



City of
Golden

PLANNING & DEVELOPMENT

TEL: 303-384-8097

PUBLIC WORKS

TEL: 303-384-8151

1445 10TH ST. GOLDEN, CO 80401

FAX: 303-384-8161

WWW.CITYOFGOLDEN.NET

Sustainability-Nonresidential or Multi-family

Standards, Guidelines and Menu Requirements for Permit/Plan Submission

Address: _____ Permit/Case Number: _____

Applicability: All new structures and additions equaling over 25% of the original structure's square footage. For additions, sustainability is only required for that portion of the building.

Photovoltaic energy generation system calculation

What is structure's modeled electric consumption annually(kWh): _____

What is the modeled offset of the proposed photovoltaic energy system(kWh): _____

Total offset (percentage): _____

How many points are being requested? _____

Building Envelope Efficiency

What is the building's total energy efficiency based on the adopted building code (% EUI-Energy Use Intensity)?: _____

How many points are being requested? _____



Section I. Standards-Section 18.40.340 (All applicable standards must be met)

Standard	Applicable Yes/No	Explanation of compliance, including reference to document showing compliance	Staff Comments
1. Install a photovoltaic energy generation system on-site that offsets ten percent (10%) of the structure(s) modeled electrical consumption on an annual basis.			
2. Provide and install a programmable thermostat for each individual commercial building, tenant-occupied space in a commercial building, or multifamily dwelling unit.			
3. Provide and install separate electricity meters for each individual multifamily dwelling unit or tenant-occupied space in a commercial building. For natural gas, must provide and install separate meters for commercial tenant spaces 10,000 square feet or more.			
4. Demonstrate through energy modeling software that the multifamily or commercial project exceeds the minimum applicable International Energy Conservation Code standards adopted by the city by at least four percent.			
5. Integrate in any trash enclosure an equal-sized space and access for recycling receptacles adjacent to any trash receptacles.			
6. Provide and install one level 2 electric car (EV) charging station per 15 required parking spaces for the project and EV ready conduit for 15 percent of the total required parking spaces on-site. This requirement shall only apply once the total minimum required parking spaces for the project reaches 15, using rounding for any subsequent charging station requirements.			



Standard	Applicable Yes/No	Explanation of compliance, including reference to document showing compliance	Staff Comments
7. All fenestrations must achieve u-values of .25 or below.			
8. Use EPA Water Sense certified water conservation measures for fixtures including flush urinals, dual flush toilets, faucets and showerheads, drip irrigation with rain sensors and industrial conservation measures.			
9. Provide an amount of bicycle parking on site equivalent to ten percent of the minimum vehicle parking requirement.			
10. Install an all-season bus shelter if the property abuts ROW that is within an existing transit route and a stop is adjacent to the property boundary.			
11. Install heat reflective roof materials. Minimum 29 SRI (solar reflective index) materials qualify.			



Section II. Guideline-Section 18.40.341 (50% of applicable guidelines must be met)

Guideline	Applicable Yes/No	Explanation of compliance, including reference to document showing compliance	Staff Comments
1. Provide community garden plots, fruit trees, or other means of food production on site for a minimum of 15 percent of residential units to foster local food production. Plots must be a minimum of 20 square feet each.			
2. Plant at least 20 percent additional trees than otherwise required to maximize shade over paved or covered areas in summer (deciduous east, west, south), provide a wind break in winter (evergreens to north) and reduce the urban heat island effect in parking areas and throughout the site.			
3. Install building automation system for advanced monitoring, which can include networked controls of multiple building systems, such as heating and cooling, ventilation, daylighting and lighting.			
4. Install energy or heat recovery ventilation (E/HRVs) for energy efficiency and balanced ventilation.			
5. Daylighting or passive lighting for at least 20 percent of internal spaces. Skylights, solar tubes and lumen sensors are examples.			
6. Install a green roof in accordance with applicable stormwater standards and building codes.			



Guideline	Applicable Yes/No	Explanation of compliance, including reference to document showing compliance	Staff Comments
7. Employ stormwater runoff reduction strategies to slow runoff and promote infiltration by routing stormwater through bioswales, rain gardens and/or permeable pavement designed in accordance with the City of Golden Stormwater Standards Manual.			
8. Provide compost bin location on the property with contract for pick-up service.			
9. Provide a bike repair station and secure and enclosed parking (e.g. lockers, storage room) for at least 50 percent of the bike parking required.			
10. Provide number of shower units for a minimum of two percent of all full time equivalent employees.			



Section III. Menu-Section 18.40.350 (20 points must be achieved). If adding high-energy use, additional points may be required.

	Menu Item	Points	Documentation Required	Explanation of Compliance and Points Requested
Energy Efficiency				
1.	Sustainability menu requirements and associated point system shall be waived if project achieves LEED Gold or the Passive House Standard.	20	For LEED Gold, provide proof of registration accepted by USGBC and completed LEED checklist for site plan review. Construction drawings and LEED templates required for building permit. For Passive House Standard, project must be certified by the Passive House Institute (PHI) or PHI U.S.	
2.	Increase energy efficiency of structure over the energy efficiency standards set forth in section 18.40.340. Points are awarded on a sliding scale with one point for every two percent increase in energy efficiency, up to 20 points. Points may be awarded for efficiency gains in specific systems, such as lighting or mechanical, but more points may be awarded for an integrated design approach.	1 - 20	Using data from an energy model of each building, complete REScheck or COMcheck Compliance Certificate for interior and exterior lighting, building envelope, and mechanical equipment, and provide proof of energy modeling for structures and/or additions greater than 10,000 square feet in size, with a defined performance target that demonstrates projected energy efficiency in Energy Use Intensity (EUI) units. HERS rating may be used for attached residential units, with one unit serving as the model for all units if identical construction methods are used.	
4.	Offset traditional energy usage with renewable energy production on site beyond the solar requirement standard set forth in section 18.40.340. There will be one point awarded for every four percent reduction in energy use, ending with 20 points for a net zero building that produces as much power as it consumes over the course of a calendar year. The cash in lieu provision outlined in Section 18.40.340 (1) is applicable for site specific conditions as described in this section.	1 - 20	Applicant must demonstrate the projected energy usage of the structure and calculate the percentage of that power that will reliably be produced on site. Building department staff will verify the model and projected renewable energy component.	



	Menu Item	Points	Documentation Required	Explanation of Compliance and Points Requested
5.	Install additional level 2 or higher electric plug-in stations for hybrid and electric vehicles on-site over the minimum applicable standard set forth in section 18.40.340 for one to five points over the minimum applicable standard set forth in section 18.40.340 for one point for every two spaces.	1 - 5 total	Site plan must demonstrate location and number of station locations, and applicant must provide product specification sheets.	
Community Preservation and Revitalization				
1.	Preserve an existing structure when increasing square footage or creating additional structures. To receive points, all structures must also be brought into compliance with currently adopted IECC Code. Points awarded on a sliding scale with one point for the first 1,000 square feet and then one for every 1,000 square feet thereafter, up to a maximum of five points.	1 - 5	Site plan and building plans shall both reflect the building square footage being preserved on site.	
2.	If preserving a historically designated structure, applicant may be awarded five additional points for improving energy efficiency while maintaining both the character and structural integrity of the building.	5	Provide elevation drawings with site plan submittal that demonstrate preservation efforts, as well as achieve energy efficiency points per the "Energy Efficiency" category of this menu.	
3.	Add affordable dwelling units (as defined in chapter 18.04) to a project. Points awarded on a sliding scale, with two points awarded for every affordable dwelling unit created up to a maximum of ten points.	2 - 10	Demonstrate at site plan review and at building permit review with details on size and price points of units. Deed restriction is required, and proof shall be provided in order to get c/o.	



For projects involving the installation of certain high-resource use features, the minimum number of points increases according to the following schedule:

High Energy-Use Feature	Additional Sustainability Points Required	Provided on Plan Yes/No
Gas fire pits exceeding 40,000 BTU	5	
Indoor heated swimming pool	5	
Outdoor heated swimming pool	10	
Hot tub or spa	5	
Snow and ice melt system	5	

Applicant Summary of Menu Points	
Menu Point Items	Points Requested
Total Points:	