January 2022

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

CERTIFICATE

PRODUCT
ATLANTA prefabricated stair kit (PSK)

DESCRIPTION
Structural verification of the staircase ATLANTA product family. The maximum installation height from floor to top tread is 3000 mm and it has a maximum of 11 treads. The tread width is 580 mm. The following configurations are included in this certificate:
Straight flight.

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
- EN 1990:2002 Eurocode: Basis of Structural Design
- EN 1991-1-1:2002 + AC:2009 Eurocode 1: Actions on structures - Part 1-1
- 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 ATLANTA staircase is calculated according to Eurocodes [1] and the design is found to be strong and stable [2].

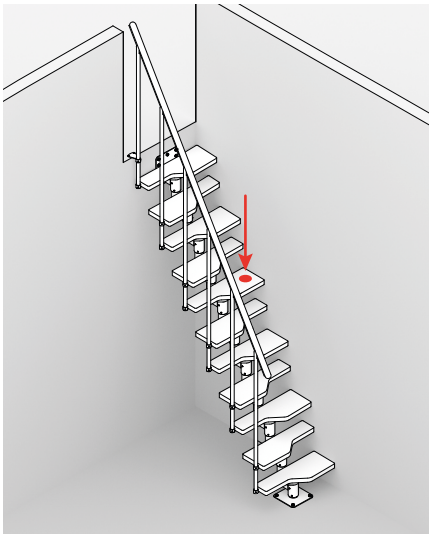
DESIGNATION
Complete product

REFERENCES
[1] DOLLE PSK verification procedure
[2] ATLANTA PSK FEA verification report

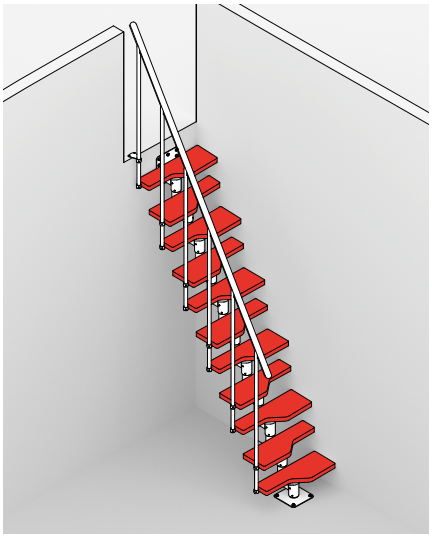
CLIENT
DOLLE A/S
CVR: 69 39 50 15
Vestergade 47, 7741 Frøstrup, Denmark

ISO 9001 BUREAU VERITAS Certification

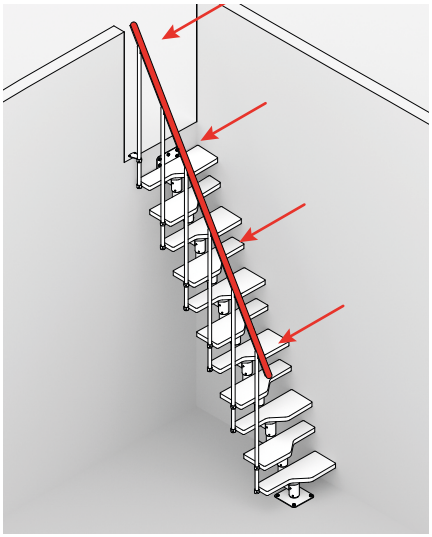
Thomas Sillesen
CEO AKKERMAN ENGINEERING SOLUTIONS ApS



STAIR POINT LOAD
Max. 2 kN ~ 200 kg



STAIR SURFACE LOAD
Max. 2 kN/m² ~ 400 kg total load



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