When a group of manufacturers joined forces in 1930, they had one goal as they created the Steel Tube Institute (STI)—to promote and market the utility and versatility of steel tubing. Nearly 100 years later, that remains their primary goal—to improve manufacturing processes and inform those within the industry of the advantages of building with steel tubing.

As a trade association operating as a nonprofit, The Steel Tube Institute consists of several member companies along with five product committees and various task forces working to address safety, technical, and manufacturing questions as well as sponsor applicable research and software for industry engineers and electricians. One project the institute’s director of steel conduit who works closely with the companies within STI’s steel conduit division—Allied Tube & Conduit, Republic Conduit, Western Tube & Conduit, and Wheatland Tube. Though there are cabling options, which have their place, but are typically installed in a fixed configuration that is not easily replaced. Some other solutions that utilize nonmetallic raceways also produce toxic fumes when burned, leading to additional concerns. Meanwhile, the three types of steel conduit used today—rigid metal conduit (RMC), intermediate metal conduit (IMC), and electrical metallic tubing (EMT)—are, well, made of steel, a noncombustible, crush-resistant material that will last (or outlast) the lifespan of any building. “There’s nothing quite as strong or quite as resilient,” Crawford says. “That’s why steel conduit has been the go-to wiring method for well over 100 years.”

The Steel Tube Institute shows us why this electrical raceway option is the most cost effective and long-lasting.

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Because of its steel construction, steel conduit can protect highly sensitive data from electromagnetic interference. Just imagine the banking information whizzing through electrical circuits or the cables powering the monitors or other sensitive equipment in an operating room—all of that information travels through wiring and electrical raceways. “Whenever you’re dealing with wiring or electrical equipment, there’s potential for electromagnetic interference (EMI),” Crawford says. Steel conduit’s superior protection against EMI will protect whatever data or equipment that is currently in service in your building now, or that will be at any point in the building’s future.

Steel conduit is most commonly used in commercial and industrial building projects, however, on the residential level, non-metallic cable is more widely used. But there is one oddity within the U.S. residential construction market—the Chicago metro area. The Chicago Electric Code makes amendments to the National Electric Code that requires steel conduit raceways in all homes. So while most homes in, say, Colorado, California, or Georgia are likely to utilize nonmetallic wiring, Chicago uses conduit.

Because of conduit’s ability to be reused, this means a home that is undergoing renovations in Chicago can have wiring replaced in an afternoon, while those same houses in other states across the United States will likely be pulling and replacing drywall and finishings for significantly longer.