The UK’s only thermally broken structural glazing system.

Developed in house by IQ Glass using our years of experience in structural glazing. The Invisio system is a structural glass system with thermally broken fixing details. It is suitable for all structural glazing applications and offers unparalleled thermal insulation whilst maintaining the key frameless glass design of structural glazing.

Maximum Sizes
There is no maximum size for a structural glass installation. We design the glass specification around your requirements bearing in mind the design, site access and budget. Contact IQ to calculate the most effective sizes for your project.

Frame/Fixing
Using the unique Invisio structural glass fixing section with a full thermal break.
Frame Material thermally broken aluminium
Frame Depth 63mm
Base Fixing INV3 section, 60mm, designed to be hidden by building finishes.
Head + Jamb Fixing INV1 section, 60mm, designed to be hidden by building finishes.
Configurations SC2 solution suitable for silicone jointed glass, glass to glass corners, shaped glass, and more.

Frame Finishes PPC in RAL colours 7016/7021/7024/9005 as standard, additional RAL colours incur additional costs and increased lead times.

Glass
Typical Glass Specification Dependant on glass height and wind pressure, see page 4
Typical Ug Value 1.0 W/m²K
Max Glass Thickness 41.5mm
Glass Options solar control coatings, triple glazing, low maintenance coatings, low iron glass, heated glass, decorative glass, translucent glass, coloured glass, manifestations, privacy glass, reflective glass, anti condensation glass, bird protection glass. Almost any glass specification can be used. Contact IQ with specific requests.
Thermally Broken Structural Glazing

Silicone joint (10mm)
The Invisio Structural Glazing system is ‘set back’ to the distance requested by the architect or indicated on the architectural drawings. The minimum fixing distance from edge of slab to the centre of the profile is 55mm. If the glazing is to be located closer to the edge of the slab fixing straps will be used.
One disadvantage of traditional structural glazing systems (apart from the thermal bridging) is how difficult the glazing can be to install and then replace should it be needed in future. The Invisio fixing system has been designed to overcome that issue.

The INV1 section (used at the head and jambs of a structural glass wall opening) has a removeable section that can be removed if necessary to allow for the glass panels to be removed without having to remove the whole installation.

Please note that the removeable part of the Invisio section can be covered by the building finishes. However if a replacement is required these building finishes will also need to be removed before replacement can occur.

**Ease of Installation and Replacement**

One disadvantage of traditional structural glazing systems (apart from the thermal bridging) is how difficult the glazing can be to install and then replace should it be needed in future. The Invisio fixing system has been designed to overcome that issue.

The INV1 section (used at the head and jambs of a structural glass wall opening) has a removeable section that can be removed if necessary to allow for the glass panels to be removed without having to remove the whole installation.

Please note that the removeable part of the Invisio section can be covered by the building finishes. However if a replacement is required these building finishes will also need to be removed before replacement can occur.
Example Design Details

Glass to Glass connections with frameless connections. CAD details available on request.

Glass to Glass Linear Joints

Glass to Glass Corner Joints
Application Examples

Glass Walls

Clerestory Windows
**Glass Specification + Max Sizes**

The Invisio System has been fully tested to provide a solution for structural glazing on architectural projects with proven performance. The below tables indicate the tested glass sizes and recommended specifications. If your glass installation is larger than these sizes shown we can provide a bespoke solution. Tables show the recommended glass specification for each opening width and opening height.

**Table 1**

Wind Pressure: up to 0.8 kN/m²

Max. Glass Deflection: H¹/175 (i.e. if the height is 1m the silicone joint max deflection is 1.75mm)

<table>
<thead>
<tr>
<th>Opening height (m)</th>
<th>2</th>
<th>2.25</th>
<th>2.50</th>
<th>2.75</th>
<th>3</th>
<th>3.25</th>
<th>3.50</th>
<th>3.75</th>
<th>4</th>
<th>4.25</th>
<th>4.50</th>
<th>4.75</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14-8</td>
<td>4.86</td>
<td>4.80</td>
<td>4.78</td>
<td>4.86</td>
<td>4.95</td>
<td>5.17</td>
<td>5.36</td>
<td>5.55</td>
<td>5.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-18-6</td>
<td>2.58</td>
<td>2.60</td>
<td>2.62</td>
<td>2.55</td>
<td>2.48</td>
<td>2.46</td>
<td>2.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-18-6</td>
<td>1.95</td>
<td>1.91</td>
<td>1.87</td>
<td>1.83</td>
<td>1.78</td>
<td>1.74</td>
<td>1.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2**

Wind Pressure: up to 1.6 kN/m²

Max. Glass Deflection: H¹/175 (i.e. if the height is 1m the silicone joint max deflection is 1.75mm)

<table>
<thead>
<tr>
<th>Opening height (m)</th>
<th>2</th>
<th>2.25</th>
<th>2.50</th>
<th>2.75</th>
<th>3</th>
<th>3.25</th>
<th>3.50</th>
<th>3.75</th>
<th>4</th>
<th>4.25</th>
<th>4.50</th>
<th>4.75</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14-8</td>
<td>2.51</td>
<td>2.50</td>
<td>2.49</td>
<td>2.47</td>
<td>2.48</td>
<td>2.57</td>
<td>2.67</td>
<td>2.77</td>
<td>2.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-18-6</td>
<td>1.98</td>
<td>1.99</td>
<td>2.00</td>
<td>2.02</td>
<td>2.04</td>
<td>1.96</td>
<td>1.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-18-6</td>
<td>1.58</td>
<td>1.61</td>
<td>1.64</td>
<td>1.56</td>
<td>1.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Invisio Structural Glazing SC2
Product Information Sheet

How to Specify Invisio from IQ Glass

The Invisio structural glazing system is exclusive to IQ Glass and was developed in house to provide specifiers with high performing, thermally broken structural glass solutions, suitable for the most exclusive of projects. Thanks to the full thermal break within the unique fixing details, the Invisio structural glass system can achieve expectational levels of thermal insulation without the inherent thermal bridging effect of normal structural glass installations.

Speak to the team at IQ
The team at IQ are the experts in our product range. If you are considering using the Invisio system on your project speak to the team at IQ who will be able to start our in house engineering service. We can also advise you on the best solution for your intended design, ensure that all specification criteria are met and advise the feasibility to areas of the installation you may not have considered.

Get a Quotation
As part of our engineering service we will create a quotation for the works in question. This allows us all to ensure that the proposed design is within budget. If it is not we can help you adjust the specification to reach all performance, design and budgetary requirements.

Add us to your NBS Specification
To assist you in specification we have created individual NBS Specification sheets for our systems. These, easy to navigate, documents contain all the vital information needed for specification. They are available for you to complete on your own, alternatively ask your sales representative at IQ to complete this on your behalf.

Place the Order
When ready you (or your client or the builder) can then place the order for your architectural glazing with us. A full in-house handover will take place and your project will be passed to the contracts and
design team. Once your project deposit is placed we will then undertake full detailed design drawings for the installation and any other additional glazing works. Please allow at least 20 working days for the design process.

The project will be appointed a dedicated contracts manager who will oversee the installation process. The estimated production lead time for Invisio structural glazing system is 6 to 8 weeks depending on application and glass specification chosen. This may be longer for specialist installations. This will be confirmed on order.

**Where can I see the Invisio System before order?**
We have several Invisio installations available to view at our showroom in Amersham. These structural glazing installations have been installed in a purpose built structure, exposed to the environment and used on a day to day basis. This will enable you to see what the Invisio system looks like in situ and the various applications in which it can be used.

If you or your clients would like to see the Invisio system in person just contact us and arrange an appointment at the showroom.