

CERTIFICATE

PRODUCT

BOSTON prefabricated stair kit (PSK)



DESCRIPTION

Structural verification of the staircase BOSTON 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 700 mm. The following configurations are included in this certificate: Straight-way and quarter-turn in any position except the top tread. Support post is demanded in all configurations. Wall brackets or tread connectors are demanded in all quarter turn configurations. The required strength of the walls, deck and floor are not included in this verification.

MATERIAL

Treads: 33 mm beech or oak	Center stringer elements: Steel, S235 JR	Tread connector: Steel, S235 JR
Handrail: Ø40 mm beech or oak	Wall brackets: Steel, S235 JR	Balusters: Steel, S235 JR

PARTICULARITIES

The structure is checked with FEM for deformations and stress.

EUROCODES

- » 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 1993-1-8:2005 + AC:2009 Eurocode 3: Design of steel structures - Part 1-8

CONCLUSION

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

DESIGNATION

Complete product

REFERENCES

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

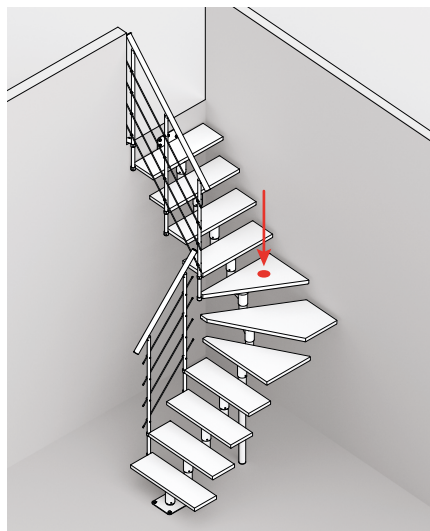
CLIENT



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

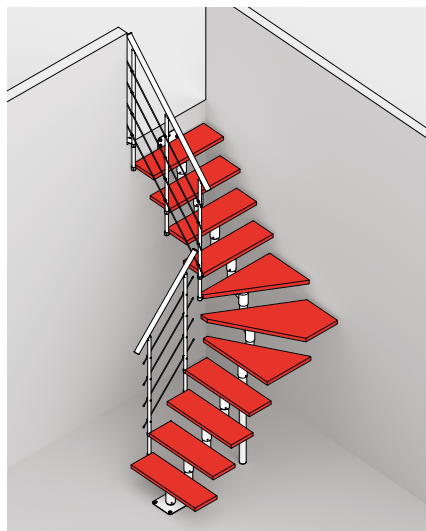



Thomas Sillesen
 CEO AKKERMAN ENGINEERING SOLUTIONS ApS



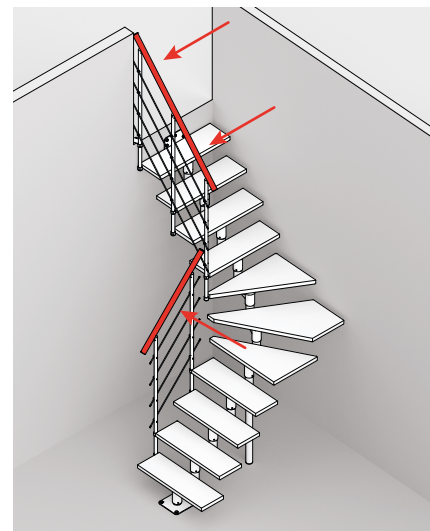
STAIR POINT LOAD

Max. 2 kN ~ 200 kg



STAIR SURFACE LOAD

Max. 2 kN/m² ~ 435 kg total load



LOAD ON HANDRAIL

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