Manhole Steps
M.A. MANHOLE STEP: First in

- **Long Life in Corrosive Environments**

  Has polypropylene's superior resistance to all types of corrosive environments found in manholes. Tests show polypropylene resists even 50% hydrogen sulfide or sulfuric acid up to 120°F. Accelerated aging tests on polypropylene indicate a life expectancy as long as the manhole you install in it.

- **M.A. Step**

  The manhole step most widely specified in the industry. Injection molded of tough copolymer polypropylene that encapsulates a 1/2" grade 60 steel reinforced rod. This combination is the best solution for a dependable manhole step.

- **Vertical Load and Pullout Strength**

  Manhole steps must withstand a vertical load test of 800 lbs. This test measures the deflection of the step after a load of 800 lbs is applied. There can be no more than 1/2" deflection. All M.A. Steps meet this requirement.

  Manhole steps must have a minimum of 400 lbs pullout strength. This test is performed regularly out in the field by our sales force. All M.A. Steps meet this requirement. M.A. Steps will withstand Impact Testing of up to 300 ft lbs with only minor deflection and no cracking or breaking.

- **Consistently Tight Installations**

  The M.A. Press Fit step is simply driven into preformed holes in the cured concrete. No grout or epoxy is necessary. The locking Rings create a positive friction lock when the step is driven into the hole. This creates the excellent pullout strength.

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For More Information Visit www.maind.com or Call 800-241-8250
Quality, Safety & Price, Since 1969

* OSHA
OSHA Instructions STD 1 - 1.9 issued December 29, 1978, revised the agency's original directive for Fixed Ladders, 29, (FR 1910.27, to specifically exclude manhole steps. STD 1 - 1.9 states, "individual rungs or steps used for access or egress, embedded in the walls of risers or conical top sections of manholes, shall be safe, well constructed and installed in accordance with good engineering practices."

As of this publication, OSHA has not updated this directive.

* ASTM
All of M.A. Industries' Manhole Steps meet ASTM Standard (-478. M.A. Industries has a representative on the committee that oversees (-478).

* Material Specification
Plastic - M.A. Manhole steps are made of copolymer polypropylene. This material is available in many different formulations. After years of actual use, we have determined polypropylene conforming to the following specific values is the best currently available for manhole steps.

The copolymer polypropylene used in all M.A. manhole steps conforms to ASTM D-41 01 PP0344B3353402.

Steel Reinforcing Bar - The steel used in our manhole steps is deformed 1/2" reinforcing rod except the PS3- PFC model which is 5/8" rod. It is grade 60 and conforms to ASTM A-615.

For More Information Visit www.maind.com or Call 800-241-8250
## Manhole Step Quick Reference

### Leg Design

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Manhole Steps

**PS1-PF Manhole Step**

Item# – 004-501  
Qty – 30 pieces per box, 750 pieces per pallet

Tread Width – 10-3/4" (273 mm)  
Projection from Wall – 5-3/4" (146 mm)  
Leg Center Dimension – 10" (254 mm)

PS1-PF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. Minimum Embedment into the concrete is 3".

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**PS1-PF Double Faced Manhole Step**

Item# – 004-501-DF  
Qty – 30 pieces per box, 750 pieces per pallet

Tread Width – 10-1/2" (273 mm)  
Projection from Wall – 5-3/4" (146 mm)  
Leg Center Dimension – 10" (254 mm)

PS1-PF-DF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. This step is double sided and cannot be driven in upside down. Minimum embedment into the concrete is 3".

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**PS1-DI Manhole Step**

Item# – 004-505  
Qty – 25 pieces per box, 625 pieces per pallet

Tread Width – 10-3/4" (273 mm)  
Projection from Wall – 5-3/8" (137 mm)  
Leg Center Dimension – 10" (254 mm)  
Leg Embedment – 4-3/8" (111 mm)

PS1-DI Manhole Steps are designed to be driven into Green (uncured) concrete. This step is used in Dry Cast Operations. Minimum Embedment into the concrete is 3".

For More Information Visit www.maind.com or Call 800-241-8250
Manhole Steps

PS1-DIS Manhole Step
Item# – 004-506
Qty – 25 pieces per box, 625 pieces per pallet

Tread Width – 10-3/4" (273 mm)
Projection from Wall – 5-3/8" (137 mm)
Leg Center Dimension – 10" (254 mm)
Leg Embedment – 3-5/16" (84 mm)

PS1-DIS Manhole Steps are designed to be driven into Green (uncured) concrete. This step is used in Dry Cast Operations. Minimum Embedment into the concrete is 3".

PS1-DIS-DF Manhole Step
Item# – 004-501-DF
Qty – 25 pieces per box, 625 pieces per pallet

Tread Width – 10-1/2" (273 mm)
Projection from Wall – 5-1/4" (133 mm)
Leg Center Dimension – 10" (254 mm)
Leg Embedment – 3-5/16" (84 mm)

PS1-DIS-DF Manhole Steps are designed to be driven into Green (uncured) concrete. This step is used in Dry Cast Operations. This step is double sided and cannot be driven in upside down. Minimum Embedment into the concrete is 3".

PS1 Manhole Step
Item# – 004-500
Qty – 25 pieces per box, 625 pieces per pallet

Tread Width – 10-3/4" (273 mm)
Projection from Wall – 5-3/4" (146 mm)
Leg Center Dimension – 10" (254 mm)

PS1 manhole step is designed to be cast in place only. Minimum Embedment into the concrete is 3".

For More Information Visit www.maind.com or Call 800-241-8250
Manhole Steps

PS2-PF Manhole Step
Item# – 004-510
Qty – 25 pieces per box, 500 pieces per pallet

Tread Width – 14" (356 mm)
Projection from Wall – 6" (152 mm)
Leg Center Dimension – 13" (330 mm)

PS2-PF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. Minimum Embedment into the concrete is 3".

PS2-PF Double Faced Manhole Step
Item# – 004-510-DF
Qty – 25 pieces per box, 500 pieces per pallet

Tread Width – 13-1/2" (343 mm)
Projection from Wall – 5-7/8" (149 mm)
Leg Center Dimension – 13" (330 mm)

PS2-PF-DF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. This step is double sided and cannot be driven in upside down. Minimum Embedment into the concrete is 3".

PS2-PFS Manhole Step
Item# – 004-511
Qty – 25 pieces per box, 500 pieces per pallet

Tread Width – 14" (356 mm)
Projection from Wall – 5-1/8" (130 mm)
Leg Center Dimension – 13" (330 mm)

PS2-PFS Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. Minimum Embedment into the concrete is 3".

For More Information Visit www.maind.com or Call 800-241-8250
Manhole Steps

**PS2-PFS-DF Manhole Step**

Item# – 004-511-DF  
Qty – 20 pieces per box, 500 pieces per pallet  

Tread Width – 13 1/2" (343 mm)  
Projection from Wall – 5 1/16" (130 mm)  
Leg Center Dimension – 13" (330 mm)  

PS2-PFS-DF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. This step is double sided and cannot be driven in upside down. Minimum Embedment into the concrete is 3".

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**PS2-PFSL Manhole Step**

Item# – 004-512  
Qty – 25 pieces per box, 500 pieces per pallet  

Tread Width – 14" (356 mm)  
Projection from Wall – 5-1/8" (130 mm)  
Leg Center Dimension – 13" (330 mm)  

PS2-PFSL Manhole Steps are designed to be driven into a preformed hole created by a Step Insert or Cam Pin. This requires a 1-1/4" hole. Minimum Embedment into the concrete is 3".

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**PS2-PFSL Double Faced Manhole Step**

Item# – 004-512-DF  
Qty – 25 pieces per box, 500 pieces per pallet  

Tread Width – 13-1/2" (343 mm)  
Projection from Wall – 5" (127 mm)  
Leg Center Dimension – 13" (330 mm)  

PS2-PFSL-DF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert or Cam Pin. This step is double sided and cannot be installed upside down. This requires a 1-1/4" hole. Minimum Embedment into the concrete is 3".
Manhole Steps

**PS12-PF-DF Manhole Step**
Item# – 004-521
Qty – 25 pieces per box, 625 pieces per pallet

Tread Width – 10-3/4" (273 mm)
Projection from Wall – 5-3/4" (146 mm)
Leg Center Dimension – 11" (279 mm)

PS12-PF-DF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. Minimum Embedment into the concrete is 3".

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**PS12-PF-DF Manhole Step**
Item# – 004-530-DF
Qty – 25 pieces per box, 500 pieces per pallet

Tread Width – 12-1/2" (318 mm)
Projection from Wall – 5-7/8" (149 mm)
Leg Center Dimension – 12" (305 mm)

PS12-PF-DF Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. This step is double sided and cannot be driven in upside down. Minimum Embedment into the concrete is 3".

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**PS3-PFC Manhole Step**
Item# – 004-516
Qty – 15 pieces per box, 375 pieces per pallet

Tread Width – 16-3/4" (425 mm)
Projection from Wall – 7" (177 mm)
Leg Center Dimension – 16" (406 mm)

PS3-PFC Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. Drilling. This requires a 1" hole. Minimum Embedment into the concrete is 3".

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For More Information Visit www.mainind.com or Call 800-241-8250
Manhole Steps

**PS2-PF-DRP Manhole Step**

Item# – 004-510-DRP-O  
Qty – 20 pieces per box, 400 pieces per pallet

Tread Width – 11-13/16" (300 mm)  
Projection from Wall – 6-7/16" (164 mm)  
Leg Center Dimension – 13" (330 mm)

PS2-PF-DRP Manhole Steps are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or by Drilling. Minimum Embedment into the concrete is 3".

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**PFS-1 Manhole Step**

Item# – 004-528  
Qty – 30 pieces per box, 750 pieces per pallet

Tread Width – 10-1/8" (257 mm)  
Projection from Wall – 5-5/8" (143 mm)  
Leg Center Dimension – 10" (254 mm)

PFS-1 Manhole Steps are designed to be driven into a preformed hole created by a PFS-1 Step Insert or Drilling. This requires a 1" Straight hole. Legs are not tapered. Minimum Embedment into the concrete is 3".

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**PFS-2 Manhole Step**

Item# – 004-529  
Qty – 25 pieces per box, 500 pieces per pallet

Tread Width – 13-3/4" (349 mm)  
Projection from Wall – 5-5/8" (143 mm)  
Leg Center Dimension – 13" (330 mm)

PFS-2 Manhole Steps are designed to be driven into a preformed hole created by a PFS-1 Step Insert or Drilling. This requires a 1" Straight hole. Legs are not tapered. Minimum Embedment into the concrete is 3".

For More Information Visit www.maind.com or Call 800-241-8250
Manhole Steps

PFS-2-DF Manhole Step
Item# – 004-529-DF
Qty – 25 pieces per box, 500 pieces per pallet

Tread Width – 13-3/8" (340 mm)
Projection from Wall – 5-1/2" (140 mm)
Leg Center Dimension – 13" (330 mm)

PFS-2 Manhole Steps are designed to be driven into a preformed hole created by a PFS-1 Step Insert or Drilling. This requires a 1" Straight hole. Legs are not tapered. This step is double sided and cannot be driven in upside down. Minimum Embedment into the concrete is 3".

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PS1-B Manhole Step
Item# – 004-504
Qty – 20 pieces per box, 400 pieces per pallet

Tread Width – 10-1/2" (267 mm)
Projection from Wall – 5-1/2" (140 mm)
Leg Center Dimension – 10" (254 mm)

PS1-B Manhole Steps are designed to be installed into block or brick structures. Minimum Embedment into the concrete is 3".

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PS2-BG Manhole Step
Item# – 004-508
Qty – 20 pieces per box, 400 pieces per pallet

Tread Width – 14" (356 mm)
Projection from Wall – 5-1/8" (130 mm)
Leg Center Dimension – 13" (330 mm)

PS2-BG Manhole Steps are designed to be installed into block or brick structures Minimum Embedment into the concrete is 3".

For More Information Visit www.mainind.com or Call 800-241-8250
Manhole Steps

**PS4-B Manhole Step**
- Item# – 004-519
- Qty – 25 pieces per box, 625 pieces per pallet
- Tread Width – 10-3/4" (273 mm)
- Projection from Wall – 5-3/4" (146 mm)
- Leg Center Dimension – 11" (279 mm)

PS4-B Manhole Steps are designed to be driven into "square" plastic insert only. Minimum Embedment into the concrete is 3".

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**PS2-B Manhole Step**
- Item# – 004-507
- Qty – 25 pieces per box, 500 pieces per pallet
- Tread Width – 13-3/4" (349 mm)
- Projection from Wall – 5-7/8" (149 mm)
- Leg Center Dimension – 13" (330 mm)

PS2-B Manhole Steps are designed to be driven into "square" plastic insert only. Minimum Embedment into the concrete is 3".

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**PS2-B-DF Manhole Step**
- Item# – 004-507-DF
- Qty – 25 pieces per box, 500 pieces per pallet
- Tread Width – 13-1/2" (343 mm)
- Projection from Wall – 5-5/8" (143 mm)
- Leg Center Dimension – 13" (330 mm)

PS2-B-DF Manhole Steps are designed to be driven into "square" plastic insert only. This step is double sided and cannot be driven in upside down. Minimum Embedment into the concrete is 3".

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Manhole Steps

PS2-PFHH Hand Hold
Item# – 004-515
Qty – 30 pieces per box, 600 pieces per pallet

Grasp Width – 14" (356 mm)
Projection from Wall – 3-1/8" (79 mm)
Leg Center Dimension – 13" (330 mm)

PS2-PFHH Hand Holds are designed to be driven into a preformed hole created by a Step Insert, Cam Pin or Drilling. This requires a 1" hole. This is not designed to be used as a Manhole Step.

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PS2-BGLN Grade Ring Hand Hold
Item# – 004-509
Qty – 20 pieces per box, 400 pieces per pallet

Tread Width – 13-7/8" (352 mm)
Projection from Wall – 3" (76 mm)
Leg Center Dimension – 13" (330 mm)

PS2-BGLN Grade Ring Hand Holes are designed to be installed between the grade rings and secured with 2 BGLN Nuts. This is not designed to be used as a Manhole Step.
IS IT UPSIDE DOWN OR RIGHT SIDE UP?

With M.A. Industries' Double Faced Manhole Steps, you will not have to worry.

The Double Faced Manhole Step can be installed with either side up or down. No longer do you have to worry about installing steps upside down. These steps utilize existing tooling for installation.

The Double Faced Step is made from the same high quality materials as all M.A. Industries' steps. They meet all ASTM, AASHTO and OSHA standards.

Available in the following models in Black or Orange:
PS1-PF-DF  PS2-PF-DF  PS2-PFS-DF  PS2-PFSL-DF  PS1-DIS-DF  PS2-B-DF

Call our Customer Service Department to place your order or additional information at:

Toll-Free 1-800-241-8250

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We want to ensure everyone goes home at night to what really matters most.

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