

## F16.de

System data sheet

12/2021

## Knauf GIFAfloor Hugo L Pre-Fab Floor Screed

F161.de – Knauf pre-fab floor screed

F163.de – Knauf pre-fab floor screed as heating screed type B

### Note on English translation / Hinweise zur englischen Fassung

This is a translation of the System Data Sheet valid in Germany.

All stated details and properties are in compliance with the regulations of the German standards and building regulations. They are only applicable for the specified products, system components, application rules, and construction details in connection with the specifications of the respective certificates and approvals.

Knauf denies any liability for applications outside of Germany as this requires changes acc. to the respective national standards and building regulations.

Dies ist eine Übersetzung des in Deutschland gültigen Detailblattes. Alle angegebenen Werte und Eigenschaften entsprechen den in Deutschland gültigen Normen und bauaufsichtlichen Regelungen. Sie gelten nur bei Verwendung der angegebenen Produkte, Systemkomponenten, Anwendungsregeln und Konstruktionsdetails in Verbindung mit den Vorgaben der bauaufsichtlichen Nachweise.

Die Knauf lehnt jegliche Haftung für Einsatz und Anwendung außerhalb Deutschlands ab, da in diesem Fall eine Anpassung an nationale Normen und bauaufsichtliche Regelungen notwendig ist.

# Content

	<b>Instructions for use</b>	
	<b>Notes</b> .....	3
	Notes on the document.....	3
	References to other documents.....	3
	Pictograms in the system data sheet.....	3
	Intended use of Knauf systems.....	3
	General information on Knauf systems.....	3
	Application areas.....	3
	Notes on static characteristic values.....	3
	Notes on fire resistance.....	3
	Proof of applicability.....	3
	Notes on sound insulation.....	3
	<b>Introduction</b>	
	<b>System overview</b> .....	4
	<b>Data for planning</b>	
	<b>Product overview GIFAfloor</b> .....	5
	<b>Fundamentals of statics</b> .....	6
	<b>Static characteristic values</b> .....	7
	Static characteristic values GIFAfloor Hugo L 18.....	7
	Static characteristic values GIFAfloor Hugo L 23.....	7
	<b>Fire resistance</b> .....	8
	Fire resistance in connection with wooden beam ceilings (construction type IV).....	8
	Fire resistance on high ceilings (construction type I-III).....	8
	<b>Impact sound insulation</b> .....	9
	<b>Implementation details</b>	
	<b>F161.de</b> Pre-fab floor screed.....	10
	<b>F163.de</b> Pre-fab floor screed as heating screed type B.....	11
	<b>Special details</b> .....	12
	<b>Installation and application</b>	
	<b>Installation Knauf GIFAfloor Hugo L</b> .....	13
	<b>Height compensation of the unfinished floor   Subfloor</b> .....	14
	<b>Surface treatment and top layer</b> .....	14
	<b>Information on sustainability</b>	
	<b>Information on the sustainability of Knauf GIFAfloor Hugo L</b> .....	15

**Notes on the document**

Knauf system data sheets are the planning and application basis for the planners and professional installers with the application of Knauf systems. The contained information and specifications, constructions, details, and stated products are based, unless otherwise stated, on the certificates of usability (e.g. National Technical Test Certificate (AbP) and/or general building authority approvals abZ) valid at the date they are published as well as on the applicable standards. In addition, design and structural requirements and those regarding building physics (fire resistance and sound insulation) are considered. The contained construction details are examples and can be used in a similar way for various structures of the respective system. At the same time, the demands made on fire resistance and/or sound insulation as well as any necessary additional measures and/or limitations must be considered.

**References to other documents**

**Detail sheets**

- F18.de Knauf GIFAfloor FHB Hollow Core Floor System
- F19.de Knauf GIFAfloor LBS Line-Bearing Floor Systems
- Load-bearing system elements for timber joist ceilings in residential construction see detail sheet F19-E01.de Knauf GIFAfloor PRESTO

**Technical sheets**

- Observe the technical sheets of the individual Knauf system components

**Intended use of Knauf systems**

Please observe the following:

<b>Caution</b>	Knauf systems may only be used for the application cases as stated in the Knauf documentation. In case third-party products or components are used, they must be recommended or approved by Knauf. Flawless application of products/systems assumes proper transport, storage, assembly, installation and maintenance.
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**General notes on Knauf systems**

**Field of application**

Knauf pre-fab floor screed systems are used in interiors in dependence on the load, substructure and floor covering as systems on insulation layers, separating layers, on light levelling mortar and equalisation materials or as heated screed. The systems save on installation thickness and weight due to the low layer thicknesses. They are thus ideal for renovation of older buildings or for new constructions with tight deadlines due to its drywall construction method. Knauf pre-fab floor screed systems improve the fire protection and sound insulation without introducing additional moisture into the building. Knauf pre-fab floor screed systems are also suitable for domestic areas of high humidity and accessible bathrooms.

**Application areas**

- Residential Building
- Office construction
- Schools
- Hospitals etc.

**Information on static characteristic values**

View page 7

**Information on fire resistance**

View page 8

**Fire resistance effect**

Knauf pre-fab floor screed systems protect the floor slab from the upper side of the room against the effects of fire as a floor construction and assures the stability of the basic floor/ceiling for the duration of the fire resistance class classification.

**Certificate of usability**

Knauf System F12.de	Fire resistance
F126.de	AbP P-3103/9975-MPA BS
F127.de	
F128B.de	–

**Information on fire resistance**

The specifications marked with **plus** offer additional application options, which are not directly included in the Certificate of Usability. On the basis of our technical assessments, we assume that these marked design solutions can be assessed as a non-significant divergence. We can make the documentation on which this assessment is based, such as surveyors' reports or technical assessments, available to you together with the Certificate of Usability on request. We recommend that a non-significant divergence be coordinated and authorised in advance in consultation between the persons responsible for fire resistance and/or the relevant authorities.

The stated constructional and structural properties, and characteristic building physics of Knauf systems can solely be ensured with the exclusive use of Knauf system components, or other products expressly recommended by Knauf. The validity date of the stated proofs have to be considered.

**Notes on sound insulation**

View page 9

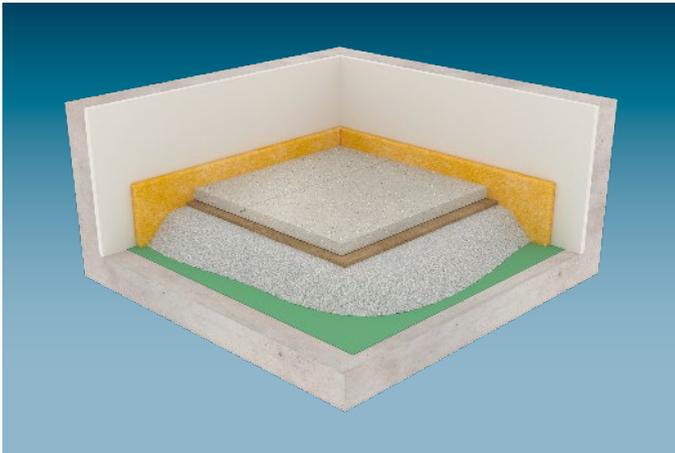
- $\Delta L_{w,R}$  = Impact sound improvement measure of the pre-fab screed system (calculation value)
- $\Delta L_{w,P}$  = Impact sound improvement measure of the prefab screed system (test value)

### Pre-fab floor screed elements for drywall based screed systems

Knauf GIFAfloor Hugo L consists of homogeneously constructed gypsum fibre elements with patented tongue-and-groove edge formation for quick and safe installation on even and stable subfloors. The elements are glued in the tongue and groove area and are suitable for underfloor heating.

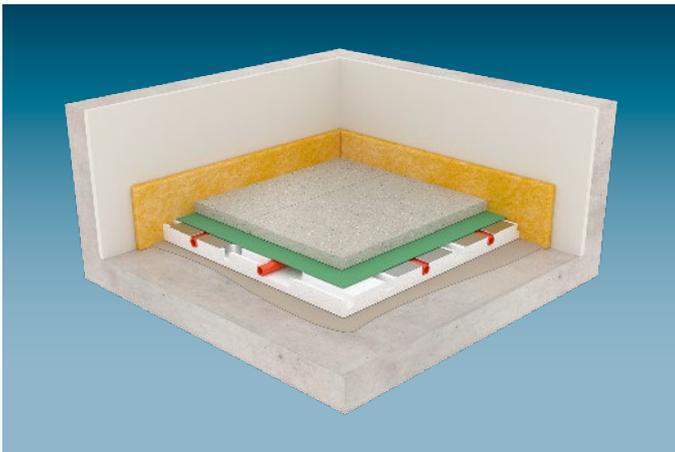
Knauf GIFAfloor Hugo L-composite elements, thickness 18 mm, laminated with 10 mm wood fibre impact sound insulation layer (total thickness 28 mm) or GIFAfloor Hugo L elements, thickness 23 mm, laminated with 10 mm wood fibre impact sound insulation layer (total thickness 33 mm).

#### F161.de Pre-fab floor screed



**F161.de** Knauf pre-fab floor screed on separate insulation layer, as composite element (Knauf GIFAfloor Hugo L WF) or on a light levelling mortar to achieve fire resistance, sound insulation, thermal insulation or height compensation.

#### F163.de Pre-fab floor screed as heating screed type B



**F163.de** Pre-fab floor screed on underfloor heating with heating pipes underneath the screed (construction type B).

**GIFAfloor standard elements**

Schematic diagrams without scale	Technical data						
	Element Designation according to EN 15283-2	Dimension Element- coverage mm	Element thickness mm	Weights (Gross density $\geq 1100 \text{ kg/m}^3$ ) Element approx. kg/pc    approx. kg/m <sup>2</sup>		Material- number	Packaging unit Palletising
	<b>GIFAfloor Hugo L-Elements</b>						
	<b>Hugo L 18</b> GF-IW1/1200/600/18-C2/NF	1200x600	<b>18</b>	16,2	22,5	00550815	50 pcs./pal.
	<b>Hugo L 23</b> GF-IW1/1200/600/23-C2/NF	1200x600	<b>23</b>	20,7	28,8	00602387	35 pcs./pal.
	<b>GIFAfloor Hugo L-composite elements</b>						
	<b>Hugo L 18 WF</b>	1200x600	<b>28</b>	18,0	25,0	00550815	30 pcs./Pal.
<b>Hugo L 23 WF</b>	1200x600	<b>33</b>	22,5	31,3	00607371	25 pcs./Pal.	

Material	Mat.-Nr.	PU	Consumption in g/m <sup>2</sup>
Knauf screed primer	5355	10 kg-bucket	approx. 200
GIFAfloor edge insulation strip MW	109147	100 pcs/box	as required
GIFAfloor edge insulation strip MW	756440	10 pcs/box	as required
GIFAfloor foam tape sk	74339	10 m roll	as required
GIFAbond blue	676976	1.2 kg-bottle	ca. 51 <sup>1)</sup>

1) When using 1200x600 mm elements.

Tools	Mat.-Nr.	PU	Consumption
Knauf adhesive gun	4657	pcs	as required
GIFAtool Diamond (Diamond-tipped saw blade 160x2.2/1.6x20))	186326	pcs	as required

Fundamentals

Usage categories and load capacity following EN 1991-1-1/NA:2010-12

Usage and application areas		Area load	Single load
Examples following DIN EN 1991-1-1/NA:2010-12			
Row	Usage and examples	in kN/m <sup>2</sup>	in kN
0	Attic is walkable, not suitable for residential purposes (accessible loft up to 1.80 m clearance)	1	1
1	Rooms and corridors in residential buildings, bedrooms in hospitals, hotel rooms incl. the corresponding kitchens and bathrooms	2	1
2	Corridors in office buildings, office areas, doctors surgeries without heavy equipment, waiting rooms, lounges including the corridors, areas in sales rooms up to 50 m <sup>2</sup> in residential, office and comparable buildings	2	2
3	Office areas with higher loads	3	2
4	Corridors and kitchens in hospitals, hotels, retirement homes, boarding schools etc.; treatment rooms in hospitals including surgery rooms without heavy equipment; basement rooms in residential buildings	3	3
5	Areas with tables, e.g. crèches, day nurseries, classrooms, cafes, restaurants, dining halls, reading rooms, reception rooms, staff rooms (assignment of loads divergent to DIN EN 1991-1-1/NA:2010-12)	4	3
6	Areas with fixed seating, e.g. surfaces in churches, theatres or cinemas, congress rooms, auditoria, waiting rooms	4	4
7	Offices, working spaces and corridors with heavy equipment freely walkable areas, e.g. museum and exhibition areas, entrance areas in public buildings and hotels as well as the corridors in lines 5 + 6.	5	4
7.1	Areas where large groups of people meet, e.g. in buildings such as concert halls, entrance areas in retail stores and department stores Areas in factories and light-duty workshops (dead loads)	5	5

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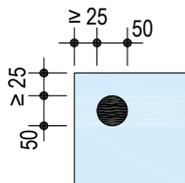
Determination of the permissible load capacity

The basis for the stated load capacities on page 7 are real load tests according to the following test procedure:

Single load (point load)

The specifications of the permissible single loads are based on:

- Loading area Ø 50 mm
- Spacing from edge ≥ 25 mm
- Deflection ≤ 3 mm



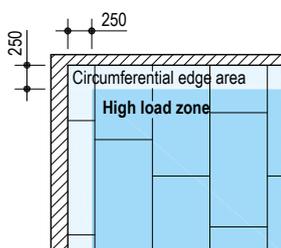
High load zone

Whether point or area load: Within the scope of the specified values the fitness for use of a floor is assured for the entire floor surface. The possible deformation on the edge of a surface is higher than in the middle of the surface when under load conditions. The probability of a deformation is reduced with the increasing distance from the edge and the capacity of the floor also increases. The monolithic pre-fab floor screed GIFAFloor Hugo L exhibits a considerable increased capacity at just 25 cm from the edge. Knauf defines this areas as the high load zone, which can be used with an increased point load and/or area loads.

For GIFAFloor Hugo L-systems, depending on the floor covering and use, an edge distance of 25 cm or more can be planned with a point and/or area load increased by 1 kN.

Such a high load zone is always important when heavy pieces of furniture or room elements are placed. For example, a representative conference table, a large aquarium or a room-dividing bookshelf. In these cases, GIFAFloor Hugo L offers major safety reserves.

Scale in mm



**Floor constructions in dependence on the load capacities**
**Pre-Fab floor screed system GIFAfloor Hugo L**

Possible structure underneath the base layer/underfloor heating			
Point load in kN	Area load in kN/m <sup>2</sup>	Insulation layer	Levelling layer
<b>GIFAfloor Hugo L 18</b>			
1	2	Mineral wool impact sound insulation boards TP-GP 12/1 or TPD 20 mm	Heavy fill ≤ 150 mm
2	2	EPS DEO ≥ 100 kPa Thickness ≤ 100 mm	Heavy fill ≤ 150 mm
2	2	Underfloor heating Uponor Siccus Thickness = 25 mm	–
2	2	Wood fibre insulation board WF 10 mm / Fasoperl A8 / painter's fleece	EPO-Light 15–800 mm
2	3	WF10 + EPS DEO ≥ 100 kPa Thickness ≤ 30 mm	Heavy fill ≤ 150 mm
2	3	EPS DEO ≥ 100 kPa Thickness ≤ 60 mm	Heavy fill ≤ 150 mm
2	3	2x Wood fibre insulation boards WF 10 mm	Heavy fill ≤ 150 mm
3	3	EPS DEO ≥ 100 kPa Thickness ≤ 20 mm	Heavy fill ≤ 150 mm
2	2	Wood fibre insulation board WF 10 mm	Heavy fill ≤ 150 mm
<b>GIFAfloor Hugo L 23</b>			
1	2	Mineral wool impact sound insulation boards TP-GP 12/1, or TPD 20 mm	Heavy fill ≤ 150 mm
2	2	EPS DEO ≥ 100 kPa Thickness ≤ 100 mm	Heavy fill ≤ 150 mm
2	2	Underfloor heating Uponor Siccus Thickness = 25 mm	–
2	3	WF10 + EPS DEO ≥ 100 kPa Thickness ≤ 30 mm	Heavy fill ≤ 150 mm
2	3	Wood fibre insulation board WF 10 mm / Fasoperl A8 / painter's fleece	EPO-Light 15–800 mm
2	3	EPS DEO ≥ 100 kPa Thickness ≤ 60 mm	Heavy fill ≤ 150 mm
2	3	2x Wood fibre insulation boards WF 10 mm	Heavy fill ≤ 150 mm
3	3	EPS DEO ≥ 100 kPa Thickness ≤ 20 mm	Heavy fill ≤ 150 mm
3	3	Wood fibre insulation board WF 10 mm	Heavy fill ≤ 150 mm

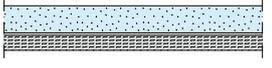
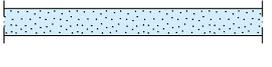
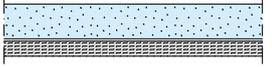
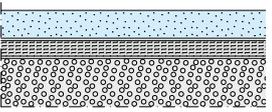
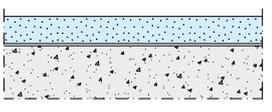
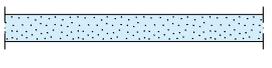
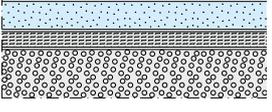
**Note**

The load-bearing capacity of the raw floor must be guaranteed at every point. For levelling minor unevenness of the unfinished floor, use levelling compounds on a suitable primer.

Filling and levelling compounds as well as EPO-Light from a thickness of 20 mm have no negative influence on the working loads.

Constructions for higher payloads on request.

Fire resistance F161.de / F163.de Knauf Pre-Fab floor screed

Floor construction  Schematic drawing	Fire resistance class	Knauf Pre-fab floor screed floor structure		
		Base course Minimum thickness required for fire resistance	Structure underneath the base layer Required for fire protection (from top to bottom)	Fire resistance permissible intermediate layers
<b>Fire resistance in connection with wood joist ceilings (construction type IV) F161.de / F163.de Knauf Pre-fab floor Screeds</b>				
	F60	Hugo L 18 WF	–	None
	F60	Hugo L 18	–	Non-combustible building materials and/or ≤ 5 mm separating layers and/or ≤ 60 mm normally flammable building materials
	F90	Hugo L 23 <sup>1)</sup>	≥ 10 mm Knauf WF	None
	F90	Hugo L 23	≥ 10 mm Knauf WF	Non-combustible building materials
		Hugo L 18	≥ 10 mm Knauf WF on ≥ 60 mm EPO-Light (max. 80 mm)	Non-combustible building materials and/or ≤ 5 mm separating layers and/or ≤ 60 normally flammable building materials
		Hugo L 18	≥ 40 mm dry leveller PA	Non-combustible building materials and/or ≤ 5 mm separating layers and/or ≤ 60 normally flammable building materials
<b>Fire resistance on solid ceilings (type I-III) F161.de / F163.de Knauf pre-fab floor screeds</b>				
	F30	Hugo L 18	–	Non-combustible building materials and/or ≤ 5 mm separating layers and/or ≤ 60 mm normally flammable building materials
	F90	Hugo L 18	≥ 10 mm Knauf WF on ≥ 60 mm EPO-Light (max. 80 mm)	Non-combustible building materials and/or ≤ 5 mm separating layers and/or ≤ 60 normally flammable building materials

1) For classification in fire resistance class F90, additional cladding must be installed on the underside of the ceiling construction in the event of fire exposure from above. Additional cladding must be arranged on the underside of the ceiling structure in the event of a fire load from above, at least consisting of wooden battens (width x thickness ≥ 50 mm x 30 mm, centre-to-centre distance ≤ 400 mm) and Knauf Fire Protection Board GKF d ≥ 12.5 mm..

**plus** Extension of the usability certificate fire resistance  
Prior coordination as per page 3 recommended.

Impact sound reduction  $\Delta L$  for various constructions with Knauf GIFAfloor Hugo L on solid ceilings

Floor structure	Base course + Structure underneath the base course	Total thickness  mm	Impact sound reduction solid ceiling Impact sound improvement measure Calculation value $\Delta L_{w,R}$ in dB	
			Test value $\Delta L_{w,P}$ in dB	
	<ul style="list-style-type: none"> <li>■ Hugo L 18 / Hugo L 23</li> <li>■ 20 mm EPS DEO</li> </ul>	38/43	<b>16</b>	18
	<ul style="list-style-type: none"> <li>■ Hugo L 18 / Hugo L 23</li> <li>■ 10 mm wood fibre</li> </ul>	28/33	<b>19</b>	21
	<ul style="list-style-type: none"> <li>■ Hugo L 18 / Hugo L 23</li> <li>■ 25 mm underfloor heating type B measured with Unipor Siccus</li> </ul>	43/48	<b>18</b>	20
	<ul style="list-style-type: none"> <li>■ Hugo L 18 / Hugo L 23</li> <li>■ 12 mm mineral wool, <math>s' = 70 \text{ MN/m}^3</math> measured with Knauf Insulation TP-GP 12-1</li> </ul>	30/35	<b>20</b>	22
	<ul style="list-style-type: none"> <li>■ Hugo L 18 / Hugo L 23</li> <li>■ 10 mm wood fibre</li> <li>■ 20 mm dry leveller PA</li> </ul>	48/53	<b>22</b>	24
	<ul style="list-style-type: none"> <li>■ Hugo L 23</li> <li>■ Knauf Insulation TPE 12-2</li> </ul>	35	<b>25</b>	27
	<ul style="list-style-type: none"> <li>■ Hugo L 23</li> <li>■ Knauf Insulation TPE 12-2</li> <li>■ 10 mm wood fibre</li> <li>■ 20 mm dry leveller PA</li> </ul>	65	<b>28</b>	30

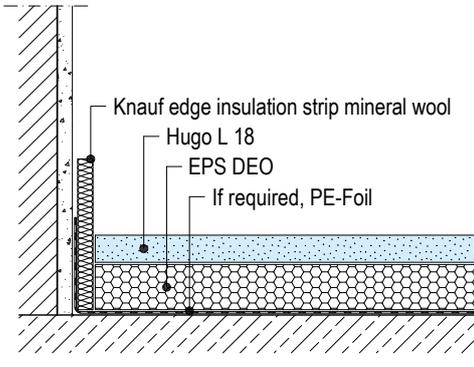
*Values in italics are derived values from measurements of deviating constructions.*

- The specified base layer thickness is the minimum thickness required for sound insulation. Larger screed thicknesses required for structural reasons must be taken into account.

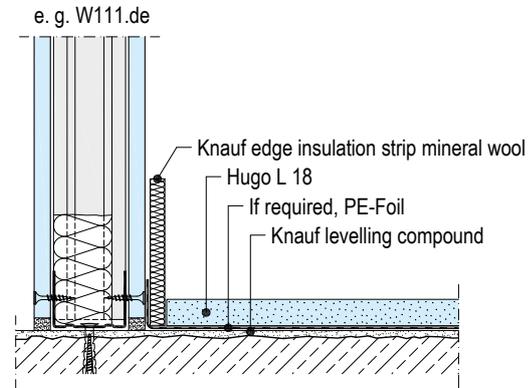
Details

Scale 1:5 | dimensions in mm

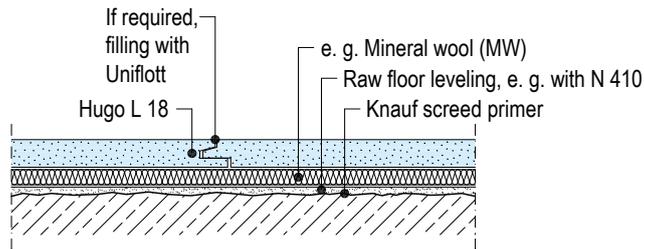
F161.de-V11 Wall connection solid ceiling



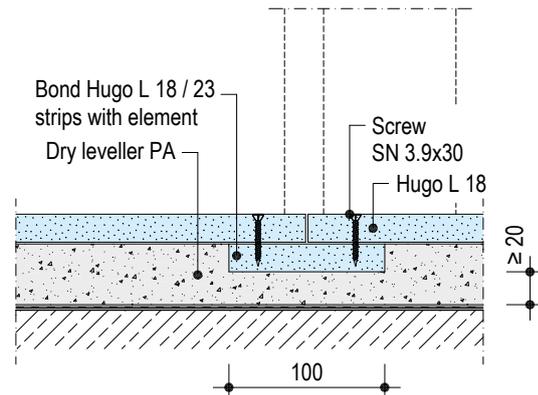
F161.de-V5 Connection to stud wall



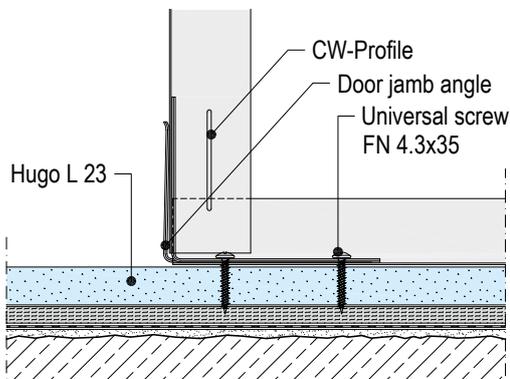
F161.de-V13 Plate joint



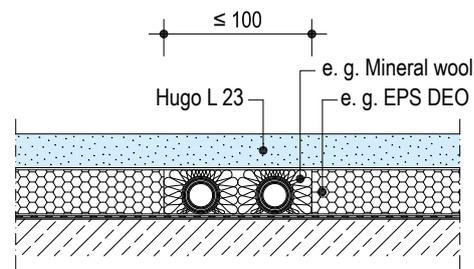
F161.de-V7 Element joint in the door area



F161.de-V6 Door frame bracket



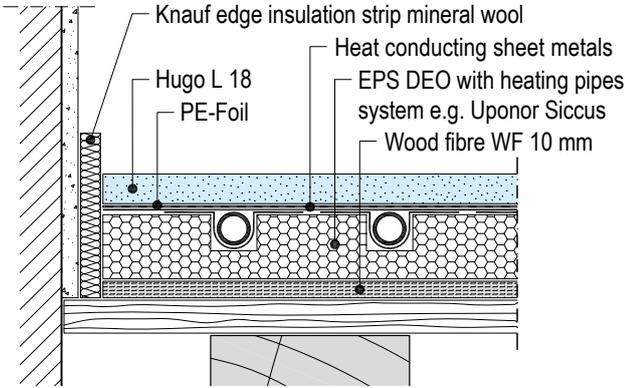
F161.de-V15 Tubes in insulation layer



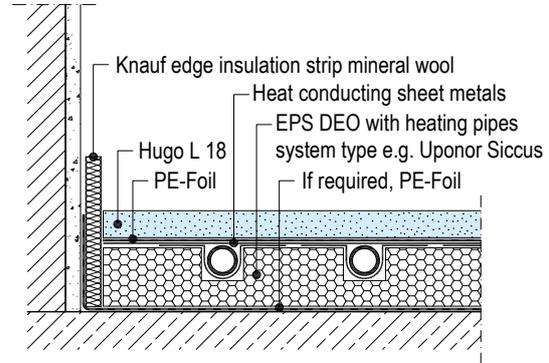
Details

Scale 1:5 | dimensions in mm

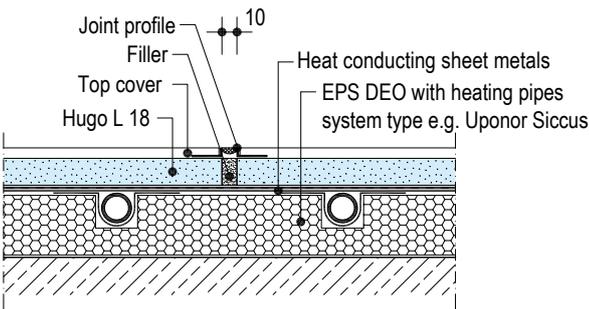
F163.de-V1 Wall connection on underfloor heating



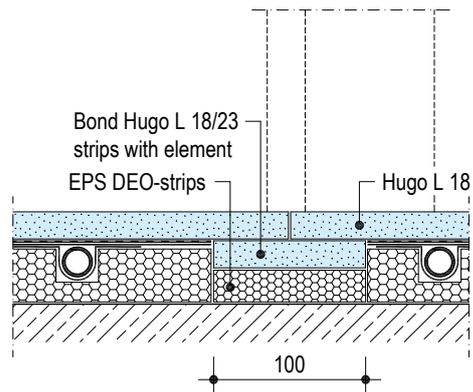
F163.de-V2 Wall connection on underfloor heating



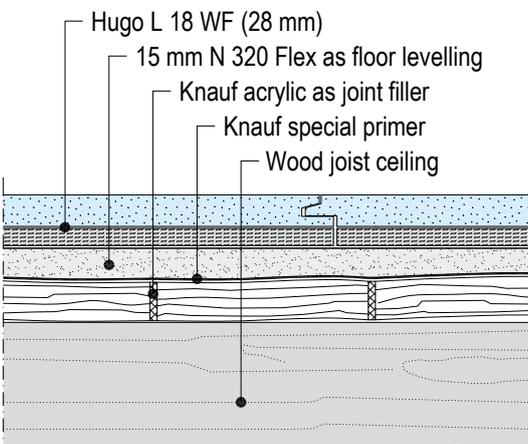
F163.de-V5 Movement joint with underfloor heating



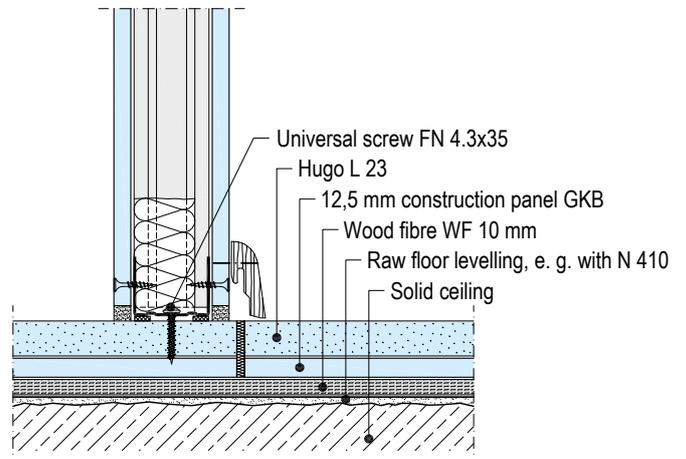
F163.de-V7 Door area element joint



F161.de-SO4 Superstructure on old wood joist ceiling



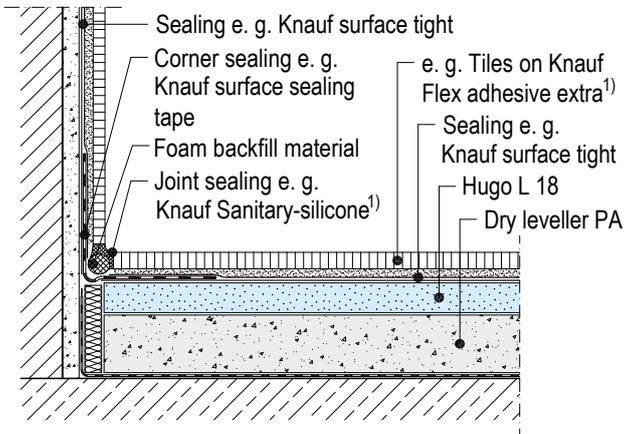
F161.de-SO5 Lightweight partition, installed



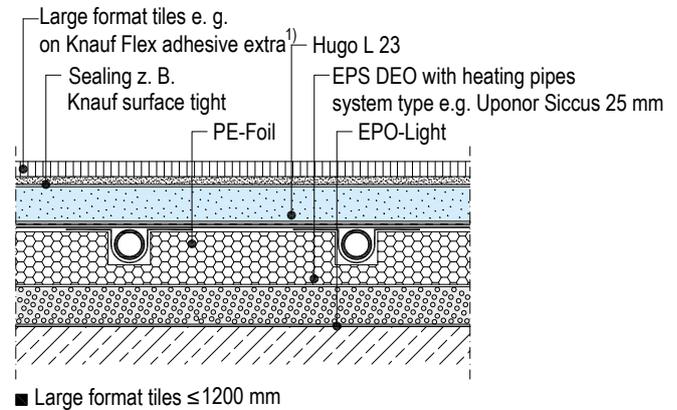
Details

Scale 1:5 | dimensions in mm

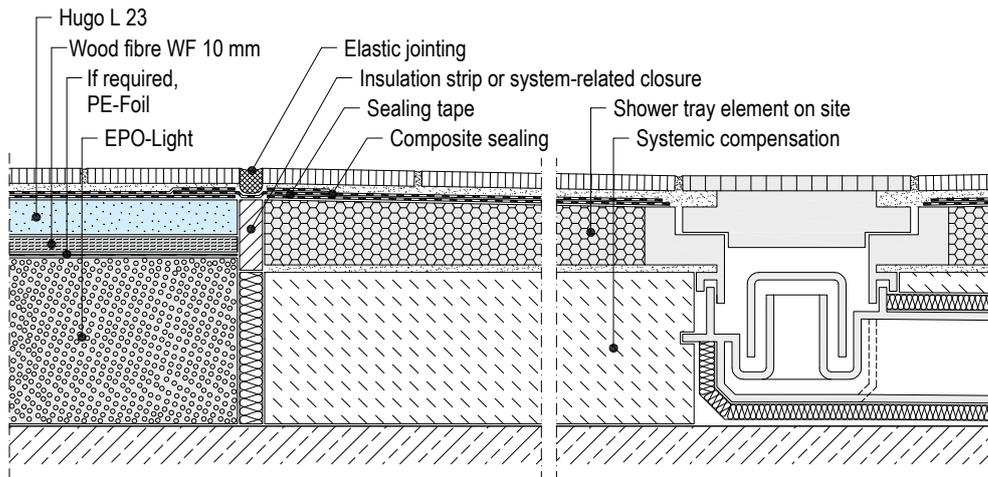
F161.de-V16 Wall connection damp room



F163.de-V9 Damp room with underfloor heating



F161.de-V17 Connection to floor of shower unit - barrier free



**Area of application**

Hugo L can be used in domestic bathrooms and kitchens, in bathrooms of hotel rooms or rooms with similar exposure to moisture. A surface sealing is required. Hugo L is not suitable for wet areas where slopes and drains are intended, (e.g. commercial kitchens, communal showers, swimming pools). Hugo L may be used in bathrooms with flush-to-floor (barrier-free) shower elements, if the shower tray is applied as a separate element complete with its own slope (see F127.de-V31).

**Sealing**

Apply Knauf surface tight or Knauf Flex-tight<sup>1)</sup> to the entire surface. Execute the connections to the walls with Knauf surface sealing tape.

**Joint between Hugo L and shower element – barrier free bathroom**

Seal the joint with a sealing strip and integrate into the area sealing of the pre-fab floor screed and shower element. Recommended area sealing is a suitable cementitious sealing slurry (e.g. Knauf Flex-tight<sup>1)</sup>).

**Insulation layers – barrier free bathroom**

EPS DEO (compressive strength ≥ 150 kPa) with footfall sound insulation use of wood fibre insulation max. 10 mm, e.g. Wood fibre WF.

**Levelling**

For dynamic loads (e.g. washing machines), do not use dry leveller PA, use Knauf EPO-Light.

Use a rigid substrate leveller for the barrier free construction type, e.g. not the flexible light levelling mortar Knauf EPO-Light or the Knauf jointing compounds.

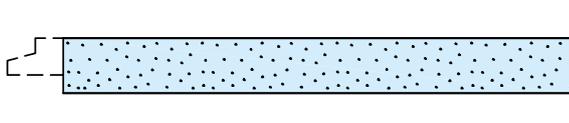
1) Knauf Bauprodukte GmbH & Co. KG

### Application of Knauf GIFAfloor Hugo L

Hugo L elements can be applied without joints as unheated constructions. Structural joints must be implemented in the screed. Lay the elements continuously in the door area or form butt joints underneath the door leaf and underlay with approx. 100 mm wide strips made of Hugo L elements or wooden material board strips  $\geq 19$  mm and adhesively bond with elements/boards. Lay the elements continuously, using the cut section from the previous row  $\geq 200$  mm to start the new row at an offset (no cut waste). In case of connections of pre-fab floor screed to other floor constructions (e.g. with flowing screed), provide limit or separating rails or movement joint profiles and pull the foil upwards.

#### First wall connection element row

Cut off the notch with connection to wall



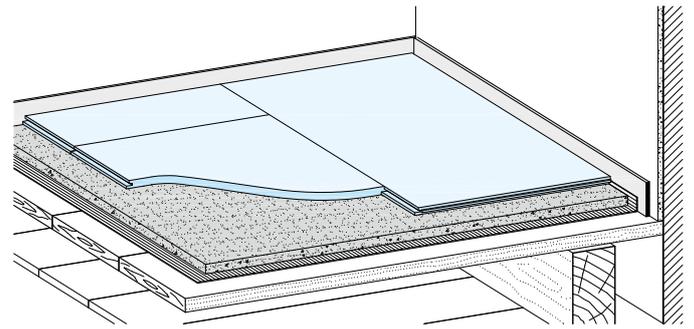
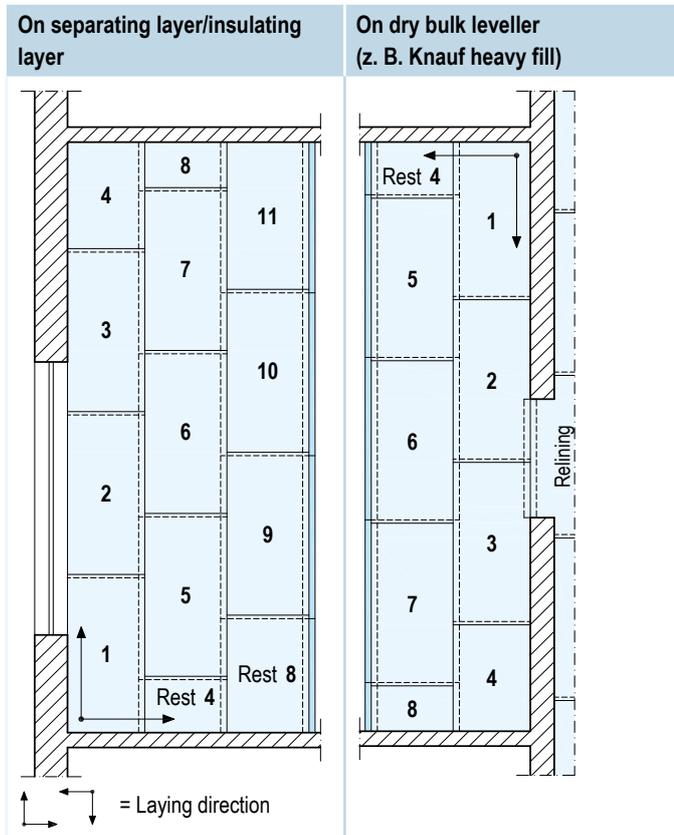
#### Laying on a separating layer/insulating layer

Start laying on the left of the wall opposite the door. The elements can be laid continuously in the door area (if butt joint at door area, please underlay).

#### Laying on dry bulk leveller (e.g. Knauf heavy fill)

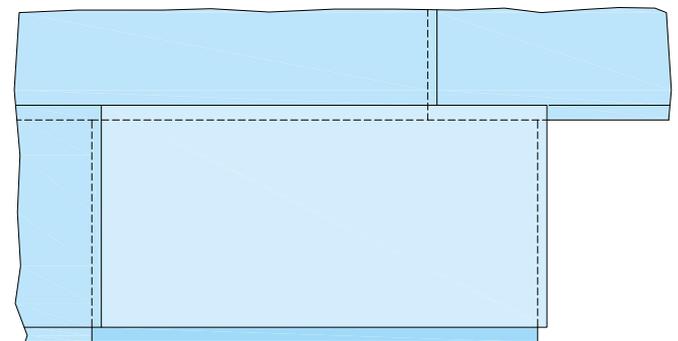
Start at the right when laying on the door side. Apply underlay to the element joint in the door area. It is recommended that the dry bulk leveller is covered with a covering board for saving time when laying the elements. In this case laying should begin at the wall opposite the door starting on the left.

#### Application scheme



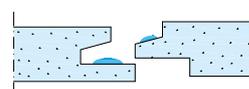
#### Joint stagger

Joint stagger at least 200 mm, cross joint and butt joints not permitted.

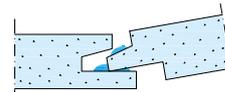


#### Adhesive bonding of the elements

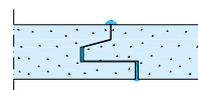
Apply adhesive to the tongue and to the leading edge of the groove.



Installation sequence: Insert the tongue into the horizontal groove.



Leaking adhesive shows sufficient quantity.



Do not walk on pre-fab floor screed for approx. eight hours after laying (depending on temperature) so that the adhesive can set undisturbed.

#### Note

Protect the surface of the screed from construction site traffic (e.g. dirt, moisture from plastering work, overloading).

## Height compensation of the unfinished floor

### Wood substrates

- In case of minor unevenness, worn out old planking and direct laying of the prefabricated screed without insulation layer, use corrugated cardboard or felt board as compensation.
- Wood substrates can be filled with N 410 Flex or N 320 Flex. Close joints and knotholes beforehand. Priming with Knauf special primer is required.

### Larger unevenness

- Install Knauf heavy fill according to Detail Sheet F475.de, fill height 15 to 150 mm. To facilitate work, cover the dry leveller with a Knauf wood fibre insulation board WF; this covering is required under mineral wool insulation layers or underfloor heating, recommended under EPS insulation layers. On wooden beam ceilings, trickle protection with Knauf Schrenzlage is required. Do not use dry leveller on board stack ceilings. Do not use dry leveller in rooms with high dynamic loads (e.g. washing machines, spin dryers).
- EPO-Light is a fast-setting, water-free levelling mortar that can be walked on after 24 h for layer thicknesses of 15 to 800 mm with a weight per unit area of approx. 2 kg/m<sup>2</sup>. EPO-Light is used for levelling uneven unfinished floors, for filling cavities and for height levelling, especially with high dynamic loads (e.g. washing machines, spin dryers). EPO-Light can also be used underneath any necessary waterproofing for concrete slabs.

## Underground

- Check the substrate and any levelling layer (unevenness, height difference, load-bearing capacity).
- In the case of wooden joist ceilings, pay particular attention to a load-bearing subfloor of floorboards or wood-based panels (deflection max. 1/300). Do not lay prefabricated screed directly on wooden joists (only possible with Knauf GIFAfloor LBS F191/F192 system). Laying over missing floor and levelling with fill or EPO-Light only if sufficient load-bearing capacity of the missing floor is guaranteed.
- In the case of reinforced concrete ceilings, lay PE foil 0.2 mm thick with an overlap of at least 20 cm as protection against rising residual moisture from the ceiling and run it up the walls at the construction height.
- For concrete slabs in contact with the ground, waterproof against ground moisture in accordance with DIN 18533 using Katja Sprint waterproofing membrane.
- Insulation layers: For proof of suitability, the technical specifications of the respective manufacturer apply.

When laying Hugo L elements directly without an insulating layer on the level or trowelled unfinished floor or on EPO-Light apply painter's fleece (foil side up) to avoid clicking/rattling noises between Hugo L and solid ceiling.

## Surface treatment and floor covering

### Board joints

Fill the board joints with Uniflott if necessary. With fire protection from above, always fill the joints and screw heads and staples with Uniflott.

### Repairs

Smaller holes and damage should be sealed with Uniflott. Larger holes and damage in pre-fab floor screed can be repaired with Knauf Stretto. The screed surfaces must be primed with FE-Imprägnierung impregnation agent for this purpose. Stretto is subsequently applied wet on wet.

### Protection against moisture in damp rooms

On surfaces where water is expected in domestic bathrooms and kitchens, apply full surface sealant with Knauf Flächendichtband sealing tape.

### Resistance to castors of chairs

Pre-fab floor screed Hugo L is resistant to castors of chairs without additional measures.

### Priming

Before laying the floor covering and before full surface levelling, Hugo L must be primed with Knauf screed primer (diluted 1:1 with water) or Knauf quick primer (undiluted). When applying parquet, apply a preliminary layer of system compliant adhesive.

### Elastic thin-layer floor coverings

With elastic thin-layer floor coverings (e.g. PVC, Linoleum), Knauf GIFAfloor Hugo L must have a full surface application of at least a 2 mm thick layer of N 410 applied. Fill the board joints beforehand with Uniflott and subsequently prime with a full surface application of Knauf screed primer (1:1) or Knauf quick primer (undiluted).

### Pre-fab parquet or mosaic parquet

Multi-layered prefabricated parquet or mosaic parquet (mosaic cubes) are suitable for glued to a prefabricated screed over the entire surface. Recommendations from different adhesive manufacturers, which can also be used to lay other types of parquet, are available after consultation with Knauf. Other types of parquet can also be used on a separating layer or with a bracket.

If Knauf pre-fab floor screeds are filled with N 410 before parquet installation, proceed as described under "Elastic thin coverings".

### Ceramic tiles and natural stone

Use flexible adhesive systems. The processing requirements of the adhesive manufacturer for the tile size used, particularly the stated minimum thickness of the adhesive bed, must be observed, if necessary, install fabric or fleece. Lay stoneware and natural stone using the buttering-floating method, and push the tile with side motion into the adhesive bed while pressing it in. Lay floor tiles with a format of max. 33 cm edge length using the thin bed method. Large format floor tiles and natural stone can be laid on Knauf pre-fab floor screed up to 120 cm edge length. You can obtain build-up recommendations from different adhesive manufacturers after consultation with Knauf.

**Sustainability and environment**

Brief description	Value	Unit
Requirements according to AgBB (2015) and DIBt (2010)	Complies	–
French emission class	A+	–
IBR Award certificate	Tested and recommended	–
Eurofins Indoor Air Comfort 6.0	Complies	–
Post-consumer recycling share (mean value)	approx. 16	%
Pre-consumer recycling share (mean value)	approx. 13	%
Environmental Product Declaration	EPD-BVG-20140069-IAG1-DE	–

**Information on the sustainability of Knauf GIFAfloor**

Building assessment systems ensure the sustainable quality of buildings and structural facilities through a detailed evaluation of ecological, economic, social, functional and technical aspects.

In Germany, the following certification systems are of particular relevance.

■ **DGNB System**

German seal of approval for sustainable building from the DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen/German Sustainable Building Council)

■ **BNB**

(Sustainable Building Rating System)

■ **LEED**

(Leadership in Energy and Environmental Design).

Knauf products and Knauf access flooring materials can positively influence numerous criteria here.

**DGNB/BNB**

*Ecological quality*

- Criterion: Life cycle assessment of the building  
Relevant environmental data are stored in the EPD
- Criterion Risks for the local environment  
Building material Gypsum as an ecological material

*Economic quality*

- Criterion: building-related costs in the life cycle  
Economic Knauf dry construction

*Technical quality*

- Criterion: Deconstruction and recyclability  
Possible with Knauf dry construction

**LEED**

*Materials and Resources*

- Building Life-Cycle Impact Reduction:  
Relevant data are stored in the EPD
- Environmental Product Declarations:  
Relevant data are stored in the EPD
- Sourcing of Raw Materials:  
Recycling content in Knauf GIFAboard

*Indoor Environmental Quality*

- Low Emitting Materials:  
Knauf products are subject to regular VOC measurements

**Disposal**

GIFAfloor waste is classified with the waste code number 17 08 02 gypsum-based construction materials, or 17 09 04 mixed construction and demolition wastes, not contaminated with hazardous substances.

## Building Biology

Knauf GIFAfloor has been regularly tested since 2003 by the IBR (Institute for Building Biology Rosenheim) and has been recommended by the award certificate continuously since then.



Institut für **Baubiologie** Rosenheim GmbH

# Certificate of Award

Based on the excellent test results, the Seal of Approval



is hereby awarded to



Knauf Integral KG  
D-74589 Satteldorf

for the tested product

## Knauf gypsum fibreboards

(Certification-No. 3019 - 1032)

by the Institut für Baubiologie Rosenheim GmbH.



Reimut Hentschel, Managing Director  
Rosenheim, February 2019

The Seal of Approval is awarded for 2 years. In the interest of consumers, follow-up testing of the products must be performed in due time before the Seal of Approval expires. The applicant will have to reapply for these tests.

IBR Institut für Baubiologie GmbH D-83022 Rosenheim Münchener Straße 18  
Tel. +49 (0)8031 / 3675-0 Fax +49 (0)8031 / 3675-30 www.baubiologie-ibr.de

Knauf GIFAfloor meets the requirements of the French VOC class A+. Eurofins Product Testing A/S, Galten (DK) certifies that GIFAfloor complies with the required values for VOC emissions in Europe. GIFAfloor meets the requirements of Indoor Air Comfort 6.0.



# Attestation

## European National Regulations on VOC emissions

On 27 February 2018, Eurofins Product Testing A/S received a sample of a ceiling panel with the product name:

### GIFAboard and GIFAfloor

supplied by

### Knauf Integral KG

The emissions were tested according to the regulations in Germany, France and Belgium. The test is in accordance with German AgBB (2015) and the guidelines of the DIBt (2010), the French legislation of 2011 on emission classes as specified in decree no 2011-321, and the Belgian Royal Decree C-2014/24239. Sampling, testing and evaluation were performed according to EN 16516, ISO 16000-3, ISO 16000-6, ISO 16000-9, ISO 16000-11 in the latest versions, see the test report no. 392-2018-00088701\_A\_DE.

The formaldehyde test result is similar to a test obtained with EN 717-1.

**Evaluation of the emission test result according to Indoor Air Comfort 6.0:**

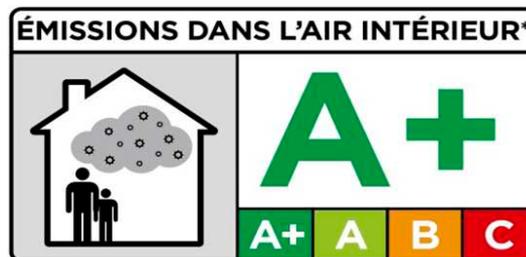
- French VOC class: 
- Carcinogenic substances were not detectable after 3 and after 28 days.
- The total of all VOC ("TVOC") and the sum of all VOC (AgBB) after 3 days both were below the limit of 10 000 µg/m³.
- The total of all VOC ("TVOC") and the sum of all VOC (AgBB) after 28 days both were below the limit of 1000 µg/m³.
- The total of all SVOC ("TSVOC") after 28 days was below the limit of 100 µg/m³.
- After 28 days the values R<sub>3</sub> and R<sub>28</sub> were below the limit of 1.
- The sum of VOC without LCl<sub>0</sub> after 28 days was below the limit of 100 µg/m³.
- Formaldehyde after 28 days was below the limit of 60 µg/m³.

**The tested product complies with referenced European regulations as of 13 April 2018**  
13 April 2018

  
 Nanna Bohalm  
Chemist

  
 Rasmus Stenbjaard Christensen  
Analytical Service Manager, MSc in Chemistry

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