May 2022



AKKERMAN ENGINEERING SOLUTIONS ApS Torskekaj 1A, 3. sal, 6700 Esbjerg, Denmark CVR: 41 82 40 26

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:		
35	mm	multiplex

Center stringer elements: Steel, S235 JR

Handrail: Ø42 mm PVC Balusters:

Steel, S235 JR

PARTICULARITIES

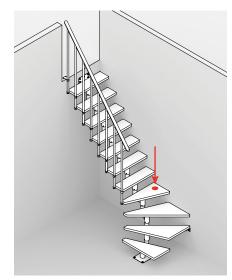
The structure is checked with FEM for deformations and stress.

EUROCODES

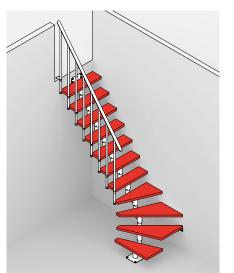
- » EAD 340006-00-0506
- » EN 1990:2002 Eurocode: Basis of Structural Design
- » EN 1991-1-1:2002 + AC:2009 Eurocode 1: Actions on structures Part 1-1
- » EN 1991-1-6:2005 + AC:2008 Eurocode 1: Actions on structures Part 1-6
- » EN 1993-1-5:2005 + AC:2009 Eurocode 3: Design of steel structures Part 1-5
- » 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/m² ~ 465 kg total load

DESIGNATION Complete product

REFERENCES

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

CLIENT

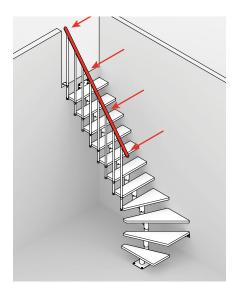


DOLLE A/S CVR: 69 39 50 15 Vestergade 47, 7741 Frøstrup, Denmark





Thomas Sillesen CEO AKKERMAN ENGINEERING SOLUTIONS ApS



LOAD ON HANDRAIL Max. 0,5 kN/m ~ 50 kg/m