AS3251C
Extend-A-Mat™ Asphalt Screed

AS3251C Extend-A-Mat with Rear-Mounted Extenders	
Weight	**2925 kg (6,450 lb)**
Paving Ranges:	
hydraulically extendible	**2.44 - 4.75 m (8' - 15' 6")**
with bolt-on extensions	**2.44 - 6.15 m (8' - 20' 2")**
minimum with cutoff shoes	**1.83 m (6')**

Productivity Provided in a Versatile Screed

The AS3251C Extend-A-Mat™ asphalt screed provides high quality results on highways and streets as well as commercial applications.

Rear-Mounted Extenders
Caterpillar® Extend-A-Mat Screeds are rigidly built to handle the high demands of wide width paving. The heavy-duty frame prevents flexing and allows material to easily flow back to the extenders when increasing paving widths.
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Screed Plates
The electrically-heated screed plates provide even heat distribution leading to a long service life. The curved-nose bars located in front of the screed plates provide pre-compaction and good material flow under the screed. The threaded-bolt leveling system for the front and back of the screed plate provides quick adjustment.
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End Gates
The end gates feature a spring-loaded false-wall design that provides easy gate adjustment in order to contain the asphalt mix. The sliding portion of the gate provides a downward force in order to follow the profile of the surface being paved. A dual-bolt design allows smooth vertical movement and guides the end gate when making adjustments.
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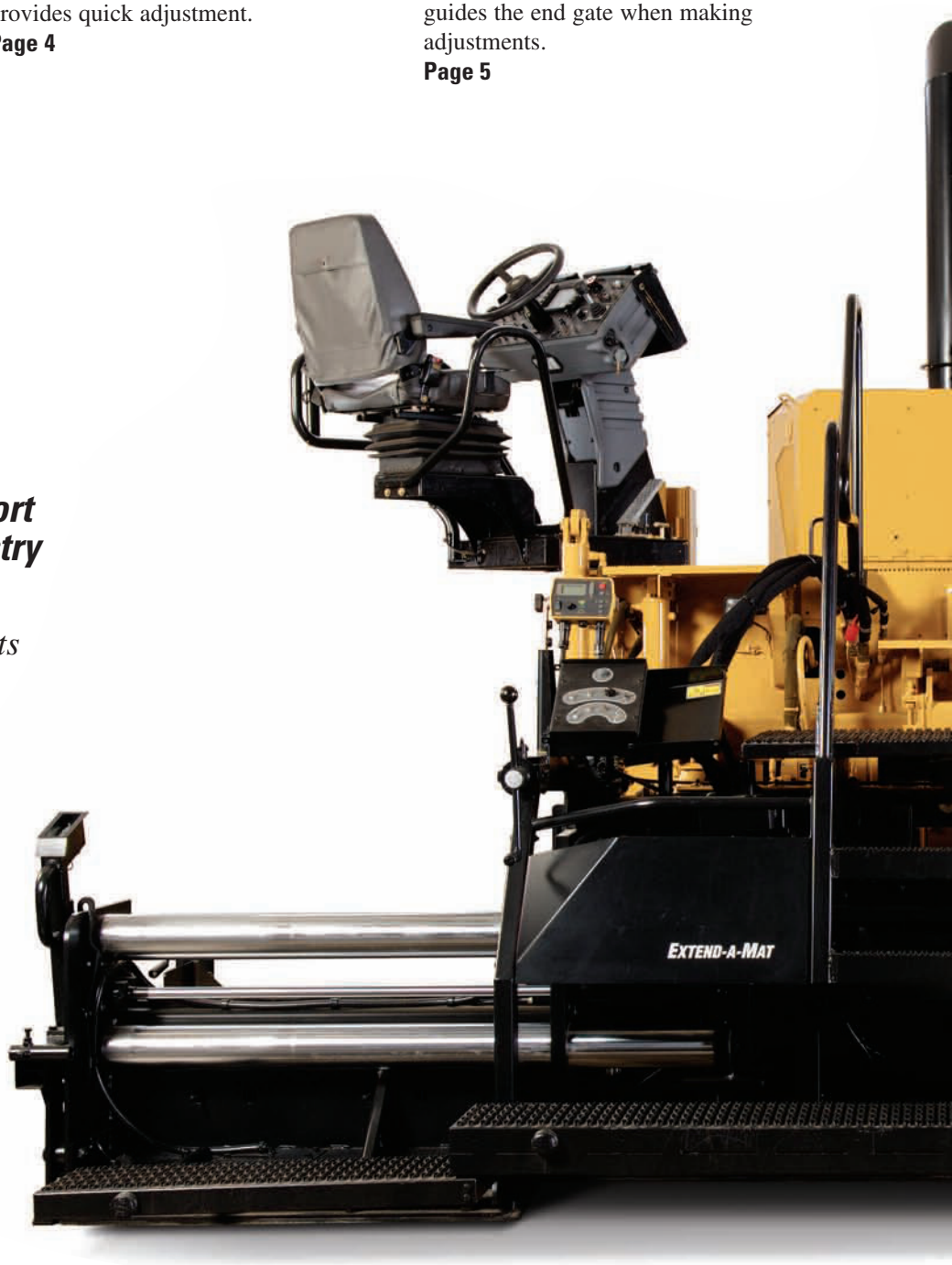
Hydraulically-Driven Vibrators
Hydraulically-driven vibrators located on the main screed and on the extenders provide pre-compaction. The vibrator speed can be easily adjusted to match mix type.

Caterpillar® Dealer Support is the Leader in the Industry

Caterpillar Dealers offer the very best dealer support, parts support and service training in the industry.



Electric Heat and Easy to Use Features Increase Operator Comfort

The AS3251C Extend-A-Mat™ asphalt screed with electrically-heated screed plates integrates an ergonomic control switch layout, and remote-mounted controls on the extenders.

Screed Controls

The main screed control panels are mounted on each side of the screed. The layout of each control panel promotes productivity and allows the screed operators to quickly make the necessary adjustments to the mat. Power controls for crown, height and slope are standard features that increase operator efficiency.

The electric screed heat control panel utilizes touch-pad technology for simplified operation and backlit LED's provide easy recognition for a user-friendly operating environment.

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Serviceability

The AS3251C has been designed for easy service and maintenance. Access to components such as screed plate adjusters, slope stops, wiring harnesses, hydraulic lines and grease fittings make service quick and efficient.

The CANbus electrical system reduces the wiring bundle size for better efficiency and increased reliability along with excellent diagnostic capability.

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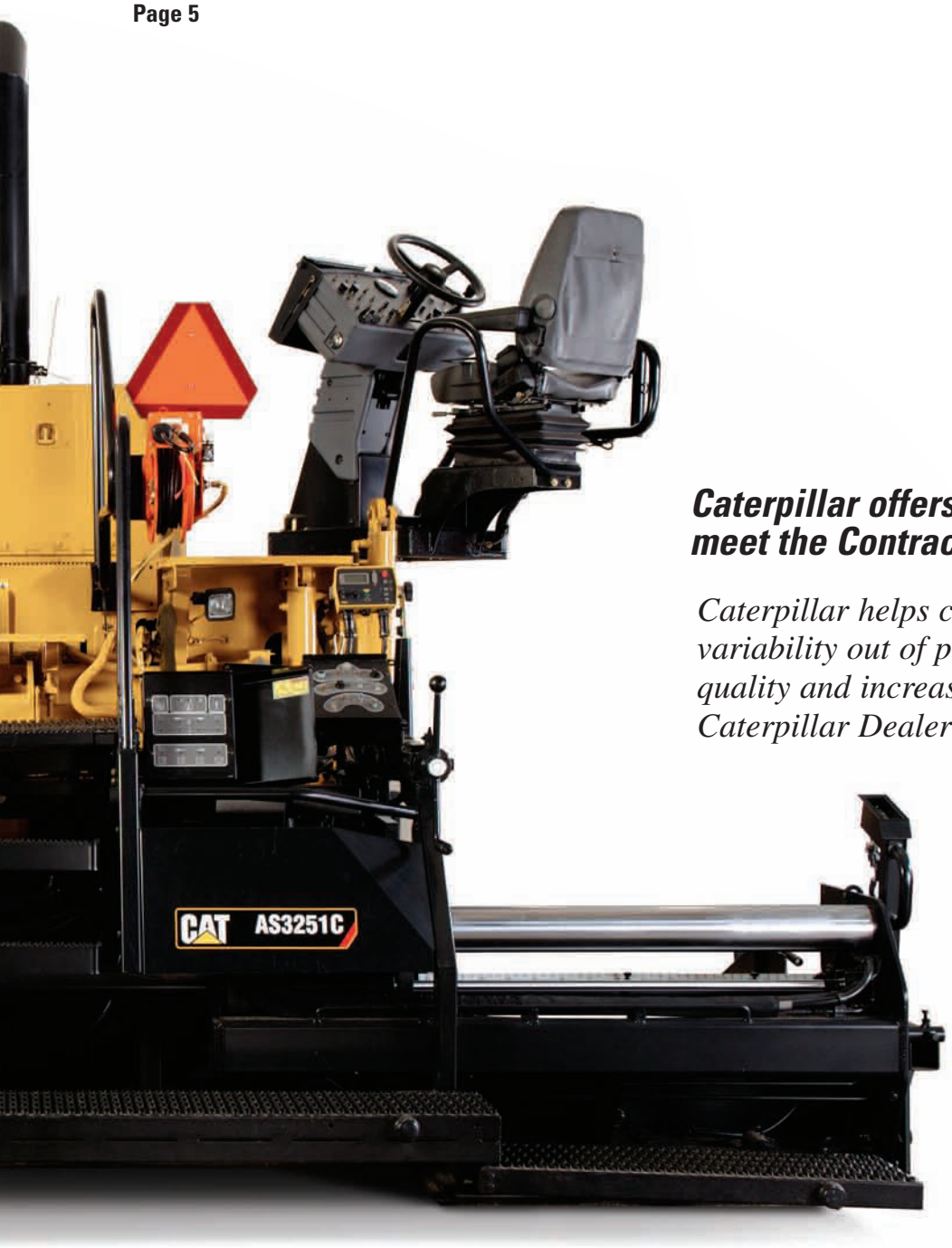


Caterpillar offers "Solutions and Services" to meet the Contractor's everyday needs.

Caterpillar helps contractors take risk and variability out of projects in order to improve ride quality and increase profitability. Contact your Caterpillar Dealer today for more information.

Rear-Mounted Extenders

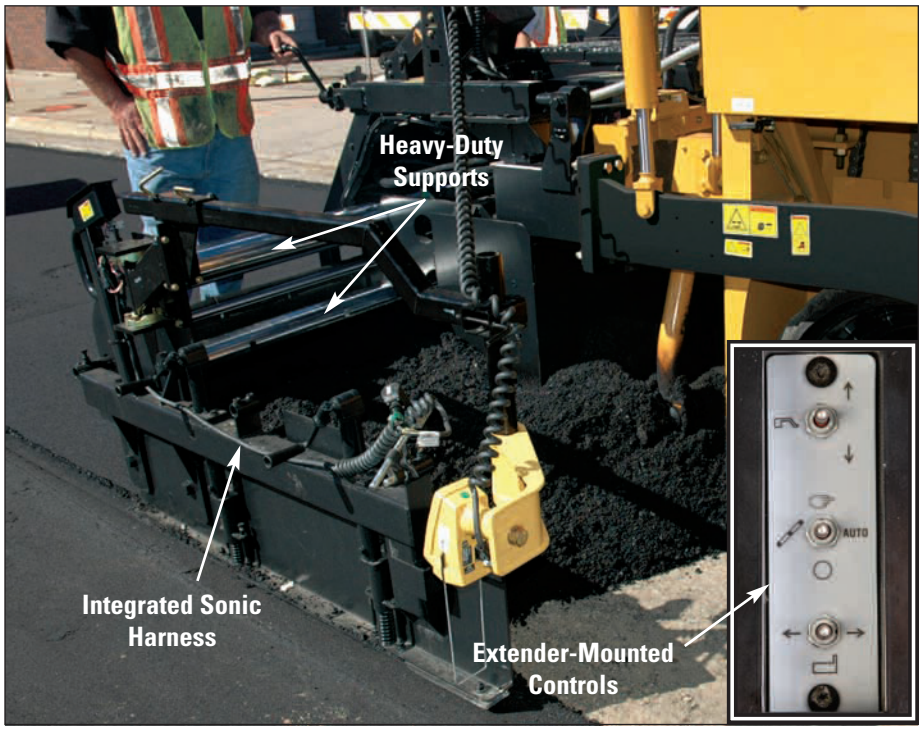
Heavy-duty supports provide torsional rigidity that allows even material flow, resulting in high quality mats.

Rear-Mounted Extenders
The extenders are mounted behind the main screed. This rearward location allows material to easily flow back to the extender when increasing paving widths.

Heavy-Duty Support Design
Two heavy-duty support tubes and a third frame member stabilize the extender and prevents flexing for even material flow.

Extender-Mounted Controls
The extenders include controls for adjusting paving width, material flow and tow-point height, convenient features when setting-up for wide width paving.

Integrated Harnesses
The electrical connections for the sonic feeder control sensors are integrated within the screed frame, eliminating the extra cord leading to the tractor.



Screed Plates

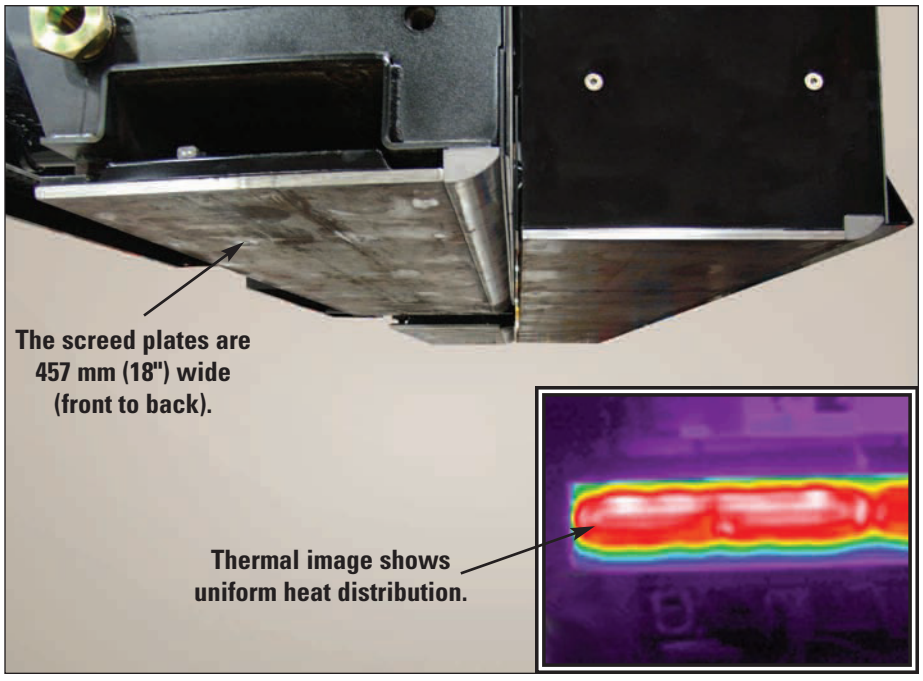
The industry-leading electric heating system delivers tight textures for high-quality mats and a long service life.

Screed Plates
The screed plates are constructed of an abrasion resistant alloy steel and utilize curved nose-bars to provide pre-compaction and good material flow.

Hydraulically-Driven Vibrators
Hydraulically-driven vibrators mounted on the main screed and extenders increase mix density under the screed.

Electric Heating Elements
The heating elements are located in each screed plate section to provide even heat distribution. The heating elements are reusable and can be easily removed and installed on new screed plates.

Uniform Heating
The heating elements provide uniform heat distribution over the entire screed plate for reliable operation.



End Gates

Easy-grip handles and dual-bolt guides provide smooth height adjustments to ensure good joint-matching capabilities.

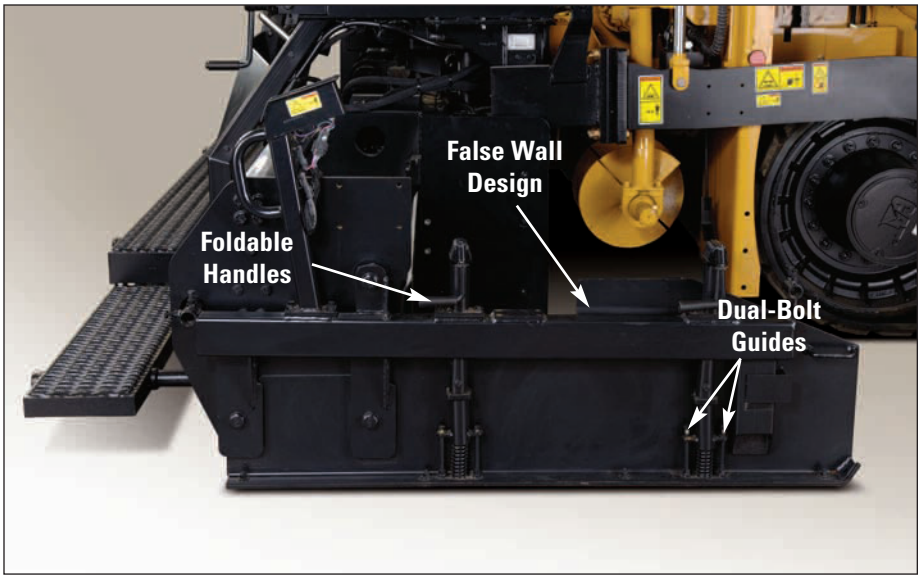
Spring-Loaded End Gates
The spring-loaded end gates create a downward force that cause the gates to follow the profile of the surface being paved, ensuring a good joint with the adjacent mat.

False-Wall Design
The false-wall design reduces mix contact with the sliding portion of the gate, providing easy gate adjustments.

Bolt-on Design
The bolt-on design allows easy end gate installation and removal when transportation concerns exist.

Foldable Handles
Foldable handles located on the end gate height adjustments allow them to be fully retracted when working close to barriers.

Dual-Bolt Guides
The dual-bolt guides allow smooth vertical movements and eliminate retention chains.



Control Panels

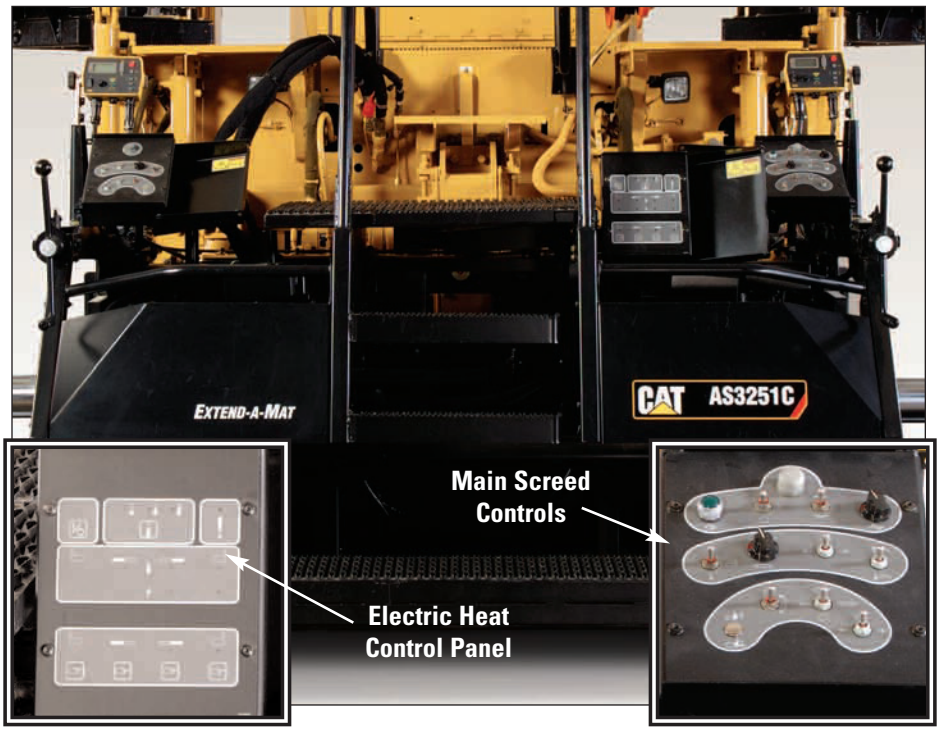
A state-of-the-art electric heating system with controls that are located in the right place, allow the operator to make quick adjustments.

Conveniently Located Controls
The screed controls are conveniently located and easily recognizable to provide efficient operation.

Quick Angle of Attack Adjustment
The thickness control screws utilize spinner handles for easy angle of attack adjustments.

Electric Heat Control Panel
The electric heat control panel includes three temperature settings that are able to accommodate a variety of asphalt mixes and paving conditions.

Electric Heat Controller
An electric heat controller automatically regulates screed plate temperatures to the selected setting. The controller also assists troubleshooting procedures with minimal training.



Serviceability

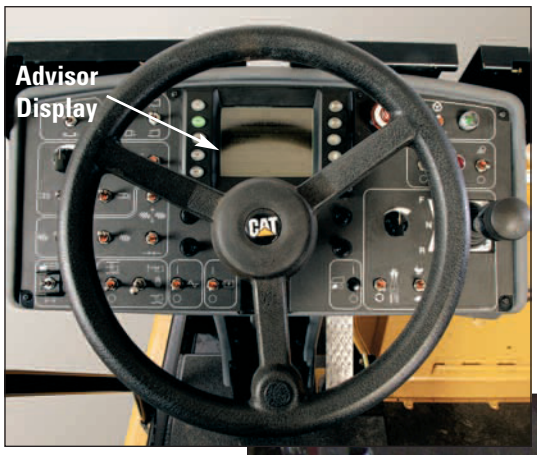
The CANbus electrical system and easy access to the screed plate adjusters enables quick service.

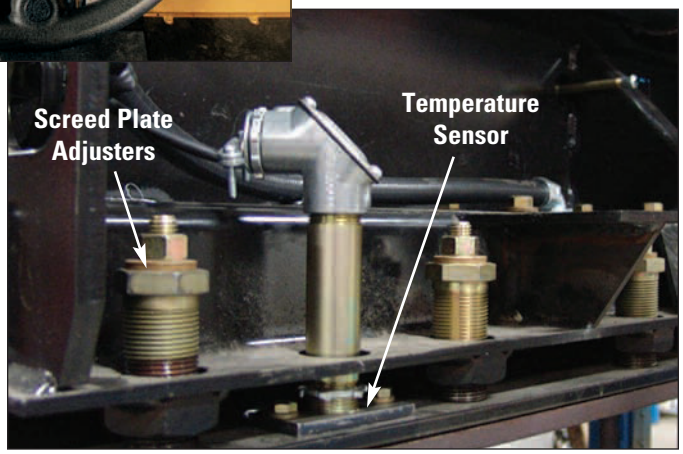
Quick Screed Plate Adjustment
The threaded-bolt design located on the front and rear edge of the screed plates eliminate shims to provide quick replacement and leveling.

CANbus Electrical System
The CANbus electrical system utilizes a controller to perform screed functions, eliminating many wires and relays for a reliable electrical system.

CANbus Interface
The CANbus electrical system on the screed provides an interface with the Advisor display on the tractor for simplified diagnostics. The system is compatible with Cat ET.

Color-Coded Electrical Wiring
Caterpillar® electrical harnesses utilize a kevlar braid and nylon mounting blocks to protect against abrasion. The wires are color-coded and numbered for fast reference.



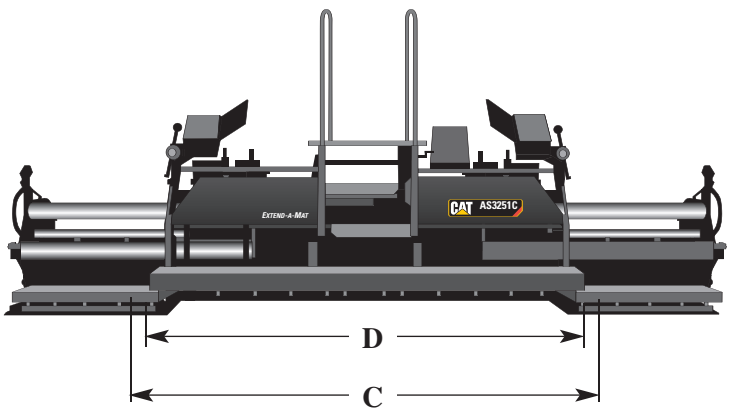


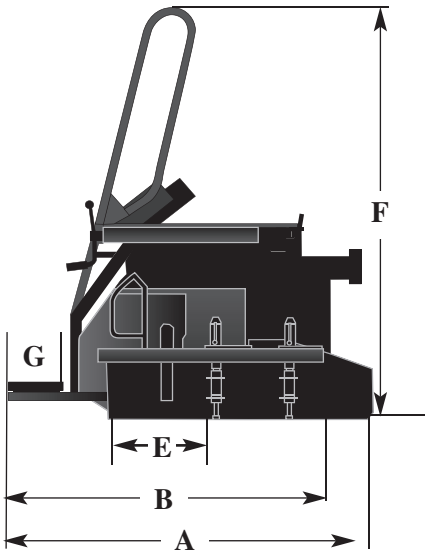
Dimensions

A	Length with end gates (front to rear)	2.08 m (6' 10")
B	Length without end gates (front to rear)	1.78 m (5' 10")
C	Width with end gates (retracted)	2.70 m (8' 10")
D	Width without end gates (retracted)	2.46 m (8')
E	Screed plate width (front to back)	457 mm (18")
F	Height	2.15 m (7' 1")
G	Walkway Width	298 mm (11.75")

Weight

AS3251C Screed	2925 kg (6450 lb)
305 mm (1') Extender	83 kg (183 lb)
711 mm (2' 4") Extender	132 kg (290 lb)





Optional Equipment

Screed Extensions
Extensions are available in 305 mm (1') and 711 mm (2' 4") widths.

Wide Width Paving Packages
Paving packages are available in 6.10 m (20') and 6.71 m (22') widths.

Cutoff Shoe
The cut-off shoe reduces the standard paving width from 2.44 m (8 ft) down to 1.83 m (6 ft).

Extender Configuration

Extender width changes can be made from the tractor, main screed or remote-mounted control boxes. The remote-mounted control boxes are positioned at the end of each extender.

Extenders are equipped with vibrators and heaters that are separate from the main screed. Vibrator motors and shafts are hydraulically driven. Frequency and amplitude are synchronized with main screed vibrators.

Thickness Screws

Thickness control screws with spinner handles are located on the outboard side of each control console. The thickness screws control the paving depth. Two thread configurations are available for the thickness control screws; Acme clockwise and Acme counterclockwise with 25.4 mm (1") - 8 tpi fine thread or 25.4 mm (1") - 4 tpi coarse thread.

End Gates

End gates are 1.28 m (4' 3") long, helping contain material and providing an optimal longitudinal joint. End gates are spring-loaded, creating an adjustable downward force that allows them to follow the profile of the surface being paved. The spring-loaded design also creates a contained joint with the adjacent mat.

Power Controls

Standard power controls for crown, height and slope provide the operator with fingertip control.

The crown adjustment is made with a switch in the right control panel. Crown range is from +10% to -3%.

The height adjustment allows each extender to match the mat thickness being placed by the main screed. Indicators show the amount of adjustment in 6.4 mm (0.25") increments.

Each extender can be sloped during operation from 14% below horizontal to 2% above horizontal. Indicators show the percent of slope.

Screed Controls

The controls are logically grouped providing easy operation. Main control consoles are mounted on each side of the screed. They contain all electrically actuated controls.

The electric heat control panel is mounted on the right side of the screed near the center walkway. The electric heat panel includes a touch pad with high intensity LED’s for simplified use.

Remote-mounted control boxes are mounted on the outboard side of each extender. They contain switches for the extender width, material feed system and tow-point height.

Electrical System

The electrical system is 24-volts to match the tractor. Integrity of the electrical system on Cat® machines is ensured with the use of high-quality components. The Caterpillar electrical standards, developed to enhance reliability and durability, feature soldered, molded, numbered and color-coded wires with nylon-braided wrap to protect the electrical harness.

Hydraulic System

The extenders are hydraulically controlled with electric-over-hydraulic components. The tractor supplies hydraulic flow.

Hydraulic connections have O-ring face seal (ORFS) fittings and straight-thread O-ring (STOR) couplings to provide maximum protection against hydraulic system leaks. High-pressure Cat XT hoses provide an extended service life.

Vibrator System

The main screed and extenders are equipped with a vibrator system that provides initial compaction. Vibrator speed is adjustable with a rheostat control located on the right control panel from 0 to 50 Hz (0-3,000 vpm).

Electric Heating System

The electric heating system is powered by a tractor-mounted generator. The screed plates integrate multi-zone heating elements that provide fast heat-up. Temperature sensors located in each screed section including the extenders provide inputs to the electric heat controller. The controller automatically adjusts the screed plate to the selected temperature range. Three temperature ranges; low, medium and high are available to accommodate various environmental conditions and asphalt mixes.

The heating elements are held in place with threaded bolts and clamps making removal and installation onto new screed plates quick and easy.

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