Formula® 4000
Mid Range Rear Loader

The Standard Worldwide For Performance and Durability
The Heil Formula® 4000 rear loader is the mid-range workhorse of the industry. Its low profile, high-tensile steel body delivers the biggest payload-to-weight ratio of any mid-range rear loader. With a variety of container handling options available, the Formula® 4000 is a complete, economical system for refuse collection.

Start With A Tough Body
Heil builds refuse vehicles to last. We start with high-tensile steel to put extra strength into the body and tailgate without adding extra weight. Heil's interlaced subfloor puts even more strength where it's needed most, to ensure years of dependable service.

Build In Performance
The Formula® 4000 gets the job done quickly, capable of an 18-second packing cycle and equipped with a 2.66 cubic yard hopper that's ready to reload in 5 seconds. You'll get payloads up to 800 pounds per cubic yard, too. With numbers like that, the Formula® 4000 will outperform any other rear loader in its class.

Calculate The Value
Thousands of satisfied customers worldwide are using the Heil mid-range rear loader to handle collections in big cities and small towns alike.

Because we build it better in the beginning for greater durability and performance, your long term cost of ownership is lower with the Formula® 4000. You can be assured your Formula® 4000 will be on the route every day for years to come. That kind of dependability not only saves you money, it means peace of mind. And that can be priceless.

Tight Fit
Ejector panel is engineered for precise fit and does not contact the tailgate. The snoutless ejector, with elevated cylinder base and aluminum/brass alloy shoes, ensures lower maintenance costs.

Open Front Head
Provides easy access for maintenance behind ejector panel and to the ejector cylinder. An optional side access door is also available with an enclosed front head.
The most popular mid-range rear loader in the world, with over 15,000 sold.

"Build it right...then back it with integrity." - Julius B. Heil

More than any other principal of doing business, Heil's mission to build a quality product and then stand behind it has been our guiding force for over 100 years. Whether it's technical support, training, parts, warranty service, or just "doing the right thing," Heil's commitment to customer satisfaction is legendary.

Also Available in Narrow Width Models.

**Stronger Floor**
Heil's interlaced subfloor and abrasion-resistant, high tensile steel result in a stronger floor to survive the most demanding conditions.

Filtration
External oil tank with 10 micron spin-on oil filter and suction line shutoff valve. Easy service of hydraulic oil system will mean your system stays cleaner, reducing wear on hydraulic components.

**Lighting**
High visibility lighting is standard on the Formula® 4000, for the safety of your operators as well as your customers.

**Container Handling Options**
A variety of container mechanisms are available, including the winch (shown), the fully hydraulic roll bar, and the reeving cylinder.
# Specifications

## Formula 4000 Mid-Range Rear Loader

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 for this product.

### HYDRAULIC SPECIFICATIONS

<table>
<thead>
<tr>
<th>PUMP</th>
<th>Type</th>
<th>High pressure gear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. operating pressure</td>
<td>2500 psi (17,237 kPa)</td>
<td></td>
</tr>
<tr>
<td>GPM (optional regen. valve)</td>
<td>24 GPM (90.6 liters/min.)</td>
<td></td>
</tr>
</tbody>
</table>

### OIL RESERVOIR

| Tank capacity | 24 gallons (90.8 liters) |
| Filters (replaceable) | Return - 1 micron |
| Suction | - 140 micron |

### VALVES

| Shut-off | Ball type |
| Packing control | Spool type |
| Ejector and tailgate raise | Spool type |

### CHASSIS REQUIREMENTS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>MIN. GVWR (lbs.)</th>
<th>MIN. GAWR (lbs.)</th>
<th>USABLE CA (in.)</th>
<th>USABLE CT (in.)</th>
<th>MIN. AF (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000-13</td>
<td>25,500</td>
<td>8,000</td>
<td>17,500</td>
<td>96</td>
<td>2438</td>
</tr>
<tr>
<td>4000-16</td>
<td>27,000</td>
<td>9,000</td>
<td>18,000</td>
<td>102-108</td>
<td>2591-2743</td>
</tr>
<tr>
<td>4000-18</td>
<td>29,500</td>
<td>9,000</td>
<td>20,000</td>
<td>118-124</td>
<td>2997-3150</td>
</tr>
<tr>
<td>4000-20</td>
<td>32,000</td>
<td>9,000</td>
<td>23,000</td>
<td>132-138</td>
<td>3353-3505</td>
</tr>
<tr>
<td>4000-25</td>
<td>43,000</td>
<td>9,000</td>
<td>34,000</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

**NOTES:**
- Any chassis sent to The Heil Co. with less than these minimum GVWR/GAWRs will not be mounted.
- 1) If CA/CT is not as recommended, contact Heil Environmental Industries, Ltd. for applicable weight distribution and GVWR/GAWR requirements.
- 2) Requires 7" forward mounting of body.
- 3) L.H. Side Door optional 4) Closed Front Head optional

## Tailgate Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HOPPER CAPACITY</th>
<th>LOADING SILL HEIGHT BELOW CHASSIS FRAME (in.)</th>
<th>HOPPER LOADING WIDTH (in.)</th>
<th>HOPPER OPENING HEIGHT (in.)</th>
<th>CYCLE TIME - Seconds (Complete)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000-13-20</td>
<td>2.66 2.04 m³</td>
<td>0</td>
<td>80</td>
<td>46</td>
<td>15-17</td>
</tr>
<tr>
<td>4000-25</td>
<td>2.66 2.04 m³</td>
<td>2</td>
<td>51</td>
<td>1168</td>
<td>15-17</td>
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</tbody>
</table>

## Body Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>BODY CAPACITY</th>
<th>OVERALL LENGTH</th>
<th>OVERALL LENGTH TAILGATE RAISED</th>
<th>OVERALL WIDTH</th>
<th>OVERALL HEIGHT ABOVE FRAME</th>
<th>OVERALL HEIGHT TAILGATE RAISED</th>
<th>GROSS WEIGHT Approximate (lbs. kg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000-13</td>
<td>13.8 10.55 m³</td>
<td>186 5124</td>
<td>211 5359</td>
<td>95.75 2432</td>
<td>95.75 2432</td>
<td>156 9362</td>
<td>9,100 4,128</td>
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<tr>
<td>4000-16</td>
<td>16 12.23 m³</td>
<td>201 5105</td>
<td>225 5740</td>
<td>95.75 2432</td>
<td>95.75 2432</td>
<td>156 9362</td>
<td>9,400 4,264</td>
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<tr>
<td>4000-18</td>
<td>18 13.76 m³</td>
<td>217 5512</td>
<td>241.5 6134</td>
<td>95.75 2432</td>
<td>95.75 2432</td>
<td>156 9362</td>
<td>9,650 4,377</td>
</tr>
<tr>
<td>4000-20</td>
<td>20 15.29 m³</td>
<td>231 5867</td>
<td>255 6477</td>
<td>95.75 2432</td>
<td>95.75 2432</td>
<td>156 9362</td>
<td>9,900 4,491</td>
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<tr>
<td>4000-25</td>
<td>25 19.11 m³</td>
<td>254 6452</td>
<td>287 7299</td>
<td>95.75 2432</td>
<td>93 2362</td>
<td>167 4242</td>
<td>10,700 4,853</td>
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## Cylinders

<table>
<thead>
<tr>
<th>TAILGATE RAISE (2)</th>
<th>PACKING BLADE (2)</th>
<th>SLIDE (2)</th>
<th>EJECTION (1) Double Acting Telescopic</th>
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</thead>
<tbody>
<tr>
<td>MODEL</td>
<td>BORE STROKE</td>
<td>BORE STROKE</td>
<td>BORE STROKE</td>
</tr>
<tr>
<td></td>
<td>inches inches</td>
<td>inches inches</td>
<td>inches inches</td>
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<tr>
<td>ALL</td>
<td>3 4 5 6 7 8</td>
<td>3 4 5 6 7 8</td>
<td>4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

**Performance Specifications**

- Compaction: up to 800 Lbs. per Yd³
- Hopper Size: 2.66 Cubic Yards
- Packing Cycle Time: 15-17 Seconds
- Reload Time: 5-6 Seconds
- FET Exempt: 13, 16, 18 & 20 Yd. Units

(single axle configurations)