



LUSE THERMAL TECHNOLOGIES, LLC

Fire Mitigation Solutions

Introduction of LTT's Specialty Construction Division

LTT's value lies in our refusal to recognize the words "No" and "Can not". We have assembled an outstanding team with excellent field and engineering expertise. Our team prides itself on never being satisfied with the status quo. We are known to our customers as creative innovators who drive costs down and share the benefits with them. We accomplish this all within the context of meeting all construction schedules; complete and accurate bid packages (no change orders to arbitrarily build profit); and a safety record of no incidents or accidents which gives us an extremely low EMR. Our primary goal is not accomplished until we are recognized as valued added member of your construction team.

Overview of our capabilities

FortiFire™

This is our patent pending fire mitigation system to protect the substation assets of electric utilities. The costs associated with a substation fire can typically be in the \$7,000,000 to \$12,000,000 range. LTT's FortiFire™ system has reduced that exposure to the \$300,000 to \$500,000 threshold. The process involves addressing the four primary failure elements within a substation to create a complete protection package. Most utilities, without benefit of hindsight, have addressed one or two potential causes of fire with the result being akin to purchasing a lottery ticket--more losses than wins. LTT's engineering and construction team studied, beta tested, and devised the solution to this problem at the request of a major utility. The results can be measured by the aftermath of multiple substation fires with no lost time nor shut down of substations coupled with no customer disruption. The FortiFire™ system performed as designed, compartmentalized and isolated the failure sources, and formed a protective cocoon around all electrical cabinets. Our team is a call or email away and is ready to survey your unique environments to create a tailor made asset protection program.

MFBBS™

Our modular fire barrier blast system is designed to contain and minimize the damage of a transformer failure on the surrounding equipment. This patent pending system has been tested per NFPA 850 standards for both impact resistance and fire containment. Transformer failures involve both flying metal parts (shrapnel) and high temperature oils. The MFBBS™ system is far superior to competing options which generally offer only one of the two types of protection. In a registered transformer failure occurring the



summer of 2008, an unprotected second transformer was effectively rendered inoperable from the fallout of the primary failure. Hot oils destroyed a shed housing sub-critical compressors prior to application of a foam retardant. Most interesting was finding metal projectiles measured at 400 to 500 feet from the source failure. These projectiles penetrated glass, brick, metal, and gypsum walls of the on-site offices. Our engineering team will assess your facilities vulnerabilities and issue a white paper for your eyes only with suggested resolutions. Our assessments take into account your current suppression systems, spray patterns, trench systems, and other elements needed to protect your assets and keep the electricity flowing.

Nuclear Firestop

We have on staff both engineers and field installers with many years of nuclear firestop experience. Our expertise spans over the last 25 years. We can lower your time and cost commitments of NRC compliance. We do this by providing detailed mapping of work to be done along with relieving you of extraordinary management time by utilizing our cost effective manpower working under experienced supervision which fully understands all the documentation required. You have enough responsibilities now, let us put you in an oversight role so your time can be devoted to more pressing issues.

Electric Utility New Substation

Throughout the major urban cities of the United States, construction of new 387KV facilities is on the rise. LTT has participated in the construction of more than 7 of these projects to date. The sequencing requirements for this type of project demand the best professionals. This is not an atmosphere that will tolerate amateurs. Put us in touch with your Contractor of Choice to insure a small part of the overall project does not become a major headache.

Commercial Industrial Firestop

No project is considered too small or large when it means being a member of our customer's construction team. We are part of projects as famous as Trump Tower, of importance to local communities like CGH Hospital, to construction of new hospitals in urban environments like Northwest Community, to the dynamic return of suburbanites to urban center condominiums like the Legacy, and to active senior living centers like Monarch Landing. We are one of the few contractors in the United States capable of top to bottom firestop installations. From curtain wall at the front end to the GC's punch list on the way out, LTT is truly a one stop source for all your firestopping requirements. The dynamics of this life safety category of construction demands you have a team that performs and always passes the rigorous standards involving—destructive testing, labeling, parameters of UL tested systems, and workable engineering judgments. Our crew members are OSHA 10 certified, CPR/FirstAid, and confined space trained among



other certifications. The most important training they have is to always be aware we are the final signature on your work. If we are sloppy it reflects poorly by default on your work. Let LTT remove the worry and liability of firestopping from your next project. Hire us once and we know you will add LTT to your team. Our primary goal is not accomplished until we are recognized as valued added member of your construction team.

Key References

ComEd/Exelon	Kenny Construction—Power Division
Substation sites throughout service area	Grenshaw, West Loop, and other new substations in Metro Chicago area
Value of project: \$6,000,000 +	Value of project: \$1,000,000 +

Riley Construction	Kenny Construction
Wheaton Franciscan Hospital	Waverly
Responsible for firestopping entire project	New substation Metro Philadelphia
Value of project: \$200,000	Value of project: \$400,000 +

Pepper Construction	Marshall Erdman
Provena St. Joseph Hospital	St.Mary's Hospital
Responsible for firestopping entire project	Responsible for firestopping entire project
Value of project: \$200,000	Value of project: \$100,000



Pepper Construction

Marshall Erdman

Trump Tower

Northwest Community Hospital

Commercial firestop of hotel
condominium property thru 90th floor

Responsible for firestopping entire
project

Value of Project:
\$150,000

Value of Project:
\$250,000

Meade Electric

Key Lime Cove Water Park & Hotel

Responsible for all electrical penetrations

Value of Project:
\$85,000