 650 mm. The following configurations are included in this certificate: Straightway and quarter-turn in any position except the top tread. Wall brackets are demanded in all quarter-turn configurations and straightway configurations with 12 and 13 treads. The required strength of the walls, deck and floor are not included in this verification.

## MATERIAL

|                            |   |
|----------------------------|---|
| Treads:<br>35 mm multiplex | Center stringer elements:<br>Steel, S235 JR |
| Handrail:<br>Ø42 mm PVC    | Balusters:<br>Steel, S235 JR                |

## PARTICULARITIES

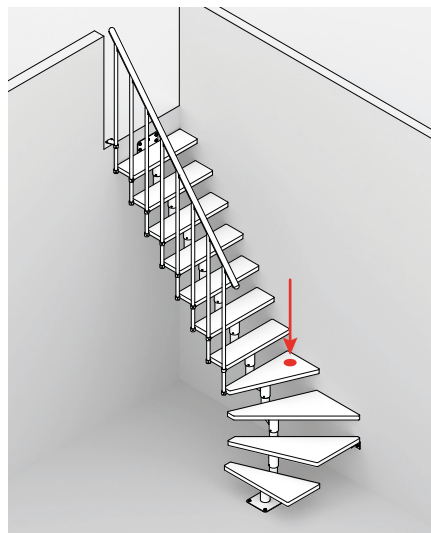
The structure is checked with FEM for deformations and stress.

## EUROCODES

- » EAD 340006-00-0506
- » EN 1990:2002 Eurocode: Basis of Structural Design
- » EN 1991-1-1:2002 + AC:2009 Eurocode 1: Actions on structures - Part 1-1
- » EN 1991-1-6:2005 + AC:2008 Eurocode 1: Actions on structures - Part 1-6
- » EN 1993-1-5:2005 + AC:2009 Eurocode 3: Design of steel structures - Part 1-5
- » EN 1993-1-8:2005 + AC:2009 Eurocode 3: Design of steel structures - Part 1-8

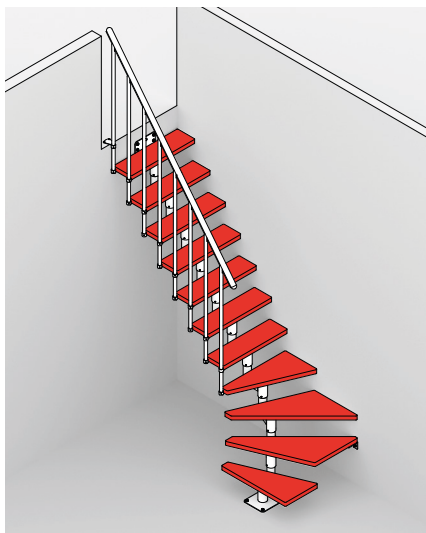
## CONCLUSION

DOLLE DALLAS staircase is calculated according to Eurocodes [1] and the design is found to be strong and stable [2].



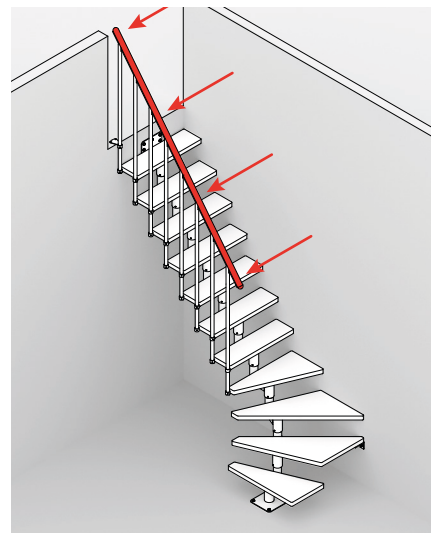
**STAIR POINT LOAD**

Max. 2 kN ~ 200 kg



**STAIR SURFACE LOAD**

Max. 2 kN/m<sup>2</sup> ~ 465 kg total load



**LOAD ON HANDRAIL**

Max. 0,5 kN/m ~ 50 kg/m

## DESIGNATION

Complete product

## REFERENCES

- [1] DOLLE PSK verification procedure
- [2] DALLAS PSK FEA verification report

## CLIENT



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