


	STANDARD OPERATING PROCEDURE BUILDING & SITE DEVELOPMENT	Number: 310.1
Approval: Yves Khawam 		Effective Date: December 27, 2006
Subject: Requirements for County building inspections		Page 1 of 7

1.0 PURPOSE:

The purpose of this document is to provide standards for persons requesting or subject to County building inspections.

2.0 REVISION HISTORY:

Revised 4/4/07 to provide additional information including appendix A. Revised 4/24/09 to reflect unit reorganization. Revised 6/16/10 to expand section 4.10. Renumbered SOP from 501.2 on 12/30/10. Revised 9/6/11 adding section 4.11 to reflect historic practice. Revised 6/8/12 with new inspection codes. Updated on 8/8/14 to add section 4.12. Amended on 1/20/16 to reflect new auto-routing process. Revised on 7/24/17 to add a site water/sewer underground inspection.

3.0 PERSONS AFFECTED:

Inspection staff and persons requesting or subject to County building inspections.

4.0 ADMINISTRATIVE POLICY:

4.1 Inspector questions

Please note that we are unable to provide estimated inspector arrival time. If you have other inspection related questions, you can reach an inspector supervisor by calling 520-724-6716.

4.2 Access to construction

All construction for which an inspection is requested shall be provided with a proper posted address and signed directions to work location. For locations not situated on a signed road, it is especially important that as many signs as needed be posted from the signed road to the job site. Access shall be provided to all work including providing ladders as required. All animals shall be secured so as not to interfere with access to the work requiring inspection.

Inspectors shall not enter a lived-in residence without the presence of an adult.



4.3 Permitting documentation

Required permitting documentation shall consist of permit and conditions sheet, approved bound plans containing no other markings, a folder containing inspection history arranged in chronological order, and any supporting construction documentation including evaluation reports, manufacture specifications and approved truss drawings with layout sheet.

Documentation for single family dwellings shall be located as follows for intermediate inspections: water heater platform, fireplace, or entrance to dwelling from garage or carport. For final inspections, documentation shall be located on the kitchen countertop or at the entrance to dwelling from the garage or carport.

If documentation is placed in a tube, the tube shall be minimum 3" diameter and large enough to allow the easy removal and reinserting of all documentation.

4.4 Permit conditions

Project specific special conditions are listed on the permit documents. These need to be read by the contractor prior to start of construction.

4.5 Partial inspections

Building permit fees are in part based on the number of inspections listed on the permit card. Hence the standard permit fee does not cover partial inspections for single family dwellings smaller than 5000 square feet. However, should a client desire partial inspections, these can be accommodated with payment of a re-inspection fee for each additional requested visit in order to cover our cost.

Please attempt to group the temporary power inspection and the site water/sewer underground inspection with another inspection.

4.6 Requesting custom inspection times or same-day inspections

In order to maximize efficiency, inspectors are auto-routed via a complex algorithm considering factors associated with type of inspection and drive times resulting in a specific route for each inspector and which will eventually allow us to provide estimated time of arrivals to clients automatically, the business day prior to the inspection day. As a result, inspectors cannot deviate from their route without impacting subsequent clients. However, for those occasions where a specific arrival time or a same day inspection is requested, clients may use our remote inspection program described at www.pima.gov/remoteinspections. Alternatively, clients may



contact the Chief Inspector one business day prior to schedule a custom field inspection by calling 520-724-6490. There is a minimum two-hour charge for a custom field inspection.

4.7 Re-inspection fees

We wish to help you succeed in building safe and sustainable structures through providing efficient and effective inspections. In that regard, your inspector is a valuable resource from whom you may solicit information and guidance throughout the process. However, in order to provide our services, we need to ensure that no inspection is called in prior to being ready. Please verify that all prior approvals have been obtained, that all pertaining conditions have been met and that all work is ready prior to calling for an inspection.

Inspections which cannot be located for lack of a posted address shall be subject to a re-inspection fee.

Any item not ready at the time of the inspection, not corrected after failing an inspection or not grouped per section 4.5, shall be subject to a re-inspection fee for each inspection item requested. Furthermore, if a superintendent of construction or contractor has been warned of a deficient item, he or she may be subject to a re-inspection fee for the first time inspection failure of like items on subsequent projects. *Please note that inspections canceled after 4pm the business day prior to the inspection day will be subject to this fee as our inspector routes are determined at this time.*

4.8 Inspection of construction built without permit

Construction built without permit or construction which has progressed beyond the next unapproved required inspection shall need to have elements destructively opened for inspection. The inspector shall determine which elements need to be exposed, the quantity and location of openings within membranes and whether certain items which cannot be observed require engineered certification. Depending on the complexity/size of the structure and inspector workload, it is possible that the inspection may require rescheduling to conclude on a subsequent visit.

4.9 Occupying spaces prior to final inspection

No building area under active permit shall be occupied, to include stocking or placing of furniture, without the explicit prior approval of the building inspector. Violations of occupancy may be subject to the removal of building contents and enforcement penalties.



4.10 Commercial certificates of occupancy

Prior to requesting a certificate of occupancy on all commercial projects, approval shall be solicited from the fire district, the responding fire department or the State Fire Marshall's Office as well as completing all other conditions listed on the permit. Such approvals may be emailed to Building.Safety@Pima.gov. Prior to requesting a certificate of occupancy on all facilities storing or selling food, approval shall be solicited from the Pima County Health Department. Certificates of Occupancy shall not be issued prior to receipt of these conditions.

4.11 Client expectation of inspectors

Persons receiving a County inspection may expect the following of their inspectors:

- Clients may request that the inspector clarify or indicate the code or policy provisions supporting any required corrections
- Inspectors shall not deviate from approved plans or impose requirements beyond those listed on approved plans unless a gross life-safety omission occurred during plan review
- Inspectors shall honor all field modifications granted by prior inspectors
- Clients shall not be subject to inconsistencies in application of requirements among field inspectors and shall report all such events to an inspection supervisor at 520-724-6490

4.12 Setbacks from property lines

Pima County inspectors do not verify location of property lines when inspecting construction. It is strictly the responsibility of the owner and person doing the work to ensure that structures are sited in accordance with the approved plans. Failure to adhere to approved setbacks may require structures to be moved at owner's expense. The reasoning as to why setbacks are not verified by inspectors is that exact property line location cannot be ascertained without requiring a survey be conducted for all projects, thereby creating a financial burden to property owners. If owners/contractors have any doubt as to location of property lines, it is their responsibility to obtain a survey so as to validate approved setbacks prior to construction.

4.13 Sidewalks associated with homes in platted subdivisions

Final inspection shall not be approved for homes in platted subdivisions prior to the sidewalks being completed on the driveway side of the house.



4.14 HCS (Home Connection Sewer) connection

Pima County inspects the site sewer up to the point of connection to the public sewer or private disposal system but does not inspect the HCS connection itself. It is strictly the responsibility of the property owner or the person performing the work to ensure that the HCS connection is completed in accordance with adopted standards.

5.0 DEFINITIONS:

Not applicable.

6.0 RESPONSIBILITIES:

It is the responsibility for all persons requesting or subject to County building inspections to adhere to the requirements of this document.

7.0 PROCEDURES:

Not applicable.

Appendix A Typical Residential Inspection Listing and Cursory Requirements

1. Building plumbing/mechanical underground inspection (0111):

Waste/vent system shall be provided with a 10 ft water test; proper bedding/shading shall be provided for piping (no rocks); and underground/slab water lines shall be under working pressure or an air test of 50 psi (no air test allowed on plastic pipe).

2. Site water/sewer underground inspection (0112):

The site sewer (and back-water valve, if applicable) is required to have a tracer-wire from the building clean-out to the sewer main connection. Non-metallic yard water-line also requires a tracer-wire from the meter to the structure. Note: all required tracer-wires shall be a minimum of 18 AWG copper with insulation color to match Blue Stake standards:

- Green: non-metallic sanitary sewer systems
- Blue: non-metallic water systems
- Yellow: non-metallic gas and oil
- Red: non-metallic electrical and other empty conduit
- Orange: non-metallic communications



3. Pre-slab inspection (0120):

Forms, footings and rebar shall be in place with set-backs per the approved site plan (note section 4.11 regarding setbacks). Plumbing in direct contact with concrete shall be wrapped. Underground vacuum and kitchen exhaust duct work shall be installed. The concrete encased electrode (ufer) and underground electric conduits and floor boxes shall be installed. Sub-slab soils shall be compacted. Hold-downs shall be placed/installed per plan.

4. Wall footing inspection (0121):

Excavation, structural reinforcement, and electric ufer shall be inspected at this time. Forms, footing and rebar shall be in place with set-backs per approved site plan. The concrete encased electrode (ufer) shall be installed.

5. Stem/retaining wall inspection (0122):

Structural reinforcement shall be inspected at this time. Forms/masonry block and rebar shall be in place. Hold-downs shall be placed /installed per plan. See "Reinforced Masonry" below for special inspection.

6. Reinforced masonry inspection (0123):

If the wall(s) requires a special inspection do not schedule a County inspection (see your approved plans and permit). This inspection shall be completed by the special inspector designated by the approved registrant of the project who shall turn appropriate paperwork to building.safety@pima.gov. If special inspection is not required, schedule County inspections prior to placing grout at each 5 ft lift (or greater with cleanouts). Structural reinforcement and electrical conduit will be inspected at this time. Masonry block and rebar shall be in place.

7. Roof & wall nail/bracing inspection (0130):

Inspection shall be called for prior to start of plumbing, electrical and mechanical work. Braced wall panels/shear walls, truss placement (if applicable), roof nail, and exterior siding (if applicable) shall be inspected at this time. Provide County approved set of truss drawing complete with layout sheet matching installed trusses. Have shear walls or braced panels and headers installed per plan along with connections and transfers. Have anchor bolts and hold-downs complete with special inspection approval for epoxy-bolts as required. Provide a ladder to inspect roof.

8. Intermediate inspection (0140):

All mechanical, plumbing, and electrical rough-ins and all framing will be inspected at this time. The roof shall be dried-in and loaded. Stucco lath shall be installed with all penetrations sealed. Windows shall be installed with safety glass at all code-required locations. Plumbing waste/vent system shall be under test with minimum 10 ft head of water above highest fixture. Water lines shall be under working pressure or minimum of 50 psi air (except on plastic pipes). Gas lines shall be under test of minimum 30 minutes at no less than 1.5 times working pressure (min 3 psig) with an installed pressure gauge of maximum 0.10 psi increments.



Mechanical ducts and vents must be sized and installed per plan with proper clearances to combustibles and all condensate drain lines installed. Check that smoke detectors are not located within 3 ft of any return or supply registers.

Electric boxes and recessed can lights must have all wiring terminated and grounded. Sub-panels should be in place with conductors terminating in the panel but no breakers installed. Ensure outlets and circuits requiring GFCI and AFCI protection are appropriately wired.

Pay critical attention to stairs including headroom, tread rise and run, landings, and future rail and guard locations, making sure that finished floor, wall and ceiling thicknesses have been taken into account to avert the unpleasant task of starting over at final inspection! Fire blocking shall be in place with all penetrations sealed. Nailers and backing shall be in place for sheet rock, tubs, shower stalls, and grab bars per Pima County Inclusive Home Design Ordinance.

9. Thermal envelope inspection (0150):

Insulation installation (to Grade 1 specifications) and sealing will be inspected at this time. Insulation shall have correct R value, shall be installed to Grade 1 specifications; shall not be compressed and shall be cut and properly installed around all electrical devices/conductors, waste/vent pipes, etc. All exterior doors and windows shall have U Value and Solar Heat Gain Coefficient labels attached.

10. Fire/shear sheetrock nailing inspection (0160):

Sheet rock attachment for shear walls, fire rated walls and fire rated supports will be inspected prior to taping joints. If you don't have any shear or fire rated walls within your house, do NOT call in for this inspection.

11. Final inspection (0190):

Plumbing, mechanical, electrical, outdoor lighting and building final inspections shall take place at this time. Submit to building.safety@pima.gov any special inspection reports and documents per the Special Conditions listed on your permit prior to attempting to schedule final inspections. The entire building needs to be complete (including all bathrooms)! Install and label circuit breakers and test all systems. Provide manufacturer installation specs for all appliances including furnace, AC unit, and water heater. Check that exterior grades slope away from the building for drainage and that exterior doors are provided with landings. Paint any exterior ABS or PVC piping.