



ALBANY CALIFORNIA

GREEN BUILDING RESOLUTION REGULATIONS WORKSHEET

Review the City of Albany Green Building Resolution Regulations and complete each section of the worksheet applicable to your project.

		CITY OF ALBANY REGULATION	Existing Single-Family	NEW Single-Family	Existing Multi-Family	NEW Multi-Family	Existing Non-Residential	NEW Non-Residential
1	Permeable Paving	30% of all paved areas of the property, excluding the primary driveway, entry walkway, and entry porch or landing, must use permeable paving.	■	■	■	■		
2	Low Carbon Concrete	Cement content of concrete must be reduced by at least 25% by replacing with fly ash, slag, silica fume, rice hull ash, or another similar material.	■	■	■	■	■	■
3	Kitchen Faucets	Kitchen faucets must have a maximum flow of 1.5 gallons per minute or less.	■	■	■	■		
4	Energy Star rated appliances	Each residential unit in which a clothes washer or dishwasher is to be installed, at least one of those appliances must be Energy Star approved.	■	■	■	■		
5	Resilient Flooring	At least 90% of the total area of resilient flooring installed must comply with Volatile Organic Compound (VOC) emissions limits by being a certified UL GREENGUARD Gold product OR a Resilient Floor Covering Institute (RFCI) FloorScore Program certified product.	■	■	■	■	■	■
6	All-Electric Construction	Newly-constructed buildings must be all-electric, with no gas appliances. *This requirement also applies to ADUs and major alterations subject to the fire sprinkler requirement.	*	■	*	■	*	■
7	EV Charging	20% of parking spaces must be equipped with level 2 EV Chargers. The remainder must be EV-Ready.				■		
8	Designated Parking Spaces	12% of parking spaces must be designated for Clean Air Vehicles.					■	■
9	Water Use	Reduce indoor water use by 12% via prescriptive or performance methods.						■

1. PERMEABLE PAVING

"Permeable paving" is any paving materials or techniques that allow water to percolate through the paved surface to the soil below. Examples: gravel, spaced brick or tile, permeable asphalt or concrete
 When calculating the total paved area of your property, you can exclude the primary driveway, entry walkway, and entry porch or landing. You can also exclude any accessible routes for persons with disabilities.
 30% of the remaining paved area after those exclusions must use permeable paving.

Will the project involve installing or replacing paving?

YES / NO

If yes, list the paved areas below, separated into permeable areas and non-permeable areas. DO NOT include exempted areas in the list.

PERMEABLE PAVEMENT AREAS		
Location	Sq Ft	Pavement Type
Permeable Subtotal	(A)	
IMPERMEABLE PAVEMENT AREAS		
Location	Sq Ft	Pavement Type
Permeable Subtotal	(B)	

TOTAL PAVED AREA (A+B): _____ = (C)

PERCENTAGE OF PERMEABLE PAVING (A/C) = _____ (Must be at least 0.3)

Example:

PERMEABLE PAVEMENT AREAS		
Location	Sq Ft	Pavement Type
Front Walkway	25	Gravel
Side Walkway	50	Gravel
Front Patio	50	Brick Pavers
Permeable Subtotal	125 (A)	
IMPERMEABLE PAVEMENT AREAS		
Location	Sq Ft	Pavement Type
Back Patio	120	Concrete
Permeable Subtotal	120 (B)	

Total Paved Area (A+B): 125 + 120 = 245 (C)

Percentage of Permeable Paving (A / C) = 125 / 245 = 0.49

2. LOW CARBON CONCRETE

The cement content of concrete must be reduced using additives such as fly ash, slag, silica fume, rice hull ash, or another similar material. For residential projects, the weight of the additives must equal at least 25% of the weight of the total cementitious material (additives and cement). For non-residential projects, concrete additives must follow the equation: $F/25 + SL/50 + UF/12 \geq 1$.

Will the project involve pouring concrete?

YES / NO

To demonstrate compliance, fill out the following equations for each concrete mix used in the project. If the concrete mix has not been determined yet, write "TBD" and complete when the mix is determined.

RESIDENTIAL:			
Weight of Cement + Weight of Additives = Weight of Total Cementitious Material	<hr style="border: 1px solid black;"/> + <hr style="border: 1px solid black;"/> =		<hr style="border: 1px solid black;"/> ÷ <hr style="border: 1px solid black;"/> =
Example: Weight of Cement + Weight of Additives = Weight of Total Cementitious Material	<hr style="border: 1px solid black;"/> 100 + <hr style="border: 1px solid black;"/> 50 = 150	Weight of Additives / Weight of Total Cementitious Material = (Must be at least 0.25)	<hr style="border: 1px solid black;"/> 50 ÷ <hr style="border: 1px solid black;"/> 150 = 0.33

NON-RESIDENTIAL

Calculate Total Weight of materials used for all concrete.

Cement _____ lbs
 Slag Cement _____ lbs
 Silica Fume, Metakaolin, or UFFA _____ lbs
 Fly Ash, Pozzolan, or other SCM _____ lbs
 ADD ABOVE = Total Cementitious Material (TCM)
 _____ lbs

Determine values of SL, UF and F and complete below equation.

$$SL = \frac{\text{slag cement}}{\text{TCM}} = \frac{\quad}{\quad}$$

$$UF = \frac{\text{silica fume, UFFA}}{\text{TCM}} = \frac{\quad}{\quad}$$

$$F = \frac{\text{fly ash, SCM}}{\text{TCM}} = \frac{\quad}{\quad}$$

$$\left(\frac{\quad}{50}\right) + \left(\frac{\quad}{12}\right) + \left(\frac{\quad}{25}\right) = \quad \text{(must be } \leq 1)$$

For each of the measures below, simply mark YES or NO to identify whether the measure is applicable to your project.

3. ENERGY STAR RATED APPLIANCES	
<p>In each unit where a dishwasher or clothes-washer is being installed, at least one dishwasher or clothes-washer shall be Energy Star approved.</p> <p>A unit is an individual residence. Only one appliance per unit needs to be Energy Star approved. If the residence only has a clothes-washer but no dishwasher, or vice versa, the appliance that is installed will need to be Energy Star approved.</p>	<p>Will the project involve installing at least one clothes washer or dishwasher?</p> <p>YES / NO</p>

4. KITCHEN FAUCETS	
<p>All kitchen faucets must have a flow rate of no more than 1.5 gallons per minute, either through the use of a low flow faucet, or aerator.</p>	<p>Will the project involve installing or replacing a kitchen faucet?</p> <p>YES / NO</p>

5. RESILIENT FLOORING	
<p>Resilient flooring is nontextile synthetic flooring materials which have a firm surface but offer a slight give or bounce. Examples: vinyl tile, linoleum, cork, rubber, polymer flooring.</p> <p>At least 90% of the total area of resilient flooring installed must use products that are certified by one of the two programs below.</p> <ol style="list-style-type: none"> 1. Products certified UL GREENGUARD Gold 2. Products certified under the Resilient Floor Covering Institute (RCFI) FloorScore Program. 	<p>Will the project involve installing or replacing resilient flooring?</p> <p>YES / NO</p>

6. ALL-ELECTRIC CONSTRUCTION	
<p>Newly constructed buildings (including ADUs) and major alterations subject the fire sprinkler requirement must be all electric. This means that the building must not use any gas-powered appliances.</p> <p>Exemptions: Restaurants, scientific laboratories, existing appliances in attached ADUs, and demonstrated financial hardship or infeasibility. Exemptions require a separate staff review process.</p>	<p>Is this project a new building including ADU or a major alteration subject to the fire sprinkler requirement.</p> <p>YES / NO</p> <p>If yes, are you claiming an exemption?</p> <p>YES / NO</p>

7. EV CHARGING

<p>In new multi-family buildings, at least 20% of the parking spaces must be electric vehicle (EV) charging stations. The remainder of spaces must be EV-Ready, with inaccessible wiring installed and electrical panel capacity.</p> <p>EV-Charging spaces must have a level 2 charger available at the space. They must be able to deliver 40 amps of power at 240 volts. The EV-Ready spaces must have all inaccessible raceway installed. This means that the physical pathways for future wiring must be installed during construction if they won't be accessible later (for example if they will be underground or go through a wall). If the raceway will be accessible, such as on the outside of a wall or ceiling, it does NOT need to be installed during construction. The raceway must lead to an electrical panel with enough capacity to serve each required EV charging space with 40 amps at 240 volts. The panel must also include an open breaker space labeled "EV-Ready" for each EV-Ready parking space.</p>	<p>Is this project construction of a NEW MULTI-FAMILY DWELLING (three or more units)?</p> <p style="text-align: center;">YES / NO</p>
---	---

Total number of parking spaces: _____ **X 0.2 =** _____ **number of required EV Charging Stations (rounded to nearest whole number)**

Remaining spaces must be EV Ready

8. DESIGNATED PARKING SPACES

<p>12% of parking spaces (rounded to the nearest whole number) must be designated for clean air vehicles.</p> <p>Clean air vehicles include any zero-emissions vehicle, vehicles with High-occupancy Vehicle (HOV) carpool lane stickers, or carpool or van pool vehicles. Each space must be marked with the words "CLEAN AIR/VANPOOL/EV" in stall striping paint at the end of the stall striping.</p>	<p>Does the project involve construction of a NEW NON-RESIDENTIAL unit?</p> <p style="text-align: center;">YES / NO</p>
--	---

Total number of parking spaces: _____ **X 0.12 =** _____ **number of required marked Clean Air spaces (rounded to the nearest whole number)**

9. WATER USE

<p>Reduce indoor water use by 12% via prescriptive or performance methods.</p> <p>The prescriptive method, which requires all plumbing fixtures in the building have a 12% reduction in flow rate and the performance method, which requires a calculation showing that the overall water use in calculate the overall water use of the building and demonstrate that it is at least a 12% reduction from the maximum water use.</p> <p>Choose only ONE of the methods and fill out the worksheet for that method below.</p>	<p>If this project involves construction of a NEW NON-RESIDENTIAL unit, which method will be used to meet compliance:</p> <p style="text-align: center;"> <input type="checkbox"/> Prescriptive OR <input type="checkbox"/> Performance </p>
---	--

PRESCRIPTIVE METHOD

Fill in the flow rate of the fixtures to be installed in the far-right column. The actual flow rates may not be greater than those listed in the "Maximum flow rate at 12% reduction" column.

Fixture Type	Maximum flow rate at 12% reduction	Actual flow rate of installed fixtures
Showerheads	1.8 gpm @80 psi	
Lavatory Faucets	0.35 gpm @ 60 psi	
Kitchen Faucets/ Aerators	1.6 gpm@ 60 psi	
Wash Fountains	1.6 gpm/20 [rim space (in.) @ 60 psi]	
Metering Facuets	0.18 gallons/cycle	

Metering Faucets for wash fountains	0.18 gallons/ cycle 20 [rim space (in.) @ 60 psi]	
Water Closets	1.12 gallons/flush	
Floor mounted urinal	0.44 gallons/flush	
Wall Mounted urinal	0.11 gallons/flush	

PERFORMANCE METHOD

Fill in the number of occupants, using Table A, Chapter 4 of the California Plumbing Code to determine occupant load. Then, multiply the numbers in each row to determine the baseline gallons per day for each fixture. Finally, add together all the gallons per day to determine the total gallons per day.

Fixture Type	Baseline Flow Rate	Duration (min or cycle)	Daily Uses	Occupants	Gallons per day
Showerheads	2 gpm	5	1		
Lavatory Faucets	0.5 gpm	25	3		
Kitchen faucets	1.8 gpm	4	1		
Aerators	2 gpm	4	1		
Wash Fountains	1.8/20		3		
Metering Faucets	0.2 gal per 20" rim space	1	4		
Water Closet	1.28	1	4		
Floor mounted urinal	0.5	1	2		
Wall mounted urinal	0.125	1	2		
Total	-----	-----	-----	-----	Baseline GPD

In this chart, fill in the same number of occupants, but insert the actual flow rates of the fixtures to be installed. Then, multiply each row to determine the gallons per day, and add up to the total gallons per day at the bottom.

Fixture Type	Actual Flow Rate	Duration (min or cycle)	Daily Uses	Occupants	Gallons per day
Showerheads		5	1		
Lavatory Faucets		25	3		
Kitchen Faucets/aerators		4	1		
Wash Fountains		1	3		
Metering Faucets		1	4		
Water Closets		1	4		
Floor mounted urinal		1	2		
Wall mounted urinal		1	2		
Total	-----	-----	-----	-----	Actual GPD

$$\frac{\text{Actual GPD}}{\text{Baseline GPD}} = \text{_____} \text{ (must be no more than 0.88)}$$