

## 5.17. Road and Rail Tunnels

**5.17.1.** The Road and Rail Tunnels shall comply with **Table 3.38.** along with all other sections of this chapter. Where conflicts arise between this section and other sections of this Chapter or code, the requirements of this section shall prevail.

**Table 3.38.: Road and Rail Tunnel**

ITEMS	REQUIREMENTS
<b>1. EMERGENCY EXITS</b>	<ul style="list-style-type: none"> <li>i. Emergency exits not less than 1200 mm in width shall be provided throughout the tunnel spaced not more than 300 m apart.</li> <li>ii. Where tunnels are divided by a minimum of 2-hour fire-rated construction or where tunnels are in twin bores, cross-passageways between the two compartments of tunnels, not farther than 200 m apart shall be provided.</li> <li>iii. Cross-passageways shall be permitted to be used in lieu of emergency exit stairways to the surface where trainways in tunnels are divided by a minimum of 2 hour-rated fire walls or where trainways are in twin bores.</li> <li>iv. An emergency egress walkway with a minimum clear width of 1120 mm shall be provided on each side of the cross-passageways.</li> <li>v. Walkways shall be continuous the entire length of the tunnel, terminating at surface grade.</li> </ul>
<b>2. SIGNAGE</b>	<ul style="list-style-type: none"> <li>i. Reflective, Photoluminescent or lighted directional signs indicating the distance to the two nearest emergency exits shall be provided on the side walls at distances of no more than 25 m.</li> <li>ii. Exit signs shall be distinguishable from Vehicle Exit route and emergency Exit directions for people.</li> </ul>
<b>3. HAZARDOUS MATERIALS</b>	<ul style="list-style-type: none"> <li>i. Control of hazardous materials shall comply with the requirements of Code of Practice for the Management of Dangerous Goods in the Emirates.</li> </ul>
<b>4. CARBON MONOXIDE DETECTION</b>	<ul style="list-style-type: none"> <li>i. Carbon monoxide detection shall be provided in the Tunnel. Such CO detection system shall be electrically operated, complete with control panel and interfacing with ventilation system.</li> </ul>
<b>5. CCTV</b>	<ul style="list-style-type: none"> <li>i. Tunnels exceeding 90 m in length shall be provided with CCTV system.</li> </ul>
<b>6. SAFETY PROVISIONS</b>	<ul style="list-style-type: none"> <li>i. Where the tunnel length equals or exceeds 240 m, such tunnels shall be provided with Fire Access, Automatic Fire Detection system, Wet Riser System, Fixed Fire Water Suppression system, Portable Fire Extinguishers , Emergency Ventilation systems, Emergency Lighting, Emergency power supply as per relevant chapters of this code.</li> <li>ii. Additionally, telephones, Drainage system, Traffic Control Systems and Emergency Response procedures shall be provided for tunnels exceeding 1000 m in length.</li> </ul>