



PEA RIDGE FIRE DEPARTMENT CORE COMPETENCY DRILL



Firefighter Dynamics—Fire Load

DESCRIPTION AND EXPECTED PERFORMANCE: Every Member shall be able to accurately define and describe what fire load is, how it's calculated, and how it effects us.

Length: 2 HOURS

REFERENCE: PRFD S.O.G.s for Department.
NFPA Standard 557

Equipment, Props, Information or Other Resources Needed: A computer, and a training environment.

INSTRUCTIONS FOR THIS CORE COMPETENCY DRILL

1 **Fire Load**

Is a term used to describe the potential severity of a fire within a specified space. It is a form of hazard assessment and is used to determine the level of fire risk that exists within a defined area.

2 **Fire Load Inspections**

Require the assessment of all materials within the space in order to determine that space's overall flammability. This includes both the material being used in the structure itself and any flammable objects and substances that may be stored in it.

Fire Load = (Combustibles in kg) x Calorific value in kcal/kg/Floor area is square meters

4 **3 Classifications of Occupancy**

1. Low Fire Load
Residential
2. Moderate Low Fire Load
Retail
3. High Low Fire Load
Warehouses

3 **Grading of Structures**

Structural element of buildings are graded according to the time factor which is nearly equal to but does not exceed the test period which the element fulfills its specified requirements.

Five Categories of fire resistance

- Grade 1—6 Hours
- Grade 2—4 Hours
- Grade 3—2 Hours
- Grade 4—1 Hour
- Grade 5—0.5 Hours