



# Lonsdale GlazaTherm Design Guide

## Introduction

This Design Guide has been produced to assist specifiers and designers by illustrating typical installation details for GlazaTherm in sloped glazed roofs. It is not exhaustive, but it does illustrate good practice for most applications and all details are in accordance with BS5516 for the design and installation of the product.

Users of this guide must exercise all reasonable care to ensure that the details and products of Lonsdale Metal Company Limited are suitable for the intended purpose. If in doubt, ask us. Having decided to specify Lonsdale's GlazaTherm, to save you valuable drafting time, CAD drawings of typical installation details are available on disk or from our website : [www.roofglazing.co.uk](http://www.roofglazing.co.uk)

If you require assistance please contact our Technical Department.  
Lonsdale Metal Company Limited,  
Millmead Industrial Centre, Mill Mead Road, London. N17 9QU  
Telephone : 020 8801 4221                      Facsimile: 020 8801 1287

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PRINT OUT THIS DESIGN GUIDE FOR REFERENCE IF YOU WISH.  
CLICK THE **Pages** TAB TO SEE THUMBNAILS OF ALL THE PAGES IN THE PUBLICATION.  
TO PRINT OUT INDIVIDUAL PAGES, CLICK **File, Print** THEN CHECK **Current page**  
OR SELECT **Pages** RANGE AND CLICK **OK**. TO PRINT DRAWINGS TO THE SCALE INDICATED  
YOUR PRINT DRIVER MUST BE CAPABLE OF BEING SET AT 100%. LOOK IN YOUR PRINTER'S  
**Properties** FOR SETTINGS. CONTACT OUR TECHNICAL DEPARTMENT FOR FURTHER ADVICE.

# GlazaTherm Technical Summary and Specification

## Specification

Sections are extruded aluminium alloy 6063-T6 to BS1474. Fasteners provided are either stainless steel to BS304515 Grade A2 or mild steel bright zinc plated. Gaskets are extruded Thermo Plastic Rubber quality 98625 to BS4255:Part1:1986 Grade C.

## Performance

All systems are designed to conform with the requirements of BS5516 when installed within the manufacturers recommendations. A guide to sizes is given on page 3 of the Design Guide and should be referred to prior to planning an installation.

## Installation

Installation details are provided with each order. For a copy, visit our website..

[www.roofglazing.co.uk](http://www.roofglazing.co.uk)

## Appearance

Materials are supplied Mill Finished as standard. A range of architectural finishes is available including polyester powder coating to BS6496 in standard RAL or BS colour ranges.

## Building Regulations

Please visit our website [www.roofglazing.co.uk](http://www.roofglazing.co.uk) for guidance and compliance with the Regulations relating to fire, non-fragility, thermal and air-tightness performance.

## Infill

All popular specifications can be accommodated including 6 / 7mm Single Glazing, 24mm and 28mm Double Glazed Sealed Units or 10mm,16mm or 25mm Polycarbonate Sheeting. Other infills should be discussed with our technical department.

## Specification

See [www.roofglazing.co.uk](http://www.roofglazing.co.uk) for Quick Specifications which cover most popular typical applications or contact out Technical Support for advice. We recommend you consider the National Building Specification H10 Patent Glazing. If you do not have access to a copy they can be contacted at:-

NBS Services, Mansion House Chambers, The Close, Newcastle upon Tyne NE1 3RE

Tel : 0191 232 9594 Fax : 0191 232 5714

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## Cleaning and Maintenance

Recommended procedures can be found on our website [www.roofglazing.co.uk](http://www.roofglazing.co.uk) and in BS5516 - Code of practice for the design & installation of GlazaTherm, sloping and vertical patent glazing.

In addition, if materials are coated with an architectural finish e.g. polyester powder paint, advice should be sought from the manufacturers / applicator of the process.

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## Recommended further reading

BS5516 - Code of practice for the design & installation of sloping and vertical patent glazing

BS6399:Part 3 - Loading for buildings - Code of practice for imposed loads

BS CP3 Chapter V Part 2 - Code of basic data for the design of buildings - Wind loads

NBS Specification H10 Patent Glazing

# GlazaTherm

## Sizing matrix

Approximate Geometric Free Air Area m<sup>2</sup>

Based upon open actuator stroke lengths 300mm and 550mm

Length L mm*	Width W mm**						
	600	700	800	900	1000	1100	1200
600	0.28	0.31	0.34	0.37	0.40	0.43	0.46
	0.50	0.56	0.61	0.67	0.72	0.78	0.83
700	0.31	0.34	0.37	0.40	0.43	0.46	0.49
	0.56	0.62	0.67	0.73	0.78	0.84	0.89
800	0.34	0.37	0.40	0.43	0.46	0.49	0.52
	0.61	0.67	0.72	0.78	0.83	0.89	0.94
900	0.37	0.40	0.43	0.46	0.49	0.52	0.55
	0.67	0.73	0.78	0.84	0.89	0.95	1.00
1000	0.40	0.43	0.46	0.49	0.52	0.55	0.58
	0.72	0.78	0.83	0.89	0.94	1.00	1.05
1100	0.43	0.46	0.49	0.52	0.55	0.58	0.61
	0.78	0.84	0.89	0.95	1.00	1.06	1.11
1200	0.46	0.49	0.52	0.55	0.58	0.61	0.64
	0.83	0.89	0.94	1.00	1.05	1.11	1.16
1500	0.55	0.58	0.61	0.64	0.67	0.70	0.73
	1.00	1.06	1.11	1.17	1.22	1.28	1.33
1800	0.64	0.67	0.70	0.73	0.76	0.79	0.82
	1.16	1.22	1.27	1.33	1.38	1.44	1.49
2000	0.70	0.73	0.76	0.79	0.82	0.85	0.88
	1.27	1.33	1.38	1.44	1.49	1.55	1.60
2400	0.82	0.85	0.88				
	1.49	1.55	1.60				

\* Dimension L mm = overall fixed frame length – see drawings on page 5.

\*\*Dimension W mm = overall fixed frame width – see drawings on pages 6.

Side hung vents are restricted to 1.20m<sup>2</sup> (Width x Length) with a maximum overall fixed frame length of 1800mm.

**IF THE SIZE REQUIRED IS OUTSIDE THE BOUNDRIES OF THE ABOVE MATRIX PLEASE CONTACT OUR SALES OFFICE.**

Please note : Whilst we are pleased to assist, the above example is given for guidance only. Responsibility remains with Specifiers to exercise all reasonable care ensuring our products are suitable for their requirements and correctly specified.

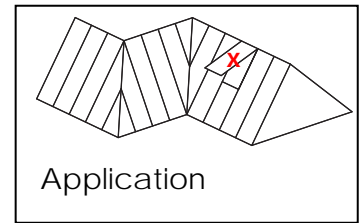
## GlazaTherm Drawings and CAD Code Index

Drawing number CAD code	Description	Page
GLAZ1PG	Top & bottom detail two edge support patent glazing	5
GLAZ2PGCW	Side rail into typical patent glazing or sloped curtain wall	6
GLAZ3CW	Bottom detail into typical curtain wall transom	7
GLAZ4CW	Head detail into typical curtain wall transom	8
GLAZ5PG	Vent top detail with glass above	8

GlazaTherm – suitable for 24 – 28mm Double Glazed Units or 25mm polycarbonate

# GlazaTherm ordering information

## Top hung roof ventilator



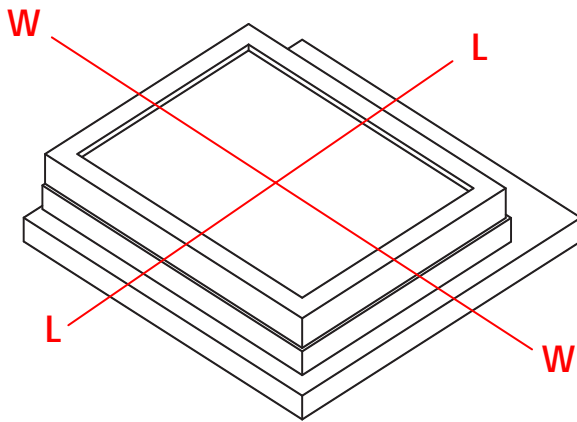
When ordering GlazaTherm to fit other manufacturers glazing bars or sloped 4-edge support systems, please specify fixed frame width and length. See notes below.

- GlazaTherm inserts between most patent glazing bars, sloped curtain walling and conservatory roof systems currently available.
- Suitable for single glazing, sealed double glazed units and Polycarbonate sheeting.
- Standard size 610mm x 915mm. Please contact our Sales Office for details of non-standard sizes.
- Manufactured from extruded aluminium alloy 6063-T6 sections supplied mill finish as standard and thermally broken with polyamides extrusions.
- Polyester powder paint finishes available in a wide range of colours.
- Various factory-fitted opening mechanisms, including pole, cord, thermostatic, electric and smoke actuators.
- Complies with BS5516 when used within manufacturers recommendations.

Dimensions required when ordering please state:

0/A Fixed Frame Length (Dimension L - refer drawings on page 5)

0/A Fixed Frame Width (Dimension W - refer drawings on page 6)



### Sectional views

**L-L** = 0/A Fixed Frame Length - Dimension L

**W-W** = 0/A Fixed Frame Width - Dimension W

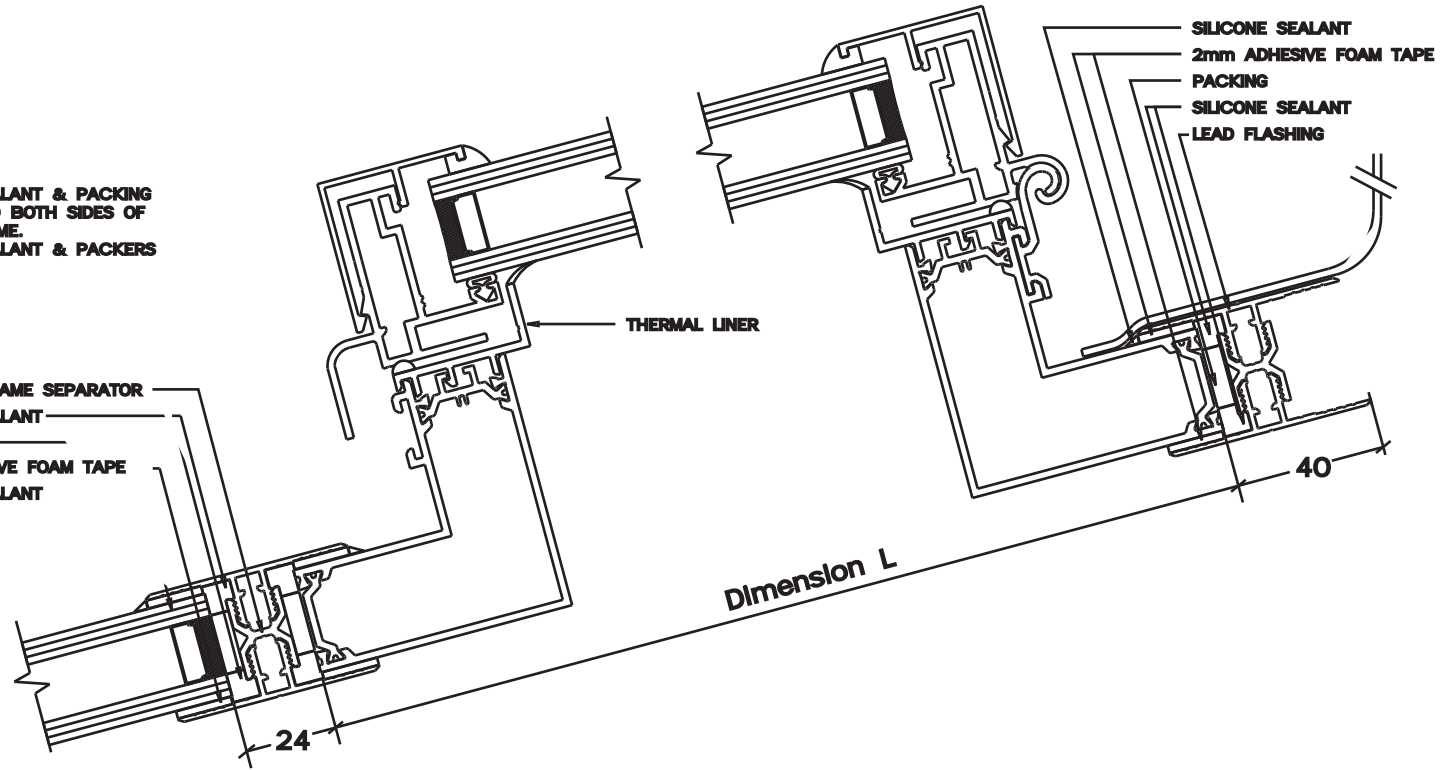
# GlazaTherm

## Top and bottom detail two edge support Patent Glazing

CAD Code GLAZ1PG

SILICONE SEALANT & PACKING REPEATED TO BOTH SIDES OF LOWER H CAME. SILICONE SEALANT & PACKERS BY OTHERS.

PLASTIC H CAME SEPARATOR  
SILICONE SEALANT  
PACKING  
2mm ADHESIVE FOAM TAPE  
SILICONE SEALANT

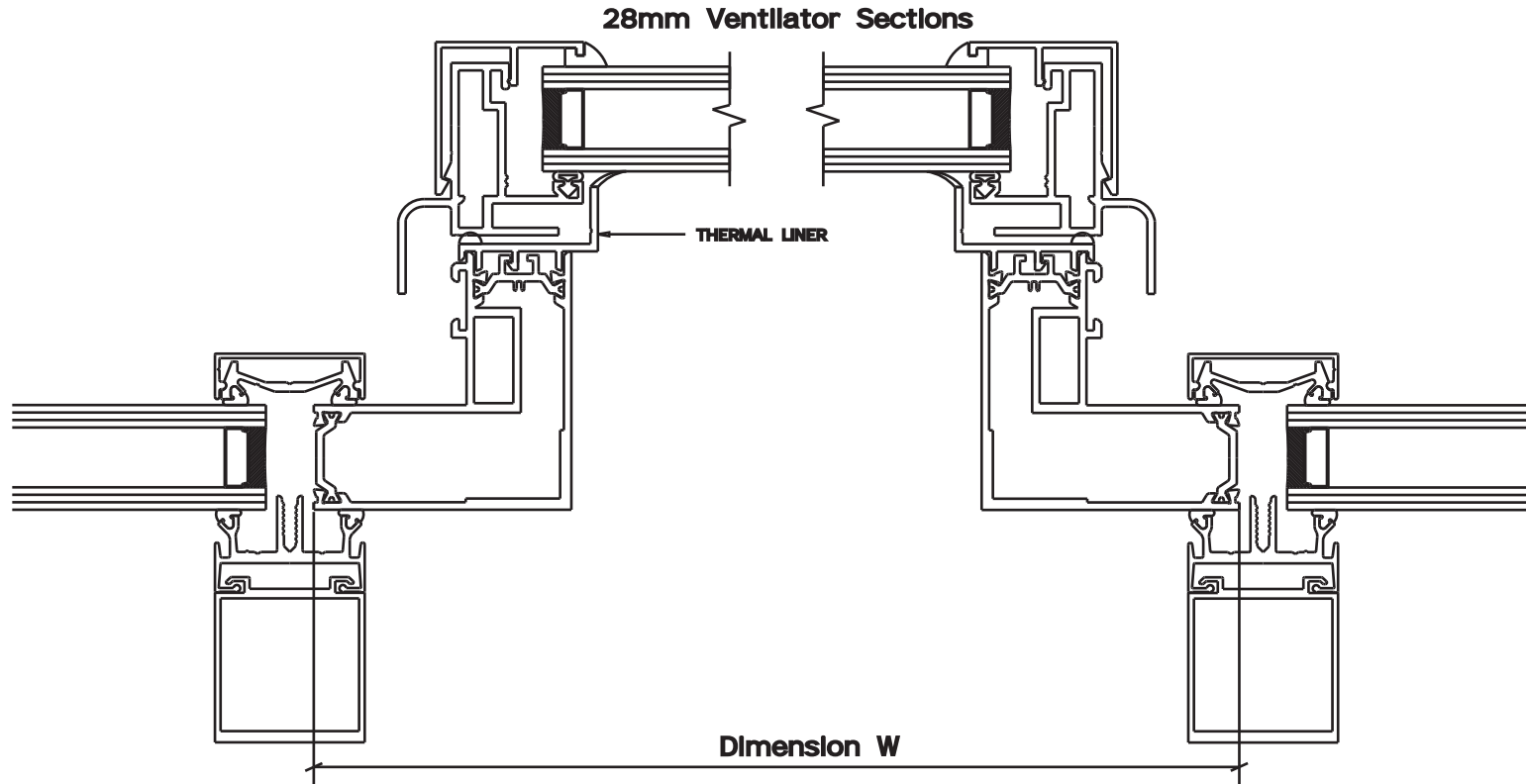


Scale of view 1: 2

GlazaTherm

Side rail into Patent Glazing bar or sloping curtain walling

CAD Code GLAZ2PGCW



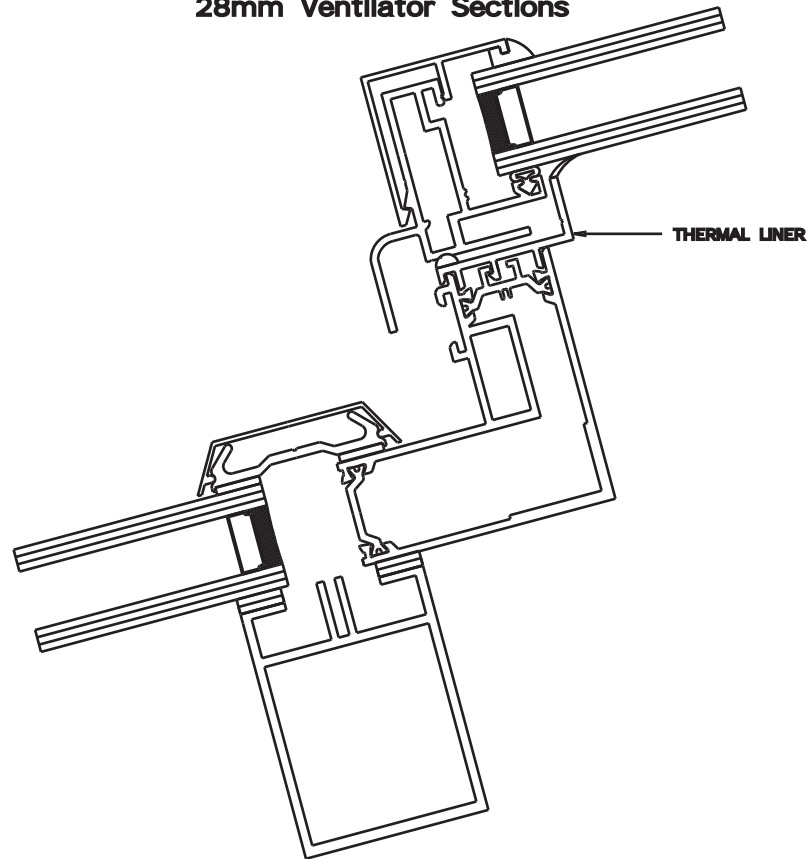
Scale of view 1: 2

GlazaTherm

Bottom detail into typical curtain wall transom

CAD Code GLAZ3CW

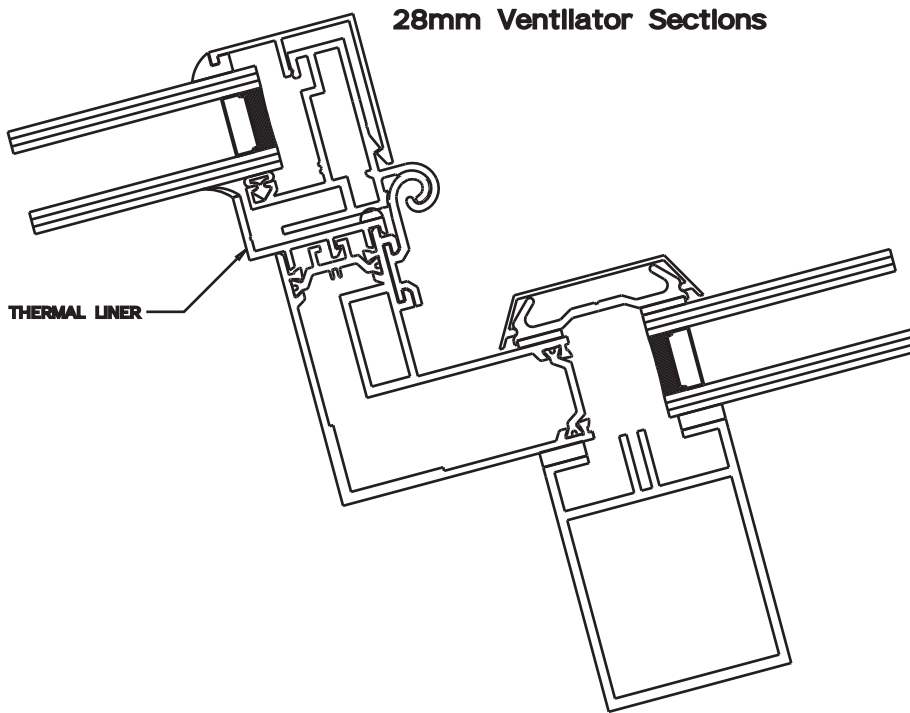
**28mm Ventilator Sections**



Scale of view 1: 2

Head detail into typical curtain wall transom

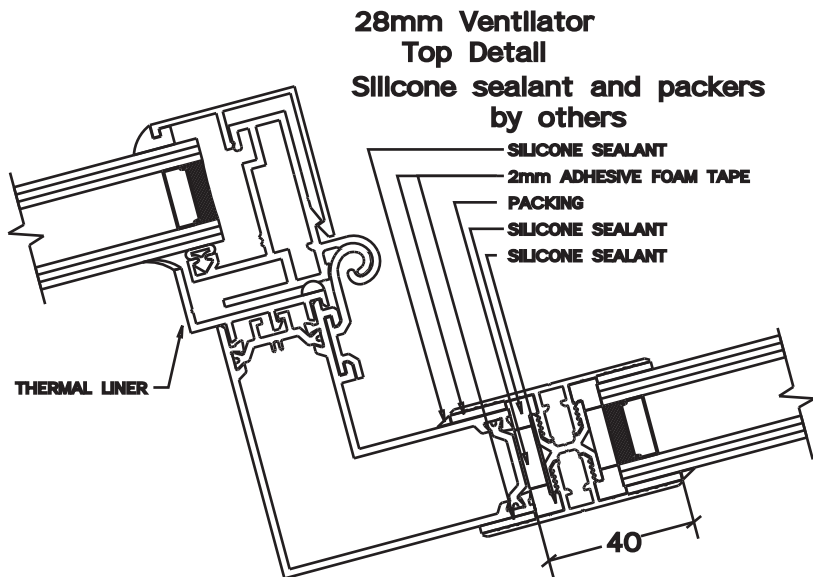
CAD Code GLAZ4CW



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Vent detail with glass above

CAD Code GLAZ5PG







## Research & Development

Lonsdale has made a very significant investment in research and development to bring you the products set out in this publication. Lonsdale's intention is to continue to invest to stay at the fore front of its Industry and bring its customers products with unrivalled technological advancements and standards. We reserve the right to make changes without prior notification to achieve these aims.

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