

ATTACHMENT 9

**Delaware State Housing Authority
State of Delaware
LOW INCOME HOUSING TAX CREDIT PROGRAM**

MINIMUM CONSTRUCTION /REHABILITATION STANDARDS

Delaware State Housing Authority ("DSHA") and DSHA staff have specifically relied on the representations contained in the documents provided by the Developer, Borrower and their respective professionals, including but not limited to, their architects, contractors, engineers, surveyors and attorneys (collectively "Developer"). The Developer is responsible for complying with DSHA's minimum construction and rehabilitation standards along with all rules, ordinances and laws of all legal entities and authorities having jurisdiction over the development, and the construction and/or alteration of the development, whether or not such requirements are specifically addressed in the plans and specifications or by DSHA's review. All LIHTC developments must adhere to DSHA's minimum construction standards regardless of financing source(s), including tax-exempt bond financing. In order to meet minimum threshold requirements, the Rehabilitation Standards Checklist must be fully completed for rehabilitation projects. DSHA's agreement to proceed with closing on a loan or other transaction shall not constitute in any manner whatsoever a final approval of the construction/rehabilitation of a development.

- **Fair Housing Amendments Act:**

All projects are required by law to meet the handicap-accessibility standards outlined in the Fair Housing Laws, including the Federal Fair Housing Amendments Act of 1988 (the "Act"). The law provides that failure to design and construct certain residential dwelling units to include certain features of accessible design will be regarded as unlawful discrimination.

- **The Americans with Disabilities Act:**

All projects are required by law to meet the handicap accessibility standards outlined in the Americans With Disabilities Act (ADA). The law provides that failure to design and construct certain public accommodations to include certain features of accessible design will be regarded as unlawful discrimination.

ADA Legislation was passed in July 1990 and became effective on July 26, 1992. Title III deals with non-discrimination on the basis of disability by public accommodations and in commercial facilities. Public accommodations includes all new construction effective January 26, 1993 and impacts any rental office, model unit, public bathroom, building entrances, or any other public or common use area. Existing public accommodations must be retrofitted or altered beginning January 26, 1992, unless a financial or administrative burden exists.

The ADA guidelines do not impact residential units, since these are covered under Fair Housing and Section 504 laws.

- **Delaware State Accessibility Standards:**

All projects are required by law to meet the handicap accessibility standards as outlined in the Delaware State Accessibility Standards. The design and construction guidelines are enforced by state and/or local building code officials. Compliance with these guidelines is mandatory in order to receive a Certificate of Occupancy for your proposed development.

- **Energy:**

Builders/Contractors shall be Delaware Energy Star Partners *and/or* Builders.

Notwithstanding any other energy requirements contained herein, to the greatest extent

practicable, new construction and acquisition/rehabilitation projects shall install energy efficiency components, HVAC equipment and appliances that are Energy Star rated.

Architect Certification:

- All documents/specifications shall be prepared by or under the direction of an architect registered in the State of Delaware, stamped with the design of professional's registration seal and accompanied by a statement signed by the professional certifying compliance with DSHA's Minimum Construction/Rehabilitation Standards.
- Designs that do not meet current code requirements **will not be considered cause for a change order.**
- **Bidding Protocol:**

The bidding protocol is not required for projects receiving Tax Credits only. However, all DSHA projects financed with HDF, HOME or other state funds receiving Tax Credits shall invite a minimum of three (3) pre-qualified builders to provide bid estimates for the proposed projects. The bids shall be sent to the architect of record in a sealed envelope, clearly marked with the project name and date stamped. Faxed or e-mailed bids shall not be accepted. The bids shall be privately opened, tallied and the results forwarded to DSHA and Developer.

Bids shall be awarded to the lowest bidder unless low bid is incomplete.

General Contractor Requirements:

- General Contractors must follow DSHA's bidding protocol. All members of the Development Team including the General Contractor must comply with DSHA's Mortgagor's Draw Requisition and Cost Certification Guide. The Guide is located at the following link:

http://www.destatehousing.com/services/servicesmedia/mortgagors_draw_and_cost_guide.pdf

The General Contractor Certification and Questionnaire shall be completed with all required attachments and submitted to DSHA and approved by DSHA 30 days prior to invitation to bid. The questionnaire can be found at the following link:

http://www.destatehousing.com/services/servicesmedia/contractor_questionnaire.pdf

After DSHA has approved the General Contractor certification, the General Contractor will be placed on a list of approved General Contractors.

DSHA must review/approve bid documents prior to release for bidding.

1. Site Work-

- All new construction shall be designed to obtain 100% accessible routes to all units.
- New construction and rehabilitation/conversion developments (includes all common areas, rental offices, *playgrounds*, etc.) shall comply with State Architectural Accessibility Standards, Fair Housing, and ADA. Most stringent requirements will apply.
- All landscaped areas shall have warrantied weed barriers installed under mulch and maintain 12" buffer between vinyl siding and grass areas, unless siding (fabric only) is at least 8" above finished grade. Minimum landscaping budgets of \$500 per residential dwelling unit are required. This allowance is for **installation of mulch beds, plantings and new trees** only. It may **NOT** be used for fine grading, seeding and/or straw and sod or tree trimming. This is for curb appeal and

- beautification of the property. **Allowance is not to be used for tree removal or trimming.**
- A grading and landscaping plan shall be provided for all projects prior to closing.
- Tot lots and/or a designated recreation area shall be provided. Family developments must provide playground on site. Designated play areas and playgrounds are considered “common areas” and must be on an accessible route.
- Large parking lots shall include planting areas. At a minimum, all parking areas shall be seal coated and striped, if physical needs assessment and/or civil engineer shall so determine. However, the condition of existing parking areas may require additional courses of action.
- All condenser units shall be landscaped to avoid mowing and trimming around unit **and provided with concrete or fiberglass pad.**
- If underground sprinkler system is not provided, hose bibs shall be provided on each front and rear of building with lockable boxes. *Depending on building size, additional hose bibs may be required for ease of maintenance for landscape areas.*
- No portable storage buildings allowed. Incorporate into building design as a maintenance area.
- Storm water management ponds shall be designed to state standards, bio retention ponds are optimum. If storm water management pond is designed to be wet, it shall have a perimeter fence for safety of tenants. **Minimum fence material shall be post and rail with quality coated wire fence material on interior of rails. Minimum height of 48” AFF. Make every effort to match new pond fencing with project fencing.**
- All sites shall provide permanent enclosures for garbage dumpsters or trash receptacles consistent with the appearance of the dwelling units. Refuse collection areas must be on an accessible route.
- If parking area does not have a curbed sidewalk area adjacent to parking, parking bumpers doveled into pavement shall be provided to maintain safe distance between parking area and tree lawns.
- Preservation of existing trees is required to the greatest extent feasible and in compliance with state and local requirements.
- Use of drought resistant, minimal water consumption landscaping **is required.**
- Contractor shall verify all existing utility connections. **New connections must be included in base bid in order to make all utilities functional (outside 5' of perimeter of building).**
- **When feasible, segregate all recyclable construction debris, materials and waste.**

2. Wood and Plastic

- Thermoply exterior sheathing will not be allowed. All exterior wall sheathing shall be solid 7/16” or thicker. Roof sheathing shall be a minimum of 5/8" *plywood* in thickness.
- Exterior grade caulking shall be used.
- Vinyl siding must be solid, and shall be a minimum of 0.044 inch in thickness.
- Existing base molding shall be removed and replaced with taller dimension profile composite trim.

3. Thermal and Moisture Protection

- Insulation shall meet all applicable codes for new construction and rehabilitation.
- Roofing materials which exceed 50% of the life expectancy shall be removed; at this time substrate shall be inspected. (No second layers allowed.)
- Asphalt shingles shall have a minimum warranty of 30 years, and meet *applicable wind building codes.*
- All exterior building surfaces shall be designed to be maintenance-free.

- All roofs shall have 3" "T" edging, no smaller than two-foot section, *especially at corner intersections.*
- All exterior surfaces shall have house wrap installed as per manufacturer's instructions.

4. Doors and Windows

- Interior doors shall be six-panel Masonite or better. Tops and bottoms of all interior and exterior doors must be painted.
- No bi-fold or bi-pass closet doors; all closets to have a hinged door. If code requires metal bi-fold door application, doors to be installed in wood frame with wood trim.
- Hardware shall be brushed aluminum or better - no high polished brass. Grade two (2) or better, including hinges and door bumpers. All exterior hinge hardware shall be of non-rusting material.
- Windows shall be thermal insulated with a minimum "U" value of 0.33 or below. **Slider windows will not be allowed.**
- Entry doors shall have a minimum "U" value of 0.33 or below. Frame savers shall be used *on all exterior applications.*
- Medium density overlay board is not allowed for any applications.
- Entry door shall have either doorbell or knocker and peep hole (eye viewer), no polished brass.
- Exterior signage shall not be polished brass.
- Peep/viewer to be provided for solid rear door. Unit numbers shall be provided on all rear doors.
- Unit numbering and building identification numbers shall be provided **and approved by the Fire Marshal and Post Office.**

5. Finishes

- VCT flooring shall be used for entry areas, bathroom, dining areas, and kitchen and utility areas unless prior approval is given by DSHA. (A minimum of two color fields required.) **Seal and wax, per manufacturer's direction.**
- Carpet to meet minimum weight and grade standard as follows: Filament 100% smartstrand triexta BCF; Gauge: 5/32; Pile Height: .520; Stiches per inch: 7.50; Certified Pile Height: 29.40 ozs; Total Weight: 64.47 ozs; Denisty: 2035; Primary Backing Woven Polypropyhlene; Indoor Air Quality# GLP 1118; Flammability: Pill Test – 16CFR-1630.4 (FF-1-70): Pass. Carpet width shall be 15' wide to minimize seams in high traffic areas. (No Berber allowed). **Padding is required and shall be a minimum of 6# density. See attached carpet specification as quality standard.**
- Drywall shall be glued and screwed. Moisture resistant drywall shall be used in all locations where plumbing penetrates walls, or building code whichever is more stringent. Mold resistance drywall shall be used for all exterior applications and core wall applications. Grade 4 finishes shall be provided for all drywall finishes. **If ceramic tile is used, cementious board shall be provided as underlayment.**
- Paint shall be an Egg Shell or low luster semi-gloss. Kitchens and bathrooms shall be semi-gloss. **NO FLAT PAINT WILL BE ALLOWED.** Other paints must be approved by DSHA. Minimum three (3) coats - one (1) primer and two (2) finish coats. Shall meet requirements of manufacturer.
Preparation required to obtain level 4 finish: For rehabilitation projects, if a level 4 cannot be achieved, overlay of existing wall with 3/8 inch drywall should be used. Rehabilitation properties shall have primer similar to "Kilz" enamel or oil based type sealer/primer for application on existing drywall or approved primer to adhere to existing drywall conditions.

- Doorstops shall be rubber disk type or half moon type. All other types must be approved by DSHA. All stop finish to match door hardware. The use of hinge pin type doorstops are prohibited.
- Kitchen counter top shall be provided with end splash for adjacent or end walls.
- No self-edge counter tops except for pass thru applications.

6. Specialties

- Concealed blocking is to be provided for all items such as tissue paper holders, grab bars, and medicine cabinets.
- One inch diameter grab bars properly mounted to in-wall blocking shall be used in lieu of standard towel bar.
- Cultured marble tops for vanities with slide splashes when adjacent to wall--no laminated tops with drop in bowl type fixtures.
- One-piece bathtub unit. If space constraints will not allow, rigid fiberglass surrounds Swanstone RM-58, or equal will be used in conjunction with tub. No plastic surrounds will be allowed. Select style based on adaptability. **Base shall have composite, rot proof material. If gap is present quarter round rot proof moulding to be installed.** Tub liners are acceptable with full height wall surrounds.
- Exhaust fans for all bathrooms shall be low speed/low noise continuous exhaust fan (hard wired), similar to Panasonic Quiet Whisper model or single switch exhaust fan light combination that meets all applicable building codes and approved by DSHA and the architect.
- Mini blinds shall be of quality construction. Each window shall be provided with one blind, i.e., twin window shall have (2) two blinds. Install center support brackets provided with blind for all blinds wider than 36". Maximum blind size no wider than 42".
- Shower rod to be surface mounted, no tension rods allowed.
- 2.0 g.p.m. Showerheads.
- 0.5 g.p.m. Faucet aerators.
- *Vertical blinds shall be of quality construction. Each exterior door assembly (French door, slider or any combination) shall be provided with vertical blinds for privacy.*

7. Equipment

Appliances:

- All appliances will be Energy Star.
- Refrigerators shall be frost free--minimum of 15 cubic feet.
- Ovens shall be self-cleaning. (Utilize U.L. listed stainless steel connectors for gas stoves.)
- Exhaust fan, duct to exterior. Re-circulating charcoal filter type model may be used if approved by DSHA.
- Back splashguard shall be wall mounted behind range. If range located in corner, install additional splashguard on adjacent wall.
- Washer and dryer hook-up shall be designed for side-by-side set up with a minimum depth of 30" **(vented to exterior)**.
- Garbage disposals are not recommended due to high maintenance. If used, disposal shall be 1/2 hp motor with a stainless steel shank. For ADA units, a lowered switch within reach range shall be provided.
- Dishwashers are to be provided. If venting on unit is located adjacent to counter top, underside of counter top edge must be laminated.

8. Furnishings

- Kitchen cabinets and vanities doors, fronts, and boxes shall be solid wood construction with concealed door hinges. No high-density laminates will be allowed. Provide, at a minimum, one drawer base for each kitchen layout. *If cabinet is not designed with recessed edge, hardware shall be provided.*
- Provide plastic laminate on wall between wall and base cabinet for all areas adjacent to cabinets.
- Medicine cabinet shall be installed in lieu of mirrors, surface mount, heavy gauge steel construction with stainless steel frame or molded bodies, rust resistant, soft tone baked enamel interiors, shatter resistant, polystyrene shelves.
- Wet wall at mop sink shall have FRP board on walls.
- Hardware shall be provided for all cabinet drawers and doors per ADA requirements. **NO BRIGHT BRASS FINISHES.**

9. Mechanical

- Non-mercury programmable thermostats.
- If natural gas is available for site, full gas package to be installed unless otherwise approved by DSHA (i.e. all appliances, hot water heater and furnace). Provide hard wire Carbon Monoxide detector with gas package.
- Provide a main water supply shutoff for each building.
- Condensate lines shall drain correctly with exterior grade and/or foundation. (Pumps shall be provided when needed.) Existing condensate lines shall be checked and free flowing if lines will be reused. Contractor to check discharge location **and eliminate all pooling water.**
- **Existing utility connections shall be field verified to receive new equipment. Existing condensate lines shall be cleaned, tested, and discharge connections verified. (REPLACE IF NECESSARY)**
- No polybutylene piping allowed.
- High efficiency HVAC units. Furnace efficiency = 90% or better. Min. SEER = 13.0.
- Hot water heater shall have integral R = 16 insulation. No blankets will be allowed. *Minimum warranty period is 5 years.*
- Hot water heaters shall have a minimum Energy Factor between 0.82 to 0.91EF.
- Provide pans for all hot water heaters. Any heat or coil unit located in attic area shall have a pan and condensate line draining to the exterior.
- No through the wall HVAC units.
- Tub and shower faucets shall have anti-scald protection provided.
- Sealed combustion, direct vent furnace and water heater.
- Floor drains and/or sump holes shall be provided in all basements. The floor shall be pitched to these drains or sumps and the drains or sumps shall be connected to a positive drainage system, or to the exterior of the building. Sump pumps must be installed, ½ Hp minimum.

10. Electrical

- **All building codes shall be incorporated into each project, any item to make project code compliant shall not be an extra or change order. All incidentals shall be included.**
- Energy Star fluorescent lighting package.
- Overhead ceiling fixture for living room/dining area in lieu of swag fixture.
- Exterior fixtures shall not have brass finish.
- Overhead ceiling fixtures shall be installed in all bedrooms. Wall sconces may be installed due to existing conditions.
- Bathrooms shall provide minimum of one ceiling fixture and one wall fixture.

- ARC Fault Circuit Interrupter must be provided on all bedroom circuits or where code mandates, most stringent shall apply.
- Provide one telephone and cable outlet in each bedroom and one other telephone and cable outlet *if possible use combination box/plate.*
- Energy Star fluorescent porch lights with photocell.
- **Electrical services shall be field verified, service loads shall be calculated prior to any equipment upgrades and all necessary components made a part of the contract price.**
- **Contractor shall verify existing utility conditions and include into base bid of contract.**

11. Miscellaneous

- If common hallways are designed, no carpet. VCT to be installed in common hallways with two colors required.
- Shelving shall be vinyl coated wire units. Provide all intermediate supports needed.
- Contractor shall supply rechargeable 2.5 ABC fire extinguishers (minimum size) for each unit, or where code mandates, most stringent shall apply.
- All emergency exit signs shall be LED.
- All developments consisting of eighteen (18) residential dwelling units or more must have a site office of at least 200 square feet (excluding of handicap toilet facility) and a maintenance room of at least 100 square feet.
- Automatic light controls in the community building should minimize energy use.
- A termite inspection and certificate shall be provided for all rehabilitation projects prior to construction closing.
- Termite pre-treat of soils is required for all new construction. *Certificates shall be part of the Operation and Maintenance Manual.*
- All developments must be provided with adequate laundry facilities on site or washer and dryer hook ups in each unit. Dryer venting must meet all applicable codes for venting. Laundry facilities must meet ADA requirements for front-loading washing machines.
- Elderly dwelling units shall be provided with medical emergency pull chains in at least two locations that are connected to a central station. The two locations will be in the Master bedroom and full bathroom. The pull chains will be wired to an exterior warning device, which consists of a strobe light and audible alarm.
- Elderly dwelling units and fully accessible units shall have grab bars in all tub/shower units and at toilet location per State Architectural Accessible Standards and/or Federal Standard, more stringent will apply.
- High efficiency air filters for mechanical blower units.
- Use of ABS plastic in lieu of CPVC.
- Rehab: Contractor shall verify all substrates and/or flooring surfaces for suitability of new VCT and/or carpet installation. If homosote and/or gypcrete is present, expect to remove material prior to installation of new flooring material.
- Contractor shall make conservative effort to separate construction debris for recycling.

NOTE 1: Although most of the above standards are geared to new construction developments, rehabilitation of existing units must follow the same standards. **DSHA requires that a comprehensive physical needs assessment be submitted with the application if rehabilitation work is to be performed.** DSHA will also complete a site inspection **45 days** prior to submission of an application to assure that its standards are being met and reserves the right to require additions and/or amendments to the physical needs assessment.

NOTE 2: **The following Rehabilitation Standards Checklist must be completed and submitted with the application for developments involving rehabilitation.** Please verify actual lifespan of all

components of existing structure. If not submitted/completed, application will be considered incomplete and will not be scored.

NOTE 3: The following "Plans/Specifications Review" checklist is for informational purposes as to the key areas DSHA will review for compliance to DSHA's minimum construction/rehabilitation standards.

NOTE 4: Any Multi-Family residential building, new construction or rehabilitation shall follow the Delaware State Fire Prevention Regulations to the fullest extent of the law. Please note Part VI, Chapter 3 for Apartment Buildings/Multi-Dwellings. No exception will be made for rehabilitation which will qualify for the 50% rule for grandfathering of any code. Entire Fire Prevention Regulations can be found at the following web page: <http://www.delawarestatefiremarshal.com/>.

NOTE 5: All projects with below grade habitable space (units, common space, laundry rooms) will require an assessment to determine possible water infiltration/moisture problem, which could directly affect the overall total development budget.

NOTE 6: All projects are to provide "AS-BUILTS" drawings and specifications at end of project. These "AS-BUILTS" are to be provided in both paper copy and available on CD's. This is also applicable to the "ALTA-Survey" for permanent closing. All CD's are to be in a .dwg format.

For rehabilitation projects, the "Rehabilitation Standards Checklist" must be completed or the application will be considered incomplete and will not be scored.

The "Plans/Specifications Review Checklist" is to be used as a guide for various governmental submissions and/or approvals DSHA requires prior to loan approval.

Updated: 1/10