

CLASSIFICATION REPORT LOADBEARING FLOOR

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|-------------------------|------------|---------------------|---|
| Name of sponsor: | Dolle A/S | | |
| Product name: | None | | |
| File no.: | PCA10747A | Revision No: | 1 |
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Sponsor information

Sponsor: Dolle A/S
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The results relate only to the items tested. The classification report should only be reproduced in extenso – in extracts only with a written agreement with this institute.

| Revision chronology | | | | |
|---------------------|------------|---|--------|----------|
| Rev. no. | Date | Description | Author | Approved |
| 0 | 04-10-2021 | Original version | MNP | ADR |
| 1 | 24-02-2022 | Updating reports in support of classification | MNP | NOL |

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Introduction

This classification report defines the classification assigned to the product in accordance with the procedures given in DS/EN 13501-2:2016.

This classification report includes the direct field of application of the test results.

Details of classified product

General

Producer of product: Dolle A/S

The product had no designation.

The classification is valid for the following end use application: Loadbearing floor.

Product description

The product is a loadbearing floor construction made of particle boards, wooden beams, insulation, wooden joists and gypsum boards. The loadbearing floor included a hatch designated REI60. The hatch was installed in a cavity of 800 x 1600 mm (W X L) and consisted of a wooden frame and a wooden leaf with isolated core.

The test specimen had a free span length of 4140 mm and exposed length of 4000 mm. The test specimen was loaded as to obtain a maximum moment per beam of 2.94 kNm at the request of the sponsor.

The details of the product are described in DBI test report PGA11973A_rev1 dated 24-02-2022.

Reports in support of the classification

Test report

The product was successfully tested in accordance with EN 1365-2:2014. The evidence for this is given in the test report listed below:

| Reference test: | | | | |
|--|-----------------|---------------------------------|----------------|--------------|
| Name of Laboratory | Name of sponsor | Test report file no. | Test method | Date of test |
| Danish Institute of Fire and Security Technology | Dolle A/S | PGA11973A_rev1 dated 24-02-2022 | EN 1365-2:2014 | 07-07-2021 |

Test results

The test specimen in PGA11973A_rev1 was, loaded as to obtain a maximum moment per beam of 2.94kNm at the request of the sponsor:

| Test Duration | Parameter | Test results |
|---------------|--|---|
| 68 minutes | <p>Load-bearing capacity</p> <ul style="list-style-type: none"> - Failure of vertical deflection - Failure of vertical deflection rate <p>Integrity</p> <ul style="list-style-type: none"> - Time of ignition of cotton pad: - Time of occurrence of sustained flaming: - Time of failure of gap gauge criteria: <p>Insulation</p> <ul style="list-style-type: none"> - Failure of insulation due to failure of integrity: - Time of failure of measured average temperature rise: - Failure of maximum measured temperature rise (fixed thermocouples covering I₁): - Failure of maximum measured temperature rise (fixed thermocouples covering I₂): | <p>No failure</p> <p>No failure</p> <p>No failure</p> <p>68 minutes</p> <p>No failure</p> <p>68 minutes</p> <p>No failure</p> <p>No failure</p> <p>No failure</p> |

Classification and field of application

Reference

This classification has been carried out in accordance with clause 7.3.3. of EN 13501-2:2016.

Classification

The product is classified according to the following combinations of performance and classes as appropriate.

Fire resistance classification: REI 60

The classification is valid for fire resistance from one side only. From the side with the gypsum plasterboards – underside.

Field of application

The classification is valid for the following end use conditions:

- a) With respect to the structural building members:
 - The maximum moments and shear forces, which when calculated on the same basis as the test load, shall not be greater than those tested.

The maximum moment the loadbearing beams were subjected during the test was 2.94 kNm/beam at c/c 600 mm or 4.90kNm/m.

The maximum shear load the deck was subjected during the test was 2.84kN/beam at c/c 600 mm or 4.74kN/m.

b) With respect to the ceiling:

- The size of panels of the ceiling lining may be increased by a maximum of 5% but limited to a maximum of 50 mm. The maximum tested gypsum panels of the ceiling lining measured 2400 x 900 mm, positioned with the largest side along the width of the loadbearing element. The maximum allowed size of the ceiling panels is 2450 x 945 mm. The length of the grid members can be increased accordingly.
- The total area occupied by fixtures and fittings relative to the area of the ceiling lining is not increased and the maximum tested opening is not exceeded. The maximum tested opening was 3000 x 4000 mm (w x l)

c) With respect to the cavity:

- The height of the cavity (h) is equal to or greater than tested. The tested height of cavity was 195 mm. The ceiling lining was direct fixed and therefore there was no distance between the ceiling and the structural members (d).
- No material may be added to the cavity other than the tested material. Insulation stone wool with nominal density 32kg/m³ and thickness 145 mm was tested.

Limitations

This document does not represent type approval or certification of the element.

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