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**MECHANICAL DRAWINGS**

Sealed by a mechanical engineer registered in the State of Arizona (if applicable).

**2018 International Mechanical Code with city of Phoenix Amendments (IMC).**

- Site plan documenting location of project.
- Complete Mechanical floor plan for the entire project area IBC 107.2.1
- Mechanical energy conservation code compliance for HVAC equipment, duct insulation, controls, economizers, pipe insulation IECC C403.
- Mechanical layout (A/C units, air-handlers, ducts, diffusers, etc.) IMC 303, 304, 306, 308, 309, 603.
- Mechanical equipment listings, specifications and weights IMC 301.
- Cooling load calculations IMC 312.
- Outside air ventilation calculations IMC 401, 402, 403, Table 403.3.
- Air-balance schedule IMC 403, 501.4.
- Air-balance report required to be submitted to Inspector (note on plans) IMC 403.7.
- HVAC equipment condensate disposal IMC 307.
- Independent exhaust systems and discharge IMC 501.2, 501.3.
- Bulk CO<sub>2</sub> installation for restaurants, IMC 502.21 (City of Phoenix amendment)
- MMJ odor control, IBC 307, PFC chapter 39, PFC table 5003, IMC 403, IMC 501, IMC 510, IMC 408 (City of Phoenix amendments)
- Exhaust airflow rates based on Table 403.3 IMC 403.
- Battery charging ventilation systems IMC 502.4, 503.1, PFC 608.
- Clothes dryer exhaust systems IMC 504.
- Commercial cooking grease exhaust systems IMC 506, 507, 508, PFC 609.

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- Hazardous exhaust ventilation systems IMC 510, PFC 5003
  - Paint spray booth, IMC 502, IMC 503, IMC 408 (City of Phoenix amendments)
  - Motor vehicle repairs, IMC 502.14, IMC 502.15, IMC 502.16
  - Make-up air for exhaust systems [sizes and locations] IMC 504.5, 505.2, 508, 510.5.5.
  - Duct detector automatic shutoff of HVAC systems in excess of 2,000 cfm IMC 606.
  - HVAC duct detector audible/visual alarms and trouble lights IMC 606.4.
  - HVAC automatic shutoff test report required to be submitted to Inspector IMC 606.5.
  - Fire/smoke damper location and specifications IMC 607, IBC 717.
  - Boilers, water heaters and pressure vessels IMC 1001, IBC 1015.3.
  - Refrigeration systems including walk-in freezers/coolers, machinery rooms and mechanical chiller systems and monitoring, IMC 1101, PFC 605, IBC 509.4, Table 509, IBC 1006.2.2, 1006.2.2.3
  - Hydronic piping system layouts, materials, sizing IMC 1201.
  - Solar water heating systems for space heating/cooling, domestic hot water heating, swimming pool or process heating IMC 1401.
  - Combustion-air openings sizes and locations IMC 701 (other than gas-fired appliances, for gas-fired appliances see International Fuel Gas Code).
  - Identify any mechanical special inspection items (duct detectors, fire and/or smoke dampers, grease duct enclosures) IBC 1705.