

ALUKAP<sup>®</sup>-XR

## Superior Roof Glazing System Technical Guide



## Simple Effective Roof Glazing

Roof glazing has always been a challenging task; rewarding if it goes well, and expensive if it doesn't. ALUKAP®-XR puts paid 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 neat aesthetics, ALUKAP®-XR's excellent performance makes it suitable for a huge variety of applications.

Available in two bar widths, plus a range of specialised bars to match, all with quality aluminium end caps, ALUKAP®-XR provides the ultimate roof glazing solution for even the worst weather. High quality fixings and gaskets are included with every bar, with a number of rafter gasket options available too.

Samples of ALUKAP®-XR are readily available on request.



### Common uses:

- ✓ Carports
- ✓ Greenhouses
- ✓ Canopies
- ✓ Smoking Shelters
- ✓ Verandas
- ✓ Covered Walkways
- ✓ Swimming Pools
- ✓ Factory Partitions
- ✓ Cycle Shelters
- ✓ Vertical Glazing

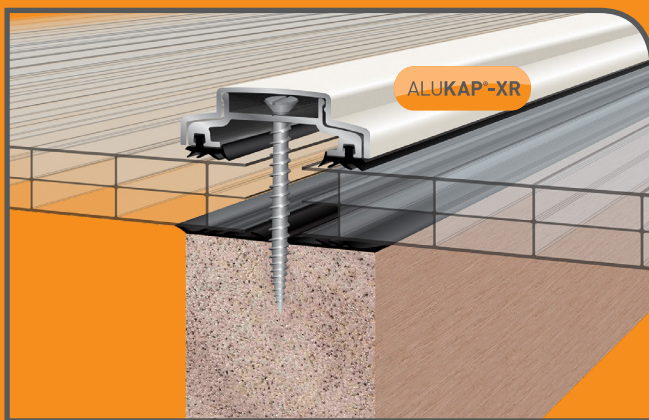
### Qualities:

- ✓ 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 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 sight lines providing impressive aesthetics to the glazing structure. The secret-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 Bar

Length	Rafter Gasket Options	Code
3.0m	No Rafter Gasket	AKX220
3.6m	No Rafter Gasket	AKX222
4.8m	No Rafter Gasket	AKX224
6.0m	No Rafter Gasket	AKX226
3.0m	45mm Rafter Gasket	AKX228
3.6m	45mm Rafter Gasket	AKX230
4.8m	45mm Rafter Gasket	AKX232
6.0m	45mm Rafter Gasket	AKX234
3.0m	45mm Slot Fit Rafter Gasket	AKX236
3.6m	45mm Slot Fit Rafter Gasket	AKX238
4.8m	45mm Slot Fit Rafter Gasket	AKX240
6.0m	45mm Slot Fit Rafter Gasket	AKX242
3.0m	55mm Rafter Gasket	AKX244
3.6m	55mm Rafter Gasket	AKX246
4.8m	55mm Rafter Gasket	AKX248
6.0m	55mm Rafter Gasket	AKX250
3.0m	55mm Slot Fit Rafter Gasket	AKX252
3.6m	55mm Slot Fit Rafter Gasket	AKX254
4.8m	55mm Slot Fit Rafter Gasket	AKX256
6.0m	55mm Slot Fit Rafter Gasket	AKX258

## ALUKAP®-XR : 60mm 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 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 Bar

Length	Rafter Gasket Options	Code
3.0m	No Rafter Gasket	AKX320
3.6m	No Rafter Gasket	AKX322
4.8m	No Rafter Gasket	AKX324
6.0m	No Rafter Gasket	AKX326
3.0m	45mm Rafter Gasket	AKX328
3.6m	45mm Rafter Gasket	AKX330
4.8m	45mm Rafter Gasket	AKX332
6.0m	45mm Rafter Gasket	AKX334
3.0m	45mm Slot Fit Rafter Gasket	AKX336
3.6m	45mm Slot Fit Rafter Gasket	AKX338
4.8m	45mm Slot Fit Rafter Gasket	AKX340
6.0m	45mm Slot Fit Rafter Gasket	AKX342
3.0m	55mm Rafter Gasket	AKX344
3.6m	55mm Rafter Gasket	AKX346
4.8m	55mm Rafter Gasket	AKX348
6.0m	55mm Rafter Gasket	AKX350
3.0m	55mm Slot Fit Rafter Gasket	AKX352
3.6m	55mm Slot Fit Rafter Gasket	AKX354
4.8m	55mm Slot Fit Rafter Gasket	AKX356
6.0m	55mm Slot Fit Rafter Gasket	AKX358

## ALUKAP®-XR : 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 Gable Bar 60mm

Length	Rafter Gasket Options	Code
3.0m	No Rafter Gasket	AKX452
3.6m	No Rafter Gasket	AKX454
4.8m	No Rafter Gasket	AKX456
6.0m	No Rafter Gasket	AKX458
3.0m	45mm Rafter Gasket	AKX460
3.6m	45mm Rafter Gasket	AKX462
4.8m	45mm Rafter Gasket	AKX464
6.0m	45mm Rafter Gasket	AKX466
3.0m	45mm Slot Fit Rafter Gasket	AKX468
3.6m	45mm Slot Fit Rafter Gasket	AKX470
4.8m	45mm Slot Fit Rafter Gasket	AKX472
6.0m	45mm Slot Fit Rafter Gasket	AKX474
3.0m	55mm Rafter Gasket	AKX476
3.6m	55mm Rafter Gasket	AKX478
4.8m	55mm Rafter Gasket	AKX480
6.0m	55mm Rafter Gasket	AKX482
3.0m	55mm Slot Fit Rafter Gasket	AKX484
3.6m	55mm Slot Fit Rafter Gasket	AKX486
4.8m	55mm Slot Fit Rafter Gasket	AKX488
6.0m	55mm Slot Fit Rafter Gasket	AKX490

## ALUKAP®-XR : 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-fix top section allows all the hard work to be done first before simply snapping the upper profile in place. This system eliminates much of what would otherwise be a complex lead detail.



### ALUKAP®-XR Wall Bar 60mm

Length	Rafter Gasket Options	Code
3.0m	No Rafter Gasket	AKX552
3.6m	No Rafter Gasket	AKX554
4.8m	No Rafter Gasket	AKX556
6.0m	No Rafter Gasket	AKX558
3.0m	45mm Rafter Gasket	AKX560
3.6m	45mm Rafter Gasket	AKX562
4.8m	45mm Rafter Gasket	AKX564
6.0m	45mm Rafter Gasket	AKX566
3.0m	45mm Slot Fit Rafter Gasket	AKX568
3.6m	45mm Slot Fit Rafter Gasket	AKX570
4.8m	45mm Slot Fit Rafter Gasket	AKX572
6.0m	45mm Slot Fit Rafter Gasket	AKX574
3.0m	55mm Rafter Gasket	AKX576
3.6m	55mm Rafter Gasket	AKX578
4.8m	55mm Rafter Gasket	AKX580
6.0m	55mm Rafter Gasket	AKX582
3.0m	55mm Slot Fit Rafter Gasket	AKX584
3.6m	55mm Slot Fit Rafter Gasket	AKX586
4.8m	55mm Slot Fit Rafter Gasket	AKX588
6.0m	55mm Slot Fit Rafter Gasket	AKX590

## ALUKAP®-XR : 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.

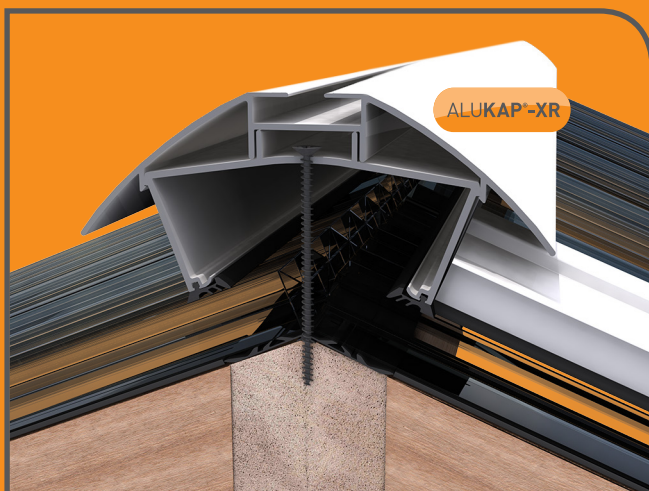


### ALUKAP®-XR Hip Bar

Length	Rafter Gasket Options	Code
3.0m	No Rafter Gasket	AKX612
3.6m	No Rafter Gasket	AKX614
4.8m	No Rafter Gasket	AKX616
6.0m	No Rafter Gasket	AKX618
3.0m	45mm Rafter Gasket	AKX620
3.6m	45mm Rafter Gasket	AKX622
4.8m	45mm Rafter Gasket	AKX624
6.0m	45mm Rafter Gasket	AKX626
3.0m	45mm Slot Fit Rafter Gasket	AKX628
3.6m	45mm Slot Fit Rafter Gasket	AKX630
4.8m	45mm Slot Fit Rafter Gasket	AKX632
6.0m	45mm Slot Fit Rafter Gasket	AKX634
3.0m	55mm Rafter Gasket	AKX636
3.6m	55mm Rafter Gasket	AKX638
4.8m	55mm Rafter Gasket	AKX640
6.0m	55mm Rafter Gasket	AKX642
3.0m	55mm Slot Fit Rafter Gasket	AKX644
3.6m	55mm Slot Fit Rafter Gasket	AKX646
4.8m	55mm Slot Fit Rafter Gasket	AKX648
6.0m	55mm Slot Fit Rafter Gasket	AKX650

## 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 from adjoining 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

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

## ALUKAP®-XR : Valley Bar

The ALUKAP®-XR valley 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

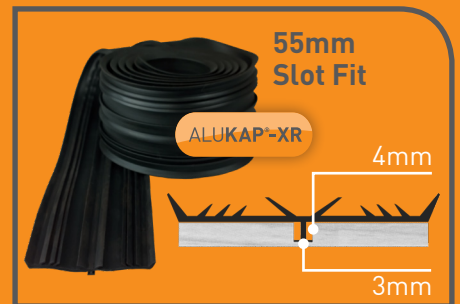
Description	Code
Alukap-XR Valley Bar with gaskets 3.0m	AKX810
Alukap-XR Valley Bar with gaskets 4.8m	AKX812
Alukap-XR Valley Bar with gaskets 6.0m	AKX814



## ALUKAP®-XR : 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 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 that the Rafter Gasket can be quickly installed with perfect alignment before the glazing sheet is positioned on to the roof.

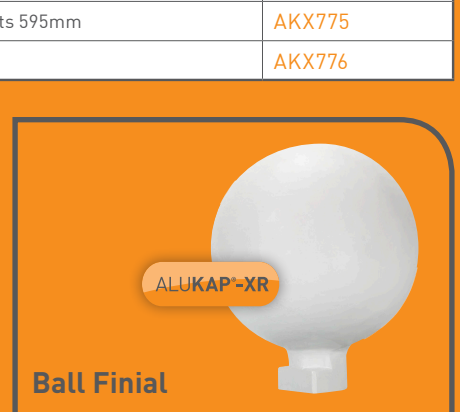
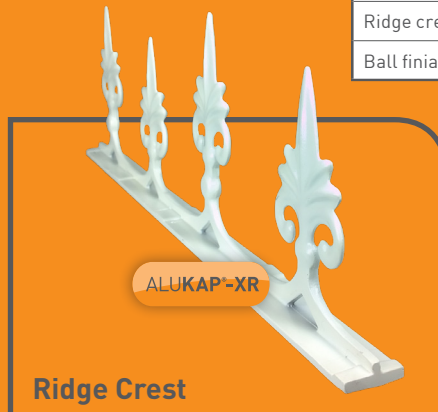
Description	Code
Standard bar gasket	AKX65
Rafter gasket 45mm	AT45
Rafter gasket 45mm slot fit	AT47
Rafter gasket 55mm	AT55
Rafter gasket 55mm slot fit	AT57



## ALUKAP®-XR : Castings

The ALUKAP®-XR Castings provide long-lasting, durable solutions for various end caps and decorative finishing's.

Description	Code
Ridge finial	AKX774
Ridge crests 595mm	AKX775
Ball finial	AKX776



## ALUKAP® : Standard Bar Endcap

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

### Standard Endcap



Description	Code
Glazing bar end cap	AKX310

## ALUKAP®-XR : Ridge Endcaps

The ALUKAP®-XR Ridge has two endcap options. For roofs where the end of the ALUKAP®-XR Ridge is a gable end the flat finish of the ALUKAP®-XR Gable Endcap 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 Endcap provides excellent coverage for adjoining bars.

### Gable End Plate



Description	Code
Gable end ridge cap	AKX772
Radius end ridge cap	AKX773

### Radius End Cap



## ALUKAP®-XR : Endstop 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!

### Endstop Bar



Length	Code (6.4mm)	Code (10mm)	Code (16mm)	Code (25mm)	Code (28mm)	Code (35mm)	Code (78mm)
3.0m	-	AKX106	AKX112	AKX118	-	AKX130	-
3.6m	-	AKX108	AKX114	AKX120	-	AKX132	-
4.8m	AKX104	AKX110	AKX116	AKX122	AKX128	AKX134	AKX140



## ALUKAP® : Lantern Pinnacle Top Cap

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

### Lantern Pinnacle Top Cap



Description	Code
Roof Lantern Pinnacle Top Cap	AKX779

## ALUKAP® : Lantern Radius End Cap

The ALUKAP®-XR Lantern Radius Endcap 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, this Radius Endcap connects in to the Hip-Ridge profile and provides excellent cover for the intersection Hip bars.

### Lantern Radius End Cap



**NOTE: If you are using an ALUKAP®-XR Ridge and not an ALUKAP®-XR Hip Bar for the ridge then please use the AKX773 Ridge Radius Endcap.**

Description	Code
Roof Lantern Radius End Cap	AKX778

## Reducing Chance of Slippage

This image shows a glazing assembly which combines the ALUKAP®-XR Endstop Bar glazed behind the ALUKAP® Standard Bar Endcap. 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 Endcap and Endstop bar provides a further constraint, thereby greatly reducing any chance of glazing slippage.



## 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

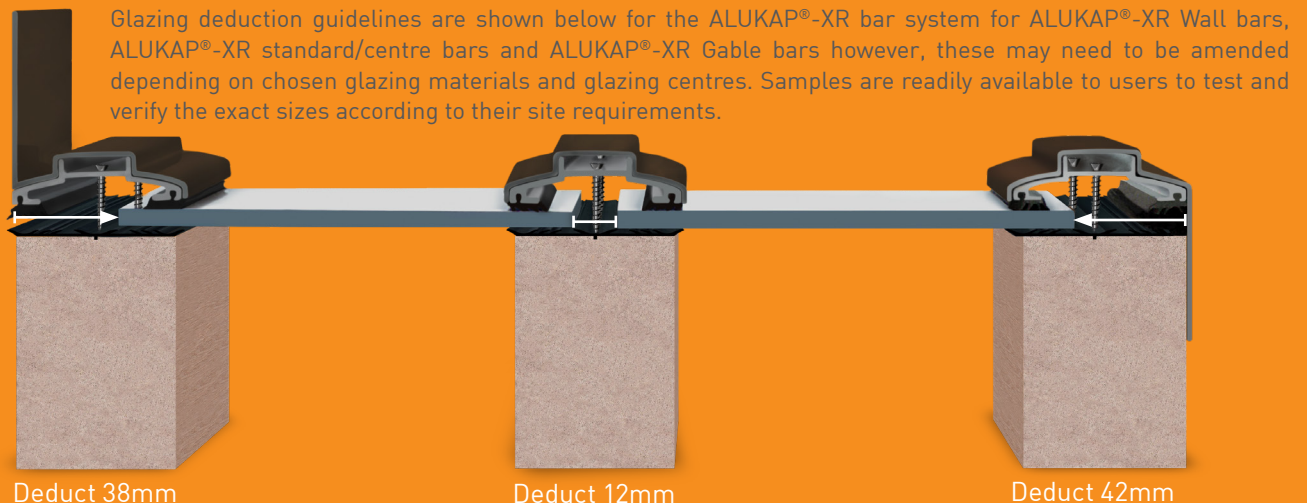
Property	Standard/type	Measure	Value
Aluminium Strength	60663 T6	UTS	215/nm <sup>2</sup>
Dimensions & mechanical	EN755		
Chemical composition	EN573		

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

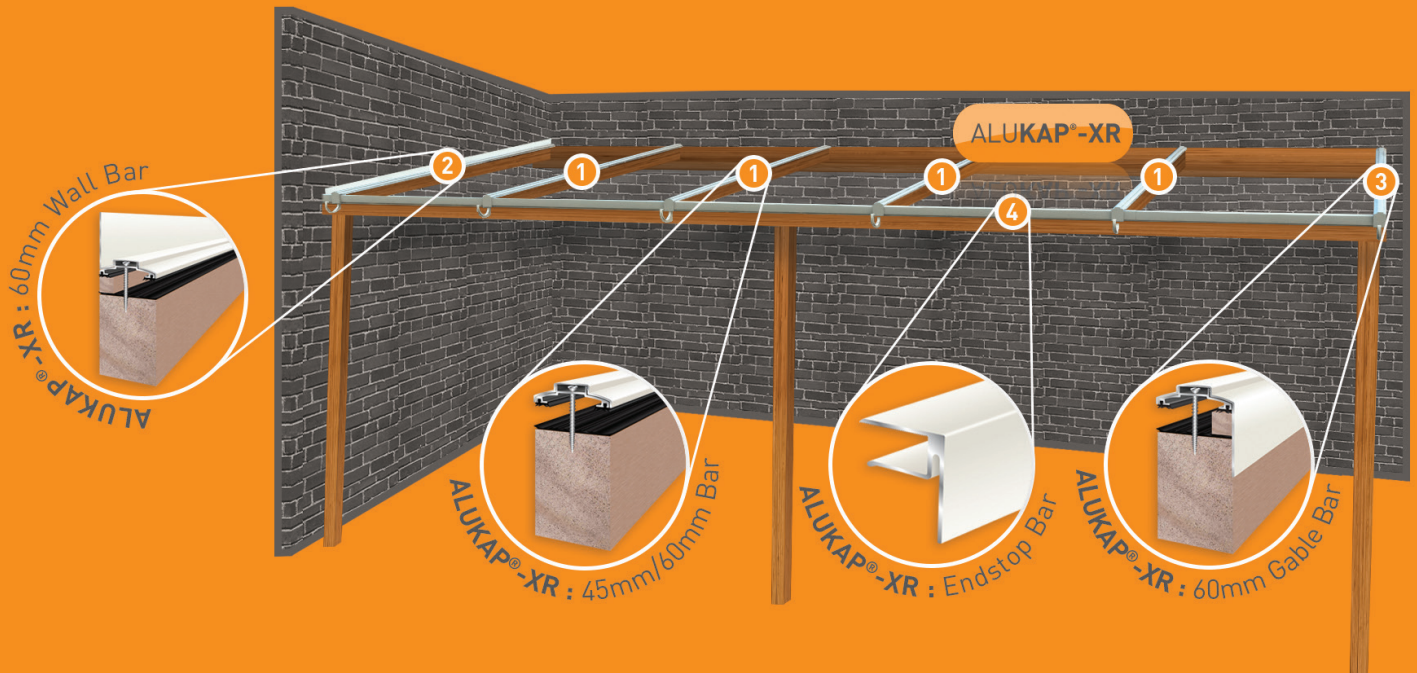
Property	Measure	Value
Powder coating standard	BS6496	EN12206
Minimum thickness	Microns	60
Average typical thickness	Microns	80 - 100

## ALUKAP®-XR : Glazing Deductions



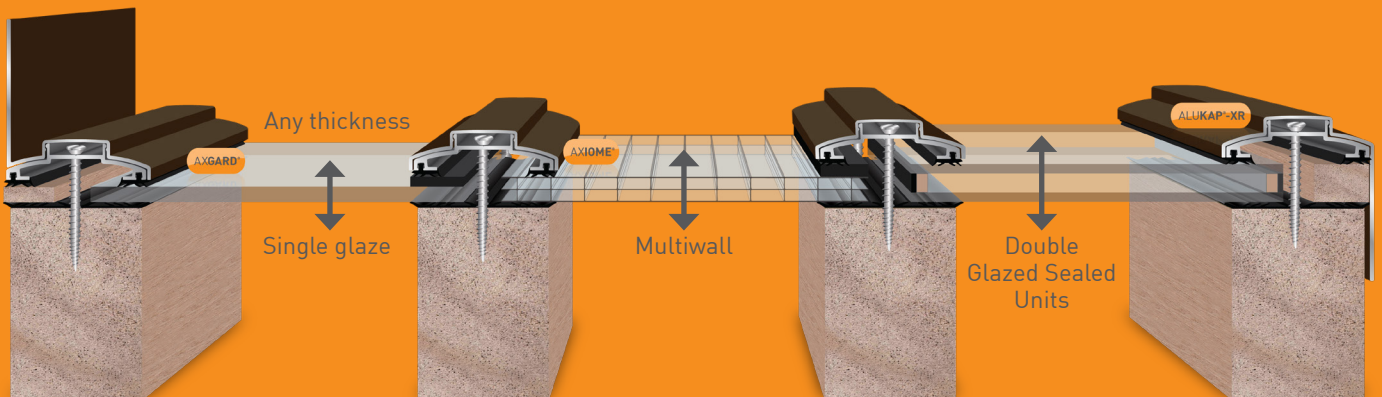
## ALUKAP®-XR : Typical Roof Component Assembly Example

### ALUKAP®-XR Rafter Supported Lean-to



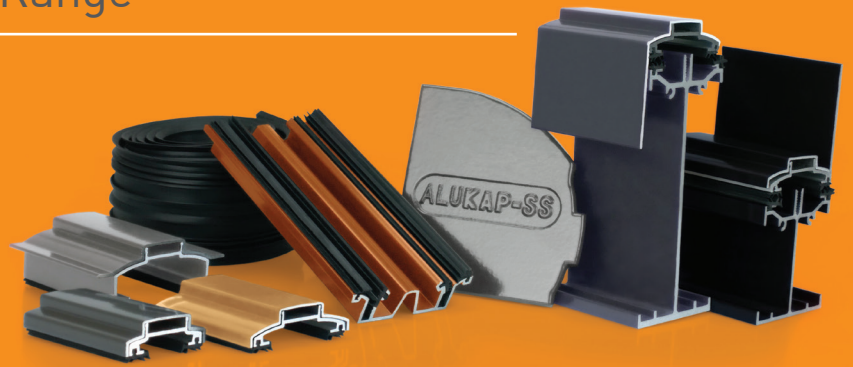
## ALUKAP®-XR : Suited to any thickness or type of glazing

The diagram below indicates how the ALUKAP®-XR bar system is suitable for any thickness or type of glazing material – AXGARD®, Glass, AXIOME®, Double Glazed Glass Unit.



# 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.



## Other Bespoke Colours:

ALUKAP®-XR can be coloured to any RAL code, using our special coating process.

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

## 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.