



**GROUP OF TESTING LABORATORIES  
GRYFITLAB**

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**Fire resistance classification No. LBO – 759 – K/24E**

Classified product:

**Partition walls, Norgips, double-sided cladded with 1x15 mm thick  
gypsum plasterboards Norgips GKF type DF or Norgips GKFI type DFH2**

**Sponsor:**

Norgips Sp. z o.o.  
ul. Krakowiaków 50  
02-255 Warszawa

**Prepared by:**

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1. **This classification has been prepared based on the following documents:**
  - 1.1. Standard PN-EN 13501-2:2023-09 Fire classification of construction products and building elements – Part 2: Classification using data from fire resistance tests, excluding ventilation services.
  - 1.2. Standard PN-EN 1364-1:2015-08 Fire resistance tests for non-loadbearing elements – Part 1: Walls.
  - 1.3. Standard PN-EN 1363-1:2020-07 Fire resistance tests – Part 1: General requirements.
  - 1.4. Test Report No. LBO-759/15 Partition wall SD – 1x15 GKF DF CW 50. Fire Tests Laboratory, GRYFITLAB Spółka z o.o., Łozienica 2015.
  - 1.5. Drawings and technical documentation provided by the Sponsor.
  - 1.6. Technical evaluation of Norgips partition walls. Reference number of the evaluation: 06041/14/R20NK (LK00-06041/14/R20NK). Building Research Institute, Warsaw 2014.
2. **Technical description of Norgips partition walls double-sided cladded with 1x15 mm thick gypsum plasterboards Norgips GKF type DF or Norgips GKFI type DFH2.**
  - 2.1 **Partition walls SD-1x15 GKF DF/CW 50, SD-1x15 GKF DF/CW 75, SD-1x15 GKF DF/CW 100, SD-1x15 GKF DF/VP 66, SD-1x15 GKF DF/VP 70, SD-1x15 GKF DF/VP 95, SD-1x15 GKF DF/VP 120, double-sided cladded with 1x15 mm thick gypsum plasterboards Norgips GKF type DF, and SD-1x15 GKFI DFH2/CW 50, SD-1x15 GKFI DFH2/CW 75, SD-1x15 GKFI DFH2/CW 100, SD-1x15 GKFI DFH2/VP66 50, SD-1x15 GKFI DFH2/VP 70, SD-1x15 GKFI DFH2/VP 95, SD-1x15 GKFI DFH2/VP 120, double-sided cladded with 1x15 mm thick gypsum plasterboards Norgips GKFI type DFH2, with a single framework**

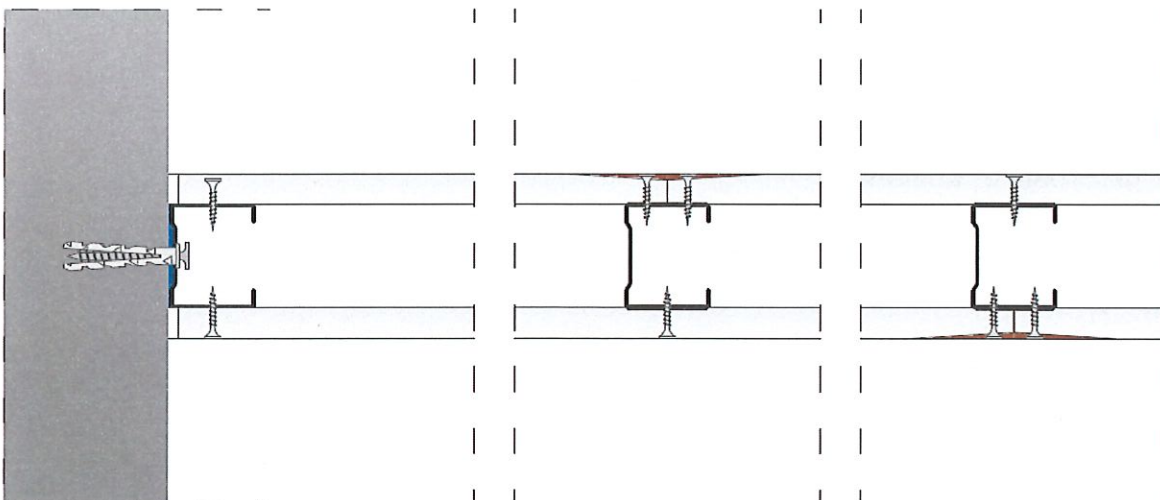


Figure A. Walls described in item 2.1

The construction of the walls is made of profiles e.g. Norgips **CW 50 and UW 50, CW 75 and UW 75, CW 100 and UW 100, VP 66 and HP 66, VP 70 and HP 70, VP 95 and HP 95, VP 120 and HP 120**. The profiles are made of cold bent galvanized steel; the nominal thickness of the steel used is **0.55 mm** (tolerance +/- 0.06 mm) or **0.6 mm** (tolerance +/- 0.06 mm).

Perimeter profiles **CW 50 and UW 50, CW 75 and UW 75, CW 100 and UW 100, VP 66 and HP 66, VP 70 and HP 70, VP 95 and HP 95, VP 120 and HP 120** are fixed to the ceiling, floor and side walls by means of mechanical connectors, such as: wall plugs, dowels etc. placed every **80 cm**. **3 mm** thick Norgips polyethylene sealing tape is placed between the perimeter steel profiles and the ceiling, floor and side walls. Single profiles **CW 50, CW 75 CW 100** or **VP 66, VP 70, VP 95, VP 120** are vertically slid between the bottom and top webs of, respectively, profiles **UW 50, UW 75, UW 100** or **HP 66, HP 70, HP 95, HP 120**.

The maximum distance between the axes of vertical profiles **CW 50, CW 75 CW 100** or **VP 66, VP 70, VP 95, VP 120** is **60 cm** or **62.5 cm**. The length of these profiles should be 1.5 cm less than the distance between the webs of the bottom and top profiles **UW 50, UW 75 UW 100** or **HP 66, HP 70, HP 95, HP 120**.

The layer of **1x15 mm thick boards GKF type DF** or **1x15 mm thick boards GKFI type DFH2** is fixed to the bottom profiles **UW** and profiles **CW** (studs) by means of screws e.g. Norgips **Ø3.5 x 25 mm** placed at most every **25 cm**.

The boards are installed and fixed so that vertical joints between two sides of the wall (in the covering layer) are staggered to avoid locating them on one stud. For this purpose, boards of one side of the wall are shifted in relation to the respective boards of the other side of the wall by minimally **30 cm** and usually, **60 cm** or **62.5 cm**.

In case of surface horizontal joints between adjacent boards of the wall, the joints have to be shifted in relation to one another by minimally **40 cm**.

The screw heads as well as the vertical and horizontal joints between the **GKF** plasterboards type **DF** or the **GKFI** plasterboards type **DFH2** are filled with gypsum plaster jointing compound e.g. **Norgips Start, Norgips Super Filler, Norgips Standard** or ready mixed jointing compound e.g. **Norgips Start & Finish (Norgips Light Ready Mix)** and are additionally strengthened with self-adhesive reinforcing tapes made of glass fibre or with reinforcing tapes made of interlining. For final filling, it is recommended to apply ready to use jointing compounds eg **Norgips Extra Finish, Start & Finish (Norgips Light Ready Mix)** or **Norgips Finish**. Taking into account the acoustic considerations, it is possible to fill the wall with any mineral wool of the A1 reaction to fire class.

Details of the construction of the partition walls are presented in **Figures 1 ÷ 4**.

The fire resistance classification of the walls is presented in **Table 1 – columns 7 and 9**; the maximum heights of the walls are specified in **Table 1 – columns 8 and 10**. In places where there are constructional expansion joints of a building and in case when a wall section without expansion joints is longer than 15 m, one should provide expansion joints (**Figure 5**).

- 2.2 Partition walls SD-1x15 GKF DF/CW 50 + CW 50, SD-1x15 GKF DF/CW 75 + CW 75, SD-1x15 GKF DF/CW 100 + CW 100, SD-1x15 GKF DF/VP 66 + VP 66, SD-1x15 GKF DF/VP 70 + VP 70, SD-1x15 GKF DF/VP 95 + VP 95, SD-1x15 GKF DF/VP 120 + VP 120, double-sided clad with 1x15 mm thick gypsum plasterboards Norgips GKF type DF, and SD-1x15 GKFI DFH2/CW 50 + CW 50, SD-1x15 GKFI DFH2/CW 75 + CW 75, SD-1x15 GKFI DFH2/CW 100 + CW 100, SD-1x15 GKFI DFH2/VP 66 + VP 66, SD-1x15 GKFI DFH2/VP 70 + VP 70, SD-1x15 GKFI DFH2/VP 95 + VP 95, SD-1x15 GKFI DFH2/VP 120 + VP 120, double-sided clad with 1x15 mm thick gypsum plasterboards Norgips GKFI type DFH2, with a single framework and double vertical profiles

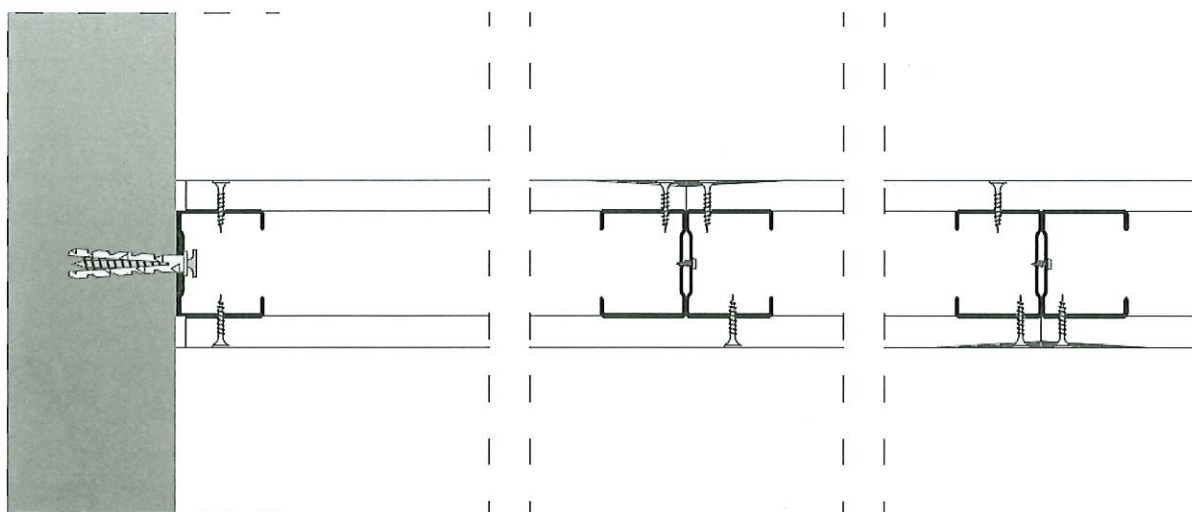


Figure B. Walls described in item 2.2

The construction of the walls is made of profiles e.g. Norgips **CW 50 and UW 50, CW 75 and UW 75, CW 100 and UW 100, VP 66 and HP 66, VP 70 and HP 70, VP 95 and HP 95, VP 120 and HP 120**. The profiles are made of cold bent galvanized steel; the nominal thickness of the steel used is **0.55 mm** (tolerance +/- 0.06 mm) or **0.6 mm** (tolerance +/- 0.06 mm).

Perimeter profiles **CW 50 and UW 50, CW 75 and UW 75, CW 100 and UW 100, VP 66 and HP 66, VP 70 and HP 70, VP 95 and HP 95, VP 120 and HP 120** are fixed to the ceiling, floor and side walls by means of mechanical connectors, such as: wall plugs, dowels etc. placed every **80 cm**. **3 mm** thick Norgips polyethylene sealing tape is placed between the perimeter steel profiles and the ceiling, floor and side walls. Double profiles **CW 50, CW 75, CW 100 or VP 66, VP 70, VP 95, VP 120** are vertically slid between the bottom and top webs of, respectively, profiles **UW 50, UW 75, UW 100 or HP 66, HP 70, HP 95, HP 120**. Each double profile consists of two single profiles screwed with one another along their webs, by means of screws with the **Ø 3.5 x 9.5 mm** self-drilling end; the screws are placed at most every 40 cm. The maximum distance between the axes of profiles constituting double profiles **CW 50, CW 75, CW 100 or VP 66, VP 70, VP 95, VP 120** is **60 cm** or **62.5 cm**. The length of vertical profiles **CW 50, CW 75, CW 100 or VP 66, VP 70, VP 95, VP 120** should be 1.5 cm less than the distance between the webs of the bottom and top profiles **UW 50, UW 75, UW 100 or HP 66, HP 70, HP 95, HP 120**.

The layer of **1x15 mm thick boards GKF type DF** or **1x15 mm thick boards GKFI type DFH2** is fixed to the bottom profiles **UW** and profiles **CW** (studs) by means of screws e.g. Norgips **Ø3.5 x 25 mm** placed at most every **25 cm**.

The boards are installed and fixed so that vertical joints between two sides of the wall (in the covering layer) are staggered to avoid locating them on one stud. For this purpose, boards of one side of the wall are shifted in relation to the respective boards of the other side of the wall by minimally **30 cm** and usually, **60 cm** or **62.5 cm**.

In case of surface horizontal joints between adjacent boards of the wall, the joints have to be shifted in relation to one another by minimally **40 cm**.

The screw heads as well as the vertical and horizontal joints between the **GKF** plasterboards **type DF** or the **GKFI** plasterboards **type DFH2** are filled with gypsum plaster jointing compound **Norgips Start, Norgips Super Filler or Norgips Standard** or ready mixed jointing compound e.g. **Norgips Start & Finish (Norgips Light Ready Mix)** and are additionally strengthened with self-adhesive reinforcing tapes made of glass fibre or with reinforcing tapes made of interlining. For final filling, it is recommended to apply ready to use jointing compounds eg **Norgips Extra Finish, Start & Finish (Norgips Light Ready Mix)** or **Norgips Finish**. Taking into account the acoustic considerations, it is possible to fill the wall with any mineral wool of the A1 reaction to fire class.

The fire resistance classification of the walls is presented in **Table 2 – columns 7 and 9**; the maximum heights of the walls are specified in **Table 2 – columns 8 and 10**.

In places where there are constructional expansion joints of a building and in case when a wall section without expansion joints is longer than 15 m, one should provide expansion joints.

### **3. Fire resistance tests**

Fire resistance tests of Norgips partition walls made of 1x15 mm thick gypsum plasterboards were carried out in the Fire Tests Laboratory of Gryfitlab Sp. z.o.o., in Łozienica.

Test report: No. LBO-759/15 [1.4].

### **4. Fire resistance classification of Norgips partition walls, double-sided cladded with 1x15 mm thick gypsum plasterboards Norgips GKF type DF or Norgips GKFI type DFH2**

Based on the analysis of test results indicated in item 3, Norgips partition walls double-sided cladded with 1x15 mm thick gypsum plasterboards Norgips GKF type DF or Norgips GKFI type DFH2, manufactured and installed in accordance with the technical description presented in item 2, are classified as follows:

- according to standard PN-EN 13501-2:2023-09 [1.1]: as belonging to fire resistance classes specified in Tables 1 and 2, in column 7 – for the maximum height of the walls specified in column 8,

- according to the criteria of standard PN-EN 13501-2:2023-09 [1.1]: as belonging to fire resistance classes specified in Tables 1 and 2, in column 9 – for the maximum height of the walls specified in column 10.

**5. Norgips partition walls, double-sided cladded with 1x15 mm thick gypsum plasterboards Norgips GKF type DF or Norgips GKFI type DFH2, used as fire separation**

In view of fire safety, according to the requirements specified in the ordinance of the Minister of Infrastructure of 12<sup>th</sup> April 2002 on technical requirements to be fulfilled by buildings and their localization (Journal of Laws of 2001, No. 75, item 690 with later amendments), taking into account the classification presented in item 4 herein, Norgips partition walls, double-sided cladded with 1x15 mm thick gypsum plasterboards Norgips GKF type DF or Norgips GKFI type DFH2, manufactured and installed in accordance with the technical description specified in item 2 herein, may be used as fire separation meeting the classification criteria for the REI fire resistance class specified in the ordinance in question, if the following conditions are fulfilled:

- the walls are either fixed to or placed on a construction which meets the EI criteria for a fire resistance class not lower than the fire resistance class of the partition wall,
- the walls are not subjected to mechanical loads generated by the construction of a building,
- the walls are fixed to the elements of a building in accordance with the solution presented in the construction design.

**6. Restriction**

The classification presented in item 4 is valid for elements made of 15 mm thick Norgips gypsum plasterboards, manufactured in accordance with standard PN-EN 520+A1:2012, and of the surface density not less than:

12.0 kg/m<sup>2</sup> – for boards type DF and DFH2.

Classification No. LBO – 759 – K/24E may only be used or reproduced in its entirety.

**7. Validity**

This classification is valid until 15.11.2027 on the condition that there are no changes in the construction or materials of the classified products.

Prezes Zarządu  
  
Andrzej Szarycki

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## **8. Tables, figures**

**Norgips partition walls, double-sided cladded with 15 mm thick gypsum  
plasterboards Norgips GKF type DF or Norgips GKFI type DFH2**

Table 1

Technical details of Norgips partition walls, with the covering made of plasterboards GKF type DF and GKFI type DFH2 – for the following partition walls:

**SD-1x15 GKF DF/CW 50, SD-1x15 GKF DF/CW 75, SD-1x15 GKF DF/CW 100,**

**SD-1x15 GKF DF/VP 66, SD-1x15 GKF DF/VP 70, SD-1x15 GKF DF/VP 95,**

**SD-1x15 GKF DF/VP 120**

**SD-1x15 GKFI DFH2/CW 50, SD-1x15 GKFI DFH2/CW 75, SD-1x15 GKFI DFH2/CW 100,**

**SD-1x15 GKFI DFH2/VP 66, SD-1x15 GKFI DFH2/VP 70, SD-1x15 GKFI DFH2/VP 95,**

**SD-1x15 GKFI DFH2/VP 120**

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Identification symbol of a Norgips partition wall	Type of profiles	Maximum distance between CW profiles [cm]	Type of gypsum plasterboard cladding		Total thickness of the wall [mm]	Filling with mineral wool	Fire resistance classification of the wall			
			Type/ thickness [mm]	Minimum surface density [kg/m <sup>2</sup> ]			As per PN-EN 13501-2:2023-09	Fire resistance class	Maximum height [cm]	As per the criteria of PN-EN 13501-2:2023-09
1	2		3	4	5	6	7	8	9	10
SD-1x15 GKF DF/CW 50	CW 50, UW 50	60/62.5			80			330		330
SD-1x15 GKF DF/VP 66	VP 66, HP 66	40/41.7	DF; 1x15	12.0	96		EI 60	400	EI 60	410
SD-1x15 GKF DF/VP 70	VP 70, HP 70	30/31.3			100			400		480
SD-1x15 GKFI DFH2/CW 50	CW 50, UW 50	60/62.5			80	No filling or any mineral wool of the A1 reaction to fire class		330		330
SD-1x15 GKFI DFH2/VP 66	VP 66, HP 66	40/41.7	DFH2; 1x15	12.0	96		EI 60	400	EI 60	410
SD-1x15 GKFI DFH2/VP 70	VP 70, HP 70	30/31.3			100			400		480
SD-1x15 GKF DF/CW 75	CW 75, UW 75	60/62.5			105			400		440
SD-1x15 GKF DF/VP 95	VP 95, HP 95	40/41.7	DF; 1x15	12.0	125		EI 60	400	EI 60	500
SD-1x15 GKFI DFH2/CW 75	CW 75, UW 75	60/62.5			105			400		560
SD-1x15 GKFI DFH2/VP 95	VP 95, HP 95	40/41.7	DFH2; 1x15	12.0	125		EI 60	400	EI 60	500
SD-1x15 GKF DF/CW 100	CW 100, UW 100	60/62.5			130			400		530
SD-1x15 GKF DF/VP 120	VP 120, HP 120	40/41.7	DF; 1x15	12.0	150		EI 60	400	EI 60	620
		30/31.3						400		650



Table 1, continued

Identification symbol of a Norgips partition wall	Type of profiles	Maximum distance between CW profiles [cm]	Type of gypsum plasterboard cladding		Total thickness of the wall [mm]	Filling with mineral wool	Fire resistance classification of the wall			
			Type/ thickness [mm]	Minimum surface density [kg/m <sup>2</sup> ]			As per PN-EN 13501-2:2023-09	Fire resistance class	Maximum height [cm]	As per the criteria of PN-EN 13501-2:2023-09
1	2		3	4	5	6	7	8	9	10
SD-1x15 GKFI DFH2/CW 100	CW 100, UW 100	60/62.5			130			400		530
SD-1x15 GKFI DFH2/VP 120	VP 120, HP 120	40/41.7 30/31.3	DFH2; 1x15	12.0	150	<b>1)</b>	EI 60	400	EI 60	620
								400		650

1) No filling or any mineral wool of the A1 reaction to fire class

NOTE: Taking into account the acoustic considerations, it is possible to use thicker mineral wool and gypsum plasterboards, and additional layers of boards.

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Table 2

Technical details of Norgips partition walls, with the covering made of plasterboards GKF type DF and GKFI type DFH2 – for the following partition walls:

**SD-1x15 GKF DF/CW 50 + CW 50, SD-1x15 GKF DF/CW 75 + CW 75, SD-1x15 GKF DF/CW 100 + CW 100,**

**SD-1x15 GKF DF/VP 66 + VP 66, SD-1x15 GKF DF/VP 70 + VP 70, SD-1x15 GKF DF/VP 95 + VP 95,**

**SD-1x15 GKF DF/VP 120 + VP 120**

**SD-1x15 GKFI DFH2/CW 50 + CW 50, SD-1x15 GKFI DFH2/CW 75 + CW 75, SD-1x15 GKFI DFH2/CW 100 + CW 100,**

**SD-1x15 GKFI DFH2/VP 66 + VP 66, SD-1x15 GKFI DFH2/VP 70 + VP 70, SD-1x15 GKFI DFH2/VP 95 + VP 95,**

**SD-1x15 GKFI DFH2/VP 120 + VP 120**

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Identification symbol of a Norgips partition wall	Type of profiles	Maximum distance between CW profiles [cm]	Type of gypsum plasterboard cladding		Total thickness of the wall [mm]	Filling with mineral wool	Fire resistance classification of the wall			
			Type/ thickness [mm]	Minimum surface density [kg/m <sup>2</sup> ]			As per PN-EN 13501-2:2023-09	As per the criteria of PN-EN 13501-2:2023-09	Maximum height [cm]	
1	2		3	4	5	6	7	8	9	10
SD-1x15 GKF DF/CW 50 + CW 50	CW 50, UW 50	60/62.5			80			400		410
SD-1x15 GKF DF/VP 66 + VP 66	VP 66, HP 66	40/41.7	DF; 1x15	12.0	96		EI 60	400	EI 60	450
SD-1x15 GKF DF/VP 70 + VP 70	VP 70, HP 70	30/31.3			100			400		550
SD-1x15 GKFI DFH2/CW50 + CW50	CW 50, UW 50	60/62.5			80			400		410
SD-1x15 GKFI DFH2/VP 66 + VP 66	VP 66, HP 66	40/41.7	DFH2; 1x15	12.0	96		EI 60	400	EI 60	450
SD-1x15 GKFI DFH2/VP 70 + VP 70	VP 70, HP 70	30/31.3			100			400		550
SD-1x15 GKF DF/CW 75 + CW 75	CW 75, UW 75	60/62.5			105	No filling or any mineral wool of the A1 reaction to fire class		400		550
SD-1x15 GKF DF/VP 95 + VP 95	VP 95, HP 95	40/41.7	DF; 1x15	12.0	125		EI 60	400	EI 60	600
SD-1x15 GKFI DFH2/CW75 + CW75	CW 75, UW 75	60/62.5			105			400		550
SD-1x15 GKFI DFH2/VP 95 + VP 95	VP 95, HP 95	40/41.7	DFH2; 1x15	12.0	125		EI 60	400	EI 60	630
SD-1x15 GKF DF/CW 100+CW 100	CW100, UW100	60/62.5			130			400		650
SD-1x15 GKF DF/CW 100+CW 100	VP120, HP120	40/41.7	DF; 1x15	12.0	150		EI 60	400	EI 60	650
		30/31.3						400		650

Table 2, continued

Identification symbol of a Norgips partition wall	Type of profiles	Maximum distance between CW profiles [cm]	Type of gypsum plasterboard cladding		Total thickness of the wall [mm]	Filling with mineral wool	Fire resistance classification of the wall			
			Type/ thickness [mm]	Minimum surface density [kg/m <sup>2</sup> ]			As per PN-EN 13501-2:2023-09	As per the criteria of PN-EN 13501-2:2023-09	Fire resistance class	Maximum height [cm]
1	2		3	4	5	6	7	8	9	10
SD-1x15 GKFI DFH2/CW100+CW100	CW100, UW100	60/62.5			130			400		650
SD-1x15 GKFI DFH2/CW100+CW100	VP120, HP120	40/41.7	DFH2; 1x15	12.0	150	<b>1)</b>	EI 60	400	EI 60	650
		30/31.3						400		650

1) No filling or any mineral wool of the A1 reaction to fire class

NOTE: Taking into account the acoustic considerations, it is possible to use thicker mineral wool and gypsum plasterboards, and additional layers of boards.

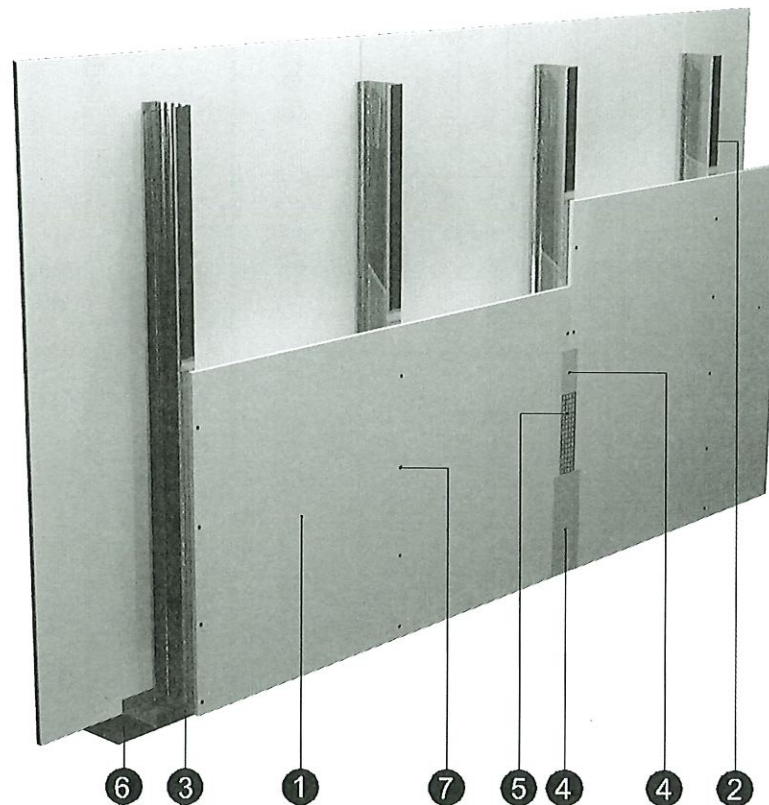


Figure 1 – view of the wall

Symbols:

1. Gypsum plasterboard Norgips GKF type DF or GKFI DFH2, th.15 mm
2. Vertical profiles e.g. Norgips CW 50/CW 75/CW 100/VP 66/VP 70/ VP 95/VP 120 made of at least 0.55 mm thick steel sheet, placed maximally every 60 cm or 62.5 cm
3. Horizontal profiles Norgips UW 50/UW 75/ UW 100/HP 66/HP 70/HP 95/HP 120 made of at least 0.55 mm thick steel sheet
4. Gypsum filler jointing compound Norgips Start or Norgips Super Filler or ready mix jointing compound e.g. Norgips Start & Finish (Norgips Light Ready Mix)
5. Self-adhesive reinforcing tape made of glass fibre or interlining
6. Sealing tape e.g. Norgips, width 50 mm/75 mm/100 mm
7. Screws e.g. Norgips  $\varnothing 3.5 \times 25$  mm placed maximally every 25 cm

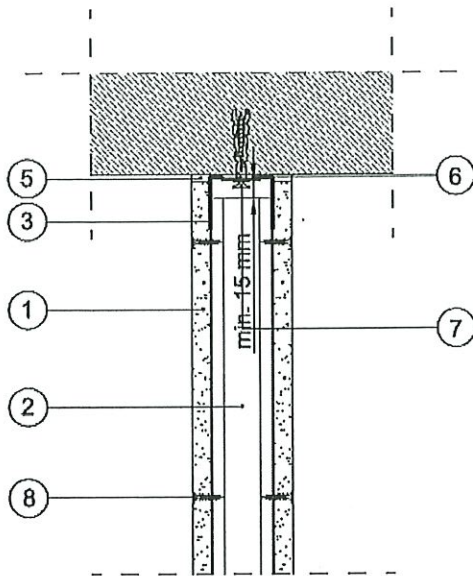


Figure 2 – vertical section, top connection

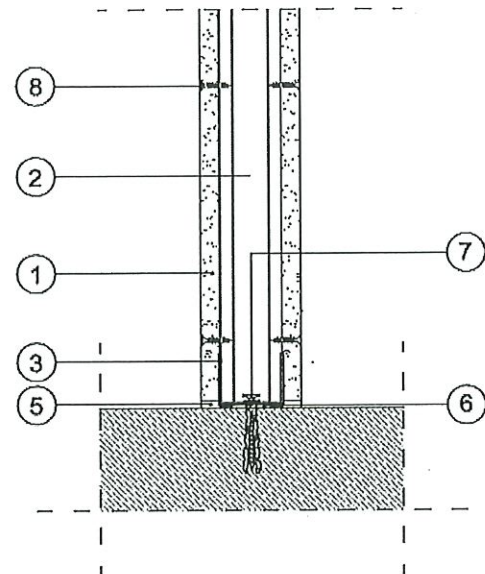


Figure 3 – vertical section, bottom connection

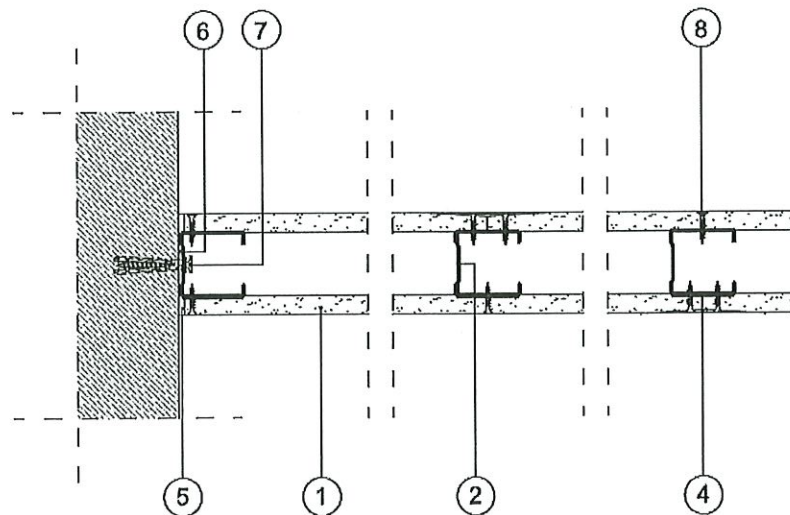


Figure 4 – horizontal section

Symbols:

1. Gypsum plasterboard Norgips GKF type DF or GKFI DFH2, th.15 mm
2. Vertical profiles e.g. Norgips CW 50/CW 75/CW 100/VP 66/VP 70/ VP 95/VP 120 made of at least 0.55 mm thick steel sheet, placed maximally every 60 cm or 62.5 cm
3. Horizontal profiles e.g. Norgips UW 50/UW 75/ UW 100/HP 66/HP 70/HP 95/HP 120 made of at least 0.55 mm thick steel sheet
4. Gypsum filler jointing compound Norgips Start or Norgips Super Filler or ready mix jointing compound e.g. Norgips Start & Finish (Norgips Light Ready Mix) + self-adhesive reinforcing tape made of glass fibre or interlining
5. Gypsum filler jointing compound Norgips Start or Norgips Super Filler or ready mix jointing compound e.g. Norgips Start & Finish (Norgips Light Ready Mix)
6. Sealing tape e.g. Norgips, width 50 mm/75 mm/100 mm
7. Mechanical connector, e.g. wall plug, dowel minimum  $\varnothing 6 \times 40$  mm, placed maximally every 80 cm
8. Screws e.g. Norgips  $\varnothing 3.5 \times 25$  mm placed maximally every 25 cm

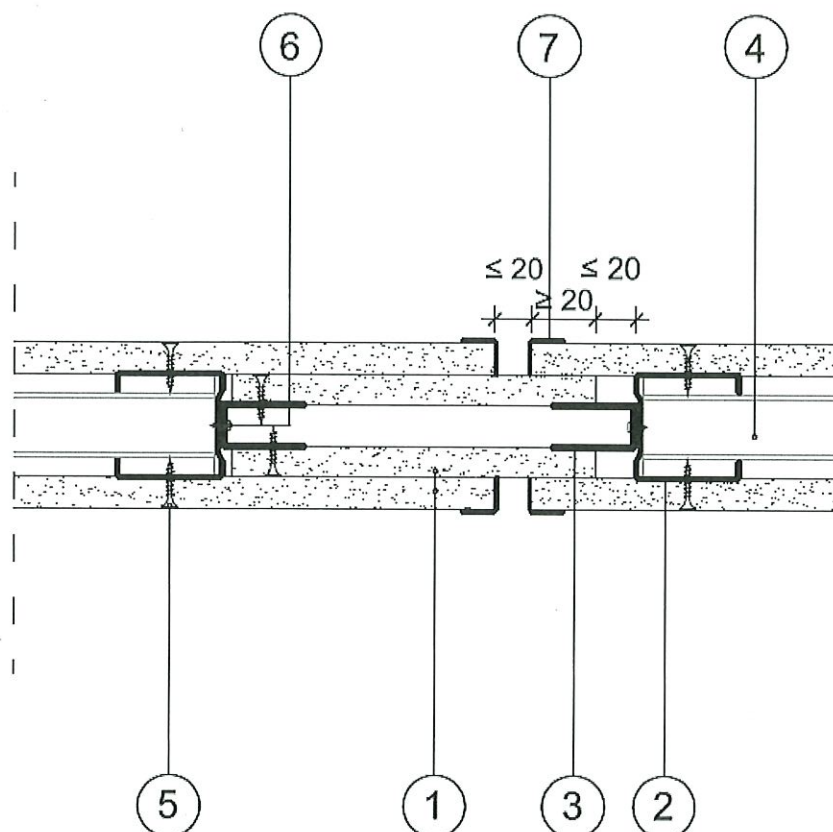


Figure 5 – expansion joints

Symbols:

1. Gypsum plasterboard Norgips GKF type DF or GKFI DFH2, th.15 mm
2. Vertical profiles e.g. Norgips CW 50/CW 75/CW 100/VP 66/VP 70/ VP 95/VP 120 made of at least 0.55 mm thick steel sheet,
3. Angle elements 2 x L 20x50/2 x L 40x50/2 x L 60x50 made of at least 0.55 mm thick steel sheet, screwed to profiles CW 50/CW 75/CW 100/VP 66/VP 70/ VP 95/VP 120 by means of screws with self-drilling ends  $\varnothing 3.5 \times 9.5$  mm placed maximally every 40 cm
4. Horizontal profiles e.g. Norgips UW 50/UW 75/ UW 100/HP 66/HP 70/HP 95/HP 120 made of at least 0.55 mm thick steel sheet
5. Screws e.g. Norgips  $\varnothing 3.5 \times 25$  mm placed maximally every 25 cm
6. Screws e.g. Norgips  $\varnothing 3.5 \times 25$  mm with self-drilling ends  $\varnothing 3.5 \times 9.5$  mm placed maximally every 40 cm
7. Corner for gypsum plasterboards