

Prescriptive Requirements							Performance Compliance Option	
Alterations to Skylights	Skylight to Roof Ratio ≤0.05 §140.3(a)6A	Minimum Skylit Daylit Area §140.3(c)	VT §140.3(a)6D	SHGC §140.3(a)6C	U-factor §140.3(a)6B	Window Film NA7.4.2 ^E	Dynamic Glazing NA7.4.3 ^H	
Add skylight >50ft ²	YES^{B, C}	no	YES^C	YES^C	YES^C	YES	YES	
Add skylight ≤50ft ²	YES^{B, C}	no	no	no	YES^C	YES	YES	
Alter Existing Skylight	no	no	YES^{C, E}	YES^{C, E}	YES^C	YES	YES	
Alterations to Vertical Fenestration	Window Wall Ratio ≤0.40 §140.3(a)5A	Minimum Skylit Daylit Area §140.3(c)	VT §140.3(a)5D	SHGC §141.0(b)2A	U-factor §141.0(b)2A	Window Film NA7.4.2 ^E	Dynamic Glazing NA7.4.3 ^H	
Add Vertical fenestration ≤50ft ²	YES	no	no	no	YES^C	YES	YES	
Add Vertical fenestration >50ft ²	YES	no	YES^C	YES^C	YES^C	YES	YES	
Replace Vertical fenestration ≤150ft ²	no	no	no	no	YES^F	YES	YES	
Replace Vertical Fenestration >150ft ²	no	no	YES^F	YES^F	YES^F	YES	YES	
Alter Existing Vertical Fenestration ^A	no	no	no	no	no	YES	YES	
New Fenestration including Skylights	Window Wall Ratio ≤0.40 §140.3(a)5A	Skylight to Roof Ratio ≤0.05 §140.3(a)6A	Minimum Skylit Daylit Area §140.3(c)	VT §140.3(a)5D §140.3(a)6D	SHGC §140.3(a)5C §140.3(a)6C	U-factor §140.3(a)5B §140.3(a)6B	Window Film NA7.4.2 ^E	Dynamic Glazing NA7.4.3 ^H
New Construction	YES	YES	YES^D	YES^G	YES	YES	YES	YES

A Replacement of fenestration, where existing fenestration area in an existing wall or roof is replaced with a new manufactured fenestration product and up to the total fenestration area removed in the existing wall or roof.

B Atria over 55ft high are limited to a maximum 0.10 skylight to roof ratio.

C See §141.0(b)2A for reference to Table 140.3-B, C or D.

D The minimum skylit daylit area requirement applies to climate zones 2 through 15, for roofs directly over spaces >5,000ft² with a ceiling height of at least 15ft and interior LPD of at least 0.5 W/ft².

E Window Films are applicable for use in existing glass in existing buildings and must be modeled under the performance approach to receive performance SHGC credit and must meet the criteria of NA7.4.2.

F See Table 141.0-A for efficiency values.

G VT ≥0.11/WWR also applicable.

H Dynamic Glazing must use automatic controls and must meet the criteria in NA7.4.3.

For More Information

Primary Documents

- Energy Standards Nonresidential Compliance Manual Section 3.2:
energy.ca.gov/2015publications/CEC-400-2015-033/chapters/chapter_03_building_envelope.pdf

California Energy Commission Information & Services

- Energy Standards Hotline: 1-800-772-3300 (Free) or Title24@energy.ca.gov
- Online Resource Center:
energy.ca.gov/title24/orc/
 - The Energy Commission’s main web portal for Energy Standards, including information, documents, and historical information

Additional Resources

- National Fenestration Rating Council (NFRC):
nfr.org/
 - NFRC offerings can help facility managers, specifiers, designers and others make informed purchasing and design decisions about fenestration products
- Component Modeling Approach (CMA):
nfr.org/CMA/default.aspx
 - To help select windows with the desired energy performance for institutional projects
- Energy Code Ace:
EnergyCodeAce.com
 - An online “one-stop-shop” providing free resources and training to help appliance and building industry professionals decode and comply with Title 24, Part 6 and Title 20. The site is administered by California’s investor-owned utilities.
Please register with the site and select an industry role for your profile in order to receive messages about all our free offerings!



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