LEICESTERSHIRE

FIRE and RESCUE SERVICE

Fire and Rescue Service Access to Domestic New Builds

Guide for Planners and Developers





Fire Service Access Requirements (Domestic New Builds)

This guidance document has been produced to help planners and developers incorporate adequate access facilities for the fire and rescue service, when planning new developments for either individual dwellings or new housing estates. It does **not** cover the requirements for commercial builds which are done through different regulations. With an ever increasing number of vehicles on Great Britain's roads and the development of larger fire appliances, it is more important than ever that adequate facilities are available. Developers also have a responsibility to ensure their developments are safe by providing these facilities in order to minimise delays to the fire and rescue service when responding to emergencies.

The information contained within this guidance is based upon the Building Regulations 2010 Approved Document B, Volume 1: Dwelling (2019 edition), Requirement B5: Access and facilities for the fire service. The guidance will also try to explain the importance of adherence to the regulations and the dangers to members of the public due to non-compliance.

As laid out in Building Regulations 2010 Approved Document B, there should be access for a pumping appliance to within 45m of all points within any dwelling house. This allows standard quick response hose reels to be utilised without the necessity for extending them which in turn adds valuable time to firefighting operations.

As the role of the fire and rescue service becomes more diverse and the amount of equipment required increases, the size of the fire appliance has also increased. With this in mind, the minimum requirements for access arrangements are shown in the table below and are taken from the Building Regulations 2010 Approved Document B where still applicable. Access roads may be public highways, private roads, footpaths or specially strengthened and defined routes through the land surrounding the buildings.

Appliance type	Minimum width of road between kerbs (m	Minimum width of gateway s (m)	Minimum turning circle between kerbs (m)	Minimu m turning circle between walls (m)	Minimum clearance height (m)	Minimum carrying capacity (tonnes)
Pump	3.7	3.1	16.8	19.2	3.7	13.5
High Reach	3.7	3.1	26.0	29.0	4.0	17.0

Road Width

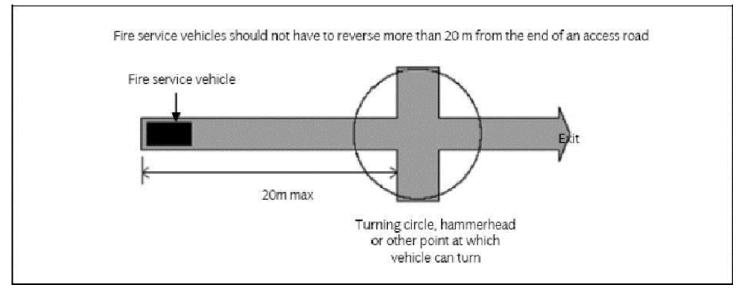
This dimension allows enough space for appliances to pass unhindered to the affected building taking into account the possibility of parked vehicles. This also allows enough space around the vehicle to remove equipment quickly and efficiently from the appliance.

Gateway Width

The gateway dimension allows the new appliances which have a width of approximately 2.9m adequate clearance to enter a premise.

Turning Circle

A turning facility will be required for any dead end situation, where without this provision a fire appliance would be required to reverse more than 20m. The diagram shown in Building Regulations 2010 Approved Document B (below).



Height Clearance

This clearance allows fire appliances to manoeuvre under overhead obstructions such as archways, barriers and gateways. Consideration should also be taken where trees that line access routes may impinge on this required clearance.

Carrying Capacity

All roads that form part of the access arrangements for fire and rescue service vehicles should be constructed to withstand a minimum weight of 13.5 tonne. This capacity takes into consideration the specification for new appliances.

One of the main concerns for the fire and rescue service would be the time taken to manoeuvre fire appliances if suitable turning facilities are not available. This situation would be compounded further where lengthy dead end situations occur. With this in mind the arrangements described above should be considered when the designs of new developments are being planned.

Provided these provisions are incorporated into a development, Leicestershire Fire and Rescue Service would deem access arrangements for domestic builds to be satisfactory.

Firefighting Water Supplies

Under the Fire and Rescue Service Act 2004, a fire and rescue authority must take all reasonable measures for securing that an adequate supply of water will be available for the authority's use in the event of fire.

To achieve this requirement all developers will need to consider the following:

- Installation of fire hydrants at agreed locations with Leicestershire Fire and Rescue Service
- Fire hydrants should be installed on water mains 90mm or above

Developers should refer to guidelines on firefighting flow rates from fire hydrants. Consideration should be given to open water access for firefighting. To achieve this developer's may need to consider providing access (hard standing) for a fire appliance next to an open water site such as a canal, river, large pond or lake. This supply will support firefighting alongside on-site fire hydrants.

Industrial/commercial buildings may require additional measures to assist with firefighting water supplies, this should be considered as part of the Building Regulation Consultation. Leicestershire Fire and Rescue Service recommends the installation of domestic sprinkler systems to British Standard BS9251 in residential dwellings and British Standard BS EN:12845 in commercial premises.

Council Highways are to work with Leicestershire Fire and Rescue Service in ensuring that developers install fire hydrants in accordance with British Standard specification i.e. hydrant/chamber/frame/lid and reinstatement