



CODE WISE

PIMA COUNTY BUILDING CODES An Informational Newsletter

Volume 1

October 7, 2002

WHY THIS NEWSLETTER

The following are the Mission Statement of Pima County Developmental Services and the Goals of the Building Codes Department:

PIMA COUNTY DEVELOPMENT SERVICES MISSION STATEMENT

Pima County Developmental Services, through knowledgeable, friendly and helpful employees, protects and enhances public health, safety and welfare, and promotes the sound stewardship of the natural and built environment by providing timely land use planning, development review and permitting services

Building Codes Goals Statement

To be an organized, educated team, serving our customers professionally and timely, insuring public safety while keeping all informed and satisfied.

This News Letter is being produced by the Building Codes Plans Examiner staff as a step towards fulfilling the goals of these Statements by providing a mechanism to inform the public of Code changes; problem areas in plan review; general building design and construction information and inspection.

This News Letter will be available quarterly on the first Monday of the quarter. Additional issues will be forthcoming when needed . -

HOW TO OBTAIN A BUILDING PERMIT

Note:

The permit application process may require contacting some or all of the Development Service Departments and Divisions to obtain the proper information relating to your permit. For general questions relating to your project, contact Development Services Information at: 740-6510. For specific questions related to a denial, request for information or some other item for a specific division in Development Services contact that division using the numbers on the **“Road Map” on page 3 of this Newsletter.**

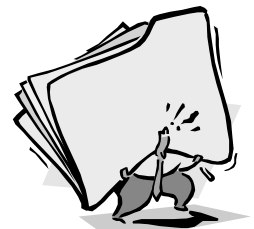
A person may apply for a building permit at the Pima County Development Services Department, 201 North Stone Avenue, 1st Floor, Tucson Arizona. All requests for permits must be submitted at the Public Service counter with a statement of valuation based on construction costs.

NOTE:

Some projects may be exempt from needing a Building Permit; however, they may still require permitting by other departments or divisions. For an example refer to “Kody Says” on page 8.

Required Paperwork:

The applicant, or the applicants agent (with a Letter of Authorization), must provide detailed information to fully and clearly describe the proposed project. In some cases, a simple description of the project,



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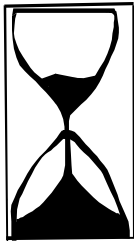
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such as "Upgrade existing electric service from 100 Amps to 200 Amps" may be sufficient. However, in most cases a site plan and construction drawing will be required. In addition, when applying for permits on undeveloped property a copy of the recorded deed and legal description for the property is usually required.

Plans submitted for minor projects may be submitted on plain paper. All plans must be signed by the preparer of the drawings, or responsible individual, and include the correct address and phone number. Scaled drawings (1/4" per foot) are preferred and, if drawings are five (5) pages or more, at least one reproducible copy (CAD velum or sepia) of each drawing must be submitted. If plans are less than five (5) pages, two (2) non-reproducible copies may be submitted. It is important to know that plans drawn in pencil will not be accepted for submittal.

The Review Process:

Upon submittal, the site plan and construction drawings will be reviewed by several departments or divisions in Development Services to verify compliance with all applicable zoning and building code requirements. Corrections, modifications, and/or additional information may be required after the initial reviews have been completed.



What is the Time Frame:

Time frames for building permit review and issuance may vary depending on the project being permitted. Some simpler projects can be fully permitted "over-the-counter".

Every Monday and Tuesday between 8:30 a.m. and 12:00 p.m. the Building Codes division has "walk-thru" reviews for small Residential additions of four hundred (400) square feet or less.

More extensive small residential project will require the plan to be left with the Building Codes Division for a short term. Approximately one (1) or two (2) days.

Small Commercial Tenant improvements are usually completed over the counter. However, more extensive Commercial Tenant improvements will require the plan to be left with the Building Codes Division for a short term. Approximately one (1) or two (2) days.

Generally, residential plan reviews are preformed within sixteen (16) working days and residential additions are completed within ten (10) working days. Commercial plan reviews are performed within sixteen (16) to twenty (20) working days.

If, after this initial review, a plan is required to be returned to the applicant for corrections, and the applicant returns the plan to the Building Codes Division with the corrections made, it may take up to ten (10) working days to complete the re-review.

It should be noted that the preceding review times are estimates and are only for the Building Codes review, which is usually the last to occur. Since there are several other departments or divisions which have to review the plans, the total review time can extend out. The applicants will be called when the plans are ready to be picked up, either for corrections or for the permit.

How Fees are established:

The building permit fee varies depending on the construction type and size of the project. For example, room additions, patio covers, and garages, are charged a fee based on the square footage. Single family homes are charged a fee based on numerous items including but not limited to square footage of living area, garage, and porches, number of motors, number of electrical circuits and etc.. Estimates for permit fees may be provided by the Public Service Division at (520) 740-6510.



Issuance of the Permit:

Upon approval of the construction drawings, and after all of the questions, comments and the like from all the reviewers have been addressed, the application, and an approved set of documentation is taken to the Public Service desk in Development Services. The staff there assembles the information, the fees are calculated and a Permit is issued.

The "permit paperwork," including the Inspection Card, contains information which the applicant should review carefully as some conditions, or comments may require the applicant to provide additional information prior to certain phases of construction, during the construction process, or at the end of the project. It also contains information regarding the inspections required and how to arrange for them.

With the issuance of a building permit, one set of approved drawings and documents must be available on the job-site. Pima County will retain an approved set of drawings until the job is finished. When the final inspections are completed, the permit is then closed. -

Some Permit Questions

What if I do not get a Building Permit?

If a building permit is not obtained prior to the start of construction, the property owner may be subject to fines, penalties and/or legal action.

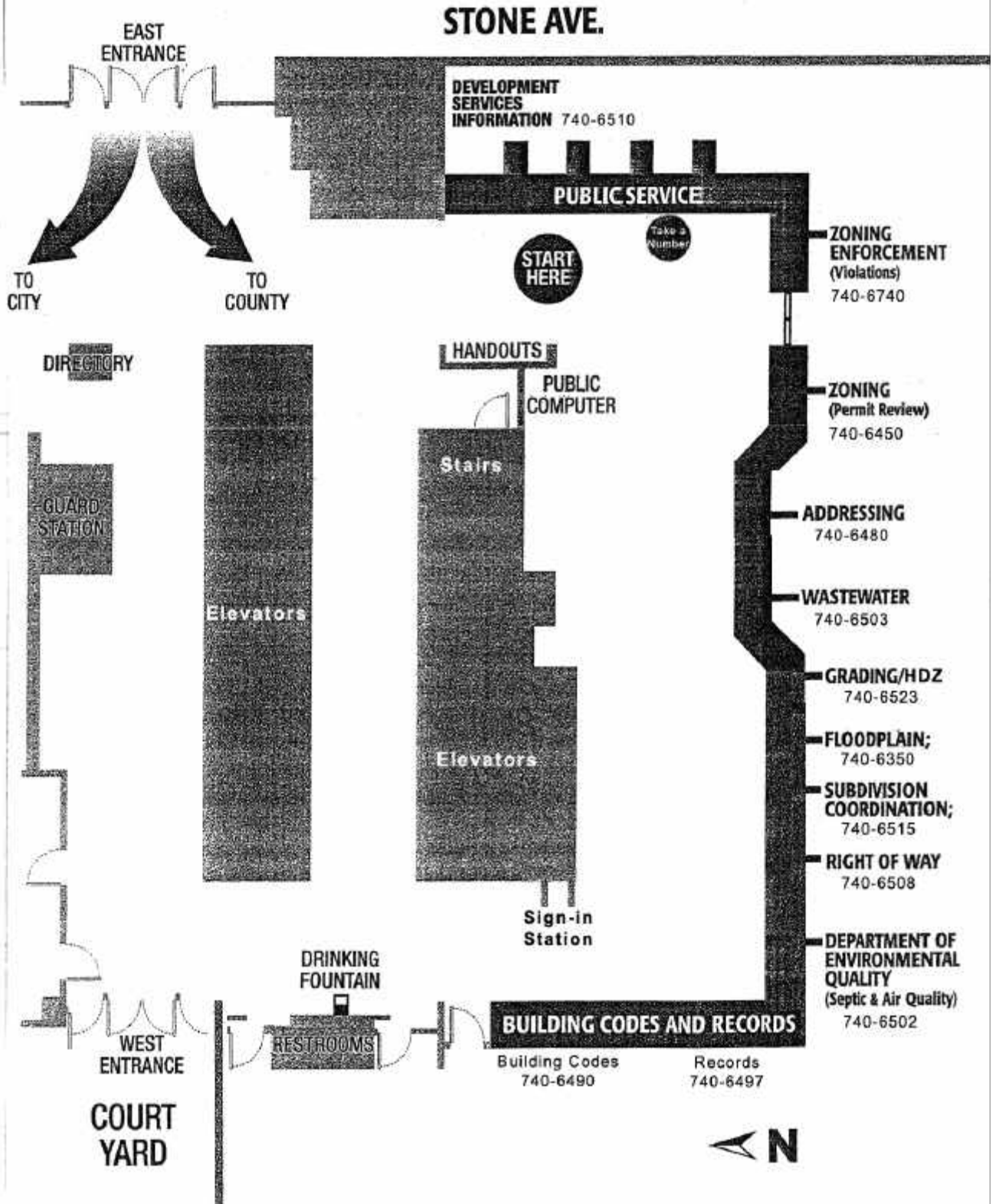
Do I need a permit for a slab?

No; as long as the slab is not over 30" above the finish grade. However, a permit would be required if a roof structure is built over the slab.

Do I need a permit to replace old light switches?

No; a permit is not required, however, installing additional outlets or relocating fixtures would require a permit.

ROADMAP FOR PIMA COUNTY DEVELOPMENT SERVICES



SUMMARY OF INCLUSIVE HOME DESIGN ORDINANCE

Refer to Pima County Ordinance NO. 2002-66 as amended by 2002-72

BACKGROUND

In response to the needs of a rapidly growing number of senior citizens and persons with disabilities, the Pima County Board of Supervisors adopted the Inclusive Home Design Ordinance. This ordinance requires that all newly built homes offer a very basic level of accessibility. Requirements of this ordinance, which are summarized below, are a minimum standard. Alternative designs, products, or technologies which provide equivalent or superior accessibility and usability, may be used. **THIS ORDINANCE DOES NOT REQUIRE EXISTING HOMES TO BE RETROFITTED.**

APPLICATION

This ordinance applies to all dwelling units (site-built homes) permitted for construction in unincorporated Pima County on or after October 8th, 2002. Dwelling units for which plans have already been certified prior to October 8th, 2002 shall be exempt from its provisions until the date of their next annual renewal. These are detached one, two and three-family homes which have one occupiable floor at grade level.

ACCESSIBLE FLOOR

This is any occupiable floor which is less than one story above or below grade, with direct access to grade.

EXTERIOR ACCESSIBLE ROUTE

There shall be at least one exterior accessible route to the accessible entrance. This route may originate from the carport, driveway, or public street or sidewalk. The slope of this accessible route to the accessible entrance shall not exceed one-foot vertical rise per twenty feet horizontal distance (1:20), unless a ramp is constructed complying with the 2000 International Residential Code; (ramps may have a grade of 1:12).

ACCESSIBLE ENTRANCE

There shall be at least one no-step, accessible entrance to the home. This entrance may be at the front, back, side, garage or carport of the home, but may not be through a bedroom. The door of this entrance shall be 32" wide minimum and shall meet the door hardware requirements described in this pamphlet.

INTERIOR ACCESSIBLE ROUTE

At least one accessible route shall connect all spaces and elements which are a part of the accessible floor of the home. Exceptions to the interior accessible route provision include a raised or sunken portion of a living, dining or sleeping room. This route shall not pass through bathrooms, closets, or similar spaces. As per existing code, this route is required to be 36" wide minimum.

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THRESHOLDS

Thresholds at the accessible entrance and along accessible routes may be 2 inch high maximum. Changes in level which exceed 3 inch high, shall be beveled, with a slope not steeper than one inch rise to 2 inch run (1:2).

INTERIOR DOORS

Doorways on the accessible route shall have a clear opening of 30 inches wide minimum. A 32@ (2= 8@) wide door satisfies these requirements. This door shall contain hardware meeting the door hardware requirements described in this pamphlet.

DOOR HARDWARE

Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and that does not require tight grasping, pinching, or twisting of the wrist to operate. Lever hardware satisfies the requirements of this provision.

BATHROOM WALL REINFORCEMENT (Refer to Figure R on page 6)

In bathrooms on the accessible route, reinforcement shall be installed to allow the future installation of grab bars on walls adjacent to the tub and toilet. In addition, reinforcement shall be installed in shower compartments for future installation of grab bars. This reinforcement shall be installed flush with the studs and at the following locations:

Toilet: 33@-36@ above the floor on all adjacent walls. Horizontal length of reinforcement shall be sufficient to allow a 42@ grab bar and 24@ rear grab bar. **Note:** Nothing in the ordinance requires that the toilet be placed by a side wall.

Tub: Horizontal length reinforcement shall be sufficient to allow for

- a) Back Wall: Two backing reinforcements, one backing reinforcement horizontal position 33@ minimum and 36@ maximum above the floor, and one backing reinforcement 9@ above the rim of the bathtub. Each backing reinforcement shall be 24@ long minimum and shall be 24@ maximum from the head end wall and 12@ maximum from the foot end wall.
- b) Foot End Wall: One backing reinforcement 24@ long minimum on the foot end wall at the front edge of the bathtub.
- c) Head End Wall: One backing reinforcement 12@ long minimum on the head end wall at the front edge of the bathtub.
- d) Shower compartments shall have backing on a minimum of two walls, not to include control valve wall, mounted at 33" - 36" above shower floor.

All wall reinforcement shall be capable of resisting shear and bending forces of a minimum of 250 pounds. Reinforcement is not required at the location of vanities, linen closets, and pre-molded shower/tub surrounds, or in a room containing only a sink and a toilet, provided that the room does not contain the only sink or toilet on the accessible floor of the home.

ELECTRICAL

- ? All light controls shall be placed no higher than 48@, on center, above the floor.
- ? Where practical, all electrical receptacles shall be placed no lower than 15@, on center, above the floor.
- ? All thermostats shall be placed no higher than 54@, on center, above the floor.

The exceptions to these provisions are as follows:

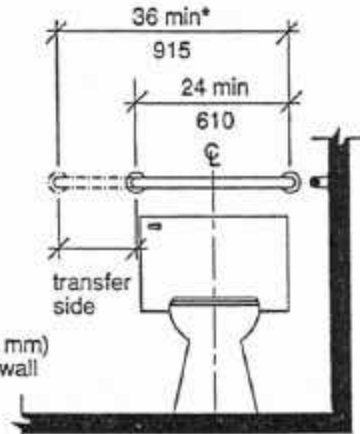
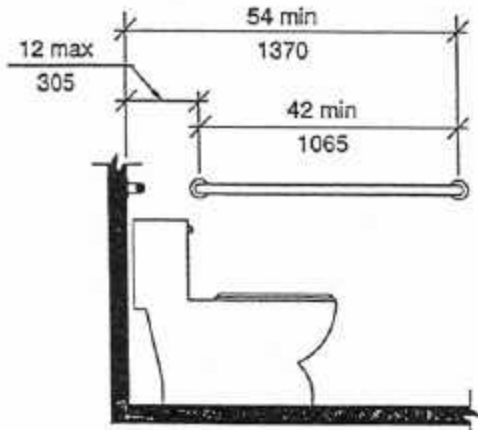
1. Electrical receptacles serving a dedicated use.

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GUIDE FOR TOILET, SHOWER, AND TUB GRAB BAR REINFORCEMENT INSTALLATION

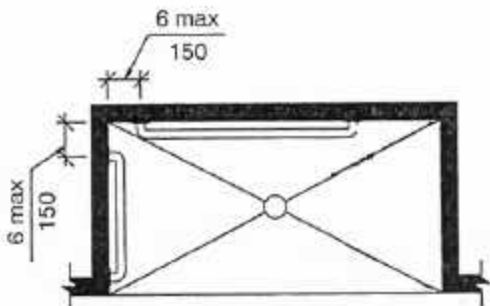
FOR PIMA COUNTY INCLUSIVE HOME DESIGN ORDINANCE

NOTE: Grab bars shall be mounted in a horizontal position, 33 inches minimum and 36 inches maximum above the floor.

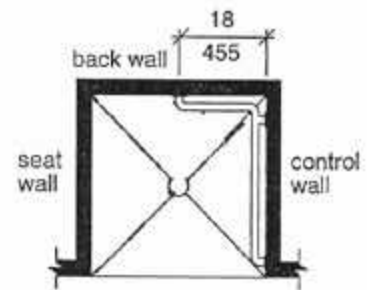


*36 inches (915 mm) minimum when wall space permits

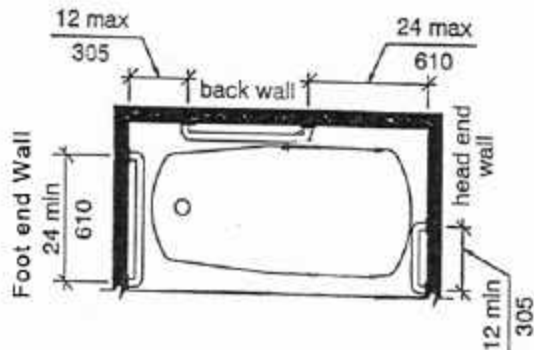
Future toilet grab bars



Future grab bars (2'-6" x 5'-0") shower



Future grab bars (2'-6" x 2'-6") shower



Future grab bar location for bath tub

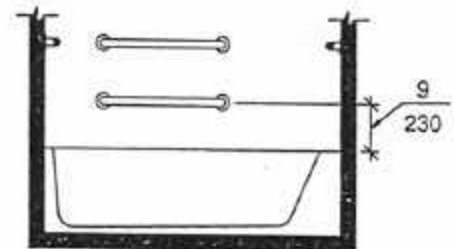


Figure R

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2. Appliance mounted controls or switches.
3. A single outlet where all of the following conditions are met:
 - a) The outlet is above a length of countertop that is uninterrupted by a sink or appliance; and
 - b) At least one receptacle is provided for that length of countertop; and
 - c) All other receptacles provided for that length of countertop set no higher than 48".
4. Floor electrical receptacles.
5. Plumbing fixture controls.
6. HVAC diffusers.
7. Ceiling fan mounted controls.

WAIVER PROVISIONS

Upon a determination by the Building Official that by virtue of terrain or other unusual characteristics of the building site, there are practical difficulties associated with compliance of any specific provision of this standard, and that the additional cost to comply with the applicable provision of this standard shall exceed two hundred dollars, as shown by clear and convincing evidence presented by the applicant, the Building Official may waive the requirements of that specific provision.

For any questions, please contact Development Services Building Codes Division at (520) 740-6490.

For a copy of the Ordinance, please contact the Clerk of the Board of Supervisors at (520) 740-8449. -

NAILS – WHAT’S SO COMMON ABOUT THE COMMON NAIL?

A recent inspection by Department staff of numerous buildings under construction reveals that common nails are not being used in wood frame construction even though their design values were used in engineering calculations. All the nails currently being used in the jobs surveyed are “sinker” nails, which are smaller in diameter and shorter in length than common nails.



Do you know that a 16d sinker is essentially a 10d common with a different shaped head and a 1/4 inch longer length. The lateral load capacity is about 15% less than the common nail. Allowable Code values for shear are based on using the common nail.

In addition to the above nail substitution some jobs have used Hem-fir for studs or sill plates, which gives you an additional 18% decrease. If you combine this with a substitution of sinker or box nails you have almost a 30% reduction in capacity. That’s providing they have done an adequate job of nailing with no over driven, or air-nails.

Effective immediately, “Sinker” or “box” nails may be used in construction if the design values for common nails in the current code are reduced by 20% and so specified on the plans. -



Don't Starve Your Furnace

If your furnace does not get enough air to properly burn fuel, it will starve. This allows partially burned fuel and carbon monoxide to infiltrate back into your home causing illness—or even death. You can prevent this from occurring by having your gas furnace inspected and cleaned once a year by a qualified heating specialist. Contact your local gas company for more information. -

SAHBA SPRING HOME & GARDEN SHOW

Tucson Convention Center
 Friday Apr. 11, 10 AM– 9 PM
 Saturday Apr. 12, 10 AM – 9 PM
 Sunday Apr. 13, 10 AM – 6 PM



Codes Education Opportunity

AZBO Spring Education Institute

April 21-25, 2003

Will be held at:

The Prescott Resort

1500 Hwy 69

Prescott AZ 86301

Classes will be held on Residential Inspection, Building inspection, Building Classification Residential Electrical Inspection, Property Maintenance, Means of Egress and many more subjects. The Arizona Building Officials and the Arizona Fire Marshals Association invite you to attend. Call AZBO at (520) 498-2425 or e-mail at: registrar@azbo.org



Kody says:

You do not need a Building permit for a detached storage shed that is 1 story in height and is less than 200 sq. ft. in floor area. Refer to the IRC section R105.2 to see what other items are exempt from a Building Code permit. A storage shed, over 120 sq. ft. will require a Zoning Permit . -

CODES in Effect in Pima County	
CODE	Effective Date
International Residential Code (IRC- 2000) IRC includes Structural, Mechanical, Plumbing and Electrical	March 6, 2001
International Building Code (IBC-2000)	March 6, 2001
International Mechanical Code (IMC-2000)	June 22, 2001
International Energy Conservation Code	June 22, 2001
International Property Maintenance Code	June 22, 2001
1994 Uniform Plumbing Code (For Commercial use only)	February 5, 1996
1999 National Electrical Code	June 22, 2001
1999 Spa and Pool Code	June 22, 2001
Outdoor Lighting Code	September 21, 2000

Copies of these codes are available at the main branch of the Tucson-Pima County Library.
 Help-Line 791-4010

Copies of some are available for purchase at Pima County Building Codes, 201 N. Stone.

Ph. 520-740-6490

Purchase on line at:

www.ICBO.org

Ph. 1-800-423-6587

Useful Telephone	Numbers
PC Bldg. Codes and Plan Review	740-6490
PC Bldg. Codes FAX	740-6555 740-6888
Inspection Request	740-6499
Building Inspectors between 7AM and 7:30AM	292-2255 293-5657
PC Zoning Enforcement	740-6470
Zoning Information	740-6450
Public Service	740-6510
City of Tucson	791-5550

Prepared by the **Plans Review Staff** of the Building Codes Division of Development Services Department.

Carmine DeBonis, Director, Carla Blackwell, Deputy Director Development Services, Bill Jones, Chief Building Official

The information provided herein is for information only and is not to be interpreted as superceding the codes as adopted by Pima County but should only be used as an aid in understanding the requirements of those codes to facilitate compliance.