



The strength of precast concrete gradually increases over time. Other materials can deteriorate, experience creep and stress relaxation, lose strength and deflect over time. The load-carrying capacity of precast concrete is derived from its own structural qualities and does not rely on the strength or quality of the surrounding backfill material.

Studies have shown that precast concrete products can provide a service life in excess of 100 years. For severe service conditions, additional design options are available which can extend the life of the precast concrete product. This is extremely important when calculating life-cycle costs for a project. Precast concrete also resists most substances. While no material is completely immune to attack from aggressive chemical agents, precast products can often be designed to resist corrosion in specific applications.

By following a simple program of inspection and maintenance precast concrete can guarantee the designed service life of a building. Any signs of deterioration should be documented with a copy of the written report sent to the manufacturer. Any applicable defects reported within the warranty period shall be remedied by the manufacturer.

MAINTENANCE & PROTECTION RECOMMENDATIONS:

1. After a building or structure is erected, it should be cleaned as required.
2. Precast expands and contracts. Ensure the precast joints are properly sealed.
3. The precast should be power-washed every four to six years to maintain its original appearance.
4. If the pigment is used in the manufacture of the precast units, a non-acid cleaning treatment is recommended.
5. Damaged (i.e. split or cracked) caulking should be replaced by:
 - a) Removing damaged caulking
 - b) Cleaning area with solvent to remove oil debris
 - c) Applying primer as required
 - d) Re-caulk with matching caulking as per manufacturer's instructions.
6. If using acid to clean surfaces, pre-test a sample to ensure units will not be damaged by the treatment.