2010 California Green Building Standards Code

CAL Green

Davis

BACKGROUND

- In 2007 the City of Davis Building Division was directed by Council to Develop GBO
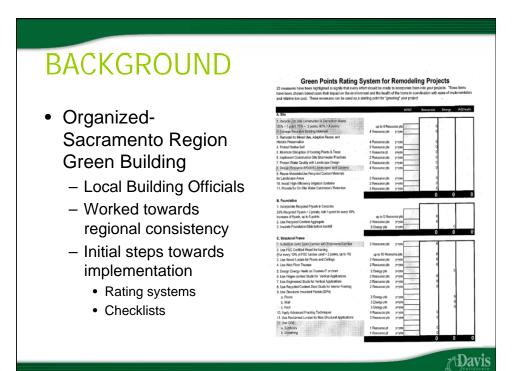- Starting from zero….

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BACKGROUND

Education and Training
- CGBP
- Green Point Rater
- LEED AP
- Sonoma State
- BPI Building Analyst
- PG&E Commissioning Classes
- HERS
- Reviewed existing GBOs

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BACKGROUND

- Organized- Sacramento Region Green Building
  - Local Building Officials
  - Worked towards regional consistency
  - Initial steps towards implementation
    - Rating systems
    - Checklists

Green Points Rating System for Remodeling Projects

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BACKGROUND

- Green Building Forums
  - Invited Stakeholders
    - Designers
    - Contractors
    - Owners
    - Suppliers
    - Citizens
    - Staff

BACKGROUND

- Green Building Forums
  - Developed contact list for future forums and meeting announcements.
  - Sought input and encouraged collaboration
  - Presented and encouraged participation in the Natural Resources Commission meetings

BACKGROUND

- Davis City Council approves mandatory GBO, effective 9/01/2008
- Build It Green for Residential
    - 70-90 points SFD
    - 40 points Room Additions
    - 10 points Remodels
- LEED for Non-Residential
    - 20-28 points for new
    - 8-15 points for Tenant Improvements

OUTREACH

- Green building info available on website and at public counter
    - Checklists
    - Forms
    - General information

OUTREACH

- Green Building and CALGreen informative power point presentations at counter

OUTREACH

- CAL Green and green building presentations and seminars
  - UC Davis
  - Cosumnes River College
  - Sacramento Valley Association of Building Officials (SVABO) classes
  - Construction Specifications Institute Product Show

TRAINING

- Expert on Staff
  - Champion of green building
  - Go-to person for questions and info
  - Similar to accessibility, electrical, structural etc..

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TRAINING

- Buy-in from staff is necessary
  - Importance of the compliance with CAL Green must be stressed by supervisors
  - Expectations for staff should be clear
  - Follow-up in field

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TRAINING

- CGBP training and certification
  - Demonstrate importance with investment in staff training
  - CAL Green seminars and training
  - CGBP certification
    - Staff becomes credible source of information
    - Professional development

IMPLEMENTATION

- Existing ordinances vs. CAL Green
- Coordinate with other Departments or Divisions within the Jurisdiction
  - Waste Diversion
  - SWPPP
  - Landscape Ordinance
  - Dark Sky Ordinance
  - Heat Island/Parking Lot Shading
  - Bicycle Parking

IMPLEMENTATION

- Create a culture within the organization that embraces CALGreen
- State law requires enforcement
- Define staffs roles in implementation
  - What
  - Who
  - When
  - How

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PLAN REVIEW

- Primary educator of the public
- Review checklists
- Measures on checklist incorporated into plans
- Complete set of plans eliminates conflicts in the field

CITY OF DAVIS
DEPARTMENT OF COMMUNITY DEVELOPMENT AND SUSTAINABILITY
23 Russell Blvd. Davis CA 95616
530 757-5610 FAX 530 757-5660

CAL-GREEN RESIDENTIAL ROOM ADDITION / REMODEL APPLICATION CHECKLIST

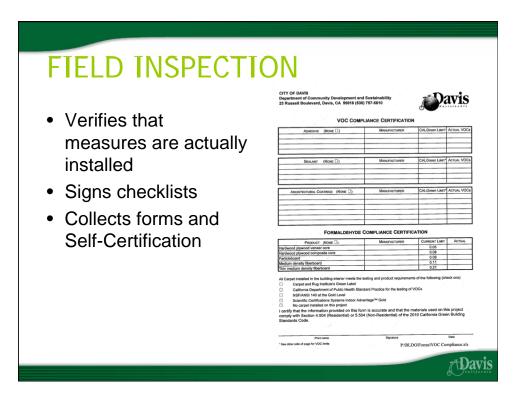| Feature or Measure	Required	N/A	Approval
A4.203.1 Exceed the California Energy Code requirements by 15%			
4.303.1 Indoor water use shall be reduced by at least 20 percent using one of the following methods. 1. Water saving fixtures or flow restrictors shall be used. 2. A 20 percent reduction in baseline water use shall be demonstrated. (7/1/2011)			
4.303.2 When using the calculation method specified in Section 4.303.1, multiple showerheads shall not exceed maximum flow rates. (7/1/2011)			
4.303.3 Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with specified performance requirements. (7/1/2011)			
A4.303.1 Kitchen faucets and dishwashers shall comply with this section. Tier 1. The maximum flow rate at a kitchen sink faucet shall not be greater than 1.5 gallons per minute at 60 psi. (7/1/2011)			
A4.403.2 Cement use in foundation mix design is reduced. Tier 1. Not less than a 20 percent reduction in cement use.			
A4.405.3 Postconsumer or preconsumer recycled content value (RCV) materials are used on the project. Tier 1. Not less than a 10 percent recycled content value.			
4.406.1 Joints and openings. Annular spaces around pipes, electric cables, conduits or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.			
A4.408.1 Construction waste generated at the site is diverted to recycle or salvage in compliance with the following: 1. Tier 1 at least a 65 percent reduction			
4.503.1 Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with US EPA Phase II emission limits where applicable. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.			
4.504.1 Duct openings and other related air distribution component openings shall be covered during construction.			

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FIELD INSPECTION

- Where the rubber hits the road
- Staff Inspections or Special Inspection
- Dialogue with contractor-no surprises
- Successful implementation requires buy-in from field inspectors

FIELD INSPECTION

- Verifies that measures are actually installed
- Signs checklists
- Collects forms and Self-Certification

COSTS TO JURISDICTION

- Training
- Additional staff time for enforcement
- Final verification and QC of 3rd Party Inspections/Special Inspections

COST TO BUILDER/OWNER

- 3rd Party Verification
- Consultants
    - HVAC Design
    - SWPPP
    - Commissioning
    - Water budgets
    - Sub-metering
    - Materials

IMPEDIMENTS TO IMPLEMENTATION

- Staff Buy-in
- Unreasonable expectations
- Timely posting of info on website
- Construction practices
  - New and different methods
  - Learning curve
- Material availability
  - Recycled materials
  - Fixtures
  - Etc.....

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QUESTIONS

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