



S 7 RAW System Installation Instructions

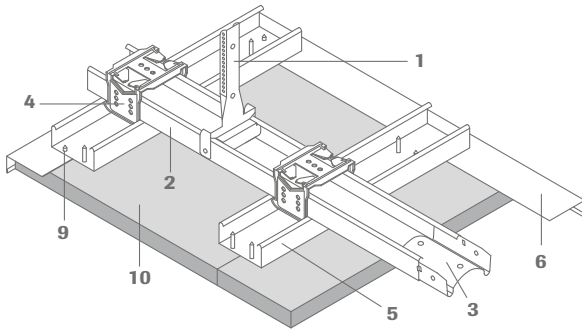
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Contents

1. Product data	4
2. General information on workmanship	5
3. During the installation of the S 7 RAW ceiling, the following instructions must be observed . . .	5
4. Substructure and RAW tiles	5
4.1 Substructure	5
4.2 RAW tiles	6
4.3 System-compliant integrated parts and accessories	6
4.4 Inclined installation	6
5. Installation instructions	7
5.1 Installation of the 1st level (supporting grid)	7
5.2 Installation of the 2nd level (tile grid)	8
5.3 Installation of the RAW tiles	8
5.4 Comfort inspection hatch no. 8031/9 and no. 8031/10	9
5.5 Mounting frame no. 8069/6	11
5.6 Connection to plasterboard friezes, bulkheads, folding tiles	12
6. Material requirements	13

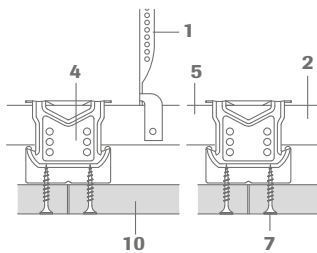
1. Product data

Sliding wall connection (shadow gap)

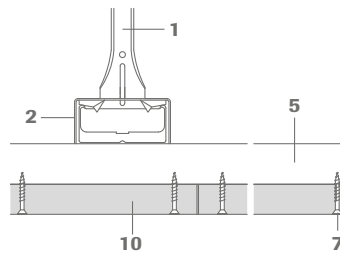


- 1 Nonius hanger no. 2001, distance \leq 1000 mm
- 2 Supporting grid CD profile 60/27 no. 2003, distance \leq 1000 mm
- 3 Longitudinal profile connector no. 2005
- 4 Cross connector no. 2004
- 5 Tile grid CD profile 60/27 no. 2003, distance \leq 400 mm
- 6 Wall profile no. 51/22
- 7 Tile screw no. 2007, distance \leq 300 and 400 mm
- 8 Direct hangers no. 2002, distance \leq 1000 mm; fixture: safety pin no. 76 (2-fold)
- 9 Metal screw no. 2008
- 10 RAW tile

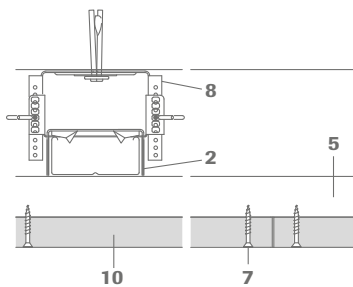
Longitudinal section:



Cross section:



Direct mounting:



Technical data | Mineral tiles

Dimensions	2400 mm x 1200 mm
Edge	3
Tile thickness	20 mm nom. (OWAcoustic® premium)
Building material class	A2-s1,d0 nach DIN EN 13501-1
Metal system	All metal parts galvanised
Minimum suspension height	Suspended installation 115 - 140 mm (depending on the existing ceiling slab) Direct mounting approx. 90 mm to the ceiling slab

2. General information on workmanship

S 7 RAW is a special, high-quality ceiling system whose appearance also depends on the workmanship of the substructure.

In the classification of fire behaviour according to DIN EN 13501-1, the building product S 7 RAW was awarded the classification A2-s1, d0 – not flammable and given the CE mark as a ceiling kit.

If other non-certified system components are used, the specified system-relevant properties of the S 7 RAW building product are not guaranteed.

3. During the installation of the S 7 RAW ceiling, the following instructions must be observed:

- The installation room must be dry.
- The temperature must not fall below 15 °C during installation.
- The relative humidity must not exceed 70 %.
- Original system-compliant parts must be used.
- All installation plans for required fittings must be available before the commencement of work.
- Existing building expansion gaps must be retained in the S 7 RAW ceiling.
- All fittings that may be required must be installed before the installation of the RAW tiles. It is essential that coordination between the drywall construction, electrical and other trades involved should be proved (see section 1).
- Artificial light (e.g. spotlights, indirect lighting) directed at the ceiling surface from below or from the side is to be avoided.
- All fittings must also be suspended from the ceiling slab.
- In the event that installation work should be hindered by external influences for which the company performing the work is not responsible, as well as in the case of deviations from the installation conditions specified in these installation instruction etc., it is essential that reservations should be expressed vis-à-vis the customer in writing (VOB/B [German Construction Contract Procedures] §6).

4. Substructure and RAW tiles

4.1 Substructure

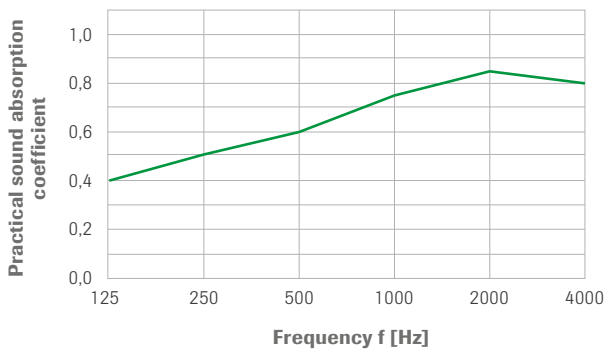
Only the following OWAconstruct® profile construction parts may be used. The specified axis distances must be observed. Deviations may adversely affect or change the subsequent appearance of the S 7 RAW ceiling.

- nonius hangers no. 2001 – max. axis distance = 1000 mm + 2 safety pins no. 76
 - CD profile no. 2003 (supporting grid), 60 x 27 x 0.6 mm – max. axis distance = 1000 mm
 - CD profile no. 2003 (tile grid), 60 x 27 x 0.6 mm – max. axis distance = 400 mm
 - cross connector no. 2004
 - longitudinal profile connector no. 2005
 - drywall screws no. 2007 max. axis distance = 150 mm
 - angle profile no. 51/22 as sliding wall connection (attachment to substructure)
 - metal screws no. 2008 for angle profile no. 51/22 – max. axis distance = 400 mm
 - in the joint area of the RAW tiles, the angle profile must be additionally secured with 2 metal screws
 - inclined hanger lower element no. 2012 – max. axis distance = 1000 mm + 2 safety pins no. 76
 - inclined hanger upper element no. 2013
-

4.2 RAW tiles

RAW is a highly individual ceiling tile. Irregular appearance, material and colour differences in the tile surface are intentional. This is part of the natural aesthetic appearance of the design and does not constitute grounds for complaint. Prior to installation of the tiles, care should be taken to make sure that tiles from as many different packages as possible are installed to ensure sufficient mixing of the tile surfaces. Where applicable, the appearance of the ceiling should be discussed with the customer and/or planner. RAW ceiling tiles are mounted on the CD profile structure using drywall screws. The heads of the screws remain visible and contribute to the desired appearance of the ceiling.

4.2.1 Sound-absorbing



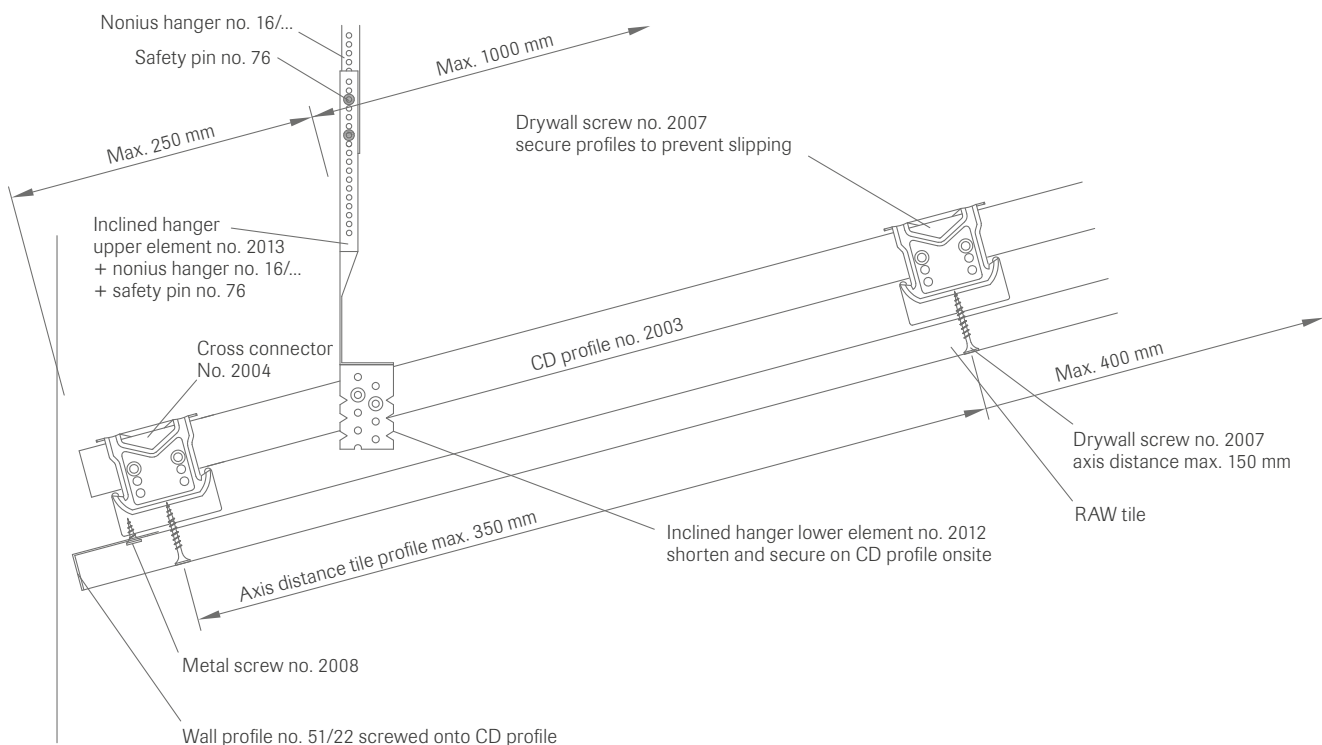
Freq. [Hz]	Test setup E200 α_p
125	0.40
250	0.50
500	0.60
1000	0.75
2000	0.85
4000	0.80
NRC	0.70
α_w	0.70
SRA	0.75

4.3 System-compliant integrated parts and accessories

Mounting frame no. 8069/6, consisting of 2 parts, for the installation of downlights. The frame is placed on the CD profiles of the tile grid and can be shifted or positioned during installation (see section 5.5).

4.4 Inclined installation

Longitudinal section for inclined installation/sliding wall connection:

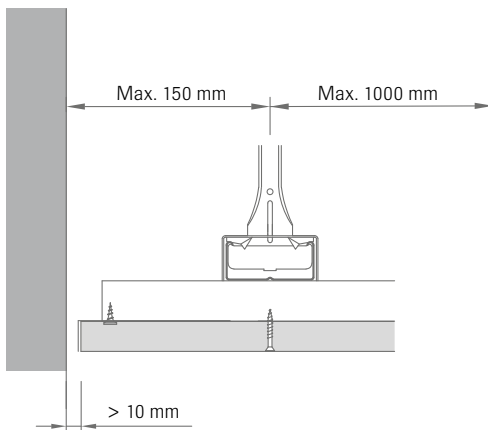
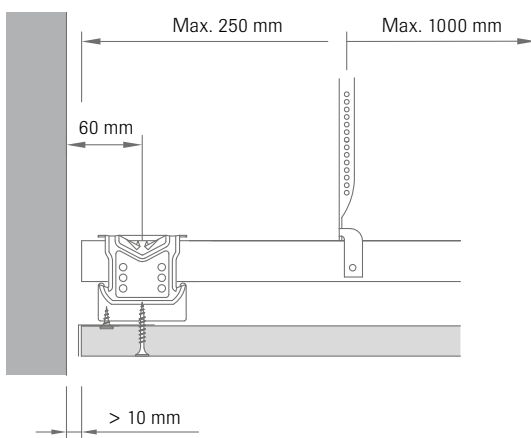


5. Installation instructions

5.1 Installation of the 1st level (supporting grid)

Installation with CD profiles no. 2003 and nonius hangers no. 2001, no. 16/..., no. 76 at a max. axis distance from the CD profiles of 1000 mm. The first and last CD profile is to be fitted at an axis distance of max. 150 mm from the wall. The entire construction is to be aligned so that it is level. The maximum axis distance of the nonius hangers from the wall is max. 250 mm. Axis distance of the nonius hangers below each other max. 1000 mm. The connection between the CD profiles is effected with straight connector no. 2005.

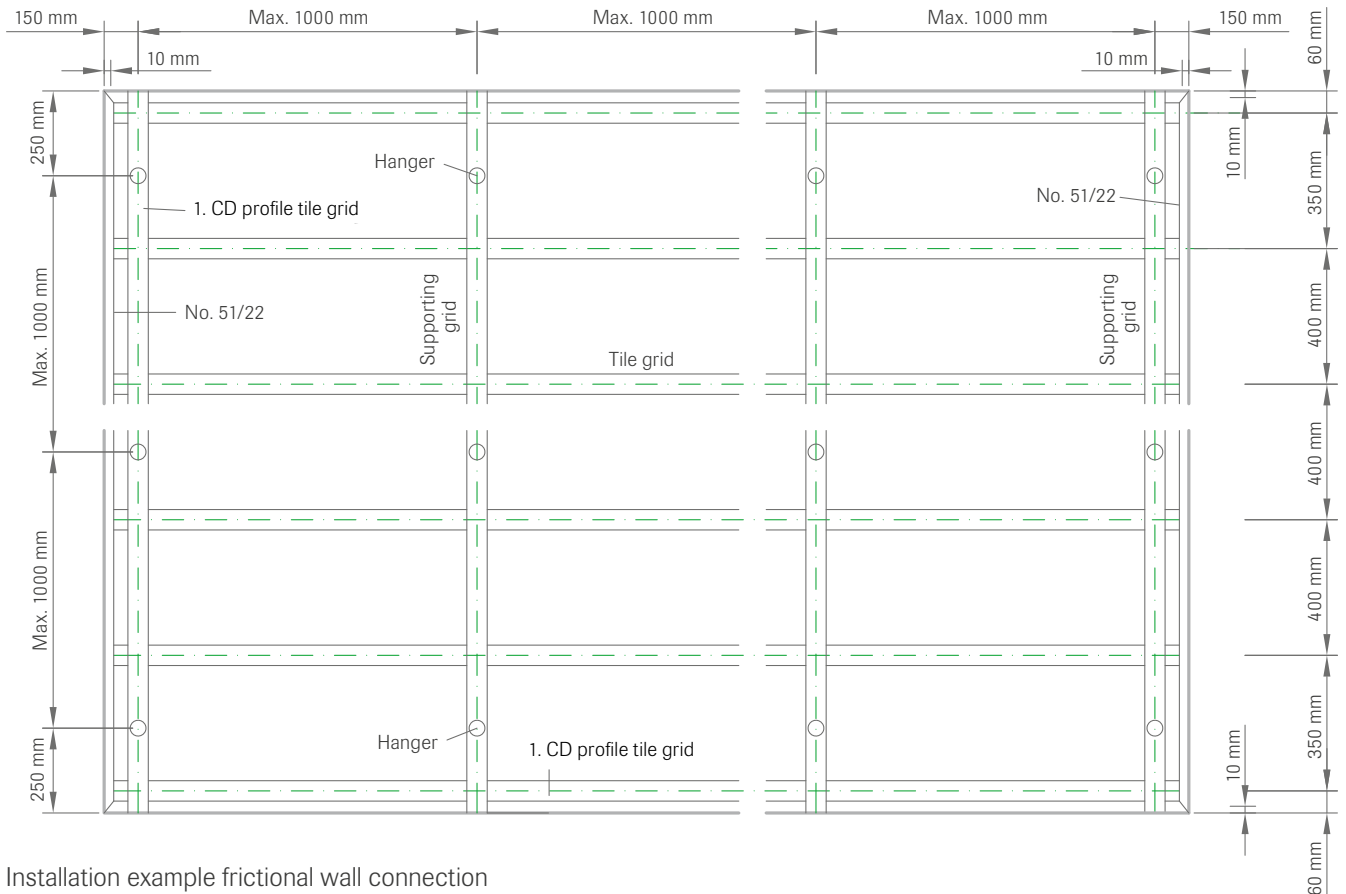
Sliding wall connection:



5.2 Installation of the 2nd level (tile grid)

Installation with CD profiles no. 2003 at a max. axis distance of 400 mm. The first and last CD profile is to be fitted at an axis distance of max. 60 mm from the wall. Mounting on supporting grid with cross connector no. 2004. The cross connector must first snap into the CD profile on one side along the CD profile, so that both lugs engage in the curved edge of the CD profile. Only then should the connector snap into the opposite curved edge of the CD profile. The connection of the CD profiles to each other is effected with longitudinal profile connector no. 2005.

Sliding wall connection:



Installation example frictional wall connection

5.3 Installation of the RAW tiles

Installation with drywall screws no. 2007 with a max. axis distance of 150 mm. The tiles are installed with offset joint gaps at right angles to or along the CD profiles of the tile grid. The tiles are always screwed to the CD profiles from the tile centre outwards.

Please note: The longitudinal tile edges should always be installed in the direction of incident daylight (main direction of light)!

5.4 Comfort inspection hatch no. 8031/9 and no. 8031/10

In the installation of the seamless OWAplan ceiling, inspection hatches often have to be installed.

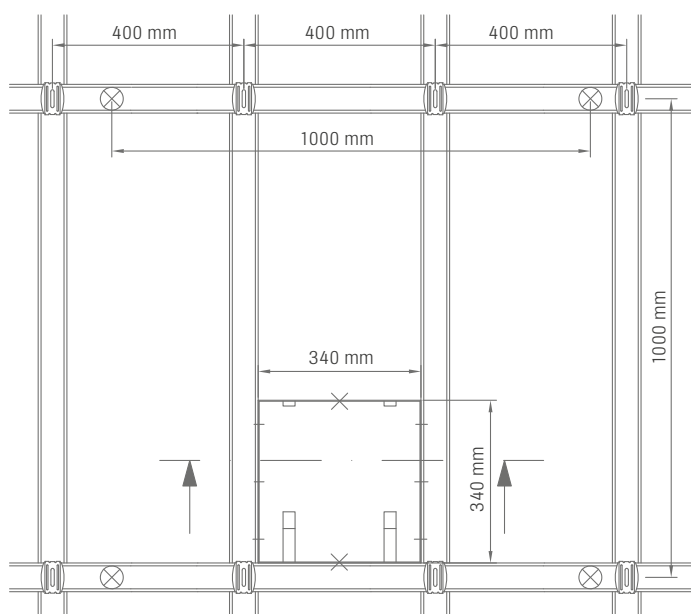
- comfort inspection hatch no. 8031/9, dimensions 340 x 340 mm
(tile insert of the inspection hatch must be made onsite from a RAW tile)
- comfort inspection hatch no. 8031/10, dimensions 540 x 540 mm
(tile insert of the inspection hatch must be made onsite from a RAW tile)
- nonius hanger no 17/81 + extension no. 16/... for comfort inspection hatch,
2 pieces each or 4 pieces per inspection hatch

For the required hanger see section 4.4

The following points must be observed:

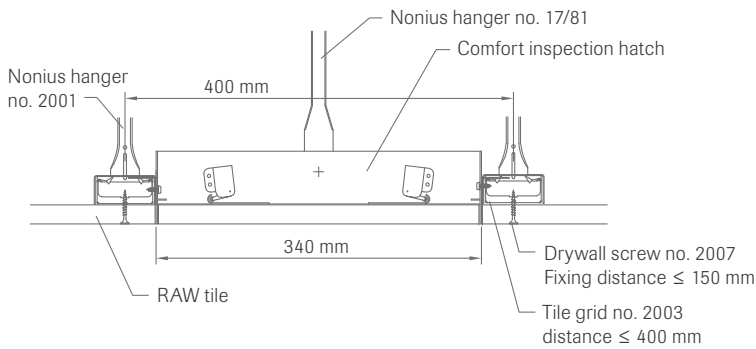
- The exact location of the inspection hatches must correspond to the substructure of the false ceiling.
- The nonius hangers must be assigned to the appropriate region of the false ceiling, depending on the number and weight of the proposed inspection hatches (see top view of ceiling).
- The size of the opening in the ceiling must correspond to the outer dimensions of the inspection hatch to be installed.
- The inspection hatches must be fitted before the tiles are installed.
- When using inspection hatch no. 8031/10, the CD profile in the region of the inspection hatch must be separated accordingly. In addition, two CD profiles, length 1000 mm, must be fitted and suspended from the ceiling slab (see top view of ceiling 540 x 540 mm).

Ceiling top view of inspection hatch no. 8031/9 (340 x 340 mm):

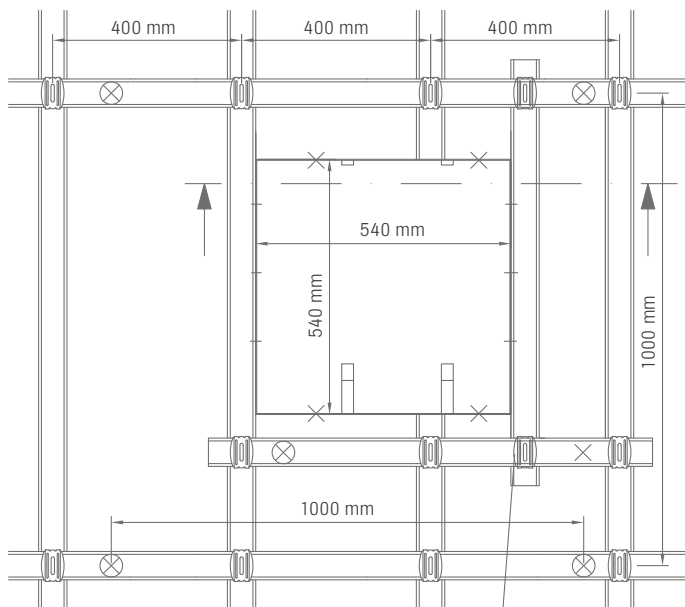


- ⊗ = 2 additional hangers no. 17/81
+ extension no. 16/...
+ safety pin no. 76 (2-fold)
- ⊗ = Nonius hanger no. 2001

Cross-section through inspection hatch no. 8031/9:



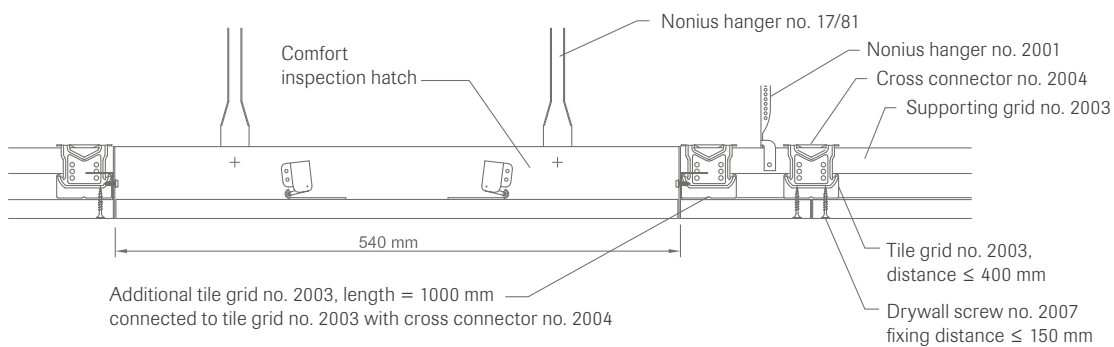
Ceiling top view of inspection hatch no. 8031/10 (540 x 540 mm):



Additional supporting grid no. 2003, length = 1000 mm
 connected to tile grid no. 2003 with cross connector no. 2004

- ⊗ = 4 additional hangers no. 17/81
 + extension no. 16/...
 + safety pin no. 76 (2-fold)
- ⊗ = Nonius hanger no. 2001

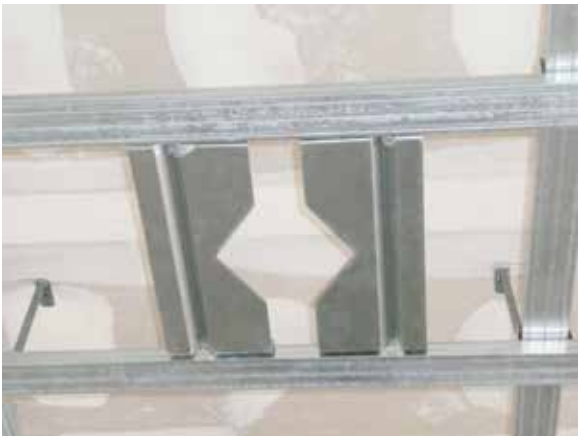
Cross-section through inspection hatch no. 8031/10:



The inspection hatch is inserted correctly into the opening, aligned and bolted to the CD profiles with six screws. Fine adjustment is possible in the area of the hinge mountings and the locking mechanism by unscrewing the Phillips screws and moving the unit vertically in the region of the slots. The corresponding RAW tile must be fitted onto the inspection hatch onsite. It must be bonded using adhesive no. 9924.

The hatch is opened by pushing the opening part on one side and lowering it again immediately. The inspection hatch is closed by pressing it gently. The closing mechanism can then be heard to engage. It is highly recommended that the hatch should only be opened and closed with clean mounting gloves.

5.5 Mounting frame no. 8069/6



The mounting frame no. 8069/6 must be used when installing downlights. For each downlight, 2 mounting frames are required. The frames are to be placed on the CD profiles with the lateral edges upturned. The distance between the frames themselves must be chosen in accordance with the diameter of the downlights. It is important here to ensure that the clamping device of the downlight subsequently rests on the frame and the mounting frames do not extend beyond the edge of the hole. The cutout for the downlight can be made with the circle cutter no. 99/15. The size must be adjusted to the diameter of the downlight. Install it before fitting the tile!

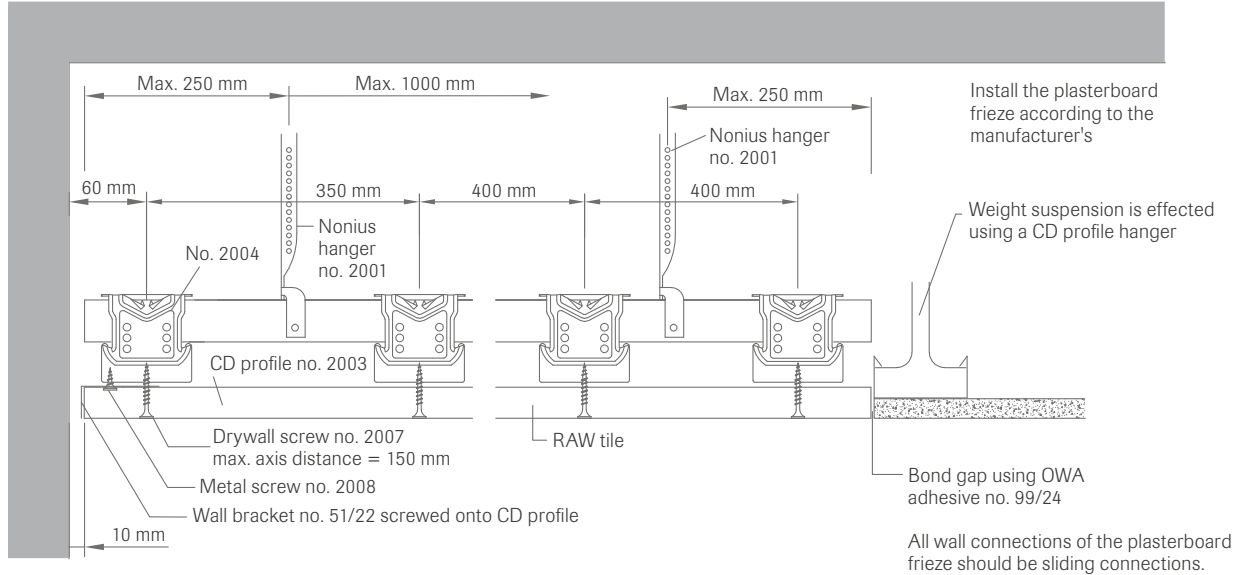
Downlights with a weight of 250 g or more each must also be suspended from the ceiling slab.

Electrical wiring must be installed before the ceiling is closed. The cables should be sufficiently long. The correct functioning of the luminaire should be tested before installation, as subsequent alterations are no longer possible.

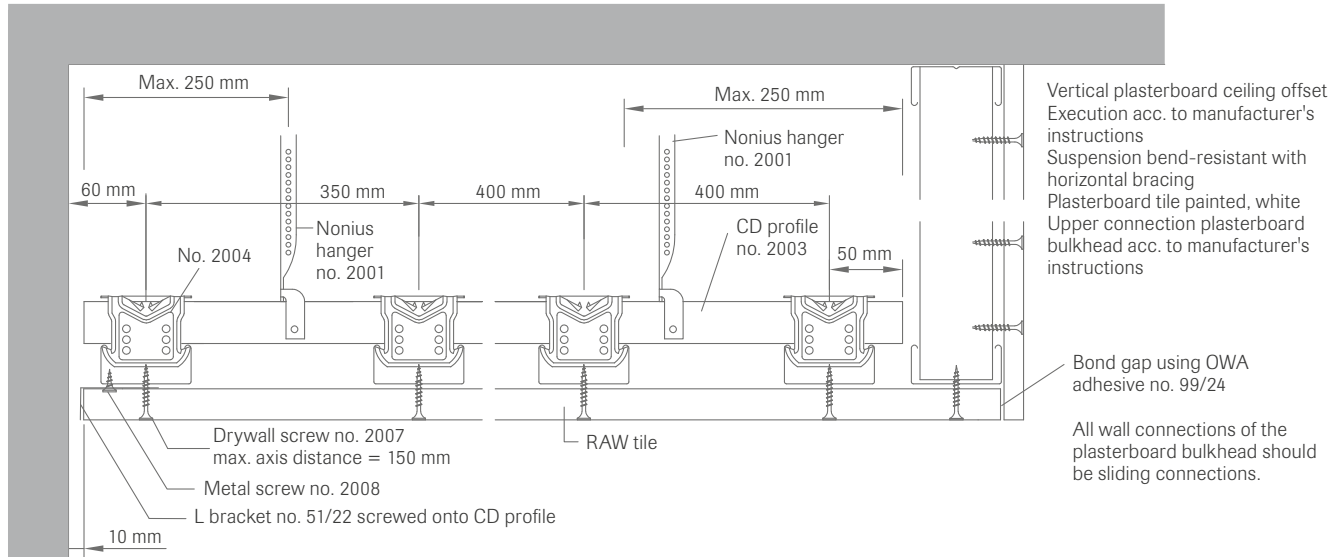
5.6 Connection to plasterboard friezes, bulkheads, folding tiles

Sliding connection:

Connection of S 7 RAW to plasterboard friezes



Connection of S 7 RAW to plasterboard bulkhead



6. Material requirements

Material requirements per m² (reference values):

No.	Designation	2400 x 1200
2001	Nonius hanger lower element	1 piece
16/...	Nonius hanger upper element	1 piece
76	Safety pin	2 piece
2002	Adjustable direct hanger	1 piece
2012	Inclined hanger lower element	1 piece
2013	Inclined hanger upper element	1 piece
2003	CD profile	3.5 m
2004	Cross connector	2.5 piece
2005	Longitudinal profile connector	0.9 piece
2007	Drywall screw	27 piece
2008	Metal screw	6 piece/m
99/24	Tile adhesive	Project-specific
51/22	Angle profile	Project-specific
51/22G-O	Angle profile, curved, in linear metres	Project-specific
51/22G-O	Angle profile semi-circular pillar connection up to $\varnothing = 1500$ mm	Project-specific
8069/6	Mounting frame	Project-specific
8031/9	Inspection hatch 340 x 340 mm	Project-specific
8031/10	Inspection hatch 540 x 540 mm	Project-specific

Product warranties

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Odenwald Faserplattenwerk GmbH

Dr.-F.-A.-Freundt-Straße 3 | 63916 Amorbach | Germany
tel +49 93 73.2 01-0 | info@owa.de
www.owa-ceilings.com