

# LOW COST CONCRETE BRIDGE DECK WATERPROOFING

## Key features and benefits of Radcon #7

1. Cannot suffer mechanical damage. Radcon #7 creates a continuous sub surface barrier in the cracks and general matrix of concrete against the ingress of water, salts and other dissolved contaminants.
2. No loss of slip resistance for leather or rubber on Radcon #7 treated concrete in wet or dry conditions (Can2 - 75.1 - M77).
3. Increases concrete hardness from 6 to 8 on Mohs Scale. Exposed/trafficable Radcon #7 treated concrete has hardness equivalent to granite.
4. Increases bond strength between cementitious materials by 27.5% (ASTM C952).
5. Federal Highway Administration, Washington D.C. Report PB84 - 238740, completed 1984
  - 0-1" depth - chloride reduction 60.4%
  - 1"-2" depth - chloride reduction 94.2%
  - No negative impact by placing 160°C asphalt over Radcon #7 treated concrete
  - No bond loss between Radcon #7 treated concrete and asphaltic overlay.
6. Reinstates alkalinity into old concretes (pH value 12).
7. Waterproofs concrete and cracks present up to 2.0mm in width, seals future hairline cracking.
8. Maintains watertight cracks undergoing cyclical expansion and contraction up to 0.4mm tolerance.
9. Penetrates Highway grade concrete up to 20mm.
10. Totally non-toxic, non-flammable, environmentally friendly with 0% VOG emissions.
11. Treated concrete is completely trafficable within first 6 hours of application.
12. Can be applied at a rate of 800 sqm/hr or faster using mechanical pump.
13. Allows outgassing. Cannot blister, pinhole or delaminate.
14. Greatly enhances freeze/thaw resistance of concrete. (No visible scaling after 95 freeze/thaw cycles ASTM C672-76).
15. Suitable for ponding water on flat surfaces. (Tested to 40kg/cm<sup>2</sup> with no failure).