## LAPORTE COUNTY BUILDING INSPECTION DEPARTMENT

Michael Polan
Building Commissioner

Janet Cole Administrative Specialist

Ashley Kazmucha Administrative Coordinator

Kelly Richie Financial Administrator Government Complex 809 State Street, Suite 503 A LaPorte, Indiana 46350-3391 (219) 326-6808 Ext. 2221, 2591 & 2563 -- Fax: (219) 362-5561 Dave Schuman Building Inspector

Scott Schroeder
Building Inspector

John T. Niegos
Electrical Inspector

### **Advanced Structural Components**

### IC 22-11-21-2 "Advanced structural components"

- Sec. 2. As used in this chapter, "advanced structural components" means lightweight I-joists or lightweight roof trusses that:
  - (1) have less mass cross-sectional area than sawn lumber of equivalent proportions used in an equivalent application; and
  - (2) are assembled from combustible or noncombustible materials, or both.

The term does not include a structural assembly, joist, or truss that provides at least one (1) hour of fire resistance when tested in accordance with the ASTM Standard E119.

As added by P.L.104-2018, SEC.1.

### IC 22-11-21-9 Required information about advanced structural components in building permit applications

- Sec. 9. (a) An applicant for a city, town, or county issued building permit for a Class 1 or Class 2 structure must provide the following information when applying for the building permit:
  - (1) The street address of a qualifying property containing advanced structural components.
  - (2) The name of the township and the county in which the qualifying property is located.
  - (3) The types of advanced structural components used in the qualifying property.
  - (4) The location of the advanced structural components used in the floor, or roof, or both, of the qualifying property.
- (b) The city, town, or county issued building permit application form used to comply with subsection (a) must include a place on the form for providing the information required under subsection (a). As added by P.L.104-2018, SEC.1.

### IC 22-11-21-10 Electronic notification of use of advanced structural components

- Sec. 10. Not later than ninety (90) days after issuing the building permit, the city, town, or county building commissioner shall send electronic notification, read receipt requested, of a structure's use of advanced structural components to the:
  - (1) local fire department; and
  - (2) 911 telephone call center;

responsible for the area where the structure is located.

As added by P.L.104-2018, SEC.1.

## BUILDING INSPECTION DEPARTMENT

Michael Polan Building Commissioner

Janet Cole Administrative Specialist

Ashley Kazmucha Administrative Coordinator

Kelly Richie Financial Administrator Government Complex 809 State Street, Suite 503 A LaPorte, Indiana 46350-3391 (219) 326-6808 Ext. 2221, 2591 & 2563 -- Fax: (219) 362-5561 Dave Schuman Building Inspector

Scott Schroeder Building Inspector

John T. Niegos Electrical Inspector

# ASTM E119 – Standard Test Methods for Fire Tests of Building Construction and Materials

**Scope**: These test methods are intended to evaluate the duration for which types of building elements contain a fire, retain their structural integrity, or exhibit both properties during a predetermined furnace test exposure. The test exposes a test specimen to a standard fire controlled to achieve specified temperatures throughout a specified time period. When required, usually for wall assemblies, the fire exposure is followed by the application of a specified standard fire hose stream exposure. The test provides a relative measure of the fire-test-response of comparable building elements under these fire exposure conditions.

**Applicable Products**: Assemblies of masonry units and composite assemblies of structural materials for buildings, including loadbearing and other walls and partitions, columns, girders, beams, slabs, and composite slab and beam assemblies for floors and roofs. Also applicable to other assemblies and structural units that constitute permanent integral parts of a finished building.

Test Procedure: The test specimen representative of the construction that the test is intended to assess, is assembled and installed abutting or on top of the appropriate test furnace. Test instrumentation will vary based on the nature of the sample under test and will usually include unexposed side thermocouples and/or thermocouples internal to the test assembly to monitor critical features. Depending on the testing requirements and sample type, external uniform loading may be applied to the sample for the duration of the test. The furnace is operated to expose the sample to the prescribed time temperature curve for the desired period of exposure, or until the applicable criteria have been exceeded. For most vertical assemblies, a standard fire hose water stream exposure is required and may be conducted on a duplicate sample.

End Result: Performance is defined as the period of resistance to standard exposure elapsing before the first critical point in behavior is observed. These critical points may include temperature rise, projection of flames or hot gases, failure to maintain applied load, etc. Results are reported in units in which field exposures can be judged and expressed. The test methods may be cited as the "Standard Fire Tests," and the performance or exposure shall be expressed as "2-h," "6-h," "1/2-h," etc. A comprehensive test report will be issued at the end of the conclusion of testing. If certification is chosen, the Listing Report and application Design Listings will be created and published following successful testing. Both the test report and Design Listings will include the achieved Fire Resistance Rating.

## Senate Enrolled Act 393, Effective July 1st, 2018

In order to comply with IC 22-11-21 (Public Law 104, 2018) starting July 1<sup>st</sup>, 2018 if you use advanced structural components (lightweight I-joists or lightweight roof trusses) within a Class 1 or Class 2 structure you are required to provide the following information:

- The street address of the qualifying property containing advanced structural components.
- The name of the township and the county in which the qualifying property is located.
- The types of advanced structural components used in the qualifying property.
- The location of the advanced structural components used in the floor, or roof, or both, of the qualifying property. (blueprints required for Class 1 structures and floor or roof system framing detail layout drawings required for Class 2 structures)

As a result of SEA 393, when using advanced structural components within your structure you are required to provide the required information by filling out From 393. All information requested on the form must be provided along with floor plans, roof plans and/or blueprints.

### Definitions:

- Advanced structural component; lightweight I-joists or lightweight roof trusses that:
  - 1. Have less mass cross-sectional area than sawn lumber of equivalent proportions used in an equivalent applications and.
  - 2. Are assembled from combustible or noncombustible materials, or both. The term does not include a structural assembly, joist, or truss that provides at least one (1) hour of fire resistance when tested in accordance with ASTM Standard E119.

### • Class 1 structure;

- (1) A building or structure that is intended to be or is occupied or otherwise used in any part by any of the following:
  - (A) The public
  - (B) Three (3) or more tenants.
  - (C) One (1) or more persons who act as the employees of another.

### Class 2 structure;

(1) A townhouse or a building or structure that is intended to contain or contains only one (1) dwelling unit or two (2) dwelling units unless any part of the building or structure is regularly used as a Class 1 structure.