# Pikes Peak REGIONAL Building Department

### COMMERCIAL MECHANICAL PLAN REVIEW REQUIREMENTS

#### <u>ALL PLANS REQUIRE:</u>

- Compliance with currently adopted IMC, IFGC, IECC, IBC
- Colorado professional engineer stamp and signature per RBC 106.1.3
- Scale and format per RBC106.1.1 (1/8" = 1'-0" minimum scale/ 1/8" minimum lettering)
- Grid lines and column lines coinciding with architectural pages
- Accessibility requirements must be met

#### HVAC EQUIPMENT

- To include but not limited to RTU, MUA, exhaust fans, Economizers, etc.
- BTUH for heating and cooling
- Fan CFM with OSA quantity complying with table adopted IMC version
- Note requiring balance report to be provided to inspector at heating final
- Smoke detection system controls complying with currently adopted IMC version
- Setback thermostats
- Labels on equipment as to location being served

#### <u>DUCTS</u>

- Duct Sizes, Duct and plenum insulation, and method of sealing
- Insulation with "R" value complying with adopted amendments from IECC and RBC
- Balance damper locations with CFM marked
- Damper locations (Fire, Smoke, Fire/Smoke, Radiation, Radiation/Smoke)

#### <u>REFRIGERANT</u>

- Type and quantity for confined split systems complying with currently adopted version of IMC
- Type and quantity for walk-in freezers and coolers complying with currently adopted version of IMC
- Previously accepted designs, where refrigerant piping penetrates two or more floor/ceiling assemblies may no longer be acceptable (See 1109.2.5, 2021 IMC)

#### TYPE I AND TYPE II HOOD DETAILS

- Detail drawings with listings, CFM, exhaust collar and grease duct size and type of material
- Rated shaft showing clearance or approved fire wrap
- How hood and ceiling join together
- Rated Protection for top of hood
- Exhaust fan location, termination in relation to openings into building
- Detail all rated penetrations, indicate all clearance to combustible construction

## Pikes Peak REGIONAL Building Department COMMERCIAL MECHANICAL PLAN REVIEW REQUIREMENTS (CONT'D)

#### GAS FUELED APPLIANCES

- Vent sizes, routing, termination in relation to openings into structure
- Combustion air sizes and source
- Show access to rooftop equipment, electrical outlet with 25'

#### SPECIALIZED EXHAUST

- Exhaust fan location, termination in relation to MUA and OSA inlets
- Makeup air with all associated interlocks, (MUA, RTU, E.F., Gas valves, fire alarm system)
- Declaration statement if exhaust is/is not part of mall or building smoke evacuation system

#### GAS PIPE

- Always to be provided on (M) or (G) sheets
- Drawing to show T.D.L., pipe sizes, BTU's at unit location, total meter BTU load, etc.
- If new piping connects to existing provide all existing lengths, sizes, BTU loads and meter
- Indicate what table from currently adopted IFGC gas pipe sizing table was used

#### COMPLIANCE WITH CURRENTLY ADOPTED VERSION OF IECC

- Section C403 Building Mechanical Systems
- Air system balancing
- Check for penetrations of rated shafts, walls and ceilings
- Fuel burning appliances are prohibited in a R/A plenum
- Section C408 system commissioning