

GALVANIC ANODE SELECTION MATRIX

MAPEI Mapeshield™ I pure zinc galvanic anodes for corrosion protection of reinforcing steel

	Compact anodes (4" and 6")		4" high-zinc anodes		12" long anodes	
Product	Mapeshield I 70	Mapeshield I 105	Mapeshield I 10/10	Mapeshield I 10/20	Mapeshield I 30/10	Mapeshield I 30/20
Best for	Patch repairs with light to moderate steel (up to 1.0 sq. ft. per sq. ft.)	Patch repairs, including congested steel (up to 1.4)	Patch repairs where more zinc (longer service) is wanted in a 4" anode	Same footprint as 10/10 with the most zinc of the 4" anodes	Larger repairs and new pours: widest spacing, fewer anodes	Widest spacing with the most zinc in the line
External size (L x W)	3.94" x 1.97" (10.0 x 5.0 cm)	5.91" x 1.97" (15.0 x 5.0 cm)	3.94" x 1.97" (10.0 x 5.0 cm)	3.94" x 1.97" (10.0 x 5.0 cm)	11.81" x 1.97" (30.0 x 5.0 cm)	11.81" x 1.97" (30.0 x 5.0 cm)
Thickness	0.2" (5 mm)	0.2" (5 mm)	0.47" (12 mm)	0.59" (15 mm)	0.39" (10 mm)	0.47" (12 mm)
Mass of zinc	70 g	105 g	168 g	245 g	340 g	450 g
Packaging	50 per carton	50 per carton	24 per carton	24 per carton	12 per carton	12 per carton
At Altitude	Price list	Price list	Special order	Special order	Special order	Price list
Structures requiring repair: maximum spacing, on center by density of reinforcing steel*						
0.6	~24" (60.9 cm)	~24" (60.9 cm)	~24" (60.9 cm)		~32" (81.2 cm)	
0.8	~20" (50.8 cm)	~20" (50.8 cm)	~20" (50.8 cm)		~28" (71.1 cm)	
1.0	~16" (40.6 cm)	~16" (40.6 cm)	~16" (40.6 cm)		~24" (60.9 cm)	
1.2	N/A	~12" (30 cm)	~12" (30 cm)		~20" (50.8 cm)	
1.4	N/A	~8" (20 cm)	~8" (20 cm)		~16" (40.6 cm)	
New structures: maximum spacing, on center by density of reinforcing steel*						
0.6	~36" (91.4 cm)	~36" (91.4 cm)	~36" (91.4 cm)		~40" (101.6 cm)	
0.8	~32" (81.2 cm)	~32" (81.2 cm)	~32" (81.2 cm)		~36" (91.4 cm)	
1.0	~28" (71.1 cm)	~28" (71.1 cm)	~28" (71.1 cm)		~32" (81.2 cm)	
1.2	N/A	~24" (60.9 cm)	~24" (60.9 cm)		~28" (71.1 cm)	
1.4	N/A	~20" (50.8 cm)	~20" (50.8 cm)		~24" (60.9 cm)	

Before installing

- Clean exposed steel to near-white metal (SSPC SP-5 / NACE No. 1).
- Check rebar continuity with an ohmmeter: up to 1 ohm is acceptable; tie bars to restore it.

Placement

- Fasten anodes to the steel along the perimeter of the repair (hose clamps, rebar ties or welding) so they can't move during the pour.
- Clearance to the substrate: 3/4" (19 mm), or 1/4" (6 mm) more than the largest aggregate, whichever is greater.

Repair materials

- Works with concrete and repair mortars up to 100 kΩ resistivity; no special low-resistivity mortar needed.
- Do not use epoxy or polyurethane repair mortars. All MAPEI Planitop mortars we stock are Mapeshield I compatible.

* Density of reinforcing steel = actual surface area of reinforcing steel per square foot (0.09 m²) of concrete. Maximum spacing is MAPEI's general guidance for typical conditions; the design professional sets the location and spacing for each project. Protective current depends heavily on chloride content and steel density. Values from the MAPEI Mapeshield I technical data sheet (MK 06308, Nov 13, 2024). Always confirm with the current data sheet and MAPEI's installation instructions. Questions? Call Altitude at (303) 482-1010.