The 2021 International Mechanical Code®

Why It Should Be In Your Future

FACTS

- The International Code Council (ICC) updates its construction and public safety codes every three years through a governmental consensus process.
- The International Mechanical Code® (IMC®) is in use or adopted in 47 states, the District of Columbia, NYC, Guam, Puerto Rico and the U.S. Virgin Islands. Approximately 293 million people, or 88% of the U.S. population, live in areas that have adopted the IMC.
- The IMC is fully correlated with the other 14 International Codes® (I-Codes®). The IMC has over 178 code sections that reference sections of code in other members of the International Code Family and in total there are over 387 IMC cross-references among the suite of 15 I-Codes.

CORRELATION

- The IMC has 155 correlated sections with the International Building code® (IBC®); 26 in the International Plumbing Code® (IPC®); 24 in the International Fuel Gas Code® (IFGC®); 26 in the International Energy Conservation Code® (IECC®) and 140 in the International Fire Code® (IFC®); all of which avoids conflict and over lapping requirements. Correlated cross-references impact life safety issues related to:
    - fire protection and life safety systems
    - detailed ventilation and exhaust requirements based on occupancy and use
    - fire and smoke protection features
    - allowable quantities of hazardous materials
    - means of egress
- The I-Codes, when adopted as a family of codes, correlating as they do, provide a consistent system of regulations that designers, builders, and regulators can rely on, across city, county or state lines. Codes that correlate provide better public safety, improving fire prevention, reducing design problems and reducing construction costs.

ICC PMG
PLUMBING, MECHANICAL, FUEL GAS, AND SWIMMING POOL & SPA

- The IMC and the IFC codes work together to aid emergency responders and untrained refrigeration personnel. They mitigate overpressure conditions prior to operation of emergency pressure relief valves by requiring an emergency pressure control system for refrigeration systems that contain more than 6.6 pounds of flammable, toxic or highly toxic refrigerants or ammonia.
- Code provisions found in the IMC are in-line with all IECC requirements; correlation between adopted codes simplifies enforcement and eliminates direct conflicts with the IECC. The IMC includes several correlated subsections which go into great detail regarding insulation requirements.
- There are many code sections that have been incorporated from the IFC and the IBC into the IMC. Other model codes can only make a reference to a generic fire or building code term. This is a big advantage for designers and installers using the IMC.

BENEFITS

- Intake/exhaust combination terminations, which are regularly installed with heating and energy recovery ventilators, are approved for use by the IMC. Their use reduces building penetrations, labor, and associated system costs. By reducing the number of penetrations, air leakage can also be reduced, resulting in space conditioning energy savings. Further, the durability of the structure can be improved through reducing entry pathways for bulk water.
- The IMC provides a mechanical ventilation credit for the better performance of whole-building dilution ventilation systems that are distributed, mixed and balanced. The minimum mechanical ventilation rate can be reduced by 30%, when a whole house balanced ventilation system is installed. This mechanical ventilation credit results in space conditioning energy savings.
- Complete sections on common exhaust systems for domestic kitchens and dryers are included in the IMC. These systems result in significant installation cost savings by reducing the number of wall penetrations and required materials. Air leakage can also be reduced, resulting in space conditioning energy savings.
- The IMC authorizes code officials to issue annual permits. In cases where a series of alterations will be made to an already approved system, equipment or application, an annual permit can be issued instead of requiring an individual construction permit for each alteration. These code provisions allow industrial facilities to make routine equipment changes in a timely manner, saving both time and money.

For more information, contact:

Rich Anderson, Director, PMG Technical Resources
randerson@iccsafe.org
(888).ICC.SAFE, x6245

Mark Fasel, Director, PMG Technical Resources
mfasel@iccsafe.org
(888).ICC.SAFE, x5259

Jim Cika, Director, PMG Technical Resources
jcika@iccsafe.org
(888).ICC.SAFE, x6241

Gary Gauthier, Director, PMG Technical Resources
ggauthier@iccsafe.org
(888).ICC.SAFE, x6234

ICC PMG
PLUMBING, MECHANICAL, FUEL GAS, AND SWIMMING POOL & SPA

18-15281