

SEAMLESS ACOUSTICAL SURFACES



AKUSTAPLAN® GLASS

ALVARO® GLASS

with 1.0 mm plaster of structure (B1 and A2);
1.5/3.0 mm plaster of structure on request

with 0.5 – 0.7 mm plaster of structure (B1 and A2)



AKUSTAPLAN 1,0 mm



ALVARO 0,5–0,7 mm

TECHNICAL DATA

Base panel:

Expanded glass granulate with inorganic binder.

Surface:

Undercoat and FWA plaster, white by spraying on the building site, without any loss of sound absorption properties.
Special colors on request

Maintenance:

Washable or resprayable with Wilhelmi acoustical paint (WAF-R), which can be applied without any loss of sound absorption properties.

Reverse side:

Acoustical membrane like visible side

Edge configurations:

Untreated

Panel thickness:

Approx. 18 mm

Format:

2500 mm x 1250 mm or in special format 1250 mm x 1250 mm

Weight per unit area:

Approx. 7.5 kg/m²

Sound absorption level:

See graph in the chapter Sound absorption levels

Before installation and coating it is essential that you take note of the processing guideline relating to Akustaplan® Glass seamless surfaces.



AKUSTAPLAN® GLAS



ALVARO® GLAS

TEXT FOR TENDER / SPECIFICATION

Suspension system:

Supply ... m² suspended ceiling according to 13964

plenum height: ... mm
 installation height: ... mm
 and assemble according to manufacturer's instructions.

General note:

Expectations and requirements of the function of the high-quality seamless acoustic ceilings „Akustaplan® glass FWA“ and „Alvaro® glass FWA“ can be fulfilled only if the installation and the coating work are according to the processing guideline of Lahнау Akustik GmbH.

A relocatability of the entire UK (lower c-profile/supporting profile) must be ensured in along and transverse direction. Before installation and coating it is essential that you take note of the technical information relating to Akustaplan® Glass.

Manufacturer:

Wilhelmi
 Akustaplan® Glass*
 Alvaro® Glass*

Material:

Expanded glass granulate bound with inorganic binder.

Thickness:

18 mm

Fire/flame spread classification:

A2 non-combustible
 B1 non-flamable
 according to German DIN 4102

Surface/support panel:

Covered on both sides with acoustical membrane

Edges:

Non-grooved
 edge treatment made on site with edge planer.

Panel format:

– Length: 2500mm / 1250 mm
 – Width: 1250 mm
 inclusive of cut panel sections

Fixing:

To the support profile with self-tapping screws.

Surface/Visible side:

Apply primer and Akustaplan/Alvaro G plaster by spray coating, ensuring that the acoustical properties are guaranteed.

Grain size:

*Akustaplan® Glass**
 1.0* Standard
 1.5*/3.0 mm on request

*Alvaro® Glass**
 0.5 – 0.7 mm

Note: the coating is contained in the uniform price

Additional requirements

Construct ... cut-outs, rectangular/
 round, dimensions ... mm in the acoustical panel. The frame of the recessed fixture should conceal the cut edge.

An edge, approx 20 mm wide, should be created around the cut-out and painted over with white paint. No acoustical plaster coating is applied to this edge.

The recessed features should not add load to the ceiling panels.

Construct a ... m cut out in the acoustical panel, approx ... mm wide, for the customer to mount, for example, curtain rails flushmounted to ceiling, recessed lighting, electrical busbars etc.

Construct ... m of expansion joints, approx. 15 mm wide, with a reverse-side backing according to manufacturer's instructions. The panels should be cut by the customer and the cut edges covered with hot-melt fleece edging.

Cover ... m² of the surfaces with a protective foil. The foil should be selected on the basis of guaranteeing an effective protection against dirt and damage.

Construction types:

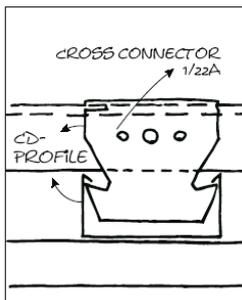
See chapter: *Details & features*

* delete as appropriate

DETAILS & FEATURES

AKUSTAPLAN® GLASS ALVARO® GLASS

TEXT FOR TENDER / SPECIFICATION



The installation of seamless areas are possible up to an area of max.200 sqm.

Supply ... m² suspension system according to DIN 13 964 or other applicable standard for seamless Wilhelmi acoustical ceilings and install in according to manufacturer's instructions.

Manufacturer:

Concrete ceiling base (define):

Hanging:

Nonius hangers, including approved fixing accessories.

Material:

Galvanised steel

Base profile:

DP 17

Maximum distance 1000 mm (centre to centre)

Support profile:

DP 17 Cross grid perpendicular to base profiles at 415 mm distance (centre to centre), fixed to main grid by sliding cross connector.

Panel fixing:

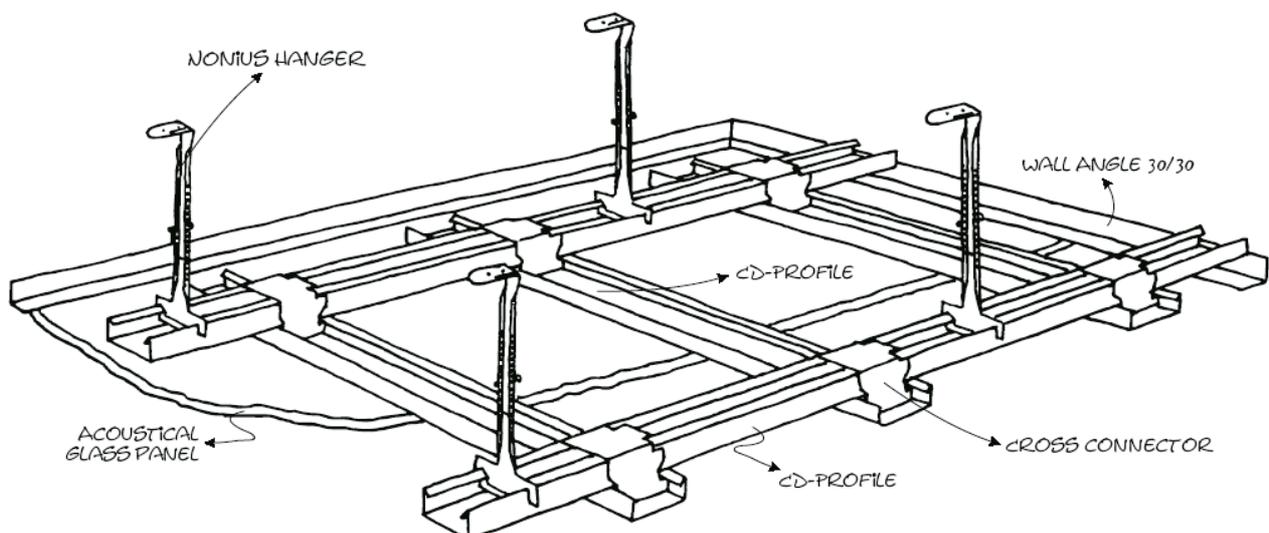
Secure to the support profile from the visible side of the panel using self-tapping screws.

Additional requirements

... replacement sections for the base construction in proximity to openings, dimensions ... x ... mm.

Supply ... m wide span construction for ceiling system, consisting of ceiling profile ..., including the necessary hangers and connecting pieces for ceiling construction and install in the ceiling plenum. The maximum distance between the profile hangers should be based on the static requirements.

Supply ... m support structure to fix recessed fixtures (detailed description) and install in the ceiling plenum. Load per profile max ... N.



THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

Akustaplan[®] Glass with 1.0mm plaster of structure
Alvaro[®] Glass with 0.5 – 0.7mm plaster of structure





The processing guideline for Installation and coating of FWA-Glass seamless acoustic ceiling types

Akustaplan® Glass with 1.0 mm plaster of structure and / or
Alvaro® Glass with 0.5 – 0.7 mm plaster of structure

must be read before beginning of the installation absolutely attentively!

This guideline is divided into 6 chapters/work procedures.

1. **General note**
2. **Product discription**
3. **Installation of the suspension system**
4. **Installation of the acoustic panels**
5. **Filling and Sanding Down**
6. **Coating**

During the transition of a chapter/processing step to the next the references at the end of each chapter are to be considered and examined!

Expectations and requirements of the function of the high-quality seamless acoustic ceilings „Akustaplan® glass FWA “and „Alvaro® glass FWA “*can be fulfilled only if the installation and the coating work are according to the processing guideline of Lahnau Akustik GmbH*. The preconditions correspond to the current state of the technology and do not relieve the processing plant from its responsibility to execution and quality. We reserve the right to make changes in the pursuit of technical progress. This version replaces all preceding versions.

This processing guideline cannot meet all questions, which concern the installation.

>> Please contact us with questions, immediately.

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

Chapter 2 → Product description



Akustaplan® glass FWA “and „Alvaro® glass panels for seamless acoustic ceilings

The panels consist of an inorganic blown-glass granulate (2-4mm grain size) and meet the requirements of the building material class DIN 4102-A2 for non-combustibility. General building regulatory approval no. Z-56.426-882.

Fleece coating and armoring on both sides.

The panels are available in sizes of 2500 x 1250 mm or 1250 x 1250 mm.

The thickness of the panel is 18 mm (thickness tolerance + - 0.3mm). The acoustic panels must be stocked in the interior at ground level and must be protected against humidity and climatic conditions.

Areas of Application

- interior ceilings and wall cladding.
- requires corrosion resistant substructure to DIN 18168 for damp locations.
- only for use as wall cladding outside traffic areas.

The installation of **seamless areas are possible** up to an area of **max.200 sqm**. The maximum length or width should not exceed 15 m. You have to place expansion joints for larger sizes. The max. height for wall cladding (without any joints) 5 m. The length of wall claddings is limited like ceilings. Corners have to be separated by expansions joints.

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN[®] GLASS
ALVARO[®] GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

Chapter 3 → Installation of the suspension system

The installation temperatures may not be under 12° C. The relative air humidity should amount to at least 30% however max. 70%!

The components of the suspension system are to be used from only one system supplier! Permissible are products of the following companies: Suckow + Fischer; Protector; Vogel or companies with comparable systems.

A relocatability of the entire suspension system (lower C-profile / supporting profile) must be ensured in length- and transverse direction. Don't use angle anchors!

Different pressure ratios between ceiling void and room side are to avoid. Because of the physical characteristics of the ceiling system the surface can become dirty. **Before beginning of the installation the shifting direction should be according to the incidence of light.**

Arrangement of the panel longitudinal joints (lower c-profile /support profile) in consideration of the incidence of light (>>90° to the window) see picture 1. A seamless cover is not 100% touch light-free. With multilateral incidence of light the lower c-profile (support profile) should be arranged in east-west direction. (See picture 1)



Picture 1

A relocatability of the entire UK (lower c-profile/supporting profile) must be ensured in lengthwise and lateral direction (see arrows). No angle anchors use, no fixing. At all system connections like walls, cover jumps, columns, cross girders etc. the connections are to be laid out as per manufacturer default.

THE PROCESSING GUIDELINE

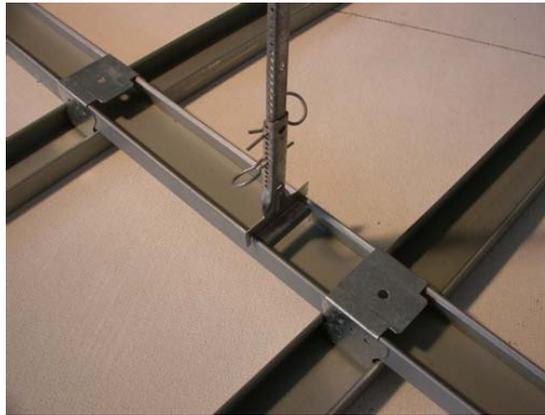
Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

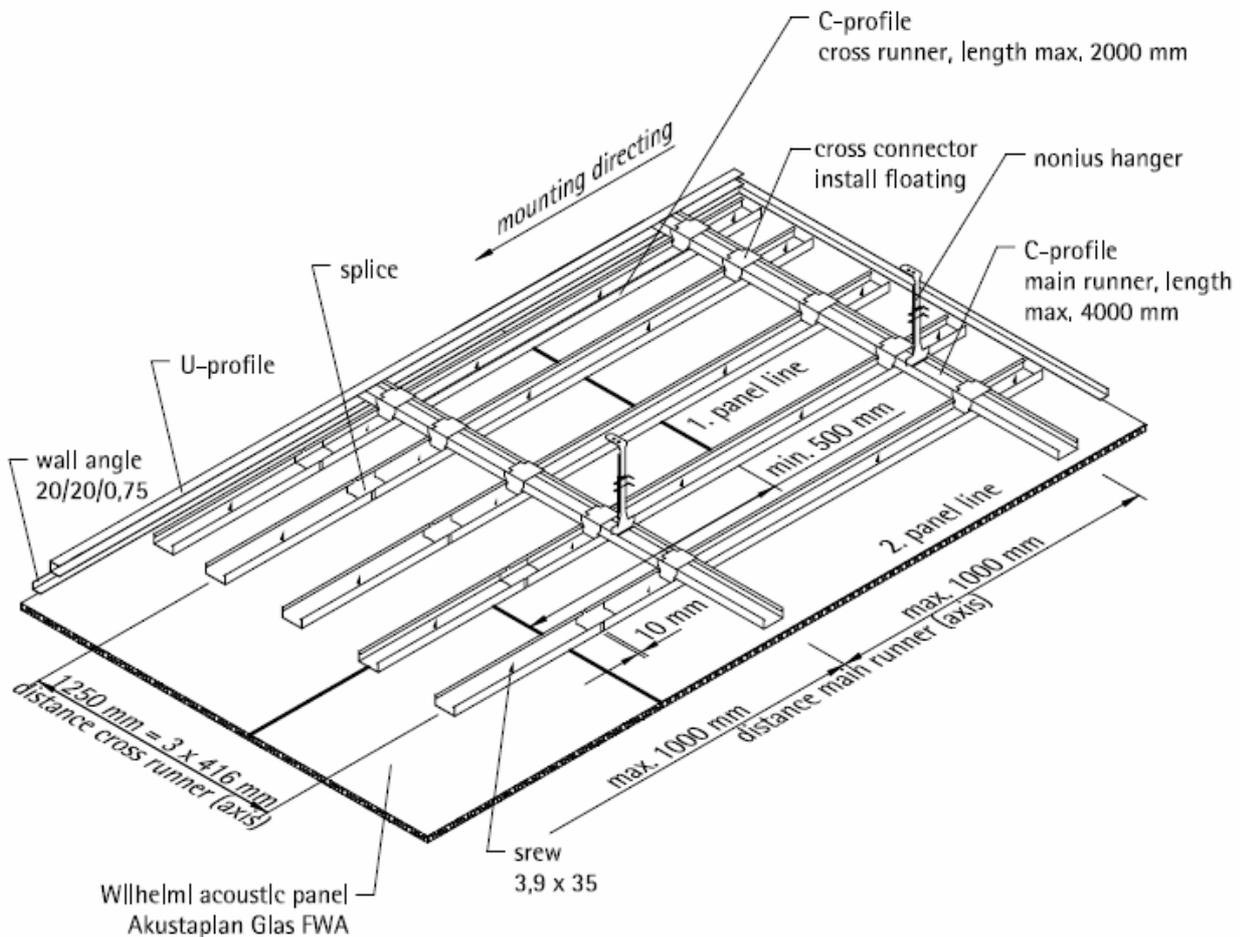
with 0.5 – 0.7 mm plaster of structure

- 3.1** Tightly fasten the CD–primary profile (upper c-profile) to the underlying ceiling using Nonius hangers. (pic. 2)
Use only approved and standardised rawplugs to fix the upper section of the Nonius hanger.



Pic. 2

Set the hangers at a distance of 1000 mm between centres. U-connection profiles (but only for primary profile / upper c-profile) can be fitted at the wall perimeter as an assembly aid. The lower c-profile (support profile) may not be determined! (see pic. 3 and the wall connections details in pictures 5 + 6 + 7.)



Pic. 3

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

- 3.2 The primary profile (upper c-profile) should have a maximum length of 4000 mm and they **should be set at a distance of 1000 mm between centres**. Locate the primary ceiling channels at a distance of approx. 120 mm from the wall. Use a laser beam director to adjust the primary profile to the required height.
- 3.3 Fix the CD-support profile (lower c-profile), max. length 4000 mm crosswise to primary ceiling profile at intervals of approx. 415 mm (panel width 1250 mm) by using cross connectors to fasten them to the primary ceiling profile. (overview picture 3) For connected ceiling surfaces of $\geq 100\text{sqm}$ are CD-support profiles (lower c-profiles) with max. length of 2000 mm recommendable. Fix the support profile (lower c-profile) at right angles to the primary profile (upper profile). No diagonal spannings.

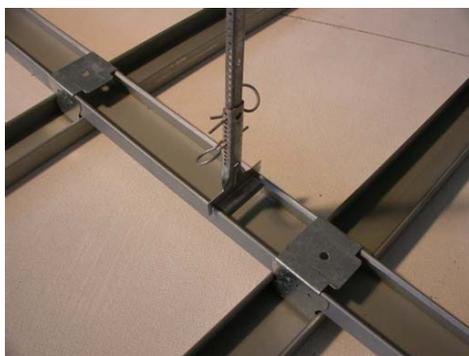
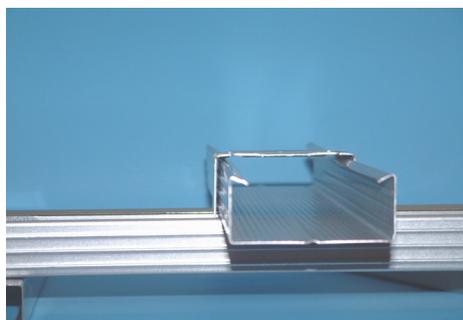
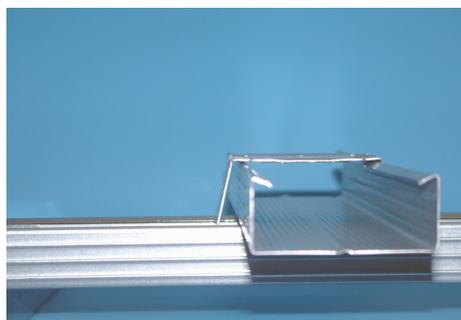


Abb. 4



Cross connector –**CORRECTLY**-
Without spannings!!!



Cross connector – **WRONGLY** -
With spannings – **not permissible!!!**

*A relocatability of the entire UK (lower c-profile/supporting profile) must be ensured in along and transverse direction (see arrows). No angle anchors use, no determining.
All system connections like walls, cover jumps, columns, to bearers etc. the connections are to be explained according to manufacturer's default.*

THE PROCESSING GUIDELINE

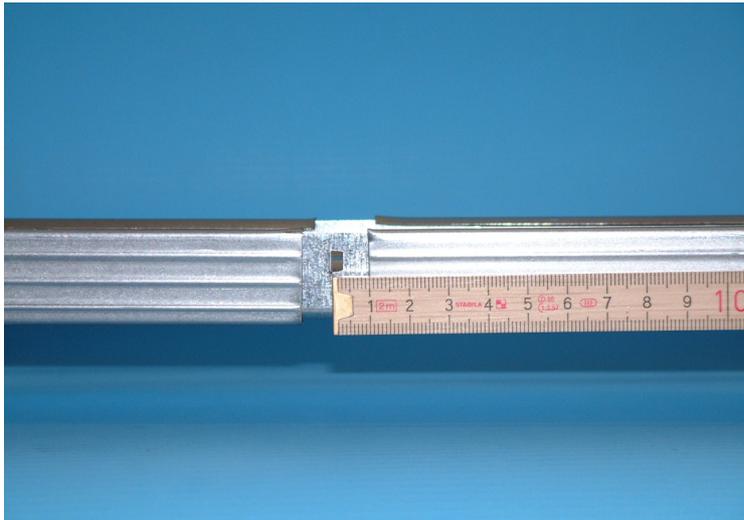
Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

- 3.4** The CD support profiles (lower t-profile), with a max. length of 4000mm, for connected ceiling surfaces ≥ 100 sqm are CD support profiles (lower t-profile) with max. length up to 2000 mm recommendable, should be fixed with longitudinal connecting pieces aligned at 10 mm centres. (see pictures 3 and 4.1)



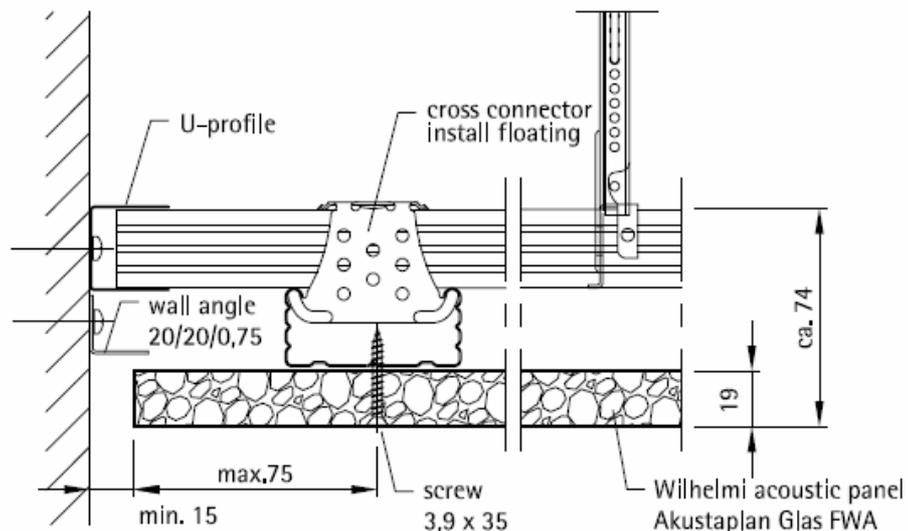
pic. 4.1

The centre distance parallel to the flanking construction units should have max. 90 mm.(pic. 6)

- 3.5** The support profile (lower c-profile) should not be screwed with an U-connection profile or other perimeter components. The distance of the profile ends to the flanking construction units should have at least min. 30 mm, however max. 50 mm. (Details pictures 5 + 6 + 7)

wall junction

Section A - A



Picture 5

THE PROCESSING GUIDELINE

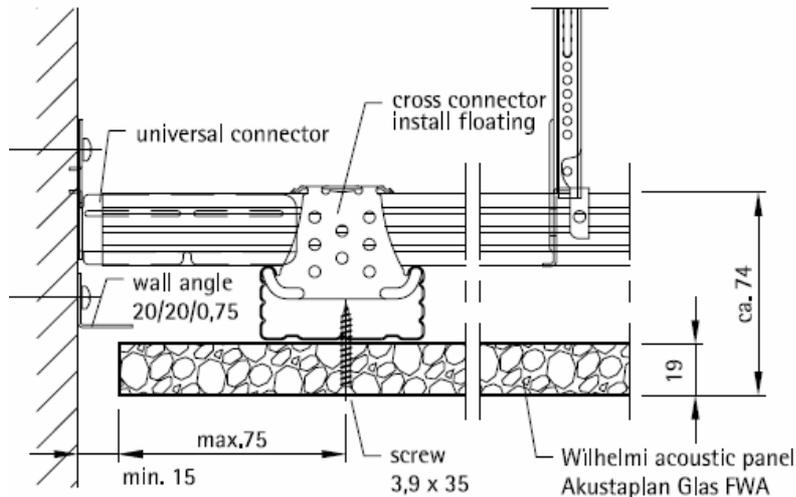
Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

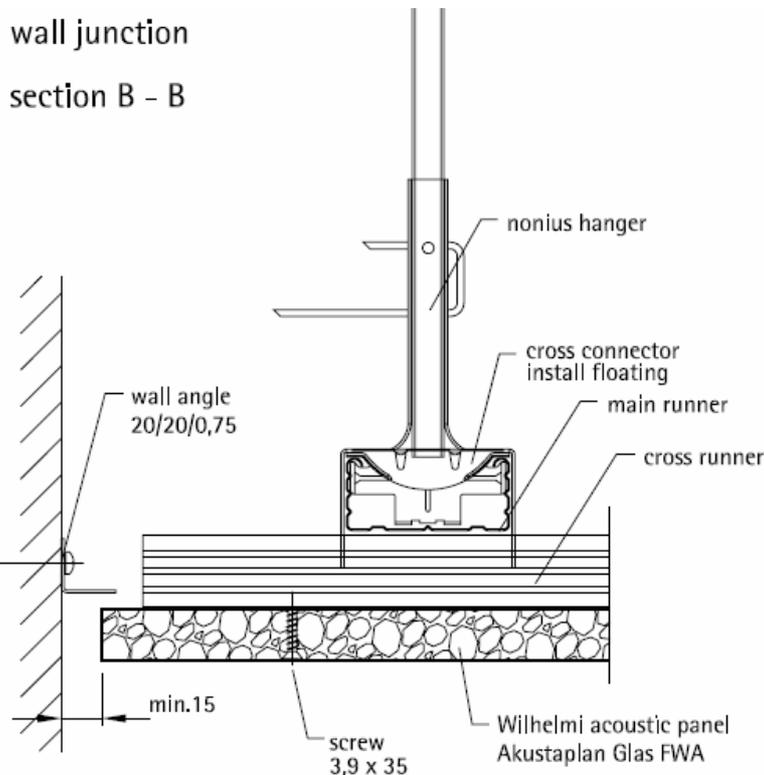
with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

Section A - A alternative with WA 16



Picture 6



Picture 7

Don't screw, lay-on or set the flanking construction units and wall connections to the support profile (lower c-profile) or to the panels. See the wall connections details in picture 5 + 6 + 7.

Different pressure ratios between ceiling void and room side are to avoid. Because of the physical characteristics of the ceiling system the surface could become dirty. For such problems it is necessary to have enough air circulation in the ceiling void. With the help of right dimensioned open joints on the ceiling sides you will get the correct air circulation.

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

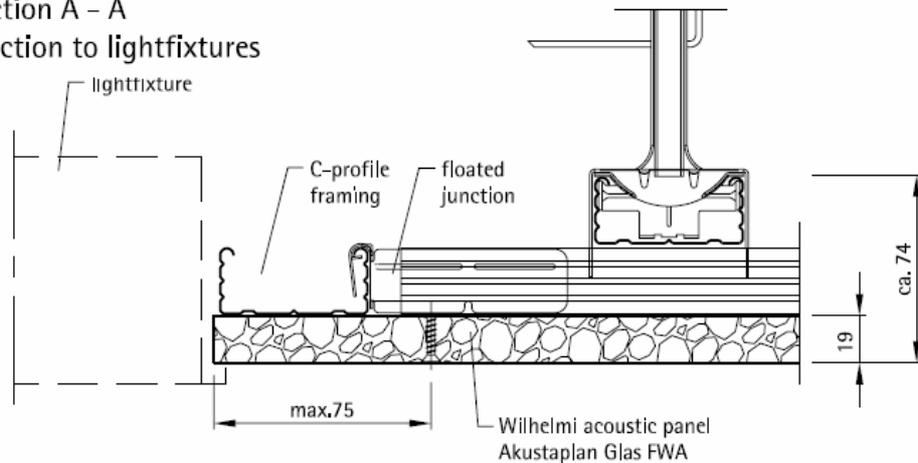
AKUSTAPLAN[®] GLASS
ALVARO[®] GLASS

with 1.0 mm plaster of structure

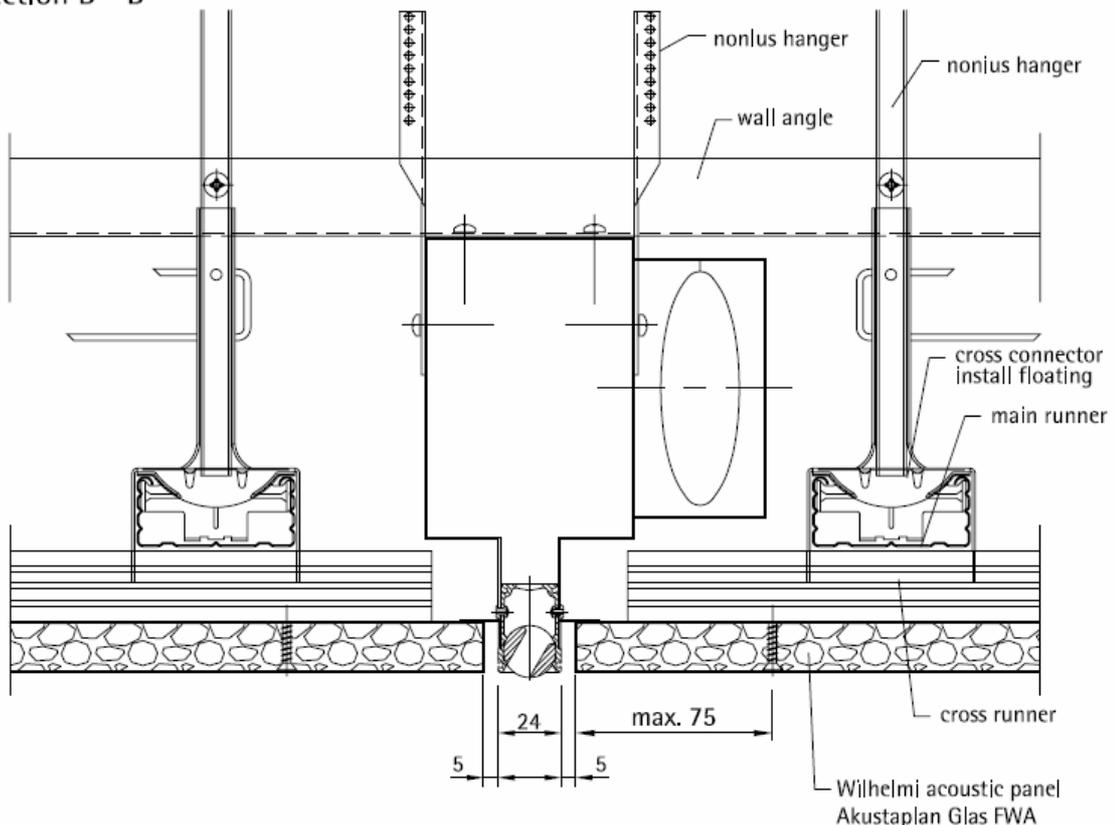
with 0.5 – 0.7 mm plaster of structure

- 3.6** Any required modification to the substructure system to accommodate ceiling components should be made during the construction phase. This will avoid having to saw through the substructure system at a later date.
- 3.7** **Ceiling components**, like lightings, air-channels etc. **may not load the cover panels**. The panels are to be fixed separately or with the help of the support profile. No fixation of components on the lower c-profile / support profile or cover panels. All connections must be made slidingly.

Section A - A
junction to lightfixtures



Section B - B



(more details on request)

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

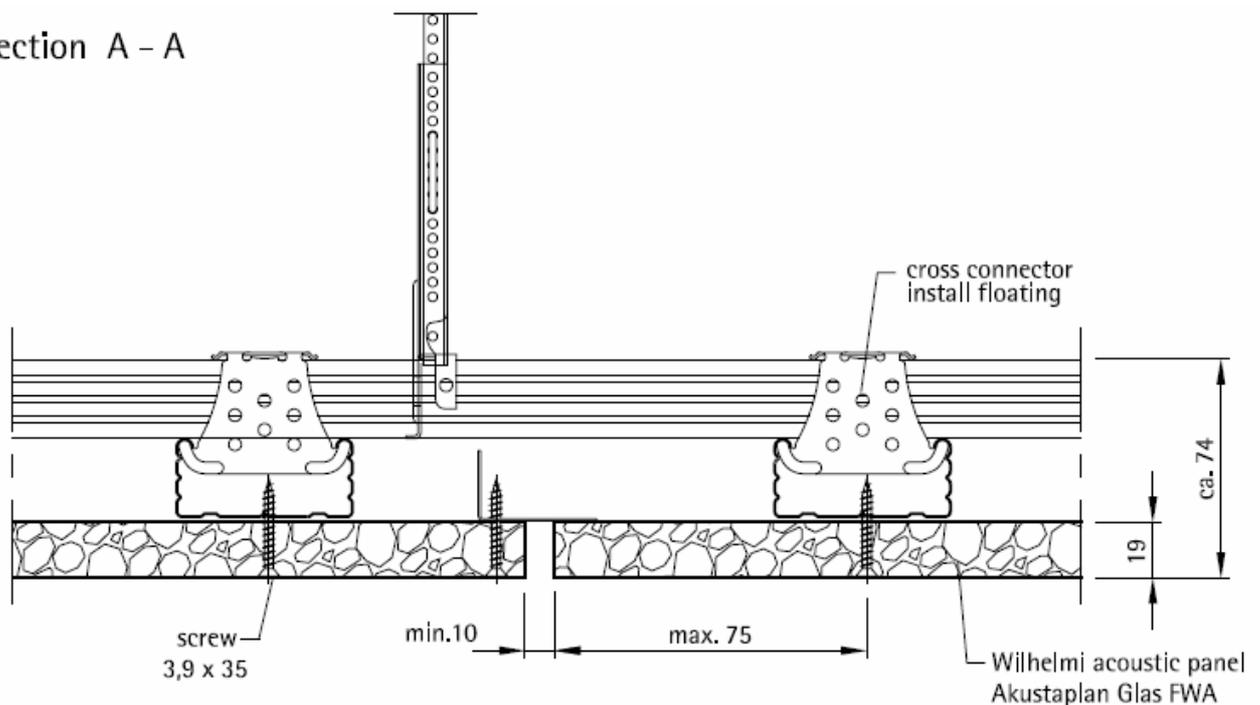
AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

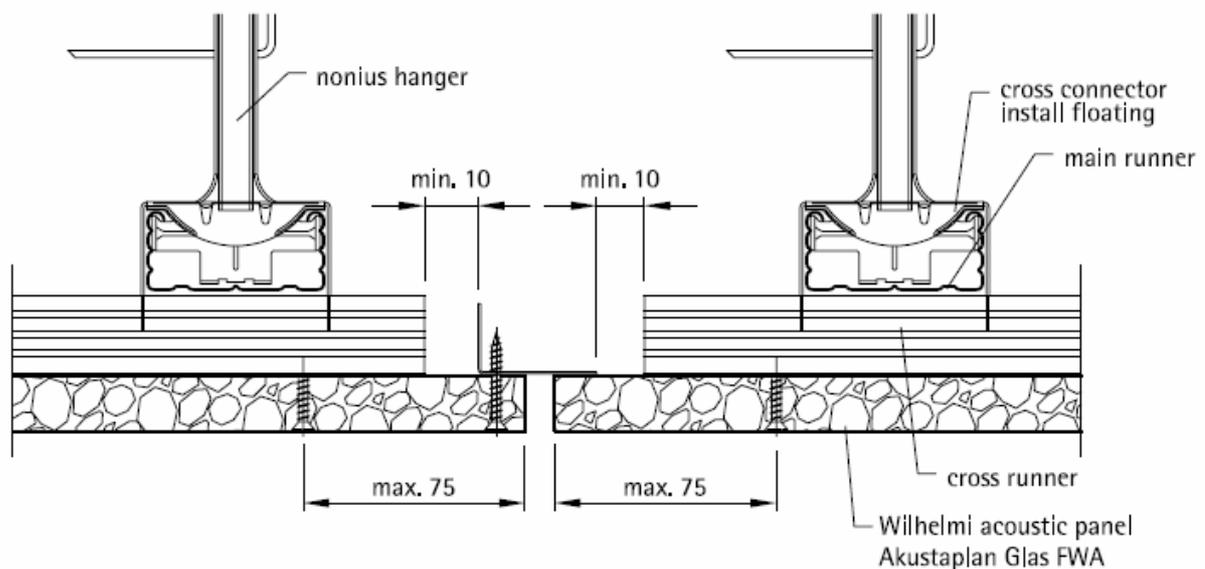
with 0.5 – 0.7 mm plaster of structure

- 3.8 The substructure system should be interrupted at the location of the expansion joints (ceiling surfaces greater than 200 sqm). **For surfaces in length and or width greater than 15 m continuous expansion joints must be arranged. Don't screw tight the panels.**

Section A - A



Section B - B



- 3.9 **Building expansion joints are to take over** to the ceiling surfaces.

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

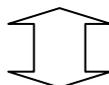
Before starting the Installation of the acoustic panels, it is necessary to check the following points of chapter 3 „Installation of the suspension system“!

Expectations and requirements of the function of the high-quality seamless acoustic ceilings „Akustaplan® glass FWA “and „Alvaro® glass FWA “can be fulfilled only if the installation and coating work are according to the processing guideline of Lahnau Akustik GmbH.

	Yes	No
→ The shifting direction should according to the incidence of light.	<input type="checkbox"/>	<input type="checkbox"/>
→ The installation temperatures may not be under 12° C. The relative air humidity should amount to at least 30% however max. 70%!	<input type="checkbox"/>	<input type="checkbox"/>
→ Were the components of the suspension system used only from one system?	<input type="checkbox"/>	<input type="checkbox"/>
→ A relocatability of the entire UK (lower c-profile/supporting profile) must be ensured in along and transverse direction. No use of angle anchors!	<input type="checkbox"/>	<input type="checkbox"/>
→ Don't screw, lay-on or set the flanking construction units and wall connections to the support profile (lower c-profile) or to the panels.	<input type="checkbox"/>	<input type="checkbox"/>
→ Any required modification to the substructure system to accommodate ceiling components should be made during the construction phase.	<input type="checkbox"/>	<input type="checkbox"/>
→ Were the required expansion joints considered during the installation of the suspension system?	<input type="checkbox"/>	<input type="checkbox"/>
→ Building expansion joints are to take over to the ceiling surfaces.	<input type="checkbox"/>	<input type="checkbox"/>
→ The panels are to be stored before the installation at least 24 hr. in the area of application under temperature and humidity of the installation conditions.	<input type="checkbox"/>	<input type="checkbox"/>

Only if all points were answered with “YES”, you can change into chapter 5 “Filling and Sanding”

→ Points which were answered with „NO“ are to be revised in accordance with manufacturer defaults



next to chapter 4 → Installation of the acoustic panels

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN[®] GLASS
ALVARO[®] GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

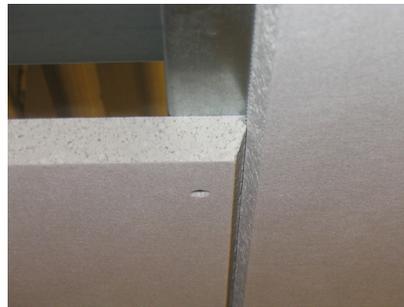
Chapter 4 → Installation of the acoustic panels

The acoustic panel Akustaplan[®] Glass und Alvaro[®] Glass may be installed only after adjustment of the balance dampness. The panels are to be stored before the installation at least 24 hr. in the area of application under temperature and humidity of the installation conditions.

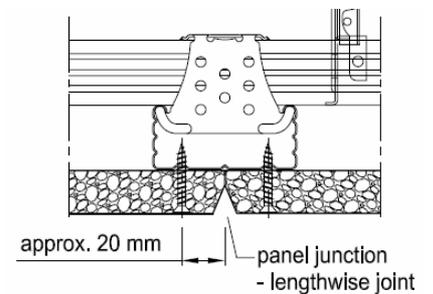
- 4.1 Before screwing the panels into position, bevel down the edges of the panels (to approx 23°) at the butt joints. This should be done on visible side using an edge plane. Both panel reverse sides have to get contact. On the visible side you get **V-joints in along and transverse direction**. It is very important for the firmness of the joints.



Detail edge plane on the visible side



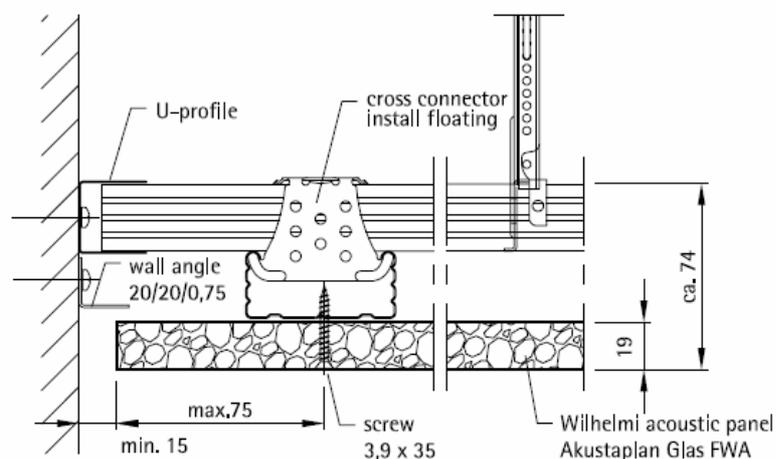
Detail edge after bevel down the edge



- 4.2 It is not important where you begin with the first row of panels. The cutaway percentage needs to be considered. The first row must be in full alignment.
- 4.3 **Don't screw, lay-on or set the** flanking construction units and wall connections to the support profile (lower c-profile) or to the **panels**.

wall junction

Section A - A



THE PROCESSING GUIDELINE

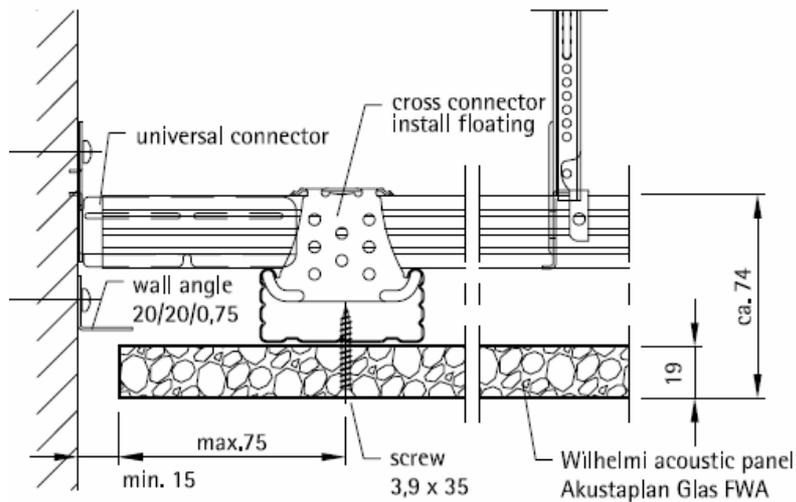
Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

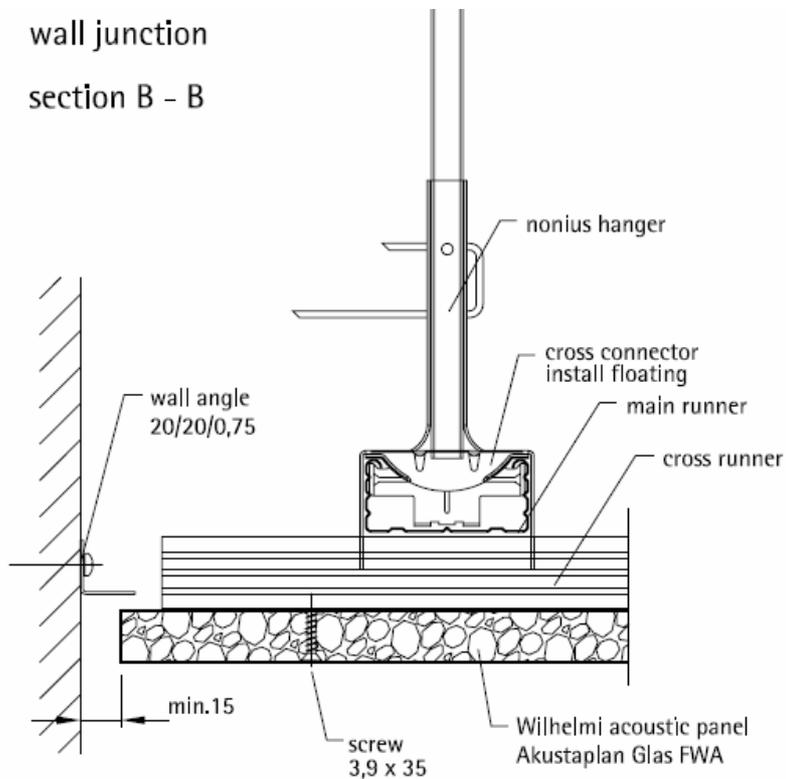
with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

Section A - A alternative with WA 16



wall junction
section B - B



A relocatability of the whole ceiling must be ensured in along and transverse direction. In all system connections like with walls, cover jumps, bearers etc. are to be explained according to manufacturer's default.

THE PROCESSING GUIDELINE

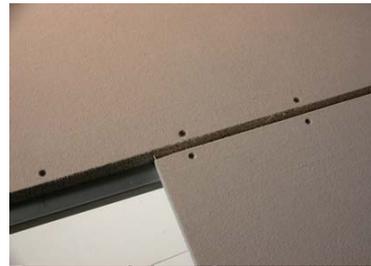
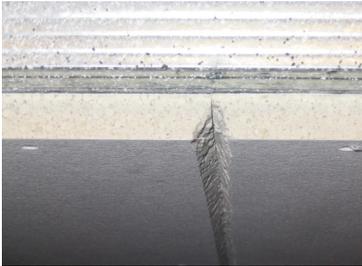
Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

- 4.4** The panels are fixed in the longitudinal joints, centred on the support profile with phosphorated quick-fix needlepoint screws, Form TN to DIN 18182 at a distance of approx. 20 mm from the edge. Set the screws at a uniform distance apart of **approx. 250 mm**. The screw head should be countersunk to 1 mm. Connect the panels on the suspension system in the way, that the panels will contact each other. On the visible side you get **V-joints in along and transverse direction**.



**Range of panels
(visible side)**



Installation

- 4.5** The following ranges of panels should be laid with the joints offset by at least 500 mm to each other. (See the overview in picture 3)
- 4.6** Use a circular hand saw with a vacuum attachment to create panel cut-outs. Where the cut edge of the panels is visible at the expansion joints, open wall connections and ceiling penetrations, these should be covered prior to installation with edge fleece that is coated with a hot-melt adhesive.



THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

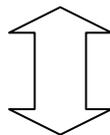
Before starting „Filling and Sanding“ it is necessary to check the following points of chapter 4 „Installation of the acoustic panels“

Expectations and requirements of the function of the high-quality seamless acoustic ceilings „Akustaplan® glass FWA “and „Alvaro® glass FWA “can be fulfilled only if the installation and coating work are according to the processing guideline of Lahnau Akustik GmbH.

	Yes	No
→ According to the manufacturers default all panel connections should have a V-joint?	<input type="checkbox"/>	<input type="checkbox"/>
→ The ranges of panels should be laid with the joints offset by at least 500 mm to each other.	<input type="checkbox"/>	<input type="checkbox"/>
→ The installation temperatures may not be under 12° C. The relative air humidity should amount to at least 30% however max. 70%!	<input type="checkbox"/>	<input type="checkbox"/>
→ Visible cut edge of the panels at the expansion joints, open wall connections and ceiling penetrations should be covered with edge fleece before the installation.	<input type="checkbox"/>	<input type="checkbox"/>
→ Don't screw, lay-on or set the flanking construction units and wall connections to the support profile (lower c-profile) or to the panels.	<input type="checkbox"/>	<input type="checkbox"/>
→ The panels are fixed in the longitudinal joints, centred on the support profile	<input type="checkbox"/>	<input type="checkbox"/>
→ Were the screw distances with approx. 250 mms kept?	<input type="checkbox"/>	<input type="checkbox"/>

Only if all points were answered with “YES”, you can change into chapter 5 “Filling and Sanding”

→ Points which are answered with „NO“ are to be revised in accordance with manufacturer defaults.



Next to chapter 5 → Filling and Sanding

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

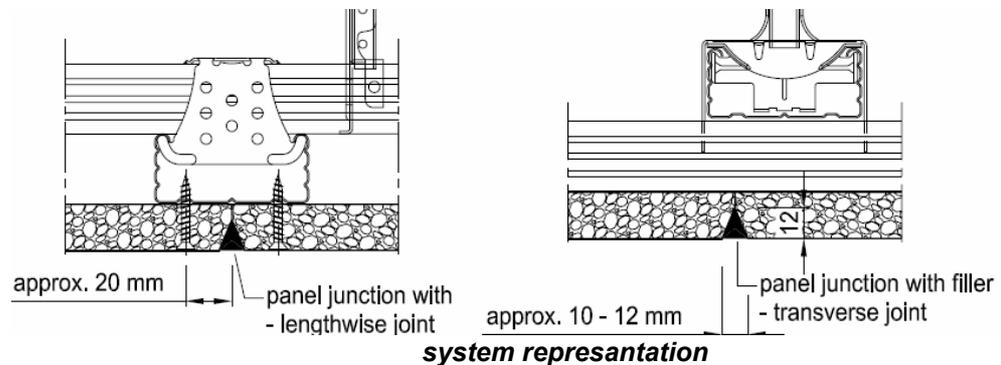
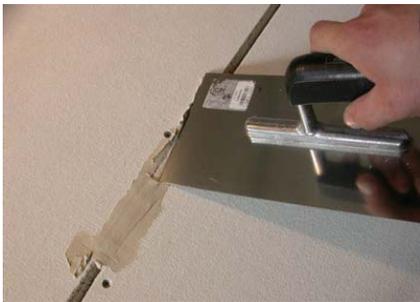
AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

Chapter 5 → Filling and Sanding down

- 5.1** Having installed the **FWA panels**, it is necessary to **fill both the joints** in between the panels and screw locations with **Wilhelmi jointing filler G**. Keep the filled areas to a minimum width possible (maximum 50 mm). Fill the locations of the countersunk screw-heads so that the filler protrudes; due to the fact that the fillers sinks, this will obviate the need to repeat the filling process.



The Wilhelmi jointing filler G is to be press-in hard into the V-joints. It is very important for the firmness of the panel connections.

- 5.2** Cut out any part areas where there is damage to the fleece surface or where mechanical damage has caused pieces of fleece to come loose. Then fill and level the surface with **Wilhelmi jointing filler G**.
- 5.3** Once dry, the **seams** and **screw locations** should be sanded down with a **belt sander with sanding frame (grain-size 80)**. Any isolated problem spots that remain **after sanding down** the joints can **be re-filled with Akustaplan FWA filler** and **sanded down again**. This can be done using **hand-held sanders** and sanding screens.



- 5.4** Mark with **colourless chalk-line** any areas that subsequently require to be cut out. Cut edges that are still visible can be covered with edge fleece or filled.

→ **General: Don't use any colour chalk-line or tallow pencils**

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

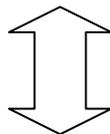
Before starting the coating process, it is necessary to check the following points of chapter 5 „ Filling and Sanding down “!

Expectations and requirements of the function of the high-quality seamless acoustic ceilings „Akustaplan® glass FWA “and „Alvaro® glass FWA “can be fulfilled only if the installation and coating work are according to the processing guideline of Lahnau Akustik GmbH.

	Yes	No
→ Were all panel connections executed in accordance with manufacturer default ?	<input type="checkbox"/>	<input type="checkbox"/>
→ Was the Wilhelmi jointing filler G press-in into the joints?	<input type="checkbox"/>	<input type="checkbox"/>
→ The installation temperatures may not be under 12° C. The relative air humidity should amount to at least 30% however max. 70%!	<input type="checkbox"/>	<input type="checkbox"/>
→ Any isolated problem spots that remain after sanding down the joints can be re-filled with Akustaplan FWA filler and sanded down again.	<input type="checkbox"/>	<input type="checkbox"/>
→ Were areas, where there was damage to the fleece surface or where mechanical damage had caused pieces of fleece to come loose. Then fill and level the surface with Wilhelmi jointing filler G, according to manufacturer's default.	<input type="checkbox"/>	<input type="checkbox"/>
→ It is necessary to check that the ceiling is level by projecting a light across its surface. Ceiling surface has to be perfectly level and clean.	<input type="checkbox"/>	<input type="checkbox"/>

Only if all points were answered with “YES”, you can change into chapter 6 “Coating”

→ Points which were answered with „NO“ are to be revised in accordance with manufacturer defaults.



Next to chapter 6 → Coating

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

Chapter 6 → Coating

Coating of the seamless acoustic ceiling Akustaplan® Glass with 1,0mm plaster of structure or the seamless acoustic ceiling Alvaro® Glass mit 0,5 - 0,7mm plaster of structure.

Before starting the coating process, it is necessary to **check that the ceiling is level by projecting a light across its surface**. Visible installation or detail mistakes should be shown by the coating personal.

The only way to ensure that the finished seamless Wilhelmi Akustaplan® Glass ceiling/ seamless Wilhelmi Alvaro® Glass ceiling has a perfect optical finish is to start with a ceiling surface that is perfectly level and clean.

- 6.1** The first step of the process is to **spray coat the whole of the ceiling surface with Wilhelmi Undercoat G using a pressure spray** (quantity: approx. 200 ml / sqm).



Note:

The Undercoat G must be completely dried before starting the coating process.

- 6.2** The **FWA Spray Undercoat WAF R 86** is applied by means of spray-pistol, nozzle 3mm or plaster-pipe, nozzle 4mm (**Quantity approx. 800 g/sqm**). The undercoat should be left to dry for approximately 12 hours before application of the final coat.



Note:

During the drying process between the coating steps it is necessarily to open the foils and to provide enough ventilation.

All coating components are put ready for use, nevertheless, are to be stirred up before use by means of beater thoroughly!

Attention: Having applied the undercoat to the surface of the ceiling, it is advisable to check the finish again by projecting a light across the surface. Any problems with filler or sanding must be corrected.

→ Once the undercoat has been applied, the filled joints should not longer be visible.

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

- 6.3 The final coating with Wilhelmi Acoustic Plaster Filigree Structure, grain size - 1 mm or the Wilhelmi Acoustic Plaster Alvaro, grain size 0,5 – 0,7 is applied in two consecutive coats with a drying time of approximately 3-4 hours between each. Total coating weight 1.8 kg per sqm. The plaster should be applied by cross strokes. During the coating process the room temperature should not fall below 12° C and the relative humidity should not be above 70 %.

After the coating it is necessary to feed enough ventilation and drying out of the rooms immediately!

→ Shock-like heating or cooling the rooms are to be avoided, because it can come to crack initiation !



Note:

During the drying process between the coating steps it is necessarily to open the foils and to provide enough ventilation.

All coating components are put ready for use, nevertheless, are to be stirred up before use by means of beater thoroughly!

Use plaster spraying equipment with a screw conveyor to coat the ceilings. The air compressor should have a minimum rating of 600 – 800 l / m. (Equipment manufacturer: e.g. Strobel).

Nozzle diameter:

Undercoat WAF R 86 *spray-pistol or plaster pipe:*

- spray-pistol nozzle = 3 mm
- plaster pipe nozzle = 4 mm

For plaster coating Akustaplan® oder Alvaro® only plaster pipe allowed:

- **Filigree Structure**, grain size - 1 mm
plaster pipe nozzle = 6,5 mm

- **Alvaro**, grain size 0,5 – 0,7
plaster pipe nozzle = 5 mm

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS
ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

After the finishing of the coating the following points of chapter 6 „Coating“ should be absolutely kept.

Expectations and requirements of the function of the high-quality seamless acoustic ceilings „Akustaplan® glass FWA“ and „Alvaro® glass FWA“ can be fulfilled only if the installation and coating work are according to the processing guideline of Lahнау Akustik GmbH.

	Yes	No
→ During the coating process the room temperature should not fall below 12° C and the relative humidity should have min.30% however max. 70 %.	<input type="checkbox"/>	<input type="checkbox"/>
→ After the coating it is necessary to feed enough ventilation and drying out of the rooms immediately!	<input type="checkbox"/>	<input type="checkbox"/>
→ Shock-like heating or cooling the rooms is to be avoided, because it can come to crack initiation !	<input type="checkbox"/>	<input type="checkbox"/>
→ Tape material and foils are to remove immediately for a sufficient air circulation.	<input type="checkbox"/>	<input type="checkbox"/>

Protective measure:

Protective measures: a protective mask P 1 and protective goggles should be worn for overhead work and in areas where there is dust.

The technical information we provide, including that relating to recommended applications, is on the basis of the current state of technology.

Otherwise our “General Terms and Conditions of Sale” apply.

THE PROCESSING GUIDELINE

Installation and coating of FWA-Glass seamless acoustic ceilings

AKUSTAPLAN® GLASS ALVARO® GLASS

with 1.0 mm plaster of structure

with 0.5 – 0.7 mm plaster of structure

Material Requirement

Quantities are indicated per square metre of ceiling surface. Calculation-basis: rectangular, straight area

Suspension system

• Metal–drill plug (wedge nail)	0.95 pcs
• Nonius hangers (upper and lower section), for CD-ceiling channel 06 x 27	0.95 pcs
• Locking pin for Nonius hanger	1.90 pcs
• U–connection profile 28 x 27 x 06 / 3000 m long	0.3 m
• Screw rawplug 6 x 40 mm	0.70 pcs
• CD-ceiling channel 60 x 27 x 0,6 / 4 m long	3.50 m
• Channel connector for CD-ceiling channel	0.80 pcs
• CD-cross-recess quick fastener for CD-ceiling channel 60 x 27	2.50 pcs

Mikropor® G Cover Layer and Accessories

• Mikropor® G glass acoustic panel Format: 2500 x 1250 mm, 1250 x 1250 mm	1.0 /sqm
• Drywall needlepoint screws 3.5 x 35 mm	14 pcs
• Wilhelmi Jointing Filler G (powder-form)	300 g /sqm
• Wilhelmi Akustaplan FWA (ready to use)	40 g/sqm

Coating Materials

• Wilhelmi base coat G (ready to use)	200 ml/sqm
• Undercoat WAF R86	800 g/sqm
• Acoustic plaster - filigree structure, grain-size 1 mm	1.8 kg/sqm
• Acoustic plaster - structure, grain-size 0.5 – 0.7 mm	1.8 kg/sqm

All coating components are put ready for use, nevertheless, are to be stirred up before use by means of beater thoroughly!

