

CERTIFICATE

Client:	DOLLE A/S
Product:	DOLLE Graz
Designation:	Complete product
Description:	Structural verification of the centre-stringer staircase Graz. The maximum installation height from floor to top tread is 2700 mm and it has maximum 12 treads. The product is approved with minimum 5 balustrades. The staircase can turn from 0 to 90 degrees. The screws for fastening the top module to the wall are not included in this verification.
Material:	Treads: 35 mm multiplex Centre construction: Steel, S235 JRG2 Handrail: Ø25 mm Steel, S235 JRG2 Balustrades: Ø25 mm Steel, S235 JRG2
Particularities:	The structure is checked with FEM for deformations and stress.
Eurocodes:	EN 1991-1-1:2007 Eurocode 1: Actions on structures - Part 1-1 EN 1991-1-4:2007 Eurocode 1: Actions on structures - Part 1-4 EN 1993-1-8+AC:2007 Eurocode 3: Design of steel structures - Part 1-8
References:	[1] DOLLE® Design basis for ladders and stairs, rev. 01
Conclusion:	DOLLE Graz staircase is calculated according to Eurocodes [1] and the design is found to be strong and stable.

ISO 9001 : 2015
Management System Certification
BUREAU VERITAS
Certification Denmark A/S



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Jan Riis Bovbjerg
Senior Management Consultant
BIIR ApS

A handwritten signature in black ink, reading 'Jan Riis Bovbjerg'.