

## MetalWorks Linear C&S Planks (Interior Applications)

Armstrong METALWORKS® ceilings are **INTERIOR FINISHES ONLY** and conditions during the installation should reflect this. Armstrong recommends during installation that relative humidity should not exceed 99%, within a temperature range of 0 to 49 degrees Celsius and with the absence of any “standing water”. Conditions following completion should be maintained as such.

Because of the risk of soiling, the installation of ceiling tiles should only take place after the completion of any work generating large amounts of dust. The wearing of clean gloves is recommended for installation work. The ceiling installer is responsible for the satisfactory installation of the ceiling and adherence to industry best practice and in accordance with AS/NZS2785:2020

Ceiling tiles should only be stored in a dust-free and dry area. It is important to ensure that the tiles are not subjected to any mechanical influences, such as damage caused by the underlying surface. Ceiling tiles delivered on pallets should be stored in their original packaging until they are installed. Where this is not possible, care should be taken to ensure that cartons are stored with the designated side facing upwards. The installation company is responsible for the careful storage of tiles.

The ceiling system is made up of Armstrong METALWORKS C or S Planks, which are supported by the Armstrong Suspension System (Carrier Channel and hangers) and Wall Angle which runs around the perimeter of the space.

The integrity of the entire suspended ceiling depends on the hangers – commonly 5mm gal rod is used, with some contractors using 2.5mm wire and M6 Threaded Rod (Both types meet Australian / New Zealand standard 2785-2020) which are used to support the Carrier Channel. Bracing is to be applied where required to ensure the Suspension System remains square.

**\*Note: Specially designed MetalWorks Ceilings for EXTERIOR applications are available upon request. Contact your Armstrong Ceiling Solutions Representative for details and conditions.**

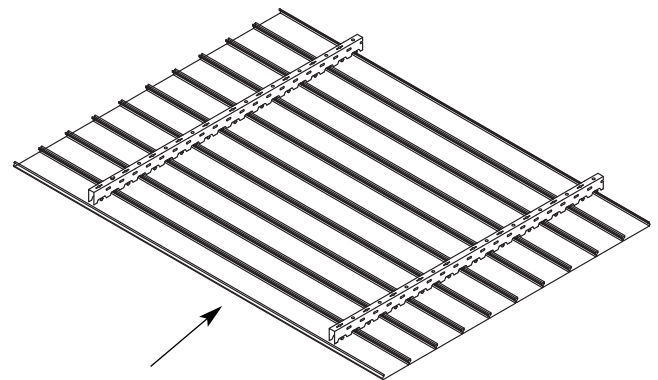
### 1. GENERAL

#### 1.1 Product Description

METALWORKS Linear C & S Planks are available up to 6000mm in length, with C-Planks available in 100, 150 and 200mm width options and S-Plank being 300mm wide.

Linear C & S Planks are roll formed from aluminium with a powder coated finish and available either plain or perforated with acoustic fleece.

The carrier channel is hung with 5mm Rod. Carriers are hung on 1200mm centers with suspension hanger installed at 900mm centres.



C100 / C150 / C200 / S300 Panels

#### 1.2 Storage and Handling

Linear C & S Planks shall be stored in a dry interior location and shall remain in cartons prior to installation to avoid damage. The cartons shall be stored in accordance with the instructions on the carton. Proper care should be taken when handling to avoid damage or soiling.

#### 1.3 Site Conditions

Building areas to receive ceilings shall be free of construction dust and debris.

#### 1.4 Ceiling Panel Layout

The Linear C & S Plank layout should have perimeter panels equal in width on opposite ends. These cut perimeter panels should be more than 50% of their original width. See METALWORKS cutting instructions. Divide the room dimension by the nominal width of the panel (100mm, 200mm or 300mm). Determine the remainder, add one full panel width, and divide by two to determine the width of the border panel.

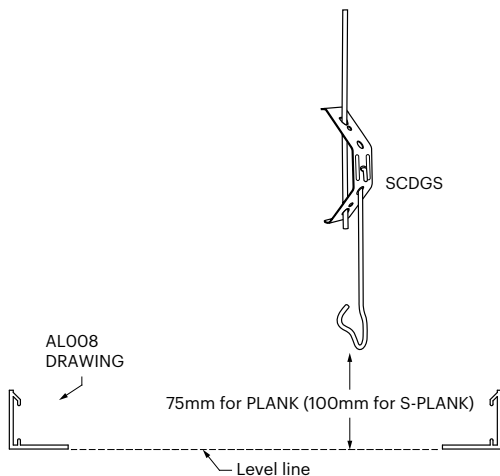
Example: 200mm nominal panel width, room dimension 3100mm. Divide 3100mm by 200mm = 15 full sections with 100mm remainder. Add 100mm+ 200mm = 300mm. Divided by 2 = 150mm border panel with 14 full rows of panels. This will create the best visual and installation.

## 2. PREPARATION

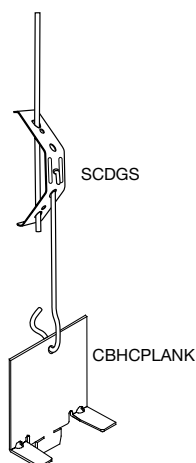
- 2.1 Determine desired height of new ceiling.
- 2.2 Strike a level line around the perimeter of the area at this height.
- 2.3 Determine direction of Linear C & S Plank ceiling.
- 2.4 The carriers will be installed 1200mm on center perpendicular to this direction. The first and last carrier must be within 600mm of the wall.

## 3. INSTALLATION

- 3.1 Install Wall Angles, secured to the perimeter walls at a maximum of 450mm centres. The bottom of the moulding is the finish height of the Linear C & S Plank panel.
- 3.2 Secure 5mm rods to the structure above to support the carriers. The first suspension point for carriers should be within 300mm of the perimeter and then 900mm on center.
- 3.3 Stretch a string line or set a laser at the bottom of the moulding from one side to the other along a row of hanger rods with SCDGS, 100mm above finished ceiling height.

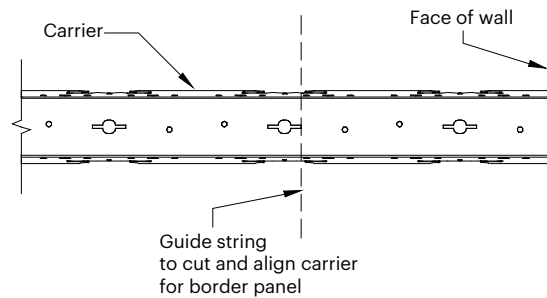


- 3.4 Hang a Carrier Hanger (item CBHCPLANK) from hanger rods SCDGS.



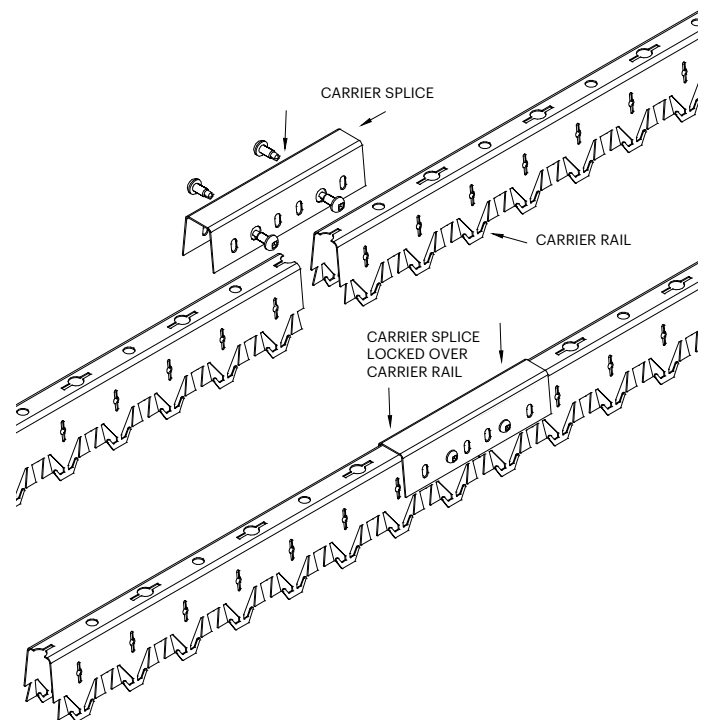
- 3.5 Stretch a string from one side of the room to the other at the top of the moulding (string perpendicular to carrier). The string should be out from the "end" wall by the calculated width of the first "plank." See section 1.4 for border panel layout.

- 3.6 Measure from this string to the wall. Cut the first carrier channel in each row so the indicated notch lines up with this string.



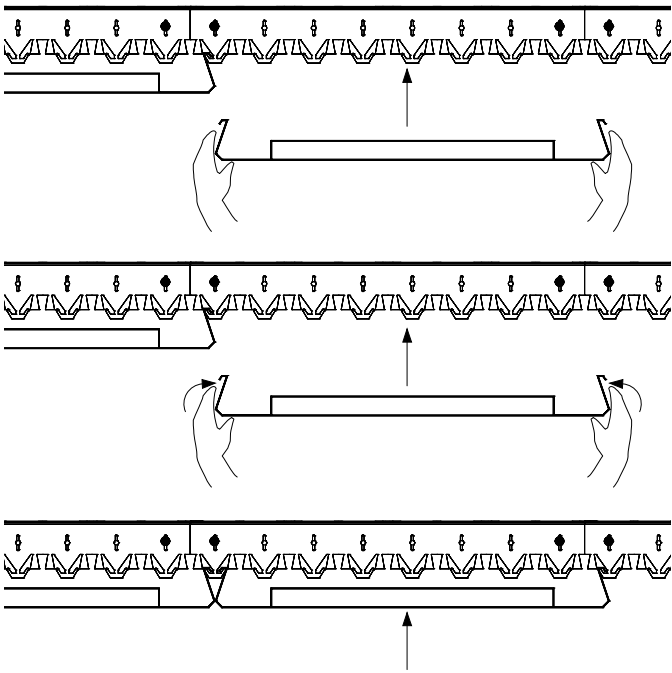
- 3.7 Secure the carriers to the carrier hangers. Insert the hanger clip into the pre-punched slot on top of the carrier and twist the clip 90 degrees. Bend both side tabs down to lock the clip onto the carrier.
- 3.8 Fasten the Carrier Rail at the proper location, align the notch as indicated in Section 3.6 and fasten with a framing screw or pop rivet. Notch the carrier to fit into the wall moulding as needed.

- 3.9 Use the Carrier Splice (item CBS300) to join sections of carrier together and maintain the proper spacing. Fit the Splice over the top of the Carrier Rails as per the illustration below. Line up all the holes and insert four framing screws or pop rivets (one on each side and at both ends of the carriers) to secure the splice to the carriers.



- 3.10 Complete the run of carriers to the other end of the space.
- 3.11 Measure from the wall to the string several places and determine the exact width of the first row of panels.
- 3.12 Mark the plank and cut to width with electric shears. The flange edge is the edge that should be cut off.
- 3.13 Slide the cut edge of this plank onto the perimeter wall moulding.

3.14 Install panels as per illustration below.



#### 4. PANEL PENETRATIONS

4.1 Penetrations through Linear C & S Plank metal panels are made using typical metal working equipment. Hole saws work well for sprinklers. Tin snips can be used for larger openings. All penetrations should be fitted with escutcheons that conceal the cut panel edges.

4.2 Panels are not to be used to support the weight of ceiling mounted hardware. These items are to be supported directly from the overhead structure.

#### 5. ACCESS PANELS

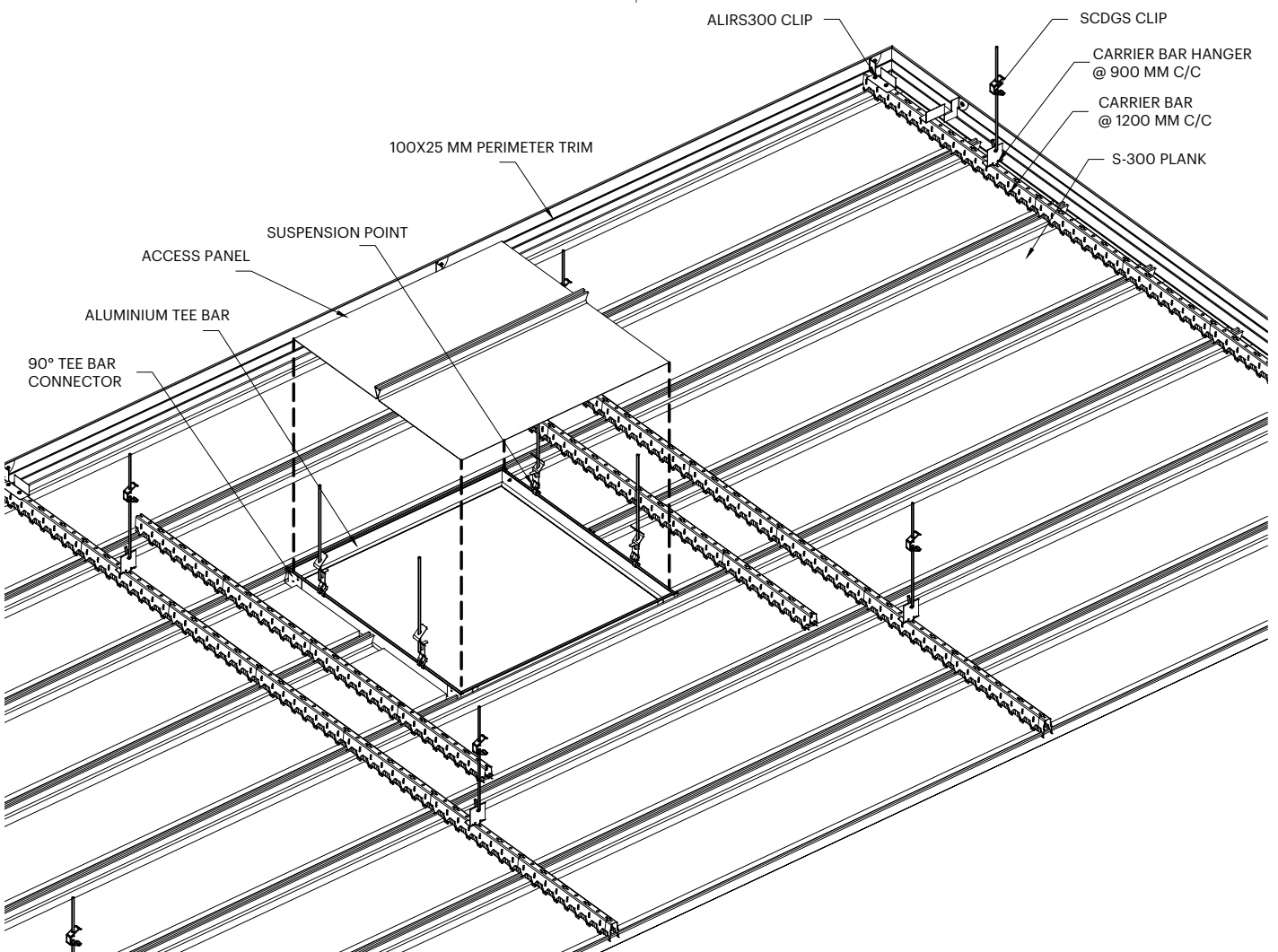
5.1 Access panels must be installed at each location where entry through the ceiling is required; plan size and location carefully to ensure that all above ceiling equipment requiring service is reachable.

5.2 Make sure that a carrier is installed not more than 300mm from each end of the openings. If sections of carrier must be added, they should extend at least one full plank width beyond the sides of the openings.

5.3 Frame the opening with Aluminium T-Bar carefully mitered and cut to match the size of the opening.

5.4 Cut lengths of panel to fill the opening, making sure that they will line up with the panels in the field of the ceiling.

5.5 Install Access panels as per illustration below. Contact your Armstrong Technical Representative for further project specific solutions.



## 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](http://armstrongceilings.com.au)

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