

## Bollard, Model R-1009-12-SM-R 4000 PSI CONCRETE FOUNDATIONS -SIX (6) #10 REBAR @ 72" LONG TIED TO REBAR THROUGH HORIZONTAL STRUCTURE PROVIDED BY INSTALLER NINE (9) #8 REBAR @ 60" LONG THROUGH PREDRILLED HOLES PROVIDED BY INSTALLER BOLLARD FILLED TO TOP WITH 4000 PSI CONCRETE INTERNAL LIFTING PIN (TYP) SCHEDULE 80 STEEL INNER BOLLARD PIPE Ø 10-3/4" SCHEDULE 120 STEEL BOLLARD PIPE Ø 12-3/4" SCHEDULE 100 STEEL BOLLARD PIPE CLEAR SPAN (BELOW GRADE) FOUR (4) #10 VERTICAL REBAR @ 48" BOLLARD SPACING **BOLLARD FILLED TO TOP** WITH 4000 PSI CONCRETE INTERNAL LIFTING PIN (TYP) FOUR (4) #10 VERTICAL REBAR @ 48" PROVIDED WITH BOLLARD Ø 8-5/8" SCHEDULE 80 STEEL INNER BOLLARD PIPE Ø 10-3/4" SCHEDULE 120 STEEL BOLLARD PIPE Ø 12-3/4" SCHEDULE 100 STEEL BOLLARD PIPE (BELOW GRADE) TOP OF GUSSET/COLLAR IS TOP OF CONCRETE I" CHAIR ELEVATES BOLLARD **TAMPED SUBGRADE** ABOVE SUBGRADE 4000 PSI CONCRETE FOUNDATIONS NINE (9) #8 REBAR @ 60" LONG SIX (6) #10 REBAR @ 72" LONG -THROUGH PREDRILLED HOLES TIED TO REBAR THROUGH HORIZONTAL STRUCTURE PROVIDED BY INSTALLER PROVIDED BY INSTALLER

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## **General Description:**

The Patriot R-1009-12-SM-R combines shallow foundation engineering with removable functionality for unmatched versatility. Engineered to ASTM F2656 M50 P1 standards, it is capable of stopping a 15,000 lb vehicle at 50 mph with minimum penetration. This bollard allows for flexible access while delivering uncompromising perimeter defense. Proudly manufactured in America from high-strength steel, the Patriot R-1009-12-SM-R ensures both security and compliance with Buy America mandates.

## **Specifications:**

Bollard Diameter: 10 3/4" [273 mm]

Total Height: 52 7/8" [1343 mm]

Height Above Grade: 39" [991 mm]

Height Below Grade: 13 3/8" [340 mm]

Total Weight: 2235 lb [1016 kg] (Bollard & Sleeve)

Material: Steel

For more information on bollard installation, please visit: https://www.reliance-foundry.com/bollard/vector-fixed-<u>installation</u>

## Notes:

- Embedment details are for reference illustration only. Minimum foundation sizes depend on local soil conditions, weather conditions, and engineering requirements.
- Bollard is provided as shown, with parts listed below. Concrete foundation and/or installation not provided by Reliance Foundry.
- This drawing is not drawn to scale. Dimensions provided herein is for reference only. Please consult Reliance Foundry sales professionals if any dimension is critical to your particular installation.
- Reliance Foundry reserves the right to amend design and specifications without prior notice for product improvement.

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ITEN	4 QTY	PART NUMBER	DESCRIPTION	MATERIAL	
1	1	2500134	Bollard Pipe Twist Tool (For Removing Bollard)	Steel	
2	3	2500070	R-1009-12-SM-R M50 Removable Sleeve	Steel	_
3	3	2500071	R-1009-12-SM-R M50 Removable Bollard	Steel	
4	12	REBAR10- 48	#10 Rebar (60 ksil) - 1-1/4" OD X 48" Long (Included with Bollard)	Steel	
5	9	REBAR8-60	#8 Rebar (60 ksi) - 1" OD X 60" Long (Provided by Installer)	Steel	
6	6	REBAR10- 72	#10 Rebar (60 ksil) - 1-1/4" OD X 72" Long (Provided by Installer)	Steel	



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DO NOT SCALE DRAWING

**BOLLARD R-1009-12-SM** 

	NAME	DATE	_	DWG: PART:	2500053-01		REV	
DRAWN	JF	2025-09-16			2500069		OIC	
REVIEWED	JL	2025-09-16	SCALE: 1:15			SHEE	T 2 OF 2	