

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by

Francois Grimal, Chairman of the board  
Frøstrup d. 31/3-15



Signature

Place and date

## Declaration of conformity:

Dolle Modular staircases:

Graz

is designed and manufactured according to ETAG 008:2001 part 1.

Material and manufacturing of the staircase complies to ETA 07/0193.

Dolle Suzhou Indu. Co. LTD is certified by inspection of FPC system based on ETAG 008:2002 and ETA 07/0193. The FPC system is under continuously surveillance, assessed and approved by ITeC (Institut de Tecnologia de la Construcció de Catalunya). Furthermore compliance to ETAG 008:2002 part 1 is declared by this document and by CE-marking of the products in accordance to ETA 07/0193 section 3.

Reaction to fire class F – no performance determined.

31-03-2015



Francois Grimal

Chairman of Dolle Suzhou Indu. CO. LTD

## Declaration of Performance

1. Building material category:  
Prefabricated stair kit
2. Building material identification:  
ETA 07/0193 Modular staircases  
Product name: Graz (Trade name: Athena)  
Dolle A/S product number: 68540 AL
3. Intended use or uses of the construction product:  
Dolle Spiral modular are defined as means of internal access under the category "floors" because this type of staircase is for use in private homes as opposed to stairs, which are used as external access in larger building complexes.  
The staircases are meant to be used as secondary access ways.
4. Name and contact address of the manufacturer:  
Dolle Suzhou Indu. CO. LTD  
32 Yongfang Rd., Huangqiao Street  
XiangCheng District  
215132 SUZHOU, Jiangsu, China
5. Name and address of authorized representative: Not available.
6. System of assessment and verification of constancy of performance of construction product: System 2+
7. Not available.
8. ETA Danmark  
Issued Technical Approval: ETA 07/0193  
on the basis of Technical Approval Guideline:  
ETAG 008:2002



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Dolle Suzhou Indu. CO. LTD  
32 Yongfang Rd., Huangqiao Street  
XiangCheng District  
215132 SUZHOU, Jiangsu, China

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2292/CPR/4293

Notified body:

ITEC – The Catalonia Institute of Construction Technology  
 Wellington 19 - E08018 Barcelona - Tel 933 093 404  
 fperez@itec.cat - www.itec.cat

Performed assessment and verification of constancy of performance described in the ETA 07/0193 under system 2+

And issued certificate of conformity of the factory production control:

1220-CPR-1211

Essential characteristics	Performance	Reference to ETAG and/or ETA
Steps • E0 • G <sub>mean</sub> • f <sub>m,k</sub> • F <sub>v,k</sub> • γ <sub>M</sub>	Plywood  10000 [N/mm <sup>2</sup> ] 600 [N/mm <sup>2</sup> ] 30 [N/mm <sup>2</sup> ] 3 [N/mm <sup>2</sup> ] 1,5	ETAG 008 and ETA 07/0193
Center String modules and banister • E • G • F <sub>y,k</sub> • F <sub>u,k</sub> • γ <sub>M</sub>	S235JRG2  210000 [N/mm <sup>2</sup> ] 81000 [N/mm <sup>2</sup> ] 235 [N/mm <sup>2</sup> ] 360 [N/mm <sup>2</sup> ] 1,1	ETAG 008 and ETA 07/0193
Set screws • E • G • F <sub>y,k</sub> • F <sub>u,k</sub> • γ <sub>M</sub>	S275  210000 [N/mm <sup>2</sup> ] 81000 [N/mm <sup>2</sup> ] 275 [N/mm <sup>2</sup> ] 410 [N/mm <sup>2</sup> ] 1,1	ETAG 008 and ETA 07/0193
Load/displacement behaviour and vibration behaviour (dead load/single load of F = 1,0 kN): Deflection max Frequency	Determined by assessment W ≤ 5 mm ≥ 5 Hz.	ETAG 008 and ETA 07/0193
Load bearing capacity ultimate limit state: Flight: vertical distributed load Step: vertical single load Handrail: Horizontal line load γ <sub>M</sub>	  9,96 kN/m <sup>2</sup> 3,39 kN 0,97 kN/m 1,1	ETAG 008 and ETA 07/0193

Load bearing capacity at serviceability limit state: • Deflection of the flight under service load ( uniformly distributed load ) Load F <sub>s</sub> • Length of the median line of the flight • Deflection of step under service load (P) (point load) Load F <sub>s</sub> • Deflection under service load related to the median line of the flight	  p: 6,25 kN/m <sup>2</sup> L: 2940 mm  P: 2,7 kN L: 2940 mm  W: L/200	ETAG 008 and ETA 07/0193 EN 1991-1-1
Load bearing capacity – Service loads Vertical variable uniformly distributed load q Vertical variable single load Q	6,0 kN/m <sup>2</sup> 2,1 Kn	ETAG 008 and ETA 07/0193
Resistance to earthquakes	NPD	ETAG 008 and ETA 07/0193
Resistance of the fixing	NPD	ETAG 008 and ETA 07/0193
Reaction to Fire	Class F	ETAG 008 and ETA 07/0193
Fire resistance	NPD	ETAG 008 and ETA 07/0193
Hygiene, health and environment	Does not contain classified substances. Class E1	Regulation 1272/2008 and EN 13986
Slipperiness	NPD	ETAG 008 and ETA 07/0193
Impact resistance	NPD	ETAG 008 and ETA 07/0193
Resistance to deterioration caused by physical, chemical and biological agents	Resistant	ETAG 008 and ETA 07/0193

9. The performance of the product identified in points 1 and 2 in conformity with the declared performance in point 8.