# F13 Knauf Vidifloor Dry Floor Screed

Consumption, substrate and height compensation



# Consumption per m<sup>2</sup> floor construction without addition for loss and waste

average values

| Description italic = not provided by Knauf                  | Unit           | F134 Solo (18 mm)         | F 135 Duo (2 x 10.0 mm)   | F 135 Duo (2 x 12.5 mm)   |
|---|----------------|---------------------------|---------------------------|---------------------------|
| Insulation strip 100 mm width                               | m              | length of wall connection | length of wall connection | length of wall connection |
| Vidifloor units: (18 mm)                                    | m²             | 1                         | 2                         | -                         |
| Vidifloor boards: (2 x 10.0 mm)                             | m²             | -                         | -                         | -                         |
| Vidifloor boards: (2 x 12.5 mm)                             | m²             | -                         | -                         | 2                         |
| Glue for the edges F 134:                                   |                |                           |                           |                           |
| Vidifloor SOLO adhesive, bag 0,8 kg                         | kg             | appr. 0,4                 | -                         | -                         |
| Surface glue F135 :   |                |                           |                           |                           |
| or Uniflott<br>Vidifloor Flächenkleber (surface adhesive)   | kg             | appr. 0.6 (double layer)  | appr. 0.6                 | appr. 0.6                 |
| Screw attachment / stapling:                                |                |                           |                           |                           |
| Vidifloor screws 17 mm or Staples                           | pcs            | appr. 10                  | appr. 30                  |                           |
| Vidifloor screws 22 mm or Staples                           | pcs            |                           |                           | appr. 30                  |
| Uniflott for joint filling                                  | kg             | as required               | as required               | as required               |
| Dry levelling fill per cm layer height                      |                | appr. 10                  | appr. 10                  | appr. 10                  |
| Covering board (on dry levelling fill)                      | m <sup>2</sup> | 1                         | 1                         | 1                         |
|   |                |                           |                           |                           |
| Knauf Nivellierspachtel 415 Knauf Nivellierestrich 425      | kg             | as required               | as required               | as required               |
| Estrichgrund (screed primer, diluted with water, ratio 1:1) | g              | 50                        | 50                        | 50                        |

## Construction

#### F134 Vidifloor Units (1 x 18 mm)

Knauf Vidifloor Units, 18.0 mm thick, are gypsum fiberboards with the dimensions of 900 x 600 mm. They have 35 mm wide milled tier edges. The units are glued at edges with Knauf Vidifloor SOLO adhesive. The edges have to be screw attached or stapled.

## F135 Vidifloor Boards (2 x 10 mm)

Knauf Vidifloor Boards, 10.0 mm thick, are gypsum fiberboards with the dimensions of 1500 x 1000 mm. They have SK milled edges. The boards are installed in two layers. The boards are glued Knauf Vidifloor Flächenkleber (surface adhesive) and mechanically attached.

#### F135 Vidifloor Boards (2 x 12.5 mm)

Knauf Vidifloor Boards, 12.5 mm thick, are gypsum fiberboards with the dimensions of 1500 x 1000 mm. They have SK milled edges. The boards are installed in two layers. The boards are glued Knauf Vidifloor Flächenkleber (surface adhesive) and mechanically attached.

# Substrate and height compensation (leveling)

#### Substrate

Check substrate and possibly applied leveling layer/coat for unevenness, height consistency and sturdiness.

In case of wood joist ceilings check particularly the stability of the surface made of planks or wood based panels (maximum deflection l/300). No direct application of pre-fab screed on wood joists.

Application on dead floor and leveling with dry levelling fill or Knauf EPO - Leicht onliy, if an adequate stability of the dead floor is ensured.

- In case of reinforced concrete ceilings apply PE foil with a thickness of at least 0.2 mm with a joint overlap of at least 20 cm in order to protect against residual moisture. Apply PE foil on walls up to floor construction height.
- In case of concrete base plate with soil contac apply water-proof sealing against ground moisture with appropriate sealing membranes
- Install 10 mm thick mineral wool edge strip at all connections to walls.
- Insulation layers: For proof of suitability refer to technical information of the insulation manufacturer.

#### Height compensation of the raw floor

■ Ensure a sufficiently even surface. Check height continuously. Provide a tight contact of the pre-fab floor screed to the raw floor on its entire surface.

- In case of minor unevenness of worn-out old floor planks and direct application of the prefab screed without insulation layer, use corrugated cardboard or paper felt as leveler. Do NOT apply it on surrounding wall connections.
- For low leveling height of
  Nivellierspachtel 415 or for
  Fließ-Spachtel 315. Consumption approx.
  1.6 kg/m per mm of coat thickness.
- For leveling heights of 10 to 35 mm use Knau Nivellierestrich 425 or for 5 to 30 mm Knau Dünn-Estrich 325. Consumption approx. 1.8 o 1.6 kg/m per mm coat thickness.
- Dry levelling fill Knauf Trockenschütting PA (area weight approx.5 kg/m per cm high), and expanded clay dry levelling fill (area weigh approx. 6.5 kg/m per cm height), residual moisture 1 %, bulk height 20 to 100 mm, are layed before the installation of Vidifloor for the purpose of height compensation of 20 mm. Before the installation of one-layer F134 Vidiflor cover levelling fill with Knauf gypsum board 9.5 mm. Below mineral wool and below EPS insulation this covering layer is also obligatory. On wood joist ceilings a trickling protection made of Knauf Schrenzlage or other vapour permissive material is required.

Do not use dry levelling fill on wooden plank plank stack slabs or rooms with high dynamic stress (washing machines, spin driers etc.).

- For continuous height compensation or in case of installation pipes lying on the raw floor:

  Use polystyrene with a compressive strength o

  100 kN/m or use cement-based wood fiberlightweight boards. Sheath pipes with mineral wool. Cut out EPS or lightweight boards accordingly. Lay pre-fab screed laterally to the laying direction of the insulation or compensation boards/panels.
- Knauf EPO-Leicht is a rapidly setting waterfree mortar that is accessible 24 hours afte application. The thickness of the EPO-Leicht leveler can be from 15 to 800 mm with a density of approx. 200 kg/m . It is used for leveling uneven raw floors, to fill cavities and for height compensation, particularly on areas with high dynamic stress (washing machines etc.).
- If Knauf Brio Units or Floorboards are installed directly on the even or filled raw floor or directly on EPO-Leicht leveler, apply a layer of thin fleece, soft cardboard or similar material in between.

# F13 Knauf Vidifloor Dry Floor Screed

Application, Surface treatment and Floor covering



## **Application**

#### General application

- Knauf Vidifloor Units and Boards can be installed without joints if the floor does not include floor heating. In rooms that exceed the width of 10 m the installation of movement joints (joint profiles) is recommended. Transfer structural joints into the floor construction.
- Apply units or boards continuously at doors or create a butt joint below the door leaf and underlay the joint with approx. 10 cm wide wood based panel strips, ≥ 19 mm thick, and glue strips with units/boards, using Vidifloor SOLO adhesive for F134, or Vidifloor Flächenkleber (surface adhesive) with F135, and attach with Vidiwall screws. If dry floor screed is connected to other floor constructions, (e. g. self-leveling floor screed) install gauge profiles or separating profiles or apply movement joint profiles while raising the foil. At connection areas the dry levelling fill has to be carefully pre-compacted.
- Fill joints of units/boards with Knauf Uniflott if necessary.
- Do not access d r y floor screed for approx. 4 hours (depending on temperature) after application to allow for setting of the glue.
- Protect surface of dry screed from site traffic. It is recommended to install the dry screed after other work trades have been finished.
- Holes and chunking of the dry screed can be filled with Knauf Uniflott. In order to provide good bonding, prime the damages with Knauf Estrichgrund.

#### Floor heating screed

Knauf F134 Vidifloor Units and F135 Vidifloor Boards can be installed on floor heating. It is recommended to apply movement joints at doors and in case of room width of more than 10 m. Maximum allowable flow temperature is 55 °C.

The use of electric floor heating or electric tile tempering is suitable to only a limited extent. Avoid heat accumulation (e. g. below cupboards or carpets) in any case. The maximum allowable temperature of the dry screed units/boards is 45 °C.

#### F134 Vidifloor Units

- Start laying at wall opposite to the door from left hand side. Cut off tier at connection to wall.
- If a dry levelling fill is applied, it is necessaryto cover the even levelling fill with covering boards (e.g. Knauf gypsum boards ≥ 9,5 mm) before installing the F134 Vidifloor Units. The laying of Vidifloor units starts at the wall opposite to the door from left hand side.
- Lay units continuously. Start new row staggered with cut-off from previous row (no waste). Stagger by at least 20 cm. Butt joints and cross joints are not permitted.
- Create a tight and stiff connection by means of gluing and filling the tier joints with Knauf SOLO adhesive.

- Screw attach Vidifloor Units at tier joints with Vidifloor screws, 17 mm long, or fasten with staples (spacing ≥ 300 mm).
- In case of multi-layer application of Vidifloor Units conglutinate layers if required with surface adhesive Vidifloor Flächenkleber (notching B3) and staple or screw attach. Use Vidiwall screws 30 mm

#### F135 Vidifloor Boards

- Start first board layer with full board and install as cross joint pattern. After application of Vidifloor Flächenkleber (surface adhesive) or Knauf Uniflott (notching B3) start installation of second layer with a half- size board (quarter-size board at corners) staggered by half a board size again as cross joint pattern.
- After gluing of the two layers of Vidiwall boards fix the layers with Vidifloor screws , 17 mm (for 2 x 10 mm) or 22 mm (for 2 x 12,5 mm). Instead of screws appropriate staples can be used for mechanical fixation. While fixation of the two layers load boards with body weight.

#### Surface treatment and floor covering

#### Moisture protection in moist rooms

Seal all watered areas in private bathrooms and kitchens entirely with Knauf Flächendicht sealant. Seal connections to walls with Knauf Flächendichtband sealing tape.

# Chair roll resistance

One-layer and two-layer Dry screed Knauf Vidifloor F134 and F135 are chair roll proof after application of a min. 2 mm thick skim coat of Knauf Nivellierspachtel.

# Priming

Before applying floor coverings or before skim coating, prime Knauf Vidifloor Units and Knauf Vidifloor Boards with screed primer Knauf Estrichgrund (diluted with water at a ratio of 1:1).

For parquet flooring prime with a system primer of the parquet glue system (take care of the product facts an the requirements of the glue manufacturer).

#### Elastic floor covering

In case of elastic floor covering (e. g. PVC, Linoleum) skim coat Knauf Dry Floor Screed with min. 2 mm Knauf Nivellierspachtel 415. Before skimming the surface fill board joints with Knauf Uniflott and prime with screed primer Knauf Estrichgrund (diluted with water at a ratio of 1:1).

#### Dry parquet or mosaic parquet

Laminated dry parquet or mosaic parquet (mosaic cubes) can be applied on dry screed if it is conglutinated to the screed on the entire surface. In coordination with the parquet manufacturer other parquet types are possible. On separation layer or with clamp assembly other parquet types can generally be applied. If dry screed is skim coated with Nivellier-spachtel 415 before parquet application, refer to the procedure described before in "Elastic floor covering".

#### Ceramic coverings

Thin-bed application:

Size of floor tiles max. 33 cm x 33 cm.

Use flexible floor tiles glue.

If substrate is stiff and if thickness of load bearing layer is increased (double-layer application of Knauf Vidifloor F134) larger dimensions or natural stone tiles can be applied if coordinated with Knauf.

# F13 Knauf Vidifloor Dry Screed Specifications





| Item. Description   | Units        | Unit price | Total almount |
|---|--------------|------------|---------------|
| Sealing coat against residual moisture from the concrete ceiling, made of PE foil, 0.2 mm thickness, overlap joints by at least 20 cm. Product:   | m2           | €          | €             |
| Edge strip, made of mineral wool, 10 mm thickness, 100 mm height. Product: <b>Knauf Randdämmstreifen</b> (edge insulation strip)  | m2           | €          | €             |
| Separation layer as trickling protection on wood joist ceilings, made of natron kraft paper, plastic coated on both sides, min. 100 g/m2 single layer, overlap joints by at least 8 cm. Product: <b>Knauf Schrenzlag</b>  |              | €          | €             |
| Leveling of substrate made of, in case of gradient deviations/ in case of substantial unevenness/ in ca of pipelines/ cables */ for height compensation *, with levelling fill made mineral covered volcanic stone, cover levelling fills with gypsum board levelling fill thickness:mm. Product: Knauf Trockenschüttung PA (dry bulk leveller) | e of         | €          | €             |
| One layer dry floor screed made of gypsum fiberboard units with 35 mm tier, nominal thickness 18 mm, on concrete/ wood joist ceili with leveling coat/ insulation layer/ separation layer *,Building material class A2 and fire behaviour according to EN 13501-1, Product/ System: F134 Knauf Vidifloor SOLO 18                                | ing*<br>m2   | €          | €             |
| Double layer dry floor screed made of conglutinated gypsum fiberboards, nominal thickness 20 mm (2 x 10.0 mm), on concrete/ woo joist ceiling* with leveling coat/ insulation layer/ separation layer *, build class A2 and fire behaviour according to EN 13501-1, Product/ System: F135 Knauf Vidifloor DUO 20                                |              | €          | €             |
| Double layer dry floor screed made of conglutinated gypsum fiberboards nominal thickness 25 mm (2 x 12.5 mm), on concrete/ wood joist ceiling* with leveling coat/ insulation layer/ separation layer *, building material cland fire behaviour according to EN 13501-1, Product/ System: F135 Knauf Vidifloor DUO 25                           | k            | €          | €             |
| Two layer dry floor screed made of gypsum fiberboard units with 35 mm nominal thickness 36 mm (2 x 18 mm), on concrete/ wood joist ceiling* with leveling coat/ insulation layer/ separation layer *,Building material cl and fire behaviour according to EN 13501-1, Product/ System: F134 Knauf Vidifloor SOLO 36                             |              | €          | €             |
| Priming of floor substrates made of dry screed, with solvent-free synthetic dispersion, consumption approx. 50 g/m2. Product: <b>Knauf Estrichgrund</b> (screed primer)   | m2           | €          | €             |
| Skim coating of entire dry screed surface, with self leveling calcium sulfate filler of particularly low stress, made of factory blend dry mortar, chair roller proof form 2 mm thickness,* thickne mmProduct: Knauf Nivellierspachtel 415 (leveler)  | ess in<br>m2 | €          | €             |
| * Cancel not applicable items   |              |            | Total€        |