

Crocodile Plug

Quick Set Water Plug Cement



Rapid Hardening Cement

Crocodile Plug is a ready-mixed, highly accelerated underwater cement, scientifically designed for quick repair work of concrete subject to hydrostatic pressure, active leaks, or underwater conditions. Plug sets quickly while bonding to the surface and expanding to rapidly block the flow of water. Use as a permanent patching material above or below grade. Plug's quick set, non-shrink characteristic, and high bond strength properties make it an excellent mortar for anchoring ornamental iron, bolts, posts, and dowels. Crocodile Plug can be used to patch roadways, bridge decks, freezer rooms, and other surfaces at temperatures below 0°C. At these temperatures, many patching materials are unusable or require expensive and time-consuming attention. The catalytic reaction which produces the highly accelerated setting time for Plug generates enough heat to assure a secure surface bond. Crocodile Plug, when properly applied will provide permanent, watertight seals that will not corrode or decompose.

Product Features

- Expands and sets quickly to cut off water flow.
- Sets permanently in 30 seconds to 3 minutes.
- Easy to use - just add water.
- Excellent for low temperature patching and repair work (< 0 °C).
- Firmly anchor bolts, dowels, etc.
- Will set under water.

Application

Plug is an excellent choice for patching and sealing basements, piers, dams, mines, pipes, tunnels, tanks, reservoirs, canals, swimming pools, pilings, wall and panel junctions, and many other areas.

Standard: ASTM C109

Color: Grey



Application Instruction

Substrate Preparation

- To ensure proper bonding, patch area must be free of all contaminants such as oil, grease, from release, dust and other foreign matter.
- For underwater applications, bonding area should be free of surface film or algae.
- Roughen surface area with wire brush, chisel, or other mechanical means. Remove any loose or weakened concrete and mortar.
- If crack is less than 1 inch. in width or depth, widen or rout to this dimension. Best results will be attained if the inner portion of the crack is under cut so that the depth of the crack is wider than the surface opening. This allows a keying to occur enabling Plug to expand and resist high water pressures.

Proportion of Mixing

Crocodile Plug 4 parts : Water 1 part (by volume)

Mixing

- Use of rubber gloves
- Mix Crocodile Plug in a clean container with fresh, uncontaminated water.
- Mix until material has attained a putty-like consistency. Shape the material to a form similar to the crack or cavity about to be repaired.
- Mixing time should not exceed two minutes.
- Never mix more than can be used within three minutes. Do not additional water or retemper.
- Optimum water temperature is approximately 21°C. Mix with cold water to increase working time.

Application

1. Apply immediately when Crocodile Plug has achieved a stiff consistency and is shaped to fill the crack area.
2. Force the material into the crack or cavity, compressing it firmly using a gloved palm, trowel, wood block, or other flat object.
3. Hold it in place for over a minute. If there is a strong water flow hold for 2-3 minutes.
4. Shave off excess material with the edge of a trowel.
5. For long, leaking, vertical cracks, patch with successive small amounts of Crocodile Plug, starting at the top of the crack. Install a diverter pipe with a valve to control high volume leaks, during patching. For anchoring bolts, posts, dowels, etc., drill hole deep enough and large enough to allow 1/2 in. (13 mm) clearance around fixture. Mix to a putty consistency and fill hole, then tap fixture firmly into place. Keep damp for 15 minutes. Do not apply excessive pressure for 2-3 hours.



Technical Data

Test	Standard	Evaluation
Bulk		~1.25 kg/L
Compressive Strength		
10 min	ASTM C109	> 60 ksc
30 min		> 80 ksc
1 hr		> 90 ksc
1 day		> 180 ksc
7 days		> 200 ksc

Above evaluations are from test room, actual installation might provide the different results according to the condition of workplaces.

Caution

- It is recommended to mix only a small amount sufficient for each application. Mix a new batch for the next application. Do not mix a large amount and divide it for multiple applications, as the mixture may harden before it can be used.
- The product contains Portland cement and other additives. Safety equipment such as gloves, dust masks, and safety glasses should be used
- Avoid contact with eye. Wash thoroughly with water and seek advice from doctor.
- Keep out of reach of children

Storage

- It should be kept in a dry place and the temperature is not too high to avoid product's degradation.
- Shelf life for 1 year since manufactured date when kept in sealed condition.

Packing

Net weight : 4.5 kg/bucket, 1 kg/bucket

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