



# Formula<sup>®</sup> 4000

Mid-Range Rear Loader



# Formula® 4000

A workaholic built to last.

Why are there so many **Formula 4000** refuse collection vehicles on the road today? Because once you put one on the road, it tends to stay there. In fact, thousands of these vehicles are dedicated to serving the needs of small municipalities and large metropolitan cities the world over. They feature the low cost of ownership you expect from Heil, along with the best payload-to-weight ratio of any mid-range rear loader. And, with a proven track record in both residential and commercial applications, the **Formula 4000** has earned its reputation as the mid-range workhorse of the industry.

**Built to last.** The base of the **Formula 4000's** durability is its interlaced subframe, featuring formed channels for extra strength. Heil pioneered this design to provide the strongest base in the industry for long-lasting performance. In addition, the floor of the **Formula 4000** is made from abrasion-resistant, high-tensile steel that stands up to the most demanding conditions, yet its

lower overall body weight increases payloads and reduces stress on chassis components.

**Precision Engineered.** The **Formula 4000** features a number of engineered innovations, including an ejector panel designed to reduce wear by fitting precisely into the body, without ever contacting the tailgate. Its snout-less ejector elevates the cylinder base, which keeps the cylinder free from contamination by refuse. We even designed the **Formula 4000** to feature a lower profile for better center of gravity and clearance from overhead obstructions.

To add the proven **Formula 4000** to your fleet, simply contact your local Authorized Heil Dealer. To find the Dealer nearest you, visit [www.heil.com](http://www.heil.com).



Shown with optional equipment.



### Reliable Residential and Commercial Performance

Heil's **Formula® 4000** was engineered with the durability and flexibility to handle both residential and commercial routes.

- **Best Payload** — The **Formula 4000** features the best payload-to-weight ratio of any mid-range rear loader on the market.
- **High Capacity** — Choose from body capacities ranging from 13 to 25 cubic yards.
- **Low Profile** — The low profile design provides better center of gravity and clearance from overhead obstructions.
- **Large Hopper** — The 2.7 cubic yard hopper makes short work of any residential route.
- **Low Flow, High Efficiency Hydraulics** — The hydraulics operate at a lower temperature, extending the life of hydraulic components, while cushioned cylinders prevent internal damage and premature wear, reducing maintenance requirements.
- **Rapid Reload** — The 15-17 second cycle time and 7-10 second reload time will have you finishing routes quickly and efficiently.
- **Non-CDL** — Certain single-axle body/chassis combinations will enable your operators to do the job without a CDL license.

*Visit [www.heil.com](http://www.heil.com) to learn more about our entire offering of proven refuse collection vehicles.*

### Interlaced Subframe

*Our exclusive fully welded interlaced subframe provides exceptional longevity, while resisting abrasion, corrosion, and salt damage. The body is constructed of 11- to 12-gauge high-tensile steel, while the hopper features 5/16 -inch thick AR400 steel on the floor and 3/16-inch thick AR400 steel on the sides for superior strength and durability.*



### Commercial & Residential Applications

*The **Formula 4000** can be fitted with a wide selection of premium Bayne lifters for residential carts, or with a winch, reeving cylinder, or roll bar for commercial containers.*



### Narrow Widths Available

*The **Formula 4000** is available in narrow widths to accommodate alleys, congested streets, and other space challenges of residential collection routes.*



### Service Smart™ Side Door

*Our Service Smart™ design simplifies routine maintenance, keeping you away from the shop and out servicing your customers – and making money. The side door provides easy access for common maintenance tasks.*





# Formula<sup>®</sup> 4000

## Mid-Range Rear Loader Product Specifications

Performance Specifications	
Compaction	Up to 800 lbs. per yd <sup>3</sup>
Hopper Size	2.7 yd <sup>3</sup>
Packing Cycle Time	15-17 seconds*
Reload Time	7-10 seconds*
* with optional regen valve	

All designs, specifications, and components are subject to change at the manufacturer's sole discretion at any time without notice. Data published herein is for information purposes only and shall not be construed to warrant suitability of the unit for any particular purpose, as performance may vary with the conditions encountered. The only warranty is our standard written Warranty Statement for this product at the time of shipment.

Hydraulic Specifications	
<b>PUMP</b>	
Type	High pressure gear
Maximum Operating Pressure	2,500 psi
GPM	24 GPM
<b>OIL RESERVOIR</b>	
Tank Capacity (net)	35 gallons
Filters	10 micron return filter; 140 micron suction line
<b>VALVES</b>	
Shutoff	Ball type
Packing Control	Spool type
Ejector and Tailgate Raise	Spool type

Tailgate Specifications		13-20 yd <sup>3</sup>	25 yd <sup>3</sup>
Hopper Capacity	yd <sup>3</sup>	2.7	2.7
	m <sup>3</sup>	2.0	2.0
Sill Height Below Chassis Frame	in.	0	2
	mm	0	50
Hopper Loading Width	in.	80	80
	mm	2,030	2,030
Hopper Opening Height	in.	46	46
	mm	1,070	1,070
Cycle Time (seconds)	complete	17-19	17-19
	reload	7-10	7-10

Chassis Requirements		13 yd <sup>3</sup>	16 yd <sup>3</sup>	18 yd <sup>3</sup>	20 yd <sup>3</sup>	25 yd <sup>3</sup>
Minimum GVWR		29,000	31,000	33,000	35,000/39,000	44,000
Minimum GAWR <sup>(1)</sup>	front	8,000	9,000	9,000	9,000	9,000
	rear	17,500	18,000	20,000	23,000	34,000
Usable CA	in.	96 <sup>(2)</sup>	102-110	118-124	134-140	N/A
	mm	2,438	2,590-2,800	2,997-3,150	3,400-3,560	N/A
Usable CT	in.	N/A	N/A	N/A	114-120	136-142
	mm	N/A	N/A	N/A	2,896-3,048	3,454-3,607
Minimum AF	in.	32	32	32	32/51	51
	mm	813	813	813	813/1,295	1,295

NOTES  
 \* Any chassis sent to Heil Environmental with less than these minimum GVWR/GVARs will not be mounted.  
 1) Single-axle chassis axle requirements are based on a conventional cab chassis with a front axle weight of 7,000 lb. and rear axle weight of 4,000 lb. and a payload ratio of 700 lb./yd<sup>3</sup> and minimal body options.  
 2) Tandem-axle chassis requirements are based on a conventional cab chassis with a front axle weight of 8,000 lb. and rear axle weight of 7,000 lb. and a payload ratio of 700 lb./yd<sup>3</sup> and minimal body options.

Body Specifications		13 yd <sup>3</sup>	16 yd <sup>3</sup>	18 yd <sup>3</sup>	20 yd <sup>3</sup>	25 yd <sup>3</sup>
Body Capacity	yd <sup>3</sup>	13	16	18	20	25
	m <sup>3</sup>	10.6	12.2	13.8	15.3	19.1
Overall Length	in.	186	201	217	231	254
	mm	4,720	5,110	5,510	5,870	6,450
Overall Length with Tailgate Raised	in.	211	226	241.5	255	287
	mm	5,540	5,740	6,130	6,480	7,300
Overall Width	in.	95.75	95.75	95.75	95.75	95.75
	mm	2,430	2,430	2,430	2,430	2,430
Overall Height Above Frame	in.	86	86	86	86	93
	mm	2,180	2,180	2,180	2,180	2,360
Overall Height with Tailgate Raised	in.	156	156	156	156	167
	mm	3,960	3,960	3,960	3,960	4,242
Gross Weight (approximate)	lbs.	9,100	9,400	9,650	9,900	10,700
	kg.	4,130	4,260	4,380	4,450	4,860

Cylinder Specifications						
Body Cylinders	Type	Model	Stages	Bore		
Tailgate Raise	Double Acting	ALL	N/A	in.	3	
				mm	76	
in.	4					
mm	102					
Packer Blade	Double Acting			in.	4.5	
Slide	Double Acting			mm	114	
				in.	5.5	
Ejection	Double Acting Telescopic			13 yd <sup>3</sup>	3	mm
		in.	5.5			
		16 yd <sup>3</sup>	3	mm	140	
				in.	5.5	
		18 yd <sup>3</sup>	4	in.	6.5	
				mm	165	
		20 yd <sup>3</sup>		in.	6.5	
				mm	165	
25 yd <sup>3</sup>	in.	6.5				
	mm	165				

CONTACT YOUR LOCAL DEALER



2030 Hamilton Place Blvd., Suite 200, Chattanooga, TN 37421  
 866.FOR.HEIL (866.367.4345) • Fax: 423.855.3478  
 www.heil.com

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