

1986

ARCHITECTURAL CONTROL GUIDELINES

RESIDENTIAL PROJECTS - MARCH 1986

FRIENDSWOOD DEVELOPMENT COMPANY

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ARCHITECTURAL CONTROL GUIDELINES

I. Architectural Review

The Architectural Review Committee (ARC) meets weekly to review all master plans and site plans received the previous week. Review and approval of plans and specifications by the Architectural Review Committee are for the purpose of determining compliance with the requirements of the subdivision plat, the Declaration of Covenants, Conditions and Restrictions for each particular section, the Minimum Construction Standards, and this Guide. The review process also involves consideration of each house's exterior and its compatibility with the overall street scene.

A. Master Plans

Three (3) sets of plans are to be submitted to the ARC for each "master" plan to be built. Master plan sets are to include the following:

1. Foundation detail sheet and foundation plan with details marked.
2. Fully detailed floor plan including sizes and spacing of ceiling and floor joists.
3. Exterior elevations of all sides, indicating types of exterior materials to be used and where.
4. Typical building sections and details.
5. Specifications.
6. Square footage of living area.

Upon review of these plans, a letter will be sent to the builder notifying that builder of the approval or rejection of said plans. Upon ARC approval and subsequent review by a contract architectural consultant as to compliance with the Minimum Construction Standards and deed restrictions, the three sets of plans will be distributed as follows:

1. Builder.
2. Contract Inspector.
3. Friendswood Development Company.

B. Site Plans

After master plan approval, the builder will submit three (3) site plans for each lot prior to any construction and siting with the following information designated on each site plan:

1. Builder's identity.
2. Lot, block, section, street address.
3. Plan and elevation number.
4. Lot dimensions, easements, setbacks, building lines, location of all improvements including driveways, sidewalks, patios, etc.

The ARC will not accept plans for review on any lot unless said lot has been properly reserved in advance with Friendswood Development Company.

Construction may not begin until the builder has received written approval from the ARC on the site plans.

II. House Sizes (Minimum square footages)

Please consult the respective Declaration of Covenants, Conditions and Restrictions for minimum square footage for houses in a particular section and subdivision.

III. Siting guidelines.

A. Minimum Setbacks

Site plans shall conform to restrictions set forth in the Declaration of Covenants, Conditions and Restrictions and the recorded subdivision plat, which show building setback lines and easements.

B. Repetition of Elevations

1. Each elevation shall be limited to a minimum number of occurrences per street scene at the Architectural Review Committee's discretion. The ARC reserves the right to reject an elevation that, in its opinion, closely resembles that of a nearby house or in any way detracts from the overall street scene.

2. An identical elevation should not be repeated without at least 4-6 intervening lots. When an elevation is duplicated on the same street, brick and trim color must differ.
3. The effect of repetition of all plans and elevations along any given street should be softened by varying exterior colors and materials. Single family homes side by side should not be painted with the same exterior trim color or have identical brick.

C. Garage and Driveway Locations

1. Custom builders should generally adhere to the guideline that garages be located on the north or west side of the lot except on corner lots.
2. Volume builders should plan garages to maintain a consistency in driveways being placed on the same side of the lot along any given street as much as possible.
3. The use of side-by-side driveways is discouraged, but exceptions may be granted by the ARC for reasons such as tree preservation, house placement on certain unusual lots, location of utilities, etc.
4. No driveways will be allowed to parallel side streets on corner lots.
5. The preferred location for driveways for houses on corner lots is along the inside lot line. Side entry drives on corner lots will be considered on an individual basis by the Architectural Review Committee.
6. Hook-in drives at the house front may not occur on more than two consecutive lots.
7. No garages or driveways shall be located adjacent to a greenbelt.

D. Fences

1. Builders should refer to the Declaration of Covenants, Conditions and Restrictions of each subdivision section for specific fencing requirements.

2. Please note that side yard fences on corner lots shall not be located nearer to the property line than the building line setback shown on the recorded plat for the subdivision.

E. Sidewalks

Master sidewalk plans have been established for each subdivision and will be strictly enforced. Contract inspector will not grant final approval unless sidewalks have been installed as required by the sidewalk plan.

F. Landscaping

1. When construction of LD-2/2.5 and LD-3 houses is completed, the builder shall install at least 2 young trees of 3 1/2" caliper on each lot. The front and back yards on all LD-2/2.5 house lots must be sprigged and stripped. The front yards on all LD-3 house lots must be sprigged and stripped. Special care should be given to stripping curbs, driveways, sidewalks, and patios.
2. When construction of LD-4 and LD-5 houses is completed, the builder shall install at least 2 young trees of 2 1/2" caliper on each lot. The front yards on all LD-4 and LD-5 house lots must be sprigged and stripped. Special care should be given to stripping curbs, driveways, sidewalks, and patios.
3. Minimum FHA or VA landscaping requirements must be met where applicable.

*SD front yard -
sprigged*

IV. Exterior Materials and Colors

A. Brick

Brick colors should be earth tones; the use of white, very light, or very dark color bricks is strongly discouraged. Brick for houses on consecutive lots should not sharply contrast in color or style.

B. Wood

Wood should be painted or stained with colors in the medium range and should not drastically contrast adjacent brick or other materials.

C. Roofs

Roofing materials must be No. 1 grade wood shingles or shakes, wood simulated fiberglass or composition asphalt shingles, clay tile, concrete tile, slate, or aluminum shingles, as approved by the Committee. Earth tone colors are required in all roofing materials. Fiberglass or composition asphalt shingles shall be limited to the following types:

1. LD-2/2.5 and LD-3 houses - Minimum 300# per square, 30 year warranty minimum.
 - (a) Elk "Prestique", approximately 320# per square in the Weatheredwood, Hickory, or Barkwood colors.
 - (b) GAF "Timberline", approximately 300# per square, in the Heather Blend, Weathered Wood Blend, or Burnt Sienna Blend colors.
 - (c) Genstar "Architect 80", approximately 300# per square, in the Barnwood or Driftwood colors.
 - (d) Other brands, weights, and colors are subject to approval by the Architectural Review Committee.
2. LD-4 and LD-5 houses - Minimum 220# per square, 20 year warranty minimum.
 - (a) Elk "Prestique II", approximately ~~240#~~ per square, in the Weatheredwood, Hickory or Barkwood colors (25 year warranty).
 - (b) Elk Fiberglass "Sunseal", approximately 225# per square, in the Chestnut, Bark Blend, Weather Blend, or Sable Blend colors (25 year warranty).
 - (c) Genstar "Firescreen Brigade", approximately 220# per square, in the Weather Blend or Barnwood colors (20 year warranty).
 - (d) Georgia Pacific "Valiant Fiberglass", approximately 235# per square, in the Weathered Wood color (30 year warranty).

- (e) Other brands, weights, and colors are subject to approval by the Architectural Review Committee.

D. Glass

Mirrored or reflective glass may not be used on any side of a house facing a street.

E. Chimneys

Metal chimneys shall not exceed a maximum exposed height of 6 inches of chimney pipe nor a maximum height of 18 inches of total exposed metal including both chimney pipe and cap. The housing that must surround the remainder of the metal chimney shall be of similar material used on the front elevation of that house, matching those materials both in size and color. See Exhibit "E" in the Minimum Construction Standards.

V. Energy Conservation .

Use of the following items for siting and building a more energy efficient house is suggested as follows:

A. Design and Planning

1. Floor plans that are compact to reduce amount of exterior wall exposure.
2. Design so that the entrance becomes a vestibule "air lock" isolated from the conditioned spaces.
3. Deciduous shade trees, roof overhangs, porches, and louvered windows.
4. Landscaping instead of concrete patios or drives near windows, to reduce radiant heat gain.
5. Proper lot orientation of house to avoid south and west sun.

B. Equipment and Materials

1. High SEER heating and cooling equipment.
2. Pilotless furnace igniter.
3. Thermostat with timer.
4. Solar space heating and/or water heating.

5. Heat pumps for heating and cooling.
6. Attic or ceiling fans.
7. Special circulator fireplaces using outdoor air for combustion or one that vents heated air from the fireplace into interior rooms.
8. Drop ducts into conditioned spaces below the ceiling and out of the unconditioned attic.
9. Double paned or tinted glass windows; solar film.
10. Insulation sheathing.
11. Insulating factors of R-26 in ceiling and R-13 in walls.
12. Storm doors and windows.
13. Metal insulated exterior doors, fully weather-stripped.
14. Caulking bottom plate, door and window frames, and also rough-in holes for plumbing and wiring.
15. Energy saving appliances.

VI. Signage

A. "For Sale" and "Sold" Signs

In most subdivisions, each builder will provide their own builder signs which may be placed at the front of each lot when the lot is deeded and which may remain on the lot until the home is closed. Only one sign per lot is allowed, and all signs must be of a quality to withstand the weather, etc. The ARC reserves the right to request any signs be upgraded if, in its opinion, quality standards are not being met.

In certain custom areas such as Deerfield Village, the builder will use coordinated "For Sale" signs provided by Friendswood and made available through the respective custom sales office.

B. Model Home Park Signage

Model home park signage and any other signs desired by the builder must receive written approval by the ARC before being installed.

C. "Bandit" Signs

The use of "bandit" signs or any other signs not approved by the ARC will not be allowed.

MINIMUM CONSTRUCTION STANDARDS

Residential Projects - March 1986
Friendswood Development Company

I. Governing Codes

- A. Residential Projects Minimum Construction Standards
- B. Standard Building Code--Southern Building Code Congress International, Inc.
- C. HUD "Minimum Property Standards for One- and Two-Family Dwellings" 4900.1 (where applicable)
- D. Other Codes and Standards specified herein or incorporated into Standards listed above.

II. Inspection Procedures

- A. Builder's Responsibility
- B. Inspector's Responsibility

III. Construction

- A. Site Construction
- B. Slabs
- C. Foundations
- D. Flat Work
- E. Framing
- F. Exterior Materials
- G. Plywood
- H. Insulation
- I. Plumbing
- J. Air Conditioning
- K. Electrical
- L. Miscellaneous

IV. Exhibits

MINIMUM CONSTRUCTION STANDARDS

Listed below are the Minimum Construction Standards as adopted by the Architectural Review Committee (ARC). For items not covered herein, the Southern Standard Building Code, Southern Building Code Congress International, Inc., shall govern. It is understood that these Standards are prescribed solely as minimum standards for the items covered and are in the nature of a municipality-adopted building code and are not set forth for the purpose of the Architectural Review Committee or Friendswood Development Company prescribing the specific design of any improvements constructed or the manner or method of constructing such improvements. These standards may be revised from time to time, without prior notice, by Friendswood Development Company; however, any such revisions shall not be retroactively effective beyond the date of such revisions.

I. Governing Codes

Residential construction in a development will meet or exceed the following:

- A. Residential Projects Minimum Construction Standards as provided below
- B. Southern Standard Building Code--1985 and amendments or current edition--Southern Building Code Congress International, Inc.
- C. HUD "Minimum Property Standards for One- and Two-family Dwellings" 4900.1 (where applicable)
- D. Other Codes and Standards specified herein or incorporated into Standards listed above.

II. Inspection Procedures

Construction inspections will be conducted by Friendswood to determine compliance with the ARC approved plans and specifications. Payment for each inspection is the responsibility of the builder. Friendswood's contract inspector will be responsible for conventional construction inspections, and FHA and VA construction inspections will

be the responsibility of those federal agencies. FHA and VA at this time accept Friendswood's contract inspector's first and second HOW inspections in lieu of their own; an FHA or VA inspector must inspect for the final inspection. Friendswood reserves the right to require any necessary work to correct any omissions made by FHA and VA inspectors that in the opinion of the contract inspector would be detrimental to good building practices.

A. Builder's Responsibility--Conventional Inspections

1. Place an approved builder's sign with the street address, lot, and block, and Harris County Building Permit attached to it at the front of the lot before the first inspection is to be made.
2. Every effort should be made to have the builder or a builder's representative present at each inspection.
3. To arrange for an inspection, call our current contract inspector, Billy Shaw (445-2620), and provide him with the builder's name, legal description, address, and type of inspection. Call at least one working day in advance of the desired inspection date.
4. **First Inspection--Slab:** Foundation completely prepared for pour, but before concrete pour. Key items to be inspected:
 - a. Siting of house, garage, driveway, and any other improvements
 - b. Slab elevation
 - c. Steel arrangement
 - d. Depth and size of beams and slab
 - e. Form placement
 - f. Plumbing
5. **Second Inspection--Interior:** House completely framed in with all utilities in place but before insulation and sheetrock installation. Key items to be inspected:
 - a. Bracing and connectors

- b. Spans
 - c. Plates
 - d. General framing
 - e. Roof overhangs (patio homes and townhomes)
 - f. Plumbing, mechanical, electrical
6. Third Inspection--Final: House completed but prior to occupancy. Key items to be inspected:
- a. Final grading
 - b. Chimney height
 - c. Fireplace hearth
 - d. Stairs and rails
 - e. Smoke detectors and other safety devices
 - f. Exterior materials: size, type, color
 - g. Insulation: depth, soffit vents open
 - h. Roofing
 - i. Attic ventilation
 - j. Sidewalks, driveways, and flatwork
7. Re-Inspections: If the inspector is required to reinspect a house because of deficiencies or because the house was not ready for inspection, the charge for such will be imposed on the builder as are all other inspections.
8. Please note that these inspections do not in any way guarantee quality of construction or relieve the builder's obligation to comply with any governing standards, nor do they substitute for any other inspections that may be required by any applicable

code or regulation. They are Friendswood's method of checking adherence to the guidelines as set forth in the Residential Projects Minimum Construction Standards and compliance with ARC approved plans and specifications.

B. Inspector's Responsibility--Conventional Inspections

1. Inspector will make the initial foundation inspection as soon as possible after request by the builders. In addition to the foundation details, the inspector should check top of slab elevations and form placements on the lot. If placement appears incorrect (especially where side lot utility easements exist), the builder should be notified immediately. If the foundation is acceptable, the inspector will leave a completed inspection form on site or with the superintendent. If not acceptable, he will place a red inspection sticker on the builder's sign. The inspector may, at his discretion, witness any concrete pour and have batch samples taken for compressive strength compliance.
2. Inspector will make the second inspection after receiving notice, and leave an inspection form at the site upon completion of inspection.
3. Any variance or deficiency noted by the inspector during any inspection will be explained in writing on the inspection form. After the builder makes the necessary corrections, he must notify the inspector that he is ready for another inspection.

III. Construction

A. Site Construction

1. General

All site construction shall conform to the Declaration of Covenants, Conditions and Restrictions; recorded subdivision plat showing setback lines and easements; and water, sewer and drainage plans which will be provided to builder for each section.

2. Excavation

Care shall be given to protect existing trees and to maintain them during construction. Dirt, spoil, or debris shall not be left deposited on or around the trunks of trees during construction, and every effort shall be made to protect the trees' root system. Site plans shall be approved by the ARC prior to clearing of lots and construction of houses.

3. Tree Preservation

Builders are responsible for maximum tree preservation on their lots. Protective measures include:

- a. Prudent decision as to which trees to save and which to remove--it is generally best not to try to save trees that will have substantial root damage/loss or coverage.
- b. Prune back trees that are to be saved where there will be root area coverage.
- c. Do not change elevation under tree drip line more than (+/-) two (2) inches.
- d. Do not stockpile fill dirt or construction material or dispose of toxic fluids such as paint under the drip line of trees.
- e. Barricade around tree's drip line to provide protection to the root area.
- f. Solve drainage problems with drainage pipe and/or swales rather than fill dirt.
- g. Builders are responsible for removing all trees that die within ninety (90) days of buyer move-in.

4. Site Grading and Drainage

- a. Drainage shall be provided for the lot at the time fill is being placed in the slab form by filling the back easement area and sloping to front and sides or otherwise as required by the subdivision

- grading plan. Driveway excavation material may be used for this purpose if desired.
- b. Builders will be responsible for proper drainage of each lot. Except where otherwise required by the subdivision grading plan, drainage shall be from the rear lot line to the front, and no lot shall drain onto an adjoining lot.
 - c. Each wooded lot should be drained in a manner that maximizes tree preservation. In general, swales and underground drainage pipe will be more effective in saving trees than adding fill to achieve proper drainage.
 - d. Area drains are recommended at all interior courts that are enclosed on at least three (3) sides as required for other site drainage. This area drain shall be a minimum twelve (12) inches diameter pre-manufactured concrete area drain with a metal grate. PVC floor drains mounted on PVC pipe will be acceptable. Area drain piping may be either concrete or PVC. The piping shall extend to and through the street curb. If the curb has been installed, a minimum of twelve (12) inches of the curb will be removed by saw cutting, the area drain pipe installed, then the curb replaced to same configuration as existing. The drain line shall have a minimum two (2) inch concrete cover. Refer to Exhibit "F", Figure 1.
 - e. The drainage for "zero lot line" construction, shall drain from the open area side draining toward the street. Drainage space must be designed into the front wall to allow the escape of excess water to the street. See Exhibit "F", Figure 2.
 - f. Greenbelt Lots: Construction activities shall not encroach onto greenbelt or unrestricted reserves. A construction fence/barrier is required along the property line prior to clearing and is to remain until final grading.
 - g. Litter Containers: Containers shall be provided on all construction sites for all litter that can blow or float into the street or neighboring yards.

B. Slabs

1. Tops of house floor slabs constructed on typically flat building sites shall be a minimum of twenty-two (22) inches above top of curb of street at front of the site, measured at the centerline of the site. The slab shall also be a minimum of nine (9) inches above natural ground. It is understood that variations in the above may be allowed due to conditions relative to certain sites.
2. For Class "B" or flood plain lots, the slab must be a minimum of twelve (12) inches above the 100-year flood plain level.
3. Water should drain from outdoor flat work areas. No standing water exceeding one-fourth (1/4) inch is acceptable.

C. Foundations

1. Concrete shall be hard rock aggregate concrete and meet all specifications as stated in the Southern Standard Building Code.
2. Concrete shall be not less than four and one-half (4-1/2) sack 2,500 p.s.i. if placed directly from trucks nor less than five (5) sacks if pumped.
3. Foundations shall be equal to or better than designs shown in Exhibit "A." Foundations of other design may be acceptable if designed and sealed by a registered professional structural engineer certifying that the foundation is suitable for the structure and the site and has been designed in accordance with recognized engineering practices for soil conditions, designated by the respective Geotechnical Investigation which will be provided to the builder by the developer for each section.
4. Cold Weather: Concrete shall not be mixed when air temperature is at or forecasted to be below forty (40) degrees in next twenty-four (24) hours.
5. Brick ledges shall be provided on sloping lots where more than eighteen (18) inches of concrete would show to the street.

D. Flat Work

1. Drives shall be constructed in accordance with the specifications shown in Exhibit "G." A minimum width of ten (10) feet with expansion joints on sixteen (16) foot maximum spacings is required.
2. Sidewalks will be required in each individual subdivision as shown on the Master Sidewalk Plan for that subdivision. The sidewalk is to conform to the specifications shown on Exhibit "G." Placement of the sidewalk and conformance with all applicable governmental regulations is the responsibility of the builder.
3. Please note other driveway and sidewalk specifications following Exhibit "G" for further information.

E. Framing

1. Framing shall be structurally sound and equal to or better than stud grade Douglas Fir for studs; #3 Southern Yellow Pine for plates, sills, joists, rafters, and general framing. Framing shall be in accordance with the table of "Maximum Spans for Joists and Rafters" which follows and is marked as Exhibit "B." Studs shall be spaced to properly support the finish material attached to them (as specified and recommended by the manufacturers) and also to meet structural requirements. All framing lumber shall be grade marked.
2. As stated in Sections 1703.4 and 1706.1 of the Southern Standard Building Code:
 - a. Sleepers and sills on concrete or masonry slabs at or below grade shall be of approved wood of natural decay resistance or pressure treated wood.
 - b. Sills on continuous foundation walls shall be not less than 2-in thick and shall be anchored thereto by 1/2-in bolts spaced not more than 6 feet apart and which are embedded at least 6-in in concrete or 15-in in masonry units. Girders supported on

piers shall be provided a true and even bearing surface. Except where wood of natural decay resistance or pressure treated wood is used, an approved moisture barrier shall be provided between the sill and foundation wall.

3. Studs supporting floors shall be spaced no more than sixteen (16) inches on center; those supporting ceilings and roofs shall be spaced not more than twenty-four (24) inches on center.
4. Maximum recommended spacing for joists or rafters that are to receive the minimum one-half (1/2) inch sheet rock is twenty (20) inches on center. Maximum recommended spacing for joists or rafters that are to receive a minimum of five-eighths (5/8) inch sheet-rock is twenty-four (24) inches on center.
5. Ceiling joists and rafters shall be nailed to each other where possible, and the assembly shall be nailed to the top wall plate in an adequate manner to secure the roof framing to the walls, Section 1708.1.3, Southern Standard Building Code.
6. Ceiling joists shall be continuous or securely joined where they meet over interior partitions to provide a continuous tie across the building, Section 1708.1.4, Southern Standard Building Code.
7. Collar beams of 1 x 6 boards shall be installed in the upper third of the roof height to every third pair of rafters, Section 1708.1.7, Southern Standard Building Code.
8. Ceiling Joists Sizing Under "Live Loads" such as Air Handling Units

Maximum spans for ceiling joists supporting live loads such as air conditioning units, which vary in weight, should be checked for bending stress, deflection, and shear. The Southern Standard Building Code provides performance standards and engineering tests for framing material supporting live loads. The framing should be sufficient to prevent extreme fiber stress deflection of ceiling joists, sheetrock cracks, and nail popping, and unnecessary resonance frequency vibrations during A. C. operation. Perhaps the easiest way to solve this problem is to locate A. C. units over hallways or

closet vertical walls. When the unit is not over a vertical wall, the ceiling joists directly under the A. C. unit should be doubled. The following span table is provided for reference:

**Ceiling Joists Supporting A. C. Units or Other Live Loads
Typically Found in a Single Family Residence
(With 2 - 3 Joists Doubled Under Unit)**

<u>Spacing C to C</u>	<u>Joist Span</u>	<u>Joist Size</u>	<u>Joist Grade</u>
16" to 20"	Under 10'	2" x 6" Doubled	Min. #3 KD
16" to 20"	10'0" to 14'0"	2' x 8"	Min. #3 KD
16" to 20"	14'0" to 20'0"	2' x 10' Doubled	Min. #3 KD

Knotted or cracked material should be replaced or doubled.

Supporting A. C. units by suspension from roof structures is not recommended.

F. Exterior Materials:

1. Roofing

- a. See Architectural Control Guidelines for roofing types allowed.
- b. Wood shingles or shakes shall be No. 1 perfection red cedar, sixteen (16) inches or eighteen (18) inches over 1 x 4 nailer strips. Nailer strips must cover fifty-one (51) percent of roof surface. Minimum roof slope of 5 to 12 is required for wood shingle construction.
- c. Fiberglass or composition asphalt shingles shall have a minimum weight classification of approximately 300 pounds per square over solid plywood decking in the LD-2/2.5 and LD-3 houses and approximately 220 pounds per square permitted in the LD-4 and LD-5 building program. For approved brands and colors refer to the Architectural Control Guidelines. Plywood decking shall be grade and thickness required for rafter spanning, as specified in Exhibit "C." H-clips must be used along unsupported edges.

- d. Built up roofing shall be slag or pea gravel set in a 15-year, 4 ply 15 pound hot mopped felt on solid plywood decking.
- e. All roof penetrations should be located behind the ridge whenever architecture allows.

2. Masonry

- a. Bricks must be gas fired and capable of 1,500 p.s.i. minimum test.
- b. Bricks shall be tied to studs every 32 inches horizontally and 16 inches vertically, using a minimum of 22 gauge galvanized wall ties.
- c. Expansion joints in the masonry should conform to Standard Trade Practices and Southern Standard Building Code.
- d. Cold Weather: Bricks shall not be laid when air temperature is at or below forty (40) degrees or when predicted temperature will fall below forty (40) degrees within the next twenty-four (24) hours, except when masonry is protected in accordance with "Recommended Practices for Cold Weather Masonry Construction" as published by The International Masonry Industry All-Weather Council, Section 1409.7, Southern Standard Building Code.
- e. Weep holes shall be provided at bottom course each third brick.

3. Siding Materials--As per manufacturer's recommendation.

G. Plywood--All plywood shall be APA grade marked and shall be installed in accordance with the tables attached herewith and marked Exhibit "C."

H. Insulation

Sufficient amount of materials (mineral wool, fiberglass or equal) to obtain insulating factors of:

R-19 in ceiling
R-11 in outside walls
R-13 in crawl spaces

Thickness and type in accordance with Exhibit "D."

Install insulation to exterior of all water piping.

I. Plumbing

1. Water service and sanitary sewer installation shall conform to the standards established and enforced by the Southern Standard Building Code and/or the standards adopted by the appropriate utility districts or regulatory authorities having jurisdiction.
2. Gas water heaters shall not be located in detached garages nor be opened directly into attached garages. If located within attached garage, gas water heaters shall be raised on a platform and be vented to the outside for both combustion air and flue gases.
3. Gas piping and installation shall comply with the latest Southern Gas Code. Gas meter must not be visible from street.
4. Sewer line outfall from house to main line shall be ABS or PVC schedule 40 or better.
5. Water service line shall be buried at sufficient depth so as to have a minimum of twelve (12) inch cover after finish grade has been obtained.
6. All roof penetrations should be made behind the roof ridge whenever architecture allows.
7. Courtyards, atriums, and pools shall not be drained into the sanitary sewer system.
8. A relief valve shall be provided in the sanitary sewer cleanout in all houses where the slab is at a lower elevation than the nearest manhole.
9. Job built showers (recessed or not) shall have approved shower pans as described in Section 910.1 of the Standard Plumbing Code. Where sheetrock is used under tile, it shall be of the water resistant type (WR).

- J. HVAC--Builder shall obtain from the HVAC contractor a statement that all heating and air conditioning equipment and systems have been engineered and installed to meet the following minimums:
1. Maintain 78 degrees inside temperature at 50 percent relative humidity when outside temperature is 95 degrees dry bulb, 80 degrees wet bulb.
 2. Maintain 70 degrees inside temperature when the temperature is 20 degrees outside.
 3. Units shall be accessible for inspection, service, repair, and replacement without removing permanent construction. Insure proper condensate drainage.
 4. Compressors should be located to provide minimal sound and visual disturbances.
 5. All roof penetrations should be made behind the roof ridge whenever architecture allows.
 6. Primary condensate drains shall be tied into a P-trap and be a closed system.
 7. Burners shall be vented to the outside for both combustion air and flue gases.
 8. Every unit shall have a minimum of thirty (30) inches working space, both in height and width, in front of the burner opening.
 9. Ducts must be fastened together with screws (minimum of three (3) per connection) and taped before insulated. Dampers must be provided in all ducts to allow balancing air flow.
 10. Electrical disconnects for air conditioning equipment must be provided when the unit is not visible from the circuit box and when the distance is greater than fifty feet.
- K. Electrical--Unless otherwise specified herein, electrical construction shall conform to the standards of Underwriters Laboratories, Inc., the rules and regulations of the National Fire Protection Association, referred to as the "National Electrical Code," and to

the published standards of the Federal Housing Administration and Veterans Administration except that only copper wire is permitted from the circuit box throughout the entire house.

1. A minimum depth of thirty (30) inches from final grade shall be maintained for conductors and cables buried directly in the earth. This depth may be reduced to twelve (12) inches provided supplemental protective covering such as a two (2) inch concrete pad, metal raceway, pipe, etc., is used. The buried conductor shall be separated in all locations a minimum of six (6) inches from any metallic pipe. No electric meters or service equipment shall be visible from the street.
2. Electrical Outlets in Garages: A minimum of two (2) outlets shall be provided in all garages for general use, one of which must be G.F.I. This circuit shall be comprised of 12/2 wire.
3. All houses must have ground fault interrupters (G.F.I.) in bathrooms, outside plugs, whirlpool tubs, and one in garage.

L. Miscellaneous

1. Fireplace

- a. As required in the Southern Standard Building Code, Section 802.2.4, chimneys shall extend at least three (3) feet above the highest point where they pass through the roof of the building and at least two (2) feet higher than any portion of the roof or building located within 10 feet horizontally of such chimney. Refer to Exhibit "E."
- b. Fireplaces shall be designed and constructed to have a hearth of brick, concrete, stone, or other approved non-combustible material at least twelve (12) inches wider on each side than the fireplace opening and at least twenty (20) inches from the front. The hearth slab shall be a minimum of four (4) inches thick and shall be supported by non-combustible material.

- c. Gas starters shall be provided in all fireplaces served with gas. The valves shall be located so as to permit reaching and viewing the flame while regulating the valve.

2. Glass

Glazing in hazardous locations such as ingress and egress doors, fixed and sliding panels of sliding type doors, storm doors, unframed swinging doors, shower and bathtub doors and enclosures, etc. shall be safety glazing materials and meet the requirements of Sections 2703.1 and 2703.2, Southern Standard Building Code.

Products, materials and uses which are exempt from hazardous locations are listed in Section 2703.2.2, Southern Standard Building Code.

3. Attic Ventilation

Attic ventilation shall be provided to furnish cross ventilation of each separate attic space with weather protected vents. The ratio of total net free ventilating area to the area of the ceiling shall be not less than $1/150$. For further information, see Southern Standard Building Code, Chapter XVII, Section 1708.8. All roof penetrations shall be located behind the ridge whenever architecture allows.

4. Smoke Detector

No less than one smoke detector must be installed in each house. Specific requirements are stated in Section 903.2, Southern Standard Building Code.

5. Light and Ventilation: Every habitable room shall have one or more windows to afford light and ventilation. Each bedroom shall have an operable window with a minimum net clear opening height dimension of 22 inches and minimum net clear opening width dimension of 20 inches. The sill shall be no more than 44 inches from the floor. See Sections 2001.1 and 1104.4, Southern Standard Building Code.