Central Florida Fire Chief’s
Light Weight Construction
Round Table Discussion

*Aldridge/Benge Firefighter Safety Act*

February 25, 2010

Held at the Central Florida Fire Academy, Orlando, Florida
Discussion of Enforcement & Operations Issues

The meeting was opened by Fire Chief Jim White who welcomed everyone and thanked them for attending this important meeting. Chief White stated that the reason for this meeting was to establish some common ground to work from concerning the new Light Truss Legislation. He stated that the meeting was an effort that came out of the Central Florida Fire Chiefs and the Central Florida Fire Academy agreed to hold the meeting at their facility. All participants were presented with a package of information including a copy of 69A-60.0081, the Declaratory Statement, NIOSH Alert concerning Truss System Failures, and the UL Research Study of engineered lumber in fire conditions.

Chief White then asked Director Stilp to facilitate the remained of the meeting. Director Stilp asked two participants to do a brief presentation. First, Chief McGrew from Winter Garden FD to give an overview of Todd Aldridge and Mark Benge and how the Legislation started, and second Tony Apfelbeck was asked to give an overview of the actual Firefighter Safety Act and what the requirements for marking were going to be.
Matt McGrew: Gave history of the two firefighters who lost their lives in a Orange County Merchandise Shop (Due to a Truss Failure in a gift shop); Todd Aldridge & Mark Benge. 21st Anniversary of their deaths was yesterday. This new legislation is called the Aldridge/Benge Firefighter Safety Act and the legislation was initiated from South Florida in an effort to mark buildings containing light truss construction.

Tony Apfelbeck: Discussed the Ruling of Marking Structures. He stated that Engineered Lumber and light weight metal structures (12-24 gage) were also included in the light weight wood truss rule but bar joist structure would be excluded. He suggested that both County and City buildings lead the way with appropriate markings. Although the law is scheduled to be in effect by March 13th it is unrealistic and stated that he expected that it would take 4 – 5 years to become compliant.

In situations like strip malls the markings need to be every 100’ Size: 8” x 8” with Maltese cross outline and appropriate lettering (bright red reflective coloring). Property owner’s responsibility to comply with posting of the appropriate marking. The Pride Company does sell the placards to government entities for about $4-$6 apiece.

- R = Light-Frame Truss roof
- F = Light-Frame Floor systems
- RF = Combination of light-frame truss & floor

www.Ul.com has interesting videos on degradation of trusses when exposed to heat/fire

Overall Discussion: Director Stilp identified two sides to the issues; Enforcement and Operations. Soliciting the input from the group 13 issues involving enforcement was listed on the board. This was followed by listing 12 issues of Operations. The participants were asked to sit on the side of the room where each had expertise/interest to help develop ideas/plans for addressing the issues. The lists developed by the group are identified below:
Enforcement:

- Language for the Public
- Notification/ Public Education
- Municipal Buildings
- Time Frame requirements
- Public Officials
- New Compliance & Challenges (Standardizations)
- Resources/Operational Cost
- Internal/External Communications
- Time frame for Licensing Facilities (compliance)
- Website update (1,3)
- Priority of marking (9)
- Plan Review for New Construction
- Sign Placement Limitations

Operations

- Education & Training
- SOP/SOG policy changes/tactics
- Liabilities (having vs not having)
- Multi-jurisdictional (Automatic aid/Mutual aid)
- Pre-fire planning or Pre-incident planning
- Timing of Education
- Internal Communications
- Common Communications (Radio Report/Procedures)
- Integration to 911 dispatch center
- Public information policy (PIO)
- Staged approached to a marked building (2)(10)
- Consideration of response units (2)

Large Group: Operations

The general discussion was led by Rick Fudge. Several overall statements were made involving the subject.

A. The Fire Chief decision needs to stand therefore beware of Union’s counter the issues
B. Training must be directed by an Area Wide policy. Training on the meaning of the new placards and what information the placard provides during a fire situation should begin in recruit school, continue during formal fire officer training and during department provided training. In addition any “lessons learned” situations at live events should be shared across Central Florida.

C. The group reviewed the NIOSH recommendations and stated that these recommendations should be used as a guide but the group also cautioned with the global acceptance of the recommendations across the board.

D. The group thought that the best way to handle the new law and each department’s own SOPs was to have a number of statements that are consistent and can be used for all Central Florida Fire Agencies. These statements could be used to guide each department in the development of policy.
- It was noted that not all departments have policy/SOPs concerning lightweight truss roofs/floor structures. It is recommended that all departments should have a Policy on Lightweight Trusses when a building is involved in a fire situation. Those departments without a policy it is suggested that one be written.
- There should be a common terminology used in the SOPs, during dispatch, and during routine radio reports to indicate that the building is marked with the new marking system. This will reduce the confusion during joint operations and mutual aid responses. This common terminology was decided through consensus of the group. It is as follows: “Roof/Floor Placard”, “Roof Placard”, and “Floor Placard”.
- Lightweight Trusses should be considered during Size-Up and Tactical decision making regardless of the presence or absence of a placard.
- The marking system (placard) should be clarified in the department’s current policy and tactical plans.
- Placarding system will assist in determining actions/expectation but decisions made will not be solely determined based on the presence or absence of the placard.

The group also decided to provide an official “Position Statement” that should be included as part of each departments current policy. That position statement is as follows:

“While the presence or absence of a lightweight truss signature (placard) on a building should not alter the Departments SOP/SOG’s, the presence of a placard indicates lightweight construction. However, the absence of a placard should not be construed as an absence of lightweight truss construction or instill a false sense of safe roof or floor construction.”
On the subject of Education & Training there should be a focus on the items listed below:
  o Changes in manufacturing
  o NIOSH Recommendations
  o Pre-Incident Planning
  o Marking System (location and definition)

Final Statement from the Operations Group:

  • Each participating agency should disseminate new tactical safety concepts as they are learned or experienced from live fire events.
  • Training should be development that highlights all national standards, including NIOHS recommendations, as applicable. It is recommended that this training begin on a recruit level and should extend throughout entire career
  • Tactical Communications: It is further recommended that all situational awareness reports include updates on structural condition as a function of Incident Command. This can be the Incident Commander, Safety Officer, or any other segment of the Incident Command Structure. Examples: Arrival reports, information on structural conditions (improve or deteriorate), PAR, Safety message etc.

Large Group, Enforcement

Language for the public

  • Notification / Public Education
  • Marking municipal buildings first
  • Addressing time frame requirements
  • Informing Public Officials
  • Compliance & Challenges (Consistent-Standardization)
  • Resource needs / Operational Costs
  • Internal/external communications
  • Consider Licensed Facilities / Target Hazards (time frame for compliance)
  • Update Websites to include Structure Marking Notice
  • Priorities for what structures get marked first, etc.
  • Plans review process for new construction
  • Sign placement interpretation / limitations
Fire Marshal’s break-out group took the 13 large group enforcement topics above and consolidated them into the 6 targeted categories listed below. The group used their shared experiences within their organizations and consensus within the group to frame these recommended actions and best practices.

**Enforcement Issues/Actions: (recommendations)**

**A. NOTIFICATION - CRAFT A MESSAGE / NOTICE - GET THE WORD OUT**  
(Common Language, Consistent Definition, Pub Ed, Time Frames, Web)

- Create a Notice/Letter from Jurisdiction with facts, info & time frames
- Web Site – Post the Notice/Letter on your Web
- Use mail outs and electronic mail
- Cross-ownership (owners with multiple buildings in different jurisdictions will pass the word)
- Public Service Announcements if available
- Communication with: Apartment Associations, etc.
- Message should be in Common/Layman’s Terms

**B. INFORM PUBLIC OFFICIALS (This is a Life Safety issue)**

- City/County Administrators (keep them in the loop, they will get calls)
- Building Officials / Building Department
- Plans Review/Permitting (required of all new construction)
  - Plan Stamp (stamp required on all new plans that fall under this provision)
- Code Enforcement Mechanism (for non-compliance, board or special magistrate)
- City/County Department Head – Involves their buildings too

**C. UTILIZE INTERNAL & EXTERNAL COMMUNICATIONS**

- Communication with the Operations side of FD is essential
- Fire Marshals/Inspectors can offer: Technical Info/Expertise/Training
Utilize Examples & Photos when possible to eliminate confusion

Identify or create a list of buildings that fall under this provision

Add truss info into the electronic or paper record (may require new fields, etc.)

Inspectors enter truss info directly into RMS/CAD (may require added programming)

Communicate with Professional Associations and Commercial Associations
   - Apartment Associations, FFMIA, BOAF, BOMA
   - Provide these Associations options for access to more info (signs, etc.)

D. CONSIDER RESOURCE NEEDS / COSTS

Providing Information (added calls/inquiries related to this provision)

Increased inspections from this provision (specific or special inspections)

Additional training needs for Inspection force, etc.

Consider official enforcement needs/impact (Code Board, Magistrate process, etc.)

Prioritize a list of buildings to be inspected for compliance
   1. City/County owned buildings (lead by example, mark your own buildings)
   2. Next handle; Priority 1’s, Target Hazards, Institutions, then Multi-family – or –
   3. Handle all via normal inspection cycle (do special inspection as called upon)

E. COMPLIANCE / INSPECTION (Compliance with exact language & placement)

Ability to comply, may not meet exact language

*Sign Placement Interpretation & Limitations – (Biggest Issue)

Interpretations by others may vary; FD’s/AHJ’s interpretation must be consistent

Signs must be affixed to the building
   - Placed to be seen
   - Will be confirmed by 360 degree survey

Understand the sign purpose: “To Warn FF’s Conducting Fire Control Operations”

Judgment / Discretion required
Empower your people to make decisions, if in doubt refer to Supervisor / Fire Marshal or Fire Chief (AHJ)

Allow some flexibility (to meet the purpose)

F. CHALLENGES

Non-Compliance (owner not aware, signs not present, refusal to comply)

Allowable time to comply from initial Inspection (average 30 days)

Agreement w/construction type may be an issue or confusing

Truss type may not be evident or apparent ("may have to go up and look)

When in doubt…”mark it” (better to have one too many signs vs. one too few)

Educate and inform the owner whenever possible (be positive, promote FF safety)

If challenged; advise of process for verification (45 days, via licensed Engineer)

Utilize enforcement mechanism steps when necessary:

- Start with written warning (most effective)
- Code Board, Special Magistrate
- State Fire Marshal