

QUANTAL Atriums, Orangeries, Glass houses, O



home to life with Quantal...

It's a great feeling. Big skies, beautiful surroundings. Changing your views and giving you so much more to admire. Light, airy spaces that lengthen summer evenings and brighten winter days. Expanding not just your home, but your horizons... and giving you a different perspective on life. That's Quantal.

Imagine bringing your





individual VISION **ON** Bo more than just add

Developed over 20 years, the highly versatile Quantal construction system brings a unique look and refreshing feel to even the most individual and prestigious home traditional or contemporary.







The bespoke glass buildings Quantal creates are not only distinctive and unique, they're also the result of advanced engineering applied to quality materials; in this case premium grade aluminium.

individual **VISION**

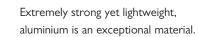
Strong, lightweight and thermally very efficient, using aluminium gives a Quantal extension a sleek, uncluttered look, improving the views of the outside and allowing more light inside. Combined with advanced glazing options, Ultraframe's Super Insulated Columns and our exclusive Insulated Pelmet, it also makes sure your additional space can be enjoyed all year round.

The result: a seamless continuation of your home, inside and out, with every detail from window types to roof crests designed to blend or contrast with your existing property. Now, what sort of extra space have you always dreamed of?









why? ALUMINIUM

Using polyester-coated aluminium means Quantal frames can be narrow and aesthetically pleasing with outstanding durability, retaining their colour and appearance with minimal maintenance for many years. The high strength and lower thermal expansion than PVC-U or wood means the roof is less prone to movement, too.





individual **SPACE**

Imagine your ideal home extension

This versatile system offers a huge range of detailing and design options, all thoughtfully considered and beautifully engineered, so you can create a completely unique addition to your home that's simply perfect for you.

..with Quantal, it's possible.



Whatever style you go for, Quantal makes sure your extra space is usable all year round too.

individual **SPACE**

Roof lights, ventilation and solar glass keep it cool in summer, while insulating double glazing, draught-free construction and Quantal's unique Super Insulated Columns and Insulated Pelmet System offer unrivalled warmth in winter.

So what would you choose? To help you decide, take a look at a few of the options available.

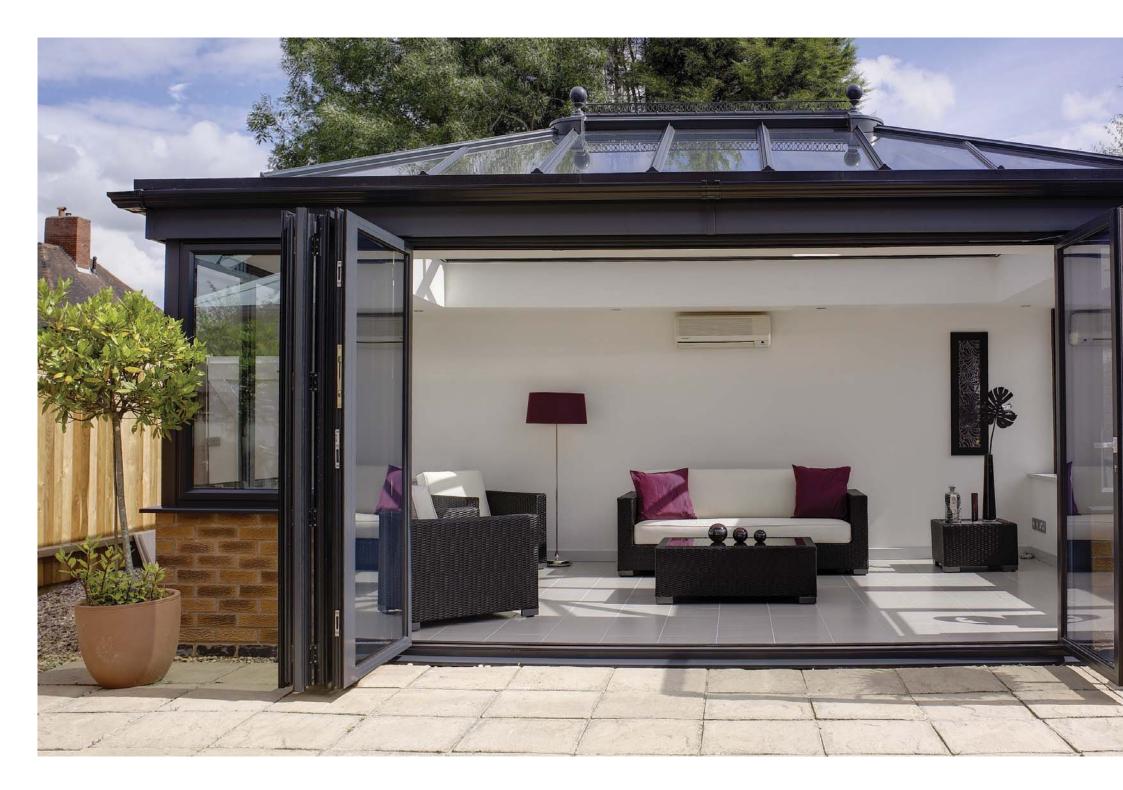




individual DESIGN

SIGN to flood a room with light

Quantal is an ideal choice for conservatories, its slender frames offering a more elegant look than other materials such as PVC-U and wood. The versatile construction system allows virtually endless design options, while the wide range of finishes and on-trend colours mean your finished conservatory can perfectly complement or contrast with the rest of your home.









individual DESIGN

a unique feature to your home. Orangeries that add

Unlike a conservatory's full glazing, an orangery has a 'lantern' glazed roof on a perimeter 'deck' supported by pillars or columns. Quantal orangeries incorporate our Super Insulated Columns (which are five times more thermally efficient than brick) and Insulated Pelmet system, creating a room-like feel with exceptional warmth. The columns are designed to incorporate our bespoke heating system too, while the pelmet can feature discreet lighting or speakers for a truly stunning effect.









n dividual ESIGN Solid Roof Extension individual DESIGN

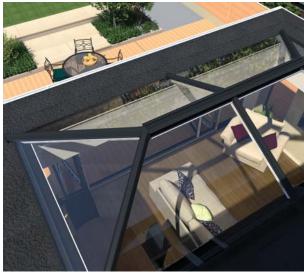
Solid Roof Extensions use the same basic framework as other Quantal structures, but incorporate fully insulated aluminium roof panels. Unlike traditional solid-roofed extensions though, with Quantal you have the added flexibility of being able to replace any of these with glazed panels - allowing as much light in as you wish. A really practical and versatile option.

















individual **DESIGN**

A Lantern Roof

A glazed lantern roof is an ideal way to add a feeling of space and let more light into a living room, kitchen, dining room, bedroom or bathroom. The Quantal lantern roof is designed to perfectly complement your property's style, whether it's traditional or modern, while using thermally-efficient glazing to reduce heat loss and intrusive noise.

allows light to flood in





vidual SIGN Pergola for covered individual DESIGN

For something a little different, Quantal also lends itself to creating distinctive pergolas ideal for a stunning patio area offering al fresco dining whatever the weather – or as a car shelter at the side of your home.

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The Quantal system is quality through and through. It's been cleverly designed to offer all the versatility of bespoke construction, with the practicality needed for easy installation.

individual SYSTEM

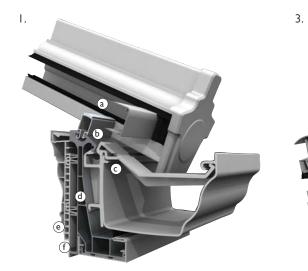


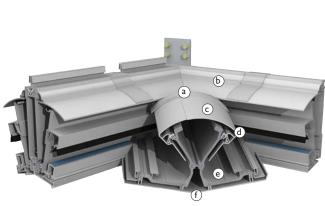
And it's the only aluminium glazed roof system to have prestigious BBA Accreditation.

Each Quantal configuration is designed using U-Design software to make sure the specification exceeds the wind and snow loads required for the property's postcode. Then as much of the structure is manufactured at our factory as possible, making construction as simple as possible and cutting down time on-site.

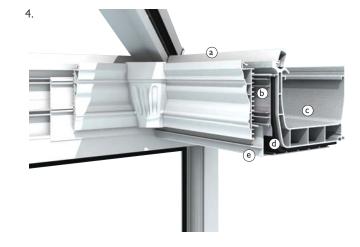
Quantal's technical features include:

- All aluminium externally yet thermally sleeved for optimum comfort
- Optional Eavesflow trickle ventilation at the eaves
- Various eaves options to achieve 2.5 ° lean-to*, with a reinforced version for gables and to provide support over wide opening doors
- Chambered combi eaves and box gutter, foam insulation wrapped for enhanced thermal performance and to virtually eliminate condensation
- A full suite of glazing bars including a wide span version – for as much span performance as you need
- Jack rafter tenon sleeves into chambered aluminium jack rafter, retained by triple fixings before multi point fixing to hip bar
- Ridge end offers perfect glazing alignment and perfect waterproofing with 'soft touch' weathering seal









The Quantal Aluminium Roof is beautifully detailed, robustly engineered and offers unrivalled structural performance and long term weather proofing.

- Standard eaves assembly

 (a) Glazing bar, (b) Glazing support
 (optional ventilation), (c) Classic
 gutter, (d) Eaves beam, (e) Heritage
 fascia, (f) Heritage fascia carrier.
- Wall plate assembly

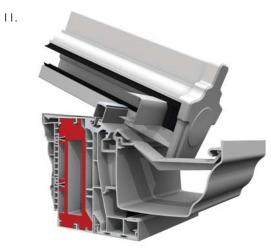
 (a) Wall plate flashing trim, (b) Wing,
 (c) Square bead, (d) Aluminium wall plate, (e) Glazing support, (f) Wall plate undercladding.
- Valley main assembly

 (a) Valley top cap, (b) Ridge to
 wallplate cover (Cladded), (c) Valley
 Outer Cladding, (d) PVC Carrier, (e)
 Valley Wings, (f) Valley undercladding.
- Boxgutter main assembly

 (a) Glazing Support, (b) Heritage
 Carrier, (c) Boxgutter, (d) Foil
 backed insulation foam, (e) Boxgutter
 undercladding.







5. Uni Ridge

(a) Uni Ridge body, (b) Gaskets, (c) Glazing support, (d) Internal Cladding.

Variable (clip on) Ridge (15°-40°)

 (a) Ridge capping (clip on), (b) Ridge body, (c)
 Wing, (d) Square bead, (e) Glazing support, (f)
 Internal Cladding.

7. Ridge Ends

(a) Britannia finial, (b) Gallery top cap, (c) Front screen, (d) Radius end seal, (e) Speedlok, (f) Radius end, (g) Radius end internal cap, (h) Flashing Saddle.

8. Bar End

9. Glass Stop

10. Widespan bar

The Widespan glazing bar is purpose designed for lean-to and hipped lean-to conservatories, responding to the increasing requirements for conservatories large enough to significantly increase living space in the home or to add extra space in commercial buildings.

Widespan can reduce the need for portal frames, purlins or bolster bars; improving the all round aesthetics, substantially reducing costs and making for faster, easier installation on these bigger projects. With a span increase of 25% it enables projections of 4.15 metres at 700mm centres with glass and projections of up to 5.25 metres can be achieved with ease with polycarbonate glazing.

11. Re-inforced Eaves*

The ideal solution for Bi-fold doors in glazed extensions. The bolstered eaves ensures you can easily incorporate a Bi-folding door without effecting the Bi-fold door's operating mechanisms on regular projects. The Quantal Bi-fold Eaves eliminates the need for unsightly and costly steel structures to support door openings. Quantal provide a truly engineered solution without affecting the internal or external aesthetic.

Quantal's Bi-fold Eaves can give you up to 4.3m openings using polycarbonate as your roof glazing material, or up to 4.0m using a sealed unit. This will provide an opening to fit typically a 4 or 5 panel Bi-folding door, giving the homeowner lavish uninterrupted views.

* Further options include the insertion of rolled steels to further increase unsupported spans.



12. Cornice

(a) Cornice upper section, (b) Support bracket,(c) Gutter bracket, (d) Cornice middle section, (e)Cornice lower section.

13. Plastered Perimeter Ceiling

- $$15-40^\circ$$ pitch, unequal pitches are accommodated
- Choose variable internal projection, from 300-1200mm
- Comes with 25mm heatguard polycarbonate
 'cloaking screen'
- 0.6 'U' value improves thermal comfort (option on site to add 100mm mineral wool quilt to improve 'U' value to 0.2).
- Use on side frames, brick piers or super insulated aluminium columns.

14. Roof Vent

Primary ventilation can be introduced using the gasketed thermally broken aluminium roof vent. Choose from manual operation or climate control electric pack.

The roof vent is fully BBA certified and tested to 300 pascal water tightness

15. Heritage Architrave

The adjustable internal eaves beam cladding system brings the superior aesthetics of the Quantal roof inside. Available with internal and external corner trims the clip on cladding offers variable height settings to speed up installation. Available in white or foiled finishes the Heritage Architrave is a perfect match for all frame types.

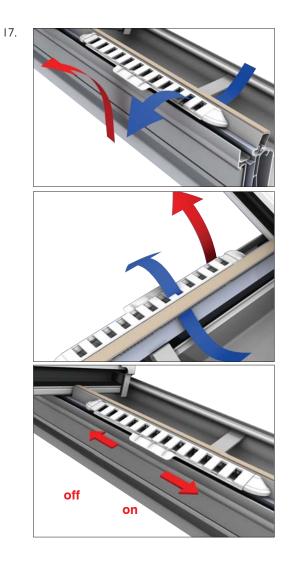
16. Super Insulated Columns

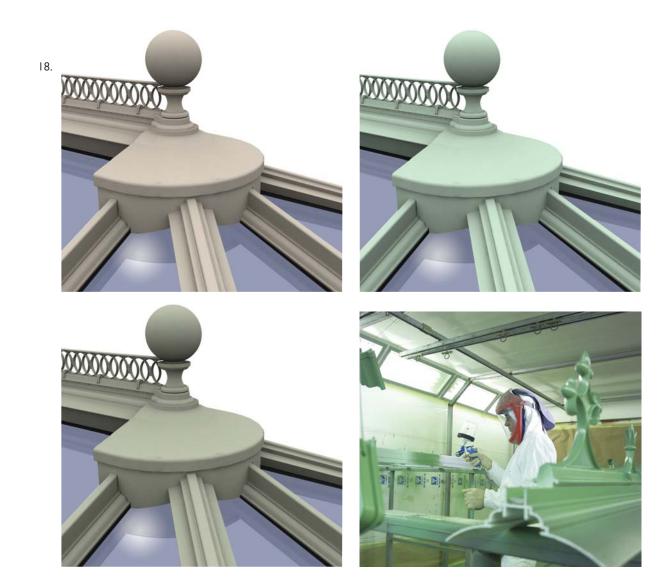
A Quantal contemporary orangery is the best of all worlds with light and sky and solid plastered walls it consists of exciting and innovative elements, namely super insulated columns (0.15 'U' Value) and the internal perimeter ceiling. With its aluminium roof, aluminium cornice and powder coated aluminium columns.

(a) Quantal roof with Cornice sits on top,
(b) Insulation core is expanded polystyrene
(eps), (c) OSB board to all sides
mechanically fixed to battens (wrapped in beathable membrane), (d) Powder coated aluminium claddings in a range of standard colours, (e) Various base details available,
(f) Brickwork set out post. (other structural supports/posts available)

17. Eavesflow (optional)

A trim that fits between the wall sideframe & roof, with built-in ventilation and slider on/off control button.





18. Colour

The optional features of Quantal's unique authentic period style aluminium roof with traditional solid cast cresting and finial are ideally suited for creating a truly stunning coloured glazed roof.

Coloured roofs are particularly suitable for enhancing the heritage feel of distinguished period properties.

All our aluminium and internal cladding components can be coloured in any RAL or BS shade to allow customers an infinite choice across the whole range of conservatory designs.

Using our purpose built in house paint shop we 'spray and bake on' at 60° using the same high-grade acrylic formulation and technology employed on modern car bodywork.

The result is a totally colourfast and durable finish, fully guaranteed. Here are just a few examples of special colours.





All of the exciting range of home additions in this brochure feature the Quantal aluminium roofing system. Quantal's policy is one of continuous development and specification and ranges may change without notification.



www.quantal.co.uk Job No. 3048 IW QTY 5,000. JULY 2015. Code: QDOCS002