

CEILIA

The AYRES® Marine Ceiling System

The CEILIA® clip in tile system of AYRES® is the latest and most advanced aluminium ceiling system available having lightweight, ease of installation and the installers flexibility in mind. It is available in various designs, surfaces and sizes.

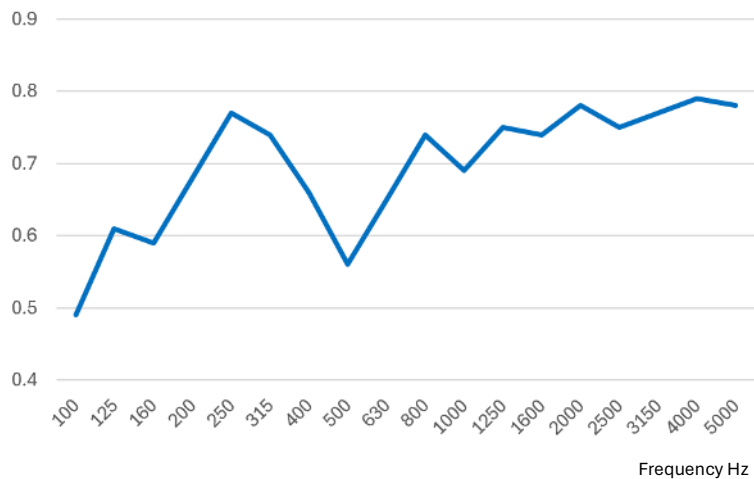
The C-Class Ceiling System provides naval architects the freedom to create unique and individual ceilings without losing a standard concept, to keep the weight at a minimum and the installation time short.

The CEILIA® system was principally developed for high-performance marine vessel.

CREATIVITY, DESIGN & ACOUSTICS

Enjoy endless possibility of integrating elements, provided by AYRES® or third parties. There are light fittings, LED solutions, heating, cooling and sound systems, etc. options which will make the installation easy and provide outstanding architectural flexibility at the same time.

The CEILIA® System has a world leading acoustic performance which will provide an exceptional acoustic environment on board any vessel. The combination of perforation & acoustic felt will absorb noise creating a quieter, indoor environment. The tile system in cooperation with a revolutionary new ‘acoustic pillow’ will help to enhance the acoustic environment as well as increase sound transmission loss even further at the same time. This far more comfortable environment helps passengers and crew to enjoy the journey, relax and focus.



NRC: 0.7

Perforation: 1.8mm holes

Open area: approx.: 21%

Inlay: Acoustic Felt

SIZES & SURFACES

CEILIA® as standard is available as 600mm x 600mm tile system but can be ordered in many other different sizes (e.g. 300mm x 300mm, 1200mm, 600mm, etc.). There will be a solution for any ceiling requirement a customer may have.

CEILIA® is available in many different colors with a standard colour chart being offered. But even outside that range, endless colours are available helping to create extraordinary ceilings. To go to the next level, CEILIA® is also offered as digital printed version, creating unique ceilings in any environment. As usual for AYRES® products, we can offer AYRES® Tailored Solutions, helping the customer to create the colour/finish required. Therefore, feel free to send AYRES® a sample of a specific colour to create a matching colour sample. Once approved by the customer, a unique colour can be provided to the bespoke project.

| CEILIA® | |
|------------------|-----------------------|
| Size | Weight |
| 600mmL x 600mmW | 1.9 kg/m ² |
| 300mmL x 300mmW | 2.2 kg/m ² |
| 600mmL x 300mmW | 2.0 kg/m ² |
| 1200mmL x 600mmW | 1.8 kg/m ² |

Offered as perforated or unperforated tiles
Other dimensions are available on request

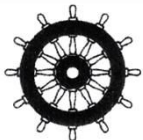
The standard tiles are perforated with 1.8 mm holes at 3.5 mm centres, open area about 21% and, depending on modular size, with 5-10 mm unperforated border on all four sides

Perforated tiles are as standard provided with black acoustic felt bonded to the reverse side, other colours on request

The overall weight of the CEILIA® tile system installed is about 2.9 kg/m². It depends of course on the chosen size of tiles. Small tile sizes influence the number of Support Channels (ACC-SC) required.

For specific project related weight information, please see the weight of each item.

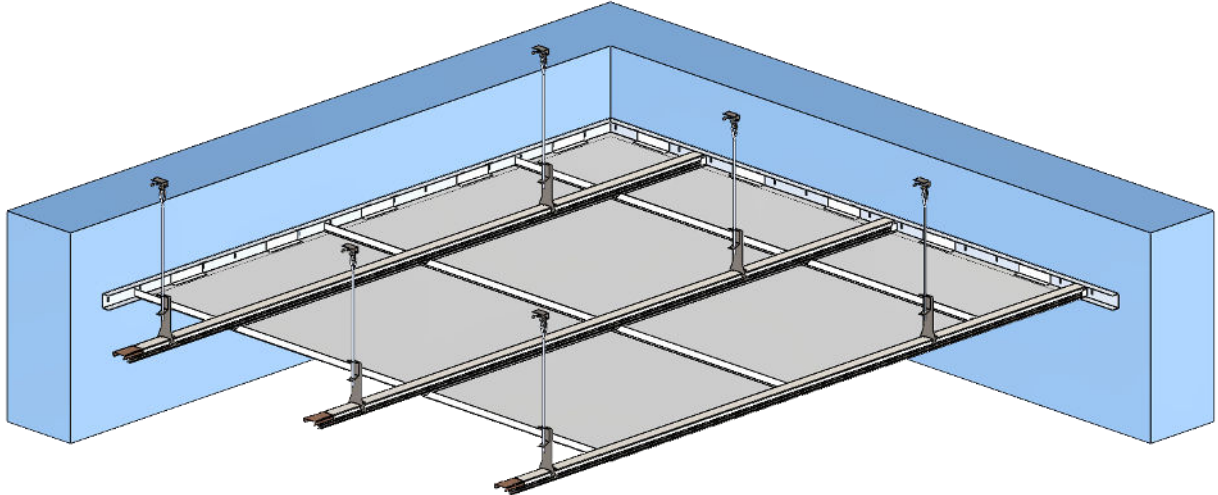
ACCREDIATIONS



As with all products provided by AYRES®, safety plays a key role. Therefore CEILIA® is a fully C-Class fire rated, certified solution.

INSTALLATION

The installation of CEILIA® Tiles, in a concealed suspension system creates a ceiling surface, flat and uniform.



To install the ceiling system, it is recommended to follow the 4 steps below:

1. Install Edge Channels
2. Install Hanger Assemblies and Support Channels
3. Install CEILIA Tiles around perimeters in centre of the installation area
4. Install CEILIA Tiles in centre of the installation area

1 – Install Edge Channels

First use a laser level (or alternative method) to assist in marking the vertical position of the perimeter of the ceiling installation. The Edge Channels (ACC-EC) can then be secured to the wall around the perimeter of the installation area using screws, rivets, or other suitable fasteners (depending on the application).

2 – Install Hanger Assemblies & Support Channels

The width of the installation should be measured to determine the size of any CEILIA® tiles that may need to be cut around the perimeter. Usually, the CEILIA® tiles will be arranged with evenly sized cut tiles on all sides of the installation area, but other factors may also need to be considered.

Hanger Assemblies (ACC-HAS) and Support Channels (ACC-SC) can now be installed to the vessel structure with consideration to the following points:

- Use appropriately sized Clips (ACC-CLP) for the structural member
- Hanging Rod lengths can be determined based on the distance between the ceiling height and the vessel structure (allowing some extra length for adjustment)
- Hanger assemblies should be spaced no more than 1200mm apart along the length of each Support Channel
- Use Support Channel Joiners (ACC-SCJ) where lengths of Support Channel meet
- Start installing the Support Channels and Hanger Assemblies at one side of the installation area along the full length of the area. The position of this first Support Channel (which may be comprised of numerous lengths of ACC-SC) can be adjusted to ensure that it is in the correct position and running in a completely straight line along its length
- This first Support Channel can then be used as a reference to install consecutive parallel support channels
- CEILIA Tiles may be used at intervals to ensure the correct spacing between Support Channels.

3 – Install CEILIA® Tiles around perimeter

Once the Support Channel grid has been installed, the CEILIA® Tiles around the perimeter of the installation area should be fitted. These tiles may need to be cut at various sizes to fit.

Starting in a corner, perimeter tiles can be installed by placing the edge of the tile inside the perimeter channel (insert the cut side into the Perimeter Channel if the tile is cut to size) and clip the other edge of the tile into the Support Channel. Retainers (ACC-RET) can then be used to secure the tile inside the Perimeter Channel.

Install tiles sequentially to ensure that the correct spacing is maintained between tiles.

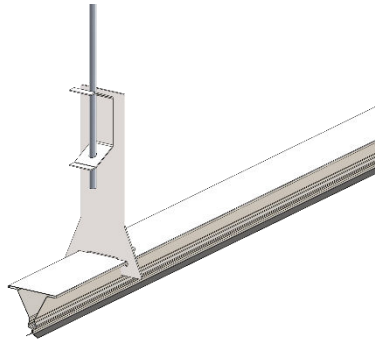
4 – Install CEILIA® Tiles in centre of the installation area

After completing the installation of the perimeter tiles, the central area of the installation can be fitted with tiles. Install tiles by clipping the tile edges into the Support Channels.

Install tiles sequentially to ensure that the correct spacing is maintained between tiles.

Alternative installation

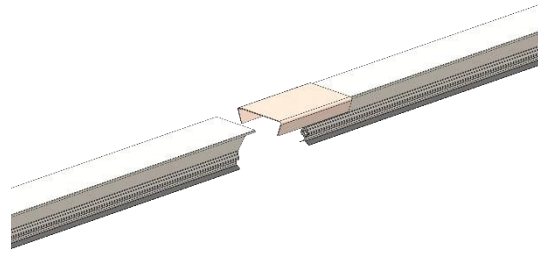
As an alternative to using the Hanger Assemblies (ACC-HAS) to suspend the CEILIA® ceiling system, Support Channels may be installed directly onto a suitable existing structure. Use the same principles described in the standard installation procedure, however instead of using Hanger Assemblies, fasten the Support Channel directly to the existing structure using appropriate fasteners (rivets or metal screws, for example).



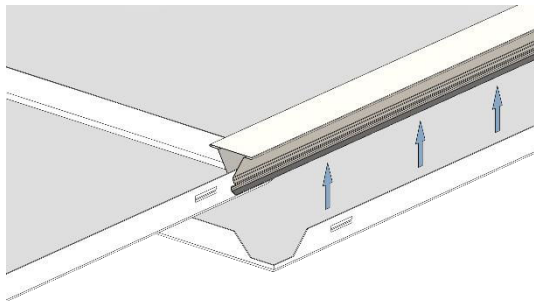
Hanging assemblies (ACC-HAS) are installed at 1200mm intervals

Support channels (ACC-SC) are suspended from the hanging assemblies as shown

Height can be fine-tuned/adjusted using the quick adjustment mechanism

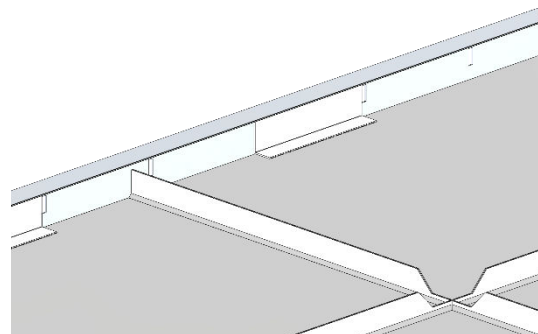


Lengths of Support Channel (ACC-SC) can be joined using Support Channel Joiners (ACC-SCJ)



CEILIA® tiles are installed by pushing into the Support Channel (ACC-SC) grid

Ensure that the edge of the tile with notches are inserted into the Support Channel (ACC-SC)



Cut CEILIA® tiles are installed around the perimeter of the installation

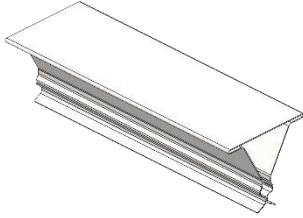
Cut edges of CEILIA tiles are supported by the Edge Channel (ACC-EC)

CEILIA tiles are secured within Edge Channels (ACC-EC) using retainer at minimum 300mm spacings

ACC-SC

Support Channel

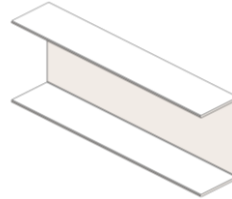
Material: Steel | Length: 3000mmL



ACC-EC

Edge Channel

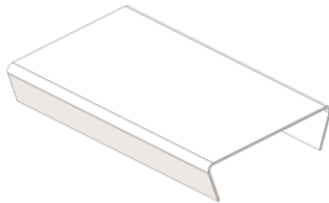
Material: Aluminium | Length: 3000mmL



ACC-SCJ

Support Channel Joiner

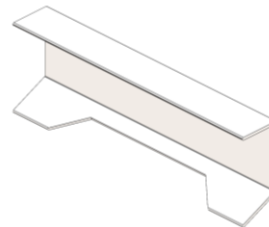
Material: Steel



ACC-RET

Retainer

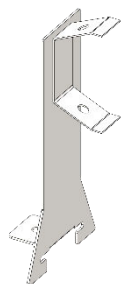
Material: Aluminium



ACC-SCC

Support Channel Clip

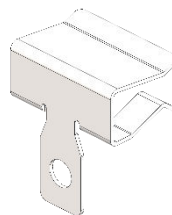
Material: Steel



ACC-CLP

Clip

Material: Steel



ACC-HR

Hanging Rod

Material: Steel | \varnothing 4mm/length varies per application



MAINTENANCE

ALWAYS – be aware of compliance with current work health

Inspections

There are no supplier requirements for regular inspection.

Demounting and remounting instructions

CEILIA® can easily be demounted / remounted by any trained personnel.

For tiles in a concealed suspension system the first tile is demounted by inserting the CEILIA® ‘Pully’ tool in the joint across the direction of the bars, close to a corner and carefully pull downwards. For tiles longer than 600 mm, there should be two people doing the demounting to avoid the tile is twisted out of the suspension system. Please note that this needs to be vertically removed from the suspension system.

When the tile is mounted again, it needs to be pressed into the suspension system.

Maintenance instructions

The maintenance for CEILIA® is rather simple and easy. The tiles can be wiped with a soft cloth or vacuumed with a soft nozzle brush.

For better cleanliness, the tiles can be washed using a regular mild household detergent. The solution is applied to the tiles by using a natural sponge, wiped off with a (soft) cotton cloth wrung in clean water.

For ‘greasy’ surfaces an ammonia-containing detergent can be used.

In areas with high humidity and frequent cleaning, ceilings with a special surface coating are recommended.