IOSCO COUNTY BUILDING DEPARTMENT
P.O. BOX 88, 420 LAKE ST.
TAWAS CITY, MI. 48763
989-362-6511

Permit MUST be Obtained BEFORE starting work , Inspections MUST be completed BEFORE any work is CONCEALED . COMMERCIAL & LARGE RESIDENTIAL Projects are subject to PLAN REVIEW & Approval, Engineered Drawings, Stamped Drawings, Specification listings & Project Time-Line Sheets MAY all be required before permit is Issued.

MECHANICAL PERMIT "Generally" Covers the Following :

1. UNDERGROUND: Environmental and Special Use Area Conditioning Systems, Buried Fuel Supply systems, Process Supply and Return Piping, Condensate & Drain Systems, Waste Management Piping & Proprietary disposal Methods, But Is not limited in scope to just these listings.
2. UNDERFLOOR: Rough-In Piping, Fittings, Insulation's, Fittings, Protective shields, Hangers, Expansion Joints, of Specified, Listed, & Approved Ductwork /Piping for Code & Engineered Delivery & Return Systems. Rated According to Pressures and Temperatures of ALL mediums of Energy Transfer/ Transmission. Rated for the local Environment in which the Ductwork is installed. With Attention to Clearances From Specified Hazards, & Fresh Air Intake/ Exhaust openings as per manufacturers Instructions & Michigan Mechancial Code.
3. IN-WALL : Rough-in of mechanical equipment and piping systems with Special attention to Preservation / Repair of Structural / Fire Resistance integrity of Wood Frame Assemblies Altered due to installation of Ductwork/ Piping Systems.
4. FINAL: Inspection of ALL Equipment, Appliances, Exposed Piping/Fitting Systems, DYNAMIC TESTING of these Systems for appropriate performance, according to Engineered Data & State Code. . Some Systems are required To be CRITICAL mode tested for fail-safe proof of performance, i.e. Smoke Detectors, Sprinkler & Fire control systems, Certified Documentation of these tests are required to be kept on record in this office.

PERMIT INSPECTIONS Generally allows for up to three trips to job site, EXCESS trips to the site will result in additional fees..

1. MECHANICAL Equipment must be provided with Access, heating Equipment in Attics, Crawlspaces or Alcoves MUST Comply with Code Requirements, regarding Work Space, Lighting, Available Service outlets , Drainage, Removal openings & in some cases Smoke Detection devices & other safety equipment. MRC 1305

2. SERVICE WORK SPACE Required at front of mechancial appliances 30"x 30" MRC M1305.1

3. MECHANICAL Equipment MUST have a permanent label stating Clearance Information & Approval agency Mark, Including Solid Fueled Space heating equipment & all accessories, (wet or dry) MRC 1303.1

4. MECHANCIAL , On NEW Work, regardless of who is installing the Bath Fans, Kitchen Hood, Dryer Exhaust, Water heater, gas fireplace, the Vent & Fuel System for these appliances will fall under the scope of a mechanical permit. MMC 106.1

5. HOMEOWNER CANNOT be issued a Permit to Install a Space heating Boiler . MICHIGAN BOILER CODE.

6. FUEL FIRED Equipment may NOT be installed in Sleeping Rooms, Storage Closets, Bathrooms, Toilet rooms, With some Dedicated exceptions, i.e. direct vented types obtaining ALL combustion air from exterior, & others per code. MMC 303

7. SOLID FUEL Heating Equipment is Prohibited for use in Private Garages, Unless Semi/Sealed Combustion, & Cleaning DOES NOT require Cinder Exposure to area. Together with 18" Floor Clearance to Source of ignition. MMC 304.3 (pellet, corn, cherry pit, compressed wood, Fuel fired units could be approved on a case by case basis) NFPA 211

8. GARAGE Fuel fired Equipment MUST be raised 18" Above Floor to point of ignition. MRC G2408.2 (305.7)

9. GARAGE FUEL fired Space heating Equipment MUST be Installed 72" above floor MRC G2408.3 (305.5) Or Protected from impact damage by vehicle movement by respective guards.

10. INSTALLER of ALL exhaust equipment is Responsible for Air Balance within the Building, code requires Neither Positive or Negative pressure in structure when exhausting, & ventilating equipment is in use. MMC 501.3

11. MECHANICAL Equipment MUST be installed according to Manufacture's Supplied Instructions, Inspection WILL Follow all aspects of CLEARANCES, VENTING, COMBUSTION AIR, and MAKE-UP AIR requirements of equipment/installation. According to installation Manual, Which MUST be available at Inspection & Property Owner. MRC304.1

12. VENTILATION is required in Residential Bathrooms, Either Natural (window), or Mechanical bathfans can Provide Necessary exhaust from Shower/Bath areas as per Code MRC R303.3

13. MAKE-UP AIR for Exhaust Equipment is REQUIRED, i.e. Clothes Dryer, Bath Fans, Kitchen Hoods & Ventilators.
Make-Up air supply Should be taken from Un-Contaminated Exterior locations, away from other exhausts, & Supplied as Close as Practical to the Exhausting Equipment to Contain Thermal Impact a supply of fresh air may have on the area.
Design, Sizing, and Method Should be approved BEFORE installing MAKE-UP ducts, or supply systems. Intake location & Discharge location may determine which method is most effective, i.e. Skuttle, /drop Duct (from Attic) or Floor type from Crawlspace/Basement. Inches by Inches method or calculate it from appliance data sheets, or use the Applicable Michigan Mechanical Code. MMC 501.4

14. COMBUSTION AIR for all Single Pipe vented heating or process Equipment is REQUIRED, according to the Manufacturer's requirements as per Installation instructions supplied with unit, Design/Sizing Pre-Approval MRC 1701

15. SMOOTH METAL Exhaust Piping / Fittings are Required for Clothes Dryers, Kitchen Hoods & Medium Temperature Exhaust Ductwork . MRC 1501.1

16. TAPEING OF DUCT , if ductwork needs to be further sealed (poor fit-up),Must use approved tape, Vinyl duct tape is not allowed unless UL-181 marked, Ductboard aluminum is usually preferred and approved MRC 1601.3

17. SUPPLY/RETURN AIR , warm air systems must be designed to deliver and return correct amount of BTU's to areas based on a Heatloss of the structure, Capacity of heating unit, Ductwork connected to heating unit, & registers connected to ductwork.
A Reasonable attempt MUST be made for proper circulation , Return air from a single S/A register can be allowed via a "doorcut", if the opening is roughed to allow for flooring finish, larger areas will require appropriate R/A registers: MRC 1602

18. HVAC DUCTWORK condensation control is REQUIRED, steps MUST be taken to Prevent Condensation in or on the Ductwork systems Or Ductwork MUST be insulated in UN-Conditioned areas.
Ambient conditions MUST be considered per seasonal temperature differentials. Generally if Crawlspace is Insulated on ALL exposed walls, including rim joist, with vapor barrier and Damp Ground is covered with 4 Mil Vapor Barrier, (duct area humidity control), The Space can be considered as a Conditioned Space. MRC 1601.3.4.

19. INSULATION, ductwork in Un-Conditioned Areas ,(Crawlspaces) without Exposed wall Insulation, Sill Plate Insulation, or Vapor Barrier on all Grade/ Weather Surfaces, MUST be insulated to R 5.2 to prevent Seasonal condensation MMC 604

20. CLEARANCES FOR All Fuel fired Vents, Chimneys, are established by the Supplier/ Manufacturer & Clearances MUST be Maintained between combustibles and Connection Piping, Vent Piping, & Exit Termination MRC 1801

21. FUEL SUPPLY Piping , Systems MUST be installed according to Fuel Gas Code, with Approved Materials, Including Required Shields, Sleeveing, Chase Guards, Hangers, or Bulkhead fittings. Must be Leak Tested BEFORE covering, to 1 ½ times Operating Pressure for not less than 10 minutes. MRC G2415 (404)

22. MANFACTURED FIREPLACES. LOGS. Must be installed according to Literature Supplied with unit, Units CANNOT be placed in Un-Sheathed Alcoves, Insulation & Wall Covering is required behind the fireplace. Fuel Piping To Unit other than Black Steel MUST be protected through Metal cabinet with appropriate Chase, (i.e. BX cable) MRC G2422.1.1 (R411.1.1 MMC 901

23. FUEL SUPPLY piping MUST be supplied with Condensate Drip tees at ALL appliances at low point for Moisture control & drain-off within Natural Gas systems MRC G2418.2

24. MAIN FUEL SHUT OFF VALVE at entry to structure REQUIRED ahead of Medium Pressure Regulator MRC G2419 (408)

25. SERVICE SHUTOFF VALVE required at each appliance ahead of disconnect Union fitting MRC G 2420.5 (409.6)

26. FUEL GAS Piping shall be tested at no less than 3psi for not less than 10 minutes with no leaks MRC G 2417 (406)

27. THESE Fuel Gas Fittings ; Unions, Tubing Fittings, Uni-Couplings, bushings, Compression types, or swing joints are Prohibited in Concealed locations, MRC 2414.3; FUEL GAS PIPING or DWV may not be installed in HVAC Ducts. MRC 2415.1 (404.1) G 2415.3 (404.3)

28. FUEL GAS Connectors, & piping must be protected with Auxillary shielding, where there exists potential damage from corrosion, physical damage, installation fasteners. Ground contact, or buried installations require special techniques MRC 2415

29. HANGERS, steel fuel piping- ½"=6ft, ¾"-1"=8ft, 1 ¼"=10ft. copper tube ½"od=4ft,5/8"-3/4" =6ft, 7/8"-1"=8ft: MRC2424.1