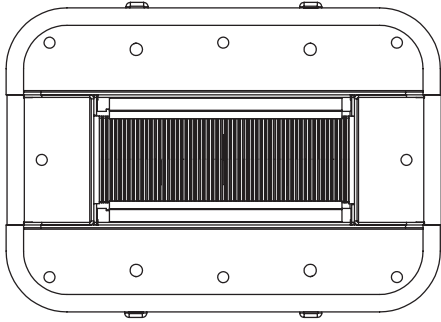
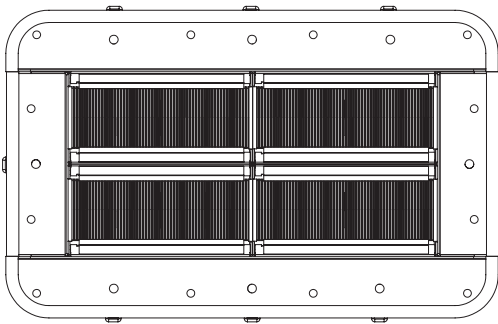


Catalog Numbers: MDM150A, MDM150Y, MDM150B, MDM150Z, MDM400A, MDM400C, MDM400G



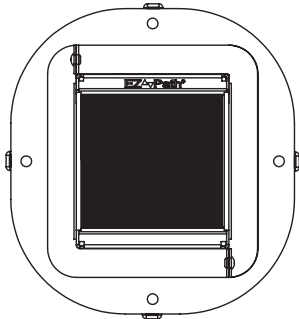
**MDM150A & MDM150Y**

Number of Welds	Opening Dimensions		
	Width	Height	Radius
4	155 mm (6.1 in)	80 mm (3.2 in)	6 mm (0.24 in)



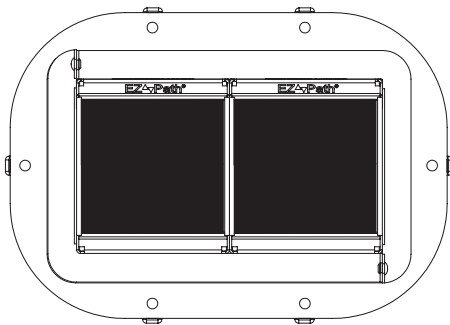
**MDM150B & MDM150Z**

Number of Welds	Opening Dimensions		
	Width	Height	Radius
8	305 mm (12.0 in)	155 mm (6.1 in)	6 mm (0.24 in)



**MDM400A**

Number of Welds	Opening Dimensions		
	Width	Height	Radius
4	110 mm (4.3 in)	126 mm (5.0 in)	6 mm (0.24 in)

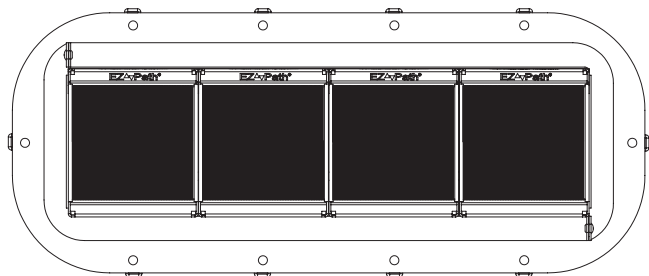


**MDM400C**

Number of Welds	Opening Dimensions		
	Width	Height	Radius
6	210 mm (8.3 in)	126 mm (5.0 in)	6 mm (0.24 in)

\*Not drawn to scale

Catalog Numbers: MDM150A, MDM150Y, MDM150B, MDM150Z, MDM400A, MDM400C, MDM400G



MDM400C			
Number of Welds	Opening Dimensions		
	Width	Height	Radius
10	420 mm (16.5 in)	126 mm (5 in)	6 mm (0.24 in)

\*Not drawn to scale

Refer to product installation instructions: ZIS1079 (MDM150A & MDM150B), ZIS1211 (MDM150Y), ZIS1212 (MDM150Z), ZIS1080 (MDM400A, MDM400C, MDM400G).

**Weld Preparation:**

- Opening size per the table above or as listed in appropriate approval.
- It is recommended practice to clean welded surfaces of all oil, scale, paint and dirt; specifically at designated weld zones

**Tack and Weld Sequence:**

- Tack each weld area, one place, opposite sides of device
- Clean tack welds: chip, wire-brush
- Length of welds to be 12.7 mm (0.5 in) min. - 25.4 mm (1.0 in) max.

**Finish:**

- Clean welds: wire-brush, sanding, rinse
- Prime & paint for corrosion resistance

**Cautionary!**

- Keep heat input to a minimum; Intumescent material inside device will begin expanding between 149°C-177°C (300°F-350°F); a wet rag can be used to limit heat input

**Welders Qualified in Accordance**

**with:**

AWS D1.1 latest edition  
 ASME  
 MIL-STD-248  
 API 1104  
 CWB  
 or equivalent

**Welding Methods:**

Shielded Metal Arc Welding (SMAW)  
 Gas Metal Arc Welding (GMAW)  
 Flux Core Arc Welding (FCAW)  
 Gas Tungsten Arc Welding (GTAW)

**Welding Parameters:**

**SMAW - Shielded Metal Arc Welding**

Electrode: E6010  
 Filler Wire: 6011 or Equivalent  
 Size/Diameter: 3/32, 1/8  
 Polarity: Straight/DCEN  
 Amp Range: 60-90  
 Volt Range: 24-32

**GMAW - Gas Metal Arc Welding**

Filler Wire: ER70S-6 or Equivalent  
 Shielding Gas: Argon/CO2 Mix 92%/8% or 75%/25%  
 CFH/Flow: 30-45  
 Polarity: Reverse/DCEP  
 Amp Range: 170-210  
 Volt Range: 18-25

**FCAW - G/Flux Core Arc Welding**

Filler Wire: E71T-S-9C, Outer Shield 71M  
 Shielding Gas: CO2 or 75% Argon / 25% CO2 Mix  
 CFH/Flow: 45-55  
 Polarity: Reverse/DCEP  
 Amp Range: 225-275  
 Volt Range: 29-34

**GTAW - Gas Tungsten Arc Welding**

Filler Wire: ER70S-6 or Equivalent  
 Shielding Gas: 100% Argon  
 CFH/Flow: 15-25  
 Polarity: Straight/DCEN  
 Tungsten Type: 2% Thoriated  
 Tungsten Size: 3/32 - 1/8  
 Amp Range: 100-150  
 Volt Range: 12-18