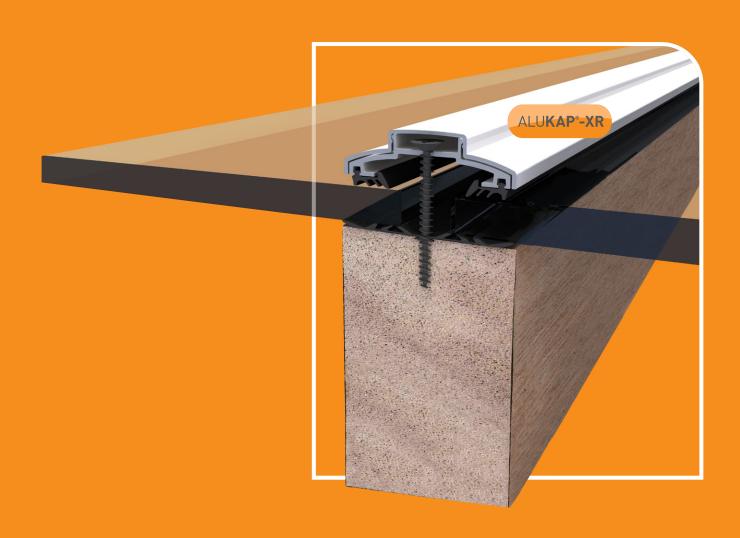


# Superior Roof Glazing System Technical Guide



# Simple Effective Roof Glazing

Roof glazing has always been a challenging task; rewarding if done well, and costly if not. Alukap®-XR puts an end to uncertainty. With a proven gasket system, concealed fixings and reduced installation time, it's an all-round winner

With no plastic components, superior waterproofing and a sleek appearance, Alukap®-XR's excellent performance makes it suitable for a wide variety of applications.

Available in two bar widths, as well as a range of matching specialised profiles, all with quality aluminium end caps, Alukap®-XR offers the ultimate roof glazing solution, for even the most challenging weather conditions. High-quality stainless steel fixings and gaskets are included with each profile, with several rafter gasket options are also available.

Samples of Alukap®-XR are available on request.



#### Common uses:

- ✓ Carports
- ✓ Greenhouses
- √ Canopies
- √ Smoking shelters
- √ Verandas
- √ Covered walkways
- ✓ Swimming pools
- √ Factory partitions
- ✓ Cycle shelters
- √ Vertical glazing

#### Qualities:

- √ Superior weather resistance
- ✓ All aluminium components
- √ Class leading aesthetics
- ✓ Installer friendly
- √ Reduced installation time
- √ Concealed fixings
- √ Manufactured from high quality aluminium
- √ No plastic connections











## Alukap®-XR: 45mm Glazing Bar

This neat 45mm Alukap®-XR glazing bar is an excellent solution to compliment 45mm timber rafters. Despite its petite nature, it offers surprisingly substantial sightlines providing impressive aesthetics to the glazing structure.

The concealed-fix security aluminium end cap system prevents the top section from slippage and many clients say that they have even used to prevent the glazing itself from slipping down moderately sloped roofs. Users must carry out their own tests on the site specific loadings to satisfy themselves that this structurally acceptable for each particular application.



### Alukap®-XR 45mm Glazing Bar

Rafter Gasket Type	2.0m	2.4m	3.0m	3.6m	4.8m	6.0m
No Rafter Gasket	AKX216	AKX218	AKX220	AKX222	AKX224	AKX226
45mm Rafter Gasket	AKX225	AKX227	AKX228	AKX230	AKX232	AKX234
45mm Slot-fit Rafter Gasket	AKX233	AKX235	AKX236	AKX238	AKX240	AKX242
55mm Rafter Gasket	AKX241	AKX243	AKX244	AKX246	AKX248	AKX250
55mm Slot-fit Rafter Gasket	AKX249	AKX251	AKX252	AKX254	AKX256	AKX258

### Alukap®-XR: 60mm Glazing Bar

The 60mm Alukap®-XR glazing bar has been developed to cope with situations where a wider cover is required. Its shape compliments the 45mm Alukap®-XR glazing bar so that both can be used on the one structure if desired.

Both bars lend themselves excellently to a perfect inline joint connection without extra components allowing a far higher yield on optimisation of bar lengths which underscores one of the key design features for reducing waste and cutting costs.



### Alukap®-XR 60mm Glazing Bar

Rafter Gasket Type	2.0m	2.4m	3.0m	3.6m	4.8m	6.0m
No Rafter Gasket	AKX316	AKX319	AKX320	AKX322	AKX324	AKX326
45mm Rafter Gasket	AKX325	AKX327	AKX328	AKX330	AKX332	AKX334
45mm Slot-fit Rafter Gasket	AKX333	AKX335	AKX336	AKX338	AKX340	AKX342
55mm Rafter Gasket	AKX341	AKX343	AKX344	AKX346	AKX348	AKX350
55mm Slot-fit Rafter Gasket	AKX347	AKX349	AKX352	AKX354	AKX356	AKX358



## Alukap®-XR: 60mm Gable Bar

The Alukap®-XR Gable Bar is an incredibly useful system, allowing all the alignment and fixing work to be completed before snap-fixing the top section, providing a perfect finish to an area of the roof that is often seen the most.



### Alukap®-XR 60mm Gable Bar

Rafter Gasket Type	2.0m	2.4m	3.0m	3.6m	4.8m	6.0m
No Rafter Gasket	AKX449	AKX451	AKX452	AKX454	AKX456	AKX458
45mm Rafter Gasket	AKX457	AKX459	AKX460	AKX462	AKX464	AKX466
45mm Slot-fit Rafter Gasket	AKX465	AKX467	AKX468	AKX470	AKX472	AKX474
55mm Rafter Gasket	AKX473	AKX475	AKX476	AKX478	AKX480	AKX482
55mm Slot-fit Rafter Gasket	AKX481	AKX483	AKX484	AKX486	AKX488	AKX490

### Alukap®-XR: 60mm Wall Bar

The Alukap®-XR Wall Bar offers the ultimate waterproofing solution in circumstances where a glazing structure terminates at a rising wall. Again the second-fixing top section allows all the hard work to be done first before simply snapping the top profile into place. This system eliminates much of what would otherwise be a complex lead detail.



### Alukap®-XR 60mm Wall Bar

Rafter Gasket Type	2.0m	2.4m	3.0m	3.6m	4.8m	6.0m
No Rafter Gasket	AKX549	AKX551	AKX552	AKX554	AKX556	AKX558
45mm Rafter Gasket	AKX557	AKX559	AKX560	AKX562	AKX564	AKX566
45mm Slot-fit Rafter Gasket	AKX565	AKX567	AKX568	AKX570	AKX572	AKX574
55mm Rafter Gasket	AKX573	AKX575	AKX576	AKX578	AKX580	AKX582
55mm Slot-fit Rafter Gasket	AKX581	AKX583	AKX584	AKX586	AKX588	AKX590



### Alukap®-XR: Top Wall Flashing

When flashing from a back wall onto a roof the use of a lead flashing on its own is prone to leaks and an unsightly finish.

Now you can properly seal and install flashing on the back of your lean-to roof with our Alukap®-XR Top Wall Flashing with its unique foam gaskets! Manufactured from aluminium the top wall flashing has an expected life-span of 20 plus years and will help stop any drips or leaks for many years, when installed correctly.

#### Top Wall **Flashing**



Description	2.0m	2.4m	3.0m	6.0m
Alukap <sup>®</sup> -XR Top Wall Flashing - Brown	AKX898B	AKX900B	AKX903B	AKX906B
Alukap®-XR Top Wall Flashing - Bespoke Colour	AKX898PC	AKX900PC	AKX903PC	AKX906PC
Alukap®-XR Top Wall Flashing - White	AKX898W	AKX900W	AKX903W	AKX906W

### Alukap®-XR: End Stop Bar

Issues with the lower end of glass and polycarbonate glazing panels gave rise to the innovation of a substantial drip trim that will not warp, discolour, crack or fall off like the inferior plastic equivalents.

This crucial area is all too often left to chance, and can cause costly damage to the glazing. The Alukap®-XR End Stop, puts a stop to that!

Length	6.4mm	10mm	16mm	25mm	28mm	35mm
2.4m	AKX008	AKX105	AKX111	AKX117		AKX129
3.0m		AKX106	AKX112	AKX118		AKX130
3.6m		AKX108	AKX114	AKX120		AKX132

**AKX116** 

#### **End Stop Bar**



### Reducing the Chance of Slippage

**AKX110** 

**AKX104** 

4.8m

This image shows a glazing assembly which combines the Alukap®-XR End Stop Bar glazed behind the Alukap® Glazing Bar End Cap.

This means that in addition to the pressure from the main fixings on the Alukap®-XR bars holding the glazing sheets in position, the combined end cap and end stop bar provides a further constraint, thereby greatly reducing any chance of glazing slippage.

#### Glazing Bar **Assembly**

**AKX134** 

**AKX128** 

**AKX122** 





# Alukap®-XR: 60mm Hip Bar

This Alukap®-XR Hip Bar is a must-have for easy hip connections. It provides a second-fix cover member, allowing the installer to make accurate mitre abutments and apply sealant if necessary, before snapping on the upper profile that acts as an umbrella protection without any unsightly and impractical plastic connectors.



#### Alukap®-XR 60mm Hip Bar

Rafter Gasket Type	2.0m	2.4m	3.0m	3.6m	4.8m	6.0m
No Rafter Gasket	AKX658	AKX611	AKX612	AKX614	AKX616	AKX618
45mm Rafter Gasket	AKX617	AKX619	AKX620	AKX622	AKX624	AKX626
45mm Slot-fit Rafter Gasket	AKX625	AKX627	AKX628	AKX630	AKX632	AKX634
55mm Rafter Gasket	AKX633	AKX635	AKX636	AKX638	AKX640	AKX642
55mm Slot-fit Rafter Gasket	AKX641	AKX643	AKX644	AKX646	AKX648	AKX650

## Alukap®-XR: Valley Bar

The Alukap®-XR Valley Bar is one entirely unique patent pending design. It is designed to recess in to a timber valley so that it is entirely concealed. It's double gasket water seal, ensures that there are no possibilities of leaks.

The high-capacity channels ensure a fast rainwater flow. The valley suits almost any angle of glazing. For extreme angles the valley can be simply tilted within the valley timber if required, as shown in the lower image below.

#### Benefits:

- ✓ One piece leak-proof system
- ✓ Not visible from underneath
- ✓ Integral glass stops
- ✓ Suits varying angles
- √ Suits any glazing thickness
- √ No need for glazing bar on the top of the glass down the valley

Description	Code
Alukap®-XR Valley Bar with gaskets - 3.0m	AKX810
Alukap®-XR Valley Bar with gaskets - 4.8m	AKX812
Alukap®-XR Valley Bar with gaskets - 6.0m	AKX814





## Alukap®-XR: Ridge Bar

The ridge area of a roof gets the greatest impact from the elements, which is why the Alukap®-XR Ridge Bar is manufactured with an incredibly robust structure.

Curved gasket feet that accommodate varying pitches, and a generous overhang that again protects the connections of adjacent bars without any unsightly and impractical plastic connectors are just two of the many outstanding features and benefits to this unique ridge system.



#### Alukap®-XR Ridge Bar

Rafter Gasket Type	1.0m	2.0m	3.0m	6.0m
No Rafter Gasket	AKX710	AKX720	AKX730	AKX760
45mm Rafter Gasket	AKX712	AKX722	AKX732	AKX762
45mm Slot-fit Rafter Gasket	AKX714	AKX724	AKX734	AKX764
55mm Rafter Gasket	AKX716	AKX726	AKX736	AKX766
55mm Slot-fit Rafter Gasket	AKX718	AKX728	AKX738	AKX768

### Alukap®-XR: Ridge Crests and Finials

The Alukap®-XR aluminium finials provides a spire style finish to the end of your Alukap®-XR Ridge Bar. Finials add decorative style and class to any ridge detail.



Ridge Finial



Ridge Crest



Ridge Ball Finial

Description	Code
Alukap®-XR Ridge Finial	AKX774
Alukap®-XR Ridge Crests - 595mm	AKX775
Alukap®-XR Ridge Ball Finial	AKX776

## Alukap®-XR: Ridge Snap Channel Cover

The Alukap®-XR Ridge Snap Channel Cover makes a perfect finish for the Alukap®-XR Ridge Bar. You can use the ridge snap channel cover alongside the crests and finials to seal the crest from any water getting inside.

Description	3.0m	6.0m
Alukap®-XR Ridge Snap Channel Cover - White	AKX706WH	AKX708WH
Alukap®-XR Ridge Snap Channel Cover - Brown	AKX706BR	AKX708BR
Alukap®-XR Ridge Snap Channel Cover - Bespoke Colour	AKX706P	AKX708P





### Alukap®-XR: Ridge End Cap and End Plate

The Alukap®-XR Ridge has two end plate and cap options. For roofs where the end of the Alukap®-XR Ridge is a gable end, the flat finish of the Alukap®-XR Gable End Plate finishes the Ridge off with a vertical end.

Alternatively where the Alukap®-XR Ridge is joined to connecting Hip bars, the unique design of the Radius End Cap provides excellent coverage for adjoining bars.

Richard Parks

CARROLLA RA

Ridge Radius **End Cap** 

Ridge Gable

**End Plate** 



#### **Description** Code **AKX772** Alukap®-XR Ridge Gable End Plate **AKX773** Alukap®-XR Ridge Radius End Cap

### Alukap®-XR: Lantern Pinnacle Cap

This Alukap®-XR Lantern Pinnacle Cap provides the perfect solution for a lantern pinnacle roof apex. It works well with a wide range of pitches and any number of intersecting glazing bars. The two-piece Alukap®-XR Lantern Pinnacle Cap provides a fully concealed fixing method for any lantern roof pinnacle capping requirement.

Description	Code
Alukap®-XR Lantern Pinnacle Cap	AKX779

Lantern **Pinnacle** Cap



## Alukap®-XR: Lantern Radius End Cap

The Alukap®-XR Lantern Radius End Cap is designed specifically to work with the Alukap®-XR Hip bars.

On roof lanterns where a Hip bar is used as a ridge section to create a neater and lower-cost solution, the lantern radius end cap connects in to the Hip profile when used as the roof ridge and provides excellent cover for the intersection Hip bars.

NOTE: If you are using an Alukap®-XR Ridge and NOT the Alukap®-XR Hip Bar for the ridge then please use the AKX773 Alukap®-XR Ridge Radius End Cap.

Description	Code
Alukap®-XR Lantern Radius End Cap	AKX778

Lantern Radius **End Cap** 





### Alukap®-XR: Glazing Bar End Cap

The end cap of a glazing bar is sometimes the most prominently seen component. On the Alukap®-XR system, every bar comes with a powder coated metal end cap which provides a robust solution that will last. Each Alukap® glazing bar end cap comes with a screw which fixes to the bar completely concealed below the bar top cap.

Glaz	ing	Bar
End	Cap	



Description	Code
Alukap® Glazing Bar End Cap	AKX310

## Securbond®: Flashing Tape and Silicone LMN Sealant

Securbond® Flashing Tape and Silicone LMN Sealant provides a secure seal between your roof and connecting wall, which helps to prevent any water

Description	Code
Securbond® 150mm Flashing Tape - 10m	AG73
Securbond® 200mm Flashing Tape - 10m	AG74

Description	Code
Securbond® Silicone Sealant 300ml - Clear	AG83C
Securbond® Silicone Sealant 300ml - White	AG83W
Securbond® Silicone Sealant 300ml - Black	AG83B
Securbond® Silicone Sealant 300ml - Grey	AG74G







**LMN Sealant** 

### Alukap®-XR: Rubber Gaskets

The Alukap®-XR gaskets are pre-lubricated with a special lubricant that is safe for use with coated glass units. Gasket lubrication helps assist natural expansion and contraction and reduces any unnecessary friction build up.

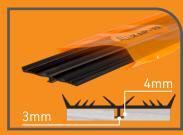
The rafter gasket with a slot-fit is designed as an on-site time saver, where a centre groove has been routed in to the rafters. The slot-fit then means the rafter gasket can be quickly installed with perfect alignment before the glazing sheet is positioned on to the roof.

Description	Code
Alukap®-XR Glazing Bar Gasket	AKX65
Alukap®-XR 45mm Rafter Gasket	AT45
Alukap®-XR 45mm Slot-fit Rafter Gasket	AT47
Alukap®-XR 55mm Rafter Gasket	AT55
Alukap®-XR 55mm Slot-fit Rafter Gasket	AT57

NOTE: Standard non-slot-fit gasket is the most popular option and works for the majority of residential and commercial applications.



45mm Rafter Gasket



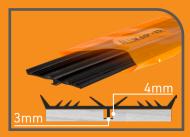
45mm Slot-fit Rafter Gasket



Glazing Bar Gasket



55mm Rafter Gasket



55mm Slot-fit Rafter Gasket



## Alukap®-XR: Suited to any Thickness or Type of Glazing

The diagram below indicates how the Alukap®-XR bar system is suitable for any thickness or type of glazing material – Axqard®, Glass, Axiome®, Double Glazed Glass Units.





View our Axgard® Solid Glazing Sheets

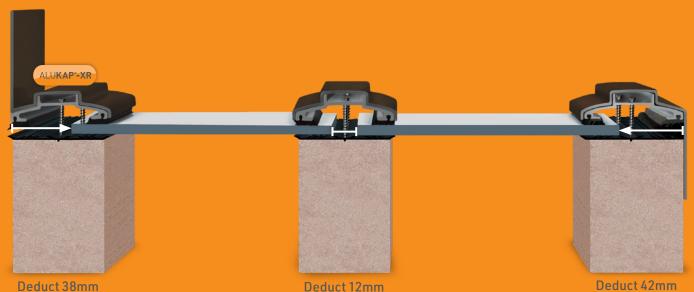


View our Axiome® Multiwall Glazing Sheets

### Alukap®-XR: Glazing Deductions

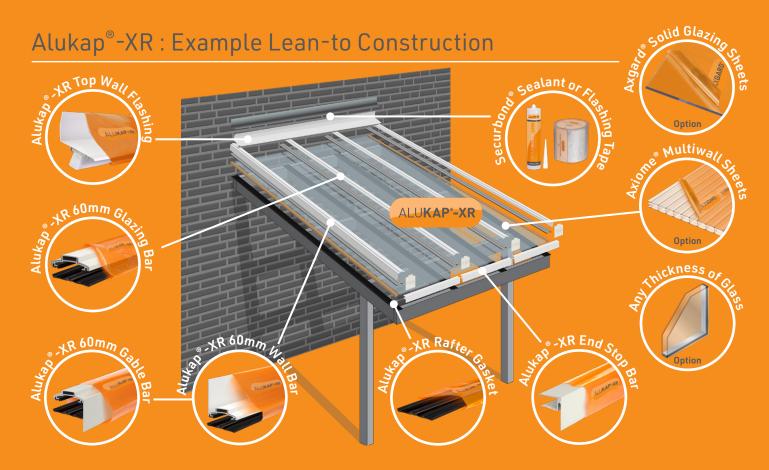
Glazing deduction guidelines are shown below for the Alukap®-XR bar system for Alukap®-XR Wall bars, Alukap®-XR Glazing bars and Alukap®-XR Gable bars however, these may need to be amended depending on chosen glazing materials and glazing centres.

Samples are readily available to users to test and verify the exact sizes according to their site requirements.



#### NOTE: Alukap®-XR Gable and Wall Bars ONLY

- When using Axiome® or Axgard®, the glazing panels can be extended right across the rafter under the outermost Alukap®-XR bar gasket. Or, you can add a timber packer under the outer edge gasket.
- Where Glass is chosen you WILL require a timber packer under the outer edge gaskets. The battens width is 12mm and height (x) equates to the glazing thickness plus 2mm. The Alukap®-XR rafter gasket should run under the timber packer.



Alukap®-XR: Example Edwardian Roof Construction





# Alukap®-XR: Technical Data

The inherent robust qualities of Alukap®-XR are seen clearly in the technical data provided below. The tables below are intended for guideline use only, when seeking particular qualities for any specification.

#### **Aluminium Extrusion**

Property	Standard / type	Measure	Value
Aluminium strength	60663 T6	UTS	215/nm <sup>2</sup>
Dimensions and mechanical	EN755		
Chemical composition	EN573		

Product / Property	Test	Value
Lubricant	Non-hazardous	Low toxicity
Lubricant properties	25°C:1.13	Clear mobile liquid
Lubricant emulsion stability		Excellent
Lubricant compatibility		Active compatible
Gasket grade	Developed for BS7412	Class A
Gasket tolerance	Produced to BS3734	E1

### **Powder Coating**

Property	Measure	Value
Powder coating standard	BS6496	EN12206
Minimum thickness	Microns	60
Average typical thickness	Microns	80 - 100



# Alukap®-XR : Heritage Range

This standard palette of colours are designed to provide a core range of most popular colours that are frequently requested. By collating this suite of hues we are able to provide faster deliveries for your day-to-day requirements whilst still meeting a demands for a wider choice of matching profiles.



### **Bespoke Colours:**

Alukap®-XR can be coloured to any RAL colour, using our special coating process, to match your project. Below are some of our most popular colours:

RAL 9010	RAL 1011	RAL 3003	RAL 3005	RAL 5007	RAL 5011
Alukap® White	Brown Beige	Ruby Red	Wine Red	Brilliant Blue	Steel Blue
RAL 6021 Pale Green	RAL 6005	RAL 6009	RAL 7035	RAL 7038	RAL 7040
	Moss Green	Fir Green	Light Grey	Agate Grey	Window Grey
RAL 7005	RAL 7011	RAL 7016	RAL 8016	RAL 8017	RAL 8040
Mouse Grey	Iron Grey	Anthracite Grey	Mahogany Brown	Chocolate Brown	Alukap <sup>®</sup> Brown



View our full RAL colour options

#### **WARNING: REGISTERED DESIGNS & PATENTS**

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Inasmuch as Clear Amber have no control over the circumstances in which our material may be used, or site specific parameters, we cannot guarantee that any particular results will be achieved. Users should carry out their own tests to determine the suitability of the material for their application. Installers should satisfy themselves that published permissible loadings and bar spacings for Alukap\*-XR structures, together with any supporting posts, frames, or walls and fixings, are sufficient to provide adequate strength for the intended use and to meet regional loading requirements. Installers should also obtain their own job-specific structural engineer's report for their individual site. Samples are readily available to users to test and verify the exact sizes according to their site requirements.

