The Cat® 308E2 CR VAB Mini Hydraulic Excavator delivers high performance, durability and versatility in a compact design to help you work in a variety of applications. The 308E2 CR VAB features the following:

QUALITY
- The durable hoods and frame and the compact radius design of the 308E2 CR VAB let you work comfortably and confidently in confined areas.
- The operator environment includes a high quality suspension seat, easy to adjust armrests and 100% pilot controls which offer consistent and long-lasting controllability.

EFFICIENCY
- High Definition Hydraulic System provides a load sensing and flow sharing capability leading to operational precision, efficient performance and greater controllability.
- Power on Demand provides optimal efficiency and performance the moment you need it. This automatic system ensures fuel efficiency through appropriate engine rating to meet all operational needs as required.

DURABLE FRONT LINKAGE
- Uptime and service intervals are increased with durable and reliable booms, sticks, and linkage pins. Each boom and stick is built to provide superior strength to withstand any tough application.
- Variable angle boom option offers flexibility and versatility in the working envelope. With full extension, the working range gives maximum dig depth, reach and working height. When retracted, it can work closer to the blade and tracks, provide increased lifting capacity and work productively in confined areas.

PERFORMANCE
- Front shovel bucket orientation provides the operator with more ways to get the job done faster.
- COMPASS Control Panel is a standard feature that allows the operator to easily adjust auxiliary flows to achieve the optimal work tool performance, activate auto idle for improved fuel efficiency and utilize the security system to ensure protection of valuable assets with the simple touch of a button.
- The Site Reference System included in the COMPASS monitor provides output from pitch and roll sensors to aid in grading and level trenching. This impacts accuracy and productivity for job site finishing.
- Rearview camera improves operator productivity and efficiency through increased visibility, making work easier to complete.

SERVICEABILITY
- Convenient service and maintenance requirements include ease of access to daily check points, 500 hour engine oil and filter change period, 500 hour grease interval on front implement, S·O·S™ oil sampling valve and overall long-term durability.

SAFETY
- All Cat Mini Excavators from 3.5 metric tons to 8 metric tons are ROPS, TOPS and Top Guard Level II certified and include the Cat Interlock (hydraulic lockout) System, a certified accumulator which allows for auxiliary pressure to be released, making connecting and disconnecting work tools safer and easier, and a travel alarm. All of these safety features are standard on the E2 model lineup (travel alarm optional in Europe).

Specifications

<table>
<thead>
<tr>
<th>Engine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Model*</td>
<td>Cat C3.3B</td>
</tr>
<tr>
<td>Rated Net Power @ 2,000 rpm ISO 9249/EEC 80/1269</td>
<td>48.5 kW 65.0 hp</td>
</tr>
<tr>
<td>Gross Power ISO 14396</td>
<td>49.7 kW 66.6 hp</td>
</tr>
<tr>
<td>Bore</td>
<td>94 mm 3.7 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>120.0 mm 4.7 in</td>
</tr>
<tr>
<td>Displacement</td>
<td>3.3 L 201 in³</td>
</tr>
</tbody>
</table>

*Meets U.S. EPA Tier 4 Final/EU Stage IIIIB emission standards.

Weights*

| Weight – Cab, Standard Stick | 8700 kg 19,184 lb |

*Weight includes counterweight, rubber tracks, bucket, operator, full fuel and auxiliary lines.
308E2 CR VAB Mini Hydraulic Excavator with Variable Angle Boom

**Swing System**
- Machine Swing Speed: 11 rpm
- Boom Swing – Left: 60°
- Boom Swing – Right: 50°

**Travel System**
- Travel Speed – High: 5.3 km/h (3.3 mph)
- Travel Speed – Low: 3.3 km/h (2.1 mph)
- Max Traction Force – High Speed: 35.8 kN (8,048 lb)
- Max Traction Force – Low Speed: 61.8 kN (13,893 lb)
- Ground Pressure – Cab: 63.5 kPa (9.2 psi)
- Gradeability (continuous operation): 20°
- Gradeability (<10 minutes operation): 30°

**Service Refill Capacities**
- Cooling System: 14.0 L (3.7 gal)
- Engine Oil: 11.2 L (3.0 gal)
- Fuel Tank: 125.0 L (33.0 gal)
- Hydraulic Tank: 82.0 L (21.7 gal)
- Hydraulic System: 94.0 L (24.8 gal)

**Hydraulic System**
- Load Sensing Hydraulics with Variable Displacement Piston Pump
- Pump Flow at 2,000 rpm: 150 L/min (39.6 gal/min)
- Operating Pressure – Equipment: 280 bar (4,060 psi)
- Operating Pressure – Travel: 280 bar (4,060 psi)
- Operating Pressure – Swing: 240 bar (3,480 psi)
- Auxiliary Circuit – Primary (280 bar/4,061 psi): 128 L/min (33.8 gal/min)
- Auxiliary Circuit – Secondary (280 bar/4,061 psi): 64 L/min (16.9 gal/min)
- Digging Force – Stick (standard): 33.4 kN (7,509 lb)
- Digging Force – Bucket: 57.5 kN (12,927 lb)

**Blade**
- Width: 2320 mm (91.3 in)
- Height: 450 mm (17.7 in)
- Dig Depth: 360 mm (14.2 in)
- Lift Height: 380 mm (15.0 in)

**Cab**
- Dynamic Operator Sound Pressure Level (ISO 6396:2008): 70 dB(A)
- Exterior Sound Power Level (ISO 6395:2008)*: 99 dB(A)

**Air Conditioning System**
The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.3 kg (2.9 lb) of refrigerant which has a CO₂ equivalent of 1.9 metric tonnes (4,189 lb).

**Certification – Cab and Canopy**
- Roll Over Protective Structure (ROPS): ISO 12117-2
- Tip Over Protective Structure (TOPS): ISO 12117
- Top Guard: ISO 10262 (Level II)

**Operating Specifications**
- Stick Length – Standard: 1665 mm (66 in)
- Machine Overhang: 290 mm (11 in)
- Machine Overhang with Extra Counterweight: 405 mm (16 in)

**Undercarriage**
- Number of Carrier Rollers: 1/side
- Number of Track Rollers: 5/side
- Track Roller Type (Rubber Belt): Center Flange

**Lift Capacities at Ground Level – VAB Minimum**

<table>
<thead>
<tr>
<th>Lift Point Radius</th>
<th>5000 mm (16’5&quot;)</th>
<th>5500 mm (18’1&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Front</td>
<td>Side</td>
</tr>
<tr>
<td>Blade Down</td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td></td>
<td>(lb)</td>
<td>(lb)</td>
</tr>
<tr>
<td>Blade Down</td>
<td>2354</td>
<td>(5,191)</td>
</tr>
<tr>
<td>Blade Up</td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td></td>
<td>(lb)</td>
<td>(lb)</td>
</tr>
<tr>
<td>Blade Up</td>
<td>2354</td>
<td>(5,191)</td>
</tr>
</tbody>
</table>

**Lift Capacities at Ground Level – VAB Maximum**

<table>
<thead>
<tr>
<th>Lift Point Radius</th>
<th>5000 mm (16’5&quot;)</th>
<th>6800 mm (22’4&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Front</td>
<td>Side</td>
</tr>
<tr>
<td>Blade Down</td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td></td>
<td>(lb)</td>
<td>(lb)</td>
</tr>
<tr>
<td>Blade Down</td>
<td>2479</td>
<td>(5,466)</td>
</tr>
<tr>
<td>Blade Up</td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td></td>
<td>(lb)</td>
<td>(lb)</td>
</tr>
<tr>
<td>Blade Up</td>
<td>1164</td>
<td>(2,567)</td>
</tr>
</tbody>
</table>

*The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.
### Dimensions

<table>
<thead>
<tr>
<th></th>
<th>Standard Stick with Angle Boom Extended</th>
<th>Standard Stick with Angle Boom Retracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dig Depth</td>
<td>3980 mm 157 in</td>
</tr>
<tr>
<td>2</td>
<td>Vertical Wall</td>
<td>3820 mm 150 in</td>
</tr>
<tr>
<td>3</td>
<td>Maximum Reach at Ground Level</td>
<td>7632 mm 300 in</td>
</tr>
<tr>
<td>4</td>
<td>Maximum Reach</td>
<td>7780 mm 306 in</td>
</tr>
<tr>
<td>5</td>
<td>Maximum Dig Height</td>
<td>8000 mm 315 in</td>
</tr>
<tr>
<td>6</td>
<td>Maximum Dump Clearance</td>
<td>6080 mm 239 in</td>
</tr>
<tr>
<td>7</td>
<td>Linkage In Minimum Radius</td>
<td>2925 mm 115 in</td>
</tr>
<tr>
<td>8</td>
<td>Tail Swing – Standard Counterweight</td>
<td>1450 mm 57 in</td>
</tr>
<tr>
<td></td>
<td>Tail Swing – with Extra Counterweight</td>
<td>1565 mm 62 in</td>
</tr>
<tr>
<td>9</td>
<td>Maximum Blade Height</td>
<td>420 mm 17 in</td>
</tr>
<tr>
<td>10</td>
<td>Maximum Blade Depth</td>
<td>320 mm 13 in</td>
</tr>
<tr>
<td>11</td>
<td>Boom Height in Shipping Position</td>
<td>2280 mm 90 in</td>
</tr>
<tr>
<td>12</td>
<td>O/A Shipping Height</td>
<td>2550 mm 100 in</td>
</tr>
<tr>
<td>13</td>
<td>Swing Bearing Height</td>
<td>735 mm 29 in</td>
</tr>
<tr>
<td>14</td>
<td>O/A Undercarriage Length</td>
<td>2903 mm 114 in</td>
</tr>
<tr>
<td>15</td>
<td>O/A Shipping Length</td>
<td>7010 mm 276 in</td>
</tr>
<tr>
<td>16</td>
<td>Boom Swing Right</td>
<td>1010 mm 40 in</td>
</tr>
<tr>
<td>17</td>
<td>Boom Swing Left</td>
<td>635 mm 25 in</td>
</tr>
<tr>
<td>18</td>
<td>Track Belt/Shoe Width</td>
<td>450 mm 18 in</td>
</tr>
<tr>
<td>19</td>
<td>O/A Track Width</td>
<td>2320 mm 91 in</td>
</tr>
</tbody>
</table>
### Standard Equipment

**Engine**
- Cat C3.3B diesel engine (meets U.S. EPA Tier 4 Final/EU Stage IIIB emission standards)
- Automatic engine idle
- Automatic engine shut-off
- Automatic two speed travel
- Diesel Particulate Filter (North America only)
- Diesel Oxidation Catalyst (North America only)
- Fuel and water separator
- Power on demand

**Hydraulic System**
- 1-way and 2-way (combined function)
- Accumulator
- Automatic swing parking brake
- Auxiliary hydraulic lines
- Adjustable auxiliary relief
- Auxiliary line quick disconnects
- Cat interlock system: hydraulic lockout
- Continuous auxiliary flow
- Ecology drain
- Hydraulic oil cooler
- High definition hydraulics
- Load sensing/flow sharing

**Operator Environment**
- 100% pilot control ergonomic joysticks
- Adjustable armrests
- Air conditioning/heat

**COMPASS**
- complete, operation, maintenance, performance and security system
- Multiple languages
- Cup holder
- High back suspension seat, heated
- Hydraulic neutral lockout bar
- Interior light
- Literature holder
- Pattern changer (optional in Europe)
- Radio (optional in Europe)
- Site reference system: leveling
- Tool storage area
- Travel control pedals with hand levers
- Washable floor mat
- Windshield wiper

**Undercarriage**
- Dozer blade with float function
- Track, rubber belt, 450 mm (18 in) width
- Tie down eyes on track frame
- Towing eye on base frame

**Front Linkage**
- 180 degree bucket rotation
- Certified lifting eye on bucket linkage (optional in Europe)
- Front shovel capable
- Thumb ready stick

**Electrical**
- 12 volt electrical system
- 60 ampere alternator
- 650 CCA maintenance free battery
- Fuse box
- Ignition key start/stop switch
- Slow blow fuse
- Warning horn

**Lights and Mirrors**
- Cab and boom light with time delay capability
- Mirror, rear view, cab left

**Safety and Security**
- Anti-theft system (COMPASS)
- Caterpillar Corporate “One Key” System
- Door locks
- Lockable fuel cap
- Retractable seat belt
- Roll Over Protective Structure (ROPS) (ISO 12117-2)
- Tip Over Protective Structure (TOPS) (ISO 12117)
- Top guard – ISO 10262 (Level II)
- Travel alarm (optional in Europe)

### Optional Equipment

**Engine**
- Engine block heater

**Hydraulic System**
- Quick coupler lines
- Boom lowering check valve*
- Stick lowering check valve*
- Secondary auxiliary hydraulic lines*

**Undercarriage**
- Blade, weld on
- Track, triple grouser (steel), 450 mm (18 in)
- Track, triple grouser (steel) with rubber pad, 450 mm (18 in)
- Track, triple grouser (steel), 600 mm (24 in)

**Front Linkage**
- Quick coupler: manual or hydraulic
- Thumb
- Buckets
- Full range of performance matched work tools
  - Auger, hammer, shear, ripper

**Lights and Mirrors**
- Mirror, cab rear

**SAFETY AND SECURITY**
- Battery disconnect
- Rearview camera
- Front wire mesh guard
- Front steel plate guard
- Rain guard

**Technology**
- Product Link™

**Other Attachments**
- Counterweight, extra, 1121 kg (2,493 lb)*

*Standard on VAB configuration.