City of Phoenix
PLANNING & DEVELOPMENT DEPARTMENT

Air Conditioner Replacement Counter Questions and Guidelines

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Code/Section	IBC Sections 105.1 and 105.2
Approved:	May 4th, 2020
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Issue: This guideline establishes a permit vetting procedure for establishing permit exempt qualifications for air conditioning unit replacements.

Procedure: All customers requesting permit exempt approval for AC unit replacement, shall be asked the following questions. If any answer is "yes", a permit is required.

1. Architectural/Structural (must have roof layout plan, aerial view ok if legible)
    a. Is the unit replacement in a different location?
    b. Does the unit have the same footprint as the original? If not, a support stand may need to be modified or provided
    c. Is the equipment weight the same? If the proposed unit is heavier, professional structural engineering for roof loading is required.
    d. Are the ductwork penetrations in the same location and the same size? If not, penetration details will be required
2. Mechanical
    a. Is the new unit "in kind" as the original?
    b. Are outdoor air calculations and schedules provided for each ac area served?
    c. Is the unit over 2,000 CFM air delivery? If yes, a mechanical special inspection for duct smoke detector operation is required. Per City of Phoenix IMC 606.2.1 amendment, the placement of smoke detectors shall be installed in air distribution downstream of the filters and ahead (upstream) of any branch connections in systems having a design capacity greater than 2,000 CFM.
    d. Are there any ductwork revisions? If yes, a ductwork plan showing revised and new ductwork is required.
    e. Will outdoor air opening size or location change? Was there an outdoor air hood? Will the new unit now require an outside air hood?
    f. Are there any condensate pipe revisions? Per City of Phoenix IMC 606.2.1 amendment, nonmetallic piping shall not be installed in exposed locations.
    g. Does the new unit contain 10 lbs. or more of refrigerant? (Greater than 5 tons of refrigeration capacity)
    h. Are repair or replacement of any air conditioning components located inside a building?

3. Plumbing
    a. Does the new unit have natural gas burner? If yes, does the new unit heating demand increase in BTU / CFH? If yes, provide complete natural gas piping isometric from the existing gas meter to the new unit showing piping capacity at all segments.
    b. Verify capacity of existing gas meter and piping. Natural gas calculations for the meter must be on the plumbing drawings.
4. Electrical
    a. Does the new unit have an increased amp draw? If yes, provide revised electrical one-line diagram and panel schedule.
    b. Does the new unit require new wire installation, size, and fuse size?