



Weatherford[®]

FracShield[™] Composite Frac Plug



Unparalleled strength, efficiency, and simplicity

During horizontal pump-down operations, using the right plug is critical. The FracShield™ composite frac plug combines field-proven slip technology with Weatherford composite upper-slip and molded-element innovation to enable higher run-in speeds, more efficient milling, and superior sealing and anchoring.

Trusted experience, inspired innovation

As the only integrated oilfield-services company that manufactures its own composite, Weatherford owns the entire development process, which gives us complete control over quality. The FracShield frac plug is the culmination of more than 10-years' experience and expertise in composite technology. Each component is designed and optimized for uncompromising tolerance, efficiency, and ease of use.



MULE SHOE

The beveled mule shoe acts as a clutch to prevent the composite mandrel from spinning when milled. A groove in the mule shoe provides a space for an optional pump-down ring.

LOWER SLIP

Weatherford segmented wicker-slip design is optimized for superior anchoring with the least amount of metal. This slip has been field proven in thousands of successful runs.

LOWER CONE

The lower cone interfaces with the proprietary slip system and is faceted to eliminate spinning during mill up.

MOLDED ELEMENT SYSTEM

The molded element system provides a superior seal and smooth surface that enables run-in speeds up to 500 ft/min (152.40 m/min). The seal is proven reliable at up to 10,000 psi and temperatures up to 350°F (176.67°C). The composite back-up system ensures that the element does not extrude while holding pressure.

UPPER SLIP AND CONE

Machined from a single piece of proprietary composite, the rigid upper slip and cone, paired with the powdered metal buttons, provide the required anchoring force and easy mill up.

PUMP-DOWN RING

When required, a proprietary pump-down ring can be installed onto the plug to decrease the amount of water needed to pump the plug to its final location. The pump-down ring is made of the same easily milled material as the element.

SLIP SECTION

Weatherford slips are optimized for superior anchoring using the smallest possible amount of metal. The slip is hollowed out on the back to ensure small cuttings and easy wellbore milling. The segmented slip design is held with metal bands and is pinned in place to ensure the plug reaches the bottom every time.

The FracShield™ composite frac plug is part of our comprehensive portfolio of products and services designed to help you stimulate well production. For more information, contact your authorized Weatherford representative or visit **weatherford.com**.



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