



ARCH LINING SYSTEM

FROM ROCKWELL

The proven arch lining system
which offers low whole life cost

- ✓ Simple
- ✓ Effective
- ✓ Durable
- ✓ Lightweight
- ✓ Removable



Rockwell
BUILDING PLASTICS



SIMPLICITY

The economical and established railway arch lining system that has proved effective for many years.

High impact plastic lining sheets are flexible enough to adapt to each arch and will cold curve to match most vaulted ceilings.

Screw fixed directly to brickwork, the system is completely demountable allowing arch structures to be easily inspected.

ARCH LINING SYSTEM

Transform railway arches from dark and damp environments into pleasant work, storage, retail or leisure space.



PROVEN

The corrugated white PVC sheets are extruded in a bi-orientated process to give double the traction impact resistance of comparable PVC sheets.

Battens and sheets are completely water and rodent proof plus offer good chemical resistance.

For internal lining applications Rockwell white PVC sheets can expect to have a useful life in excess of 25 years.



The standard Rockwell arch lining system provides a long lasting lining which allows any water that has permeated the brickwork to be directed around the arch into floor level soak aways, gutters or drainage channels.

The versatile nature of the components makes the system suitable for a wide range of curved or flat lining projects. For specific applications Rockwell can also advise on the use of additional products from its stock of plastic lining and glazing materials.

Contact the technical department on 01676 523 386 to discuss any specific requirements.



TECHNOLOGY

Rockwood WPC composite battens are extremely robust yet flexible enough to follow uneven brickwork.

High quality austenitic fixings are manufactured from 304 series stainless steel to give the ultimate system durability.

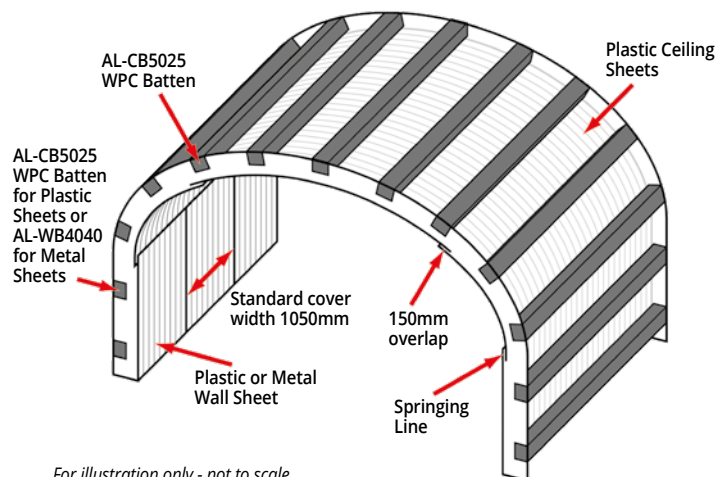
The systems' attractive gloss white finish evenly reflects the maximum available light and the complete lining is B s1 d0 fire rated (equivalent to UK Class 0).

TYPICAL SYSTEM INSTALLATION

DESIGN & SHEET LAYOUT

Measure the arch to determine the number of corrugated sheets required to go around the arch ceiling down to the springing line on each side allowing approximately 150mm for sheet end overlaps.

The first sheet spans the crown of the arch to avoid an overlap in the centre of the ceiling. The adjacent sheets going round the curve will fit in front of the first sheet thus allowing water to drain freely down the corrugations. An arch therefore always has an odd number of sheets going around the ceiling between the springing lines (or from floor to floor on arches with no vertical walls).



There are 3 lengths of corrugated sheet available to help achieve the optimum material yield; 2.44m, 3.05m and 3.66m. Allowing one corrugation for sheet side-laps, the sheets will have a cover width of 1050mm with respect to the depth of the arch.

Wall sheets are generally fitted from floor level up to springing line height and can be either plastic or corrugated metal depending on the specification required.

BATTEN FIXING

Begin by securing AL-CB5025 WPC battens horizontally to the brickwork with AL-CBF65 fixings. For ceiling areas allow approximately 750mm between batten runs. Depending on the radius of the curve, the sheet length used and the sheet configuration the batten centres can be increased or reduced by up to 150mm in order to achieve even spacing.

For side wall areas where greater rigidity is desired the batten spacing should be reduced to 600mm. Use either AL-CB5025 WPC battens and AL-CBF65 fixings behind plastic wall sheets or AL-WB4040 WPC battens and AL-WBF80 fixings behind metal wall sheets. Both battens are supplied in 2.9m lengths.

Use 7 fixings per 2.9m batten length to give max 500mm between fixing points. Start at the centre of the batten and work outwards to keep batten flat to the brickwork.

Drill clearance holes through battens before fitting screws. Always use correct stainless steel batten fixings and heavy duty plastic wall plugs.

SHEET FIXING

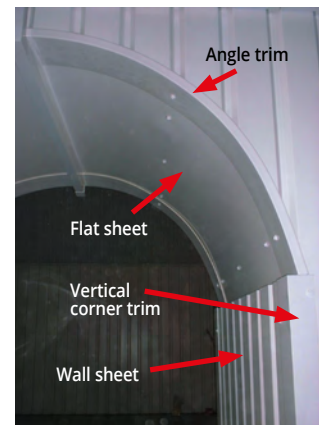
Plastic ceiling or wall sheets are secured to Rockwood WPC composite battens with 25mm stainless steel sharp point fixings (AL-WGF25P) which are supplied complete with push fit white plastic caps to give a discreet finish.

Fixing screws have an 8mm hex head. Use a suitable socket tool to fit a minimum of 4 fixings across the sheet into each batten run..

JACK ARCH LINING

The ceiling of these small interlinking arches should be lined with flat white 2mm thick PVC sheet.

Depending on site conditions the Rockwood AL-CB5025 WPC battens would normally be installed horizontally on jack arch ceilings. When fixed horizontally the battens should be angled slightly to create 20mm gaps within each row to facilitate drainage. The battens should be evenly spaced (max. 600mm centres) and secured with AL-CBF65 batten fixings. The 2mm thick flat white PVC lining sheets are then secured to the battens with AL-WGF25G sheet fixings.



The bottom of the flat white sheets fit behind the jack arch wall sheets. On the joint between the edge of the jack arch ceiling sheets and the main arch wall sheets use the hollow section angle trim which will flex to suit the curve of most jack arches. These are secured with 38mm hex head fixings (AL-TRF38L) through the flat sheet into the AL-CB5025 batten.

Where the jack arch ceiling sheets meet the angle trim it is advisable to use a butyl sealing strip to ensure a watertight joint. The angle trims allow any water at this junction to be directed around into the vertical corner trim where it will drain to floor level. Vertical corner trims give a neat, robust finish and are secured through the wall lining sheets into the battens with 50mm hex head fixings (AL-TRF50XL).

BACK WALL CLADDING

For a planked effect finish to the upper section or whole of the back wall Rockwell offers triple plank PVC panels with tongue and groove edges. These simply slot together and are secured vertically with AL-WGF25P fixings to horizontal AL-CB5025 battens at max. 600mm centres. For damp rear walls allow 20mm gaps between ends of the horizontal battens to act as weep holes.



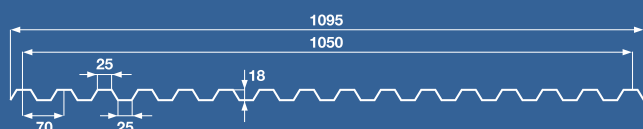
The T & G cladding planks are scribed tight to the arch ceiling sheets – additional capping trim or flashing can be used here if required. Where the planks are not running all the way to the floor they will tuck neatly behind the metal wall sheets.

MAIN ARCH LINING COMPONENTS

Batten & Batten Fixings

AL-CB5025	Rockwood WPC composite batten 2900mmx50mmx25mm
AL-CBF65	Batten fixing: 4.8 x 65mm s/s counter sunk screw c/w plastic wall plug (per 100)
AL-WB4040	Rockwood WPC composite batten 2900mmx40mmx40mm
AL-WBF80	Batten fixing: 4.8 x 80mm s/s counter sunk screw c/w plastic wall plug (per 100)

Sheet & Sheet Fixings



Rockwell 70/18 greca box profile corrugated PVC sheet 1090mm wide (1050mm cover width) available in the following sizes:

AL-WG2440	White Greca profiled 70/18 corrugated sheet: 2440mm long
AL-WG3050	White Greca profiled 70/18 corrugated sheet: 3050mm long
AL-WG3660	White Greca profiled 70/18 corrugated sheet: 3660mm long
AL-WGF25P	25mm hex head sheet fixings: austenitic s/s sharp point c/w white caps for plastic sheets and cladding (per 100)

Note: Rockwell is a plastics specialist and does not supply corrugated metal sheets. Industrial roofing suppliers will advise on the cost and availability of metal sheets and flashings.

Bending radius

White corrugated PVC sheet	- 2.5m
2mm thick flat white PVC sheet	- 0.4m
Hollow section PVC angle trim	- 1.4m

Based on ambient temperature during installation being above 60C

JACK ARCHES, REAR WALLS & ACCESSORIES

Cladding & Trims

AL-W8	White flat PVC sheet: 1220 x 2440 x 2mm
AL-W10	White flat PVC sheet: 1220 x 3050 x 2mm
AL-HS300/5	Triple plank T & G cladding: 300mm x 5m
AL-HB150	Angle trim in white hollow section PVC: 150mmx5m
AL-BUT15	Butyl sealing strip: 3mm x 9mm x 15m roll
AL-HA10080	Vertical corner trim in white hollow section PVC: 100mm x 80mm x 5m
AL-FLEXI	White PVC flexi-angle: 35mm x 35mm x 5m
AL-5050AW	White PVC rigid angle: 50mm x 50mm x 5m
AL-FB100	5mtr x 100mm White Flat Board
AL-FB150	5mtr x 150mm White Flat Board



Division bars/joining profiles as well as corner and capping profiles to suit flat sheets or triple plank cladding are available. Also stocked are 3mm flat white PVC sheets, flat-boards, sealants and drive rivets plus black or white PVC guttering - contact Rockwell for details.

Trim Fixings

AL-TRF38L	38mm hex head s/s fixing with washer c/w white cap for angle trim/flat sheet (per 100)
AL-TRF50XL	50mm hex head s/s fixing with washer c/w white cap for angle trim/corrugated sheet (per 100)

Note: White plastic accessories and metal wall sheets may be a slightly different shade of white to the PVC ceiling and wall linings. To ensure system integrity, during installation always use the correct fixings as detailed in this brochure.

Material weight

White corrugated PVC sheet	- 1.65Kg/m2
2mm thick flat PVC sheet	- 2.8Kg/m2
Triple plank PVC cladding	- 2.3Kg/m2

STORAGE & MAINTENANCE

Sheets should be stored and transported flat and kept suitably protected against the elements if stored outside. Rockwell lining products require practically no maintenance and may be simply cleaned when necessary. On such occasions mild detergent and warm water solutions only should be used together with non-abrasive cloths or sponges. Never use cleaning agents that contain abrasives or concentrations of chemicals, especially alkalis.

DELIVERY & PAYMENTS

Materials are usually available for delivery nationwide within 7 days from receipt of order. Payments are with order or, subject to status, Nett 30 days to approved accounts. Delivery charges apply to all orders and will vary by location and size. Next day/special dedicated deliveries can also be arranged and are subject to an additional surcharge - Please contact our sales office on 01676 523386 for accurate delivery costs before placing order.

PRICES & NOTICE

All prices listed exclude VAT. Prices listed and component details are correct at time of printing, Rockwell Sheet Sales Ltd reserve the right to change product specifications or prices without notice. Please check the current prices and system details with the Rockwell Sales Office when ordering.

All information in this brochure is given in good faith and for general help and guidance. Since detail is likely to vary with different arches, it cannot be assumed to be suitable for every application. All information in this brochure is Copyright Rockwell Sheet Sales Ltd.

Rockwell Sheet Sales Ltd

Rockwell House
Birmingham Road
Millisons Wood
Coventry, CV5 9AZ

Tel: 01676 523 386
Fax: 01676 523 630
Email: info@rockwellsheet.com
www.rockwellsheet.com



Rockwell
BUILDING PLASTICS

HEALTH & SAFETY DATA

Rockwell plastic lining products present few hazards to the user and there are no exposure limits for working with the materials. Swarf may be produced during cutting or drilling and as a precaution the use of standard PPE such as gloves, goggles and masks are advised during handling, cutting or drilling.

FIRE DATA

Rockwell greca corrugated profiled and flat white PVC sheet meet the requirements for a UK Class 0 fire classification. Rockwell hollow t&g cladding profiles are Class 1 fire rated to British Standard BS476 Part 7 (1997) 'surface spread of flame'. When subject to thermal decomposition some PVC materials can give off fumes containing Hydrogen Chloride, Lead Oxide, Barium Oxide, and Nitrogen Oxide. Inhalation of fumes arising from ignited material must be avoided. Extinguish using dry powder, water, carbon dioxide or foam.

RECYCLING & DISPOSAL

Rockwell uses recycled materials in its products wherever possible and PVC products can be recycled up to 10 times. Most plastic cladding sheets and profiles can be recycled where facilities exist. As an alternative to disposing of used sheets in approved landfill sites, Rockwell is able to arrange reprocessing of returned items - please contact us for further details.