

CORRIDOR SOLUTIONS

This Technical Data Sheet is offered as an aid to the specification of our products and provides information on the products manufactured at our European production facilities.

Orcal Corridor Planks can come with either a Plain, Standard Perforated, Microperforated or Extra Microperforated visual. Other custom perforations are also available with factory applied black acoustic fleece, whilst Orcal tiles with Extra Microperforation are always supplied with factory applied acoustic fleece. Orcal Corridor Planks can also be made available to order with Premium B15 infill.

Armstrong mineral fibre planks can also be used in corridor applications, these products can be supplied with a range of different edge profiles, visuals and acoustic performances. The main difference between a metal solution and a mineral fibre solution is the suspension. For mineral fibre applications there will be a concealed or visible suspension element along the long edge of the plank. This can be either independent or connected to the wall suspension system. For more details about the range of solutions available, please contact Armstrong Internal Technical Sales Group.

All the technical and product information included in this datasheet relates primarily to Orcal Corridor Planks.

Wall to Wall Solutions

These solutions are available with or without a shadow gap using Orcal Corridor Planks. These solutions can also be achieved with or without a shadow gap using Armstrong mineral fibre planks. This choice of products and systems allows the specifier a wide range of acoustic performance characteristics and visuals.

Floating Solutions

This datasheet shows some of the more typical metal floating corridor solutions from Armstrong. These solutions always incorporate a shadow gap. Mineral fibre corridor planks are generally not suitable for floating solutions.

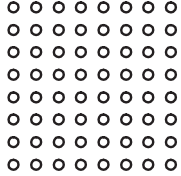
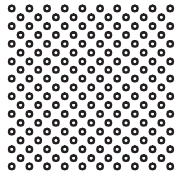
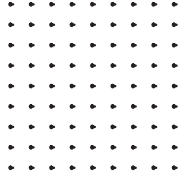
Other custom solutions are available on request such as combined fixed and floating systems, or with special visual and functional characteristics. Please contact us to find out more information.

Availability of products may vary according to country. Please contact your local Armstrong office for product range information.

Orcal Corridor Planks

Material	Tiles are manufactured from zinc coated mild steel. Minimum thickness 0.5mm.		
Finish	Factory applied polyester powder coat, minimum thickness 55 microns.		
Colour	Standard:	RAL 9010 & 'Global White'	
	Semi-Standard:	RAL 9001, RAL 9002, RAL 9006, RAL 9007, RAL 9016	
Gloss	RAL 9010 :	20%	
	Global White :	20%	
	Semi-Standard :	30%	
	Measured in accordance with ISO 2813:2000, use 60° geometry.		

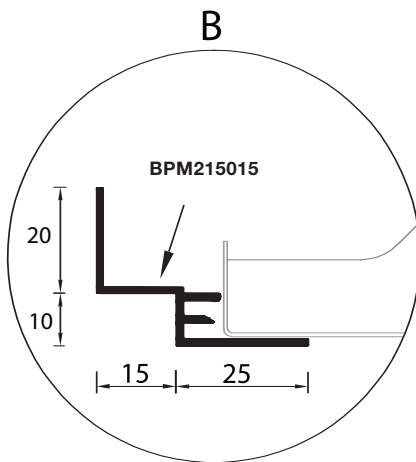
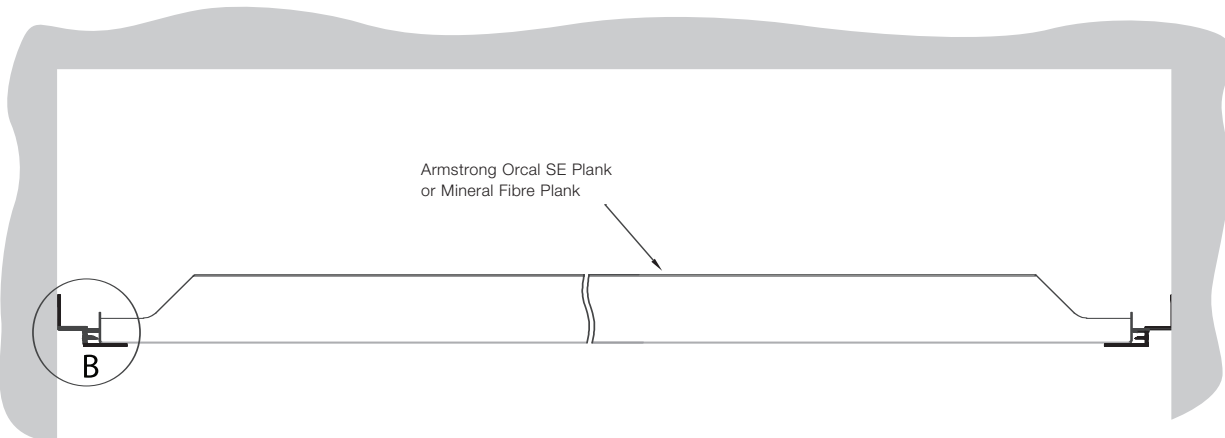
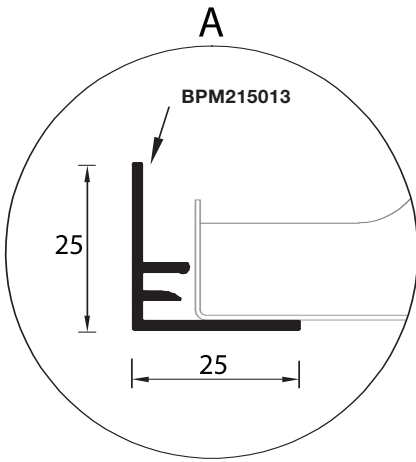
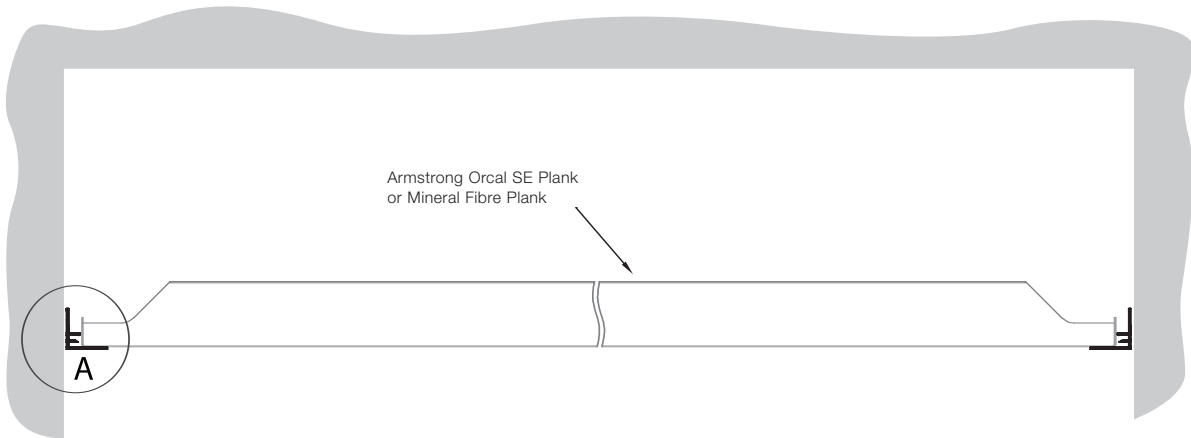
Light Reflectance	Pattern	RAL 9010	Global White
	Plain (unperforated)	87%	77%
	Extra Microperforation with black fleece	85%	76%
	Microperforation with black fleece	71%	63%
	Standard Perforation with black fleece	75%	68%
	Measured in accordance with ASTM 1477-98.		

Perforations	Standard Perforation 2.5mm dia.holes 16% open area	Microperforation 1.5mm dia. holes 22% open area	Extra Microperforation 0.7mm dia. holes 1% open area
			

Orcal Planks with Standard Perforation and Microperforation are produced with a nominal 10mm plain border to the tile edge. Orcal Planks with Extra Microperforation are perforated overall.

All measurements are in millimetres.

Wall to Wall Solutions

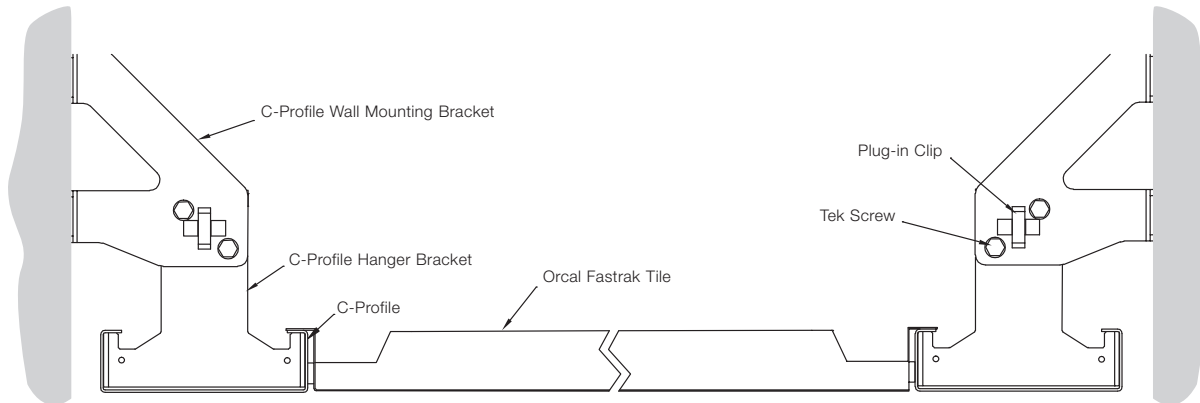


Dimension Range:
Length 600 - 2500mm
Width 297 - 600mm

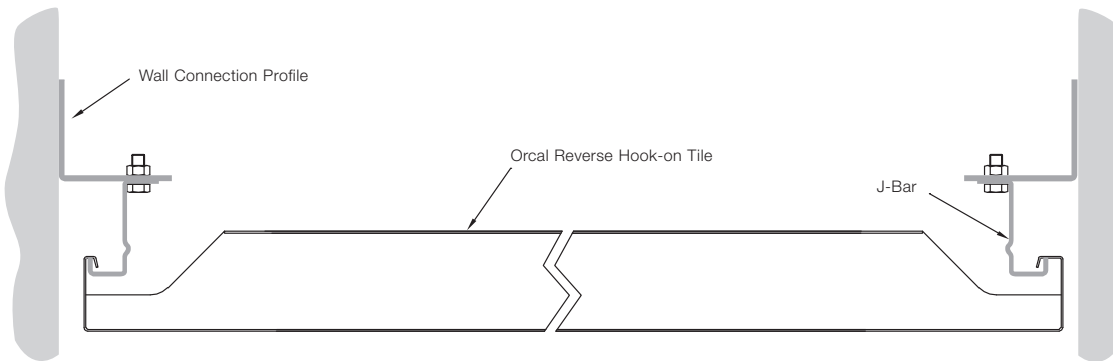


Floating Solutions

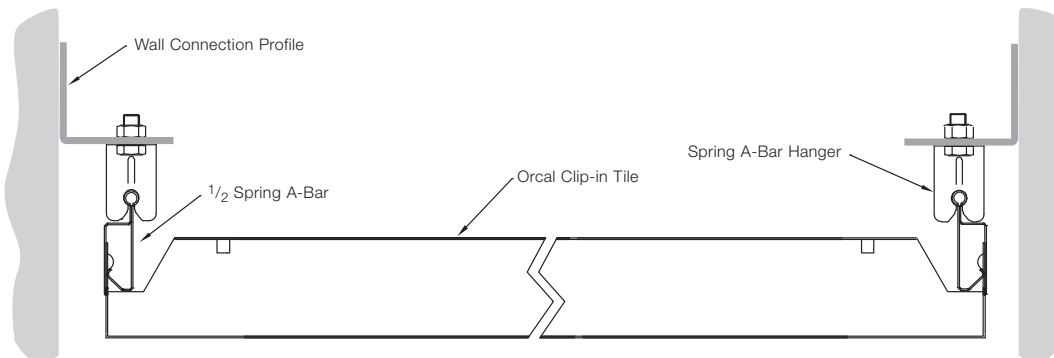
Orcal Fastrak



Orcal Reverse Hook-on



Orcal Clip-in with 1/2 Spring A-Bar



Notes

Typical Dimension Range
Length 600 – 2500mm
Width 297 – 600mm

Product may also be specified with a factory fitted gasket system if required.

C-Profile is available in a range of widths from 50mm to 125mm but other sizes may be able to be used depending on the application.

Orcal Fastrak and Hook-on Corridor Systems are also available with a range of hinge-down options to allow access to the services in the plenum without having to fully remove the panel.

Recommended minimum size of shadow gap is 10mm.

Acoustic Performance**For wall to wall solutions in metal****Sound Absorption (α_w)**

	Acoustic fleece	Premium B15 infill
Standard Perforation	0.70 (L)	0.60 (H)
Microperforation	0.75 (L)	0.60 (H)
Extra Microperforation	0.55 (L)	0.65 (L)

No acoustic infill (α_w)

Plain 0.10(L)

Room-to-room sound attenuation (Dncw)

	Acoustic fleece	Premium B15 infill
Standard Perforation	20 dB	41 dB
Microperforation	20 dB	41 dB
Extra Microperforation	30 dB	40 dB
Plain	-	47 dB

No acoustic infill (Dncw)

Plain 44 dB

A range of acoustic infills is available to achieve various acoustic performance levels. For further information please contact Armstrong Internal Technical Sales Group. Typical acoustic performances of mineral fibre tiles would be Dncw - 30-40dB, α_w 0.60 - 0.80 depending on the substrate

Tile Loading

Armstrong Corridor Planks are capable of directly supporting limited additional loads from small service fittings. The maximum total uniformly distributed static load that can be applied to the rear of a plank should not exceed 3kg. The use of a patrix is recommended to distribute the load and to minimise face deflection of the tiles. Loads greater than 3kg should be independently suspended or supported from the primary grid. The maximum distributed static load that can be carried by the grid system should not exceed 10 kg/m².

Services Integration

Orcal planks can be supplied with factory produced cut outs and apertures for the integration of lighting fittings, air grilles, sprinklers, and other building services equipment.

Handling and Storage

Ceiling components should be stored under conditions of use in a dry interior location and should remain in cartons until installation. Cartons should be stacked and oriented as shown on the carton. Care must be exercised during handling and opening of cartons to avoid damage. The use of soft cotton gloves is recommended for tile installation.

Environmental

Our metal ceilings have an average of 25% recycling content. ISO 14001:2004 certified process. Recycled content of Mineral Fibre planks is up to 75%.

Thermal Conductivity**Steel**(λ) W/mK 50.0 :
0.04 : Acoustic fleece**Mineral Fibre**(λ) W/mK 0.052 :
0057**Humidity Exposure**

Not greater than 70% RH @ 16°-23°C for long term exposure. Not greater than 95% RH for short term exposure during building site installation.

Fire Reaction Metal**Plain without acoustic infill**

EEA Euroclass A1 (RAL 9010)

EEA Euroclass A2-s2, d0 (other colours)

No acoustic infillPerforated $\phi \leq 2.5$ mm

EEA Euroclass A1 (RAL 9010)

EEA Euroclass A2-s1, d0 (other colours)

With acoustic Fleece, ABBTF pad or B15 infillPerforated $\phi \leq 2.5$ mm (acoustic fleece)

EEA Euroclass A2-s2, d0

Perforated $\phi \leq 2.5$ mm (ABBTF pad)

EEA Euroclass A1

Perforated $\phi \leq 2.5$ mm (Premium B15 infill)

EEA Euroclass A2-s1, d0

Mineral Fibre Planks

EEA Euroclass A2-s1, d0

WeightSteel tile - 5 kg/m²Mineral Fibre - 3.5 - 5.2kg/m² (typically)**Field Cutting**

Orcal planks can be cut using tin snips, electric sheet metal shears or band/jig saw. Care must be exercised to avoid damage to the painted surface, bending or distortion of the tiles.

Mineral Fibre planks can also be cut to size on site as required.

Cleaning

Dust should be removed from the painted surface by wiping with a clean soft cloth. More stubborn marks should be removed with a mild household detergent in warm water. Excessive use of water should be avoided. The use of abrasive cleaners or scrubbing of the painted surface is not recommended.

Quality Standard

Armstrong is a certified ISO900:200 Quality Assumed Manufacturer. All tiles and products are manufactured to tolerances and quality standards in accordance with EN13964. Where differences exist between this and any expressed or implied architectural specifications or requirements than Armstrong's manufacturing standards will prevail unless stated otherwise.

Detailed NBS K40 specifications are available for these products, please contact Armstrong Internal Technical Sales Group for further details. All product specifications are subject to modifications without prior notice.

United Kingdom**Republic of Ireland**

Armstrong World Industries Ltd.
Building Products Division
Armstrong House
38 Market Square
Uxbridge UB8 1NG

0800 371849 (UK) **FREEPHONE**

1800 409002 (ROI)

Fax: +44 (0) 1895 274287

sales-support@armstrong.com

www.armstrong-ceilings.co.ukwww.armstrong-ceilings.ieOther markets: www.armstrong-europe.com