

ARCHITECTURAL DESIGN GUIDELINES

Minimum Design and Construction Standards for New Construction and Substantial Rehabilitation Developments

By

**Community Development Commission/
Housing Authority of the County of Los Angeles**

TABLE OF CONTENTS

I. DESIGN REVIEW PROCESS & SUBMITTAL REQUIREMENTS

- A. NOFA Application Phase: Technical Review/Scoring of Schematic Design
- B. Loan Committee Phase: Review of Drawings and Specifications

II. FUNDAMENTAL DESIGN CRITERIA

NOFA Application Phase: Scoring of Schematic Design

- A. Site
- B. Building Exterior
- C. Building Interior
- D. Crime Prevention Through Environmental Design (CPTED)
- E. Optional Universal Design Principles

Loan Committee Phase: Review of Drawings and Specifications

- A. Site
- B. Building Construction

III. SUSTAINABLE BUILDING METHODS

IV. SENIOR HOUSING CRITERIA

- A. Mobility: Physical mobility and dexterity issues.
- B. Clarity: Perceptual and orientation issues.
- C. Inclusiveness: Promotion of resident interaction and accessibility for all.

V. STANDARD ACCESSIBILITY REQUIREMENTS

- A. Projects Assisted with City of Industry Funds
- B. Projects Assisted with HOME Funds
- C. NOFA Accessibility Requirements for All Projects
- D. Certification and Acknowledgment of Accessibility Requirements

I. DESIGN REVIEW PROCESS & SUBMITTAL REQUIREMENTS

PHASE		REVIEW	SUBMITTALS	APPLICABILITY
A.	NOFA Application	Design Scoring	Schematic Design	All applications passing threshold
B.	Loan Committee Approval	Design Review	Construction Documents & Specifications	All projects being recommended for funding

The following is a summary of how the Community Development Commission/ Housing Authority of the County of Los Angeles (CDC/HACOLA) scores and reviews the architectural design of proposed projects under the Notice of Funding Availability (NOFA).

Applicants are responsible for ensuring their project design team understands and adheres to all standard accessibility requirements as required by Section 504 of the Rehabilitation Act of 1973 when federal funding is involved.

A. NOFA Application Phase: Technical Review/Scoring of Schematic Design

THRESHOLD REVIEW

The review process begins with the developer's submittal of a project application in response to the NOFA. Project applications are evaluated and determined to either meet or not meet the NOFA Threshold Requirements. These requirements are noted in *Section 6 Threshold Requirements* of the NOFA Guidelines. Should an application not meet the Threshold Requirements, the review process is terminated. The design portion of the application is not evaluated at the Threshold Review.

TECHNICAL REVIEW

Project applications that meet the Threshold Requirements advance to the Technical Review stage where the Development Feasibility, Supportive Services Plan, and Design categories are scored separately. In order for the project to pass Technical Review, it must meet the minimum percentage point thresholds as follows:

Minimum Percentage Point Thresholds Required to Pass Technical Review

Development Feasibility	70%
Supportive Services Plan	70%
Design	70%
Overall Project Total Points	70%

The Design Reviewers examine the submitted schematic design plans based on the *Architectural Design Guidelines*. The complete design evaluation is summarized in the NOFA Design Score Sheet, which applicants receive along with the notification of the Technical Scores for the overall project. Projects that receive less than 70% of possible points in the Fundamental Design Criteria and Sustainable Building Methods categories will not pass Technical Review and therefore not advance for funding approval. Assuming all sixty (60) points for Fundamental Design Criteria are obtained, to meet the 70% Design Threshold, all projects will need to select and pursue a minimum of twenty-four (24) optional points from Sustainable Building Methods.

Design Scoring Categories and Minimum Design Threshold

Fundamental Design Criteria	
Site	10
Building Exterior	10
Building Interior	10
CPTED	20
Optional Universal Design	5
Other Design Considerations	5
Sustainable Building Methods	60
TOTAL POSSIBLE POINTS	120
70% POINT THRESHOLD	84
Min Sustainability Points	24

B. Loan Committee Phase: Review of Drawings and Specifications

Projects that pass Technical Review are recommended to the Board of Commissioners for funding approval. At this stage, the project is assigned to a project manager who will coordinate a more comprehensive Design Review in preparation of presenting the project to the Loan Committee. The project manager will determine the Design Review submittal requirements depending on the development stage of the project when it has to be reviewed by the Loan Committee.

DESIGN REVIEW

Projects located in a city with an existing design review process, which the project has successfully completed, are not exempt from the CDC/HACOLA Design Review process; however consideration will be given to projects that have undergone a rigorous design review that includes an opportunity for public comment. Applicants will be responsible for demonstrating the level of design review completed by its jurisdiction. These projects will undergo one review during underwriting.

Projects located in unincorporated areas of the County of Los Angeles or in a participating city that does not have an existing design review process are subject to

Design Review as well. Projects that go to Loan Committee while still in the early development stage may complete the Design Review based on Schematic Drawings or Design Development documents and draft specifications. However, these projects will require a follow-up Design Review once Construction Documents and specifications are completed. A follow-up Design Review is triggered only when the initial Design Review is based on Schematic Drawings or Design Development documents and draft project specifications.

REQUIRED SUBMITTALS

Once the applicant and the assigned project manager agree on when to take the project to the Loan Committee, either Schematic Drawings, Design Development or Construction Documents are submitted to CDC/HACOLA. Full size Design Development documents and draft specifications are acceptable when Construction Documents and complete project specifications are not available prior to going to the Loan Committee. Construction Documents must include full size prints of architectural, structural, mechanical, electrical, plumbing, and landscape plans, as well as specifications.

SUBSTANTIAL REHABILITATION PROJECTS

To the extent possible applicants proposing substantial rehabilitation projects should make every effort to comply with the Fundamental Design Criteria and Sustainable Building Methods. However given the vast variety of rehabilitation projects possible (e.g. historic, adaptive reuse and mix of new and rehabilitation), CDC/HACOLA staff will exercise discretion to deviate from the guidelines if considered reasonable. Adherence to the guidelines will be considered on a case by case basis and substantial rehabilitation projects will not be penalized for not meeting certain requirements.

PROTOCOL FOR MODIFYING THE ORIGINAL DESIGN

CDC/HACOLA must be notified of significant changes to the design as originally submitted in the NOFA application. Changes considered significant may include but are not limited to modifications in the unit mix, number of units, significant plan or elevation changes, noncompliance with required and selected Sustainable Building Methods, and quality material upgrades or downgrades. All changes, whether they occur prior to or after obtaining the approval by the Loan Committee, will be subject to approval by CDC/HACOLCA staff and may trigger the re-scoring of the project design. Should CDC/HACOLCA staff consider it necessary to re-score the design it will be done at the applicant's expense. CDC/HACOLA reserves the right, at its sole discretion, to reduce or rescind its funding commitment.

II. FUNDAMENTAL DESIGN CRITERIA

NOFA Application Phase: Technical Review/Scoring of Schematic Design

A. Site

1. Open Space for New Construction

Private Area: 60 sq. ft. per ground floor unit, and 30 sq. ft. per non-ground floor unit, with a minimum dimension of 5 ft. Area may be a patio, deck, porch, yard or balcony. Primary access to private open space should not be from bedrooms. Developments for residents with physical safety concerns, SRO's and developments in dense urban areas may be exempt from this requirement.

Common Area (not including circulation or required front and sideyard setbacks unless incorporated into larger usable space):

0 -10 Units	30 sq. ft. per unit.
11-25 Units	20 sq. ft. per unit
26-50 Units	17.5 sq. ft. per unit
51+ Units	15 sq. ft. per unit

Common area should provide amenities to residents and may include seating areas, bbq and tables, play areas or community gardens.

2. Landscaping

- Refer to the Sustainable Building Methods table (page 16) below for required outdoor water conservation measures.
- Preliminary plans must be prepared and must include plant list.
- Drought tolerant plants, less lawn. For more information, refer to LA County's "Drought Tolerant Plant List."
- 1 – 24" box shade tree in front yard for every 50' of street frontage.
- Provide deciduous trees to shade south windows and evergreen trees to shade west windows.
- All landscaped areas or planter boxes must be accessible for maintenance.
- Landscaping requirements will be waived for projects that reuse grey water according to the California Grey Water Standards for outdoor water use.

3. Pedestrian Hardscape Areas

- Where appropriate, permeable paving materials are recommended (e.g. pervious concrete, turf block, pavers, etc.).

4. Fencing/Site Walls

- All front yard and street front fencing must be setback at least 12" from the sidewalk with a landscape strip.
- Common entry gates must have automatic closers.

- Walls facing streets and retaining walls at side or rear of site shall incorporate decorative designs, attractive paint schemes or be accompanied by landscaping such as vines to soften their appearance.

5. Trash Collection

- Trash collection area(s) shall be conveniently located but screened from view.
- Projects are required to have an easily accessible recycling area that serves the entire building.
- Projects of 3 stories or more shall have a trash chute at each floor.

6. Building Placement & Orientation

- Maintain the existing setback patterns within the vicinity of the building.
- Avoid locating a building far in front of or far behind the average setback lines of the properties located on either side of the proposed project.
- When possible, orient building(s) to maximize solar access during cooler months and to control it during warmer months, by, for example, creating a south elevation that is longer than the east and west elevations.

7. Parking

- Whenever possible, locate parking towards the rear of the site to minimize its impact on the street.
- On large projects consider subterranean parking to free up open space at grade level.
- If the garage must be out front, consider multiple doors and recessing the doors to minimize the effect.
- Consider placing second story massing over garage to bring the living space closer to the street and take some attention off of the garage.
- Parking area should provide a safe and secure environment. Minimize the walking distance to insure a short and direct access to the units.
- Provide clear separation between vehicles and pedestrians.
- Use landscaping to soften the visual impact of large parking areas.
- Consider improving unavoidable blank walls with decorative artwork, display cases, vines, and good quality durable materials to minimize graffiti and deterioration.
- Senior housing developments shall provide for a shuttle-bus stop and/or pedestrian drop-off area at main entrance.

B. Building Exterior

1. Height/Scale

- Relate the overall height of the new structure to that of adjacent structures and those in the immediate neighborhood.
- Avoid new construction that varies greatly in height from other residential buildings in the area. Taller projects in areas undergoing transition to larger structures should provide an explanation in the Project Design Narrative.

- Relate the size and bulk of the new structure to the prevalent scale in other buildings the immediate area.
 - Design should reflect a human scale, particularly at street level.
 - On sloped sites, relate scale of project to existing topography. Design should not necessitate unit windows opening onto retaining walls in excess of two stories, but should instead step down along the slope.
2. Massing
- Consider stepping larger structures down towards the street in areas where the predominant scale along the street is single story and pedestrian oriented.
 - Consider breaking larger buildings into smaller pieces.
3. Form
- Consider utilizing a variety of building forms and roof shapes instead of box-like forms with large, unvaried roofs.
 - Ensure forms and shapes work together to create a cohesive whole project.
 - Provide elements such as porches, balconies, landscaping, recessed openings and variation in materials to break up large masses and add visual complexity.
4. Architectural Style
- In neighborhoods with a cohesive or predominant architectural style, incorporate elements of that style into project.
 - Maintain architectural detailing at sides and rear of project.
5. Size and Rhythm of Openings
- Respect the rhythm and proportion of openings prevalent in the immediate area surrounding the new building.
6. Materials and Colors
- Use materials and color for the facade treatment and roofing that is compatible with those in similar good quality buildings in the surrounding neighborhood or region.
 - Avoid introducing drastically different colors and materials than those of the surrounding neighborhood.
 - Use materials that do not require extensive maintenance.
7. Individual Unit Identities
- Whenever possible, divide repetitive structures into smaller clusters to promote individuality and a sense of place for residents.
 - Consider strategies that allow residents to enhance the exterior appearance of their units.
 - Provide transitional space such as an entry porch, or at a minimum, a recessed entrance doorway.

8. Project Entrance
 - Provide a prominent and visible entry.
 - Provide transitional space such as an entry porch to help make the transition from public to semi-private or private space.
 - Consider issues of shelter, security, lighting and identity. Entrance should reflect a human scale.

9. Roof Top Equipment
 - All roof top equipment, with the exception of photovoltaic systems (PV), should be screened from view.
 - No free standing wood screens permitted. Screening shall be achieved through the use of parapet walls and other permanent building features.

10. Windows
 - Window size and placement should maximize day-lighting and natural ventilation.
 - Placement should relate to building interior layout.
 - Kitchens and bathrooms shall have windows wherever possible.
 - Plant-on mullions are discouraged.
 - Consider ways to screen and physically separate ground floor windows from sidewalk to provide privacy and security.
 - Overhangs for south facing windows are recommended.

11. Roofing
 - Design the roof to accommodate future installation of PV systems.
 - Use a light colored cool roof with high solar reflectance index (SRI) value

C. Building Interior

1. Unit Access / Corridors
 - Avoid corridors of excessive length, i.e greater than 100' of unbroken length.
 - Whenever possible provide natural lighting in corridors
 - Providing natural ventilation is encouraged.
 - Individualize unit entrances on corridors. At a minimum, doorways should be recessed.

2. Elevators
 - Provide elevators for all structures with three floors or more and for all senior or disabled projects of two floors or more.
 - Include at least one elevator that accommodates an ambulance stretcher. This requires a cab size of 4'-6" x 6'-8".

3. "Furnishability"
 - Consider ease of moving furniture from street or parking area into each unit

- The placement of doorways, staircases and hallways should permit the easy in and out transport of furniture to the units and building.

4. <u>Unit Sizes</u>	Studio:	400-500 sq. ft.
	1-Bedroom	500-700 sq. ft.
	2-Bedroom	750 - 950 sq. ft.
	3-Bedroom	1,000 - 1,200 sq. ft.
	4-Bedroom	1,200 - 1,400 sq. ft.

5. Room Size Range & Features

- Maximize usable space throughout projects.
- Minimize circulation space such as hallways.
- Rooms should be easily furnishable.

	<u>Room Size</u>	<u>Minimum Room Width</u>
	1-Bedroom	5 linear feet
	2-Bedroom	6.5 linear feet
	3-Bedroom	8 linear feet
	4-Bedroom	9.5 linear feet
Living Area	150-220 sq. ft.	9 ft.
Dining Area	Comfortably seat 2 people per bedroom	
Kitchen Counters/ Base Cabinets	Minimum measurement along front edge of counter, not including sink and cooktop areas:	
Stove/cook top	At least 12" away from any sidewall. Minimum 24" wide in 1-bedroom and smaller units, 30" wide for 2-bedroom and larger units.	
Refrigerators	12 cu. ft. for 1-bedroom or less. 16 cu. ft. for 2-bedrooms. 18 cu. ft. for 3-bedrooms or more.	
Dishwashers	Desired in all 2-4 bedroom units.	

Garbage disposals (Recommended)

	<u>Room Size</u>	<u>Minimum Room Width</u>
Bedroom	90-120 sq. ft.	9 ft.
Bedroom Storage	10 sq. ft. min.	
Master Bedroom	150-200 sq. ft.	12 ft.
M. Bdrm. Storage	20 sq. ft. min.	

	<u>Room Size</u>	<u>Minimum Room Width</u>
General Storage	105 c.f.	
Linen Storage	28 c.f.	

6. Common Indoor Areas

Community Room

- A minimum of 400 sq. ft. for developments of 15 units or less.
- A minimum of 600 sq. ft. for developments of 16 units or more.
- Public restroom and microwave alcove are required.

Laundry Area

- Common laundry area shall have one washer and dryer for every 10 units. Senior developments shall have one washer and dryer for every 15 units.
- Common laundry areas shall have a minimum 6' long countertop surface.
- Provide adequate natural light and ventilation.
- Provide visibility and access to outdoor recreation space or community room for supervision of children.

Rental Office/ Manager's Unit

- If provided, locate conveniently to main entrance and common areas for site security.

D. Crime Prevention Through Environmental Design (CPTED)

CDC/HACOLA supports creating safe neighborhoods through the implementation of Crime Prevention Through Environmental Design (CPTED). The basic premise of CPTED is that the nature of buildings and layout of a community can attract offenders and make it easier for them to commit crimes and escape arrest. CPTED focuses on eliminating these features at the design stage to reduce crime and the fear of crime.

The five overlapping concepts or strategies which are incorporated in CPTED are:

- Access Control
- Surveillance
- Territorial Reinforcement
- Activity Support
- Image and Maintenance

Architectural designers should make sure to:

- Provide clear border definitions of controlled space.
- Provide clearly marked transitional zones that indicate movement from public to semi-public to private space.
- Relocate gathering areas to locations with natural surveillance.

- Place unsafe activities in safe spots to overcome the vulnerability of these activities with natural surveillance and access control of the safe area.
- Redesign space to increase the perception or reality of natural surveillance.
- Careful planning a reduced number of entry points.
- Place signage to advise visitors what the access restrictions are and where they must go if they are authorized to enter your territory.
- Eliminate blind spots around the project site where individuals approaching the site cannot be observed.
- Include fencing and landscaping to direct the circulation flow of persons to a select observable pathway.
- Make sure that landscape plant material that is selected will not block windows and eliminate opportunities for natural surveillance.
- Consider the use of reflective glass so that you can see out but outsiders cannot see in.
- Plant low vegetation with thorns or other repelling qualities adjacent to first floor windows to prevent outsiders from approaching windows.
- Provide good outdoor lighting standards that illuminate pathways evenly and without shadow pockets.
- Pre-wire for future security cameras is recommended.

E. Optional Universal Design Principles

Non-Senior Housing projects that volunteer to incorporate the below principles of Universal Design will receive five (5) optional points. To receive these points a minimum of half of the project's units shall include:

- Accessible routes of travel to the dwelling units with accessible 34" minimum clear-opening-width entry.
- Interior doors with lever hardware and 42" minimum width hallways.
- Accessible full bathroom on primary floor with 30" x 48" clearance parallel to and centered on front of all major fixtures and appliances.

Loan Committee Phase: Review of Drawings and Specifications

A. Site

1. Landscaping

- Refer to the Sustainable Building Methods table (page 16) for required outdoor water conservation measures.
- The final Plans must be prepared by a landscape architect licensed in the State of California.
- All new planted areas to be heavily mulched for water conservation.
- Automatic irrigation system to be provided.
- Provide redwood bender board edging or equal at planter bed and turf boundaries.

2. Parking
 - Parking area and overall site should have adequate lighting.
3. Fencing
 - If used, all wrought iron to be painted a dark color.
 - Line posts shall be galvanized.
4. Trash Collection
 - Trash enclosure for dumpsters shall have a concrete pad, CMU walls, and heavy-duty metal gates with perforated metal cladding. 3x12 wood crash rails or 6"x6" concrete curbs shall be installed on 3 sides of the interior.
 - The gates should be located 6 inches off the ground to improve surveillance into the area to reduce loitering.
5. Curbs
 - Provide concrete curbs at or around all drives and parking areas

B. Building Construction

1. Recycled Content Materials
 - Refer to the Sustainable Building Methods table (page 16) for specific recycling material content requirements.
 - The use of recycled content insulation, drywall, carpet and other "green" materials is encouraged wherever possible.
2. Indoor Air Quality Materials
 - No-VOC paint (5 g/l or less) for indoors is required.
 - Formaldehyde-free insulation is required
 - Formaldehyde-free or fully sealed material for cabinets and counters are encouraged.
3. Roofing
 - Minimum 20-year roof.
 - If asphalt shingle use "architectural" profile.
4. Roof Drainage
 - Locate downspouts to drain either into splash blocks, which spill on to planter areas large enough to absorb outflow or directly into an underground drain system.
5. Wood Structural Members
 - The use of engineered wood for headers, joists and sheathing is encouraged.

6. Blocking
 - Provide blocking to provide adequate support for fixtures, cabinets, bathroom accessories, hardware, and other equipment suspended from ceilings or mounted on walls.

7. Solid Surface Countertops at All Wet Locations
 - Must be bullnosed on one side or have a waterfall edge on all sides and an integral splash.
 - No less than 6" ceramic tile is an acceptable alternative to a solid surface.
 - Use a substrate that is free of added formaldehyde and uses low-VOC adhesives.

8. Cabinetry
 - For all developments cabinets shall be constructed in accordance with the Manual of Millwork Standards of the Woodwork Industry published by WIC (Woodwork Institute of California) custom grade for material, hardware and joinery shall apply to all new cabinets.

9. Doors
 - Entry doors to be solid core 1 3/4" thick minimum with reinforced latch and viewfinder.
 - Non-removable hinge pins required on all out swing doors.
 - No windows allowed within 36" of the latch side of the door.
 - Interior doors shall have a 1 3/8" thick hollow core, flush, paint grade hardboard face and prime coated for enamel on all six sides.
 - Hardboard faces or wood veneers on pre-finished interior built-up doors shall be a minimum of 1/8" thick.

10. Door Hardware
 - Use medium or premium grade hardware.
 - Suggested hardware:
 - Schlage AL-Series keyed lever lock or equal.
 - Grade 2 or higher deadbolts.
 - Interior doorstops shall be provided using spring type, screwed to door or wood base, or steel plated rubber wall stops.

11. Windows/Window Coverings
 - All windows shall have NFRC certification of the U-value and Solar Gain Coefficient.
 - Low-emissivity glass is required for all south and west facing windows and encouraged for east facing windows.
 - Screens on all operable windows.
 - Metal horizontal blinds are not permitted.

12. Flooring
- Sustainable materials are encouraged instead of vinyl, and include linoleum, cork, recycled-content rubber and chlorine-free polymer resin tile.
 - Ceramic tile, if used, should have recycled content.
 - Use .080" minimum thickness - Type II Grade A. For family rental units avoid seams and provide 4" cove base at walls in wet locations including bathrooms, kitchens and laundry rooms.
 - 50% of floor area receiving resilient flooring, shall be certified under the Resilient Floor Covering Institute (RCFI) FloorScore program.
13. Carpeting
- The use of CRI Green-label, low-VOC carpeting and pad and low-VOC adhesives 25 g/l or less is required.
 - Minimum 10-year performance warranty and the following:
 - Lifetime – Moisture resistant
 - Lifetime – Dimensional Stability
 - Lifetime – No Edge Ravel
 - Lifetime – No Delamination
 - Lifetime – No Zippering
 - Underlayment shall have high recycled content, be nontoxic, and provide both sound barrier and R12 insulating values.
 - Provide wood base, rubber or vinyl covered base at carpet locations.
 - Transition strips shall be provided between carpet and sheet vinyl or other flooring types.
14. Bath Tubs and Shower Enclosures
- Family units must have at least one tub per unit.
 - Use cast iron tubs with ceramic tile surrounds over backer board or high quality fiberglass tub/shower/surrounds
 - Suggested Manufacturer and Model:
 - LASCO Model 2603 3 CT series with reinforced flat wells for adaptable units or equal.
 - LASCO Model 2603-SMH with reinforced flat wells and grab bars for ADA units or equal.
15. Medicine Cabinets
- Provide recessed cabinets (plastic medicine cabinets are not permitted).
16. Appliances
- ENERGY STAR appliances are required. Refer to the Sustainable Building Methods table (page 16) for required energy conservation measures.
17. Kitchen Hoods
- Unvented hoods are not recommended for rehabilitation projects and not permitted on new construction projects.

- Range hoods shall be minimum 6” wider than stovetops and shall be centered over stove.

18. Bathroom Ventilation

Windows are recommended in addition to bathroom exhaust fans capable of providing a minimum of five air changes per hour and a minimum of 50 cfm.19. HVAC

- Provide air conditioning for all separately-metered units.
- Whole house mechanized ventilation (e.g. whole house fans and forced air units with economizer cycles) may be used in lieu of air conditioning.
- ENERGY STAR rated ceiling fans in all bedrooms are encouraged.

20. Fire Extinguishers

- Provide semi recessed or recessed and vandal-resistant fire extinguishers as required by the Fire Department.
- Furnish units with kitchen fire extinguishers of similar standard.

21. Plumbing

- Refer to the Sustainable Building Methods table (page 16) for required indoor water conservation measures.
- Provide vandal-resistant hose bibs.

22. Lighting

- Refer to the Sustainable Building Methods table (page 16) for lighting requirements under energy conservation measures.
- Use fluorescent light fixtures for 100% of light fixtures or comparable energy efficient lighting for the project’s total lighting including common areas.

23. Entry Security System

- Provide security entry system (e.g. intercoms, key cards, combination pads, etc.) for all rental developments.

24. Communication Wiring

- Provide a telephone jack in all bedrooms and in one common area.
- Provide CAT 5 wiring to at least one location per unit.

25. Cable Television

- Provide at least one jack in the living room for units with 2 bedrooms or less.
- Provide a minimum of one jack in at least one bedroom plus one in the living room for units with 3 bedrooms or more.
- Provide MATV (master antenna television) for all developments.

26. Carbon Monoxide Detectors

- Provide at least one hardwired carbon monoxide detector with battery back-up near the bedrooms (no combination smoke detection).

III. SUSTAINABLE BUILDING METHODS

All projects funded under this NOFA are required to meet a minimum threshold for sustainable building development. CDC/HACOLA continues to support and encourage sustainable affordable housing developments in response to Assembly Bill 32, the Global Warming Solutions Act of 2006. These guidelines aim to reduce greenhouse gas emission (GHG) in accordance with Senate Bill 375, the land use, transportation and housing legislation, and the CEQA amendment pursuant to Senate Bill 97 as well as other California climate change, energy and green building regulations.

To be considered for funding, all projects must comply with these minimum Sustainable Building Methods requirements regardless if the project will or will not be subject to compliance with the California Green Building Standards Code (CALGreen), to be effective January 1, 2011. The NOFA application will require that the applicant and project architect certify the development has been designed and will be constructed with the required and selected voluntary Sustainable Building Methods specified below.

Optional points will be awarded under the Sustainable Design category to projects that incorporate sustainable elements beyond those required. The NOFA Energy Efficiency Incentive amount is increased to \$100,000 for developments that commit to design and construct the project to exceed 2008 Title 24 by at least 15% and certify the project under an eligible green building program. Refer to section 7.3 Design of the NOFA Program Guidelines for details on the incentive requirements.

SUSTAINABLE BUILDING METHODS		Optional Points
1	Use of no-VOC interior paint (5 g/l or less).	Required
2	Use of CRI Green-label, low-VOC carpeting and pad and low-VOC adhesives 25 g/l or less.	Required
3	Use insulation that has been certified by the Green Guard Children and Schools standard.	Required
4	Use of materials for all cabinets, countertops and shelving that is free of added formaldehyde or fully sealed on all six sides by laminates and/or a low-VOC primer or sealant (150 g/l or less).	Required
5	Use of at least one of the following recycled materials at the designated levels: a) cast-in-place concrete (20% flyash); b) carpet (25%); c) road base, fill or landscaped amendments (30%).	Required
6	At minimum the project shall recycle and/or salvage 65% of non-hazardous construction and demolition debris.	Required
7	The project will provide a comprehensive recycling program that includes facilitating periodic disposal of batteries, CFLs, electronic waste, and other hazardous waste. An easily accessible recycling area will be provided for tenant use that serves the entire building. [Include in Service Plan]	Required

SUSTAINABLE BUILDING METHODS		Optional Points
8	Use of bathroom fans in all bathrooms that exhaust to the outdoors and are equipped with a humidistat sensor or timer.	Required
9	The proposed project will contain nonsmoking buildings or sections of buildings. Nonsmoking sections must consist of at least half the units within the buildings, and those units must be contiguous.	Required
10	Design the project to retain, infiltrate and/or treat on-site the first one-half inch of rainfall in a 24-hour period.	Required
11	Outdoor water conservation measures include: 1) Use native or drought-tolerant plants for a minimum of 75% of landscaped area; select plants from LA County's <i>Drought-tolerant Plant List</i> found at http://planning.lacounty.gov/green . 2) Limit conventional grass/turf to 25% of landscaped area. 3) Group plants with similar watering needs (hydrozones). 4) Install high efficiency irrigation system with smart irrigation controls for all landscaping.	Required
12	Indoor water conservation measures include: 1) Tank-like toilets shall be high efficiency (1.28 gpf or less). 2) All showerheads shall be water efficient (1.5 gpm or less). 3) Use water-saving fixtures or flow restrictors in the kitchen (2gpm or less) and bathrooms (1.5 gpm or less). 4) Install high efficiency urinals (0.5 gpm or less).	Required
13	Energy conservation measures for all building locations include: 1) ENERGY STAR labeled refrigerators 2) ENERGY STAR labeled dishwashers (6.0 gpc or less) 3) ENERGY STAR clothes washers (water efficient) 4) ENERGY STAR lighting for interior and exterior 5) Fluorescent light fixtures for 100% of light fixtures or comparable efficient lighting.	Required
SUSTAINABLE BUILDING METHODS		Optional Points
14	Projects located within 1/2 mile radius of a bus, light rail or rapid transit system stop with service every 15 minutes during rush hours or within a designated Transit Oriented District.	6
15	Use innovative stormwater management strategies or low-impact development practices onsite.	2
16	Projects proposing a grey water irrigation systems as part of their outdoor water conservation measures.	4
17	Use of Energy Star rated ceiling fans in all bedrooms and living rooms; or use of a whole house fan; or use of an economizer cycle on mechanically cooled HVAC systems.	2

SUSTAINABLE BUILDING METHODS		Optional Points
18	Eliminate mechanical cooling through a combination of building envelope, thermal mass, and passive cooling strategies. A place of refuge with mechanical cooling must be provided for 20% of the project occupancy.	4
19	Install an on-site photovoltaic system that provides a minimum of 10% of the total project electricity demand on an annual basis.	4
20	Design building solar-ready for photovoltaic or solar thermal system. Delineate estimated area on roof that is consistent with potential future system.	2
21	Develop and commit to exceed Title 24 energy standards by at least 15% <u>and</u> certify the project under any one of the following programs: Green Communities Criteria, GreenPoint Rated Multifamily or LEED. TCAC's 4% basis limit boost will also be considered. [20 points and Energy Efficiency Incentive]	20 or 10
22	Develop and commit to exceed Title 24 energy standards by at least 15%. For a substantial rehabilitation project that reduces energy use on a per square foot basis by 25% as calculated using a methodology approved by California Energy Commission. [10 points and no Energy Efficiency Incentive]	
23	Use of California Utility Allowance Calculator (TCAC projects).	2
24	Use resilient flooring that is FloorScore certified.	2
25	Include in the project specifications a Construction Indoor Air Quality Management Plan that requires the following: a) protection of construction material; c) cleaning of ducts upon completion of construction; and d) for rehabilitation projects, implementation of a dust control plan that prevents particulates from migrating into occupied areas.	2
26	Project will provide an Edible Garden Program that includes education, on-site garden space and necessary resources. An off-site program will be considered. [Include in Service Plan] Note: The CDC assumes the applicant has done its due diligence and found the soil to be acceptable for gardening food for human consumption.	4
27	Projects will provide a Composting Program that includes education, necessary resources and on-site composting area for use by all tenants. An off-site program will be considered. [Include in Service Plan]	4
28	The property manager and maintenance staff will be trained in the use of a Green Operations and Maintenance Manual. The manual is to be prepared at pre-lease up using Green Communities' template found at: http://www.greencommunitiesonline.org/tools/resources/index.asp . [For projects not requesting the Energy Efficiency Incentive; include in Property Management Plan]	2

TOTAL 60

IV. SENIOR HOUSING CRITERIA

In addition to conforming to the Fundamental Design Criteria and Sustainable Building Methods, applicants are required to integrate Senior Housing Criteria to respond to the specific needs of the senior population. These needs are based upon the recognition of the senior residents' changing physical conditions, the need for design clarity, and accommodation of the wide range of senior residents' mobility and visual perception capabilities. A well designed Senior Housing development should also support the feeling of community and encourage interaction among its residents through thoughtful and creative design, enhancing the immediate neighborhood.

Senior Housing projects will be evaluated in three basic categories listed below.

A. Mobility: Physical mobility and dexterity issues.

- Easy access from parking areas and project entries to apartments, common areas and outdoor areas.
- Main entrance should have automatic doors to accommodate for resident's declining physical strength.
- Wider corridors, 5' minimum, to accommodate wheelchairs, assisted walking, and two residents walking side by side with mechanical assistance.
- Wider stairwells and landings.
- Elimination of excessive changes in grades; minimum slopes of 1:12 where ramps are required.
- Use lever hardware on doors and other hardware for cabinets, drawers, and closets that is easy to use with minimal physical effort and limited finger dexterity.
- Reasonable access/distance from units to parking, common rooms, trash rooms and laundry.
- Within units, the use of wider doors (2'-10") to rooms, where feasible.
- Maneuvering space in kitchens and bathrooms for wheelchair turning in a diameter of a minimum of 5'. Expanding accessibility features to all units will create a better environment for all residents.
- Include at least one elevator that accommodates an ambulance stretcher. This requires a cab size of 4'-6" x 6'-8".

B. Clarity: Perceptual and orientation issues.

- Organization of the architectural elements for a senior development that are clear and straightforward, without confusing angles and complicated access paths.
- Within a structure and within the individual unit, floor plan layouts that are easy to understand and remember.
- The incorporation of visual cues such as skylights, windows, widened corridors, enlarged corridor intersections, recessed entries (to common rooms and offices), sculptural light fixtures, and colors to serve as spatial points of reference and landmarks for resident navigation.

- Comprehensible signage design that is large enough to read, that offers appropriate visual contrast between text and foreground, and is appropriately located. Clear lobby directories.
- Coupling signage text with recognizable icons that cater to varying levels of literacy and cognitive ability (i.e. line drawing or icon of a computer next to the computer lab sign in the directory).
- The use of wayfinding strategies that incorporate visual access between parts of the building to allow opportunities to monitor interior or exterior landmarks.
- The use of wayfinding strategies that incorporate a degree of architectural differentiation between spaces through the use of distinct shapes and forms.
- Signage design that is large enough to read and is appropriately located. Clear lobby directories.

C. Inclusiveness: Promotion of resident interaction and accessibility for all.

- A project that is accessible to residents of all physical abilities, especially the common areas of parking, outdoor areas, and common rooms including laundry and trash areas.
- A project that can accommodate residents with varying vision, hearing and dexterity levels.
- A project that accommodates the frail and those with physical limitations.
- A project that provides a variety of unit size to accommodate single residents, couples, or residents with caretaker.
- The incorporation of informal meeting places in the main circulation corridors, intersections of hallways, stairways in addition to the common and outdoor spaces.
- Use of doors with glass panels to maintain a visual connection at laundry rooms and common rooms to the corridors and to the building exterior.
- Use of internal window openings along interior corridors to provide visual connections to the exterior or courtyard.
- Common areas that can accommodate a variety of uses for a variety of users.
- Additional design features that promote a sense of community among residents.

V. STANDARD ACCESSIBILITY REQUIREMENTS

Housing Type	HOME & CITY OF INDUSTRY	HOME	
	California: Fair Employment & Housing Act	Federal: Section 504	Federal: Fair Housing Act
New Construction Multifamily Rental	All Projects	All Projects	All Projects
Substantial Rehab Multifamily Rental	N/A	All Projects	N/A

A. Projects Assisted with City of Industry Funds

All developments in California must be designed and constructed in a manner that allows access to and use by disabled persons in accordance with the California Fair Employment and Housing Act (Article 2, Section 12955 of the Government Code, et al).

SENIOR HOUSING PROJECT

A new housing development for seniors with 35 units or more must be designed to meet the physical and social needs of seniors by including all of the required elements as provided in California Civil Code Sec. 51.2 (d). The development shall comply with all other applicable requirements for access and design imposed by law, including, but not limited to, the Fair Housing Act (42 U.S.C. Sec. 3601 et seq.), the Americans with Disabilities Act (42 U.S.C. Sec. 12101 et seq.), and the regulations promulgated by Title 24 of the California Code of Regulations which relate to access for persons with disabilities or handicaps.

In addition, developers of senior housing developments constructed on or after January 1, 2001 are encouraged, but not required, to implement in their construction the principles of Universal Design as promulgated by the Center for Universal Design at the North Carolina State University, or any other design guidelines for home modifications for seniors which may be promulgated in the future by the Department of Aging.

B. Projects Assisted with HOME Funds

In addition to compliance with California law, developments using HOME funding must also comply with Section 504 of the Rehabilitation Act of 1973, the Fair Housing Act, and HUD's implementation Regulations (24 CFR Parts 8 and 100, respectively), which prohibit discrimination based on disability and establish program accessibility and physical accessibility requirements.

For purposes of this NOFA, newly-constructed multifamily rental housing with four or more units shall adhere to both Section 504 and Fair Housing Act design requirements.

Substantial rehabilitated multifamily housing with 15 or more units shall adhere to Section 504 requirements only.

Section 504 design requirements are satisfied when the development is designed in compliance with the technical criteria in the Uniform Federal Accessibility Standards. Fair Housing Act design requirements found in HUD's Fair Housing Act Design Manual are also required. For new construction of rental projects where two or more accessibility standards apply, the developer is required to follow and apply both standards.

To ensure full compliance with Section 504 of the Rehabilitation Act of 1973, the Fair Housing Act, and HUD's implementation Regulations (24 CFR Parts 8 and 100, respectively), the developer and architect must obtain and use:

1. Uniform Federal Accessibility Standards (UFAS)
2. Fair Housing Accessibility Guidelines
3. Fair Housing Act Design Manual (*Revised April 1998, 130 p.*)

All are available from the HUD Distribution Center available at 1-800-767-7468 or at www.access-board.gov/gs.htm or at www.huduser.org/publications/pdrpubli.html.

C. NOFA Accessibility Requirements for All Projects

- Fully adapted units (as defined by Section 504).
 - 5% of total units (min. 1 unit) accessible for mobility impairments.
 - 2% of total units (min. 1 unit) accessible for sensory impairments.
- Adaptable units (as defined by CA Fair Employment & Housing Act).
 - All ground floor units and those serviced by an elevator.
- All common areas including rental office, community room, laundry area, etc.

D. Certification and Acknowledgment of Accessibility Requirements

The application and project architect will be required to certify they understand the accessibility requirements under the NOFA for City of Industry and HOME assisted projects. Furthermore, application and architect are to acknowledge that the development shall comply with all other applicable requirements for access and design imposed by law, including, but not limited to, the Fair Housing Act (42 U.S.C. Sec. 3601 et seq.), the Americans with Disabilities Act (42 U.S.C. Sec. 12101 et seq.), and the regulations promulgated at Title 24 of the California Code of Regulations which relate to access for persons with disabilities or handicaps. Nothing in this section shall be construed to limit or reduce any right or obligation applicable under those laws.