



# CERTIFICATE

## **PRODUCT**

CORK prefabricated stair kit (PSK)







## DESCRIPTION

Structural verification of the staircase CORK product family. The maximum installation height from floor to top tread is 3375 mm and it has a maximum of 15 treads. When the staircase is installed with 13, 14 or 15 treads then a support post is demanded. The tread width is 710 mm. The following configurations are included in this certificate: Straight flight, quarter turn and half turn. Turn can be positioned any place on the staircase except from top tread. CORK is approved with Classic II, Classic III and Style6 banister. 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**

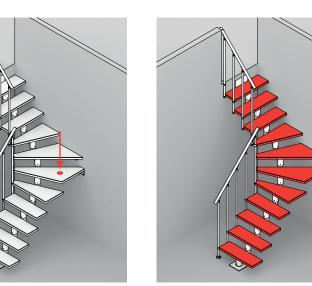
The structure is checked with FEM for deformations and stress.

## **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 CORK** staircase is calculated according to Eurocodes [1] and the design is found to be strong and stable [2].



STAIR SURFACE LOAD

Max. 2 kN/m<sup>2</sup> ~ 500 kg total load

## **DESIGNATION**

Complete product

## REFERENCES

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

#### CLIENT

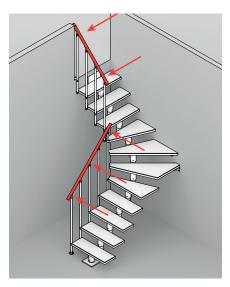


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LOAD ON HANDRAIL Max. 0,5 kN/m ~ 50 kg/m

# STAIR POINT LOAD

Max. 2 kN ~ 200 kg