

ULTIMA CANOPY

Data sheet

Acoustic performance meets High Design

Armstrong

ULTIMA CANOPY

Installation Instructions

I. GENERAL

1. Product Description

Ultima Canopy is a pre-formed acoustical canopy suspended with cables and available in either convex or concave configurations.



2. Materials and Finishes

Ultima Canopy panels consist of pre-formed and pre-curved layers of mineral fibre with an acoustically transparent membrane on all exposed surfaces.

3. Storage and Handling

The ceiling components shall be stored in a dry interior location and shall remain in original cartons prior to installation to avoid damage. The cartons shall be stored in a flat, horizontal position. Upon opening the carton, proper care should be taken to locate the accessory packet immediately. Targets printed on the top carton lid need to be kept for use during installation as a guide for hanging the canopies. Panels should not be removed from the cartons and the plastic film and protectors around the panels should not be removed until installation is complete. Proper care should be taken when handling to avoid damage and soiling.

- Precautionary Measures:

During installation, ensure that the work site is well ventilated to avoid breathing dust. All power-cutting tools must be equipped with dust collectors. Avoid contact with skin or eyes. Wear suitable clothes, gloves and eye protection.

- First Aid Measures:

If contact occurs flush eyes and skin irritation with plenty of water for at least 15 minutes.

4. Jobsite Conditions

Ultima canopies should be allowed to reach room temperature and have stabilised moisture content for a minimum of 24 hours before installation. Panels must be protected against damage from moisture, direct sunlight, surface contamination, and other causes. Building areas should be free of construction dust and debris before delivery.

5. Temperature and Humidity during Installation

The product can be installed in temperatures up to 38°C. It cannot be used in exterior or interior applications, where standing water is present, or where moisture will come in direct contact with the canopy.

Installation must not be carried out in areas in excess of 90%RH; in the presence of chemical fumes requiring personal protection; or with temperatures at or below 0°C. Following practical completion, conditions must be maintained below 70%RH (16-23°C).

6. Fire Performance

Ultima canopies, as with other architectural features located in the ceiling plane, may obstruct or skew the existing or planned fire sprinkler water distribution pattern, or possibly delay the activation of the fire sprinkler or fire detection system. Designers and installers are advised to consult a fire protection engineer and their local building codes for guidance on the proper installation techniques where fire detection or suppression systems are present.

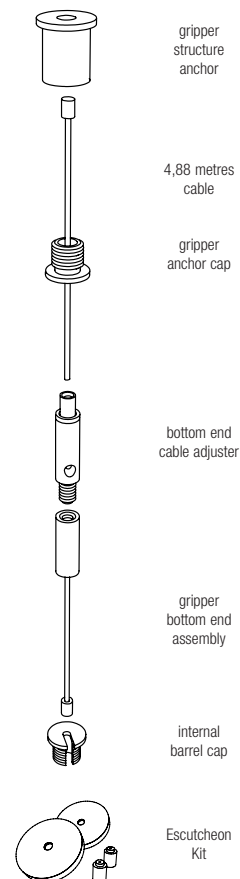
II. KIT COMPONENTS

1. Ultima canopies

Ultima canopies are 1905 mm x 1180 mm x 32 mm thick. Canopies are available in either Convex or Concave configurations with a fixed arc radius of 3.28 metres.

2. Suspension System

Ultima canopies are suspended with metal wire cables. Complete suspension cable kits are supplied with each canopy. They consist of four 4.88 metre cables per canopy and accessories that attach the cables to the canopy and structure with an adjustable gripper to easily set the proper elevation. Extended 9.15 metre cables are available as a separate accessory (BP625530)



3. Light Fittings

Ultima canopies have been designed to allow a suitable 1200 mm light unit to be installed underneath the panel and still allow for the luminaire suspension fittings to pass outside the width of the canopy. Note that these cables must not be fixed to the canopy and no additional load should be applied to the canopy installation.

Where Ultima canopy light fittings are installed below an existing ceiling, these must be supported from the structural soffit.

Installation

General

After opening the product carton, and before installation, be sure to locate, remove, and set aside the accessory kit before proceeding.

Ultima canopies require two people to handle each panel safely, minimise damage and provide panel support during installation. **DO NOT REMOVE THE CANOPIES FROM THE CARTON** until step 4 of the installation process. Since the canopies are pre-assembled, locate the suspension accessories and make all the connections while the product is still in the carton. Do not remove the plastic film or canopy edge protectors until the panel is installed.

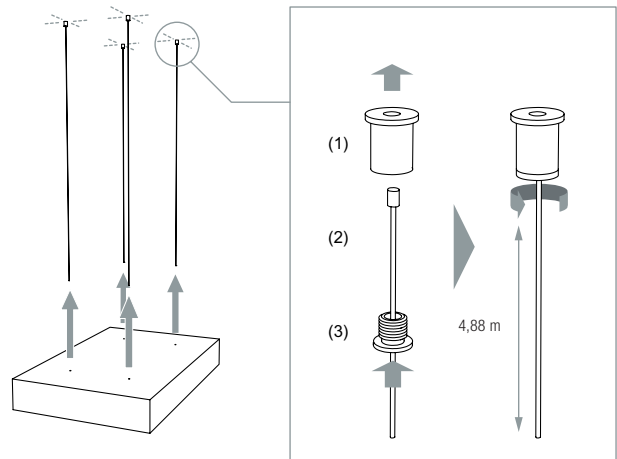
Ultima Canopy panels cannot be cut, drilled or altered in any way. The canopy must not be used to support any other material, fixtures or fittings. The cable suspension system must be fastened to the structure and cannot be hung from any commercial ceiling system. Ultima Canopy panels are not approved for exterior application.

Suspension Cables

Canopies must be installed with four suspension cables.

1. Cable attachment to structure

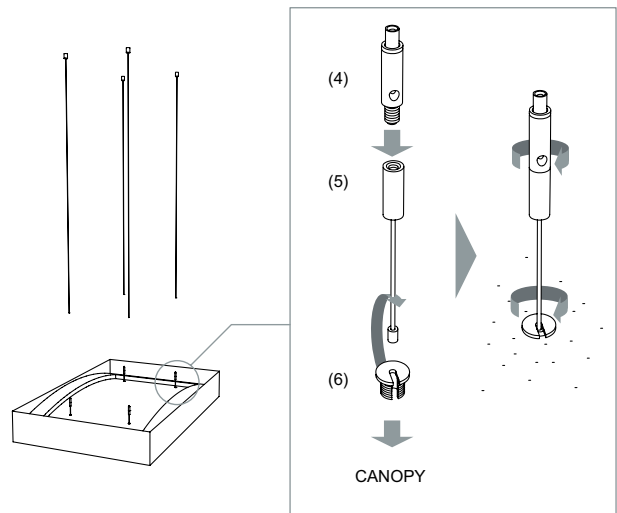
1. Use the suspension cable targets on the top of the package to locate cable anchor points at the structure. Additional structural support may be required if cable anchor points are obstructed by HVAC, piping or other components in the plenum.
2. Attach the gripper structure anchor to the structure with a fastener that will carry the full weight of the 23 kg canopy, in accordance with EN13964. The top of the gripper anchor has a 6 mm threaded hole for use with an M6 (6 mm) bolt, or you can use a suitable wood or sheet metal screw through this hole for proper attachment to the structure.
3. Insert the end of the cable into the gripper anchor cap.
4. Screw the gripper anchor cap completely into the gripper structure anchor.



2. Cable attachment to canopy

All cable attachments should be made while the product is in the carton.

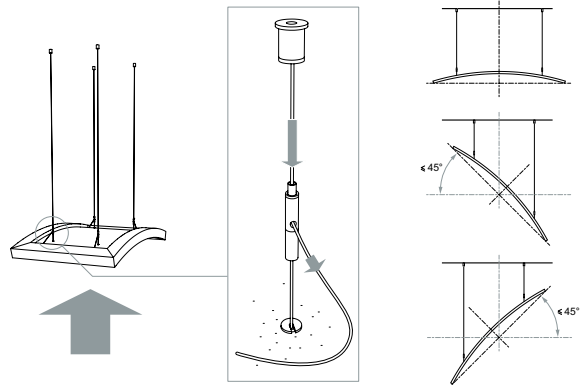
1. Remove cardboard packaging from top of canopy.
2. Pull back the plastic film to expose the four anchor points. This will ease final removal after the panel is installed.
3. Locate the four embedded anchor points on the canopy.
4. Insert the end of the cable into the internal barrel cap and completely screw this into the embedded canopy plate.
5. Screw the bottom end cable adjuster into the gripper bottom end assembly.
6. Repeat until all four-bottom end assemblies are attached to the canopy.



3. Install the Canopy

Insert Suspension Cables

1. Move the carton to the approximate location of the installation.
2. Keep the boxed canopy on a flat surface to support the carton.
3. Insert a suspension cable into the top of the cable adjuster at all four corners.
4. Gently pull the cable through the cable adjuster until all the slack is removed.
5. Do not remove the canopy corner protectors.



4. Suspend the Canopy

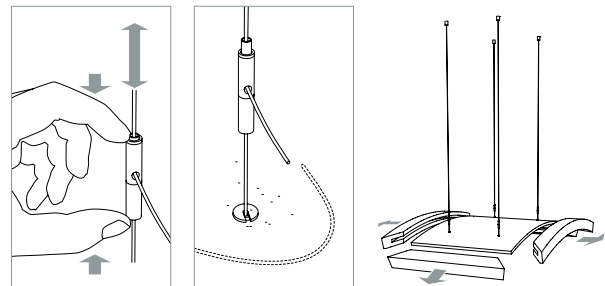
Canopies must be installed so the lowest point will not cause an obstruction or injury to people walking by. As a guideline we recommend that the lowest point is a minimum of 2.25 metres from the finished floor level.

1. Suspending the canopy requires two people.
2. Make sure your hands are clean or wear white cotton gloves.
3. Raise the panel and gently pull the cable(s) to take up the slack.

Do not pull the cables to raise the canopy under full panel weight. Cable damage will occur.

4. Continue to raise the canopy until you reach the required height.
5. Canopies can be installed up to a 45 degree angle in either direction.
6. To lower the canopy, take the weight off the cable(s), depress the plunger on top of the cable adjuster and lower the canopy. Release the plunger to lock the cable into the adjuster. Adjust panel height as desired.
7. Do not allow excess cable to drop below the canopy while adjusting final panel height. Could cause injury or panel edge damage.

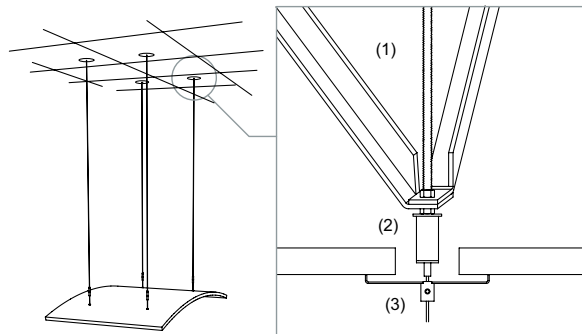
8. Once the panel is installed at the correct height - cut off excess cable leaving about 25 mm remaining out of the cable adjuster.
9. It is recommended to keep the edge protection and plastic film on the canopy until all canopies are installed and other trades have finished in the area. This will keep the panel clean and minimise edge damage.



5. Installing the canopy below an existing ceiling

Canopy suspension cables should not impose any additional load or lateral force on an existing ceiling.

1. The structure gripper anchor must be mounted to a structural support at or above the existing ceiling.
2. Use 6 mm threaded rod (1) attached to structure to secure the structure gripper anchor (2) at the correct height.
3. Use diagonal bracing to structure to provide support and lateral restraint.
4. Use the optional escutcheon kit accessory (3) to conceal the structure gripper anchor when installed above the ceiling level.



Acoustics

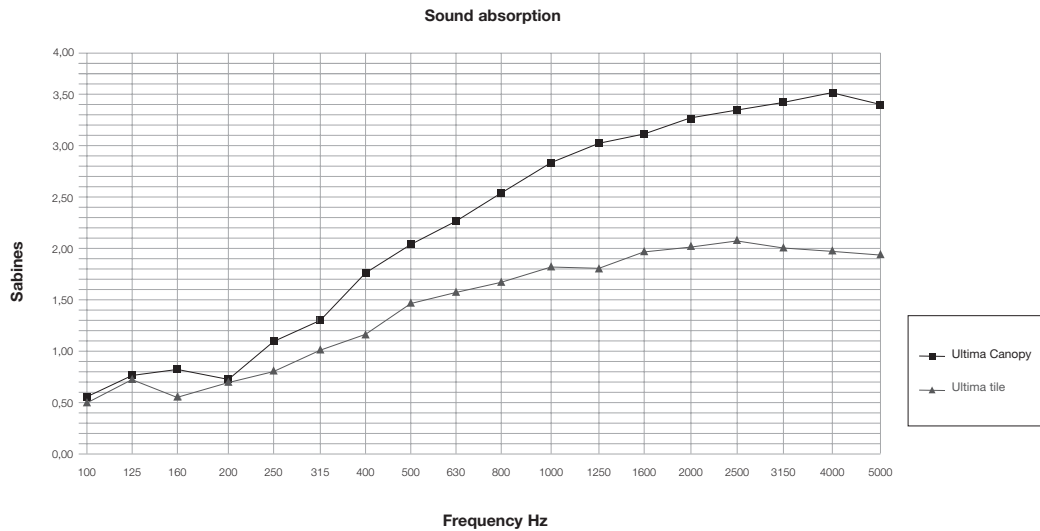
Ultima Canopies offers excellent additional sound absorption for larger open spaces such as Reception Areas, Call Centres, Shopping Malls and Atria.

Canopies installed above an individual or group work station will enhance the overall atmosphere, creating a 'localised acoustical enclosure'. This can be beneficial for open spaces with high ceilings.

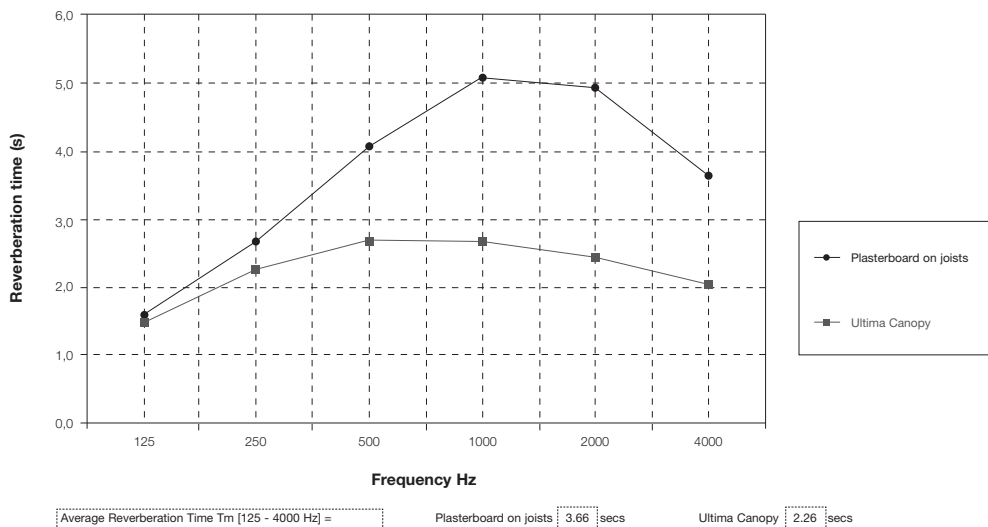
By providing sound absorption Ultima Canopies help to:

- Reduce reverberation times
- Control noise levels
- Increase speech intelligibility
- Provide a local sense of 'acoustic enclosure' for people working beneath them.

For example: Each 2.2 m² canopy provides nearly 3 Sabines (m²) of sound absorption at 1 kHz (EN ISO 354).



One canopy will absorb over 50% more sound than the same area of an Ultima flat ceiling.



In a modelled reception area space using plasterboard – 5 canopies will reduce the Reverberation Time by 38%.

Key Selection Attributes



- Canopies can be used to define spaces, accentuate an area, provide focus and create ceiling sculptures.
- You can mix & match shapes
- Durable
Washable
Scrubable (non-abrasive cloth)
Impact-Resistant
Strong Edges
- Standard components allow you to create custom configurations
- Lighting can enhance the impact of canopies
- Use individually or in groupings, convex or concave
- Suspended from the building structure
- Installation is fast and simple – no special tools are required
- Easy to order kits provide all the necessary accessories
- Do not stack canopies vertically in design configurations

Typical Applications

High visibility and focus areas, including:

- Hospitality & retail
- Offices
- Reception areas, atriums
- Open plenum areas
- Transportation, airports
- Exhibitions

Physical Data

| | |
|--|---|
| Dimensions | 1905 x 1180 x 32 mm |
| Colour | White |
| Edge | Paint on edges |
| Edge detail | Board |
| Fire reaction | A2, s1- d0 (EN 13964:2004) |
| Humidity resistance | 70% RH |
| Light reflectance | 86% |
| Scratch resistance | Yes |
| Thermal conductivity (W/mK) | 0.052-0.057 W/mK |
| Recycled content | ≤ 70% |
| Sound absorption – Sabine m² | 2.84 (1 kHz) |
| Weight | Panel = 23 kg |
| Cleaning | Use a clean, dry, soft white cloth to wipe off any dirt or fingerprints. Regular light dusting of the back side of the canopy is recommended. |

Item number

| | CONCAVE | CONVEX |
|---------------------|----------|----------|
| 1 piece per carton | BP62591G | BP62581G |
| 2 pieces per carton | BP62592G | BP62582G |

Extended Hanging Cables

(4) 9.15 metre cables

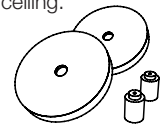
BP625530

Escutcheon Kit

BP70056

Used when hanging canopies below an existing ceiling.

- (2) Collars with Set Screws
- (2) 50 mm Escutcheons



Note: 2 kits are required for each Canopy



Recommendation



- Attach the gripper structure anchor with a suitable fastener in accordance with EN13964.
- Use the suspension cable template on the top of the carton to identify the cable anchor points on the structure.
- Canopies cannot be drilled, cut or altered in any way.
- Ultima Canopies are not recommended for external use.
- All cable attachments should be made while the product is in the carton.
- The Canopy (23 kg) should always be suspended by 2 people.
- After opening the carton, remove and set aside the accessory kit before proceeding.
- Do not remove the Canopy from the carton until the Canopy is suspended.
- Canopy suspension cables should not impose any additional load or lateral force on an existing ceiling.
- Do not allow excess cable to drop below the canopy when adjusting the panel to the required height. This could cause injury or panel edge damage.

Please contact
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