Introducing the

Facility Actual Savings Test

FAST X

Developed in cooperation with NorthWrite, Inc., the AFE (F)acility (A)ctual (S)avings (T)est, known by its' acronym as FAST-X, is our new energy savings certification methodology for buildings.

Unlike the US Green Building Council's LEED® program, any building can receive an uncontentious *FAST-X* certification or *FAST-X* energy check-up. Paper mills, tobacco manufacturers, and overall industrial plants experiencing complications from the protocols of other well-known energy accreditation programs, now have a method and a home for official recognition. Yet, *FAST-X* works in harmony with ASHRAE's Procedures For Commercial Building Energy Audits for all facilities, along with helping you within other popular programs to maintain your energy efficiency scores, found within such programs as EnergyStar® and LEED®. In addition, while a significant number of International projects are not eligible for the EnergyStar® rating, *FAST-X* is free of restrictive practices.

Briefly, the previous edition of the *Facilities Engineering Journal*® debuted the AFE Certified Facility Energy Analyst (CFEA), the industry's truly first analytical program using energy charting and metrics. The CFEA is an exclusive AFE platform using ECAM+, a Department of Energy sanctioned program for Energy Charting and Metrics as the main component for the CFEA lab program.

Designed for Building Owners, Energy Managers, Energy Consultants, Facility Managers, and Energy Efficiency Program Managers, ECAM+ is public domain software that you can download and use at no cost directly from our AFE website. Once you register through the AFE website, you are provided free access to the software, user guides, and data import specifications. *FAST-X* is dependent upon a review using the ECAM+ system, and the *FAST-X* building audit is conducted by a qualified *FAST-X* energy analyst, organized by NorthWrite, Inc.

All facilities conduct energy audits within their respective buildings. However, what's next? How do we monitor and maintain the corrections we have made from the audits we have conducted? How do we even know what to correct? Facility professionals need a way to conduct a check-up of their building(s), whether monthly, quarterly, annually or anytime.

In using ECAM+ as the analytic tool for *FAST-X*, your building can now be credited for improvement, not just relative status. As an example, LEED® is a numerical rating system that ascribes "points" to specific "green building" attributes present in building design. Therefore, if smoking is an issue - to comply with LEED® - you may need to establish a nonsmoking policy in and around the building (including entrances and balconies), while installing appropriate signage. Conversely, if smoking is allowed, stringent measures may be required. As indicated within the LEED® site, *"hotels may feel compelled to allow smoking in some or all units, and some projects, like airports, have designated smoking rooms. In these*

cases, stringent measures will be needed to stop movement of smoke from smoking to nonsmoking areas. See Fig 1. These measures include air barriers between units, negative air pressure in smoking areas, separate exhaust systems, and blower-door testing, all of which may add design and construction costs." Although the air barrier will most likely improve energy efficiency as well as acoustical privacy, the issue is the obligation of having these upgrades or new building requirements before any energy certification can be obtained.
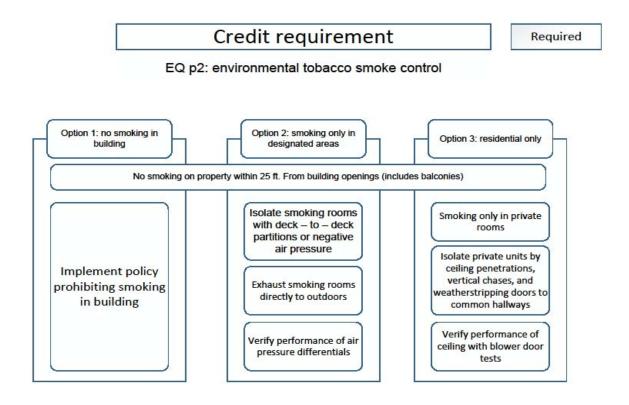

Figure 1 LEED® Credit Requirements in tobacco smoke control *(above)*

This is the advantage of the *FAST-X* certification. There are no relative requirements. How are you operating your building? How energy efficient your building is and where your energy efficiency numbers are?

According to a paper published by the American Forest and Paper Association (AFPA), the LEED® rating system discriminates against the use of wood products; does not properly rate products based on environmental criteria, and the USGBC is said not develop LEED® in a consensus process open to all interested parties. However, this changed somewhat In 2010, when the LEED® rating system recognize the Forestry Stewardship Council (FSC) through certified wood credits (MRc7 in LEED for New Construction 2009) but to the exclusion of other wood-related certification systems, such as the Sustainable Forest Initiative (SFI).

While remembering to keep in mind that *FAST-X* serves all facilities within all industries, AFE routinely stays clear of such certification controversies. Our members advocate for the
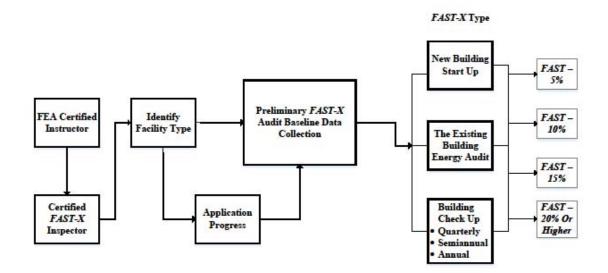
building and not for any one green energy initiative. Therefore, please be mindful these accreditation controversies are offered merely as examples revealing thousands of buildings that are adversely impacted by these existing certification programs, and also offered to illustrate a *FAST-X* advantage in having no similar restrictions.

Having said this, LEED® and EnergyStar® programs are actually excellent programs and highly regarded by AFE, where *FAST-X* works nicely with these programs, providing a check-up mechanism for certification holders to maintain their recognized credential.

The Objectives of *FAST-X* Certification

- *Recognize FEA's energy savings efforts at any facility*
- *Enable the certification of almost any building*
- *Provide a simple methodology for analysis and submission of candidate buildings*
- *Allow for progression to higher FAST certifications as more energy savings are achieved*
- *Allow for more rapid recognition of energy savings improvements*

Requirements

- *You must be FEA certified (CFEA) to submit a building for FAST-X certification*
- *Energy savings must come from the FEAs deliberate implementation of energy savings measures—for example, the following would not qualify for energy savings contributing to FAST-X:*
  - *Lower building occupancy*
  - *Production changes*
  - *Forced building schedule changes (e.g. reducing hours of business)*
- *Energy savings must persist at a level greater than or equal to the desired FAST-X certification level for at least 90 days.*
- *FAST-X certification is at a whole building level.*
- *Baseline for FAST-X savings comparison must cover similar operating conditions (weather, day types, schedules, etc.)*
- *Certified FEA's will submit prescribed ECAM data files and building/energy savings measure summary information to AFE for certification.*

Savings Goals and Objectives

- FAST-5 (5% Savings)
- FAST-10 (10% Savings)
- FAST-15 (15% Savings)
- FAST-20+ (More than 20% Savings)

CFEA Training of Navy Facilities (NAVFAC) in Maryland (above)

AFE will be your clearinghouse for energy certification. Why would you not want your distinguished certification plaque presented by the Association for Facilities Engineering, the oldest and most experienced facilities maintenance and engineering organization in the world.

To get going you must first possess a Facility Energy Analyst certification (CFEA). Certification Class schedules are listed within this Journal, or on the www.afe.org website. You can also telephone AFE directly for certification classes within your area.

Start gathering your baseline data, develop your energy savings measures and set your *FAST-X* certification goals!!! Non-exclusionary Energy

Certification for your building, with the capacity for providing an anytime energy check-up on any energy accreditation program, is finally here.