Mechanical permits are required when installing, altering, relocating or replacing mechanical systems or fuel gas piping in existing buildings or new buildings. Incorrectly installed appliances represent a significant threat to life safety and property damage.

- Gas appliance installation issues may include:
  - Improper flue installation could result in a house fire or CO poisoning
  - Improper combustion air will result in wasted fuel and furnace malfunctioning in addition to potential CO poisoning
  - A leaky gas piping installation could result in an explosion
  - Improper gas supply through furnace cabinet could result in a belated explosion
  - Inadequate bonding (grounding) of corrugated stainless steel gas piping could result in an explosion
  - Improper equipment placement in proximity of bedrooms

- Hot Water Heaters need to be checked for:
  - Proper installation of earthquake straps
  - Proper pressure relief valve drains to prevent scalding and/or flooding
  - Garage installations elevated above the floor to prevent explosions except for those with flammable vapor ignition resistant (FVIR) burners

- Check for properly safety listed and labeled equipment (UL, for instance)
- Check for proper clearances from combustible construction, walls, floors and ground surfaces
- Check to ensure adequate access and lighting for periodic maintenance and filter changes
- Garage mechanical installations need to be protected from vehicle damage
- Check for duct leak testing where significant portion of ductwork is located in unheated spaces
- If an installer knows the work will be inspected, they tend to pay closer attention to details