

SpaceJoist™ 30minute fire resistance.

Guidance document - Ireland















# SpaceJoist™ 30 minute fire separation to EN 1365-2:2014 Fire resistance tests for loadbearing elements – Part 2: Floors and roofs

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#### **Objective**

To provide suitable floor construction when tested to EN 1365-2:2014 Part 2: Floors and roofs and meet the requirements of Building Regulations 2017 – Technical Guidance Document B, Fire Safety – Volume 2 – Dwelling Houses (Appendix A – Performance of Materials and Structures -Table 1A)

#### **Testing body**

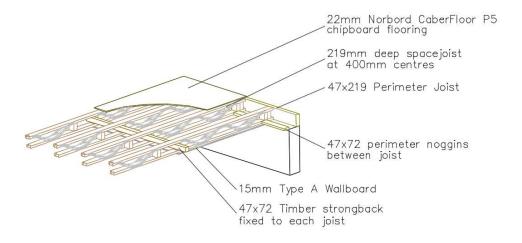
Peutz bv, Lindenlaan 41, NL-6584 AC Molenhoek, Postbus 66, NL-6585 ZH Mook, The Netherlands

NB 2264

#### Test 1 - 24th July 2017 Report number - Y 1859-1E-RA-001

#### **Tested floor**

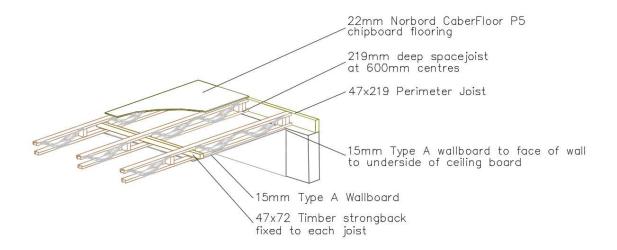
- 22mm chipboard flooring.
- 219mm SpaceJoist metalweb joists at 400mm centres.
- 15mm Gyproc wallboard, all joints taped and filled.
- Perimeter noggins between joists at joist bearing only.



Test 2 - 18th January 2018 Report number - Y 1940

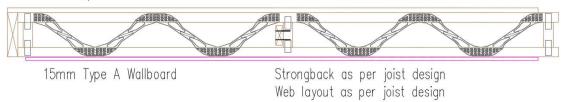
#### Tested floor

- 22mm chipboard flooring.
- 219mm SpaceJoist metalweb joists at 600mm centres.
- 15mm Gyproc Type A wallboard, all joints taped and filled.
- No noggins within floor.



## Floor construction for 30minutes fire resistance in accordance with EN1365-2:2014

T&G chipboard or OSB



#### Joist:

- SpaceJoist<sup>™</sup> depths of 219, 254 & 304mm deep (SJ9, SJ10 & SJ12).
- Flanges to be minimum timber section of 47x72.
- Maximum joist centres of 600mm.

#### Floor deck options:

- 18mm T&G P5 chipboard flooring (maximum joist spacing 450mm).
- 22mm T&G P5 chipboard flooring (maximum joist spacing 600mm).
- 18mm T&G OSB/3 (maximum joist spacing 600mm).
   Decking glued using D4 adhesive to joists and joints, fixed with screws at 200mm centres (4.2x45mm minimum screw size).

#### Ceiling:

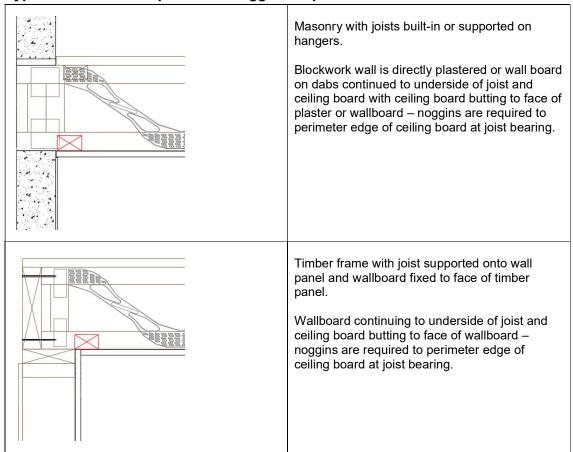
- 15mm type F Gyproc wallboard (fixed with 3.5x55mm drywall screws at 150mm centres).
- Please refer to details below for perimeter noggin requirements.
- No noggins required at plasterboard to plasterboard joints.

Note: although it has been proved by test that perimeter noggins are not required, these may be required by the building design for the structural diaphragm of the floor.

4

Typical wall details – No perimeter noggins required			
	Masonry with joist supported on hangers and wallboard on plaster dabs.  Ceiling board continues to face of wall with vertical wall board butting to underside of ceiling board with joint taped and filled no plasterboard perimeter noggins required.		
	Masonry with joist built into wall and wallboard on plaster dabs.  Ceiling board continues to face of wall with vertical wall board butting to underside of ceiling board with joint taped and filled no plasterboard perimeter noggins required.		
(a)	Timber frame with joist supported onto wall panel and wallboard fixed to face of timber panel.  Ceiling board continues to face of wall with vertical wall board butting to underside of ceiling board with joint taped and filled no plasterboard perimeter noggins required.		

#### Typical wall details - perimeter noggins required



#### Openings within the floor

Any opening or break in the separating ceiling must be fire protected to at least a minimum of the fire separation of the floor.

Example – Down lighters in a 30minute ceiling must have 30minutes minimum fire rating.



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