

CERTIFICATE

PRODUCT

DUBAI prefabricated stair kit (PSK)





DESCRIPTION

Structural verification of the staircase DUBAI product family. The maximum installation height from floor to top tread is 3570 mm and it has a maximum of 16 treads. The maximum tread width is 900 mm. The following configurations are included in this certificate: Straightway, quarter turn and half turn. Turn can be positioned any place on the staircase except from top tread. DUBAI is approved with Classic 3, Classic 4 and Design banister. Support column and wall support brackets are mandatory to ensure the structural capability of the staircase. The required strength of the walls, deck and floor are not included in this verification.

MATERIAL

Treads: Center stringer elements:

38 mm oak or beech Steel, S235 JR Handrail: Balusters: Ø40 mm oak or beech Steel, S235 JR

PARTICULARITIES

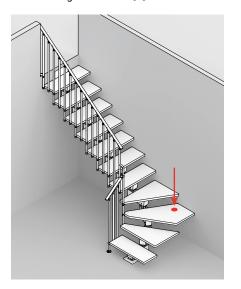
The structure is checked with FEM for deformations and stress.

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

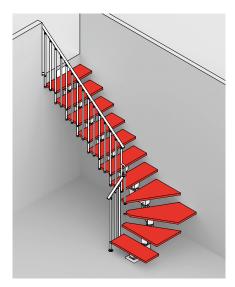
CONCLUSION

DOLLE DUBAI 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 ~ 880 kg total load

DESIGNATION

Complete product

REFERENCES

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

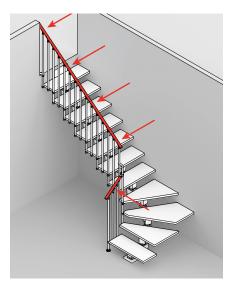
CLIENT



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



Thomas Sillesen
CEO AKKERMAN ENGINEERING SOLUTIONS ADS



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