Coffee Break Training - Fire Protection Series



Access and Water Supplies: Fire Apparatus Access Road Widths

No. FP-2009-1 January 6, 2009

Learning Objective: The student shall be able to identify the minimum required road widths for fire apparatus access.

Often it seems there is an immutable conflict among property owners, land use planners, and emergency response officials over the width of roads in some neighborhoods. Property owners and developers may want to minimize the impact and cost of drivable surfaces while fire officials are concerned about safe, reasonable access to emergency scenes.

The two model fire codes, the International Fire Code® and NFPA 1®, Uniform Fire Code®, address the access road requirement similarly. Both require that a minimum 20-foot-(6.1 m) wide road reach within 150 feet (45 m) of all portions of the exterior wall of the first story of a building, measured in an approved route around the exterior.

The illustration shows the importance of the minimum 20-foot-width requirement to help in firefighting tactics. Modern fire apparatus, especially large aerial equipment, consume a major part of the driving surface. When ladder trucks or aerial towers have their stabilizing jacks extended, they use even more of the road.



Photo courtesy Vigilant Hose Company, Emmitsburg, Maryland. An aerial apparatus with its stabilizers extended and an engine take up the bulk of this paved road width.

The purpose of the minimum 20-foot-width requirement is to enable aerial apparatus to set up, and allow other vehicles to pass safely around stabilizers and personnel who may be working around the vehicle. If large diameter supply hoses or smaller handlines must be deployed, fire apparatus needs to get around them as well.

The fire code official has the authority under the model codes to require even greater road widths if there are traffic, topographical, weather, or safety considerations that may affect access.

Next time someone asks about the need for minimum 20-foot-wide fire access roads, show them this picture and explain the firefighter safety and operational considerations.