

SF-Rima™

SF-Rima™ permeable interlocking concrete paving system offers an environmentally friendly way of providing long lasting beautiful walkways, driveways and parking lots. It effectively filters and drains stormwater back to the native soil.

Best Management Practice (BMP) and Low Impact Development (LID)

Permeable paving systems are recognized by many Environmental Protection Agencies in the United States and in Canada as a best management practice (BMP) for stormwater control. SF-Rima™ pavements allow infiltration of rain water at the spot and capture runoff from impermeable areas.

Alberta Environment is encouraging sustainable infrastructure, resource conservation and pollution prevention.

SF-Rima™ permeable concrete pavements are built on an open-graded crushed stone base and infiltrates and detent rain water for some time. The base provides infiltration and partial treatment of stormwater pollution for improved water quality and slowly releases the water to the ground water.

Runoff can be reduced by 100% from frequent, low intensity and short duration storms, whereby reducing or eliminating the need for retention ponds and sewer connections. The initial infiltration rate of SF-Rima™ is very high and can be conservatively estimated at 3 inches/hour for a 20-25 year life time.

SF-Rima™ pavements reduce downstream flows and stream bank erosion and eliminate puddles on surfaces. They also reduce micro-climatic temperatures and urban heat islands.

LEED (Leadership in Energy and Environmental Design) credits

SF-Rima™ pavements can earn points:

- 1 to 2 points for local materials (Credit 5)
- 1 to 2 points for runoff reduction (Credit 6.1)
- 1 point for cleaning-up runoff (Credit 6.2)
- 1 point for reduction of heat islands (Credit 7)

SF-Rima™ for cold climates

SF-Rima™ pavements are proven to be effective in even the coldest climates. The concrete stones are freeze-thaw and deicing salt resistant. Snow removal is handled in the same way as regular pavements and ice build up is nearly eliminated. When snow or ice melts, it drains through the open-graded

joints to the base layers and will not refreeze into ice, and does not freeze and heave.

Maintenance

SF-Rima™ permeable pavements should be swept by using a vacuum street cleaning equipment to remove debris and sediment. The aggregate in the joints can be replaced if overly clogged.

Repair and Replacement

To accommodate new service utility lines and repair existing ones, the paving stones can be removed and reinstated, without leaving any ugly marks.

Summary – Purpose of SF-Rima™ permeable pavement

- **Meets stormwater regulations (part of BMP)**
- **Conserves space: “Detention facility” below pavement**
- **100% runoff reduction for low intensity storms**
- **Reduce retention requirements**
- **Filter and reduce nutrients, metals**
- **Increase groundwater recharge**
- **Lower peak flows/volume – reduce downstream erosion**
- **Reduce runoff temperatures**
- **Potentially fewer drainage appurtenances**
- **More attractive than alternatives**
- **Reinstatement of surface after repairs**
- **Filters oil drippings**
- **Suitable for cold climates**