Green Buildings Ordinance
Project & Submittal Requirements
Existing Buildings

NOTE: Denver's Green Buildings Ordinance applies to all existing commercial buildings with 25,000 ft² of Gross Floor Area or larger upon roof replacement or roof recover. All roof permit applications must use the currently adopted Denver Building and Fire Codes.

1. Required & Reference Documents

Click here to view the Green Buildings Ordinance

Click here to download the GBO Rules & Regulations PDF

Click here to download the Green Building Declaration Form for Existing Buildings

Denver Roof Permit Application

Abbreviations
GBO = Green Buildings Ordinance R+Rs = Rules & Regulations GBDF = Green Building Declaration Form SDP = Site Development Plan IBC = International Building Code IECC = International Energy Conservation Code DBCA = Denver Building Code Amendments

2. Project Compliance

A. All projects must address two areas of compliance:
   i. Provide a cool roof, and
   ii. Select an additional green building option (A through G) on the GBDF.

B. Exemptions are available for certain types of projects. See Section 10-302(d) in the Ordinance for a complete list of available exemptions.

3. Construction Permits

A. At the time of the permit submittal, provide all applicable materials listed in the submittal requirements table below necessary to demonstrate conformance with requirements specifically outlined in the GBO R+Rs Article III pertaining to cool roof requirements and R+Rs Article IV Section 4.02 pertaining to Green Space requirements.

4. Project Requirements for Option A:

Green Space (Vegetated Roofs + At-Grade Green Space) *Note - Existing green space cannot be used to meet the Green Buildings Ordinance, unless it is improved with trees or an above-grade, vegetated, water quality facility. Review the Rules and Regulations for details.*

A. Total roof replacement/additions, select a coverage area (choose one):
   i. 2% of Gross Floor Area
   ii. 18% of Total Roof Area

B. Replacing roof section(s), select a coverage area (choose one):
   i. (2% of the building GFA × roof section area) ÷ total roof area of the building
   ii. 18% of the roof section(s)

C. For Vegetated Roofs, reference R+Rs for specifics including those related to:

- Professional qualifications
- Irrigation
- 80% coverage of vegetated roof within 3 years
- Plant selection lists
- PVs and vegetation
- Trees and groundcover
- Maintenance plan
- 5" growing media
- IBC, IFC, IPC Denver amendments
- Standpipes, fire zones, fire clearances, and exit stairs
- Wind and gravity loads

D. For At-Grade Green Space, reference R+Rs for specifics including those related to:

- Trees and groundcover
- Zoning
- Water quality treatment
- Right of way
- Must be new
- Soil quality
- Drainage
- Tree standards
- Turfgrass
- Urban agriculture

E. Provide items listed in the Submittal Requirements Checklist starting on the next page of this guide.

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Submittal Requirements Checklist

Mandatory Cool Roof Requirements and Exemptions for All Existing Buildings:

	#	Construction Phase	Applicable Code Section	Submittal Item	Requirement
MANDATORY FOR ALL NEW SUBMITTALS	1	Roof Permit	R+Rs 2.03(c)	Green Building Declaration Form	Provide a Green Building Declaration Form for Existing Buildings (GBDF) with all applicable fields completed and include the owner's signature.
	2	Roof Permit		Roof permit application	Provide a roof permit application with the project valuation.
	3	Roof Permit	R+Rs 2.03(a)	Roof plan	Provide a roof plan with the total roof area quantified. For partial roof repairs, highlight and quantify the repair area(s).
	4	Roof Permit	R+Rs 3.02(a) R+Rs 3.03(a) R+Rs 3.03(b)	Roof product & solar reflectance data	Provide cool roof covering and paver solar reflectance data with the color circled, highlighted, or otherwise identified in conformance with Table 1 - Reflectance Requirements in the GBO R+Rs. This information may be included in the project specifications or by providing the manufacturer's product data sheet.
	5	Roof Permit		Roof assembly section details	Roof section detail - OR - a detailed, layer-by-layer description of the roof assembly. Provide a section detail for the existing assembly AND the proposed assembly.
	6	Roof Permit	R+Rs 3.03(b)(i)	Condensation avoidance strategy (*required for existing non-cool roofs*)	Provide one of the following two options: (1) Air barrier AND vapor retarder product data if the low-slope prescriptive assembly is being provided, OR **(2)** A dew point analysis report following Denver's guidelines from a registered professional if a prescriptive assembly is NOT being provided. Find qualified professionals at International Institute of Building Enclosure Consultants (IIBEC).
	7	Roof Permit	IBC 1202.2 IBC 1202.3	**(Steep slope only)** Ventilation details	Provide one of the following two options: (1) A roof plan illustrating locations, sizing, and calculations, OR (2) A dew point analysis report following Denver's guidelines Find qualified professionals at International Institute of Building Enclosure Consultants (IIBEC).
EXEMPTIONS	8	Roof Permit	R+Rs 3.04	Exemptions	For any exemptions claimed, please provide substantiation and reference the applicable exemption from the GBO rules and regulations in Section II of the GBDF.
	9	Roof Permit	R+Rs 3.04(a)	Character defining roofs	See applicable GBO R+Rs Section 3.04(a) for additional submittal requirements if claiming a character defining roof. It is recommended that any project considering applying for a character defining cool roof exemption, first contact stephen.sanderson@denvergov.org.
	10	Roof Permit		Existing cool roof or reuse of existing ballast	*If the existing roof is a cool roof or for reuse of existing ballast* – Simply check the applicable box in Section II of the GBDF.
	11	Roof Permit	R+Rs Section 10-302(d)(3)(a)	Residential building below 5 stories OR 62.5' in height	Provide photos and/or drawings substantiating the claimed exemption as a residential property <5 stories OR 62.5' or less in height with measurements.

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Option A: Green Space – Additional Green Buildings Requirements:

#	Construction Phase	Applicable Code Section	Submittal Item	Requirement
12	Roof Permit		GBO landscape site plan	Provide detailed calculations of green space required including dimensioned roof plan(s) for vegetated roofs *if applicable*.
13	Roof Permit	R+Rs 4.02(b)(v)	GBO landscape site plan notes	Provide a GBO sheet that includes the building area calculation, site plan, landscape plan and the following note: *Green space is shown on this site development plan for compliance with Article XIII of Chapter 10, must be maintained, and cannot be used for purposes other than that shown on this site development plan. Should a future amendment change the amount or location of this green space, then additional green space must be provided to document compliance or payment of cash-in-lieu fees will be required.*
14	Roof Permit		GBO landscape site plan notes	Statement signed by landscape architect stating design is per GBO.
15	Roof Permit		GBO landscape general notes	Provide a general note in the landscape documents underscoring the applicability of GBO landscape requirements.
16	Roof Permit	R+Rs 4.02 (d)(ii)(2)(b)	GBO vegetated roof plan	Provide a roof plan identifying and dimensioning all GBO R+Rs required clearances *if applicable*.
17	Roof Permit	R+Rs 4.02 (d)(vi)	Vegetated roof details and specifications	Provide details and system specifications for approved manufactured systems.
18	Roof Permit	R+Rs 4.02(e)(iii)	GBO irrigation plans	Provide irrigation plans per GBO requirements.