Building Safety is … Personal

Week 2 – Building Safety Professionals and You (May 8th – 14th)

Week 2 of Building Safety Month introduces you to the important role that building safety professionals play in keeping our homes, schools and businesses safe. Safety Tips and Information is provided by the International Code Council. Go to www.buildingsafetymonth.org for more awareness about building safety. Join the Building Safety Month conversation – tag the International Code Council on social media and use #BuildingSafety365 to help spread the word!

Who are Building Safety Professionals?

While you're probably very familiar with what your local police and fire departments do, you may be less familiar with building safety professionals. In that way, building safety professionals are the silent defenders of public safety.

Here are a few things you should know:

- Building safety professionals include building inspectors of all kinds, building officials, plans examiners, permit technicians, fire marshals and more.
- Building safety professionals are constantly training and keeping up with the latest codes and standards.
- Their knowledge spans every aspect of the life of a building – from the bottom of the foundation to the top of the roof – and everything in between.
- Many building safety professionals have experience as architects, engineers, contractors or even government officials.
- There are many paths available to become a building safety professional.

Careers in Building Safety

There is a tremendous work opportunity for qualified candidates seeking a job in the building safety industry, including code officials. Professions within the building safety field vary widely in their specialties, and the industry offers many well-paying career options for today's workforce:

- **Building inspectors** inspect structures to determine compliance with the various building codes and standards adopted by the jurisdiction.
- **Building officials** manage the development, administration, interpretation, application and enforcement of the codes adopted by their jurisdiction.
- **Special inspectors** provide a specialized inspection of structural material fabrication and placement, such as poured concrete, structural steel installation and fasteners, etc.
- **Permit technicians** assist in the issuance of construction and development permits to ensure compliance with the provisions of a jurisdiction's adopted regulations and codes.
- **Fire marshals** develop and deliver fire prevention and implement public fire safety programs that provide for inspections of occupancies for life safety and fire issues in accordance with codes and standards adopted by their jurisdiction.
- **Plumbing inspectors** inspect the installation, maintenance and alteration of plumbing systems complete with their fixtures, equipment, accessories, and appliances.
- **Electrical inspectors** check the quality of materials, the installation work and the safeguards in electrical systems. They make sure electrical systems meet city, state or national codes, and electrical codes and standards. Electrical inspectors look closely at new wiring and fixtures in businesses, public buildings, and in homes.
- **Mechanical inspectors** focus on heating, ventilation and air-conditioning (HVAC) concerns. This includes inspection of mechanical appliances and equipment; air distribution systems; kitchen exhaust equipment; boilers and water heaters; hydronic piping; gas piping systems; flammable and combustible liquid storage and piping systems; fireplaces, chimneys and vents; refrigeration systems; incinerators and crematories. The mechanical inspector also check for air quality and energy conservation measures.
- **Public works inspectors** check digging and fill operations, and the placement of forms for concrete. They observe the concrete mixing and pouring, asphalt paving and grading operations and keep records of all work performed and the materials used. Public works inspectors may be specialist in one kind of operation such as reinforced concrete, dredging or ditches.
- **Property maintenance or housing inspectors** inspect existing buildings to check for health or safety violations and the condition of the exterior property.
- **Plan reviewers or examiners** begin the evaluation process which ensures that a building or structure conforms to the requirement of the local or specified code. The plan reviewer examines the construction documents used to describe a project, including architectural, structural, site plan, mechanical, plumbing, electrical and fire protection drawings as well as the corresponding specifications, structural design calculations and soil report.
- **Code enforcement officers** evaluate and enforce local building codes. They typically issue warnings or give citations for any code violations they find.

What Do They Do?

Building safety professionals provide guidance and advice to architects, engineers and contractors to help them bring building projects to life while ensuring safety for occupants and residents. They also help keep existing buildings safe by conducting inspections and adopting the latest building codes. They are community-oriented and dedicated to making the world a safer place. Building safety professionals:

- Protect the public through their commitment to building safety.
- Enforce code compliance to empower and educate partners to embrace and integrate safety standards in their work.
- Ensure that buildings are constructed to withstand the stress of everyday use.
- Perform safety checks that protect your home from emergencies before fire, flood or disaster strike.
- Support economic development by making our buildings studier, and therefore longer lasting.
- Play a significant role in community planning decision making as a connection between government, business and built environment partners.

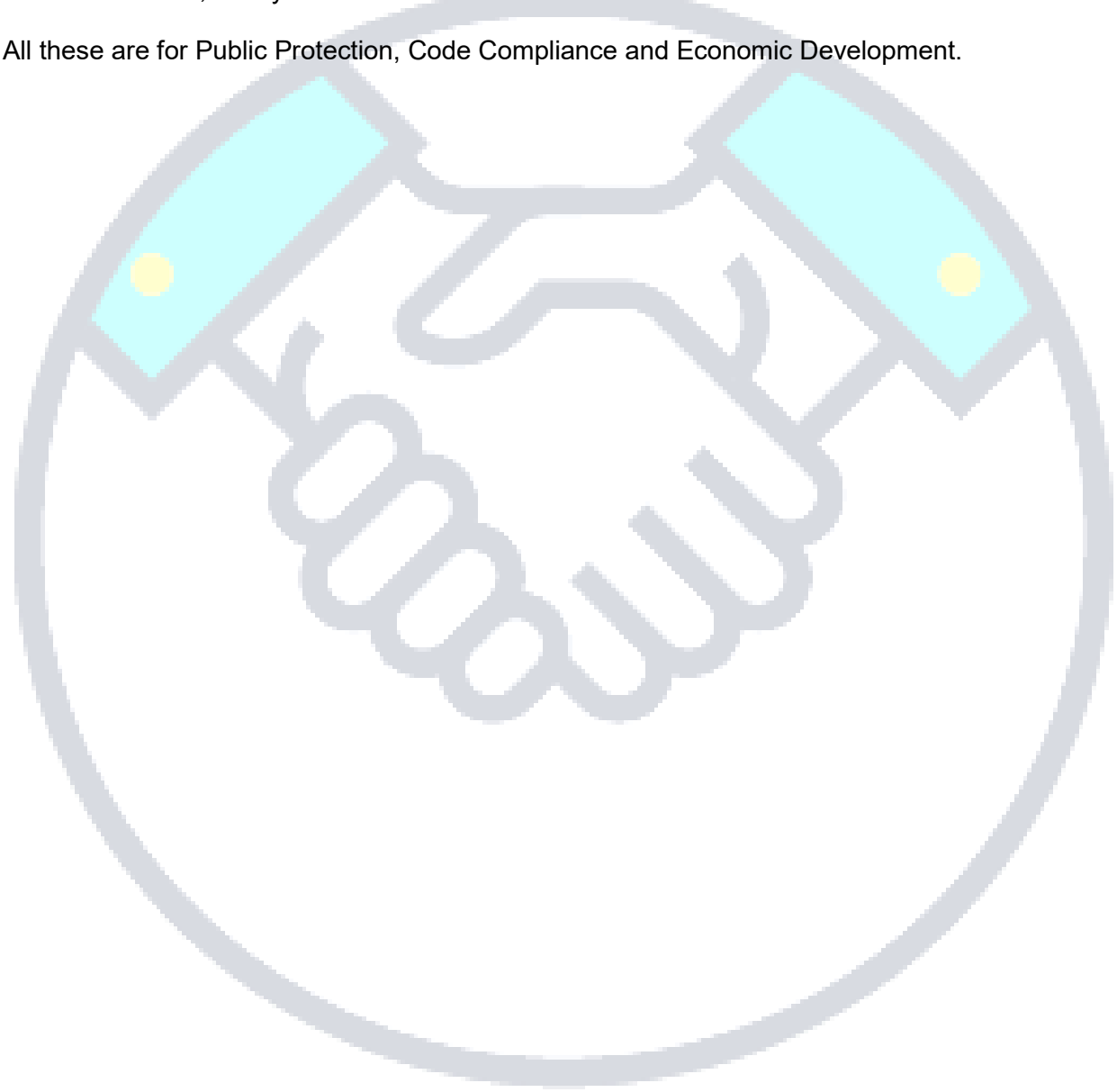
Value of the Code Official

Code Officials ensure building safety today, for a stronger tomorrow.

Code Officials are Essential, Dedicated, Qualified and Professional.

Competencies in Relationship Building/Customer Service, Being Curiosity, Community-Oriented, Communications, Ability to Multi-Task and Attention to Detail.

All these are for Public Protection, Code Compliance and Economic Development.



Defining Building Safety

Disciplines of Building Safety

The Building Safety Profession covers every aspect of the life of a building, from planning and construction to use, operation and maintenance. Building Safety Professionals assist design professionals, contractors, building owners, and the public to understand how to design, construct, operate and occupy buildings in conformance with the International Codes and technical standards adopted by local and state jurisdictions.

BUILDING Addresses general materials and methods of construction, including heights and areas, occupancy classification, construction type, occupancy and use requirements, structural stability, interior and exterior finishes, means of egress, accessibility and safeguards during construction.

FIRE Address the hazards of smoke and fire arising from building operations, occupancy, storage and use, fire detection, suppression and alarm systems and conditions affecting safety of fire fighters and emergency responders during emergency operations.

PLUMBING/MECHANICAL/FUEL GAS/POOLS/SPAS Addresses the design construction, installation, operation and maintenance of plumbing, mechanical and fuel gas systems in buildings, also includes swimming pools and spas.

ELECTRICAL Addresses the design, construction and installation of electrical components, appliances, equipment and systems in buildings.

ENERGY AND SUSTAINABILITY Addresses the design, construction and installation of energy conservation features in buildings, use of natural resources in building construction, and indoor environmental quality and comfort.

The Life of a Building

RENOVATIONS If the owner wishes to alter an existing building's construction or change its use, the process is subject to the application and issuance of a building permit, construction inspection(s) and issuance of Certificate of Occupancy or Compliance by the Code Official.

OPERATION AND MAINTENANCE The Fire Marshal periodically perform fire safety and property maintenance inspections to ensure the building is occupied, operated and maintained in conformance with applicable requirements of the code.

CONSTRUTION The contractor constructs the building in accordance with approved plans and specifications. The Building Inspector conducts periodic inspections to ensure the work conforms with approved plans and specifications. Upon completion, a Certificate of Occupancy (or Certificate of Compliance) is issued by the Code Official.

PERMITTING The design professional submits building plans, specifications and a building permit application to the Permit Technician. The Plans Examiner reviews the plans and specification for conformance with local regulations and adopted codes and standards. Once the project is determined to comply, a building permit is issued by the Code Official.

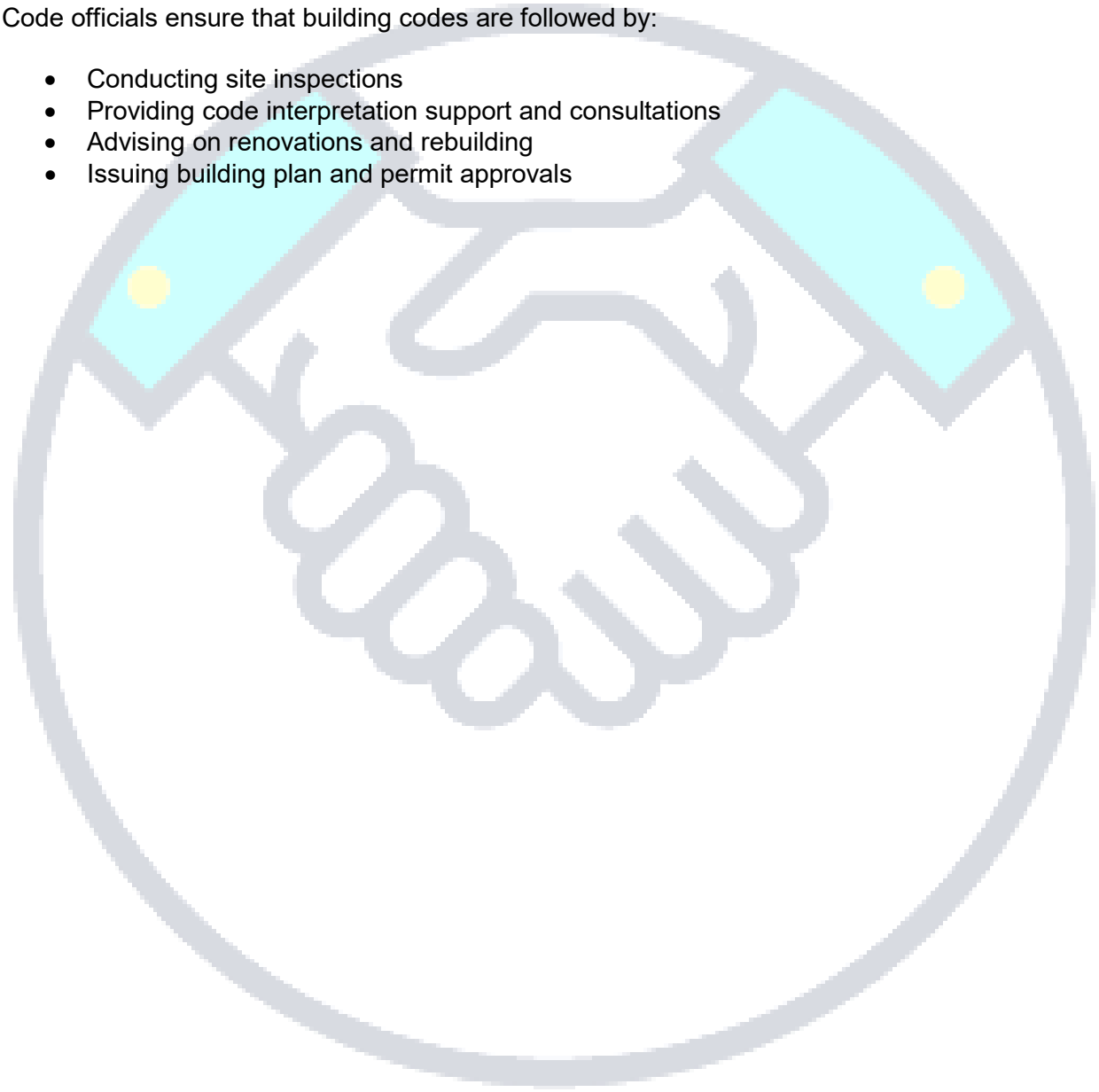
PLANNING AND DEVELOPMENT The owner engages a design professional to plan and design a building. The Code Official assists the owner and design professional to understand proper application of zoning, codes and standards to the project. The Permit Technician provides assistance during the application and approval process.

When to Call a Professional

Always check with your local building department before beginning home improvement projects. Requirements vary, but most building departments require permits for home improvement projects, including electrical, mechanical, structural or plumbing work. Follow-up inspections provide a measure of safety to protect your life and property.

Code officials ensure that building codes are followed by:

- Conducting site inspections
- Providing code interpretation support and consultations
- Advising on renovations and rebuilding
- Issuing building plan and permit approvals



Do I Need a Permit?

Permit Safety Tips

Do I need a Permit for My Home Project?

Check with your local building safety department before beginning home improvement projects. Requirements vary, but many building safety departments require permits for home improvement projects, including electrical, mechanical, structural or plumbing work. As a result of getting a permit, an inspector will check the work. Inspections provide a measure of safety to protect your life and property.

Projects That Usually Require Permits

- Re-roofing
- Installing electrical outlets
- Window frame modifications
- Remodeling kitchens or bathrooms
- Installing a pool, spa or hot tub
- Building an addition, including seasonal rooms
- Installing equipment and replacements such as furnaces, water heaters, fireplaces and space heaters
- Building a tall fence and decks

If you are planning to make home improvements, contact your local building safety department to find out what building safety code provisions apply in your area and if you need a permit.

Benefits of Building Permits

Your home or business is an investment. If your construction project does not comply with the codes adopted by your community, the value of your investment could be reduced. Property insurers may not cover work done without permits and inspections. If you decided to sell a home or building that has had modifications without a permit, you may be required to tear down the addition, leave it unoccupied, or make costly repairs.

A property owner who can show that code requirements were strictly and consistently met – as demonstrated by a code official's carefully maintained records – has a strong ally if something happens to trigger a potentially destructive lawsuit.

Your permit also allows the code official to protect the public by reducing the potential hazards of unsafe construction and ensuring public health, safety, and welfare. By following code guidelines, the completed project will meet minimum standards of safety and will be less likely to cause injury to you, your family, your friends, or future owners.

What's A Building Permit?

A building permit give you legal permission to start construction of a building project in accordance with approved drawings and specifications.

When do you need a permit?

The best way to find out if you need a permit is to call your local building department. Discuss your plans with the code official before beginning construction to determine whether you need a permit. Even if a permit is not needed, the code official will answer construction questions and may provide valuable advice.

Permits are usually required for the following:

- New buildings
- Additions (bedroom, bathrooms, family rooms. etc.)
- Residential work (decks, garages, fences, fireplaces, pools, water heaters, etc.)
- Renovations (garage conversions, basement furnishings, kitchen expansions, reroofing, etc.)
- Electrical systems
- Plumbing systems
- HVAC (heating, ventilating, and air conditioning) systems

The Simple Permit Process

TALK TO YOUR LOCAL CODE OFFICIAL
Your code official wants your project to be a success and will help you avoid potential problems that could cost you time and money. You will be asked some basic questions (What are you planning to do? Where?), advised of any requirements, and, if necessary, referred to other departments for their approval. The code official will provide you with the resources and information needed for compliance with the applicable building codes. You will then receive an application for a building permit.

SUBMIT APPLICATION

At this stage you will document the “Who, What, When, Where, and How” of the job, along with any sketches or plans of the proposed work.

REVIEW PROCESS

In a brief amount of time, the code official will review your plans and determine if your project is in compliance with local requirements. If your plans meet these requirements, a permit is issued. If not, the code official may suggest solutions to help correct the problem.

RECEIVE PERMIT

Now that you have been approved for a permit, you have legal permission to start construction. A fee, based on the size of the job, is collected to cover the cost of the application, the review, and the inspection process. An experienced code official is available to you should you have any questions concerning your project. You should consider your code official as an ally who will help you make your project a success. Separate permits are typically required for electrical, plumbing, and heating or air-conditioning work.

JOB-SITE VISITS

On-site inspections will be required to make certain the work conforms to the permit, local codes, and plans. Again, you will have access to the expertise of the code official to help you with questions or concerns regarding the project and to minimize potentially costly mistakes. The code official will let you know approximately how many inspections may be needed for your project. Usually, a one-or-two day notice is needed when requesting visits.

FINAL APPROVAL

The code official will provide documentation when construction is complete and code compliance is determined. You will then have the personal satisfaction of a job done right. Enjoy your new surroundings with the peace of mind and the knowledge that they meet the safety standards in your community. It takes everyone in a community to keep our homes, schools, offices, stores, and other buildings safe for public use. Your safe construction practices help protect you, your family, your friends, and your investment. Be sure to get your local code official involved with your project, because the building department is an important ally, from start to finish.