

Installation Instructions



HERADESIGN® Wood Wool Lay In Panels



DO NOT REMOVE PRODUCT FROM THE CARTON UNTIL YOU HAVE READ THESE INSTRUCTIONS IN THEIR ENTIRETY.

1. GENERAL

1.1 Product Description

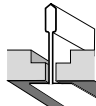
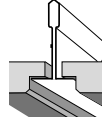
Armstrong HERADESIGN® are high performance, noise absorbing acoustical wall or ceiling panels produced from sustainable wood fibre with a magnesite binder. With multiple textures and colors to choose from, Armstrong HERADESIGN® is the perfect choice for creative design in education, sports, office, infrastructure, hospitality and recreational facilities. HERADESIGN® panels are durable and

impact resistant and can be simply installed on Armstrong PeakForm Prelude XL 24mm Tee Grid. Typical panel sizes are 600 x 600mm or 1200 x 600mm. Panels are 25mm thick.

1.2 Surface Finish

HERADESIGN® panels are available in a number of textures, with Superfine and Fine being the most common, and are finished with water-soluble (dispersion) silicate paint; typically Natural or White, although special colours are available upon request. As per the illustrations below, there are two standard edge types, both paint sealed, with colour to match the face.

1.3 Physical Data Summary

Panel Options	PANEL SIZE (mm) NOM	BOARD (SK-04) EDGE ON ALL SIDES	TEGULAR BE 24 (SK-06) EDGE ON ALL SIDES
		 Prelude 24mm Grid	 Prelude 24mm Grid
Pattern – Superfine (Fibre width 1mm) Colour – Natural	600 x 600 x 25mm	HSFSK04060625	HSFSK06060625
	1200 x 600 x 25mm	HSFSK04120625	HSFSK06120625
Weight		12.6 kg/m ² (25mm Superfine)	12.6 kg/m ² (25mm Superfine)
Pattern – Fine (Fibre width 2mm) Colour – Natural	600 x 600 x 25mm	HFSK04060625	HFSK06060625
	1200 x 600 x 25mm	HFSK04060625	HFSK06120625
Weight		13.3 kg/m ² (25mm Fine)	13.3 kg/m ² (25mm Fine)

Notes: . Special items and other sizes available upon request. 2. For all items: Contact your local Armstrong Ceilings representative for stock availability

2. INSTALLATION

2.1 Transport

HERADESIGN® acoustic panels are high-quality visual panels that are carefully packed and checked and delivered to the construction site on pallets with a protective cardboard cover.

They may only be transported in closed trucks and must be protected against moisture during the entire journey.

Only stack a maximum of two pallets. Pallets and boxes must be secured against tipping, slipping and physical damage.

All material delivered to site should be checked, identifying correct: items (matching details on picking slips with product labels), correct quantities, original packages and ensuring there is no damage or opened cartons. All materials to be kept dry and protected from the elements.

If there are any transport damages, insufficient quantities, or other discrepancies to the delivery slip, have this certified by the driver.

Also, immediately inform your Armstrong office or Distributor that shipped the goods. Flawed panels must not be used.

2.2 Panel Storage

As the installing contractor, you are responsible for the proper storage of the goods at the construction site and for their transport to the installation point.

And this is how to do it correctly:

- Panels must be stored flat, on a stable floor in a dry, clean, swept-out room to protect them from moisture, soiling and dust.
- The existing packaging is no protection against rain. The panels MUST be stored in a fully enclosed environment.
- Only stack a maximum of two pallets of HERADESIGN® acoustic panels (max. height 2.5m) on top of each other.



2.3 Areas of application

- HERADESIGN® is a decorative and acoustically effective sub-ceiling and wall cladding for use in interior rooms and roofed outdoor areas, which are not exposed to direct environmental influences such as rain or pollutants.

2.4 Limitations of use

- Maximum span 625 mm (panel width)
- Suitable for rooms with a constant humidity of up to 90%.

Note: For applications where there is a constant humidity in excess of 80% construction physics advice is recommended! Specifically, an analysis of the temperature and humidity profile of the intended environment, structure and plenum space, with water vapour diffusion and installation of suitable vapour barrier to ensure there is no risk of condensation forming in the structure.

2.5 Site Conditions & Installation

- All dust-causing construction measures must be completed and the installation environment free of construction dust and debris before starting the installation.
- Installation of HERADESIGN® acoustic panels is part of the interior fitting of the building and must only be carried out under conditions of controlled humidity and temperature.

3. WORKING WITH WOOD FIBRE PRODUCTS

3.1 Precautionary Measures

During the installation be certain that the work site is well ventilated and avoid breathing dust. If high dust levels are anticipated during installation such as with the use of power tools, use appropriate NIOSH designated dust respirator. All power cutting tools must be equipped with dust collectors. Avoid contact with skin or eyes. Wear long-sleeved, loose-fitting clothes, gloves and eye protection.

3.2 First Aid Measures

If contact occurs flush eyes and skin irritation with plenty of water for at least 15 minutes and remove contaminated clothing. After installing material, wash with warm water and mild soap. Wash work clothes separately from other clothing. Rinse washer thoroughly. Refer to Armstrong MSDS (which includes information on established occupational exposure limits) which are available from Armstrong or your employer.

3.3 Before You Start

Proper care should be taken when handling to avoid damage or soiling. White cotton or latex gloves are recommended for handling.

NOTE: Do not lean HERADESIGN® panels on an angle against the wall during installation or when field painting. This causes the panels to warp – warped panels can no longer be installed

3.4 Material and air humidity

Due to the organic component of wood, in the HERADESIGN® panels, slight deviations in the size cannot be excluded. Likewise, the panels also contract and expand if there is strongly fluctuating air humidity.

- Maximum changes in dimension in standard climate 23°C/50% relative humidity: $\pm 1\%$.

Therefore, special attention must be given to the temperature and air humidity during installation (if necessary heat, ventilate, back-ventilate the ceiling or dehumidify the air under constant monitoring) in order to ensure constant installation conditions.

- Production tolerance for the nominal dimensions is +/- 1 mm; for lengths over 1250 mm +/- 2 mm.

3.5 Colour and structure

As a consequence of the natural raw materials of magnesite and wood, differences to the colour and structure may occur. Especially for white coloured acoustic panels, there may be changes to the degree of brightness due to the wood wool structure as well as due to the influence of light sources and the viewpoint of the observer.

Only the same type of panels may be installed in a ceiling. Therefore, constantly check the panels before installation as well as the overall impression of the ceiling from the floor.

Coloured panels (except RAL 9010) can only be ordered as specials upon request. No liability can be assumed for colour deviations in the event of partial deliveries or deviations from the colour chart.

4. UNPACKING AND HANDLING



Carefully remove the separating paper layer from the panels and dispose of it immediately. Dust lying on it must not fall onto the panel below.



Check panel for damages. Remove any remaining dust with a soft brush.



When lifting the acoustic panels from the stack, only carry them on edge. When lifting panels from the stack, never drag them over the edge of the stack in order to prevent damage to the visual side.



Never lean the acoustic panels on an angle against the wall during installation and subsequent painting. This causes the panels to warp – warped panels can no longer be installed.

5. SUSPENSION SYSTEM

5.1 General

- **The suspension system** shall be Armstrong Peakform Prelude 24mm exposed tee grid.
- **The ceiling installer** is responsible for the satisfactory installation of the ceiling and adherence to industry best practice and in accordance with AS/NZS2785:2000.
- **Before you start mounting panels**, check the grid system is installed as per following to ensure sufficient load-bearing capacity for 25mm HERADESIGN® panels, being up to 13.3kg/m².
- **Contact your Armstrong Technical Representative** where there are additional design loads or for Seismic Design.

5.2 Suspension Grid

The suspension system for 600 x 600 panels shall consist of main beams installed at 600mm centres with suspension points at 900mm centres. The 600mm cross tees shall intersect the main beams at 90° every 600mm.

5.2.1 The suspension system for 600 x 1200 panels shall consist of main beams installed at 600mm centres with suspension points at 900mm centres. The 600mm cross tees shall intersect the main beams at 90° every 1200mm.

5.2.2 In all cases, hangers shall be spaced not more than 900mm on centre along the length of the main beams.

- **Resistance to wind loads:** If it is to be expected that suspended ceilings will be subject to wind loads (e.g. by open windows, doors), then the appropriate measures must be taken to ensure that the panels and grid system can withstand suction and/or pressure wind loads. Contact your Armstrong Technical Representative for details.
- **Panel Directionality:** The installation direction must be observed for square panels. This is identified by an arrow on the panel backside. Always install with the arrow in the same direction.
- **Maximum span** of the panel: 625mm.
- **Vapour Barrier** (thickness < approx. 25 m) is recommended as moisture protection for insulation backing.

5.3 Ball Impact Applications (such as gymnasiums)

For ball impact resistant fixing of HERADESIGN® acoustic tiles, contact your Armstrong Technical Representative.

6. CUTTING

6.1 Cutting and Finishing Panels:

- Eye protection should always be worn when cutting HERADESIGN® panels.
- HERADESIGN® panels may be cut with a variety of tools including table saws, circular saws, jig saws, and hand saws. A high speed circular saw with a carbide-tipped, fine tooth blade (diameter approx. 400mm) and dust extraction are recommended for all finish cuts. Sandpaper can be used to smooth the edges. Please follow the safety instructions issued by the power tool manufacturer.
- Table saw or hand saw – cut face up to minimize face chipping or damage
- Circular saw or jig saw – cut face down to minimize face chipping or damage.
- Bevels and tegular edges can be formed afterwards with a router or saw blade set on an angle, by sanding with coarse sand paper or by using a belt sander. See following illustrations. If possible, the finishing work should be carried out outdoors. Always work with clean hands and clean tools. Cut the panels such that the visual surfaces are not dirtied by saw dust.

- The cutting must not be done using the stack of panels as a base.
- Carefully cover minor damages, edges and panel surfaces with paint after installation. Only apply a small amount of paint to avoid colour differences.



Not this way! – Never cut acoustic panels on a stack.



Table saw – Lay the acoustic panel down with the exposed side up. Always work with a safety guard, guide and an extraction system.



Jack saw – Lay the acoustic panel down with the exposed side up. Always work with a guide. Support the free end of the panel.



Circular saw – Lay the acoustic panel down with the exposed side down. Always work with a guide and an extraction system. Support the free end of the panel.



Jigsaw – Lay the acoustic panel down with the exposed side down. Always make longitudinal cuts with a guide.



Cutting openings by means of a supercutter – Only cut at a right angle to the panel surface.

7. PAINTING AND CLEAN UP

7.1 Field Painting or Re-Painting of HERADESIGN® Panels

For subsequent painting of HERADESIGN® acoustic tiles, there is a distinction between painting or re-painting the tiles and improvement of surface damage as well as unevenness and refreshing paint. For factory painted HERADESIGN® wood wool tiles, a water-soluble (dispersion) silicate paint with potassium silicate and co-polymerisates as bonding agents is used. Therefore, the composition of the new paint must be compatible with the existing paint and be of the same quality as the specified and tested reference paints.

For the following applications, the following quantities are recommended:

HERADESIGN® panels are interior finishes and a commercial grade acrylic dispersion paint, tested for harmful substances is recommended for "Field Painting or Re-Painting" as follows.

- **White paint on a white surface (restoration):**
Quantity: approx. 0.20 l/m², one coat
- **Restoring other colours with the same colour (except white):** Quantity: approx. 0.20 – 0.25 l/m², one coat
- **Painting or changing colours of wood wool tiles:**
Bold or contrasting colours may require increased quantities
Quantity: approx. 0.25 – 0.30 l/m² per coat, min. two coats
- **Small area repair of metallic colours:**
Recommended product: Sto Color Metallic or equivalent

Protective measures for bordering surfaces, floors, etc.

Bordering surfaces, windows, floors, etc. must be covered. Water can be used to clean surfaces that have been dirtied with paint, while they are still wet. Dried paint can only be removed with a paint stripper and that may cause damage to the underlying surface.

Safety:

Follow the information regarding protective measures in the safety data sheets from the paint manufacturer. If necessary, protect your head, eyes, respiratory system and skin by wearing protective masks, goggles, gloves and work clothing.

Types of application:

a) Painting or changing colours of wood wool tiles:

In order to achieve sufficiently deep penetration of the paint in the wood wool texture, the paint must be applied with an airless sprayer. The paint should be applied in at least two different directions and at varying angles to the tile surface so that the colour penetrates all pores and openings. When applying two coats, the first coat must be dry before the second coat is applied.

b) Refreshing paint and improving paint deviations:

For refreshing paint, improving paint deviations and painting the fibres, a short-pile roller can be used for small areas or for the same or very similar colours. Well suited are for example:

- Glaze or varnish rollers with max. pile depth 13 mm (e.g.: Microfibre rollers 13 mm, glaze rollers 10 mm, etc.)
- Flock rollers

c) Improving damaged or uneven surfaces:

To even out gloss differences in the same colour tones, foam rollers (paint rollers) are suitable.

d) Painting and improving slight damage to the surface e.g. single fibre breaks:

Minor damage and individual fibres can be covered with a fine brush. Avoid double painting the tile surface.

e) Painting bevels and tegular edges:

The paint can be applied with a short-pile paint roller (as described in point b), or by brush. Avoid double painting the tile surface.



Creating the edge bevel – The bevel is formed with coarse sand paper, belt sander or a saw blade set on an angle.



Remove any dust with a soft brush.



Painting the bevel – Use a brush or a thin paint roller to apply the paint.



Edge touch-up – Cover cut edges with paint if these are not concealed by a cover.



Brushing – Efflorescence, dust, etc. can be removed with a soft brush. Set loose fibres with a commercial grade acrylic primer.



Chipped fibre – Cover chipped fibre with a fine brush or a spray gun using the supplied paint or an equivalent.

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Touching-up chipped fibre or small, unclean areas of the panels – The paint is sprayed on carefully with a spray gun using various spraying angles.

Note:

Always apply only the recommended quantities. Too much paint causes excessive moisture to be added and can cause the tiles to warp and swell as well as causing a reduction of the sound absorption of the tiles. Up to three proper paint applications (quantity and application) of HERADESIGN® superfine and HERADESIGN® fine, leads to no significant decrease in sound absorption.

The application of the paint and the coverage must be checked constantly from the floor. The manufacturers' regulations and instruction manuals must be observed when working with the paint and operating the equipment. For application variants b) and c) a paint roller grid should be used to ensure the paint is evenly distributed on the roller. To avoid clogging the wood wool texture, only light pressure should be applied to the tile. The application should be done cross-wise. It is recommended to test the colour first (hidden tile or sample tile). Deep penetration of the paint in the texture, as necessary when changing the colour of the tile, is only possible with an airless spray application.

MORE INFORMATION

For complete technical information, detail drawings, CAD design assistance, installation information and many other technical services, call your local Armstrong Ceilings representative.

For the latest product selection and specification data, visit armstrongceilings.com.au

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