

ROADBUILDING



SF6004

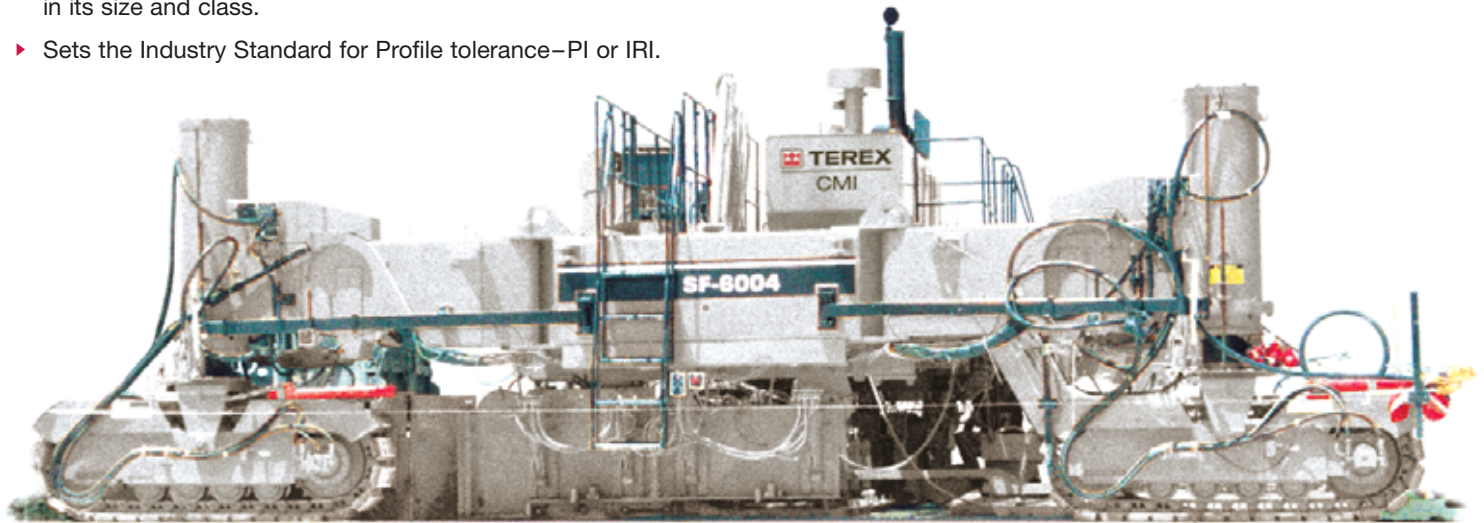
FOUR-TRACK CONCRETE SLIPFORM PAVER

SF6004

FOUR-TRACK CONCRETE SLIPFORM PAVER

FEATURES

- ▶ “MAINLINE CLASS” slipform paver for highway and airport concrete construction.
- ▶ Versatile, high-production four-track design provides superior paving capabilities and performance unmatched in its size and class.
- ▶ Sets the Industry Standard for Profile tolerance—PI or IRI.



STANDARDS & OPTIONS*

CATERPILLAR® ENGINE

Caterpillar Model C-15 (DITA-ATAAC) Industrial Diesel Engine. Performance power rated (B): 425 bhp/317kW @ 2,100 rpm. Emission rated: Tier II (EPA), Stage 2 (CE) Y2001.

4-stroke-cycle diesel engine: 6 cylinders, 5.4-in (137-mm) bore, 6.5-in (165-mm) stroke and 893-in³ (14.6-L) displacement; turbocharged with air-to-air after-cooling, ADEM III electronic fuel management system, automatic altitude compensation.

Air cleaner, dry-type two-stage with service indicator, 24-volt electronic starting system, 60-amp alternator-charging suction fan, selectable/programmable electronic monitoring system.

Fuel Consumption: 21.1 gal/hr (80 L/hr)

DRIVE SYSTEM

Dual-range propelling system with variable hydrostatic drives for both forward and reverse. Paving range variable up to 30 fpm (9 mpm). Travel range variable up to 60 fpm (18 mpm).

EDC-controlled track drive and auger drive for finite control of hydrostatic functions.

Tracks are driven hydrostatically through deep-reduction planetary gear reducers at a 257:1 ratio. Posi-Trac® flow divider control limits track slippage. Track length 8.33 ft (2.54 m). D-4 undercarriage components with 18-in (457.2-mm) triple-grouser street shoes. 10-in (254-mm) leg barrels with 42-in (1,066.8-mm) vertical stroke.

MAINFRAME

Deep-section, telescoping mainframe is hydraulically adjustable up to 8 ft (2.44 m), providing paving width ranges from 12 ft to 26 ft (3.66 m to 7.92 m), standard. Optional extensions expand paving width to 44 ft (13.4 m).

POWER DISTRIBUTION SYSTEM

Standard machine configuration includes six (6) axial piston-type hydrostatic pumps driven by engine-mounted (flex plate coupling) 4-place pump drive gearbox. Pumps included: two (2) 100-cc, pressure-compensated, closed-loop Vibrator Pumps; two (2) 100-cc, EDC-controlled Auger Drive Pumps; one (1) 100 cc, EDC-controlled Track Drive Pump, operating through 4-way Posi-Trac flow control valve; and one (1) open-loop, pressure-compensated L-38 dedicated control-circuit pump. Optional pumps are available for additional vibrators and added attachments.

HYDRAULIC OIL FILTRATION

The owner's hydraulic system is protected by a “Best-in-Class” filtration system: 3-micron (a)¹ PRE-FILTERED supply make-up reservoir, Track Drive, Auger Drives and Vibrator Circuits are protected by 6- μ^2 (n)³ return filters, and the AUX control system is protected by 3- μ (a) pressure and return filters.

NOTES: ¹ (a)= Absolute Rating: nothing greater than 3 μ will pass the filter.

² μ = symbol for Micron: 1/1000th of a Millimeter (0.001 mm) – the finest industrial filters.

³ (n)= Nominal Rating: 95% of particles greater than 6 μ size will not pass.

STANDARDS & OPTIONS (continued)*

WATER SYSTEM

Hydraulically driven pump delivers 800 psi (5,512 kPa) water to hose and high-powered nozzle for cleanup and utility use. Onboard water storage capacity is 200 gal (758 L).

GRADE CONTROL

HYDRA-MATION® all-hydraulic control system is fully proportional. Pressure-compensated, variable-displacement pump provides hydraulic oil to the direct-acting servo-valve proportional sensors. Individual flow control at sensors for fine-tuning.

ELEVATION CONTROL

Operator selection for automatic or manual mode. Four elevation control sensors with extendible mounting arms. Calibrated scale-adjusting hardware for each sensor. Standard control-system arrangement includes equipment for four-point control (dual stringline), lock-to-grade for automatic reference control of elevation.

STEERING

Operator selection for automatic or manual mode, forward or reverse. Right-hand or left-hand stringline steering control mounting. Separate operator selection for manual steering in transport mode. Calibrated scale hardware for adjusting sensor position and fine-tuning alignment. Two steering sensors standard. Remote manual steering switch located conveniently at each leg for setup and transport loading.

OPERATOR'S CONSOLE

Rubber-booted all-weather switches. Locking covers protect critical function controls. EDC-controlled hydrostatic auger drive and track drive for precise operator control. "Joystick" controls for auger and travel. Synchronized sequential master pave and stop control. Central keyed lock-out for electrical system. EMS system at ground level. Selector switches for manual or automatic control of elevation or steering. Roll-top lockable anti-vandalism console cover. Entire console repositions for operation mode or recesses for transport.

SERIES II PAVING PROCESS (STANDARD)

SUBFRAME

Heavy-duty independent subframe supports paving assembly components and provides flexible positioning of paving unit components. Hydraulic system includes quick couplers and electrical cables equipped with cannon-type plug connectors.

SPREADER AUGER

18-in (457.2-mm)-diameter, 8-in (203.2-mm) heavy-weld center tube, welded flighting 1-in (25.4-mm)-thick by 10-in-(254 mm)-deep helical spiral blades. Auger shaft features self-aligning spherical bearings with sealed lubrication reservoirs.

Right- and left-hand augers are independently driven by variable-displacement hydraulic pumps in combination with fixed-displacement axial-piston hydrostatic motors.

Planetary high-torque reductions provide final drive to H.D. roller chain in oil-bath housing for shockload protection.

EDC uni-lever controls provide control of speed and direction. Right- and left-hand pitched auger sections are flanged and bolted for width adjustment.

HYDRAULIC STRIKE-OFF

Operator-controlled hydraulic strike-off for metering concrete flow to enclosed vibrator and tamper section in front of profile pan. Sections are flanged for quick width changes.

HYDRAULIC VIBRATORS

Hydraulic-powered, motor-in-head, concrete internal vibrators are rated to 10,000 vpm at 4 gpm (15 Lpm).

Standard 24-ft (7.32-m) machine includes 20 hydraulic internal vibrators and 20 vibrator circuits. Vertical adjustment is operator-controlled through hydraulically powered parallel linkage lift system.

TAMPER BAR

Hydraulically driven and sectionalized for width adjustment. Hinge points for crowning. Lubricated pins and bushings.

Tamping speed is variable from 0 to 137 strokes per minute from vibrator control panel.

Mechanical adjustment for stroke amplitude provides ½-in (12.7-mm), ¾-in (19.05-mm) or 1-in (25.4-mm) length of stroke.

PROFILE PAN

48-in (1.22-m)-long, extrusion-process profile pan is attached to and supported by the subframe. Front and rear crowning stanchions provide support and adjustment for leading edge and trailing edge of profile pan. All components are sectionalized with flange connections for changes in width requirements. Sections available in U.S. dimensions or metric dimensions.

SIDEFORMS

Power folding sideforms are hydraulically actuated to allow backing over previous day's pavement.

Batter angle and front-to-rear taper set by mechanically adjusting the sideforms.

CROWNING SYSTEM

Operator-controlled, with position indicators. Powered by a single hydraulic cylinder and controlled by adjustment made at each of the individual cam-operated crowning stanchions. No special pan sections are required. Tangent, parabolic, multiple-point or inverted crowning may be accomplished. Maximum crown: 6 in (152.4 mm).

Transitional crowning adjustments may be made by the operator during paving operation in spiral curves.

* Specifications subject to change without notice.

SERIES II PAVING PROCESS (STANDARD, continued)

FLOAT PAN

36-in (914.4-mm)-long, integral float-pan finisher provides secondary finishing and minor deviation corrections in concrete surface. Final edge profile is adjusted by independent powered edges (forms) on the float pan.

WEIGHT

Basic Tractor	75,000 lb (34019.4 kg) – 24 ft (7.32 m) without paving kit
Paver	110,000-lb (49,896-kg) – 24 ft (7.32 m) Series I paving kit and 32-in (812.8-mm) float pan
Paver	115,000-lb (52,164-kg) – 24-ft (7.32-m) Series II paving kit and 36-in (914.4-mm) float pan

DIMENSIONS

Paving Depth	to 18 in (457.2 mm)
Height	12 ft 8 in (3.86 m), plus paving depth

PAVING WIDTH

Standard	from 12 ft to 24 ft (3.66 m to 7.32 m)
Optional Width	to 44 ft (13.41 m)
Overall Paving Length	32 ft 3 in (9.83 m), tracks in standard position
Wheelbase	
Paving Length	23 ft 10 in (7.26 m), tracks in standard position
Shipping Width	10 ft 2 in (3.1 m), less paving assembly and optional equipment
Track Footprint When	
Loading Width	7 ft 6 in (2.28 m), truck in transport position
Shipping Length	50 ft 5 in (15.37 m), with 24 ft (7.32 m) paving kit
Shipping Height	10 ft 6 in (3.2 m)

SERVICE REFILL CAPACITIES

Fuel Tank	185 gal (700 L)
Hydraulic Oil Tank	63 gal (238.48 L)
Replenishing	
Hydraulic Reservoir	10 gal (37.85 L)
Engine Oil	9 gal (34.07 L)
Engine Coolant	22 gal (83.28 L)
Auxiliary Water Supply	200 gal (757.07 L)

OPTIONAL EQUIPMENT

Caterpillar® C-15 (DITA-ATAAC) Tier II Stage 2 diesel engine, 450 hp (336 kW) at 2,100 rpm

Heavy-duty severe-service augers

SALT (sealed and lubricated) tracks

Polyurethane track pads

Hydraulically powered guillotine track guards

Series I modular paving kit

Metric dimension paving kit – 3.66 to 7.5 m (standard), 13.41 m (optional)

Right- and left-hand curbsforms, integral or outboard

Hydraulic curbform block-off

Outboard paving extensions

Zero-clearance paving for widths to 14 ft (4.27 m)

Rear-mounted, magazine-load tie-bar inserter; computer control for up to 3 units

Side tie-bar inserter for various style tie bars

Combination power-folding, guillotine sectional sideforms

Paving unit extensions in U.S. or metric dimensions

Propelling unit extensions: 6 ft (1.83 m) and 7 ft (2.13 m). Special extension available

Additional vibrators and controls; long eccentric, high-energy vibrators

Dowel Bar Inserter (DBI) System

54 in (1.37 m) float pan with tow bars

Computer-controlled crowning

Multiple crowning points – centerline plus inside and outside shoulder breaks

Oscillating float finisher with automatic microprocessor controls

Tamper bar dual drive for wide-width paving

Flanged tractor end frames (PS6004 application)

Auxiliary hydraulic supply pump (for rear-mounted attachments)

Auxiliary water system (for use with burlap drag)

Auxiliary hydraulic oil cooler (special application)

Hydraulic-powered 4-corner outrigger system with removable pads

Metal keyway former, right- and left-hand side

Adjacent-slab paving attachment

Adjacent-slab steering attachment



SERIES I PAVING ASSEMBLY (OPTIONAL)

SPREADER AUGER

16-in (406.4-mm)-diameter split auger with independent right- and left-hand bi-directional hydraulic drive permits accurate control of side-to-side concrete spreading. Flanged sections for width adjustment. Heavy-duty flighting with 1-in (25.4-mm)-thick flights. Optional severe-service flighting available.

HYDRAULIC VIBRATORS

Hydraulic-powered, motor-in-head, sealed internal vibrators are rated to 10,000 vpm at 4 gpm (15 Lpm).

Standard machine features 15 hydraulic internal vibrators and 20 vibrator circuits with individual flow-control valves. Additional vibrators and circuits are provided with optional-width paving assemblies. Vertical adjustment, operator-controlled through hydraulically powered parallel linkage lift system.

TAMPER BAR

Hydraulically driven and sectionalized for width adjustment. Hinge points for crowning. Lubricated pins and bushings. Tamping speed is variable from 0 to 137 strokes per minute from vibrator control panel. Mechanical adjustment for stroke amplitude provides $\frac{1}{2}$ -in (12.7-mm), $\frac{3}{4}$ -in (19.05-mm) or 1-in (25.4-mm) length of stroke.

PROFILE PAN

Modular construction allows unitized assembly to be connected to tractor mainframe. Individual self-supporting modules of 54-in (1.37-m)-long profile section may be inserted or removed from paving assembly for paving width changes. End sections provide overbuild adjustment for edge slump control, mechanical adjustment for batter angle and front-to-rear taper.

Operator selector for remote or central control for depth of sideforms.

SIDEFORMS

Vertical guillotine sideforms hydraulically adjustable up to 18 in (457.2 mm).

Batter angle and front-to-rear taper set by mechanically adjusting the sideforms.

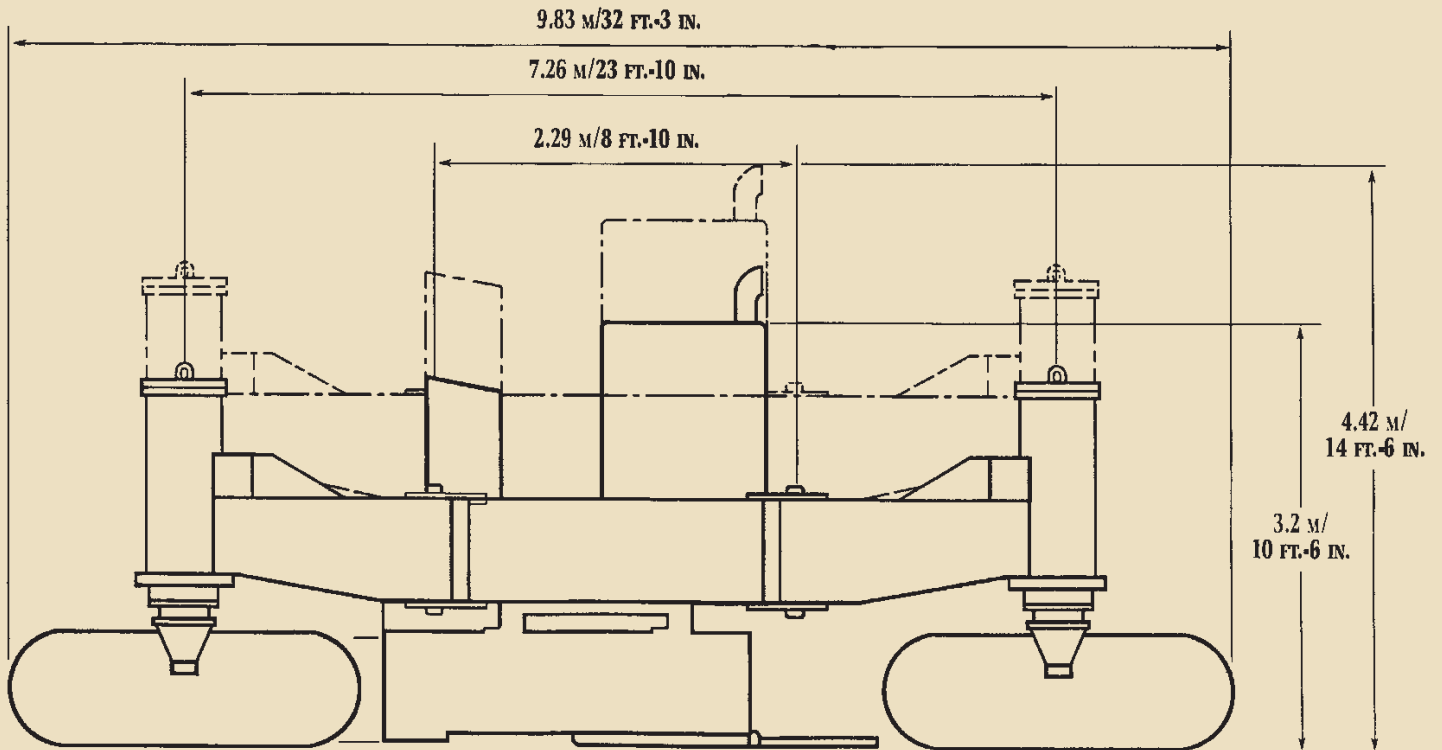
CROWNING SYSTEM

Hydraulic-powered crowning system for single-point control of tangent crown. Operator controls allow transition into and out of crown for paving in super-elevated curves.

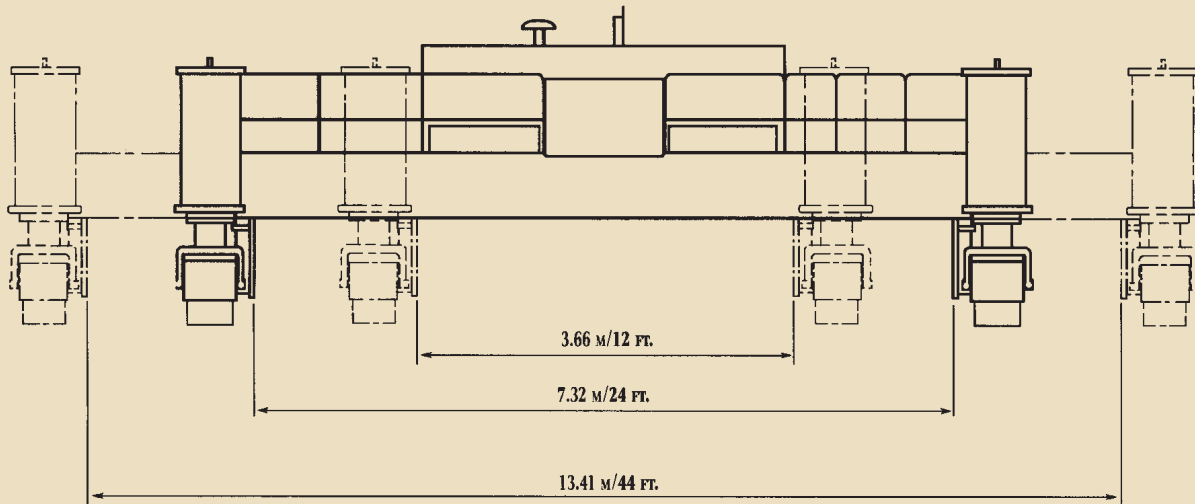
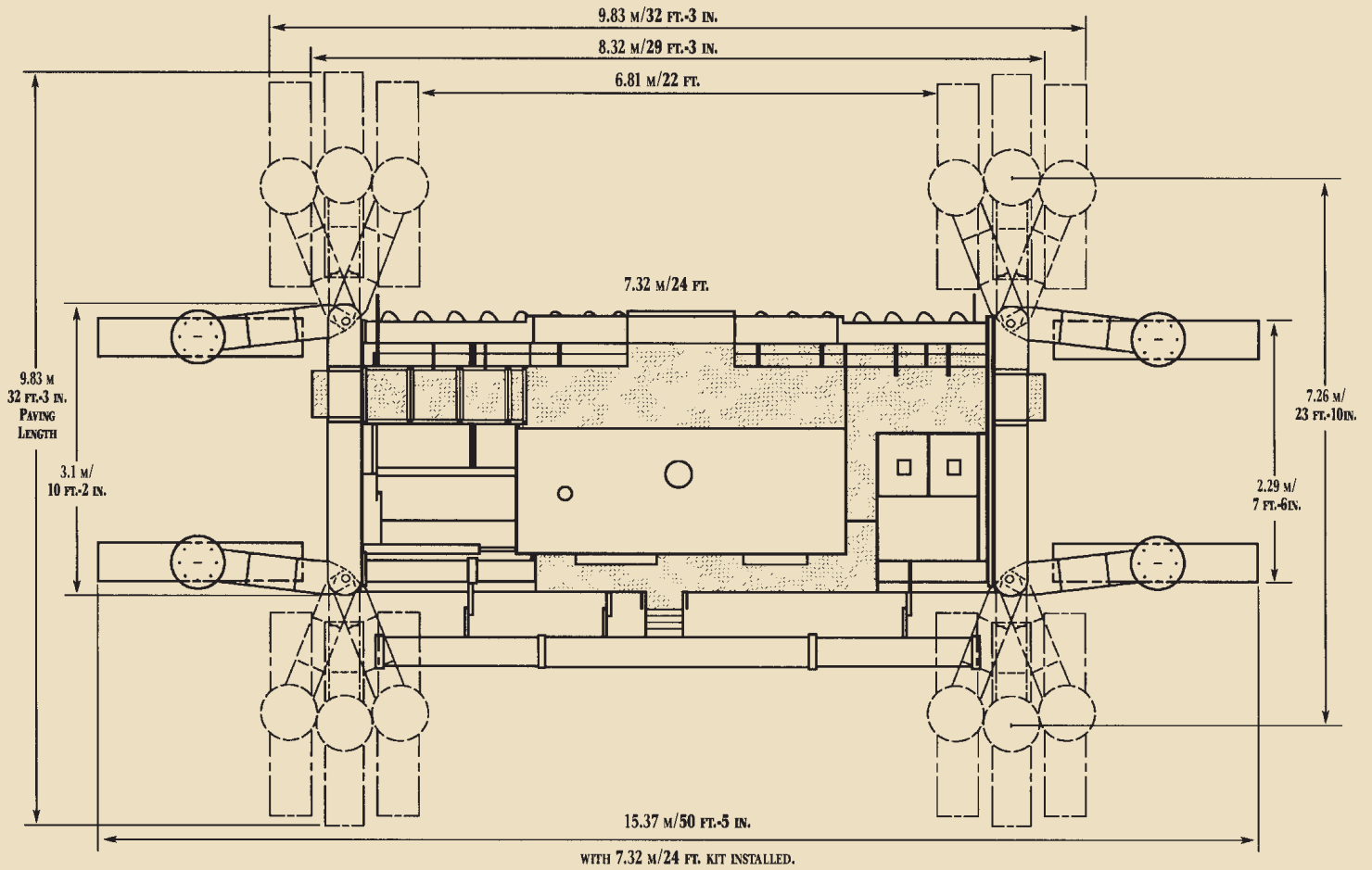
FLOAT PAN

32-in (812.8-mm)-long, integral float-pan finisher provides secondary finishing and minor deviation corrections in concrete surface. Final edge profile is adjusted by independent powered edger section of the float pan.

TECHNICAL DIMENSIONS



SF6004 DIMENSIONS



www.terexrb.com • 1-888-TEREXRB

