The framework behind great buildings
Fischer A|C|T Subframe System

Product information fischer FZP-G
Product information

point fixing glazing system

FZP-G (fischer zykon point fixing - glass)
**FZP-G** point fixing glazing system without penetration of the glass panel

- **Undercut drillhole**
- **No expansion force in glass panel**
- **Only outside loads on the anchor result in forces in the panel**

Other systems available for:
- natural stone
- Finished stone
- ceramic
- HPL
FZP-G Innovative glazing system

**Characteristics of the FZP-G system:**
- Smooth facade surface with no penetration of the glass – no problems with impermeability & easy cleaning of the outside of glass facade
- Small fixing point diameter, Ø16mm – maximises the transparency by minimising of the fixing point
- High transparency means aesthetically pleasing facade with enormous architectural potentials
- Reduced edge spacing with no contact between A4 steel and glass
- Direct fixing in the glass with undercut hole
- German general technical approval Z-70.2-122

**Applications:**
- Point fixing glazing system of glass facades
- Fixing of solar panels
- Partition walls
- Furniture, show cases

**ACT-Service:**
- Automatic drilling equipment
- Design and test support
FZP-G Anchor Construction

- plastic washer
- expansions ring
- cone bolt
- plastic cap
**FZP-G** Comparison to Traditional methods

- Undercut Point Fixing System reduces edge spacing
- Small fixing point diameter
- Direct fixing in the glass with undercut hole

Fischer undercut point fitting

```
ø 26 mm
minimum edge distance  ≥ 60 mm
```

standard-point fitting

```
ø ≥ 40 mm
minimum edge distance  ≥ 120 mm
```
**FZP-G** available anchors

**FZP-G for toughened safety glass:**
- Toughened glass (ESG) or Heat strengthened glass (TVG)
- 6 mm, 8 mm, 10 mm and 12 mm glass

**FZP-G for laminated safety glass:**
- Toughened glass (ESG) or heat strengthened glass (TVG)
- 10/8 mm and 10/10 mm glass

Installation drawing of available anchors on request.
**FZP-G** Production process

1. Drilling the glass
   - 1. Drilling cylindrical blind hole
   - 2. Drilling undercut hole

2. Tempering the glass
   - 1. Tempering the glass
   - 2. Heat soak test

3. Setting the FZP-G
   - 1. Apply FZP-G
   - 2. Torque controlled assembling
   - 3. Assembled FZP-G
FZP-G with Subframe SystemOne
FZP-G Subframe system: StarSolution

- 2-point holder
- 4-point holder

Technical details:
- Adjustable horizontal range appr. ± 5 mm
- Adjustable vertical range appr. ± 9 mm
- Low forces in panel plane
- No forces by thermal expansion
- Effective compensation of building tolerances
- Available in a variation of colours
### FZP-G

Typical ultimate loads with 30cm x 30 cm ESG samples, span Ø 145 mm

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Test</th>
<th>Glass</th>
<th>Size</th>
<th>Panel thickness</th>
<th>Anchorage depth</th>
<th>Ø ultimate load</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>axial tension</td>
<td>ESG</td>
<td>30 cm x 30 cm</td>
<td>10 mm</td>
<td>6 mm</td>
<td>4,85 kN</td>
</tr>
<tr>
<td>2</td>
<td>II</td>
<td>ESG</td>
<td>30 cm x 30 cm</td>
<td>12 mm</td>
<td>7 mm</td>
<td>5,53 kN</td>
</tr>
<tr>
<td>3</td>
<td>axial pressure</td>
<td>ESG</td>
<td>30 cm x 30 cm</td>
<td>10 mm</td>
<td>6 mm</td>
<td>17,92 kN</td>
</tr>
<tr>
<td>4</td>
<td>II</td>
<td>ESG</td>
<td>30 cm x 30 cm</td>
<td>12 mm</td>
<td>7 mm</td>
<td>24,79 kN</td>
</tr>
<tr>
<td>5</td>
<td>shear load</td>
<td>ESG</td>
<td>30 cm x 30 cm</td>
<td>10 mm</td>
<td>6 mm</td>
<td>10,77 kN</td>
</tr>
<tr>
<td>6</td>
<td>II</td>
<td>ESG</td>
<td>30 cm x 30 cm</td>
<td>12 mm</td>
<td>7 mm</td>
<td>13,06 kN</td>
</tr>
</tbody>
</table>

- Ultimate loads depend heavily on glass quality
- Shown values only allow a rough overview about the system's capabilities and therefore do not replace engineering calculation and testing methods
FZP-G Project examples

Detailed project information on request