



Engineering Hub

Site QA/QC checklists

06

Crack and joint injection

Polyurethane and epoxy injection: diagnosis, packers, injection sequence and verification.

Systems

Crack injection

Inspection record

Project	Location / area	Inspector	Date	Signature
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06.1 Before: surface acceptance

Check	Method or record	Acceptance	Remarks
☐ Cracks mapped and classified: active or dormant, wet or dry, structural or not ◆ Hold point	A map with widths and moisture; an engineering decision for structural cracks	Every crack located, classified and given an approved treatment	
☐ Resin chosen: PU to stop water, epoxy for structural bonding of dry cracks	Per the specification	Resin type approved for each crack before drilling	
☐ Crack line cleaned	Visual check	Crack mouth visible and free of dust and loose material	

06.2 During application

Check	Method or record	Acceptance	Remarks
☐ Packers drilled at an angle to cross the crack, at the specified spacing; holes flushed	Packer spacing and angle checked; holes flushed	Each hole crosses the crack; spacing as specified	
☐ Crack mouth sealed where needed so the resin stays in	Visual check before injection	Seal continuous and hard before pressure is applied	

☐	Injection from the first or lowest packer to the next, until resin shows at the adjacent one ◆ Hold point	Pressure and quantity logged per packer	Resin travel or refusal reached at each packer, as logged	
☐	Injection pressure within the equipment and product limits	Pressure gauge read and logged	No reading above the product or equipment limit; no new cracking	

06.3 After: testing and handover

Check	Method or record	Acceptance	Remarks
☐ Packers removed after cure; holes made good	Visual check	A flush, sealed surface	
☐ Area observed under wet or pressure conditions; re-injected where needed ◆ Hold point	Follow-up log	No water at treated cracks over the observation period	
☐ Cores to verify the filling of structural cracks where specified	Cores at agreed points, examined	Resin fills the crack depth as specified	
☐ Records: crack map and packer log	The project quality file	Complete, signed and filed for handover	



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