2022 Denver Green Code
Explanatory Video Series

CEO7: Building Envelope

Community Planning & Development
Office of Climate Action, Sustainability and Resiliency
Why is this a priority in Denver?

• Improving the performance of the building thermal envelope is a passive design strategy that:
  – **Reduces heating and cooling energy use** by enhancing the insulative and shading properties of assemblies
  – **Enhances occupant comfort** by reducing temperature differential between internal and perimeter zones
  – **Supports climate resilience** by allowing buildings to remain habitable longer during service interruptions
CE07: Building Envelope

Project Requirements

- Use **reduced U-, F-, and C-factors** for envelope and glazing components
  - Values are 4% to 11% reduction from Denver Energy Code
- Reduced values can also be used for envelope tradeoffs (projects following DEC C402.1.5, Component performance alternative)

(Projects Requirements continue on next slide)
CE07: Building Envelope

Project Requirements (Continued)

• **Maximum vertical fenestration area** requirements of DEC apply
  – ≤ 30% of gross above grade wall area, or ≤ 40% with daylight responsive controls

• **Single-rafter roofs** must follow Table A101.1 (Normative Appendix A)

• Maximum U-1.20 for **high-speed doors** (≥ 75 cycles/day)

Note: Projects that select CE07 for LMU compliance cannot use DEC C406.8 for C406 compliance
# CE07: Building Envelope

## Submittal Requirements

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<th>Phase</th>
<th>What’s required?</th>
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| Permit | • Submit completed DGC LMU and DEC Checklists  
        • Provide drawings, schedules, and/or specifications indicating R-values for all insulation, U-factors for vertical fenestration and skylights (whole-assembly values), and documentation or calculations showing that all specified assemblies meet the requirements of this provision  
        • If the component performance alternative is used for building envelope compliance, provide calculations in accordance with DEC Section C402.1.5 utilizing the appropriate factors in DGC Table C402.1.4 |
Where can I learn more?

Visit Denvergov.org/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 | Checklists | Resources & Trainings

For Green Buildings Ordinance, visit Denvergov.org/GreenRoofs