CE08: SHGC of Vertical Fenestration

Why is this a priority in Denver?

- Reducing solar heat gain coefficient can reduce cooling energy use and costs and improve occupant comfort by reducing hot zones around building perimeter.
Project Requirements

- Apply orientation-based multipliers to the Solar Heat Gain Coefficient (SHGC) requirements of DEC Table C402.4
  - 20% reduction in DEC SHGC values for South, East, and West facing vertical fenestration
  - 5% reduction in DEC SHGC values for North facing vertical fenestration

### Adjusted Solar Heat Gain Coefficients

<table>
<thead>
<tr>
<th>Projection Factor</th>
<th>South, East, West</th>
<th>North</th>
<th>South, East, West</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF &lt; 0.2</td>
<td>0.30</td>
<td>0.36</td>
<td>0.26</td>
<td>0.31</td>
</tr>
<tr>
<td>0.2 &lt; PF &lt; 0.5</td>
<td>0.36</td>
<td>0.43</td>
<td>0.32</td>
<td>0.38</td>
</tr>
<tr>
<td>PF &gt; 0.5</td>
<td>0.48</td>
<td>0.58</td>
<td>0.42</td>
<td>0.50</td>
</tr>
</tbody>
</table>
# Submittal Requirements

<table>
<thead>
<tr>
<th>Phase</th>
<th>What’s required?</th>
</tr>
</thead>
</table>
| Permit | • Submit completed DGC LMU and DEC Checklists  
  • Provide drawings, schedules, and/or specifications indicating SHGC for all glazing products specified (whole-assembly values). If provided in a schedule, include orientation of all vertical fenestration. |
Where can I learn more?

Visit [Denver.gov/GreenCode](https://Denver.gov/GreenCode) to:

- Link to the **2022 Denver Green Code**
  - Download the DGC Checklists
  - Watch other videos in this series
  - Register for DGC Virtual Office Hours
  - Find additional resources for your project

Denver Energy Code links: [Code & Policies](https://Denvergov.org/CodePolicies) | [Checklists](https://Denvergov.org/Checklists) | [Resources & Trainings](https://Denvergov.org/ResourcesTrainings)

For **Green Buildings Ordinance**, visit [Denver.gov/GreenRoofs](https://Denver.gov/GreenRoofs)