CAD
Fire Access Details

The following information is issued solely as an aid to design and does not assume liability in the final design. Information detailed is subject to change without notice.
Design Philosophy

An emergency situation isn't the time to test the suitability of an emergency access road. "It might never be used" shouldn't feature in the design appraisal and neither should a reliance upon secondary factors such as grass growth and favourably dry ground conditions which may not be evident in an emergency situation.
**Detail 1**

Single or 2 Storey Building (Pump appliance *)

* Check with local Fire Department as certain residential buildings may receive a Platform appliance irrespective of the height of the building

- GC1: 100mm Thick
  - A193 Mesh Reinforcement (200 x 200 x 7mmØ)
  - 10.8 Tonnes GVW
  - A252 Mesh Reinforcement (200 x 200 x 8mmØ)
  - 13.3 Tonnes GVW

**Detail 2**

3 Storey Building (Platform appliance)

- GC2: 150mm Thick
  - A252 Mesh Reinforcement (200 x 200 x 8mmØ)
  - 30.0 Tonnes GVW

**Detail 3**

High Rise Building (Platform appliance)

- GC2: 150mm Thick
  - A252 Mesh Reinforcement (200 x 200 x 8mmØ)
  - 30.0 Tonnes GVW
  - A393 Mesh Reinforcement* (200 x 200 x 10mmØ)
  - 40.0 Tonnes GVW

* May be considered when access is required to accept heavy goods vehicles in addition to emergency access.

Access routes should avoid sudden or steep variations in gradient and should be free from obstructions such as overhangs.
Standard Sub-base

- Paving depth or 100mm, whichever is greater

- 20mm sand layer

- GC1 A19 - min 150mm thick sub-base
- GC1 A22 - min 150mm thick sub-base
- GC2 A25 - min 150mm thick sub-base
- GC2 A33 - min 200mm thick sub-base
(UK Specification Clause 803 Type 1)

* Assuming an allowable ground bearing of 45kN/m². For typical sub grades, the following guideline can be considered:

<table>
<thead>
<tr>
<th>CBR</th>
<th>Thickness</th>
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<tbody>
<tr>
<td>4%+</td>
<td>150mm Thick</td>
</tr>
<tr>
<td>2 - 4%</td>
<td>250 - 200mm Thick</td>
</tr>
<tr>
<td>&lt;2%</td>
<td>300mm + Thick min.</td>
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** The sand layer is intended to create a uniform seating for the Grasscrete formers and to prevent the loss of soil into the sub-base. It is not to be a regulating layer.

Standard Sub-base with optional drainage blanket

- Paving depth or 100mm, whichever is greater

- 20mm sand layer

- GC1 A19 - min 150mm thick sub-base
- GC1 A22 - min 150mm thick sub-base
- GC2 A25 - min 150mm thick sub-base
- GC2 A33 - min 200mm thick sub-base
(UK Specification Clause 803 Type 1)

- 40mm single sized granular material for drainage blanket. Depth to be determined by ground conditions and attenuation requirements.

Formation to be cut level for infiltration into sub-strata or cut to falls for rainwater harvesting.

Geotextile membrane

Needle punched geotextile membrane